



SRC ENERGY

**SECTION 15, T6N, R66W
HARVESTERS STATE 7-15 PAD
HARVESTERS STATE 34C-16-M**

**OH
PLAN #1**

Anticollision Report

04 October, 2017





Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Reference	PLAN #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.00ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.00 ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.45 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	10/4/2017		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	15,794.13	PLAN #1 (OH)	MWD+IFR1	OWSG MWD + IFR1

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
HARVESTERS STATE 7-15 PAD						
BERG 33-15 (AB_150CC) - OH - OH	3,284.69	2,934.70	393.25	359.57	11.675	CC
BERG 33-15 (AB_150CC) - OH - OH	3,300.00	2,947.66	393.33	359.48	11.620	ES
BERG 33-15 (AB_150CC) - OH - OH	3,400.00	3,032.38	398.04	363.17	11.417	SF
BERRY 22-2(PR_75CC) - OH - OH	7,406.61	6,556.27	1,140.81	1,071.33	16.420	CC, ES
BERRY 22-2(PR_75CC) - OH - OH	7,600.00	6,748.04	1,157.42	1,086.33	16.282	SF
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	7,412.12	6,658.69	1,161.72	1,091.83	16.622	CC, ES
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	7,600.00	6,849.66	1,177.19	1,105.79	16.489	SF
BLACKGOLD 3(AB_150CC) - OH - OH	0.00	24.91	2,938.49			
BLACKGOLD 3(AB_150CC) - OH - OH	100.00	122.82	2,938.50	2,931.92	446.616	ES
BLACKGOLD 3(AB_150CC) - OH - OH	12,900.00	7,239.29	6,993.23	6,841.12	45.975	SF
BURBACH 15-22(SI_150CC) - OH - OH	200.00	181.00	2,516.39	2,507.42	280.694	CC
BURBACH 15-22(SI_150CC) - OH - OH	400.00	380.84	2,519.68	2,504.08	161.565	ES
BURBACH 15-22(SI_150CC) - OH - OH	10,900.00	7,210.86	4,466.42	4,125.27	13.092	SF
BURBACH 15-23(SI_150CC) - OH - OH	1,178.00	1,125.11	2,528.66	2,484.80	57.646	CC
BURBACH 15-23(SI_150CC) - OH - OH	1,700.00	1,601.61	2,538.08	2,474.69	40.038	ES
BURBACH 15-23(SI_150CC) - OH - OH	10,700.00	7,203.33	3,039.63	2,702.44	9.015	SF
BURMAN 16-42(PR_75CC) - OH - OH	12,404.44	7,178.75	1,831.60	1,447.78	4.772	CC, ES
BURMAN 16-42(PR_75CC) - OH - OH	12,600.00	7,177.96	1,842.01	1,454.04	4.748	SF
BURMAN 16-43(PR_75CC) - OH - OH	12,419.49	7,175.69	330.73	-53.40	0.861	Level 1, CC, ES, SF
DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN	10,785.75	7,350.64	347.10	258.15	3.902	CC
DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN	15,794.94	12,360.72	440.39	112.77	1.344	Level 3, ES, SF
DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN	10,764.89	7,436.40	419.72	296.56	3.408	CC
DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN	15,794.94	12,458.61	504.86	112.03	1.285	Level 3, ES, SF
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	4,894.69	15,904.30	5,416.36	5,169.87	21.974	CC
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	11,000.00	19,118.26	5,510.53	5,071.22	12.544	ES
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	11,800.00	19,118.26	5,583.94	5,128.88	12.271	SF
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	4,892.24	15,850.53	5,222.02	4,974.69	21.113	CC
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	11,000.00	19,018.34	5,311.18	4,872.96	12.120	ES
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	11,700.00	19,018.34	5,371.30	4,919.64	11.892	SF
FRITZLER 11-21-4(PR_150CC) - OH - OH	14,691.20	7,234.47	154.93	-77.12	0.668	Level 1, CC
FRITZLER 11-21-4(PR_150CC) - OH - OH	14,700.00	7,234.75	155.18	-77.31	0.667	Level 1, ES, SF
FRITZLER 11-21(PR_150CC) - OH - OH	15,285.78	7,146.06	824.08	361.17	1.780	CC
FRITZLER 11-21(PR_150CC) - OH - OH	15,300.00	7,146.01	824.20	360.84	1.779	ES, SF
FRITZLER 1-17(PR_150CC) - OH - OH	15,794.94	7,159.00	929.76	546.25	2.424	CC, ES, SF
FRITZLER 17-23-18(PR_150CC) - OH - OH	15,794.94	7,500.36	3,041.72	2,905.27	22.292	CC, ES, SF
FRITZLER 17-32-12(PR_150CC) - OH - OH	15,794.94	7,573.36	2,856.95	2,619.21	12.017	CC, ES, SF
FRITZLER 17-42-11(PR_150CC) - OH - MWD	15,794.94	7,531.90	2,477.26	2,209.94	9.267	CC, ES, SF

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
HARVESTERS STATE 7-15 PAD						
FRITZLER 34-17(PR_150CC) - OH - OH	15,794.94	7,311.21	2,119.27	2,012.53	19.856	CC, ES, SF
FRITZLER 43-17(PR_150CC) - OH - OH	15,794.94	7,304.95	2,008.02	1,761.27	8.138	CC, ES, SF
FRITZLER 6-6-17 (PR_150CC) - OH - OH	15,794.94	7,170.91	1,877.17	1,695.84	10.352	CC, ES, SF
FRITZLER 6-8-17(PR_150CC) - OH - OH	15,794.94	7,245.40	1,446.41	1,358.61	16.474	CC, ES, SF
FRITZLER 8-8-17(PR_150CC) - OH - OH	15,794.94	7,250.10	244.77	63.52	1.350	Level 3, CC, ES, SF
GREELEY SWD #1(XX) - OH - OH	10,988.21	7,166.50	114.06	-231.22	0.330	Level 1, CC, ES, SF
HARVESTER 31-15(SI_150CC) - OH - OH	0.00	0.00	1,406.77			
HARVESTER 31-15(SI_150CC) - OH - OH	10,900.00	7,451.55	5,727.85	5,619.18	52.706	SF
HARVESTER 32-15(SI_150CC) - OH - OH	100.00	76.95	586.68	580.11	89.304	CC, ES
HARVESTER 32-15(SI_150CC) - OH - OH	9,500.00	7,218.97	4,072.01	3,986.06	47.375	SF
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	7,898.11	11,587.00	406.51	322.23	4.824	CC
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	7,900.00	11,587.00	406.51	322.07	4.814	ES
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	8,100.00	11,587.00	465.64	358.70	4.354	SF
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	7,767.94	11,662.00	620.46	500.71	5.181	CC
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	7,800.00	11,662.00	621.94	499.43	5.077	ES
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	7,900.00	11,662.00	644.99	514.93	4.959	SF
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	7,632.70	11,565.00	864.94	726.87	6.265	CC, ES
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	7,700.00	11,565.00	870.79	729.74	6.174	SF
HARVESTERS RESOURCES 15R-403(PR_150CC) - OH	7,611.30	11,711.00	1,269.90	1,127.66	8.928	CC, ES
HARVESTERS RESOURCES 15R-403(PR_150CC) - OH	7,700.00	11,711.00	1,278.89	1,134.38	8.849	SF
HARVESTERS STATE 30C-16-M - OH - PLAN #1	200.00	203.00	519.88	513.20	77.867	CC, ES
HARVESTERS STATE 30C-16-M - OH - PLAN #1	15,794.94	15,216.01	5,032.20	4,573.86	10.979	SF
HARVESTERS STATE 30N-16B-M - OH - PLAN #1	200.00	203.00	500.21	493.53	74.921	CC, ES
HARVESTERS STATE 30N-16B-M - OH - PLAN #1	15,794.94	14,942.37	4,815.94	4,358.07	10.518	SF
HARVESTERS STATE 31C-16-M - OH - PLAN #1	200.00	202.00	420.05	413.38	62.923	CC, ES
HARVESTERS STATE 31C-16-M - OH - PLAN #1	15,794.94	14,997.77	3,932.35	3,474.43	8.587	SF
HARVESTERS STATE 33C-16-M - OH - PLAN #1	988.99	1,022.64	115.72	104.86	10.659	CC
HARVESTERS STATE 33C-16-M - OH - PLAN #1	1,000.00	1,033.65	115.74	104.81	10.583	ES
HARVESTERS STATE 33C-16-M - OH - PLAN #1	15,794.94	15,258.04	1,262.36	804.50	2.757	SF
HARVESTERS STATE 5C-16-M - OH - PLAN #1	200.00	202.00	379.98	373.30	56.920	CC, ES
HARVESTERS STATE 5C-16-M - OH - PLAN #1	15,794.94	14,987.41	3,492.27	3,034.54	7.629	SF
HARVESTERS STATE 12N-16A-M - OH - PLAN #1	941.51	978.29	135.35	124.84	12.875	CC, ES
HARVESTERS STATE 12N-16A-M - OH - PLAN #1	15,794.94	14,915.55	1,500.30	1,053.16	3.355	SF
HARVESTERS STATE 12N-16B-M - OH - PLAN #1	845.71	882.43	156.03	146.21	15.894	CC, ES
HARVESTERS STATE 12N-16B-M - OH - PLAN #1	15,794.94	14,979.18	1,689.20	1,234.95	3.719	SF
HARVESTERS STATE 12N-16C-M - OH - PLAN #1	723.01	756.68	177.16	168.17	19.708	CC, ES
HARVESTERS STATE 12N-16C-M - OH - PLAN #1	15,794.94	15,000.73	1,893.67	1,437.83	4.154	SF
HARVESTERS STATE 13C-16-M - OH - PLAN #1	1,229.37	1,250.50	56.53	43.80	4.443	CC, ES
HARVESTERS STATE 13C-16-M - OH - PLAN #1	15,794.94	15,437.48	630.99	172.82	1.377	Level 3, SF
HARVESTERS STATE 13N-16B-M - OH - PLAN #1	1,338.07	1,353.57	37.23	23.61	2.733	CC, ES
HARVESTERS STATE 13N-16B-M - OH - PLAN #1	15,791.22	15,345.56	451.57	26.47	1.062	Level 2, SF
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	200.00	202.00	400.03	393.35	59.923	CC, ES
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	15,794.94	14,817.75	3,724.66	3,268.58	8.167	SF
HARVESTERS STATE 32C-16-M - OH - PLAN #1	667.37	700.85	197.54	188.90	22.859	CC
HARVESTERS STATE 32C-16-M - OH - PLAN #1	700.00	733.48	197.73	188.89	22.391	ES
HARVESTERS STATE 32C-16-M - OH - PLAN #1	15,794.94	15,081.89	2,101.38	1,604.40	4.228	SF
HARVESTERS STATE 32C-16-M2 - OH - PLAN #1	200.00	202.00	319.87	313.20	47.916	CC, ES
HARVESTERS STATE 32C-16-M2 - OH - PLAN #1	15,794.94	15,002.44	2,831.07	2,373.54	6.188	SF
HARVESTERS STATE 32N-16B-M - OH - PLAN #1	200.00	201.00	220.05	213.38	32.967	CC, ES
HARVESTERS STATE 32N-16B-M - OH - PLAN #1	15,794.94	14,871.88	2,307.30	1,852.07	5.068	SF
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	200.00	202.00	300.21	293.53	44.970	CC, ES
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	15,794.94	14,909.96	2,615.67	2,159.16	5.730	SF
HARVESTERS STATE 33N-16B-M - OH - PLAN #1	1,091.36	1,122.99	95.40	83.76	8.194	CC

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
HARVESTERS STATE 7-15 PAD						
HARVESTERS STATE 33N-16B-M - OH - PLAN #1	1,100.00	1,131.63	95.42	83.71	8.148	ES
HARVESTERS STATE 33N-16B-M - OH - PLAN #1	15,783.15	15,148.06	1,061.27	610.60	2.355	SF
HARVESTERS STATE 33N-16C-M - OH - PLAN #1	1,163.38	1,189.82	75.94	63.74	6.224	CC
HARVESTERS STATE 33N-16C-M - OH - PLAN #1	1,200.00	1,226.44	76.17	63.68	6.096	ES
HARVESTERS STATE 33N-16C-M - OH - PLAN #1	15,794.94	15,274.57	849.20	396.67	1.877	SF
HARVESTERS STATE 34N-16C-M - OH - PLAN #1	1,408.43	1,416.67	18.52	4.32	1.304	Level 3, CC
HARVESTERS STATE 34N-16C-M - OH - PLAN #1	15,794.94	15,494.35	236.07	-172.41	0.578	Level 1, ES, SF
HARVESTERS STATE 4C-16-M - OH - PLAN #1	200.00	203.00	480.17	476.20	121.117	CC, ES
HARVESTERS STATE 4C-16-M - OH - PLAN #1	15,794.94	15,116.21	4,627.93	4,169.85	10.103	SF
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	200.00	202.00	440.10	433.42	65.925	CC, ES
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	15,794.94	14,732.12	4,163.82	3,707.43	9.123	SF
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	200.00	202.00	460.14	453.46	68.928	CC, ES
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	15,794.94	14,969.16	4,275.44	3,818.32	9.353	SF
HARVESTERS STATE 5N-16B-M - OH - PLAN #1	200.00	202.00	339.92	333.24	50.919	CC, ES
HARVESTERS STATE 5N-16B-M - OH - PLAN #1	15,794.94	14,805.04	3,158.59	2,702.31	6.922	SF
HARVESTERS STATE 5N-16C-M - OH - PLAN #1	200.00	202.00	359.95	353.27	53.919	CC, ES
HARVESTERS STATE 5N-16C-M - OH - PLAN #1	15,794.94	14,872.41	3,275.11	2,818.36	7.171	SF
HOOD 41-20(PR_150CC) - OH - OH	15,794.94	7,151.00	1,176.63	763.92	2.851	CC, ES, SF
HOOD 6-2-20(PR_150CC) - OH - OH	15,794.94	7,579.98	2,028.26	1,821.18	9.795	CC, ES, SF
LEFFLER 1 21-2(SI_75CC) - OH - OH	12,641.88	7,150.13	798.57	626.39	4.638	CC, ES
LEFFLER 1 21-2(SI_75CC) - OH - OH	12,700.00	7,153.59	800.67	626.92	4.608	SF
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	8,200.00	10,102.94	472.49	334.10	3.414	SF
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	8,300.00	10,000.20	470.85	333.90	3.438	ES
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	10,572.48	7,728.97	464.59	341.42	3.772	CC
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	7,931.79	10,193.07	206.58	61.02	1.419	Level 3, CC, ES, SF
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,968.90	7,153.41	1,012.12	585.87	2.374	CC
LEFFLER FARM 1-21(PA_75CC) - OH - OH	14,000.00	7,153.28	1,012.60	585.41	2.370	ES, SF
LOVELY 1(AB_150CC) - OH - OH	13,939.69	7,200.53	5,786.86	5,359.77	13.550	CC
LOVELY 1(AB_150CC) - OH - OH	14,100.00	7,200.13	5,789.08	5,357.73	13.421	ES
LOVELY 1(AB_150CC) - OH - OH	15,400.00	7,205.40	5,968.26	5,507.51	12.953	SF
LOVELY 14-9(AB_150CC) - OH - OH	15,436.33	7,202.55	5,730.88	5,261.76	12.216	CC
LOVELY 14-9(AB_150CC) - OH - OH	15,600.00	7,203.21	5,733.21	5,259.69	12.108	ES
LOVELY 14-9(AB_150CC) - OH - OH	15,794.94	7,204.00	5,742.09	5,263.55	11.999	SF
LUCAS SCHOOL 1(TA_150CC) - OH - OH	200.00	203.00	4,568.57	4,558.97	475.646	CC
LUCAS SCHOOL 1(TA_150CC) - OH - OH	400.00	402.84	4,572.56	4,556.22	279.900	ES
LUCAS SCHOOL 1(TA_150CC) - OH - OH	13,000.00	7,224.34	6,089.28	5,694.77	15.435	SF
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	200.00	163.00	5,568.06	5,559.60	657.593	CC
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	12,600.00	7,185.96	5,801.69	5,412.45	14.905	ES
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	14,000.00	7,180.28	6,008.74	5,587.66	14.270	SF
MAURICE LEFFLER 1(AB_150CC) - OH - OH	13,985.27	4,452.00	2,821.10	2,683.08	20.439	CC
MAURICE LEFFLER 1(AB_150CC) - OH - OH	14,000.00	4,452.00	2,821.14	2,682.93	20.412	ES
MAURICE LEFFLER 1(AB_150CC) - OH - OH	15,600.00	4,452.00	3,250.53	3,063.24	17.355	SF
MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH	15,794.94	7,255.77	1,228.05	967.72	4.717	CC, ES, SF
MCGLOTHLIN 17-11(PR_75CC) - OH - OH	15,794.94	7,182.00	4,708.16	4,233.06	9.910	CC, ES, SF
MONTERA 10-34 (PR_75CC) - OH - OH	225.54	263.61	2,586.03	2,579.26	382.283	CC, ES
MONTERA 10-34 (PR_75CC) - OH - OH	12,400.00	7,352.09	7,454.31	7,318.23	54.778	SF
RUTT-ADAMS HEIRS 2-22 - OH - OH	8,668.89	7,180.91	813.68	520.07	2.771	CC, ES
RUTT-ADAMS HEIRS 2-22 - OH - OH	8,700.00	7,180.78	814.27	520.12	2.768	SF
SENA 15-21(PR_75CC) - OH - OH	200.00	203.00	1,936.41	1,926.80	201.604	CC
SENA 15-21(PR_75CC) - OH - OH	300.00	303.02	1,937.75	1,924.89	150.657	ES
SENA 15-21(PR_75CC) - OH - OH	10,100.00	7,230.10	4,771.94	4,449.83	14.814	SF
SENA 15-24(PR_75CC) - OH - OH	200.00	183.00	1,128.44	1,119.42	125.080	CC
SENA 15-24(PR_75CC) - OH - OH	700.00	680.47	1,136.79	1,110.22	42.790	ES

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
HARVESTERS STATE 7-15 PAD						
SENA 15-24(PR_75CC) - OH - OH	9,400.00	7,218.94	3,346.71	3,039.44	10.892	SF
SENA 15-25(PR_75CC) - OH - OH	200.00	210.00	1,746.32	1,736.50	177.933	CC
SENA 15-25(PR_75CC) - OH - OH	400.00	389.84	1,749.76	1,733.86	110.061	ES
SENA 15-25(PR_75CC) - OH - OH	10,100.00	7,223.10	4,087.05	3,764.71	12.679	SF
STATE 1(AB_150CC) - OH - OH	12,580.41	7,176.04	4,486.00	4,097.45	11.545	CC
STATE 1(AB_150CC) - OH - OH	12,700.00	7,175.55	4,487.59	4,095.94	11.458	ES
STATE 1(AB_150CC) - OH - OH	13,600.00	7,171.90	4,600.41	4,188.63	11.172	SF
STATE BEATRICE 16-1(AB_150CC) - OH - OH	12,710.16	7,177.51	4,507.58	4,115.41	11.494	CC
STATE BEATRICE 16-1(AB_150CC) - OH - OH	12,800.00	7,177.15	4,508.48	4,113.96	11.428	ES
STATE BEATRICE 16-1(AB_150CC) - OH - OH	13,700.00	7,173.50	4,614.98	4,200.16	11.125	SF
STATE BEATRICE 32-16(PR_75CC) - OH - OH	12,516.44	7,171.30	3,034.54	2,647.91	7.849	CC
STATE BEATRICE 32-16(PR_75CC) - OH - OH	12,600.00	7,170.96	3,035.69	2,646.95	7.809	ES
STATE BEATRICE 32-16(PR_75CC) - OH - OH	13,000.00	7,169.34	3,072.82	2,675.36	7.731	SF
STATE-HOPPE 16-1(SI_75CC) - OH - OH	15,270.75	7,157.12	343.81	-119.06	0.743	Level 1, CC, ES, SF
STATE-HOPPE 16-2(PR_75CC) - OH - OH	14,126.01	7,174.77	1,828.69	1,397.31	4.239	CC
STATE-HOPPE 16-2(PR_75CC) - OH - OH	14,200.00	7,174.47	1,830.19	1,397.08	4.226	ES
STATE-HOPPE 16-2(PR_75CC) - OH - OH	14,300.00	7,174.06	1,836.95	1,401.96	4.223	SF
STATE-HOPPE 16-3(PR_150CC) - OH - OH	15,331.97	7,198.94	2,991.39	2,744.11	12.098	CC
STATE-HOPPE 16-3(PR_150CC) - OH - OH	15,400.00	7,200.17	2,992.16	2,743.13	12.015	ES
STATE-HOPPE 16-3(PR_150CC) - OH - OH	15,794.94	7,207.19	3,026.99	2,769.92	11.775	SF
STOCKOVER 16-1(PR_75CC) - OH - OH	11,174.24	7,168.75	1,856.28	1,506.02	5.300	CC
STOCKOVER 16-1(PR_75CC) - OH - OH	11,200.00	7,168.64	1,856.46	1,505.59	5.291	ES
STOCKOVER 16-1(PR_75CC) - OH - OH	11,400.00	7,167.83	1,869.96	1,514.90	5.267	SF
ULRICH PC I 17-07D(PR_75CC) - OH - OH	15,794.94	7,349.45	3,725.60	3,493.03	16.019	CC, ES, SF
ULRICH PC I 17-08(PR_75CC) - OH - OH	15,794.94	7,173.00	3,296.63	2,826.28	7.009	CC, ES, SF
ULRICH PC I17-17D(PR_75CC) - OH - OH	15,794.94	7,447.73	4,296.28	4,048.94	17.370	CC, ES, SF

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	36.00	3.28	3.28	164.12	-1,240.10	352.70	1,289.78				
100.00	100.00	61.33	97.33	3.28	3.28	164.12	-1,240.16	352.71	1,289.34	1,282.78	6.57	196.326	
200.00	200.00	160.16	196.16	3.34	3.31	164.13	-1,240.48	352.68	1,289.64	1,282.99	6.65	193.904	
300.00	299.98	262.19	298.19	3.44	3.40	-18.54	-1,240.79	352.48	1,288.22	1,281.38	6.84	188.235	
400.00	399.84	362.64	398.64	3.59	3.54	-18.64	-1,240.89	352.40	1,283.35	1,276.21	7.13	179.874	
500.00	499.45	461.92	497.92	3.79	3.73	-18.82	-1,241.00	352.43	1,275.20	1,267.69	7.52	169.657	
600.00	598.70	558.02	594.02	4.03	3.94	-19.07	-1,241.16	352.56	1,263.87	1,255.90	7.97	158.574	
700.00	697.47	654.49	690.49	4.31	4.18	-19.39	-1,241.65	352.66	1,249.58	1,241.09	8.49	147.152	
800.00	795.62	754.81	790.80	4.64	4.46	-19.80	-1,242.24	352.51	1,232.08	1,223.00	9.08	135.667	
900.00	893.06	854.89	890.88	5.00	4.76	-20.28	-1,242.67	351.97	1,211.14	1,201.42	9.72	124.599	
1,000.00	989.64	953.01	989.00	5.40	5.07	-20.87	-1,242.95	351.47	1,186.92	1,176.53	10.39	114.185	
1,100.00	1,085.27	1,047.73	1,083.72	5.83	5.39	-21.55	-1,243.20	350.81	1,159.56	1,148.46	11.09	104.514	
1,200.00	1,179.82	1,140.79	1,176.78	6.29	5.71	-22.35	-1,243.62	350.26	1,129.36	1,117.54	11.82	95.536	
1,300.00	1,273.17	1,234.62	1,270.60	6.79	6.04	-23.29	-1,244.07	349.65	1,096.24	1,083.66	12.58	87.150	
1,400.00	1,365.21	1,327.45	1,363.43	7.33	6.38	-24.39	-1,244.55	348.92	1,060.26	1,046.90	13.36	79.367	
1,500.00	1,455.84	1,420.21	1,456.19	7.89	6.73	-25.69	-1,244.89	348.17	1,021.40	1,007.24	14.16	72.123	
1,600.00	1,544.94	1,511.34	1,547.31	8.50	7.07	-27.22	-1,245.00	347.53	979.77	964.79	14.98	65.396	
1,700.00	1,632.39	1,600.33	1,636.30	9.13	7.41	-28.99	-1,245.03	346.69	935.54	919.72	15.82	59.140	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
1,800.00	1,718.11	1,684.13	1,720.09	9.80	7.73	-30.98	-1,245.13	345.80	889.08	872.41	16.67	53.339		
1,900.00	1,802.44	1,767.43	1,803.39	10.49	8.06	-32.88	-1,245.34	345.03	841.37	823.83	17.54	47.964		
2,000.00	1,886.68	1,851.78	1,887.73	11.20	8.39	-34.83	-1,245.65	344.22	794.37	775.93	18.44	43.076		
2,100.00	1,970.92	1,936.15	1,972.10	11.93	8.72	-36.99	-1,245.96	343.38	748.21	728.84	19.37	38.619		
2,200.00	2,055.17	2,020.18	2,056.12	12.66	9.06	-39.38	-1,246.42	342.39	703.16	682.82	20.34	34.562		
2,300.00	2,139.41	2,104.58	2,140.52	13.40	9.40	-42.06	-1,246.88	341.44	659.39	638.03	21.36	30.873		
2,400.00	2,223.66	2,187.61	2,223.54	14.14	9.73	-45.04	-1,247.31	340.74	617.25	594.83	22.42	27.529		
2,500.00	2,307.90	2,272.14	2,308.07	14.89	10.07	-48.44	-1,247.79	340.18	577.10	553.56	23.54	24.516		
2,600.00	2,392.14	2,358.20	2,394.12	15.65	10.42	-52.31	-1,248.30	339.42	539.15	514.43	24.72	21.814		
2,700.00	2,476.39	2,443.19	2,479.11	16.41	10.77	-56.61	-1,248.55	338.58	503.76	477.80	25.96	19.406		
2,800.00	2,560.63	2,526.94	2,562.86	17.17	11.11	-61.35	-1,248.67	337.96	471.90	444.64	27.27	17.306		
2,900.00	2,644.88	2,610.96	2,646.87	17.93	11.46	-66.62	-1,248.68	337.48	444.36	415.73	28.63	15.521		
3,000.00	2,729.12	2,694.79	2,730.70	18.70	11.80	-72.33	-1,248.78	337.05	422.00	391.98	30.02	14.058		
3,100.00	2,813.36	2,779.21	2,815.12	19.47	12.15	-78.47	-1,249.02	336.60	405.61	374.22	31.39	12.923		
3,200.00	2,897.61	2,863.35	2,899.26	20.25	12.50	-84.88	-1,249.24	336.17	395.87	363.18	32.68	12.113		
3,284.69	2,968.96	2,934.70	2,970.61	20.90	12.79	-90.45	-1,249.38	335.87	393.25	359.57	33.68	11.675 CC		
3,300.00	2,981.85	2,947.66	2,983.57	21.02	12.85	-91.46	-1,249.41	335.82	393.33	359.48	33.85	11.620 ES		
3,400.00	3,066.10	3,032.38	3,068.29	21.80	13.20	-98.03	-1,249.72	335.41	398.04	363.17	34.86	11.417 SF		
3,500.00	3,150.34	3,116.76	3,152.67	22.58	13.55	-104.36	-1,250.16	334.98	409.68	373.96	35.72	11.470		
3,600.00	3,234.58	3,199.22	3,235.13	23.35	13.89	-110.24	-1,250.45	334.77	427.98	391.57	36.41	11.753		
3,700.00	3,318.83	3,284.98	3,320.88	24.13	14.25	-115.96	-1,250.50	334.50	452.00	414.96	37.05	12.201		
3,800.00	3,403.07	3,368.53	3,404.43	24.92	14.60	-121.09	-1,250.27	333.97	480.79	443.20	37.59	12.789		
3,900.00	3,487.32	3,453.16	3,489.06	25.70	14.95	-125.81	-1,249.85	333.42	513.78	475.65	38.14	13.472		
4,000.00	3,571.56	3,538.56	3,574.46	26.48	15.31	-130.06	-1,249.67	332.76	549.92	511.23	38.69	14.212		
4,100.00	3,655.80	3,624.25	3,660.15	27.27	15.67	-133.85	-1,249.74	332.13	588.65	549.37	39.28	14.985		
4,200.00	3,740.05	3,712.43	3,748.32	28.05	16.04	-137.28	-1,250.31	331.42	629.20	589.26	39.94	15.756		
4,300.00	3,824.29	3,796.70	3,832.58	28.84	16.39	-140.20	-1,251.08	330.73	671.35	630.79	40.56	16.551		
4,400.00	3,908.54	3,879.12	3,915.00	29.62	16.74	-142.75	-1,251.74	330.12	715.08	673.89	41.19	17.362		
4,500.00	3,992.78	3,963.21	3,999.09	30.41	17.09	-145.09	-1,252.19	329.55	760.21	718.35	41.86	18.161		
4,600.00	4,077.03	4,048.06	4,083.94	31.20	17.45	-147.21	-1,252.63	328.90	806.35	763.78	42.57	18.942		
4,700.00	4,161.27	4,131.79	4,167.66	31.98	17.80	-149.10	-1,253.05	328.21	853.32	810.04	43.28	19.715		
4,800.00	4,245.51	4,213.04	4,248.91	32.77	18.15	-150.76	-1,253.30	327.69	901.22	857.25	43.98	20.494		
4,900.00	4,329.76	4,291.71	4,327.57	33.56	18.48	-152.24	-1,253.06	327.10	950.15	905.51	44.64	21.284		
5,000.00	4,414.00	4,376.19	4,412.04	34.35	18.83	-153.70	-1,252.47	326.36	999.88	954.46	45.41	22.018		
5,100.00	4,498.25	4,460.99	4,496.84	35.14	19.19	-155.03	-1,252.00	325.65	1,049.97	1,003.77	46.20	22.726		
5,200.00	4,582.49	4,541.63	4,577.48	35.93	19.53	-156.20	-1,251.45	324.81	1,100.49	1,053.56	46.94	23.447		
5,300.00	4,666.73	4,619.08	4,654.92	36.72	19.85	-157.24	-1,250.45	323.94	1,151.82	1,104.19	47.63	24.182		
5,400.00	4,750.98	4,698.60	4,734.43	37.51	20.19	-158.20	-1,249.36	323.78	1,203.81	1,155.44	48.37	24.886		
5,500.00	4,835.22	4,790.34	4,826.16	38.30	20.57	-159.21	-1,248.23	323.54	1,255.92	1,206.61	49.31	25.470		
5,600.00	4,919.47	4,894.82	4,930.63	39.09	21.02	-160.30	-1,247.78	322.19	1,307.36	1,256.92	50.43	25.922		
5,700.00	5,003.71	4,975.61	5,011.42	39.88	21.36	-161.04	-1,248.20	321.54	1,358.37	1,307.15	51.22	26.520		
5,800.00	5,088.06	5,049.22	5,085.02	40.67	21.67	-161.77	-1,248.44	321.68	1,409.83	1,357.93	51.91	27.160		
5,900.00	5,173.83	5,122.23	5,158.03	41.44	21.97	-162.65	-1,247.96	321.85	1,460.00	1,407.43	52.57	27.772		
6,000.00	5,261.34	5,200.11	5,235.91	42.18	22.30	-163.45	-1,246.96	322.27	1,507.98	1,454.69	53.29	28.299		
6,100.00	5,350.49	5,287.51	5,323.29	42.88	22.67	-164.19	-1,245.61	323.00	1,553.38	1,499.25	54.13	28.698		
6,200.00	5,441.16	5,386.46	5,422.23	43.56	23.08	-164.85	-1,244.41	324.19	1,595.65	1,540.53	55.12	28.949		
6,300.00	5,533.25	5,499.31	5,535.06	44.20	23.56	-165.45	-1,244.12	325.50	1,634.04	1,577.76	56.29	29.030		
6,400.00	5,626.65	5,580.71	5,616.46	44.82	23.90	-165.88	-1,244.09	326.10	1,669.03	1,612.04	56.98	29.289		
6,500.00	5,721.23	5,670.64	5,706.39	45.40	24.28	-166.27	-1,243.61	327.03	1,701.38	1,643.59	57.78	29.445		
6,600.00	5,816.89	5,772.45	5,808.19	45.94	24.70	-166.62	-1,243.11	328.12	1,730.49	1,671.77	58.72	29.468		
6,700.00	5,913.51	5,870.52	5,906.26	46.45	25.12	-166.94	-1,242.73	328.22	1,756.00	1,696.41	59.59	29.469		
6,800.00	6,010.97	5,962.93	5,998.67	46.93	25.51	-167.17	-1,242.46	329.05	1,778.35	1,718.00	60.35	29.466		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
6,900.00	6,109.15	6,068.78	6,104.49	47.38	25.95	-167.34	-1,242.35	331.17	1,797.50	1,736.21	61.29	29.329		
7,000.00	6,207.93	6,168.24	6,203.94	47.80	26.37	-167.45	-1,242.73	333.00	1,812.77	1,750.66	62.11	29.187		
7,100.00	6,307.19	6,259.26	6,294.95	48.18	26.76	-167.55	-1,242.66	334.23	1,824.98	1,762.19	62.79	29.064		
7,200.00	6,406.82	6,365.29	6,400.96	48.53	27.20	-167.58	-1,242.48	336.35	1,834.08	1,770.42	63.66	28.810		
7,300.00	6,506.68	6,465.56	6,531.19	48.84	27.76	-167.56	-1,243.74	338.79	1,838.65	1,773.82	64.83	28.361		
7,400.00	6,606.66	6,595.88	6,631.49	49.10	28.18	105.48	-1,245.54	340.19	1,838.88	1,773.31	65.56	28.047		
7,424.99	6,631.64	6,617.87	6,653.47	49.16	28.27	105.52	-1,245.86	340.29	1,838.72	1,773.02	65.71	27.984		
7,500.00	6,706.21	6,681.89	6,717.49	49.35	28.55	105.60	-1,246.46	340.29	1,840.13	1,774.01	66.12	27.828		
7,600.00	6,803.22	6,785.59	6,821.19	49.59	28.99	105.84	-1,247.29	340.28	1,845.99	1,779.00	66.99	27.555		
7,700.00	6,895.32	6,877.55	6,913.15	49.82	29.38	106.01	-1,248.31	340.58	1,856.44	1,788.63	67.81	27.378		
7,800.00	6,980.23	6,962.29	6,997.88	50.03	29.74	105.97	-1,249.24	340.85	1,872.25	1,803.59	68.66	27.270		
7,900.00	7,055.85	7,037.71	7,073.29	50.21	30.06	105.53	-1,250.08	341.10	1,893.99	1,824.44	69.55	27.234		
8,000.00	7,120.34	7,101.95	7,137.52	50.36	30.33	104.46	-1,250.79	341.30	1,922.14	1,851.66	70.48	27.272		
8,100.00	7,172.10	7,153.43	7,189.00	50.47	30.55	102.57	-1,251.36	341.47	1,956.91	1,885.46	71.46	27.385		
8,200.00	7,209.85	7,190.89	7,226.46	50.55	30.71	99.65	-1,251.77	341.59	1,998.16	1,925.70	72.46	27.576		
8,300.00	7,232.68	7,213.40	7,248.97	50.61	30.81	95.58	-1,252.02	341.66	2,045.30	1,971.86	73.44	27.849		
8,400.00	7,240.00	7,220.41	7,255.98	50.65	30.84	90.37	-1,252.10	341.69	2,097.30	2,022.95	74.36	28.206		
8,500.00	7,239.60	7,219.69	7,255.26	50.69	30.84	90.35	-1,252.09	341.69	2,152.93	2,077.69	75.24	28.615		
8,600.00	7,239.19	7,218.96	7,254.53	50.75	30.83	90.32	-1,252.08	341.68	2,211.68	2,135.55	76.14	29.049		
8,700.00	7,238.78	7,218.24	7,253.81	50.85	30.83	90.30	-1,252.08	341.68	2,273.32	2,196.28	77.03	29.511		
8,800.00	7,238.38	7,217.52	7,253.09	51.02	30.83	90.28	-1,252.07	341.68	2,337.61	2,259.69	77.92	30.000		
8,900.00	7,237.97	7,216.80	7,252.36	51.32	30.82	90.25	-1,252.06	341.68	2,404.33	2,325.55	78.79	30.518		
9,000.00	7,237.57	7,216.07	7,251.64	51.95	30.82	90.23	-1,252.05	341.67	2,473.31	2,393.68	79.62	31.063		
9,100.00	7,237.16	7,215.35	7,250.92	53.10	30.82	90.21	-1,252.04	341.67	2,544.34	2,463.91	80.43	31.634		
9,200.00	7,236.76	7,214.63	7,250.20	54.69	30.81	90.18	-1,252.04	341.67	2,617.27	2,536.07	81.20	32.231		
9,300.00	7,236.35	7,213.90	7,249.47	56.53	30.81	90.16	-1,252.03	341.67	2,691.94	2,609.99	81.94	32.852		
9,400.00	7,235.94	7,213.18	7,248.75	58.53	30.81	90.13	-1,252.02	341.66	2,768.20	2,685.56	82.64	33.496		
9,500.00	7,235.54	7,212.46	7,248.03	60.62	30.81	90.11	-1,252.01	341.66	2,845.94	2,762.63	83.31	34.161		
9,600.00	7,235.13	7,211.74	7,247.30	62.80	30.80	90.09	-1,252.00	341.66	2,925.03	2,841.08	83.94	34.845		
9,700.00	7,234.73	7,211.01	7,246.58	65.03	30.80	90.06	-1,252.00	341.66	3,005.36	2,920.82	84.54	35.549		
9,800.00	7,234.32	7,210.29	7,245.86	67.32	30.80	90.04	-1,251.99	341.65	3,086.85	3,001.74	85.11	36.269		
9,900.00	7,233.92	7,209.57	7,245.14	69.66	30.79	90.02	-1,251.98	341.65	3,169.39	3,083.74	85.65	37.005		
10,000.00	7,233.51	7,208.84	7,244.41	72.03	30.79	89.99	-1,251.97	341.65	3,252.91	3,166.76	86.15	37.757		
10,100.00	7,233.10	7,208.12	7,243.69	74.45	30.79	89.97	-1,251.96	341.65	3,337.34	3,250.71	86.64	38.521		
10,200.00	7,232.70	7,207.40	7,242.97	76.89	30.78	89.95	-1,251.96	341.65	3,422.61	3,335.52	87.09	39.299		
10,300.00	7,232.29	7,206.68	7,242.24	79.36	30.78	89.92	-1,251.95	341.64	3,508.66	3,421.14	87.52	40.088		
10,400.00	7,231.89	7,205.95	7,241.52	81.86	30.78	89.90	-1,251.94	341.64	3,595.43	3,507.50	87.93	40.889		
10,500.00	7,231.48	7,205.23	7,240.80	84.38	30.77	89.88	-1,251.93	341.64	3,682.87	3,594.55	88.32	41.699		
10,600.00	7,231.08	7,204.51	7,240.08	86.93	30.77	89.85	-1,251.92	341.64	3,770.93	3,682.24	88.69	42.519		
10,700.00	7,230.67	7,203.78	7,239.35	89.49	30.77	89.83	-1,251.92	341.63	3,859.58	3,770.54	89.04	43.348		
10,800.00	7,230.26	7,203.06	7,238.63	92.07	30.77	89.81	-1,251.91	341.63	3,948.76	3,859.39	89.37	44.184		
10,900.00	7,229.86	7,202.34	7,237.91	94.67	30.76	89.78	-1,251.90	341.63	4,038.46	3,948.77	89.69	45.028		
11,000.00	7,229.45	7,201.62	7,237.19	97.28	30.76	89.76	-1,251.89	341.63	4,128.62	4,038.64	89.99	45.879		
11,100.00	7,229.05	7,200.89	7,236.46	99.90	30.76	89.74	-1,251.88	341.62	4,219.23	4,128.96	90.28	46.737		
11,200.00	7,228.64	7,200.17	7,235.74	102.54	30.75	89.71	-1,251.88	341.62	4,310.26	4,219.71	90.55	47.600		
11,300.00	7,228.24	7,199.45	7,235.02	105.19	30.75	89.69	-1,251.87	341.62	4,401.68	4,310.86	90.81	48.469		
11,400.00	7,227.83	7,198.72	7,234.29	107.85	30.75	89.67	-1,251.86	341.62	4,493.46	4,402.39	91.06	49.343		
11,500.00	7,227.42	7,198.00	7,233.57	110.52	30.74	89.64	-1,251.85	341.62	4,585.58	4,494.27	91.31	50.222		
11,600.00	7,227.02	7,197.28	7,232.85	113.20	30.74	89.62	-1,251.84	341.61	4,678.03	4,586.49	91.54	51.106		
11,700.00	7,226.61	7,196.56	7,232.13	115.89	30.74	89.60	-1,251.84	341.61	4,770.78	4,679.02	91.76	51.994		
11,800.00	7,226.21	7,195.83	7,231.40	118.59	30.73	89.57	-1,251.83	341.61	4,863.82	4,771.85	91.97	52.885		
11,900.00	7,225.80	7,195.11	7,230.68	121.29	30.73	89.55	-1,251.82	341.61	4,957.13	4,864.96	92.17	53.780		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
12,000.00	7,225.40	7,194.39	7,229.96	124.00	30.73	89.53	-1,251.81	341.60	5,050.70	4,958.33	92.37	54.679		
12,100.00	7,224.99	7,193.66	7,229.23	126.72	30.73	89.50	-1,251.80	341.60	5,144.50	5,051.94	92.56	55.580		
12,200.00	7,224.58	7,192.94	7,228.51	129.44	30.72	89.48	-1,251.80	341.60	5,238.54	5,145.80	92.74	56.485		
12,300.00	7,224.18	7,192.22	7,227.79	132.17	30.72	89.45	-1,251.79	341.60	5,332.79	5,239.88	92.92	57.392		
12,400.00	7,223.77	7,191.50	7,227.07	134.91	30.72	89.43	-1,251.78	341.59	5,427.25	5,334.16	93.09	58.301		
12,500.00	7,223.37	7,190.77	7,226.34	137.65	30.71	89.41	-1,251.77	341.59	5,521.91	5,428.65	93.25	59.213		
12,600.00	7,222.96	7,190.05	7,225.62	140.39	30.71	89.38	-1,251.76	341.59	5,616.75	5,523.33	93.41	60.127		
12,700.00	7,222.55	7,189.33	7,224.90	143.14	30.71	89.36	-1,251.76	341.59	5,711.76	5,618.20	93.57	61.043		
12,800.00	7,222.15	7,188.60	7,224.17	145.89	30.70	89.34	-1,251.75	341.58	5,806.95	5,713.23	93.72	61.961		
12,900.00	7,221.74	7,187.88	7,223.45	148.65	30.70	89.31	-1,251.74	341.58	5,902.29	5,808.42	93.87	62.881		
13,000.00	7,221.34	7,187.16	7,222.73	151.41	30.70	89.29	-1,251.73	341.58	5,997.78	5,903.78	94.01	63.802		
13,100.00	7,220.93	7,186.44	7,222.01	154.18	30.69	89.27	-1,251.72	341.58	6,093.42	5,999.28	94.14	64.724		
13,200.00	7,220.53	7,185.71	7,221.28	156.94	30.69	89.24	-1,251.72	341.58	6,189.20	6,094.92	94.28	65.648		
13,300.00	7,220.12	7,184.99	7,220.56	159.72	30.69	89.22	-1,251.71	341.57	6,285.11	6,190.70	94.41	66.572		
13,400.00	7,219.71	7,184.27	7,219.84	162.49	30.69	89.20	-1,251.70	341.57	6,381.14	6,286.60	94.54	67.498		
13,500.00	7,219.31	7,183.54	7,219.11	165.27	30.68	89.17	-1,251.69	341.57	6,477.29	6,382.63	94.66	68.425		
13,600.00	7,218.90	7,182.82	7,218.39	168.05	30.68	89.15	-1,251.68	341.57	6,573.56	6,478.78	94.78	69.353		
13,700.00	7,218.50	7,182.10	7,217.67	170.83	30.68	89.13	-1,251.68	341.56	6,669.94	6,575.03	94.90	70.281		
13,800.00	7,218.09	7,181.37	7,216.95	173.61	30.67	89.10	-1,251.67	341.56	6,766.42	6,671.40	95.02	71.210		
13,900.00	7,217.69	7,180.65	7,216.22	176.40	30.67	89.08	-1,251.66	341.56	6,863.00	6,767.87	95.13	72.140		
14,000.00	7,217.28	7,179.93	7,215.50	179.19	30.67	89.06	-1,251.65	341.56	6,959.68	6,864.44	95.25	73.071		
14,100.00	7,216.87	7,179.21	7,214.78	181.98	30.66	89.03	-1,251.64	341.55	7,056.46	6,961.10	95.36	74.001		
14,200.00	7,216.47	7,178.48	7,214.06	184.78	30.66	89.01	-1,251.64	341.55	7,153.32	7,057.85	95.46	74.932		
14,300.00	7,216.06	7,177.76	7,213.33	187.57	30.66	88.99	-1,251.63	341.55	7,250.26	7,154.69	95.57	75.864		
14,400.00	7,215.66	7,177.04	7,212.61	190.37	30.65	88.96	-1,251.62	341.55	7,347.29	7,251.62	95.67	76.795		
14,500.00	7,215.25	7,176.31	7,211.89	193.17	30.65	88.94	-1,251.61	341.54	7,444.40	7,348.62	95.78	77.727		
14,600.00	7,214.85	7,175.59	7,211.16	195.97	30.65	88.92	-1,251.60	341.54	7,541.58	7,445.70	95.88	78.659		
14,700.00	7,214.44	7,174.87	7,210.44	198.77	30.64	88.89	-1,251.60	341.54	7,638.83	7,542.86	95.98	79.591		
14,800.00	7,214.03	7,174.15	7,209.72	201.58	30.64	88.87	-1,251.59	341.54	7,736.16	7,640.08	96.07	80.523		
14,900.00	7,213.63	7,173.42	7,209.00	204.38	30.64	88.85	-1,251.58	341.54	7,833.55	7,737.38	96.17	81.455		
15,000.00	7,213.22	7,172.70	7,208.27	207.19	30.64	88.82	-1,251.57	341.53	7,931.01	7,834.74	96.27	82.387		
15,100.00	7,212.82	7,171.98	7,207.55	210.00	30.63	88.80	-1,251.56	341.53	8,028.53	7,932.17	96.36	83.318		
15,200.00	7,212.41	7,171.25	7,206.83	212.81	30.63	88.77	-1,251.56	341.53	8,126.10	8,029.65	96.45	84.250		
15,300.00	7,212.01	7,170.53	7,206.10	215.62	30.63	88.75	-1,251.55	341.53	8,223.74	8,127.20	96.54	85.181		
15,400.00	7,211.60	7,169.81	7,205.38	218.43	30.62	88.73	-1,251.54	341.52	8,321.44	8,224.80	96.64	86.112		
15,500.00	7,211.19	7,169.09	7,204.66	221.25	30.62	88.70	-1,251.53	341.52	8,419.18	8,322.46	96.73	87.042		
15,600.00	7,210.79	7,168.36	7,203.94	224.06	30.62	88.68	-1,251.52	341.52	8,516.98	8,420.17	96.81	87.973		
15,700.00	7,210.38	7,167.64	7,203.21	226.88	30.61	88.66	-1,251.52	341.52	8,614.83	8,517.93	96.90	88.902		
15,794.94	7,210.00	7,166.95	7,202.53	229.55	30.61	88.64	-1,251.51	341.51	8,707.78	8,610.80	96.99	89.785		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	68.00	3.28	3.28	172.15	-3,979.30	548.31	4,017.47					
100.00	100.00	31.39	99.39	3.28	3.28	172.15	-3,979.30	548.29	4,016.90	4,010.33	6.57	611.830		
200.00	200.00	127.11	195.11	3.34	3.30	172.16	-3,979.38	548.08	4,016.95	4,010.31	6.63	605.545		
300.00	299.98	218.10	286.10	3.44	3.36	-10.50	-3,979.64	547.81	4,015.47	4,008.67	6.80	590.682		
400.00	399.84	313.33	381.32	3.59	3.47	-10.52	-3,980.05	547.73	4,010.74	4,003.68	7.06	568.077		
500.00	499.45	415.25	483.25	3.79	3.63	-10.58	-3,980.48	547.77	4,002.60	3,995.17	7.43	539.005		
600.00	598.70	513.41	581.41	4.03	3.83	-10.65	-3,980.90	547.77	3,991.04	3,983.17	7.87	507.248		
700.00	697.47	615.55	683.54	4.31	4.08	-10.75	-3,981.35	547.52	3,976.05	3,967.66	8.39	473.896		
800.00	795.62	717.38	785.37	4.64	4.35	-10.86	-3,981.70	547.03	3,957.57	3,948.60	8.97	441.079		
900.00	893.06	808.62	876.61	5.00	4.62	-10.99	-3,982.12	546.33	3,935.81	3,926.23	9.57	411.067		
1,000.00	989.64	908.40	976.38	5.40	4.93	-11.15	-3,982.65	545.28	3,910.74	3,900.50	10.24	381.756		
1,100.00	1,085.27	986.48	1,054.46	5.83	5.19	-11.32	-3,983.28	544.20	3,882.59	3,871.71	10.88	356.845		
1,200.00	1,179.82	1,071.60	1,139.56	6.29	5.47	-11.51	-3,984.28	542.79	3,851.50	3,839.93	11.57	332.931		
1,300.00	1,273.17	1,161.27	1,229.20	6.79	5.79	-11.73	-3,985.53	541.20	3,817.35	3,805.06	12.30	310.410		
1,400.00	1,365.21	1,258.95	1,326.85	7.33	6.14	-11.99	-3,986.90	539.38	3,780.03	3,766.96	13.08	289.047		
1,500.00	1,455.84	1,357.01	1,424.89	7.89	6.50	-12.28	-3,988.10	537.32	3,739.38	3,725.50	13.88	269.430		
1,600.00	1,544.94	1,448.18	1,516.03	8.50	6.84	-12.61	-3,989.11	535.43	3,695.55	3,680.87	14.67	251.853		
1,700.00	1,632.39	1,533.03	1,600.86	9.13	7.16	-12.98	-3,990.06	533.72	3,648.71	3,633.25	15.46	235.998		
1,800.00	1,718.11	1,617.31	1,685.11	9.80	7.48	-13.39	-3,991.11	532.13	3,599.03	3,582.78	16.26	221.362		
1,900.00	1,802.44	1,715.11	1,782.89	10.49	7.86	-13.66	-3,992.07	530.28	3,546.94	3,529.83	17.11	207.315		
2,000.00	1,886.68	1,789.81	1,857.58	11.20	8.15	-13.82	-3,992.80	528.97	3,494.76	3,476.88	17.89	195.394		
2,100.00	1,970.92	1,870.75	1,938.51	11.93	8.47	-14.00	-3,993.74	527.67	3,442.79	3,424.10	18.70	184.154		
2,200.00	2,055.17	1,951.40	2,019.13	12.66	8.79	-14.17	-3,994.78	526.30	3,390.93	3,371.42	19.51	173.762		
2,300.00	2,139.41	2,030.64	2,098.36	13.40	9.11	-14.35	-3,995.94	524.84	3,339.23	3,318.89	20.34	164.167		
2,400.00	2,223.66	2,109.78	2,177.47	14.14	9.43	-14.53	-3,997.27	523.35	3,287.72	3,266.55	21.18	155.264		
2,500.00	2,307.90	2,196.52	2,264.18	14.89	9.78	-14.73	-3,998.77	521.66	3,236.29	3,214.25	22.04	146.841		
2,600.00	2,392.14	2,312.83	2,380.46	15.65	10.25	-15.02	-4,000.18	519.53	3,184.46	3,161.48	22.99	138.529		
2,700.00	2,476.39	2,431.80	2,499.41	16.41	10.73	-15.34	-4,000.33	517.71	3,131.82	3,107.89	23.94	130.833		
2,800.00	2,560.63	2,540.23	2,607.82	17.17	11.18	-15.65	-3,999.22	516.12	3,078.23	3,053.37	24.86	123.833		
2,900.00	2,644.88	2,624.73	2,692.31	17.93	11.52	-15.90	-3,998.12	514.83	3,024.49	2,998.76	25.73	117.564		
3,000.00	2,729.12	2,709.11	2,776.67	18.70	11.87	-16.16	-3,997.03	513.45	2,970.70	2,944.17	26.60	111.686		
3,100.00	2,813.36	2,788.95	2,856.49	19.47	12.20	-16.41	-3,996.05	512.06	2,917.13	2,889.66	27.47	106.198		
3,200.00	2,897.61	2,871.87	2,939.40	20.25	12.54	-16.68	-3,995.12	510.55	2,863.61	2,835.26	28.35	101.011		
3,300.00	2,981.85	2,952.72	3,020.23	21.02	12.87	-16.95	-3,994.25	509.05	2,810.17	2,780.94	29.23	96.135		
3,400.00	3,066.10	3,035.82	3,103.31	21.80	13.22	-17.24	-3,993.46	507.43	2,756.88	2,726.76	30.12	91.524		
3,500.00	3,150.34	3,123.78	3,191.24	22.58	13.58	-17.55	-3,992.55	505.65	2,703.55	2,672.53	31.02	87.148		
3,600.00	3,234.58	3,211.48	3,278.92	23.35	13.95	-17.88	-3,991.50	503.93	2,650.15	2,618.22	31.93	83.010		
3,700.00	3,318.83	3,285.89	3,353.31	24.13	14.26	-18.17	-3,990.70	502.49	2,596.92	2,564.10	32.82	79.126		
3,800.00	3,403.07	3,363.66	3,431.06	24.92	14.59	-18.48	-3,990.11	500.87	2,543.98	2,510.26	33.72	75.434		
3,900.00	3,487.32	3,443.58	3,510.96	25.70	14.92	-18.80	-3,989.72	498.96	2,491.28	2,456.64	34.64	71.926		
4,000.00	3,571.56	3,524.52	3,591.87	26.48	15.26	-19.13	-3,989.49	496.82	2,438.75	2,403.19	35.55	68.592		
4,100.00	3,655.80	3,604.67	3,672.00	27.27	15.59	-19.48	-3,989.37	494.75	2,386.42	2,349.94	36.48	65.421		
4,200.00	3,740.05	3,687.74	3,755.04	28.05	15.94	-19.86	-3,989.27	492.91	2,334.25	2,296.84	37.41	62.401		
4,300.00	3,824.29	3,768.84	3,836.13	28.84	16.28	-20.25	-3,989.18	491.32	2,282.24	2,243.90	38.34	59.522		
4,400.00	3,908.54	3,852.24	3,919.51	29.62	16.63	-20.66	-3,989.23	489.57	2,230.42	2,191.13	39.28	56.777		
4,500.00	3,992.78	3,937.23	4,004.49	30.41	16.99	-21.12	-3,989.18	488.05	2,178.68	2,138.45	40.23	54.156		
4,600.00	4,077.03	4,021.80	4,089.04	31.20	17.35	-21.59	-3,989.09	486.64	2,127.01	2,085.83	41.18	51.650		
4,700.00	4,161.27	4,104.77	4,172.01	31.98	17.70	-22.09	-3,988.93	485.55	2,075.49	2,033.35	42.14	49.250		
4,800.00	4,245.51	4,188.76	4,255.99	32.77	18.05	-22.64	-3,988.56	485.26	2,024.12	1,981.01	43.11	46.952		
4,900.00	4,329.76	4,278.25	4,345.48	33.56	18.42	-23.30	-3,987.80	485.80	1,972.82	1,928.74	44.08	44.754		
5,000.00	4,414.00	4,376.36	4,443.58	34.35	18.83	-24.06	-3,986.40	486.55	1,921.29	1,876.25	45.04	42.656		
5,100.00	4,498.25	4,461.68	4,528.88	35.14	19.19	-24.77	-3,984.70	487.15	1,869.49	1,823.46	46.03	40.611		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERRY 22-2(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,538.73	4,605.91	35.93	19.51	-25.45	-3,983.24	487.83	1,818.04	1,770.98	47.06	38.634		
5,300.00	4,666.73	4,612.22	4,679.40	36.72	19.82	-26.12	-3,982.29	488.26	1,767.23	1,719.12	48.11	36.736		
5,400.00	4,750.98	4,683.04	4,750.22	37.51	20.11	-26.78	-3,981.92	488.60	1,717.24	1,668.06	49.18	34.918		
5,500.00	4,835.22	4,764.23	4,831.40	38.30	20.45	-27.57	-3,981.94	489.01	1,667.97	1,617.73	50.24	33.201		
5,600.00	4,919.47	4,849.17	4,916.34	39.09	20.81	-28.44	-3,981.97	489.44	1,618.99	1,567.69	51.30	31.559		
5,700.00	5,003.71	4,933.68	5,000.85	39.88	21.16	-29.35	-3,982.05	489.63	1,570.29	1,517.91	52.38	29.978		
5,800.00	5,088.06	5,017.21	5,084.38	40.67	21.51	-30.13	-3,982.12	489.93	1,522.12	1,468.64	53.48	28.460		
5,900.00	5,173.83	5,103.73	5,170.90	41.44	21.88	-30.59	-3,982.11	490.42	1,476.40	1,421.81	54.59	27.045		
6,000.00	5,261.34	5,194.55	5,261.71	42.18	22.26	-31.11	-3,981.91	491.04	1,433.60	1,377.91	55.69	25.742		
6,100.00	5,350.49	5,293.22	5,360.38	42.88	22.67	-31.73	-3,981.16	491.79	1,393.48	1,336.72	56.76	24.549		
6,200.00	5,441.16	5,385.27	5,452.41	43.56	23.06	-32.30	-3,979.74	492.97	1,356.06	1,298.18	57.88	23.430		
6,300.00	5,533.25	5,492.14	5,559.20	44.20	23.51	-33.10	-3,976.69	495.71	1,321.24	1,262.32	58.92	22.423		
6,400.00	5,626.65	5,577.27	5,644.23	44.82	23.87	-33.68	-3,973.52	498.42	1,289.14	1,229.04	60.10	21.450		
6,500.00	5,721.23	5,663.36	5,730.26	45.40	24.24	-34.21	-3,971.34	500.46	1,260.77	1,199.51	61.25	20.583		
6,600.00	5,816.89	5,754.17	5,821.05	45.94	24.62	-34.71	-3,970.07	501.76	1,235.94	1,173.59	62.35	19.822		
6,700.00	5,913.51	5,848.92	5,915.80	46.45	25.02	-35.16	-3,969.49	502.27	1,214.34	1,150.94	63.39	19.155		
6,800.00	6,010.97	5,948.72	6,015.60	46.93	25.45	-35.59	-3,969.09	502.51	1,195.72	1,131.35	64.38	18.574		
6,900.00	6,109.15	6,049.19	6,116.07	47.38	25.87	-35.96	-3,968.44	502.46	1,179.67	1,114.35	65.32	18.060		
7,000.00	6,207.93	6,148.99	6,215.86	47.80	26.30	-36.26	-3,967.87	502.29	1,166.50	1,100.26	66.23	17.612		
7,100.00	6,307.19	6,251.56	6,318.43	48.18	26.73	-36.51	-3,966.99	502.06	1,155.92	1,088.83	67.09	17.230		
7,200.00	6,406.82	6,350.69	6,417.55	48.53	27.15	-36.69	-3,965.95	501.79	1,147.98	1,080.06	67.92	16.901		
7,300.00	6,506.68	6,449.68	6,516.54	48.84	27.57	-36.80	-3,965.11	501.55	1,143.04	1,074.32	68.72	16.634		
7,400.00	6,606.66	6,549.77	6,616.63	49.10	28.00	-123.82	-3,964.42	500.95	1,140.83	1,071.40	69.43	16.431		
7,406.61	6,613.27	6,556.27	6,623.12	49.12	28.02	-123.82	-3,964.37	500.91	1,140.81	1,071.33	69.48	16.420 CC, ES		
7,500.00	6,706.21	6,648.50	6,715.35	49.35	28.42	-123.88	-3,963.62	500.69	1,144.68	1,074.47	70.21	16.304		
7,600.00	6,803.22	6,748.04	6,814.88	49.59	28.84	-123.96	-3,962.40	500.95	1,157.42	1,086.33	71.09	16.282 SF		
7,700.00	6,895.32	6,842.49	6,909.33	49.82	29.24	-123.84	-3,961.20	500.74	1,179.08	1,107.04	72.04	16.366		
7,800.00	6,980.23	6,924.59	6,991.42	50.03	29.59	-123.21	-3,960.17	500.57	1,210.38	1,137.29	73.08	16.562		
7,900.00	7,055.85	6,993.39	7,060.21	50.21	29.88	-121.72	-3,959.18	501.05	1,251.82	1,177.65	74.17	16.878		
8,000.00	7,120.34	7,049.85	7,116.66	50.36	30.12	-119.03	-3,958.42	501.84	1,303.29	1,228.05	75.24	17.321		
8,100.00	7,172.10	7,106.23	7,160.60	50.47	30.36	-114.71	-3,958.05	502.53	1,364.04	1,287.71	76.33	17.870		
8,200.00	7,209.85	7,130.01	7,196.80	50.55	30.46	-108.56	-3,957.86	503.13	1,432.73	1,355.49	77.25	18.548		
8,300.00	7,232.68	7,151.20	7,218.00	50.61	30.55	-99.87	-3,957.75	503.48	1,507.63	1,429.49	78.14	19.295		
8,400.00	7,240.00	7,156.87	7,223.67	50.65	30.58	-88.69	-3,957.72	503.58	1,586.75	1,507.82	78.93	20.103		
8,500.00	7,239.60	7,154.80	7,221.60	50.69	30.57	-88.56	-3,957.73	503.54	1,668.30	1,588.66	79.64	20.948		
8,600.00	7,239.19	7,152.73	7,219.53	50.75	30.56	-88.44	-3,957.74	503.51	1,751.77	1,671.48	80.29	21.819		
8,700.00	7,238.78	7,150.66	7,217.46	50.85	30.55	-88.31	-3,957.75	503.47	1,836.88	1,756.00	80.88	22.712		
8,800.00	7,238.38	7,148.59	7,215.39	51.02	30.54	-88.19	-3,957.76	503.44	1,923.43	1,842.01	81.42	23.624		
8,900.00	7,237.97	7,146.52	7,213.32	51.32	30.53	-88.06	-3,957.77	503.41	2,011.22	1,929.31	81.91	24.554		
9,000.00	7,237.57	7,144.45	7,211.25	51.95	30.52	-87.94	-3,957.78	503.37	2,100.10	2,017.74	82.36	25.499		
9,100.00	7,237.16	7,142.38	7,209.18	53.10	30.51	-87.81	-3,957.80	503.34	2,189.94	2,107.17	82.77	26.458		
9,200.00	7,236.76	7,140.31	7,207.11	54.69	30.51	-87.68	-3,957.81	503.30	2,280.62	2,197.47	83.15	27.429		
9,300.00	7,236.35	7,138.24	7,205.04	56.53	30.50	-87.56	-3,957.82	503.27	2,372.05	2,288.56	83.49	28.410		
9,400.00	7,235.94	7,136.17	7,202.97	58.53	30.49	-87.43	-3,957.83	503.23	2,464.15	2,380.33	83.81	29.401		
9,500.00	7,235.54	7,134.10	7,200.90	60.62	30.48	-87.31	-3,957.84	503.20	2,556.83	2,472.73	84.10	30.401		
9,600.00	7,235.13	7,132.03	7,198.83	62.80	30.47	-87.18	-3,957.85	503.16	2,650.05	2,565.67	84.38	31.408		
9,700.00	7,234.73	7,129.97	7,196.76	65.03	30.46	-87.06	-3,957.86	503.13	2,743.74	2,659.12	84.63	32.422		
9,800.00	7,234.32	7,127.90	7,194.69	67.32	30.45	-86.93	-3,957.87	503.10	2,837.86	2,753.00	84.86	33.441		
9,900.00	7,233.92	7,125.83	7,192.62	69.66	30.44	-86.80	-3,957.88	503.06	2,932.37	2,847.30	85.08	34.467		
10,000.00	7,233.51	7,123.76	7,190.55	72.03	30.43	-86.68	-3,957.90	503.03	3,027.23	2,941.95	85.28	35.497		
10,100.00	7,233.10	7,121.69	7,188.48	74.45	30.43	-86.55	-3,957.91	502.99	3,122.42	3,036.94	85.47	36.531		
10,200.00	7,232.70	7,119.62	7,186.42	76.89	30.42	-86.43	-3,957.92	502.96	3,217.89	3,132.24	85.65	37.570		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERRY 22-2(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	7,117.55	7,184.35	79.36	30.41	-86.30	-3,957.93	502.92	3,313.62	3,227.81	85.82	38.612		
10,400.00	7,231.89	7,115.48	7,182.28	81.86	30.40	-86.18	-3,957.94	502.89	3,409.60	3,323.63	85.98	39.657		
10,500.00	7,231.48	7,113.41	7,180.21	84.38	30.39	-86.05	-3,957.95	502.86	3,505.81	3,419.68	86.13	40.705		
10,600.00	7,231.08	7,111.34	7,178.14	86.93	30.38	-85.93	-3,957.96	502.82	3,602.22	3,515.95	86.27	41.756		
10,700.00	7,230.67	7,109.27	7,176.07	89.49	30.37	-85.80	-3,957.97	502.79	3,698.82	3,612.42	86.40	42.809		
10,800.00	7,230.26	7,107.20	7,174.00	92.07	30.36	-85.68	-3,957.98	502.75	3,795.59	3,709.06	86.53	43.864		
10,900.00	7,229.86	7,105.13	7,171.93	94.67	30.36	-85.55	-3,957.99	502.72	3,892.53	3,805.88	86.65	44.921		
11,000.00	7,229.45	7,103.06	7,169.86	97.28	30.35	-85.43	-3,958.01	502.68	3,989.62	3,902.85	86.77	45.980		
11,100.00	7,229.05	7,100.99	7,167.79	99.90	30.34	-85.30	-3,958.02	502.65	4,086.84	3,999.96	86.88	47.040		
11,200.00	7,228.64	7,101.11	7,165.72	102.54	30.34	-85.18	-3,958.03	502.61	4,184.20	4,097.20	87.00	48.097		
11,300.00	7,228.24	7,103.18	7,163.65	105.19	30.35	-85.05	-3,958.04	502.58	4,281.67	4,194.56	87.12	49.149		
11,400.00	7,227.83	7,105.25	7,161.58	107.85	30.36	-84.93	-3,958.05	502.55	4,379.26	4,292.03	87.23	50.203		
11,500.00	7,227.42	7,107.32	7,159.51	110.52	30.37	-84.80	-3,958.06	502.51	4,476.96	4,389.61	87.34	51.257		
11,600.00	7,227.02	7,109.39	7,157.44	113.20	30.37	-84.68	-3,958.07	502.48	4,574.75	4,487.30	87.45	52.311		
11,700.00	7,226.61	7,111.46	7,155.37	115.89	30.38	-84.55	-3,958.08	502.44	4,672.64	4,585.08	87.56	53.365		
11,800.00	7,226.21	7,113.53	7,153.30	118.59	30.39	-84.43	-3,958.09	502.41	4,770.61	4,682.95	87.66	54.420		
11,900.00	7,225.80	7,115.60	7,151.24	121.29	30.40	-84.30	-3,958.10	502.37	4,868.66	4,780.90	87.76	55.475		
12,000.00	7,225.40	7,117.67	7,149.17	124.00	30.41	-84.18	-3,958.12	502.34	4,966.79	4,878.93	87.86	56.529		
12,100.00	7,224.99	7,119.74	7,147.10	126.72	30.42	-84.05	-3,958.13	502.31	5,065.00	4,977.04	87.96	57.584		
12,200.00	7,224.58	7,121.81	7,145.03	129.44	30.43	-83.93	-3,958.14	502.27	5,163.27	5,075.22	88.05	58.638		
12,300.00	7,224.18	7,081.13	7,147.93	132.17	30.25	-84.10	-3,958.14	502.33	5,261.62	5,173.65	87.96	59.815		
12,400.00	7,223.77	7,079.54	7,146.35	134.91	30.25	-84.01	-3,958.15	502.30	5,360.02	5,271.98	88.04	60.882		
12,500.00	7,223.37	7,077.96	7,144.76	137.65	30.24	-83.91	-3,958.16	502.27	5,458.47	5,370.36	88.11	61.948		
12,600.00	7,222.96	7,076.39	7,143.19	140.39	30.23	-83.82	-3,958.18	502.25	5,556.98	5,468.80	88.19	63.014		
12,700.00	7,222.55	7,074.82	7,141.63	143.14	30.23	-83.72	-3,958.19	502.22	5,655.54	5,567.29	88.26	64.080		
12,800.00	7,222.15	7,073.26	7,140.07	145.89	30.22	-83.63	-3,958.20	502.20	5,754.16	5,665.83	88.33	65.146		
12,900.00	7,221.74	7,071.71	7,138.52	148.65	30.21	-83.54	-3,958.21	502.18	5,852.81	5,764.42	88.40	66.211		
13,000.00	7,221.34	7,070.17	7,136.98	151.41	30.21	-83.44	-3,958.23	502.15	5,951.52	5,863.05	88.46	67.276		
13,100.00	7,220.93	7,068.63	7,135.44	154.18	30.20	-83.35	-3,958.24	502.13	6,050.26	5,961.73	88.53	68.340		
13,200.00	7,220.53	7,067.11	7,133.91	156.94	30.19	-83.26	-3,958.25	502.10	6,149.04	6,060.45	88.60	69.404		
13,300.00	7,220.12	7,065.59	7,132.39	159.72	30.19	-83.17	-3,958.27	502.08	6,247.87	6,159.20	88.66	70.468		
13,400.00	7,219.71	7,064.07	7,130.88	162.49	30.18	-83.08	-3,958.28	502.06	6,346.73	6,258.00	88.73	71.530		
13,500.00	7,219.31	7,062.57	7,129.38	165.27	30.18	-82.99	-3,958.29	502.03	6,445.62	6,356.83	88.79	72.592		
13,600.00	7,218.90	7,061.07	7,127.88	168.05	30.17	-82.90	-3,958.31	502.01	6,544.55	6,455.69	88.86	73.654		
13,700.00	7,218.50	7,059.58	7,126.39	170.83	30.16	-82.81	-3,958.32	501.99	6,643.51	6,554.59	88.92	74.714		
13,800.00	7,218.09	7,058.09	7,124.90	173.61	30.16	-82.72	-3,958.34	501.97	6,742.50	6,653.51	88.98	75.774		
13,900.00	7,217.69	7,056.62	7,123.43	176.40	30.15	-82.63	-3,958.35	501.94	6,841.51	6,752.47	89.04	76.833		
14,000.00	7,217.28	7,055.15	7,121.96	179.19	30.14	-82.55	-3,958.37	501.92	6,940.56	6,851.45	89.11	77.891		
14,100.00	7,216.87	7,053.68	7,120.49	181.98	30.14	-82.46	-3,958.38	501.90	7,039.63	6,950.46	89.17	78.949		
14,200.00	7,216.47	7,052.23	7,119.04	184.78	30.13	-82.37	-3,958.40	501.88	7,138.73	7,049.50	89.23	80.005		
14,300.00	7,216.06	7,050.78	7,117.59	187.57	30.13	-82.29	-3,958.41	501.85	7,237.85	7,148.56	89.29	81.060		
14,400.00	7,215.66	7,049.34	7,116.15	190.37	30.12	-82.20	-3,958.43	501.83	7,337.00	7,247.65	89.35	82.115		
14,500.00	7,215.25	7,047.90	7,114.71	193.17	30.11	-82.11	-3,958.44	501.81	7,436.17	7,346.75	89.41	83.168		
14,600.00	7,214.85	7,046.47	7,113.28	195.97	30.11	-82.03	-3,958.46	501.79	7,535.36	7,445.88	89.47	84.220		
14,700.00	7,214.44	7,045.05	7,111.86	198.77	30.10	-81.94	-3,958.47	501.77	7,634.57	7,545.03	89.53	85.272		
14,800.00	7,214.03	7,043.64	7,110.45	201.58	30.10	-81.86	-3,958.49	501.75	7,733.80	7,644.20	89.59	86.322		
14,900.00	7,213.63	7,042.23	7,109.04	204.38	30.09	-81.78	-3,958.50	501.73	7,833.05	7,743.39	89.65	87.371		
15,000.00	7,213.22	7,040.83	7,107.64	207.19	30.08	-81.69	-3,958.52	501.71	7,932.31	7,842.60	89.71	88.418		
15,100.00	7,212.82	7,039.43	7,106.24	210.00	30.08	-81.61	-3,958.54	501.69	8,031.60	7,941.83	89.77	89.465		
15,200.00	7,212.41	7,038.04	7,104.85	212.81	30.07	-81.53	-3,958.55	501.67	8,130.90	8,041.07	89.83	90.510		
15,300.00	7,212.01	7,036.66	7,103.47	215.62	30.07	-81.44	-3,958.57	501.65	8,230.22	8,140.33	89.89	91.554		
15,400.00	7,211.60	7,035.28	7,102.10	218.43	30.06	-81.36	-3,958.59	501.63	8,329.56	8,239.60	89.96	92.597		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERRY 22-2(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,500.00	7,211.19	7,033.91	7,100.73	221.25	30.05	-81.28	-3,958.60	501.61	8,428.91	8,338.90	90.02	93.638	
15,600.00	7,210.79	7,032.55	7,099.36	224.06	30.05	-81.20	-3,958.62	501.59	8,528.28	8,438.20	90.08	94.678	
15,700.00	7,210.38	7,031.19	7,098.01	226.88	30.04	-81.12	-3,958.64	501.57	8,627.66	8,537.52	90.14	95.717	
15,794.94	7,210.00	7,029.91	7,096.73	229.55	30.04	-81.04	-3,958.65	501.55	8,722.03	8,631.83	90.19	96.702	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	22.23	-1.77	3.28	3.28	172.15	-3,979.30	548.30	4,016.90					
100.00	100.00	115.69	91.69	3.28	3.29	172.16	-3,979.45	548.20	4,017.04	4,010.46	6.58	610.791		
200.00	200.00	214.87	190.87	3.34	3.36	172.16	-3,979.69	548.08	4,017.27	4,010.58	6.69	600.283		
300.00	299.98	320.62	296.62	3.44	3.48	-10.50	-3,979.87	547.87	4,015.69	4,008.77	6.92	580.408		
400.00	399.84	420.81	396.81	3.59	3.65	-10.52	-3,980.01	547.53	4,010.63	4,003.40	7.24	554.273		
500.00	499.45	522.49	498.48	3.79	3.86	-10.57	-3,980.09	547.22	4,002.10	3,994.45	7.65	523.486		
600.00	598.70	620.26	596.25	4.03	4.09	-10.64	-3,980.19	546.85	3,990.17	3,982.05	8.12	491.297		
700.00	697.47	720.55	696.55	4.31	4.36	-10.74	-3,980.26	546.56	3,974.82	3,966.15	8.67	458.503		
800.00	795.62	815.52	791.52	4.64	4.64	-10.86	-3,980.36	546.36	3,956.14	3,946.88	9.26	427.442		
900.00	893.06	914.31	890.30	5.00	4.95	-11.00	-3,980.48	546.05	3,934.11	3,924.21	9.90	397.445		
1,000.00	989.64	1,009.31	985.30	5.40	5.26	-11.17	-3,980.62	545.77	3,908.78	3,898.21	10.57	369.862		
1,100.00	1,085.27	1,108.67	1,084.66	5.83	5.60	-11.37	-3,980.72	545.50	3,880.12	3,868.83	11.29	343.821		
1,200.00	1,179.82	1,198.76	1,174.76	6.29	5.92	-11.59	-3,980.84	545.17	3,848.22	3,836.23	12.00	320.705		
1,300.00	1,273.17	1,285.03	1,261.02	6.79	6.23	-11.83	-3,981.09	544.81	3,813.25	3,800.53	12.72	299.684		
1,400.00	1,365.21	1,377.55	1,353.54	7.33	6.57	-12.12	-3,981.46	544.37	3,775.21	3,761.72	13.49	279.808		
1,500.00	1,455.84	1,473.74	1,449.73	7.89	6.93	-12.45	-3,981.79	543.83	3,733.98	3,719.69	14.29	261.277		
1,600.00	1,544.94	1,563.67	1,539.66	8.50	7.28	-12.81	-3,982.00	543.22	3,689.58	3,674.49	15.08	244.596		
1,700.00	1,632.39	1,650.42	1,626.40	9.13	7.61	-13.21	-3,982.22	542.65	3,642.20	3,626.32	15.88	229.355		
1,800.00	1,718.11	1,734.65	1,710.63	9.80	7.94	-13.65	-3,982.46	542.13	3,591.90	3,575.22	16.68	215.352		
1,900.00	1,802.44	1,815.82	1,791.80	10.49	8.26	-13.92	-3,982.76	541.54	3,539.49	3,522.01	17.48	202.533		
2,000.00	1,886.68	1,896.38	1,872.36	11.20	8.57	-14.11	-3,983.16	540.87	3,487.07	3,468.79	18.27	190.825		
2,100.00	1,970.92	1,980.38	1,956.35	11.93	8.91	-14.31	-3,983.66	540.01	3,434.73	3,415.64	19.09	179.883		
2,200.00	2,055.17	2,070.44	2,046.40	12.66	9.27	-14.52	-3,984.17	538.92	3,382.39	3,362.44	19.94	169.599		
2,300.00	2,139.41	2,159.64	2,135.59	13.40	9.63	-14.75	-3,984.52	537.82	3,329.92	3,309.12	20.80	160.108		
2,400.00	2,223.66	2,250.72	2,226.66	14.14	10.00	-14.98	-3,984.77	536.58	3,277.36	3,255.70	21.66	151.277		
2,500.00	2,307.90	2,342.68	2,318.62	14.89	10.37	-15.22	-3,984.77	535.38	3,224.63	3,202.09	22.54	143.066		
2,600.00	2,392.14	2,430.19	2,406.12	15.65	10.73	-15.46	-3,984.60	534.31	3,171.78	3,148.38	23.41	135.505		
2,700.00	2,476.39	2,513.67	2,489.60	16.41	11.07	-15.70	-3,984.41	533.44	3,118.97	3,094.70	24.27	128.510		
2,800.00	2,560.63	2,599.89	2,575.82	17.17	11.42	-15.96	-3,984.15	532.68	3,066.17	3,041.02	25.15	121.936		
2,900.00	2,644.88	2,683.96	2,659.88	17.93	11.77	-16.23	-3,983.86	531.96	3,013.39	2,987.37	26.02	115.806		
3,000.00	2,729.12	2,764.11	2,740.02	18.70	12.10	-16.49	-3,983.63	531.27	2,960.70	2,933.81	26.89	110.090		
3,100.00	2,813.36	2,847.82	2,823.74	19.47	12.44	-16.77	-3,983.49	530.61	2,908.17	2,880.39	27.78	104.690		
3,200.00	2,897.61	2,929.83	2,905.74	20.25	12.78	-17.06	-3,983.29	530.03	2,855.65	2,826.98	28.67	99.618		
3,300.00	2,981.85	3,004.53	2,980.44	21.02	13.09	-17.33	-3,983.29	529.64	2,803.42	2,773.87	29.55	94.883		
3,400.00	3,066.10	3,084.64	3,060.55	21.80	13.42	-17.64	-3,983.47	529.26	2,751.45	2,721.01	30.44	90.384		
3,500.00	3,150.34	3,170.49	3,146.40	22.58	13.78	-17.97	-3,983.74	528.81	2,699.61	2,668.26	31.35	86.108		
3,600.00	3,234.58	3,251.41	3,227.31	23.35	14.12	-18.30	-3,983.99	528.36	2,647.82	2,615.56	32.26	82.080		
3,700.00	3,318.83	3,330.12	3,306.03	24.13	14.45	-18.63	-3,984.41	527.90	2,596.29	2,563.12	33.17	78.274		
3,800.00	3,403.07	3,414.55	3,390.45	24.92	14.80	-18.99	-3,985.04	527.34	2,545.00	2,510.90	34.09	74.652		
3,900.00	3,487.32	3,523.14	3,499.03	25.70	15.25	-19.49	-3,985.13	526.81	2,493.27	2,458.23	35.04	71.163		
4,000.00	3,571.56	3,618.06	3,593.96	26.48	15.65	-19.96	-3,984.47	526.68	2,441.07	2,405.10	35.97	67.866		
4,100.00	3,655.80	3,707.98	3,683.87	27.27	16.02	-20.43	-3,983.54	526.52	2,388.70	2,351.80	36.90	64.732		
4,200.00	3,740.05	3,796.59	3,772.47	28.05	16.39	-20.91	-3,982.42	526.33	2,336.23	2,298.40	37.84	61.745		
4,300.00	3,824.29	3,874.86	3,850.74	28.84	16.72	-21.36	-3,981.43	526.15	2,283.89	2,245.11	38.78	58.896		
4,400.00	3,908.54	3,954.20	3,930.08	29.62	17.05	-21.82	-3,980.64	525.85	2,231.85	2,192.13	39.73	56.179		
4,500.00	3,992.78	4,034.98	4,010.85	30.41	17.39	-22.31	-3,980.00	525.50	2,180.09	2,139.40	40.68	53.585		
4,600.00	4,077.03	4,115.44	4,091.30	31.20	17.73	-22.82	-3,979.48	525.04	2,128.56	2,086.91	41.65	51.107		
4,700.00	4,161.27	4,190.90	4,166.76	31.98	18.05	-23.32	-3,979.26	524.57	2,077.43	2,034.80	42.63	48.734		
4,800.00	4,245.51	4,275.26	4,251.12	32.77	18.40	-23.89	-3,979.19	524.08	2,026.65	1,983.04	43.61	46.476		
4,900.00	4,329.76	4,357.99	4,333.85	33.56	18.75	-24.48	-3,979.11	523.63	1,976.03	1,931.43	44.60	44.309		
5,000.00	4,414.00	4,441.15	4,417.01	34.35	19.10	-25.11	-3,979.11	523.22	1,925.67	1,880.08	45.59	42.234		
5,100.00	4,498.25	4,526.13	4,501.98	35.14	19.46	-25.78	-3,979.08	522.85	1,875.51	1,828.91	46.60	40.246		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,611.11	4,586.96	35.93	19.82	-26.49	-3,979.01	522.45	1,825.50	1,777.89	47.62	38.337		
5,300.00	4,666.73	4,692.32	4,668.18	36.72	20.17	-27.20	-3,979.03	522.02	1,775.80	1,727.14	48.65	36.499		
5,400.00	4,750.98	4,771.27	4,747.13	37.51	20.50	-27.93	-3,979.19	521.74	1,726.53	1,676.82	49.71	34.731		
5,500.00	4,835.22	4,853.89	4,829.75	38.30	20.85	-28.74	-3,979.47	521.76	1,677.76	1,626.99	50.78	33.043		
5,600.00	4,919.47	4,938.50	4,914.36	39.09	21.20	-29.62	-3,979.75	521.78	1,629.29	1,577.44	51.85	31.424		
5,700.00	5,003.71	5,022.54	4,998.39	39.88	21.56	-30.54	-3,980.03	521.80	1,581.16	1,528.22	52.94	29.866		
5,800.00	5,088.06	5,105.84	5,081.70	40.67	21.91	-31.32	-3,980.36	521.83	1,533.59	1,479.53	54.06	28.370		
5,900.00	5,173.83	5,190.90	5,166.75	41.44	22.27	-31.75	-3,980.74	521.91	1,488.51	1,433.33	55.18	26.975		
6,000.00	5,261.34	5,281.00	5,256.85	42.18	22.65	-32.25	-3,981.13	521.94	1,446.44	1,390.15	56.29	25.695		
6,100.00	5,350.49	5,370.79	5,346.64	42.88	23.03	-32.74	-3,981.46	521.84	1,407.31	1,349.90	57.41	24.512		
6,200.00	5,441.16	5,460.63	5,436.48	43.56	23.41	-33.22	-3,981.79	521.79	1,371.26	1,312.73	58.54	23.426		
6,300.00	5,533.25	5,559.15	5,535.00	44.20	23.82	-33.78	-3,982.04	521.79	1,338.20	1,278.59	59.61	22.449		
6,400.00	5,626.65	5,657.87	5,633.72	44.82	24.24	-34.34	-3,981.39	522.07	1,307.58	1,246.89	60.68	21.548		
6,500.00	5,721.23	5,749.89	5,725.73	45.40	24.63	-34.82	-3,980.75	522.23	1,279.90	1,218.12	61.78	20.718		
6,600.00	5,816.89	5,841.66	5,817.51	45.94	25.02	-35.25	-3,980.60	522.20	1,255.54	1,192.68	62.85	19.975		
6,700.00	5,913.51	5,938.12	5,913.96	46.45	25.42	-35.67	-3,980.68	522.07	1,234.31	1,170.43	63.88	19.322		
6,800.00	6,010.97	6,036.93	6,012.77	46.93	25.84	-36.05	-3,980.76	521.70	1,215.88	1,151.02	64.86	18.746		
6,900.00	6,109.15	6,134.72	6,110.57	47.38	26.26	-36.36	-3,980.93	521.23	1,200.36	1,134.55	65.81	18.239		
7,000.00	6,207.93	6,236.36	6,212.20	47.80	26.69	-36.64	-3,981.10	520.63	1,187.64	1,120.94	66.71	17.804		
7,100.00	6,307.19	6,341.20	6,317.03	48.18	27.14	-36.85	-3,980.88	519.79	1,177.32	1,109.78	67.54	17.432		
7,200.00	6,406.82	6,442.55	6,418.38	48.53	27.57	-36.99	-3,980.41	518.74	1,169.47	1,101.12	68.35	17.110		
7,300.00	6,506.68	6,543.97	6,519.80	48.84	28.00	-37.05	-3,979.90	517.71	1,164.39	1,095.27	69.12	16.847		
7,400.00	6,606.66	6,646.63	6,622.45	49.10	28.44	-124.04	-3,979.19	516.37	1,161.79	1,091.98	69.81	16.643		
7,412.12	6,618.78	6,658.69	6,634.51	49.13	28.49	-124.05	-3,979.11	516.21	1,161.72	1,091.83	69.89	16.622 CC, ES		
7,500.00	6,706.21	6,746.87	6,722.66	49.35	28.87	-124.09	-3,978.53	514.94	1,165.12	1,094.56	70.56	16.512		
7,600.00	6,803.22	6,849.66	6,825.43	49.59	29.30	-124.13	-3,977.93	512.97	1,177.19	1,105.79	71.39	16.489 SF		
7,700.00	6,895.32	6,948.99	6,924.73	49.82	29.73	-124.04	-3,977.18	510.26	1,197.85	1,125.55	72.29	16.569		
7,800.00	6,980.23	7,040.68	7,016.38	50.03	30.12	-123.61	-3,976.30	507.43	1,227.71	1,154.45	73.26	16.758		
7,900.00	7,055.85	7,123.86	7,099.49	50.21	30.47	-122.58	-3,975.41	504.29	1,266.89	1,192.62	74.27	17.059		
8,000.00	7,120.34	7,191.33	7,166.90	50.36	30.76	-120.46	-3,974.68	501.59	1,315.67	1,240.35	75.32	17.468		
8,100.00	7,172.10	7,246.45	7,221.97	50.47	31.00	-116.94	-3,974.08	499.40	1,373.68	1,297.32	76.36	17.989		
8,200.00	7,209.85	7,287.86	7,263.34	50.55	31.17	-111.54	-3,973.63	497.74	1,439.95	1,362.58	77.37	18.612		
8,300.00	7,232.68	7,314.53	7,289.99	50.61	31.29	-103.74	-3,973.34	496.68	1,513.05	1,434.74	78.31	19.321		
8,400.00	7,240.00	7,325.82	7,301.27	50.65	31.34	-93.36	-3,973.22	496.23	1,591.10	1,511.94	79.16	20.100		
8,500.00	7,239.60	7,329.40	7,304.85	50.69	31.35	-93.57	-3,973.18	496.09	1,672.02	1,592.09	79.93	20.919		
8,600.00	7,239.19	7,332.97	7,308.42	50.75	31.37	-93.78	-3,973.14	495.94	1,754.89	1,674.26	80.63	21.764		
8,700.00	7,238.78	7,336.55	7,312.00	50.85	31.38	-94.00	-3,973.10	495.80	1,839.46	1,758.18	81.28	22.631		
8,800.00	7,238.38	7,340.13	7,315.57	51.02	31.40	-94.21	-3,973.06	495.66	1,925.51	1,843.63	81.87	23.518		
8,900.00	7,237.97	7,343.71	7,319.15	51.32	31.41	-94.42	-3,973.02	495.52	2,012.83	1,930.42	82.42	24.422		
9,000.00	7,237.57	7,347.28	7,322.72	51.95	31.43	-94.64	-3,972.98	495.37	2,101.29	2,018.37	82.92	25.341		
9,100.00	7,237.16	7,350.86	7,326.29	53.10	31.44	-94.85	-3,972.94	495.23	2,190.73	2,107.34	83.38	26.273		
9,200.00	7,236.76	7,354.44	7,329.87	54.69	31.46	-95.06	-3,972.90	495.09	2,281.04	2,197.23	83.81	27.218		
9,300.00	7,236.35	7,358.02	7,333.44	56.53	31.47	-95.28	-3,972.87	494.94	2,372.12	2,287.92	84.20	28.172		
9,400.00	7,235.94	7,361.59	7,337.02	58.53	31.49	-95.49	-3,972.83	494.80	2,463.89	2,379.33	84.57	29.136		
9,500.00	7,235.54	7,365.17	7,340.59	60.62	31.51	-95.70	-3,972.79	494.66	2,556.27	2,471.37	84.90	30.108		
9,600.00	7,235.13	7,368.75	7,344.17	62.80	31.52	-95.91	-3,972.75	494.52	2,649.20	2,563.98	85.22	31.087		
9,700.00	7,234.73	7,372.33	7,347.74	65.03	31.54	-96.12	-3,972.71	494.37	2,742.63	2,657.11	85.51	32.073		
9,800.00	7,234.32	7,375.90	7,351.32	67.32	31.55	-96.34	-3,972.67	494.23	2,836.49	2,750.71	85.79	33.064		
9,900.00	7,233.92	7,379.48	7,354.89	69.66	31.57	-96.55	-3,972.63	494.09	2,930.76	2,844.72	86.05	34.060		
10,000.00	7,233.51	7,383.06	7,358.46	72.03	31.58	-96.76	-3,972.59	493.95	3,025.39	2,939.10	86.29	35.061		
10,100.00	7,233.10	7,386.64	7,362.04	74.45	31.60	-96.97	-3,972.55	493.80	3,120.36	3,033.84	86.52	36.065		
10,200.00	7,232.70	7,390.21	7,365.61	76.89	31.61	-97.18	-3,972.51	493.66	3,215.62	3,128.89	86.74	37.074		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	7,393.79	7,369.19	79.36	31.63	-97.39	-3,972.48	493.52	3,311.16	3,224.22	86.94	38.085		
10,400.00	7,231.89	7,397.37	7,372.76	81.86	31.64	-97.61	-3,972.44	493.37	3,406.95	3,319.82	87.14	39.099		
10,500.00	7,231.48	7,400.95	7,376.34	84.38	31.66	-97.82	-3,972.40	493.23	3,502.98	3,415.65	87.32	40.115		
10,600.00	7,231.08	7,404.52	7,379.91	86.93	31.67	-98.03	-3,972.36	493.09	3,599.21	3,511.71	87.50	41.133		
10,700.00	7,230.67	7,408.10	7,383.49	89.49	31.69	-98.24	-3,972.32	492.95	3,695.65	3,607.98	87.67	42.153		
10,800.00	7,230.26	7,411.68	7,387.06	92.07	31.70	-98.45	-3,972.28	492.80	3,792.26	3,704.43	87.83	43.175		
10,900.00	7,229.86	7,415.26	7,390.63	94.67	31.72	-98.66	-3,972.24	492.66	3,889.04	3,801.05	87.99	44.198		
11,000.00	7,229.45	7,418.83	7,394.21	97.28	31.74	-98.87	-3,972.20	492.52	3,985.98	3,897.84	88.14	45.223		
11,100.00	7,229.05	7,422.41	7,397.78	99.90	31.75	-99.08	-3,972.16	492.38	4,083.07	3,994.78	88.29	46.248		
11,200.00	7,228.64	7,425.99	7,401.36	102.54	31.77	-99.29	-3,972.13	492.23	4,180.28	4,091.86	88.43	47.274		
11,300.00	7,228.24	7,429.57	7,404.93	105.19	31.78	-99.49	-3,972.09	492.09	4,277.62	4,189.06	88.56	48.300		
11,400.00	7,227.83	7,400.00	7,375.39	107.85	31.65	-97.76	-3,972.41	493.27	4,375.21	4,286.63	88.58	49.394		
11,500.00	7,227.42	7,400.00	7,375.39	110.52	31.65	-97.76	-3,972.41	493.27	4,472.80	4,384.11	88.69	50.431		
11,600.00	7,227.02	7,400.00	7,375.39	113.20	31.65	-97.76	-3,972.41	493.27	4,570.50	4,481.70	88.80	51.469		
11,700.00	7,226.61	7,400.00	7,375.39	115.89	31.65	-97.76	-3,972.41	493.27	4,668.30	4,579.39	88.91	52.507		
11,800.00	7,226.21	7,400.00	7,375.39	118.59	31.65	-97.76	-3,972.41	493.27	4,766.18	4,677.17	89.01	53.546		
11,900.00	7,225.80	7,400.00	7,375.39	121.29	31.65	-97.76	-3,972.41	493.27	4,864.16	4,775.05	89.11	54.586		
12,000.00	7,225.40	7,400.00	7,375.39	124.00	31.65	-97.76	-3,972.41	493.27	4,962.21	4,873.00	89.21	55.625		
12,100.00	7,224.99	7,400.00	7,375.39	126.72	31.65	-97.76	-3,972.41	493.27	5,060.34	4,971.04	89.30	56.665		
12,200.00	7,224.58	7,400.00	7,375.39	129.44	31.65	-97.76	-3,972.41	493.27	5,158.54	5,069.15	89.39	57.705		
12,300.00	7,224.18	7,400.00	7,375.39	132.17	31.65	-97.76	-3,972.41	493.27	5,256.81	5,167.33	89.48	58.745		
12,400.00	7,223.77	7,400.00	7,375.39	134.91	31.65	-97.76	-3,972.41	493.27	5,355.14	5,265.57	89.57	59.785		
12,500.00	7,223.37	7,400.00	7,375.39	137.65	31.65	-97.76	-3,972.41	493.27	5,453.54	5,363.88	89.66	60.825		
12,600.00	7,222.96	7,400.00	7,375.39	140.39	31.65	-97.76	-3,972.41	493.27	5,551.99	5,462.25	89.74	61.865		
12,700.00	7,222.55	7,400.00	7,375.39	143.14	31.65	-97.76	-3,972.41	493.27	5,650.50	5,560.67	89.83	62.904		
12,800.00	7,222.15	7,400.00	7,375.39	145.89	31.65	-97.76	-3,972.41	493.27	5,749.05	5,659.14	89.91	63.943		
12,900.00	7,221.74	7,400.00	7,375.39	148.65	31.65	-97.76	-3,972.41	493.27	5,847.66	5,757.67	89.99	64.981		
13,000.00	7,221.34	7,400.00	7,375.39	151.41	31.65	-97.76	-3,972.41	493.27	5,946.31	5,856.24	90.07	66.020		
13,100.00	7,220.93	7,400.00	7,375.39	154.18	31.65	-97.76	-3,972.41	493.27	6,045.01	5,954.86	90.15	67.057		
13,200.00	7,220.53	7,400.00	7,375.39	156.94	31.65	-97.76	-3,972.41	493.27	6,143.75	6,053.53	90.22	68.094		
13,300.00	7,220.12	7,400.00	7,375.39	159.72	31.65	-97.76	-3,972.41	493.27	6,242.53	6,152.23	90.30	69.131		
13,400.00	7,219.71	7,400.00	7,375.39	162.49	31.65	-97.76	-3,972.41	493.27	6,341.35	6,250.97	90.38	70.167		
13,500.00	7,219.31	7,400.00	7,375.39	165.27	31.65	-97.76	-3,972.41	493.27	6,440.20	6,349.75	90.45	71.202		
13,600.00	7,218.90	7,400.00	7,375.39	168.05	31.65	-97.76	-3,972.41	493.27	6,539.09	6,448.57	90.52	72.237		
13,700.00	7,218.50	7,400.00	7,375.39	170.83	31.65	-97.76	-3,972.41	493.27	6,638.01	6,547.42	90.60	73.270		
13,800.00	7,218.09	7,400.00	7,375.39	173.61	31.65	-97.76	-3,972.41	493.27	6,736.97	6,646.30	90.67	74.303		
13,900.00	7,217.69	7,400.00	7,375.39	176.40	31.65	-97.76	-3,972.41	493.27	6,835.95	6,745.21	90.74	75.335		
14,000.00	7,217.28	7,400.00	7,375.39	179.19	31.65	-97.76	-3,972.41	493.27	6,934.97	6,844.15	90.81	76.366		
14,100.00	7,216.87	7,400.00	7,375.39	181.98	31.65	-97.76	-3,972.41	493.27	7,034.01	6,943.13	90.88	77.397		
14,200.00	7,216.47	7,400.00	7,375.39	184.78	31.65	-97.76	-3,972.41	493.27	7,133.08	7,042.12	90.95	78.426		
14,300.00	7,216.06	7,400.00	7,375.39	187.57	31.65	-97.76	-3,972.41	493.27	7,232.17	7,141.15	91.02	79.454		
14,400.00	7,215.66	7,400.00	7,375.39	190.37	31.65	-97.76	-3,972.41	493.27	7,331.29	7,240.20	91.09	80.482		
14,500.00	7,215.25	7,400.00	7,375.39	193.17	31.65	-97.76	-3,972.41	493.27	7,430.43	7,339.27	91.16	81.508		
14,600.00	7,214.85	7,400.00	7,375.39	195.97	31.65	-97.76	-3,972.41	493.27	7,529.60	7,438.36	91.23	82.533		
14,700.00	7,214.44	7,400.00	7,375.39	198.77	31.65	-97.76	-3,972.41	493.27	7,628.78	7,537.48	91.30	83.557		
14,800.00	7,214.03	7,400.00	7,375.39	201.58	31.65	-97.76	-3,972.41	493.27	7,727.99	7,636.62	91.37	84.580		
14,900.00	7,213.63	7,400.00	7,375.39	204.38	31.65	-97.76	-3,972.41	493.27	7,827.22	7,735.78	91.44	85.602		
15,000.00	7,213.22	7,400.00	7,375.39	207.19	31.65	-97.76	-3,972.41	493.27	7,926.47	7,834.96	91.51	86.622		
15,100.00	7,212.82	7,400.00	7,375.39	210.00	31.65	-97.76	-3,972.41	493.27	8,025.73	7,934.16	91.57	87.641		
15,200.00	7,212.41	7,400.00	7,375.39	212.81	31.65	-97.76	-3,972.41	493.27	8,125.02	8,033.37	91.64	88.659		
15,300.00	7,212.01	7,400.00	7,375.39	215.62	31.65	-97.76	-3,972.41	493.27	8,224.32	8,132.61	91.71	89.676		
15,400.00	7,211.60	7,400.00	7,375.39	218.43	31.65	-97.76	-3,972.41	493.27	8,323.64	8,231.86	91.78	90.692		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,500.00	7,211.19	7,400.00	7,375.39	221.25	31.65	-97.76	-3,972.41	493.27	8,422.97	8,331.12	91.85	91.706	
15,600.00	7,210.79	7,400.00	7,375.39	224.06	31.65	-97.76	-3,972.41	493.27	8,522.32	8,430.40	91.92	92.719	
15,700.00	7,210.38	7,400.00	7,375.39	226.88	31.65	-97.76	-3,972.41	493.27	8,621.68	8,529.70	91.98	93.730	
15,794.94	7,210.00	7,400.00	7,375.39	229.55	31.65	-97.76	-3,972.41	493.27	8,716.04	8,623.99	92.05	94.689	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACKGOLD 3(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	24.91	-0.09	3.28	3.28	-23.10	2,702.81	-1,153.06	2,938.49					
100.00	100.00	122.82	97.82	3.28	3.29	-23.11	2,702.73	-1,153.27	2,938.50	2,931.92	6.58	446.616 ES		
200.00	200.00	220.33	195.33	3.34	3.36	-23.11	2,702.90	-1,153.34	2,938.69	2,931.99	6.70	438.811		
300.00	299.98	330.16	305.16	3.44	3.49	154.25	2,702.89	-1,152.99	2,940.12	2,933.18	6.93	424.154		
400.00	399.84	421.54	396.54	3.59	3.64	154.26	2,702.98	-1,152.87	2,944.87	2,937.63	7.24	406.983		
500.00	499.45	530.19	505.19	3.79	3.87	154.27	2,702.91	-1,152.81	2,952.64	2,944.98	7.66	385.451		
600.00	598.70	637.30	612.30	4.03	4.13	154.29	2,702.75	-1,152.53	2,963.40	2,955.23	8.16	363.016		
700.00	697.47	741.93	716.92	4.31	4.42	154.31	2,702.19	-1,151.93	2,976.81	2,968.08	8.73	341.030		
800.00	795.62	837.95	812.94	4.64	4.70	154.33	2,701.90	-1,151.46	2,993.59	2,984.27	9.33	321.005		
900.00	893.06	944.27	919.26	5.00	5.04	154.37	2,701.26	-1,150.64	3,013.12	3,003.12	10.00	301.244		
1,000.00	989.64	1,033.12	1,008.10	5.40	5.33	154.36	2,700.78	-1,150.08	3,035.88	3,025.22	10.66	284.743		
1,100.00	1,085.27	1,124.14	1,099.12	5.83	5.65	154.36	2,700.49	-1,149.60	3,061.97	3,050.61	11.36	269.507		
1,200.00	1,179.82	1,222.61	1,197.59	6.29	5.99	154.37	2,700.14	-1,149.09	3,091.11	3,078.99	12.12	255.093		
1,300.00	1,273.17	1,315.52	1,290.50	6.79	6.33	154.37	2,699.72	-1,148.67	3,123.26	3,110.38	12.88	242.487		
1,400.00	1,365.21	1,401.17	1,376.15	7.33	6.65	154.33	2,699.51	-1,148.15	3,158.57	3,144.93	13.64	231.618		
1,500.00	1,455.84	1,493.64	1,468.62	7.89	7.00	154.31	2,699.37	-1,147.55	3,196.96	3,182.52	14.44	221.384		
1,600.00	1,544.94	1,592.59	1,567.57	8.50	7.37	154.30	2,698.97	-1,147.08	3,238.18	3,222.89	15.29	211.770		
1,700.00	1,632.39	1,678.39	1,653.36	9.13	7.70	154.23	2,698.38	-1,147.00	3,282.23	3,266.13	16.10	203.825		
1,800.00	1,718.11	1,756.65	1,731.62	9.80	8.01	154.10	2,697.83	-1,147.26	3,329.31	3,312.42	16.90	197.050		
1,900.00	1,802.44	1,847.60	1,822.57	10.49	8.36	154.36	2,697.40	-1,147.46	3,378.74	3,360.99	17.75	190.311		
2,000.00	1,886.68	1,939.16	1,914.13	11.20	8.73	154.77	2,696.55	-1,147.58	3,428.01	3,409.39	18.62	184.123		
2,100.00	1,970.92	2,014.30	1,989.26	11.93	9.02	155.08	2,695.91	-1,147.97	3,477.57	3,458.15	19.41	179.118		
2,200.00	2,055.17	2,100.96	2,075.91	12.66	9.37	155.44	2,695.25	-1,148.41	3,527.30	3,507.03	20.27	173.986		
2,300.00	2,139.41	2,197.92	2,172.87	13.40	9.76	155.83	2,694.39	-1,148.68	3,576.96	3,555.77	21.19	168.803		
2,400.00	2,223.66	2,276.28	2,251.23	14.14	10.08	156.14	2,693.61	-1,148.90	3,626.65	3,604.63	22.02	164.690		
2,500.00	2,307.90	2,361.61	2,336.55	14.89	10.42	156.46	2,692.81	-1,149.34	3,676.53	3,653.64	22.89	160.607		
2,600.00	2,392.14	2,446.65	2,421.58	15.65	10.77	156.77	2,691.89	-1,149.97	3,726.44	3,702.68	23.76	156.806		
2,700.00	2,476.39	2,528.48	2,503.41	16.41	11.10	157.06	2,691.01	-1,150.73	3,776.48	3,751.86	24.62	153.362		
2,800.00	2,560.63	2,608.72	2,583.64	17.17	11.43	157.33	2,690.21	-1,151.51	3,826.68	3,801.20	25.48	150.192		
2,900.00	2,644.88	2,682.66	2,657.58	17.93	11.74	157.58	2,689.65	-1,152.18	3,877.13	3,850.83	26.30	147.421		
3,000.00	2,729.12	2,754.95	2,729.86	18.70	12.03	157.82	2,689.34	-1,152.80	3,927.90	3,900.79	27.11	144.879		
3,100.00	2,813.36	2,833.12	2,808.03	19.47	12.35	158.08	2,689.19	-1,153.62	3,978.99	3,951.03	27.96	142.326		
3,200.00	2,897.61	2,921.55	2,896.45	20.25	12.72	158.36	2,689.00	-1,154.52	4,030.11	4,001.25	28.86	139.635		
3,300.00	2,981.85	3,007.68	2,982.57	21.02	13.07	158.62	2,688.66	-1,155.74	4,081.25	4,051.50	29.76	137.157		
3,400.00	3,066.10	3,090.69	3,065.57	21.80	13.42	158.86	2,688.30	-1,157.06	4,132.45	4,101.82	30.63	134.897		
3,500.00	3,150.34	3,168.74	3,143.60	22.58	13.74	159.08	2,688.01	-1,158.34	4,183.78	4,152.30	31.48	132.885		
3,600.00	3,234.58	3,247.01	3,221.87	23.35	14.07	159.29	2,687.78	-1,159.93	4,235.30	4,202.96	32.34	130.977		
3,700.00	3,318.83	3,327.07	3,301.90	24.13	14.40	159.50	2,687.56	-1,161.84	4,286.97	4,253.77	33.20	129.126		
3,800.00	3,403.07	3,410.73	3,385.53	24.92	14.75	159.71	2,687.38	-1,163.91	4,338.75	4,304.66	34.09	127.287		
3,900.00	3,487.32	3,504.08	3,478.86	25.70	15.14	159.95	2,687.10	-1,166.11	4,390.48	4,355.45	35.03	125.323		
4,000.00	3,571.56	3,580.20	3,554.96	26.48	15.46	160.13	2,686.89	-1,167.81	4,442.25	4,406.38	35.87	123.828		
4,100.00	3,655.80	3,725.15	3,699.87	27.27	16.07	160.48	2,685.68	-1,171.04	4,493.63	4,456.48	37.15	120.971		
4,200.00	3,740.05	3,824.27	3,798.94	28.05	16.48	160.70	2,683.97	-1,173.11	4,544.26	4,506.12	38.14	119.159		
4,300.00	3,824.29	3,911.88	3,886.52	28.84	16.85	160.90	2,682.34	-1,174.85	4,594.79	4,555.74	39.06	117.648		
4,400.00	3,908.54	3,996.29	3,970.90	29.62	17.21	161.08	2,680.74	-1,176.60	4,645.36	4,605.40	39.96	116.263		
4,500.00	3,992.78	4,084.73	4,059.31	30.41	17.58	161.27	2,679.03	-1,178.52	4,695.94	4,655.06	40.88	114.866		
4,600.00	4,077.03	4,172.28	4,146.82	31.20	17.95	161.45	2,677.28	-1,180.41	4,746.51	4,704.71	41.80	113.543		
4,700.00	4,161.27	4,260.55	4,235.05	31.98	18.32	161.63	2,675.48	-1,182.25	4,797.07	4,754.34	42.73	112.264		
4,800.00	4,245.51	4,346.27	4,320.73	32.77	18.68	161.80	2,673.70	-1,184.02	4,847.61	4,803.97	43.64	111.080		
4,900.00	4,329.76	4,431.48	4,405.90	33.56	19.04	161.96	2,671.95	-1,185.78	4,898.22	4,853.67	44.55	109.952		
5,000.00	4,414.00	4,520.01	4,494.40	34.35	19.42	162.13	2,670.07	-1,187.72	4,948.81	4,903.33	45.48	108.815		
5,100.00	4,498.25	4,607.51	4,581.85	35.14	19.79	162.29	2,668.16	-1,189.65	4,999.39	4,952.98	46.40	107.738		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACKGOLD 3(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,689.01	4,663.32	35.93	20.13	162.44	2,666.40	-1,191.46	5,050.01	5,002.72	47.29	106.793		
5,300.00	4,666.73	4,803.28	4,777.53	36.72	20.61	162.65	2,663.69	-1,193.92	5,100.49	5,052.10	48.39	105.401		
5,400.00	4,750.98	4,893.20	4,867.39	37.51	20.99	162.80	2,661.26	-1,195.74	5,150.69	5,101.35	49.33	104.405		
5,500.00	4,835.22	4,970.99	4,945.15	38.30	21.32	162.94	2,659.18	-1,197.29	5,200.93	5,150.73	50.20	103.614		
5,600.00	4,919.47	5,048.85	5,022.96	39.09	21.65	163.07	2,657.24	-1,198.80	5,251.33	5,200.27	51.06	102.853		
5,700.00	5,003.71	5,125.87	5,099.95	39.88	21.98	163.20	2,655.45	-1,200.21	5,301.88	5,249.97	51.91	102.133		
5,800.00	5,088.06	5,200.12	5,174.17	40.67	22.30	163.43	2,653.87	-1,201.56	5,352.46	5,299.72	52.75	101.477		
5,900.00	5,173.83	5,277.53	5,251.55	41.44	22.62	163.86	2,652.38	-1,202.95	5,400.97	5,347.38	53.59	100.780		
6,000.00	5,261.34	5,350.80	5,324.80	42.18	22.93	164.24	2,651.16	-1,204.12	5,446.73	5,392.33	54.40	100.129		
6,100.00	5,350.49	5,428.75	5,402.74	42.88	23.27	164.60	2,650.17	-1,205.02	5,489.76	5,434.54	55.22	99.413		
6,200.00	5,441.16	5,518.04	5,492.02	43.56	23.64	164.92	2,649.10	-1,206.01	5,529.81	5,473.69	56.11	98.549		
6,300.00	5,533.25	5,599.28	5,573.24	44.20	23.99	165.21	2,648.22	-1,207.03	5,566.89	5,509.95	56.93	97.781		
6,400.00	5,626.65	5,688.47	5,642.43	44.82	24.28	165.45	2,647.71	-1,207.82	5,601.12	5,543.47	57.65	97.158		
6,500.00	5,721.23	5,793.57	5,767.53	45.40	24.81	165.72	2,647.12	-1,208.35	5,632.33	5,573.59	58.75	95.875		
6,600.00	5,816.89	5,895.92	5,869.87	45.94	25.25	165.93	2,646.22	-1,208.12	5,659.78	5,600.11	59.67	94.859		
6,700.00	5,913.51	5,997.93	5,971.88	46.45	25.68	166.12	2,645.31	-1,207.56	5,683.88	5,623.32	60.56	93.852		
6,800.00	6,010.97	6,800.00	6,227.40	46.93	29.10	166.40	2,639.53	-1,201.94	5,702.72	5,637.89	64.83	87.963		
6,900.00	6,109.15	6,400.00	6,373.62	47.38	27.39	166.57	2,633.69	-1,197.50	5,716.62	5,652.96	63.66	89.799		
7,000.00	6,207.93	6,448.70	6,422.28	47.80	27.60	166.64	2,631.73	-1,196.57	5,727.53	5,663.40	64.14	89.302		
7,100.00	6,307.19	6,500.00	6,473.55	48.18	27.82	166.70	2,630.19	-1,196.05	5,736.06	5,671.46	64.61	88.787		
7,200.00	6,406.82	6,541.93	6,515.47	48.53	28.00	166.73	2,629.27	-1,195.87	5,742.12	5,677.13	64.98	88.364		
7,300.00	6,506.68	6,600.00	6,573.53	48.84	28.24	166.76	2,628.44	-1,195.80	5,745.63	5,680.19	65.45	87.790		
7,400.00	6,606.66	6,676.09	6,649.62	49.10	28.57	79.76	2,627.75	-1,195.95	5,746.34	5,680.34	66.00	87.064		
7,500.00	6,706.21	6,758.48	6,732.01	49.35	28.92	80.01	2,627.17	-1,196.34	5,744.26	5,677.68	66.58	86.271		
7,600.00	6,803.22	6,826.78	6,800.30	49.59	29.21	80.55	2,626.87	-1,196.94	5,739.86	5,672.82	67.04	85.614		
7,700.00	6,895.32	6,880.40	6,853.91	49.82	29.44	81.30	2,626.96	-1,197.61	5,733.66	5,666.28	67.38	85.093		
7,800.00	6,980.23	6,957.81	6,931.31	50.03	29.77	82.39	2,627.47	-1,198.76	5,725.90	5,658.00	67.90	84.329		
7,900.00	7,055.85	7,036.16	7,009.65	50.21	30.10	83.73	2,627.94	-1,199.79	5,716.60	5,648.13	68.47	83.489		
8,000.00	7,120.34	7,097.48	7,070.97	50.36	30.36	85.10	2,628.34	-1,200.57	5,706.46	5,637.45	69.02	82.684		
8,100.00	7,172.10	7,147.08	7,120.57	50.47	30.57	86.46	2,628.71	-1,201.15	5,696.15	5,626.52	69.63	81.809		
8,200.00	7,209.85	7,183.28	7,156.76	50.55	30.72	87.69	2,629.00	-1,201.49	5,686.25	5,615.92	70.34	80.840		
8,300.00	7,232.68	7,205.93	7,179.41	50.61	30.82	88.72	2,629.20	-1,201.67	5,677.30	5,606.13	71.18	79.765		
8,400.00	7,240.00	7,214.43	7,187.91	50.65	30.85	89.49	2,629.27	-1,201.74	5,669.69	5,597.57	72.12	78.612		
8,500.00	7,239.60	7,214.88	7,188.36	50.69	30.85	89.49	2,629.28	-1,201.75	5,663.73	5,590.54	73.19	77.380		
8,600.00	7,239.19	7,215.33	7,188.81	50.75	30.86	89.50	2,629.28	-1,201.75	5,659.53	5,585.10	74.43	76.043		
8,700.00	7,238.78	7,215.78	7,189.26	50.85	30.86	89.50	2,629.28	-1,201.76	5,657.10	5,581.29	75.80	74.630		
8,787.75	7,238.43	7,216.18	7,189.67	50.99	30.86	89.51	2,629.29	-1,201.76	5,656.42	5,579.29	77.12	73.342		
8,800.00	7,238.38	7,216.24	7,189.72	51.02	30.86	89.51	2,629.29	-1,201.76	5,656.43	5,579.12	77.31	73.167		
8,900.00	7,237.97	7,216.70	7,190.18	51.32	30.86	89.51	2,629.29	-1,201.76	5,657.53	5,578.60	78.93	71.678		
9,000.00	7,237.57	7,217.17	7,190.65	51.95	30.86	89.52	2,629.29	-1,201.77	5,660.40	5,579.74	80.65	70.183		
9,100.00	7,237.16	7,217.64	7,191.12	53.10	30.87	89.52	2,629.30	-1,201.77	5,665.03	5,582.57	82.46	68.699		
9,200.00	7,236.76	7,218.12	7,191.60	54.69	30.87	89.53	2,629.30	-1,201.78	5,671.42	5,587.07	84.35	67.240		
9,300.00	7,236.35	7,218.59	7,192.08	56.53	30.87	89.53	2,629.31	-1,201.78	5,679.56	5,593.27	86.29	65.817		
9,400.00	7,235.94	7,219.08	7,192.56	58.53	30.87	89.54	2,629.31	-1,201.78	5,689.45	5,601.16	88.29	64.439		
9,500.00	7,235.54	7,219.57	7,193.05	60.62	30.87	89.54	2,629.32	-1,201.79	5,701.08	5,610.75	90.33	63.111		
9,600.00	7,235.13	7,220.06	7,193.54	62.80	30.88	89.55	2,629.32	-1,201.79	5,714.44	5,622.03	92.41	61.838		
9,700.00	7,234.73	7,220.56	7,194.04	65.03	30.88	89.55	2,629.32	-1,201.80	5,729.50	5,635.00	94.51	60.624		
9,800.00	7,234.32	7,221.06	7,194.54	67.32	30.88	89.56	2,629.33	-1,201.80	5,746.27	5,649.65	96.63	59.469		
9,900.00	7,233.92	7,221.56	7,195.05	69.66	30.88	89.56	2,629.33	-1,201.80	5,764.73	5,665.98	98.75	58.374		
10,000.00	7,233.51	7,222.08	7,195.56	72.03	30.88	89.57	2,629.34	-1,201.81	5,784.86	5,683.97	100.89	57.339		
10,100.00	7,233.10	7,222.59	7,196.07	74.45	30.89	89.57	2,629.34	-1,201.81	5,806.64	5,703.61	103.02	56.364		
10,200.00	7,232.70	7,223.11	7,196.59	76.89	30.89	89.58	2,629.35	-1,201.82	5,830.05	5,724.90	105.15	55.446		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACKGOLD 3(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	7,223.64	7,197.12	79.36	30.89	89.58	2,629.35	-1,201.82	5,855.07	5,747.81	107.27	54.585		
10,400.00	7,231.89	7,224.17	7,197.65	81.86	30.89	89.59	2,629.35	-1,201.83	5,881.70	5,772.33	109.37	53.778		
10,500.00	7,231.48	7,224.70	7,198.19	84.38	30.90	89.59	2,629.36	-1,201.83	5,909.89	5,798.43	111.46	53.024		
10,600.00	7,231.08	7,225.24	7,198.73	86.93	30.90	89.60	2,629.36	-1,201.84	5,939.63	5,826.11	113.52	52.321		
10,700.00	7,230.67	7,225.79	7,199.27	89.49	30.90	89.60	2,629.37	-1,201.84	5,970.90	5,855.34	115.57	51.666		
10,800.00	7,230.26	7,226.34	7,199.82	92.07	30.90	89.61	2,629.37	-1,201.85	6,003.68	5,886.09	117.58	51.059		
10,900.00	7,229.86	7,226.90	7,200.38	94.67	30.90	89.61	2,629.38	-1,201.85	6,037.93	5,918.35	119.57	50.495		
11,000.00	7,229.45	7,227.46	7,200.94	97.28	30.91	89.62	2,629.38	-1,201.86	6,073.63	5,952.10	121.54	49.974		
11,100.00	7,229.05	7,228.03	7,201.51	99.90	30.91	89.63	2,629.39	-1,201.86	6,110.76	5,987.30	123.47	49.494		
11,200.00	7,228.64	7,228.60	7,202.08	102.54	30.91	89.63	2,629.39	-1,201.87	6,149.30	6,023.94	125.36	49.052		
11,300.00	7,228.24	7,229.18	7,202.66	105.19	30.91	89.64	2,629.40	-1,201.87	6,189.21	6,061.98	127.23	48.647		
11,400.00	7,227.83	7,229.77	7,203.25	107.85	30.92	89.64	2,629.40	-1,201.88	6,230.47	6,101.41	129.06	48.278		
11,500.00	7,227.42	7,230.36	7,203.84	110.52	30.92	89.65	2,629.41	-1,201.88	6,273.05	6,142.20	130.85	47.941		
11,600.00	7,227.02	7,230.95	7,204.43	113.20	30.92	89.66	2,629.41	-1,201.89	6,316.93	6,184.33	132.61	47.637		
11,700.00	7,226.61	7,231.56	7,205.04	115.89	30.92	89.66	2,629.42	-1,201.89	6,362.08	6,227.75	134.33	47.363		
11,800.00	7,226.21	7,232.16	7,205.65	118.59	30.93	89.67	2,629.42	-1,201.90	6,408.47	6,272.46	136.01	47.117		
11,900.00	7,225.80	7,232.78	7,206.26	121.29	30.93	89.67	2,629.43	-1,201.90	6,456.08	6,318.42	137.66	46.899		
12,000.00	7,225.40	7,233.40	7,206.88	124.00	30.93	89.68	2,629.43	-1,201.91	6,504.87	6,365.61	139.27	46.708		
12,100.00	7,224.99	7,234.03	7,207.51	126.72	30.94	89.69	2,629.44	-1,201.92	6,554.83	6,413.99	140.84	46.541		
12,200.00	7,224.58	7,234.66	7,208.14	129.44	30.94	89.69	2,629.44	-1,201.92	6,605.92	6,463.55	142.38	46.398		
12,300.00	7,224.18	7,235.30	7,208.78	132.17	30.94	89.70	2,629.45	-1,201.93	6,658.13	6,514.25	143.87	46.277		
12,400.00	7,223.77	7,235.95	7,209.43	134.91	30.94	89.71	2,629.45	-1,201.93	6,711.42	6,566.08	145.34	46.179		
12,500.00	7,223.37	7,236.61	7,210.09	137.65	30.95	89.71	2,629.46	-1,201.94	6,765.76	6,619.00	146.76	46.100		
12,600.00	7,222.96	7,237.27	7,210.75	140.39	30.95	89.72	2,629.46	-1,201.95	6,821.14	6,672.99	148.15	46.042		
12,700.00	7,222.55	7,237.94	7,211.42	143.14	30.95	89.73	2,629.47	-1,201.95	6,877.53	6,728.02	149.51	46.002		
12,800.00	7,222.15	7,238.61	7,212.09	145.89	30.95	89.73	2,629.48	-1,201.96	6,934.90	6,784.07	150.82	45.980		
12,900.00	7,221.74	7,239.29	7,212.77	148.65	30.96	89.74	2,629.48	-1,201.96	6,993.23	6,841.12	152.11	45.975 SF		
13,000.00	7,221.34	7,239.98	7,213.46	151.41	30.96	89.75	2,629.49	-1,201.97	7,052.50	6,899.13	153.36	45.986		
13,100.00	7,220.93	7,240.68	7,214.16	154.18	30.96	89.75	2,629.49	-1,201.98	7,112.67	6,958.09	154.58	46.013		
13,200.00	7,220.53	7,241.39	7,214.87	156.94	30.97	89.76	2,629.50	-1,201.98	7,173.74	7,017.98	155.76	46.055		
13,300.00	7,220.12	7,242.10	7,215.58	159.72	30.97	89.77	2,629.50	-1,201.99	7,235.67	7,078.76	156.92	46.112		
13,400.00	7,219.71	7,242.82	7,216.30	162.49	30.97	89.78	2,629.51	-1,202.00	7,298.45	7,140.41	158.04	46.181		
13,500.00	7,219.31	7,243.55	7,217.03	165.27	30.98	89.78	2,629.52	-1,202.01	7,362.05	7,202.92	159.13	46.264		
13,600.00	7,218.90	7,244.29	7,217.77	168.05	30.98	89.79	2,629.52	-1,202.01	7,426.46	7,266.26	160.19	46.360		
13,700.00	7,218.50	7,245.03	7,218.51	170.83	30.98	89.80	2,629.53	-1,202.02	7,491.64	7,330.42	161.22	46.468		
13,800.00	7,218.09	7,245.79	7,219.27	173.61	30.98	89.81	2,629.54	-1,202.03	7,557.58	7,395.36	162.23	46.587		
13,900.00	7,217.69	7,246.55	7,220.03	176.40	30.99	89.81	2,629.54	-1,202.03	7,624.27	7,461.07	163.20	46.717		
14,000.00	7,217.28	7,247.32	7,220.80	179.19	30.99	89.82	2,629.55	-1,202.04	7,691.68	7,527.53	164.15	46.857		
14,100.00	7,216.87	7,248.10	7,221.58	181.98	30.99	89.83	2,629.55	-1,202.05	7,759.79	7,594.72	165.07	47.008		
14,200.00	7,216.47	7,248.89	7,222.37	184.78	31.00	89.84	2,629.56	-1,202.06	7,828.59	7,662.62	165.97	47.169		
14,300.00	7,216.06	7,249.69	7,223.17	187.57	31.00	89.85	2,629.57	-1,202.06	7,898.05	7,731.21	166.84	47.339		
14,400.00	7,215.66	7,250.50	7,223.98	190.37	31.00	89.85	2,629.57	-1,202.07	7,968.16	7,800.47	167.69	47.518		
14,500.00	7,215.25	7,251.32	7,224.80	193.17	31.01	89.86	2,629.58	-1,202.08	8,038.91	7,870.40	168.51	47.705		
14,600.00	7,214.85	7,252.14	7,225.62	195.97	31.01	89.87	2,629.59	-1,202.09	8,110.27	7,940.96	169.31	47.901		
14,700.00	7,214.44	7,252.98	7,226.46	198.77	31.02	89.88	2,629.59	-1,202.10	8,182.23	8,012.14	170.09	48.105		
14,800.00	7,214.03	7,253.83	7,227.31	201.58	31.02	89.89	2,629.60	-1,202.11	8,254.77	8,083.93	170.85	48.317		
14,900.00	7,213.63	7,254.69	7,228.17	204.38	31.02	89.90	2,629.61	-1,202.11	8,327.89	8,156.30	171.58	48.536		
15,000.00	7,213.22	7,255.55	7,229.03	207.19	31.03	89.90	2,629.62	-1,202.12	8,401.55	8,229.26	172.30	48.762		
15,100.00	7,212.82	7,256.43	7,229.91	210.00	31.03	89.91	2,629.62	-1,202.13	8,475.76	8,302.77	172.99	48.996		
15,200.00	7,212.41	7,257.32	7,230.80	212.81	31.03	89.92	2,629.63	-1,202.14	8,550.49	8,376.83	173.67	49.235		
15,300.00	7,212.01	7,258.22	7,231.70	215.62	31.04	89.93	2,629.64	-1,202.15	8,625.74	8,451.41	174.32	49.481		
15,400.00	7,211.60	7,259.13	7,232.61	218.43	31.04	89.94	2,629.64	-1,202.16	8,701.48	8,526.52	174.96	49.734		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACKGOLD 3(AB_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,500.00	7,211.19	7,260.06	7,233.53	221.25	31.05	89.95	2,629.65	-1,202.17	8,777.71	8,602.12	175.58	49.992	
15,600.00	7,210.79	7,260.99	7,234.47	224.06	31.05	89.96	2,629.66	-1,202.18	8,854.41	8,678.22	176.19	50.256	
15,700.00	7,210.38	7,261.94	7,235.42	226.88	31.05	89.97	2,629.67	-1,202.19	8,931.57	8,754.79	176.77	50.525	
15,794.94	7,210.00	7,262.85	7,236.33	229.55	31.06	89.98	2,629.67	-1,202.20	9,005.25	8,827.93	177.32	50.786	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-22(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	19.00	3.28	3.28	-59.29	1,285.00	-2,163.55	2,516.46					
100.00	100.00	81.00	100.00	3.28	3.57	-59.29	1,285.00	-2,163.55	2,516.39	2,509.53	6.86	367.010		
200.00	200.00	181.00	200.00	3.34	5.63	-59.29	1,285.00	-2,163.55	2,516.39	2,507.42	8.96	280.694 CC		
300.00	299.98	280.98	299.98	3.44	8.71	118.08	1,285.00	-2,163.55	2,517.21	2,505.06	12.14	207.271		
400.00	399.84	380.84	399.84	3.59	12.01	118.14	1,285.00	-2,163.55	2,519.68	2,504.08	15.60	161.565 ES		
500.00	499.45	480.45	499.45	3.79	15.38	118.24	1,285.00	-2,163.55	2,523.81	2,504.64	19.17	131.664		
600.00	598.70	579.70	598.70	4.03	18.78	118.38	1,285.00	-2,163.55	2,529.62	2,506.81	22.81	110.895		
700.00	697.47	678.47	697.47	4.31	22.18	118.56	1,285.00	-2,163.55	2,537.15	2,510.65	26.50	95.751		
800.00	795.62	776.62	795.62	4.64	25.58	118.77	1,285.00	-2,163.55	2,546.43	2,516.22	30.21	84.286		
900.00	893.06	874.06	893.06	5.00	28.95	119.00	1,285.00	-2,163.55	2,557.52	2,523.57	33.94	75.347		
1,000.00	989.64	970.64	989.64	5.40	32.31	119.27	1,285.00	-2,163.55	2,570.45	2,532.77	37.68	68.213		
1,100.00	1,085.27	1,066.27	1,085.27	5.83	35.63	119.55	1,285.00	-2,163.55	2,585.30	2,543.88	41.42	62.412		
1,200.00	1,179.82	1,160.82	1,179.82	6.29	38.92	119.86	1,285.00	-2,163.55	2,602.12	2,556.97	45.16	57.624		
1,300.00	1,273.17	1,254.17	1,273.17	6.79	42.17	120.17	1,285.00	-2,163.55	2,620.98	2,572.10	48.88	53.622		
1,400.00	1,365.21	1,346.21	1,365.21	7.33	45.37	120.49	1,285.00	-2,163.55	2,641.94	2,589.36	52.58	50.243		
1,500.00	1,455.84	1,436.84	1,455.84	7.89	48.53	120.81	1,285.00	-2,163.55	2,665.08	2,608.81	56.26	47.368		
1,600.00	1,544.94	1,525.94	1,544.94	8.50	51.63	121.13	1,285.00	-2,163.55	2,690.44	2,630.53	59.91	44.905		
1,700.00	1,632.39	1,613.39	1,632.39	9.13	54.68	121.44	1,285.00	-2,163.55	2,718.11	2,654.58	63.53	42.784		
1,800.00	1,718.11	1,700.89	1,718.11	9.80	57.73	121.73	1,285.00	-2,163.55	2,748.13	2,680.96	67.17	40.913		
1,900.00	1,802.44	1,783.44	1,802.44	10.49	60.60	122.40	1,285.00	-2,163.55	2,780.13	2,709.49	70.65	39.352		
2,000.00	1,886.68	1,867.68	1,886.68	11.20	63.54	123.23	1,285.00	-2,163.55	2,812.88	2,738.69	74.19	37.914		
2,100.00	1,970.92	1,951.92	1,970.92	11.93	66.48	124.04	1,285.00	-2,163.55	2,846.27	2,768.53	77.74	36.613		
2,200.00	2,055.17	2,036.17	2,055.17	12.66	69.41	124.83	1,285.00	-2,163.55	2,880.28	2,798.99	81.29	35.433		
2,300.00	2,139.41	2,120.41	2,139.41	13.40	72.35	125.62	1,285.00	-2,163.55	2,914.89	2,830.05	84.84	34.358		
2,400.00	2,223.66	2,204.66	2,223.66	14.14	75.29	126.38	1,285.00	-2,163.55	2,950.08	2,861.69	88.39	33.376		
2,500.00	2,307.90	2,288.90	2,307.90	14.89	78.23	127.13	1,285.00	-2,163.55	2,985.82	2,893.88	91.94	32.475		
2,600.00	2,392.14	2,373.14	2,392.14	15.65	81.17	127.87	1,285.00	-2,163.55	3,022.11	2,926.62	95.49	31.648		
2,700.00	2,476.39	2,457.39	2,476.39	16.41	84.11	128.59	1,285.00	-2,163.55	3,058.91	2,959.87	99.04	30.886		
2,800.00	2,560.63	2,541.63	2,560.63	17.17	87.04	129.30	1,285.00	-2,163.55	3,096.21	2,993.63	102.59	30.182		
2,900.00	2,644.88	2,625.88	2,644.88	17.93	89.98	130.00	1,285.00	-2,163.55	3,134.00	3,027.87	106.13	29.530		
3,000.00	2,729.12	2,710.12	2,729.12	18.70	92.92	130.68	1,285.00	-2,163.55	3,172.25	3,062.57	109.67	28.925		
3,100.00	2,813.36	2,805.64	2,813.36	19.47	96.26	131.34	1,285.00	-2,163.55	3,210.94	3,097.34	113.60	28.264		
3,200.00	2,897.61	2,878.61	2,897.61	20.25	98.80	132.00	1,285.00	-2,163.55	3,250.07	3,133.33	117.65	27.838		
3,300.00	2,981.85	2,962.85	2,981.85	21.02	101.74	132.64	1,285.00	-2,163.55	3,289.62	3,169.34	120.28	27.349		
3,400.00	3,066.10	3,047.10	3,066.10	21.80	104.68	133.26	1,285.00	-2,163.55	3,329.57	3,205.76	123.81	26.892		
3,500.00	3,150.34	3,131.34	3,150.34	22.58	107.62	133.88	1,285.00	-2,163.55	3,369.91	3,242.57	127.34	26.463		
3,600.00	3,234.58	3,215.58	3,234.58	23.35	110.56	134.48	1,285.00	-2,163.55	3,410.62	3,279.75	130.87	26.061		
3,700.00	3,318.83	3,300.17	3,318.83	24.13	113.51	135.07	1,285.00	-2,163.55	3,451.69	3,317.29	134.41	25.681		
3,800.00	3,403.07	3,384.07	3,403.07	24.92	116.44	135.65	1,285.00	-2,163.55	3,493.11	3,355.20	137.92	25.328		
3,900.00	3,487.32	3,468.32	3,487.32	25.70	119.38	136.22	1,285.00	-2,163.55	3,534.87	3,393.44	141.44	24.993		
4,000.00	3,571.56	3,552.56	3,571.56	26.48	122.32	136.77	1,285.00	-2,163.55	3,576.95	3,432.00	144.95	24.677		
4,100.00	3,655.80	3,636.80	3,655.80	27.27	125.26	137.32	1,285.00	-2,163.55	3,619.34	3,470.88	148.47	24.378		
4,200.00	3,740.05	3,721.05	3,740.05	28.05	128.20	137.85	1,285.00	-2,163.55	3,662.04	3,510.06	151.98	24.096		
4,300.00	3,824.29	3,805.29	3,824.29	28.84	131.14	138.37	1,285.00	-2,163.55	3,705.03	3,549.54	155.49	23.828		
4,400.00	3,908.54	3,889.54	3,908.54	29.62	134.08	138.88	1,285.00	-2,163.55	3,748.30	3,589.30	159.00	23.574		
4,500.00	3,992.78	3,973.78	3,992.78	30.41	137.02	139.38	1,285.00	-2,163.55	3,791.84	3,629.33	162.51	23.333		
4,600.00	4,077.03	4,058.03	4,077.03	31.20	139.96	139.87	1,285.00	-2,163.55	3,835.64	3,669.63	166.01	23.105		
4,700.00	4,161.27	4,142.27	4,161.27	31.98	142.90	140.36	1,285.00	-2,163.55	3,879.70	3,710.18	169.51	22.887		
4,800.00	4,245.51	4,226.51	4,245.51	32.77	145.84	140.83	1,285.00	-2,163.55	3,924.00	3,750.98	173.02	22.680		
4,900.00	4,329.76	4,310.76	4,329.76	33.56	148.78	141.29	1,285.00	-2,163.55	3,968.54	3,792.02	176.52	22.483		
5,000.00	4,414.00	4,405.00	4,414.00	34.35	152.07	141.74	1,285.00	-2,163.55	4,013.30	3,832.94	180.36	22.251		
5,100.00	4,498.25	4,479.25	4,498.25	35.14	154.66	142.19	1,285.00	-2,163.55	4,058.29	3,874.78	183.51	22.115		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-22(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,563.49	4,582.49	35.93	157.60	142.62	1,285.00	-2,163.55	4,103.50	3,916.49	187.01	21.943		
5,300.00	4,666.73	4,647.73	4,666.73	36.72	160.54	143.05	1,285.00	-2,163.55	4,148.91	3,958.41	190.50	21.779		
5,400.00	4,750.98	4,731.98	4,750.98	37.51	163.48	143.47	1,285.00	-2,163.55	4,194.52	4,000.52	193.99	21.622		
5,500.00	4,835.22	4,816.22	4,835.22	38.30	166.42	143.88	1,285.00	-2,163.55	4,240.32	4,042.84	197.49	21.472		
5,600.00	4,919.47	4,900.47	4,919.47	39.09	169.36	144.28	1,285.00	-2,163.55	4,286.32	4,085.34	200.98	21.327		
5,700.00	5,003.71	4,984.71	5,003.71	39.88	172.30	144.68	1,285.00	-2,163.55	4,332.49	4,128.02	204.47	21.189		
5,800.00	5,088.06	5,069.06	5,088.06	40.67	175.25	145.26	1,285.00	-2,163.55	4,378.70	4,170.74	207.96	21.056		
5,900.00	5,173.83	5,154.83	5,173.83	41.44	178.24	146.18	1,285.00	-2,163.55	4,423.08	4,211.59	211.49	20.914		
6,000.00	5,261.34	5,242.34	5,261.34	42.18	181.29	147.02	1,285.00	-2,163.55	4,464.99	4,249.91	215.07	20.760		
6,100.00	5,350.49	5,331.49	5,350.49	42.88	184.41	147.79	1,285.00	-2,163.55	4,504.34	4,285.63	218.71	20.595		
6,200.00	5,441.16	5,422.16	5,441.16	43.56	187.57	148.48	1,285.00	-2,163.55	4,541.06	4,318.68	222.38	20.420		
6,300.00	5,533.25	5,514.25	5,533.25	44.20	190.79	149.10	1,285.00	-2,163.55	4,575.09	4,349.00	226.09	20.236		
6,400.00	5,626.65	5,607.65	5,626.65	44.82	194.05	149.66	1,285.00	-2,163.55	4,606.36	4,376.53	229.83	20.042		
6,500.00	5,721.23	5,702.23	5,721.23	45.40	197.35	150.16	1,285.00	-2,163.55	4,634.82	4,401.22	233.60	19.841		
6,600.00	5,816.89	5,802.11	5,816.89	45.94	200.83	150.59	1,285.00	-2,163.55	4,660.40	4,422.87	237.54	19.620		
6,700.00	5,913.51	5,905.49	5,913.51	46.45	204.44	150.97	1,285.00	-2,163.55	4,683.08	4,441.49	241.58	19.385		
6,800.00	6,010.97	6,008.03	6,010.97	46.93	208.02	151.30	1,285.00	-2,163.55	4,702.79	4,457.21	245.58	19.150		
6,900.00	6,109.15	6,109.85	6,109.15	47.38	211.58	151.57	1,285.00	-2,163.55	4,719.52	4,469.99	249.54	18.913		
7,000.00	6,207.93	6,188.93	6,207.93	47.80	214.34	151.79	1,285.00	-2,163.55	4,733.23	4,480.55	252.68	18.732		
7,100.00	6,307.19	6,288.19	6,307.19	48.18	217.80	151.96	1,285.00	-2,163.55	4,743.90	4,487.39	256.51	18.494		
7,200.00	6,406.82	6,387.82	6,406.82	48.53	221.28	152.08	1,285.00	-2,163.55	4,751.50	4,491.17	260.33	18.252		
7,300.00	6,506.68	6,487.68	6,506.68	48.84	224.76	152.15	1,285.00	-2,163.55	4,756.03	4,491.89	264.14	18.006		
7,400.00	6,606.66	6,587.66	6,606.66	49.10	228.25	152.17	1,285.00	-2,163.55	4,757.47	4,489.55	267.92	17.757		
7,500.00	6,706.21	6,687.21	6,706.21	49.35	231.73	152.15	1,285.00	-2,163.55	4,753.97	4,482.31	271.65	17.500		
7,600.00	6,803.22	6,784.22	6,803.22	49.59	235.12	152.08	1,285.00	-2,163.55	4,744.05	4,468.80	275.25	17.235		
7,700.00	6,895.32	6,876.32	6,895.32	49.82	238.33	151.96	1,285.00	-2,163.55	4,728.15	4,449.52	278.63	16.969		
7,800.00	6,980.23	6,961.23	6,980.23	50.03	241.29	151.79	1,285.00	-2,163.55	4,706.95	4,425.22	281.73	16.708		
7,900.00	7,055.85	7,036.85	7,055.85	50.21	243.93	151.57	1,285.00	-2,163.55	4,681.35	4,396.86	284.49	16.455		
8,000.00	7,120.34	7,101.34	7,120.34	50.36	246.18	151.30	1,285.00	-2,163.55	4,652.40	4,365.49	286.91	16.216		
8,100.00	7,172.10	7,153.10	7,172.10	50.47	247.99	150.97	1,285.00	-2,163.55	4,621.27	4,332.29	288.97	15.992		
8,200.00	7,209.85	7,209.15	7,209.85	50.55	249.95	150.63	1,285.00	-2,163.55	4,589.12	4,297.79	291.33	15.752		
8,300.00	7,232.68	7,213.68	7,232.68	50.61	250.11	150.26	1,285.00	-2,163.55	4,557.10	4,265.03	292.07	15.603		
8,400.00	7,240.00	7,221.00	7,240.00	50.65	250.36	150.07	1,285.00	-2,163.55	4,526.22	4,233.14	293.08	15.443		
8,500.00	7,239.60	7,220.60	7,239.60	50.69	250.35	150.07	1,285.00	-2,163.55	4,497.24	4,203.24	294.00	15.297		
8,600.00	7,239.19	7,220.19	7,239.19	50.75	250.33	150.06	1,285.00	-2,163.55	4,470.31	4,175.22	295.09	15.149		
8,700.00	7,238.78	7,219.78	7,238.78	50.85	250.32	150.06	1,285.00	-2,163.55	4,445.47	4,149.13	296.33	15.002		
8,800.00	7,238.38	7,219.38	7,238.38	51.02	250.31	150.05	1,285.00	-2,163.55	4,422.74	4,125.02	297.73	14.855		
8,900.00	7,237.97	7,218.97	7,237.97	51.32	250.29	150.05	1,285.00	-2,163.55	4,402.17	4,102.92	299.26	14.710		
9,000.00	7,237.57	7,218.57	7,237.57	51.95	250.28	150.04	1,285.00	-2,163.55	4,383.79	4,082.88	300.91	14.568		
9,100.00	7,237.16	7,218.16	7,237.16	53.10	250.26	150.04	1,285.00	-2,163.55	4,367.62	4,064.94	302.68	14.430		
9,200.00	7,236.76	7,217.76	7,236.76	54.69	250.25	150.03	1,285.00	-2,163.55	4,353.69	4,049.14	304.55	14.296		
9,300.00	7,236.35	7,217.35	7,236.35	56.53	250.23	150.02	1,285.00	-2,163.55	4,342.02	4,035.51	306.50	14.166		
9,400.00	7,235.94	7,216.94	7,235.94	58.53	250.22	150.02	1,285.00	-2,163.55	4,332.62	4,024.09	308.53	14.043		
9,500.00	7,235.54	7,216.54	7,235.54	60.62	250.21	150.01	1,285.00	-2,163.55	4,325.51	4,014.89	310.62	13.925		
9,600.00	7,235.13	7,216.13	7,235.13	62.80	250.19	150.01	1,285.00	-2,163.55	4,320.71	4,007.95	312.76	13.815		
9,700.00	7,234.73	7,215.73	7,234.73	65.03	250.18	150.00	1,285.00	-2,163.55	4,318.22	4,003.28	314.95	13.711		
9,757.57	7,234.49	7,215.49	7,234.49	66.35	250.17	150.00	1,285.00	-2,163.55	4,317.84	4,001.62	316.22	13.654		
9,800.00	7,234.32	7,215.32	7,234.32	67.32	250.16	150.00	1,285.00	-2,163.55	4,318.05	4,000.89	317.16	13.615		
9,900.00	7,233.92	7,214.92	7,233.92	69.66	250.15	89.99	1,285.00	-2,163.55	4,320.19	4,000.80	319.39	13.526		
10,000.00	7,233.51	7,214.51	7,233.51	72.03	250.14	89.99	1,285.00	-2,163.55	4,324.64	4,003.01	321.63	13.446		
10,100.00	7,233.10	7,214.10	7,233.10	74.45	250.12	89.98	1,285.00	-2,163.55	4,331.40	4,007.52	323.88	13.374		
10,200.00	7,232.70	7,213.70	7,232.70	76.89	250.11	89.98	1,285.00	-2,163.55	4,340.45	4,014.33	326.12	13.309		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-22(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	7,213.29	7,232.29	79.36	250.09	89.97	1,285.00	-2,163.55	4,351.78	4,023.43	328.35	13.254		
10,400.00	7,231.89	7,212.89	7,231.89	81.86	250.08	89.97	1,285.00	-2,163.55	4,365.37	4,034.81	330.56	13.206		
10,500.00	7,231.48	7,212.48	7,231.48	84.38	250.06	89.96	1,285.00	-2,163.55	4,381.20	4,048.46	332.74	13.167		
10,600.00	7,231.08	7,212.08	7,231.08	86.93	250.05	89.95	1,285.00	-2,163.55	4,399.25	4,064.35	334.90	13.136		
10,700.00	7,230.67	7,211.67	7,230.67	89.49	250.04	89.95	1,285.00	-2,163.55	4,419.49	4,082.47	337.02	13.113		
10,800.00	7,230.26	7,211.26	7,230.26	92.07	250.02	89.94	1,285.00	-2,163.55	4,441.89	4,102.78	339.11	13.099		
10,900.00	7,229.86	7,210.86	7,229.86	94.67	250.01	89.94	1,285.00	-2,163.55	4,466.42	4,125.27	341.15	13.092 SF		
11,000.00	7,229.45	7,210.45	7,229.45	97.28	249.99	89.93	1,285.00	-2,163.55	4,493.03	4,149.89	343.14	13.094		
11,100.00	7,229.05	7,210.05	7,229.05	99.90	249.98	89.93	1,285.00	-2,163.55	4,521.71	4,176.62	345.09	13.103		
11,200.00	7,228.64	7,209.64	7,228.64	102.54	249.97	89.92	1,285.00	-2,163.55	4,552.40	4,205.42	346.98	13.120		
11,300.00	7,228.24	7,209.24	7,228.24	105.19	249.95	89.92	1,285.00	-2,163.55	4,585.06	4,236.24	348.82	13.144		
11,400.00	7,227.83	7,208.83	7,227.83	107.85	249.94	89.91	1,285.00	-2,163.55	4,619.66	4,269.05	350.61	13.176		
11,500.00	7,227.42	7,208.42	7,227.42	110.52	249.92	89.91	1,285.00	-2,163.55	4,656.15	4,303.81	352.35	13.215		
11,600.00	7,227.02	7,208.02	7,227.02	113.20	249.91	89.90	1,285.00	-2,163.55	4,694.49	4,340.47	354.02	13.260		
11,700.00	7,226.61	7,207.61	7,226.61	115.89	249.89	89.90	1,285.00	-2,163.55	4,734.63	4,378.99	355.64	13.313		
11,800.00	7,226.21	7,207.21	7,226.21	118.59	249.88	89.89	1,285.00	-2,163.55	4,776.53	4,419.32	357.21	13.372		
11,900.00	7,225.80	7,206.80	7,225.80	121.29	249.87	89.88	1,285.00	-2,163.55	4,820.13	4,461.42	358.72	13.437		
12,000.00	7,225.40	7,206.40	7,225.40	124.00	249.85	89.88	1,285.00	-2,163.55	4,865.40	4,505.24	360.17	13.509		
12,100.00	7,224.99	7,205.99	7,224.99	126.72	249.84	89.87	1,285.00	-2,163.55	4,912.29	4,550.73	361.56	13.586		
12,200.00	7,224.58	7,205.58	7,224.58	129.44	249.82	89.87	1,285.00	-2,163.55	4,960.76	4,597.85	362.90	13.670		
12,300.00	7,224.18	7,205.18	7,224.18	132.17	249.81	89.86	1,285.00	-2,163.55	5,010.75	4,646.56	364.19	13.759		
12,400.00	7,223.77	7,204.77	7,223.77	134.91	249.80	89.86	1,285.00	-2,163.55	5,062.22	4,696.79	365.43	13.853		
12,500.00	7,223.37	7,204.37	7,223.37	137.65	249.78	89.85	1,285.00	-2,163.55	5,115.13	4,748.52	366.61	13.952		
12,600.00	7,222.96	7,203.96	7,222.96	140.39	249.77	89.85	1,285.00	-2,163.55	5,169.43	4,801.69	367.74	14.057		
12,700.00	7,222.55	7,203.55	7,222.55	143.14	249.75	89.84	1,285.00	-2,163.55	5,225.08	4,856.26	368.83	14.167		
12,800.00	7,222.15	7,203.15	7,222.15	145.89	249.74	89.84	1,285.00	-2,163.55	5,282.04	4,912.18	369.87	14.281		
12,900.00	7,221.74	7,202.74	7,221.74	148.65	249.72	89.83	1,285.00	-2,163.55	5,340.27	4,969.41	370.86	14.400		
13,000.00	7,221.34	7,202.34	7,221.34	151.41	249.71	89.83	1,285.00	-2,163.55	5,399.72	5,027.91	371.80	14.523		
13,100.00	7,220.93	7,201.93	7,220.93	154.18	249.70	89.82	1,285.00	-2,163.55	5,460.35	5,087.64	372.71	14.651		
13,200.00	7,220.53	7,201.53	7,220.53	156.94	249.68	89.81	1,285.00	-2,163.55	5,522.13	5,148.56	373.57	14.782		
13,300.00	7,220.12	7,201.12	7,220.12	159.72	249.67	89.81	1,285.00	-2,163.55	5,585.01	5,210.63	374.39	14.918		
13,400.00	7,219.71	7,200.71	7,219.71	162.49	249.65	89.80	1,285.00	-2,163.55	5,648.97	5,273.80	375.17	15.057		
13,500.00	7,219.31	7,200.31	7,219.31	165.27	249.64	89.80	1,285.00	-2,163.55	5,713.96	5,338.04	375.92	15.201		
13,600.00	7,218.90	7,200.10	7,218.90	168.05	249.63	89.79	1,285.00	-2,163.55	5,779.95	5,403.32	376.63	15.346		
13,700.00	7,218.50	7,200.50	7,218.50	170.83	249.65	89.79	1,285.00	-2,163.55	5,846.90	5,469.57	377.34	15.495		
13,800.00	7,218.09	7,200.91	7,218.09	173.61	249.66	89.78	1,285.00	-2,163.55	5,914.79	5,536.78	378.01	15.647		
13,900.00	7,217.69	7,201.31	7,217.69	176.40	249.67	89.78	1,285.00	-2,163.55	5,983.58	5,604.93	378.65	15.803		
14,000.00	7,217.28	7,201.72	7,217.28	179.19	249.69	89.77	1,285.00	-2,163.55	6,053.24	5,673.98	379.26	15.961		
14,100.00	7,216.87	7,202.13	7,216.87	181.98	249.70	89.77	1,285.00	-2,163.55	6,123.74	5,743.90	379.84	16.122		
14,200.00	7,216.47	7,202.53	7,216.47	184.78	249.72	89.76	1,285.00	-2,163.55	6,195.05	5,814.66	380.39	16.286		
14,300.00	7,216.06	7,202.94	7,216.06	187.57	249.73	89.76	1,285.00	-2,163.55	6,267.14	5,886.22	380.92	16.453		
14,400.00	7,215.66	7,203.34	7,215.66	190.37	249.75	89.75	1,285.00	-2,163.55	6,340.00	5,958.58	381.42	16.622		
14,500.00	7,215.25	7,203.75	7,215.25	193.17	249.76	89.74	1,285.00	-2,163.55	6,413.58	6,031.68	381.90	16.794		
14,600.00	7,214.85	7,204.15	7,214.85	195.97	249.77	89.74	1,285.00	-2,163.55	6,487.87	6,105.52	382.36	16.968		
14,700.00	7,214.44	7,204.56	7,214.44	198.77	249.79	89.73	1,285.00	-2,163.55	6,562.85	6,180.06	382.79	17.145		
14,800.00	7,214.03	7,204.97	7,214.03	201.58	249.80	89.73	1,285.00	-2,163.55	6,638.48	6,255.28	383.21	17.324		
14,900.00	7,213.63	7,205.37	7,213.63	204.38	249.82	89.72	1,285.00	-2,163.55	6,714.75	6,331.15	383.60	17.505		
15,000.00	7,213.22	7,205.78	7,213.22	207.19	249.83	89.72	1,285.00	-2,163.55	6,791.64	6,407.67	383.98	17.688		
15,100.00	7,212.82	7,206.18	7,212.82	210.00	249.84	89.71	1,285.00	-2,163.55	6,869.12	6,484.79	384.33	17.873		
15,200.00	7,212.41	7,206.59	7,212.41	212.81	249.86	89.71	1,285.00	-2,163.55	6,947.18	6,562.51	384.67	18.060		
15,300.00	7,212.01	7,206.99	7,212.01	215.62	249.87	89.70	1,285.00	-2,163.55	7,025.80	6,640.80	385.00	18.249		
15,400.00	7,211.60	7,207.40	7,211.60	218.43	249.89	89.70	1,285.00	-2,163.55	7,104.95	6,719.64	385.31	18.440		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-22(SI_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,500.00	7,211.19	7,207.81	7,211.19	221.25	249.90	89.69	1,285.00	-2,163.55	7,184.62	6,799.02	385.60	18.632	
15,600.00	7,210.79	7,208.21	7,210.79	224.06	249.92	89.69	1,285.00	-2,163.55	7,264.79	6,878.91	385.88	18.826	
15,700.00	7,210.38	7,208.62	7,210.38	226.88	249.93	89.68	1,285.00	-2,163.55	7,345.45	6,959.30	386.15	19.022	
15,794.94	7,210.00	7,209.00	7,210.00	229.55	249.94	89.67	1,285.00	-2,163.55	7,422.47	7,036.08	386.39	19.210	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-23(SI_150CC - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	34.00	3.28	3.28	-91.09	-48.32	-2,533.60	2,534.29					
100.00	100.00	66.00	100.00	3.28	3.48	-91.09	-48.32	-2,533.60	2,534.06	2,527.30	6.76	374.797		
200.00	200.00	166.00	200.00	3.34	5.21	-91.09	-48.32	-2,533.60	2,534.06	2,525.51	8.55	296.440		
300.00	299.98	265.98	299.98	3.44	8.22	86.30	-48.32	-2,533.60	2,533.95	2,522.29	11.66	217.288		
400.00	399.84	365.84	399.84	3.59	11.50	86.43	-48.32	-2,533.60	2,533.62	2,518.52	15.09	167.881		
500.00	499.45	465.45	499.45	3.79	14.87	86.63	-48.32	-2,533.60	2,533.09	2,514.43	18.66	135.780		
600.00	598.70	564.70	598.70	4.03	18.27	86.92	-48.32	-2,533.60	2,532.39	2,510.10	22.29	113.590		
700.00	697.47	663.47	697.47	4.31	21.67	87.28	-48.32	-2,533.60	2,531.59	2,505.61	25.98	97.446		
800.00	795.62	761.62	795.62	4.64	25.06	87.72	-48.32	-2,533.60	2,530.75	2,501.05	29.70	85.222		
900.00	893.06	859.06	893.06	5.00	28.43	88.24	-48.32	-2,533.60	2,529.93	2,496.50	33.43	75.672		
1,000.00	989.64	955.64	989.64	5.40	31.79	88.82	-48.32	-2,533.60	2,529.25	2,492.06	37.18	68.024		
1,100.00	1,085.27	1,051.27	1,085.27	5.83	35.11	89.46	-48.32	-2,533.60	2,528.79	2,487.85	40.94	61.775		
1,178.00	1,159.11	1,125.11	1,159.11	6.19	37.68	90.00	-48.32	-2,533.60	2,528.66	2,484.80	43.87	57.646 CC		
1,200.00	1,179.82	1,145.82	1,179.82	6.29	38.40	90.16	-48.32	-2,533.60	2,528.67	2,483.98	44.69	56.584		
1,300.00	1,273.17	1,239.17	1,273.17	6.79	41.64	90.91	-48.32	-2,533.60	2,529.03	2,480.60	48.44	52.213		
1,400.00	1,365.21	1,331.21	1,365.21	7.33	44.85	91.70	-48.32	-2,533.60	2,530.00	2,477.83	52.17	48.491		
1,500.00	1,455.84	1,421.84	1,455.84	7.89	48.00	92.54	-48.32	-2,533.60	2,531.73	2,475.83	55.90	45.293		
1,600.00	1,544.94	1,510.94	1,544.94	8.50	51.11	93.40	-48.32	-2,533.60	2,534.37	2,474.77	59.60	42.523		
1,700.00	1,632.39	1,601.61	1,632.39	9.13	54.27	94.28	-48.32	-2,533.60	2,538.08	2,474.69	63.39	40.038 ES		
1,800.00	1,718.11	1,684.11	1,718.11	9.80	57.14	95.17	-48.32	-2,533.60	2,543.04	2,476.11	66.93	37.996		
1,900.00	1,802.44	1,768.44	1,802.44	10.49	60.08	96.16	-48.32	-2,533.60	2,549.30	2,478.75	70.55	36.132		
2,000.00	1,886.68	1,852.68	1,886.68	11.20	63.02	97.17	-48.32	-2,533.60	2,556.70	2,482.51	74.19	34.461		
2,100.00	1,970.92	1,936.92	1,970.92	11.93	65.95	98.18	-48.32	-2,533.60	2,565.21	2,487.38	77.84	32.957		
2,200.00	2,055.17	2,021.17	2,055.17	12.66	68.89	99.19	-48.32	-2,533.60	2,574.82	2,493.34	81.49	31.599		
2,300.00	2,139.41	2,105.41	2,139.41	13.40	71.83	100.18	-48.32	-2,533.60	2,585.52	2,500.38	85.14	30.369		
2,400.00	2,223.66	2,189.66	2,223.66	14.14	74.77	101.18	-48.32	-2,533.60	2,597.29	2,508.50	88.79	29.251		
2,500.00	2,307.90	2,273.90	2,307.90	14.89	77.71	102.16	-48.32	-2,533.60	2,610.13	2,517.68	92.45	28.234		
2,600.00	2,392.14	2,358.14	2,392.14	15.65	80.64	103.14	-48.32	-2,533.60	2,624.00	2,527.90	96.10	27.305		
2,700.00	2,476.39	2,442.39	2,476.39	16.41	83.58	104.11	-48.32	-2,533.60	2,638.90	2,539.15	99.75	26.455		
2,800.00	2,560.63	2,526.63	2,560.63	17.17	86.52	105.08	-48.32	-2,533.60	2,654.81	2,551.42	103.40	25.675		
2,900.00	2,644.88	2,610.88	2,644.88	17.93	89.46	106.03	-48.32	-2,533.60	2,671.72	2,564.67	107.04	24.959		
3,000.00	2,729.12	2,704.88	2,729.12	18.70	92.74	106.98	-48.32	-2,533.60	2,689.60	2,578.57	111.03	24.225		
3,100.00	2,813.36	2,779.36	2,813.36	19.47	95.34	107.91	-48.32	-2,533.60	2,708.43	2,594.11	114.32	23.691		
3,200.00	2,897.61	2,863.61	2,897.61	20.25	98.28	108.84	-48.32	-2,533.60	2,728.19	2,610.24	117.95	23.130		
3,300.00	2,981.85	2,947.85	2,981.85	21.02	101.22	109.76	-48.32	-2,533.60	2,748.87	2,627.29	121.58	22.610		
3,400.00	3,066.10	3,032.10	3,066.10	21.80	104.16	110.66	-48.32	-2,533.60	2,770.45	2,645.25	125.20	22.128		
3,500.00	3,150.34	3,116.34	3,150.34	22.58	107.10	111.56	-48.32	-2,533.60	2,792.89	2,664.08	128.82	21.681		
3,600.00	3,234.58	3,200.58	3,234.58	23.35	110.04	112.44	-48.32	-2,533.60	2,816.19	2,683.77	132.43	21.266		
3,700.00	3,318.83	3,284.83	3,318.83	24.13	112.98	113.31	-48.32	-2,533.60	2,840.32	2,704.29	136.03	20.880		
3,800.00	3,403.07	3,369.07	3,403.07	24.92	115.92	114.18	-48.32	-2,533.60	2,865.26	2,725.63	139.63	20.521		
3,900.00	3,487.32	3,453.32	3,487.32	25.70	118.86	115.03	-48.32	-2,533.60	2,890.99	2,747.77	143.22	20.186		
4,000.00	3,571.56	3,537.56	3,571.56	26.48	121.80	115.86	-48.32	-2,533.60	2,917.48	2,770.68	146.81	19.873		
4,100.00	3,655.80	3,621.80	3,655.80	27.27	124.74	116.69	-48.32	-2,533.60	2,944.73	2,794.34	150.39	19.581		
4,200.00	3,740.05	3,706.05	3,740.05	28.05	127.68	117.51	-48.32	-2,533.60	2,972.70	2,818.74	153.96	19.308		
4,300.00	3,824.29	3,809.71	3,824.29	28.84	131.29	118.31	-48.32	-2,533.60	3,001.38	2,843.17	158.21	18.971		
4,400.00	3,908.54	3,874.54	3,908.54	29.62	133.56	119.10	-48.32	-2,533.60	3,030.74	2,869.65	161.09	18.813		
4,500.00	3,992.78	3,958.78	3,992.78	30.41	136.50	119.88	-48.32	-2,533.60	3,060.77	2,896.12	164.65	18.589		
4,600.00	4,077.03	4,043.03	4,077.03	31.20	139.44	120.65	-48.32	-2,533.60	3,091.45	2,923.25	168.21	18.379		
4,700.00	4,161.27	4,127.27	4,161.27	31.98	142.38	121.40	-48.32	-2,533.60	3,122.76	2,951.01	171.75	18.182		
4,800.00	4,245.51	4,211.51	4,245.51	32.77	145.32	122.15	-48.32	-2,533.60	3,154.67	2,979.38	175.30	17.996		
4,900.00	4,329.76	4,304.24	4,329.76	33.56	148.55	122.88	-48.32	-2,533.60	3,187.18	3,008.05	179.13	17.793		
5,000.00	4,414.00	4,380.00	4,414.00	34.35	151.20	123.60	-48.32	-2,533.60	3,220.26	3,037.90	182.37	17.658		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-23(SI_150CC - OH - OH)													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	4,464.25	4,498.25	35.14	154.14	124.30	-48.32	-2,533.60	3,253.90	3,068.00	185.90	17.504		
5,200.00	4,582.49	4,548.49	4,582.49	35.93	157.08	125.00	-48.32	-2,533.60	3,288.08	3,098.66	189.42	17.359		
5,300.00	4,666.73	4,632.73	4,666.73	36.72	160.02	125.68	-48.32	-2,533.60	3,322.77	3,129.83	192.94	17.222		
5,400.00	4,750.98	4,716.98	4,750.98	37.51	162.96	126.36	-48.32	-2,533.60	3,357.98	3,161.52	196.46	17.093		
5,500.00	4,835.22	4,801.22	4,835.22	38.30	165.90	127.02	-48.32	-2,533.60	3,393.67	3,193.70	199.97	16.971		
5,600.00	4,919.47	4,885.47	4,919.47	39.09	168.84	127.67	-48.32	-2,533.60	3,429.84	3,226.36	203.48	16.856		
5,700.00	5,003.71	4,969.71	5,003.71	39.88	171.78	128.31	-48.32	-2,533.60	3,466.47	3,259.48	206.98	16.747		
5,800.00	5,088.06	5,054.06	5,088.06	40.67	174.72	129.14	-48.32	-2,533.60	3,503.43	3,292.94	210.49	16.644		
5,900.00	5,173.83	5,139.83	5,173.83	41.44	177.72	130.32	-48.32	-2,533.60	3,539.20	3,325.17	214.03	16.536		
6,000.00	5,261.34	5,227.34	5,261.34	42.18	180.77	131.41	-48.32	-2,533.60	3,573.22	3,355.60	217.62	16.420		
6,100.00	5,350.49	5,316.49	5,350.49	42.88	183.88	132.43	-48.32	-2,533.60	3,605.36	3,384.12	221.25	16.296		
6,200.00	5,441.16	5,407.16	5,441.16	43.56	187.05	133.35	-48.32	-2,533.60	3,635.53	3,410.62	224.92	16.164		
6,300.00	5,533.25	5,500.75	5,533.25	44.20	190.31	134.20	-48.32	-2,533.60	3,663.63	3,434.96	228.67	16.021		
6,400.00	5,626.65	5,607.35	5,626.65	44.82	194.04	134.97	-48.32	-2,533.60	3,689.57	3,456.70	232.86	15.844		
6,500.00	5,721.23	5,687.23	5,721.23	45.40	196.82	135.65	-48.32	-2,533.60	3,713.26	3,477.15	236.11	15.727		
6,600.00	5,816.89	5,782.89	5,816.89	45.94	200.16	136.26	-48.32	-2,533.60	3,734.64	3,494.76	239.88	15.568		
6,700.00	5,913.51	5,879.51	5,913.51	46.45	203.53	136.80	-48.32	-2,533.60	3,753.65	3,509.97	243.68	15.404		
6,800.00	6,010.97	5,976.97	6,010.97	46.93	206.94	137.26	-48.32	-2,533.60	3,770.22	3,522.74	247.48	15.234		
6,900.00	6,109.15	6,075.15	6,109.15	47.38	210.36	137.64	-48.32	-2,533.60	3,784.31	3,533.01	251.30	15.059		
7,000.00	6,207.93	6,173.93	6,207.93	47.80	213.81	137.95	-48.32	-2,533.60	3,795.88	3,540.76	255.11	14.879		
7,100.00	6,307.19	6,273.19	6,307.19	48.18	217.28	138.20	-48.32	-2,533.60	3,804.89	3,545.96	258.93	14.695		
7,200.00	6,406.82	6,372.82	6,406.82	48.53	220.75	138.37	-48.32	-2,533.60	3,811.32	3,548.58	262.74	14.506		
7,300.00	6,506.68	6,472.68	6,506.68	48.84	224.24	138.47	-48.32	-2,533.60	3,815.16	3,548.62	266.54	14.314		
7,400.00	6,606.66	6,572.66	6,606.66	49.10	227.73	138.50	-48.32	-2,533.60	3,816.37	3,546.07	270.30	14.119		
7,500.00	6,706.21	6,672.21	6,706.21	49.35	231.21	138.53	-48.32	-2,533.60	3,811.18	3,537.16	274.02	13.908		
7,600.00	6,803.22	6,769.22	6,803.22	49.59	234.59	138.53	-48.32	-2,533.60	3,796.43	3,518.83	277.60	13.676		
7,700.00	6,895.32	6,861.32	6,895.32	49.82	237.81	138.53	-48.32	-2,533.60	3,772.66	3,491.72	280.95	13.428		
7,800.00	6,980.23	6,946.23	6,980.23	50.03	240.77	138.53	-48.32	-2,533.60	3,740.74	3,456.75	283.99	13.172		
7,900.00	7,055.85	7,021.85	7,055.85	50.21	243.41	138.53	-48.32	-2,533.60	3,701.81	3,415.13	286.68	12.913		
8,000.00	7,120.34	7,086.34	7,120.34	50.36	245.66	138.53	-48.32	-2,533.60	3,657.26	3,368.27	288.99	12.655		
8,100.00	7,172.10	7,138.10	7,172.10	50.47	247.47	138.53	-48.32	-2,533.60	3,608.63	3,317.71	290.91	12.404		
8,200.00	7,209.85	7,175.85	7,209.85	50.55	248.79	138.53	-48.32	-2,533.60	3,557.55	3,265.09	292.46	12.164		
8,300.00	7,232.68	7,201.32	7,232.68	50.61	249.67	138.53	-48.32	-2,533.60	3,505.66	3,211.95	293.71	11.936		
8,400.00	7,240.00	7,206.00	7,240.00	50.65	249.84	138.53	-48.32	-2,533.60	3,454.55	3,160.13	294.41	11.734		
8,500.00	7,239.60	7,205.60	7,239.60	50.69	249.82	138.53	-48.32	-2,533.60	3,405.40	3,110.30	295.10	11.540		
8,600.00	7,239.19	7,205.19	7,239.19	50.75	249.81	138.53	-48.32	-2,533.60	3,358.51	3,062.56	295.95	11.348		
8,700.00	7,238.78	7,204.78	7,238.78	50.85	249.80	138.53	-48.32	-2,533.60	3,313.98	3,017.02	296.96	11.160		
8,800.00	7,238.38	7,204.38	7,238.38	51.02	249.78	138.53	-48.32	-2,533.60	3,271.89	2,973.76	298.14	10.974		
8,900.00	7,237.97	7,203.97	7,237.97	51.32	249.77	138.53	-48.32	-2,533.60	3,232.36	2,932.89	299.47	10.794		
9,000.00	7,237.57	7,203.57	7,237.57	51.95	249.75	138.53	-48.32	-2,533.60	3,195.46	2,894.51	300.96	10.618		
9,100.00	7,237.16	7,203.16	7,237.16	53.10	249.74	138.53	-48.32	-2,533.60	3,161.30	2,858.72	302.59	10.448		
9,200.00	7,236.76	7,202.76	7,236.76	54.69	249.72	138.53	-48.32	-2,533.60	3,129.97	2,825.62	304.35	10.284		
9,300.00	7,236.35	7,202.35	7,236.35	56.53	249.71	138.53	-48.32	-2,533.60	3,101.54	2,795.31	306.23	10.128		
9,400.00	7,235.94	7,201.94	7,235.94	58.53	249.70	138.53	-48.32	-2,533.60	3,076.10	2,767.88	308.22	9.980		
9,500.00	7,235.54	7,201.54	7,235.54	60.62	249.68	138.53	-48.32	-2,533.60	3,053.72	2,743.42	310.30	9.841		
9,600.00	7,235.13	7,201.13	7,235.13	62.80	249.67	138.53	-48.32	-2,533.60	3,034.48	2,722.02	312.46	9.711		
9,700.00	7,234.73	7,200.73	7,234.73	65.03	249.65	138.53	-48.32	-2,533.60	3,018.43	2,703.75	314.68	9.592		
9,800.00	7,234.32	7,200.32	7,234.32	67.32	249.64	138.53	-48.32	-2,533.60	3,005.62	2,688.67	316.95	9.483		
9,900.00	7,233.92	7,200.08	7,233.92	69.66	249.63	138.53	-48.32	-2,533.60	2,996.10	2,676.85	319.25	9.385		
10,000.00	7,233.51	7,200.49	7,233.51	72.03	249.65	138.53	-48.32	-2,533.60	2,989.89	2,668.30	321.59	9.297		
10,100.00	7,233.10	7,200.90	7,233.10	74.45	249.66	138.53	-48.32	-2,533.60	2,987.02	2,663.10	323.93	9.221		
10,135.78	7,232.96	7,201.04	7,232.96	75.32	249.66	138.53	-48.32	-2,533.60	2,986.81	2,662.05	324.76	9.197		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-23(SI_150CC - OH - OH)													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,232.70	7,201.30	7,232.70	76.89	249.67	90.00	-48.32	-2,533.60	2,987.50	2,661.25	326.25	9.157		
10,300.00	7,232.29	7,201.71	7,232.29	79.36	249.69	89.99	-48.32	-2,533.60	2,991.32	2,662.78	328.54	9.105		
10,400.00	7,231.89	7,202.11	7,231.89	81.86	249.70	89.98	-48.32	-2,533.60	2,998.47	2,667.68	330.79	9.065		
10,500.00	7,231.48	7,202.52	7,231.48	84.38	249.72	89.97	-48.32	-2,533.60	3,008.93	2,675.94	332.99	9.036		
10,600.00	7,231.08	7,202.92	7,231.08	86.93	249.73	89.96	-48.32	-2,533.60	3,022.67	2,687.54	335.13	9.020		
10,700.00	7,230.67	7,203.33	7,230.67	89.49	249.74	89.96	-48.32	-2,533.60	3,039.63	2,702.44	337.19	9.015 SF		
10,800.00	7,230.26	7,203.74	7,230.26	92.07	249.76	89.95	-48.32	-2,533.60	3,059.77	2,720.59	339.18	9.021		
10,900.00	7,229.86	7,204.14	7,229.86	94.67	249.77	89.94	-48.32	-2,533.60	3,083.03	2,741.94	341.08	9.039		
11,000.00	7,229.45	7,204.55	7,229.45	97.28	249.79	89.93	-48.32	-2,533.60	3,109.32	2,766.42	342.90	9.068		
11,100.00	7,229.05	7,204.95	7,229.05	99.90	249.80	89.92	-48.32	-2,533.60	3,138.59	2,793.96	344.62	9.107		
11,200.00	7,228.64	7,205.36	7,228.64	102.54	249.82	89.92	-48.32	-2,533.60	3,170.74	2,824.48	346.26	9.157		
11,300.00	7,228.24	7,205.76	7,228.24	105.19	249.83	89.91	-48.32	-2,533.60	3,205.69	2,857.89	347.79	9.217		
11,400.00	7,227.83	7,206.17	7,227.83	107.85	249.84	89.90	-48.32	-2,533.60	3,243.34	2,894.10	349.24	9.287		
11,500.00	7,227.42	7,206.58	7,227.42	110.52	249.86	89.89	-48.32	-2,533.60	3,283.61	2,933.02	350.59	9.366		
11,600.00	7,227.02	7,206.98	7,227.02	113.20	249.87	89.89	-48.32	-2,533.60	3,326.40	2,974.55	351.85	9.454		
11,700.00	7,226.61	7,207.39	7,226.61	115.89	249.89	89.88	-48.32	-2,533.60	3,371.61	3,018.59	353.02	9.551		
11,800.00	7,226.21	7,207.79	7,226.21	118.59	249.90	89.87	-48.32	-2,533.60	3,419.16	3,065.05	354.11	9.656		
11,900.00	7,225.80	7,208.20	7,225.80	121.29	249.91	89.86	-48.32	-2,533.60	3,468.93	3,113.82	355.11	9.769		
12,000.00	7,225.40	7,208.61	7,225.40	124.00	249.93	89.85	-48.32	-2,533.60	3,520.84	3,164.80	356.03	9.889		
12,100.00	7,224.99	7,209.01	7,224.99	126.72	249.94	89.85	-48.32	-2,533.60	3,574.79	3,217.91	356.88	10.017		
12,200.00	7,224.58	7,209.42	7,224.58	129.44	249.96	89.84	-48.32	-2,533.60	3,630.70	3,273.04	357.66	10.151		
12,300.00	7,224.18	7,209.82	7,224.18	132.17	249.97	89.83	-48.32	-2,533.60	3,688.47	3,330.10	358.37	10.292		
12,400.00	7,223.77	7,209.77	7,223.77	134.91	249.27	89.82	-48.32	-2,533.60	3,748.02	3,389.72	358.30	10.460		
12,500.00	7,223.37	7,209.37	7,223.37	137.65	249.26	89.82	-48.32	-2,533.60	3,809.26	3,450.40	358.86	10.615		
12,600.00	7,222.96	7,208.96	7,222.96	140.39	249.24	89.81	-48.32	-2,533.60	3,872.12	3,512.75	359.37	10.775		
12,700.00	7,222.55	7,208.55	7,222.55	143.14	249.23	89.80	-48.32	-2,533.60	3,936.52	3,576.70	359.82	10.940		
12,800.00	7,222.15	7,208.15	7,222.15	145.89	249.21	89.79	-48.32	-2,533.60	4,002.37	3,642.15	360.22	11.111		
12,900.00	7,221.74	7,207.74	7,221.74	148.65	249.20	89.78	-48.32	-2,533.60	4,069.62	3,709.04	360.58	11.286		
13,000.00	7,221.34	7,207.34	7,221.34	151.41	249.19	89.78	-48.32	-2,533.60	4,138.20	3,777.29	360.90	11.466		
13,100.00	7,220.93	7,206.93	7,220.93	154.18	249.17	89.77	-48.32	-2,533.60	4,208.03	3,846.85	361.18	11.651		
13,200.00	7,220.53	7,206.53	7,220.53	156.94	249.16	89.76	-48.32	-2,533.60	4,279.06	3,917.63	361.43	11.839		
13,300.00	7,220.12	7,206.12	7,220.12	159.72	249.14	89.75	-48.32	-2,533.60	4,351.23	3,989.59	361.64	12.032		
13,400.00	7,219.71	7,205.71	7,219.71	162.49	249.13	89.75	-48.32	-2,533.60	4,424.48	4,062.65	361.83	12.228		
13,500.00	7,219.31	7,205.31	7,219.31	165.27	249.12	89.74	-48.32	-2,533.60	4,498.76	4,136.78	361.98	12.428		
13,600.00	7,218.90	7,204.90	7,218.90	168.05	249.10	89.73	-48.32	-2,533.60	4,574.02	4,211.91	362.11	12.632		
13,700.00	7,218.50	7,204.50	7,218.50	170.83	249.09	89.72	-48.32	-2,533.60	4,650.22	4,288.00	362.22	12.838		
13,800.00	7,218.09	7,204.09	7,218.09	173.61	249.07	89.71	-48.32	-2,533.60	4,727.30	4,364.99	362.31	13.048		
13,900.00	7,217.69	7,203.69	7,217.69	176.40	249.06	89.71	-48.32	-2,533.60	4,805.22	4,442.85	362.37	13.260		
14,000.00	7,217.28	7,203.28	7,217.28	179.19	249.04	89.70	-48.32	-2,533.60	4,883.95	4,521.53	362.43	13.476		
14,100.00	7,216.87	7,202.87	7,216.87	181.98	249.03	89.69	-48.32	-2,533.60	4,963.45	4,600.99	362.46	13.694		
14,200.00	7,216.47	7,202.47	7,216.47	184.78	249.02	89.68	-48.32	-2,533.60	5,043.68	4,681.20	362.48	13.914		
14,300.00	7,216.06	7,202.06	7,216.06	187.57	249.00	89.68	-48.32	-2,533.60	5,124.60	4,762.11	362.49	14.137		
14,400.00	7,215.66	7,201.66	7,215.66	190.37	248.99	89.67	-48.32	-2,533.60	5,206.18	4,843.70	362.48	14.363		
14,500.00	7,215.25	7,201.25	7,215.25	193.17	248.97	89.66	-48.32	-2,533.60	5,288.40	4,925.93	362.47	14.590		
14,600.00	7,214.85	7,200.85	7,214.85	195.97	248.96	89.65	-48.32	-2,533.60	5,371.22	5,008.78	362.44	14.819		
14,700.00	7,214.44	7,200.44	7,214.44	198.77	248.95	89.64	-48.32	-2,533.60	5,454.62	5,092.21	362.41	15.051		
14,800.00	7,214.03	7,200.03	7,214.03	201.58	248.93	89.64	-48.32	-2,533.60	5,538.56	5,176.19	362.37	15.284		
14,900.00	7,213.63	7,200.63	7,213.63	204.38	248.92	89.63	-48.32	-2,533.60	5,623.03	5,260.71	362.32	15.520		
15,000.00	7,213.22	7,200.22	7,213.22	207.19	248.90	89.62	-48.32	-2,533.60	5,708.00	5,345.74	362.26	15.756		
15,100.00	7,212.82	7,200.82	7,212.82	210.00	248.89	89.61	-48.32	-2,533.60	5,793.46	5,431.25	362.20	15.995		
15,200.00	7,212.41	7,200.41	7,212.41	212.81	248.87	89.61	-48.32	-2,533.60	5,879.37	5,517.23	362.14	16.235		
15,300.00	7,212.01	7,200.01	7,212.01	215.62	248.86	89.60	-48.32	-2,533.60	5,965.72	5,603.65	362.07	16.477		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
HARVESTERS STATE 7-15 PAD - BURBACH 15-23(SI_150CC - OH - OH)												Offset Well Error:	3.28 ft
Survey Program: 100-2" Cone@2.448 Sigma													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.00	7,211.60	7,177.60	7,211.60	218.43	248.85	89.59	-48.32	-2,533.60	6,052.49	5,690.50	361.99	16.720	
15,500.00	7,211.19	7,177.19	7,211.19	221.25	248.83	89.58	-48.32	-2,533.60	6,139.66	5,777.75	361.92	16.964	
15,600.00	7,210.79	7,176.79	7,210.79	224.06	248.82	89.57	-48.32	-2,533.60	6,227.22	5,865.39	361.84	17.210	
15,700.00	7,210.38	7,176.38	7,210.38	226.88	248.80	89.57	-48.32	-2,533.60	6,315.15	5,953.40	361.75	17.457	
15,794.94	7,210.00	7,176.00	7,210.00	229.55	248.79	89.56	-48.32	-2,533.60	6,398.96	6,037.29	361.67	17.693	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-42(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	45.00	3.28	3.28	-104.25	-1,217.40	-4,795.13	4,947.46				
100.00	100.00	55.00	100.00	3.28	3.42	-104.25	-1,217.40	-4,795.13	4,947.25	4,940.55	6.70	738.139	
200.00	200.00	155.00	200.00	3.34	4.92	-104.25	-1,217.40	-4,795.13	4,947.25	4,939.00	8.26	599.243	
300.00	299.98	254.98	299.98	3.44	7.87	73.14	-1,217.40	-4,795.13	4,946.75	4,935.43	11.31	437.335	
400.00	399.84	354.84	399.84	3.59	11.14	73.22	-1,217.40	-4,795.13	4,945.23	4,930.50	14.72	335.850	
500.00	499.45	454.45	499.45	3.79	14.50	73.37	-1,217.40	-4,795.13	4,942.71	4,924.43	18.28	270.360	
600.00	598.70	553.70	598.70	4.03	17.89	73.57	-1,217.40	-4,795.13	4,939.22	4,917.31	21.92	225.362	
700.00	697.47	652.47	697.47	4.31	21.29	73.83	-1,217.40	-4,795.13	4,934.78	4,909.18	25.60	192.767	
800.00	795.62	750.62	795.62	4.64	24.68	74.14	-1,217.40	-4,795.13	4,929.42	4,900.11	29.31	168.161	
900.00	893.06	848.06	893.06	5.00	28.05	74.50	-1,217.40	-4,795.13	4,923.20	4,890.15	33.05	148.973	
1,000.00	989.64	944.64	989.64	5.40	31.40	74.92	-1,217.40	-4,795.13	4,916.15	4,879.36	36.79	133.617	
1,100.00	1,085.27	1,040.27	1,085.27	5.83	34.73	75.39	-1,217.40	-4,795.13	4,908.34	4,867.80	40.54	121.066	
1,200.00	1,179.82	1,134.82	1,179.82	6.29	38.01	75.91	-1,217.40	-4,795.13	4,899.84	4,855.55	44.29	110.628	
1,300.00	1,273.17	1,228.17	1,273.17	6.79	41.26	76.46	-1,217.40	-4,795.13	4,890.71	4,842.67	48.03	101.818	
1,400.00	1,365.21	1,320.21	1,365.21	7.33	44.46	77.07	-1,217.40	-4,795.13	4,881.04	4,829.27	51.77	94.291	
1,500.00	1,455.84	1,410.84	1,455.84	7.89	47.62	77.71	-1,217.40	-4,795.13	4,870.91	4,815.42	55.48	87.791	
1,600.00	1,544.94	1,500.06	1,544.94	8.50	50.73	78.38	-1,217.40	-4,795.13	4,860.41	4,801.22	59.19	82.121	
1,700.00	1,632.39	1,587.39	1,632.39	9.13	53.77	79.09	-1,217.40	-4,795.13	4,849.64	4,786.79	62.86	77.152	
1,800.00	1,718.11	1,673.11	1,718.11	9.80	56.76	79.82	-1,217.40	-4,795.13	4,838.71	4,772.21	66.51	72.753	
1,900.00	1,802.44	1,757.44	1,802.44	10.49	59.70	80.42	-1,217.40	-4,795.13	4,827.87	4,757.73	70.14	68.834	
2,000.00	1,886.68	1,841.68	1,886.68	11.20	62.63	80.95	-1,217.40	-4,795.13	4,817.57	4,743.79	73.78	65.294	
2,100.00	1,970.92	1,925.92	1,970.92	11.93	65.57	81.49	-1,217.40	-4,795.13	4,807.86	4,730.42	77.44	62.084	
2,200.00	2,055.17	2,010.17	2,055.17	12.66	68.51	82.03	-1,217.40	-4,795.13	4,798.73	4,717.62	81.11	59.163	
2,300.00	2,139.41	2,105.59	2,139.41	13.40	71.84	82.57	-1,217.40	-4,795.13	4,790.19	4,705.01	85.18	56.238	
2,400.00	2,223.66	2,178.66	2,223.66	14.14	74.38	83.11	-1,217.40	-4,795.13	4,782.24	4,693.76	88.47	54.053	
2,500.00	2,307.90	2,262.90	2,307.90	14.89	77.32	83.65	-1,217.40	-4,795.13	4,774.88	4,682.72	92.17	51.808	
2,600.00	2,392.14	2,347.14	2,392.14	15.65	80.26	84.19	-1,217.40	-4,795.13	4,768.13	4,672.26	95.86	49.739	
2,700.00	2,476.39	2,431.39	2,476.39	16.41	83.20	84.74	-1,217.40	-4,795.13	4,761.97	4,662.40	99.57	47.827	
2,800.00	2,560.63	2,515.63	2,560.63	17.17	86.14	85.28	-1,217.40	-4,795.13	4,756.42	4,653.14	103.27	46.057	
2,900.00	2,644.88	2,600.12	2,644.88	17.93	89.09	85.83	-1,217.40	-4,795.13	4,751.47	4,644.47	106.99	44.410	
3,000.00	2,729.12	2,684.12	2,729.12	18.70	92.02	86.38	-1,217.40	-4,795.13	4,747.12	4,636.43	110.69	42.885	
3,100.00	2,813.36	2,768.36	2,813.36	19.47	94.95	86.92	-1,217.40	-4,795.13	4,743.39	4,628.98	114.41	41.460	
3,200.00	2,897.61	2,852.61	2,897.61	20.25	97.89	87.47	-1,217.40	-4,795.13	4,740.26	4,622.13	118.13	40.129	
3,300.00	2,981.85	2,936.85	2,981.85	21.02	100.83	88.02	-1,217.40	-4,795.13	4,737.75	4,615.90	121.85	38.883	
3,400.00	3,066.10	3,021.10	3,066.10	21.80	103.77	88.57	-1,217.40	-4,795.13	4,735.84	4,610.28	125.56	37.716	
3,500.00	3,150.34	3,105.34	3,150.34	22.58	106.71	89.12	-1,217.40	-4,795.13	4,734.55	4,605.27	129.29	36.621	
3,600.00	3,234.58	3,189.58	3,234.58	23.35	109.65	89.67	-1,217.40	-4,795.13	4,733.87	4,600.87	133.01	35.592	
3,660.59	3,285.63	3,240.63	3,285.63	23.83	111.43	90.00	-1,217.40	-4,795.13	4,733.76	4,598.50	135.26	34.997	
3,700.00	3,318.83	3,273.83	3,318.83	24.13	112.59	90.22	-1,217.40	-4,795.13	4,733.81	4,597.08	136.73	34.622	
3,800.00	3,403.07	3,358.07	3,403.07	24.92	115.53	90.77	-1,217.40	-4,795.13	4,734.36	4,593.91	140.45	33.709	
3,900.00	3,487.32	3,442.32	3,487.32	25.70	118.47	91.32	-1,217.40	-4,795.13	4,735.52	4,591.35	144.17	32.847	
4,000.00	3,571.56	3,526.56	3,571.56	26.48	121.41	91.86	-1,217.40	-4,795.13	4,737.29	4,589.41	147.89	32.033	
4,100.00	3,655.80	3,610.80	3,655.80	27.27	124.35	92.41	-1,217.40	-4,795.13	4,739.68	4,588.07	151.60	31.263	
4,200.00	3,740.05	3,704.95	3,740.05	28.05	127.64	92.96	-1,217.40	-4,795.13	4,742.67	4,587.01	155.67	30.467	
4,300.00	3,824.29	3,779.29	3,824.29	28.84	130.23	93.51	-1,217.40	-4,795.13	4,746.28	4,587.24	159.04	29.844	
4,400.00	3,908.54	3,863.54	3,908.54	29.62	133.17	94.06	-1,217.40	-4,795.13	4,750.50	4,587.74	162.75	29.189	
4,500.00	3,992.78	3,947.78	3,992.78	30.41	136.11	94.60	-1,217.40	-4,795.13	4,755.32	4,588.85	166.46	28.567	
4,600.00	4,077.03	4,032.03	4,077.03	31.20	139.05	95.15	-1,217.40	-4,795.13	4,760.74	4,590.57	170.17	27.976	
4,700.00	4,161.27	4,116.27	4,161.27	31.98	141.99	95.69	-1,217.40	-4,795.13	4,766.77	4,592.89	173.88	27.414	
4,800.00	4,245.51	4,200.51	4,245.51	32.77	144.93	96.24	-1,217.40	-4,795.13	4,773.40	4,595.81	177.59	26.879	
4,900.00	4,329.76	4,284.76	4,329.76	33.56	147.87	96.78	-1,217.40	-4,795.13	4,780.63	4,599.34	181.29	26.370	
5,000.00	4,414.00	4,369.00	4,414.00	34.35	150.81	97.32	-1,217.40	-4,795.13	4,788.45	4,603.46	184.99	25.885	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-42(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	4,453.25	4,498.25	35.14	153.75	97.86	-1,217.40	-4,795.13	4,796.87	4,608.18	188.69	25.422		
5,200.00	4,582.49	4,537.49	4,582.49	35.93	156.69	98.40	-1,217.40	-4,795.13	4,805.87	4,613.49	192.38	24.981		
5,300.00	4,666.73	4,621.73	4,666.73	36.72	159.63	98.93	-1,217.40	-4,795.13	4,815.47	4,619.39	196.08	24.559		
5,400.00	4,750.98	4,705.98	4,750.98	37.51	162.57	99.47	-1,217.40	-4,795.13	4,825.64	4,625.87	199.77	24.157		
5,500.00	4,835.22	4,809.78	4,835.22	38.30	166.20	100.00	-1,217.40	-4,795.13	4,836.39	4,632.26	204.13	23.692		
5,600.00	4,919.47	4,874.47	4,919.47	39.09	168.45	100.53	-1,217.40	-4,795.13	4,847.72	4,640.59	207.13	23.404		
5,700.00	5,003.71	4,958.71	5,003.71	39.88	171.39	101.06	-1,217.40	-4,795.13	4,859.62	4,648.81	210.81	23.052		
5,800.00	5,088.06	5,043.06	5,088.06	40.67	174.34	101.67	-1,217.40	-4,795.13	4,872.04	4,657.56	214.49	22.715		
5,900.00	5,173.83	5,128.83	5,173.83	41.44	177.33	102.43	-1,217.40	-4,795.13	4,884.46	4,666.27	218.19	22.386		
6,000.00	5,261.34	5,216.34	5,261.34	42.18	180.39	103.16	-1,217.40	-4,795.13	4,896.61	4,674.68	221.92	22.064		
6,100.00	5,350.49	5,305.49	5,350.49	42.88	183.50	103.85	-1,217.40	-4,795.13	4,908.39	4,682.70	225.69	21.749		
6,200.00	5,441.16	5,403.84	5,441.16	43.56	186.93	104.50	-1,217.40	-4,795.13	4,919.70	4,689.96	229.74	21.414		
6,300.00	5,533.25	5,488.25	5,533.25	44.20	189.88	105.12	-1,217.40	-4,795.13	4,930.45	4,697.17	233.28	21.135		
6,400.00	5,626.65	5,581.65	5,626.65	44.82	193.14	105.69	-1,217.40	-4,795.13	4,940.56	4,703.46	237.10	20.837		
6,500.00	5,721.23	5,676.23	5,721.23	45.40	196.44	106.21	-1,217.40	-4,795.13	4,949.95	4,709.01	240.94	20.544		
6,600.00	5,816.89	5,771.89	5,816.89	45.94	199.78	106.69	-1,217.40	-4,795.13	4,958.54	4,713.76	244.78	20.257		
6,700.00	5,913.51	5,868.51	5,913.51	46.45	203.15	107.11	-1,217.40	-4,795.13	4,966.28	4,717.64	248.63	19.974		
6,800.00	6,010.97	5,965.97	6,010.97	46.93	206.55	107.49	-1,217.40	-4,795.13	4,973.09	4,720.61	252.48	19.697		
6,900.00	6,109.15	6,064.15	6,109.15	47.38	209.98	107.80	-1,217.40	-4,795.13	4,978.94	4,722.61	256.33	19.424		
7,000.00	6,207.93	6,162.93	6,207.93	47.80	213.43	108.06	-1,217.40	-4,795.13	4,983.77	4,723.60	260.17	19.156		
7,100.00	6,307.19	6,262.19	6,307.19	48.18	216.89	108.27	-1,217.40	-4,795.13	4,987.56	4,723.56	264.00	18.892		
7,200.00	6,406.82	6,361.82	6,406.82	48.53	220.37	108.41	-1,217.40	-4,795.13	4,990.28	4,722.46	267.82	18.633		
7,300.00	6,506.68	6,461.68	6,506.68	48.84	223.86	108.50	-1,217.40	-4,795.13	4,991.90	4,720.28	271.61	18.379		
7,400.00	6,606.66	6,561.66	6,606.66	49.10	227.35	21.52	-1,217.40	-4,795.13	4,992.41	4,717.05	275.36	18.130		
7,500.00	6,706.21	6,661.21	6,706.21	49.35	230.82	21.82	-1,217.40	-4,795.13	4,984.64	4,705.56	279.08	17.861		
7,600.00	6,803.22	6,758.22	6,803.22	49.59	234.21	22.70	-1,217.40	-4,795.13	4,962.50	4,679.80	282.70	17.554		
7,700.00	6,895.32	6,850.32	6,895.32	49.82	237.42	24.26	-1,217.40	-4,795.13	4,926.55	4,640.43	286.12	17.219		
7,800.00	6,980.23	6,935.23	6,980.23	50.03	240.39	26.69	-1,217.40	-4,795.13	4,877.73	4,588.48	289.25	16.863		
7,900.00	7,055.85	7,010.85	7,055.85	50.21	243.03	30.30	-1,217.40	-4,795.13	4,817.30	4,525.27	292.03	16.496		
8,000.00	7,120.34	7,075.34	7,120.34	50.36	245.28	35.63	-1,217.40	-4,795.13	4,746.82	4,452.42	294.40	16.123		
8,100.00	7,172.10	7,127.10	7,172.10	50.47	247.08	43.51	-1,217.40	-4,795.13	4,668.11	4,371.79	296.32	15.753		
8,200.00	7,209.85	7,164.85	7,209.85	50.55	248.40	55.10	-1,217.40	-4,795.13	4,583.18	4,285.42	297.76	15.392		
8,300.00	7,232.68	7,187.68	7,232.68	50.61	249.20	71.27	-1,217.40	-4,795.13	4,494.20	4,195.50	298.70	15.046		
8,400.00	7,240.00	7,205.00	7,240.00	50.65	249.80	90.51	-1,217.40	-4,795.13	4,403.41	4,103.92	299.49	14.703		
8,500.00	7,239.60	7,205.40	7,239.60	50.69	249.82	90.50	-1,217.40	-4,795.13	4,312.67	4,012.94	299.73	14.388		
8,600.00	7,239.19	7,205.81	7,239.19	50.75	249.83	90.48	-1,217.40	-4,795.13	4,222.35	3,922.33	300.02	14.074		
8,700.00	7,238.78	7,206.22	7,238.78	50.85	249.85	90.47	-1,217.40	-4,795.13	4,132.48	3,832.12	300.36	13.759		
8,800.00	7,238.38	7,206.62	7,238.38	51.02	249.86	90.46	-1,217.40	-4,795.13	4,043.08	3,742.34	300.75	13.444		
8,900.00	7,237.97	7,207.03	7,237.97	51.32	249.87	90.44	-1,217.40	-4,795.13	3,954.19	3,653.00	301.19	13.128		
9,000.00	7,237.57	7,207.43	7,237.57	51.95	249.89	90.43	-1,217.40	-4,795.13	3,865.85	3,564.14	301.71	12.813		
9,100.00	7,237.16	7,207.84	7,237.16	53.10	249.90	90.42	-1,217.40	-4,795.13	3,778.08	3,475.79	302.29	12.498		
9,200.00	7,236.76	7,208.24	7,236.76	54.69	249.92	90.41	-1,217.40	-4,795.13	3,690.94	3,387.99	302.95	12.183		
9,300.00	7,236.35	7,208.65	7,236.35	56.53	249.93	90.39	-1,217.40	-4,795.13	3,604.46	3,300.77	303.69	11.869		
9,400.00	7,235.94	7,209.06	7,235.94	58.53	249.94	90.38	-1,217.40	-4,795.13	3,518.70	3,214.18	304.52	11.555		
9,500.00	7,235.54	7,209.46	7,235.54	60.62	249.96	90.37	-1,217.40	-4,795.13	3,433.71	3,128.26	305.45	11.242		
9,600.00	7,235.13	7,209.87	7,235.13	62.80	249.97	90.36	-1,217.40	-4,795.13	3,349.55	3,043.07	306.48	10.929		
9,700.00	7,234.73	7,189.73	7,234.73	65.03	249.27	90.34	-1,217.40	-4,795.13	3,266.28	2,959.38	306.90	10.643		
9,800.00	7,234.32	7,189.32	7,234.32	67.32	249.26	90.33	-1,217.40	-4,795.13	3,183.98	2,875.85	308.14	10.333		
9,900.00	7,233.92	7,188.92	7,233.92	69.66	249.24	90.32	-1,217.40	-4,795.13	3,102.72	2,793.22	309.49	10.025		
10,000.00	7,233.51	7,188.51	7,233.51	72.03	249.23	90.31	-1,217.40	-4,795.13	3,022.58	2,711.59	310.99	9.719		
10,100.00	7,233.10	7,188.10	7,233.10	74.45	249.21	90.29	-1,217.40	-4,795.13	2,943.65	2,631.03	312.62	9.416		
10,200.00	7,232.70	7,187.70	7,232.70	76.89	249.20	90.28	-1,217.40	-4,795.13	2,866.05	2,551.64	314.41	9.116		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-42(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	7,187.29	7,232.29	79.36	249.18	90.27	-1,217.40	-4,795.13	2,789.86	2,473.51	316.35	8.819		
10,400.00	7,231.89	7,186.89	7,231.89	81.86	249.17	90.25	-1,217.40	-4,795.13	2,715.23	2,396.77	318.46	8.526		
10,500.00	7,231.48	7,186.48	7,231.48	84.38	249.16	90.24	-1,217.40	-4,795.13	2,642.27	2,321.54	320.73	8.238		
10,600.00	7,231.08	7,186.08	7,231.08	86.93	249.14	90.23	-1,217.40	-4,795.13	2,571.13	2,247.95	323.18	7.956		
10,700.00	7,230.67	7,185.67	7,230.67	89.49	249.13	90.22	-1,217.40	-4,795.13	2,501.96	2,176.17	325.80	7.680		
10,800.00	7,230.26	7,185.26	7,230.26	92.07	249.11	90.20	-1,217.40	-4,795.13	2,434.94	2,106.35	328.59	7.410		
10,900.00	7,229.86	7,184.86	7,229.86	94.67	249.10	90.19	-1,217.40	-4,795.13	2,370.24	2,038.68	331.57	7.149		
11,000.00	7,229.45	7,184.45	7,229.45	97.28	249.09	90.18	-1,217.40	-4,795.13	2,308.07	1,973.36	334.71	6.896		
11,100.00	7,229.05	7,184.05	7,229.05	99.90	249.07	90.17	-1,217.40	-4,795.13	2,248.62	1,910.61	338.01	6.652		
11,200.00	7,228.64	7,183.64	7,228.64	102.54	249.06	90.15	-1,217.40	-4,795.13	2,192.12	1,850.65	341.47	6.420		
11,300.00	7,228.24	7,183.24	7,228.24	105.19	249.04	90.14	-1,217.40	-4,795.13	2,138.81	1,793.76	345.06	6.198		
11,400.00	7,227.83	7,182.83	7,227.83	107.85	249.03	90.13	-1,217.40	-4,795.13	2,088.93	1,740.17	348.76	5.990		
11,500.00	7,227.42	7,182.42	7,227.42	110.52	249.02	90.11	-1,217.40	-4,795.13	2,042.73	1,690.19	352.54	5.794		
11,600.00	7,227.02	7,182.02	7,227.02	113.20	249.00	90.10	-1,217.40	-4,795.13	2,000.47	1,644.08	356.38	5.613		
11,700.00	7,226.61	7,181.61	7,226.61	115.89	248.99	90.09	-1,217.40	-4,795.13	1,962.39	1,602.15	360.24	5.447		
11,800.00	7,226.21	7,181.21	7,226.21	118.59	248.97	90.08	-1,217.40	-4,795.13	1,928.75	1,564.69	364.06	5.298		
11,900.00	7,225.80	7,180.80	7,225.80	121.29	248.96	90.06	-1,217.40	-4,795.13	1,899.79	1,531.98	367.81	5.165		
12,000.00	7,225.40	7,180.40	7,225.40	124.00	248.94	90.05	-1,217.40	-4,795.13	1,875.72	1,504.28	371.44	5.050		
12,100.00	7,224.99	7,179.99	7,224.99	126.72	248.93	90.04	-1,217.40	-4,795.13	1,856.73	1,481.84	374.88	4.953		
12,200.00	7,224.58	7,179.58	7,224.58	129.44	248.92	90.03	-1,217.40	-4,795.13	1,842.97	1,464.86	378.11	4.874		
12,300.00	7,224.18	7,179.18	7,224.18	132.17	248.90	90.01	-1,217.40	-4,795.13	1,834.57	1,453.51	381.06	4.814		
12,400.00	7,223.77	7,178.77	7,223.77	134.91	248.89	90.00	-1,217.40	-4,795.13	1,831.60	1,447.90	383.71	4.773		
12,404.44	7,223.75	7,178.75	7,223.75	135.03	248.89	90.00	-1,217.40	-4,795.13	1,831.60	1,447.78	383.82	4.772	CC, ES	
12,500.00	7,223.37	7,178.37	7,223.37	137.65	248.87	89.99	-1,217.40	-4,795.13	1,834.09	1,448.07	386.02	4.751		
12,600.00	7,222.96	7,177.96	7,222.96	140.39	248.86	89.98	-1,217.40	-4,795.13	1,842.01	1,454.04	387.97	4.748	SF	
12,700.00	7,222.55	7,177.55	7,222.55	143.14	248.85	89.96	-1,217.40	-4,795.13	1,855.29	1,465.75	389.54	4.763		
12,800.00	7,222.15	7,177.15	7,222.15	145.89	248.83	89.95	-1,217.40	-4,795.13	1,873.82	1,483.07	390.75	4.795		
12,900.00	7,221.74	7,176.74	7,221.74	148.65	248.82	89.94	-1,217.40	-4,795.13	1,897.45	1,505.85	391.61	4.845		
13,000.00	7,221.34	7,176.34	7,221.34	151.41	248.80	89.92	-1,217.40	-4,795.13	1,925.99	1,533.88	392.11	4.912		
13,100.00	7,220.93	7,175.93	7,220.93	154.18	248.79	89.91	-1,217.40	-4,795.13	1,959.22	1,566.92	392.31	4.994		
13,200.00	7,220.53	7,175.53	7,220.53	156.94	248.77	89.90	-1,217.40	-4,795.13	1,996.91	1,604.70	392.21	5.091		
13,300.00	7,220.12	7,175.12	7,220.12	159.72	248.76	89.89	-1,217.40	-4,795.13	2,038.82	1,646.96	391.86	5.203		
13,400.00	7,219.71	7,174.71	7,219.71	162.49	248.75	89.87	-1,217.40	-4,795.13	2,084.68	1,693.39	391.28	5.328		
13,500.00	7,219.31	7,174.31	7,219.31	165.27	248.73	89.86	-1,217.40	-4,795.13	2,134.24	1,743.72	390.52	5.465		
13,600.00	7,218.90	7,173.90	7,218.90	168.05	248.72	89.85	-1,217.40	-4,795.13	2,187.26	1,797.66	389.60	5.614		
13,700.00	7,218.50	7,173.50	7,218.50	170.83	248.70	89.84	-1,217.40	-4,795.13	2,243.48	1,854.94	388.54	5.774		
13,800.00	7,218.09	7,173.09	7,218.09	173.61	248.69	89.82	-1,217.40	-4,795.13	2,302.68	1,915.29	387.39	5.944		
13,900.00	7,217.69	7,172.69	7,217.69	176.40	248.68	89.81	-1,217.40	-4,795.13	2,364.62	1,978.46	386.15	6.124		
14,000.00	7,217.28	7,172.28	7,217.28	179.19	248.66	89.80	-1,217.40	-4,795.13	2,429.10	2,044.24	384.86	6.312		
14,100.00	7,216.87	7,171.87	7,216.87	181.98	248.65	89.78	-1,217.40	-4,795.13	2,495.92	2,112.39	383.53	6.508		
14,200.00	7,216.47	7,171.47	7,216.47	184.78	248.63	89.77	-1,217.40	-4,795.13	2,564.91	2,182.73	382.18	6.711		
14,300.00	7,216.06	7,171.06	7,216.06	187.57	248.62	89.76	-1,217.40	-4,795.13	2,635.88	2,255.07	380.81	6.922		
14,400.00	7,215.66	7,170.66	7,215.66	190.37	248.60	89.75	-1,217.40	-4,795.13	2,708.68	2,329.24	379.45	7.139		
14,500.00	7,215.25	7,170.25	7,215.25	193.17	248.59	89.73	-1,217.40	-4,795.13	2,783.17	2,405.09	378.09	7.361		
14,600.00	7,214.85	7,169.85	7,214.85	195.97	248.58	89.72	-1,217.40	-4,795.13	2,859.22	2,482.48	376.74	7.589		
14,700.00	7,214.44	7,169.44	7,214.44	198.77	248.56	89.71	-1,217.40	-4,795.13	2,936.71	2,561.29	375.42	7.822		
14,800.00	7,214.03	7,169.03	7,214.03	201.58	248.55	89.70	-1,217.40	-4,795.13	3,015.52	2,641.40	374.12	8.060		
14,900.00	7,213.63	7,168.63	7,213.63	204.38	248.53	89.68	-1,217.40	-4,795.13	3,095.56	2,722.70	372.86	8.302		
15,000.00	7,213.22	7,168.22	7,213.22	207.19	248.52	89.67	-1,217.40	-4,795.13	3,176.73	2,805.11	371.62	8.548		
15,100.00	7,212.82	7,167.82	7,212.82	210.00	248.51	89.66	-1,217.40	-4,795.13	3,258.94	2,888.53	370.41	8.798		
15,200.00	7,212.41	7,167.41	7,212.41	212.81	248.49	89.65	-1,217.40	-4,795.13	3,342.12	2,972.88	369.24	9.051		
15,300.00	7,212.01	7,167.01	7,212.01	215.62	248.48	89.63	-1,217.40	-4,795.13	3,426.21	3,058.10	368.11	9.308		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
HARVESTERS STATE 7-15 PAD - BURMAN 16-42(PR_75CC) - OH - OH												Offset Well Error:	3.28 ft
Survey Program: 100-2" Cone@2.448 Sigma													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.00	7,211.60	7,166.60	7,211.60	218.43	248.46	89.62	-1,217.40	-4,795.13	3,511.12	3,144.12	367.01	9.567	
15,500.00	7,211.19	7,166.19	7,211.19	221.25	248.45	89.61	-1,217.40	-4,795.13	3,596.82	3,230.88	365.94	9.829	
15,600.00	7,210.79	7,165.79	7,210.79	224.06	248.43	89.59	-1,217.40	-4,795.13	3,683.23	3,318.32	364.91	10.094	
15,700.00	7,210.38	7,165.38	7,210.38	226.88	248.42	89.58	-1,217.40	-4,795.13	3,770.32	3,406.41	363.91	10.360	
15,794.94	7,210.00	7,165.00	7,210.00	229.55	248.41	89.57	-1,217.40	-4,795.13	3,853.58	3,490.58	363.00	10.616	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-43(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	48.00	3.28	3.28	-119.52	-2,718.34	-4,800.98	5,517.34				
100.00	100.00	52.00	100.00	3.28	3.40	-119.52	-2,718.34	-4,800.98	5,517.13	5,510.45	6.69	824.931	
200.00	200.00	152.00	200.00	3.34	4.84	-119.52	-2,718.34	-4,800.98	5,517.13	5,508.96	8.18	674.607	
300.00	299.98	251.98	299.98	3.44	7.78	57.86	-2,718.34	-4,800.98	5,516.21	5,504.99	11.22	491.808	
400.00	399.84	351.84	399.84	3.59	11.04	57.96	-2,718.34	-4,800.98	5,513.42	5,498.80	14.63	376.980	
500.00	499.45	451.45	499.45	3.79	14.39	58.11	-2,718.34	-4,800.98	5,508.80	5,490.61	18.18	302.994	
600.00	598.70	550.70	598.70	4.03	17.78	58.33	-2,718.34	-4,800.98	5,502.34	5,480.53	21.81	252.228	
700.00	697.47	649.47	697.47	4.31	21.18	58.61	-2,718.34	-4,800.98	5,494.09	5,468.59	25.50	215.490	
800.00	795.62	747.62	795.62	4.64	24.57	58.95	-2,718.34	-4,800.98	5,484.06	5,454.86	29.21	187.769	
900.00	893.06	845.06	893.06	5.00	27.95	59.35	-2,718.34	-4,800.98	5,472.30	5,439.37	32.93	166.156	
1,000.00	989.64	941.64	989.64	5.40	31.30	59.81	-2,718.34	-4,800.98	5,458.86	5,422.19	36.67	148.857	
1,100.00	1,085.27	1,037.27	1,085.27	5.83	34.62	60.33	-2,718.34	-4,800.98	5,443.78	5,403.37	40.41	134.710	
1,200.00	1,179.82	1,131.82	1,179.82	6.29	37.91	60.92	-2,718.34	-4,800.98	5,427.13	5,382.98	44.15	122.936	
1,300.00	1,273.17	1,225.17	1,273.17	6.79	41.16	61.55	-2,718.34	-4,800.98	5,408.96	5,361.09	47.87	112.989	
1,400.00	1,365.21	1,317.21	1,365.21	7.33	44.36	62.25	-2,718.34	-4,800.98	5,389.36	5,337.77	51.58	104.479	
1,500.00	1,455.84	1,407.84	1,455.84	7.89	47.52	63.00	-2,718.34	-4,800.98	5,368.39	5,313.11	55.28	97.118	
1,600.00	1,544.94	1,503.06	1,544.94	8.50	50.83	63.81	-2,718.34	-4,800.98	5,346.15	5,286.99	59.16	90.364	
1,700.00	1,632.39	1,584.39	1,632.39	9.13	53.67	64.66	-2,718.34	-4,800.98	5,322.73	5,260.13	62.60	85.034	
1,800.00	1,718.11	1,670.11	1,718.11	9.80	56.65	65.57	-2,718.34	-4,800.98	5,298.21	5,232.00	66.21	80.018	
1,900.00	1,802.44	1,754.44	1,802.44	10.49	59.59	66.17	-2,718.34	-4,800.98	5,273.04	5,203.24	69.81	75.538	
2,000.00	1,886.68	1,838.68	1,886.68	11.20	62.53	66.64	-2,718.34	-4,800.98	5,248.25	5,174.83	73.42	71.486	
2,100.00	1,970.92	1,922.92	1,970.92	11.93	65.47	67.11	-2,718.34	-4,800.98	5,223.89	5,146.85	77.04	67.807	
2,200.00	2,055.17	2,007.17	2,055.17	12.66	68.40	67.59	-2,718.34	-4,800.98	5,199.97	5,119.29	80.68	64.454	
2,300.00	2,139.41	2,108.59	2,139.41	13.40	71.94	68.06	-2,718.34	-4,800.98	5,176.50	5,091.58	84.92	60.955	
2,400.00	2,223.66	2,175.66	2,223.66	14.14	74.28	68.54	-2,718.34	-4,800.98	5,153.50	5,065.51	87.98	58.574	
2,500.00	2,307.90	2,259.90	2,307.90	14.89	77.22	69.03	-2,718.34	-4,800.98	5,130.95	5,039.30	91.65	55.985	
2,600.00	2,392.14	2,344.14	2,392.14	15.65	80.16	69.52	-2,718.34	-4,800.98	5,108.87	5,013.55	95.32	53.595	
2,700.00	2,476.39	2,428.39	2,476.39	16.41	83.09	70.01	-2,718.34	-4,800.98	5,087.27	4,988.26	99.01	51.383	
2,800.00	2,560.63	2,512.63	2,560.63	17.17	86.03	70.50	-2,718.34	-4,800.98	5,066.15	4,963.45	102.70	49.332	
2,900.00	2,644.88	2,603.12	2,644.88	17.93	89.19	71.00	-2,718.34	-4,800.98	5,045.51	4,938.90	106.61	47.328	
3,000.00	2,729.12	2,681.12	2,729.12	18.70	91.91	71.49	-2,718.34	-4,800.98	5,025.37	4,915.28	110.09	45.647	
3,100.00	2,813.36	2,765.36	2,813.36	19.47	94.85	72.00	-2,718.34	-4,800.98	5,005.73	4,891.93	113.80	43.988	
3,200.00	2,897.61	2,849.61	2,897.61	20.25	97.79	72.50	-2,718.34	-4,800.98	4,986.59	4,869.08	117.51	42.436	
3,300.00	2,981.85	2,933.85	2,981.85	21.02	100.73	73.01	-2,718.34	-4,800.98	4,967.96	4,846.73	121.22	40.982	
3,400.00	3,066.10	3,018.10	3,066.10	21.80	103.67	73.52	-2,718.34	-4,800.98	4,949.85	4,824.90	124.94	39.616	
3,500.00	3,150.34	3,102.34	3,150.34	22.58	106.61	74.03	-2,718.34	-4,800.98	4,932.26	4,803.59	128.67	38.333	
3,600.00	3,234.58	3,186.58	3,234.58	23.35	109.55	74.55	-2,718.34	-4,800.98	4,915.20	4,782.80	132.40	37.125	
3,700.00	3,318.83	3,270.83	3,318.83	24.13	112.49	75.07	-2,718.34	-4,800.98	4,898.67	4,762.54	136.13	35.986	
3,800.00	3,403.07	3,355.07	3,403.07	24.92	115.43	75.59	-2,718.34	-4,800.98	4,882.68	4,742.82	139.86	34.911	
3,900.00	3,487.32	3,439.32	3,487.32	25.70	118.37	76.11	-2,718.34	-4,800.98	4,867.23	4,723.63	143.60	33.895	
4,000.00	3,571.56	3,523.56	3,571.56	26.48	121.31	76.64	-2,718.34	-4,800.98	4,852.34	4,705.00	147.34	32.934	
4,100.00	3,655.80	3,607.80	3,655.80	27.27	124.25	77.17	-2,718.34	-4,800.98	4,837.99	4,686.91	151.08	32.023	
4,200.00	3,740.05	3,707.95	3,740.05	28.05	127.74	77.70	-2,718.34	-4,800.98	4,824.21	4,668.83	155.38	31.048	
4,300.00	3,824.29	3,776.29	3,824.29	28.84	130.13	78.23	-2,718.34	-4,800.98	4,810.99	4,652.42	158.57	30.340	
4,400.00	3,908.54	3,860.54	3,908.54	29.62	133.07	78.76	-2,718.34	-4,800.98	4,798.34	4,636.02	162.32	29.562	
4,500.00	3,992.78	3,944.78	3,992.78	30.41	136.01	79.30	-2,718.34	-4,800.98	4,786.26	4,620.19	166.07	28.821	
4,600.00	4,077.03	4,029.03	4,077.03	31.20	138.95	79.84	-2,718.34	-4,800.98	4,774.76	4,604.94	169.82	28.117	
4,700.00	4,161.27	4,113.27	4,161.27	31.98	141.89	80.38	-2,718.34	-4,800.98	4,763.84	4,590.27	173.57	27.447	
4,800.00	4,245.51	4,202.49	4,245.51	32.77	145.00	80.92	-2,718.34	-4,800.98	4,753.51	4,576.01	177.49	26.781	
4,900.00	4,329.76	4,281.76	4,329.76	33.56	147.77	81.47	-2,718.34	-4,800.98	4,743.76	4,562.69	181.07	26.198	
5,000.00	4,414.00	4,366.00	4,414.00	34.35	150.71	82.01	-2,718.34	-4,800.98	4,734.61	4,549.79	184.83	25.616	
5,100.00	4,498.25	4,450.25	4,498.25	35.14	153.65	82.56	-2,718.34	-4,800.98	4,726.06	4,537.48	188.58	25.061	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-43(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,534.49	4,582.49	35.93	156.59	83.11	-2,718.34	-4,800.98	4,718.11	4,525.77	192.33	24.531		
5,300.00	4,666.73	4,618.73	4,666.73	36.72	159.53	83.66	-2,718.34	-4,800.98	4,710.75	4,514.67	196.09	24.024		
5,400.00	4,750.98	4,702.98	4,750.98	37.51	162.47	84.21	-2,718.34	-4,800.98	4,704.01	4,504.17	199.84	23.539		
5,500.00	4,835.22	4,787.22	4,835.22	38.30	165.41	84.76	-2,718.34	-4,800.98	4,697.87	4,494.28	203.59	23.075		
5,600.00	4,919.47	4,871.47	4,919.47	39.09	168.35	85.31	-2,718.34	-4,800.98	4,692.34	4,485.00	207.35	22.631		
5,700.00	5,003.71	4,955.71	5,003.71	39.88	171.29	85.86	-2,718.34	-4,800.98	4,687.43	4,476.34	211.10	22.205		
5,800.00	5,088.06	5,040.06	5,088.06	40.67	174.23	86.39	-2,718.34	-4,800.98	4,683.14	4,468.30	214.85	21.798		
5,900.00	5,173.83	5,125.83	5,173.83	41.44	177.23	86.86	-2,718.34	-4,800.98	4,679.62	4,460.99	218.62	21.405		
6,000.00	5,261.34	5,213.34	5,261.34	42.18	180.28	87.32	-2,718.34	-4,800.98	4,676.81	4,454.38	222.43	21.026		
6,100.00	5,350.49	5,302.49	5,350.49	42.88	183.39	87.77	-2,718.34	-4,800.98	4,674.63	4,448.38	226.25	20.661		
6,200.00	5,441.16	5,406.84	5,441.16	43.56	187.04	88.21	-2,718.34	-4,800.98	4,673.00	4,442.42	230.58	20.266		
6,300.00	5,533.25	5,485.25	5,533.25	44.20	189.77	88.62	-2,718.34	-4,800.98	4,671.83	4,437.86	233.97	19.968		
6,400.00	5,626.65	5,578.65	5,626.65	44.82	193.03	89.02	-2,718.34	-4,800.98	4,671.04	4,433.20	237.84	19.639		
6,500.00	5,721.23	5,673.23	5,721.23	45.40	196.33	89.38	-2,718.34	-4,800.98	4,670.56	4,428.84	241.73	19.322		
6,600.00	5,816.89	5,768.89	5,816.89	45.94	199.67	89.72	-2,718.34	-4,800.98	4,670.32	4,424.71	245.61	19.015		
6,690.93	5,904.71	5,856.71	5,904.71	46.41	202.74	90.00	-2,718.34	-4,800.98	4,670.27	4,421.12	249.15	18.745		
6,700.00	5,913.51	5,865.51	5,913.51	46.45	203.05	90.03	-2,718.34	-4,800.98	4,670.27	4,420.77	249.50	18.718		
6,800.00	6,010.97	5,962.97	6,010.97	46.93	206.45	90.30	-2,718.34	-4,800.98	4,670.33	4,416.95	253.38	18.432		
6,900.00	6,109.15	6,061.15	6,109.15	47.38	209.88	90.53	-2,718.34	-4,800.98	4,670.47	4,413.21	257.26	18.155		
7,000.00	6,207.93	6,159.93	6,207.93	47.80	213.32	90.72	-2,718.34	-4,800.98	4,670.64	4,409.52	261.12	17.887		
7,100.00	6,307.19	6,259.19	6,307.19	48.18	216.79	90.87	-2,718.34	-4,800.98	4,670.81	4,405.84	264.96	17.628		
7,200.00	6,406.82	6,358.82	6,406.82	48.53	220.27	90.98	-2,718.34	-4,800.98	4,670.95	4,402.16	268.79	17.378		
7,300.00	6,506.68	6,458.68	6,506.68	48.84	223.75	91.04	-2,718.34	-4,800.98	4,671.04	4,398.44	272.59	17.136		
7,400.00	6,606.66	6,558.66	6,606.66	49.10	227.24	4.06	-2,718.34	-4,800.98	4,671.06	4,394.72	276.34	16.903		
7,500.00	6,706.21	6,658.21	6,706.21	49.35	230.72	4.12	-2,718.34	-4,800.98	4,662.73	4,382.67	280.06	16.649		
7,600.00	6,803.22	6,755.22	6,803.22	49.59	234.10	4.31	-2,718.34	-4,800.98	4,668.97	4,355.28	283.69	16.352		
7,700.00	6,895.32	6,847.32	6,895.32	49.82	237.32	4.64	-2,718.34	-4,800.98	4,600.37	4,313.23	287.13	16.022		
7,800.00	6,980.23	6,932.23	6,980.23	50.03	240.28	5.17	-2,718.34	-4,800.98	4,547.87	4,257.57	290.30	15.666		
7,900.00	7,055.85	7,007.85	7,055.85	50.21	242.92	6.00	-2,718.34	-4,800.98	4,482.78	4,189.66	293.12	15.293		
8,000.00	7,120.34	7,072.34	7,120.34	50.36	245.17	7.35	-2,718.34	-4,800.98	4,406.70	4,111.17	295.52	14.912		
8,100.00	7,172.10	7,124.10	7,172.10	50.47	246.98	9.69	-2,718.34	-4,800.98	4,321.50	4,024.06	297.44	14.529		
8,200.00	7,209.85	7,161.85	7,209.85	50.55	248.30	14.46	-2,718.34	-4,800.98	4,229.29	3,930.44	298.84	14.152		
8,300.00	7,232.68	7,184.68	7,232.68	50.61	249.09	27.94	-2,718.34	-4,800.98	4,132.34	3,832.64	299.70	13.788		
8,400.00	7,240.00	7,208.00	7,240.00	50.65	249.91	92.82	-2,718.34	-4,800.98	4,033.04	3,732.48	300.55	13.419		
8,500.00	7,239.60	7,208.40	7,239.60	50.69	249.92	92.75	-2,718.34	-4,800.98	3,933.38	3,632.78	300.60	13.085		
8,600.00	7,239.19	7,208.81	7,239.19	50.75	249.94	92.68	-2,718.34	-4,800.98	3,833.75	3,533.09	300.66	12.751		
8,700.00	7,238.78	7,209.22	7,238.78	50.85	249.95	92.61	-2,718.34	-4,800.98	3,734.13	3,433.42	300.72	12.418		
8,800.00	7,238.38	7,209.62	7,238.38	51.02	249.96	92.54	-2,718.34	-4,800.98	3,634.54	3,333.76	300.78	12.084		
8,900.00	7,237.97	7,189.97	7,237.97	51.32	249.28	92.47	-2,718.34	-4,800.98	3,534.96	3,234.82	300.14	11.778		
9,000.00	7,237.57	7,189.57	7,237.57	51.95	249.26	92.40	-2,718.34	-4,800.98	3,435.41	3,135.23	300.19	11.444		
9,100.00	7,237.16	7,189.16	7,237.16	53.10	249.25	92.33	-2,718.34	-4,800.98	3,335.89	3,035.66	300.24	11.111		
9,200.00	7,236.76	7,188.76	7,236.76	54.69	249.24	92.26	-2,718.34	-4,800.98	3,236.40	2,936.11	300.30	10.777		
9,300.00	7,236.35	7,188.35	7,236.35	56.53	249.22	92.19	-2,718.34	-4,800.98	3,136.94	2,836.58	300.36	10.444		
9,400.00	7,235.94	7,187.94	7,235.94	58.53	249.21	92.12	-2,718.34	-4,800.98	3,037.52	2,737.09	300.43	10.110		
9,500.00	7,235.54	7,187.54	7,235.54	60.62	249.19	92.05	-2,718.34	-4,800.98	2,938.14	2,637.62	300.52	9.777		
9,600.00	7,235.13	7,187.13	7,235.13	62.80	249.18	91.98	-2,718.34	-4,800.98	2,838.79	2,538.18	300.61	9.443		
9,700.00	7,234.73	7,186.73	7,234.73	65.03	249.17	91.91	-2,718.34	-4,800.98	2,739.50	2,438.78	300.72	9.110		
9,800.00	7,234.32	7,186.32	7,234.32	67.32	249.15	91.84	-2,718.34	-4,800.98	2,640.26	2,339.42	300.84	8.776		
9,900.00	7,233.92	7,185.92	7,233.92	69.66	249.14	91.77	-2,718.34	-4,800.98	2,541.08	2,240.10	300.98	8.443		
10,000.00	7,233.51	7,185.51	7,233.51	72.03	249.12	91.70	-2,718.34	-4,800.98	2,441.97	2,140.83	301.13	8.109		
10,100.00	7,233.10	7,185.10	7,233.10	74.45	249.11	91.63	-2,718.34	-4,800.98	2,342.93	2,041.62	301.31	7.776		
10,200.00	7,232.70	7,184.70	7,232.70	76.89	249.09	91.56	-2,718.34	-4,800.98	2,243.97	1,942.46	301.52	7.442		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-43(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	7,184.29	7,232.29	79.36	249.08	91.49	-2,718.34	-4,800.98	2,145.12	1,843.36	301.76	7.109		
10,400.00	7,231.89	7,183.89	7,231.89	81.86	249.07	91.42	-2,718.34	-4,800.98	2,046.37	1,744.34	302.03	6.775		
10,500.00	7,231.48	7,183.48	7,231.48	84.38	249.05	91.35	-2,718.34	-4,800.98	1,947.75	1,645.40	302.35	6.442		
10,600.00	7,231.08	7,183.08	7,231.08	86.93	249.04	91.28	-2,718.34	-4,800.98	1,849.29	1,546.56	302.73	6.109		
10,700.00	7,230.67	7,182.67	7,230.67	89.49	249.02	91.21	-2,718.34	-4,800.98	1,750.99	1,447.82	303.17	5.776		
10,800.00	7,230.26	7,182.26	7,230.26	92.07	249.01	91.14	-2,718.34	-4,800.98	1,652.90	1,349.21	303.69	5.443		
10,900.00	7,229.86	7,181.86	7,229.86	94.67	249.00	91.07	-2,718.34	-4,800.98	1,555.05	1,250.74	304.31	5.110		
11,000.00	7,229.45	7,181.45	7,229.45	97.28	248.98	91.00	-2,718.34	-4,800.98	1,457.49	1,152.43	305.07	4.778		
11,100.00	7,229.05	7,181.05	7,229.05	99.90	248.97	90.93	-2,718.34	-4,800.98	1,360.29	1,054.31	305.98	4.446		
11,200.00	7,228.64	7,180.64	7,228.64	102.54	248.95	90.86	-2,718.34	-4,800.98	1,263.53	956.43	307.10	4.114		
11,300.00	7,228.24	7,180.24	7,228.24	105.19	248.94	90.79	-2,718.34	-4,800.98	1,167.31	858.82	308.49	3.784		
11,400.00	7,227.83	7,179.83	7,227.83	107.85	248.92	90.72	-2,718.34	-4,800.98	1,071.78	761.56	310.23	3.455		
11,500.00	7,227.42	7,179.42	7,227.42	110.52	248.91	90.65	-2,718.34	-4,800.98	977.15	664.72	312.43	3.128		
11,600.00	7,227.02	7,179.02	7,227.02	113.20	248.90	90.58	-2,718.34	-4,800.98	883.70	568.43	315.27	2.803		
11,700.00	7,226.61	7,178.61	7,226.61	115.89	248.88	90.51	-2,718.34	-4,800.98	791.85	472.90	318.95	2.483		
11,800.00	7,226.21	7,178.21	7,226.21	118.59	248.87	90.44	-2,718.34	-4,800.98	702.24	378.45	323.79	2.169		
11,900.00	7,225.80	7,177.80	7,225.80	121.29	248.85	90.37	-2,718.34	-4,800.98	615.83	285.62	330.20	1.865		
12,000.00	7,225.40	7,177.40	7,225.40	124.00	248.84	90.29	-2,718.34	-4,800.98	534.18	195.50	338.68	1.577		
12,100.00	7,224.99	7,176.99	7,224.99	126.72	248.83	90.22	-2,718.34	-4,800.98	459.84	110.22	349.62	1.315	Level 3	
12,200.00	7,224.58	7,176.58	7,224.58	129.44	248.81	90.15	-2,718.34	-4,800.98	396.93	34.18	362.75	1.094	Level 2	
12,300.00	7,224.18	7,176.18	7,224.18	132.17	248.80	90.08	-2,718.34	-4,800.98	351.65	-24.17	375.82	0.936	Level 1	
12,400.00	7,223.77	7,175.77	7,223.77	134.91	248.78	90.01	-2,718.34	-4,800.98	331.30	-52.37	383.67	0.864	Level 1	
12,419.49	7,223.69	7,175.69	7,223.69	135.44	248.78	90.00	-2,718.34	-4,800.98	330.73	-53.40	384.12	0.861	Level 1, CC, ES, SF	
12,500.00	7,223.37	7,175.37	7,223.37	137.65	248.77	89.94	-2,718.34	-4,800.98	340.39	-41.46	381.84	0.891	Level 1	
12,600.00	7,222.96	7,174.96	7,222.96	140.39	248.75	89.87	-2,718.34	-4,800.98	376.78	4.70	372.09	1.013	Level 2	
12,700.00	7,222.55	7,174.55	7,222.55	143.14	248.74	89.80	-2,718.34	-4,800.98	433.67	73.86	359.81	1.205	Level 2	
12,800.00	7,222.15	7,174.15	7,222.15	145.89	248.73	89.73	-2,718.34	-4,800.98	504.15	155.57	348.58	1.446	Level 3	
12,900.00	7,221.74	7,173.74	7,221.74	148.65	248.71	89.66	-2,718.34	-4,800.98	583.33	243.87	339.46	1.718		
13,000.00	7,221.34	7,173.34	7,221.34	151.41	248.70	89.59	-2,718.34	-4,800.98	668.11	335.76	332.35	2.010		
13,100.00	7,220.93	7,172.93	7,220.93	154.18	248.68	89.52	-2,718.34	-4,800.98	756.62	429.75	326.87	2.315		
13,200.00	7,220.53	7,172.53	7,220.53	156.94	248.67	89.45	-2,718.34	-4,800.98	847.69	525.07	322.62	2.628		
13,300.00	7,220.12	7,172.12	7,220.12	159.72	248.66	89.38	-2,718.34	-4,800.98	940.57	621.28	319.29	2.946		
13,400.00	7,219.71	7,171.71	7,219.71	162.49	248.64	89.31	-2,718.34	-4,800.98	1,034.78	718.13	316.66	3.268		
13,500.00	7,219.31	7,171.31	7,219.31	165.27	248.63	89.24	-2,718.34	-4,800.98	1,129.99	815.44	314.54	3.592		
13,600.00	7,218.90	7,170.90	7,218.90	168.05	248.61	89.17	-2,718.34	-4,800.98	1,225.96	913.12	312.83	3.919		
13,700.00	7,218.50	7,170.50	7,218.50	170.83	248.60	89.10	-2,718.34	-4,800.98	1,322.52	1,011.10	311.43	4.247		
13,800.00	7,218.09	7,170.09	7,218.09	173.61	248.58	89.03	-2,718.34	-4,800.98	1,419.57	1,109.30	310.27	4.575		
13,900.00	7,217.69	7,169.69	7,217.69	176.40	248.57	88.96	-2,718.34	-4,800.98	1,516.99	1,207.70	309.29	4.905		
14,000.00	7,217.28	7,169.28	7,217.28	179.19	248.56	88.89	-2,718.34	-4,800.98	1,614.73	1,306.26	308.48	5.235		
14,100.00	7,216.87	7,168.87	7,216.87	181.98	248.54	88.82	-2,718.34	-4,800.98	1,712.73	1,404.95	307.78	5.565		
14,200.00	7,216.47	7,168.47	7,216.47	184.78	248.53	88.75	-2,718.34	-4,800.98	1,810.96	1,503.77	307.19	5.895		
14,300.00	7,216.06	7,168.06	7,216.06	187.57	248.51	88.68	-2,718.34	-4,800.98	1,909.36	1,602.68	306.68	6.226		
14,400.00	7,215.66	7,167.66	7,215.66	190.37	248.50	88.61	-2,718.34	-4,800.98	2,007.92	1,701.69	306.23	6.557		
14,500.00	7,215.25	7,167.25	7,215.25	193.17	248.49	88.54	-2,718.34	-4,800.98	2,106.62	1,800.77	305.85	6.888		
14,600.00	7,214.85	7,166.85	7,214.85	195.97	248.47	88.47	-2,718.34	-4,800.98	2,205.43	1,899.92	305.52	7.219		
14,700.00	7,214.44	7,166.44	7,214.44	198.77	248.46	88.40	-2,718.34	-4,800.98	2,304.35	1,999.13	305.22	7.550		
14,800.00	7,214.03	7,166.03	7,214.03	201.58	248.44	88.33	-2,718.34	-4,800.98	2,403.36	2,098.39	304.97	7.881		
14,900.00	7,213.63	7,165.63	7,213.63	204.38	248.43	88.26	-2,718.34	-4,800.98	2,502.44	2,197.70	304.74	8.212		
15,000.00	7,213.22	7,165.22	7,213.22	207.19	248.41	88.19	-2,718.34	-4,800.98	2,601.60	2,297.06	304.54	8.543		
15,100.00	7,212.82	7,164.82	7,212.82	210.00	248.40	88.12	-2,718.34	-4,800.98	2,700.82	2,396.45	304.37	8.874		
15,200.00	7,212.41	7,164.41	7,212.41	212.81	248.39	88.05	-2,718.34	-4,800.98	2,800.09	2,495.88	304.21	9.204		
15,300.00	7,212.01	7,164.01	7,212.01	215.62	248.37	87.98	-2,718.34	-4,800.98	2,899.41	2,595.34	304.07	9.535		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-43(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,400.00	7,211.60	7,163.60	7,211.60	218.43	248.36	87.91	-2,718.34	-4,800.98	2,998.78	2,694.83	303.95	9.866	
15,500.00	7,211.19	7,163.19	7,211.19	221.25	248.34	87.84	-2,718.34	-4,800.98	3,098.19	2,794.35	303.85	10.197	
15,600.00	7,210.79	7,162.79	7,210.79	224.06	248.33	87.77	-2,718.34	-4,800.98	3,197.64	2,893.89	303.75	10.527	
15,700.00	7,210.38	7,162.38	7,210.38	226.88	248.32	87.70	-2,718.34	-4,800.98	3,297.12	2,993.45	303.67	10.858	
15,794.94	7,210.00	7,162.00	7,210.00	229.55	248.30	87.63	-2,718.34	-4,800.98	3,391.59	3,088.00	303.60	11.171	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	25.00	66.00	3.28	3.28	-139.98	-3,889.45	-3,265.62	5,079.03					
100.00	100.00	878.27	914.37	3.28	5.06	-140.14	-3,843.51	-3,209.56	5,073.17	5,064.78	8.39	604.996		
200.00	200.00	976.93	1,011.70	3.34	5.47	-140.17	-3,833.29	-3,197.09	5,057.11	5,048.35	8.77	576.700		
300.00	299.98	1,075.37	1,108.82	3.44	5.90	37.37	-3,823.10	-3,184.66	5,039.70	5,030.48	9.22	546.589		
400.00	399.84	1,173.32	1,205.45	3.59	6.35	37.62	-3,812.96	-3,172.28	5,019.55	5,009.82	9.73	515.779		
500.00	499.45	1,270.64	1,301.47	3.79	6.80	37.94	-3,802.88	-3,159.99	4,996.71	4,986.41	10.30	485.296		
600.00	598.70	1,367.23	1,396.76	4.03	7.26	38.32	-3,792.88	-3,147.79	4,971.20	4,960.29	10.91	455.844		
700.00	697.47	1,462.96	1,491.20	4.31	7.73	38.76	-3,782.97	-3,135.69	4,943.06	4,931.50	11.55	427.852		
800.00	795.62	1,557.71	1,584.68	4.64	8.20	39.27	-3,773.16	-3,123.72	4,912.32	4,900.09	12.23	401.542		
900.00	893.06	1,651.38	1,677.09	5.00	8.67	39.86	-3,763.46	-3,111.89	4,879.05	4,866.11	12.94	376.989		
1,000.00	989.64	1,743.84	1,768.31	5.40	9.14	40.52	-3,753.89	-3,100.20	4,843.30	4,829.62	13.67	354.174		
1,100.00	1,085.27	1,834.99	1,858.24	5.83	9.61	41.25	-3,744.45	-3,088.69	4,805.12	4,790.69	14.43	333.024		
1,200.00	1,179.82	1,925.30	1,946.75	6.29	10.07	42.06	-3,735.16	-3,077.35	4,764.58	4,749.38	15.20	313.381		
1,300.00	1,273.17	2,012.89	2,033.75	6.79	10.53	42.96	-3,726.03	-3,066.21	4,721.76	4,705.77	15.99	295.286		
1,400.00	1,365.21	2,100.57	2,119.13	7.33	10.98	43.95	-3,717.07	-3,055.28	4,676.74	4,659.94	16.80	278.381		
1,500.00	1,455.84	2,184.22	2,202.78	7.89	11.42	45.02	-3,708.29	-3,044.57	4,629.60	4,611.99	17.61	262.849		
1,600.00	1,544.94	2,267.16	2,284.61	8.50	11.86	46.19	-3,699.71	-3,034.09	4,580.45	4,562.00	18.44	248.335		
1,700.00	1,632.39	2,348.15	2,364.50	9.13	12.28	47.45	-3,691.32	-3,023.86	4,529.36	4,510.07	19.29	234.822		
1,800.00	1,718.11	2,427.08	2,442.38	9.80	12.70	48.82	-3,683.15	-3,013.89	4,476.46	4,456.32	20.14	222.218		
1,900.00	1,802.44	2,504.41	2,518.66	10.49	13.11	49.57	-3,675.14	-3,004.12	4,422.32	4,401.31	21.01	210.483		
2,000.00	1,886.68	2,581.63	2,594.85	11.20	13.52	50.05	-3,667.15	-2,994.36	4,368.35	4,346.46	21.89	199.578		
2,100.00	1,970.92	2,658.86	2,671.04	11.93	13.93	50.53	-3,659.15	-2,984.60	4,314.63	4,291.85	22.78	189.392		
2,200.00	2,055.17	2,736.08	2,747.23	12.66	14.34	51.03	-3,651.16	-2,974.85	4,261.18	4,237.49	23.69	179.875		
2,300.00	2,139.41	2,813.31	2,823.42	13.40	14.75	51.54	-3,643.16	-2,965.09	4,208.01	4,183.40	24.61	170.976		
2,400.00	2,223.66	2,890.53	2,899.61	14.14	15.17	52.05	-3,635.17	-2,955.33	4,155.14	4,129.59	25.55	162.650		
2,500.00	2,307.90	2,967.76	2,975.79	14.89	15.58	52.58	-3,627.17	-2,945.58	4,102.56	4,076.07	26.49	154.852		
2,600.00	2,392.14	3,044.99	3,051.98	15.65	16.00	53.12	-3,619.17	-2,935.82	4,050.30	4,022.85	27.45	147.541		
2,700.00	2,476.39	3,122.21	3,128.17	16.41	16.41	53.67	-3,611.18	-2,926.06	3,998.37	3,969.95	28.42	140.680		
2,800.00	2,560.63	3,200.56	3,204.36	17.17	16.83	54.24	-3,603.18	-2,916.31	3,946.78	3,917.37	29.41	134.210		
2,900.00	2,644.88	3,276.66	3,280.55	17.93	17.24	54.81	-3,595.19	-2,906.55	3,895.54	3,865.14	30.39	128.168		
3,000.00	2,729.12	3,353.89	3,356.74	18.70	17.66	55.40	-3,587.19	-2,896.80	3,844.66	3,813.27	31.40	122.457		
3,100.00	2,813.36	3,431.11	3,432.93	19.47	18.07	56.00	-3,579.20	-2,887.04	3,794.17	3,761.76	32.41	117.073		
3,200.00	2,897.61	3,508.34	3,509.11	20.25	18.49	56.61	-3,571.20	-2,877.28	3,744.08	3,710.64	33.43	111.992		
3,300.00	2,981.85	3,585.57	3,585.30	21.02	18.91	57.23	-3,563.20	-2,867.53	3,694.39	3,659.93	34.47	107.191		
3,400.00	3,066.10	3,662.79	3,661.49	21.80	19.33	57.87	-3,555.21	-2,857.77	3,645.14	3,609.63	35.51	102.651		
3,500.00	3,150.34	3,740.02	3,737.68	22.58	19.74	58.53	-3,547.21	-2,848.01	3,596.34	3,559.77	36.57	98.355		
3,600.00	3,234.58	3,817.24	3,813.87	23.35	20.16	59.19	-3,539.22	-2,838.26	3,548.00	3,510.37	37.63	94.284		
3,700.00	3,318.83	3,894.47	3,890.06	24.13	20.58	59.87	-3,531.22	-2,828.50	3,500.15	3,461.44	38.71	90.424		
3,800.00	3,403.07	3,971.69	3,966.24	24.92	21.00	60.57	-3,523.23	-2,818.74	3,452.80	3,413.01	39.80	86.761		
3,900.00	3,487.32	4,048.92	4,042.43	25.70	21.42	61.28	-3,515.23	-2,808.99	3,405.98	3,365.09	40.90	83.282		
4,000.00	3,571.56	4,126.15	4,118.62	26.48	21.84	62.00	-3,507.23	-2,799.23	3,359.71	3,317.70	42.01	79.977		
4,100.00	3,655.80	4,203.37	4,194.81	27.27	22.26	62.74	-3,499.24	-2,789.47	3,314.01	3,270.88	43.13	76.833		
4,200.00	3,740.05	4,280.60	4,271.00	28.05	22.68	63.50	-3,491.24	-2,779.72	3,268.91	3,224.64	44.27	73.843		
4,300.00	3,824.29	4,357.82	4,347.19	28.84	23.10	64.27	-3,483.25	-2,769.96	3,224.43	3,179.01	45.42	70.996		
4,400.00	3,908.54	4,435.05	4,423.37	29.62	23.51	65.05	-3,475.25	-2,760.20	3,180.60	3,134.02	46.58	68.285		
4,500.00	3,992.78	4,512.27	4,499.56	30.41	23.93	65.86	-3,467.26	-2,750.45	3,137.44	3,089.68	47.75	65.702		
4,600.00	4,077.03	4,589.50	4,575.75	31.20	24.35	66.68	-3,459.26	-2,740.69	3,094.98	3,046.04	48.94	63.241		
4,700.00	4,161.27	4,666.72	4,651.94	31.98	24.78	67.51	-3,451.26	-2,730.93	3,053.25	3,003.11	50.14	60.894		
4,800.00	4,245.51	4,743.95	4,728.13	32.77	25.20	68.36	-3,443.27	-2,721.18	3,012.29	2,960.93	51.35	58.657		
4,900.00	4,329.76	4,828.84	4,804.32	33.56	25.66	69.23	-3,435.27	-2,711.42	2,972.12	2,919.50	52.62	56.485		
5,000.00	4,414.00	4,901.60	4,880.51	34.35	26.05	70.11	-3,427.28	-2,701.67	2,932.77	2,878.93	53.84	54.474		
5,100.00	4,498.25	4,975.63	4,956.69	35.14	26.46	71.02	-3,419.28	-2,691.91	2,894.29	2,839.21	55.08	52.548		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	5,052.85	5,032.88	35.93	26.88	71.93	-3,411.29	-2,682.15	2,856.69	2,800.35	56.35	50.697		
5,300.00	4,666.73	5,130.08	5,109.07	36.72	27.30	72.87	-3,403.29	-2,672.40	2,820.03	2,762.40	57.63	48.933		
5,400.00	4,750.98	5,207.30	5,185.26	37.51	27.72	73.82	-3,395.29	-2,662.64	2,784.34	2,725.41	58.93	47.250		
5,500.00	4,835.22	5,284.53	5,261.45	38.30	28.14	74.79	-3,387.30	-2,652.88	2,749.65	2,689.42	60.24	45.647		
5,600.00	4,919.47	5,361.76	5,337.64	39.09	28.56	75.77	-3,379.30	-2,643.13	2,716.01	2,654.45	61.56	44.120		
5,700.00	5,003.71	5,438.98	5,413.82	39.88	28.98	76.77	-3,371.31	-2,633.37	2,683.45	2,620.55	62.89	42.666		
5,800.00	5,088.06	5,516.33	5,490.13	40.67	29.41	77.57	-3,363.30	-2,623.60	2,652.04	2,587.81	64.24	41.284		
5,900.00	5,173.83	5,595.33	5,568.07	41.44	29.84	77.97	-3,355.12	-2,613.62	2,622.32	2,556.74	65.57	39.990		
6,000.00	5,261.34	5,676.38	5,648.04	42.18	30.28	78.40	-3,346.73	-2,603.38	2,594.34	2,527.45	66.89	38.786		
6,100.00	5,350.49	5,759.38	5,729.92	42.88	30.73	78.84	-3,338.13	-2,592.89	2,568.01	2,499.83	68.18	37.666		
6,200.00	5,441.16	5,844.23	5,813.63	43.56	31.20	79.28	-3,329.35	-2,582.17	2,543.24	2,473.79	69.44	36.623		
6,300.00	5,533.25	5,930.83	5,899.07	44.20	31.67	79.73	-3,320.38	-2,571.23	2,519.90	2,449.23	70.68	35.654		
6,400.00	5,626.65	6,030.96	5,986.12	44.82	32.22	80.16	-3,311.25	-2,560.08	2,497.91	2,425.97	71.94	34.724		
6,500.00	5,721.23	6,108.83	6,074.68	45.40	32.64	80.58	-3,301.95	-2,548.74	2,477.15	2,404.10	73.05	33.911		
6,600.00	5,816.89	6,200.03	6,164.65	45.94	33.14	80.98	-3,292.51	-2,537.22	2,457.51	2,383.33	74.18	33.129		
6,700.00	5,913.51	6,260.38	6,224.19	46.45	33.47	81.10	-3,286.26	-2,529.60	2,439.10	2,363.89	75.22	32.428		
6,800.00	6,010.97	6,300.00	6,263.41	46.93	33.68	81.09	-3,282.18	-2,525.82	2,423.96	2,347.82	76.14	31.835		
6,900.00	6,109.15	6,300.00	6,263.41	47.38	33.68	80.86	-3,282.18	-2,525.82	2,412.38	2,335.54	76.84	31.394		
7,000.00	6,207.93	6,325.01	6,288.27	47.80	33.79	80.86	-3,279.61	-2,524.70	2,404.74	2,327.24	77.50	31.028		
7,100.00	6,307.19	6,350.00	6,313.12	48.18	33.90	80.91	-3,277.08	-2,524.56	2,401.02	2,322.97	78.05	30.764		
7,140.07	6,347.07	6,350.00	6,313.12	48.32	33.90	80.90	-3,277.08	-2,524.56	2,400.64	2,322.47	78.17	30.711		
7,200.00	6,406.82	6,350.00	6,313.12	48.53	33.90	80.92	-3,277.08	-2,524.56	2,401.49	2,323.17	78.31	30.665		
7,300.00	6,506.68	6,400.00	6,362.79	48.84	34.08	81.19	-3,272.07	-2,527.22	2,405.29	2,326.51	78.78	30.533		
7,400.00	6,606.66	6,409.58	6,372.27	49.10	34.11	-5.64	-3,271.12	-2,528.18	2,412.99	2,334.17	78.82	30.614		
7,500.00	6,706.21	6,425.01	6,387.52	49.35	34.16	-5.57	-3,269.61	-2,530.02	2,416.06	2,337.26	78.80	30.661		
7,600.00	6,803.22	6,450.00	6,412.10	49.59	34.23	-5.60	-3,267.19	-2,533.79	2,406.74	2,327.95	78.79	30.546		
7,700.00	6,895.32	6,471.52	6,433.14	49.82	34.28	-5.75	-3,265.13	-2,537.82	2,385.22	2,306.53	78.69	30.312		
7,800.00	6,980.23	6,500.00	6,460.76	50.03	34.34	-6.04	-3,262.46	-2,544.23	2,351.82	2,273.21	78.62	29.915		
7,900.00	7,055.85	6,510.61	6,470.97	50.21	34.37	-6.53	-3,261.48	-2,546.94	2,306.77	2,228.46	78.30	29.459		
8,000.00	7,120.34	6,525.01	6,484.76	50.36	34.39	-7.24	-3,260.17	-2,550.88	2,250.87	2,172.87	78.00	28.858		
8,100.00	7,172.10	6,550.00	6,508.46	50.47	34.44	-8.31	-3,257.92	-2,558.47	2,184.83	2,107.00	77.82	28.074		
8,200.00	7,209.85	6,550.00	6,508.46	50.55	34.44	-9.94	-3,257.92	-2,558.47	2,109.67	2,032.36	77.32	27.286		
8,300.00	7,232.68	6,573.45	6,530.41	50.61	34.47	-12.68	-3,255.86	-2,566.43	2,026.28	1,949.10	77.18	26.254		
8,400.00	7,240.00	6,600.00	6,554.91	50.65	34.51	-17.84	-3,253.59	-2,576.43	1,936.63	1,859.45	77.18	25.093		
8,500.00	7,239.60	6,600.00	6,554.91	50.69	34.51	-17.84	-3,253.59	-2,576.43	1,844.00	1,767.22	76.78	24.016		
8,600.00	7,239.19	6,600.00	6,554.91	50.75	34.51	-17.84	-3,253.59	-2,576.43	1,752.18	1,675.85	76.33	22.954		
8,700.00	7,238.78	6,614.59	6,568.18	50.85	34.52	-18.08	-3,252.37	-2,582.35	1,661.08	1,584.97	76.10	21.827		
8,800.00	7,238.38	6,625.01	6,577.58	51.02	34.53	-18.25	-3,251.52	-2,586.77	1,570.77	1,495.01	75.76	20.735		
8,900.00	7,237.97	6,639.44	6,590.48	51.32	34.54	-18.49	-3,250.35	-2,593.14	1,481.35	1,405.90	75.45	19.635		
9,000.00	7,237.57	6,650.00	6,599.82	51.95	34.55	-18.68	-3,249.50	-2,597.98	1,392.94	1,317.94	75.00	18.572		
9,100.00	7,237.16	6,668.89	6,616.33	53.10	34.56	-19.02	-3,248.03	-2,607.04	1,305.66	1,230.96	74.69	17.480		
9,200.00	7,236.76	6,700.00	6,642.92	54.69	34.58	-19.60	-3,245.68	-2,623.01	1,219.94	1,145.29	74.65	16.343		
9,300.00	7,236.35	6,700.00	6,642.92	56.53	34.58	-19.60	-3,245.68	-2,623.01	1,135.26	1,061.53	73.73	15.397		
9,400.00	7,235.94	6,725.01	6,663.72	58.53	34.59	-20.09	-3,243.87	-2,636.79	1,052.52	979.11	73.42	14.336		
9,500.00	7,235.54	6,750.00	6,683.94	60.62	34.59	-20.61	-3,242.14	-2,651.36	971.83	898.78	73.05	13.304		
9,600.00	7,235.13	6,771.65	6,700.99	62.80	34.59	-21.07	-3,240.70	-2,664.62	893.46	820.96	72.50	12.323		
9,700.00	7,234.73	6,800.00	6,722.63	65.03	34.59	-21.70	-3,238.91	-2,682.85	817.84	745.71	72.13	11.338		
9,800.00	7,234.32	6,825.01	6,741.03	67.32	34.59	-22.28	-3,237.42	-2,699.72	745.45	673.88	71.58	10.415		
9,900.00	7,233.92	6,863.52	6,768.04	69.66	34.58	-23.20	-3,235.29	-2,727.08	676.75	605.19	71.57	9.456		
10,000.00	7,233.51	6,900.00	6,792.07	72.03	34.58	-24.12	-3,233.46	-2,754.45	612.47	540.94	71.53	8.563		
10,100.00	7,233.10	6,942.98	6,818.33	74.45	34.57	-25.23	-3,231.56	-2,788.42	553.30	481.37	71.93	7.692		
10,200.00	7,232.70	6,989.19	6,843.95	76.89	34.58	-26.44	-3,229.82	-2,826.82	500.06	427.31	72.75	6.874		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	7,039.98	6,868.83	79.36	34.61	-27.78	-3,228.30	-2,871.06	453.58	379.40	74.18	6.114		
10,400.00	7,231.89	7,100.00	6,893.61	81.86	34.68	-29.29	-3,227.01	-2,925.69	414.75	338.20	76.55	5.418		
10,500.00	7,231.48	7,150.00	6,910.27	84.38	34.81	-30.44	-3,226.39	-2,972.81	384.23	305.11	79.11	4.857		
10,600.00	7,231.08	7,218.15	6,926.97	86.93	35.09	-31.73	-3,226.20	-3,038.85	362.56	279.90	82.67	4.386		
10,700.00	7,230.67	7,283.98	6,936.34	89.49	35.51	-32.58	-3,226.73	-3,103.98	350.21	264.06	86.15	4.065		
10,785.75	7,230.32	7,350.64	6,939.03	91.70	36.10	-32.93	-3,227.72	-3,159.66	347.10	258.15	88.95	3.902 CC		
10,800.00	7,230.26	7,354.00	6,938.97	92.07	36.13	-32.97	-3,228.05	-3,173.90	347.23	257.99	89.24	3.891		
10,900.00	7,229.86	7,453.99	6,938.55	94.67	37.32	-33.20	-3,230.38	-3,273.86	348.18	256.21	91.97	3.786		
11,000.00	7,229.45	7,553.97	6,938.14	97.28	38.82	-33.44	-3,232.70	-3,373.82	349.13	254.25	94.88	3.680		
11,100.00	7,229.05	7,653.96	6,937.72	99.90	40.56	-33.67	-3,235.03	-3,473.78	350.09	252.14	97.95	3.574		
11,200.00	7,228.64	7,753.94	6,937.30	102.54	42.50	-33.90	-3,237.35	-3,573.73	351.05	249.88	101.17	3.470		
11,300.00	7,228.24	7,853.93	6,936.89	105.19	44.61	-34.13	-3,239.68	-3,673.69	352.02	247.50	104.51	3.368		
11,400.00	7,227.83	7,953.91	6,936.47	107.85	46.86	-34.36	-3,242.00	-3,773.65	352.99	245.02	107.97	3.269		
11,500.00	7,227.42	8,053.90	6,936.05	110.52	49.24	-34.59	-3,244.33	-3,873.61	353.97	242.44	111.53	3.174		
11,600.00	7,227.02	8,153.88	6,935.63	113.20	51.71	-34.82	-3,246.65	-3,973.56	354.95	239.78	115.18	3.082		
11,700.00	7,226.61	8,253.87	6,935.22	115.89	54.28	-35.04	-3,248.98	-4,073.52	355.94	237.04	118.90	2.994		
11,800.00	7,226.21	8,353.85	6,934.80	118.59	56.93	-35.27	-3,251.30	-4,173.48	356.94	234.24	122.70	2.909		
11,900.00	7,225.80	8,453.84	6,934.38	121.29	59.64	-35.49	-3,253.63	-4,273.44	357.94	231.37	126.57	2.828		
12,000.00	7,225.40	8,553.83	6,933.97	124.00	62.41	-35.71	-3,255.95	-4,373.39	358.95	228.45	130.50	2.751		
12,100.00	7,224.99	8,653.81	6,933.55	126.72	65.24	-35.93	-3,258.28	-4,473.35	359.96	225.48	134.48	2.677		
12,200.00	7,224.58	8,753.80	6,933.13	129.44	68.10	-36.15	-3,260.60	-4,573.31	360.98	222.46	138.52	2.606		
12,300.00	7,224.18	8,853.78	6,932.72	132.17	71.01	-36.37	-3,262.93	-4,673.27	362.00	219.39	142.61	2.538		
12,400.00	7,223.77	8,953.77	6,932.30	134.91	73.95	-36.58	-3,265.25	-4,773.22	363.03	216.28	146.74	2.474		
12,500.00	7,223.37	9,053.75	6,931.88	137.65	76.92	-36.80	-3,267.58	-4,873.18	364.06	213.14	150.92	2.412		
12,600.00	7,222.96	9,153.74	6,931.46	140.39	79.93	-37.01	-3,269.90	-4,973.14	365.10	209.95	155.15	2.353		
12,700.00	7,222.55	9,253.72	6,931.05	143.14	82.95	-37.23	-3,272.23	-5,073.10	366.14	206.73	159.41	2.297		
12,800.00	7,222.15	9,353.71	6,930.63	145.89	86.00	-37.44	-3,274.55	-5,173.05	367.19	203.48	163.71	2.243		
12,900.00	7,221.74	9,453.69	6,930.21	148.65	89.06	-37.65	-3,276.88	-5,273.01	368.24	200.19	168.05	2.191		
13,000.00	7,221.34	9,553.68	6,929.80	151.41	92.15	-37.86	-3,279.20	-5,372.97	369.30	196.87	172.43	2.142		
13,100.00	7,220.93	9,653.66	6,929.38	154.18	95.25	-38.07	-3,281.53	-5,472.92	370.36	193.52	176.84	2.094		
13,200.00	7,220.53	9,753.65	6,928.96	156.94	98.36	-38.27	-3,283.85	-5,572.88	371.43	190.14	181.29	2.049		
13,300.00	7,220.12	9,853.63	6,928.54	159.72	101.49	-38.48	-3,286.18	-5,672.84	372.50	186.73	185.77	2.005		
13,400.00	7,219.71	9,953.62	6,928.13	162.49	104.63	-38.68	-3,288.50	-5,772.80	373.58	183.29	190.29	1.963		
13,500.00	7,219.31	10,053.61	6,927.71	165.27	107.79	-38.89	-3,290.83	-5,872.75	374.66	179.83	194.83	1.923		
13,600.00	7,218.90	10,153.59	6,927.29	168.05	110.95	-39.09	-3,293.15	-5,972.71	375.75	176.34	199.41	1.884		
13,700.00	7,218.50	10,253.58	6,926.88	170.83	114.12	-39.29	-3,295.48	-6,072.67	376.84	172.83	204.01	1.847		
13,800.00	7,218.09	10,353.56	6,926.46	173.61	117.30	-39.49	-3,297.80	-6,172.63	377.93	169.29	208.64	1.811		
13,900.00	7,217.69	10,453.55	6,926.04	176.40	120.49	-39.69	-3,300.13	-6,272.58	379.04	165.73	213.31	1.777		
14,000.00	7,217.28	10,546.44	6,925.65	179.19	123.45	-40.03	-3,303.69	-6,365.40	381.11	162.84	218.27	1.746		
14,100.00	7,216.87	10,646.34	6,925.24	181.98	126.63	-40.56	-3,308.91	-6,465.16	384.10	160.07	224.04	1.714		
14,200.00	7,216.47	10,743.79	6,924.83	184.78	129.74	-41.07	-3,314.08	-6,562.48	387.19	157.44	229.75	1.685		
14,300.00	7,216.06	10,831.60	6,924.46	187.57	132.53	-41.83	-3,321.52	-6,649.96	392.41	156.55	235.87	1.664		
14,400.00	7,215.66	10,918.59	6,924.10	190.37	135.26	-42.99	-3,332.84	-6,736.21	400.83	157.76	243.08	1.649		
14,500.00	7,215.25	11,006.29	6,923.73	193.17	137.98	-44.50	-3,348.17	-6,822.55	412.58	161.22	251.36	1.641		
14,600.00	7,214.85	11,106.98	6,923.31	195.97	141.08	-46.29	-3,367.31	-6,921.40	425.82	164.17	261.64	1.627		
14,700.00	7,214.44	11,225.65	6,922.82	198.77	144.80	-47.87	-3,385.40	-7,038.66	436.61	163.91	272.70	1.601		
14,800.00	7,214.03	11,346.06	6,922.31	201.58	148.65	-48.75	-3,396.27	-7,158.56	442.92	161.67	281.25	1.575		
14,900.00	7,213.63	11,465.80	6,921.81	204.38	152.53	-48.97	-3,399.59	-7,278.23	444.53	157.35	287.18	1.548		
15,000.00	7,213.22	11,565.79	6,921.40	207.19	155.78	-48.92	-3,399.57	-7,378.23	444.07	152.35	291.71	1.522		
15,100.00	7,212.82	11,665.79	6,920.98	210.00	159.04	-48.86	-3,399.56	-7,478.22	443.60	147.36	296.24	1.497 Level 3		
15,200.00	7,212.41	11,765.79	6,920.56	212.81	162.30	-48.81	-3,399.55	-7,578.22	443.14	142.37	300.77	1.473 Level 3		
15,300.00	7,212.01	11,865.79	6,920.15	215.62	165.56	-48.75	-3,399.53	-7,678.22	442.68	137.38	305.29	1.450 Level 3		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN												Offset Site Error:	0.00 ft
Survey Program: 25-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.00	7,211.60	11,965.79	6,919.73	218.43	168.83	-48.70	-3,399.52	-7,778.22	442.21	132.40	309.81	1.427	Level 3
15,500.00	7,211.19	12,065.78	6,919.31	221.25	172.10	-48.64	-3,399.51	-7,878.21	441.75	127.42	314.33	1.405	Level 3
15,600.00	7,210.79	12,165.78	6,918.89	224.06	175.37	-48.59	-3,399.49	-7,978.21	441.29	122.45	318.84	1.384	Level 3
15,700.00	7,210.38	12,265.78	6,918.48	226.88	178.64	-48.53	-3,399.48	-8,078.21	440.83	117.49	323.34	1.363	Level 3
15,794.94	7,210.00	12,360.72	6,918.08	229.55	181.75	-48.48	-3,399.47	-8,173.15	440.39	112.77	327.62	1.344	Level 3, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	25.00	66.00	3.28	0.00	-140.13	-3,909.49	-3,265.63	5,094.39					
100.00	100.00	59.00	100.00	3.28	0.07	-140.13	-3,909.49	-3,265.63	5,093.96	5,090.60	3.36	1,516.323		
200.00	200.00	868.82	906.71	3.34	3.68	-140.32	-3,882.33	-3,220.62	5,093.55	5,086.46	7.09	718.315		
300.00	299.98	967.57	1,004.39	3.44	4.18	37.17	-3,874.84	-3,208.21	5,078.30	5,070.67	7.63	665.440		
400.00	399.84	1,065.92	1,101.68	3.59	4.68	37.38	-3,867.38	-3,195.85	5,060.31	5,052.09	8.22	615.456		
500.00	499.45	1,163.75	1,198.44	3.79	5.19	37.64	-3,859.96	-3,183.56	5,039.60	5,030.74	8.86	568.980		
600.00	598.70	1,260.93	1,294.57	4.03	5.69	37.97	-3,852.60	-3,171.35	5,016.19	5,006.66	9.53	526.309		
700.00	697.47	1,357.35	1,389.95	4.31	6.19	38.36	-3,845.28	-3,159.23	4,990.12	4,979.89	10.24	487.446		
800.00	795.62	1,452.89	1,484.45	4.64	6.69	38.81	-3,838.04	-3,147.23	4,961.43	4,950.46	10.97	452.208		
900.00	893.06	1,547.43	1,577.97	5.00	7.19	39.34	-3,830.87	-3,135.35	4,930.15	4,918.42	11.73	420.313		
1,000.00	989.64	1,640.86	1,670.39	5.40	7.68	39.94	-3,823.79	-3,123.61	4,896.34	4,883.83	12.51	391.443		
1,100.00	1,085.27	1,733.07	1,761.60	5.83	8.16	40.61	-3,816.79	-3,112.02	4,860.06	4,846.76	13.31	365.277		
1,200.00	1,179.82	1,826.07	1,851.48	6.29	8.65	41.35	-3,809.90	-3,100.61	4,821.37	4,807.24	14.13	341.273		
1,300.00	1,273.17	1,913.36	1,939.93	6.79	9.11	42.18	-3,803.12	-3,089.37	4,780.33	4,765.38	14.94	319.871		
1,400.00	1,365.21	2,001.22	2,026.84	7.33	9.57	43.10	-3,796.46	-3,078.33	4,737.02	4,721.23	15.78	300.110		
1,500.00	1,455.84	2,087.42	2,112.11	7.89	10.02	44.10	-3,789.92	-3,067.50	4,691.52	4,674.88	16.64	282.012		
1,600.00	1,544.94	2,171.85	2,195.63	8.50	10.47	45.19	-3,783.52	-3,056.89	4,643.92	4,626.42	17.50	265.388		
1,700.00	1,632.39	2,254.40	2,277.29	9.13	10.91	46.37	-3,777.26	-3,046.52	4,594.32	4,575.94	18.37	250.073		
1,800.00	1,718.11	2,334.99	2,357.00	9.80	11.33	47.65	-3,771.15	-3,036.39	4,542.81	4,523.55	19.26	235.924		
1,900.00	1,802.44	2,414.02	2,435.18	10.49	11.75	48.65	-3,765.16	-3,026.46	4,489.97	4,469.83	20.15	222.860		
2,000.00	1,886.68	2,492.96	2,513.26	11.20	12.16	48.80	-3,759.17	-3,016.54	4,437.27	4,416.22	21.05	210.814		
2,100.00	1,970.92	2,571.90	2,591.34	11.93	12.58	49.25	-3,753.19	-3,006.63	4,384.79	4,362.83	21.96	199.636		
2,200.00	2,055.17	2,650.84	2,669.43	12.66	13.00	49.71	-3,747.20	-2,996.71	4,332.55	4,309.66	22.89	189.256		
2,300.00	2,139.41	2,729.77	2,747.51	13.40	13.42	50.18	-3,741.22	-2,986.79	4,280.55	4,256.71	23.83	179.605		
2,400.00	2,223.66	2,808.71	2,825.59	14.14	13.83	50.66	-3,735.23	-2,976.87	4,228.80	4,204.01	24.78	170.621		
2,500.00	2,307.90	2,887.65	2,903.68	14.89	14.25	51.15	-3,729.25	-2,966.95	4,177.31	4,151.56	25.75	162.246		
2,600.00	2,392.14	2,966.59	2,981.76	15.65	14.67	51.65	-3,723.26	-2,957.03	4,126.09	4,099.37	26.72	154.427		
2,700.00	2,476.39	3,045.53	3,059.84	16.41	15.09	52.16	-3,717.27	-2,947.12	4,075.16	4,047.46	27.70	147.117		
2,800.00	2,560.63	3,125.55	3,137.93	17.17	15.51	52.68	-3,711.29	-2,937.20	4,024.51	3,995.82	28.70	140.248		
2,900.00	2,644.88	3,203.40	3,216.01	17.93	15.92	53.21	-3,705.30	-2,927.28	3,974.17	3,944.48	29.69	133.855		
3,000.00	2,729.12	3,282.34	3,294.09	18.70	16.34	53.76	-3,699.32	-2,917.36	3,924.15	3,893.45	30.70	127.829		
3,100.00	2,813.36	3,361.28	3,372.18	19.47	16.76	54.31	-3,693.33	-2,907.44	3,874.45	3,842.73	31.72	122.164		
3,200.00	2,897.61	3,440.22	3,450.26	20.25	17.17	54.88	-3,687.35	-2,897.52	3,825.09	3,792.35	32.74	116.830		
3,300.00	2,981.85	3,530.86	3,528.34	21.02	17.65	55.46	-3,681.36	-2,887.60	3,776.08	3,742.25	33.83	111.624		
3,400.00	3,066.10	3,598.09	3,606.43	21.80	18.01	56.05	-3,675.37	-2,877.69	3,727.44	3,692.62	34.82	107.057		
3,500.00	3,150.34	3,677.03	3,684.51	22.58	18.43	56.65	-3,669.39	-2,867.77	3,679.18	3,643.31	35.87	102.573		
3,600.00	3,234.58	3,755.97	3,762.59	23.35	18.85	57.27	-3,663.40	-2,857.85	3,631.32	3,594.39	36.93	98.332		
3,700.00	3,318.83	3,834.91	3,840.68	24.13	19.26	57.90	-3,657.42	-2,847.93	3,583.87	3,545.87	38.00	94.317		
3,800.00	3,403.07	3,913.84	3,918.76	24.92	19.68	58.54	-3,651.43	-2,838.01	3,536.85	3,497.77	39.08	90.512		
3,900.00	3,487.32	3,992.78	3,996.84	25.70	20.10	59.20	-3,645.45	-2,828.09	3,490.27	3,450.11	40.16	86.902		
4,000.00	3,571.56	4,071.72	4,074.93	26.48	20.52	59.87	-3,639.46	-2,818.18	3,444.16	3,402.90	41.26	83.474		
4,100.00	3,655.80	4,150.66	4,153.01	27.27	20.94	60.56	-3,633.47	-2,808.26	3,398.53	3,356.17	42.37	80.218		
4,200.00	3,740.05	4,229.60	4,231.09	28.05	21.35	61.26	-3,627.49	-2,798.34	3,353.41	3,309.93	43.48	77.121		
4,300.00	3,824.29	4,308.53	4,309.18	28.84	21.77	61.97	-3,621.50	-2,788.42	3,308.81	3,264.20	44.61	74.175		
4,400.00	3,908.54	4,387.47	4,387.26	29.62	22.19	62.70	-3,615.52	-2,778.50	3,264.75	3,219.01	45.74	71.370		
4,500.00	3,992.78	4,466.41	4,465.34	30.41	22.61	63.45	-3,609.53	-2,768.58	3,221.27	3,174.38	46.89	68.698		
4,600.00	4,077.03	4,545.35	4,543.43	31.20	23.03	64.21	-3,603.55	-2,758.66	3,178.37	3,130.32	48.05	66.151		
4,700.00	4,161.27	4,625.73	4,621.51	31.98	23.45	64.99	-3,597.56	-2,748.75	3,136.09	3,086.87	49.22	63.714		
4,800.00	4,245.51	4,703.22	4,699.59	32.77	23.86	65.78	-3,591.58	-2,738.83	3,094.45	3,044.05	50.39	61.406		
4,900.00	4,329.76	4,782.16	4,777.68	33.56	24.28	66.59	-3,585.59	-2,728.91	3,053.47	3,001.89	51.58	59.195		
5,000.00	4,414.00	4,861.10	4,855.76	34.35	24.70	67.41	-3,579.60	-2,718.99	3,013.19	2,960.41	52.78	57.086		
5,100.00	4,498.25	4,940.04	4,933.84	35.14	25.12	68.25	-3,573.62	-2,709.07	2,973.63	2,919.64	54.00	55.072		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWVD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	5,031.04	5,011.93	35.93	25.60	69.11	-3,567.63	-2,699.15	2,934.82	2,879.55	55.27	53.096		
5,300.00	4,666.73	5,102.09	5,090.01	36.72	25.98	69.98	-3,561.65	-2,689.23	2,896.80	2,840.32	56.47	51.296		
5,400.00	4,750.98	5,176.85	5,168.09	37.51	26.37	70.88	-3,555.66	-2,679.32	2,859.58	2,801.88	57.70	49.560		
5,500.00	4,835.22	5,255.79	5,246.18	38.30	26.79	71.78	-3,549.68	-2,669.40	2,823.21	2,764.25	58.96	47.886		
5,600.00	4,919.47	5,334.73	5,324.26	39.09	27.21	72.71	-3,543.69	-2,659.48	2,787.72	2,727.49	60.23	46.288		
5,700.00	5,003.71	5,413.67	5,402.34	39.88	27.63	73.65	-3,537.70	-2,649.56	2,753.14	2,691.63	61.51	44.762		
5,800.00	5,088.06	5,492.72	5,480.54	40.67	28.05	74.38	-3,531.71	-2,639.63	2,719.55	2,656.76	62.79	43.309		
5,900.00	5,173.83	5,573.37	5,560.32	41.44	28.47	74.67	-3,525.59	-2,629.49	2,687.60	2,623.52	64.07	41.946		
6,000.00	5,261.34	5,655.99	5,642.04	42.18	28.91	74.99	-3,519.33	-2,619.11	2,657.40	2,592.07	65.33	40.675		
6,100.00	5,350.49	5,740.48	5,725.62	42.88	29.36	75.32	-3,512.92	-2,608.50	2,628.88	2,562.31	66.57	39.490		
6,200.00	5,441.16	5,826.73	5,810.94	43.56	29.82	75.65	-3,506.38	-2,597.66	2,601.95	2,534.16	67.78	38.387		
6,300.00	5,533.25	5,914.65	5,897.90	44.20	30.28	75.97	-3,499.72	-2,586.61	2,576.51	2,507.55	68.97	37.359		
6,400.00	5,626.65	6,004.12	5,986.40	44.82	30.76	76.29	-3,492.93	-2,575.37	2,552.49	2,482.37	70.12	36.402		
6,500.00	5,721.23	6,095.03	6,076.33	45.40	31.24	76.59	-3,486.04	-2,563.95	2,529.78	2,458.54	71.24	35.510		
6,600.00	5,816.89	6,187.28	6,167.58	45.94	31.73	76.87	-3,479.04	-2,552.36	2,508.31	2,435.99	72.33	34.680		
6,700.00	5,913.51	6,280.75	6,260.04	46.45	32.22	77.12	-3,471.96	-2,540.61	2,487.99	2,414.61	73.38	33.906		
6,800.00	6,010.97	6,375.33	6,353.59	46.93	32.73	77.33	-3,464.78	-2,528.73	2,468.74	2,394.35	74.39	33.186		
6,900.00	6,109.15	6,400.00	6,378.05	47.38	32.85	77.13	-3,462.92	-2,526.12	2,452.00	2,376.74	75.26	32.582		
7,000.00	6,207.93	6,415.32	6,393.29	47.80	32.92	76.96	-3,461.77	-2,524.97	2,439.17	2,363.18	75.99	32.097		
7,100.00	6,307.19	6,435.86	6,413.75	48.18	33.02	76.87	-3,460.24	-2,524.02	2,430.39	2,353.76	76.63	31.717		
7,200.00	6,406.82	6,450.00	6,427.85	48.53	33.08	76.83	-3,459.20	-2,523.75	2,425.70	2,348.58	77.11	31.456		
7,266.44	6,473.15	6,470.42	6,448.21	48.74	33.15	76.88	-3,457.70	-2,523.91	2,424.76	2,347.34	77.42	31.321		
7,300.00	6,506.68	6,477.42	6,455.19	48.84	33.18	76.90	-3,457.19	-2,524.11	2,424.98	2,347.44	77.54	31.275		
7,400.00	6,606.66	6,500.00	6,477.68	49.10	33.26	-9.98	-3,455.56	-2,525.30	2,428.36	2,350.56	77.80	31.213		
7,500.00	6,706.21	6,525.01	6,502.52	49.35	33.34	-9.96	-3,453.78	-2,527.55	2,427.16	2,349.18	77.98	31.124		
7,600.00	6,803.22	6,539.96	6,517.32	49.59	33.38	-10.16	-3,452.73	-2,529.36	2,413.73	2,335.70	78.03	30.934		
7,700.00	6,895.32	6,550.00	6,527.24	49.82	33.41	-10.57	-3,452.03	-2,530.77	2,388.43	2,310.47	77.96	30.638		
7,800.00	6,980.23	6,580.19	6,556.90	50.03	33.48	-11.25	-3,449.96	-2,535.95	2,351.24	2,273.24	78.00	30.144		
7,900.00	7,055.85	6,600.00	6,576.23	50.21	33.53	-12.28	-3,448.64	-2,540.12	2,302.97	2,225.06	77.92	29.557		
8,000.00	7,120.34	6,625.01	6,600.42	50.36	33.58	-13.82	-3,446.99	-2,546.23	2,244.25	2,166.39	77.86	28.825		
8,100.00	7,172.10	6,625.01	6,600.42	50.47	33.58	-16.00	-3,446.99	-2,546.23	2,175.80	2,098.28	77.51	28.070		
8,200.00	7,209.85	6,650.00	6,624.34	50.55	33.63	-19.50	-3,445.39	-2,553.29	2,098.63	2,021.18	77.46	27.095		
8,300.00	7,232.68	6,650.00	6,624.34	50.61	33.63	-24.86	-3,445.39	-2,553.29	2,014.24	1,937.12	77.12	26.118		
8,400.00	7,240.00	6,669.68	6,642.97	50.65	33.66	-34.73	-3,444.16	-2,559.50	1,923.73	1,846.64	77.09	24.955		
8,500.00	7,239.60	6,678.20	6,650.98	50.69	33.67	-35.06	-3,443.64	-2,562.37	1,831.26	1,754.31	76.94	23.801		
8,600.00	7,239.19	6,700.00	6,671.28	50.75	33.70	-35.93	-3,442.32	-2,570.20	1,739.60	1,662.63	76.98	22.599		
8,700.00	7,238.78	6,700.00	6,671.28	50.85	33.70	-35.93	-3,442.32	-2,570.20	1,648.37	1,571.67	76.70	21.491		
8,800.00	7,238.38	6,708.22	6,678.86	51.02	33.71	-36.27	-3,441.84	-2,573.33	1,558.15	1,481.60	76.54	20.356		
8,900.00	7,237.97	6,725.01	6,694.23	51.32	33.73	-36.97	-3,440.86	-2,580.03	1,468.93	1,392.39	76.53	19.193		
9,000.00	7,237.57	6,732.92	6,701.40	51.95	33.74	-37.31	-3,440.41	-2,583.33	1,380.77	1,304.37	76.39	18.074		
9,100.00	7,237.16	6,750.00	6,716.75	53.10	33.75	-38.06	-3,439.45	-2,590.75	1,293.93	1,217.49	76.44	16.926		
9,200.00	7,236.76	6,750.00	6,716.75	54.69	33.75	-38.06	-3,439.45	-2,590.75	1,208.76	1,132.54	76.22	15.859		
9,300.00	7,236.35	6,779.80	6,743.05	56.53	33.78	-39.41	-3,437.83	-2,604.68	1,124.97	1,048.33	76.65	14.677		
9,400.00	7,235.94	6,800.00	6,760.49	58.53	33.79	-40.35	-3,436.78	-2,614.81	1,043.42	966.41	77.01	13.550		
9,500.00	7,235.54	6,825.01	6,781.63	60.62	33.81	-41.56	-3,435.53	-2,628.12	964.31	886.68	77.63	12.421		
9,600.00	7,235.13	6,843.63	6,797.01	62.80	33.81	-42.49	-3,434.64	-2,638.56	887.99	809.64	78.35	11.333		
9,700.00	7,234.73	6,870.09	6,818.34	65.03	33.82	-43.83	-3,433.43	-2,654.16	815.09	735.53	79.56	10.245		
9,800.00	7,234.32	6,900.00	6,841.66	67.32	33.84	-45.40	-3,432.14	-2,672.85	746.21	664.95	81.27	9.182		
9,900.00	7,233.92	6,933.30	6,866.55	69.66	33.85	-47.18	-3,430.81	-2,694.92	682.09	598.50	83.59	8.160		
10,000.00	7,233.51	6,971.07	6,893.36	72.03	33.86	-49.25	-3,429.45	-2,721.49	623.56	536.89	86.67	7.195		
10,100.00	7,233.10	7,013.70	6,921.66	74.45	33.89	-51.60	-3,428.10	-2,753.32	571.49	480.94	90.55	6.312		
10,200.00	7,232.70	7,061.70	6,950.92	76.89	33.93	-54.24	-3,426.83	-2,791.35	526.72	431.51	95.21	5.532		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWVD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	7,115.52	6,980.21	79.36	34.01	-57.10	-3,425.71	-2,836.46	489.89	389.44	100.45	4.877		
10,400.00	7,231.89	7,175.37	7,008.20	81.86	34.16	-60.05	-3,424.87	-2,889.33	461.28	355.33	105.95	4.354		
10,500.00	7,231.48	7,241.07	7,033.08	84.38	34.40	-62.87	-3,424.44	-2,950.11	440.71	329.39	111.32	3.959		
10,600.00	7,231.08	7,311.94	7,052.77	86.93	34.80	-65.25	-3,424.56	-3,018.15	427.53	311.25	116.28	3.677		
10,700.00	7,230.67	7,386.69	7,065.23	89.49	35.38	-66.85	-3,425.35	-3,091.80	420.90	300.23	120.66	3.488		
10,764.89	7,230.41	7,436.40	7,068.71	91.16	35.85	-67.34	-3,426.24	-3,141.38	419.72	296.56	123.16	3.408 CC		
10,800.00	7,230.26	7,464.44	7,068.98	92.07	36.14	-67.41	-3,426.87	-3,169.40	420.06	295.66	124.40	3.377		
10,900.00	7,229.86	7,564.42	7,068.38	94.67	37.39	-67.48	-3,429.22	-3,269.36	421.74	293.75	128.00	3.295		
11,000.00	7,229.45	7,664.41	7,067.78	97.28	38.89	-67.55	-3,431.58	-3,369.31	423.43	291.60	131.83	3.212		
11,100.00	7,229.05	7,764.39	7,067.18	99.90	40.61	-67.61	-3,433.94	-3,469.27	425.12	289.23	135.89	3.128		
11,200.00	7,228.64	7,864.38	7,066.57	102.54	42.54	-67.68	-3,436.29	-3,569.22	426.81	286.66	140.15	3.045		
11,300.00	7,228.24	7,964.36	7,065.97	105.19	44.63	-67.74	-3,438.65	-3,669.18	428.49	283.92	144.58	2.964		
11,400.00	7,227.83	8,064.35	7,065.37	107.85	46.86	-67.80	-3,441.01	-3,769.13	430.18	281.03	149.16	2.884		
11,500.00	7,227.42	8,164.33	7,064.77	110.52	49.22	-67.87	-3,443.36	-3,869.09	431.87	278.01	153.87	2.807		
11,600.00	7,227.02	8,264.31	7,064.17	113.20	51.69	-67.93	-3,445.72	-3,969.04	433.56	274.87	158.69	2.732		
11,700.00	7,226.61	8,364.30	7,063.56	115.89	54.24	-67.99	-3,448.07	-4,069.00	435.25	271.64	163.61	2.660		
11,800.00	7,226.21	8,464.28	7,062.96	118.59	56.88	-68.05	-3,450.43	-4,168.95	436.94	268.33	168.62	2.591		
11,900.00	7,225.80	8,564.27	7,062.36	121.29	59.58	-68.12	-3,452.79	-4,268.91	438.64	264.93	173.70	2.525		
12,000.00	7,225.40	8,664.25	7,061.76	124.00	62.35	-68.18	-3,455.14	-4,368.86	440.33	261.47	178.85	2.462		
12,100.00	7,224.99	8,764.24	7,061.16	126.72	65.16	-68.24	-3,457.50	-4,468.82	442.02	257.96	184.06	2.401		
12,200.00	7,224.58	8,864.22	7,060.55	129.44	68.03	-68.30	-3,459.86	-4,568.77	443.71	254.39	189.33	2.344		
12,300.00	7,224.18	8,964.21	7,059.95	132.17	70.93	-68.36	-3,462.21	-4,668.73	445.41	250.77	194.63	2.288		
12,400.00	7,223.77	9,064.19	7,059.35	134.91	73.87	-68.42	-3,464.57	-4,768.68	447.10	247.12	199.99	2.236		
12,500.00	7,223.37	9,164.18	7,058.75	137.65	76.83	-68.47	-3,466.92	-4,868.64	448.80	243.42	205.37	2.185		
12,600.00	7,222.96	9,264.16	7,058.15	140.39	79.83	-68.53	-3,469.28	-4,968.59	450.49	239.69	210.80	2.137		
12,700.00	7,222.55	9,364.15	7,057.54	143.14	82.85	-68.59	-3,471.64	-5,068.55	452.19	235.93	216.25	2.091		
12,800.00	7,222.15	9,464.13	7,056.94	145.89	85.90	-68.65	-3,473.99	-5,168.50	453.88	232.15	221.74	2.047		
12,900.00	7,221.74	9,564.11	7,056.34	148.65	88.96	-68.70	-3,476.35	-5,268.46	455.58	228.33	227.24	2.005		
13,000.00	7,221.34	9,664.10	7,055.74	151.41	92.05	-68.76	-3,478.71	-5,368.41	457.28	224.50	232.78	1.964		
13,100.00	7,220.93	9,764.08	7,055.14	154.18	95.15	-68.82	-3,481.06	-5,468.37	458.97	220.64	238.33	1.926		
13,200.00	7,220.53	9,864.07	7,054.53	156.94	98.26	-68.87	-3,483.42	-5,568.32	460.67	216.76	243.91	1.889		
13,300.00	7,220.12	9,964.05	7,053.93	159.72	101.39	-68.93	-3,485.77	-5,668.28	462.37	212.87	249.50	1.853		
13,400.00	7,219.71	10,064.04	7,053.33	162.49	104.53	-68.98	-3,488.13	-5,768.23	464.07	208.96	255.11	1.819		
13,500.00	7,219.31	10,164.02	7,052.73	165.27	107.68	-69.04	-3,490.49	-5,868.19	465.77	205.03	260.74	1.786		
13,600.00	7,218.90	10,264.01	7,052.13	168.05	110.84	-69.09	-3,492.84	-5,968.14	467.46	201.08	266.38	1.755		
13,700.00	7,218.50	10,363.99	7,051.52	170.83	114.01	-69.14	-3,495.20	-6,068.10	469.16	197.12	272.04	1.725		
13,800.00	7,218.09	10,463.98	7,050.92	173.61	117.19	-69.20	-3,497.56	-6,168.05	470.86	193.15	277.71	1.696		
13,900.00	7,217.69	10,563.96	7,050.32	176.40	120.37	-69.25	-3,499.91	-6,268.01	472.57	189.17	283.39	1.668		
14,000.00	7,217.28	10,663.95	7,049.72	179.19	123.57	-69.30	-3,502.27	-6,367.96	474.27	185.18	289.09	1.641		
14,100.00	7,216.87	10,763.93	7,049.11	181.98	126.77	-69.35	-3,504.63	-6,467.92	475.97	181.17	294.80	1.615		
14,200.00	7,216.47	10,863.91	7,048.51	184.78	129.98	-69.41	-3,506.98	-6,567.87	477.67	177.15	300.52	1.590		
14,300.00	7,216.06	10,963.90	7,047.91	187.57	133.19	-69.46	-3,509.34	-6,667.83	479.37	173.13	306.24	1.565		
14,400.00	7,215.66	11,063.88	7,047.31	190.37	136.41	-69.51	-3,511.69	-6,767.78	481.07	169.09	311.98	1.542		
14,500.00	7,215.25	11,163.87	7,046.71	193.17	139.63	-69.56	-3,514.05	-6,867.74	482.78	165.05	317.73	1.519		
14,600.00	7,214.85	11,263.85	7,046.10	195.97	142.86	-69.61	-3,516.41	-6,967.69	484.48	161.00	323.48	1.498 Level 3		
14,700.00	7,214.44	11,363.84	7,045.50	198.77	146.09	-69.66	-3,518.76	-7,067.65	486.18	156.94	329.25	1.477 Level 3		
14,800.00	7,214.03	11,463.82	7,044.90	201.58	149.33	-69.71	-3,521.12	-7,167.60	487.89	152.87	335.02	1.456 Level 3		
14,900.00	7,213.63	11,563.81	7,044.30	204.38	152.57	-69.76	-3,523.48	-7,267.56	489.59	148.79	340.80	1.437 Level 3		
15,000.00	7,213.22	11,663.79	7,043.70	207.19	155.82	-69.81	-3,525.83	-7,367.51	491.30	144.71	346.59	1.418 Level 3		
15,100.00	7,212.82	11,763.78	7,043.09	210.00	159.06	-69.86	-3,528.19	-7,467.47	493.00	140.62	352.38	1.399 Level 3		
15,200.00	7,212.41	11,863.76	7,042.49	212.81	162.32	-69.90	-3,530.54	-7,567.42	494.71	136.52	358.18	1.381 Level 3		
15,300.00	7,212.01	11,963.74	7,041.89	215.62	165.57	-69.95	-3,532.90	-7,667.38	496.41	132.42	363.99	1.364 Level 3		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN												Offset Site Error:	0.00 ft
Survey Program: 25-MWD												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,400.00	7,211.60	12,063.73	7,041.29	218.43	168.83	-70.00	-3,535.26	-7,767.33	498.12	128.31	369.81	1.347	Level 3
15,500.00	7,211.19	12,163.71	7,040.69	221.25	172.09	-70.05	-3,537.61	-7,867.29	499.83	124.20	375.63	1.331	Level 3
15,600.00	7,210.79	12,263.70	7,040.08	224.06	175.35	-70.09	-3,539.97	-7,967.24	501.53	120.08	381.45	1.315	Level 3
15,700.00	7,210.38	12,363.68	7,039.48	226.88	178.61	-70.14	-3,542.33	-8,067.20	503.24	115.96	387.28	1.299	Level 3
15,794.94	7,210.00	12,458.61	7,038.91	229.55	181.71	-70.18	-3,544.56	-8,162.10	504.86	112.03	392.83	1.285	Level 3, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	15,808.24	7,241.41	3.28	248.31	0.51	2,463.65	22.12	7,649.05					
100.00	100.00	15,807.99	7,241.41	3.28	248.31	0.51	2,463.65	21.87	7,554.45	7,429.79	124.66	60.601		
200.00	200.00	15,807.75	7,241.41	3.34	248.30	0.50	2,463.65	21.63	7,459.99	7,334.80	125.19	59.591		
300.00	299.98	15,807.43	7,241.41	3.44	248.29	178.04	2,463.65	21.31	7,366.28	7,240.51	125.77	58.571		
400.00	399.84	15,806.95	7,241.41	3.59	248.28	178.19	2,463.65	20.83	7,274.03	7,147.60	126.43	57.534		
500.00	499.45	15,806.32	7,241.41	3.79	248.26	178.31	2,463.65	20.20	7,183.42	7,056.23	127.19	56.476		
600.00	598.70	15,805.54	7,241.41	4.03	248.24	178.40	2,463.65	19.41	7,094.62	6,966.56	128.06	55.400		
700.00	697.47	15,804.60	7,241.42	4.31	248.21	178.48	2,463.65	18.48	7,007.81	6,878.77	129.04	54.309		
800.00	795.62	15,803.51	7,241.42	4.64	248.18	178.55	2,463.66	17.39	6,923.17	6,793.05	130.13	53.204		
900.00	893.06	15,802.28	7,241.42	5.00	248.14	178.60	2,463.66	16.15	6,840.89	6,709.56	131.34	52.086		
1,000.00	989.64	15,800.89	7,241.42	5.40	248.10	178.65	2,463.66	14.77	6,761.16	6,628.48	132.68	50.959		
1,100.00	1,085.27	15,800.71	7,241.43	5.83	248.10	178.68	2,463.66	13.24	6,684.17	6,549.99	134.17	49.818		
1,200.00	1,179.82	15,802.38	7,241.43	6.29	248.15	178.71	2,463.67	11.56	6,610.10	6,474.26	135.84	48.662		
1,300.00	1,273.17	15,804.20	7,241.44	6.79	248.20	178.73	2,463.67	9.74	6,539.15	6,401.49	137.65	47.505		
1,400.00	1,365.21	15,806.16	7,241.44	7.33	248.25	178.75	2,463.67	7.78	6,471.51	6,331.88	139.62	46.349		
1,500.00	1,455.84	15,808.26	7,241.45	7.89	248.31	178.76	2,463.68	5.68	6,407.36	6,265.60	141.76	45.200		
1,600.00	1,544.94	15,810.49	7,241.45	8.50	248.38	178.77	2,463.68	3.45	6,346.90	6,202.85	144.05	44.062		
1,700.00	1,632.39	15,812.86	7,241.46	9.13	248.44	178.77	2,463.69	1.08	6,290.30	6,143.80	146.49	42.939		
1,800.00	1,718.11	15,815.36	7,241.46	9.80	248.51	178.77	2,463.69	-1.41	6,237.73	6,088.64	149.10	41.837		
1,900.00	1,802.44	15,817.95	7,241.47	10.49	248.59	178.75	2,463.69	-4.01	6,188.63	6,036.79	151.83	40.759		
2,000.00	1,886.68	15,820.55	7,241.48	11.20	248.66	178.73	2,463.70	-6.60	6,140.89	5,986.23	154.66	39.706		
2,100.00	1,970.92	15,823.15	7,241.48	11.93	248.73	178.70	2,463.70	-9.20	6,094.42	5,936.87	157.55	38.681		
2,200.00	2,055.17	15,825.75	7,241.49	12.66	248.81	178.67	2,463.71	-11.80	6,049.25	5,888.74	160.51	37.687		
2,300.00	2,139.41	15,828.34	7,241.50	13.40	248.88	178.64	2,463.71	-14.40	6,005.40	5,841.88	163.53	36.724		
2,400.00	2,223.66	15,830.94	7,241.50	14.14	248.95	178.62	2,463.72	-17.00	5,962.91	5,796.31	166.59	35.793		
2,500.00	2,307.90	15,833.54	7,241.51	14.89	249.03	178.59	2,463.72	-19.60	5,921.79	5,752.09	169.71	34.894		
2,600.00	2,392.14	15,836.14	7,241.51	15.65	249.10	178.56	2,463.73	-22.20	5,882.09	5,709.23	172.86	34.027		
2,700.00	2,476.39	15,838.74	7,241.52	16.41	249.17	178.53	2,463.73	-24.79	5,843.83	5,667.77	176.06	33.193		
2,800.00	2,560.63	15,841.34	7,241.53	17.17	249.25	178.51	2,463.74	-27.39	5,807.04	5,627.76	179.29	32.390		
2,900.00	2,644.88	15,843.93	7,241.53	17.93	249.32	178.48	2,463.74	-29.99	5,771.75	5,589.21	182.54	31.619		
3,000.00	2,729.12	15,846.53	7,241.54	18.70	249.40	178.45	2,463.75	-32.59	5,737.98	5,552.15	185.82	30.879		
3,100.00	2,813.36	15,849.13	7,241.55	19.47	249.47	178.42	2,463.75	-35.19	5,705.76	5,516.64	189.12	30.169		
3,200.00	2,897.61	15,851.73	7,241.55	20.25	249.54	178.40	2,463.75	-37.79	5,675.12	5,482.68	192.44	29.490		
3,300.00	2,981.85	15,854.33	7,241.56	21.02	249.62	178.37	2,463.76	-40.38	5,646.09	5,450.32	195.76	28.841		
3,400.00	3,066.10	15,856.93	7,241.57	21.80	249.69	178.34	2,463.76	-42.98	5,618.68	5,419.59	199.09	28.221		
3,500.00	3,150.34	15,859.53	7,241.57	22.58	249.76	178.31	2,463.77	-45.58	5,592.93	5,390.50	202.43	27.630		
3,600.00	3,234.58	15,862.12	7,241.58	23.35	249.84	178.29	2,463.77	-48.18	5,568.85	5,363.10	205.75	27.066		
3,700.00	3,318.83	15,864.72	7,241.58	24.13	249.91	178.26	2,463.78	-50.78	5,546.47	5,337.40	209.07	26.529		
3,800.00	3,403.07	15,867.32	7,241.59	24.92	249.98	178.23	2,463.78	-53.38	5,525.80	5,313.43	212.37	26.019		
3,900.00	3,487.32	15,869.92	7,241.60	25.70	250.06	178.20	2,463.79	-55.98	5,506.88	5,291.22	215.66	25.535		
4,000.00	3,571.56	15,872.52	7,241.60	26.48	250.13	178.18	2,463.79	-58.57	5,489.71	5,270.79	218.92	25.077		
4,100.00	3,655.80	15,875.12	7,241.61	27.27	250.20	178.15	2,463.80	-61.17	5,474.31	5,252.16	222.15	24.643		
4,200.00	3,740.05	15,877.72	7,241.62	28.05	250.28	178.12	2,463.80	-63.77	5,460.70	5,235.35	225.35	24.232		
4,300.00	3,824.29	15,880.31	7,241.62	28.84	250.35	178.09	2,463.81	-66.37	5,448.89	5,220.38	228.51	23.846		
4,400.00	3,908.54	15,882.91	7,241.63	29.62	250.42	178.07	2,463.81	-68.97	5,438.89	5,207.26	231.62	23.481		
4,500.00	3,992.78	15,885.51	7,241.64	30.41	250.50	178.04	2,463.82	-71.57	5,430.71	5,196.02	234.70	23.139		
4,600.00	4,077.03	15,888.11	7,241.64	31.20	250.57	178.01	2,463.82	-74.17	5,424.37	5,186.65	237.72	22.819		
4,700.00	4,161.27	15,909.36	7,241.65	31.98	251.17	177.98	2,463.82	-76.76	5,419.86	5,178.73	241.12	22.477		
4,800.00	4,245.51	15,906.76	7,241.65	32.77	251.10	177.96	2,463.83	-79.36	5,417.19	5,173.28	243.91	22.210		
4,894.69	4,325.29	15,904.30	7,241.66	33.52	251.03	177.93	2,463.83	-81.82	5,416.36	5,169.87	246.49	21.974 CC		
4,900.00	4,329.76	15,904.16	7,241.66	33.56	251.03	177.93	2,463.83	-81.96	5,416.36	5,169.73	246.63	21.962		
5,000.00	4,414.00	15,901.56	7,241.67	34.35	250.95	177.90	2,463.84	-84.56	5,417.38	5,168.10	249.28	21.732		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	15,901.10	7,241.67	35.14	250.94	177.87	2,463.84	-87.16	5,420.25	5,168.34	251.91	21.516		
5,200.00	4,582.49	15,903.70	7,241.68	35.93	251.01	177.85	2,463.85	-89.76	5,424.95	5,170.41	254.55	21.312		
5,300.00	4,666.73	15,906.30	7,241.69	36.72	251.09	177.82	2,463.85	-92.35	5,431.49	5,174.39	257.11	21.126		
5,400.00	4,750.98	15,908.90	7,241.69	37.51	251.16	177.79	2,463.86	-94.95	5,439.86	5,180.28	259.59	20.956		
5,500.00	4,835.22	15,911.50	7,241.70	38.30	251.23	177.76	2,463.86	-97.55	5,450.06	5,188.07	261.99	20.803		
5,600.00	4,919.47	15,914.09	7,241.71	39.09	251.31	177.74	2,463.87	-100.15	5,462.06	5,197.75	264.31	20.665		
5,700.00	5,003.71	15,916.69	7,241.71	39.88	251.38	177.71	2,463.87	-102.75	5,475.86	5,209.31	266.55	20.544		
5,800.00	5,088.06	15,919.28	7,241.72	40.67	251.45	177.69	2,463.88	-105.34	5,491.26	5,222.56	268.70	20.436		
5,900.00	5,173.83	15,921.78	7,241.72	41.44	251.52	177.67	2,463.88	-107.83	5,505.75	5,234.99	270.76	20.334		
6,000.00	5,261.34	15,924.14	7,241.73	42.18	251.59	177.66	2,463.88	-110.19	5,518.57	5,245.84	272.72	20.235		
6,100.00	5,350.49	15,926.37	7,241.74	42.88	251.65	177.64	2,463.89	-112.42	5,529.71	5,255.12	274.59	20.138		
6,200.00	5,441.16	15,928.46	7,241.74	43.56	251.71	177.63	2,463.89	-114.52	5,539.17	5,262.81	276.36	20.043		
6,300.00	5,533.25	15,930.42	7,241.74	44.20	251.77	177.62	2,463.90	-116.47	5,546.94	5,268.92	278.03	19.951		
6,400.00	5,626.65	15,932.23	7,241.75	44.82	251.82	177.60	2,463.90	-118.29	5,553.03	5,273.44	279.60	19.861		
6,500.00	5,721.23	15,933.90	7,241.75	45.40	251.87	177.59	2,463.90	-119.96	5,557.44	5,276.38	281.06	19.773		
6,600.00	5,816.89	15,935.43	7,241.76	45.94	251.91	177.58	2,463.91	-121.49	5,560.15	5,277.73	282.42	19.688		
6,700.00	5,913.51	15,936.81	7,241.76	46.45	251.95	177.56	2,463.91	-122.87	5,561.18	5,277.50	283.68	19.604		
6,800.00	6,010.97	15,938.04	7,241.76	46.93	251.98	177.55	2,463.91	-124.10	5,560.51	5,275.69	284.83	19.523		
6,900.00	6,109.15	15,939.13	7,241.77	47.38	252.01	177.54	2,463.91	-125.18	5,558.16	5,272.29	285.87	19.443		
7,000.00	6,207.93	15,940.06	7,241.77	47.80	252.04	177.52	2,463.91	-126.11	5,554.12	5,267.31	286.80	19.366		
7,100.00	6,307.19	15,940.84	7,241.77	48.18	252.06	177.51	2,463.91	-126.89	5,548.39	5,260.76	287.63	19.290		
7,200.00	6,406.82	15,941.46	7,241.77	48.53	252.08	177.50	2,463.92	-127.52	5,540.97	5,252.62	288.35	19.216		
7,300.00	6,506.68	15,941.93	7,241.77	48.84	252.09	177.48	2,463.92	-127.99	5,531.88	5,242.91	288.97	19.144		
7,400.00	6,606.66	15,942.26	7,241.77	49.10	252.10	90.50	2,463.92	-128.31	5,521.10	5,231.65	289.45	19.074		
7,500.00	6,706.21	15,950.85	7,241.79	49.35	252.35	91.36	2,463.93	-136.91	5,510.60	5,220.52	290.08	18.997		
7,600.00	6,803.22	15,974.91	7,241.85	49.59	253.03	91.88	2,463.98	-160.96	5,502.22	5,211.15	291.07	18.904		
7,700.00	6,895.32	16,013.83	7,241.95	49.82	254.13	92.07	2,464.05	-199.89	5,495.95	5,203.56	292.39	18.796		
7,800.00	6,980.23	16,066.67	7,242.08	50.03	255.62	91.99	2,464.14	-252.73	5,491.67	5,197.61	294.06	18.675		
7,900.00	7,055.85	16,132.12	7,242.24	50.21	257.48	91.71	2,464.26	-318.18	5,489.11	5,193.03	296.07	18.540		
8,000.00	7,120.34	16,208.57	7,242.42	50.36	259.64	91.30	2,464.40	-394.62	5,487.91	5,189.46	298.45	18.388		
8,079.20	7,162.45	16,275.69	7,242.59	50.45	261.54	90.95	2,464.52	-461.75	5,487.66	5,187.06	300.60	18.255		
8,100.00	7,172.10	16,305.93	7,242.63	50.47	262.40	90.86	2,464.55	-480.19	5,487.68	5,186.15	301.53	18.199		
8,200.00	7,209.85	16,386.71	7,242.86	50.55	264.68	90.47	2,464.72	-572.77	5,488.06	5,183.74	304.32	18.034		
8,300.00	7,232.68	16,484.02	7,243.10	50.61	267.44	90.18	2,464.89	-670.08	5,488.74	5,180.96	307.78	17.833		
8,400.00	7,240.00	16,583.66	7,243.34	50.65	270.26	90.03	2,465.07	-769.72	5,489.52	5,177.99	311.53	17.621		
8,500.00	7,239.60	16,683.66	7,243.59	50.69	273.10	90.04	2,465.25	-869.71	5,490.31	5,174.84	315.47	17.403		
8,600.00	7,239.19	16,783.65	7,243.83	50.75	275.93	90.05	2,465.43	-969.71	5,491.10	5,171.52	319.58	17.182		
8,700.00	7,238.78	16,883.65	7,244.07	50.85	278.76	90.05	2,465.61	-1,069.70	5,491.90	5,168.06	323.83	16.959		
8,800.00	7,238.38	16,983.64	7,244.32	51.02	281.60	90.06	2,465.79	-1,169.69	5,492.69	5,164.47	328.22	16.735		
8,900.00	7,237.97	17,083.64	7,244.56	51.32	284.43	90.07	2,465.97	-1,269.69	5,493.48	5,160.76	332.72	16.511		
9,000.00	7,237.57	17,183.63	7,244.81	51.95	287.27	90.07	2,466.15	-1,369.68	5,494.27	5,156.94	337.33	16.287		
9,100.00	7,237.16	17,283.63	7,245.05	53.10	290.11	90.08	2,466.32	-1,469.68	5,495.07	5,153.02	342.05	16.065		
9,200.00	7,236.76	17,383.62	7,245.30	54.69	292.94	90.09	2,466.50	-1,569.67	5,495.86	5,149.02	346.84	15.845		
9,300.00	7,236.35	17,483.62	7,245.54	56.53	295.78	90.09	2,466.68	-1,669.67	5,496.65	5,144.93	351.72	15.628		
9,400.00	7,235.94	17,583.61	7,245.78	58.53	298.62	90.10	2,466.86	-1,769.66	5,497.44	5,140.78	356.66	15.414		
9,500.00	7,235.54	17,683.61	7,246.03	60.62	301.46	90.11	2,467.04	-1,869.65	5,498.24	5,136.57	361.67	15.202		
9,600.00	7,235.13	17,783.60	7,246.27	62.80	304.30	90.11	2,467.22	-1,969.65	5,499.03	5,132.30	366.74	14.995		
9,700.00	7,234.73	17,883.60	7,246.52	65.03	307.14	90.12	2,467.40	-2,069.64	5,499.82	5,127.97	371.85	14.790		
9,800.00	7,234.32	17,983.59	7,246.76	67.32	309.97	90.13	2,467.58	-2,169.64	5,500.62	5,123.61	377.01	14.590		
9,900.00	7,233.92	18,083.59	7,247.01	69.66	312.81	90.13	2,467.76	-2,269.63	5,501.41	5,119.20	382.21	14.394		
10,000.00	7,233.51	18,183.58	7,247.25	72.03	315.66	90.14	2,467.94	-2,369.63	5,502.20	5,114.76	387.45	14.201		
10,100.00	7,233.10	18,283.58	7,247.49	74.45	318.50	90.15	2,468.12	-2,469.62	5,503.00	5,110.28	392.72	14.013		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,232.70	18,383.57	7,247.74	76.89	321.34	90.15	2,468.30	-2,569.61	5,503.79	5,105.78	398.02	13.828		
10,300.00	7,232.29	18,483.57	7,247.98	79.36	324.18	90.16	2,468.48	-2,669.61	5,504.59	5,101.24	403.34	13.647		
10,400.00	7,231.89	18,583.56	7,248.23	81.86	327.02	90.17	2,468.66	-2,769.60	5,505.38	5,096.68	408.70	13.471		
10,500.00	7,231.48	18,683.55	7,248.47	84.38	329.86	90.17	2,468.84	-2,869.60	5,506.17	5,092.10	414.07	13.298		
10,600.00	7,231.08	18,783.55	7,248.72	86.93	332.70	90.18	2,469.02	-2,969.59	5,506.97	5,087.50	419.47	13.128		
10,700.00	7,230.67	18,883.54	7,248.96	89.49	335.55	90.19	2,469.20	-3,069.59	5,507.76	5,082.88	424.88	12.963		
10,800.00	7,230.26	18,983.54	7,249.21	92.07	338.39	90.20	2,469.38	-3,169.58	5,508.56	5,078.24	430.31	12.801		
10,900.00	7,229.86	19,083.53	7,249.45	94.67	341.23	90.20	2,469.56	-3,269.58	5,509.35	5,073.59	435.76	12.643		
11,000.00	7,229.45	19,118.26	7,249.53	97.28	342.22	90.20	2,469.62	-3,304.30	5,510.53	5,071.22	439.31	12.544 ES		
11,100.00	7,229.05	19,118.26	7,249.53	99.90	342.22	90.20	2,469.62	-3,304.30	5,513.42	5,071.68	441.74	12.481		
11,200.00	7,228.64	19,118.26	7,249.53	102.54	342.22	90.20	2,469.62	-3,304.30	5,518.11	5,074.07	444.04	12.427		
11,300.00	7,228.24	19,118.26	7,249.53	105.19	342.22	90.20	2,469.62	-3,304.30	5,524.62	5,078.40	446.22	12.381		
11,400.00	7,227.83	19,118.26	7,249.53	107.85	342.22	90.20	2,469.62	-3,304.30	5,532.92	5,084.66	448.26	12.343		
11,500.00	7,227.42	19,118.26	7,249.53	110.52	342.22	90.20	2,469.62	-3,304.30	5,543.01	5,092.85	450.16	12.313		
11,600.00	7,227.02	19,118.26	7,249.53	113.20	342.22	90.20	2,469.62	-3,304.30	5,554.89	5,102.96	451.93	12.291		
11,700.00	7,226.61	19,118.26	7,249.53	115.89	342.22	90.20	2,469.62	-3,304.30	5,568.54	5,114.97	453.57	12.277		
11,800.00	7,226.21	19,118.26	7,249.53	118.59	342.22	90.20	2,469.62	-3,304.30	5,583.94	5,128.88	455.06	12.271 SF		
11,900.00	7,225.80	19,118.26	7,249.53	121.29	342.22	90.20	2,469.62	-3,304.30	5,601.09	5,144.67	456.42	12.272		
12,000.00	7,225.40	19,118.26	7,249.53	124.00	342.22	90.20	2,469.62	-3,304.30	5,619.97	5,162.32	457.64	12.280		
12,100.00	7,224.99	19,118.26	7,249.53	126.72	342.22	90.20	2,469.62	-3,304.30	5,640.55	5,181.82	458.73	12.296		
12,200.00	7,224.58	19,118.26	7,249.53	129.44	342.22	90.20	2,469.62	-3,304.30	5,662.83	5,203.15	459.68	12.319		
12,300.00	7,224.18	19,118.26	7,249.53	132.17	342.22	90.20	2,469.62	-3,304.30	5,686.78	5,226.28	460.50	12.349		
12,400.00	7,223.77	19,118.26	7,249.53	134.91	342.22	90.20	2,469.62	-3,304.30	5,712.38	5,251.18	461.19	12.386		
12,500.00	7,223.37	19,118.26	7,249.53	137.65	342.22	90.20	2,469.62	-3,304.30	5,739.60	5,277.85	461.75	12.430		
12,600.00	7,222.96	19,118.26	7,249.53	140.39	342.22	90.20	2,469.62	-3,304.30	5,768.44	5,306.25	462.19	12.481		
12,700.00	7,222.55	19,118.26	7,249.53	143.14	342.22	90.20	2,469.62	-3,304.30	5,798.85	5,336.34	462.51	12.538		
12,800.00	7,222.15	19,118.26	7,249.53	145.89	342.22	90.20	2,469.62	-3,304.30	5,830.82	5,368.12	462.70	12.602		
12,900.00	7,221.74	19,118.26	7,249.53	148.65	342.22	90.20	2,469.62	-3,304.30	5,864.32	5,401.54	462.78	12.672		
13,000.00	7,221.34	19,118.26	7,249.53	151.41	342.22	90.20	2,469.62	-3,304.30	5,899.33	5,436.58	462.75	12.748		
13,100.00	7,220.93	19,118.26	7,249.53	154.18	342.22	90.20	2,469.62	-3,304.30	5,935.81	5,473.20	462.61	12.831		
13,200.00	7,220.53	19,118.26	7,249.53	156.94	342.22	90.20	2,469.62	-3,304.30	5,973.75	5,511.38	462.37	12.920		
13,300.00	7,220.12	19,118.26	7,249.53	159.72	342.22	90.20	2,469.62	-3,304.30	6,013.11	5,551.08	462.03	13.015		
13,400.00	7,219.71	19,118.26	7,249.53	162.49	342.22	90.20	2,469.62	-3,304.30	6,053.87	5,592.28	461.59	13.115		
13,500.00	7,219.31	19,118.26	7,249.53	165.27	342.22	90.20	2,469.62	-3,304.30	6,095.99	5,634.93	461.06	13.222		
13,600.00	7,218.90	19,118.26	7,249.53	168.05	342.22	90.20	2,469.62	-3,304.30	6,139.46	5,679.01	460.44	13.334		
13,700.00	7,218.50	19,118.26	7,249.53	170.83	342.22	90.20	2,469.62	-3,304.30	6,184.23	5,724.49	459.74	13.451		
13,800.00	7,218.09	19,118.26	7,249.53	173.61	342.22	90.20	2,469.62	-3,304.30	6,230.29	5,771.33	458.96	13.575		
13,900.00	7,217.69	19,118.26	7,249.53	176.40	342.22	90.20	2,469.62	-3,304.30	6,277.61	5,819.50	458.11	13.703		
14,000.00	7,217.28	19,118.26	7,249.53	179.19	342.22	90.20	2,469.62	-3,304.30	6,326.15	5,868.97	457.18	13.837		
14,100.00	7,216.87	19,118.26	7,249.53	181.98	342.22	90.20	2,469.62	-3,304.30	6,375.89	5,919.70	456.19	13.976		
14,200.00	7,216.47	19,118.26	7,249.53	184.78	342.22	90.20	2,469.62	-3,304.30	6,426.80	5,971.67	455.13	14.121		
14,300.00	7,216.06	19,118.26	7,249.53	187.57	342.22	90.20	2,469.62	-3,304.30	6,478.86	6,024.84	454.02	14.270		
14,400.00	7,215.66	19,118.26	7,249.53	190.37	342.22	90.20	2,469.62	-3,304.30	6,532.03	6,079.18	452.85	14.424		
14,500.00	7,215.25	19,118.26	7,249.53	193.17	342.22	90.20	2,469.62	-3,304.30	6,586.29	6,134.66	451.63	14.583		
14,600.00	7,214.85	19,118.26	7,249.53	195.97	342.22	90.20	2,469.62	-3,304.30	6,641.61	6,191.25	450.36	14.747		
14,700.00	7,214.44	19,118.26	7,249.53	198.77	342.22	90.20	2,469.62	-3,304.30	6,697.97	6,248.93	449.04	14.916		
14,800.00	7,214.03	19,118.26	7,249.53	201.58	342.22	90.20	2,469.62	-3,304.30	6,755.34	6,307.65	447.69	15.089		
14,900.00	7,213.63	19,118.26	7,249.53	204.38	342.22	90.20	2,469.62	-3,304.30	6,813.69	6,367.40	446.29	15.267		
15,000.00	7,213.22	19,118.26	7,249.53	207.19	342.22	90.20	2,469.62	-3,304.30	6,873.01	6,428.14	444.86	15.450		
15,100.00	7,212.82	19,118.26	7,249.53	210.00	342.22	90.20	2,469.62	-3,304.30	6,933.26	6,489.85	443.40	15.636		
15,200.00	7,212.41	19,118.26	7,249.53	212.81	342.22	90.20	2,469.62	-3,304.30	6,994.42	6,552.50	441.91	15.828		
15,300.00	7,212.01	19,118.26	7,249.53	215.62	342.22	90.20	2,469.62	-3,304.30	7,056.46	6,616.06	440.40	16.023		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
15,400.00	7,211.60	19,118.26	7,249.53	218.43	342.22	90.20	2,469.62	-3,304.30	7,119.37	6,680.51	438.86	16.222		
15,500.00	7,211.19	19,118.26	7,249.53	221.25	342.22	90.20	2,469.62	-3,304.30	7,183.12	6,745.82	437.30	16.426		
15,600.00	7,210.79	19,118.26	7,249.53	224.06	342.22	90.20	2,469.62	-3,304.30	7,247.69	6,811.97	435.72	16.634		
15,700.00	7,210.38	19,118.26	7,249.53	226.88	342.22	90.20	2,469.62	-3,304.30	7,313.06	6,878.94	434.13	16.846		
15,794.94	7,210.00	19,118.26	7,249.53	229.55	342.22	90.20	2,469.62	-3,304.30	7,375.84	6,943.25	432.60	17.050		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	15,721.38	7,133.46	3.28	248.17	-0.15	2,303.32	-6.17	7,496.11					
100.00	100.00	15,721.63	7,133.46	3.28	248.18	-0.16	2,303.32	-6.42	7,401.01	7,278.35	122.66	60.340		
200.00	200.00	15,721.87	7,133.46	3.34	248.19	-0.17	2,303.32	-6.66	7,306.04	7,182.88	123.16	59.321		
300.00	299.98	15,722.21	7,133.47	3.44	248.20	177.44	2,303.31	-7.01	7,211.79	7,088.07	123.72	58.292		
400.00	399.84	15,722.75	7,133.47	3.59	248.21	177.65	2,303.31	-7.54	7,118.93	6,994.56	124.37	57.241		
500.00	499.45	15,723.49	7,133.47	3.79	248.23	177.81	2,303.30	-8.28	7,027.65	6,902.53	125.12	56.168		
600.00	598.70	15,724.42	7,133.47	4.03	248.26	177.94	2,303.29	-9.21	6,938.12	6,812.14	125.98	55.073		
700.00	697.47	15,725.54	7,133.47	4.31	248.29	178.05	2,303.28	-10.33	6,850.51	6,723.56	126.96	53.960		
800.00	795.62	15,726.86	7,133.48	4.64	248.33	178.14	2,303.26	-11.65	6,765.02	6,636.97	128.05	52.830		
900.00	893.06	15,728.37	7,133.48	5.00	248.37	178.21	2,303.25	-13.16	6,681.82	6,552.54	129.28	51.686		
1,000.00	989.64	15,730.06	7,133.48	5.40	248.42	178.27	2,303.23	-14.85	6,601.11	6,470.47	130.64	50.529		
1,100.00	1,085.27	15,731.95	7,133.49	5.83	248.47	178.32	2,303.21	-16.74	6,523.09	6,390.94	132.14	49.363		
1,200.00	1,179.82	15,734.02	7,133.49	6.29	248.53	178.36	2,303.19	-18.81	6,447.93	6,314.13	133.80	48.191		
1,300.00	1,273.17	15,736.27	7,133.50	6.79	248.59	178.39	2,303.17	-21.06	6,375.85	6,240.24	135.61	47.015		
1,400.00	1,365.21	15,738.70	7,133.51	7.33	248.66	178.41	2,303.14	-23.49	6,307.03	6,169.44	137.59	45.840		
1,500.00	1,455.84	15,741.30	7,133.51	7.89	248.74	178.42	2,303.12	-26.09	6,241.67	6,101.94	139.73	44.670		
1,600.00	1,544.94	15,744.08	7,133.52	8.50	248.81	178.43	2,303.09	-28.87	6,179.95	6,037.92	142.03	43.510		
1,700.00	1,632.39	15,747.03	7,133.53	9.13	248.90	178.44	2,303.06	-31.82	6,122.07	5,977.56	144.51	42.365		
1,800.00	1,718.11	15,750.15	7,133.53	9.80	248.99	178.44	2,303.03	-34.94	6,068.20	5,921.05	147.14	41.240		
1,900.00	1,802.44	15,753.39	7,133.54	10.49	249.08	178.41	2,302.99	-38.18	6,017.77	5,867.85	149.92	40.140		
2,000.00	1,886.68	15,756.63	7,133.55	11.20	249.17	178.38	2,302.96	-41.42	5,968.73	5,815.93	152.80	39.063		
2,100.00	1,970.92	15,759.88	7,133.56	11.93	249.26	178.34	2,302.93	-44.67	5,920.97	5,765.22	155.75	38.017		
2,200.00	2,055.17	15,763.13	7,133.56	12.66	249.35	178.31	2,302.89	-47.92	5,874.52	5,715.76	158.76	37.002		
2,300.00	2,139.41	15,766.37	7,133.57	13.40	249.44	178.27	2,302.86	-51.16	5,829.42	5,667.57	161.84	36.019		
2,400.00	2,223.66	15,769.62	7,133.58	14.14	249.54	178.24	2,302.83	-54.41	5,785.69	5,620.70	164.98	35.068		
2,500.00	2,307.90	15,772.87	7,133.59	14.89	249.63	178.20	2,302.79	-57.65	5,743.37	5,575.19	168.18	34.151		
2,600.00	2,392.14	15,776.11	7,133.60	15.65	249.72	178.17	2,302.76	-60.90	5,702.48	5,531.07	171.42	33.267		
2,700.00	2,476.39	15,779.36	7,133.60	16.41	249.81	178.13	2,302.73	-64.15	5,663.07	5,488.37	174.70	32.416		
2,800.00	2,560.63	15,782.61	7,133.61	17.17	249.90	178.09	2,302.69	-67.39	5,625.15	5,447.13	178.02	31.598		
2,900.00	2,644.88	15,785.85	7,133.62	17.93	249.99	178.06	2,302.66	-70.64	5,588.77	5,407.39	181.38	30.813		
3,000.00	2,729.12	15,789.10	7,133.63	18.70	250.09	178.02	2,302.63	-73.89	5,553.94	5,369.18	184.76	30.060		
3,100.00	2,813.36	15,807.72	7,133.64	19.47	250.61	177.99	2,302.59	-77.13	5,520.71	5,332.25	188.46	29.294		
3,200.00	2,897.61	15,804.47	7,133.64	20.25	250.52	177.95	2,302.56	-80.38	5,489.09	5,297.33	191.77	28.624		
3,300.00	2,981.85	15,801.23	7,133.65	21.02	250.43	177.92	2,302.53	-83.63	5,459.12	5,264.04	195.08	27.984		
3,400.00	3,066.10	15,802.09	7,133.66	21.80	250.45	177.88	2,302.49	-86.87	5,430.83	5,232.35	198.48	27.362		
3,500.00	3,150.34	15,805.33	7,133.67	22.58	250.54	177.84	2,302.46	-90.12	5,404.24	5,202.31	201.93	26.763		
3,600.00	3,234.58	15,808.58	7,133.68	23.35	250.64	177.81	2,302.43	-93.36	5,379.37	5,173.99	205.38	26.193		
3,700.00	3,318.83	15,811.82	7,133.68	24.13	250.73	177.77	2,302.39	-96.61	5,356.25	5,147.43	208.82	25.651		
3,800.00	3,403.07	15,815.07	7,133.69	24.92	250.82	177.74	2,302.36	-99.86	5,334.90	5,122.66	212.24	25.136		
3,900.00	3,487.32	15,818.32	7,133.70	25.70	250.91	177.70	2,302.33	-103.10	5,315.35	5,099.70	215.65	24.648		
4,000.00	3,571.56	15,821.56	7,133.71	26.48	251.00	177.67	2,302.29	-106.35	5,297.62	5,078.58	219.03	24.186		
4,100.00	3,655.80	15,824.81	7,133.72	27.27	251.10	177.63	2,302.26	-109.60	5,281.71	5,059.32	222.39	23.750		
4,200.00	3,740.05	15,828.06	7,133.72	28.05	251.19	177.60	2,302.23	-112.84	5,267.65	5,041.95	225.71	23.338		
4,300.00	3,824.29	15,831.30	7,133.73	28.84	251.28	177.56	2,302.19	-116.09	5,255.46	5,026.47	228.99	22.951		
4,400.00	3,908.54	15,834.55	7,133.74	29.62	251.37	177.52	2,302.16	-119.33	5,245.14	5,012.92	232.22	22.587		
4,500.00	3,992.78	15,837.80	7,133.75	30.41	251.46	177.49	2,302.13	-122.58	5,236.71	5,001.31	235.41	22.245		
4,600.00	4,077.03	15,841.04	7,133.76	31.20	251.55	177.45	2,302.09	-125.83	5,230.18	4,991.64	238.54	21.926		
4,700.00	4,161.27	15,844.29	7,133.76	31.98	251.65	177.42	2,302.06	-129.07	5,225.55	4,983.94	241.61	21.628		
4,800.00	4,245.51	15,847.54	7,133.77	32.77	251.74	177.38	2,302.03	-132.32	5,222.83	4,978.21	244.62	21.351		
4,892.24	4,323.22	15,850.53	7,133.78	33.50	251.82	177.35	2,302.00	-135.31	5,222.02	4,974.69	247.33	21.113 CC		
4,900.00	4,329.76	15,850.78	7,133.78	33.56	251.83	177.35	2,301.99	-135.57	5,222.02	4,974.47	247.56	21.094		
5,000.00	4,414.00	15,854.03	7,133.79	34.35	251.92	177.31	2,301.96	-138.81	5,223.13	4,972.70	250.43	20.857		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	15,857.28	7,133.80	35.14	252.01	177.28	2,301.93	-142.06	5,226.14	4,972.92	253.22	20.639		
5,200.00	4,582.49	15,860.52	7,133.80	35.93	252.10	177.24	2,301.89	-145.31	5,231.07	4,975.13	255.94	20.439		
5,300.00	4,666.73	15,863.77	7,133.81	36.72	252.20	177.20	2,301.86	-148.55	5,237.90	4,979.32	258.57	20.257		
5,400.00	4,750.98	15,867.02	7,133.82	37.51	252.29	177.17	2,301.83	-151.80	5,246.62	4,985.50	261.12	20.093		
5,500.00	4,835.22	15,870.26	7,133.83	38.30	252.38	177.13	2,301.79	-155.04	5,257.23	4,993.64	263.59	19.945		
5,600.00	4,919.47	15,873.51	7,133.83	39.09	252.47	177.10	2,301.76	-158.29	5,269.71	5,003.75	265.96	19.814		
5,700.00	5,003.71	15,876.76	7,133.84	39.88	252.56	177.06	2,301.73	-161.54	5,284.06	5,015.80	268.25	19.698		
5,800.00	5,088.06	15,879.99	7,133.85	40.67	252.65	177.03	2,301.70	-164.77	5,300.06	5,029.61	270.45	19.597		
5,900.00	5,173.83	15,883.10	7,133.86	41.44	252.74	177.01	2,301.66	-167.88	5,315.22	5,042.67	272.54	19.502		
6,000.00	5,261.34	15,886.05	7,133.87	42.18	252.83	177.00	2,301.63	-170.83	5,328.77	5,054.23	274.54	19.410		
6,100.00	5,350.49	15,888.82	7,133.87	42.88	252.90	176.98	2,301.60	-173.60	5,340.71	5,064.28	276.43	19.321		
6,200.00	5,441.16	15,908.64	7,133.88	43.56	253.46	176.96	2,301.58	-176.20	5,351.03	5,072.35	278.67	19.202		
6,300.00	5,533.25	15,906.22	7,133.88	44.20	253.40	176.94	2,301.55	-178.63	5,359.73	5,079.51	280.22	19.127		
6,400.00	5,626.65	15,896.09	7,133.89	44.82	253.11	176.93	2,301.53	-180.87	5,366.81	5,085.36	281.46	19.068		
6,500.00	5,721.23	15,898.15	7,133.89	45.40	253.17	176.91	2,301.51	-182.93	5,372.27	5,089.36	282.91	18.989		
6,600.00	5,816.89	15,900.03	7,133.90	45.94	253.22	176.90	2,301.49	-184.81	5,376.10	5,091.84	284.26	18.913		
6,700.00	5,913.51	15,901.72	7,133.90	46.45	253.27	176.88	2,301.47	-186.50	5,378.31	5,092.82	285.50	18.839		
6,800.00	6,010.97	15,903.22	7,133.91	46.93	253.31	176.87	2,301.46	-188.00	5,378.89	5,092.27	286.62	18.767		
6,900.00	6,109.15	15,904.53	7,133.91	47.38	253.35	176.85	2,301.44	-189.31	5,377.84	5,090.22	287.63	18.697		
7,000.00	6,207.93	15,905.65	7,133.91	47.80	253.38	176.84	2,301.43	-190.43	5,375.17	5,086.65	288.52	18.630		
7,100.00	6,307.19	15,906.57	7,133.92	48.18	253.41	176.82	2,301.42	-191.35	5,370.87	5,081.57	289.30	18.565		
7,200.00	6,406.82	15,907.30	7,133.92	48.53	253.43	176.81	2,301.42	-192.08	5,364.95	5,074.99	289.96	18.502		
7,300.00	6,506.68	15,907.84	7,133.92	48.84	253.44	176.79	2,301.41	-192.62	5,357.41	5,066.90	290.51	18.441		
7,400.00	6,606.66	15,908.18	7,133.92	49.10	253.45	89.81	2,301.41	-192.96	5,348.25	5,057.32	290.93	18.383		
7,500.00	6,706.21	15,916.77	7,133.94	49.35	253.69	90.52	2,301.32	-201.55	5,339.32	5,047.84	291.48	18.318		
7,600.00	6,803.22	15,940.83	7,134.00	49.59	254.37	90.90	2,301.07	-225.61	5,332.33	5,039.95	292.38	18.238		
7,700.00	6,895.32	15,979.76	7,134.09	49.82	255.47	90.97	2,300.67	-264.53	5,327.25	5,033.63	293.62	18.143		
7,800.00	6,980.23	16,032.60	7,134.22	50.03	256.97	90.79	2,300.13	-317.37	5,323.91	5,028.71	295.20	18.035		
7,900.00	7,055.85	16,098.05	7,134.38	50.21	258.82	90.44	2,299.46	-382.82	5,321.99	5,024.86	297.13	17.911		
8,000.00	7,120.34	16,174.50	7,134.57	50.36	260.98	89.99	2,298.68	-459.26	5,321.12	5,021.69	299.43	17.771		
8,100.00	7,172.10	16,260.07	7,134.78	50.47	263.40	89.53	2,297.80	-544.83	5,320.88	5,018.77	302.11	17.612		
8,127.13	7,183.77	16,284.59	7,134.84	50.49	264.09	89.42	2,297.55	-569.35	5,320.87	5,017.95	302.92	17.565		
8,200.00	7,209.85	16,352.65	7,135.01	50.55	266.02	89.16	2,296.85	-637.40	5,320.89	5,015.71	305.18	17.435		
8,300.00	7,232.68	16,449.96	7,135.24	50.61	268.77	88.93	2,295.85	-734.71	5,320.86	5,012.24	308.62	17.241		
8,400.00	7,240.00	16,549.60	7,135.49	50.65	271.59	88.88	2,294.83	-834.35	5,320.58	5,008.23	312.35	17.034		
8,500.00	7,239.60	16,649.60	7,135.73	50.69	274.42	88.88	2,293.81	-934.34	5,320.16	5,003.86	316.30	16.820		
8,600.00	7,239.19	16,749.60	7,135.98	50.75	277.25	88.89	2,292.78	-1,034.33	5,319.73	4,999.33	320.40	16.603		
8,700.00	7,238.78	16,849.59	7,136.22	50.85	280.08	88.90	2,291.76	-1,134.32	5,319.31	4,994.65	324.66	16.384		
8,800.00	7,238.38	16,949.59	7,136.46	51.02	282.92	88.90	2,290.73	-1,234.31	5,318.88	4,989.84	329.04	16.165		
8,900.00	7,237.97	17,049.59	7,136.71	51.32	285.75	88.91	2,289.71	-1,334.30	5,318.46	4,984.90	333.55	15.945		
9,000.00	7,237.57	17,149.58	7,136.95	51.95	288.58	88.92	2,288.68	-1,434.30	5,318.03	4,979.86	338.17	15.726		
9,100.00	7,237.16	17,249.58	7,137.20	53.10	291.41	88.92	2,287.66	-1,534.29	5,317.61	4,974.72	342.88	15.508		
9,200.00	7,236.76	17,349.58	7,137.44	54.69	294.25	88.93	2,286.64	-1,634.28	5,317.18	4,969.50	347.69	15.293		
9,300.00	7,236.35	17,449.58	7,137.69	56.53	297.08	88.94	2,285.61	-1,734.27	5,316.76	4,964.19	352.57	15.080		
9,400.00	7,235.94	17,549.57	7,137.93	58.53	299.92	88.94	2,284.59	-1,834.26	5,316.33	4,958.82	357.51	14.870		
9,500.00	7,235.54	17,649.57	7,138.17	60.62	302.75	88.95	2,283.56	-1,934.25	5,315.91	4,953.38	362.53	14.664		
9,600.00	7,235.13	17,749.57	7,138.42	62.80	305.59	88.96	2,282.54	-2,034.25	5,315.49	4,947.89	367.59	14.460		
9,700.00	7,234.73	17,849.56	7,138.66	65.03	308.42	88.97	2,281.51	-2,134.24	5,315.06	4,942.35	372.71	14.261		
9,800.00	7,234.32	17,949.56	7,138.91	67.32	311.26	88.97	2,280.49	-2,234.23	5,314.64	4,936.77	377.87	14.065		
9,900.00	7,233.92	18,049.56	7,139.15	69.66	314.10	88.98	2,279.46	-2,334.22	5,314.21	4,931.14	383.08	13.872		
10,000.00	7,233.51	18,149.56	7,139.40	72.03	316.93	88.99	2,278.44	-2,434.21	5,313.79	4,925.48	388.32	13.684		
10,100.00	7,233.10	18,249.55	7,139.64	74.45	319.77	88.99	2,277.41	-2,534.20	5,313.37	4,919.78	393.59	13.500		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,232.70	18,349.55	7,139.88	76.89	322.61	89.00	2,276.39	-2,634.19	5,312.94	4,914.05	398.89	13.319		
10,300.00	7,232.29	18,449.55	7,140.13	79.36	325.45	89.01	2,275.36	-2,734.19	5,312.52	4,908.30	404.22	13.143		
10,400.00	7,231.89	18,549.54	7,140.37	81.86	328.29	89.01	2,274.34	-2,834.18	5,312.10	4,902.52	409.57	12.970		
10,500.00	7,231.48	18,649.54	7,140.62	84.38	331.12	89.02	2,273.31	-2,934.17	5,311.67	4,896.72	414.95	12.801		
10,600.00	7,231.08	18,749.54	7,140.86	86.93	333.96	89.03	2,272.29	-3,034.16	5,311.25	4,890.90	420.35	12.635		
10,700.00	7,230.67	18,849.53	7,141.11	89.49	336.80	89.03	2,271.26	-3,134.15	5,310.83	4,885.06	425.76	12.474		
10,800.00	7,230.26	18,949.53	7,141.35	92.07	339.64	89.04	2,270.24	-3,234.14	5,310.40	4,879.21	431.20	12.316		
10,891.27	7,229.89	19,018.34	7,141.52	94.44	341.60	89.05	2,269.53	-3,302.95	5,310.06	4,874.54	435.52	12.192		
10,900.00	7,229.86	19,018.34	7,141.52	94.67	341.60	89.05	2,269.53	-3,302.95	5,310.07	4,874.33	435.74	12.186		
11,000.00	7,229.45	19,018.34	7,141.52	97.28	341.60	89.05	2,269.53	-3,302.95	5,311.18	4,872.96	438.22	12.120 ES		
11,100.00	7,229.05	19,018.34	7,141.52	99.90	341.60	89.05	2,269.53	-3,302.95	5,314.17	4,873.60	440.56	12.062		
11,200.00	7,228.64	19,018.34	7,141.52	102.54	341.60	89.05	2,269.53	-3,302.95	5,319.03	4,876.26	442.77	12.013		
11,300.00	7,228.24	19,018.34	7,141.52	105.19	341.60	89.05	2,269.53	-3,302.95	5,325.77	4,880.93	444.84	11.972		
11,400.00	7,227.83	19,018.34	7,141.52	107.85	341.60	89.05	2,269.53	-3,302.95	5,334.38	4,887.62	446.76	11.940		
11,500.00	7,227.42	19,018.34	7,141.52	110.52	341.60	89.05	2,269.53	-3,302.95	5,344.84	4,896.30	448.54	11.916		
11,600.00	7,227.02	19,018.34	7,141.52	113.20	341.60	89.05	2,269.53	-3,302.95	5,357.15	4,906.98	450.17	11.900		
11,700.00	7,226.61	19,018.34	7,141.52	115.89	341.60	89.05	2,269.53	-3,302.95	5,371.30	4,919.64	451.66	11.892 SF		
11,800.00	7,226.21	19,018.34	7,141.52	118.59	341.60	89.05	2,269.53	-3,302.95	5,387.26	4,934.26	453.00	11.892		
11,900.00	7,225.80	19,018.34	7,141.52	121.29	341.60	89.05	2,269.53	-3,302.95	5,405.03	4,950.83	454.19	11.900		
12,000.00	7,225.40	19,018.34	7,141.52	124.00	341.60	89.05	2,269.53	-3,302.95	5,424.58	4,969.33	455.24	11.916		
12,100.00	7,224.99	19,018.34	7,141.52	126.72	341.60	89.05	2,269.53	-3,302.95	5,445.90	4,989.75	456.15	11.939		
12,200.00	7,224.58	19,018.34	7,141.52	129.44	341.60	89.05	2,269.53	-3,302.95	5,468.96	5,012.05	456.92	11.969		
12,300.00	7,224.18	19,018.34	7,141.52	132.17	341.60	89.05	2,269.53	-3,302.95	5,493.75	5,036.21	457.54	12.007		
12,400.00	7,223.77	19,018.34	7,141.52	134.91	341.60	89.05	2,269.53	-3,302.95	5,520.24	5,062.21	458.03	12.052		
12,500.00	7,223.37	19,018.34	7,141.52	137.65	341.60	89.05	2,269.53	-3,302.95	5,548.40	5,090.02	458.39	12.104		
12,600.00	7,222.96	19,018.34	7,141.52	140.39	341.60	89.05	2,269.53	-3,302.95	5,578.22	5,119.61	458.61	12.163		
12,700.00	7,222.55	19,018.34	7,141.52	143.14	341.60	89.05	2,269.53	-3,302.95	5,609.66	5,150.95	458.71	12.229		
12,800.00	7,222.15	19,018.34	7,141.52	145.89	341.60	89.05	2,269.53	-3,302.95	5,642.70	5,184.01	458.69	12.302		
12,900.00	7,221.74	19,018.34	7,141.52	148.65	341.60	89.05	2,269.53	-3,302.95	5,677.30	5,218.76	458.54	12.381		
13,000.00	7,221.34	19,018.34	7,141.52	151.41	341.60	89.05	2,269.53	-3,302.95	5,713.45	5,255.16	458.29	12.467		
13,100.00	7,220.93	19,018.34	7,141.52	154.18	341.60	89.05	2,269.53	-3,302.95	5,751.11	5,293.19	457.92	12.559		
13,200.00	7,220.53	19,018.34	7,141.52	156.94	341.60	89.05	2,269.53	-3,302.95	5,790.25	5,332.80	457.45	12.658		
13,300.00	7,220.12	19,018.34	7,141.52	159.72	341.60	89.05	2,269.53	-3,302.95	5,830.84	5,373.97	456.88	12.762		
13,400.00	7,219.71	19,018.34	7,141.52	162.49	341.60	89.05	2,269.53	-3,302.95	5,872.86	5,416.65	456.21	12.873		
13,500.00	7,219.31	19,018.34	7,141.52	165.27	341.60	89.05	2,269.53	-3,302.95	5,916.27	5,460.82	455.45	12.990		
13,600.00	7,218.90	19,018.34	7,141.52	168.05	341.60	89.05	2,269.53	-3,302.95	5,961.04	5,506.44	454.60	13.113		
13,700.00	7,218.50	19,018.34	7,141.52	170.83	341.60	89.05	2,269.53	-3,302.95	6,007.14	5,553.47	453.67	13.241		
13,800.00	7,218.09	19,018.34	7,141.52	173.61	341.60	89.05	2,269.53	-3,302.95	6,054.54	5,601.88	452.66	13.375		
13,900.00	7,217.69	19,018.34	7,141.52	176.40	341.60	89.05	2,269.53	-3,302.95	6,103.21	5,651.63	451.58	13.515		
14,000.00	7,217.28	19,018.34	7,141.52	179.19	341.60	89.05	2,269.53	-3,302.95	6,153.13	5,702.69	450.43	13.660		
14,100.00	7,216.87	19,018.34	7,141.52	181.98	341.60	89.05	2,269.53	-3,302.95	6,204.25	5,755.03	449.22	13.811		
14,200.00	7,216.47	19,018.34	7,141.52	184.78	341.60	89.05	2,269.53	-3,302.95	6,256.55	5,808.60	447.95	13.967		
14,300.00	7,216.06	19,018.34	7,141.52	187.57	341.60	89.05	2,269.53	-3,302.95	6,310.01	5,863.39	446.62	14.128		
14,400.00	7,215.66	19,018.34	7,141.52	190.37	341.60	89.05	2,269.53	-3,302.95	6,364.58	5,919.35	445.24	14.295		
14,500.00	7,215.25	19,018.34	7,141.52	193.17	341.60	89.05	2,269.53	-3,302.95	6,420.26	5,976.44	443.81	14.466		
14,600.00	7,214.85	19,018.34	7,141.52	195.97	341.60	89.05	2,269.53	-3,302.95	6,476.99	6,034.65	442.34	14.643		
14,700.00	7,214.44	19,018.34	7,141.52	198.77	341.60	89.05	2,269.53	-3,302.95	6,534.77	6,093.94	440.83	14.824		
14,800.00	7,214.03	19,018.34	7,141.52	201.58	341.60	89.05	2,269.53	-3,302.95	6,593.55	6,154.27	439.28	15.010		
14,900.00	7,213.63	19,018.34	7,141.52	204.38	341.60	89.05	2,269.53	-3,302.95	6,653.32	6,215.63	437.69	15.201		
15,000.00	7,213.22	19,018.34	7,141.52	207.19	341.60	89.05	2,269.53	-3,302.95	6,714.05	6,277.96	436.08	15.396		
15,100.00	7,212.82	19,018.34	7,141.52	210.00	341.60	89.05	2,269.53	-3,302.95	6,775.70	6,341.26	434.44	15.596		
15,200.00	7,212.41	19,018.34	7,141.52	212.81	341.60	89.05	2,269.53	-3,302.95	6,838.27	6,405.49	432.78	15.801		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,300.00	7,212.01	19,018.34	7,141.52	215.62	341.60	89.05	2,269.53	-3,302.95	6,901.71	6,470.62	431.09	16.010	
15,400.00	7,211.60	19,018.34	7,141.52	218.43	341.60	89.05	2,269.53	-3,302.95	6,966.02	6,536.63	429.38	16.223	
15,500.00	7,211.19	19,018.34	7,141.52	221.25	341.60	89.05	2,269.53	-3,302.95	7,031.15	6,603.49	427.66	16.441	
15,600.00	7,210.79	19,018.34	7,141.52	224.06	341.60	89.05	2,269.53	-3,302.95	7,097.10	6,671.17	425.93	16.663	
15,700.00	7,210.38	19,018.34	7,141.52	226.88	341.60	89.05	2,269.53	-3,302.95	7,163.84	6,739.66	424.18	16.889	
15,794.94	7,210.00	19,018.34	7,141.52	229.55	341.60	89.05	2,269.53	-3,302.95	7,227.91	6,805.40	422.52	17.107	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21-4(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 172-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1,487.27	1,533.89	3.28	8.00	-116.43	-3,737.45	-7,518.63	8,535.29					
100.00	100.00	1,518.62	1,564.68	3.28	8.16	-116.42	-3,733.08	-7,514.66	8,517.71	8,506.89	10.82	787.445		
200.00	200.00	1,584.00	1,629.02	3.34	8.51	-116.39	-3,724.28	-7,507.10	8,501.11	8,489.98	11.13	763.819		
300.00	299.98	1,584.00	1,629.02	3.44	8.51	61.27	-3,724.28	-7,507.10	8,484.04	8,472.84	11.20	757.425		
400.00	399.84	1,701.64	1,744.82	3.59	9.12	61.70	-3,707.92	-7,494.41	8,465.66	8,453.80	11.85	714.213		
500.00	499.45	1,752.80	1,795.21	3.79	9.39	62.10	-3,700.89	-7,489.00	8,445.94	8,433.69	12.25	689.212		
600.00	598.70	1,844.94	1,886.07	4.03	9.86	62.60	-3,689.06	-7,479.23	8,425.04	8,412.16	12.88	653.890		
700.00	697.47	1,910.09	1,950.32	4.31	10.20	63.10	-3,680.94	-7,472.21	8,402.65	8,389.22	13.43	625.456		
800.00	795.62	800.00	2,053.66	4.64	4.86	63.71	-3,667.37	-7,461.56	8,379.10	8,369.81	9.29	902.334		
900.00	893.06	2,287.42	2,322.08	5.00	12.20	64.72	-3,633.02	-7,429.05	8,352.42	8,336.65	15.77	529.663		
1,000.00	989.64	2,497.45	2,528.28	5.40	13.38	65.72	-3,605.05	-7,400.61	8,322.86	8,305.77	17.09	486.936		
1,100.00	1,085.27	2,550.15	2,580.00	5.83	13.68	66.44	-3,598.10	-7,393.26	8,291.98	8,274.25	17.73	467.685		
1,200.00	1,179.82	2,869.96	2,893.07	6.29	15.54	67.96	-3,552.47	-7,346.89	8,259.45	8,239.82	19.63	420.792		
1,300.00	1,273.17	2,912.02	2,934.13	6.79	15.80	68.78	-3,545.95	-7,340.43	8,224.27	8,203.99	20.29	405.414		
1,400.00	1,365.21	2,953.53	2,974.69	7.33	16.05	69.63	-3,539.74	-7,334.19	8,188.56	8,167.58	20.97	390.396		
1,500.00	1,455.84	1,500.00	3,084.61	7.89	7.67	70.77	-3,523.85	-7,317.16	8,152.19	8,137.36	14.83	549.667		
1,600.00	1,544.94	3,148.17	3,165.03	8.50	17.21	71.84	-3,512.49	-7,304.00	8,114.41	8,091.46	22.95	353.538		
1,700.00	1,632.39	3,200.00	3,215.79	9.13	17.52	72.84	-3,505.68	-7,296.05	8,076.49	8,052.71	23.78	339.598		
1,800.00	1,718.11	3,208.64	3,224.25	9.80	17.57	73.67	-3,504.57	-7,294.77	8,038.18	8,013.72	24.46	328.682		
1,900.00	1,802.44	3,327.68	3,340.86	10.49	18.26	74.45	-3,488.92	-7,276.61	7,999.36	7,973.72	25.64	311.960		
2,000.00	1,886.68	3,374.44	3,386.67	11.20	18.54	74.66	-3,482.78	-7,269.53	7,961.03	7,934.50	26.53	300.058		
2,100.00	1,970.92	3,391.00	3,402.90	11.93	18.64	74.73	-3,480.62	-7,267.05	7,923.42	7,896.12	27.31	290.164		
2,200.00	2,055.17	3,391.00	3,402.90	12.66	18.64	74.73	-3,480.62	-7,267.05	7,886.88	7,858.85	28.02	281.425		
2,300.00	2,139.41	3,443.05	3,454.00	13.40	18.93	74.97	-3,473.85	-7,259.82	7,850.78	7,821.79	28.98	270.871		
2,400.00	2,223.66	3,486.00	3,496.27	14.14	19.18	75.17	-3,468.27	-7,254.64	7,815.98	7,786.07	29.91	261.275		
2,500.00	2,307.90	3,486.00	3,496.27	14.89	19.18	75.17	-3,468.27	-7,254.64	7,781.87	7,751.20	30.67	253.730		
2,600.00	2,392.14	2,600.00	3,594.90	15.65	14.27	75.64	-3,454.89	-7,242.98	7,748.24	7,721.04	27.20	284.850		
2,700.00	2,476.39	3,581.00	3,589.77	16.41	19.70	75.61	-3,455.59	-7,243.58	7,715.49	7,682.87	32.63	236.481		
2,800.00	2,560.63	3,631.14	3,639.12	17.17	19.98	75.85	-3,448.62	-7,238.09	7,683.27	7,649.64	33.63	228.455		
2,900.00	2,644.88	3,677.00	3,684.32	17.93	20.23	76.07	-3,442.08	-7,233.97	7,652.44	7,617.81	34.63	221.001		
3,000.00	2,729.12	4,098.14	4,097.01	18.70	22.67	78.17	-3,373.98	-7,185.83	7,619.14	7,581.81	37.34	204.069		
3,100.00	2,813.36	3,100.00	4,220.60	19.47	16.79	78.78	-3,357.11	-7,167.20	7,585.53	7,552.26	33.27	228.025		
3,200.00	2,897.61	4,284.51	4,279.57	20.25	23.77	79.07	-3,349.03	-7,157.87	7,551.85	7,512.08	39.77	189.908		
3,300.00	2,981.85	4,304.24	4,298.91	21.02	23.89	79.17	-3,346.44	-7,154.98	7,519.18	7,478.50	40.68	184.829		
3,400.00	3,066.10	4,343.00	4,336.99	21.80	24.11	79.36	-3,341.49	-7,149.67	7,487.60	7,445.92	41.68	179.630		
3,500.00	3,150.34	4,348.02	4,341.93	22.58	24.14	79.39	-3,340.86	-7,149.02	7,456.85	7,414.30	42.55	175.254		
3,600.00	3,234.58	4,437.34	4,429.72	23.35	24.65	79.83	-3,329.19	-7,137.45	7,426.80	7,383.03	43.78	169.657		
3,700.00	3,318.83	4,475.33	4,467.06	24.13	24.87	80.02	-3,324.06	-7,132.63	7,397.34	7,352.55	44.79	165.149		
3,800.00	3,403.07	4,512.56	4,503.67	24.92	25.08	80.20	-3,319.11	-7,128.09	7,368.73	7,322.92	45.81	160.854		
3,900.00	3,487.32	4,563.21	4,553.54	25.70	25.36	80.45	-3,312.56	-7,122.12	7,340.97	7,294.08	46.89	156.564		
4,000.00	3,571.56	4,632.76	4,622.10	26.48	25.74	80.80	-3,304.29	-7,113.84	7,313.80	7,265.75	48.05	152.221		
4,100.00	3,655.80	4,629.00	4,618.39	27.27	25.72	80.78	-3,304.72	-7,114.29	7,287.58	7,238.67	48.90	149.024		
4,200.00	3,740.05	4,679.25	4,668.01	28.05	25.99	81.03	-3,299.17	-7,108.60	7,262.09	7,212.11	49.98	145.294		
4,300.00	3,824.29	4,724.00	4,712.28	28.84	26.23	81.25	-3,294.48	-7,104.11	7,237.86	7,186.82	51.04	141.801		
4,400.00	3,908.54	4,766.35	4,754.22	29.62	26.44	81.46	-3,290.21	-7,100.02	7,214.46	7,162.37	52.09	138.493		
4,500.00	3,992.78	4,819.00	4,806.35	30.41	26.71	81.71	-3,285.13	-7,094.66	7,191.46	7,138.27	53.19	135.210		
4,600.00	4,077.03	4,873.30	4,860.15	31.20	26.99	81.98	-3,280.11	-7,089.28	7,169.19	7,114.90	54.29	132.058		
4,700.00	4,161.27	4,915.00	4,901.51	31.98	27.19	82.18	-3,276.41	-7,085.55	7,148.02	7,092.68	55.34	129.165		
4,800.00	4,245.51	4,915.00	4,901.51	32.77	27.19	82.18	-3,276.41	-7,085.55	7,127.89	7,071.67	56.22	126.783		
4,900.00	4,329.76	4,982.63	4,968.67	33.56	27.52	82.51	-3,270.61	-7,080.07	7,108.49	7,051.11	57.38	123.889		
5,000.00	4,414.00	5,023.55	5,009.34	34.35	27.71	82.71	-3,267.18	-7,077.03	7,090.08	7,031.65	58.43	121.349		
5,100.00	4,498.25	5,064.61	5,050.16	35.14	27.91	82.91	-3,263.79	-7,074.20	7,072.59	7,013.11	59.48	118.913		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21-4(PR_150CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 172-MWD													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,200.00	4,582.49	5,104.00	5,089.34	35.93	28.09	83.10	-3,260.60	-7,071.69	7,056.00	6,995.48	60.52	116.588		
5,300.00	4,666.73	5,104.00	5,089.34	36.72	28.09	83.10	-3,260.60	-7,071.69	7,040.59	6,979.19	61.40	114.676		
5,400.00	4,750.98	5,182.59	5,167.59	37.51	28.44	83.49	-3,254.84	-7,067.26	7,025.66	6,963.07	62.59	112.250		
5,500.00	4,835.22	5,221.70	5,206.57	38.30	28.61	83.67	-3,252.39	-7,065.35	7,011.91	6,948.29	63.62	110.213		
5,600.00	4,919.47	5,294.00	5,278.71	39.09	28.92	84.02	-3,248.56	-7,062.35	6,999.27	6,934.48	64.79	108.030		
5,700.00	5,003.71	5,294.00	5,278.71	39.88	28.92	84.02	-3,248.56	-7,062.35	6,987.27	6,921.61	65.66	106.423		
5,800.00	5,088.06	5,361.31	5,345.92	40.67	29.19	84.26	-3,245.60	-7,059.99	6,976.23	6,909.45	66.78	104.463		
5,900.00	5,173.83	5,419.84	5,404.37	41.44	29.42	84.32	-3,243.30	-7,058.15	6,966.21	6,898.37	67.85	102.674		
6,000.00	5,261.34	5,480.01	5,464.48	42.18	29.66	84.40	-3,241.19	-7,056.44	6,957.24	6,888.35	68.89	100.995		
6,100.00	5,350.49	5,541.75	5,526.16	42.88	29.90	84.48	-3,239.31	-7,054.90	6,949.28	6,879.38	69.90	99.422		
6,200.00	5,441.16	5,604.28	5,588.66	43.56	30.14	84.57	-3,237.68	-7,053.56	6,942.28	6,871.41	70.87	97.959		
6,300.00	5,533.25	5,667.14	5,651.50	44.20	30.38	84.66	-3,236.28	-7,052.44	6,936.24	6,864.44	71.80	96.605		
6,400.00	5,626.65	5,731.16	5,715.50	44.82	30.61	84.76	-3,235.07	-7,051.55	6,931.11	6,858.41	72.70	95.341		
6,500.00	5,721.23	5,796.23	5,780.56	45.40	30.85	84.85	-3,234.08	-7,050.91	6,926.88	6,853.31	73.56	94.164		
6,600.00	5,816.89	5,864.00	5,848.32	45.94	31.11	84.95	-3,233.29	-7,050.52	6,923.50	6,849.10	74.40	93.060		
6,700.00	5,913.51	5,935.27	5,919.59	46.45	31.35	85.06	-3,232.61	-7,050.37	6,920.91	6,845.71	75.20	92.033		
6,800.00	6,010.97	6,009.16	5,993.47	46.93	31.61	85.16	-3,231.94	-7,050.46	6,919.04	6,843.06	75.97	91.071		
6,900.00	6,109.15	6,083.63	6,067.94	47.38	31.87	85.26	-3,231.30	-7,050.80	6,917.86	6,841.14	76.71	90.178		
7,000.00	6,207.93	6,161.77	6,146.08	47.80	32.15	85.36	-3,230.66	-7,051.42	6,917.34	6,839.91	77.43	89.337		
7,100.00	6,307.19	6,268.59	6,252.89	48.18	32.52	85.47	-3,229.71	-7,052.35	6,917.22	6,838.99	78.23	88.425		
7,117.50	6,324.60	6,287.33	6,271.63	48.24	32.59	85.49	-3,229.53	-7,052.50	6,917.21	6,838.85	78.36	88.274		
7,200.00	6,406.82	6,375.80	6,360.09	48.53	32.90	85.56	-3,228.58	-7,053.17	6,917.27	6,838.28	78.99	87.571		
7,300.00	6,506.68	6,474.33	6,458.61	48.84	33.25	85.61	-3,227.39	-7,053.84	6,917.53	6,837.84	79.69	86.811		
7,400.00	6,606.66	6,561.16	6,545.43	49.10	33.56	-1.35	-3,226.27	-7,054.56	6,918.19	6,837.91	80.27	86.182		
7,500.00	6,706.21	6,647.70	6,631.96	49.35	33.87	-1.36	-3,225.10	-7,055.45	6,910.82	6,829.97	80.85	85.478		
7,600.00	6,803.22	6,723.00	6,707.25	49.59	34.14	-1.41	-3,224.05	-7,056.35	6,888.14	6,806.77	81.38	84.645		
7,700.00	6,895.32	6,796.78	6,781.02	49.82	34.40	-1.49	-3,223.08	-7,057.45	6,850.81	6,768.92	81.88	83.665		
7,800.00	6,980.23	6,858.24	6,842.46	50.03	34.61	-1.64	-3,222.41	-7,058.61	6,799.77	6,717.44	82.32	82.599		
7,900.00	7,055.85	6,913.52	6,897.72	50.21	34.80	-1.88	-3,221.91	-7,059.83	6,736.19	6,653.47	82.71	81.441		
8,000.00	7,120.34	6,961.27	6,945.46	50.36	34.97	-2.26	-3,221.56	-7,061.03	6,661.54	6,578.50	83.04	80.219		
8,100.00	7,172.10	7,010.00	6,994.17	50.47	35.14	-2.91	-3,221.28	-7,062.39	6,577.58	6,494.24	83.34	78.921		
8,200.00	7,209.85	7,033.15	7,017.30	50.55	35.22	-4.20	-3,221.14	-7,063.07	6,486.25	6,402.74	83.51	77.673		
8,300.00	7,232.68	7,055.21	7,039.35	50.61	35.30	-7.77	-3,220.96	-7,063.74	6,389.75	6,306.12	83.64	76.400		
8,400.00	7,240.00	7,064.12	7,048.26	50.65	35.33	-43.53	-3,220.88	-7,064.01	6,290.42	6,206.74	83.68	75.170		
8,500.00	7,239.60	7,066.42	7,050.56	50.69	35.34	-43.93	-3,220.86	-7,064.08	6,190.49	6,106.80	83.69	73.968		
8,600.00	7,239.19	7,068.73	7,052.87	50.75	35.35	-44.33	-3,220.83	-7,064.15	6,090.56	6,006.86	83.70	72.766		
8,700.00	7,238.78	7,071.05	7,055.19	50.85	35.36	-44.74	-3,220.81	-7,064.22	5,990.63	5,906.92	83.71	71.564		
8,800.00	7,238.38	7,073.39	7,057.52	51.02	35.37	-45.16	-3,220.78	-7,064.30	5,890.70	5,806.98	83.72	70.362		
8,900.00	7,237.97	7,075.73	7,059.87	51.32	35.37	-45.59	-3,220.76	-7,064.37	5,790.77	5,707.04	83.73	69.159		
9,000.00	7,237.57	7,078.09	7,062.22	51.95	35.38	-46.02	-3,220.73	-7,064.44	5,690.85	5,607.10	83.74	67.956		
9,100.00	7,237.16	7,080.46	7,064.59	53.10	35.39	-46.46	-3,220.70	-7,064.52	5,590.92	5,507.17	83.76	66.753		
9,200.00	7,236.76	7,082.84	7,066.97	54.69	35.40	-46.92	-3,220.68	-7,064.59	5,491.00	5,407.23	83.77	65.550		
9,300.00	7,236.35	7,085.23	7,069.36	56.53	35.41	-47.38	-3,220.65	-7,064.67	5,391.08	5,307.29	83.78	64.347		
9,400.00	7,235.94	7,087.64	7,071.76	58.53	35.42	-47.85	-3,220.62	-7,064.74	5,291.16	5,207.36	83.80	63.143		
9,500.00	7,235.54	7,090.05	7,074.18	60.62	35.42	-48.33	-3,220.59	-7,064.82	5,191.24	5,107.43	83.81	61.940		
9,600.00	7,235.13	7,092.48	7,076.61	62.80	35.43	-48.82	-3,220.56	-7,064.90	5,091.32	5,007.49	83.83	60.737		
9,700.00	7,234.73	7,094.92	7,079.05	65.03	35.44	-49.32	-3,220.53	-7,064.97	4,991.41	4,907.56	83.84	59.533		
9,800.00	7,234.32	7,097.38	7,081.50	67.32	35.45	-49.83	-3,220.50	-7,065.05	4,891.49	4,807.64	83.86	58.330		
9,900.00	7,233.92	7,099.84	7,083.96	69.66	35.46	-50.35	-3,220.47	-7,065.13	4,791.58	4,707.71	83.88	57.126		
10,000.00	7,233.51	7,102.32	7,086.44	72.03	35.47	-50.89	-3,220.43	-7,065.21	4,691.68	4,607.78	83.90	55.923		
10,100.00	7,233.10	7,104.81	7,088.93	74.45	35.48	-51.43	-3,220.40	-7,065.29	4,591.77	4,507.86	83.91	54.720		
10,200.00	7,232.70	7,107.31	7,091.43	76.89	35.48	-51.98	-3,220.36	-7,065.37	4,491.87	4,407.94	83.93	53.517		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21-4(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 172-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	7,109.83	7,093.94	79.36	35.49	-52.55	-3,220.33	-7,065.45	4,391.97	4,308.02	83.95	52.314		
10,400.00	7,231.89	7,112.36	7,096.47	81.86	35.50	-53.13	-3,220.29	-7,065.53	4,292.07	4,208.10	83.98	51.111		
10,500.00	7,231.48	7,114.90	7,099.01	84.38	35.51	-53.72	-3,220.26	-7,065.61	4,192.18	4,108.18	84.00	49.908		
10,600.00	7,231.08	7,117.45	7,101.56	86.93	35.52	-54.32	-3,220.22	-7,065.69	4,092.29	4,008.27	84.02	48.706		
10,700.00	7,230.67	7,120.02	7,104.13	89.49	35.53	-54.93	-3,220.18	-7,065.78	3,992.40	3,908.36	84.04	47.503		
10,800.00	7,230.26	7,122.60	7,106.71	92.07	35.54	-55.56	-3,220.14	-7,065.86	3,892.52	3,808.45	84.07	46.301		
10,900.00	7,229.86	7,125.19	7,109.30	94.67	35.55	-56.20	-3,220.10	-7,065.95	3,792.64	3,708.55	84.10	45.099		
11,000.00	7,229.45	7,127.80	7,111.90	97.28	35.56	-56.86	-3,220.06	-7,066.03	3,692.77	3,608.65	84.12	43.898		
11,100.00	7,229.05	7,130.42	7,114.52	99.90	35.57	-57.53	-3,220.02	-7,066.12	3,592.90	3,508.75	84.15	42.696		
11,200.00	7,228.64	7,133.06	7,117.16	102.54	35.58	-58.21	-3,219.97	-7,066.20	3,493.04	3,408.86	84.18	41.495		
11,300.00	7,228.24	7,135.70	7,119.80	105.19	35.58	-58.90	-3,219.93	-7,066.29	3,393.18	3,308.97	84.21	40.294		
11,400.00	7,227.83	7,138.37	7,122.46	107.85	35.59	-59.61	-3,219.89	-7,066.38	3,293.33	3,209.09	84.24	39.093		
11,500.00	7,227.42	7,141.04	7,125.14	110.52	35.60	-60.34	-3,219.84	-7,066.47	3,193.49	3,109.21	84.28	37.892		
11,600.00	7,227.02	7,143.73	7,127.82	113.20	35.61	-61.08	-3,219.79	-7,066.55	3,093.65	3,009.34	84.32	36.691		
11,700.00	7,226.61	7,146.44	7,130.53	115.89	35.62	-61.83	-3,219.75	-7,066.64	2,993.82	2,909.47	84.35	35.491		
11,800.00	7,226.21	7,149.16	7,133.24	118.59	35.63	-62.60	-3,219.70	-7,066.73	2,894.01	2,809.61	84.40	34.290		
11,900.00	7,225.80	7,151.89	7,135.97	121.29	35.64	-63.39	-3,219.65	-7,066.83	2,794.20	2,709.76	84.44	33.090		
12,000.00	7,225.40	7,154.64	7,138.72	124.00	35.65	-64.19	-3,219.60	-7,066.92	2,694.40	2,609.91	84.49	31.890		
12,100.00	7,224.99	7,157.40	7,141.48	126.72	35.66	-65.00	-3,219.55	-7,067.01	2,594.62	2,510.07	84.55	30.689		
12,200.00	7,224.58	7,160.17	7,144.25	129.44	35.67	-65.84	-3,219.50	-7,067.10	2,494.84	2,410.24	84.60	29.488		
12,300.00	7,224.18	7,162.97	7,147.04	132.17	35.68	-66.69	-3,219.44	-7,067.20	2,395.09	2,310.42	84.67	28.287		
12,400.00	7,223.77	7,165.77	7,149.85	134.91	35.69	-67.55	-3,219.39	-7,067.29	2,295.35	2,210.61	84.74	27.086		
12,500.00	7,223.37	7,168.59	7,152.67	137.65	35.70	-68.43	-3,219.34	-7,067.39	2,195.63	2,110.81	84.83	25.884		
12,600.00	7,222.96	7,171.43	7,155.50	140.39	35.71	-69.33	-3,219.28	-7,067.48	2,095.94	2,011.02	84.92	24.681		
12,700.00	7,222.55	7,174.28	7,158.35	143.14	35.72	-70.24	-3,219.22	-7,067.58	1,996.27	1,911.24	85.03	23.477		
12,800.00	7,222.15	7,177.15	7,161.22	145.89	35.73	-71.17	-3,219.17	-7,067.68	1,896.64	1,811.48	85.16	22.272		
12,900.00	7,221.74	7,180.04	7,164.10	148.65	35.74	-72.12	-3,219.11	-7,067.77	1,797.03	1,711.73	85.31	21.066		
13,000.00	7,221.34	7,182.93	7,167.00	151.41	35.75	-73.08	-3,219.05	-7,067.87	1,697.47	1,611.99	85.48	19.857		
13,100.00	7,220.93	7,185.85	7,169.91	154.18	35.76	-74.06	-3,218.98	-7,067.97	1,597.96	1,512.26	85.70	18.646		
13,200.00	7,220.53	7,188.78	7,172.84	156.94	35.77	-75.05	-3,218.92	-7,068.07	1,498.51	1,412.55	85.96	17.432		
13,300.00	7,220.12	7,191.73	7,175.78	159.72	35.78	-76.06	-3,218.86	-7,068.18	1,399.13	1,312.84	86.29	16.214		
13,400.00	7,219.71	7,194.69	7,178.74	162.49	35.79	-77.08	-3,218.79	-7,068.28	1,299.84	1,213.13	86.71	14.991		
13,500.00	7,219.31	7,197.67	7,181.72	165.27	35.80	-78.12	-3,218.73	-7,068.38	1,200.66	1,113.42	87.24	13.762		
13,600.00	7,218.90	7,200.67	7,184.71	168.05	35.81	-79.18	-3,218.66	-7,068.49	1,101.62	1,013.68	87.94	12.527		
13,700.00	7,218.50	7,203.68	7,187.72	170.83	35.82	-80.24	-3,218.59	-7,068.59	1,002.76	913.89	88.86	11.284		
13,800.00	7,218.09	7,206.71	7,190.75	173.61	35.83	-81.33	-3,218.52	-7,068.70	904.13	814.01	90.13	10.032		
13,900.00	7,217.69	7,209.76	7,193.79	176.40	35.85	-82.42	-3,218.45	-7,068.80	805.84	713.95	91.89	8.769		
14,000.00	7,217.28	7,212.82	7,196.85	179.19	35.86	-83.53	-3,218.38	-7,068.91	708.02	613.59	94.43	7.498		
14,100.00	7,216.87	7,215.90	7,199.93	181.98	35.87	-84.65	-3,218.31	-7,069.02	610.88	512.68	98.20	6.221		
14,200.00	7,216.47	7,219.00	7,203.03	184.78	35.88	-85.78	-3,218.23	-7,069.13	514.82	410.82	104.00	4.950		
14,300.00	7,216.06	7,222.11	7,206.14	187.57	35.89	-86.93	-3,218.16	-7,069.24	420.58	307.24	113.34	3.711		
14,400.00	7,215.66	7,225.25	7,209.27	190.37	35.90	-88.08	-3,218.08	-7,069.35	329.72	200.64	129.08	2.554		
14,500.00	7,215.25	7,228.40	7,212.42	193.17	35.91	-89.24	-3,218.00	-7,069.46	246.02	89.50	156.52	1.572		
14,600.00	7,214.85	7,231.57	7,215.59	195.97	35.92	-90.41	-3,217.92	-7,069.57	179.75	-20.69	200.45	0.897 Level 1		
14,691.20	7,214.48	7,234.47	7,218.49	198.53	35.93	-91.48	-3,217.85	-7,069.68	154.93	-77.12	232.05	0.668 Level 1, CC		
14,700.00	7,214.44	7,234.75	7,218.77	198.77	35.93	-91.59	-3,217.84	-7,069.69	155.18	-77.31	232.48	0.667 Level 1, ES, SF		
14,800.00	7,214.03	7,237.96	7,221.97	201.58	35.94	-92.77	-3,217.76	-7,069.80	189.28	-16.40	205.68	0.920 Level 1		
14,900.00	7,213.63	7,241.18	7,225.19	204.38	35.96	-93.96	-3,217.67	-7,069.92	259.92	92.08	167.84	1.549		
15,000.00	7,213.22	7,244.43	7,228.43	207.19	35.97	-95.16	-3,217.59	-7,070.03	345.35	202.35	143.00	2.415		
15,100.00	7,212.82	7,247.69	7,231.69	210.00	35.98	-96.36	-3,217.50	-7,070.15	436.98	309.18	127.80	3.419		
15,200.00	7,212.41	7,250.97	7,234.97	212.81	35.99	-97.56	-3,217.41	-7,070.27	531.62	413.48	118.14	4.500		
15,300.00	7,212.01	7,254.27	7,238.26	215.62	36.00	-98.76	-3,217.32	-7,070.39	627.90	516.22	111.69	5.622		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21-4(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 172-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,400.00	7,211.60	7,257.58	7,241.58	218.43	36.01	-99.97	-3,217.23	-7,070.51	725.18	617.99	107.19	6.765	
15,500.00	7,211.19	7,260.92	7,244.91	221.25	36.03	-101.17	-3,217.13	-7,070.63	823.10	719.15	103.94	7.919	
15,600.00	7,210.79	7,264.28	7,248.27	224.06	36.04	-102.37	-3,217.04	-7,070.75	921.45	819.93	101.52	9.076	
15,700.00	7,210.38	7,267.66	7,251.64	226.88	36.05	-103.57	-3,216.94	-7,070.88	1,020.11	920.44	99.67	10.234	
15,794.94	7,210.00	7,270.88	7,254.86	229.55	36.06	-104.71	-3,216.85	-7,070.99	1,114.00	1,015.70	98.30	11.333	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	66.00	3.28	3.28	-116.93	-3,890.68	-7,660.13	8,591.81					
100.00	100.00	34.00	100.00	3.28	3.33	-116.93	-3,890.68	-7,660.13	8,591.56	8,584.94	6.62	1,298.215		
200.00	200.00	134.00	200.00	3.34	4.40	-116.93	-3,890.68	-7,660.13	8,591.56	8,583.82	7.74	1,110.486		
300.00	299.98	233.98	299.98	3.44	7.21	60.45	-3,890.68	-7,660.13	8,590.70	8,580.05	10.65	806.542		
400.00	399.84	333.84	399.84	3.59	10.44	60.53	-3,890.68	-7,660.13	8,588.12	8,574.09	14.03	612.266		
500.00	499.45	433.45	499.45	3.79	13.78	60.65	-3,890.68	-7,660.13	8,583.83	8,566.26	17.57	488.554		
600.00	598.70	532.70	598.70	4.03	17.17	60.83	-3,890.68	-7,660.13	8,577.83	8,556.64	21.20	404.662		
700.00	697.47	631.47	697.47	4.31	20.56	61.05	-3,890.68	-7,660.13	8,570.16	8,545.29	24.88	344.525		
800.00	795.62	729.62	795.62	4.64	23.95	61.33	-3,890.68	-7,660.13	8,560.84	8,532.25	28.58	299.493		
900.00	893.06	827.06	893.06	5.00	27.32	61.65	-3,890.68	-7,660.13	8,549.88	8,517.57	32.31	264.601		
1,000.00	989.64	923.64	989.64	5.40	30.67	62.02	-3,890.68	-7,660.13	8,537.33	8,501.28	36.05	236.819		
1,100.00	1,085.27	1,019.27	1,085.27	5.83	34.00	62.44	-3,890.68	-7,660.13	8,523.23	8,483.44	39.79	214.205		
1,200.00	1,179.82	1,113.82	1,179.82	6.29	37.28	62.91	-3,890.68	-7,660.13	8,507.62	8,464.09	43.53	195.459		
1,300.00	1,273.17	1,207.17	1,273.17	6.79	40.53	63.42	-3,890.68	-7,660.13	8,490.54	8,443.29	47.25	179.679		
1,400.00	1,365.21	1,300.79	1,365.21	7.33	43.79	63.98	-3,890.68	-7,660.13	8,472.06	8,421.04	51.02	166.046		
1,500.00	1,455.84	1,389.84	1,455.84	7.89	46.89	64.58	-3,890.68	-7,660.13	8,452.22	8,397.56	54.66	154.623		
1,600.00	1,544.94	1,478.94	1,544.94	8.50	49.99	65.23	-3,890.68	-7,660.13	8,431.10	8,372.76	58.34	144.523		
1,700.00	1,632.39	1,566.39	1,632.39	9.13	53.04	65.92	-3,890.68	-7,660.13	8,408.76	8,346.77	61.99	135.658		
1,800.00	1,718.11	1,652.11	1,718.11	9.80	56.03	66.64	-3,890.68	-7,660.13	8,385.26	8,319.66	65.60	127.818		
1,900.00	1,802.44	1,736.44	1,802.44	10.49	58.96	67.07	-3,890.68	-7,660.13	8,361.01	8,291.81	69.20	120.828		
2,000.00	1,886.68	1,820.68	1,886.68	11.20	61.90	67.37	-3,890.68	-7,660.13	8,336.97	8,264.17	72.81	114.510		
2,100.00	1,970.92	1,904.92	1,970.92	11.93	64.84	67.67	-3,890.68	-7,660.13	8,313.22	8,236.79	76.43	108.773		
2,200.00	2,055.17	1,989.17	2,055.17	12.66	67.78	67.97	-3,890.68	-7,660.13	8,289.75	8,209.68	80.06	103.543		
2,300.00	2,139.41	2,073.41	2,139.41	13.40	70.71	68.27	-3,890.68	-7,660.13	8,266.56	8,182.85	83.70	98.760		
2,400.00	2,223.66	2,157.66	2,223.66	14.14	73.65	68.57	-3,890.68	-7,660.13	8,243.65	8,156.30	87.36	94.369		
2,500.00	2,307.90	2,241.90	2,307.90	14.89	76.59	68.87	-3,890.68	-7,660.13	8,221.04	8,130.03	91.01	90.326		
2,600.00	2,392.14	2,326.14	2,392.14	15.65	79.53	69.17	-3,890.68	-7,660.13	8,198.72	8,104.04	94.68	86.593		
2,700.00	2,476.39	2,410.39	2,476.39	16.41	82.47	69.48	-3,890.68	-7,660.13	8,176.69	8,078.34	98.35	83.135		
2,800.00	2,560.63	2,505.37	2,560.63	17.17	85.78	69.78	-3,890.68	-7,660.13	8,154.96	8,052.56	102.41	79.633		
2,900.00	2,644.88	2,578.88	2,644.88	17.93	88.34	70.09	-3,890.68	-7,660.13	8,133.53	8,027.82	105.72	76.937		
3,000.00	2,729.12	2,663.12	2,729.12	18.70	91.28	70.40	-3,890.68	-7,660.13	8,112.40	8,003.00	109.40	74.150		
3,100.00	2,813.36	2,747.36	2,813.36	19.47	94.22	70.71	-3,890.68	-7,660.13	8,091.58	7,978.48	113.10	71.545		
3,200.00	2,897.61	2,831.61	2,897.61	20.25	97.16	71.02	-3,890.68	-7,660.13	8,071.06	7,954.26	116.79	69.105		
3,300.00	2,981.85	2,915.85	2,981.85	21.02	100.10	71.33	-3,890.68	-7,660.13	8,050.84	7,930.35	120.50	66.814		
3,400.00	3,066.10	3,000.10	3,066.10	21.80	103.04	71.64	-3,890.68	-7,660.13	8,030.94	7,906.74	124.20	64.661		
3,500.00	3,150.34	3,084.34	3,150.34	22.58	105.98	71.96	-3,890.68	-7,660.13	8,011.35	7,883.45	127.91	62.634		
3,600.00	3,234.58	3,168.58	3,234.58	23.35	108.92	72.27	-3,890.68	-7,660.13	7,992.08	7,860.46	131.62	60.721		
3,700.00	3,318.83	3,252.83	3,318.83	24.13	111.86	72.59	-3,890.68	-7,660.13	7,973.12	7,837.79	135.33	58.915		
3,800.00	3,403.07	3,337.07	3,403.07	24.92	114.80	72.91	-3,890.68	-7,660.13	7,954.49	7,815.44	139.05	57.206		
3,900.00	3,487.32	3,421.32	3,487.32	25.70	117.74	73.22	-3,890.68	-7,660.13	7,936.17	7,793.40	142.77	55.588		
4,000.00	3,571.56	3,505.56	3,571.56	26.48	120.68	73.54	-3,890.68	-7,660.13	7,918.18	7,771.69	146.49	54.052		
4,100.00	3,655.80	3,589.80	3,655.80	27.27	123.62	73.86	-3,890.68	-7,660.13	7,900.52	7,750.30	150.22	52.595		
4,200.00	3,740.05	3,674.05	3,740.05	28.05	126.56	74.19	-3,890.68	-7,660.13	7,883.19	7,729.24	153.94	51.209		
4,300.00	3,824.29	3,758.29	3,824.29	28.84	129.50	74.51	-3,890.68	-7,660.13	7,866.18	7,708.51	157.67	49.890		
4,400.00	3,908.54	3,842.54	3,908.54	29.62	132.44	74.83	-3,890.68	-7,660.13	7,849.51	7,688.11	161.40	48.633		
4,500.00	3,992.78	3,926.78	3,992.78	30.41	135.38	75.16	-3,890.68	-7,660.13	7,833.17	7,668.04	165.14	47.435		
4,600.00	4,077.03	4,011.03	4,077.03	31.20	138.32	75.48	-3,890.68	-7,660.13	7,817.18	7,648.31	168.87	46.291		
4,700.00	4,161.27	4,104.73	4,161.27	31.98	141.59	75.81	-3,890.68	-7,660.13	7,801.52	7,628.58	172.94	45.112		
4,800.00	4,245.51	4,179.51	4,245.51	32.77	144.20	76.14	-3,890.68	-7,660.13	7,786.20	7,609.85	176.34	44.153		
4,900.00	4,329.76	4,263.76	4,329.76	33.56	147.14	76.47	-3,890.68	-7,660.13	7,771.22	7,591.14	180.08	43.153		
5,000.00	4,414.00	4,348.00	4,414.00	34.35	150.08	76.80	-3,890.68	-7,660.13	7,756.59	7,572.77	183.83	42.195		
5,100.00	4,498.25	4,432.25	4,498.25	35.14	153.02	77.13	-3,890.68	-7,660.13	7,742.31	7,554.74	187.57	41.277		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21(PR_150CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,516.49	4,582.49	35.93	155.96	77.46	-3,890.68	-7,660.13	7,728.38	7,537.07	191.31	40.397		
5,300.00	4,666.73	4,600.73	4,666.73	36.72	158.90	77.79	-3,890.68	-7,660.13	7,714.80	7,519.74	195.06	39.551		
5,400.00	4,750.98	4,684.98	4,750.98	37.51	161.84	78.12	-3,890.68	-7,660.13	7,701.57	7,502.76	198.81	38.739		
5,500.00	4,835.22	4,769.22	4,835.22	38.30	164.78	78.46	-3,890.68	-7,660.13	7,688.70	7,486.14	202.55	37.959		
5,600.00	4,919.47	4,853.47	4,919.47	39.09	167.72	78.79	-3,890.68	-7,660.13	7,676.18	7,469.88	206.30	37.209		
5,700.00	5,003.71	4,937.71	5,003.71	39.88	170.66	79.13	-3,890.68	-7,660.13	7,664.02	7,453.97	210.05	36.486		
5,800.00	5,088.06	5,022.06	5,088.06	40.67	173.61	79.38	-3,890.68	-7,660.13	7,652.26	7,438.45	213.80	35.791		
5,900.00	5,173.83	5,107.83	5,173.83	41.44	176.60	79.50	-3,890.68	-7,660.13	7,641.34	7,423.75	217.58	35.119		
6,000.00	5,261.34	5,204.66	5,261.34	42.18	179.98	79.61	-3,890.68	-7,660.13	7,631.36	7,409.64	221.72	34.419		
6,100.00	5,350.49	5,284.49	5,350.49	42.88	182.77	79.73	-3,890.68	-7,660.13	7,622.29	7,397.06	225.23	33.843		
6,200.00	5,441.16	5,375.16	5,441.16	43.56	185.93	79.85	-3,890.68	-7,660.13	7,614.07	7,384.99	229.08	33.237		
6,300.00	5,533.25	5,467.25	5,533.25	44.20	189.15	79.97	-3,890.68	-7,660.13	7,606.68	7,373.72	232.96	32.653		
6,400.00	5,626.65	5,560.65	5,626.65	44.82	192.41	80.09	-3,890.68	-7,660.13	7,600.07	7,363.23	236.84	32.089		
6,500.00	5,721.23	5,655.23	5,721.23	45.40	195.71	80.21	-3,890.68	-7,660.13	7,594.21	7,353.48	240.74	31.546		
6,600.00	5,816.89	5,750.89	5,816.89	45.94	199.05	80.31	-3,890.68	-7,660.13	7,589.07	7,344.43	244.64	31.022		
6,700.00	5,913.51	5,847.51	5,913.51	46.45	202.42	80.41	-3,890.68	-7,660.13	7,584.61	7,336.07	248.53	30.518		
6,800.00	6,010.97	5,944.97	6,010.97	46.93	205.82	80.50	-3,890.68	-7,660.13	7,580.80	7,328.38	252.42	30.032		
6,900.00	6,109.15	6,043.15	6,109.15	47.38	209.25	80.57	-3,890.68	-7,660.13	7,577.62	7,321.32	256.31	29.565		
7,000.00	6,207.93	6,141.93	6,207.93	47.80	212.69	80.64	-3,890.68	-7,660.13	7,575.06	7,314.88	260.17	29.115		
7,100.00	6,307.19	6,241.19	6,307.19	48.18	216.16	80.69	-3,890.68	-7,660.13	7,573.08	7,309.06	264.03	28.683		
7,200.00	6,406.82	6,340.82	6,406.82	48.53	219.64	80.72	-3,890.68	-7,660.13	7,571.69	7,303.83	267.86	28.268		
7,300.00	6,506.68	6,440.68	6,506.68	48.84	223.12	80.74	-3,890.68	-7,660.13	7,570.86	7,299.20	271.66	27.869		
7,400.00	6,606.66	6,540.66	6,606.66	49.10	226.61	-6.25	-3,890.68	-7,660.13	7,570.59	7,295.18	275.41	27.489		
7,500.00	6,706.21	6,640.21	6,706.21	49.35	230.09	-6.34	-3,890.68	-7,660.13	7,562.29	7,283.16	279.13	27.092		
7,600.00	6,803.22	6,737.22	6,803.22	49.59	233.47	-6.61	-3,890.68	-7,660.13	7,558.61	7,255.85	282.76	26.661		
7,700.00	6,895.32	6,829.32	6,895.32	49.82	236.69	-7.09	-3,890.68	-7,660.13	7,550.15	7,213.93	286.21	26.205		
7,800.00	6,980.23	6,914.23	6,980.23	50.03	239.65	-7.86	-3,890.68	-7,660.13	7,447.83	7,158.44	289.39	25.736		
7,900.00	7,055.85	6,989.85	7,055.85	50.21	242.29	-9.07	-3,890.68	-7,660.13	7,382.97	7,090.75	292.22	25.265		
8,000.00	7,120.34	7,054.34	7,120.34	50.36	244.54	-11.01	-3,890.68	-7,660.13	7,307.16	7,012.54	294.62	24.802		
8,100.00	7,172.10	7,106.10	7,172.10	50.47	246.35	-14.34	-3,890.68	-7,660.13	7,222.27	6,925.73	296.54	24.355		
8,200.00	7,209.85	7,143.85	7,209.85	50.55	247.67	-20.94	-3,890.68	-7,660.13	7,130.39	6,832.46	297.92	23.934		
8,300.00	7,232.68	7,166.68	7,232.68	50.61	248.47	-37.93	-3,890.68	-7,660.13	7,033.79	6,735.04	298.75	23.544		
8,400.00	7,240.00	7,174.00	7,240.00	50.65	248.72	-91.94	-3,890.68	-7,660.13	6,934.86	6,635.86	299.00	23.194		
8,500.00	7,239.60	7,173.60	7,239.60	50.69	248.71	-91.91	-3,890.68	-7,660.13	6,835.58	6,536.62	298.96	22.864		
8,600.00	7,239.19	7,173.19	7,239.19	50.75	248.69	-91.89	-3,890.68	-7,660.13	6,736.32	6,437.39	298.93	22.535		
8,700.00	7,238.78	7,172.78	7,238.78	50.85	248.68	-91.86	-3,890.68	-7,660.13	6,637.09	6,338.18	298.90	22.205		
8,800.00	7,238.38	7,172.38	7,238.38	51.02	248.66	-91.83	-3,890.68	-7,660.13	6,537.87	6,238.99	298.88	21.875		
8,900.00	7,237.97	7,171.97	7,237.97	51.32	248.65	-91.80	-3,890.68	-7,660.13	6,438.68	6,139.83	298.86	21.544		
9,000.00	7,237.57	7,171.57	7,237.57	51.95	248.64	-91.77	-3,890.68	-7,660.13	6,339.52	6,040.68	298.84	21.214		
9,100.00	7,237.16	7,171.16	7,237.16	53.10	248.62	-91.74	-3,890.68	-7,660.13	6,240.38	5,941.56	298.82	20.883		
9,200.00	7,236.76	7,170.76	7,236.76	54.69	248.61	-91.72	-3,890.68	-7,660.13	6,141.27	5,842.46	298.81	20.552		
9,300.00	7,236.35	7,170.35	7,236.35	56.53	248.59	-91.69	-3,890.68	-7,660.13	6,042.19	5,743.38	298.81	20.221		
9,400.00	7,235.94	7,169.94	7,235.94	58.53	248.58	-91.66	-3,890.68	-7,660.13	5,943.14	5,644.33	298.81	19.889		
9,500.00	7,235.54	7,169.54	7,235.54	60.62	248.57	-91.63	-3,890.68	-7,660.13	5,844.13	5,545.31	298.81	19.558		
9,600.00	7,235.13	7,169.13	7,235.13	62.80	248.55	-91.60	-3,890.68	-7,660.13	5,745.14	5,446.32	298.83	19.226		
9,700.00	7,234.73	7,168.73	7,234.73	65.03	248.54	-91.58	-3,890.68	-7,660.13	5,646.20	5,347.35	298.85	18.893		
9,800.00	7,234.32	7,168.32	7,234.32	67.32	248.52	-91.55	-3,890.68	-7,660.13	5,547.29	5,248.42	298.87	18.561		
9,900.00	7,233.92	7,167.92	7,233.92	69.66	248.51	-91.52	-3,890.68	-7,660.13	5,448.42	5,149.51	298.91	18.228		
10,000.00	7,233.51	7,167.51	7,233.51	72.03	248.49	-91.49	-3,890.68	-7,660.13	5,349.59	5,050.64	298.95	17.895		
10,100.00	7,233.10	7,167.10	7,233.10	74.45	248.48	-91.46	-3,890.68	-7,660.13	5,250.81	4,951.81	299.00	17.561		
10,200.00	7,232.70	7,166.70	7,232.70	76.89	248.47	-91.43	-3,890.68	-7,660.13	5,152.07	4,853.01	299.06	17.227		
10,300.00	7,232.29	7,166.29	7,232.29	79.36	248.45	-91.41	-3,890.68	-7,660.13	5,053.39	4,754.25	299.14	16.893		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	7,165.89	7,231.89	81.86	248.44	-91.38	-3,890.68	-7,660.13	4,954.75	4,655.53	299.23	16.559		
10,500.00	7,231.48	7,165.48	7,231.48	84.38	248.42	-91.35	-3,890.68	-7,660.13	4,856.17	4,556.85	299.33	16.224		
10,600.00	7,231.08	7,165.08	7,231.08	86.93	248.41	-91.32	-3,890.68	-7,660.13	4,757.66	4,458.21	299.44	15.888		
10,700.00	7,230.67	7,164.67	7,230.67	89.49	248.40	-91.29	-3,890.68	-7,660.13	4,659.20	4,359.62	299.58	15.553		
10,800.00	7,230.26	7,164.26	7,230.26	92.07	248.38	-91.27	-3,890.68	-7,660.13	4,560.81	4,261.08	299.73	15.217		
10,900.00	7,229.86	7,163.86	7,229.86	94.67	248.37	-91.24	-3,890.68	-7,660.13	4,462.50	4,162.60	299.90	14.880		
11,000.00	7,229.45	7,163.45	7,229.45	97.28	248.35	-91.21	-3,890.68	-7,660.13	4,364.26	4,064.16	300.09	14.543		
11,100.00	7,229.05	7,163.05	7,229.05	99.90	248.34	-91.18	-3,890.68	-7,660.13	4,266.10	3,965.79	300.31	14.206		
11,200.00	7,228.64	7,162.64	7,228.64	102.54	248.32	-91.15	-3,890.68	-7,660.13	4,168.03	3,867.47	300.56	13.868		
11,300.00	7,228.24	7,162.24	7,228.24	105.19	248.31	-91.12	-3,890.68	-7,660.13	4,070.05	3,769.22	300.83	13.529		
11,400.00	7,227.83	7,161.83	7,227.83	107.85	248.30	-91.10	-3,890.68	-7,660.13	3,972.17	3,671.03	301.14	13.190		
11,500.00	7,227.42	7,161.42	7,227.42	110.52	248.28	-91.07	-3,890.68	-7,660.13	3,874.40	3,572.92	301.49	12.851		
11,600.00	7,227.02	7,161.02	7,227.02	113.20	248.27	-91.04	-3,890.68	-7,660.13	3,776.75	3,474.88	301.87	12.511		
11,700.00	7,226.61	7,160.61	7,226.61	115.89	248.25	-91.01	-3,890.68	-7,660.13	3,679.23	3,376.92	302.30	12.171		
11,800.00	7,226.21	7,160.21	7,226.21	118.59	248.24	-90.98	-3,890.68	-7,660.13	3,581.84	3,279.06	302.78	11.830		
11,900.00	7,225.80	7,159.80	7,225.80	121.29	248.23	-90.96	-3,890.68	-7,660.13	3,484.60	3,181.28	303.32	11.488		
12,000.00	7,225.40	7,159.40	7,225.40	124.00	248.21	-90.93	-3,890.68	-7,660.13	3,387.52	3,083.60	303.92	11.146		
12,100.00	7,224.99	7,158.99	7,224.99	126.72	248.20	-90.90	-3,890.68	-7,660.13	3,290.61	2,986.03	304.59	10.804		
12,200.00	7,224.58	7,158.58	7,224.58	129.44	248.18	-90.87	-3,890.68	-7,660.13	3,193.90	2,888.57	305.33	10.460		
12,300.00	7,224.18	7,158.18	7,224.18	132.17	248.17	-90.84	-3,890.68	-7,660.13	3,097.39	2,791.23	306.16	10.117		
12,400.00	7,223.77	7,157.77	7,223.77	134.91	248.15	-90.81	-3,890.68	-7,660.13	3,001.12	2,694.03	307.08	9.773		
12,500.00	7,223.37	7,157.37	7,223.37	137.65	248.14	-90.79	-3,890.68	-7,660.13	2,905.09	2,596.98	308.11	9.429		
12,600.00	7,222.96	7,156.96	7,222.96	140.39	248.13	-90.76	-3,890.68	-7,660.13	2,809.34	2,500.08	309.26	9.084		
12,700.00	7,222.55	7,156.55	7,222.55	143.14	248.11	-90.73	-3,890.68	-7,660.13	2,713.90	2,403.36	310.54	8.739		
12,800.00	7,222.15	7,156.15	7,222.15	145.89	248.10	-90.70	-3,890.68	-7,660.13	2,618.80	2,306.83	311.97	8.394		
12,900.00	7,221.74	7,155.74	7,221.74	148.65	248.08	-90.67	-3,890.68	-7,660.13	2,524.08	2,210.51	313.57	8.049		
13,000.00	7,221.34	7,155.34	7,221.34	151.41	248.07	-90.64	-3,890.68	-7,660.13	2,429.78	2,114.42	315.35	7.705		
13,100.00	7,220.93	7,154.93	7,220.93	154.18	248.06	-90.62	-3,890.68	-7,660.13	2,335.95	2,018.60	317.35	7.361		
13,200.00	7,220.53	7,154.53	7,220.53	156.94	248.04	-90.59	-3,890.68	-7,660.13	2,242.66	1,923.08	319.58	7.018		
13,300.00	7,220.12	7,154.12	7,220.12	159.72	248.03	-90.56	-3,890.68	-7,660.13	2,149.97	1,827.90	322.07	6.676		
13,400.00	7,219.71	7,153.71	7,219.71	162.49	248.01	-90.53	-3,890.68	-7,660.13	2,057.97	1,733.11	324.86	6.335		
13,500.00	7,219.31	7,153.31	7,219.31	165.27	248.00	-90.50	-3,890.68	-7,660.13	1,966.74	1,638.76	327.98	5.996		
13,600.00	7,218.90	7,152.90	7,218.90	168.05	247.98	-90.48	-3,890.68	-7,660.13	1,876.41	1,544.93	331.48	5.661		
13,700.00	7,218.50	7,152.50	7,218.50	170.83	247.97	-90.45	-3,890.68	-7,660.13	1,787.11	1,451.71	335.41	5.328		
13,800.00	7,218.09	7,152.09	7,218.09	173.61	247.96	-90.42	-3,890.68	-7,660.13	1,699.00	1,359.20	339.81	5.000		
13,900.00	7,217.69	7,151.69	7,217.69	176.40	247.94	-90.39	-3,890.68	-7,660.13	1,612.29	1,267.55	344.74	4.677		
14,000.00	7,217.28	7,151.28	7,217.28	179.19	247.93	-90.36	-3,890.68	-7,660.13	1,527.19	1,176.93	350.27	4.360		
14,100.00	7,216.87	7,150.87	7,216.87	181.98	247.91	-90.33	-3,890.68	-7,660.13	1,444.01	1,087.56	356.45	4.051		
14,200.00	7,216.47	7,150.47	7,216.47	184.78	247.90	-90.31	-3,890.68	-7,660.13	1,363.09	999.73	363.36	3.751		
14,300.00	7,216.06	7,150.06	7,216.06	187.57	247.89	-90.28	-3,890.68	-7,660.13	1,284.86	913.80	371.05	3.463		
14,400.00	7,215.66	7,149.66	7,215.66	190.37	247.87	-90.25	-3,890.68	-7,660.13	1,209.84	830.27	379.57	3.187		
14,500.00	7,215.25	7,149.25	7,215.25	193.17	247.86	-90.22	-3,890.68	-7,660.13	1,138.66	749.75	388.91	2.928		
14,600.00	7,214.85	7,148.85	7,214.85	195.97	247.84	-90.19	-3,890.68	-7,660.13	1,072.10	673.06	399.04	2.687		
14,700.00	7,214.44	7,148.44	7,214.44	198.77	247.83	-90.17	-3,890.68	-7,660.13	1,011.06	601.24	409.82	2.467		
14,800.00	7,214.03	7,148.03	7,214.03	201.58	247.81	-90.14	-3,890.68	-7,660.13	956.60	535.62	420.99	2.272		
14,900.00	7,213.63	7,147.63	7,213.63	204.38	247.80	-90.11	-3,890.68	-7,660.13	909.91	477.78	432.12	2.106		
15,000.00	7,213.22	7,147.22	7,213.22	207.19	247.79	-90.08	-3,890.68	-7,660.13	872.23	429.58	442.64	1.970		
15,100.00	7,212.82	7,146.82	7,212.82	210.00	247.77	-90.05	-3,890.68	-7,660.13	844.76	392.94	451.83	1.870		
15,200.00	7,212.41	7,146.41	7,212.41	212.81	247.76	-90.02	-3,890.68	-7,660.13	828.53	369.60	458.93	1.805		
15,285.78	7,212.06	7,146.06	7,212.06	215.22	247.75	-90.00	-3,890.68	-7,660.13	824.08	361.17	462.91	1.780 CC		
15,300.00	7,212.01	7,146.01	7,212.01	215.62	247.74	-90.00	-3,890.68	-7,660.13	824.20	360.84	463.36	1.779 ES, SF		
15,400.00	7,211.60	7,145.60	7,211.60	218.43	247.73	-89.97	-3,890.68	-7,660.13	831.96	367.13	464.82	1.790		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
HARVESTERS STATE 7-15 PAD - FRITZLER 11-21(PR_150CC) - OH - OH												Offset Well Error:	3.28 ft
Survey Program: 100-2" Cone@2.448 Sigma													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,500.00	7,211.19	7,145.19	7,211.19	221.25	247.72	-89.94	-3,890.68	-7,660.13	851.47	388.05	463.42	1.837	
15,600.00	7,210.79	7,144.79	7,210.79	224.06	247.70	-89.91	-3,890.68	-7,660.13	881.95	422.38	459.57	1.919	
15,700.00	7,210.38	7,144.38	7,210.38	226.88	247.69	-89.88	-3,890.68	-7,660.13	922.33	468.43	453.89	2.032	
15,794.94	7,210.00	7,144.00	7,210.00	229.55	247.67	-89.86	-3,890.68	-7,660.13	968.69	521.28	447.40	2.165	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 1-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	51.00	3.28	3.28	-106.02	-2,573.28	-8,960.44	9,322.76					
100.00	100.00	49.00	100.00	3.28	3.39	-106.02	-2,573.28	-8,960.44	9,322.62	9,315.95	6.67	1,396.772		
200.00	200.00	149.00	200.00	3.34	4.76	-106.02	-2,573.28	-8,960.44	9,322.62	9,314.52	8.10	1,150.687		
300.00	299.98	248.98	299.98	3.44	7.68	71.35	-2,573.28	-8,960.44	9,322.07	9,310.94	11.12	838.224		
400.00	399.84	348.84	399.84	3.59	10.94	71.41	-2,573.28	-8,960.44	9,320.39	9,305.87	14.52	641.697		
500.00	499.45	448.45	499.45	3.79	14.29	71.52	-2,573.28	-8,960.44	9,317.61	9,299.53	18.08	515.408		
600.00	598.70	547.70	598.70	4.03	17.68	71.66	-2,573.28	-8,960.44	9,313.74	9,292.02	21.71	428.986		
700.00	697.47	646.47	697.47	4.31	21.08	71.84	-2,573.28	-8,960.44	9,308.78	9,283.39	25.39	366.593		
800.00	795.62	744.62	795.62	4.64	24.47	72.07	-2,573.28	-8,960.44	9,302.77	9,273.67	29.11	319.620		
900.00	893.06	842.06	893.06	5.00	27.84	72.33	-2,573.28	-8,960.44	9,295.73	9,262.89	32.84	283.073		
1,000.00	989.64	938.64	989.64	5.40	31.20	72.63	-2,573.28	-8,960.44	9,287.69	9,251.11	36.58	253.883		
1,100.00	1,085.27	1,034.27	1,085.27	5.83	34.52	72.97	-2,573.28	-8,960.44	9,278.69	9,238.36	40.33	230.065		
1,200.00	1,179.82	1,128.82	1,179.82	6.29	37.80	73.34	-2,573.28	-8,960.44	9,268.76	9,224.68	44.08	210.285		
1,300.00	1,273.17	1,222.17	1,273.17	6.79	41.05	73.75	-2,573.28	-8,960.44	9,257.95	9,210.14	47.82	193.613		
1,400.00	1,365.21	1,314.21	1,365.21	7.33	44.26	74.19	-2,573.28	-8,960.44	9,246.31	9,194.77	51.55	179.382		
1,500.00	1,455.84	1,404.84	1,455.84	7.89	47.41	74.67	-2,573.28	-8,960.44	9,233.89	9,178.63	55.26	167.105		
1,600.00	1,544.94	1,506.06	1,544.94	8.50	50.94	75.17	-2,573.28	-8,960.44	9,220.75	9,161.37	59.37	155.300		
1,700.00	1,632.39	1,581.39	1,632.39	9.13	53.56	75.69	-2,573.28	-8,960.44	9,206.94	9,144.31	62.62	147.027		
1,800.00	1,718.11	1,667.11	1,718.11	9.80	56.55	76.25	-2,573.28	-8,960.44	9,192.52	9,126.26	66.26	138.728		
1,900.00	1,802.44	1,751.44	1,802.44	10.49	59.49	76.61	-2,573.28	-8,960.44	9,177.76	9,107.88	69.88	131.330		
2,000.00	1,886.68	1,835.68	1,886.68	11.20	62.42	76.89	-2,573.28	-8,960.44	9,163.26	9,089.74	73.52	124.639		
2,100.00	1,970.92	1,919.92	1,970.92	11.93	65.36	77.17	-2,573.28	-8,960.44	9,149.05	9,071.88	77.17	118.563		
2,200.00	2,055.17	2,004.17	2,055.17	12.66	68.30	77.45	-2,573.28	-8,960.44	9,135.14	9,054.31	80.82	113.024		
2,300.00	2,139.41	2,088.41	2,139.41	13.40	71.24	77.73	-2,573.28	-8,960.44	9,121.52	9,037.03	84.49	107.957		
2,400.00	2,223.66	2,172.66	2,223.66	14.14	74.17	78.01	-2,573.28	-8,960.44	9,108.20	9,020.04	88.17	103.306		
2,500.00	2,307.90	2,256.90	2,307.90	14.89	77.11	78.29	-2,573.28	-8,960.44	9,095.18	9,003.34	91.85	99.023		
2,600.00	2,392.14	2,341.14	2,392.14	15.65	80.05	78.58	-2,573.28	-8,960.44	9,082.47	8,986.93	95.54	95.067		
2,700.00	2,476.39	2,425.39	2,476.39	16.41	82.99	78.86	-2,573.28	-8,960.44	9,070.05	8,970.82	99.23	91.404		
2,800.00	2,560.63	2,509.63	2,560.63	17.17	85.93	79.14	-2,573.28	-8,960.44	9,057.94	8,955.01	102.93	88.002		
2,900.00	2,644.88	2,606.12	2,644.88	17.93	89.29	79.43	-2,573.28	-8,960.44	9,046.13	8,939.08	107.06	84.497		
3,000.00	2,729.12	2,678.12	2,729.12	18.70	91.81	79.71	-2,573.28	-8,960.44	9,034.63	8,924.30	110.34	81.882		
3,100.00	2,813.36	2,762.36	2,813.36	19.47	94.75	80.00	-2,573.28	-8,960.44	9,023.44	8,909.39	114.05	79.121		
3,200.00	2,897.61	2,846.61	2,897.61	20.25	97.68	80.28	-2,573.28	-8,960.44	9,012.55	8,894.80	117.76	76.534		
3,300.00	2,981.85	2,930.85	2,981.85	21.02	100.62	80.57	-2,573.28	-8,960.44	9,001.98	8,880.51	121.47	74.107		
3,400.00	3,066.10	3,015.10	3,066.10	21.80	103.56	80.86	-2,573.28	-8,960.44	8,991.71	8,866.52	125.19	71.824		
3,500.00	3,150.34	3,100.66	3,150.34	22.58	106.55	81.14	-2,573.28	-8,960.44	8,981.76	8,852.80	128.96	69.649		
3,600.00	3,234.58	3,183.58	3,234.58	23.35	109.44	81.43	-2,573.28	-8,960.44	8,972.12	8,839.48	132.63	67.646		
3,700.00	3,318.83	3,267.83	3,318.83	24.13	112.38	81.72	-2,573.28	-8,960.44	8,962.79	8,826.43	136.36	65.731		
3,800.00	3,403.07	3,352.07	3,403.07	24.92	115.32	82.01	-2,573.28	-8,960.44	8,953.77	8,813.69	140.08	63.918		
3,900.00	3,487.32	3,436.32	3,487.32	25.70	118.26	82.30	-2,573.28	-8,960.44	8,945.08	8,801.27	143.81	62.201		
4,000.00	3,571.56	3,520.56	3,571.56	26.48	121.20	82.59	-2,573.28	-8,960.44	8,936.69	8,789.16	147.54	60.572		
4,100.00	3,655.80	3,604.80	3,655.80	27.27	124.14	82.88	-2,573.28	-8,960.44	8,928.63	8,777.36	151.27	59.026		
4,200.00	3,740.05	3,689.05	3,740.05	28.05	127.08	83.17	-2,573.28	-8,960.44	8,920.88	8,765.89	155.00	57.555		
4,300.00	3,824.29	3,773.29	3,824.29	28.84	130.02	83.46	-2,573.28	-8,960.44	8,913.46	8,754.73	158.73	56.155		
4,400.00	3,908.54	3,857.54	3,908.54	29.62	132.96	83.75	-2,573.28	-8,960.44	8,906.35	8,743.88	162.46	54.821		
4,500.00	3,992.78	3,941.78	3,992.78	30.41	135.90	84.04	-2,573.28	-8,960.44	8,899.56	8,733.36	166.20	53.548		
4,600.00	4,077.03	4,026.03	4,077.03	31.20	138.84	84.33	-2,573.28	-8,960.44	8,893.09	8,723.16	169.93	52.333		
4,700.00	4,161.27	4,110.27	4,161.27	31.98	141.78	84.62	-2,573.28	-8,960.44	8,886.95	8,713.28	173.67	51.172		
4,800.00	4,245.51	4,205.49	4,245.51	32.77	145.11	84.91	-2,573.28	-8,960.44	8,881.13	8,703.34	177.79	49.954		
4,900.00	4,329.76	4,278.76	4,329.76	33.56	147.66	85.21	-2,573.28	-8,960.44	8,875.63	8,694.49	181.14	48.999		
5,000.00	4,414.00	4,363.00	4,414.00	34.35	150.60	85.50	-2,573.28	-8,960.44	8,870.46	8,685.58	184.88	47.981		
5,100.00	4,498.25	4,447.25	4,498.25	35.14	153.54	85.79	-2,573.28	-8,960.44	8,865.61	8,676.99	188.61	47.004		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 1-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,531.49	4,582.49	35.93	156.48	86.09	-2,573.28	-8,960.44	8,861.08	8,668.73	192.35	46.067		
5,300.00	4,666.73	4,615.73	4,666.73	36.72	159.42	86.38	-2,573.28	-8,960.44	8,856.88	8,660.79	196.09	45.168		
5,400.00	4,750.98	4,700.02	4,750.98	37.51	162.37	86.67	-2,573.28	-8,960.44	8,853.01	8,653.18	199.83	44.303		
5,500.00	4,835.22	4,784.22	4,835.22	38.30	165.30	86.97	-2,573.28	-8,960.44	8,849.46	8,645.90	203.56	43.473		
5,600.00	4,919.47	4,868.47	4,919.47	39.09	168.24	87.26	-2,573.28	-8,960.44	8,846.24	8,638.94	207.30	42.673		
5,700.00	5,003.71	4,952.71	5,003.71	39.88	171.19	87.55	-2,573.28	-8,960.44	8,843.35	8,632.31	211.04	41.904		
5,800.00	5,088.06	5,037.06	5,088.06	40.67	174.13	87.83	-2,573.28	-8,960.44	8,840.79	8,626.01	214.78	41.162		
5,900.00	5,173.83	5,122.83	5,173.83	41.44	177.12	88.07	-2,573.28	-8,960.44	8,838.64	8,620.10	218.54	40.443		
6,000.00	5,261.34	5,210.34	5,261.34	42.18	180.18	88.31	-2,573.28	-8,960.44	8,836.90	8,614.56	222.34	39.745		
6,100.00	5,350.49	5,300.51	5,350.49	42.88	183.33	88.55	-2,573.28	-8,960.44	8,835.51	8,609.31	226.20	39.061		
6,200.00	5,441.16	5,409.84	5,441.16	43.56	187.14	88.77	-2,573.28	-8,960.44	8,834.42	8,603.72	230.69	38.295		
6,300.00	5,533.25	5,482.25	5,533.25	44.20	189.67	88.99	-2,573.28	-8,960.44	8,833.59	8,599.72	233.87	37.772		
6,400.00	5,626.65	5,575.65	5,626.65	44.82	192.93	89.19	-2,573.28	-8,960.44	8,832.98	8,595.24	237.74	37.154		
6,500.00	5,721.23	5,670.23	5,721.23	45.40	196.23	89.38	-2,573.28	-8,960.44	8,832.55	8,590.93	241.62	36.555		
6,600.00	5,816.89	5,765.89	5,816.89	45.94	199.57	89.56	-2,573.28	-8,960.44	8,832.27	8,586.76	245.51	35.975		
6,700.00	5,913.51	5,862.51	5,913.51	46.45	202.94	89.72	-2,573.28	-8,960.44	8,832.10	8,582.71	249.39	35.414		
6,800.00	6,010.97	5,959.97	6,010.97	46.93	206.34	89.86	-2,573.28	-8,960.44	8,832.02	8,578.74	253.28	34.871		
6,900.00	6,109.15	6,058.15	6,109.15	47.38	209.77	89.98	-2,573.28	-8,960.44	8,831.99	8,574.84	257.15	34.345		
6,922.02	6,130.85	6,079.85	6,130.85	47.47	210.53	90.00	-2,573.28	-8,960.44	8,831.99	8,573.99	258.00	34.232		
7,000.00	6,207.93	6,156.93	6,207.93	47.80	213.22	90.08	-2,573.28	-8,960.44	8,832.00	8,570.98	261.01	33.837		
7,100.00	6,307.19	6,256.19	6,307.19	48.18	216.68	90.15	-2,573.28	-8,960.44	8,832.02	8,567.16	264.86	33.346		
7,200.00	6,406.82	6,355.82	6,406.82	48.53	220.16	90.21	-2,573.28	-8,960.44	8,832.05	8,563.36	268.69	32.871		
7,300.00	6,506.68	6,455.68	6,506.68	48.84	223.65	90.24	-2,573.28	-8,960.44	8,832.07	8,559.58	272.49	32.413		
7,400.00	6,606.66	6,555.66	6,606.66	49.10	227.14	3.25	-2,573.28	-8,960.44	8,832.07	8,555.83	276.24	31.973		
7,500.00	6,706.21	6,655.21	6,706.21	49.35	230.61	3.30	-2,573.28	-8,960.44	8,823.73	8,543.77	279.96	31.518		
7,600.00	6,803.22	6,752.22	6,803.22	49.59	234.00	3.44	-2,573.28	-8,960.44	8,799.95	8,516.36	283.59	31.031		
7,700.00	6,895.32	6,844.32	6,895.32	49.82	237.21	3.69	-2,573.28	-8,960.44	8,761.31	8,474.28	287.03	30.524		
7,800.00	6,980.23	6,929.23	6,980.23	50.03	240.18	4.09	-2,573.28	-8,960.44	8,708.77	8,418.56	290.20	30.009		
7,900.00	7,055.85	7,004.85	7,055.85	50.21	242.82	4.72	-2,573.28	-8,960.44	8,643.61	8,350.58	293.02	29.498		
8,000.00	7,120.34	7,069.34	7,120.34	50.36	245.07	5.73	-2,573.28	-8,960.44	8,567.44	8,272.02	295.42	29.001		
8,100.00	7,172.10	7,121.10	7,172.10	50.47	246.87	7.50	-2,573.28	-8,960.44	8,482.15	8,184.80	297.34	28.526		
8,200.00	7,209.85	7,158.85	7,209.85	50.55	248.19	11.13	-2,573.28	-8,960.44	8,389.82	8,091.08	298.74	28.084		
8,300.00	7,232.68	7,181.68	7,232.68	50.61	248.99	21.81	-2,573.28	-8,960.44	8,292.74	7,993.15	299.59	27.680		
8,400.00	7,240.00	7,189.00	7,240.00	50.65	249.24	93.79	-2,573.28	-8,960.44	8,193.30	7,893.41	299.88	27.322		
8,500.00	7,239.60	7,188.60	7,239.60	50.69	249.23	93.74	-2,573.28	-8,960.44	8,093.49	7,793.59	299.90	26.988		
8,600.00	7,239.19	7,188.19	7,239.19	50.75	249.22	93.69	-2,573.28	-8,960.44	7,993.68	7,693.77	299.91	26.653		
8,700.00	7,238.78	7,187.78	7,238.78	50.85	249.20	93.65	-2,573.28	-8,960.44	7,893.88	7,593.96	299.93	26.319		
8,800.00	7,238.38	7,187.38	7,238.38	51.02	249.19	93.60	-2,573.28	-8,960.44	7,794.09	7,494.14	299.95	25.985		
8,900.00	7,237.97	7,186.97	7,237.97	51.32	249.17	93.56	-2,573.28	-8,960.44	7,694.30	7,394.33	299.97	25.650		
9,000.00	7,237.57	7,186.57	7,237.57	51.95	249.16	93.51	-2,573.28	-8,960.44	7,594.52	7,294.52	299.99	25.316		
9,100.00	7,237.16	7,186.16	7,237.16	53.10	249.15	93.46	-2,573.28	-8,960.44	7,494.74	7,194.72	300.02	24.981		
9,200.00	7,236.76	7,185.76	7,236.76	54.69	249.13	93.42	-2,573.28	-8,960.44	7,394.96	7,094.92	300.05	24.646		
9,300.00	7,236.35	7,185.35	7,236.35	56.53	249.12	93.37	-2,573.28	-8,960.44	7,295.20	6,995.12	300.08	24.311		
9,400.00	7,235.94	7,184.94	7,235.94	58.53	249.10	93.33	-2,573.28	-8,960.44	7,195.44	6,895.33	300.11	23.976		
9,500.00	7,235.54	7,184.54	7,235.54	60.62	249.09	93.28	-2,573.28	-8,960.44	7,095.69	6,795.54	300.15	23.641		
9,600.00	7,235.13	7,184.13	7,235.13	62.80	249.07	93.23	-2,573.28	-8,960.44	6,995.94	6,695.76	300.18	23.306		
9,700.00	7,234.73	7,183.73	7,234.73	65.03	249.06	93.19	-2,573.28	-8,960.44	6,896.20	6,595.98	300.23	22.970		
9,800.00	7,234.32	7,183.32	7,234.32	67.32	249.05	93.14	-2,573.28	-8,960.44	6,796.47	6,496.20	300.27	22.634		
9,900.00	7,233.92	7,182.92	7,233.92	69.66	249.03	93.09	-2,573.28	-8,960.44	6,696.75	6,396.43	300.32	22.299		
10,000.00	7,233.51	7,182.51	7,233.51	72.03	249.02	93.05	-2,573.28	-8,960.44	6,597.03	6,296.66	300.37	21.963		
10,100.00	7,233.10	7,182.10	7,233.10	74.45	249.00	93.00	-2,573.28	-8,960.44	6,497.33	6,196.90	300.43	21.627		
10,200.00	7,232.70	7,181.70	7,232.70	76.89	248.99	92.96	-2,573.28	-8,960.44	6,397.63	6,097.14	300.49	21.291		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 1-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	7,181.29	7,232.29	79.36	248.98	92.91	-2,573.28	-8,960.44	6,297.95	5,997.39	300.55	20.955		
10,400.00	7,231.89	7,180.89	7,231.89	81.86	248.96	92.86	-2,573.28	-8,960.44	6,198.27	5,897.65	300.62	20.618		
10,500.00	7,231.48	7,180.48	7,231.48	84.38	248.95	92.82	-2,573.28	-8,960.44	6,098.60	5,797.91	300.69	20.282		
10,600.00	7,231.08	7,180.08	7,231.08	86.93	248.93	92.77	-2,573.28	-8,960.44	5,998.95	5,698.18	300.77	19.945		
10,700.00	7,230.67	7,179.67	7,230.67	89.49	248.92	92.72	-2,573.28	-8,960.44	5,899.30	5,598.45	300.85	19.608		
10,800.00	7,230.26	7,179.26	7,230.26	92.07	248.90	92.68	-2,573.28	-8,960.44	5,799.67	5,498.73	300.94	19.272		
10,900.00	7,229.86	7,178.86	7,229.86	94.67	248.89	92.63	-2,573.28	-8,960.44	5,700.05	5,399.02	301.04	18.935		
11,000.00	7,229.45	7,178.45	7,229.45	97.28	248.88	92.59	-2,573.28	-8,960.44	5,600.45	5,299.31	301.14	18.598		
11,100.00	7,229.05	7,178.05	7,229.05	99.90	248.86	92.54	-2,573.28	-8,960.44	5,500.86	5,199.61	301.25	18.260		
11,200.00	7,228.64	7,177.64	7,228.64	102.54	248.85	92.49	-2,573.28	-8,960.44	5,401.28	5,099.92	301.36	17.923		
11,300.00	7,228.24	7,177.24	7,228.24	105.19	248.83	92.45	-2,573.28	-8,960.44	5,301.72	5,000.24	301.48	17.585		
11,400.00	7,227.83	7,176.83	7,227.83	107.85	248.82	92.40	-2,573.28	-8,960.44	5,202.18	4,900.56	301.62	17.248		
11,500.00	7,227.42	7,176.42	7,227.42	110.52	248.81	92.35	-2,573.28	-8,960.44	5,102.66	4,800.90	301.76	16.910		
11,600.00	7,227.02	7,176.02	7,227.02	113.20	248.79	92.31	-2,573.28	-8,960.44	5,003.15	4,701.24	301.91	16.572		
11,700.00	7,226.61	7,175.61	7,226.61	115.89	248.78	92.26	-2,573.28	-8,960.44	4,903.66	4,601.60	302.07	16.234		
11,800.00	7,226.21	7,175.21	7,226.21	118.59	248.76	92.21	-2,573.28	-8,960.44	4,804.20	4,501.96	302.24	15.896		
11,900.00	7,225.80	7,174.80	7,225.80	121.29	248.75	92.17	-2,573.28	-8,960.44	4,704.76	4,402.34	302.42	15.557		
12,000.00	7,225.40	7,174.40	7,225.40	124.00	248.73	92.12	-2,573.28	-8,960.44	4,605.34	4,302.72	302.62	15.218		
12,100.00	7,224.99	7,173.99	7,224.99	126.72	248.72	92.08	-2,573.28	-8,960.44	4,505.95	4,203.12	302.83	14.880		
12,200.00	7,224.58	7,173.58	7,224.58	129.44	248.71	92.03	-2,573.28	-8,960.44	4,406.58	4,103.53	303.05	14.541		
12,300.00	7,224.18	7,173.18	7,224.18	132.17	248.69	91.98	-2,573.28	-8,960.44	4,307.25	4,003.96	303.29	14.202		
12,400.00	7,223.77	7,172.77	7,223.77	134.91	248.68	91.94	-2,573.28	-8,960.44	4,207.95	3,904.39	303.55	13.862		
12,500.00	7,223.37	7,172.37	7,223.37	137.65	248.66	91.89	-2,573.28	-8,960.44	4,108.68	3,804.84	303.83	13.523		
12,600.00	7,222.96	7,171.96	7,222.96	140.39	248.65	91.84	-2,573.28	-8,960.44	4,009.44	3,705.31	304.14	13.183		
12,700.00	7,222.55	7,171.55	7,222.55	143.14	248.64	91.80	-2,573.28	-8,960.44	3,910.25	3,605.79	304.46	12.843		
12,800.00	7,222.15	7,171.15	7,222.15	145.89	248.62	91.75	-2,573.28	-8,960.44	3,811.09	3,506.28	304.81	12.503		
12,900.00	7,221.74	7,170.74	7,221.74	148.65	248.61	91.71	-2,573.28	-8,960.44	3,711.99	3,406.79	305.19	12.163		
13,000.00	7,221.34	7,170.34	7,221.34	151.41	248.59	91.66	-2,573.28	-8,960.44	3,612.93	3,307.32	305.61	11.822		
13,100.00	7,220.93	7,169.93	7,220.93	154.18	248.58	91.61	-2,573.28	-8,960.44	3,513.92	3,207.87	306.05	11.481		
13,200.00	7,220.53	7,169.53	7,220.53	156.94	248.56	91.57	-2,573.28	-8,960.44	3,414.98	3,108.44	306.54	11.140		
13,300.00	7,220.12	7,169.12	7,220.12	159.72	248.55	91.52	-2,573.28	-8,960.44	3,316.09	3,009.03	307.07	10.799		
13,400.00	7,219.71	7,168.71	7,219.71	162.49	248.54	91.47	-2,573.28	-8,960.44	3,217.28	2,909.64	307.64	10.458		
13,500.00	7,219.31	7,168.31	7,219.31	165.27	248.52	91.43	-2,573.28	-8,960.44	3,118.54	2,810.27	308.27	10.116		
13,600.00	7,218.90	7,167.90	7,218.90	168.05	248.51	91.38	-2,573.28	-8,960.44	3,019.88	2,710.92	308.96	9.774		
13,700.00	7,218.50	7,167.50	7,218.50	170.83	248.49	91.33	-2,573.28	-8,960.44	2,921.32	2,611.60	309.72	9.432		
13,800.00	7,218.09	7,167.09	7,218.09	173.61	248.48	91.29	-2,573.28	-8,960.44	2,822.86	2,512.30	310.55	9.090		
13,900.00	7,217.69	7,166.69	7,217.69	176.40	248.47	91.24	-2,573.28	-8,960.44	2,724.50	2,413.04	311.47	8.747		
14,000.00	7,217.28	7,166.28	7,217.28	179.19	248.45	91.20	-2,573.28	-8,960.44	2,626.28	2,313.80	312.48	8.405		
14,100.00	7,216.87	7,165.87	7,216.87	181.98	248.44	91.15	-2,573.28	-8,960.44	2,528.19	2,214.59	313.60	8.062		
14,200.00	7,216.47	7,165.47	7,216.47	184.78	248.42	91.10	-2,573.28	-8,960.44	2,430.25	2,115.42	314.84	7.719		
14,300.00	7,216.06	7,165.06	7,216.06	187.57	248.41	91.06	-2,573.28	-8,960.44	2,332.50	2,016.28	316.22	7.376		
14,400.00	7,215.66	7,164.66	7,215.66	190.37	248.39	91.01	-2,573.28	-8,960.44	2,234.94	1,917.18	317.76	7.033		
14,500.00	7,215.25	7,164.25	7,215.25	193.17	248.38	90.96	-2,573.28	-8,960.44	2,137.60	1,818.12	319.49	6.691		
14,600.00	7,214.85	7,163.85	7,214.85	195.97	248.37	90.92	-2,573.28	-8,960.44	2,040.53	1,719.10	321.42	6.348		
14,700.00	7,214.44	7,163.44	7,214.44	198.77	248.35	90.87	-2,573.28	-8,960.44	1,943.75	1,620.14	323.61	6.006		
14,800.00	7,214.03	7,163.03	7,214.03	201.58	248.34	90.82	-2,573.28	-8,960.44	1,847.31	1,521.23	326.08	5.665		
14,900.00	7,213.63	7,162.63	7,213.63	204.38	248.32	90.78	-2,573.28	-8,960.44	1,751.27	1,422.40	328.88	5.325		
15,000.00	7,213.22	7,162.22	7,213.22	207.19	248.31	90.73	-2,573.28	-8,960.44	1,655.71	1,323.64	332.07	4.986		
15,100.00	7,212.82	7,161.82	7,212.82	210.00	248.30	90.69	-2,573.28	-8,960.44	1,560.69	1,224.97	335.72	4.649		
15,200.00	7,212.41	7,161.41	7,212.41	212.81	248.28	90.64	-2,573.28	-8,960.44	1,466.34	1,126.43	339.91	4.314		
15,300.00	7,212.01	7,161.01	7,212.01	215.62	248.27	90.59	-2,573.28	-8,960.44	1,372.79	1,028.04	344.76	3.982		
15,400.00	7,211.60	7,160.60	7,211.60	218.43	248.25	90.55	-2,573.28	-8,960.44	1,280.22	929.85	350.37	3.654		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
HARVESTERS STATE 7-15 PAD - FRITZLER 1-17(PR_150CC) - OH - OH												Offset Well Error:	3.28 ft
Survey Program: 100-2" Cone@2.448 Sigma													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,500.00	7,211.19	7,160.19	7,211.19	221.25	248.24	90.50	-2,573.28	-8,960.44	1,188.85	831.94	356.91	3.331	
15,600.00	7,210.79	7,159.79	7,210.79	224.06	248.22	90.45	-2,573.28	-8,960.44	1,098.98	734.43	364.56	3.015	
15,700.00	7,210.38	7,159.38	7,210.38	226.88	248.21	90.41	-2,573.28	-8,960.44	1,011.02	637.49	373.53	2.707	
15,794.94	7,210.00	7,159.00	7,210.00	229.55	248.20	90.36	-2,573.28	-8,960.44	929.76	546.25	383.51	2.424	CC, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 121-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	34.00	3.28	3.28	-105.77	-2,540.12	-8,992.70	9,344.63					
100.00	100.00	30.26	64.26	3.28	3.28	-105.77	-2,540.19	-8,992.74	9,344.69	9,338.12	6.57	1,423.335		
200.00	200.00	76.11	110.11	3.34	3.28	-105.78	-2,540.55	-8,992.96	9,345.36	9,338.74	6.62	1,411.509		
300.00	299.98	121.00	154.99	3.44	3.29	71.56	-2,541.20	-8,993.36	9,346.06	9,339.33	6.73	1,389.031		
400.00	399.84	167.08	201.06	3.59	3.31	71.57	-2,542.00	-8,994.01	9,346.24	9,339.34	6.90	1,354.733		
500.00	499.45	208.00	241.97	3.79	3.34	71.60	-2,542.66	-8,994.84	9,345.91	9,338.78	7.13	1,311.515		
600.00	598.70	208.00	241.97	4.03	3.34	71.61	-2,542.66	-8,994.84	9,345.34	9,337.97	7.37	1,267.772		
700.00	697.47	257.34	291.28	4.31	3.39	71.67	-2,543.27	-8,996.46	9,344.20	9,336.50	7.70	1,213.056		
800.00	795.62	300.00	333.88	4.64	3.44	71.74	-2,543.55	-8,998.63	9,343.02	9,334.94	8.08	1,156.614		
900.00	893.06	300.00	333.88	5.00	3.44	71.77	-2,543.55	-8,998.63	9,341.40	9,332.96	8.44	1,106.702		
1,000.00	989.64	300.00	333.88	5.40	3.44	71.80	-2,543.55	-8,998.63	9,339.76	9,330.92	8.84	1,056.639		
1,100.00	1,085.27	351.38	385.14	5.83	3.52	71.93	-2,543.49	-9,002.19	9,337.53	9,328.19	9.34	999.621		
1,200.00	1,179.82	391.00	424.60	6.29	3.59	72.06	-2,543.08	-9,005.64	9,335.28	9,325.41	9.87	945.980		
1,300.00	1,273.17	391.00	424.60	6.79	3.59	72.11	-2,543.08	-9,005.64	9,332.68	9,322.31	10.37	900.295		
1,400.00	1,365.21	391.00	424.60	7.33	3.59	72.16	-2,543.08	-9,005.64	9,330.08	9,319.18	10.90	856.206		
1,500.00	1,455.84	442.81	476.11	7.89	3.69	72.36	-2,542.03	-9,011.06	9,326.91	9,315.35	11.55	807.300		
1,600.00	1,544.94	481.00	514.00	8.50	3.78	72.53	-2,540.86	-9,015.72	9,323.78	9,311.56	12.22	762.709		
1,700.00	1,632.39	481.00	514.00	9.13	3.78	72.60	-2,540.86	-9,015.72	9,320.37	9,307.52	12.85	725.204		
1,800.00	1,718.11	481.00	514.00	9.80	3.78	72.66	-2,540.86	-9,015.72	9,316.98	9,303.47	13.51	689.534		
1,900.00	1,802.44	531.37	563.85	10.49	3.91	72.86	-2,538.94	-9,022.64	9,313.38	9,299.07	14.31	650.865		
2,000.00	1,886.68	572.00	603.97	11.20	4.02	73.01	-2,537.16	-9,028.82	9,310.84	9,295.73	15.11	616.264		
2,100.00	1,970.92	572.00	603.97	11.93	4.02	73.01	-2,537.16	-9,028.82	9,309.05	9,293.23	15.82	588.432		
2,200.00	2,055.17	572.00	603.97	12.66	4.02	73.01	-2,537.16	-9,028.82	9,308.32	9,291.78	16.54	562.774		
2,217.15	2,069.62	572.00	603.97	12.78	4.02	73.01	-2,537.16	-9,028.82	9,308.31	9,291.64	16.66	558.567		
2,300.00	2,139.41	572.00	603.97	13.40	4.02	73.01	-2,537.16	-9,028.82	9,308.68	9,291.41	17.27	539.108		
2,400.00	2,223.66	629.20	660.28	14.14	4.21	73.22	-2,534.42	-9,038.50	9,309.32	9,291.17	18.15	512.800		
2,500.00	2,307.90	647.20	677.95	14.89	4.27	73.28	-2,533.53	-9,041.81	9,311.25	9,292.31	18.94	491.603		
2,600.00	2,392.14	693.00	722.80	15.65	4.44	73.45	-2,531.17	-9,050.78	9,314.28	9,294.46	19.81	470.063		
2,700.00	2,476.39	693.00	722.80	16.41	4.44	73.45	-2,531.17	-9,050.78	9,317.88	9,297.32	20.56	453.294		
2,800.00	2,560.63	693.00	722.80	17.17	4.44	73.45	-2,531.17	-9,050.78	9,322.55	9,301.25	21.30	437.714		
2,900.00	2,644.88	724.15	753.22	17.93	4.57	73.56	-2,529.60	-9,057.29	9,328.10	9,305.96	22.14	421.308		
3,000.00	2,729.12	761.00	789.15	18.70	4.72	73.70	-2,527.93	-9,065.31	9,334.59	9,311.59	23.01	405.752		
3,100.00	2,813.36	761.00	789.15	19.47	4.72	73.70	-2,527.93	-9,065.31	9,341.89	9,318.14	23.75	393.372		
3,200.00	2,897.61	795.98	823.18	20.25	4.88	73.83	-2,526.27	-9,073.25	9,350.04	9,325.42	24.62	379.774		
3,300.00	2,981.85	822.38	848.80	21.02	5.01	73.93	-2,524.78	-9,079.44	9,359.05	9,333.59	25.46	367.666		
3,400.00	3,066.10	855.00	880.38	21.80	5.16	74.05	-2,522.66	-9,087.33	9,368.90	9,342.59	26.31	356.117		
3,500.00	3,150.34	855.00	880.38	22.58	5.16	74.05	-2,522.66	-9,087.33	9,379.64	9,352.59	27.05	346.815		
3,600.00	3,234.58	855.00	880.38	23.35	5.16	74.05	-2,522.66	-9,087.33	9,391.42	9,363.64	27.78	338.078		
3,700.00	3,318.83	905.63	929.21	24.13	5.43	74.24	-2,519.07	-9,100.21	9,403.68	9,374.97	28.71	327.577		
3,800.00	3,403.07	949.00	970.84	24.92	5.67	74.41	-2,515.91	-9,111.93	9,417.21	9,387.59	29.62	317.951		
3,900.00	3,487.32	949.00	970.84	25.70	5.67	74.41	-2,515.91	-9,111.93	9,431.36	9,401.01	30.34	310.822		
4,000.00	3,571.56	949.00	970.84	26.48	5.67	74.41	-2,515.91	-9,111.93	9,446.54	9,415.47	31.06	304.098		
4,100.00	3,655.80	1,005.17	1,024.55	27.27	6.01	74.62	-2,511.34	-9,127.76	9,462.38	9,430.35	32.03	295.444		
4,200.00	3,740.05	1,044.00	1,061.55	28.05	6.25	74.77	-2,507.71	-9,138.95	9,479.04	9,446.12	32.92	287.957		
4,300.00	3,824.29	1,044.00	1,061.55	28.84	6.25	74.77	-2,507.71	-9,138.95	9,496.54	9,462.91	33.63	282.407		
4,400.00	3,908.54	1,079.13	1,094.92	29.62	6.49	74.91	-2,504.19	-9,149.37	9,514.80	9,480.30	34.50	275.800		
4,500.00	3,992.78	1,097.93	1,112.71	30.41	6.62	74.99	-2,502.27	-9,155.09	9,533.98	9,498.69	35.29	270.162		
4,600.00	4,077.03	1,139.00	1,151.47	31.20	6.90	75.15	-2,497.96	-9,167.97	9,554.13	9,517.94	36.19	264.012		
4,700.00	4,161.27	1,139.00	1,151.47	31.98	6.90	75.15	-2,497.96	-9,167.97	9,574.93	9,538.05	36.88	259.639		
4,800.00	4,245.51	1,139.00	1,151.47	32.77	6.90	75.15	-2,497.96	-9,167.97	9,596.72	9,559.16	37.56	255.492		
4,900.00	4,329.76	1,139.00	1,151.47	33.56	6.90	75.15	-2,497.96	-9,167.97	9,619.51	9,581.27	38.24	251.557		
5,000.00	4,414.00	1,189.62	1,198.96	34.35	7.28	75.35	-2,492.27	-9,184.55	9,642.73	9,603.55	39.18	246.121		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-23-18(PR_150CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 121-MWD													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,100.00	4,498.25	1,234.00	1,240.31	35.14	7.62	75.53	-2,486.80	-9,199.72	9,667.18	9,627.09	40.09	241.167		
5,200.00	4,582.49	1,234.00	1,240.31	35.93	7.62	75.53	-2,486.80	-9,199.72	9,692.17	9,651.43	40.75	237.866		
5,300.00	4,666.73	1,234.00	1,240.31	36.72	7.62	75.53	-2,486.80	-9,199.72	9,718.13	9,676.73	41.40	234.731		
5,400.00	4,750.98	1,234.00	1,240.31	37.51	7.62	75.53	-2,486.80	-9,199.72	9,745.05	9,703.00	42.05	231.752		
5,500.00	4,835.22	1,275.87	1,279.07	38.30	7.97	75.70	-2,481.34	-9,214.58	9,772.54	9,729.61	42.93	227.635		
5,600.00	4,919.47	1,292.56	1,294.45	39.09	8.11	75.77	-2,479.12	-9,220.66	9,800.98	9,757.32	43.66	224.467		
5,700.00	5,003.71	1,329.00	1,327.91	39.88	8.42	75.92	-2,474.17	-9,234.22	9,830.32	9,785.82	44.51	220.875		
5,800.00	5,088.06	1,329.00	1,327.91	40.67	8.42	76.12	-2,474.17	-9,234.22	9,860.35	9,815.22	45.13	218.502		
5,900.00	5,173.83	1,329.00	1,327.91	41.44	8.42	76.77	-2,474.17	-9,234.22	9,891.91	9,846.19	45.72	216.363		
6,000.00	5,261.34	1,329.00	1,327.91	42.18	8.42	77.46	-2,474.17	-9,234.22	9,925.13	9,878.85	46.27	214.484		
6,100.00	5,350.49	1,378.01	1,372.62	42.88	8.87	78.36	-2,467.24	-9,253.07	9,959.44	9,912.34	47.10	211.469		
6,200.00	5,441.16	1,423.00	1,413.34	43.56	9.29	79.27	-2,460.58	-9,270.99	9,995.51	9,947.65	47.86	208.843		
8,600.00	7,239.19	3,427.64	3,231.91	50.75	30.29	12.22	-2,221.69	-10,079.00	9,975.18	9,908.96	66.22	150.636		
8,700.00	7,238.78	3,460.57	3,261.98	50.85	30.64	12.36	-2,217.97	-10,091.92	9,883.87	9,817.37	66.50	148.634		
8,800.00	7,238.38	3,493.67	3,292.20	51.02	30.99	12.51	-2,214.33	-10,104.94	9,792.59	9,725.81	66.78	146.635		
8,900.00	7,237.97	3,528.58	3,324.05	51.32	31.35	12.66	-2,210.57	-10,118.69	9,701.36	9,634.27	67.09	144.612		
9,000.00	7,237.57	3,564.84	3,357.14	51.95	31.73	12.82	-2,206.48	-10,132.97	9,610.15	9,542.74	67.40	142.576		
9,100.00	7,237.16	3,601.00	3,390.11	53.10	32.11	12.99	-2,202.17	-10,147.18	9,518.97	9,451.24	67.73	140.550		
9,200.00	7,236.76	3,631.81	3,418.18	54.69	32.44	13.14	-2,198.42	-10,159.30	9,427.83	9,359.81	68.02	138.606		
9,300.00	7,236.35	3,841.88	3,610.51	56.53	34.61	14.19	-2,174.12	-10,240.18	9,336.14	9,266.57	69.57	134.204		
9,400.00	7,235.94	3,857.62	3,624.97	58.53	34.77	14.28	-2,172.26	-10,246.14	9,244.40	9,174.64	69.76	132.514		
9,500.00	7,235.54	3,887.00	3,651.90	60.62	35.07	14.44	-2,168.72	-10,257.34	9,152.79	9,082.74	70.06	130.647		
9,600.00	7,235.13	3,887.00	3,651.90	62.80	35.07	14.44	-2,168.72	-10,257.34	9,061.25	8,991.09	70.16	129.155		
9,700.00	7,234.73	3,887.00	3,651.90	65.03	35.07	14.44	-2,168.72	-10,257.34	8,969.89	8,899.62	70.27	127.656		
9,800.00	7,234.32	3,918.35	3,680.57	67.32	35.40	14.61	-2,164.91	-10,269.43	8,878.57	8,807.97	70.60	125.760		
9,900.00	7,233.92	3,933.18	3,694.11	69.66	35.56	14.69	-2,163.13	-10,275.20	8,787.42	8,716.59	70.83	124.071		
10,000.00	7,233.51	7,386.00	7,004.69	72.03	57.82	80.15	-1,971.04	-11,006.12	8,694.86	8,607.69	87.18	99.739		
10,100.00	7,233.10	7,386.00	7,004.69	74.45	57.82	80.15	-1,971.04	-11,006.12	8,595.73	8,508.43	87.29	98.470		
10,200.00	7,232.70	7,386.00	7,004.69	76.89	57.82	80.15	-1,971.04	-11,006.12	8,496.61	8,409.19	87.42	97.197		
10,300.00	7,232.29	7,386.00	7,004.69	79.36	57.82	80.15	-1,971.04	-11,006.12	8,397.51	8,309.97	87.55	95.920		
10,400.00	7,231.89	7,386.00	7,004.69	81.86	57.82	80.15	-1,971.04	-11,006.12	8,298.44	8,210.75	87.68	94.639		
10,500.00	7,231.48	7,386.00	7,004.69	84.38	57.82	80.15	-1,971.04	-11,006.12	8,199.38	8,111.55	87.83	93.354		
10,600.00	7,231.08	7,386.00	7,004.69	86.93	57.82	80.15	-1,971.04	-11,006.12	8,100.36	8,012.37	87.99	92.065		
10,700.00	7,230.67	7,386.00	7,004.69	89.49	57.82	80.15	-1,971.04	-11,006.12	8,001.35	7,913.20	88.15	90.771		
10,800.00	7,230.26	7,386.00	7,004.69	92.07	57.82	80.15	-1,971.04	-11,006.12	7,902.37	7,814.05	88.32	89.473		
10,900.00	7,229.86	7,386.00	7,004.69	94.67	57.82	80.15	-1,971.04	-11,006.12	7,803.42	7,714.91	88.50	88.171		
11,000.00	7,229.45	7,386.00	7,004.69	97.28	57.82	80.15	-1,971.04	-11,006.12	7,704.49	7,615.79	88.70	86.864		
11,100.00	7,229.05	7,386.00	7,004.69	99.90	57.82	80.15	-1,971.04	-11,006.12	7,605.59	7,516.69	88.90	85.553		
11,200.00	7,228.64	7,386.00	7,004.69	102.54	57.82	80.15	-1,971.04	-11,006.12	7,506.72	7,417.61	89.11	84.238		
11,300.00	7,228.24	7,386.00	7,004.69	105.19	57.82	80.15	-1,971.04	-11,006.12	7,407.88	7,318.54	89.34	82.919		
11,400.00	7,227.83	7,386.00	7,004.69	107.85	57.82	80.15	-1,971.04	-11,006.12	7,309.07	7,219.49	89.58	81.596		
11,500.00	7,227.42	7,386.00	7,004.69	110.52	57.82	80.15	-1,971.04	-11,006.12	7,210.30	7,120.47	89.83	80.268		
11,600.00	7,227.02	7,386.00	7,004.69	113.20	57.82	80.15	-1,971.04	-11,006.12	7,111.56	7,021.46	90.09	78.936		
11,700.00	7,226.61	7,386.00	7,004.69	115.89	57.82	80.15	-1,971.04	-11,006.12	7,012.85	6,922.48	90.37	77.600		
11,800.00	7,226.21	7,386.00	7,004.69	118.59	57.82	80.15	-1,971.04	-11,006.12	6,914.18	6,823.52	90.67	76.259		
11,900.00	7,225.80	7,386.00	7,004.69	121.29	57.82	80.15	-1,971.04	-11,006.12	6,815.55	6,724.58	90.98	74.915		
12,000.00	7,225.40	7,386.00	7,004.69	124.00	57.82	80.15	-1,971.04	-11,006.12	6,716.96	6,625.66	91.30	73.566		
12,100.00	7,224.99	7,386.00	7,004.69	126.72	57.82	80.15	-1,971.04	-11,006.12	6,618.42	6,526.77	91.65	72.214		
12,200.00	7,224.58	7,386.00	7,004.69	129.44	57.82	80.15	-1,971.04	-11,006.12	6,519.92	6,427.90	92.01	70.857		
12,300.00	7,224.18	7,386.00	7,004.69	132.17	57.82	80.15	-1,971.04	-11,006.12	6,421.46	6,329.06	92.40	69.497		
12,400.00	7,223.77	7,407.83	7,026.49	134.91	57.88	81.23	-1,971.81	-11,006.92	6,323.00	6,230.15	92.85	68.102		
12,500.00	7,223.37	7,410.07	7,028.73	137.65	57.89	81.34	-1,971.89	-11,007.01	6,224.63	6,131.35	93.28	66.732		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-23-18(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 121-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
12,600.00	7,222.96	7,412.34	7,031.00	140.39	57.90	81.46	-1,971.97	-11,007.09	6,126.31	6,032.58	93.73	65.360		
12,700.00	7,222.55	7,414.64	7,033.29	143.14	57.90	81.57	-1,972.05	-11,007.18	6,028.04	5,933.83	94.21	63.984		
12,800.00	7,222.15	7,416.96	7,035.60	145.89	57.91	81.69	-1,972.13	-11,007.27	5,929.84	5,835.12	94.72	62.606		
12,900.00	7,221.74	7,419.30	7,037.94	148.65	57.91	81.80	-1,972.21	-11,007.36	5,831.69	5,736.44	95.25	61.225		
13,000.00	7,221.34	7,421.67	7,040.31	151.41	57.92	81.92	-1,972.30	-11,007.45	5,733.60	5,637.79	95.81	59.842		
13,100.00	7,220.93	7,424.06	7,042.70	154.18	57.93	82.04	-1,972.38	-11,007.54	5,635.58	5,539.18	96.41	58.457		
13,200.00	7,220.53	7,426.49	7,045.12	156.94	57.93	82.16	-1,972.47	-11,007.64	5,537.63	5,440.60	97.03	57.069		
13,300.00	7,220.12	7,428.94	7,047.57	159.72	57.94	82.29	-1,972.55	-11,007.74	5,439.76	5,342.06	97.70	55.681		
13,400.00	7,219.71	7,431.41	7,050.04	162.49	57.95	82.41	-1,972.64	-11,007.83	5,341.96	5,243.56	98.39	54.291		
13,500.00	7,219.31	7,433.92	7,052.54	165.27	57.95	82.54	-1,972.73	-11,007.93	5,244.24	5,145.10	99.13	52.900		
13,600.00	7,218.90	7,436.45	7,055.07	168.05	57.96	82.66	-1,972.82	-11,008.03	5,146.60	5,046.69	99.92	51.510		
13,700.00	7,218.50	7,439.02	7,057.63	170.83	57.97	82.79	-1,972.90	-11,008.14	5,049.06	4,948.32	100.74	50.119		
13,800.00	7,218.09	7,441.61	7,060.22	173.61	57.97	82.92	-1,973.00	-11,008.24	4,951.62	4,850.00	101.62	48.729		
13,900.00	7,217.69	7,444.23	7,062.84	176.40	57.98	83.06	-1,973.09	-11,008.35	4,854.27	4,751.73	102.54	47.340		
14,000.00	7,217.28	7,446.88	7,065.49	179.19	57.99	83.19	-1,973.18	-11,008.46	4,757.04	4,653.52	103.52	45.953		
14,100.00	7,216.87	7,449.57	7,068.17	181.98	58.00	83.32	-1,973.27	-11,008.57	4,659.92	4,555.36	104.56	44.568		
14,200.00	7,216.47	7,452.28	7,070.88	184.78	58.00	83.46	-1,973.37	-11,008.68	4,562.92	4,457.26	105.66	43.186		
14,300.00	7,216.06	7,455.03	7,073.62	187.57	58.01	83.60	-1,973.46	-11,008.79	4,466.05	4,359.23	106.82	41.808		
14,400.00	7,215.66	7,457.81	7,076.40	190.37	58.02	83.74	-1,973.56	-11,008.91	4,369.32	4,261.26	108.06	40.435		
14,500.00	7,215.25	7,460.62	7,079.21	193.17	58.03	83.88	-1,973.66	-11,009.03	4,272.74	4,163.36	109.37	39.066		
14,600.00	7,214.85	7,463.47	7,082.05	195.97	58.03	84.03	-1,973.75	-11,009.15	4,176.31	4,065.55	110.76	37.705		
14,700.00	7,214.44	7,466.35	7,084.93	198.77	58.04	84.17	-1,973.85	-11,009.27	4,080.06	3,967.81	112.24	36.350		
14,800.00	7,214.03	7,469.27	7,087.85	201.58	58.05	84.32	-1,973.95	-11,009.39	3,983.99	3,870.17	113.82	35.003		
14,900.00	7,213.63	7,472.22	7,090.79	204.38	58.06	84.47	-1,974.06	-11,009.52	3,888.11	3,772.61	115.49	33.665		
15,000.00	7,213.22	7,475.21	7,093.78	207.19	58.07	84.62	-1,974.16	-11,009.65	3,792.44	3,675.16	117.28	32.338		
15,100.00	7,212.82	7,478.24	7,096.80	210.00	58.07	84.78	-1,974.26	-11,009.78	3,697.00	3,577.82	119.17	31.022		
15,200.00	7,212.41	7,481.31	7,099.86	212.81	58.08	84.93	-1,974.37	-11,009.91	3,601.80	3,480.60	121.20	29.718		
15,300.00	7,212.01	7,484.41	7,102.96	215.62	58.09	85.09	-1,974.48	-11,010.05	3,506.87	3,383.51	123.36	28.428		
15,400.00	7,211.60	7,487.55	7,106.10	218.43	58.10	85.25	-1,974.58	-11,010.19	3,412.22	3,286.56	125.66	27.153		
15,500.00	7,211.19	7,490.74	7,109.28	221.25	58.11	85.41	-1,974.69	-11,010.33	3,317.88	3,189.75	128.13	25.895		
15,600.00	7,210.79	7,493.96	7,112.49	224.06	58.12	85.58	-1,974.80	-11,010.47	3,223.88	3,093.12	130.76	24.654		
15,700.00	7,210.38	7,497.22	7,115.75	226.88	58.12	85.74	-1,974.91	-11,010.62	3,130.25	2,996.66	133.59	23.433		
15,794.94	7,210.00	7,500.36	7,118.89	229.55	58.13	85.90	-1,975.02	-11,010.76	3,041.72	2,905.27	136.45	22.292 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-32-12(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 120-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	34.00	3.28	3.28	-105.77	-2,531.02	-8,960.15	9,310.83					
100.00	100.00	0.00	34.00	3.28	3.28	-105.77	-2,531.02	-8,960.15	9,311.00	9,304.44	6.56	1,418.299		
200.00	200.00	59.22	93.22	3.34	3.28	-105.78	-2,531.41	-8,960.39	9,311.72	9,305.10	6.62	1,406.640		
300.00	299.98	577.00	610.23	3.44	3.96	71.74	-2,516.82	-8,959.24	9,310.66	9,303.25	7.41	1,256.468		
400.00	399.84	577.00	610.23	3.59	3.96	71.83	-2,516.82	-8,959.24	9,306.23	9,298.67	7.55	1,232.175		
500.00	499.45	621.05	653.94	3.79	4.07	71.97	-2,511.37	-8,959.79	9,301.46	9,293.60	7.87	1,182.506		
600.00	598.70	667.00	699.45	4.03	4.21	72.14	-2,505.17	-8,960.97	9,296.40	9,288.17	8.24	1,128.622		
700.00	697.47	732.17	763.87	4.31	4.41	72.37	-2,495.55	-8,963.16	9,290.82	9,282.09	8.73	1,064.694		
800.00	795.62	905.40	934.48	4.64	5.06	72.88	-2,466.13	-8,969.09	9,283.81	9,274.12	9.69	957.754		
900.00	893.06	993.32	1,020.58	5.00	5.44	73.26	-2,448.69	-8,972.40	9,275.60	9,265.17	10.43	889.287		
1,000.00	989.64	1,072.79	1,097.95	5.40	5.81	73.66	-2,430.94	-8,976.04	9,266.70	9,255.50	11.20	827.459		
1,100.00	1,085.27	1,149.39	1,172.08	5.83	6.21	74.09	-2,412.05	-8,980.03	9,257.11	9,245.09	12.02	770.208		
1,200.00	1,179.82	1,201.69	1,222.41	6.29	6.49	74.46	-2,398.19	-8,983.14	9,247.09	9,234.32	12.77	724.257		
1,300.00	1,273.17	1,259.40	1,277.67	6.79	6.83	74.88	-2,381.98	-8,986.98	9,236.74	9,223.14	13.60	679.292		
1,400.00	1,365.21	1,321.86	1,337.06	7.33	7.21	75.34	-2,363.21	-8,991.54	9,226.03	9,211.52	14.51	636.014		
1,500.00	1,455.84	1,375.85	1,388.05	7.89	7.57	75.78	-2,345.98	-8,995.82	9,215.05	9,199.62	15.42	597.458		
1,600.00	1,544.94	1,417.00	1,426.69	8.50	7.85	76.19	-2,332.26	-8,999.28	9,203.89	9,187.60	16.29	564.890		
1,700.00	1,632.39	1,444.83	1,452.73	9.13	8.04	76.54	-2,322.77	-9,001.77	9,192.74	9,175.62	17.12	537.007		
1,800.00	1,718.11	1,467.01	1,473.45	9.80	8.20	76.86	-2,315.13	-9,003.89	9,181.69	9,163.76	17.94	511.875		
1,900.00	1,802.44	1,512.00	1,515.35	10.49	8.53	77.15	-2,299.43	-9,008.52	9,171.07	9,152.13	18.95	484.017		
2,000.00	1,886.68	1,512.00	1,515.35	11.20	8.53	77.15	-2,299.43	-9,008.52	9,161.18	9,141.53	19.65	466.211		
2,100.00	1,970.92	1,546.59	1,547.47	11.93	8.79	77.33	-2,287.17	-9,012.31	9,152.28	9,131.65	20.63	443.710		
2,200.00	2,055.17	1,585.70	1,583.71	12.66	9.09	77.52	-2,273.12	-9,016.70	9,144.20	9,122.56	21.65	422.392		
2,300.00	2,139.41	1,607.00	1,603.40	13.40	9.25	77.63	-2,265.38	-9,019.14	9,136.99	9,114.45	22.54	405.320		
2,400.00	2,223.66	1,648.22	1,641.41	14.14	9.58	77.84	-2,250.20	-9,024.03	9,130.64	9,107.03	23.61	386.726		
2,500.00	2,307.90	1,676.13	1,667.07	14.89	9.81	77.99	-2,239.76	-9,027.47	9,125.22	9,100.65	24.58	371.298		
2,600.00	2,392.14	1,701.00	1,689.87	15.65	10.01	78.11	-2,230.34	-9,030.63	9,120.72	9,095.20	25.52	357.357		
2,700.00	2,476.39	1,730.36	1,716.71	16.41	10.26	78.27	-2,219.08	-9,034.47	9,117.15	9,090.63	26.52	343.794		
2,800.00	2,560.63	1,756.69	1,740.71	17.17	10.48	78.40	-2,208.85	-9,038.02	9,114.51	9,087.01	27.49	331.524		
2,900.00	2,644.88	1,796.00	1,776.41	17.93	10.81	78.61	-2,193.35	-9,043.50	9,112.82	9,084.24	28.58	318.861		
3,000.00	2,729.12	1,856.46	1,831.11	18.70	11.35	78.93	-2,169.03	-9,052.01	9,111.96	9,082.09	29.87	305.062		
3,086.06	2,801.62	1,916.76	1,885.46	19.37	11.90	79.24	-2,144.28	-9,060.34	9,111.67	9,080.61	31.06	293.336		
3,100.00	2,813.36	1,922.89	1,890.97	19.47	11.96	79.28	-2,141.75	-9,061.19	9,111.68	9,080.46	31.22	291.823		
3,200.00	2,897.61	1,966.50	1,930.16	20.25	12.36	79.51	-2,123.60	-9,067.26	9,112.22	9,079.84	32.38	281.442		
3,300.00	2,981.85	1,989.00	1,950.35	21.02	12.57	79.63	-2,114.16	-9,070.41	9,113.62	9,080.29	33.33	273.397		
3,400.00	3,066.10	2,030.55	1,987.59	21.80	12.96	79.85	-2,096.72	-9,076.33	9,115.92	9,081.44	34.47	264.423		
3,500.00	3,150.34	2,058.67	2,012.79	22.58	13.22	80.00	-2,084.92	-9,080.43	9,119.16	9,083.67	35.49	256.976		
3,600.00	3,234.58	2,091.54	2,042.23	23.35	13.54	80.17	-2,071.16	-9,085.32	9,123.33	9,086.79	36.54	249.669		
3,700.00	3,318.83	2,192.38	2,132.46	24.13	14.51	80.71	-2,028.64	-9,100.12	9,128.19	9,089.94	38.25	238.641		
3,800.00	3,403.07	2,220.53	2,157.62	24.92	14.78	80.86	-2,016.70	-9,104.25	9,133.80	9,094.54	39.26	232.627		
3,900.00	3,487.32	2,256.49	2,189.73	25.70	15.13	81.05	-2,001.43	-9,109.56	9,140.29	9,099.94	40.35	226.534		
4,000.00	3,571.56	2,291.63	2,221.11	26.48	15.48	81.24	-1,986.49	-9,114.82	9,147.66	9,106.24	41.42	220.839		
4,100.00	3,655.80	2,326.22	2,252.01	27.27	15.82	81.42	-1,971.85	-9,120.07	9,155.91	9,113.43	42.49	215.495		
4,200.00	3,740.05	2,369.00	2,290.24	28.05	16.24	81.65	-1,953.83	-9,126.65	9,165.06	9,121.43	43.63	210.065		
4,300.00	3,824.29	2,369.00	2,290.24	28.84	16.24	81.65	-1,953.83	-9,126.65	9,175.13	9,130.79	44.35	206.896		
4,400.00	3,908.54	2,413.42	2,329.97	29.62	16.68	81.89	-1,935.24	-9,133.67	9,186.06	9,140.56	45.49	201.917		
4,500.00	3,992.78	2,438.64	2,352.53	30.41	16.93	82.02	-1,924.74	-9,137.76	9,197.95	9,151.50	46.45	198.025		
4,600.00	4,077.03	2,464.00	2,375.22	31.20	17.18	82.15	-1,914.22	-9,141.96	9,210.77	9,163.37	47.40	194.325		
4,700.00	4,161.27	2,526.28	2,430.97	31.98	17.80	82.48	-1,888.48	-9,152.33	9,224.40	9,175.70	48.71	189.388		
4,800.00	4,245.51	2,580.59	2,479.62	32.77	18.34	82.77	-1,866.09	-9,161.34	9,238.75	9,188.82	49.93	185.037		
4,900.00	4,329.76	2,626.98	2,521.26	33.56	18.79	83.01	-1,847.16	-9,169.09	9,253.87	9,202.80	51.07	181.210		
5,000.00	4,414.00	2,718.34	2,603.35	34.35	19.70	83.49	-1,810.05	-9,184.29	9,269.71	9,217.07	52.64	176.090		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-32-12(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 120-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	7,548.26	7,162.93	79.36	53.28	89.04	-613.90	-9,633.57	7,364.14	7,260.73	103.41	71.215		
10,400.00	7,231.89	7,548.81	7,163.47	81.86	53.28	89.05	-613.89	-9,633.58	7,269.99	7,166.04	103.95	69.940		
10,500.00	7,231.48	7,549.35	7,164.02	84.38	53.28	89.07	-613.89	-9,633.58	7,175.99	7,071.47	104.52	68.657		
10,600.00	7,231.08	7,549.89	7,164.56	86.93	53.28	89.08	-613.89	-9,633.59	7,082.16	6,977.03	105.13	67.367		
10,700.00	7,230.67	7,550.43	7,165.09	89.49	53.28	89.09	-613.89	-9,633.59	6,988.50	6,882.72	105.78	66.069		
10,800.00	7,230.26	7,550.96	7,165.63	92.07	53.28	89.10	-613.88	-9,633.60	6,895.02	6,788.55	106.46	64.765		
10,900.00	7,229.86	7,551.49	7,166.15	94.67	53.28	89.12	-613.88	-9,633.60	6,801.72	6,694.53	107.19	63.455		
11,000.00	7,229.45	7,552.01	7,166.68	97.28	53.29	89.13	-613.88	-9,633.61	6,708.61	6,600.65	107.96	62.140		
11,100.00	7,229.05	7,552.53	7,167.20	99.90	53.29	89.14	-613.88	-9,633.61	6,615.71	6,506.94	108.77	60.821		
11,200.00	7,228.64	7,553.05	7,167.72	102.54	53.29	89.15	-613.87	-9,633.61	6,523.02	6,413.39	109.63	59.499		
11,300.00	7,228.24	7,553.56	7,168.23	105.19	53.29	89.17	-613.87	-9,633.62	6,430.55	6,320.01	110.54	58.175		
11,400.00	7,227.83	7,554.07	7,168.74	107.85	53.29	89.18	-613.87	-9,633.62	6,338.30	6,226.81	111.49	56.849		
11,500.00	7,227.42	7,554.58	7,169.25	110.52	53.29	89.19	-613.87	-9,633.63	6,246.29	6,133.79	112.50	55.523		
11,600.00	7,227.02	7,555.08	7,169.75	113.20	53.29	89.20	-613.87	-9,633.63	6,154.54	6,040.98	113.56	54.198		
11,700.00	7,226.61	7,555.58	7,170.25	115.89	53.29	89.21	-613.86	-9,633.64	6,063.04	5,948.37	114.67	52.874		
11,800.00	7,226.21	7,556.07	7,170.74	118.59	53.30	89.22	-613.86	-9,633.64	5,971.82	5,855.98	115.84	51.553		
11,900.00	7,225.80	7,556.57	7,171.23	121.29	53.30	89.24	-613.86	-9,633.64	5,880.88	5,763.81	117.07	50.236		
12,000.00	7,225.40	7,557.06	7,171.72	124.00	53.30	89.25	-613.86	-9,633.65	5,790.24	5,671.88	118.35	48.924		
12,100.00	7,224.99	7,557.54	7,172.21	126.72	53.30	89.26	-613.85	-9,633.65	5,699.91	5,580.21	119.70	47.617		
12,200.00	7,224.58	7,558.02	7,172.69	129.44	53.30	89.27	-613.85	-9,633.66	5,609.91	5,488.79	121.12	46.318		
12,300.00	7,224.18	7,558.50	7,173.17	132.17	53.30	89.28	-613.85	-9,633.66	5,520.26	5,397.66	122.60	45.026		
12,400.00	7,223.77	7,558.97	7,173.64	134.91	53.30	89.29	-613.85	-9,633.66	5,430.96	5,306.81	124.15	43.744		
12,500.00	7,223.37	7,559.45	7,174.11	137.65	53.30	89.30	-613.85	-9,633.67	5,342.05	5,216.27	125.78	42.472		
12,600.00	7,222.96	7,559.91	7,174.58	140.39	53.31	89.31	-613.84	-9,633.67	5,253.53	5,126.06	127.48	41.212		
12,700.00	7,222.55	7,560.38	7,175.05	143.14	53.31	89.32	-613.84	-9,633.67	5,165.44	5,036.19	129.25	39.964		
12,800.00	7,222.15	7,560.84	7,175.51	145.89	53.31	89.33	-613.84	-9,633.68	5,077.78	4,946.67	131.11	38.729		
12,900.00	7,221.74	7,561.30	7,175.97	148.65	53.31	89.35	-613.84	-9,633.68	4,990.59	4,857.54	133.05	37.510		
13,000.00	7,221.34	7,561.76	7,176.42	151.41	53.31	89.36	-613.84	-9,633.69	4,903.89	4,768.82	135.07	36.305		
13,100.00	7,220.93	7,562.21	7,176.88	154.18	53.31	89.37	-613.83	-9,633.69	4,817.70	4,680.52	137.19	35.118		
13,200.00	7,220.53	7,562.66	7,177.33	156.94	53.31	89.38	-613.83	-9,633.69	4,732.06	4,592.67	139.39	33.947		
13,300.00	7,220.12	7,563.11	7,177.77	159.72	53.31	89.39	-613.83	-9,633.70	4,646.99	4,505.30	141.70	32.796		
13,400.00	7,219.71	7,563.55	7,178.22	162.49	53.31	89.40	-613.83	-9,633.70	4,562.53	4,418.43	144.09	31.663		
13,500.00	7,219.31	7,563.99	7,178.66	165.27	53.32	89.41	-613.83	-9,633.70	4,478.70	4,332.11	146.60	30.551		
13,600.00	7,218.90	7,564.43	7,179.09	168.05	53.32	89.42	-613.82	-9,633.71	4,395.55	4,246.35	149.20	29.460		
13,700.00	7,218.50	7,564.86	7,179.53	170.83	53.32	89.43	-613.82	-9,633.71	4,313.12	4,161.20	151.92	28.391		
13,800.00	7,218.09	7,565.30	7,179.96	173.61	53.32	89.44	-613.82	-9,633.71	4,231.45	4,076.70	154.74	27.345		
13,900.00	7,217.69	7,565.72	7,180.39	176.40	53.32	89.45	-613.82	-9,633.72	4,150.58	3,992.89	157.69	26.322		
14,000.00	7,217.28	7,566.15	7,180.82	179.19	53.32	89.46	-613.82	-9,633.72	4,070.55	3,909.80	160.75	25.323		
14,100.00	7,216.87	7,566.57	7,181.24	181.98	53.32	89.47	-613.81	-9,633.72	3,991.43	3,827.50	163.93	24.348		
14,200.00	7,216.47	7,567.00	7,181.66	184.78	53.32	89.48	-613.81	-9,633.73	3,913.27	3,746.03	167.24	23.399		
14,300.00	7,216.06	7,567.41	7,182.08	187.57	53.32	89.49	-613.81	-9,633.73	3,836.11	3,665.44	170.67	22.476		
14,400.00	7,215.66	7,567.83	7,182.49	190.37	53.33	89.50	-613.81	-9,633.73	3,760.04	3,585.80	174.24	21.580		
14,500.00	7,215.25	7,568.24	7,182.91	193.17	53.33	89.51	-613.81	-9,633.74	3,685.11	3,507.17	177.94	20.710		
14,600.00	7,214.85	7,568.65	7,183.32	195.97	53.33	89.52	-613.81	-9,633.74	3,611.39	3,429.61	181.78	19.867		
14,700.00	7,214.44	7,569.06	7,183.73	198.77	53.33	89.53	-613.80	-9,633.74	3,538.96	3,353.21	185.75	19.052		
14,800.00	7,214.03	7,569.46	7,184.13	201.58	53.33	89.53	-613.80	-9,633.75	3,467.91	3,278.05	189.86	18.266		
14,900.00	7,213.63	7,569.87	7,184.53	204.38	53.33	89.54	-613.80	-9,633.75	3,398.31	3,204.20	194.11	17.507		
15,000.00	7,213.22	7,570.27	7,184.93	207.19	53.33	89.55	-613.80	-9,633.75	3,330.26	3,131.77	198.49	16.778		
15,100.00	7,212.82	7,570.66	7,185.33	210.00	53.33	89.56	-613.80	-9,633.76	3,263.85	3,060.84	203.01	16.077		
15,200.00	7,212.41	7,571.06	7,185.72	212.81	53.33	89.57	-613.79	-9,633.76	3,199.20	2,991.53	207.67	15.406		
15,300.00	7,212.01	7,571.45	7,186.12	215.62	53.33	89.58	-613.79	-9,633.76	3,136.40	2,923.95	212.45	14.763		
15,400.00	7,211.60	7,571.84	7,186.51	218.43	53.34	89.59	-613.79	-9,633.77	3,075.57	2,858.21	217.35	14.150		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-32-12(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 120-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,500.00	7,211.19	7,572.23	7,186.89	221.25	53.34	89.60	-613.79	-9,633.77	3,016.82	2,794.45	222.37	13.567	
15,600.00	7,210.79	7,572.61	7,187.28	224.06	53.34	89.61	-613.79	-9,633.77	2,960.29	2,732.80	227.50	13.013	
15,700.00	7,210.38	7,572.99	7,187.66	226.88	53.34	89.62	-613.79	-9,633.77	2,906.11	2,673.39	232.71	12.488	
15,794.94	7,210.00	7,573.36	7,188.02	229.55	53.34	89.63	-613.78	-9,633.78	2,856.95	2,619.21	237.74	12.017	CC, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-42-11(PR_150CC) - OH - MWD													Offset Site Error:	0.00 ft
Survey Program: 57-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2,150.83	2,087.59	3.28	14.89	-102.86	-1,998.85	-8,755.09	9,219.82					
100.00	100.00	2,207.00	2,138.89	3.28	15.40	-102.74	-1,977.15	-8,747.88	9,197.37	9,179.58	17.79	517.091		
200.00	200.00	2,248.82	2,177.13	3.34	15.77	-102.64	-1,961.04	-8,742.69	9,175.48	9,157.32	18.16	505.377		
300.00	299.98	2,302.00	2,225.88	3.44	16.24	75.26	-1,940.71	-8,736.48	9,153.87	9,135.20	18.67	490.338		
400.00	399.84	2,348.87	2,268.91	3.59	16.65	75.82	-1,922.90	-8,731.17	9,131.92	9,112.74	19.18	476.178		
500.00	499.45	2,534.40	2,438.81	3.79	18.32	76.79	-1,851.79	-8,708.96	9,108.55	9,087.67	20.88	436.200		
600.00	598.70	2,585.00	2,484.87	4.03	18.78	77.43	-1,831.66	-8,703.13	9,084.79	9,063.25	21.53	421.909		
700.00	697.47	2,636.38	2,531.60	4.31	19.25	78.08	-1,811.06	-8,697.44	9,060.85	9,038.61	22.24	407.382		
800.00	795.62	2,686.00	2,581.00	4.64	19.71	78.97	-1,766.19	-8,684.94	9,036.40	9,027.98	23.22	392.909		
900.00	893.06	2,908.84	2,778.60	5.00	21.80	80.09	-1,700.51	-8,665.83	9,010.75	8,985.49	25.26	356.759		
1,000.00	989.64	2,964.00	2,828.67	5.40	22.32	80.84	-1,678.36	-8,659.17	8,985.07	8,958.94	26.13	343.834		
1,100.00	1,085.27	3,023.43	2,882.94	5.83	22.86	81.61	-1,655.24	-8,651.93	8,959.42	8,932.35	27.07	331.024		
1,200.00	1,179.82	3,093.64	2,947.43	6.29	23.50	82.43	-1,628.91	-8,643.15	8,933.72	8,905.60	28.12	317.647		
1,300.00	1,273.17	3,161.73	3,009.86	6.79	24.12	83.26	-1,603.05	-8,634.75	8,908.07	8,878.87	29.20	305.034		
1,400.00	1,365.21	3,239.84	3,081.38	7.33	24.83	84.15	-1,573.16	-8,625.14	8,882.49	8,852.08	30.41	292.086		
1,500.00	1,455.84	3,280.45	3,118.63	7.89	25.19	84.87	-1,557.79	-8,620.13	8,857.15	8,825.81	31.34	282.627		
1,600.00	1,544.94	3,316.34	3,151.72	8.50	25.51	85.56	-1,544.60	-8,615.74	8,832.29	8,800.02	32.27	273.738		
1,700.00	1,632.39	3,346.00	3,179.19	9.13	25.77	86.21	-1,534.01	-8,612.14	8,807.97	8,774.79	33.18	265.459		
1,800.00	1,718.11	3,375.57	3,206.65	9.80	26.02	86.85	-1,523.62	-8,608.63	8,784.29	8,750.17	34.12	257.431		
1,900.00	1,802.44	3,400.29	3,229.66	10.49	26.24	87.12	-1,515.02	-8,605.78	8,761.38	8,726.32	35.06	249.912		
2,000.00	1,886.68	3,440.00	3,266.68	11.20	26.57	87.33	-1,501.36	-8,601.39	8,739.40	8,703.27	36.13	241.880		
2,100.00	1,970.92	3,514.95	3,336.74	11.93	27.20	87.73	-1,476.09	-8,593.03	8,718.19	8,680.71	37.48	232.599		
2,200.00	2,055.17	3,563.58	3,382.30	12.66	27.60	87.98	-1,460.03	-8,587.40	8,697.44	8,658.80	38.64	225.085		
2,300.00	2,139.41	3,611.44	3,414.46	13.40	29.65	89.29	-1,379.03	-8,556.32	8,676.77	8,635.47	41.30	210.097		
2,400.00	2,223.66	3,681.71	3,679.99	14.14	30.25	89.66	-1,355.52	-8,546.84	8,656.16	8,613.50	42.65	202.936		
2,500.00	2,307.90	3,919.00	3,714.59	14.89	30.57	89.86	-1,342.54	-8,541.80	8,636.17	8,592.40	43.77	197.311		
2,600.00	2,392.14	3,959.30	3,751.87	15.65	30.93	90.08	-1,328.20	-8,536.50	8,617.04	8,572.11	44.93	191.798		
2,700.00	2,476.39	3,984.96	3,775.58	16.41	31.15	90.22	-1,318.94	-8,533.26	8,598.87	8,552.90	45.97	187.036		
2,800.00	2,560.63	4,015.00	3,803.31	17.17	31.42	90.39	-1,307.98	-8,529.60	8,581.66	8,534.60	47.06	182.349		
2,900.00	2,644.88	4,053.32	3,838.65	17.93	31.76	90.60	-1,293.87	-8,525.05	8,565.36	8,517.14	48.23	177.605		
3,000.00	2,729.12	4,099.84	3,881.51	18.70	32.18	90.86	-1,276.62	-8,519.58	8,549.89	8,500.43	49.47	172.846		
3,100.00	2,813.36	4,143.50	3,921.71	19.47	32.57	91.10	-1,260.36	-8,514.52	8,535.26	8,484.58	50.68	168.402		
3,200.00	2,897.61	4,186.65	3,961.48	20.25	32.95	91.34	-1,244.37	-8,509.59	8,521.49	8,469.59	51.90	164.186		
3,300.00	2,981.85	4,487.52	4,237.84	21.02	35.68	93.01	-1,131.59	-8,472.13	8,508.62	8,453.32	55.30	153.852		
3,400.00	3,066.10	4,541.77	4,286.54	21.80	36.22	93.32	-1,108.89	-8,464.55	8,494.82	8,438.14	56.68	149.874		
3,500.00	3,150.34	4,595.26	4,334.05	22.58	36.76	93.63	-1,085.48	-8,457.13	8,481.87	8,423.81	58.06	146.098		
3,600.00	3,234.58	4,666.70	4,397.42	23.35	37.49	94.05	-1,054.05	-8,447.12	8,469.69	8,410.07	59.62	142.069		
3,700.00	3,318.83	4,679.00	4,408.34	24.13	37.61	94.12	-1,048.68	-8,445.38	8,458.40	8,397.79	60.61	139.556		
3,800.00	3,403.07	4,722.66	4,447.23	24.92	38.05	94.38	-1,029.77	-8,439.31	8,448.02	8,386.13	61.90	136.488		
3,900.00	3,487.32	4,747.03	4,469.01	25.70	38.30	94.52	-1,019.35	-8,436.03	8,438.72	8,375.73	63.00	133.952		
4,000.00	3,571.56	4,774.00	4,493.17	26.48	38.57	94.68	-1,007.91	-8,432.50	8,430.45	8,366.33	64.12	131.472		
4,100.00	3,655.80	4,801.04	4,517.50	27.27	38.83	94.83	-996.61	-8,429.04	8,423.19	8,357.95	65.24	129.117		
4,200.00	3,740.05	4,831.79	4,545.31	28.05	39.12	95.01	-984.06	-8,425.20	8,416.91	8,350.53	66.38	126.797		
4,300.00	3,824.29	4,869.00	4,579.16	28.84	39.48	95.22	-969.30	-8,420.68	8,411.62	8,344.04	67.58	124.465		
4,400.00	3,908.54	4,941.46	4,645.52	29.62	40.14	95.63	-941.55	-8,411.94	8,407.18	8,338.10	69.08	121.709		
4,500.00	3,992.78	5,002.64	4,701.76	30.41	40.70	95.97	-918.66	-8,404.47	8,403.40	8,332.94	70.47	119.252		
4,600.00	4,077.03	5,053.60	4,748.43	31.20	41.17	96.26	-899.15	-8,398.24	8,400.46	8,328.70	71.77	117.051		
4,700.00	4,161.27	5,088.19	4,780.08	31.98	41.48	96.46	-885.83	-8,394.05	8,398.42	8,325.51	72.92	115.177		
4,800.00	4,245.51	5,122.39	4,811.48	32.77	41.79	96.65	-872.89	-8,390.03	8,397.35	8,323.29	74.06	113.386		
4,867.40	4,302.30	5,152.00	4,838.75	33.30	42.06	96.81	-861.88	-8,386.64	8,397.17	8,322.28	74.89	112.133		
4,900.00	4,329.76	5,152.00	4,838.75	33.56	42.06	96.81	-861.88	-8,386.64	8,397.23	8,322.07	75.16	111.729		
5,000.00	4,414.00	5,194.32	4,877.89	34.35	42.43	97.05	-846.48	-8,381.95	8,398.05	8,321.71	76.35	110.000		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-42-11(PR_150CC) - OH - MWD													Offset Site Error:	0.00 ft
Survey Program: 57-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	5,232.15	4,913.03	35.14	42.76	97.26	-833.06	-8,377.91	8,399.81	8,322.31	77.49	108.396		
5,200.00	4,582.49	5,271.77	4,949.99	35.93	43.10	97.47	-819.39	-8,373.83	8,402.48	8,323.84	78.64	106.852		
5,300.00	4,666.73	5,313.14	4,988.77	36.72	43.44	97.70	-805.57	-8,369.74	8,406.05	8,326.26	79.78	105.360		
5,400.00	4,750.98	5,342.00	5,015.93	37.51	43.68	97.85	-796.21	-8,366.99	8,410.51	8,329.69	80.82	104.062		
5,500.00	4,835.22	5,387.26	5,058.78	38.30	44.02	98.09	-782.19	-8,362.94	8,415.87	8,333.91	81.96	102.682		
5,600.00	4,919.47	5,437.00	5,106.25	39.09	44.40	98.35	-767.91	-8,358.92	8,422.18	8,339.06	83.13	101.317		
5,700.00	5,003.71	5,466.36	5,134.44	39.88	44.60	98.50	-760.00	-8,356.75	8,429.34	8,345.23	84.11	100.220		
5,800.00	5,088.06	5,514.73	5,181.11	40.67	44.93	98.80	-747.73	-8,353.43	8,437.29	8,352.08	85.21	99.014		
5,900.00	5,173.83	5,684.90	5,346.83	41.44	45.97	99.75	-710.84	-8,342.30	8,445.08	8,358.06	87.02	97.047		
6,000.00	5,261.34	5,836.77	5,496.26	42.18	46.77	100.53	-685.64	-8,332.36	8,451.83	8,363.28	88.55	95.445		
6,100.00	5,350.49	5,876.95	5,535.96	42.88	46.97	100.82	-679.98	-8,329.94	8,458.43	8,369.00	89.43	94.579		
6,200.00	5,441.16	5,930.62	5,589.15	43.56	47.21	101.14	-673.31	-8,327.22	8,465.14	8,374.81	90.34	93.708		
6,300.00	5,533.25	6,019.39	5,677.26	44.20	47.60	101.56	-663.33	-8,323.04	8,471.56	8,380.22	91.34	92.744		
6,400.00	5,626.65	6,092.05	5,749.49	44.82	47.90	101.90	-656.07	-8,319.94	8,477.64	8,385.41	92.23	91.916		
6,500.00	5,721.23	6,142.51	5,799.71	45.40	48.09	102.16	-651.47	-8,318.07	8,483.51	8,390.53	92.98	91.239		
6,600.00	5,816.89	6,192.00	5,848.98	45.94	48.28	102.40	-647.17	-8,316.56	8,489.30	8,395.61	93.69	90.611		
6,700.00	5,913.51	6,247.98	5,904.73	46.45	48.50	102.63	-642.35	-8,315.13	8,494.92	8,400.54	94.39	90.001		
6,800.00	6,010.97	6,321.62	5,978.07	46.93	48.77	102.89	-635.86	-8,313.56	8,500.31	8,405.18	95.12	89.363		
6,900.00	6,109.15	6,429.37	6,085.48	47.38	49.17	103.17	-627.52	-8,311.53	8,504.99	8,409.04	95.95	88.639		
7,000.00	6,207.93	6,537.38	6,193.24	47.80	49.54	103.40	-620.49	-8,309.76	8,508.83	8,412.10	96.73	87.966		
7,100.00	6,307.19	6,613.66	6,269.41	48.18	49.79	103.56	-616.29	-8,308.72	8,511.92	8,414.58	97.34	87.444		
7,200.00	6,406.82	6,684.44	6,340.10	48.53	50.01	103.67	-612.97	-8,308.25	8,514.61	8,416.71	97.89	86.978		
7,300.00	6,506.68	6,816.93	6,472.50	48.84	50.40	103.78	-608.22	-8,307.75	8,516.50	8,417.89	98.61	86.365		
7,400.00	6,606.66	6,937.13	6,592.67	49.10	50.74	16.83	-605.14	-8,307.12	8,517.09	8,417.88	99.22	85.845		
7,500.00	6,706.21	7,042.29	6,697.79	49.35	51.03	17.07	-602.72	-8,306.55	8,509.23	8,409.48	99.76	85.299		
7,600.00	6,803.22	7,149.87	6,805.35	49.59	51.33	17.77	-600.58	-8,305.95	8,486.48	8,386.18	100.29	84.615		
7,700.00	6,895.32	7,251.95	6,907.41	49.82	51.61	19.01	-598.96	-8,305.38	8,449.38	8,348.59	100.80	83.827		
7,800.00	6,980.23	7,340.11	6,995.57	50.03	51.85	20.94	-597.83	-8,304.90	8,398.94	8,297.71	101.22	82.974		
7,900.00	7,055.85	7,419.48	7,074.94	50.21	52.06	23.88	-597.01	-8,304.48	8,336.43	8,234.83	101.60	82.049		
8,000.00	7,120.34	7,501.78	7,157.22	50.36	52.28	28.42	-596.24	-8,303.96	8,263.39	8,161.41	101.97	81.036		
8,100.00	7,172.10	7,567.63	7,223.07	50.47	52.46	35.58	-595.61	-8,303.39	8,181.63	8,079.35	102.28	79.993		
8,200.00	7,209.85	7,600.81	7,256.25	50.55	52.55	47.11	-595.27	-8,303.07	8,093.29	7,990.80	102.49	78.966		
8,300.00	7,232.68	7,617.58	7,273.02	50.61	52.60	65.82	-595.09	-8,302.92	8,000.63	7,897.97	102.66	77.931		
8,400.00	7,240.00	7,622.51	7,277.95	50.65	52.61	91.58	-595.03	-8,302.88	7,905.91	7,803.09	102.82	76.890		
8,500.00	7,239.60	7,621.51	7,276.95	50.69	52.61	91.56	-595.04	-8,302.88	7,811.01	7,708.02	102.99	75.845		
8,600.00	7,239.19	7,620.51	7,275.95	50.75	52.60	91.54	-595.05	-8,302.89	7,716.23	7,613.06	103.17	74.788		
8,700.00	7,238.78	7,619.51	7,274.95	50.85	52.60	91.51	-595.06	-8,302.90	7,621.59	7,518.20	103.38	73.721		
8,800.00	7,238.38	7,618.50	7,273.94	51.02	52.60	91.49	-595.08	-8,302.91	7,527.08	7,423.47	103.62	72.642		
8,900.00	7,237.97	7,617.49	7,272.92	51.32	52.60	91.47	-595.09	-8,302.92	7,432.72	7,328.84	103.88	71.551		
9,000.00	7,237.57	7,616.47	7,271.91	51.95	52.59	91.44	-595.10	-8,302.93	7,338.51	7,234.34	104.17	70.449		
9,100.00	7,237.16	7,615.45	7,270.89	53.10	52.59	91.42	-595.11	-8,302.94	7,244.45	7,139.97	104.48	69.335		
9,200.00	7,236.76	7,614.42	7,269.86	54.69	52.59	91.40	-595.12	-8,302.95	7,150.56	7,045.73	104.83	68.211		
9,300.00	7,236.35	7,613.40	7,268.83	56.53	52.58	91.37	-595.13	-8,302.96	7,056.83	6,951.62	105.21	67.075		
9,400.00	7,235.94	7,612.36	7,267.80	58.53	52.58	91.35	-595.15	-8,302.97	6,963.28	6,857.66	105.62	65.928		
9,500.00	7,235.54	7,611.33	7,266.76	60.62	52.58	91.32	-595.16	-8,302.98	6,869.90	6,763.84	106.06	64.771		
9,600.00	7,235.13	7,610.28	7,265.72	62.80	52.58	91.30	-595.17	-8,302.99	6,776.72	6,670.17	106.55	63.604		
9,700.00	7,234.73	7,609.24	7,264.68	65.03	52.57	91.28	-595.18	-8,302.99	6,683.73	6,576.67	107.07	62.426		
9,800.00	7,234.32	7,608.19	7,263.63	67.32	52.57	91.25	-595.19	-8,303.00	6,590.95	6,483.33	107.63	61.240		
9,900.00	7,233.92	7,607.14	7,262.57	69.66	52.57	91.23	-595.20	-8,303.01	6,498.38	6,390.16	108.23	60.044		
10,000.00	7,233.51	7,606.08	7,261.52	72.03	52.56	91.20	-595.22	-8,303.02	6,406.04	6,297.17	108.87	58.841		
10,100.00	7,233.10	7,605.02	7,260.45	74.45	52.56	91.18	-595.23	-8,303.03	6,313.93	6,204.37	109.56	57.630		
10,200.00	7,232.70	7,603.95	7,259.39	76.89	52.56	91.15	-595.24	-8,303.04	6,222.06	6,111.76	110.30	56.412		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-42-11(PR_150CC) - OH - MWD													Offset Site Error: 0.00 ft	
Survey Program: 57-MWD													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,300.00	7,232.29	7,602.88	7,258.32	79.36	52.56	91.13	-595.25	-8,303.05	6,130.45	6,019.36	111.08	55.188		
10,400.00	7,231.89	7,612.33	7,267.77	81.86	52.58	91.35	-595.17	-8,302.94	6,039.07	5,927.12	111.96	53.941		
10,500.00	7,231.48	7,610.56	7,266.00	84.38	52.57	91.31	-595.19	-8,302.96	5,948.01	5,835.16	112.85	52.709		
10,600.00	7,231.08	7,608.80	7,264.24	86.93	52.57	91.27	-595.20	-8,302.98	5,857.23	5,743.44	113.79	51.474		
10,700.00	7,230.67	7,607.06	7,262.50	89.49	52.56	91.23	-595.22	-8,302.99	5,766.76	5,651.97	114.79	50.237		
10,800.00	7,230.26	7,605.32	7,260.76	92.07	52.56	91.19	-595.24	-8,303.01	5,676.60	5,560.75	115.85	48.998		
10,900.00	7,229.86	7,603.60	7,259.04	94.67	52.56	91.15	-595.25	-8,303.03	5,586.79	5,469.81	116.98	47.760		
11,000.00	7,229.45	7,601.89	7,257.33	97.28	52.55	91.11	-595.27	-8,303.05	5,497.32	5,379.15	118.17	46.522		
11,100.00	7,229.05	7,600.19	7,255.63	99.90	52.55	91.07	-595.29	-8,303.07	5,408.22	5,288.80	119.42	45.287		
11,200.00	7,228.64	7,598.51	7,253.95	102.54	52.54	91.03	-595.31	-8,303.09	5,319.51	5,198.76	120.75	44.056		
11,300.00	7,228.24	7,596.83	7,252.27	105.19	52.54	90.99	-595.32	-8,303.10	5,231.20	5,109.06	122.14	42.829		
11,400.00	7,227.83	7,595.17	7,250.61	107.85	52.53	90.95	-595.34	-8,303.12	5,143.33	5,019.72	123.61	41.609		
11,500.00	7,227.42	7,593.52	7,248.96	110.52	52.53	90.91	-595.35	-8,303.14	5,055.90	4,930.74	125.16	40.396		
11,600.00	7,227.02	7,591.88	7,247.32	113.20	52.52	90.87	-595.37	-8,303.15	4,968.95	4,842.16	126.79	39.192		
11,700.00	7,226.61	7,590.25	7,245.69	115.89	52.52	90.84	-595.39	-8,303.17	4,882.49	4,754.00	128.50	37.997		
11,800.00	7,226.21	7,588.63	7,244.07	118.59	52.52	90.80	-595.40	-8,303.19	4,796.57	4,666.28	130.29	36.815		
11,900.00	7,225.80	7,587.02	7,242.46	121.29	52.51	90.76	-595.42	-8,303.20	4,711.19	4,579.02	132.17	35.645		
12,000.00	7,225.40	7,585.43	7,240.87	124.00	52.51	90.73	-595.43	-8,303.22	4,626.41	4,492.26	134.14	34.489		
12,100.00	7,224.99	7,583.84	7,239.28	126.72	52.50	90.69	-595.45	-8,303.24	4,542.24	4,406.03	136.21	33.348		
12,200.00	7,224.58	7,582.27	7,237.71	129.44	52.50	90.65	-595.47	-8,303.25	4,458.72	4,320.35	138.37	32.224		
12,300.00	7,224.18	7,580.70	7,236.14	132.17	52.49	90.62	-595.48	-8,303.27	4,375.90	4,235.27	140.63	31.117		
12,400.00	7,223.77	7,579.15	7,234.59	134.91	52.49	90.58	-595.50	-8,303.28	4,293.80	4,150.82	142.99	30.029		
12,500.00	7,223.37	7,577.61	7,233.05	137.65	52.49	90.54	-595.51	-8,303.30	4,212.48	4,067.03	145.45	28.961		
12,600.00	7,222.96	7,576.07	7,231.51	140.39	52.48	90.51	-595.53	-8,303.31	4,131.98	3,983.96	148.02	27.914		
12,700.00	7,222.55	7,574.55	7,229.99	143.14	52.48	90.47	-595.54	-8,303.33	4,052.35	3,901.64	150.71	26.889		
12,800.00	7,222.15	7,573.03	7,228.48	145.89	52.47	90.44	-595.56	-8,303.34	3,973.64	3,820.14	153.50	25.887		
12,900.00	7,221.74	7,571.53	7,226.97	148.65	52.47	90.40	-595.57	-8,303.36	3,895.90	3,739.50	156.40	24.909		
13,000.00	7,221.34	7,570.04	7,225.48	151.41	52.47	90.37	-595.59	-8,303.37	3,819.20	3,659.78	159.42	23.956		
13,100.00	7,220.93	7,568.55	7,224.00	154.18	52.46	90.33	-595.60	-8,303.39	3,743.60	3,581.04	162.56	23.029		
13,200.00	7,220.53	7,567.08	7,222.52	156.94	52.46	90.30	-595.61	-8,303.40	3,669.17	3,503.35	165.81	22.128		
13,300.00	7,220.12	7,565.61	7,221.06	159.72	52.45	90.27	-595.63	-8,303.41	3,595.97	3,426.79	169.19	21.255		
13,400.00	7,219.71	7,564.16	7,219.60	162.49	52.45	90.23	-595.64	-8,303.43	3,524.10	3,351.42	172.68	20.409		
13,500.00	7,219.31	7,562.71	7,218.16	165.27	52.45	90.20	-595.66	-8,303.44	3,453.62	3,277.33	176.28	19.591		
13,600.00	7,218.90	7,561.28	7,216.72	168.05	52.44	90.17	-595.67	-8,303.45	3,384.63	3,204.62	180.00	18.803		
13,700.00	7,218.50	7,559.85	7,215.29	170.83	52.44	90.13	-595.68	-8,303.47	3,317.22	3,133.38	183.84	18.044		
13,800.00	7,218.09	7,558.43	7,213.87	173.61	52.43	90.10	-595.70	-8,303.48	3,251.48	3,063.70	187.78	17.316		
13,900.00	7,217.69	7,557.02	7,212.46	176.40	52.43	90.07	-595.71	-8,303.49	3,187.53	2,995.71	191.82	16.617		
14,000.00	7,217.28	7,555.62	7,211.06	179.19	52.43	90.04	-595.73	-8,303.51	3,125.47	2,929.51	195.96	15.950		
14,100.00	7,216.87	7,554.23	7,209.67	181.98	52.42	90.00	-595.74	-8,303.52	3,065.41	2,865.23	200.18	15.313		
14,200.00	7,216.47	7,552.84	7,208.29	184.78	52.42	89.97	-595.75	-8,303.53	3,007.48	2,803.00	204.49	14.708		
14,300.00	7,216.06	7,551.47	7,206.91	187.57	52.41	89.94	-595.77	-8,303.55	2,951.81	2,742.96	208.85	14.134		
14,400.00	7,215.66	7,550.10	7,205.55	190.37	52.41	89.91	-595.78	-8,303.56	2,898.51	2,685.25	213.26	13.591		
14,500.00	7,215.25	7,548.75	7,204.19	193.17	52.41	89.88	-595.79	-8,303.57	2,847.73	2,630.02	217.71	13.080		
14,600.00	7,214.85	7,547.40	7,202.84	195.97	52.40	89.85	-595.81	-8,303.58	2,799.59	2,577.43	222.17	12.601		
14,700.00	7,214.44	7,546.06	7,201.50	198.77	52.40	89.81	-595.82	-8,303.59	2,754.25	2,527.64	226.61	12.154		
14,800.00	7,214.03	7,544.72	7,200.17	201.58	52.40	89.78	-595.83	-8,303.61	2,711.84	2,480.81	231.03	11.738		
14,900.00	7,213.63	7,543.40	7,198.84	204.38	52.39	89.75	-595.84	-8,303.62	2,672.50	2,437.11	235.39	11.354		
15,000.00	7,213.22	7,542.08	7,197.53	207.19	52.39	89.72	-595.86	-8,303.63	2,636.37	2,396.71	239.66	11.000		
15,100.00	7,212.82	7,540.77	7,196.22	210.00	52.39	89.69	-595.87	-8,303.64	2,603.58	2,359.75	243.82	10.678		
15,200.00	7,212.41	7,539.47	7,194.92	212.81	52.38	89.66	-595.88	-8,303.65	2,574.25	2,326.41	247.84	10.387		
15,300.00	7,212.01	7,538.18	7,193.63	215.62	52.38	89.63	-595.89	-8,303.66	2,548.52	2,296.83	251.69	10.126		
15,400.00	7,211.60	7,536.90	7,192.34	218.43	52.38	89.60	-595.91	-8,303.67	2,526.48	2,271.14	255.34	9.895		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-42-11(PR_150CC) - OH - MWD												Offset Site Error:	0.00 ft
Survey Program: 57-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,500.00	7,211.19	7,535.62	7,191.07	221.25	52.37	89.57	-595.92	-8,303.69	2,508.24	2,249.48	258.76	9.693	
15,600.00	7,210.79	7,534.35	7,189.80	224.06	52.37	89.54	-595.93	-8,303.70	2,493.87	2,231.94	261.93	9.521	
15,700.00	7,210.38	7,533.09	7,188.54	226.88	52.37	89.51	-595.94	-8,303.71	2,483.46	2,218.62	264.83	9.377	
15,794.94	7,210.00	7,531.90	7,187.34	229.55	52.36	89.49	-595.95	-8,303.72	2,477.26	2,209.94	267.32	9.267	CC, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 34-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 168-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	34.00	3.28	3.28	-106.09	-2,596.94	-9,001.34	9,368.54					
100.00	100.00	37.31	71.31	3.28	3.28	-106.09	-2,596.86	-9,001.43	9,368.58	9,362.01	6.57	1,426.910		
200.00	200.00	93.84	127.83	3.34	3.29	-106.09	-2,596.43	-9,001.87	9,369.11	9,362.49	6.62	1,414.672		
300.00	299.98	168.00	201.98	3.44	3.30	71.27	-2,595.31	-9,003.02	9,369.59	9,362.85	6.74	1,390.717		
400.00	399.84	168.00	201.98	3.59	3.30	71.27	-2,595.31	-9,003.02	9,369.48	9,362.60	6.89	1,360.410		
500.00	499.45	211.32	245.27	3.79	3.33	71.31	-2,594.47	-9,004.19	9,368.94	9,361.83	7.11	1,317.429		
600.00	598.70	259.00	292.90	4.03	3.37	71.37	-2,593.56	-9,006.15	9,368.24	9,360.85	7.39	1,266.869		
700.00	697.47	259.00	292.90	4.31	3.37	71.39	-2,593.56	-9,006.15	9,367.03	9,359.34	7.68	1,219.363		
800.00	795.62	290.51	324.37	4.64	3.40	71.46	-2,593.05	-9,007.81	9,365.58	9,357.54	8.04	1,164.847		
900.00	893.06	318.27	352.08	5.00	3.44	71.53	-2,592.74	-9,009.45	9,363.80	9,355.36	8.44	1,110.067		
1,000.00	989.64	350.00	383.74	5.40	3.48	71.63	-2,592.55	-9,011.54	9,361.70	9,352.83	8.87	1,054.884		
1,100.00	1,085.27	401.30	434.91	5.83	3.56	71.77	-2,592.40	-9,015.20	9,359.16	9,349.78	9.38	997.324		
1,200.00	1,179.82	469.80	503.21	6.29	3.70	71.97	-2,592.26	-9,020.29	9,355.98	9,346.01	9.97	938.221		
1,300.00	1,273.17	532.00	565.24	6.79	3.84	72.18	-2,592.07	-9,025.02	9,352.02	9,341.42	10.60	882.388		
1,400.00	1,365.21	575.78	608.88	7.33	3.95	72.37	-2,592.01	-9,028.52	9,347.56	9,336.33	11.23	832.484		
1,500.00	1,455.84	609.95	642.92	7.89	4.04	72.55	-2,592.11	-9,031.46	9,342.79	9,330.92	11.87	786.868		
1,600.00	1,544.94	644.00	676.83	8.50	4.14	72.74	-2,592.35	-9,034.56	9,337.72	9,325.16	12.55	743.797		
1,700.00	1,632.39	702.95	735.51	9.13	4.32	73.02	-2,592.96	-9,040.15	9,332.24	9,318.90	13.34	699.586		
1,800.00	1,718.11	810.92	842.98	9.80	4.67	73.47	-2,594.34	-9,050.44	9,326.09	9,311.78	14.31	651.500		
1,900.00	1,802.44	881.59	913.33	10.49	4.91	73.74	-2,595.09	-9,057.12	9,319.38	9,304.16	15.22	612.244		
2,000.00	1,886.68	2,000.00	1,087.41	11.20	9.56	74.32	-2,595.49	-9,073.48	9,312.77	9,292.48	20.28	459.126		
2,100.00	1,970.92	1,096.00	1,126.81	11.93	5.72	74.45	-2,595.49	-9,076.96	9,305.97	9,288.61	17.37	535.823		
2,200.00	2,055.17	1,143.73	1,174.35	12.66	5.91	74.61	-2,595.37	-9,081.25	9,299.69	9,281.43	18.26	509.221		
2,300.00	2,139.41	1,190.00	1,220.36	13.40	6.09	74.77	-2,595.11	-9,086.12	9,294.56	9,275.39	19.16	485.029		
2,400.00	2,223.66	1,190.00	1,220.36	14.14	6.09	74.77	-2,595.11	-9,086.12	9,290.05	9,270.15	19.90	466.870		
2,500.00	2,307.90	1,190.00	1,220.36	14.89	6.09	74.77	-2,595.11	-9,086.12	9,286.61	9,265.97	20.64	449.959		
2,600.00	2,392.14	1,240.90	1,270.90	15.65	6.31	74.94	-2,594.76	-9,092.16	9,283.83	9,262.25	21.58	430.271		
2,700.00	2,476.39	1,285.00	1,314.63	16.41	6.50	75.09	-2,594.48	-9,097.85	9,282.01	9,259.51	22.49	412.634		
2,800.00	2,560.63	1,285.00	1,314.63	17.17	6.50	75.09	-2,594.48	-9,097.85	9,280.95	9,257.71	23.24	399.286		
2,880.19	2,628.19	1,322.71	1,351.99	17.78	6.67	75.22	-2,594.41	-9,102.99	9,280.67	9,256.68	24.00	386.775		
2,900.00	2,644.88	1,328.99	1,358.21	17.93	6.70	75.24	-2,594.43	-9,103.87	9,280.69	9,256.52	24.17	383.996		
3,000.00	2,729.12	1,379.00	1,407.70	18.70	6.92	75.40	-2,594.88	-9,111.05	9,281.29	9,256.17	25.12	369.453		
3,100.00	2,813.36	1,379.00	1,407.70	19.47	6.92	75.40	-2,594.88	-9,111.05	9,282.61	9,256.74	25.87	358.758		
3,200.00	2,897.61	1,421.56	1,449.76	20.25	7.12	75.54	-2,595.36	-9,117.51	9,284.73	9,257.93	26.80	346.422		
3,300.00	2,981.85	1,475.00	1,502.49	21.02	7.38	75.72	-2,595.54	-9,126.20	9,287.78	9,260.00	27.78	334.365		
3,400.00	3,066.10	1,475.00	1,502.49	21.80	7.38	75.72	-2,595.54	-9,126.20	9,291.46	9,262.93	28.53	325.684		
3,500.00	3,150.34	1,514.99	1,541.89	22.58	7.58	75.86	-2,595.58	-9,133.05	9,296.00	9,266.55	29.45	315.648		
3,600.00	3,234.58	1,570.00	1,596.02	23.35	7.85	76.05	-2,595.90	-9,142.85	9,301.38	9,270.94	30.44	305.579		
3,700.00	3,318.83	1,570.00	1,596.02	24.13	7.85	76.05	-2,595.90	-9,142.85	9,307.43	9,276.24	31.19	298.448		
3,800.00	3,403.07	1,623.54	1,648.63	24.92	8.13	76.23	-2,596.31	-9,152.78	9,314.21	9,282.04	32.17	289.536		
3,900.00	3,487.32	1,665.00	1,689.32	25.70	8.34	76.37	-2,596.56	-9,160.72	9,321.74	9,288.64	33.10	281.628		
4,000.00	3,571.56	1,665.00	1,689.32	26.48	8.34	76.37	-2,596.56	-9,160.72	9,330.14	9,296.30	33.84	275.710		
4,100.00	3,655.80	1,714.76	1,738.07	27.27	8.61	76.53	-2,596.79	-9,170.67	9,339.18	9,304.37	34.81	268.307		
4,200.00	3,740.05	1,759.00	1,781.31	28.05	8.85	76.68	-2,596.95	-9,180.02	9,349.20	9,313.45	35.75	261.518		
4,300.00	3,824.29	1,759.00	1,781.31	28.84	8.85	76.68	-2,596.95	-9,180.02	9,359.94	9,323.46	36.48	256.566		
4,400.00	3,908.54	1,802.96	1,824.20	29.62	9.10	76.83	-2,597.36	-9,189.65	9,371.49	9,334.07	37.42	250.440		
4,500.00	3,992.78	1,853.00	1,872.94	30.41	9.39	77.00	-2,598.53	-9,200.91	9,383.83	9,345.44	38.39	244.451		
4,600.00	4,077.03	1,880.88	1,900.07	31.20	9.55	77.09	-2,599.39	-9,207.29	9,396.82	9,357.57	39.25	239.434		
4,700.00	4,161.27	1,930.16	1,947.99	31.98	9.84	77.25	-2,600.88	-9,218.72	9,410.46	9,370.25	40.21	234.040		
4,800.00	4,245.51	1,983.23	1,999.54	32.77	10.16	77.42	-2,602.47	-9,231.21	9,424.68	9,383.49	41.19	228.806		
4,900.00	4,329.76	2,042.00	2,056.58	33.56	10.52	77.61	-2,604.21	-9,245.23	9,439.46	9,397.26	42.20	223.673		
5,000.00	4,414.00	2,042.00	2,056.58	34.35	10.52	77.61	-2,604.21	-9,245.23	9,455.00	9,412.09	42.91	220.347		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 34-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 168-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	2,042.00	2,056.58	35.14	10.52	77.61	-2,604.21	-9,245.23	9,471.56	9,427.95	43.61	217.182		
5,200.00	4,582.49	2,042.00	2,056.58	35.93	10.52	77.61	-2,604.21	-9,245.23	9,489.15	9,444.85	44.31	214.170		
5,300.00	4,666.73	2,086.83	2,099.92	36.72	10.81	77.76	-2,605.44	-9,256.65	9,506.98	9,461.75	45.24	210.160		
5,400.00	4,750.98	2,137.00	2,147.98	37.51	11.14	77.92	-2,606.63	-9,270.97	9,526.75	9,480.56	46.19	206.232		
5,500.00	4,835.22	2,137.00	2,147.98	38.30	11.14	77.92	-2,606.63	-9,270.97	9,546.56	9,499.68	46.87	203.661		
5,600.00	4,919.47	2,467.53	2,466.44	39.09	13.34	79.01	-2,611.16	-9,359.03	9,565.16	9,515.77	49.38	193.689		
5,700.00	5,003.71	2,513.00	2,510.26	39.88	13.64	79.17	-2,610.45	-9,371.15	9,584.31	9,533.99	50.32	190.461		
5,800.00	5,088.06	2,513.00	2,510.26	40.67	13.64	79.30	-2,610.45	-9,371.15	9,603.93	9,552.93	51.00	188.312		
5,900.00	5,173.83	2,513.00	2,510.26	41.44	13.64	79.73	-2,610.45	-9,371.15	9,625.04	9,573.39	51.65	186.355		
6,000.00	5,261.34	2,553.06	2,548.73	42.18	13.92	80.31	-2,609.73	-9,382.32	9,647.57	9,595.08	52.49	183.795		
6,100.00	5,350.49	2,609.00	2,602.36	42.88	14.31	80.95	-2,609.01	-9,398.21	9,671.33	9,617.93	53.39	181.142		
6,200.00	5,441.16	2,609.00	2,602.36	43.56	14.31	81.46	-2,609.01	-9,398.21	9,696.25	9,642.32	53.93	179.795		
6,300.00	5,533.25	2,609.00	2,602.36	44.20	14.31	82.00	-2,609.01	-9,398.21	9,722.63	9,668.20	54.43	178.631		
6,400.00	5,626.65	2,658.28	2,649.42	44.82	14.68	82.68	-2,608.71	-9,412.82	9,749.85	9,694.66	55.19	176.670		
6,500.00	5,721.23	2,704.00	2,692.83	45.40	15.02	83.36	-2,608.81	-9,427.16	9,778.65	9,722.76	55.89	174.965		
6,600.00	5,816.89	2,704.00	2,692.83	45.94	15.02	83.98	-2,608.81	-9,427.16	9,808.28	9,752.00	56.28	174.291		
6,700.00	5,913.51	2,704.00	2,692.83	46.45	15.02	84.62	-2,608.81	-9,427.16	9,839.18	9,782.55	56.62	173.769		
6,800.00	6,010.97	3,381.76	3,339.76	46.93	20.08	86.16	-2,606.99	-9,627.62	9,865.80	9,804.68	61.12	161.413		
6,900.00	6,109.15	3,453.92	3,409.04	47.38	20.60	86.76	-2,611.10	-9,647.37	9,892.34	9,830.46	61.87	159.880		
7,000.00	6,207.93	3,585.82	3,535.75	47.80	21.55	87.39	-2,618.41	-9,683.26	9,918.90	9,855.94	62.96	157.536		
7,100.00	6,307.19	3,737.00	3,681.40	48.18	22.64	88.02	-2,622.25	-9,723.56	9,945.11	9,880.98	64.13	155.072		
7,200.00	6,406.82	3,786.48	3,729.15	48.53	22.99	88.59	-2,623.18	-9,736.52	9,971.33	9,906.68	64.65	154.231		
7,300.00	6,506.68	3,829.00	3,770.01	48.84	23.30	89.16	-2,623.86	-9,748.24	9,998.54	9,933.45	65.10	153.595		
7,800.00	6,980.23	6,940.03	6,822.78	50.03	40.44	3.16	-2,633.89	-10,244.96	9,990.50	9,909.05	81.46	122.649		
7,900.00	7,055.85	7,017.64	6,900.37	50.21	40.69	3.61	-2,635.33	-10,246.26	9,926.52	9,844.57	81.95	121.122		
8,000.00	7,120.34	7,096.06	6,978.75	50.36	40.95	4.34	-2,637.51	-10,247.52	9,851.28	9,768.87	82.42	119.530		
8,100.00	7,172.10	7,159.30	7,041.94	50.47	41.16	5.62	-2,639.81	-10,248.49	9,766.65	9,683.87	82.78	117.978		
8,200.00	7,209.85	7,205.84	7,088.43	50.55	41.32	8.21	-2,641.83	-10,249.17	9,674.76	9,591.70	83.05	116.492		
8,300.00	7,232.68	7,234.61	7,117.16	50.61	41.41	15.70	-2,643.21	-10,249.58	9,577.89	9,494.67	83.22	115.094		
8,400.00	7,240.00	7,235.53	7,118.09	50.65	41.41	79.24	-2,643.07	-10,249.60	9,478.48	9,395.22	83.26	113.844		
8,500.00	7,239.60	7,236.56	7,119.11	50.69	41.42	79.37	-2,643.11	-10,249.62	9,378.60	9,295.31	83.29	112.608		
8,600.00	7,239.19	7,237.58	7,120.14	50.75	41.42	79.50	-2,643.15	-10,249.63	9,278.71	9,195.40	83.31	111.370		
8,700.00	7,238.78	7,238.61	7,121.17	50.85	41.42	79.62	-2,643.19	-10,249.65	9,178.83	9,095.48	83.34	110.132		
8,800.00	7,238.38	7,239.64	7,122.20	51.02	41.43	79.75	-2,643.23	-10,249.66	9,078.95	8,995.57	83.38	108.893		
8,900.00	7,237.97	7,240.67	7,123.22	51.32	41.43	79.88	-2,643.27	-10,249.68	8,979.07	8,895.66	83.41	107.652		
9,000.00	7,237.57	7,241.69	7,124.25	51.95	41.44	80.01	-2,643.31	-10,249.69	8,879.19	8,795.75	83.44	106.411		
9,100.00	7,237.16	7,242.72	7,125.28	53.10	41.44	80.14	-2,643.36	-10,249.71	8,779.32	8,695.84	83.48	105.168		
9,200.00	7,236.76	7,243.75	7,126.30	54.69	41.44	80.27	-2,643.40	-10,249.72	8,679.45	8,595.94	83.52	103.925		
9,300.00	7,236.35	7,244.78	7,127.33	56.53	41.45	80.40	-2,643.44	-10,249.74	8,579.59	8,496.03	83.56	102.680		
9,400.00	7,235.94	7,245.80	7,128.35	58.53	41.45	80.53	-2,643.48	-10,249.75	8,479.72	8,396.12	83.60	101.435		
9,500.00	7,235.54	7,246.83	7,129.38	60.62	41.45	80.66	-2,643.52	-10,249.76	8,379.86	8,296.22	83.64	100.188		
9,600.00	7,235.13	7,247.86	7,130.41	62.80	41.46	80.79	-2,643.56	-10,249.78	8,280.00	8,196.32	83.69	98.941		
9,700.00	7,234.73	7,248.88	7,131.43	65.03	41.46	80.92	-2,643.60	-10,249.79	8,180.15	8,096.42	83.73	97.692		
9,800.00	7,234.32	7,249.91	7,132.46	67.32	41.46	81.05	-2,643.64	-10,249.81	8,080.30	7,996.52	83.78	96.443		
9,900.00	7,233.92	7,250.94	7,133.48	69.66	41.47	81.18	-2,643.68	-10,249.82	7,980.45	7,896.62	83.83	95.193		
10,000.00	7,233.51	7,251.96	7,134.51	72.03	41.47	81.31	-2,643.72	-10,249.84	7,880.61	7,796.72	83.89	93.942		
10,100.00	7,233.10	7,252.99	7,135.53	74.45	41.47	81.44	-2,643.76	-10,249.85	7,780.77	7,696.83	83.94	92.690		
10,200.00	7,232.70	7,254.01	7,136.56	76.89	41.48	81.57	-2,643.80	-10,249.87	7,680.93	7,596.93	84.00	91.437		
10,300.00	7,232.29	7,255.04	7,137.58	79.36	41.48	81.70	-2,643.84	-10,249.88	7,581.10	7,497.04	84.06	90.183		
10,400.00	7,231.89	7,256.07	7,138.61	81.86	41.48	81.83	-2,643.88	-10,249.90	7,481.28	7,397.15	84.13	88.929		
10,500.00	7,231.48	7,257.09	7,139.63	84.38	41.49	81.96	-2,643.92	-10,249.91	7,381.45	7,297.26	84.19	87.674		
10,600.00	7,231.08	7,258.12	7,140.66	86.93	41.49	82.09	-2,643.96	-10,249.93	7,281.64	7,197.38	84.26	86.417		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 34-17(PR_150CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 168-MWD													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,700.00	7,230.67	7,259.14	7,141.68	89.49	41.49	82.22	-2,643.99	-10,249.94	7,181.82	7,097.49	84.33	85.160		
10,800.00	7,230.26	7,260.17	7,142.71	92.07	41.50	82.35	-2,644.03	-10,249.96	7,082.02	6,997.61	84.41	83.903		
10,900.00	7,229.86	7,261.19	7,143.73	94.67	41.50	82.48	-2,644.07	-10,249.97	6,982.21	6,897.73	84.49	82.644		
11,000.00	7,229.45	7,262.22	7,144.75	97.28	41.50	82.61	-2,644.11	-10,249.99	6,882.42	6,797.85	84.57	81.384		
11,100.00	7,229.05	7,263.24	7,145.78	99.90	41.51	82.74	-2,644.15	-10,250.00	6,782.63	6,697.98	84.65	80.124		
11,200.00	7,228.64	7,264.27	7,146.80	102.54	41.51	82.87	-2,644.19	-10,250.02	6,682.84	6,598.10	84.74	78.863		
11,300.00	7,228.24	7,265.29	7,147.83	105.19	41.51	83.01	-2,644.23	-10,250.03	6,583.07	6,498.23	84.83	77.601		
11,400.00	7,227.83	7,266.32	7,148.85	107.85	41.52	83.14	-2,644.27	-10,250.05	6,483.29	6,398.37	84.93	76.338		
11,500.00	7,227.42	7,267.34	7,149.87	110.52	41.52	83.27	-2,644.30	-10,250.06	6,383.53	6,298.50	85.03	75.075		
11,600.00	7,227.02	7,268.36	7,150.90	113.20	41.52	83.40	-2,644.34	-10,250.08	6,283.77	6,198.64	85.13	73.810		
11,700.00	7,226.61	7,269.39	7,151.92	115.89	41.53	83.53	-2,644.38	-10,250.09	6,184.02	6,098.78	85.24	72.545		
11,800.00	7,226.21	7,270.41	7,152.94	118.59	41.53	83.66	-2,644.42	-10,250.11	6,084.28	5,998.92	85.36	71.279		
11,900.00	7,225.80	7,271.44	7,153.97	121.29	41.53	83.79	-2,644.45	-10,250.12	5,984.55	5,899.07	85.48	70.012		
12,000.00	7,225.40	7,272.46	7,154.99	124.00	41.54	83.93	-2,644.49	-10,250.14	5,884.82	5,799.22	85.60	68.744		
12,100.00	7,224.99	7,273.48	7,156.01	126.72	41.54	84.06	-2,644.53	-10,250.15	5,785.11	5,699.37	85.74	67.475		
12,200.00	7,224.58	7,274.51	7,157.03	129.44	41.54	84.19	-2,644.57	-10,250.17	5,685.40	5,599.53	85.87	66.206		
12,300.00	7,224.18	7,275.53	7,158.06	132.17	41.55	84.32	-2,644.60	-10,250.18	5,585.71	5,499.69	86.02	64.935		
12,400.00	7,223.77	7,276.55	7,159.08	134.91	41.55	84.45	-2,644.64	-10,250.20	5,486.03	5,399.85	86.17	63.663		
12,500.00	7,223.37	7,277.58	7,160.10	137.65	41.55	84.59	-2,644.68	-10,250.21	5,386.35	5,300.02	86.33	62.391		
12,600.00	7,222.96	7,278.60	7,161.12	140.39	41.56	84.72	-2,644.72	-10,250.23	5,286.69	5,200.19	86.50	61.117		
12,700.00	7,222.55	7,279.62	7,162.14	143.14	41.56	84.85	-2,644.75	-10,250.24	5,187.05	5,100.37	86.68	59.842		
12,800.00	7,222.15	7,280.64	7,163.17	145.89	41.56	84.98	-2,644.79	-10,250.26	5,087.41	5,000.55	86.87	58.567		
12,900.00	7,221.74	7,281.67	7,164.19	148.65	41.57	85.12	-2,644.83	-10,250.27	4,987.79	4,900.73	87.06	57.290		
13,000.00	7,221.34	7,282.69	7,165.21	151.41	41.57	85.25	-2,644.86	-10,250.28	4,888.19	4,800.92	87.27	56.012		
13,100.00	7,220.93	7,283.71	7,166.23	154.18	41.57	85.38	-2,644.90	-10,250.30	4,788.60	4,701.11	87.49	54.733		
13,200.00	7,220.53	7,284.73	7,167.25	156.94	41.58	85.51	-2,644.93	-10,250.31	4,689.03	4,601.31	87.72	53.452		
13,300.00	7,220.12	7,285.75	7,168.27	159.72	41.58	85.65	-2,644.97	-10,250.33	4,589.48	4,501.51	87.97	52.171		
13,400.00	7,219.71	7,286.78	7,169.29	162.49	41.58	85.78	-2,645.01	-10,250.34	4,489.95	4,401.72	88.23	50.888		
13,500.00	7,219.31	7,287.80	7,170.32	165.27	41.59	85.91	-2,645.04	-10,250.36	4,390.44	4,301.93	88.51	49.604		
13,600.00	7,218.90	7,288.82	7,171.34	168.05	41.59	86.04	-2,645.08	-10,250.37	4,290.95	4,202.14	88.81	48.318		
13,700.00	7,218.50	7,289.84	7,172.36	170.83	41.60	86.18	-2,645.11	-10,250.39	4,191.49	4,102.36	89.12	47.031		
13,800.00	7,218.09	7,290.86	7,173.38	173.61	41.60	86.31	-2,645.15	-10,250.40	4,092.05	4,002.59	89.46	45.743		
13,900.00	7,217.69	7,291.88	7,174.40	176.40	41.60	86.44	-2,645.19	-10,250.42	3,992.64	3,902.82	89.82	44.453		
14,000.00	7,217.28	7,292.90	7,175.42	179.19	41.61	86.58	-2,645.22	-10,250.43	3,893.25	3,803.05	90.20	43.162		
14,100.00	7,216.87	7,293.93	7,176.44	181.98	41.61	86.71	-2,645.26	-10,250.45	3,793.91	3,703.29	90.61	41.869		
14,200.00	7,216.47	7,294.95	7,177.46	184.78	41.61	86.84	-2,645.29	-10,250.46	3,694.59	3,603.54	91.06	40.575		
14,300.00	7,216.06	7,295.97	7,178.48	187.57	41.62	86.97	-2,645.33	-10,250.48	3,595.32	3,503.78	91.53	39.279		
14,400.00	7,215.66	7,296.99	7,179.50	190.37	41.62	87.11	-2,645.36	-10,250.49	3,496.08	3,404.04	92.04	37.982		
14,500.00	7,215.25	7,298.01	7,180.52	193.17	41.62	87.24	-2,645.40	-10,250.51	3,396.89	3,304.29	92.60	36.684		
14,600.00	7,214.85	7,299.03	7,181.54	195.97	41.63	87.37	-2,645.43	-10,250.52	3,297.75	3,204.55	93.20	35.384		
14,700.00	7,214.44	7,300.05	7,182.56	198.77	41.63	87.51	-2,645.46	-10,250.54	3,198.66	3,104.81	93.85	34.083		
14,800.00	7,214.03	7,301.07	7,183.58	201.58	41.63	87.64	-2,645.50	-10,250.55	3,099.63	3,005.08	94.55	32.782		
14,900.00	7,213.63	7,302.09	7,184.60	204.38	41.64	87.77	-2,645.53	-10,250.57	3,000.66	2,905.34	95.32	31.479		
15,000.00	7,213.22	7,303.11	7,185.61	207.19	41.64	87.91	-2,645.57	-10,250.58	2,901.77	2,805.60	96.16	30.176		
15,100.00	7,212.82	7,304.13	7,186.63	210.00	41.64	88.04	-2,645.60	-10,250.60	2,802.95	2,705.87	97.08	28.872		
15,200.00	7,212.41	7,305.15	7,187.65	212.81	41.65	88.17	-2,645.64	-10,250.61	2,704.22	2,606.13	98.09	27.569		
15,300.00	7,212.01	7,306.17	7,188.67	215.62	41.65	88.31	-2,645.67	-10,250.63	2,605.58	2,506.38	99.20	26.266		
15,400.00	7,211.60	7,307.19	7,189.69	218.43	41.65	88.44	-2,645.70	-10,250.64	2,507.05	2,406.63	100.42	24.965		
15,500.00	7,211.19	7,308.20	7,190.71	221.25	41.66	88.57	-2,645.74	-10,250.65	2,408.65	2,306.87	101.78	23.665		
15,600.00	7,210.79	7,309.22	7,191.73	224.06	41.66	88.71	-2,645.77	-10,250.67	2,310.38	2,207.09	103.28	22.369		
15,700.00	7,210.38	7,310.24	7,192.74	226.88	41.66	88.84	-2,645.80	-10,250.68	2,212.26	2,107.30	104.96	21.077		
15,794.94	7,210.00	7,311.21	7,193.71	229.55	41.67	88.97	-2,645.83	-10,250.70	2,119.27	2,012.53	106.73	19.856	CC, ES, SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 43-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 118-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	34.00	3.28	3.28	-105.79	-2,529.20	-8,945.41	9,296.15					
100.00	100.00	37.34	71.34	3.28	3.28	-105.79	-2,529.13	-8,945.49	9,296.19	9,289.62	6.57	1,415.901		
200.00	200.00	93.91	127.91	3.34	3.29	-105.78	-2,528.71	-8,945.93	9,296.73	9,290.11	6.62	1,403.848		
300.00	299.98	461.49	495.33	3.44	3.71	71.68	-2,519.27	-8,944.96	9,294.46	9,287.30	7.16	1,298.988		
400.00	399.84	712.08	745.75	3.59	4.34	71.89	-2,511.41	-8,940.04	9,290.34	9,282.40	7.94	1,170.738		
500.00	499.45	786.95	820.52	3.79	4.56	72.06	-2,508.42	-8,937.95	9,283.90	9,275.55	8.35	1,111.328		
600.00	598.70	850.00	883.47	4.03	4.76	72.26	-2,505.00	-8,936.94	9,277.03	9,268.23	8.79	1,055.132		
700.00	697.47	873.61	907.04	4.31	4.84	72.43	-2,503.47	-8,936.77	9,269.60	9,260.45	9.15	1,013.043		
800.00	795.62	919.68	952.98	4.64	4.99	72.65	-2,500.13	-8,936.75	9,261.77	9,252.14	9.62	962.275		
900.00	893.06	976.19	1,009.28	5.00	5.19	72.91	-2,495.31	-8,937.22	9,253.47	9,243.29	10.18	909.084		
1,000.00	989.64	1,058.01	1,090.59	5.40	5.49	73.27	-2,486.34	-8,938.70	9,244.55	9,233.68	10.87	850.420		
1,100.00	1,085.27	1,174.98	1,206.48	5.83	5.95	73.75	-2,470.68	-8,941.20	9,234.49	9,222.73	11.76	785.501		
1,200.00	1,179.82	1,538.04	1,563.10	6.29	7.61	75.09	-2,403.52	-8,948.42	9,222.55	9,208.68	13.87	664.941		
1,300.00	1,273.17	1,832.48	1,848.09	6.79	9.24	76.43	-2,329.83	-8,951.63	9,208.17	9,192.20	15.97	576.612		
1,400.00	1,365.21	1,400.00	1,974.89	7.33	6.73	77.27	-2,293.28	-8,951.75	9,191.65	9,177.68	13.96	658.294		
1,500.00	1,455.84	2,035.99	2,043.50	7.89	10.49	77.90	-2,272.95	-8,951.54	9,174.39	9,156.11	18.28	501.815		
1,600.00	1,544.94	2,081.00	2,086.61	8.50	10.77	78.44	-2,260.04	-8,951.73	9,157.28	9,138.12	19.16	477.980		
1,700.00	1,632.39	2,081.00	2,086.61	9.13	10.77	78.78	-2,260.04	-8,951.73	9,140.27	9,120.48	19.79	461.876		
1,800.00	1,718.11	2,126.33	2,129.98	9.80	11.07	79.32	-2,246.88	-8,952.26	9,123.40	9,102.66	20.74	439.805		
1,900.00	1,802.44	2,175.00	2,176.46	10.49	11.38	79.66	-2,232.45	-8,953.21	9,106.98	9,085.23	21.75	418.748		
2,000.00	1,886.68	2,000.00	2,235.13	11.20	10.22	79.96	-2,213.71	-8,954.43	9,091.10	9,069.80	21.29	426.935		
2,100.00	1,970.92	2,393.18	2,384.12	11.93	12.87	80.72	-2,165.62	-8,956.58	9,075.30	9,050.66	24.64	368.260		
2,200.00	2,055.17	2,449.07	2,437.25	12.66	13.26	80.99	-2,148.29	-8,957.20	9,060.05	9,034.29	25.76	351.692		
2,300.00	2,139.41	2,567.54	2,550.06	13.40	14.08	81.57	-2,112.12	-8,958.12	9,045.31	9,017.99	27.32	331.124		
2,400.00	2,223.66	2,612.26	2,592.67	14.14	14.40	81.79	-2,098.56	-8,958.38	9,031.07	9,002.69	28.38	318.233		
2,500.00	2,307.90	2,685.52	2,662.32	14.89	14.92	82.15	-2,075.85	-8,958.92	9,017.51	8,987.86	29.65	304.106		
2,600.00	2,392.14	2,767.49	2,739.82	15.65	15.51	82.56	-2,049.15	-8,959.47	9,004.39	8,973.38	31.01	290.392		
2,700.00	2,476.39	2,814.85	2,784.54	16.41	15.87	82.80	-2,033.58	-8,959.83	8,991.98	8,959.85	32.13	279.899		
2,800.00	2,560.63	2,866.62	2,833.53	17.17	16.24	83.06	-2,016.83	-8,960.27	8,980.33	8,947.06	33.27	269.900		
2,900.00	2,644.88	2,925.56	2,889.78	17.93	16.66	83.35	-1,999.22	-8,960.63	8,969.38	8,934.92	34.47	260.227		
3,000.00	2,729.12	2,967.77	2,930.26	18.70	16.96	83.55	-1,987.28	-8,960.87	8,959.16	8,923.62	35.54	252.077		
3,100.00	2,813.36	3,006.85	2,967.68	19.47	17.23	83.74	-1,976.02	-8,961.23	8,949.76	8,913.16	36.60	244.562		
3,200.00	2,897.61	3,176.50	3,130.23	20.25	18.41	84.56	-1,927.48	-8,961.82	8,940.52	8,901.98	38.55	231.945		
3,300.00	2,981.85	3,280.81	3,230.45	21.02	19.12	85.07	-1,898.56	-8,961.50	8,931.69	8,891.65	40.04	223.050		
3,400.00	3,066.10	3,335.39	3,282.83	21.80	19.50	85.33	-1,883.26	-8,961.12	8,923.18	8,881.97	41.21	216.534		
3,500.00	3,150.34	3,363.81	3,310.10	22.58	19.70	85.47	-1,875.21	-8,961.05	8,915.56	8,873.36	42.20	211.273		
3,600.00	3,234.58	3,409.00	3,353.40	23.35	20.02	85.69	-1,862.29	-8,961.18	8,908.89	8,865.58	43.31	205.724		
3,700.00	3,318.83	3,446.40	3,389.25	24.13	20.28	85.87	-1,851.61	-8,961.40	8,903.01	8,858.65	44.36	200.710		
3,800.00	3,403.07	3,521.63	3,461.44	24.92	20.80	86.24	-1,830.46	-8,961.68	8,897.71	8,852.04	45.67	194.813		
3,900.00	3,487.32	3,566.69	3,504.65	25.70	21.12	86.46	-1,817.70	-8,961.91	8,893.14	8,846.36	46.78	190.107		
4,000.00	3,571.56	3,612.53	3,548.55	26.48	21.44	86.68	-1,804.50	-8,962.25	8,889.35	8,841.46	47.89	185.609		
4,100.00	3,655.80	3,661.13	3,595.06	27.27	21.79	86.92	-1,790.40	-8,962.71	8,886.34	8,837.31	49.03	181.251		
4,200.00	3,740.05	3,708.95	3,640.79	28.05	22.13	87.15	-1,776.41	-8,963.25	8,884.10	8,833.94	50.16	177.118		
4,300.00	3,824.29	3,754.73	3,684.42	28.84	22.47	87.38	-1,762.61	-8,963.86	8,882.64	8,831.36	51.28	173.217		
4,400.00	3,908.54	3,802.83	3,730.11	29.62	22.82	87.62	-1,747.57	-8,964.60	8,881.99	8,829.57	52.42	169.439		
4,438.04	3,940.59	3,824.89	3,751.03	29.92	22.99	87.73	-1,740.59	-8,964.96	8,881.94	8,829.05	52.88	167.951		
4,500.00	3,992.78	3,860.67	3,784.94	30.41	23.26	87.91	-1,729.20	-8,965.54	8,882.07	8,828.44	53.64	165.592		
4,600.00	4,077.03	3,928.69	3,849.38	31.20	23.77	88.25	-1,707.43	-8,966.65	8,882.86	8,827.92	54.93	161.699		
4,700.00	4,161.27	3,995.43	3,912.60	31.98	24.28	88.59	-1,686.08	-8,967.68	8,884.26	8,828.04	56.22	158.029		
4,800.00	4,245.51	4,048.68	3,963.11	32.77	24.68	88.85	-1,669.24	-8,968.53	8,886.38	8,828.98	57.40	154.826		
4,900.00	4,329.76	4,093.70	4,005.89	33.56	25.01	89.08	-1,655.21	-8,969.33	8,889.26	8,830.76	58.50	151.943		
5,000.00	4,414.00	4,133.00	4,043.29	34.35	25.30	89.27	-1,643.20	-8,970.14	8,892.98	8,833.42	59.56	149.306		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 43-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 118-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	4,178.31	4,086.50	35.14	25.64	89.50	-1,629.60	-8,971.23	8,897.53	8,836.87	60.66	146.673		
5,200.00	4,582.49	4,504.14	4,395.53	35.93	28.11	91.13	-1,526.46	-8,974.64	8,902.52	8,838.60	63.92	139.266		
5,300.00	4,666.73	4,545.00	4,434.01	36.72	28.42	91.34	-1,512.72	-8,974.32	8,906.66	8,841.66	65.01	137.014		
5,400.00	4,750.98	4,588.30	4,474.74	37.51	28.76	91.56	-1,498.05	-8,974.07	8,911.64	8,845.53	66.11	134.810		
5,500.00	4,835.22	4,624.48	4,508.85	38.30	29.05	91.74	-1,485.98	-8,973.99	8,917.49	8,850.34	67.14	132.811		
5,600.00	4,919.47	4,678.00	4,559.47	39.09	29.46	92.01	-1,468.61	-8,974.06	8,924.17	8,855.86	68.30	130.653		
5,700.00	5,003.71	4,745.71	4,623.95	39.88	29.97	92.35	-1,447.95	-8,974.31	8,931.51	8,861.95	69.57	128.390		
5,800.00	5,088.06	4,785.78	4,662.25	40.67	30.25	92.60	-1,436.18	-8,974.59	8,939.59	8,868.99	70.59	126.638		
5,900.00	5,173.83	4,930.42	4,801.43	41.44	31.26	93.44	-1,396.89	-8,975.89	8,948.27	8,875.94	72.33	123.713		
6,000.00	5,261.34	4,998.89	4,867.90	42.18	31.70	93.90	-1,380.49	-8,976.41	8,956.68	8,883.22	73.46	121.922		
6,100.00	5,350.49	5,080.94	4,947.79	42.88	32.22	94.41	-1,361.79	-8,977.19	8,965.35	8,890.71	74.64	120.117		
6,200.00	5,441.16	5,281.68	5,144.75	43.56	33.37	95.33	-1,323.24	-8,979.02	8,973.79	8,897.34	76.45	117.385		
6,300.00	5,533.25	5,393.37	5,255.24	44.20	33.94	95.85	-1,306.94	-8,979.82	8,981.31	8,903.68	77.63	115.699		
6,400.00	5,626.65	5,562.47	5,423.37	44.82	34.70	96.47	-1,289.04	-8,981.00	8,987.99	8,909.01	78.97	113.809		
6,500.00	5,721.23	5,838.08	5,698.36	45.40	35.77	97.26	-1,271.01	-8,980.45	8,992.59	8,911.97	80.63	111.535		
6,600.00	5,816.89	5,897.01	5,757.23	45.94	35.98	97.47	-1,268.63	-8,980.30	8,996.98	8,915.63	81.35	110.591		
6,700.00	5,913.51	5,966.00	5,826.19	46.45	36.21	97.68	-1,266.58	-8,980.50	9,001.34	8,919.26	82.08	109.667		
6,800.00	6,010.97	6,050.60	5,910.77	46.93	36.49	97.89	-1,264.65	-8,981.03	9,005.52	8,922.70	82.82	108.737		
6,900.00	6,109.15	6,164.80	6,024.95	47.38	36.87	98.11	-1,262.30	-8,981.78	9,009.27	8,925.64	83.63	107.727		
7,000.00	6,207.93	6,259.76	6,119.88	47.80	37.18	98.28	-1,260.49	-8,982.29	9,012.41	8,928.07	84.35	106.850		
7,100.00	6,307.19	6,332.86	6,192.97	48.18	37.43	98.40	-1,259.00	-8,982.84	9,015.31	8,930.35	84.96	106.117		
7,200.00	6,406.82	6,410.14	6,270.22	48.53	37.69	98.51	-1,257.33	-8,983.61	9,017.99	8,932.43	85.55	105.410		
7,300.00	6,506.68	6,494.26	6,354.32	48.84	37.97	98.59	-1,255.55	-8,984.63	9,020.35	8,934.21	86.14	104.714		
7,400.00	6,606.66	6,592.57	6,452.60	49.10	38.30	11.65	-1,253.59	-8,985.98	9,022.33	8,935.60	86.73	104.028		
7,500.00	6,706.21	6,704.99	6,564.99	49.35	38.68	11.79	-1,251.42	-8,987.43	9,015.78	8,928.42	87.36	103.206		
7,600.00	6,803.22	6,781.24	6,641.22	49.59	38.94	12.24	-1,249.99	-8,988.47	8,994.11	8,906.26	87.85	102.382		
7,700.00	6,895.32	6,856.84	6,716.80	49.82	39.20	13.06	-1,248.62	-8,989.65	8,957.97	8,869.65	88.32	101.424		
7,800.00	6,980.23	6,930.61	6,790.54	50.03	39.45	14.36	-1,247.14	-8,990.91	8,908.21	8,819.44	88.77	100.351		
7,900.00	7,055.85	6,996.63	6,856.54	50.21	39.68	16.37	-1,245.59	-8,992.07	8,846.02	8,756.85	89.17	99.209		
8,000.00	7,120.34	7,072.55	6,932.42	50.36	39.95	19.54	-1,243.67	-8,993.39	8,772.84	8,683.26	89.58	97.938		
8,100.00	7,172.10	7,138.53	6,998.37	50.47	40.18	24.77	-1,242.05	-8,994.45	8,690.39	8,600.46	89.93	96.638		
8,200.00	7,209.85	7,187.02	7,046.84	50.55	40.35	34.08	-1,240.90	-8,995.17	8,600.76	8,510.56	90.20	95.355		
8,300.00	7,232.68	7,206.84	7,066.65	50.61	40.42	52.23	-1,240.46	-8,995.48	8,506.23	8,415.88	90.35	94.145		
8,400.00	7,240.00	7,215.51	7,075.32	50.65	40.45	85.90	-1,240.28	-8,995.61	8,409.13	8,318.67	90.47	92.951		
8,500.00	7,239.60	7,216.61	7,076.42	50.69	40.45	85.94	-1,240.25	-8,995.63	8,311.58	8,221.02	90.57	91.773		
8,600.00	7,239.19	7,217.72	7,077.53	50.75	40.46	85.97	-1,240.23	-8,995.64	8,214.09	8,123.42	90.68	90.588		
8,700.00	7,238.78	7,218.82	7,078.63	50.85	40.46	86.01	-1,240.20	-8,995.66	8,116.66	8,025.87	90.80	89.394		
8,800.00	7,238.38	7,219.93	7,079.74	51.02	40.47	86.04	-1,240.18	-8,995.68	8,019.29	7,928.36	90.93	88.192		
8,900.00	7,237.97	7,221.04	7,080.85	51.32	40.47	86.08	-1,240.16	-8,995.70	7,921.99	7,830.92	91.08	86.982		
9,000.00	7,237.57	7,222.16	7,081.96	51.95	40.47	86.11	-1,240.13	-8,995.71	7,824.76	7,733.52	91.24	85.762		
9,100.00	7,237.16	7,223.27	7,083.08	53.10	40.48	86.14	-1,240.11	-8,995.73	7,727.59	7,636.18	91.41	84.535		
9,200.00	7,236.76	7,224.39	7,084.20	54.69	40.48	86.18	-1,240.09	-8,995.75	7,630.50	7,538.90	91.60	83.298		
9,300.00	7,236.35	7,225.51	7,085.32	56.53	40.49	86.21	-1,240.06	-8,995.76	7,533.49	7,441.68	91.81	82.053		
9,400.00	7,235.94	7,226.64	7,086.44	58.53	40.49	86.25	-1,240.04	-8,995.78	7,436.55	7,344.51	92.04	80.799		
9,500.00	7,235.54	7,227.77	7,087.57	60.62	40.49	86.28	-1,240.02	-8,995.80	7,339.70	7,247.42	92.28	79.536		
9,600.00	7,235.13	7,228.90	7,088.70	62.80	40.50	86.32	-1,239.99	-8,995.82	7,242.93	7,150.39	92.54	78.264		
9,700.00	7,234.73	7,230.03	7,089.83	65.03	40.50	86.36	-1,239.97	-8,995.83	7,146.25	7,053.42	92.83	76.983		
9,800.00	7,234.32	7,231.17	7,090.97	67.32	40.51	86.39	-1,239.94	-8,995.85	7,049.66	6,956.53	93.13	75.694		
9,900.00	7,233.92	7,232.31	7,092.11	69.66	40.51	86.43	-1,239.92	-8,995.87	6,953.17	6,859.71	93.46	74.397		
10,000.00	7,233.51	7,233.45	7,093.25	72.03	40.51	86.46	-1,239.90	-8,995.89	6,856.78	6,762.97	93.81	73.090		
10,100.00	7,233.10	7,234.59	7,094.40	74.45	40.52	86.50	-1,239.87	-8,995.91	6,760.50	6,666.31	94.19	71.776		
10,200.00	7,232.70	7,235.74	7,095.54	76.89	40.52	86.53	-1,239.85	-8,995.92	6,664.32	6,569.73	94.59	70.453		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 43-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 118-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	7,236.89	7,096.69	79.36	40.53	86.57	-1,239.83	-8,995.94	6,568.26	6,473.23	95.02	69.123		
10,400.00	7,231.89	7,238.04	7,097.85	81.86	40.53	86.60	-1,239.80	-8,995.96	6,472.31	6,376.83	95.48	67.785		
10,500.00	7,231.48	7,239.20	7,099.00	84.38	40.53	86.64	-1,239.78	-8,995.98	6,376.49	6,280.52	95.97	66.440		
10,600.00	7,231.08	7,240.36	7,100.16	86.93	40.54	86.68	-1,239.76	-8,996.00	6,280.80	6,184.31	96.50	65.087		
10,700.00	7,230.67	7,241.52	7,101.32	89.49	40.54	86.71	-1,239.73	-8,996.01	6,185.25	6,088.20	97.06	63.729		
10,800.00	7,230.26	7,242.69	7,102.49	92.07	40.55	86.75	-1,239.71	-8,996.03	6,089.84	5,992.19	97.65	62.364		
10,900.00	7,229.86	7,243.86	7,103.66	94.67	40.55	86.79	-1,239.69	-8,996.05	5,994.58	5,896.30	98.28	60.994		
11,000.00	7,229.45	7,245.03	7,104.83	97.28	40.55	86.82	-1,239.66	-8,996.07	5,899.48	5,800.52	98.95	59.619		
11,100.00	7,229.05	7,246.20	7,106.00	99.90	40.56	86.86	-1,239.64	-8,996.09	5,804.54	5,704.87	99.67	58.240		
11,200.00	7,228.64	7,247.38	7,107.18	102.54	40.56	86.90	-1,239.61	-8,996.11	5,709.77	5,609.34	100.42	56.856		
11,300.00	7,228.24	7,248.56	7,108.36	105.19	40.57	86.93	-1,239.59	-8,996.12	5,615.18	5,513.95	101.23	55.470		
11,400.00	7,227.83	7,249.74	7,109.54	107.85	40.57	86.97	-1,239.57	-8,996.14	5,520.79	5,418.71	102.08	54.082		
11,500.00	7,227.42	7,250.93	7,110.73	110.52	40.57	87.01	-1,239.54	-8,996.16	5,426.59	5,323.61	102.99	52.693		
11,600.00	7,227.02	7,252.12	7,111.92	113.20	40.58	87.04	-1,239.52	-8,996.18	5,332.61	5,228.66	103.94	51.303		
11,700.00	7,226.61	7,253.31	7,113.11	115.89	40.58	87.08	-1,239.50	-8,996.20	5,238.85	5,133.89	104.96	49.914		
11,800.00	7,226.21	7,254.51	7,114.31	118.59	40.59	87.12	-1,239.47	-8,996.22	5,145.32	5,039.29	106.03	48.526		
11,900.00	7,225.80	7,255.71	7,115.50	121.29	40.59	87.16	-1,239.45	-8,996.24	5,052.04	4,944.87	107.17	47.141		
12,000.00	7,225.40	7,256.91	7,116.71	124.00	40.60	87.19	-1,239.43	-8,996.26	4,959.02	4,850.65	108.37	45.759		
12,100.00	7,224.99	7,258.11	7,117.91	126.72	40.60	87.23	-1,239.40	-8,996.28	4,866.28	4,756.64	109.64	44.383		
12,200.00	7,224.58	7,259.32	7,119.12	129.44	40.60	87.27	-1,239.38	-8,996.30	4,773.83	4,662.85	110.99	43.012		
12,300.00	7,224.18	7,260.53	7,120.33	132.17	40.61	87.31	-1,239.36	-8,996.31	4,681.70	4,569.29	112.41	41.649		
12,400.00	7,223.77	7,261.75	7,121.54	134.91	40.61	87.34	-1,239.33	-8,996.33	4,589.89	4,475.98	113.91	40.294		
12,500.00	7,223.37	7,262.97	7,122.76	137.65	40.62	87.38	-1,239.31	-8,996.35	4,498.43	4,382.93	115.50	38.948		
12,600.00	7,222.96	7,264.19	7,123.98	140.39	40.62	87.42	-1,239.28	-8,996.37	4,407.34	4,290.17	117.17	37.614		
12,700.00	7,222.55	7,265.41	7,125.21	143.14	40.62	87.46	-1,239.26	-8,996.39	4,316.64	4,197.70	118.94	36.292		
12,800.00	7,222.15	7,266.64	7,126.43	145.89	40.63	87.50	-1,239.24	-8,996.41	4,226.37	4,105.56	120.81	34.984		
12,900.00	7,221.74	7,267.87	7,127.66	148.65	40.63	87.53	-1,239.21	-8,996.43	4,136.54	4,013.76	122.78	33.691		
13,000.00	7,221.34	7,269.10	7,128.90	151.41	40.64	87.57	-1,239.19	-8,996.45	4,047.19	3,922.33	124.86	32.415		
13,100.00	7,220.93	7,270.34	7,130.13	154.18	40.64	87.61	-1,239.17	-8,996.47	3,958.34	3,831.29	127.05	31.156		
13,200.00	7,220.53	7,271.58	7,131.37	156.94	40.65	87.65	-1,239.14	-8,996.49	3,870.04	3,740.68	129.36	29.916		
13,300.00	7,220.12	7,272.82	7,132.62	159.72	40.65	87.69	-1,239.12	-8,996.51	3,782.23	3,650.53	131.80	28.697		
13,400.00	7,219.71	7,274.07	7,133.86	162.49	40.66	87.73	-1,239.10	-8,996.53	3,695.23	3,560.86	134.37	27.500		
13,500.00	7,219.31	7,275.32	7,135.11	165.27	40.66	87.77	-1,239.07	-8,996.55	3,608.81	3,471.73	137.08	26.326		
13,600.00	7,218.90	7,276.57	7,136.36	168.05	40.66	87.81	-1,239.05	-8,996.57	3,523.10	3,383.17	139.93	25.177		
13,700.00	7,218.50	7,277.83	7,137.62	170.83	40.67	87.84	-1,239.03	-8,996.59	3,438.17	3,295.23	142.94	24.053		
13,800.00	7,218.09	7,279.09	7,138.88	173.61	40.67	87.88	-1,239.00	-8,996.61	3,354.06	3,207.96	146.11	22.956		
13,900.00	7,217.69	7,280.35	7,140.14	176.40	40.68	87.92	-1,238.98	-8,996.63	3,270.86	3,121.42	149.44	21.888		
14,000.00	7,217.28	7,281.62	7,141.41	179.19	40.68	87.96	-1,238.96	-8,996.65	3,188.61	3,035.67	152.94	20.848		
14,100.00	7,216.87	7,282.89	7,142.68	181.98	40.69	88.00	-1,238.93	-8,996.67	3,107.40	2,950.78	156.63	19.839		
14,200.00	7,216.47	7,284.16	7,143.95	184.78	40.69	88.04	-1,238.91	-8,996.69	3,027.33	2,866.83	160.50	18.862		
14,300.00	7,216.06	7,285.44	7,145.23	187.57	40.69	88.08	-1,238.89	-8,996.72	2,948.46	2,783.90	164.56	17.917		
14,400.00	7,215.66	7,286.72	7,146.51	190.37	40.70	88.12	-1,238.86	-8,996.74	2,870.91	2,702.09	168.83	17.005		
14,500.00	7,215.25	7,288.01	7,147.79	193.17	40.70	88.16	-1,238.84	-8,996.76	2,794.79	2,621.50	173.29	16.128		
14,600.00	7,214.85	7,289.29	7,149.08	195.97	40.71	88.20	-1,238.82	-8,996.78	2,720.22	2,542.26	177.96	15.285		
14,700.00	7,214.44	7,290.58	7,150.37	198.77	40.71	88.24	-1,238.79	-8,996.80	2,647.32	2,464.48	182.84	14.479		
14,800.00	7,214.03	7,291.88	7,151.66	201.58	40.72	88.28	-1,238.77	-8,996.82	2,576.24	2,388.31	187.93	13.709		
14,900.00	7,213.63	7,293.17	7,152.96	204.38	40.72	88.32	-1,238.75	-8,996.84	2,507.14	2,313.92	193.22	12.976		
15,000.00	7,213.22	7,294.48	7,154.26	207.19	40.73	88.36	-1,238.72	-8,996.86	2,440.17	2,241.47	198.70	12.281		
15,100.00	7,212.82	7,295.78	7,155.57	210.00	40.73	88.40	-1,238.70	-8,996.88	2,375.53	2,171.16	204.37	11.624		
15,200.00	7,212.41	7,297.09	7,156.87	212.81	40.74	88.45	-1,238.68	-8,996.91	2,313.41	2,103.20	210.21	11.005		
15,300.00	7,212.01	7,298.40	7,158.18	215.62	40.74	88.49	-1,238.66	-8,996.93	2,254.01	2,037.81	216.19	10.426		
15,400.00	7,211.60	7,299.72	7,159.50	218.43	40.74	88.53	-1,238.63	-8,996.95	2,197.55	1,975.26	222.30	9.886		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 43-17(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 118-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,500.00	7,211.19	7,301.03	7,160.82	221.25	40.75	88.57	-1,238.61	-8,996.97	2,144.28	1,915.80	228.48	9.385	
15,600.00	7,210.79	7,302.36	7,162.14	224.06	40.75	88.61	-1,238.59	-8,996.99	2,094.42	1,859.72	234.71	8.924	
15,700.00	7,210.38	7,303.68	7,163.47	226.88	40.76	88.65	-1,238.56	-8,997.01	2,048.24	1,807.33	240.92	8.502	
15,794.94	7,210.00	7,304.95	7,164.73	229.55	40.76	88.69	-1,238.54	-8,997.03	2,008.02	1,761.27	246.75	8.138	CC, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 89-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	34.00	3.28	3.28	-105.77	-2,535.02	-8,976.29	9,327.44					
100.00	100.00	167.86	201.83	3.28	3.32	-105.76	-2,532.49	-8,976.03	9,327.00	9,320.40	6.61	1,412.098		
200.00	200.00	302.84	336.78	3.34	3.46	-105.74	-2,529.33	-8,975.02	9,325.62	9,318.82	6.80	1,371.503		
300.00	299.98	403.51	437.40	3.44	3.63	71.68	-2,526.32	-8,974.37	9,323.64	9,316.58	7.07	1,319.100		
400.00	399.84	490.51	524.34	3.59	3.81	71.78	-2,523.17	-8,973.92	9,320.52	9,313.12	7.40	1,259.937		
500.00	499.45	542.00	575.78	3.79	3.93	71.89	-2,520.97	-8,973.90	9,316.66	9,308.94	7.72	1,207.500		
600.00	598.70	586.53	620.27	4.03	4.04	72.02	-2,518.96	-8,974.17	9,312.28	9,304.21	8.07	1,153.929		
700.00	697.47	648.00	681.67	4.31	4.21	72.19	-2,516.23	-8,975.12	9,307.61	9,299.09	8.52	1,092.577		
800.00	795.62	660.59	694.24	4.64	4.24	72.30	-2,515.69	-8,975.40	9,302.37	9,293.50	8.88	1,047.916		
900.00	893.06	703.29	736.89	5.00	4.36	72.48	-2,513.98	-8,976.50	9,296.84	9,287.49	9.36	993.449		
1,000.00	989.64	788.72	822.23	5.40	4.62	72.75	-2,510.84	-8,978.88	9,290.65	9,280.65	10.01	928.283		
1,100.00	1,085.27	827.86	861.32	5.83	4.74	72.96	-2,509.32	-8,980.14	9,283.86	9,273.30	10.56	879.117		
1,200.00	1,179.82	884.00	917.35	6.29	4.93	73.22	-2,506.63	-8,982.50	9,276.78	9,265.58	11.20	827.951		
1,300.00	1,273.17	884.00	917.35	6.79	4.93	73.37	-2,506.63	-8,982.50	9,269.35	9,257.65	11.70	792.263		
1,400.00	1,365.21	921.40	954.65	7.33	5.05	73.61	-2,504.65	-8,984.50	9,261.72	9,249.37	12.35	749.740		
1,500.00	1,455.84	945.70	978.86	7.89	5.14	73.83	-2,503.37	-8,986.02	9,253.98	9,240.98	13.00	712.022		
1,600.00	1,544.94	979.00	1,012.03	8.50	5.25	74.09	-2,501.61	-8,988.38	9,246.13	9,232.43	13.71	674.652		
1,700.00	1,632.39	1,002.94	1,035.86	9.13	5.34	74.32	-2,500.28	-8,990.24	9,238.12	9,223.71	14.42	640.823		
1,800.00	1,718.11	1,041.94	1,074.65	9.80	5.48	74.62	-2,497.83	-8,993.49	9,229.92	9,214.71	15.21	606.635		
1,900.00	1,802.44	1,083.37	1,115.80	10.49	5.64	74.82	-2,494.86	-8,997.23	9,221.76	9,205.71	16.05	574.517		
2,000.00	1,886.68	1,143.88	1,175.81	11.20	5.87	75.05	-2,489.75	-9,003.02	9,214.18	9,197.19	16.98	542.528		
2,100.00	1,970.92	1,168.00	1,199.70	11.93	5.97	75.14	-2,487.44	-9,005.42	9,207.25	9,189.46	17.79	517.554		
2,200.00	2,055.17	1,211.30	1,242.52	12.66	6.15	75.31	-2,482.97	-9,010.02	9,201.07	9,182.39	18.69	492.387		
2,300.00	2,139.41	1,263.00	1,293.53	13.40	6.37	75.51	-2,477.11	-9,016.11	9,195.89	9,176.26	19.63	468.493		
2,400.00	2,223.66	1,263.00	1,293.53	14.14	6.37	75.51	-2,477.11	-9,016.11	9,191.37	9,171.01	20.36	451.370		
2,500.00	2,307.90	1,263.00	1,293.53	14.89	6.37	75.51	-2,477.11	-9,016.11	9,187.94	9,166.84	21.10	435.400		
2,600.00	2,392.14	1,311.00	1,340.73	15.65	6.59	75.70	-2,471.10	-9,022.41	9,185.18	9,163.12	22.05	416.481		
2,700.00	2,476.39	1,358.00	1,386.78	16.41	6.80	75.90	-2,464.62	-9,029.24	9,183.53	9,160.52	23.01	399.145		
2,800.00	2,560.63	1,358.00	1,386.78	17.17	6.80	75.90	-2,464.62	-9,029.24	9,182.58	9,158.82	23.76	386.544		
2,882.17	2,629.85	1,417.40	1,444.87	17.80	7.09	76.14	-2,456.10	-9,038.27	9,182.43	9,157.78	24.65	372.575		
2,900.00	2,644.88	1,431.49	1,458.65	17.93	7.16	76.20	-2,454.09	-9,040.41	9,182.43	9,157.59	24.85	369.585		
3,000.00	2,729.12	1,536.50	1,561.47	18.70	7.68	76.63	-2,439.67	-9,056.12	9,182.66	9,156.56	26.09	351.922		
3,100.00	2,813.36	1,578.22	1,602.38	19.47	7.89	76.80	-2,434.31	-9,062.28	9,183.31	9,156.26	27.05	339.555		
3,200.00	2,897.61	1,612.45	1,635.91	20.25	8.06	76.94	-2,429.87	-9,067.51	9,184.76	9,156.79	27.96	328.463		
3,300.00	2,981.85	1,656.03	1,678.58	21.02	8.29	77.12	-2,424.18	-9,074.38	9,187.01	9,158.08	28.93	317.589		
3,400.00	3,066.10	1,845.94	1,864.69	21.80	9.29	77.88	-2,400.14	-9,103.50	9,189.61	9,158.99	30.62	300.076		
3,500.00	3,150.34	1,863.64	1,882.02	22.58	9.38	77.95	-2,397.80	-9,106.21	9,192.24	9,160.77	31.47	292.111		
3,600.00	3,234.58	1,895.18	1,912.90	23.35	9.56	78.08	-2,393.59	-9,111.10	9,195.69	9,163.31	32.38	283.982		
3,700.00	3,318.83	3,700.00	2,006.35	24.13	19.78	78.47	-2,381.30	-9,126.04	9,199.74	9,157.46	42.28	217.581		
3,800.00	3,403.07	2,072.68	2,086.82	24.92	10.53	78.80	-2,371.13	-9,138.54	9,203.94	9,169.14	34.80	264.509		
3,900.00	3,487.32	2,117.00	2,130.24	25.70	10.77	78.98	-2,365.63	-9,145.49	9,208.91	9,173.13	35.77	257.416		
4,000.00	3,571.56	2,342.15	2,350.40	26.48	12.05	79.90	-2,333.13	-9,179.50	9,213.90	9,176.16	37.73	244.191		
4,100.00	3,655.80	2,381.12	2,388.55	27.27	12.27	80.06	-2,327.58	-9,185.13	9,218.81	9,180.12	38.69	238.259		
4,200.00	3,740.05	2,428.17	2,434.71	28.05	12.54	80.25	-2,321.62	-9,192.08	9,224.47	9,184.78	39.69	232.402		
4,300.00	3,824.29	2,481.99	2,487.46	28.84	12.84	80.47	-2,314.72	-9,200.15	9,230.78	9,190.05	40.72	226.668		
4,400.00	3,908.54	2,521.54	2,526.20	29.62	13.07	80.63	-2,309.49	-9,206.20	9,237.77	9,196.09	41.68	221.639		
4,500.00	3,992.78	2,556.43	2,560.33	30.41	13.27	80.77	-2,304.78	-9,211.69	9,245.54	9,202.93	42.61	216.991		
4,600.00	4,077.03	2,593.88	2,596.93	31.20	13.49	80.92	-2,299.63	-9,217.76	9,254.10	9,210.56	43.55	212.503		
4,700.00	4,161.27	2,698.57	2,699.21	31.98	14.11	81.35	-2,285.16	-9,234.70	9,263.10	9,218.24	44.86	206.474		
4,800.00	4,245.51	2,754.54	2,753.92	32.77	14.44	81.58	-2,277.48	-9,243.75	9,272.57	9,226.66	45.90	201.995		
4,900.00	4,329.76	4,900.00	2,878.49	33.56	27.12	82.09	-2,260.98	-9,263.91	9,282.15	9,224.45	57.70	160.877		
5,000.00	4,414.00	2,927.93	2,923.75	34.35	15.45	82.27	-2,255.76	-9,271.08	9,292.13	9,243.81	48.31	192.338		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 89-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	2,969.00	2,964.02	35.14	15.68	82.43	-2,251.34	-9,277.82	9,303.04	9,253.79	49.26	188.872		
5,200.00	4,582.49	2,998.92	2,993.34	35.93	15.86	82.55	-2,248.14	-9,282.87	9,314.70	9,264.57	50.14	185.788		
5,300.00	4,666.73	3,232.19	3,222.22	36.72	17.20	83.45	-2,223.16	-9,320.13	9,325.94	9,273.82	52.12	178.924		
5,400.00	4,750.98	5,400.00	3,408.42	37.51	29.05	84.17	-2,206.83	-9,348.01	9,336.80	9,273.60	63.21	147.722		
5,500.00	4,835.22	3,684.11	3,668.05	38.30	19.64	85.16	-2,183.25	-9,382.17	9,346.30	9,290.38	55.92	167.132		
5,600.00	4,919.47	3,729.00	3,712.36	39.09	19.88	85.33	-2,178.63	-9,387.64	9,356.03	9,299.14	56.88	164.479		
5,700.00	5,003.71	3,729.00	3,712.36	39.88	19.88	85.33	-2,178.63	-9,387.64	9,366.69	9,309.09	57.60	162.610		
5,800.00	5,088.06	3,780.70	3,763.32	40.67	20.17	85.61	-2,172.99	-9,394.29	9,377.92	9,319.32	58.60	160.046		
5,900.00	5,173.83	3,824.00	3,805.87	41.44	20.41	86.02	-2,167.80	-9,400.40	9,390.47	9,330.95	59.52	157.777		
6,000.00	5,261.34	3,824.00	3,805.87	42.18	20.41	86.29	-2,167.80	-9,400.40	9,403.96	9,343.79	60.17	156.298		
6,100.00	5,350.49	3,856.56	3,837.80	42.88	20.61	86.70	-2,163.70	-9,405.26	9,418.56	9,357.60	60.97	154.491		
6,200.00	5,441.16	3,888.24	3,868.84	43.56	20.79	87.12	-2,159.66	-9,410.16	9,434.12	9,372.40	61.72	152.846		
6,300.00	5,533.25	3,925.69	3,905.49	44.20	21.02	87.56	-2,154.80	-9,416.16	9,450.60	9,388.13	62.48	151.260		
6,400.00	5,626.65	4,150.25	4,125.54	44.82	22.35	88.54	-2,127.15	-9,451.34	9,467.25	9,402.97	64.28	147.286		
6,500.00	5,721.23	4,201.00	4,175.33	45.40	22.64	89.00	-2,121.02	-9,458.99	9,483.52	9,418.48	65.04	145.801		
6,600.00	5,816.89	4,266.72	4,239.72	45.94	23.03	89.50	-2,112.57	-9,469.07	9,500.33	9,434.46	65.87	144.233		
6,700.00	5,913.51	4,338.66	4,310.08	46.45	23.47	90.02	-2,102.46	-9,480.17	9,517.54	9,450.84	66.70	142.691		
6,800.00	6,010.97	4,390.00	4,360.20	46.93	23.78	90.49	-2,094.67	-9,488.11	9,535.08	9,467.70	67.38	141.515		
6,900.00	6,109.15	4,455.26	4,423.78	47.38	24.19	90.99	-2,084.08	-9,498.34	9,553.02	9,484.90	68.12	140.246		
7,000.00	6,207.93	6,336.32	6,287.07	47.80	33.22	93.67	-1,945.57	-9,648.60	9,568.02	9,490.46	77.56	123.363		
7,015.73	6,223.51	7,015.73	6,258.40	47.86	35.64	93.64	-1,945.79	-9,648.48	9,567.75	9,487.47	80.28	119.185		
7,100.00	6,307.19	7,100.00	6,341.96	48.18	35.94	93.72	-1,944.88	-9,648.07	9,568.08	9,487.16	80.92	118.242		
7,200.00	6,406.82	6,458.53	6,409.26	48.53	33.66	93.76	-1,943.80	-9,647.52	9,568.14	9,489.37	78.78	121.456		
7,300.00	6,506.68	6,501.66	6,452.38	48.84	33.82	93.79	-1,943.08	-9,647.55	9,568.75	9,489.48	79.27	120.704		
7,400.00	6,606.66	6,566.00	6,516.71	49.10	34.06	6.82	-1,941.92	-9,648.08	9,569.77	9,489.98	79.79	119.934		
7,500.00	6,706.21	6,597.16	6,547.87	49.35	34.18	6.90	-1,941.35	-9,648.50	9,562.85	9,482.68	80.17	119.277		
7,600.00	6,803.22	6,657.03	6,607.72	49.59	34.41	7.17	-1,940.38	-9,649.50	9,541.01	9,460.34	80.66	118.283		
7,700.00	6,895.32	6,714.20	6,664.86	49.82	34.63	7.64	-1,939.60	-9,650.70	9,504.65	9,423.52	81.13	117.159		
7,800.00	6,980.23	6,770.37	6,721.02	50.03	34.85	8.40	-1,938.98	-9,652.10	9,454.62	9,373.06	81.56	115.918		
7,900.00	7,055.85	6,829.90	6,780.53	50.21	35.08	9.59	-1,938.40	-9,653.74	9,392.00	9,310.02	81.99	114.557		
8,000.00	7,120.34	6,881.30	6,831.90	50.36	35.28	11.46	-1,937.95	-9,655.24	9,318.26	9,235.91	82.34	113.162		
8,100.00	7,172.10	6,923.29	6,873.87	50.47	35.44	14.59	-1,937.60	-9,656.54	9,235.14	9,152.51	82.63	111.759		
8,200.00	7,209.85	6,944.00	6,894.57	50.55	35.52	20.47	-1,937.44	-9,657.20	9,144.67	9,061.85	82.81	110.427		
8,300.00	7,232.68	6,944.00	6,894.57	50.61	35.52	34.00	-1,937.44	-9,657.20	9,049.06	8,966.18	82.88	109.179		
8,400.00	7,240.00	6,944.00	6,894.57	50.65	35.52	74.83	-1,937.44	-9,657.20	8,950.59	8,867.65	82.94	107.920		
8,500.00	7,239.60	6,944.00	6,894.57	50.69	35.52	74.83	-1,937.44	-9,657.20	8,851.48	8,768.49	82.99	106.660		
8,600.00	7,239.19	6,944.00	6,894.57	50.75	35.52	74.83	-1,937.44	-9,657.20	8,752.38	8,669.34	83.04	105.397		
8,700.00	7,238.78	6,944.00	6,894.57	50.85	35.52	74.83	-1,937.44	-9,657.20	8,653.31	8,570.21	83.10	104.130		
8,800.00	7,238.38	6,977.50	6,928.05	51.02	35.66	76.41	-1,937.17	-9,658.33	8,554.14	8,470.84	83.30	102.692		
8,900.00	7,237.97	6,979.21	6,929.75	51.32	35.67	76.49	-1,937.15	-9,658.39	8,455.10	8,371.72	83.38	101.410		
9,000.00	7,237.57	6,980.94	6,931.48	51.95	35.67	76.57	-1,937.14	-9,658.46	8,356.08	8,272.62	83.46	100.124		
9,100.00	7,237.16	6,982.68	6,933.22	53.10	35.68	76.66	-1,937.12	-9,658.52	8,257.08	8,173.53	83.55	98.833		
9,200.00	7,236.76	6,984.44	6,934.98	54.69	35.69	76.74	-1,937.11	-9,658.58	8,158.11	8,074.47	83.64	97.538		
9,300.00	7,236.35	6,986.22	6,936.76	56.53	35.70	76.83	-1,937.09	-9,658.65	8,059.16	7,975.42	83.74	96.239		
9,400.00	7,235.94	6,988.02	6,938.56	58.53	35.70	76.91	-1,937.07	-9,658.71	7,960.23	7,876.39	83.85	94.936		
9,500.00	7,235.54	6,989.84	6,940.38	60.62	35.71	77.00	-1,937.05	-9,658.78	7,861.34	7,777.37	83.96	93.627		
9,600.00	7,235.13	6,991.68	6,942.22	62.80	35.72	77.09	-1,937.04	-9,658.85	7,762.47	7,678.38	84.09	92.315		
9,700.00	7,234.73	6,993.54	6,944.07	65.03	35.73	77.18	-1,937.02	-9,658.91	7,663.63	7,579.41	84.22	90.997		
9,800.00	7,234.32	6,995.42	6,945.95	67.32	35.73	77.26	-1,937.00	-9,658.98	7,564.82	7,480.46	84.36	89.676		
9,900.00	7,233.92	6,997.31	6,947.85	69.66	35.74	77.36	-1,936.98	-9,659.05	7,466.04	7,381.53	84.51	88.349		
10,000.00	7,233.51	6,999.23	6,949.76	72.03	35.75	77.45	-1,936.96	-9,659.13	7,367.29	7,282.63	84.66	87.018		
10,100.00	7,233.10	7,001.17	6,951.70	74.45	35.76	77.54	-1,936.94	-9,659.20	7,268.58	7,183.74	84.83	85.682		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 89-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,232.70	7,003.13	6,953.66	76.89	35.76	77.63	-1,936.93	-9,659.27	7,169.90	7,084.89	85.01	84.341		
10,300.00	7,232.29	7,005.11	6,955.64	79.36	35.77	77.73	-1,936.91	-9,659.35	7,071.25	6,986.05	85.20	82.996		
10,400.00	7,231.89	7,007.12	6,957.64	81.86	35.78	77.83	-1,936.89	-9,659.42	6,972.65	6,887.25	85.40	81.646		
10,500.00	7,231.48	7,009.14	6,959.66	84.38	35.79	77.92	-1,936.86	-9,659.50	6,874.08	6,788.46	85.62	80.291		
10,600.00	7,231.08	7,011.19	6,961.71	86.93	35.80	78.02	-1,936.84	-9,659.58	6,775.55	6,689.71	85.84	78.931		
10,700.00	7,230.67	7,013.26	6,963.78	89.49	35.80	78.12	-1,936.82	-9,659.66	6,677.07	6,590.99	86.08	77.566		
10,800.00	7,230.26	7,015.36	6,965.87	92.07	35.81	78.22	-1,936.80	-9,659.74	6,578.63	6,492.30	86.34	76.196		
10,900.00	7,229.86	7,017.48	6,967.99	94.67	35.82	78.32	-1,936.78	-9,659.82	6,480.24	6,393.63	86.61	74.822		
11,000.00	7,229.45	7,019.62	6,970.13	97.28	35.83	78.43	-1,936.75	-9,659.91	6,381.90	6,295.00	86.90	73.442		
11,100.00	7,229.05	7,021.79	6,972.30	99.90	35.84	78.53	-1,936.73	-9,659.99	6,283.61	6,196.41	87.20	72.058		
11,200.00	7,228.64	7,023.98	6,974.49	102.54	35.85	78.64	-1,936.71	-9,660.08	6,185.37	6,097.84	87.52	70.670		
11,300.00	7,228.24	7,026.20	6,976.70	105.19	35.86	78.74	-1,936.68	-9,660.17	6,087.19	5,999.32	87.87	69.276		
11,400.00	7,227.83	7,028.44	6,978.95	107.85	35.87	78.85	-1,936.66	-9,660.26	5,989.06	5,900.83	88.23	67.879		
11,500.00	7,227.42	7,030.71	6,981.21	110.52	35.88	78.96	-1,936.63	-9,660.35	5,891.00	5,802.38	88.62	66.476		
11,600.00	7,227.02	7,033.01	6,983.51	113.20	35.88	79.07	-1,936.61	-9,660.44	5,793.01	5,703.98	89.03	65.070		
11,700.00	7,226.61	7,035.33	6,985.83	115.89	35.89	79.19	-1,936.58	-9,660.54	5,695.08	5,605.62	89.46	63.659		
11,800.00	7,226.21	7,037.68	6,988.18	118.59	35.90	79.30	-1,936.55	-9,660.64	5,597.22	5,507.30	89.92	62.244		
11,900.00	7,225.80	7,040.06	6,990.56	121.29	35.91	79.42	-1,936.53	-9,660.73	5,499.44	5,409.03	90.41	60.826		
12,000.00	7,225.40	7,042.47	6,992.97	124.00	35.92	79.53	-1,936.50	-9,660.83	5,401.74	5,310.81	90.93	59.404		
12,100.00	7,224.99	7,044.91	6,995.40	126.72	35.93	79.65	-1,936.47	-9,660.93	5,304.12	5,212.64	91.48	57.978		
12,200.00	7,224.58	7,047.38	6,997.87	129.44	35.94	79.77	-1,936.44	-9,661.04	5,206.59	5,114.52	92.07	56.550		
12,300.00	7,224.18	7,049.88	7,000.37	132.17	35.95	79.89	-1,936.41	-9,661.14	5,109.16	5,016.46	92.69	55.119		
12,400.00	7,223.77	7,052.41	7,002.89	134.91	35.96	80.02	-1,936.38	-9,661.25	5,011.82	4,918.47	93.35	53.687		
12,500.00	7,223.37	7,054.97	7,005.45	137.65	35.97	80.14	-1,936.35	-9,661.36	4,914.59	4,820.53	94.06	52.252		
12,600.00	7,222.96	7,057.57	7,008.04	140.39	35.98	80.27	-1,936.32	-9,661.47	4,817.47	4,722.67	94.80	50.816		
12,700.00	7,222.55	7,060.19	7,010.67	143.14	35.99	80.40	-1,936.29	-9,661.58	4,720.47	4,624.87	95.60	49.379		
12,800.00	7,222.15	7,062.85	7,013.33	145.89	36.01	80.53	-1,936.25	-9,661.70	4,623.59	4,527.15	96.44	47.942		
12,900.00	7,221.74	7,065.55	7,016.02	148.65	36.02	80.66	-1,936.22	-9,661.82	4,526.85	4,429.51	97.34	46.506		
13,000.00	7,221.34	7,068.28	7,018.74	151.41	36.03	80.79	-1,936.18	-9,661.94	4,430.25	4,331.95	98.30	45.070		
13,100.00	7,220.93	7,071.04	7,021.51	154.18	36.04	80.93	-1,936.15	-9,662.06	4,333.80	4,234.49	99.32	43.637		
13,200.00	7,220.53	7,073.84	7,024.30	156.94	36.05	81.06	-1,936.11	-9,662.18	4,237.51	4,137.11	100.40	42.206		
13,300.00	7,220.12	7,076.68	7,027.14	159.72	36.06	81.20	-1,936.07	-9,662.31	4,141.40	4,039.84	101.56	40.779		
13,400.00	7,219.71	7,079.55	7,030.01	162.49	36.07	81.34	-1,936.04	-9,662.44	4,045.47	3,942.68	102.79	39.357		
13,500.00	7,219.31	7,082.47	7,032.92	165.27	36.08	81.49	-1,936.00	-9,662.57	3,949.74	3,845.64	104.10	37.940		
13,600.00	7,218.90	7,085.42	7,035.87	168.05	36.10	81.63	-1,935.96	-9,662.70	3,854.23	3,748.72	105.51	36.531		
13,700.00	7,218.50	7,088.41	7,038.86	170.83	36.11	81.78	-1,935.92	-9,662.84	3,758.94	3,651.94	107.00	35.129		
13,800.00	7,218.09	7,091.44	7,041.88	173.61	36.12	81.93	-1,935.88	-9,662.98	3,663.91	3,555.30	108.60	33.736		
13,900.00	7,217.69	7,094.52	7,044.96	176.40	36.13	82.08	-1,935.83	-9,663.12	3,569.14	3,458.82	110.31	32.354		
14,000.00	7,217.28	7,097.63	7,048.07	179.19	36.15	82.23	-1,935.79	-9,663.27	3,474.66	3,362.51	112.14	30.984		
14,100.00	7,216.87	7,100.79	7,051.22	181.98	36.16	82.39	-1,935.75	-9,663.41	3,380.49	3,266.39	114.10	29.627		
14,200.00	7,216.47	7,104.00	7,054.42	184.78	36.17	82.55	-1,935.70	-9,663.56	3,286.66	3,170.47	116.20	28.286		
14,300.00	7,216.06	7,107.25	7,057.67	187.57	36.19	82.71	-1,935.65	-9,663.72	3,193.21	3,074.77	118.44	26.961		
14,400.00	7,215.66	7,110.54	7,060.96	190.37	36.20	82.87	-1,935.61	-9,663.88	3,100.16	2,979.31	120.85	25.654		
14,500.00	7,215.25	7,113.88	7,064.30	193.17	36.21	83.03	-1,935.56	-9,664.04	3,007.55	2,884.12	123.43	24.367		
14,600.00	7,214.85	7,117.27	7,067.68	195.97	36.23	83.20	-1,935.51	-9,664.20	2,915.42	2,789.22	126.20	23.102		
14,700.00	7,214.44	7,120.71	7,071.12	198.77	36.24	83.37	-1,935.46	-9,664.37	2,823.82	2,694.65	129.17	21.861		
14,800.00	7,214.03	7,124.20	7,074.60	201.58	36.25	83.54	-1,935.40	-9,664.54	2,732.81	2,600.43	132.37	20.645		
14,900.00	7,213.63	7,127.73	7,078.39	204.38	36.29	83.98	-1,935.27	-9,664.97	2,642.44	2,506.60	135.85	19.452		
15,000.00	7,213.22	7,131.30	7,083.39	207.19	36.29	83.98	-1,935.27	-9,664.97	2,552.78	2,413.25	139.53	18.296		
15,100.00	7,212.82	7,135.85	7,088.24	210.00	36.30	84.12	-1,935.22	-9,665.12	2,463.91	2,320.40	143.51	17.169		
15,200.00	7,212.41	7,141.08	7,091.46	212.81	36.32	84.38	-1,935.14	-9,665.38	2,375.92	2,228.10	147.82	16.073		
15,300.00	7,212.01	7,146.24	7,096.61	215.62	36.34	84.64	-1,935.06	-9,665.63	2,288.90	2,136.44	152.46	15.013		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 89-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.00	7,211.60	7,151.34	7,101.71	218.43	36.36	84.89	-1,934.99	-9,665.88	2,202.97	2,045.51	157.47	13.990	
15,500.00	7,211.19	7,156.38	7,106.74	221.25	36.39	85.14	-1,934.91	-9,666.13	2,118.27	1,955.41	162.86	13.006	
15,600.00	7,210.79	7,161.36	7,111.72	224.06	36.41	85.39	-1,934.83	-9,666.37	2,034.95	1,866.27	168.68	12.064	
15,700.00	7,210.38	7,166.29	7,116.63	226.88	36.43	85.63	-1,934.76	-9,666.61	1,953.18	1,778.24	174.94	11.165	
15,794.94	7,210.00	7,170.91	7,121.25	229.55	36.44	85.86	-1,934.69	-9,666.83	1,877.17	1,695.84	181.33	10.352 CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	34.00	3.28	3.28	-106.10	-2,593.31	-8,984.65	9,351.49					
100.00	100.00	43.25	77.25	3.28	3.28	-106.10	-2,593.20	-8,984.74	9,351.51	9,344.94	6.57	1,424.303		
200.00	200.00	111.61	145.60	3.34	3.29	-106.09	-2,592.58	-8,985.22	9,351.93	9,345.30	6.63	1,410.714		
300.00	299.98	171.00	204.98	3.44	3.33	71.27	-2,591.61	-8,985.94	9,352.11	9,345.35	6.76	1,382.626		
400.00	399.84	208.54	242.51	3.59	3.36	71.29	-2,590.94	-8,986.62	9,351.74	9,344.80	6.94	1,346.556		
500.00	499.45	263.00	296.94	3.79	3.41	71.34	-2,590.22	-8,988.13	9,351.08	9,343.88	7.20	1,298.434		
600.00	598.70	263.00	296.94	4.03	3.41	71.36	-2,590.22	-8,988.13	9,349.87	9,342.42	7.45	1,255.420		
700.00	697.47	263.00	296.94	4.31	3.41	71.39	-2,590.22	-8,988.13	9,348.62	9,340.88	7.74	1,208.469		
800.00	795.62	305.13	339.04	4.64	3.47	71.46	-2,590.11	-8,989.87	9,346.81	9,338.70	8.12	1,151.711		
900.00	893.06	354.00	387.82	5.00	3.55	71.57	-2,590.78	-8,992.73	9,345.20	9,336.65	8.55	1,092.904		
1,000.00	989.64	354.00	387.82	5.40	3.55	71.61	-2,590.78	-8,992.73	9,342.87	9,333.93	8.95	1,043.985		
1,100.00	1,085.27	354.00	387.82	5.83	3.55	71.66	-2,590.78	-8,992.73	9,340.52	9,331.14	9.38	995.580		
1,200.00	1,179.82	386.80	420.52	6.29	3.61	71.77	-2,591.77	-8,995.06	9,337.91	9,328.01	9.90	943.117		
1,300.00	1,273.17	411.51	445.13	6.79	3.66	71.87	-2,592.82	-8,996.95	9,335.05	9,324.60	10.44	893.919		
1,400.00	1,365.21	445.00	478.46	7.33	3.73	72.00	-2,594.69	-8,999.71	9,331.93	9,320.89	11.04	845.564		
1,500.00	1,455.84	555.27	588.07	7.89	3.99	72.31	-2,603.02	-9,008.36	9,328.14	9,316.30	11.84	787.806		
1,600.00	1,544.94	624.37	656.69	8.50	4.19	72.56	-2,609.35	-9,013.44	9,323.35	9,310.74	12.61	739.258		
1,700.00	1,632.39	740.21	771.61	9.13	4.56	72.95	-2,621.42	-9,021.59	9,317.68	9,304.10	13.57	686.437		
1,800.00	1,718.11	805.92	836.82	9.80	4.79	73.25	-2,628.02	-9,026.27	9,311.15	9,296.71	14.44	644.734		
1,900.00	1,802.44	1,344.77	1,373.72	10.49	6.86	74.89	-2,659.25	-9,056.38	9,300.81	9,283.74	17.07	545.003		
2,000.00	1,886.68	1,383.00	1,411.90	11.20	7.01	75.01	-2,659.96	-9,058.31	9,290.25	9,272.34	17.91	518.589		
2,100.00	1,970.92	1,383.00	1,411.90	11.93	7.01	75.01	-2,659.96	-9,058.31	9,280.40	9,261.77	18.63	498.106		
2,200.00	2,055.17	1,383.00	1,411.90	12.66	7.01	75.01	-2,659.96	-9,058.31	9,271.62	9,252.26	19.36	478.967		
2,300.00	2,139.41	1,383.00	1,411.90	13.40	7.01	75.01	-2,659.96	-9,058.31	9,263.91	9,243.82	20.09	461.093		
2,400.00	2,223.66	1,383.00	1,411.90	14.14	7.01	75.01	-2,659.96	-9,058.31	9,257.27	9,236.44	20.83	444.401		
2,500.00	2,307.90	1,414.65	1,443.45	14.89	7.14	75.11	-2,660.67	-9,060.66	9,251.14	9,229.44	21.70	426.360		
2,600.00	2,392.14	1,445.00	1,473.62	15.65	7.27	75.21	-2,661.67	-9,063.83	9,246.61	9,224.05	22.56	409.777		
2,700.00	2,476.39	1,445.00	1,473.62	16.41	7.27	75.21	-2,661.67	-9,063.83	9,242.64	9,219.32	23.32	396.399		
2,800.00	2,560.63	1,445.00	1,473.62	17.17	7.27	75.21	-2,661.67	-9,063.83	9,239.74	9,215.67	24.07	383.870		
2,900.00	2,644.88	1,462.62	1,491.10	17.93	7.35	75.27	-2,662.38	-9,065.93	9,237.90	9,213.00	24.90	371.049		
3,000.00	2,729.12	1,527.96	1,555.90	18.70	7.64	75.47	-2,665.46	-9,073.74	9,236.70	9,210.78	25.92	356.319		
3,100.00	2,813.36	1,569.00	1,596.58	19.47	7.83	75.60	-2,667.78	-9,078.65	9,236.01	9,209.16	26.85	343.968		
3,150.85	2,856.20	1,596.49	1,623.80	19.87	7.96	75.68	-2,669.60	-9,081.99	9,235.90	9,208.54	27.36	337.615		
3,200.00	2,897.61	1,611.88	1,639.03	20.25	8.03	75.73	-2,670.77	-9,083.89	9,236.00	9,208.21	27.80	332.278		
3,300.00	2,981.85	1,665.00	1,691.49	21.02	8.29	75.88	-2,675.61	-9,090.69	9,236.87	9,208.08	28.79	320.858		
3,400.00	3,066.10	1,665.00	1,691.49	21.80	8.29	75.88	-2,675.61	-9,090.69	9,238.39	9,208.85	29.55	312.675		
3,500.00	3,150.34	1,665.00	1,691.49	22.58	8.29	75.88	-2,675.61	-9,090.69	9,241.00	9,210.69	30.30	304.954		
3,600.00	3,234.58	1,710.65	1,736.42	23.35	8.52	76.01	-2,680.66	-9,097.02	9,244.17	9,212.90	31.27	295.617		
3,700.00	3,318.83	3,700.00	1,818.78	24.13	19.54	76.24	-2,690.99	-9,109.51	9,248.34	9,206.92	41.43	223.236		
3,800.00	3,403.07	1,914.77	1,936.82	24.92	9.59	76.57	-2,705.75	-9,126.55	9,252.03	9,218.27	33.76	274.050		
3,900.00	3,487.32	2,073.00	2,092.22	25.70	10.45	76.99	-2,726.35	-9,148.02	9,255.40	9,220.10	35.30	262.198		
4,000.00	3,571.56	2,096.61	2,115.41	26.48	10.57	77.05	-2,729.33	-9,151.29	9,259.32	9,223.15	36.18	255.949		
4,100.00	3,655.80	2,136.00	2,154.05	27.27	10.79	77.16	-2,734.31	-9,157.12	9,264.15	9,227.02	37.13	249.494		
4,200.00	3,740.05	2,164.93	2,182.39	28.05	10.95	77.24	-2,738.00	-9,161.57	9,269.69	9,231.66	38.03	243.715		
4,300.00	3,824.29	2,367.62	2,381.04	28.84	12.09	77.78	-2,764.91	-9,191.53	9,275.23	9,235.39	39.84	232.810		
4,400.00	3,908.54	2,419.00	2,431.42	29.62	12.38	77.92	-2,771.99	-9,198.75	9,280.36	9,239.49	40.87	227.081		
4,500.00	3,992.78	2,478.08	2,489.26	30.41	12.73	78.07	-2,780.55	-9,207.22	9,286.01	9,244.07	41.94	221.399		
4,600.00	4,077.03	2,521.68	2,531.84	31.20	12.98	78.18	-2,787.29	-9,213.70	9,292.37	9,249.43	42.93	216.434		
4,700.00	4,161.27	2,592.24	2,600.69	31.98	13.40	78.36	-2,798.42	-9,224.41	9,299.22	9,255.15	44.08	210.974		
4,800.00	4,245.51	2,607.00	2,615.09	32.77	13.49	78.39	-2,800.74	-9,226.67	9,306.67	9,261.76	44.91	207.227		
4,900.00	4,329.76	3,328.13	3,322.49	33.56	17.63	80.27	-2,901.90	-9,320.23	9,312.11	9,262.53	49.58	187.825		
5,000.00	4,414.00	3,499.41	3,491.66	34.35	18.55	80.72	-2,923.68	-9,335.77	9,313.56	9,262.31	51.25	181.731		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	3,550.00	3,541.56	35.14	18.83	80.85	-2,930.65	-9,340.36	9,315.37	9,263.06	52.30	178.104		
5,200.00	4,582.49	3,550.00	3,541.56	35.93	18.83	80.85	-2,930.65	-9,340.36	9,317.93	9,264.84	53.09	175.514		
5,300.00	4,666.73	3,602.63	3,593.41	36.72	19.12	80.99	-2,938.03	-9,345.60	9,321.13	9,266.97	54.15	172.121		
5,400.00	4,750.98	3,644.00	3,634.14	37.51	19.35	81.09	-2,943.69	-9,350.13	9,325.18	9,270.03	55.16	169.064		
5,500.00	4,835.22	3,644.00	3,634.14	38.30	19.35	81.09	-2,943.69	-9,350.13	9,330.04	9,274.11	55.93	166.810		
5,600.00	4,919.47	3,682.79	3,672.27	39.09	19.58	81.19	-2,949.13	-9,354.77	9,335.66	9,278.74	56.92	164.013		
5,700.00	5,003.71	3,739.00	3,727.32	39.88	19.91	81.34	-2,957.60	-9,362.26	9,342.39	9,284.38	58.01	161.061		
5,800.00	5,088.06	3,739.00	3,727.32	40.67	19.91	81.39	-2,957.60	-9,362.26	9,349.55	9,290.79	58.76	159.104		
5,900.00	5,173.83	3,764.22	3,751.96	41.44	20.06	81.61	-2,961.60	-9,365.87	9,358.11	9,298.47	59.64	156.900		
6,000.00	5,261.34	3,805.95	3,792.66	42.18	20.32	81.89	-2,968.45	-9,372.01	9,367.85	9,307.26	60.59	154.616		
6,100.00	5,350.49	4,305.00	4,281.41	42.88	23.29	83.02	-3,046.18	-9,434.78	9,374.86	9,310.68	64.18	146.065		
6,200.00	5,441.16	4,337.90	4,313.81	43.56	23.48	83.23	-3,050.54	-9,438.46	9,382.21	9,317.20	65.02	144.299		
6,300.00	5,533.25	4,370.48	4,345.85	44.20	23.67	83.45	-3,054.96	-9,442.32	9,390.71	9,324.89	65.82	142.680		
6,400.00	5,626.65	4,399.00	4,373.88	44.82	23.83	83.68	-3,058.90	-9,445.88	9,400.33	9,333.77	66.55	141.246		
6,500.00	5,721.23	4,449.87	4,423.83	45.40	24.13	83.96	-3,065.80	-9,452.54	9,410.95	9,343.57	67.38	139.671		
6,600.00	5,816.89	4,495.00	4,468.16	45.94	24.40	84.24	-3,071.58	-9,458.72	9,422.52	9,354.39	68.14	138.289		
6,700.00	5,913.51	4,546.71	4,518.90	46.45	24.70	84.53	-3,078.26	-9,466.07	9,434.99	9,366.09	68.90	136.946		
6,800.00	6,010.97	4,611.13	4,582.00	46.93	25.09	84.83	-3,087.20	-9,475.54	9,448.27	9,378.57	69.70	135.564		
6,900.00	6,109.15	4,704.55	4,673.44	47.38	25.66	85.14	-3,100.43	-9,489.31	9,461.96	9,391.32	70.64	133.948		
7,000.00	6,207.93	6,167.32	6,124.17	47.80	32.71	86.11	-3,193.82	-9,609.58	9,473.64	9,395.69	77.95	121.529		
7,016.76	6,224.54	6,182.85	6,139.71	47.86	32.76	86.12	-3,193.85	-9,609.72	9,473.64	9,395.56	78.08	121.333		
7,100.00	6,307.19	6,260.14	6,216.99	48.18	33.05	86.17	-3,193.93	-9,610.43	9,473.75	9,395.05	78.70	120.375		
7,200.00	6,406.82	6,353.27	6,310.12	48.53	33.39	86.23	-3,193.93	-9,611.35	9,474.17	9,394.75	79.42	119.297		
7,300.00	6,506.68	6,450.83	6,407.67	48.84	33.74	86.28	-3,193.76	-9,612.36	9,474.87	9,394.76	80.11	118.279		
7,400.00	6,606.66	6,550.10	6,506.93	49.10	34.10	-0.69	-3,193.32	-9,613.41	9,475.81	9,395.07	80.74	117.364		
7,500.00	6,706.21	6,649.03	6,605.86	49.35	34.46	-0.70	-3,192.61	-9,614.47	9,468.51	9,387.15	81.36	116.382		
7,600.00	6,803.22	6,817.89	6,774.70	49.59	35.03	-0.71	-3,190.52	-9,615.70	9,445.40	9,363.21	82.19	114.926		
7,700.00	6,895.32	6,987.06	6,943.84	49.82	35.61	-0.75	-3,187.06	-9,615.59	9,406.60	9,323.60	83.00	113.338		
7,800.00	6,980.23	7,028.89	6,985.65	50.03	35.75	-0.82	-3,186.28	-9,615.61	9,353.86	9,270.49	83.38	112.190		
7,900.00	7,055.85	7,087.48	7,044.23	50.21	35.95	-0.93	-3,185.19	-9,615.65	9,288.62	9,204.85	83.78	110.875		
8,000.00	7,120.34	7,137.63	7,094.38	50.36	36.12	-1.12	-3,184.35	-9,615.77	9,212.47	9,128.35	84.11	109.526		
8,100.00	7,172.10	7,178.10	7,134.84	50.47	36.26	-1.46	-3,183.74	-9,615.92	9,127.21	9,042.83	84.38	108.174		
8,200.00	7,209.85	7,207.85	7,164.59	50.55	36.36	-2.15	-3,183.33	-9,616.06	9,034.90	8,950.34	84.56	106.843		
8,300.00	7,232.68	7,229.00	7,185.74	50.61	36.43	-4.27	-3,183.05	-9,616.18	8,937.77	8,853.09	84.68	105.547		
8,400.00	7,240.00	7,229.00	7,185.74	50.65	36.43	-80.01	-3,183.05	-9,616.18	8,838.19	8,753.49	84.70	104.349		
8,500.00	7,239.60	7,229.00	7,185.74	50.69	36.43	-80.01	-3,183.05	-9,616.18	8,738.20	8,653.50	84.70	103.165		
8,600.00	7,239.19	7,229.00	7,185.74	50.75	36.43	-80.01	-3,183.05	-9,616.18	8,638.21	8,553.50	84.70	101.980		
8,700.00	7,238.78	7,229.00	7,185.74	50.85	36.43	-80.01	-3,183.05	-9,616.18	8,538.22	8,453.51	84.71	100.796		
8,800.00	7,238.38	7,229.00	7,185.74	51.02	36.43	-80.01	-3,183.05	-9,616.18	8,438.22	8,353.51	84.71	99.610		
8,900.00	7,237.97	7,229.00	7,185.74	51.32	36.43	-80.01	-3,183.05	-9,616.18	8,338.23	8,253.51	84.72	98.424		
9,000.00	7,237.57	7,229.00	7,185.74	51.95	36.43	-80.01	-3,183.05	-9,616.18	8,238.24	8,153.52	84.72	97.237		
9,100.00	7,237.16	7,229.00	7,185.74	53.10	36.43	-80.01	-3,183.05	-9,616.18	8,138.25	8,053.52	84.73	96.049		
9,200.00	7,236.76	7,229.00	7,185.74	54.69	36.43	-80.01	-3,183.05	-9,616.18	8,038.26	7,953.52	84.74	94.861		
9,300.00	7,236.35	7,229.00	7,185.74	56.53	36.43	-80.01	-3,183.05	-9,616.18	7,938.27	7,853.52	84.74	93.673		
9,400.00	7,235.94	7,229.00	7,185.74	58.53	36.43	-80.01	-3,183.05	-9,616.18	7,838.27	7,753.52	84.75	92.483		
9,500.00	7,235.54	7,229.00	7,185.74	60.62	36.43	-80.01	-3,183.05	-9,616.18	7,738.28	7,653.52	84.76	91.294		
9,600.00	7,235.13	7,229.00	7,185.74	62.80	36.43	-80.01	-3,183.05	-9,616.18	7,638.29	7,553.52	84.77	90.104		
9,700.00	7,234.73	7,229.00	7,185.74	65.03	36.43	-80.01	-3,183.05	-9,616.18	7,538.30	7,453.52	84.78	88.914		
9,800.00	7,234.32	7,229.00	7,185.74	67.32	36.43	-80.01	-3,183.05	-9,616.18	7,438.31	7,353.52	84.79	87.723		
9,900.00	7,233.92	7,229.00	7,185.74	69.66	36.43	-80.01	-3,183.05	-9,616.18	7,338.32	7,253.52	84.81	86.532		
10,000.00	7,233.51	7,229.00	7,185.74	72.03	36.43	-80.01	-3,183.05	-9,616.18	7,238.33	7,153.52	84.82	85.340		
10,100.00	7,233.10	7,229.00	7,185.74	74.45	36.43	-80.01	-3,183.05	-9,616.18	7,138.34	7,053.51	84.83	84.149		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,232.70	7,229.00	7,185.74	76.89	36.43	-80.01	-3,183.05	-9,616.18	7,038.36	6,953.51	84.84	82.957		
10,300.00	7,232.29	7,229.00	7,185.74	79.36	36.43	-80.01	-3,183.05	-9,616.18	6,938.37	6,853.51	84.86	81.764		
10,400.00	7,231.89	7,229.00	7,185.74	81.86	36.43	-80.01	-3,183.05	-9,616.18	6,838.38	6,753.51	84.87	80.572		
10,500.00	7,231.48	7,229.00	7,185.74	84.38	36.43	-80.01	-3,183.05	-9,616.18	6,738.39	6,653.50	84.89	79.379		
10,600.00	7,231.08	7,229.00	7,185.74	86.93	36.43	-80.01	-3,183.05	-9,616.18	6,638.40	6,553.50	84.90	78.187		
10,700.00	7,230.67	7,229.00	7,185.74	89.49	36.43	-80.01	-3,183.05	-9,616.18	6,538.42	6,453.50	84.92	76.994		
10,800.00	7,230.26	7,229.00	7,185.74	92.07	36.43	-80.01	-3,183.05	-9,616.18	6,438.43	6,353.49	84.94	75.801		
10,900.00	7,229.86	7,229.00	7,185.74	94.67	36.43	-80.01	-3,183.05	-9,616.18	6,338.44	6,253.49	84.96	74.608		
11,000.00	7,229.45	7,229.00	7,185.74	97.28	36.43	-80.01	-3,183.05	-9,616.18	6,238.46	6,153.48	84.98	73.415		
11,100.00	7,229.05	7,229.00	7,185.74	99.90	36.43	-80.01	-3,183.05	-9,616.18	6,138.47	6,053.48	84.99	72.222		
11,200.00	7,228.64	7,229.00	7,185.74	102.54	36.43	-80.01	-3,183.05	-9,616.18	6,038.49	5,953.47	85.01	71.029		
11,300.00	7,228.24	7,229.00	7,185.74	105.19	36.43	-80.01	-3,183.05	-9,616.18	5,938.50	5,853.47	85.04	69.836		
11,400.00	7,227.83	7,229.00	7,185.74	107.85	36.43	-80.01	-3,183.05	-9,616.18	5,838.52	5,753.46	85.06	68.643		
11,500.00	7,227.42	7,229.00	7,185.74	110.52	36.43	-80.01	-3,183.05	-9,616.18	5,738.54	5,653.46	85.08	67.450		
11,600.00	7,227.02	7,229.00	7,185.74	113.20	36.43	-80.01	-3,183.05	-9,616.18	5,638.55	5,553.45	85.10	66.257		
11,700.00	7,226.61	7,229.00	7,185.74	115.89	36.43	-80.01	-3,183.05	-9,616.18	5,538.57	5,453.45	85.12	65.064		
11,800.00	7,226.21	7,229.00	7,185.74	118.59	36.43	-80.01	-3,183.05	-9,616.18	5,438.59	5,353.44	85.15	63.872		
11,900.00	7,225.80	7,229.00	7,185.74	121.29	36.43	-80.01	-3,183.05	-9,616.18	5,338.61	5,253.44	85.17	62.680		
12,000.00	7,225.40	7,229.00	7,185.74	124.00	36.43	-80.01	-3,183.05	-9,616.18	5,238.63	5,153.43	85.20	61.488		
12,100.00	7,224.99	7,236.81	7,193.55	126.72	36.46	-84.20	-3,182.95	-9,616.23	5,138.64	5,053.40	85.24	60.284		
12,200.00	7,224.58	7,236.98	7,193.72	129.44	36.46	-84.30	-3,182.95	-9,616.23	5,038.66	4,953.40	85.27	59.093		
12,300.00	7,224.18	7,237.16	7,193.89	132.17	36.46	-84.39	-3,182.94	-9,616.23	4,938.69	4,853.39	85.29	57.902		
12,400.00	7,223.77	7,237.33	7,194.07	134.91	36.46	-84.49	-3,182.94	-9,616.23	4,838.71	4,753.39	85.32	56.711		
12,500.00	7,223.37	7,237.51	7,194.25	137.65	36.46	-84.58	-3,182.94	-9,616.23	4,738.73	4,653.38	85.35	55.521		
12,600.00	7,222.96	7,237.69	7,194.43	140.39	36.46	-84.68	-3,182.94	-9,616.24	4,638.76	4,553.38	85.38	54.331		
12,700.00	7,222.55	7,237.87	7,194.61	143.14	36.46	-84.78	-3,182.93	-9,616.24	4,538.78	4,453.38	85.41	53.142		
12,800.00	7,222.15	7,238.06	7,194.79	145.89	36.46	-84.88	-3,182.93	-9,616.24	4,438.81	4,353.37	85.44	51.952		
12,900.00	7,221.74	7,238.24	7,194.98	148.65	36.46	-84.98	-3,182.93	-9,616.24	4,338.84	4,253.37	85.47	50.764		
13,000.00	7,221.34	7,238.43	7,195.16	151.41	36.46	-85.08	-3,182.93	-9,616.24	4,238.87	4,153.37	85.50	49.575		
13,100.00	7,220.93	7,238.62	7,195.35	154.18	36.46	-85.19	-3,182.92	-9,616.24	4,138.90	4,053.37	85.54	48.387		
13,200.00	7,220.53	7,238.81	7,195.55	156.94	36.46	-85.29	-3,182.92	-9,616.24	4,038.93	3,953.36	85.57	47.200		
13,300.00	7,220.12	7,239.00	7,195.74	159.72	36.46	-85.40	-3,182.92	-9,616.24	3,938.97	3,853.36	85.61	46.013		
13,400.00	7,219.71	7,239.20	7,195.94	162.49	36.46	-85.50	-3,182.92	-9,616.25	3,839.01	3,753.36	85.64	44.827		
13,500.00	7,219.31	7,239.40	7,196.13	165.27	36.47	-85.61	-3,182.91	-9,616.25	3,739.04	3,653.37	85.68	43.640		
13,600.00	7,218.90	7,239.60	7,196.34	168.05	36.47	-85.72	-3,182.91	-9,616.25	3,639.08	3,553.37	85.72	42.455		
13,700.00	7,218.50	7,239.80	7,196.54	170.83	36.47	-85.83	-3,182.91	-9,616.25	3,539.13	3,453.37	85.76	41.270		
13,800.00	7,218.09	7,240.01	7,196.74	173.61	36.47	-85.94	-3,182.90	-9,616.25	3,439.17	3,353.37	85.80	40.085		
13,900.00	7,217.69	7,240.22	7,196.95	176.40	36.47	-86.06	-3,182.90	-9,616.25	3,339.22	3,253.38	85.84	38.901		
14,000.00	7,217.28	7,240.43	7,197.16	179.19	36.47	-86.17	-3,182.90	-9,616.25	3,239.27	3,153.39	85.88	37.717		
14,100.00	7,216.87	7,240.64	7,197.38	181.98	36.47	-86.29	-3,182.90	-9,616.26	3,139.32	3,053.39	85.93	36.534		
14,200.00	7,216.47	7,242.11	7,198.84	184.78	36.47	-87.09	-3,182.89	-9,616.26	3,039.38	2,953.40	85.98	35.352		
14,300.00	7,216.06	7,242.31	7,199.04	187.57	36.47	-87.20	-3,182.88	-9,616.26	2,939.44	2,853.41	86.03	34.169		
14,400.00	7,215.66	7,242.50	7,199.24	190.37	36.47	-87.31	-3,182.88	-9,616.26	2,839.50	2,753.42	86.08	32.987		
14,500.00	7,215.25	7,242.70	7,199.44	193.17	36.48	-87.42	-3,182.88	-9,616.27	2,739.57	2,653.44	86.14	31.805		
14,600.00	7,214.85	7,242.91	7,199.64	195.97	36.48	-87.53	-3,182.88	-9,616.27	2,639.65	2,553.45	86.20	30.624		
14,700.00	7,214.44	7,243.11	7,199.84	198.77	36.48	-87.64	-3,182.88	-9,616.27	2,539.73	2,453.47	86.26	29.442		
14,800.00	7,214.03	7,243.31	7,200.05	201.58	36.48	-87.75	-3,182.87	-9,616.27	2,439.82	2,353.49	86.33	28.261		
14,900.00	7,213.63	7,243.52	7,200.25	204.38	36.48	-87.86	-3,182.87	-9,616.27	2,339.91	2,253.51	86.41	27.080		
15,000.00	7,213.22	7,243.72	7,200.46	207.19	36.48	-87.98	-3,182.87	-9,616.27	2,240.02	2,153.53	86.49	25.898		
15,100.00	7,212.82	7,243.93	7,200.66	210.00	36.48	-88.09	-3,182.87	-9,616.27	2,140.13	2,053.54	86.59	24.716		
15,200.00	7,212.41	7,244.14	7,200.87	212.81	36.48	-88.20	-3,182.86	-9,616.27	2,040.26	1,953.56	86.69	23.534		
15,300.00	7,212.01	7,244.35	7,201.08	215.62	36.48	-88.32	-3,182.86	-9,616.28	1,940.39	1,853.58	86.81	22.351		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-8-17(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 82-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.00	7,211.60	7,244.56	7,201.29	218.43	36.48	-88.43	-3,182.86	-9,616.28	1,840.55	1,753.59	86.95	21.167	
15,500.00	7,211.19	7,244.77	7,201.50	221.25	36.48	-88.55	-3,182.85	-9,616.28	1,740.72	1,653.60	87.12	19.982	
15,600.00	7,210.79	7,244.98	7,201.72	224.06	36.48	-88.67	-3,182.85	-9,616.28	1,640.91	1,553.60	87.31	18.795	
15,700.00	7,210.38	7,245.20	7,201.93	226.88	36.48	-88.79	-3,182.85	-9,616.28	1,541.12	1,453.59	87.54	17.605	
15,794.94	7,210.00	7,245.40	7,202.14	229.55	36.48	-88.90	-3,182.85	-9,616.28	1,446.41	1,358.61	87.80	16.474	CC, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 8-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 172-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	964.53	988.44	3.28	5.72	-106.85	-2,676.65	-8,836.36	9,285.62					
100.00	100.00	1,027.89	1,050.09	3.28	6.05	-106.93	-2,687.24	-8,826.32	9,275.12	9,265.84	9.28	999.483		
200.00	200.00	1,073.26	1,094.32	3.34	6.30	-106.99	-2,694.66	-8,819.43	9,265.17	9,255.62	9.55	969.856		
300.00	299.98	1,098.00	1,118.48	3.44	6.43	70.52	-2,698.59	-8,815.82	9,255.28	9,245.51	9.77	947.143		
400.00	399.84	1,148.17	1,167.58	3.59	6.69	70.67	-2,706.25	-8,808.93	9,244.84	9,234.68	10.17	909.422		
500.00	499.45	1,193.00	1,211.58	3.79	6.93	70.85	-2,712.71	-8,803.33	9,234.01	9,223.43	10.58	872.465		
600.00	598.70	1,247.48	1,265.07	4.03	7.22	71.05	-2,720.75	-8,796.77	9,222.59	9,211.49	11.10	830.860		
700.00	697.47	1,322.57	1,338.60	4.31	7.63	71.27	-2,732.89	-8,787.58	9,210.33	9,198.56	11.77	782.309		
800.00	795.62	1,395.07	1,409.68	4.64	8.03	71.52	-2,744.27	-8,779.01	9,197.23	9,184.75	12.48	737.249		
900.00	893.06	1,708.15	1,717.88	5.00	9.70	71.92	-2,784.55	-8,741.72	9,182.42	9,167.97	14.45	635.409		
1,000.00	989.64	1,757.00	1,765.95	5.40	9.97	72.28	-2,790.72	-8,735.57	9,165.42	9,150.33	15.09	607.344		
1,100.00	1,085.27	1,783.35	1,791.89	5.83	10.12	72.64	-2,794.13	-8,732.41	9,147.97	9,132.32	15.65	584.623		
1,200.00	1,179.82	1,851.00	1,858.42	6.29	10.49	73.06	-2,803.34	-8,724.37	9,130.00	9,113.54	16.46	554.742		
1,300.00	1,273.17	2,254.81	2,254.55	6.79	12.81	73.93	-2,857.39	-8,668.27	9,107.82	9,088.68	19.14	475.891		
1,400.00	1,365.21	2,321.00	2,319.65	7.33	13.19	74.48	-2,864.77	-8,658.80	9,085.06	9,065.05	20.00	454.229		
1,500.00	1,455.84	2,349.89	2,348.11	7.89	13.35	74.99	-2,867.79	-8,654.87	9,061.91	9,041.21	20.70	437.874		
1,600.00	1,544.94	2,383.29	2,381.02	8.50	13.53	75.52	-2,871.45	-8,650.50	9,038.58	9,017.14	21.45	421.476		
1,700.00	1,632.39	2,511.00	2,506.62	9.13	14.26	76.28	-2,887.41	-8,633.88	9,015.12	8,992.39	22.73	396.594		
1,800.00	1,718.11	2,568.63	2,563.19	9.80	14.59	76.90	-2,895.10	-8,626.02	8,990.47	8,966.79	23.68	379.610		
1,900.00	1,802.44	2,737.82	2,729.18	10.49	15.59	77.48	-2,917.93	-8,602.61	8,965.35	8,940.08	25.28	354.706		
2,000.00	1,886.68	2,827.11	2,816.31	11.20	16.15	77.69	-2,932.09	-8,589.15	8,939.70	8,913.23	26.47	337.734		
2,100.00	1,970.92	2,890.00	2,877.83	11.93	16.53	77.84	-2,941.33	-8,579.96	8,914.35	8,886.83	27.52	323.873		
2,200.00	2,055.17	2,925.51	2,912.66	12.66	16.74	77.93	-2,946.17	-8,575.04	8,889.56	8,861.14	28.43	312.734		
2,300.00	2,139.41	2,984.00	2,970.18	13.40	17.08	78.08	-2,953.74	-8,567.58	8,865.61	8,836.15	29.46	300.957		
2,400.00	2,223.66	3,003.83	2,989.70	14.14	17.19	78.13	-2,956.27	-8,565.18	8,842.17	8,811.88	30.29	291.873		
2,500.00	2,307.90	3,078.00	3,062.54	14.89	17.63	78.32	-2,966.72	-8,555.93	8,819.17	8,787.74	31.43	280.611		
2,600.00	2,392.14	3,119.34	3,103.16	15.65	17.86	78.42	-2,972.56	-8,550.93	8,796.69	8,764.30	32.39	271.612		
2,700.00	2,476.39	3,169.00	3,152.18	16.41	18.14	78.56	-2,978.47	-8,545.61	8,774.98	8,741.59	33.39	262.772		
2,800.00	2,560.63	3,190.30	3,173.26	17.17	18.25	78.62	-2,980.73	-8,543.52	8,753.94	8,719.69	34.25	255.587		
2,900.00	2,644.88	3,230.48	3,213.05	17.93	18.45	78.73	-2,984.88	-8,539.79	8,733.63	8,698.43	35.20	248.106		
3,000.00	2,729.12	3,276.70	3,258.86	18.70	18.69	78.86	-2,989.54	-8,535.79	8,714.00	8,677.82	36.19	240.817		
3,100.00	2,813.36	3,345.87	3,327.36	19.47	19.05	79.06	-2,997.09	-8,529.90	8,694.86	8,657.58	37.28	233.203		
3,200.00	2,897.61	3,405.61	3,386.50	20.25	19.35	79.22	-3,003.96	-8,524.90	8,676.17	8,637.82	38.34	226.284		
3,300.00	2,981.85	3,576.41	3,555.68	21.02	20.23	79.71	-3,022.17	-8,510.28	8,657.29	8,617.35	39.93	216.787		
3,400.00	3,066.10	3,610.16	3,589.10	21.80	20.41	79.81	-3,025.93	-8,507.33	8,638.59	8,597.71	40.87	211.346		
3,500.00	3,150.34	4,112.00	4,082.51	22.58	23.30	81.15	-3,093.80	-8,448.18	8,615.79	8,571.55	44.24	194.761		
3,600.00	3,234.58	4,142.43	4,112.38	23.35	23.48	81.23	-3,097.96	-8,444.14	8,593.79	8,548.61	45.18	190.195		
3,700.00	3,318.83	4,184.21	4,153.46	24.13	23.72	81.34	-3,103.38	-8,438.86	8,572.48	8,526.29	46.19	185.595		
3,800.00	3,403.07	4,245.17	4,213.48	24.92	24.08	81.51	-3,111.14	-8,431.51	8,551.81	8,504.52	47.30	180.814		
3,900.00	3,487.32	4,301.00	4,268.26	25.70	24.40	81.66	-3,119.43	-8,424.63	8,531.49	8,483.11	48.38	176.341		
4,000.00	3,571.56	4,350.94	4,317.23	26.48	24.70	81.79	-3,127.17	-8,418.64	8,511.74	8,462.30	49.44	172.161		
4,100.00	3,655.80	4,396.00	4,361.53	27.27	24.96	81.91	-3,133.76	-8,413.66	8,492.76	8,442.28	50.48	168.253		
4,200.00	3,740.05	4,439.99	4,404.84	28.05	25.21	82.03	-3,139.93	-8,409.09	8,474.44	8,422.95	51.50	164.558		
4,300.00	3,824.29	4,491.00	4,455.11	28.84	25.50	82.17	-3,146.91	-8,403.98	8,456.69	8,404.13	52.56	160.907		
4,400.00	3,908.54	4,530.88	4,494.47	29.62	25.72	82.28	-3,152.18	-8,400.24	8,439.59	8,386.04	53.55	157.597		
4,500.00	3,992.78	4,585.00	4,547.97	30.41	26.01	82.44	-3,158.93	-8,395.66	8,423.32	8,368.70	54.62	154.225		
4,600.00	4,077.03	4,585.00	4,547.97	31.20	26.01	82.44	-3,158.93	-8,395.66	8,407.77	8,352.35	55.41	151.727		
4,700.00	4,161.27	4,629.48	4,592.03	31.98	26.23	82.57	-3,164.08	-8,392.40	8,393.02	8,336.61	56.42	148.765		
4,800.00	4,245.51	4,680.00	4,642.17	32.77	26.49	82.72	-3,169.41	-8,389.36	8,379.25	8,321.80	57.45	145.852		
4,900.00	4,329.76	4,680.00	4,642.17	33.56	26.49	82.72	-3,169.41	-8,389.36	8,366.19	8,307.95	58.24	143.649		
5,000.00	4,414.00	4,723.29	4,685.21	34.35	26.69	82.85	-3,173.65	-8,387.25	8,354.02	8,294.79	59.23	141.055		
5,100.00	4,498.25	4,774.00	4,735.65	35.14	26.93	83.01	-3,178.40	-8,385.27	8,342.72	8,282.48	60.24	138.484		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 8-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 172-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,912.04	4,873.18	35.93	27.54	83.46	-3,188.63	-8,379.55	8,331.31	8,269.68	61.63	135.184		
5,300.00	4,666.73	4,964.00	4,925.00	36.72	27.76	83.63	-3,191.87	-8,377.50	8,320.27	8,257.63	62.64	132.833		
5,400.00	4,750.98	5,002.85	4,963.76	37.51	27.93	83.76	-3,194.18	-8,376.17	8,309.93	8,246.35	63.58	130.694		
5,500.00	4,835.22	5,059.00	5,019.81	38.30	28.16	83.95	-3,197.28	-8,374.63	8,300.38	8,235.78	64.60	128.487		
5,600.00	4,919.47	5,086.54	5,047.32	39.09	28.26	84.04	-3,198.51	-8,374.05	8,291.54	8,226.05	65.48	126.618		
5,700.00	5,003.71	5,128.24	5,088.99	39.88	28.42	84.19	-3,199.58	-8,373.42	8,283.48	8,217.06	66.42	124.713		
5,800.00	5,088.06	5,174.93	5,135.68	40.67	28.59	84.32	-3,199.73	-8,373.05	8,276.20	8,208.84	67.36	122.861		
5,900.00	5,173.83	5,232.63	5,193.38	41.44	28.78	84.40	-3,199.68	-8,372.82	8,269.84	8,201.53	68.31	121.062		
6,000.00	5,261.34	5,293.88	5,254.63	42.18	28.98	84.49	-3,199.67	-8,372.77	8,264.41	8,195.17	69.24	119.357		
6,100.00	5,350.49	5,362.02	5,322.77	42.88	29.20	84.61	-3,199.90	-8,372.92	8,259.84	8,189.68	70.17	117.718		
6,200.00	5,441.16	5,447.40	5,408.15	43.56	29.48	84.78	-3,200.32	-8,373.21	8,255.95	8,184.82	71.13	116.069		
6,300.00	5,533.25	5,534.17	5,494.91	44.20	29.77	84.95	-3,200.82	-8,373.56	8,252.64	8,180.57	72.07	114.512		
6,400.00	5,626.65	5,622.22	5,582.96	44.82	30.06	85.10	-3,201.42	-8,373.98	8,249.85	8,176.87	72.98	113.044		
6,500.00	5,721.23	5,722.42	5,683.16	45.40	30.39	85.28	-3,202.00	-8,374.45	8,247.50	8,173.60	73.90	111.607		
6,600.00	5,816.89	5,823.56	5,784.30	45.94	30.72	85.44	-3,202.31	-8,374.87	8,245.48	8,170.70	74.79	110.251		
6,700.00	5,913.51	5,928.30	5,889.04	46.45	31.07	85.59	-3,202.36	-8,375.25	8,243.77	8,168.11	75.66	108.952		
6,800.00	6,010.97	6,044.43	6,005.17	46.93	31.47	85.74	-3,202.72	-8,375.45	8,242.22	8,165.66	76.56	107.650		
6,900.00	6,109.15	6,161.64	6,122.37	47.38	31.87	85.86	-3,203.69	-8,375.37	8,240.76	8,163.33	77.44	106.418		
7,000.00	6,207.93	6,305.98	6,266.70	47.80	32.41	85.97	-3,205.42	-8,374.72	8,239.24	8,160.82	78.42	105.069		
7,100.00	6,307.19	6,458.20	6,418.90	48.18	32.99	86.05	-3,207.32	-8,373.10	8,237.35	8,157.95	79.40	103.741		
7,200.00	6,406.82	6,549.35	6,510.03	48.53	33.35	86.05	-3,208.68	-8,371.85	8,235.42	8,155.30	80.12	102.789		
7,300.00	6,506.68	6,635.55	6,596.20	48.84	33.69	86.04	-3,210.42	-8,370.80	8,233.89	8,153.10	80.79	101.921		
7,400.00	6,606.66	6,721.80	6,682.42	49.10	34.03	-0.99	-3,212.61	-8,369.88	8,232.77	8,151.37	81.40	101.144		
7,500.00	6,706.21	6,812.69	6,773.27	49.35	34.39	-1.02	-3,215.22	-8,369.05	8,223.57	8,141.55	82.02	100.269		
7,600.00	6,803.22	6,904.18	6,864.73	49.59	34.75	-1.08	-3,217.48	-8,368.28	8,198.99	8,116.36	82.64	99.218		
7,700.00	6,895.32	6,990.98	6,951.51	49.82	35.10	-1.18	-3,219.24	-8,367.61	8,159.63	8,076.41	83.23	98.042		
7,800.00	6,980.23	7,092.67	7,053.18	50.03	35.50	-1.32	-3,220.91	-8,366.82	8,106.40	8,022.54	83.86	96.671		
7,900.00	7,055.85	7,203.82	7,164.32	50.21	35.94	-1.56	-3,222.68	-8,365.53	8,040.29	7,955.80	84.49	95.161		
8,000.00	7,120.34	7,297.38	7,257.85	50.36	36.32	-1.94	-3,224.15	-8,364.05	7,963.03	7,878.01	85.02	93.663		
8,100.00	7,172.10	7,371.11	7,331.55	50.47	36.61	-2.60	-3,225.31	-8,362.64	7,876.65	7,791.22	85.42	92.207		
8,200.00	7,209.85	7,423.42	7,383.84	50.55	36.82	-4.04	-3,226.12	-8,361.50	7,783.39	7,697.69	85.70	90.817		
8,300.00	7,232.68	7,430.53	7,390.95	50.61	36.85	-8.78	-3,226.23	-8,361.39	7,685.73	7,599.96	85.77	89.605		
8,400.00	7,240.00	7,435.77	7,396.19	50.65	36.87	-140.26	-3,226.32	-8,361.28	7,586.00	7,500.19	85.81	88.410		
8,500.00	7,239.60	7,433.27	7,393.70	50.69	36.86	-139.89	-3,226.28	-8,361.33	7,486.05	7,400.25	85.79	87.256		
8,600.00	7,239.19	7,430.77	7,391.20	50.75	36.85	-139.51	-3,226.24	-8,361.38	7,386.10	7,300.32	85.78	86.100		
8,700.00	7,238.78	7,448.45	7,408.87	50.85	36.92	-142.06	-3,226.51	-8,360.92	7,286.09	7,200.24	85.85	84.870		
8,800.00	7,238.38	7,444.54	7,404.96	51.02	36.91	-141.52	-3,226.45	-8,361.01	7,186.15	7,100.31	85.84	83.719		
8,900.00	7,237.97	7,440.67	7,401.09	51.32	36.89	-140.97	-3,226.39	-8,361.10	7,086.21	7,000.38	85.82	82.568		
9,000.00	7,237.57	7,436.85	7,397.27	51.95	36.87	-140.42	-3,226.33	-8,361.19	6,986.27	6,900.46	85.81	81.415		
9,100.00	7,237.16	7,433.07	7,393.49	53.10	36.86	-139.86	-3,226.27	-8,361.28	6,886.33	6,800.53	85.80	80.261		
9,200.00	7,236.76	7,429.33	7,389.76	54.69	36.84	-139.29	-3,226.21	-8,361.37	6,786.39	6,700.60	85.79	79.106		
9,300.00	7,236.35	7,425.64	7,386.06	56.53	36.83	-138.71	-3,226.16	-8,361.45	6,686.45	6,600.67	85.78	77.949		
9,400.00	7,235.94	7,421.98	7,382.41	58.53	36.82	-138.13	-3,226.10	-8,361.53	6,586.51	6,500.74	85.77	76.792		
9,500.00	7,235.54	7,418.37	7,378.80	60.62	36.80	-137.54	-3,226.04	-8,361.62	6,486.58	6,400.81	85.76	75.634		
9,600.00	7,235.13	7,414.79	7,375.22	62.80	36.79	-136.94	-3,225.99	-8,361.70	6,386.64	6,300.88	85.76	74.474		
9,700.00	7,234.73	7,411.25	7,371.69	65.03	36.77	-136.34	-3,225.93	-8,361.77	6,286.70	6,200.95	85.75	73.314		
9,800.00	7,234.32	7,407.76	7,368.19	67.32	36.76	-135.72	-3,225.88	-8,361.85	6,186.77	6,101.02	85.74	72.153		
9,900.00	7,233.92	7,404.29	7,364.73	69.66	36.74	-135.10	-3,225.82	-8,361.93	6,086.83	6,001.09	85.74	70.991		
10,000.00	7,233.51	7,400.81	7,361.31	72.03	36.73	-134.47	-3,225.77	-8,362.00	5,986.90	5,901.16	85.74	69.828		
10,100.00	7,233.10	7,397.48	7,357.92	74.45	36.72	-133.84	-3,225.72	-8,362.08	5,886.96	5,801.23	85.73	68.665		
10,200.00	7,232.70	7,394.13	7,354.57	76.89	36.70	-133.20	-3,225.67	-8,362.15	5,787.03	5,701.30	85.73	67.500		
10,300.00	7,232.29	7,390.81	7,351.25	79.36	36.69	-132.55	-3,225.61	-8,362.22	5,687.10	5,601.37	85.73	66.335		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 8-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 172-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	7,387.53	7,347.97	81.86	36.68	-131.89	-3,225.56	-8,362.29	5,587.17	5,501.43	85.73	65.169		
10,500.00	7,231.48	7,384.28	7,344.72	84.38	36.66	-131.23	-3,225.51	-8,362.36	5,487.24	5,401.50	85.73	64.003		
10,600.00	7,231.08	7,381.07	7,341.51	86.93	36.65	-130.56	-3,225.46	-8,362.43	5,387.31	5,301.57	85.74	62.836		
10,700.00	7,230.67	7,377.89	7,338.33	89.49	36.64	-129.88	-3,225.41	-8,362.50	5,287.38	5,201.64	85.74	61.668		
10,800.00	7,230.26	7,374.74	7,335.18	92.07	36.63	-129.19	-3,225.36	-8,362.56	5,187.45	5,101.71	85.74	60.499		
10,900.00	7,229.86	7,371.62	7,332.07	94.67	36.61	-128.50	-3,225.31	-8,362.63	5,087.53	5,001.78	85.75	59.330		
11,000.00	7,229.45	7,368.53	7,328.98	97.28	36.60	-127.80	-3,225.27	-8,362.69	4,987.60	4,901.85	85.76	58.161		
11,100.00	7,229.05	7,365.48	7,325.93	99.90	36.59	-127.10	-3,225.22	-8,362.75	4,887.68	4,801.92	85.76	56.991		
11,200.00	7,228.64	7,362.46	7,322.91	102.54	36.58	-126.38	-3,225.17	-8,362.81	4,787.76	4,701.99	85.77	55.820		
11,300.00	7,228.24	7,359.46	7,319.91	105.19	36.57	-125.66	-3,225.12	-8,362.87	4,687.84	4,602.06	85.78	54.649		
11,400.00	7,227.83	7,356.50	7,316.95	107.85	36.55	-124.94	-3,225.08	-8,362.93	4,587.92	4,502.13	85.79	53.477		
11,500.00	7,227.42	7,353.56	7,314.02	110.52	36.54	-124.21	-3,225.03	-8,362.99	4,488.01	4,402.21	85.80	52.306		
11,600.00	7,227.02	7,350.66	7,311.11	113.20	36.53	-123.47	-3,224.99	-8,363.05	4,388.10	4,302.28	85.82	51.133		
11,700.00	7,226.61	7,347.78	7,308.23	115.89	36.52	-122.73	-3,224.94	-8,363.11	4,288.19	4,202.36	85.83	49.960		
11,800.00	7,226.21	7,344.93	7,305.39	118.59	36.51	-121.98	-3,224.90	-8,363.16	4,188.28	4,102.43	85.85	48.787		
11,900.00	7,225.80	7,342.11	7,302.57	121.29	36.50	-121.23	-3,224.85	-8,363.22	4,088.38	4,002.51	85.87	47.613		
12,000.00	7,225.40	7,339.32	7,299.77	124.00	36.49	-120.47	-3,224.81	-8,363.27	3,988.47	3,902.59	85.89	46.439		
12,100.00	7,224.99	7,336.55	7,297.01	126.72	36.47	-119.70	-3,224.77	-8,363.33	3,888.58	3,802.67	85.91	45.265		
12,200.00	7,224.58	7,333.81	7,294.26	129.44	36.46	-118.93	-3,224.72	-8,363.38	3,788.68	3,702.75	85.93	44.090		
12,300.00	7,224.18	7,331.09	7,291.55	132.17	36.45	-118.16	-3,224.68	-8,363.43	3,688.79	3,602.84	85.96	42.915		
12,400.00	7,223.77	7,328.40	7,288.86	134.91	36.44	-117.38	-3,224.64	-8,363.48	3,588.91	3,502.92	85.98	41.740		
12,500.00	7,223.37	7,325.74	7,286.20	137.65	36.43	-116.60	-3,224.60	-8,363.53	3,489.02	3,403.01	86.01	40.564		
12,600.00	7,222.96	7,323.10	7,283.56	140.39	36.42	-115.82	-3,224.55	-8,363.58	3,389.15	3,303.10	86.05	39.387		
12,700.00	7,222.55	7,320.48	7,280.95	143.14	36.41	-115.03	-3,224.51	-8,363.63	3,289.28	3,203.20	86.08	38.210		
12,800.00	7,222.15	7,317.89	7,278.36	145.89	36.40	-114.23	-3,224.47	-8,363.68	3,189.41	3,103.29	86.12	37.033		
12,900.00	7,221.74	7,315.33	7,275.79	148.65	36.39	-113.44	-3,224.43	-8,363.73	3,089.56	3,003.39	86.17	35.855		
13,000.00	7,221.34	7,312.78	7,273.25	151.41	36.38	-112.64	-3,224.39	-8,363.77	2,989.71	2,903.49	86.22	34.677		
13,100.00	7,220.93	7,310.26	7,270.73	154.18	36.37	-111.84	-3,224.35	-8,363.82	2,889.87	2,803.60	86.27	33.498		
13,200.00	7,220.53	7,307.77	7,268.23	156.94	36.36	-111.04	-3,224.31	-8,363.86	2,790.04	2,703.71	86.33	32.318		
13,300.00	7,220.12	7,305.29	7,265.76	159.72	36.35	-110.23	-3,224.28	-8,363.91	2,690.22	2,603.82	86.40	31.137		
13,400.00	7,219.71	7,302.84	7,263.31	162.49	36.34	-109.43	-3,224.24	-8,363.95	2,590.41	2,503.93	86.47	29.956		
13,500.00	7,219.31	7,300.41	7,260.88	165.27	36.33	-108.62	-3,224.20	-8,364.00	2,490.61	2,404.05	86.56	28.773		
13,600.00	7,218.90	7,298.00	7,258.47	168.05	36.32	-107.81	-3,224.16	-8,364.04	2,390.83	2,304.17	86.66	27.589		
13,700.00	7,218.50	7,295.62	7,256.09	170.83	36.31	-107.01	-3,224.12	-8,364.08	2,291.07	2,204.30	86.77	26.404		
13,800.00	7,218.09	7,293.25	7,253.72	173.61	36.30	-106.20	-3,224.09	-8,364.12	2,191.32	2,104.42	86.90	25.218		
13,900.00	7,217.69	7,290.91	7,251.38	176.40	36.29	-105.39	-3,224.05	-8,364.16	2,091.60	2,004.55	87.04	24.029		
14,000.00	7,217.28	7,288.59	7,249.06	179.19	36.28	-104.58	-3,224.01	-8,364.20	1,991.90	1,904.68	87.22	22.839		
14,100.00	7,216.87	7,286.28	7,246.75	181.98	36.27	-103.78	-3,223.98	-8,364.24	1,892.23	1,804.81	87.42	21.646		
14,200.00	7,216.47	7,284.00	7,244.47	184.78	36.26	-102.97	-3,223.94	-8,364.28	1,792.60	1,704.94	87.66	20.450		
14,300.00	7,216.06	7,281.74	7,242.21	187.57	36.26	-102.17	-3,223.91	-8,364.32	1,693.00	1,605.06	87.95	19.251		
14,400.00	7,215.66	7,279.49	7,239.97	190.37	36.25	-101.36	-3,223.87	-8,364.36	1,593.45	1,505.16	88.29	18.047		
14,500.00	7,215.25	7,277.27	7,237.74	193.17	36.24	-100.56	-3,223.84	-8,364.40	1,493.97	1,405.25	88.72	16.840		
14,600.00	7,214.85	7,275.06	7,235.54	195.97	36.23	-99.76	-3,223.80	-8,364.43	1,394.55	1,305.31	89.24	15.627		
14,700.00	7,214.44	7,272.87	7,233.35	198.77	36.22	-98.97	-3,223.77	-8,364.47	1,295.21	1,205.32	89.90	14.408		
14,800.00	7,214.03	7,270.71	7,231.18	201.58	36.21	-98.18	-3,223.73	-8,364.51	1,195.99	1,105.25	90.73	13.181		
14,900.00	7,213.63	7,268.56	7,229.03	204.38	36.20	-97.39	-3,223.70	-8,364.54	1,096.90	1,005.09	91.81	11.947		
15,000.00	7,213.22	7,266.42	7,226.90	207.19	36.19	-96.60	-3,223.66	-8,364.58	997.99	904.75	93.23	10.704		
15,100.00	7,212.82	7,264.31	7,224.79	210.00	36.19	-95.82	-3,223.63	-8,364.61	899.31	804.17	95.14	9.453		
15,200.00	7,212.41	7,262.21	7,222.69	212.81	36.18	-95.04	-3,223.60	-8,364.65	800.96	703.21	97.75	8.194		
15,300.00	7,212.01	7,260.14	7,220.61	215.62	36.17	-94.27	-3,223.57	-8,364.68	703.06	601.63	101.44	6.931		
15,400.00	7,211.60	7,258.07	7,218.55	218.43	36.16	-93.50	-3,223.53	-8,364.71	605.85	499.06	106.79	5.673		
15,500.00	7,211.19	7,256.03	7,216.51	221.25	36.15	-92.73	-3,223.50	-8,364.75	509.71	394.85	114.86	4.438		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 8-8-17(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 172-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,600.00	7,210.79	7,254.00	7,214.48	224.06	36.14	-91.98	-3,223.47	-8,364.78	415.39	287.88	127.51	3.258	
15,700.00	7,210.38	7,251.99	7,212.47	226.88	36.14	-91.22	-3,223.44	-8,364.81	324.47	176.18	148.29	2.188	
15,794.94	7,210.00	7,250.10	7,210.58	229.55	36.13	-90.51	-3,223.41	-8,364.84	244.77	63.52	181.25	1.350	Level 3, CC, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - GREELEY SWD #1(XX) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	63.00	3.28	3.28	-130.98	-2,926.24	-3,368.42	4,462.41					
100.00	100.00	37.00	100.00	3.28	3.34	-130.98	-2,926.24	-3,368.42	4,461.96	4,455.34	6.63	673.229		
200.00	200.00	137.00	200.00	3.34	4.47	-130.98	-2,926.24	-3,368.42	4,461.96	4,454.16	7.81	571.516		
300.00	299.98	236.98	299.98	3.44	7.31	46.40	-2,926.24	-3,368.42	4,460.76	4,450.01	10.74	415.152		
400.00	399.84	336.84	399.84	3.59	10.54	46.50	-2,926.24	-3,368.42	4,457.15	4,443.02	14.13	315.502		
500.00	499.45	436.45	499.45	3.79	13.88	46.67	-2,926.24	-3,368.42	4,451.15	4,433.48	17.67	251.860		
600.00	598.70	535.70	598.70	4.03	17.27	46.91	-2,926.24	-3,368.42	4,442.77	4,421.47	21.30	208.565		
700.00	697.47	634.47	697.47	4.31	20.67	47.21	-2,926.24	-3,368.42	4,432.04	4,407.07	24.98	177.436		
800.00	795.62	732.62	795.62	4.64	24.06	47.59	-2,926.24	-3,368.42	4,419.00	4,390.32	28.68	154.057		
900.00	893.06	830.06	893.06	5.00	27.43	48.03	-2,926.24	-3,368.42	4,403.68	4,371.27	32.41	135.889		
1,000.00	989.64	926.64	989.64	5.40	30.78	48.55	-2,926.24	-3,368.42	4,386.12	4,349.99	36.14	121.381		
1,100.00	1,085.27	1,022.27	1,085.27	5.83	34.10	49.13	-2,926.24	-3,368.42	4,366.40	4,326.53	39.86	109.534		
1,200.00	1,179.82	1,116.82	1,179.82	6.29	37.39	49.78	-2,926.24	-3,368.42	4,344.55	4,300.97	43.58	99.681		
1,300.00	1,273.17	1,210.17	1,273.17	6.79	40.63	50.51	-2,926.24	-3,368.42	4,320.67	4,273.37	47.29	91.359		
1,400.00	1,365.21	1,302.21	1,365.21	7.33	43.84	51.31	-2,926.24	-3,368.42	4,294.81	4,243.83	50.99	84.237		
1,500.00	1,455.84	1,407.16	1,455.84	7.89	47.49	52.18	-2,926.24	-3,368.42	4,267.07	4,211.92	55.15	77.367		
1,600.00	1,544.94	1,481.94	1,544.94	8.50	50.10	53.13	-2,926.24	-3,368.42	4,237.54	4,179.24	58.30	72.685		
1,700.00	1,632.39	1,569.39	1,632.39	9.13	53.14	54.15	-2,926.24	-3,368.42	4,206.32	4,144.40	61.92	67.937		
1,800.00	1,718.11	1,655.11	1,718.11	9.80	56.13	55.23	-2,926.24	-3,368.42	4,173.51	4,108.01	65.50	63.719		
1,900.00	1,802.44	1,739.44	1,802.44	10.49	59.07	55.96	-2,926.24	-3,368.42	4,139.68	4,070.62	69.06	59.946		
2,000.00	1,886.68	1,823.68	1,886.68	11.20	62.01	56.52	-2,926.24	-3,368.42	4,106.19	4,033.56	72.63	56.537		
2,100.00	1,970.92	1,907.92	1,970.92	11.93	64.94	57.08	-2,926.24	-3,368.42	4,073.14	3,996.92	76.22	53.442		
2,200.00	2,055.17	2,007.83	2,055.17	12.66	68.43	57.65	-2,926.24	-3,368.42	4,040.53	3,960.17	80.36	50.278		
2,300.00	2,139.41	2,076.41	2,139.41	13.40	70.82	58.23	-2,926.24	-3,368.42	4,008.39	3,924.95	83.43	48.044		
2,400.00	2,223.66	2,160.66	2,223.66	14.14	73.76	58.82	-2,926.24	-3,368.42	3,976.71	3,889.65	87.06	45.678		
2,500.00	2,307.90	2,244.90	2,307.90	14.89	76.69	59.41	-2,926.24	-3,368.42	3,945.52	3,854.82	90.70	43.502		
2,600.00	2,392.14	2,329.14	2,392.14	15.65	79.63	60.01	-2,926.24	-3,368.42	3,914.82	3,820.47	94.34	41.495		
2,700.00	2,476.39	2,413.39	2,476.39	16.41	82.57	60.62	-2,926.24	-3,368.42	3,884.62	3,786.62	98.00	39.638		
2,800.00	2,560.63	2,502.37	2,560.63	17.17	85.68	61.23	-2,926.24	-3,368.42	3,854.94	3,753.11	101.83	37.856		
2,900.00	2,644.88	2,581.88	2,644.88	17.93	88.45	61.85	-2,926.24	-3,368.42	3,825.79	3,720.45	105.34	36.318		
3,000.00	2,729.12	2,666.12	2,729.12	18.70	91.39	62.48	-2,926.24	-3,368.42	3,797.18	3,688.15	109.03	34.828		
3,100.00	2,813.36	2,750.36	2,813.36	19.47	94.33	63.12	-2,926.24	-3,368.42	3,769.12	3,656.40	112.72	33.439		
3,200.00	2,897.61	2,834.61	2,897.61	20.25	97.27	63.77	-2,926.24	-3,368.42	3,741.63	3,625.21	116.41	32.141		
3,300.00	2,981.85	2,918.85	2,981.85	21.02	100.21	64.42	-2,926.24	-3,368.42	3,714.71	3,594.59	120.12	30.925		
3,400.00	3,066.10	3,003.10	3,066.10	21.80	103.14	65.08	-2,926.24	-3,368.42	3,688.39	3,564.56	123.83	29.786		
3,500.00	3,150.34	3,087.34	3,150.34	22.58	106.08	65.74	-2,926.24	-3,368.42	3,662.67	3,535.12	127.55	28.716		
3,600.00	3,234.58	3,171.58	3,234.58	23.35	109.02	66.41	-2,926.24	-3,368.42	3,637.57	3,506.29	131.27	27.710		
3,700.00	3,318.83	3,255.83	3,318.83	24.13	111.96	67.09	-2,926.24	-3,368.42	3,613.09	3,478.09	135.00	26.763		
3,800.00	3,403.07	3,340.07	3,403.07	24.92	114.90	67.78	-2,926.24	-3,368.42	3,589.26	3,450.52	138.74	25.870		
3,900.00	3,487.32	3,424.32	3,487.32	25.70	117.84	68.47	-2,926.24	-3,368.42	3,566.08	3,423.60	142.48	25.028		
4,000.00	3,571.56	3,508.56	3,571.56	26.48	120.78	69.17	-2,926.24	-3,368.42	3,543.57	3,397.34	146.23	24.233		
4,100.00	3,655.80	3,607.20	3,655.80	27.27	124.23	69.88	-2,926.24	-3,368.42	3,521.74	3,371.26	150.48	23.403		
4,200.00	3,740.05	3,677.05	3,740.05	28.05	126.66	70.59	-2,926.24	-3,368.42	3,500.61	3,346.87	153.74	22.770		
4,300.00	3,824.29	3,761.29	3,824.29	28.84	129.60	71.31	-2,926.24	-3,368.42	3,480.18	3,322.68	157.50	22.097		
4,400.00	3,908.54	3,845.54	3,908.54	29.62	132.54	72.04	-2,926.24	-3,368.42	3,460.47	3,299.20	161.26	21.459		
4,500.00	3,992.78	3,929.78	3,992.78	30.41	135.48	72.77	-2,926.24	-3,368.42	3,441.48	3,276.46	165.03	20.854		
4,600.00	4,077.03	4,014.03	4,077.03	31.20	138.42	73.51	-2,926.24	-3,368.42	3,423.25	3,254.45	168.80	20.280		
4,700.00	4,161.27	4,101.73	4,161.27	31.98	141.48	74.25	-2,926.24	-3,368.42	3,405.76	3,233.07	172.69	19.721		
4,800.00	4,245.51	4,182.51	4,245.51	32.77	144.30	75.00	-2,926.24	-3,368.42	3,389.04	3,212.70	176.35	19.218		
4,900.00	4,329.76	4,266.76	4,329.76	33.56	147.24	75.75	-2,926.24	-3,368.42	3,373.11	3,192.98	180.13	18.726		
5,000.00	4,414.00	4,351.00	4,414.00	34.35	150.18	76.51	-2,926.24	-3,368.42	3,357.95	3,174.05	183.91	18.259		
5,100.00	4,498.25	4,435.25	4,498.25	35.14	153.12	77.28	-2,926.24	-3,368.42	3,343.60	3,155.92	187.69	17.815		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - GREELEY SWD #1(XX) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,519.49	4,582.49	35.93	156.06	78.05	-2,926.24	-3,368.42	3,330.06	3,138.59	191.47	17.392		
5,300.00	4,666.73	4,603.73	4,666.73	36.72	159.00	78.82	-2,926.24	-3,368.42	3,317.34	3,122.09	195.25	16.990		
5,400.00	4,750.98	4,687.98	4,750.98	37.51	161.95	79.60	-2,926.24	-3,368.42	3,305.45	3,106.42	199.03	16.608		
5,500.00	4,835.22	4,772.22	4,835.22	38.30	164.89	80.38	-2,926.24	-3,368.42	3,294.40	3,091.58	202.81	16.243		
5,600.00	4,919.47	4,856.47	4,919.47	39.09	167.83	81.16	-2,926.24	-3,368.42	3,284.19	3,077.60	206.59	15.897		
5,700.00	5,003.71	4,940.71	5,003.71	39.88	170.77	81.95	-2,926.24	-3,368.42	3,274.84	3,064.47	210.37	15.567		
5,800.00	5,088.06	5,025.06	5,088.06	40.67	173.71	82.68	-2,926.24	-3,368.42	3,266.37	3,052.22	214.15	15.253		
5,900.00	5,173.83	5,110.83	5,173.83	41.44	176.70	83.31	-2,926.24	-3,368.42	3,259.08	3,041.13	217.95	14.953		
6,000.00	5,261.34	5,201.66	5,261.34	42.18	179.87	83.93	-2,926.24	-3,368.42	3,252.95	3,031.05	221.90	14.660		
6,100.00	5,350.49	5,287.49	5,350.49	42.88	182.87	84.54	-2,926.24	-3,368.42	3,247.84	3,022.21	225.63	14.395		
6,200.00	5,441.16	5,378.16	5,441.16	43.56	186.04	85.13	-2,926.24	-3,368.42	3,243.66	3,014.16	229.50	14.134		
6,300.00	5,533.25	5,470.25	5,533.25	44.20	189.25	85.69	-2,926.24	-3,368.42	3,240.27	3,006.89	233.38	13.884		
6,400.00	5,626.65	5,563.65	5,626.65	44.82	192.51	86.23	-2,926.24	-3,368.42	3,237.57	3,000.31	237.27	13.645		
6,500.00	5,721.23	5,658.23	5,721.23	45.40	195.81	86.73	-2,926.24	-3,368.42	3,235.46	2,994.30	241.16	13.416		
6,600.00	5,816.89	5,753.89	5,816.89	45.94	199.15	87.19	-2,926.24	-3,368.42	3,233.84	2,988.79	245.06	13.196		
6,700.00	5,913.51	5,850.51	5,913.51	46.45	202.52	87.60	-2,926.24	-3,368.42	3,232.63	2,983.68	248.95	12.985		
6,800.00	6,010.97	5,947.97	6,010.97	46.93	205.92	87.97	-2,926.24	-3,368.42	3,231.74	2,978.90	252.84	12.782		
6,900.00	6,109.15	6,046.15	6,109.15	47.38	209.35	88.29	-2,926.24	-3,368.42	3,231.11	2,974.39	256.72	12.586		
7,000.00	6,207.93	6,144.93	6,207.93	47.80	212.80	88.55	-2,926.24	-3,368.42	3,230.68	2,970.10	260.58	12.398		
7,100.00	6,307.19	6,244.19	6,307.19	48.18	216.26	88.76	-2,926.24	-3,368.42	3,230.40	2,965.96	264.43	12.216		
7,200.00	6,406.82	6,343.82	6,406.82	48.53	219.74	88.91	-2,926.24	-3,368.42	3,230.22	2,961.96	268.26	12.041		
7,300.00	6,506.68	6,443.68	6,506.68	48.84	223.23	89.00	-2,926.24	-3,368.42	3,230.13	2,958.06	272.06	11.873		
7,400.00	6,606.66	6,543.66	6,606.66	49.10	226.72	2.02	-2,926.24	-3,368.42	3,230.09	2,954.28	275.81	11.711		
7,500.00	6,706.21	6,643.21	6,706.21	49.35	230.19	2.06	-2,926.24	-3,368.42	3,221.74	2,942.21	279.53	11.525		
7,600.00	6,803.22	6,740.22	6,803.22	49.59	233.58	2.15	-2,926.24	-3,368.42	3,197.94	2,914.78	283.16	11.294		
7,700.00	6,895.32	6,832.32	6,895.32	49.82	236.79	2.33	-2,926.24	-3,368.42	3,159.26	2,872.65	286.61	11.023		
7,800.00	6,980.23	6,917.23	6,980.23	50.03	239.76	2.61	-2,926.24	-3,368.42	3,106.66	2,816.88	289.78	10.721		
7,900.00	7,055.85	7,007.15	7,055.85	50.21	242.90	3.05	-2,926.24	-3,368.42	3,041.44	2,748.34	293.10	10.377		
8,000.00	7,120.34	7,057.34	7,120.34	50.36	244.65	3.77	-2,926.24	-3,368.42	2,965.20	2,670.20	295.00	10.051		
8,100.00	7,172.10	7,109.10	7,172.10	50.47	246.46	5.04	-2,926.24	-3,368.42	2,879.82	2,582.90	296.92	9.699		
8,200.00	7,209.85	7,146.85	7,209.85	50.55	247.77	7.67	-2,926.24	-3,368.42	2,787.41	2,489.09	298.32	9.344		
8,300.00	7,232.68	7,169.68	7,232.68	50.61	248.57	15.66	-2,926.24	-3,368.42	2,690.24	2,391.07	299.17	8.992		
8,400.00	7,240.00	7,177.00	7,240.00	50.65	248.83	95.26	-2,926.24	-3,368.42	2,590.70	2,291.25	299.45	8.651		
8,500.00	7,239.60	7,176.60	7,239.60	50.69	248.81	95.06	-2,926.24	-3,368.42	2,490.81	2,191.34	299.46	8.318		
8,600.00	7,239.19	7,176.19	7,239.19	50.75	248.80	94.86	-2,926.24	-3,368.42	2,390.92	2,091.44	299.47	7.984		
8,700.00	7,238.78	7,175.78	7,238.78	50.85	248.78	94.65	-2,926.24	-3,368.42	2,291.04	1,991.55	299.49	7.650		
8,800.00	7,238.38	7,175.38	7,238.38	51.02	248.77	94.45	-2,926.24	-3,368.42	2,191.17	1,891.66	299.50	7.316		
8,900.00	7,237.97	7,174.97	7,237.97	51.32	248.75	94.25	-2,926.24	-3,368.42	2,091.31	1,791.79	299.52	6.982		
9,000.00	7,237.57	7,174.57	7,237.57	51.95	248.74	94.05	-2,926.24	-3,368.42	1,991.47	1,691.92	299.55	6.648		
9,100.00	7,237.16	7,174.16	7,237.16	53.10	248.73	93.84	-2,926.24	-3,368.42	1,891.64	1,592.07	299.57	6.314		
9,200.00	7,236.76	7,173.76	7,236.76	54.69	248.71	93.64	-2,926.24	-3,368.42	1,791.83	1,492.22	299.61	5.981		
9,300.00	7,236.35	7,173.35	7,236.35	56.53	248.70	93.44	-2,926.24	-3,368.42	1,692.05	1,392.40	299.65	5.647		
9,400.00	7,235.94	7,172.94	7,235.94	58.53	248.68	93.23	-2,926.24	-3,368.42	1,592.29	1,292.59	299.70	5.313		
9,500.00	7,235.54	7,172.54	7,235.54	60.62	248.67	93.03	-2,926.24	-3,368.42	1,492.57	1,192.81	299.76	4.979		
9,600.00	7,235.13	7,172.13	7,235.13	62.80	248.66	92.83	-2,926.24	-3,368.42	1,392.88	1,093.05	299.83	4.645		
9,700.00	7,234.73	7,171.73	7,234.73	65.03	248.64	92.62	-2,926.24	-3,368.42	1,293.24	993.32	299.92	4.312		
9,800.00	7,234.32	7,171.32	7,234.32	67.32	248.63	92.42	-2,926.24	-3,368.42	1,193.67	893.63	300.04	3.978		
9,900.00	7,233.92	7,170.92	7,233.92	69.66	248.61	92.22	-2,926.24	-3,368.42	1,094.17	793.99	300.18	3.645		
10,000.00	7,233.51	7,170.51	7,233.51	72.03	248.60	92.01	-2,926.24	-3,368.42	994.77	694.41	300.36	3.312		
10,100.00	7,233.10	7,170.10	7,233.10	74.45	248.58	91.81	-2,926.24	-3,368.42	895.50	594.90	300.60	2.979		
10,200.00	7,232.70	7,169.70	7,232.70	76.89	248.57	91.61	-2,926.24	-3,368.42	796.42	495.49	300.93	2.647		
10,300.00	7,232.29	7,169.29	7,232.29	79.36	248.56	91.40	-2,926.24	-3,368.42	697.60	396.20	301.39	2.315		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,400.00	7,231.89	7,168.89	7,231.89	81.86	248.54	91.20	-2,926.24	-3,368.42	599.17	297.09	302.08	1.983	
10,500.00	7,231.48	7,168.48	7,231.48	84.38	248.53	90.99	-2,926.24	-3,368.42	501.36	198.20	303.16	1.654	
10,600.00	7,231.08	7,168.08	7,231.08	86.93	248.51	90.79	-2,926.24	-3,368.42	404.62	99.63	304.99	1.327	Level 3
10,700.00	7,230.67	7,167.67	7,230.67	89.49	248.50	90.59	-2,926.24	-3,368.42	309.96	1.51	308.45	1.005	Level 2
10,800.00	7,230.26	7,167.26	7,230.26	92.07	248.49	90.38	-2,926.24	-3,368.42	220.08	-95.74	315.82	0.697	Level 1
10,900.00	7,229.86	7,166.86	7,229.86	94.67	248.47	90.18	-2,926.24	-3,368.42	144.19	-187.80	332.00	0.434	Level 1
10,988.21	7,229.50	7,166.50	7,229.50	96.97	248.46	90.00	-2,926.24	-3,368.42	114.06	-231.22	345.28	0.330	Level 1, CC, ES, SF
11,000.00	7,229.45	7,166.45	7,229.45	97.28	248.46	89.98	-2,926.24	-3,368.42	114.67	-230.08	344.75	0.333	Level 1
11,100.00	7,229.05	7,166.05	7,229.05	99.90	248.44	89.77	-2,926.24	-3,368.42	159.70	-165.51	325.21	0.491	Level 1
11,200.00	7,228.64	7,165.64	7,228.64	102.54	248.43	89.57	-2,926.24	-3,368.42	240.55	-70.99	311.53	0.772	Level 1
11,300.00	7,228.24	7,165.24	7,228.24	105.19	248.42	89.36	-2,926.24	-3,368.42	331.99	26.24	305.75	1.086	Level 2
11,400.00	7,227.83	7,164.83	7,227.83	107.85	248.40	89.16	-2,926.24	-3,368.42	427.29	124.19	303.10	1.410	Level 3
11,500.00	7,227.42	7,164.42	7,227.42	110.52	248.39	88.96	-2,926.24	-3,368.42	524.34	222.60	301.73	1.738	
11,600.00	7,227.02	7,164.02	7,227.02	113.20	248.37	88.75	-2,926.24	-3,368.42	622.32	321.36	300.96	2.068	
11,700.00	7,226.61	7,163.61	7,226.61	115.89	248.36	88.55	-2,926.24	-3,368.42	720.86	420.37	300.49	2.399	
11,800.00	7,226.21	7,163.21	7,226.21	118.59	248.34	88.35	-2,926.24	-3,368.42	819.75	519.57	300.19	2.731	
11,900.00	7,225.80	7,162.80	7,225.80	121.29	248.33	88.14	-2,926.24	-3,368.42	918.88	618.90	299.99	3.063	
12,000.00	7,225.40	7,162.40	7,225.40	124.00	248.32	87.94	-2,926.24	-3,368.42	1,018.19	718.34	299.85	3.396	
12,100.00	7,224.99	7,161.99	7,224.99	126.72	248.30	87.74	-2,926.24	-3,368.42	1,117.61	817.86	299.76	3.728	
12,200.00	7,224.58	7,161.58	7,224.58	129.44	248.29	87.53	-2,926.24	-3,368.42	1,217.13	917.44	299.69	4.061	
12,300.00	7,224.18	7,161.18	7,224.18	132.17	248.27	87.33	-2,926.24	-3,368.42	1,316.72	1,017.08	299.64	4.394	
12,400.00	7,223.77	7,160.77	7,223.77	134.91	248.26	87.12	-2,926.24	-3,368.42	1,416.37	1,116.76	299.61	4.727	
12,500.00	7,223.37	7,160.37	7,223.37	137.65	248.25	86.92	-2,926.24	-3,368.42	1,516.07	1,216.47	299.60	5.060	
12,600.00	7,222.96	7,159.96	7,222.96	140.39	248.23	86.72	-2,926.24	-3,368.42	1,615.80	1,316.22	299.59	5.393	
12,700.00	7,222.55	7,159.55	7,222.55	143.14	248.22	86.52	-2,926.24	-3,368.42	1,715.57	1,415.98	299.58	5.727	
12,800.00	7,222.15	7,159.15	7,222.15	145.89	248.20	86.31	-2,926.24	-3,368.42	1,815.36	1,515.77	299.58	6.060	
12,900.00	7,221.74	7,158.74	7,221.74	148.65	248.19	86.11	-2,926.24	-3,368.42	1,915.17	1,615.58	299.59	6.393	
13,000.00	7,221.34	7,158.34	7,221.34	151.41	248.17	85.91	-2,926.24	-3,368.42	2,015.00	1,715.40	299.60	6.726	
13,100.00	7,220.93	7,157.93	7,220.93	154.18	248.16	85.70	-2,926.24	-3,368.42	2,114.85	1,815.23	299.61	7.059	
13,200.00	7,220.53	7,157.53	7,220.53	156.94	248.15	85.50	-2,926.24	-3,368.42	2,214.71	1,915.08	299.63	7.391	
13,300.00	7,220.12	7,157.12	7,220.12	159.72	248.13	85.30	-2,926.24	-3,368.42	2,314.58	2,014.93	299.65	7.724	
13,400.00	7,219.71	7,156.71	7,219.71	162.49	248.12	85.10	-2,926.24	-3,368.42	2,414.46	2,114.80	299.67	8.057	
13,500.00	7,219.31	7,156.31	7,219.31	165.27	248.10	84.89	-2,926.24	-3,368.42	2,514.35	2,214.67	299.69	8.390	
13,600.00	7,218.90	7,155.90	7,218.90	168.05	248.09	84.69	-2,926.24	-3,368.42	2,614.25	2,314.54	299.71	8.723	
13,700.00	7,218.50	7,155.50	7,218.50	170.83	248.08	84.49	-2,926.24	-3,368.42	2,714.16	2,414.43	299.74	9.055	
13,800.00	7,218.09	7,155.09	7,218.09	173.61	248.06	84.29	-2,926.24	-3,368.42	2,814.08	2,514.31	299.76	9.388	
13,900.00	7,217.69	7,154.69	7,217.69	176.40	248.05	84.09	-2,926.24	-3,368.42	2,914.00	2,614.21	299.79	9.720	
14,000.00	7,217.28	7,154.28	7,217.28	179.19	248.03	83.88	-2,926.24	-3,368.42	3,013.92	2,714.11	299.82	10.053	
14,100.00	7,216.87	7,153.87	7,216.87	181.98	248.02	83.68	-2,926.24	-3,368.42	3,113.85	2,814.01	299.84	10.385	
14,200.00	7,216.47	7,153.47	7,216.47	184.78	248.00	83.48	-2,926.24	-3,368.42	3,213.78	2,913.91	299.87	10.717	
14,300.00	7,216.06	7,153.06	7,216.06	187.57	247.99	83.28	-2,926.24	-3,368.42	3,313.72	3,013.82	299.90	11.049	
14,400.00	7,215.66	7,152.66	7,215.66	190.37	247.98	83.08	-2,926.24	-3,368.42	3,413.66	3,113.73	299.94	11.381	
14,500.00	7,215.25	7,152.25	7,215.25	193.17	247.96	82.88	-2,926.24	-3,368.42	3,513.61	3,213.64	299.97	11.713	
14,600.00	7,214.85	7,151.85	7,214.85	195.97	247.95	82.68	-2,926.24	-3,368.42	3,613.56	3,313.55	300.00	12.045	
14,700.00	7,214.44	7,151.44	7,214.44	198.77	247.93	82.48	-2,926.24	-3,368.42	3,713.51	3,413.47	300.04	12.377	
14,800.00	7,214.03	7,151.03	7,214.03	201.58	247.92	82.28	-2,926.24	-3,368.42	3,813.46	3,513.39	300.07	12.708	
14,900.00	7,213.63	7,150.63	7,213.63	204.38	247.91	82.08	-2,926.24	-3,368.42	3,913.42	3,613.31	300.11	13.040	
15,000.00	7,213.22	7,150.22	7,213.22	207.19	247.89	81.88	-2,926.24	-3,368.42	4,013.37	3,713.23	300.14	13.371	
15,100.00	7,212.82	7,149.82	7,212.82	210.00	247.88	81.68	-2,926.24	-3,368.42	4,113.33	3,813.15	300.18	13.703	
15,200.00	7,212.41	7,149.41	7,212.41	212.81	247.86	81.48	-2,926.24	-3,368.42	4,213.30	3,913.08	300.22	14.034	
15,300.00	7,212.01	7,149.01	7,212.01	215.62	247.85	81.28	-2,926.24	-3,368.42	4,313.26	4,013.00	300.26	14.365	
15,400.00	7,211.60	7,148.60	7,211.60	218.43	247.83	81.08	-2,926.24	-3,368.42	4,413.22	4,112.93	300.30	14.696	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design													HARVESTERS STATE 7-15 PAD - GREELEY SWD #1(XX) - OH - OH		Offset Site Error:		0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma															Offset Well Error:		3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)					
15,500.00	7,211.19	7,148.19	7,211.19	221.25	247.82	80.88	-2,926.24	-3,368.42	4,513.19	4,212.85	300.34	15.027					
15,600.00	7,210.79	7,147.79	7,210.79	224.06	247.81	80.68	-2,926.24	-3,368.42	4,613.16	4,312.78	300.38	15.358					
15,700.00	7,210.38	7,147.38	7,210.38	226.88	247.79	80.49	-2,926.24	-3,368.42	4,713.13	4,412.71	300.42	15.688					
15,794.94	7,210.00	7,147.00	7,210.00	229.55	247.78	80.30	-2,926.24	-3,368.42	4,808.04	4,507.58	300.46	16.002					



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	9.00	3.28	3.28	20.50	1,317.69	492.56	1,406.77					
100.00	100.00	87.89	96.89	3.28	3.29	20.50	1,317.77	492.62	1,406.85	1,400.28	6.57	214.127		
200.00	200.00	188.30	197.30	3.34	3.33	20.50	1,317.94	492.83	1,407.07	1,400.40	6.67	210.948		
300.00	299.98	291.82	300.82	3.44	3.44	-162.15	1,317.95	493.03	1,408.81	1,401.93	6.88	204.789		
400.00	399.84	384.05	393.05	3.59	3.58	-162.16	1,317.95	493.47	1,413.97	1,406.80	7.17	197.202		
500.00	499.45	487.30	496.29	3.79	3.78	-162.18	1,318.04	494.49	1,422.69	1,415.12	7.57	187.975		
600.00	598.70	581.31	590.30	4.03	3.99	-162.22	1,318.06	495.41	1,434.66	1,426.63	8.03	178.746		
700.00	697.47	685.53	694.51	4.31	4.26	-162.26	1,318.02	496.96	1,450.05	1,441.47	8.58	169.099		
800.00	795.62	785.20	794.17	4.64	4.55	-162.33	1,317.68	498.23	1,468.37	1,459.20	9.17	160.140		
900.00	893.06	879.39	888.35	5.00	4.84	-162.40	1,317.46	499.36	1,480.04	1,480.25	9.79	152.137		
1,000.00	989.64	978.91	987.86	5.40	5.16	-162.49	1,317.21	500.84	1,515.05	1,504.58	10.48	144.625		
1,100.00	1,085.27	1,068.60	1,077.54	5.83	5.46	-162.59	1,317.07	501.85	1,543.28	1,532.12	11.16	138.323		
1,200.00	1,179.82	1,163.27	1,172.21	6.29	5.79	-162.70	1,317.21	503.19	1,575.07	1,563.18	11.88	132.528		
1,300.00	1,273.17	1,266.14	1,275.06	6.79	6.16	-162.84	1,316.94	504.70	1,609.71	1,597.03	12.67	127.038		
1,400.00	1,365.21	1,360.78	1,369.70	7.33	6.51	-162.97	1,316.34	505.63	1,647.03	1,633.58	13.45	122.473		
1,500.00	1,455.84	1,452.56	1,461.47	7.89	6.85	-163.11	1,315.88	506.27	1,687.52	1,673.29	14.23	118.565		
1,600.00	1,544.94	1,542.97	1,551.87	8.50	7.19	-163.23	1,315.18	507.25	1,730.99	1,715.96	15.03	115.173		
1,700.00	1,632.39	1,628.26	1,637.16	9.13	7.52	-163.33	1,314.56	508.23	1,777.57	1,761.75	15.82	112.379		
1,800.00	1,718.11	1,710.96	1,719.86	9.80	7.84	-163.42	1,314.21	508.95	1,827.32	1,810.71	16.61	110.045		
1,900.00	1,802.44	1,799.71	1,808.60	10.49	8.19	-163.77	1,313.81	509.63	1,879.29	1,861.86	17.43	107.813		
2,000.00	1,886.68	1,895.92	1,904.80	11.20	8.57	-164.26	1,313.07	509.97	1,931.12	1,912.82	18.30	105.541		
2,100.00	1,970.92	1,972.07	1,980.96	11.93	8.87	-164.63	1,312.53	509.80	1,982.94	1,963.87	19.07	103.986		
2,200.00	2,055.17	2,058.14	2,067.03	12.66	9.21	-165.05	1,312.23	509.48	2,035.08	2,015.18	19.90	102.257		
2,300.00	2,139.41	2,139.55	2,148.43	13.40	9.53	-165.41	1,311.74	509.29	2,087.14	2,066.42	20.72	100.754		
2,400.00	2,223.66	2,213.05	2,221.93	14.14	9.83	-165.73	1,311.70	509.07	2,139.68	2,118.19	21.49	99.578		
2,500.00	2,307.90	2,297.62	2,306.50	14.89	10.17	-166.08	1,311.77	509.05	2,192.45	2,170.13	22.33	98.190		
2,600.00	2,392.14	2,379.04	2,387.92	15.65	10.50	-166.39	1,311.82	509.24	2,245.33	2,222.17	23.16	96.966		
2,700.00	2,476.39	2,468.52	2,477.40	16.41	10.86	-166.73	1,311.93	509.25	2,298.25	2,274.21	24.04	95.615		
2,800.00	2,560.63	2,549.67	2,558.55	17.17	11.19	-167.03	1,311.96	508.89	2,351.07	2,326.20	24.87	94.536		
2,900.00	2,644.88	2,627.59	2,636.46	17.93	11.51	-167.30	1,312.25	508.56	2,404.20	2,378.52	25.68	93.606		
3,000.00	2,729.12	2,712.11	2,720.99	18.70	11.85	-167.59	1,312.64	508.20	2,457.46	2,430.91	26.54	92.581		
3,100.00	2,813.36	2,801.85	2,810.72	19.47	12.22	-167.89	1,312.99	507.60	2,510.64	2,483.20	27.44	91.491		
3,200.00	2,897.61	2,905.49	2,914.36	20.25	12.64	-168.22	1,312.92	506.61	2,563.45	2,535.02	28.44	90.151		
3,300.00	2,981.85	2,978.14	2,987.00	21.02	12.94	-168.45	1,312.81	505.79	2,616.20	2,586.98	29.22	89.521		
3,400.00	3,066.10	3,066.52	3,075.37	21.80	13.31	-168.72	1,312.92	504.47	2,669.15	2,639.03	30.12	88.612		
3,500.00	3,150.34	3,149.28	3,158.12	22.58	13.65	-168.98	1,312.94	502.85	2,721.97	2,690.98	30.98	87.855		
3,600.00	3,234.58	3,234.40	3,243.23	23.35	14.00	-169.22	1,313.06	501.50	2,774.99	2,743.13	31.86	87.096		
3,700.00	3,318.83	3,330.99	3,339.80	24.13	14.41	-169.48	1,312.74	500.19	2,827.69	2,794.86	32.82	86.150		
3,800.00	3,403.07	3,415.02	3,423.82	24.92	14.76	-169.70	1,312.36	498.94	2,880.30	2,846.61	33.70	85.474		
3,900.00	3,487.32	3,496.68	3,505.48	25.70	15.10	-169.91	1,312.04	497.73	2,933.00	2,898.45	34.56	84.873		
4,000.00	3,571.56	3,573.85	3,582.65	26.48	15.42	-170.09	1,311.82	496.89	2,985.87	2,950.49	35.39	84.381		
4,100.00	3,655.80	3,644.05	3,652.84	27.27	15.71	-170.24	1,311.76	496.53	3,039.04	3,002.88	36.16	84.040		
4,200.00	3,740.05	3,713.93	3,722.72	28.05	16.00	-170.39	1,312.05	496.45	3,092.69	3,055.76	36.93	83.734		
4,300.00	3,824.29	3,802.54	3,811.33	28.84	16.37	-170.56	1,312.51	496.33	3,146.45	3,108.60	37.85	83.133		
4,400.00	3,908.54	3,892.00	3,900.78	29.62	16.75	-170.74	1,312.88	495.95	3,200.10	3,161.33	38.77	82.542		
4,500.00	3,992.78	3,973.36	3,982.15	30.41	17.09	-170.90	1,313.20	495.42	3,253.72	3,214.09	39.63	82.101		
4,600.00	4,077.03	4,061.31	4,070.09	31.20	17.46	-171.07	1,313.57	494.85	3,307.38	3,266.84	40.54	81.578		
4,700.00	4,161.27	4,149.87	4,158.65	31.98	17.83	-171.22	1,313.76	494.44	3,360.90	3,319.44	41.46	81.062		
4,800.00	4,245.51	4,233.54	4,242.32	32.77	18.18	-171.37	1,313.91	493.90	3,414.39	3,372.05	42.34	80.638		
4,900.00	4,329.76	4,314.30	4,323.07	33.56	18.52	-171.51	1,314.11	493.48	3,467.97	3,424.77	43.20	80.274		
5,000.00	4,414.00	4,398.29	4,407.07	34.35	18.87	-171.65	1,314.34	493.08	3,521.60	3,477.52	44.09	79.879		
5,100.00	4,498.25	4,478.71	4,487.48	35.14	19.21	-171.77	1,314.60	492.76	3,575.29	3,530.35	44.94	79.549		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,555.77	4,564.55	35.93	19.54	-171.89	1,314.92	492.64	3,629.11	3,583.33	45.78	79.279		
5,300.00	4,666.73	4,637.13	4,645.90	36.72	19.88	-172.00	1,315.38	492.72	3,683.09	3,636.45	46.64	78.965		
5,400.00	4,750.98	4,721.21	4,729.98	37.51	20.23	-172.12	1,315.82	492.72	3,737.04	3,689.51	47.53	78.624		
5,500.00	4,835.22	4,792.78	4,801.55	38.30	20.53	-172.21	1,316.31	492.94	3,791.17	3,742.85	48.32	78.462		
5,600.00	4,919.47	4,859.68	4,868.44	39.09	20.82	-172.29	1,316.98	493.42	3,845.63	3,796.56	49.07	78.375		
5,700.00	5,003.71	4,934.60	4,943.36	39.88	21.13	-172.38	1,318.01	494.13	3,900.44	3,850.55	49.88	78.194		
5,800.00	5,088.06	5,033.37	5,042.11	40.67	21.55	-172.55	1,319.37	494.57	3,955.04	3,904.15	50.89	77.715		
5,900.00	5,173.83	5,154.92	5,163.66	41.44	22.06	-172.84	1,320.18	494.68	4,006.70	3,954.62	52.08	76.934		
6,000.00	5,261.34	5,248.16	5,256.90	42.18	22.46	-173.07	1,320.33	494.24	4,054.86	4,001.84	53.02	76.473		
6,100.00	5,350.49	5,347.70	5,356.43	42.88	22.88	-173.29	1,320.58	493.36	4,100.02	4,046.01	54.01	75.918		
6,200.00	5,441.16	5,456.93	5,465.66	43.56	23.34	-173.49	1,320.24	492.13	4,141.49	4,086.44	55.05	75.226		
6,300.00	5,533.25	5,546.54	5,555.25	44.20	23.72	-173.66	1,319.95	490.61	4,179.71	4,123.79	55.93	74.735		
6,400.00	5,626.65	5,637.13	5,645.83	44.82	24.10	-173.81	1,319.69	489.43	4,214.82	4,158.02	56.79	74.215		
6,500.00	5,721.23	5,731.45	5,740.15	45.40	24.50	-173.95	1,319.44	488.17	4,246.66	4,188.99	57.67	73.636		
6,600.00	5,816.89	5,822.57	5,831.25	45.94	24.89	-174.07	1,319.32	486.43	4,275.26	4,216.75	58.50	73.076		
6,700.00	5,913.51	5,912.05	5,920.72	46.45	25.27	-174.18	1,319.35	484.74	4,300.66	4,241.36	59.31	72.517		
6,800.00	6,010.97	6,005.47	6,014.12	46.93	25.66	-174.28	1,319.48	483.04	4,322.82	4,262.70	60.12	71.904		
6,900.00	6,109.15	6,106.22	6,114.85	47.38	26.09	-174.37	1,319.71	480.91	4,341.62	4,280.64	60.97	71.205		
7,000.00	6,207.93	6,223.72	6,232.32	47.80	26.59	-174.46	1,319.53	478.36	4,356.61	4,294.66	61.94	70.333		
7,100.00	6,307.19	6,305.24	6,313.82	48.18	26.94	-174.52	1,319.53	476.47	4,368.29	4,305.69	62.60	69.785		
7,200.00	6,406.82	6,417.34	6,425.87	48.53	27.41	-174.59	1,319.56	473.26	4,376.47	4,312.99	63.48	68.943		
7,300.00	6,506.68	6,494.01	6,502.50	48.84	27.74	-174.63	1,319.76	470.90	4,381.40	4,317.35	64.05	68.405		
7,400.00	6,606.66	6,586.81	6,595.25	49.10	28.14	98.32	1,320.38	467.75	4,383.21	4,318.50	64.72	67.729		
7,500.00	6,706.21	6,697.41	6,705.76	49.35	28.61	98.26	1,321.19	463.29	4,384.59	4,319.06	65.53	66.912		
7,600.00	6,803.22	6,809.26	6,817.51	49.59	29.08	98.24	1,321.63	458.91	4,387.95	4,321.59	66.36	66.118		
7,700.00	6,895.32	6,890.96	6,899.14	49.82	29.43	98.10	1,322.00	455.49	4,393.74	4,326.75	66.98	65.595		
7,800.00	6,980.23	6,970.84	6,978.93	50.03	29.77	97.83	1,322.59	451.67	4,402.29	4,334.66	67.63	65.093		
7,900.00	7,055.85	7,058.39	7,066.36	50.21	30.15	97.51	1,323.32	447.18	4,413.70	4,345.28	68.42	64.509		
8,000.00	7,120.34	7,131.95	7,139.81	50.36	30.46	96.91	1,323.77	443.20	4,427.91	4,358.70	69.21	63.978		
8,100.00	7,172.10	7,184.76	7,192.51	50.47	30.69	95.89	1,324.23	439.78	4,445.31	4,375.33	69.98	63.519		
8,200.00	7,209.85	7,238.97	7,246.58	50.55	30.92	94.65	1,324.77	435.87	4,465.87	4,394.92	70.95	62.943		
8,300.00	7,232.68	7,274.36	7,281.88	50.61	31.07	92.92	1,325.02	433.41	4,489.37	4,417.42	71.95	62.397		
8,400.00	7,240.00	7,288.57	7,296.05	50.65	31.14	90.67	1,325.11	432.42	4,515.60	4,442.67	72.93	61.913		
8,500.00	7,239.60	7,295.09	7,302.56	50.69	31.17	90.76	1,325.15	431.97	4,544.05	4,470.06	73.99	61.415		
8,600.00	7,239.19	7,301.61	7,309.06	50.75	31.19	90.84	1,325.19	431.52	4,574.50	4,499.34	75.16	60.864		
8,700.00	7,238.78	7,308.13	7,315.56	50.85	31.22	90.93	1,325.24	431.07	4,606.91	4,530.48	76.43	60.278		
8,800.00	7,238.38	7,314.65	7,322.07	51.02	31.25	91.02	1,325.28	430.61	4,641.23	4,563.46	77.78	59.673		
8,900.00	7,237.97	7,321.17	7,328.57	51.32	31.28	91.10	1,325.32	430.16	4,677.44	4,598.24	79.19	59.063		
9,000.00	7,237.57	7,327.69	7,335.07	51.95	31.31	91.19	1,325.36	429.71	4,715.48	4,634.81	80.66	58.459		
9,100.00	7,237.16	7,334.21	7,341.58	53.10	31.34	91.27	1,325.40	429.26	4,755.31	4,673.13	82.17	57.869		
9,200.00	7,236.76	7,340.72	7,348.08	54.69	31.36	91.36	1,325.45	428.81	4,796.88	4,713.17	83.71	57.301		
9,300.00	7,236.35	7,347.24	7,354.59	56.53	31.39	91.45	1,325.49	428.36	4,840.16	4,754.88	85.27	56.760		
9,400.00	7,235.94	7,353.76	7,361.09	58.53	31.42	91.53	1,325.53	427.90	4,885.09	4,798.24	86.85	56.250		
9,500.00	7,235.54	7,360.28	7,367.59	60.62	31.45	91.62	1,325.57	427.45	4,931.63	4,843.21	88.42	55.774		
9,600.00	7,235.13	7,366.80	7,374.10	62.80	31.48	91.70	1,325.61	427.00	4,979.73	4,889.74	90.00	55.333		
9,700.00	7,234.73	7,373.32	7,380.60	65.03	31.51	91.79	1,325.66	426.55	5,029.36	4,937.80	91.56	54.928		
9,800.00	7,234.32	7,379.84	7,387.10	67.32	31.53	91.87	1,325.70	426.10	5,080.46	4,987.34	93.12	54.560		
9,900.00	7,233.92	7,386.36	7,393.61	69.66	31.56	91.96	1,325.74	425.65	5,132.99	5,038.33	94.66	54.228		
10,000.00	7,233.51	7,392.88	7,400.11	72.03	31.59	92.05	1,325.78	425.19	5,186.91	5,090.74	96.18	53.931		
10,100.00	7,233.10	7,399.40	7,406.61	74.45	31.62	92.13	1,325.82	424.74	5,242.18	5,144.50	97.67	53.670		
10,200.00	7,232.70	7,405.92	7,413.12	76.89	31.65	92.22	1,325.87	424.29	5,298.74	5,199.60	99.15	53.443		
10,300.00	7,232.29	7,412.44	7,419.62	79.36	31.68	92.30	1,325.91	423.84	5,356.57	5,255.98	100.59	53.249		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	7,418.96	7,426.12	81.86	31.71	92.39	1,325.95	423.39	5,415.63	5,313.61	102.01	53.087		
10,500.00	7,231.48	7,425.48	7,432.63	84.38	31.73	92.47	1,325.99	422.94	5,475.86	5,372.45	103.41	52.955		
10,600.00	7,231.08	7,432.00	7,439.13	86.93	31.76	92.56	1,326.03	422.48	5,537.23	5,432.47	104.77	52.852		
10,700.00	7,230.67	7,438.52	7,445.64	89.49	31.79	92.65	1,326.08	422.03	5,599.72	5,493.61	106.10	52.777		
10,800.00	7,230.26	7,445.03	7,452.14	92.07	31.82	92.73	1,326.12	421.58	5,663.27	5,555.86	107.40	52.729		
10,900.00	7,229.86	7,451.55	7,458.64	94.67	31.85	92.82	1,326.16	421.13	5,727.85	5,619.18	108.67	52.706 SF		
11,000.00	7,229.45	7,458.07	7,465.15	97.28	31.88	92.90	1,326.20	420.68	5,793.43	5,683.52	109.92	52.708		
11,100.00	7,229.05	7,443.00	7,450.11	99.90	31.81	92.70	1,326.11	421.72	5,860.02	5,749.04	110.98	52.803		
11,200.00	7,228.64	7,443.00	7,450.11	102.54	31.81	92.70	1,326.11	421.72	5,927.53	5,815.41	112.12	52.869		
11,300.00	7,228.24	7,443.00	7,450.11	105.19	31.81	92.70	1,326.11	421.72	5,995.94	5,882.72	113.22	52.956		
11,400.00	7,227.83	7,443.00	7,450.11	107.85	31.81	92.70	1,326.11	421.72	6,065.24	5,950.93	114.30	53.063		
11,500.00	7,227.42	7,443.00	7,450.11	110.52	31.81	92.70	1,326.11	421.72	6,135.38	6,020.02	115.35	53.188		
11,600.00	7,227.02	7,443.00	7,450.11	113.20	31.81	92.70	1,326.11	421.72	6,206.34	6,089.96	116.38	53.330		
11,700.00	7,226.61	7,443.00	7,450.11	115.89	31.81	92.70	1,326.11	421.72	6,278.09	6,160.72	117.37	53.490		
11,800.00	7,226.21	7,443.00	7,450.11	118.59	31.81	92.70	1,326.11	421.72	6,350.60	6,232.26	118.34	53.666		
11,900.00	7,225.80	7,443.00	7,450.11	121.29	31.81	92.70	1,326.11	421.72	6,423.85	6,304.58	119.28	53.857		
12,000.00	7,225.40	7,443.00	7,450.11	124.00	31.81	92.70	1,326.11	421.72	6,497.82	6,377.63	120.19	54.062		
12,100.00	7,224.99	7,443.00	7,450.11	126.72	31.81	92.70	1,326.11	421.72	6,572.47	6,451.39	121.08	54.282		
12,200.00	7,224.58	7,443.00	7,450.11	129.44	31.81	92.70	1,326.11	421.72	6,647.79	6,525.85	121.95	54.514		
12,300.00	7,224.18	7,443.00	7,450.11	132.17	31.81	92.70	1,326.11	421.72	6,723.76	6,600.97	122.79	54.760		
12,400.00	7,223.77	7,443.00	7,450.11	134.91	31.81	92.70	1,326.11	421.72	6,800.34	6,676.74	123.60	55.017		
12,500.00	7,223.37	7,443.00	7,450.11	137.65	31.81	92.70	1,326.11	421.72	6,877.53	6,753.13	124.40	55.286		
12,600.00	7,222.96	7,443.00	7,450.11	140.39	31.81	92.70	1,326.11	421.72	6,955.30	6,830.12	125.17	55.566		
12,700.00	7,222.55	7,443.00	7,450.11	143.14	31.81	92.70	1,326.11	421.72	7,033.63	6,907.70	125.92	55.856		
12,800.00	7,222.15	7,443.00	7,450.11	145.89	31.81	92.70	1,326.11	421.72	7,112.50	6,985.84	126.66	56.156		
12,900.00	7,221.74	7,443.00	7,450.11	148.65	31.81	92.70	1,326.11	421.72	7,191.90	7,064.53	127.37	56.466		
13,000.00	7,221.34	7,443.00	7,450.11	151.41	31.81	92.70	1,326.11	421.72	7,271.81	7,143.75	128.06	56.785		
13,100.00	7,220.93	7,443.00	7,450.11	154.18	31.81	92.70	1,326.11	421.72	7,352.20	7,223.47	128.73	57.113		
13,200.00	7,220.53	7,443.00	7,450.11	156.94	31.81	92.70	1,326.11	421.72	7,433.08	7,303.69	129.39	57.449		
13,300.00	7,220.12	7,443.00	7,450.11	159.72	31.81	92.70	1,326.11	421.72	7,514.41	7,384.39	130.02	57.793		
13,400.00	7,219.71	7,443.00	7,450.11	162.49	31.81	92.70	1,326.11	421.72	7,596.19	7,465.55	130.64	58.145		
13,500.00	7,219.31	7,443.00	7,450.11	165.27	31.81	92.70	1,326.11	421.72	7,678.41	7,547.16	131.25	58.504		
13,600.00	7,218.90	7,443.00	7,450.11	168.05	31.81	92.70	1,326.11	421.72	7,761.04	7,629.20	131.83	58.870		
13,700.00	7,218.50	7,443.00	7,450.11	170.83	31.81	92.70	1,326.11	421.72	7,844.07	7,711.67	132.40	59.243		
13,800.00	7,218.09	7,443.00	7,450.11	173.61	31.81	92.70	1,326.11	421.72	7,927.50	7,794.53	132.96	59.623		
13,900.00	7,217.69	7,443.00	7,450.11	176.40	31.81	92.70	1,326.11	421.72	8,011.30	7,877.80	133.50	60.008		
14,000.00	7,217.28	7,443.00	7,450.11	179.19	31.81	92.70	1,326.11	421.72	8,095.47	7,961.44	134.03	60.400		
14,100.00	7,216.87	7,443.00	7,450.11	181.98	31.81	92.70	1,326.11	421.72	8,180.00	8,045.46	134.55	60.797		
14,200.00	7,216.47	7,443.00	7,450.11	184.78	31.81	92.70	1,326.11	421.72	8,264.88	8,129.83	135.05	61.199		
14,300.00	7,216.06	7,443.00	7,450.11	187.57	31.81	92.70	1,326.11	421.72	8,350.09	8,214.55	135.54	61.607		
14,400.00	7,215.66	7,443.00	7,450.11	190.37	31.81	92.70	1,326.11	421.72	8,435.62	8,299.61	136.01	62.020		
14,500.00	7,215.25	7,443.00	7,450.11	193.17	31.81	92.70	1,326.11	421.72	8,521.47	8,384.99	136.48	62.438		
14,600.00	7,214.85	7,443.00	7,450.11	195.97	31.81	92.70	1,326.11	421.72	8,607.63	8,470.69	136.93	62.860		
14,700.00	7,214.44	7,443.00	7,450.11	198.77	31.81	92.70	1,326.11	421.72	8,694.08	8,556.70	137.38	63.287		
14,800.00	7,214.03	7,443.00	7,450.11	201.58	31.81	92.70	1,326.11	421.72	8,780.82	8,643.01	137.81	63.718		
14,900.00	7,213.63	7,443.00	7,450.11	204.38	31.81	92.70	1,326.11	421.72	8,867.83	8,729.61	138.23	64.153		
15,000.00	7,213.22	7,443.00	7,450.11	207.19	31.81	92.70	1,326.11	421.72	8,955.12	8,816.48	138.64	64.593		
15,100.00	7,212.82	7,443.00	7,450.11	210.00	31.81	92.70	1,326.11	421.72	9,042.68	8,903.63	139.04	65.036		
15,200.00	7,212.41	7,443.00	7,450.11	212.81	31.81	92.70	1,326.11	421.72	9,130.48	8,991.05	139.43	65.483		
15,300.00	7,212.01	7,443.00	7,450.11	215.62	31.81	92.70	1,326.11	421.72	9,218.54	9,078.72	139.82	65.933		
15,400.00	7,211.60	7,443.00	7,450.11	218.43	31.81	92.70	1,326.11	421.72	9,306.84	9,166.65	140.19	66.387		
15,500.00	7,211.19	7,443.00	7,450.11	221.25	31.81	92.70	1,326.11	421.72	9,395.37	9,254.81	140.56	66.844		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,600.00	7,210.79	7,443.00	7,450.11	224.06	31.81	92.70	1,326.11	421.72	9,484.13	9,343.22	140.92	67.304	
15,700.00	7,210.38	7,443.00	7,450.11	226.88	31.81	92.70	1,326.11	421.72	9,573.11	9,431.85	141.26	67.767	
15,794.94	7,210.00	7,443.00	7,450.11	229.55	31.81	92.70	1,326.11	421.72	9,657.80	9,516.21	141.59	68.210	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 32-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	19.00	3.28	3.28	63.15	264.86	523.18	586.71					
100.00	100.00	76.95	95.94	3.28	3.28	63.11	265.37	523.22	586.68	580.11	6.57	89.304	CC, ES	
200.00	200.00	178.93	197.92	3.34	3.33	62.97	266.96	523.17	587.35	580.68	6.67	88.115		
300.00	299.98	280.47	299.44	3.44	3.43	-119.95	268.28	522.70	588.39	581.52	6.87	85.656		
400.00	399.84	377.90	396.87	3.59	3.57	-120.44	269.42	522.36	591.27	584.11	7.16	82.547		
500.00	499.45	475.39	494.35	3.79	3.76	-121.15	270.59	522.51	596.45	588.90	7.55	79.042		
600.00	598.70	572.51	591.46	4.03	3.98	-122.07	271.86	522.94	603.90	595.89	8.01	75.412		
700.00	697.47	671.07	690.01	4.31	4.23	-123.24	273.42	523.46	613.68	605.13	8.54	71.834		
800.00	795.62	767.63	786.56	4.64	4.50	-124.53	274.76	524.08	625.74	616.60	9.13	68.512		
900.00	893.06	863.67	882.58	5.00	4.79	-125.99	276.38	524.82	640.54	630.77	9.77	65.534		
1,000.00	989.64	960.44	979.33	5.40	5.10	-127.56	277.84	525.72	658.02	647.56	10.46	62.893		
1,100.00	1,085.27	1,055.72	1,074.60	5.83	5.42	-129.20	279.21	526.52	678.23	667.04	11.19	60.635		
1,200.00	1,179.82	1,150.72	1,169.59	6.29	5.75	-130.91	280.68	527.24	701.44	689.50	11.94	58.743		
1,300.00	1,273.17	1,244.65	1,263.51	6.79	6.09	-132.64	281.98	527.79	727.58	714.85	12.72	57.192		
1,400.00	1,365.21	1,335.57	1,354.41	7.33	6.42	-134.35	283.45	528.11	757.00	743.49	13.51	56.016		
1,500.00	1,455.84	1,426.71	1,445.54	7.89	6.76	-136.04	284.86	528.55	789.84	775.51	14.33	55.126		
1,600.00	1,544.94	1,519.14	1,537.97	8.50	7.11	-137.74	285.98	528.70	825.70	810.53	15.17	54.442		
1,700.00	1,632.39	1,604.88	1,623.70	9.13	7.44	-139.26	287.11	528.62	864.96	848.97	15.99	54.107		
1,800.00	1,718.11	1,696.13	1,714.94	9.80	7.79	-140.87	288.19	528.24	907.46	890.61	16.85	53.864		
1,900.00	1,802.44	1,779.11	1,797.92	10.49	8.11	-142.64	288.89	527.84	952.57	934.90	17.67	53.912		
2,000.00	1,886.68	1,861.14	1,879.94	11.20	8.44	-144.42	289.57	527.68	998.84	980.36	18.48	54.041		
2,100.00	1,970.92	1,947.00	1,965.80	11.93	8.78	-146.13	290.40	527.46	1,045.99	1,026.67	19.32	54.130		
2,200.00	2,055.17	2,037.33	2,056.12	12.66	9.14	-147.79	290.96	526.89	1,093.44	1,073.24	20.20	54.141		
2,300.00	2,139.41	2,125.60	2,144.39	13.40	9.49	-149.27	291.04	526.15	1,141.01	1,119.95	21.06	54.183		
2,400.00	2,223.66	2,207.90	2,226.69	14.14	9.82	-150.55	291.07	525.54	1,189.14	1,167.26	21.88	54.337		
2,500.00	2,307.90	2,297.32	2,316.10	14.89	10.18	-151.83	290.92	524.93	1,237.61	1,214.85	22.76	54.373		
2,600.00	2,392.14	2,383.78	2,402.56	15.65	10.53	-152.97	290.56	524.23	1,286.26	1,262.64	23.62	54.452		
2,700.00	2,476.39	2,471.22	2,490.00	16.41	10.88	-154.05	290.05	523.46	1,335.12	1,310.63	24.49	54.513		
2,800.00	2,560.63	2,557.98	2,576.75	17.17	11.23	-155.03	289.26	522.89	1,384.14	1,358.78	25.36	54.579		
2,900.00	2,644.88	2,641.63	2,660.40	17.93	11.57	-155.91	288.39	522.42	1,433.40	1,407.19	26.21	54.692		
3,000.00	2,729.12	2,725.32	2,744.09	18.70	11.92	-156.72	287.56	522.28	1,483.06	1,456.00	27.06	54.807		
3,100.00	2,813.36	2,813.88	2,832.64	19.47	12.28	-157.53	286.54	522.00	1,532.78	1,504.83	27.95	54.839		
3,200.00	2,897.61	2,892.66	2,911.41	20.25	12.60	-158.21	285.80	521.59	1,582.81	1,554.05	28.77	55.022		
3,300.00	2,981.85	2,975.43	2,994.18	21.02	12.94	-158.89	285.27	521.12	1,633.26	1,603.65	29.62	55.148		
3,400.00	3,066.10	3,056.26	3,075.01	21.80	13.28	-159.52	284.87	520.65	1,684.00	1,653.55	30.45	55.303		
3,500.00	3,150.34	3,138.76	3,157.50	22.58	13.62	-160.14	284.73	520.01	1,735.10	1,703.80	31.30	55.436		
3,600.00	3,234.58	3,224.22	3,242.96	23.35	13.97	-160.75	284.58	519.27	1,786.32	1,754.15	32.17	55.520		
3,700.00	3,318.83	3,308.19	3,326.93	24.13	14.32	-161.32	284.43	518.54	1,837.68	1,804.64	33.04	55.622		
3,800.00	3,403.07	3,389.91	3,408.64	24.92	14.66	-161.83	284.24	518.16	1,889.24	1,855.36	33.89	55.754		
3,900.00	3,487.32	3,476.08	3,494.81	25.70	15.02	-162.33	283.98	518.05	1,940.94	1,906.17	34.77	55.818		
4,000.00	3,571.56	3,562.94	3,581.67	26.48	15.39	-162.81	283.64	517.83	1,992.64	1,956.98	35.67	55.868		
4,100.00	3,655.80	3,649.90	3,668.63	27.27	15.75	-163.27	283.23	517.50	2,044.34	2,007.77	36.56	55.912		
4,200.00	3,740.05	3,736.96	3,755.70	28.05	16.11	-163.71	282.74	517.06	2,096.02	2,058.55	37.46	55.950		
4,300.00	3,824.29	3,824.13	3,842.86	28.84	16.48	-164.13	282.17	516.50	2,147.68	2,109.31	38.36	55.982		
4,400.00	3,908.54	3,911.40	3,930.12	29.62	16.85	-164.53	281.52	515.83	2,199.32	2,160.05	39.27	56.010		
4,500.00	3,992.78	3,998.76	4,017.48	30.41	17.21	-164.92	280.80	515.04	2,250.93	2,210.76	40.17	56.033		
4,600.00	4,077.03	4,086.23	4,104.94	31.20	17.58	-165.30	280.00	514.14	2,302.51	2,261.43	41.08	56.051		
4,700.00	4,161.27	4,173.80	4,192.50	31.98	17.95	-165.66	279.12	513.13	2,354.05	2,312.07	41.99	56.066		
4,800.00	4,245.51	4,257.94	4,276.62	32.77	18.30	-165.99	278.23	512.11	2,405.61	2,362.74	42.87	56.118		
4,900.00	4,329.76	4,338.81	4,357.49	33.56	18.64	-166.30	277.41	511.32	2,457.30	2,413.58	43.72	56.207		
5,000.00	4,414.00	4,416.61	4,435.28	34.35	18.97	-166.57	276.73	510.82	2,509.24	2,464.70	44.54	56.332		
5,100.00	4,498.25	4,490.13	4,508.80	35.14	19.28	-166.82	276.37	510.34	2,561.54	2,516.21	45.33	56.509		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 32-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,574.07	4,592.74	35.93	19.63	-167.10	276.21	509.67	2,614.10	2,567.89	46.21	56.569		
5,300.00	4,666.73	4,656.33	4,674.99	36.72	19.98	-167.37	276.05	509.03	2,666.71	2,619.63	47.08	56.646		
5,400.00	4,750.98	4,740.93	4,759.60	37.51	20.34	-167.62	275.92	508.58	2,719.44	2,671.47	47.97	56.696		
5,500.00	4,835.22	4,824.70	4,843.36	38.30	20.69	-167.86	275.66	508.31	2,772.12	2,723.27	48.85	56.751		
5,600.00	4,919.47	4,897.37	4,916.03	39.09	21.00	-168.06	275.63	508.17	2,825.08	2,775.45	49.63	56.927		
5,700.00	5,003.71	4,979.41	4,998.08	39.88	21.35	-168.29	275.81	507.96	2,878.28	2,827.78	50.49	57.003		
5,800.00	5,088.06	5,066.84	5,085.50	40.67	21.72	-168.60	276.05	507.57	2,931.34	2,879.93	51.41	57.020		
5,900.00	5,173.83	5,152.39	5,171.06	41.44	22.08	-169.03	276.18	507.18	2,982.07	2,929.78	52.30	57.022		
6,000.00	5,261.34	5,240.70	5,259.35	42.18	22.45	-169.41	276.38	506.74	3,029.90	2,976.70	53.20	56.956		
6,100.00	5,350.49	5,337.28	5,355.93	42.88	22.86	-169.78	276.52	505.87	3,074.56	3,020.40	54.16	56.768		
6,200.00	5,441.16	5,431.95	5,450.60	43.56	23.26	-170.10	276.45	504.86	3,115.91	3,060.82	55.09	56.561		
6,300.00	5,533.25	5,520.00	5,538.64	44.20	23.63	-170.37	276.41	504.08	3,154.19	3,098.25	55.94	56.384		
6,400.00	5,626.65	5,616.92	5,635.56	44.82	24.05	-170.61	276.34	503.47	3,189.31	3,132.45	56.86	56.092		
6,500.00	5,721.23	5,723.67	5,742.31	45.40	24.50	-170.84	275.91	502.88	3,220.89	3,163.04	57.85	55.676		
6,600.00	5,816.89	5,816.97	5,835.61	45.94	24.89	-171.02	275.39	502.34	3,249.05	3,190.36	58.70	55.353		
6,700.00	5,913.51	5,897.90	5,916.53	46.45	25.24	-171.16	275.18	502.01	3,274.21	3,214.80	59.41	55.115		
6,800.00	6,010.97	5,995.38	6,014.01	46.93	25.65	-171.30	275.18	501.57	3,296.26	3,236.01	60.25	54.708		
6,900.00	6,109.15	6,105.00	6,123.63	47.38	26.12	-171.42	275.05	500.77	3,314.77	3,253.58	61.19	54.172		
7,000.00	6,207.93	6,199.49	6,218.12	47.80	26.52	-171.52	274.84	500.09	3,329.77	3,267.81	61.96	53.737		
7,100.00	6,307.19	6,291.39	6,310.02	48.18	26.91	-171.59	274.74	499.66	3,341.52	3,278.83	62.69	53.300		
7,200.00	6,406.82	6,390.17	6,408.80	48.53	27.33	-171.64	274.73	499.39	3,349.97	3,286.51	63.46	52.785		
7,300.00	6,506.68	6,489.87	6,508.50	48.84	27.75	-171.67	274.72	499.14	3,354.98	3,290.76	64.22	52.239		
7,400.00	6,606.66	6,589.69	6,608.32	49.10	28.18	101.32	274.71	498.91	3,356.55	3,291.60	64.95	51.681		
7,500.00	6,706.21	6,689.09	6,707.72	49.35	28.60	101.31	274.70	498.71	3,358.15	3,292.48	65.67	51.137		
7,600.00	6,803.22	6,785.99	6,804.62	49.59	29.01	101.27	274.70	498.53	3,362.92	3,296.52	66.40	50.646		
7,700.00	6,895.32	6,877.99	6,896.62	49.82	29.40	101.15	274.69	498.38	3,371.04	3,303.91	67.13	50.217		
7,800.00	6,980.23	6,962.82	6,981.44	50.03	29.77	100.85	274.69	498.25	3,382.78	3,314.92	67.86	49.852		
7,900.00	7,055.85	7,038.38	7,057.01	50.21	30.09	100.27	274.68	498.15	3,398.43	3,329.83	68.59	49.544		
8,000.00	7,120.34	7,102.82	7,121.44	50.36	30.36	99.31	274.68	498.08	3,418.21	3,348.85	69.36	49.282		
8,100.00	7,172.10	7,154.54	7,173.17	50.47	30.58	97.86	274.68	498.03	3,442.25	3,372.08	70.17	49.053		
8,200.00	7,209.85	7,192.29	7,210.92	50.55	30.74	95.83	274.68	497.99	3,470.46	3,399.42	71.04	48.852		
8,300.00	7,232.68	7,215.13	7,233.76	50.61	30.84	93.17	274.68	497.97	3,502.52	3,430.57	71.95	48.681		
8,400.00	7,240.00	7,222.52	7,241.15	50.65	30.87	89.93	274.68	497.97	3,537.84	3,464.97	72.86	48.555		
8,500.00	7,239.60	7,222.19	7,240.82	50.69	30.87	89.92	274.68	497.97	3,575.73	3,501.91	73.82	48.439		
8,600.00	7,239.19	7,221.87	7,240.50	50.75	30.87	89.92	274.68	497.97	3,615.99	3,541.12	74.87	48.298		
8,700.00	7,238.78	7,221.55	7,240.18	50.85	30.87	89.91	274.68	497.97	3,658.54	3,582.55	75.99	48.146		
8,800.00	7,238.38	7,221.23	7,239.85	51.02	30.87	89.91	274.68	497.97	3,703.30	3,626.14	77.16	47.992		
8,900.00	7,237.97	7,220.90	7,239.53	51.32	30.87	89.90	274.68	497.97	3,750.20	3,671.82	78.38	47.845		
9,000.00	7,237.57	7,220.58	7,239.21	51.95	30.86	89.89	274.68	497.97	3,799.15	3,719.52	79.63	47.710		
9,100.00	7,237.16	7,220.26	7,238.89	53.10	30.86	89.89	274.68	497.97	3,850.08	3,769.18	80.89	47.594		
9,200.00	7,236.76	7,219.94	7,238.56	54.69	30.86	89.88	274.68	497.97	3,902.90	3,820.74	82.17	47.501		
9,300.00	7,236.35	7,219.61	7,238.24	56.53	30.86	89.88	274.68	497.97	3,957.55	3,874.11	83.44	47.432		
9,400.00	7,235.94	7,219.29	7,237.92	58.53	30.86	89.87	274.68	497.97	4,013.94	3,929.24	84.70	47.389		
9,500.00	7,235.54	7,218.97	7,237.60	60.62	30.86	89.87	274.68	497.97	4,072.01	3,986.06	85.95	47.375 SF		
9,600.00	7,235.13	7,218.65	7,237.28	62.80	30.86	89.86	274.68	497.97	4,131.68	4,044.50	87.19	47.389		
9,700.00	7,234.73	7,218.33	7,236.95	65.03	30.85	89.86	274.68	497.97	4,192.89	4,104.49	88.40	47.431		
9,800.00	7,234.32	7,218.01	7,236.63	67.32	30.85	89.85	274.68	497.97	4,255.57	4,165.98	89.59	47.501		
9,900.00	7,233.92	7,217.68	7,236.31	69.66	30.85	89.84	274.68	497.97	4,319.66	4,228.91	90.75	47.599		
10,000.00	7,233.51	7,217.36	7,235.99	72.03	30.85	89.84	274.68	497.97	4,385.09	4,293.20	91.89	47.723		
10,100.00	7,233.10	7,217.04	7,235.67	74.45	30.85	89.83	274.68	497.97	4,451.80	4,358.81	92.99	47.874		
10,200.00	7,232.70	7,216.72	7,235.35	76.89	30.85	89.83	274.68	497.97	4,519.74	4,425.68	94.07	48.049		
10,300.00	7,232.29	7,216.40	7,235.03	79.36	30.85	89.82	274.68	497.97	4,588.86	4,493.75	95.11	48.248		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 32-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	7,216.08	7,234.71	81.86	30.84	89.82	274.68	497.97	4,659.09	4,562.97	96.12	48.470		
10,500.00	7,231.48	7,215.76	7,234.39	84.38	30.84	89.81	274.68	497.97	4,730.40	4,633.29	97.11	48.713		
10,600.00	7,231.08	7,215.44	7,234.07	86.93	30.84	89.81	274.68	497.97	4,802.73	4,704.67	98.06	48.978		
10,700.00	7,230.67	7,215.12	7,233.75	89.49	30.84	89.80	274.68	497.97	4,876.04	4,777.06	98.98	49.262		
10,800.00	7,230.26	7,214.80	7,233.43	92.07	30.84	89.79	274.68	497.97	4,950.28	4,850.41	99.88	49.565		
10,900.00	7,229.86	7,214.48	7,233.11	94.67	30.84	89.79	274.68	497.97	5,025.42	4,924.68	100.74	49.885		
11,000.00	7,229.45	7,214.16	7,232.79	97.28	30.84	89.78	274.68	497.98	5,101.41	4,999.83	101.57	50.223		
11,100.00	7,229.05	7,213.84	7,232.47	99.90	30.84	89.78	274.68	497.98	5,178.22	5,075.83	102.38	50.577		
11,200.00	7,228.64	7,213.52	7,232.15	102.54	30.83	89.77	274.68	497.98	5,255.80	5,152.64	103.16	50.946		
11,300.00	7,228.24	7,213.20	7,231.83	105.19	30.83	89.77	274.68	497.98	5,334.13	5,230.22	103.92	51.329		
11,400.00	7,227.83	7,212.88	7,231.51	107.85	30.83	89.76	274.68	497.98	5,413.18	5,308.53	104.65	51.726		
11,500.00	7,227.42	7,212.56	7,231.19	110.52	30.83	89.75	274.68	497.98	5,492.91	5,387.55	105.36	52.137		
11,600.00	7,227.02	7,212.24	7,230.87	113.20	30.83	89.75	274.68	497.98	5,573.29	5,467.26	106.04	52.559		
11,700.00	7,226.61	7,211.92	7,230.55	115.89	30.83	89.74	274.68	497.98	5,654.30	5,547.60	106.70	52.993		
11,800.00	7,226.21	7,211.61	7,230.23	118.59	30.83	89.74	274.68	497.98	5,735.91	5,628.57	107.34	53.438		
11,900.00	7,225.80	7,211.29	7,229.91	121.29	30.82	89.73	274.68	497.98	5,818.09	5,710.14	107.95	53.894		
12,000.00	7,225.40	7,210.97	7,229.60	124.00	30.82	89.73	274.68	497.98	5,900.83	5,792.28	108.55	54.360		
12,100.00	7,224.99	7,210.65	7,229.28	126.72	30.82	89.72	274.68	497.98	5,984.09	5,874.96	109.13	54.835		
12,200.00	7,224.58	7,210.33	7,228.96	129.44	30.82	89.72	274.68	497.98	6,067.85	5,958.16	109.69	55.319		
12,300.00	7,224.18	7,210.01	7,228.64	132.17	30.82	89.71	274.68	497.98	6,152.10	6,041.87	110.23	55.812		
12,400.00	7,223.77	7,209.70	7,228.32	134.91	30.82	89.71	274.68	497.98	6,236.82	6,126.07	110.75	56.313		
12,500.00	7,223.37	7,209.38	7,228.01	137.65	30.82	89.70	274.68	497.98	6,321.98	6,210.72	111.26	56.822		
12,600.00	7,222.96	7,209.06	7,227.69	140.39	30.81	89.69	274.68	497.98	6,407.57	6,295.82	111.75	57.338		
12,700.00	7,222.55	7,208.74	7,227.37	143.14	30.81	89.69	274.68	497.98	6,493.58	6,381.35	112.23	57.861		
12,800.00	7,222.15	7,208.43	7,227.05	145.89	30.81	89.68	274.68	497.98	6,579.97	6,467.28	112.69	58.390		
12,900.00	7,221.74	7,208.11	7,226.74	148.65	30.81	89.68	274.68	497.98	6,666.75	6,553.62	113.14	58.926		
13,000.00	7,221.34	7,207.79	7,226.42	151.41	30.81	89.67	274.68	497.98	6,753.90	6,640.33	113.57	59.468		
13,100.00	7,220.93	7,207.47	7,226.10	154.18	30.81	89.67	274.68	497.98	6,841.39	6,727.40	113.99	60.016		
13,200.00	7,220.53	7,207.16	7,225.78	156.94	30.81	89.66	274.68	497.98	6,929.23	6,814.83	114.40	60.570		
13,300.00	7,220.12	7,206.84	7,225.47	159.72	30.81	89.66	274.68	497.98	7,017.39	6,902.59	114.80	61.128		
13,400.00	7,219.71	7,206.52	7,225.15	162.49	30.80	89.65	274.68	497.98	7,105.86	6,990.68	115.18	61.692		
13,500.00	7,219.31	7,206.21	7,224.84	165.27	30.80	89.64	274.68	497.98	7,194.64	7,079.08	115.56	62.260		
13,600.00	7,218.90	7,205.89	7,224.52	168.05	30.80	89.64	274.68	497.98	7,283.70	7,167.78	115.92	62.833		
13,700.00	7,218.50	7,205.58	7,224.20	170.83	30.80	89.63	274.68	497.98	7,373.05	7,256.77	116.28	63.410		
13,800.00	7,218.09	7,205.26	7,223.89	173.61	30.80	89.63	274.68	497.98	7,462.67	7,346.05	116.62	63.992		
13,900.00	7,217.69	7,204.94	7,223.57	176.40	30.80	89.62	274.68	497.98	7,552.54	7,435.59	116.95	64.577		
14,000.00	7,217.28	7,204.63	7,223.26	179.19	30.80	89.62	274.68	497.98	7,642.67	7,525.39	117.28	65.166		
14,100.00	7,216.87	7,204.31	7,222.94	181.98	30.79	89.61	274.68	497.98	7,733.05	7,615.45	117.60	65.759		
14,200.00	7,216.47	7,204.00	7,222.62	184.78	30.79	89.61	274.68	497.98	7,823.65	7,705.75	117.91	66.355		
14,300.00	7,216.06	7,203.68	7,222.31	187.57	30.79	89.60	274.68	497.98	7,914.48	7,796.28	118.21	66.954		
14,400.00	7,215.66	7,203.37	7,221.99	190.37	30.79	89.59	274.68	497.98	8,005.54	7,887.03	118.50	67.557		
14,500.00	7,215.25	7,203.05	7,221.68	193.17	30.79	89.59	274.68	497.98	8,096.80	7,978.01	118.79	68.162		
14,600.00	7,214.85	7,202.74	7,221.36	195.97	30.79	89.58	274.68	497.98	8,188.26	8,069.20	119.07	68.771		
14,700.00	7,214.44	7,202.42	7,221.05	198.77	30.79	89.58	274.68	497.99	8,279.93	8,160.59	119.34	69.382		
14,800.00	7,214.03	7,202.11	7,220.73	201.58	30.79	89.57	274.68	497.99	8,371.78	8,252.18	119.60	69.996		
14,900.00	7,213.63	7,201.79	7,220.42	204.38	30.78	89.57	274.68	497.99	8,463.82	8,343.96	119.86	70.612		
15,000.00	7,213.22	7,201.48	7,220.10	207.19	30.78	89.56	274.68	497.99	8,556.04	8,435.92	120.12	71.231		
15,100.00	7,212.82	7,201.16	7,219.79	210.00	30.78	89.56	274.68	497.99	8,648.43	8,528.06	120.37	71.852		
15,200.00	7,212.41	7,200.85	7,219.48	212.81	30.78	89.55	274.68	497.99	8,740.99	8,620.38	120.61	72.475		
15,300.00	7,212.01	7,200.53	7,219.16	215.62	30.78	89.55	274.68	497.99	8,833.71	8,712.86	120.84	73.100		
15,400.00	7,211.60	7,200.22	7,218.85	218.43	30.78	89.54	274.68	497.99	8,926.58	8,805.51	121.08	73.727		
15,500.00	7,211.19	7,199.91	7,218.53	221.25	30.78	89.53	274.68	497.99	9,019.61	8,898.31	121.30	74.356		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 32-15(SI_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,600.00	7,210.79	7,199.59	7,218.22	224.06	30.77	89.53	274.68	497.99	9,112.79	8,991.27	121.52	74.987	
15,700.00	7,210.38	7,199.28	7,217.91	226.88	30.77	89.52	274.68	497.99	9,206.11	9,084.37	121.74	75.620	
15,794.94	7,210.00	7,198.98	7,217.61	229.55	30.77	89.52	274.68	497.99	9,294.84	9,172.90	121.94	76.222	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-303 (PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 146-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	1.11	0.11	3.28	3.28	7.87	1,790.56	247.53	1,807.59				
100.00	100.00	112.56	111.56	3.28	3.29	7.87	1,790.19	247.60	1,807.27	1,800.69	6.57	274.904	
200.00	200.00	219.11	218.11	3.34	3.34	7.88	1,789.26	247.67	1,806.41	1,799.73	6.68	270.432	
230.81	230.81	251.16	250.15	3.36	3.37	-174.77	1,788.92	247.63	1,806.25	1,799.52	6.74	268.151	
300.00	299.98	322.68	321.67	3.44	3.46	-174.77	1,788.11	247.58	1,807.04	1,800.14	6.90	261.944	
400.00	399.84	412.83	411.81	3.59	3.60	-174.78	1,787.26	247.40	1,811.29	1,804.10	7.19	251.781	
500.00	499.45	507.47	506.46	3.79	3.79	-174.80	1,786.84	247.00	1,819.47	1,811.89	7.58	239.956	
600.00	598.70	616.55	615.53	4.03	4.05	-174.82	1,786.19	246.63	1,830.98	1,822.90	8.08	226.505	
700.00	697.47	710.06	709.03	4.31	4.30	-174.85	1,785.60	246.00	1,845.85	1,837.23	8.61	214.302	
800.00	795.62	807.78	806.75	4.64	4.59	-174.90	1,785.19	244.94	1,864.30	1,855.10	9.21	202.481	
900.00	893.06	910.32	909.28	5.00	4.91	-174.96	1,784.49	243.78	1,885.90	1,876.04	9.87	191.171	
1,000.00	989.64	993.52	992.48	5.40	5.19	-175.01	1,784.11	242.66	1,911.10	1,900.60	10.50	182.072	
1,100.00	1,085.27	1,061.00	1,059.93	5.83	5.42	-175.06	1,784.67	240.92	1,940.73	1,929.64	11.10	174.894	
1,200.00	1,179.82	1,135.85	1,134.69	6.29	5.67	-175.17	1,786.36	237.81	1,974.82	1,963.08	11.74	168.204	
1,300.00	1,273.17	1,201.84	1,200.52	6.79	5.90	-175.29	1,788.76	234.02	2,013.26	2,000.89	12.37	162.768	
1,400.00	1,365.21	1,267.98	1,266.40	7.33	6.14	-175.44	1,792.19	229.17	2,056.12	2,043.11	13.01	158.031	
1,500.00	1,455.84	1,341.99	1,339.93	7.89	6.42	-175.66	1,796.81	222.22	2,102.90	2,089.20	13.70	153.500	
1,600.00	1,544.94	1,406.29	1,403.66	8.50	6.67	-175.88	1,801.48	215.08	2,153.49	2,139.13	14.36	149.961	
1,700.00	1,632.39	1,474.23	1,470.87	9.13	6.94	-176.14	1,807.10	206.85	2,207.90	2,192.85	15.05	146.726	
1,800.00	1,718.11	1,547.86	1,543.63	9.80	7.24	-176.43	1,813.55	197.61	2,265.64	2,249.87	15.78	143.621	
1,900.00	1,802.44	1,627.17	1,621.99	10.49	7.58	-176.81	1,820.60	187.56	2,325.68	2,309.14	16.54	140.582	
2,000.00	1,886.68	1,738.88	1,732.40	11.20	8.07	-177.36	1,829.75	173.31	2,385.38	2,367.88	17.50	136.290	
2,100.00	1,970.92	1,814.79	1,807.51	11.93	8.41	-177.70	1,835.57	163.92	2,444.74	2,426.47	18.28	133.774	
2,200.00	2,055.17	1,929.84	1,921.41	12.66	8.94	-178.18	1,843.53	149.84	2,503.59	2,484.29	19.30	129.748	
2,300.00	2,139.41	2,018.54	2,009.32	13.40	9.35	-178.52	1,848.93	139.29	2,561.83	2,541.66	20.17	126.995	
2,400.00	2,223.66	2,079.80	2,070.03	14.14	9.63	-178.75	1,852.79	132.08	2,620.28	2,599.40	20.89	125.461	
2,500.00	2,307.90	2,143.13	2,132.75	14.89	9.93	-178.98	1,857.16	124.50	2,679.27	2,657.66	21.61	123.966	
2,600.00	2,392.14	2,208.83	2,197.76	15.65	10.24	-179.21	1,862.13	116.46	2,738.80	2,716.45	22.36	122.944	
2,700.00	2,476.39	2,300.59	2,288.60	16.41	10.68	-179.52	1,869.04	105.41	2,798.37	2,775.08	23.29	120.172	
2,800.00	2,560.63	2,360.85	2,348.26	17.17	10.97	-179.71	1,873.67	98.32	2,858.11	2,834.11	24.00	119.084	
2,900.00	2,644.88	2,439.45	2,426.07	17.93	11.35	-179.94	1,880.04	89.24	2,918.22	2,893.37	24.84	117.459	
3,000.00	2,729.12	2,515.95	2,501.85	18.70	11.72	179.84	1,886.10	80.69	2,978.23	2,952.55	25.68	115.990	
3,100.00	2,813.36	2,582.14	2,567.39	19.47	12.04	179.66	1,891.61	73.30	3,038.59	3,012.15	26.44	114.943	
3,200.00	2,897.61	2,690.77	2,674.99	20.25	12.57	179.38	1,900.35	61.16	3,098.75	3,071.24	27.51	112.637	
3,300.00	2,981.85	2,769.78	2,753.24	21.02	12.96	179.18	1,906.40	52.09	3,158.62	3,130.25	28.37	111.322	
3,400.00	3,066.10	2,841.19	2,823.93	21.80	13.31	179.00	1,911.93	43.59	3,218.57	3,189.39	29.18	110.283	
3,500.00	3,150.34	2,912.77	2,894.74	22.58	13.67	178.82	1,917.64	34.80	3,278.74	3,248.74	30.00	109.294	
3,600.00	3,234.58	3,001.80	2,982.79	23.35	14.12	178.60	1,924.86	23.78	3,339.04	3,308.09	30.95	107.878	
3,700.00	3,318.83	3,092.16	3,072.25	24.13	14.57	178.40	1,931.62	13.00	3,398.85	3,366.94	31.92	106.490	
3,800.00	3,403.07	3,163.16	3,142.54	24.92	14.93	178.24	1,937.04	4.61	3,458.81	3,426.08	32.73	105.670	
3,900.00	3,487.32	3,239.53	3,218.10	25.70	15.32	178.07	1,942.99	-4.81	3,518.91	3,485.32	33.59	104.753	
4,000.00	3,571.56	3,388.49	3,365.66	26.48	16.07	177.77	1,952.80	-22.63	3,577.89	3,542.86	35.03	102.128	
4,100.00	3,655.80	3,598.90	3,578.00	27.27	16.87	176.87	-1,666.65	-181.43	3,532.74	3,487.16	45.57	77.516	
4,200.00	3,740.05	3,809.50	3,787.07	28.05	17.68	176.82	-1,707.23	-182.84	3,448.61	3,402.25	46.36	74.392	
4,300.00	3,824.29	4,000.00	3,978.99	28.84	18.49	176.72	-1,831.26	-185.87	3,363.68	3,327.81	47.15	71.262	
4,400.00	3,908.54	4,191.17	4,169.93	29.62	19.29	176.68	-1,888.83	-186.94	3,278.44	3,230.21	48.23	67.971	
4,500.00	3,992.78	4,382.34	4,361.10	30.41	20.08	176.65	-1,938.08	-187.57	3,193.33	3,144.30	49.04	65.119	
4,600.00	4,077.03	4,573.51	4,552.27	31.20	20.86	176.60	-2,008.86	-188.73	3,108.02	3,058.13	49.89	62.297	
4,700.00	4,161.27	4,764.68	4,743.44	31.98	21.64	176.56	-2,062.74	-189.58	3,022.62	2,971.91	50.70	59.612	
4,800.00	4,245.51	4,955.85	4,934.61	32.77	22.42	176.54	-2,093.60	-190.09	2,937.38	2,885.88	51.50	57.041	
4,900.00	4,329.76	5,147.02	5,125.78	33.56	23.20	176.50	-2,137.07	-191.02	2,852.40	2,800.08	52.32	54.523	
5,000.00	4,414.00	5,338.19	5,316.95	34.35	23.98	176.46	-2,181.15	-191.77	2,767.58	2,714.43	53.15	52.075	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-303 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	11,159.04	7,179.59	35.14	95.10	176.42	-2,226.62	-192.29	2,682.90	2,628.91	53.99	49.696		
5,200.00	4,582.49	11,208.54	7,179.36	35.93	96.12	176.39	-2,276.10	-192.89	2,598.40	2,543.56	54.83	47.387		
5,300.00	4,666.73	11,270.02	7,178.96	36.72	97.38	176.33	-2,337.58	-193.81	2,513.79	2,458.12	55.67	45.154		
5,400.00	4,750.98	11,318.12	7,178.59	37.51	98.36	176.26	-2,385.67	-194.94	2,429.14	2,372.61	56.53	42.972		
5,500.00	4,835.22	11,362.46	7,178.36	38.30	99.27	176.18	-2,429.98	-196.41	2,344.66	2,287.25	57.40	40.845		
5,600.00	4,919.47	11,415.04	7,178.22	39.09	100.35	176.06	-2,482.52	-198.41	2,260.31	2,202.04	58.27	38.791		
5,700.00	5,003.71	11,458.14	7,178.22	39.88	101.23	175.95	-2,525.59	-200.02	2,176.10	2,116.93	59.17	36.776		
5,800.00	5,088.06	11,507.21	7,178.39	40.67	102.24	175.75	-2,574.62	-201.98	2,091.99	2,031.92	60.07	34.828		
5,900.00	5,173.83	11,550.30	7,178.71	41.44	103.13	175.35	-2,617.67	-203.82	2,006.66	1,945.71	60.95	32.923		
6,000.00	5,261.34	11,587.00	7,179.03	42.18	103.88	174.89	-2,654.33	-205.42	1,919.68	1,857.86	61.82	31.052		
6,100.00	5,350.49	11,587.00	7,179.03	42.88	103.88	174.56	-2,654.33	-205.42	1,831.91	1,769.02	62.89	29.129		
6,200.00	5,441.16	11,587.00	7,179.03	43.56	103.88	174.19	-2,654.33	-205.42	1,743.72	1,679.76	63.96	27.263		
6,300.00	5,533.25	11,587.00	7,179.03	44.20	103.88	173.79	-2,654.33	-205.42	1,655.15	1,590.12	65.03	25.451		
6,400.00	5,626.65	11,587.00	7,179.03	44.82	103.88	173.36	-2,654.33	-205.42	1,566.28	1,500.16	66.11	23.691		
6,500.00	5,721.23	11,587.00	7,179.03	45.40	103.88	172.89	-2,654.33	-205.42	1,477.15	1,409.94	67.20	21.980		
6,600.00	5,816.89	11,587.00	7,179.03	45.94	103.88	172.38	-2,654.33	-205.42	1,387.83	1,319.52	68.31	20.317		
6,700.00	5,913.51	11,587.00	7,179.03	46.45	103.88	171.83	-2,654.33	-205.42	1,298.42	1,228.99	69.43	18.700		
6,800.00	6,010.97	11,587.00	7,179.03	46.93	103.88	171.24	-2,654.33	-205.42	1,209.00	1,138.42	70.58	17.129		
6,900.00	6,109.15	11,587.00	7,179.03	47.38	103.88	170.62	-2,654.33	-205.42	1,119.70	1,047.94	71.76	15.603		
7,000.00	6,207.93	11,587.00	7,179.03	47.80	103.88	169.96	-2,654.33	-205.42	1,030.68	957.70	72.99	14.122		
7,100.00	6,307.19	11,587.00	7,179.03	48.18	103.88	169.27	-2,654.33	-205.42	942.13	867.87	74.26	12.687		
7,200.00	6,406.82	11,587.00	7,179.03	48.53	103.88	168.56	-2,654.33	-205.42	854.32	778.73	75.59	11.302		
7,300.00	6,506.68	11,587.00	7,179.03	48.84	103.88	167.85	-2,654.33	-205.42	767.65	690.65	77.00	9.969		
7,400.00	6,606.66	11,587.00	7,179.03	49.10	103.88	80.62	-2,654.33	-205.42	682.65	604.17	78.48	8.698		
7,500.00	6,706.21	11,587.00	7,179.03	49.35	103.88	93.43	-2,654.33	-205.42	600.82	521.18	79.63	7.545		
7,600.00	6,803.22	11,587.00	7,179.03	49.59	103.88	103.53	-2,654.33	-205.42	525.92	446.16	79.76	6.594		
7,700.00	6,895.32	11,587.00	7,179.03	49.82	103.88	110.45	-2,654.33	-205.42	463.60	384.74	78.86	5.879		
7,800.00	6,980.23	11,587.00	7,179.03	50.03	103.88	114.37	-2,654.33	-205.42	421.32	342.30	79.02	5.332		
7,898.11	7,054.53	11,587.00	7,179.03	50.20	103.88	115.61	-2,654.33	-205.42	406.51	322.23	84.28	4.824 CC		
7,900.00	7,055.85	11,587.00	7,179.03	50.21	103.88	115.61	-2,654.33	-205.42	406.51	322.07	84.44	4.814 ES		
8,000.00	7,120.34	11,587.00	7,179.03	50.36	103.88	114.27	-2,654.33	-205.42	422.45	327.25	95.21	4.437		
8,100.00	7,172.10	11,587.00	7,179.03	50.47	103.88	110.24	-2,654.33	-205.42	465.64	358.70	106.94	4.354 SF		
8,200.00	7,209.85	11,587.00	7,179.03	50.55	103.88	103.21	-2,654.33	-205.42	528.56	411.57	116.99	4.518		
8,300.00	7,232.68	11,587.00	7,179.03	50.61	103.88	92.99	-2,654.33	-205.42	603.81	478.86	124.95	4.833		
8,400.00	7,240.00	11,587.00	7,179.03	50.65	103.88	80.20	-2,654.33	-205.42	685.82	554.68	131.14	5.230		
8,500.00	7,239.60	11,587.00	7,179.03	50.69	103.88	80.20	-2,654.33	-205.42	771.74	635.96	135.78	5.684		
8,600.00	7,239.19	11,587.00	7,179.03	50.75	103.88	80.20	-2,654.33	-205.42	860.70	721.55	139.16	6.185		
8,700.00	7,238.78	11,587.00	7,179.03	50.85	103.88	80.20	-2,654.33	-205.42	951.86	810.18	141.68	6.718		
8,800.00	7,238.38	11,587.00	7,179.03	51.02	103.88	80.20	-2,654.33	-205.42	1,044.64	901.03	143.61	7.274		
8,900.00	7,237.97	11,587.00	7,179.03	51.32	103.88	80.20	-2,654.33	-205.42	1,138.64	993.53	145.11	7.846		
9,000.00	7,237.57	11,587.00	7,179.03	51.95	103.88	80.20	-2,654.33	-205.42	1,233.59	1,087.28	146.31	8.431		
9,100.00	7,237.16	11,587.00	7,179.03	53.10	103.88	80.20	-2,654.33	-205.42	1,329.27	1,182.00	147.28	9.026		
9,200.00	7,236.76	11,587.00	7,179.03	54.69	103.88	80.20	-2,654.33	-205.42	1,425.55	1,277.48	148.07	9.628		
9,300.00	7,236.35	11,587.00	7,179.03	56.53	103.88	80.20	-2,654.33	-205.42	1,522.31	1,373.58	148.73	10.235		
9,400.00	7,235.94	11,587.00	7,179.03	58.53	103.88	80.20	-2,654.33	-205.42	1,619.47	1,470.18	149.29	10.848		
9,500.00	7,235.54	11,587.00	7,179.03	60.62	103.88	80.20	-2,654.33	-205.42	1,716.94	1,567.19	149.76	11.465		
9,600.00	7,235.13	11,587.00	7,179.03	62.80	103.88	80.20	-2,654.33	-205.42	1,814.70	1,664.53	150.17	12.085		
9,700.00	7,234.73	11,587.00	7,179.03	65.03	103.88	80.20	-2,654.33	-205.42	1,912.68	1,762.16	150.52	12.707		
9,800.00	7,234.32	11,587.00	7,179.03	67.32	103.88	80.20	-2,654.33	-205.42	2,010.87	1,860.04	150.83	13.332		
9,900.00	7,233.92	11,587.00	7,179.03	69.66	103.88	80.20	-2,654.33	-205.42	2,109.22	1,958.12	151.11	13.958		
10,000.00	7,233.51	11,587.00	7,179.03	72.03	103.88	80.20	-2,654.33	-205.42	2,207.73	2,056.37	151.35	14.587		
10,100.00	7,233.10	11,587.00	7,179.03	74.45	103.88	80.20	-2,654.33	-205.42	2,306.36	2,154.79	151.57	15.216		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-303 (PR_150CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 146-MWD													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,200.00	7,232.70	11,587.00	7,179.03	76.89	103.88	80.20	-2,654.33	-205.42	2,405.10	2,253.33	151.77	15.847		
10,300.00	7,232.29	11,587.00	7,179.03	79.36	103.88	80.20	-2,654.33	-205.42	2,503.95	2,352.00	151.95	16.479		
10,400.00	7,231.89	11,587.00	7,179.03	81.86	103.88	80.20	-2,654.33	-205.42	2,602.88	2,450.76	152.12	17.111		
10,500.00	7,231.48	11,587.00	7,179.03	84.38	103.88	80.20	-2,654.33	-205.42	2,701.89	2,549.62	152.27	17.744		
10,600.00	7,231.08	11,587.00	7,179.03	86.93	103.88	80.20	-2,654.33	-205.42	2,800.97	2,648.56	152.41	18.378		
10,700.00	7,230.67	11,587.00	7,179.03	89.49	103.88	80.20	-2,654.33	-205.42	2,900.12	2,747.58	152.54	19.012		
10,800.00	7,230.26	11,587.00	7,179.03	92.07	103.88	80.20	-2,654.33	-205.42	2,999.32	2,846.66	152.66	19.647		
10,900.00	7,229.86	11,587.00	7,179.03	94.67	103.88	80.20	-2,654.33	-205.42	3,098.57	2,945.80	152.77	20.282		
11,000.00	7,229.45	11,587.00	7,179.03	97.28	103.88	80.20	-2,654.33	-205.42	3,197.87	3,044.99	152.88	20.917		
11,100.00	7,229.05	11,587.00	7,179.03	99.90	103.88	80.20	-2,654.33	-205.42	3,297.21	3,144.23	152.98	21.553		
11,200.00	7,228.64	11,587.00	7,179.03	102.54	103.88	80.20	-2,654.33	-205.42	3,396.59	3,243.51	153.08	22.188		
11,300.00	7,228.24	11,587.00	7,179.03	105.19	103.88	80.20	-2,654.33	-205.42	3,496.01	3,342.84	153.17	22.824		
11,400.00	7,227.83	11,587.00	7,179.03	107.85	103.88	80.20	-2,654.33	-205.42	3,595.46	3,442.20	153.26	23.460		
11,500.00	7,227.42	11,587.00	7,179.03	110.52	103.88	80.20	-2,654.33	-205.42	3,694.93	3,541.59	153.34	24.096		
11,600.00	7,227.02	11,587.00	7,179.03	113.20	103.88	80.20	-2,654.33	-205.42	3,794.44	3,641.01	153.43	24.731		
11,700.00	7,226.61	11,587.00	7,179.03	115.89	103.88	80.20	-2,654.33	-205.42	3,893.97	3,740.47	153.50	25.367		
11,800.00	7,226.21	11,587.00	7,179.03	118.59	103.88	80.20	-2,654.33	-205.42	3,993.52	3,839.94	153.58	26.003		
11,900.00	7,225.80	11,587.00	7,179.03	121.29	103.88	80.20	-2,654.33	-205.42	4,093.10	3,939.45	153.65	26.638		
12,000.00	7,225.40	11,587.00	7,179.03	124.00	103.88	80.20	-2,654.33	-205.42	4,192.70	4,038.97	153.73	27.274		
12,100.00	7,224.99	11,587.00	7,179.03	126.72	103.88	80.20	-2,654.33	-205.42	4,292.31	4,138.51	153.80	27.909		
12,200.00	7,224.58	11,587.00	7,179.03	129.44	103.88	80.20	-2,654.33	-205.42	4,391.94	4,238.08	153.87	28.544		
12,300.00	7,224.18	11,587.00	7,179.03	132.17	103.88	80.20	-2,654.33	-205.42	4,491.59	4,337.66	153.93	29.179		
12,400.00	7,223.77	11,587.00	7,179.03	134.91	103.88	80.20	-2,654.33	-205.42	4,591.25	4,437.26	154.00	29.814		
12,500.00	7,223.37	11,587.00	7,179.03	137.65	103.88	80.20	-2,654.33	-205.42	4,690.93	4,536.87	154.06	30.448		
12,600.00	7,222.96	11,587.00	7,179.03	140.39	103.88	80.20	-2,654.33	-205.42	4,790.62	4,636.50	154.13	31.082		
12,700.00	7,222.55	11,587.00	7,179.03	143.14	103.88	80.20	-2,654.33	-205.42	4,890.33	4,736.14	154.19	31.716		
12,800.00	7,222.15	11,587.00	7,179.03	145.89	103.88	80.20	-2,654.33	-205.42	4,990.05	4,835.79	154.25	32.349		
12,900.00	7,221.74	11,587.00	7,179.03	148.65	103.88	80.20	-2,654.33	-205.42	5,089.77	4,935.46	154.32	32.983		
13,000.00	7,221.34	11,587.00	7,179.03	151.41	103.88	80.20	-2,654.33	-205.42	5,189.51	5,035.13	154.38	33.615		
13,100.00	7,220.93	11,587.00	7,179.03	154.18	103.88	80.20	-2,654.33	-205.42	5,289.26	5,134.82	154.44	34.248		
13,200.00	7,220.53	11,587.00	7,179.03	156.94	103.88	80.20	-2,654.33	-205.42	5,389.01	5,234.51	154.50	34.880		
13,300.00	7,220.12	11,587.00	7,179.03	159.72	103.88	80.20	-2,654.33	-205.42	5,488.78	5,334.22	154.56	35.512		
13,400.00	7,219.71	11,587.00	7,179.03	162.49	103.88	80.20	-2,654.33	-205.42	5,588.55	5,433.93	154.62	36.143		
13,500.00	7,219.31	11,587.00	7,179.03	165.27	103.88	80.20	-2,654.33	-205.42	5,688.34	5,533.65	154.68	36.774		
13,600.00	7,218.90	11,587.00	7,179.03	168.05	103.88	80.20	-2,654.33	-205.42	5,788.13	5,633.38	154.74	37.405		
13,700.00	7,218.50	11,587.00	7,179.03	170.83	103.88	80.20	-2,654.33	-205.42	5,887.92	5,733.12	154.80	38.035		
13,800.00	7,218.09	11,587.00	7,179.03	173.61	103.88	80.20	-2,654.33	-205.42	5,987.73	5,832.86	154.86	38.665		
13,900.00	7,217.69	11,587.00	7,179.03	176.40	103.88	80.20	-2,654.33	-205.42	6,087.54	5,932.61	154.92	39.294		
14,000.00	7,217.28	11,587.00	7,179.03	179.19	103.88	80.20	-2,654.33	-205.42	6,187.35	6,032.37	154.98	39.923		
14,100.00	7,216.87	11,587.00	7,179.03	181.98	103.88	80.20	-2,654.33	-205.42	6,287.17	6,132.13	155.04	40.552		
14,200.00	7,216.47	11,587.00	7,179.03	184.78	103.88	80.20	-2,654.33	-205.42	6,387.00	6,231.90	155.10	41.179		
14,300.00	7,216.06	11,587.00	7,179.03	187.57	103.88	80.20	-2,654.33	-205.42	6,486.83	6,331.67	155.16	41.807		
14,400.00	7,215.66	11,587.00	7,179.03	190.37	103.88	80.20	-2,654.33	-205.42	6,586.67	6,431.45	155.22	42.434		
14,500.00	7,215.25	11,587.00	7,179.03	193.17	103.88	80.20	-2,654.33	-205.42	6,686.52	6,531.23	155.28	43.060		
14,600.00	7,214.85	11,587.00	7,179.03	195.97	103.88	80.20	-2,654.33	-205.42	6,786.36	6,631.02	155.34	43.686		
14,700.00	7,214.44	11,587.00	7,179.03	198.77	103.88	80.20	-2,654.33	-205.42	6,886.21	6,730.81	155.40	44.311		
14,800.00	7,214.03	11,587.00	7,179.03	201.58	103.88	80.20	-2,654.33	-205.42	6,986.07	6,830.60	155.47	44.936		
14,900.00	7,213.63	11,587.00	7,179.03	204.38	103.88	80.20	-2,654.33	-205.42	7,085.93	6,930.40	155.53	45.561		
15,000.00	7,213.22	11,587.00	7,179.03	207.19	103.88	80.20	-2,654.33	-205.42	7,185.80	7,030.21	155.59	46.184		
15,100.00	7,212.82	11,587.00	7,179.03	210.00	103.88	80.20	-2,654.33	-205.42	7,285.66	7,130.01	155.65	46.808		
15,200.00	7,212.41	11,587.00	7,179.03	212.81	103.88	80.20	-2,654.33	-205.42	7,385.53	7,229.82	155.71	47.430		
15,300.00	7,212.01	11,587.00	7,179.03	215.62	103.88	80.20	-2,654.33	-205.42	7,485.41	7,329.63	155.78	48.052		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 146-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.00	7,211.60	11,587.00	7,179.03	218.43	103.88	80.20	-2,654.33	-205.42	7,585.29	7,429.45	155.84	48.674	
15,500.00	7,211.19	11,587.00	7,179.03	221.25	103.88	80.20	-2,654.33	-205.42	7,685.17	7,529.27	155.90	49.295	
15,600.00	7,210.79	11,587.00	7,179.03	224.06	103.88	80.20	-2,654.33	-205.42	7,785.05	7,629.09	155.97	49.915	
15,700.00	7,210.38	11,587.00	7,179.03	226.88	103.88	80.20	-2,654.33	-205.42	7,884.94	7,728.91	156.03	50.534	
15,794.94	7,210.00	11,587.00	7,179.03	229.55	103.88	80.20	-2,654.33	-205.42	7,979.78	7,823.69	156.09	51.122	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-423(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.04	0.04	3.28	3.28	8.84	1,792.02	278.68	1,813.56					
100.00	100.00	105.51	104.51	3.28	3.29	8.85	1,791.85	278.89	1,813.43	1,806.86	6.57	275.896		
200.00	200.00	215.05	214.05	3.34	3.34	8.87	1,791.26	279.41	1,812.98	1,806.30	6.68	271.562		
228.00	228.00	246.62	245.62	3.36	3.37	-173.78	1,790.96	279.52	1,812.87	1,806.14	6.73	269.424		
300.00	299.98	318.30	317.29	3.44	3.45	-173.79	1,790.34	279.17	1,813.79	1,806.90	6.89	263.275		
400.00	399.84	422.93	421.91	3.59	3.61	-173.82	1,789.35	278.23	1,817.93	1,810.72	7.21	252.298		
500.00	499.45	526.22	525.19	3.79	3.83	-173.83	1,787.93	278.25	1,825.23	1,817.62	7.62	239.627		
600.00	598.70	618.06	617.03	4.03	4.05	-173.83	1,786.81	278.48	1,836.19	1,828.11	8.08	227.237		
700.00	697.47	721.27	720.22	4.31	4.33	-173.83	1,785.59	279.00	1,850.67	1,842.03	8.64	214.227		
800.00	795.62	823.29	822.23	4.64	4.64	-173.83	1,784.04	279.64	1,868.25	1,859.00	9.25	201.928		
900.00	893.06	916.56	915.49	5.00	4.93	-173.83	1,782.71	280.36	1,889.36	1,879.48	9.88	191.145		
1,000.00	989.64	1,006.09	1,005.01	5.40	5.23	-173.81	1,781.57	281.46	1,914.07	1,903.53	10.54	181.594		
1,100.00	1,085.27	1,091.80	1,090.71	5.83	5.53	-173.80	1,781.03	282.33	1,942.69	1,931.48	11.21	173.272		
1,200.00	1,179.82	1,184.73	1,183.63	6.29	5.86	-173.81	1,780.73	282.99	1,974.87	1,962.93	11.94	165.459		
1,300.00	1,273.17	1,279.81	1,278.71	6.79	6.20	-173.82	1,780.41	283.71	2,010.32	1,997.62	12.69	158.377		
1,400.00	1,365.21	1,371.87	1,370.77	7.33	6.55	-173.83	1,780.01	284.24	2,048.88	2,035.42	13.46	152.208		
1,500.00	1,455.84	1,454.23	1,453.13	7.89	6.86	-173.83	1,779.90	284.77	2,090.90	2,076.69	14.20	147.210		
1,600.00	1,544.94	1,543.63	1,542.53	8.50	7.20	-173.83	1,779.92	285.39	2,136.19	2,121.21	14.99	142.518		
1,700.00	1,632.39	1,629.64	1,628.53	9.13	7.53	-173.83	1,779.96	286.07	2,184.59	2,168.81	15.77	138.493		
1,800.00	1,718.11	1,718.51	1,717.40	9.80	7.88	-173.83	1,779.96	286.70	2,235.96	2,219.37	16.59	134.811		
1,900.00	1,802.44	1,813.65	1,812.54	10.49	8.26	-173.93	1,779.69	287.33	2,289.33	2,271.89	17.44	131.258		
2,000.00	1,886.68	1,884.31	1,883.20	11.20	8.53	-174.04	1,779.51	287.62	2,342.83	2,324.67	18.17	128.972		
2,100.00	1,970.92	1,950.95	1,949.84	11.93	8.78	-174.16	1,779.90	287.20	2,396.93	2,378.06	18.87	127.036		
2,200.00	2,055.17	2,012.00	2,010.87	12.66	9.01	-174.28	1,780.78	286.30	2,451.68	2,432.14	19.54	125.472		
2,300.00	2,139.41	2,073.31	2,072.15	13.40	9.25	-174.41	1,782.27	285.00	2,507.19	2,486.98	20.21	124.027		
2,400.00	2,223.66	2,128.74	2,127.52	14.14	9.46	-174.54	1,784.24	283.55	2,563.57	2,542.71	20.86	122.908		
2,500.00	2,307.90	2,181.23	2,179.94	14.89	9.66	-174.66	1,786.71	282.06	2,620.88	2,599.39	21.48	122.004		
2,600.00	2,392.14	2,240.47	2,239.05	15.65	9.89	-174.79	1,790.12	280.33	2,679.04	2,656.89	22.14	120.980		
2,700.00	2,476.39	2,304.13	2,302.56	16.41	10.14	-174.93	1,794.20	278.58	2,737.76	2,714.92	22.83	119.896		
2,800.00	2,560.63	2,367.00	2,365.25	17.17	10.39	-175.06	1,798.61	276.92	2,797.00	2,773.48	23.52	118.916		
2,900.00	2,644.88	2,432.47	2,430.50	17.93	10.65	-175.20	1,803.61	275.12	2,856.73	2,832.51	24.22	117.926		
3,000.00	2,729.12	2,498.42	2,496.20	18.70	10.92	-175.34	1,808.98	272.90	2,916.85	2,891.91	24.93	116.986		
3,100.00	2,813.36	2,559.08	2,556.59	19.47	11.17	-175.47	1,814.28	270.73	2,977.43	2,951.82	25.61	116.274		
3,200.00	2,897.61	2,620.64	2,617.84	20.25	11.42	-175.60	1,820.04	268.55	3,038.51	3,012.22	26.29	115.590		
3,300.00	2,981.85	2,677.00	2,673.88	21.02	11.66	-175.72	1,825.62	266.49	3,100.04	3,073.11	26.93	115.117		
3,400.00	3,066.10	2,736.86	2,733.36	21.80	11.91	-175.84	1,831.94	264.13	3,162.10	3,134.50	27.60	114.583		
3,500.00	3,150.34	2,800.72	2,796.74	22.58	12.18	-175.98	1,839.20	261.30	3,224.71	3,196.41	28.29	113.976		
3,600.00	3,234.58	2,869.60	2,864.95	23.35	12.56	-176.17	1,849.31	257.06	3,287.35	3,258.17	29.18	112.667		
3,700.00	3,318.83	2,991.06	2,985.71	24.13	13.00	-176.38	1,860.16	252.12	3,349.44	3,319.28	30.16	111.048		
3,800.00	3,403.07	3,069.73	3,063.82	24.92	13.34	-176.55	1,868.43	247.80	3,411.38	3,380.40	30.98	110.116		
3,900.00	3,487.32	3,155.90	3,149.38	25.70	13.72	-176.73	1,877.39	242.80	3,473.23	3,441.37	31.86	109.022		
4,000.00	3,571.56	3,264.95	3,257.73	26.48	14.21	-176.94	1,888.09	236.89	3,534.66	3,501.75	32.92	107.386		
4,100.00	3,655.80	10,734.17	7,228.24	27.27	85.04	-172.18	-1,725.28	180.25	3,582.10	3,535.60	46.50	77.039		
4,200.00	3,740.05	10,753.00	7,228.03	28.05	85.43	-172.08	-1,744.10	180.55	3,497.73	3,450.50	47.23	74.061		
4,300.00	3,824.29	10,766.78	7,228.01	28.84	85.71	-172.00	-1,757.87	180.91	3,413.95	3,365.99	47.97	71.175		
4,400.00	3,908.54	10,785.00	7,228.22	29.62	86.08	-171.89	-1,776.08	181.53	3,330.86	3,282.11	48.75	68.325		
4,500.00	3,992.78	10,827.86	7,228.97	30.41	86.96	-171.63	-1,818.92	182.91	3,248.18	3,198.53	49.65	65.422		
4,600.00	4,077.03	10,849.00	7,229.42	31.20	87.39	-171.49	-1,840.04	183.65	3,165.87	3,115.37	50.50	62.694		
4,700.00	4,161.27	10,880.00	7,230.42	31.98	88.03	-171.29	-1,870.99	184.92	3,084.16	3,032.76	51.41	59.997		
4,800.00	4,245.51	10,912.00	7,231.82	32.77	88.68	-171.08	-1,902.95	185.98	3,003.05	2,950.71	52.34	57.375		
4,900.00	4,329.76	11,154.48	7,236.71	33.56	93.61	-169.85	-2,145.07	177.13	2,920.18	2,866.55	53.62	54.458		
5,000.00	4,414.00	11,197.21	7,236.40	34.35	94.47	-169.60	-2,187.76	175.34	2,835.94	2,781.40	54.53	52.003		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-423(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	5,100.00	7,235.45	35.14	32.33	-169.07	-2,272.28	172.12	2,751.60	2,719.35	32.26	85.300		
5,200.00	4,582.49	11,359.86	7,233.55	35.93	97.79	-168.52	-2,350.26	169.16	2,666.55	2,610.12	56.42	47.259		
5,300.00	4,666.73	11,393.45	7,232.66	36.72	98.48	-168.26	-2,383.83	168.27	2,581.51	2,524.13	57.38	44.991		
5,400.00	4,750.98	11,418.00	7,232.21	37.51	98.99	-168.04	-2,408.37	167.89	2,496.97	2,438.60	58.37	42.775		
5,500.00	4,835.22	11,450.00	7,231.93	38.30	99.65	-167.73	-2,440.37	167.95	2,413.07	2,353.65	59.41	40.615		
5,600.00	4,919.47	11,545.00	7,230.37	39.09	101.62	-166.72	-2,535.35	168.55	2,328.86	2,268.44	60.42	38.546		
5,700.00	5,003.71	11,577.00	7,229.75	39.88	102.28	-166.35	-2,567.34	168.61	2,244.57	2,183.05	61.52	36.484		
5,800.00	5,088.06	11,597.73	7,229.57	40.67	102.72	-165.85	-2,588.07	168.92	2,160.87	2,098.17	62.71	34.460		
5,900.00	5,173.83	11,635.66	7,229.61	41.44	103.51	-164.48	-2,625.98	170.07	2,076.47	2,012.59	63.88	32.505		
6,000.00	5,261.34	11,662.00	7,229.66	42.18	104.06	-163.09	-2,652.31	170.90	1,990.63	1,925.54	65.09	30.583		
6,100.00	5,350.49	11,662.00	7,229.66	42.88	104.06	-162.07	-2,652.31	170.90	1,904.22	1,837.83	66.39	28.684		
6,200.00	5,441.16	11,662.00	7,229.66	43.56	104.06	-160.96	-2,652.31	170.90	1,817.46	1,749.74	67.72	26.839		
6,300.00	5,533.25	11,662.00	7,229.66	44.20	104.06	-159.77	-2,652.31	170.90	1,730.42	1,661.32	69.09	25.045		
6,400.00	5,626.65	11,662.00	7,229.66	44.82	104.06	-158.50	-2,652.31	170.90	1,643.16	1,572.64	70.52	23.301		
6,500.00	5,721.23	11,662.00	7,229.66	45.40	104.06	-157.14	-2,652.31	170.90	1,555.76	1,483.74	72.01	21.604		
6,600.00	5,816.89	11,662.00	7,229.66	45.94	104.06	-155.70	-2,652.31	170.90	1,468.31	1,394.72	73.59	19.953		
6,700.00	5,913.51	11,662.00	7,229.66	46.45	104.06	-154.18	-2,652.31	170.90	1,380.93	1,305.67	75.27	18.347		
6,800.00	6,010.97	11,662.00	7,229.66	46.93	104.06	-152.58	-2,652.31	170.90	1,293.74	1,216.67	77.07	16.787		
6,900.00	6,109.15	11,662.00	7,229.66	47.38	104.06	-150.93	-2,652.31	170.90	1,206.90	1,127.87	79.03	15.271		
7,000.00	6,207.93	11,662.00	7,229.66	47.80	104.06	-149.22	-2,652.31	170.90	1,120.61	1,039.42	81.20	13.801		
7,100.00	6,307.19	11,662.00	7,229.66	48.18	104.06	-147.49	-2,652.31	170.90	1,035.13	951.52	83.61	12.380		
7,200.00	6,406.82	11,662.00	7,229.66	48.53	104.06	-145.77	-2,652.31	170.90	950.79	864.45	86.34	11.012		
7,300.00	6,506.68	11,662.00	7,229.66	48.84	104.06	-144.07	-2,652.31	170.90	868.05	778.58	89.47	9.702		
7,400.00	6,606.66	11,662.00	7,229.66	49.10	104.06	130.79	-2,652.31	170.90	787.52	694.44	93.08	8.461		
7,500.00	6,706.21	11,662.00	7,229.66	49.35	104.06	137.63	-2,652.31	170.90	715.09	617.08	98.01	7.296		
7,600.00	6,803.22	11,662.00	7,229.66	49.59	104.06	141.56	-2,652.31	170.90	659.60	554.56	105.03	6.280		
7,700.00	6,895.32	11,662.00	7,229.66	49.82	104.06	143.46	-2,652.31	170.90	627.06	513.40	113.66	5.517		
7,767.94	6,953.92	11,662.00	7,229.66	49.96	104.06	143.82	-2,652.31	170.90	620.46	500.71	119.75	5.181 CC		
7,800.00	6,980.23	11,662.00	7,229.66	50.03	104.06	143.74	-2,652.31	170.90	621.94	499.43	122.51	5.077 ES		
7,900.00	7,055.85	11,662.00	7,229.66	50.21	104.06	142.44	-2,652.31	170.90	644.99	514.93	130.06	4.959 SF		
8,000.00	7,120.34	11,662.00	7,229.66	50.36	104.06	139.31	-2,652.31	170.90	692.91	557.27	135.64	5.108		
8,100.00	7,172.10	11,662.00	7,229.66	50.47	104.06	133.66	-2,652.31	170.90	759.96	620.45	139.52	5.447		
8,200.00	7,209.85	11,662.00	7,229.66	50.55	104.06	124.18	-2,652.31	170.90	840.17	697.90	142.27	5.906		
8,300.00	7,232.68	11,662.00	7,229.66	50.61	104.06	109.00	-2,652.31	170.90	928.43	784.07	144.36	6.432		
8,400.00	7,240.00	11,662.00	7,229.66	50.65	104.06	87.78	-2,652.31	170.90	1,020.78	874.74	146.04	6.990		
8,500.00	7,239.60	11,662.00	7,229.66	50.69	104.06	87.78	-2,652.31	170.90	1,114.69	967.31	147.38	7.563		
8,600.00	7,239.19	11,662.00	7,229.66	50.75	104.06	87.78	-2,652.31	170.90	1,209.57	1,061.15	148.43	8.149		
8,700.00	7,238.78	11,662.00	7,229.66	50.85	104.06	87.78	-2,652.31	170.90	1,305.22	1,155.95	149.27	8.744		
8,800.00	7,238.38	11,662.00	7,229.66	51.02	104.06	87.78	-2,652.31	170.90	1,401.48	1,251.53	149.95	9.346		
8,900.00	7,237.97	11,662.00	7,229.66	51.32	104.06	87.78	-2,652.31	170.90	1,498.23	1,347.72	150.51	9.954		
9,000.00	7,237.57	11,662.00	7,229.66	51.95	104.06	87.78	-2,652.31	170.90	1,595.37	1,444.40	150.98	10.567		
9,100.00	7,237.16	11,662.00	7,229.66	53.10	104.06	87.78	-2,652.31	170.90	1,692.86	1,541.48	151.37	11.183		
9,200.00	7,236.76	11,662.00	7,229.66	54.69	104.06	87.78	-2,652.31	170.90	1,790.61	1,638.91	151.71	11.803		
9,300.00	7,236.35	11,662.00	7,229.66	56.53	104.06	87.78	-2,652.31	170.90	1,888.61	1,736.61	152.00	12.425		
9,400.00	7,235.94	11,662.00	7,229.66	58.53	104.06	87.78	-2,652.31	170.90	1,986.80	1,834.55	152.25	13.050		
9,500.00	7,235.54	11,662.00	7,229.66	60.62	104.06	87.78	-2,652.31	170.90	2,085.16	1,932.69	152.47	13.676		
9,600.00	7,235.13	11,662.00	7,229.66	62.80	104.06	87.78	-2,652.31	170.90	2,183.68	2,031.01	152.67	14.303		
9,700.00	7,234.73	11,662.00	7,229.66	65.03	104.06	87.78	-2,652.31	170.90	2,282.32	2,129.48	152.84	14.932		
9,800.00	7,234.32	11,662.00	7,229.66	67.32	104.06	87.78	-2,652.31	170.90	2,381.08	2,228.08	153.00	15.563		
9,900.00	7,233.92	11,662.00	7,229.66	69.66	104.06	87.78	-2,652.31	170.90	2,479.93	2,326.79	153.14	16.194		
10,000.00	7,233.51	11,662.00	7,229.66	72.03	104.06	87.78	-2,652.31	170.90	2,578.88	2,425.60	153.27	16.826		
10,100.00	7,233.10	11,662.00	7,229.66	74.45	104.06	87.78	-2,652.31	170.90	2,677.90	2,524.51	153.39	17.458		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-423(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,232.70	11,662.00	7,229.66	76.89	104.06	87.78	-2,652.31	170.90	2,776.99	2,623.49	153.50	18.091		
10,300.00	7,232.29	11,662.00	7,229.66	79.36	104.06	87.78	-2,652.31	170.90	2,876.15	2,722.55	153.60	18.725		
10,400.00	7,231.89	11,662.00	7,229.66	81.86	104.06	87.78	-2,652.31	170.90	2,975.36	2,821.66	153.69	19.359		
10,500.00	7,231.48	11,662.00	7,229.66	84.38	104.06	87.78	-2,652.31	170.90	3,074.62	2,920.84	153.78	19.993		
10,600.00	7,231.08	11,662.00	7,229.66	86.93	104.06	87.78	-2,652.31	170.90	3,173.93	3,020.06	153.87	20.628		
10,700.00	7,230.67	11,662.00	7,229.66	89.49	104.06	87.78	-2,652.31	170.90	3,273.28	3,119.34	153.94	21.263		
10,800.00	7,230.26	11,662.00	7,229.66	92.07	104.06	87.78	-2,652.31	170.90	3,372.67	3,218.65	154.02	21.898		
10,900.00	7,229.86	11,662.00	7,229.66	94.67	104.06	87.78	-2,652.31	170.90	3,472.09	3,318.00	154.09	22.533		
11,000.00	7,229.45	11,662.00	7,229.66	97.28	104.06	87.78	-2,652.31	170.90	3,571.55	3,417.39	154.16	23.168		
11,100.00	7,229.05	11,662.00	7,229.66	99.90	104.06	87.78	-2,652.31	170.90	3,671.04	3,516.81	154.23	23.803		
11,200.00	7,228.64	11,662.00	7,229.66	102.54	104.06	87.78	-2,652.31	170.90	3,770.55	3,616.26	154.29	24.438		
11,300.00	7,228.24	11,662.00	7,229.66	105.19	104.06	87.78	-2,652.31	170.90	3,870.09	3,715.74	154.35	25.073		
11,400.00	7,227.83	11,662.00	7,229.66	107.85	104.06	87.78	-2,652.31	170.90	3,969.65	3,815.24	154.41	25.708		
11,500.00	7,227.42	11,662.00	7,229.66	110.52	104.06	87.78	-2,652.31	170.90	4,069.23	3,914.77	154.47	26.343		
11,600.00	7,227.02	11,662.00	7,229.66	113.20	104.06	87.78	-2,652.31	170.90	4,168.84	4,014.31	154.53	26.978		
11,700.00	7,226.61	11,662.00	7,229.66	115.89	104.06	87.78	-2,652.31	170.90	4,268.46	4,113.88	154.58	27.613		
11,800.00	7,226.21	11,662.00	7,229.66	118.59	104.06	87.78	-2,652.31	170.90	4,368.10	4,213.46	154.64	28.247		
11,900.00	7,225.80	11,662.00	7,229.66	121.29	104.06	87.78	-2,652.31	170.90	4,467.75	4,313.06	154.69	28.882		
12,000.00	7,225.40	11,662.00	7,229.66	124.00	104.06	87.78	-2,652.31	170.90	4,567.42	4,412.68	154.74	29.516		
12,100.00	7,224.99	11,662.00	7,229.66	126.72	104.06	87.78	-2,652.31	170.90	4,667.11	4,512.31	154.80	30.150		
12,200.00	7,224.58	11,662.00	7,229.66	129.44	104.06	87.78	-2,652.31	170.90	4,766.81	4,611.96	154.85	30.783		
12,300.00	7,224.18	11,662.00	7,229.66	132.17	104.06	87.78	-2,652.31	170.90	4,866.52	4,711.61	154.90	31.417		
12,400.00	7,223.77	11,662.00	7,229.66	134.91	104.06	87.78	-2,652.31	170.90	4,966.24	4,811.28	154.95	32.050		
12,500.00	7,223.37	11,662.00	7,229.66	137.65	104.06	87.78	-2,652.31	170.90	5,065.97	4,910.96	155.00	32.683		
12,600.00	7,222.96	11,662.00	7,229.66	140.39	104.06	87.78	-2,652.31	170.90	5,165.71	5,010.66	155.06	33.315		
12,700.00	7,222.55	11,662.00	7,229.66	143.14	104.06	87.78	-2,652.31	170.90	5,265.46	5,110.36	155.11	33.947		
12,800.00	7,222.15	11,662.00	7,229.66	145.89	104.06	87.78	-2,652.31	170.90	5,365.23	5,210.07	155.16	34.579		
12,900.00	7,221.74	11,662.00	7,229.66	148.65	104.06	87.78	-2,652.31	170.90	5,465.00	5,309.79	155.21	35.211		
13,000.00	7,221.34	11,662.00	7,229.66	151.41	104.06	87.78	-2,652.31	170.90	5,564.78	5,409.52	155.26	35.842		
13,100.00	7,220.93	11,662.00	7,229.66	154.18	104.06	87.78	-2,652.31	170.90	5,664.56	5,509.25	155.31	36.472		
13,200.00	7,220.53	11,662.00	7,229.66	156.94	104.06	87.78	-2,652.31	170.90	5,764.36	5,608.99	155.36	37.103		
13,300.00	7,220.12	11,662.00	7,229.66	159.72	104.06	87.78	-2,652.31	170.90	5,864.16	5,708.74	155.41	37.733		
13,400.00	7,219.71	11,662.00	7,229.66	162.49	104.06	87.78	-2,652.31	170.90	5,963.97	5,808.50	155.46	38.362		
13,500.00	7,219.31	11,662.00	7,229.66	165.27	104.06	87.78	-2,652.31	170.90	6,063.78	5,908.26	155.52	38.991		
13,600.00	7,218.90	11,662.00	7,229.66	168.05	104.06	87.78	-2,652.31	170.90	6,163.60	6,008.03	155.57	39.620		
13,700.00	7,218.50	11,662.00	7,229.66	170.83	104.06	87.78	-2,652.31	170.90	6,263.43	6,107.80	155.62	40.248		
13,800.00	7,218.09	11,662.00	7,229.66	173.61	104.06	87.78	-2,652.31	170.90	6,363.26	6,207.58	155.67	40.876		
13,900.00	7,217.69	11,662.00	7,229.66	176.40	104.06	87.78	-2,652.31	170.90	6,463.09	6,307.37	155.73	41.503		
14,000.00	7,217.28	11,662.00	7,229.66	179.19	104.06	87.78	-2,652.31	170.90	6,562.93	6,407.16	155.78	42.130		
14,100.00	7,216.87	11,662.00	7,229.66	181.98	104.06	87.78	-2,652.31	170.90	6,662.78	6,506.95	155.83	42.756		
14,200.00	7,216.47	11,662.00	7,229.66	184.78	104.06	87.78	-2,652.31	170.90	6,762.63	6,606.75	155.89	43.382		
14,300.00	7,216.06	11,662.00	7,229.66	187.57	104.06	87.78	-2,652.31	170.90	6,862.49	6,706.55	155.94	44.007		
14,400.00	7,215.66	11,662.00	7,229.66	190.37	104.06	87.78	-2,652.31	170.90	6,962.35	6,806.35	155.99	44.632		
14,500.00	7,215.25	11,662.00	7,229.66	193.17	104.06	87.78	-2,652.31	170.90	7,062.21	6,906.16	156.05	45.256		
14,600.00	7,214.85	11,662.00	7,229.66	195.97	104.06	87.78	-2,652.31	170.90	7,162.08	7,005.97	156.10	45.880		
14,700.00	7,214.44	11,662.00	7,229.66	198.77	104.06	87.78	-2,652.31	170.90	7,261.95	7,105.79	156.16	46.503		
14,800.00	7,214.03	11,662.00	7,229.66	201.58	104.06	87.78	-2,652.31	170.90	7,361.82	7,205.60	156.22	47.126		
14,900.00	7,213.63	11,662.00	7,229.66	204.38	104.06	87.78	-2,652.31	170.90	7,461.70	7,305.43	156.27	47.748		
15,000.00	7,213.22	11,662.00	7,229.66	207.19	104.06	87.78	-2,652.31	170.90	7,561.58	7,405.25	156.33	48.369		
15,100.00	7,212.82	11,662.00	7,229.66	210.00	104.06	87.78	-2,652.31	170.90	7,661.46	7,505.08	156.39	48.990		
15,200.00	7,212.41	11,662.00	7,229.66	212.81	104.06	87.78	-2,652.31	170.90	7,761.35	7,604.91	156.45	49.611		
15,300.00	7,212.01	11,662.00	7,229.66	215.62	104.06	87.78	-2,652.31	170.90	7,861.24	7,704.74	156.50	50.230		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 146-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,400.00	7,211.60	11,662.00	7,229.66	218.43	104.06	87.78	-2,652.31	170.90	7,961.13	7,804.57	156.56	50.849	
15,500.00	7,211.19	11,662.00	7,229.66	221.25	104.06	87.78	-2,652.31	170.90	8,061.03	7,904.41	156.62	51.468	
15,600.00	7,210.79	11,662.00	7,229.66	224.06	104.06	87.78	-2,652.31	170.90	8,160.93	8,004.24	156.68	52.086	
15,700.00	7,210.38	11,662.00	7,229.66	226.88	104.06	87.78	-2,652.31	170.90	8,260.83	8,104.08	156.74	52.703	
15,794.94	7,210.00	11,662.00	7,229.66	229.55	104.06	87.78	-2,652.31	170.90	8,355.68	8,198.88	156.80	53.289	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-243(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 146-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	-1.00	3.28	3.28	9.72	1,787.65	306.21	1,813.69				
100.00	100.00	77.90	76.89	3.28	3.29	9.74	1,788.05	306.82	1,814.33	1,807.76	6.57	276.156	
200.00	200.00	159.04	158.01	3.34	3.30	9.79	1,789.30	308.72	1,816.22	1,809.58	6.64	273.440	
300.00	299.98	280.86	279.75	3.44	3.41	-172.75	1,790.97	312.40	1,819.85	1,813.01	6.85	265.766	
400.00	399.84	373.07	371.92	3.59	3.54	-172.67	1,791.22	315.15	1,825.87	1,818.74	7.13	256.028	
500.00	499.45	462.48	461.30	3.79	3.70	-172.66	1,793.22	316.03	1,836.82	1,829.32	7.50	245.061	
600.00	598.70	591.83	590.64	4.03	3.99	-172.70	1,794.57	316.00	1,849.85	1,841.83	8.02	230.594	
700.00	697.47	679.10	677.91	4.31	4.22	-172.70	1,795.09	316.32	1,866.03	1,857.50	8.53	218.802	
800.00	795.62	766.82	765.62	4.64	4.47	-172.70	1,796.17	317.02	1,886.28	1,877.19	9.09	207.560	
900.00	893.06	876.74	875.53	5.00	4.81	-172.72	1,797.57	317.84	1,909.96	1,900.20	9.76	195.663	
1,000.00	989.64	970.82	969.60	5.40	5.12	-172.73	1,798.44	318.40	1,936.62	1,926.19	10.43	185.734	
1,100.00	1,085.27	1,051.61	1,050.39	5.83	5.39	-172.74	1,799.52	318.82	1,966.98	1,955.90	11.08	177.573	
1,200.00	1,179.82	1,142.77	1,141.53	6.29	5.71	-172.75	1,801.17	319.34	2,001.08	1,989.29	11.79	169.724	
1,300.00	1,273.17	1,247.07	1,245.82	6.79	6.09	-172.81	1,802.94	319.24	2,038.22	2,025.64	12.58	162.062	
1,400.00	1,365.21	1,334.60	1,333.33	7.33	6.41	-172.85	1,804.30	318.61	2,078.34	2,065.02	13.32	156.069	
1,500.00	1,455.84	1,427.55	1,426.27	7.89	6.76	-172.91	1,805.83	317.82	2,121.68	2,107.58	14.10	150.498	
1,600.00	1,544.94	1,497.22	1,495.92	8.50	7.02	-172.91	1,807.06	317.73	2,168.35	2,153.56	14.79	146.572	
1,700.00	1,632.39	1,559.66	1,558.33	9.13	7.27	-172.84	1,808.62	319.00	2,218.97	2,203.50	15.46	143.484	
1,800.00	1,718.11	1,618.15	1,616.75	9.80	7.50	-172.74	1,810.59	321.16	2,273.49	2,257.36	16.12	141.020	
1,900.00	1,802.44	1,684.39	1,682.83	10.49	7.76	-172.73	1,813.31	324.68	2,330.96	2,314.15	16.82	138.596	
2,000.00	1,886.68	1,748.51	1,746.73	11.20	8.02	-172.74	1,816.14	329.17	2,389.06	2,371.56	17.50	136.522	
2,100.00	1,970.92	1,804.42	1,802.38	11.93	8.26	-172.73	1,819.05	333.76	2,447.91	2,429.77	18.14	134.941	
2,200.00	2,055.17	1,858.17	1,855.81	12.66	8.48	-172.72	1,822.34	338.59	2,507.61	2,488.83	18.77	133.588	
2,300.00	2,139.41	1,917.00	1,914.24	13.40	8.73	-172.70	1,826.61	343.92	2,568.18	2,548.74	19.43	132.157	
2,400.00	2,223.66	1,979.21	1,975.98	14.14	9.00	-172.68	1,831.58	349.70	2,629.34	2,609.22	20.12	130.694	
2,500.00	2,307.90	2,047.98	2,044.21	14.89	9.30	-172.66	1,837.26	356.19	2,690.78	2,669.93	20.85	129.067	
2,600.00	2,392.14	2,116.17	2,111.90	15.65	9.60	-172.66	1,843.33	361.71	2,752.55	2,730.97	21.58	127.568	
2,700.00	2,476.39	2,197.71	2,192.84	16.41	9.96	-172.66	1,850.67	368.42	2,814.41	2,792.01	22.40	125.648	
2,800.00	2,560.63	2,285.38	2,279.79	17.17	10.36	-172.64	1,858.21	376.65	2,876.11	2,852.84	23.27	123.588	
2,900.00	2,644.88	2,407.80	2,401.27	17.93	10.91	-172.59	1,867.50	388.56	2,937.03	2,912.63	24.39	120.411	
3,000.00	2,729.12	2,480.23	2,473.22	18.70	11.24	-172.57	1,872.64	395.17	2,997.52	2,972.34	25.17	119.070	
3,100.00	2,813.36	2,547.19	2,539.72	19.47	11.55	-172.56	1,877.63	401.20	3,058.26	3,032.34	25.92	117.983	
3,200.00	2,897.61	2,609.98	2,602.04	20.25	11.84	-172.55	1,882.56	407.04	3,119.36	3,092.73	26.64	117.096	
3,300.00	2,981.85	2,668.52	2,660.10	21.02	12.11	-172.53	1,887.49	412.69	3,180.95	3,153.63	27.33	116.406	
3,400.00	3,066.10	2,762.76	2,753.51	21.80	12.56	-172.49	1,895.50	422.22	3,242.68	3,214.39	28.28	114.658	
3,500.00	3,150.34	2,910.50	2,900.00	22.58	13.26	-172.40	1,905.45	438.65	3,302.96	3,273.32	29.64	111.423	
3,600.00	3,234.58	2,994.37	2,983.25	23.35	13.65	-172.36	1,910.46	447.44	3,362.74	3,332.20	30.53	110.132	
3,700.00	3,318.83	3,075.35	3,063.77	24.13	14.03	-172.35	1,915.42	454.46	3,422.39	3,390.99	31.40	108.987	
3,800.00	3,403.07	3,140.30	3,128.33	24.92	14.33	-172.34	1,919.56	460.23	3,482.27	3,450.12	32.15	108.313	
3,900.00	3,487.32	3,201.59	3,189.19	25.70	14.63	-172.32	1,923.66	466.21	3,542.52	3,509.65	32.87	107.767	
4,000.00	3,571.56	3,292.59	3,279.52	26.48	15.06	-172.30	1,930.11	475.17	3,603.12	3,569.30	33.82	106.527	
4,100.00	3,655.80	10,699.00	7,109.94	27.27	85.96	-158.72	-1,808.00	608.06	3,524.08	3,474.38	49.71	70.897	
4,200.00	3,740.05	10,730.00	7,109.32	28.05	86.58	-158.45	-1,838.90	605.71	3,440.15	3,389.50	50.65	67.923	
4,300.00	3,824.29	10,779.95	7,108.59	28.84	87.57	-158.02	-1,888.66	601.36	3,356.46	3,304.78	51.68	64.948	
4,400.00	3,908.54	10,811.26	7,108.21	29.62	88.19	-157.75	-1,919.84	598.50	3,272.95	3,220.27	52.67	62.135	
4,500.00	3,992.78	10,845.84	7,108.11	30.41	88.87	-157.44	-1,954.27	595.41	3,189.95	3,136.24	53.71	59.388	
4,600.00	4,077.03	10,913.82	7,107.89	31.20	90.23	-156.81	-2,021.97	589.21	3,107.03	3,052.16	54.87	56.629	
4,700.00	4,161.27	10,953.00	7,107.70	31.98	91.01	-156.42	-2,061.00	585.78	3,024.15	2,968.18	55.98	54.023	
4,800.00	4,245.51	10,976.77	7,107.77	32.77	91.48	-156.18	-2,084.69	583.78	2,941.80	2,884.70	57.10	51.518	
4,900.00	4,329.76	10,999.48	7,108.04	33.56	91.94	-155.94	-2,107.32	581.94	2,860.11	2,801.83	58.28	49.079	
5,000.00	4,414.00	11,017.00	7,108.42	34.35	92.29	-155.75	-2,124.79	580.62	2,779.18	2,719.69	59.50	46.712	
5,100.00	4,498.25	11,048.00	7,109.43	35.14	92.92	-155.40	-2,155.70	578.48	2,699.02	2,638.22	60.79	44.396	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-243(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	11,097.04	7,111.41	35.93	93.91	-154.83	-2,204.60	575.35	2,619.46	2,557.29	62.17	42.133		
5,300.00	4,666.73	11,152.94	7,113.65	36.72	95.04	-154.13	-2,260.35	572.10	2,540.13	2,476.52	63.61	39.933		
5,400.00	4,750.98	11,262.75	7,116.49	37.51	97.28	-152.62	-2,369.94	565.80	2,460.08	2,394.96	65.12	37.777		
5,500.00	4,835.22	11,316.51	7,117.16	38.30	98.38	-151.79	-2,423.65	563.49	2,379.88	2,313.20	66.68	35.690		
5,600.00	4,919.47	11,375.05	7,117.98	39.09	99.58	-150.82	-2,482.13	561.07	2,300.03	2,231.71	68.32	33.666		
5,700.00	5,003.71	11,417.12	7,118.49	39.88	100.44	-150.08	-2,524.17	559.42	2,220.40	2,150.35	70.04	31.700		
5,800.00	5,088.06	11,466.19	7,119.37	40.67	101.45	-148.73	-2,573.20	557.78	2,141.35	2,069.48	71.87	29.795		
5,900.00	5,173.83	11,513.47	7,120.33	41.44	102.43	-146.29	-2,620.45	556.21	2,061.36	1,987.59	73.78	27.941		
6,000.00	5,261.34	11,563.67	7,121.38	42.18	103.46	-143.45	-2,670.61	554.55	1,980.10	1,904.34	75.76	26.136		
6,100.00	5,350.49	11,565.00	7,121.41	42.88	103.49	-141.68	-2,671.93	554.50	1,898.26	1,820.34	77.92	24.362		
6,200.00	5,441.16	11,565.00	7,121.41	43.56	103.49	-139.89	-2,671.93	554.50	1,816.58	1,736.37	80.21	22.649		
6,300.00	5,533.25	11,565.00	7,121.41	44.20	103.49	-138.05	-2,671.93	554.50	1,735.20	1,652.56	82.64	20.996		
6,400.00	5,626.65	11,565.00	7,121.41	44.82	103.49	-136.18	-2,671.93	554.50	1,654.28	1,569.03	85.25	19.405		
6,500.00	5,721.23	11,565.00	7,121.41	45.40	103.49	-134.28	-2,671.93	554.50	1,573.98	1,485.93	88.05	17.876		
6,600.00	5,816.89	11,565.00	7,121.41	45.94	103.49	-132.37	-2,671.93	554.50	1,494.52	1,403.45	91.07	16.411		
6,700.00	5,913.51	11,565.00	7,121.41	46.45	103.49	-130.48	-2,671.93	554.50	1,416.13	1,321.80	94.33	15.013		
6,800.00	6,010.97	11,565.00	7,121.41	46.93	103.49	-128.62	-2,671.93	554.50	1,339.12	1,241.25	97.87	13.683		
6,900.00	6,109.15	11,565.00	7,121.41	47.38	103.49	-126.81	-2,671.93	554.50	1,263.83	1,162.13	101.70	12.427		
7,000.00	6,207.93	11,565.00	7,121.41	47.80	103.49	-125.07	-2,671.93	554.50	1,190.70	1,084.83	105.86	11.247		
7,100.00	6,307.19	11,565.00	7,121.41	48.18	103.49	-123.43	-2,671.93	554.50	1,120.24	1,009.88	110.35	10.151		
7,200.00	6,406.82	11,565.00	7,121.41	48.53	103.49	-121.90	-2,671.93	554.50	1,053.08	937.92	115.16	9.144		
7,300.00	6,506.68	11,565.00	7,121.41	48.84	103.49	-120.51	-2,671.93	554.50	989.99	869.75	120.24	8.234		
7,400.00	6,606.66	11,565.00	7,121.41	49.10	103.49	-119.17	-2,671.93	554.50	931.88	806.42	125.46	7.428		
7,500.00	6,706.21	11,565.00	7,121.41	49.35	103.49	-117.88	-2,671.93	554.50	887.43	756.46	130.97	6.776		
7,600.00	6,803.22	11,565.00	7,121.41	49.59	103.49	-116.64	-2,671.93	554.50	866.32	729.89	136.43	6.350		
7,632.70	6,833.99	11,565.00	7,121.41	49.66	103.49	-116.54	-2,671.93	554.50	864.94	726.87	138.07	6.265 CC, ES		
7,700.00	6,895.32	11,565.00	7,121.41	49.82	103.49	-116.33	-2,671.93	554.50	870.79	729.74	141.05	6.174 SF		
7,800.00	6,980.23	11,565.00	7,121.41	50.03	103.49	-115.18	-2,671.93	554.50	900.35	755.99	144.35	6.237		
7,900.00	7,055.85	11,565.00	7,121.41	50.21	103.49	-115.77	-2,671.93	554.50	951.98	805.58	146.41	6.502		
8,000.00	7,120.34	11,565.00	7,121.41	50.36	103.49	-114.50	-2,671.93	554.50	1,021.20	873.62	147.58	6.920		
8,100.00	7,172.10	11,565.00	7,121.41	50.47	103.49	-114.00	-2,671.93	554.50	1,103.18	954.89	148.29	7.439		
8,200.00	7,209.85	11,565.00	7,121.41	50.55	103.49	-112.29	-2,671.93	554.50	1,193.51	1,044.68	148.83	8.019		
8,300.00	7,232.68	11,565.00	7,121.41	50.61	103.49	-110.63	-2,671.93	554.50	1,288.44	1,139.09	149.36	8.627		
8,400.00	7,240.00	11,565.00	7,121.41	50.65	103.49	-110.19	-2,671.93	554.50	1,384.95	1,235.04	149.92	9.238		
8,500.00	7,239.60	11,565.00	7,121.41	50.69	103.49	-110.19	-2,671.93	554.50	1,481.63	1,331.20	150.44	9.849		
8,600.00	7,239.19	11,565.00	7,121.41	50.75	103.49	-110.19	-2,671.93	554.50	1,578.73	1,427.86	150.87	10.464		
8,700.00	7,238.78	11,565.00	7,121.41	50.85	103.49	-110.19	-2,671.93	554.50	1,676.16	1,524.94	151.23	11.084		
8,800.00	7,238.38	11,565.00	7,121.41	51.02	103.49	-110.19	-2,671.93	554.50	1,773.89	1,622.35	151.53	11.706		
8,900.00	7,237.97	11,565.00	7,121.41	51.32	103.49	-110.19	-2,671.93	554.50	1,871.85	1,720.05	151.79	12.331		
9,000.00	7,237.57	11,565.00	7,121.41	51.95	103.49	-110.19	-2,671.93	554.50	1,970.02	1,818.00	152.02	12.959		
9,100.00	7,237.16	11,565.00	7,121.41	53.10	103.49	-110.19	-2,671.93	554.50	2,068.36	1,916.14	152.22	13.588		
9,200.00	7,236.76	11,565.00	7,121.41	54.69	103.49	-110.19	-2,671.93	554.50	2,166.85	2,014.46	152.39	14.219		
9,300.00	7,236.35	11,565.00	7,121.41	56.53	103.49	-110.19	-2,671.93	554.50	2,265.48	2,112.94	152.54	14.852		
9,400.00	7,235.94	11,565.00	7,121.41	58.53	103.49	-110.19	-2,671.93	554.50	2,364.22	2,211.54	152.68	15.485		
9,500.00	7,235.54	11,565.00	7,121.41	60.62	103.49	-110.19	-2,671.93	554.50	2,463.06	2,310.26	152.80	16.120		
9,600.00	7,235.13	11,565.00	7,121.41	62.80	103.49	-110.19	-2,671.93	554.50	2,562.00	2,409.09	152.91	16.755		
9,700.00	7,234.73	11,565.00	7,121.41	65.03	103.49	-110.19	-2,671.93	554.50	2,661.01	2,508.00	153.01	17.391		
9,800.00	7,234.32	11,565.00	7,121.41	67.32	103.49	-110.19	-2,671.93	554.50	2,760.09	2,606.99	153.10	18.028		
9,900.00	7,233.92	11,565.00	7,121.41	69.66	103.49	-110.19	-2,671.93	554.50	2,859.24	2,706.05	153.19	18.665		
10,000.00	7,233.51	11,565.00	7,121.41	72.03	103.49	-110.19	-2,671.93	554.50	2,958.45	2,805.18	153.27	19.302		
10,100.00	7,233.10	11,565.00	7,121.41	74.45	103.49	-110.19	-2,671.93	554.50	3,057.70	2,904.36	153.34	19.940		
10,200.00	7,232.70	11,565.00	7,121.41	76.89	103.49	-110.19	-2,671.93	554.50	3,157.01	3,003.59	153.41	20.578		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-243(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	11,565.00	7,121.41	79.36	103.49	70.19	-2,671.93	554.50	3,256.35	3,102.87	153.48	21.217		
10,400.00	7,231.89	11,565.00	7,121.41	81.86	103.49	70.19	-2,671.93	554.50	3,355.74	3,202.20	153.54	21.856		
10,500.00	7,231.48	11,565.00	7,121.41	84.38	103.49	70.19	-2,671.93	554.50	3,455.16	3,301.56	153.60	22.494		
10,600.00	7,231.08	11,565.00	7,121.41	86.93	103.49	70.19	-2,671.93	554.50	3,554.61	3,400.95	153.66	23.133		
10,700.00	7,230.67	11,565.00	7,121.41	89.49	103.49	70.19	-2,671.93	554.50	3,654.10	3,500.38	153.71	23.772		
10,800.00	7,230.26	11,565.00	7,121.41	92.07	103.49	70.19	-2,671.93	554.50	3,753.61	3,599.84	153.77	24.411		
10,900.00	7,229.86	11,565.00	7,121.41	94.67	103.49	70.19	-2,671.93	554.50	3,853.14	3,699.32	153.82	25.050		
11,000.00	7,229.45	11,565.00	7,121.41	97.28	103.49	70.19	-2,671.93	554.50	3,952.70	3,798.83	153.87	25.689		
11,100.00	7,229.05	11,565.00	7,121.41	99.90	103.49	70.19	-2,671.93	554.50	4,052.28	3,898.36	153.92	26.327		
11,200.00	7,228.64	11,565.00	7,121.41	102.54	103.49	70.19	-2,671.93	554.50	4,151.88	3,997.92	153.97	26.966		
11,300.00	7,228.24	11,565.00	7,121.41	105.19	103.49	70.19	-2,671.93	554.50	4,251.50	4,097.49	154.01	27.605		
11,400.00	7,227.83	11,565.00	7,121.41	107.85	103.49	70.19	-2,671.93	554.50	4,351.14	4,197.08	154.06	28.243		
11,500.00	7,227.42	11,565.00	7,121.41	110.52	103.49	70.19	-2,671.93	554.50	4,450.79	4,296.69	154.11	28.881		
11,600.00	7,227.02	11,565.00	7,121.41	113.20	103.49	70.19	-2,671.93	554.50	4,550.46	4,396.31	154.15	29.519		
11,700.00	7,226.61	11,565.00	7,121.41	115.89	103.49	70.19	-2,671.93	554.50	4,650.15	4,495.95	154.20	30.157		
11,800.00	7,226.21	11,565.00	7,121.41	118.59	103.49	70.19	-2,671.93	554.50	4,749.84	4,595.60	154.24	30.795		
11,900.00	7,225.80	11,565.00	7,121.41	121.29	103.49	70.19	-2,671.93	554.50	4,849.55	4,695.26	154.29	31.432		
12,000.00	7,225.40	11,565.00	7,121.41	124.00	103.49	70.19	-2,671.93	554.50	4,949.27	4,794.94	154.33	32.069		
12,100.00	7,224.99	11,565.00	7,121.41	126.72	103.49	70.19	-2,671.93	554.50	5,049.00	4,894.63	154.38	32.706		
12,200.00	7,224.58	11,565.00	7,121.41	129.44	103.49	70.19	-2,671.93	554.50	5,148.75	4,994.33	154.42	33.342		
12,300.00	7,224.18	11,565.00	7,121.41	132.17	103.49	70.19	-2,671.93	554.50	5,248.50	5,094.03	154.46	33.979		
12,400.00	7,223.77	11,565.00	7,121.41	134.91	103.49	70.19	-2,671.93	554.50	5,348.26	5,193.75	154.51	34.615		
12,500.00	7,223.37	11,565.00	7,121.41	137.65	103.49	70.19	-2,671.93	554.50	5,448.03	5,293.47	154.55	35.250		
12,600.00	7,222.96	11,565.00	7,121.41	140.39	103.49	70.19	-2,671.93	554.50	5,547.81	5,393.21	154.60	35.885		
12,700.00	7,222.55	11,565.00	7,121.41	143.14	103.49	70.19	-2,671.93	554.50	5,647.59	5,492.95	154.64	36.520		
12,800.00	7,222.15	11,565.00	7,121.41	145.89	103.49	70.19	-2,671.93	554.50	5,747.39	5,592.70	154.69	37.154		
12,900.00	7,221.74	11,565.00	7,121.41	148.65	103.49	70.19	-2,671.93	554.50	5,847.19	5,692.45	154.73	37.788		
13,000.00	7,221.34	11,565.00	7,121.41	151.41	103.49	70.19	-2,671.93	554.50	5,946.99	5,792.21	154.78	38.422		
13,100.00	7,220.93	11,565.00	7,121.41	154.18	103.49	70.19	-2,671.93	554.50	6,046.81	5,891.98	154.83	39.055		
13,200.00	7,220.53	11,565.00	7,121.41	156.94	103.49	70.19	-2,671.93	554.50	6,146.63	5,991.75	154.87	39.688		
13,300.00	7,220.12	11,565.00	7,121.41	159.72	103.49	70.19	-2,671.93	554.50	6,246.45	6,091.53	154.92	40.321		
13,400.00	7,219.71	11,565.00	7,121.41	162.49	103.49	70.19	-2,671.93	554.50	6,346.28	6,191.32	154.97	40.952		
13,500.00	7,219.31	11,565.00	7,121.41	165.27	103.49	70.19	-2,671.93	554.50	6,446.12	6,291.11	155.01	41.584		
13,600.00	7,218.90	11,565.00	7,121.41	168.05	103.49	70.19	-2,671.93	554.50	6,545.96	6,390.90	155.06	42.215		
13,700.00	7,218.50	11,565.00	7,121.41	170.83	103.49	70.19	-2,671.93	554.50	6,645.81	6,490.70	155.11	42.846		
13,800.00	7,218.09	11,565.00	7,121.41	173.61	103.49	70.19	-2,671.93	554.50	6,745.66	6,590.50	155.16	43.476		
13,900.00	7,217.69	11,565.00	7,121.41	176.40	103.49	70.19	-2,671.93	554.50	6,845.51	6,690.30	155.21	44.105		
14,000.00	7,217.28	11,565.00	7,121.41	179.19	103.49	70.19	-2,671.93	554.50	6,945.37	6,790.11	155.26	44.734		
14,100.00	7,216.87	11,565.00	7,121.41	181.98	103.49	70.19	-2,671.93	554.50	7,045.23	6,889.93	155.31	45.363		
14,200.00	7,216.47	11,565.00	7,121.41	184.78	103.49	70.19	-2,671.93	554.50	7,145.10	6,989.74	155.36	45.991		
14,300.00	7,216.06	11,565.00	7,121.41	187.57	103.49	70.19	-2,671.93	554.50	7,244.97	7,089.56	155.41	46.618		
14,400.00	7,215.66	11,565.00	7,121.41	190.37	103.49	70.19	-2,671.93	554.50	7,344.85	7,189.38	155.46	47.245		
14,500.00	7,215.25	11,565.00	7,121.41	193.17	103.49	70.19	-2,671.93	554.50	7,444.72	7,289.21	155.51	47.872		
14,600.00	7,214.85	11,565.00	7,121.41	195.97	103.49	70.19	-2,671.93	554.50	7,544.60	7,389.04	155.57	48.497		
14,700.00	7,214.44	11,565.00	7,121.41	198.77	103.49	70.19	-2,671.93	554.50	7,644.49	7,488.87	155.62	49.123		
14,800.00	7,214.03	11,565.00	7,121.41	201.58	103.49	70.19	-2,671.93	554.50	7,744.37	7,588.70	155.67	49.747		
14,900.00	7,213.63	11,565.00	7,121.41	204.38	103.49	70.19	-2,671.93	554.50	7,844.26	7,688.54	155.73	50.372		
15,000.00	7,213.22	11,565.00	7,121.41	207.19	103.49	70.19	-2,671.93	554.50	7,944.16	7,788.37	155.78	50.995		
15,100.00	7,212.82	11,565.00	7,121.41	210.00	103.49	70.19	-2,671.93	554.50	8,044.05	7,888.21	155.84	51.618		
15,200.00	7,212.41	11,565.00	7,121.41	212.81	103.49	70.19	-2,671.93	554.50	8,143.95	7,988.06	155.89	52.240		
15,300.00	7,212.01	11,565.00	7,121.41	215.62	103.49	70.19	-2,671.93	554.50	8,243.85	8,087.90	155.95	52.862		
15,400.00	7,211.60	11,565.00	7,121.41	218.43	103.49	70.19	-2,671.93	554.50	8,343.75	8,187.75	156.01	53.483		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design		HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-243(PR_150CC) - OH - OH											Offset Site Error:	0.00 ft
Survey Program:		146-MWD											Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
15,500.00	7,211.19	11,565.00	7,121.41	221.25	103.49	70.19	-2,671.93	554.50	8,443.66	8,287.59	156.06	54.104		
15,600.00	7,210.79	11,565.00	7,121.41	224.06	103.49	70.19	-2,671.93	554.50	8,543.56	8,387.44	156.12	54.724		
15,700.00	7,210.38	11,565.00	7,121.41	226.88	103.49	70.19	-2,671.93	554.50	8,643.47	8,487.29	156.18	55.343		
15,794.94	7,210.00	11,565.00	7,121.41	229.55	103.49	70.19	-2,671.93	554.50	8,738.33	8,582.10	156.24	55.930		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-403(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 146-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	14.48	3.48	3.28	3.28	43.56	1,784.05	1,696.81	2,462.12				
100.00	100.00	146.13	135.12	3.28	3.30	43.54	1,783.95	1,695.42	2,461.33	2,454.75	6.58	374.165	
200.00	200.00	256.98	245.93	3.34	3.37	43.49	1,784.20	1,692.50	2,459.69	2,452.98	6.71	366.611	
277.24	277.23	342.89	331.77	3.41	3.48	-139.26	1,784.95	1,689.17	2,458.90	2,452.00	6.89	356.796	
300.00	299.98	357.53	346.40	3.44	3.50	-139.27	1,785.15	1,688.56	2,458.99	2,452.05	6.94	354.283	
400.00	399.84	443.19	431.96	3.59	3.65	-139.40	1,786.84	1,684.86	2,461.43	2,454.19	7.24	339.931	
500.00	499.45	540.28	528.92	3.79	3.87	-139.57	1,789.27	1,680.46	2,466.79	2,459.14	7.65	322.470	
600.00	598.70	633.55	622.02	4.03	4.10	-139.76	1,792.25	1,675.79	2,475.05	2,466.93	8.13	304.472	
700.00	697.47	725.03	713.31	4.31	4.37	-139.97	1,795.70	1,670.90	2,486.25	2,477.58	8.67	286.733	
800.00	795.62	817.86	805.90	4.64	4.66	-140.20	1,799.87	1,665.71	2,500.58	2,491.30	9.28	269.589	
900.00	893.06	916.58	904.36	5.00	4.99	-140.47	1,804.22	1,659.97	2,517.51	2,507.56	9.95	252.991	
1,000.00	989.64	994.99	982.56	5.40	5.26	-140.64	1,807.89	1,655.65	2,537.68	2,527.08	10.60	239.407	
1,100.00	1,085.27	1,207.62	1,193.25	5.83	6.12	-141.88	1,824.09	1,633.04	2,560.78	2,548.92	11.85	216.020	
1,200.00	1,179.82	1,356.14	1,339.05	6.29	6.81	-142.88	1,835.08	1,607.00	2,581.52	2,568.56	12.96	199.169	
1,300.00	1,273.17	1,447.70	1,428.82	6.79	7.26	-143.41	1,841.50	1,590.18	2,604.92	2,591.07	13.85	188.067	
1,400.00	1,365.21	1,518.21	1,497.94	7.33	7.62	-143.75	1,846.68	1,577.23	2,631.86	2,617.20	14.67	179.449	
1,500.00	1,455.84	1,723.03	1,698.52	7.89	8.69	-145.36	1,857.12	1,537.27	2,659.31	2,643.10	16.21	164.041	
1,600.00	1,544.94	1,833.10	1,806.34	8.50	9.29	-146.06	1,860.16	1,515.35	2,688.95	2,671.66	17.29	155.531	
1,700.00	1,632.39	1,881.72	1,854.05	9.13	9.55	-146.14	1,861.49	1,506.07	2,722.24	2,704.19	18.06	150.768	
1,800.00	1,718.11	1,937.41	1,908.81	9.80	9.84	-146.24	1,863.23	1,496.08	2,759.77	2,740.90	18.87	146.275	
1,900.00	1,802.44	1,996.06	1,968.58	10.49	10.15	-146.69	1,865.25	1,486.18	2,800.65	2,780.96	19.69	142.211	
2,000.00	1,886.68	2,045.80	2,015.65	11.20	10.41	-147.18	1,867.19	1,478.27	2,843.00	2,822.54	20.46	138.940	
2,100.00	1,970.92	2,106.00	2,075.11	11.93	10.72	-147.76	1,870.15	1,469.33	2,886.93	2,865.64	21.29	135.622	
2,200.00	2,055.17	2,156.03	2,124.54	12.66	10.98	-148.23	1,872.99	1,462.13	2,932.05	2,910.00	22.05	132.973	
2,300.00	2,139.41	2,223.85	2,191.49	13.40	11.33	-148.86	1,877.16	1,452.18	2,978.02	2,955.11	22.92	129.945	
2,400.00	2,223.66	2,285.33	2,252.15	14.14	11.66	-149.43	1,881.37	1,443.11	3,024.92	3,001.17	23.75	127.378	
2,500.00	2,307.90	2,347.20	2,313.16	14.89	11.98	-150.00	1,886.05	1,433.96	3,072.76	3,048.18	24.58	125.014	
2,600.00	2,392.14	2,421.08	2,385.98	15.65	12.38	-150.67	1,892.05	1,423.05	3,121.46	3,095.98	25.49	122.480	
2,700.00	2,476.39	2,511.89	2,475.66	16.41	12.85	-151.44	1,898.70	1,410.31	3,170.29	3,143.79	26.50	119.641	
2,800.00	2,560.63	2,579.11	2,542.09	17.17	13.20	-152.00	1,903.50	1,401.34	3,219.63	3,192.28	27.35	117.715	
2,900.00	2,644.88	2,665.54	2,627.60	17.93	13.65	-152.68	1,909.55	1,390.22	3,269.42	3,241.09	28.32	115.426	
3,000.00	2,729.12	2,753.65	2,714.79	18.70	14.10	-153.36	1,915.44	1,378.99	3,319.37	3,290.06	29.31	113.254	
3,100.00	2,813.36	2,882.33	2,841.86	19.47	14.78	-154.34	1,923.89	1,360.56	3,369.05	3,338.47	30.58	110.169	
3,200.00	2,897.61	2,976.69	2,934.66	20.25	15.31	-155.08	1,930.15	1,344.70	3,418.27	3,386.62	31.65	108.010	
3,300.00	2,981.85	3,061.85	3,018.46	21.02	15.79	-155.72	1,935.45	1,330.52	3,467.59	3,434.95	32.65	106.213	
3,400.00	3,066.10	3,151.51	3,106.80	21.80	16.28	-156.36	1,940.61	1,316.09	3,517.07	3,483.40	33.67	104.448	
3,500.00	3,150.34	3,224.11	3,178.33	22.58	16.68	-156.88	1,944.79	1,304.35	3,566.84	3,532.26	34.58	103.157	
3,600.00	3,234.58	3,319.88	3,272.81	23.35	17.20	-157.52	1,949.97	1,289.61	3,616.90	3,581.26	35.64	101.497	
3,700.00	3,318.83	3,457.22	3,408.79	24.13	17.91	-158.36	1,954.63	1,270.94	3,666.14	3,629.18	36.96	99.179	
3,800.00	3,403.07	3,519.12	3,470.15	24.92	18.22	-158.71	1,956.34	1,262.93	3,715.41	3,677.65	37.77	98.378	
3,900.00	3,487.32	3,572.51	3,523.11	25.70	18.49	-159.01	1,958.03	1,256.37	3,765.41	3,726.91	38.50	97.793	
4,000.00	3,571.56	10,772.00	7,229.72	26.48	85.64	-151.44	-1,730.36	964.70	3,804.64	3,748.19	56.46	67.392	
4,100.00	3,655.80	10,790.00	7,229.40	27.27	86.00	-151.24	-1,748.35	964.36	3,723.11	3,665.63	57.48	64.775	
4,200.00	3,740.05	10,804.00	7,229.19	28.05	86.28	-151.08	-1,762.35	964.14	3,642.16	3,583.65	58.51	62.251	
4,300.00	3,824.29	10,835.00	7,229.00	28.84	86.90	-150.71	-1,793.35	963.93	3,561.87	3,502.16	59.71	59.652	
4,400.00	3,908.54	10,852.34	7,229.07	29.62	87.25	-150.50	-1,810.68	963.97	3,482.30	3,421.45	60.85	57.226	
4,500.00	3,992.78	10,890.75	7,229.36	30.41	88.02	-150.01	-1,849.09	964.34	3,403.37	3,341.17	62.21	54.712	
4,600.00	4,077.03	10,966.13	7,229.67	31.20	89.54	-149.02	-1,924.46	965.46	3,324.61	3,260.70	63.91	52.020	
4,700.00	4,161.27	11,054.20	7,229.30	31.98	91.32	-147.79	-2,012.53	966.44	3,245.61	3,179.85	65.77	49.351	
4,800.00	4,245.51	11,150.19	7,227.92	32.77	93.27	-146.37	-2,108.50	966.74	3,166.24	3,098.51	67.73	46.748	
4,900.00	4,329.76	11,196.14	7,227.08	33.56	94.20	-145.66	-2,154.45	966.77	3,086.96	3,017.60	69.36	44.509	
5,000.00	4,414.00	11,253.25	7,225.86	34.35	95.37	-144.73	-2,211.54	967.17	3,007.97	2,936.83	71.14	42.280	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-403(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	11,291.79	7,224.94	35.14	96.15	-144.08	-2,250.07	967.59	2,929.33	2,856.47	72.86	40.207		
5,200.00	4,582.49	11,315.52	7,224.61	35.93	96.64	-143.67	-2,273.80	967.94	2,851.58	2,777.07	74.52	38.268		
5,300.00	4,666.73	11,377.00	7,224.07	36.72	97.89	-142.57	-2,335.27	968.81	2,774.55	2,697.98	76.57	36.235		
5,400.00	4,750.98	11,440.82	7,223.19	37.51	99.20	-141.39	-2,399.07	969.43	2,697.61	2,618.88	78.73	34.264		
5,500.00	4,835.22	11,487.18	7,222.46	38.30	100.15	-140.49	-2,445.43	970.11	2,621.20	2,540.36	80.85	32.422		
5,600.00	4,919.47	11,540.15	7,221.59	39.09	101.24	-139.42	-2,498.38	971.04	2,545.38	2,462.25	83.13	30.620		
5,700.00	5,003.71	11,590.83	7,220.68	39.88	102.29	-138.34	-2,549.04	972.28	2,470.25	2,384.74	85.51	28.887		
5,800.00	5,088.06	11,639.00	7,219.75	40.67	103.28	-136.77	-2,597.18	973.66	2,395.74	2,307.73	88.01	27.222		
5,900.00	5,173.83	11,695.18	7,218.49	41.44	104.44	-133.79	-2,653.32	975.39	2,320.60	2,229.89	90.71	25.582		
6,000.00	5,261.34	11,711.00	7,218.13	42.18	104.77	-131.67	-2,669.13	975.84	2,244.91	2,151.78	93.13	24.106		
6,100.00	5,350.49	11,711.00	7,218.13	42.88	104.77	-129.94	-2,669.13	975.84	2,169.55	2,074.07	95.48	22.723		
6,200.00	5,441.16	11,711.00	7,218.13	43.56	104.77	-128.19	-2,669.13	975.84	2,094.72	1,996.79	97.93	21.390		
6,300.00	5,533.25	11,711.00	7,218.13	44.20	104.77	-126.43	-2,669.13	975.84	2,020.58	1,920.09	100.49	20.107		
6,400.00	5,626.65	11,711.00	7,218.13	44.82	104.77	-124.68	-2,669.13	975.84	1,947.30	1,844.14	103.17	18.875		
6,500.00	5,721.23	11,711.00	7,218.13	45.40	104.77	-122.94	-2,669.13	975.84	1,875.08	1,769.11	105.96	17.696		
6,600.00	5,816.89	11,711.00	7,218.13	45.94	104.77	-121.23	-2,669.13	975.84	1,804.12	1,695.24	108.88	16.570		
6,700.00	5,913.51	11,711.00	7,218.13	46.45	104.77	-119.57	-2,669.13	975.84	1,734.70	1,622.77	111.93	15.499		
6,800.00	6,010.97	11,711.00	7,218.13	46.93	104.77	-117.96	-2,669.13	975.84	1,667.07	1,551.98	115.09	14.485		
6,900.00	6,109.15	11,711.00	7,218.13	47.38	104.77	-116.42	-2,669.13	975.84	1,601.56	1,483.19	118.37	13.530		
7,000.00	6,207.93	11,711.00	7,218.13	47.80	104.77	-114.95	-2,669.13	975.84	1,538.53	1,416.78	121.75	12.637		
7,100.00	6,307.19	11,711.00	7,218.13	48.18	104.77	-113.58	-2,669.13	975.84	1,478.37	1,353.17	125.20	11.808		
7,200.00	6,406.82	11,711.00	7,218.13	48.53	104.77	-112.31	-2,669.13	975.84	1,421.53	1,292.84	128.68	11.047		
7,300.00	6,506.68	11,711.00	7,218.13	48.84	104.77	-111.14	-2,669.13	975.84	1,368.49	1,236.34	132.15	10.356		
7,400.00	6,606.66	11,711.00	7,218.13	49.10	104.77	-109.91	-2,669.13	975.84	1,319.78	1,184.28	135.49	9.741		
7,500.00	6,706.21	11,711.00	7,218.13	49.35	104.77	-108.63	-2,669.13	975.84	1,284.02	1,145.23	138.80	9.251		
7,600.00	6,803.22	11,711.00	7,218.13	49.59	104.77	-107.42	-2,669.13	975.84	1,270.04	1,128.13	141.91	8.950		
7,611.30	6,813.92	11,711.00	7,218.13	49.62	104.77	-106.26	-2,669.13	975.84	1,269.90	1,127.66	142.23	8.928 CC, ES		
7,700.00	6,895.32	11,711.00	7,218.13	49.82	104.77	-105.03	-2,669.13	975.84	1,278.89	1,134.38	144.52	8.849 SF		
7,800.00	6,980.23	11,711.00	7,218.13	50.03	104.77	-103.82	-2,669.13	975.84	1,309.90	1,163.44	146.47	8.943		
7,900.00	7,055.85	11,711.00	7,218.13	50.21	104.77	-102.63	-2,669.13	975.84	1,360.83	1,213.05	147.78	9.208		
8,000.00	7,120.34	11,711.00	7,218.13	50.36	104.77	-101.46	-2,669.13	975.84	1,428.38	1,279.77	148.61	9.612		
8,100.00	7,172.10	11,711.00	7,218.13	50.47	104.77	-100.31	-2,669.13	975.84	1,508.78	1,359.65	149.13	10.117		
8,200.00	7,209.85	11,711.00	7,218.13	50.55	104.77	-99.17	-2,669.13	975.84	1,598.28	1,448.77	149.51	10.690		
8,300.00	7,232.68	11,711.00	7,218.13	50.61	104.77	-98.04	-2,669.13	975.84	1,693.42	1,543.57	149.85	11.301		
8,400.00	7,240.00	11,711.00	7,218.13	50.65	104.77	-96.91	-2,669.13	975.84	1,791.15	1,640.96	150.19	11.926		
8,500.00	7,239.60	11,711.00	7,218.13	50.69	104.77	-95.79	-2,669.13	975.84	1,889.36	1,738.85	150.51	12.553		
8,600.00	7,239.19	11,711.00	7,218.13	50.75	104.77	-94.68	-2,669.13	975.84	1,987.76	1,836.96	150.80	13.181		
8,700.00	7,238.78	11,711.00	7,218.13	50.85	104.77	-93.58	-2,669.13	975.84	2,086.31	1,935.25	151.06	13.811		
8,800.00	7,238.38	11,711.00	7,218.13	51.02	104.77	-92.49	-2,669.13	975.84	2,184.99	2,033.70	151.29	14.443		
8,900.00	7,237.97	11,711.00	7,218.13	51.32	104.77	-91.41	-2,669.13	975.84	2,283.78	2,132.29	151.49	15.075		
9,000.00	7,237.57	11,711.00	7,218.13	51.95	104.77	-90.34	-2,669.13	975.84	2,382.68	2,230.99	151.68	15.708		
9,100.00	7,237.16	11,711.00	7,218.13	53.10	104.77	-89.28	-2,669.13	975.84	2,481.66	2,329.81	151.85	16.342		
9,200.00	7,236.76	11,711.00	7,218.13	54.69	104.77	-88.23	-2,669.13	975.84	2,580.72	2,428.71	152.01	16.977		
9,300.00	7,236.35	11,711.00	7,218.13	56.53	104.77	-87.19	-2,669.13	975.84	2,679.85	2,527.70	152.15	17.613		
9,400.00	7,235.94	11,711.00	7,218.13	58.53	104.77	-86.16	-2,669.13	975.84	2,779.05	2,626.76	152.29	18.249		
9,500.00	7,235.54	11,711.00	7,218.13	60.62	104.77	-85.14	-2,669.13	975.84	2,878.30	2,725.89	152.41	18.885		
9,600.00	7,235.13	11,711.00	7,218.13	62.80	104.77	-84.13	-2,669.13	975.84	2,977.60	2,825.07	152.53	19.521		
9,700.00	7,234.73	11,711.00	7,218.13	65.03	104.77	-83.13	-2,669.13	975.84	3,076.94	2,924.31	152.64	20.158		
9,800.00	7,234.32	11,711.00	7,218.13	67.32	104.77	-82.14	-2,669.13	975.84	3,176.33	3,023.59	152.74	20.795		
9,900.00	7,233.92	11,711.00	7,218.13	69.66	104.77	-81.16	-2,669.13	975.84	3,275.75	3,122.92	152.84	21.433		
10,000.00	7,233.51	11,711.00	7,218.13	72.03	104.77	-80.19	-2,669.13	975.84	3,375.21	3,222.28	152.93	22.070		
10,100.00	7,233.10	11,711.00	7,218.13	74.45	104.77	-79.23	-2,669.13	975.84	3,474.70	3,321.68	153.02	22.708		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-403(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,232.70	11,711.00	7,218.13	76.89	104.77	85.19	-2,669.13	975.84	3,574.22	3,421.12	153.10	23.345		
10,300.00	7,232.29	11,711.00	7,218.13	79.36	104.77	85.19	-2,669.13	975.84	3,673.76	3,520.58	153.18	23.983		
10,400.00	7,231.89	11,711.00	7,218.13	81.86	104.77	85.19	-2,669.13	975.84	3,773.33	3,620.07	153.26	24.620		
10,500.00	7,231.48	11,711.00	7,218.13	84.38	104.77	85.19	-2,669.13	975.84	3,872.92	3,719.58	153.34	25.258		
10,600.00	7,231.08	11,711.00	7,218.13	86.93	104.77	85.19	-2,669.13	975.84	3,972.53	3,819.12	153.41	25.895		
10,700.00	7,230.67	11,711.00	7,218.13	89.49	104.77	85.19	-2,669.13	975.84	4,072.16	3,918.68	153.48	26.532		
10,800.00	7,230.26	11,711.00	7,218.13	92.07	104.77	85.19	-2,669.13	975.84	4,171.81	4,018.26	153.55	27.169		
10,900.00	7,229.86	11,711.00	7,218.13	94.67	104.77	85.19	-2,669.13	975.84	4,271.47	4,117.86	153.61	27.806		
11,000.00	7,229.45	11,711.00	7,218.13	97.28	104.77	85.19	-2,669.13	975.84	4,371.15	4,217.47	153.68	28.443		
11,100.00	7,229.05	11,711.00	7,218.13	99.90	104.77	85.19	-2,669.13	975.84	4,470.85	4,317.10	153.74	29.080		
11,200.00	7,228.64	11,711.00	7,218.13	102.54	104.77	85.19	-2,669.13	975.84	4,570.55	4,416.75	153.81	29.717		
11,300.00	7,228.24	11,711.00	7,218.13	105.19	104.77	85.19	-2,669.13	975.84	4,670.27	4,516.41	153.87	30.353		
11,400.00	7,227.83	11,711.00	7,218.13	107.85	104.77	85.19	-2,669.13	975.84	4,770.00	4,616.08	153.93	30.989		
11,500.00	7,227.42	11,711.00	7,218.13	110.52	104.77	85.19	-2,669.13	975.84	4,869.75	4,715.76	153.99	31.625		
11,600.00	7,227.02	11,711.00	7,218.13	113.20	104.77	85.19	-2,669.13	975.84	4,969.50	4,815.45	154.04	32.260		
11,700.00	7,226.61	11,711.00	7,218.13	115.89	104.77	85.19	-2,669.13	975.84	5,069.26	4,915.16	154.10	32.895		
11,800.00	7,226.21	11,711.00	7,218.13	118.59	104.77	85.19	-2,669.13	975.84	5,169.03	5,014.87	154.16	33.530		
11,900.00	7,225.80	11,711.00	7,218.13	121.29	104.77	85.19	-2,669.13	975.84	5,268.81	5,114.60	154.22	34.165		
12,000.00	7,225.40	11,711.00	7,218.13	124.00	104.77	85.19	-2,669.13	975.84	5,368.60	5,214.33	154.27	34.799		
12,100.00	7,224.99	11,711.00	7,218.13	126.72	104.77	85.19	-2,669.13	975.84	5,468.40	5,314.07	154.33	35.433		
12,200.00	7,224.58	11,711.00	7,218.13	129.44	104.77	85.19	-2,669.13	975.84	5,568.20	5,413.82	154.39	36.067		
12,300.00	7,224.18	11,711.00	7,218.13	132.17	104.77	85.19	-2,669.13	975.84	5,668.01	5,513.57	154.44	36.700		
12,400.00	7,223.77	11,711.00	7,218.13	134.91	104.77	85.19	-2,669.13	975.84	5,767.83	5,613.33	154.50	37.333		
12,500.00	7,223.37	11,711.00	7,218.13	137.65	104.77	85.19	-2,669.13	975.84	5,867.65	5,713.10	154.55	37.966		
12,600.00	7,222.96	11,711.00	7,218.13	140.39	104.77	85.19	-2,669.13	975.84	5,967.48	5,812.87	154.61	38.598		
12,700.00	7,222.55	11,711.00	7,218.13	143.14	104.77	85.19	-2,669.13	975.84	6,067.32	5,912.65	154.66	39.229		
12,800.00	7,222.15	11,711.00	7,218.13	145.89	104.77	85.19	-2,669.13	975.84	6,167.16	6,012.44	154.72	39.861		
12,900.00	7,221.74	11,711.00	7,218.13	148.65	104.77	85.19	-2,669.13	975.84	6,267.00	6,112.23	154.77	40.492		
13,000.00	7,221.34	11,711.00	7,218.13	151.41	104.77	85.19	-2,669.13	975.84	6,366.85	6,212.02	154.83	41.122		
13,100.00	7,220.93	11,711.00	7,218.13	154.18	104.77	85.19	-2,669.13	975.84	6,466.71	6,311.82	154.88	41.752		
13,200.00	7,220.53	11,711.00	7,218.13	156.94	104.77	85.19	-2,669.13	975.84	6,566.56	6,411.63	154.94	42.382		
13,300.00	7,220.12	11,711.00	7,218.13	159.72	104.77	85.19	-2,669.13	975.84	6,666.43	6,511.43	154.99	43.011		
13,400.00	7,219.71	11,711.00	7,218.13	162.49	104.77	85.19	-2,669.13	975.84	6,766.30	6,611.25	155.05	43.640		
13,500.00	7,219.31	11,711.00	7,218.13	165.27	104.77	85.19	-2,669.13	975.84	6,866.17	6,711.06	155.11	44.268		
13,600.00	7,218.90	11,711.00	7,218.13	168.05	104.77	85.19	-2,669.13	975.84	6,966.04	6,810.88	155.16	44.895		
13,700.00	7,218.50	11,711.00	7,218.13	170.83	104.77	85.19	-2,669.13	975.84	7,065.92	6,910.70	155.22	45.522		
13,800.00	7,218.09	11,711.00	7,218.13	173.61	104.77	85.19	-2,669.13	975.84	7,165.80	7,010.53	155.27	46.149		
13,900.00	7,217.69	11,711.00	7,218.13	176.40	104.77	85.19	-2,669.13	975.84	7,265.69	7,110.35	155.33	46.775		
14,000.00	7,217.28	11,711.00	7,218.13	179.19	104.77	85.19	-2,669.13	975.84	7,365.57	7,210.19	155.39	47.401		
14,100.00	7,216.87	11,711.00	7,218.13	181.98	104.77	85.19	-2,669.13	975.84	7,465.47	7,310.02	155.45	48.026		
14,200.00	7,216.47	11,711.00	7,218.13	184.78	104.77	85.19	-2,669.13	975.84	7,565.36	7,409.86	155.50	48.651		
14,300.00	7,216.06	11,711.00	7,218.13	187.57	104.77	85.19	-2,669.13	975.84	7,665.26	7,509.69	155.56	49.274		
14,400.00	7,215.66	11,711.00	7,218.13	190.37	104.77	85.19	-2,669.13	975.84	7,765.16	7,609.54	155.62	49.898		
14,500.00	7,215.25	11,711.00	7,218.13	193.17	104.77	85.19	-2,669.13	975.84	7,865.06	7,709.38	155.68	50.521		
14,600.00	7,214.85	11,711.00	7,218.13	195.97	104.77	85.19	-2,669.13	975.84	7,964.96	7,809.22	155.74	51.143		
14,700.00	7,214.44	11,711.00	7,218.13	198.77	104.77	85.19	-2,669.13	975.84	8,064.87	7,909.07	155.80	51.765		
14,800.00	7,214.03	11,711.00	7,218.13	201.58	104.77	85.19	-2,669.13	975.84	8,164.78	8,008.92	155.86	52.386		
14,900.00	7,213.63	11,711.00	7,218.13	204.38	104.77	85.19	-2,669.13	975.84	8,264.69	8,108.77	155.92	53.006		
15,000.00	7,213.22	11,711.00	7,218.13	207.19	104.77	85.19	-2,669.13	975.84	8,364.60	8,208.62	155.98	53.626		
15,100.00	7,212.82	11,711.00	7,218.13	210.00	104.77	85.19	-2,669.13	975.84	8,464.52	8,308.48	156.04	54.246		
15,200.00	7,212.41	11,711.00	7,218.13	212.81	104.77	85.19	-2,669.13	975.84	8,564.44	8,408.34	156.10	54.864		
15,300.00	7,212.01	11,711.00	7,218.13	215.62	104.77	85.19	-2,669.13	975.84	8,664.36	8,508.19	156.16	55.483		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 146-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,400.00	7,211.60	11,711.00	7,218.13	218.43	104.77	85.19	-2,669.13	975.84	8,764.28	8,608.05	156.23	56.100	
15,500.00	7,211.19	11,711.00	7,218.13	221.25	104.77	85.19	-2,669.13	975.84	8,864.20	8,707.91	156.29	56.717	
15,600.00	7,210.79	11,711.00	7,218.13	224.06	104.77	85.19	-2,669.13	975.84	8,964.13	8,807.77	156.35	57.333	
15,700.00	7,210.38	11,711.00	7,218.13	226.88	104.77	85.19	-2,669.13	975.84	9,064.05	8,907.64	156.42	57.949	
15,794.94	7,210.00	11,711.00	7,218.13	229.55	104.77	85.19	-2,669.13	975.84	9,158.93	9,002.45	156.48	58.532	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 30C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	3.00	0.00	3.28	3.28	0.46	519.86	4.17	519.88					
100.00	100.00	103.00	100.00	3.28	3.29	0.46	519.86	4.17	519.88	513.31	6.57	79.127		
200.00	200.00	203.00	200.00	3.34	3.34	0.46	519.86	4.17	519.88	513.20	6.68	77.867 CC, ES		
300.00	299.98	287.17	284.16	3.44	3.43	177.80	521.18	4.04	523.18	516.30	6.88	76.063		
400.00	399.84	371.28	368.18	3.59	3.56	177.77	524.95	3.66	532.88	525.70	7.18	74.204		
500.00	499.45	454.38	451.05	3.79	3.72	177.71	531.09	3.04	548.92	541.35	7.57	72.505		
600.00	598.70	536.00	532.23	4.03	3.90	177.64	539.44	2.21	571.18	563.16	8.03	71.159		
700.00	697.47	615.70	611.24	4.31	4.11	177.56	549.82	1.16	599.53	591.00	8.53	70.278		
800.00	795.62	693.08	687.65	4.64	4.33	177.47	561.98	-0.06	633.78	624.72	9.07	69.901		
900.00	893.06	767.79	761.08	5.00	4.56	177.36	575.66	-1.43	673.73	664.10	9.62	70.010		
1,000.00	989.64	839.54	831.24	5.40	4.80	177.25	590.59	-2.93	719.12	708.94	10.18	70.619		
1,100.00	1,085.27	908.08	897.89	5.83	5.03	177.14	606.49	-4.52	769.71	758.96	10.75	71.624		
1,200.00	1,179.82	973.21	960.85	6.29	5.27	177.02	623.05	-6.19	825.22	813.92	11.30	73.022		
1,300.00	1,273.17	1,034.79	1,020.03	6.79	5.51	176.90	640.03	-7.89	885.37	873.52	11.84	74.762		
1,400.00	1,365.21	1,108.10	1,090.17	7.33	5.81	176.76	661.24	-10.02	949.36	936.92	12.44	76.299		
1,500.00	1,455.84	1,182.64	1,161.48	7.89	6.13	176.64	682.82	-12.19	1,016.03	1,002.96	13.07	77.760		
1,600.00	1,544.94	1,254.80	1,230.52	8.50	6.45	176.52	703.73	-14.29	1,085.24	1,071.55	13.69	79.253		
1,700.00	1,632.39	1,324.51	1,297.21	9.13	6.76	176.40	723.92	-16.31	1,156.94	1,142.61	14.32	80.790		
1,800.00	1,718.11	1,408.32	1,361.47	9.80	7.14	176.28	743.37	-18.27	1,231.01	1,216.00	15.01	81.992		
1,900.00	1,802.44	1,456.88	1,423.84	10.49	7.37	176.27	762.25	-20.16	1,306.83	1,291.27	15.56	83.987		
2,000.00	1,886.68	1,521.96	1,486.10	11.20	7.68	176.30	781.10	-22.06	1,382.75	1,366.58	16.18	85.484		
2,100.00	1,970.92	1,587.04	1,548.37	11.93	7.99	176.32	799.95	-23.95	1,458.68	1,441.88	16.80	86.811		
2,200.00	2,055.17	1,652.12	1,610.63	12.66	8.30	176.35	818.80	-25.84	1,534.60	1,517.16	17.44	87.988		
2,300.00	2,139.41	1,717.20	1,672.89	13.40	8.62	176.37	837.65	-27.73	1,610.53	1,592.44	18.09	89.036		
2,400.00	2,223.66	1,782.28	1,735.15	14.14	8.93	176.39	856.50	-29.63	1,686.45	1,667.71	18.74	89.971		
2,500.00	2,307.90	1,847.36	1,797.41	14.89	9.26	176.40	875.35	-31.52	1,762.37	1,742.97	19.41	90.807		
2,600.00	2,392.14	1,912.44	1,859.68	15.65	9.58	176.42	894.20	-33.41	1,838.30	1,818.22	20.08	91.557		
2,700.00	2,476.39	1,977.52	1,921.94	16.41	9.90	176.44	913.05	-35.30	1,914.22	1,893.47	20.75	92.231		
2,800.00	2,560.63	2,042.60	1,984.20	17.17	10.23	176.45	931.90	-37.19	1,990.15	1,968.71	21.44	92.838		
2,900.00	2,644.88	2,107.68	2,046.46	17.93	10.56	176.46	950.75	-39.09	2,066.07	2,043.95	22.12	93.386		
3,000.00	2,729.12	2,172.76	2,108.72	18.70	10.89	176.47	969.60	-40.98	2,142.00	2,119.18	22.82	93.882		
3,100.00	2,813.36	2,237.84	2,170.98	19.47	11.22	176.49	988.44	-42.87	2,217.92	2,194.41	23.51	94.332		
3,200.00	2,897.61	2,302.92	2,233.25	20.25	11.55	176.50	1,007.29	-44.76	2,293.85	2,269.63	24.21	94.742		
3,300.00	2,981.85	2,368.00	2,295.51	21.02	11.88	176.51	1,026.14	-46.66	2,369.77	2,344.86	24.91	95.114		
3,400.00	3,066.10	2,433.08	2,357.77	21.80	12.22	176.51	1,044.99	-48.55	2,445.69	2,420.07	25.62	95.454		
3,500.00	3,150.34	2,501.84	2,420.03	22.58	12.57	176.52	1,063.84	-50.44	2,521.62	2,495.27	26.35	95.701		
3,600.00	3,234.58	2,563.24	2,482.29	23.35	12.89	176.53	1,082.69	-52.33	2,597.54	2,570.50	27.04	96.050		
3,700.00	3,318.83	2,628.32	2,544.55	24.13	13.22	176.54	1,101.54	-54.23	2,673.47	2,645.71	27.76	96.312		
3,800.00	3,403.07	2,706.60	2,606.82	24.92	13.63	176.55	1,120.39	-56.12	2,749.39	2,720.85	28.54	96.335		
3,900.00	3,487.32	2,758.48	2,669.08	25.70	13.90	176.55	1,139.24	-58.01	2,825.32	2,796.12	29.20	96.772		
4,000.00	3,571.56	2,823.56	2,731.34	26.48	14.24	176.56	1,158.09	-59.90	2,901.24	2,871.33	29.92	96.976		
4,100.00	3,655.80	2,888.64	2,793.60	27.27	14.58	176.56	1,176.94	-61.80	2,977.17	2,946.53	30.64	97.164		
4,200.00	3,740.05	2,953.72	2,855.86	28.05	14.92	176.57	1,195.79	-63.69	3,053.09	3,021.73	31.37	97.337		
4,300.00	3,824.29	3,018.80	2,918.12	28.84	15.26	176.58	1,214.64	-65.58	3,129.02	3,096.92	32.09	97.497		
4,400.00	3,908.54	3,083.88	2,980.39	29.62	15.60	176.58	1,233.49	-67.47	3,204.94	3,172.12	32.82	97.646		
4,500.00	3,992.78	3,148.96	3,042.65	30.41	15.94	176.59	1,252.33	-69.37	3,280.87	3,247.31	33.55	97.783		
4,600.00	4,077.03	3,214.04	3,104.91	31.20	16.28	176.59	1,271.18	-71.26	3,356.79	3,322.51	34.28	97.910		
4,700.00	4,161.27	3,279.12	3,167.17	31.98	16.62	176.60	1,290.03	-73.15	3,432.72	3,397.70	35.02	98.029		
4,800.00	4,245.51	3,344.20	3,229.43	32.77	16.96	176.60	1,308.88	-75.04	3,508.64	3,472.89	35.75	98.138		
4,900.00	4,329.76	3,409.28	3,291.69	33.56	17.30	176.60	1,327.73	-76.94	3,584.57	3,548.08	36.49	98.240		
5,000.00	4,414.00	3,474.36	3,353.96	34.35	17.65	176.61	1,346.58	-78.83	3,660.49	3,623.27	37.22	98.335		
5,100.00	4,498.25	3,539.44	3,416.22	35.14	17.99	176.61	1,365.43	-80.72	3,736.42	3,698.45	37.96	98.423		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 30C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	3,604.52	3,478.48	35.93	18.33	176.62	1,384.28	-82.61	3,812.34	3,773.64	38.70	98.505		
5,300.00	4,666.73	3,669.60	3,540.74	36.72	18.68	176.62	1,403.13	-84.50	3,888.26	3,848.82	39.44	98.581		
5,400.00	4,750.98	3,734.68	3,603.00	37.51	19.02	176.62	1,421.98	-86.40	3,964.19	3,924.01	40.18	98.651		
5,500.00	4,835.22	3,800.24	3,665.27	38.30	19.37	176.63	1,440.83	-88.29	4,040.11	3,999.19	40.93	98.711		
5,600.00	4,919.47	3,864.84	3,727.53	39.09	19.71	176.63	1,459.68	-90.18	4,116.04	4,074.37	41.67	98.778		
5,700.00	5,003.71	3,929.92	3,789.79	39.88	20.05	176.63	1,478.53	-92.07	4,191.96	4,149.55	42.41	98.835		
5,800.00	5,088.06	4,004.86	3,852.19	40.67	20.45	176.68	1,497.42	-93.97	4,267.76	4,224.56	43.21	98.774		
5,900.00	5,173.83	4,062.40	3,916.53	41.44	20.75	176.80	1,516.90	-95.93	4,341.76	4,297.85	43.92	98.864		
6,000.00	5,261.34	4,132.19	3,983.30	42.18	21.12	176.91	1,537.11	-97.96	4,413.37	4,368.68	44.69	98.757		
6,100.00	5,350.49	4,204.43	4,052.42	42.88	21.51	177.01	1,558.03	-100.06	4,482.51	4,437.03	45.48	98.566		
6,200.00	5,441.16	4,279.04	4,123.79	43.56	21.90	177.09	1,579.64	-102.23	4,549.08	4,502.81	46.28	98.300		
6,300.00	5,533.25	4,355.92	4,197.34	44.20	22.31	177.16	1,601.91	-104.46	4,613.02	4,565.93	47.09	97.965		
6,400.00	5,626.65	4,434.98	4,272.98	44.82	22.73	177.22	1,624.81	-106.76	4,674.23	4,626.33	47.91	97.568		
6,500.00	5,721.23	4,516.12	4,350.61	45.40	23.16	177.27	1,648.31	-109.12	4,732.66	4,683.93	48.73	97.116		
6,600.00	5,816.89	4,600.75	4,430.14	45.94	23.61	177.31	1,672.39	-111.54	4,788.22	4,738.65	49.57	96.600		
6,700.00	5,913.51	4,684.27	4,511.47	46.45	24.06	177.35	1,697.01	-114.01	4,840.84	4,790.45	50.39	96.067		
6,800.00	6,010.97	4,771.06	4,594.50	46.93	24.52	177.38	1,722.15	-116.53	4,890.48	4,839.26	51.22	95.481		
6,900.00	6,109.15	4,859.52	4,679.14	47.38	24.99	177.40	1,747.77	-119.11	4,937.05	4,885.00	52.05	94.859		
7,000.00	6,207.93	4,949.55	4,765.27	47.80	25.47	177.42	1,773.85	-121.72	4,980.51	4,927.64	52.87	94.204		
7,100.00	6,307.19	5,041.04	4,852.80	48.18	25.96	177.43	1,800.34	-124.38	5,020.81	4,967.13	53.69	93.522		
7,200.00	6,406.82	5,132.46	4,940.82	48.53	32.95	177.26	2,025.10	-146.95	5,038.88	4,972.22	66.66	75.595		
7,300.00	6,506.68	5,222.32	5,030.68	48.84	33.31	177.27	2,025.10	-146.95	5,043.99	4,976.61	67.38	74.859		
7,400.00	6,606.66	5,312.30	5,120.66	49.10	33.67	90.27	2,025.10	-146.95	5,045.62	4,977.55	68.07	74.124		
7,500.00	6,706.21	5,402.02	5,210.08	49.35	34.05	90.30	2,025.05	-153.30	5,045.63	4,976.86	68.77	73.371		
7,600.00	6,803.22	5,492.90	5,300.18	49.59	34.42	90.32	2,024.87	-176.85	5,045.60	4,976.12	69.48	72.624		
7,700.00	6,895.32	5,583.00	5,390.28	49.82	34.78	90.33	2,024.55	-217.23	5,045.54	4,975.35	70.19	71.887		
7,800.00	6,980.23	5,673.14	5,480.42	50.03	35.11	90.34	2,024.11	-273.34	5,045.45	4,974.52	70.92	71.139		
7,900.00	7,055.85	5,763.28	5,570.56	50.21	35.41	90.33	2,023.56	-343.49	5,045.33	4,973.59	71.74	70.329		
8,000.00	7,120.34	5,853.41	5,660.69	50.36	35.69	90.32	2,022.92	-425.55	5,045.18	4,972.47	72.71	69.386		
8,100.00	7,172.10	5,943.54	5,750.82	50.47	36.01	90.30	2,022.21	-517.02	5,045.02	4,971.09	73.93	68.242		
8,200.00	7,209.85	6,033.67	5,840.95	50.55	36.56	90.27	2,021.44	-615.16	5,044.84	4,969.39	75.45	66.864		
8,300.00	7,232.68	6,123.80	5,931.08	50.61	37.43	90.23	2,020.64	-717.11	5,044.65	4,967.36	77.29	65.267		
8,400.00	7,240.00	6,214.00	6,021.20	50.65	38.54	90.20	2,019.84	-819.10	5,044.47	4,965.05	79.42	63.519		
8,500.00	7,239.60	6,304.20	6,111.40	50.69	39.82	90.20	2,019.06	-919.09	5,044.30	4,962.45	81.85	61.631		
8,600.00	7,239.19	6,394.39	6,201.59	50.75	41.26	90.20	2,018.28	-1,019.09	5,044.13	4,959.54	84.59	59.634		
8,700.00	7,238.78	6,484.58	6,291.78	50.85	42.85	90.20	2,017.50	-1,119.08	5,043.96	4,956.35	87.61	57.572		
8,800.00	7,238.38	6,574.77	6,381.97	51.02	44.57	90.20	2,016.71	-1,219.08	5,043.79	4,952.89	90.90	55.490		
8,900.00	7,237.97	6,664.96	6,472.16	51.32	46.40	90.20	2,015.93	-1,319.08	5,043.62	4,949.21	94.41	53.421		
9,000.00	7,237.57	6,755.15	6,562.35	51.95	48.34	90.21	2,015.15	-1,419.07	5,043.45	4,945.32	98.14	51.392		
9,100.00	7,237.16	6,845.34	6,652.54	53.10	50.36	90.21	2,014.37	-1,519.07	5,043.28	4,941.24	102.04	49.423		
9,200.00	7,236.76	6,935.53	6,742.73	54.69	52.46	90.21	2,013.59	-1,619.06	5,043.11	4,937.00	106.11	47.525		
9,300.00	7,236.35	7,025.72	6,832.92	56.53	54.63	90.21	2,012.80	-1,719.06	5,042.94	4,932.61	110.33	45.707		
9,400.00	7,235.94	7,115.91	6,923.11	58.53	56.86	90.21	2,012.02	-1,819.06	5,042.77	4,928.10	114.68	43.973		
9,500.00	7,235.54	7,206.10	7,013.30	60.62	59.14	90.21	2,011.24	-1,919.05	5,042.60	4,923.46	119.14	42.325		
9,600.00	7,235.13	7,296.29	7,103.49	62.80	61.47	90.21	2,010.46	-2,019.05	5,042.44	4,918.73	123.71	40.761		
9,700.00	7,234.73	7,386.48	7,193.68	65.03	63.85	90.21	2,009.68	-2,119.04	5,042.27	4,913.90	128.36	39.281		
9,800.00	7,234.32	7,476.67	7,283.87	67.32	66.26	90.21	2,008.89	-2,219.04	5,042.10	4,908.99	133.10	37.881		
9,900.00	7,233.92	7,566.86	7,374.06	69.66	68.71	90.21	2,008.11	-2,319.04	5,041.93	4,904.01	137.92	36.557		
10,000.00	7,233.51	7,657.05	7,464.25	72.03	71.19	90.21	2,007.33	-2,419.03	5,041.76	4,898.96	142.80	35.307		
10,100.00	7,233.10	7,747.24	7,554.44	74.45	73.69	90.21	2,006.55	-2,519.03	5,041.59	4,893.85	147.74	34.125		
10,200.00	7,232.70	7,837.43	7,644.63	76.89	76.22	90.21	2,005.77	-2,619.02	5,041.42	4,888.68	152.73	33.008		
10,300.00	7,232.29	7,927.62	7,734.82	79.36	78.78	90.21	2,004.98	-2,719.02	5,041.25	4,883.47	157.78	31.952		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 30C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	9,872.57	7,250.28	81.86	81.35	90.21	2,004.20	-2,819.02	5,041.08	4,878.21	162.87	30.952		
10,500.00	7,231.48	9,972.57	7,249.90	84.38	83.94	90.21	2,003.42	-2,919.01	5,040.91	4,872.92	167.99	30.006		
10,600.00	7,231.08	10,072.57	7,249.52	86.93	86.55	90.21	2,002.64	-3,019.01	5,040.74	4,867.58	173.16	29.110		
10,700.00	7,230.67	10,172.57	7,249.14	89.49	89.17	90.21	2,001.86	-3,119.00	5,040.57	4,862.21	178.36	28.261		
10,800.00	7,230.26	10,272.57	7,248.76	92.07	91.81	90.21	2,001.07	-3,219.00	5,040.40	4,856.81	183.59	27.455		
10,900.00	7,229.86	10,372.57	7,248.38	94.67	94.46	90.21	2,000.29	-3,319.00	5,040.23	4,851.39	188.85	26.690		
11,000.00	7,229.45	10,472.57	7,248.00	97.28	97.12	90.21	1,999.51	-3,418.99	5,040.06	4,845.93	194.13	25.962		
11,100.00	7,229.05	10,572.57	7,247.62	99.90	99.80	90.21	1,998.73	-3,518.99	5,039.89	4,840.46	199.44	25.270		
11,200.00	7,228.64	10,672.57	7,247.24	102.54	102.48	90.21	1,997.95	-3,618.98	5,039.72	4,834.96	204.77	24.612		
11,300.00	7,228.24	10,772.57	7,246.86	105.19	105.17	90.21	1,997.16	-3,718.98	5,039.55	4,829.44	210.12	23.984		
11,400.00	7,227.83	10,872.57	7,246.48	107.85	107.87	90.21	1,996.38	-3,818.98	5,039.38	4,823.90	215.49	23.386		
11,500.00	7,227.42	10,972.57	7,246.10	110.52	110.58	90.21	1,995.60	-3,918.97	5,039.22	4,818.34	220.87	22.815		
11,600.00	7,227.02	11,072.57	7,245.73	113.20	113.30	90.21	1,994.82	-4,018.97	5,039.05	4,812.77	226.28	22.269		
11,700.00	7,226.61	11,172.57	7,245.35	115.89	116.02	90.21	1,994.04	-4,118.97	5,038.88	4,807.18	231.69	21.748		
11,800.00	7,226.21	11,272.56	7,244.97	118.59	118.75	90.21	1,993.25	-4,218.96	5,038.71	4,801.58	237.13	21.249		
11,900.00	7,225.80	11,372.56	7,244.59	121.29	121.49	90.21	1,992.47	-4,318.96	5,038.54	4,795.97	242.57	20.771		
12,000.00	7,225.40	11,472.56	7,244.21	124.00	124.23	90.21	1,991.69	-4,418.95	5,038.37	4,790.34	248.03	20.314		
12,100.00	7,224.99	11,572.56	7,243.83	126.72	126.97	90.21	1,990.91	-4,518.95	5,038.20	4,784.70	253.50	19.875		
12,200.00	7,224.58	11,672.56	7,243.45	129.44	129.72	90.21	1,990.13	-4,618.95	5,038.03	4,779.05	258.97	19.454		
12,300.00	7,224.18	11,772.56	7,243.07	132.17	132.48	90.22	1,989.34	-4,718.94	5,037.86	4,773.40	264.46	19.049		
12,400.00	7,223.77	11,872.56	7,242.69	134.91	135.24	90.22	1,988.56	-4,818.94	5,037.69	4,767.73	269.96	18.661		
12,500.00	7,223.37	11,972.56	7,242.31	137.65	138.00	90.22	1,987.78	-4,918.93	5,037.52	4,762.05	275.47	18.287		
12,600.00	7,222.96	12,072.56	7,241.93	140.39	140.77	90.22	1,987.00	-5,018.93	5,037.35	4,756.36	280.99	17.927		
12,700.00	7,222.55	12,172.56	7,241.55	143.14	143.54	90.22	1,986.22	-5,118.93	5,037.18	4,750.67	286.51	17.581		
12,800.00	7,222.15	12,272.56	7,241.17	145.89	146.32	90.22	1,985.43	-5,218.92	5,037.01	4,744.97	292.04	17.248		
12,900.00	7,221.74	12,372.56	7,240.79	148.65	149.09	90.22	1,984.65	-5,318.92	5,036.84	4,739.26	297.58	16.926		
13,000.00	7,221.34	12,472.56	7,240.41	151.41	151.87	90.22	1,983.87	-5,418.91	5,036.67	4,733.55	303.13	16.616		
13,100.00	7,220.93	12,572.56	7,240.03	154.18	154.66	90.22	1,983.09	-5,518.91	5,036.50	4,727.83	308.68	16.316		
13,200.00	7,220.53	12,672.56	7,239.65	156.94	157.44	90.22	1,982.31	-5,618.91	5,036.33	4,722.10	314.23	16.027		
13,300.00	7,220.12	12,772.56	7,239.27	159.72	160.23	90.22	1,981.52	-5,718.90	5,036.17	4,716.37	319.80	15.748		
13,400.00	7,219.71	12,872.56	7,238.89	162.49	163.02	90.22	1,980.74	-5,818.90	5,036.00	4,710.63	325.36	15.478		
13,500.00	7,219.31	12,972.56	7,238.51	165.27	165.82	90.22	1,979.96	-5,918.90	5,035.83	4,704.89	330.94	15.217		
13,600.00	7,218.90	13,072.56	7,238.13	168.05	168.61	90.22	1,979.18	-6,018.89	5,035.66	4,699.14	336.52	14.964		
13,700.00	7,218.50	13,172.56	7,237.76	170.83	171.41	90.22	1,978.40	-6,118.89	5,035.49	4,693.39	342.10	14.719		
13,800.00	7,218.09	13,272.56	7,237.38	173.61	174.21	90.22	1,977.61	-6,218.88	5,035.32	4,687.63	347.69	14.482		
13,900.00	7,217.69	13,372.56	7,237.00	176.40	177.01	90.22	1,976.83	-6,318.88	5,035.15	4,681.87	353.28	14.253		
14,000.00	7,217.28	13,472.56	7,236.62	179.19	179.81	90.22	1,976.05	-6,418.88	5,034.98	4,676.11	358.87	14.030		
14,100.00	7,216.87	13,572.56	7,236.24	181.98	182.62	90.22	1,975.27	-6,518.87	5,034.81	4,670.34	364.47	13.814		
14,200.00	7,216.47	13,672.56	7,235.86	184.78	185.43	90.22	1,974.49	-6,618.87	5,034.64	4,664.57	370.07	13.604		
14,300.00	7,216.06	13,772.56	7,235.48	187.57	188.23	90.22	1,973.70	-6,718.86	5,034.47	4,658.79	375.68	13.401		
14,400.00	7,215.66	13,872.56	7,235.10	190.37	191.04	90.22	1,972.92	-6,818.86	5,034.30	4,653.01	381.29	13.203		
14,500.00	7,215.25	13,972.56	7,234.72	193.17	193.85	90.22	1,972.14	-6,918.86	5,034.13	4,647.23	386.90	13.011		
14,600.00	7,214.85	14,072.56	7,234.34	195.97	196.67	90.22	1,971.36	-7,018.85	5,033.96	4,641.45	392.52	12.825		
14,700.00	7,214.44	14,172.56	7,233.96	198.77	199.48	90.22	1,970.58	-7,118.85	5,033.79	4,635.66	398.13	12.643		
14,800.00	7,214.03	14,272.56	7,233.58	201.58	202.30	90.22	1,969.79	-7,218.84	5,033.62	4,629.87	403.76	12.467		
14,900.00	7,213.63	14,372.56	7,233.20	204.38	205.11	90.22	1,969.01	-7,318.84	5,033.45	4,624.08	409.38	12.295		
15,000.00	7,213.22	14,472.56	7,232.82	207.19	207.93	90.22	1,968.23	-7,418.84	5,033.28	4,618.28	415.01	12.128		
15,100.00	7,212.82	14,572.56	7,232.44	210.00	210.75	90.22	1,967.45	-7,518.83	5,033.12	4,612.48	420.63	11.966		
15,200.00	7,212.41	14,672.56	7,232.06	212.81	213.57	90.22	1,966.67	-7,618.83	5,032.95	4,606.68	426.26	11.807		
15,300.00	7,212.01	14,772.56	7,231.68	215.62	216.39	90.22	1,965.88	-7,718.82	5,032.78	4,600.88	431.90	11.653		
15,400.00	7,211.60	14,872.56	7,231.30	218.43	219.21	90.22	1,965.10	-7,818.82	5,032.61	4,595.07	437.53	11.502		
15,500.00	7,211.19	14,972.56	7,230.92	221.25	222.03	90.23	1,964.32	-7,918.82	5,032.44	4,589.27	443.17	11.356		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 30C-16-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,600.00	7,210.79	15,072.56	7,230.54	224.06	224.85	90.23	1,963.54	-8,018.81	5,032.27	4,583.46	448.81	11.212	
15,700.00	7,210.38	15,172.56	7,230.17	226.88	227.68	90.23	1,962.75	-8,118.81	5,032.10	4,577.65	454.45	11.073	
15,752.05	7,210.17	15,216.01	7,230.00	228.34	228.91	90.23	1,962.42	-8,162.26	5,032.02	4,574.87	457.15	11.007	
15,794.94	7,210.00	15,216.01	7,230.00	229.55	228.91	90.23	1,962.42	-8,162.26	5,032.20	4,573.86	458.34	10.979 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 30N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	3.00	0.00	3.28	3.28	0.48	500.19	4.17	500.21					
100.00	100.00	103.00	100.00	3.28	3.29	0.48	500.19	4.17	500.21	493.64	6.57	76.134		
200.00	200.00	203.00	200.00	3.34	3.34	0.48	500.19	4.17	500.21	493.53	6.68	74.921	CC, ES	
300.00	299.98	302.98	299.98	3.44	3.45	177.84	500.19	4.17	501.95	495.06	6.89	72.863		
400.00	399.84	387.46	384.45	3.59	3.58	177.83	501.52	4.00	508.74	501.55	7.18	70.819		
500.00	499.45	471.60	468.50	3.79	3.75	177.79	505.29	3.52	521.90	514.33	7.57	68.943		
600.00	598.70	554.45	551.11	4.03	3.94	177.73	511.39	2.74	541.35	533.33	8.03	67.445		
700.00	697.47	635.56	631.79	4.31	4.15	177.64	519.66	1.68	566.97	558.43	8.53	66.432		
800.00	795.62	714.51	710.06	4.64	4.38	177.54	529.88	0.37	598.57	589.50	9.08	65.942		
900.00	893.06	790.92	785.52	5.00	4.62	177.42	541.81	-1.16	635.98	626.34	9.64	65.967		
1,000.00	989.64	864.47	857.82	5.40	4.86	177.29	555.17	-2.87	678.95	668.74	10.21	66.472		
1,100.00	1,085.27	950.55	942.19	5.83	5.15	177.15	572.11	-5.04	726.41	715.58	10.83	67.079		
1,200.00	1,179.82	1,036.85	1,026.77	6.29	5.46	177.03	589.11	-7.22	776.92	765.43	11.48	67.653		
1,300.00	1,273.17	1,121.33	1,109.58	6.79	5.78	176.92	605.75	-9.35	830.40	818.25	12.15	68.344		
1,400.00	1,365.21	1,203.91	1,190.50	7.33	6.10	176.82	622.01	-11.44	886.80	873.97	12.83	69.127		
1,500.00	1,455.84	1,284.46	1,269.46	7.89	6.43	176.73	637.88	-13.47	946.04	932.53	13.51	70.001		
1,600.00	1,544.94	1,362.91	1,346.34	8.50	6.75	176.65	653.33	-15.45	1,008.06	993.85	14.21	70.964		
1,700.00	1,632.39	1,439.14	1,421.06	9.13	7.07	176.57	668.34	-17.38	1,072.76	1,057.87	14.90	72.015		
1,800.00	1,718.11	1,513.08	1,493.52	9.80	7.38	176.49	682.90	-19.24	1,140.09	1,124.50	15.59	73.151		
1,900.00	1,802.44	1,585.21	1,564.22	10.49	7.69	176.50	697.11	-21.06	1,209.34	1,193.07	16.27	74.327		
2,000.00	1,886.68	1,657.24	1,634.82	11.20	8.01	176.53	711.30	-22.88	1,278.70	1,261.75	16.95	75.422		
2,100.00	1,970.92	1,729.27	1,705.41	11.93	8.32	176.56	725.48	-24.70	1,348.07	1,330.42	17.65	76.385		
2,200.00	2,055.17	1,801.30	1,776.01	12.66	8.64	176.59	739.67	-26.52	1,417.43	1,399.08	18.35	77.234		
2,300.00	2,139.41	1,873.33	1,846.60	13.40	8.96	176.62	753.86	-28.33	1,486.80	1,467.73	19.07	77.984		
2,400.00	2,223.66	1,945.36	1,917.20	14.14	9.28	176.64	768.04	-30.15	1,556.16	1,536.38	19.79	78.650		
2,500.00	2,307.90	2,017.39	1,987.79	14.89	9.61	176.67	782.23	-31.97	1,625.53	1,605.02	20.51	79.243		
2,600.00	2,392.14	2,089.42	2,058.39	15.65	9.93	176.69	796.41	-33.79	1,694.89	1,673.65	21.25	79.771		
2,700.00	2,476.39	2,161.45	2,128.98	16.41	10.26	176.71	810.60	-35.60	1,764.26	1,742.27	21.99	80.245		
2,800.00	2,560.63	2,233.48	2,199.58	17.17	10.59	176.72	824.79	-37.42	1,833.63	1,810.90	22.73	80.669		
2,900.00	2,644.88	2,305.51	2,270.17	17.93	10.92	176.74	838.97	-39.24	1,902.99	1,879.51	23.48	81.052		
3,000.00	2,729.12	2,377.54	2,340.77	18.70	11.25	176.75	853.16	-41.06	1,972.36	1,948.13	24.23	81.397		
3,100.00	2,813.36	2,449.57	2,411.36	19.47	11.59	176.77	867.34	-42.88	2,041.72	2,016.74	24.99	81.709		
3,200.00	2,897.61	2,521.60	2,481.96	20.25	11.92	176.78	881.53	-44.69	2,111.09	2,085.34	25.75	81.992		
3,300.00	2,981.85	2,606.37	2,552.55	21.02	12.31	176.79	895.72	-46.51	2,180.46	2,153.89	26.57	82.071		
3,400.00	3,066.10	2,665.66	2,623.15	21.80	12.59	176.81	909.90	-48.33	2,249.82	2,222.55	27.28	82.483		
3,500.00	3,150.34	2,737.69	2,693.74	22.58	12.92	176.82	924.09	-50.15	2,319.19	2,291.14	28.04	82.697		
3,600.00	3,234.58	2,809.71	2,764.34	23.35	13.26	176.83	938.27	-51.97	2,388.55	2,359.74	28.82	82.892		
3,700.00	3,318.83	2,881.74	2,834.94	24.13	13.60	176.84	952.46	-53.78	2,457.92	2,428.33	29.59	83.071		
3,800.00	3,403.07	2,953.77	2,905.53	24.92	13.93	176.84	966.65	-55.60	2,527.29	2,496.92	30.36	83.236		
3,900.00	3,487.32	3,025.80	2,976.13	25.70	14.27	176.85	980.83	-57.42	2,596.65	2,565.51	31.14	83.386		
4,000.00	3,571.56	3,102.17	3,046.72	26.48	14.63	176.86	995.02	-59.24	2,666.02	2,634.08	31.94	83.473		
4,100.00	3,655.80	3,169.86	3,117.32	27.27	14.95	176.87	1,009.20	-61.05	2,735.39	2,702.69	32.70	83.653		
4,200.00	3,740.05	3,241.89	3,187.91	28.05	15.29	176.88	1,023.39	-62.87	2,804.75	2,771.27	33.48	83.771		
4,300.00	3,824.29	3,313.92	3,258.51	28.84	15.63	176.88	1,037.58	-64.69	2,874.12	2,839.85	34.26	83.880		
4,400.00	3,908.54	3,385.95	3,329.10	29.62	15.97	176.89	1,051.76	-66.51	2,943.49	2,908.44	35.05	83.981		
4,500.00	3,992.78	3,457.98	3,399.70	30.41	16.31	176.90	1,065.95	-68.33	3,012.85	2,977.02	35.84	84.074		
4,600.00	4,077.03	3,530.01	3,470.29	31.20	16.65	176.90	1,080.14	-70.14	3,082.22	3,045.59	36.62	84.161		
4,700.00	4,161.27	3,602.04	3,540.89	31.98	16.99	176.91	1,094.32	-71.96	3,151.58	3,114.17	37.41	84.241		
4,800.00	4,245.51	3,674.07	3,611.48	32.77	17.33	176.91	1,108.51	-73.78	3,220.95	3,182.75	38.20	84.315		
4,900.00	4,329.76	3,746.10	3,682.08	33.56	17.68	176.92	1,122.69	-75.60	3,290.32	3,251.33	38.99	84.384		
5,000.00	4,414.00	3,818.13	3,752.67	34.35	18.02	176.92	1,136.88	-77.42	3,359.68	3,319.90	39.78	84.449		
5,100.00	4,498.25	3,890.16	3,823.27	35.14	18.36	176.93	1,151.07	-79.23	3,429.05	3,388.47	40.58	84.508		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 30N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	3,962.19	3,893.86	35.93	18.70	176.93	1,165.25	-81.05	3,498.42	3,457.05	41.37	84.564		
5,300.00	4,666.73	4,034.22	3,964.46	36.72	19.05	176.94	1,179.44	-82.87	3,567.78	3,525.62	42.16	84.615		
5,400.00	4,750.98	4,106.25	4,035.05	37.51	19.39	176.94	1,193.62	-84.69	3,637.15	3,594.19	42.96	84.663		
5,500.00	4,835.22	4,178.27	4,105.65	38.30	19.73	176.95	1,207.81	-86.51	3,706.52	3,662.76	43.76	84.708		
5,600.00	4,919.47	4,250.30	4,176.25	39.09	20.08	176.95	1,222.00	-88.32	3,775.88	3,731.33	44.55	84.749		
5,700.00	5,003.71	4,322.33	4,246.84	39.88	20.42	176.95	1,236.18	-90.14	3,845.25	3,799.90	45.35	84.788		
5,800.00	5,088.06	4,394.50	4,317.57	40.67	20.77	176.99	1,250.39	-91.96	3,914.48	3,868.33	46.15	84.821		
5,900.00	5,173.83	4,468.51	4,390.10	41.44	21.12	177.09	1,264.97	-93.83	3,981.72	3,934.76	46.96	84.795		
6,000.00	5,261.34	4,544.82	4,464.89	42.18	21.48	177.17	1,280.00	-95.76	4,046.34	3,998.56	47.78	84.695		
6,100.00	5,350.49	4,623.33	4,541.84	42.88	21.86	177.24	1,295.46	-97.74	4,108.26	4,059.66	48.60	84.525		
6,200.00	5,441.16	4,703.95	4,620.86	43.56	22.24	177.30	1,311.34	-99.77	4,167.41	4,117.97	49.44	84.292		
6,300.00	5,533.25	4,786.59	4,701.85	44.20	22.64	177.35	1,327.62	-101.86	4,223.71	4,173.43	50.28	84.000		
6,400.00	5,626.65	4,871.14	4,784.72	44.82	23.04	177.40	1,344.27	-103.99	4,277.10	4,225.97	51.13	83.655		
6,500.00	5,721.23	4,957.49	4,869.35	45.40	23.46	177.43	1,361.28	-106.17	4,327.50	4,275.53	51.97	83.262		
6,600.00	5,816.89	5,045.55	4,955.66	45.94	23.88	177.47	1,378.62	-108.39	4,374.87	4,322.05	52.82	82.825		
6,700.00	5,913.51	5,135.20	5,043.53	46.45	24.31	177.49	1,396.28	-110.66	4,419.13	4,365.47	53.66	82.350		
6,800.00	6,010.97	5,226.34	5,132.85	46.93	24.75	177.51	1,414.23	-112.96	4,460.25	4,405.75	54.50	81.838		
6,900.00	6,109.15	5,318.86	5,223.52	47.38	25.19	177.52	1,432.45	-115.29	4,498.16	4,442.83	55.33	81.294		
7,000.00	6,207.93	5,412.64	5,315.43	47.80	25.64	177.53	1,450.92	-117.66	4,532.82	4,476.67	56.15	80.721		
7,100.00	6,307.19	5,507.56	5,408.47	48.18	26.10	177.53	1,469.61	-120.05	4,564.19	4,507.22	56.97	80.120		
7,200.00	6,406.82	5,603.52	5,502.52	48.53	26.56	177.53	1,488.51	-122.48	4,592.23	4,534.47	57.77	79.495		
7,300.00	6,506.68	5,700.40	5,597.46	48.84	27.02	177.52	1,507.59	-124.92	4,616.91	4,558.36	58.56	78.846		
7,400.00	6,606.66	5,801.93	5,693.19	49.10	27.51	90.45	1,526.83	-127.38	4,638.20	4,578.87	59.33	78.173		
7,500.00	6,706.21	5,895.83	5,789.01	49.35	27.96	88.71	1,546.08	-129.85	4,657.88	4,597.82	60.07	77.546		
7,600.00	6,803.22	6,008.51	5,882.76	49.59	28.50	87.20	1,564.92	-132.27	4,677.27	4,616.40	60.87	76.836		
7,700.00	6,895.32	6,082.68	5,972.14	49.82	28.86	85.89	1,582.88	-134.57	4,696.10	4,634.61	61.48	76.380		
7,800.00	6,980.23	6,167.16	6,054.94	50.03	29.26	84.77	1,599.52	-136.70	4,714.22	4,652.09	62.13	75.871		
7,900.00	7,055.85	6,242.85	6,129.12	50.21	29.63	83.78	1,614.43	-138.61	4,731.63	4,668.86	62.77	75.384		
8,000.00	7,120.34	6,307.89	6,192.86	50.36	29.94	82.86	1,627.23	-140.25	4,748.36	4,684.94	63.42	74.876		
8,100.00	7,172.10	6,360.67	6,244.59	50.47	30.19	81.95	1,637.63	-141.58	4,764.47	4,700.35	64.12	74.304		
8,200.00	7,209.85	6,400.10	6,283.04	50.55	30.38	80.98	1,645.35	-142.57	4,780.00	4,715.09	64.92	73.634		
8,300.00	7,232.68	6,424.60	6,307.25	50.61	30.50	79.93	1,650.22	-143.20	4,794.92	4,729.11	65.81	72.864		
8,400.00	7,240.00	6,434.17	6,316.63	50.65	30.55	78.79	1,652.11	-143.44	4,809.09	4,742.31	66.78	72.017		
8,500.00	7,239.60	6,436.18	6,318.60	50.69	30.56	78.81	1,652.50	-143.49	4,823.85	4,755.99	67.86	71.083		
8,600.00	7,239.19	7,803.98	7,068.35	50.75	40.58	87.97	1,797.24	-1,015.38	4,826.06	4,742.79	83.27	57.957		
8,700.00	7,238.78	7,903.98	7,068.07	50.85	42.21	87.97	1,796.48	-1,115.37	4,825.91	4,739.57	86.35	55.890		
8,800.00	7,238.38	8,003.98	7,067.78	51.02	43.97	87.97	1,795.73	-1,215.37	4,825.77	4,736.09	89.68	53.810		
8,900.00	7,237.97	8,096.02	7,067.50	51.32	45.68	87.98	1,794.98	-1,315.37	4,825.63	4,732.53	93.09	51.837		
9,000.00	7,237.57	8,203.98	7,067.21	51.95	47.80	87.98	1,794.23	-1,415.36	4,825.48	4,728.47	97.02	49.739		
9,100.00	7,237.16	8,303.98	7,066.93	53.10	49.86	87.98	1,793.47	-1,515.36	4,825.34	4,724.37	100.97	47.791		
9,200.00	7,236.76	8,403.98	7,066.64	54.69	51.99	87.98	1,792.72	-1,615.36	4,825.19	4,720.11	105.08	45.918		
9,300.00	7,236.35	8,503.98	7,066.36	56.53	54.19	87.98	1,791.97	-1,715.35	4,825.05	4,715.71	109.34	44.129		
9,400.00	7,235.94	8,596.02	7,066.07	58.53	56.27	87.98	1,791.22	-1,815.35	4,824.90	4,711.36	113.54	42.494		
9,500.00	7,235.54	8,703.98	7,065.79	60.62	58.76	87.98	1,790.46	-1,915.35	4,824.76	4,706.54	118.22	40.810		
9,600.00	7,235.13	8,803.98	7,065.50	62.80	61.11	87.99	1,789.71	-2,015.34	4,824.62	4,701.79	122.82	39.281		
9,700.00	7,234.73	8,896.02	7,065.22	65.03	63.32	87.99	1,788.96	-2,115.34	4,824.47	4,697.15	127.32	37.893		
9,800.00	7,234.32	9,003.98	7,064.93	67.32	65.95	87.99	1,788.21	-2,215.34	4,824.33	4,692.05	132.28	36.470		
9,900.00	7,233.92	9,103.98	7,064.65	69.66	68.42	87.99	1,787.45	-2,315.33	4,824.18	4,687.06	137.12	35.181		
10,000.00	7,233.51	9,203.98	7,064.36	72.03	70.91	87.99	1,786.70	-2,415.33	4,824.04	4,682.01	142.03	33.964		
10,100.00	7,233.10	9,296.02	7,064.08	74.45	73.23	87.99	1,785.95	-2,515.33	4,823.90	4,677.10	146.79	32.862		
10,200.00	7,232.70	9,403.98	7,063.79	76.89	75.98	87.99	1,785.20	-2,615.32	4,823.75	4,671.74	152.01	31.732		
10,300.00	7,232.29	9,503.98	7,063.51	79.36	78.55	88.00	1,784.44	-2,715.32	4,823.61	4,666.53	157.08	30.708		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 30N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	9,603.98	7,063.22	81.86	81.14	88.00	1,783.69	-2,815.32	4,823.46	4,661.27	162.19	29.740		
10,500.00	7,231.48	9,703.98	7,062.94	84.38	83.75	88.00	1,782.94	-2,915.31	4,823.32	4,655.98	167.34	28.824		
10,600.00	7,231.08	9,803.98	7,062.66	86.93	86.37	88.00	1,782.19	-3,015.31	4,823.18	4,650.66	172.52	27.957		
10,700.00	7,230.67	9,903.99	7,062.37	89.49	89.01	88.00	1,781.43	-3,115.31	4,823.03	4,645.30	177.74	27.136		
10,800.00	7,230.26	10,003.99	7,062.09	92.07	91.65	88.00	1,780.68	-3,215.30	4,822.89	4,639.91	182.98	26.357		
10,900.00	7,229.86	10,103.99	7,061.80	94.67	94.32	88.00	1,779.93	-3,315.30	4,822.74	4,634.49	188.25	25.618		
11,000.00	7,229.45	10,203.99	7,061.52	97.28	96.99	88.00	1,779.18	-3,415.30	4,822.60	4,629.05	193.55	24.916		
11,100.00	7,229.05	10,303.99	7,061.23	99.90	99.67	88.01	1,778.42	-3,515.29	4,822.45	4,623.58	198.87	24.249		
11,200.00	7,228.64	10,403.99	7,060.95	102.54	102.37	88.01	1,777.67	-3,615.29	4,822.31	4,618.09	204.22	23.614		
11,300.00	7,228.24	10,503.99	7,060.66	105.19	105.07	88.01	1,776.92	-3,715.29	4,822.17	4,612.59	209.58	23.009		
11,400.00	7,227.83	10,596.01	7,060.38	107.85	107.56	88.01	1,776.17	-3,815.28	4,822.02	4,607.28	214.74	22.455		
11,500.00	7,227.42	10,703.99	7,060.09	110.52	110.49	88.01	1,775.42	-3,915.28	4,821.88	4,601.52	220.36	21.882		
11,600.00	7,227.02	10,803.99	7,059.81	113.20	113.22	88.01	1,774.66	-4,015.28	4,821.73	4,595.97	225.77	21.357		
11,700.00	7,226.61	10,903.99	7,059.52	115.89	115.95	88.01	1,773.91	-4,115.27	4,821.59	4,590.39	231.20	20.855		
11,800.00	7,226.21	11,003.99	7,059.24	118.59	118.69	88.02	1,773.16	-4,215.27	4,821.45	4,584.81	236.64	20.375		
11,900.00	7,225.80	11,103.99	7,058.95	121.29	121.43	88.02	1,772.41	-4,315.27	4,821.30	4,579.21	242.09	19.915		
12,000.00	7,225.40	11,203.99	7,058.67	124.00	124.18	88.02	1,771.65	-4,415.26	4,821.16	4,573.60	247.56	19.475		
12,100.00	7,224.99	11,303.99	7,058.38	126.72	126.93	88.02	1,770.90	-4,515.26	4,821.01	4,567.98	253.03	19.053		
12,200.00	7,224.58	11,403.99	7,058.10	129.44	129.69	88.02	1,770.15	-4,615.25	4,820.87	4,562.35	258.52	18.648		
12,300.00	7,224.18	11,503.99	7,057.81	132.17	132.45	88.02	1,769.40	-4,715.25	4,820.73	4,556.71	264.02	18.259		
12,400.00	7,223.77	11,603.99	7,057.53	134.91	135.21	88.02	1,768.64	-4,815.25	4,820.58	4,551.06	269.52	17.886		
12,500.00	7,223.37	11,703.99	7,057.24	137.65	137.98	88.03	1,767.89	-4,915.24	4,820.44	4,545.40	275.03	17.527		
12,600.00	7,222.96	11,803.99	7,056.96	140.39	140.75	88.03	1,767.14	-5,015.24	4,820.29	4,539.74	280.56	17.181		
12,700.00	7,222.55	11,903.99	7,056.68	143.14	143.53	88.03	1,766.39	-5,115.24	4,820.15	4,534.06	286.09	16.849		
12,800.00	7,222.15	12,003.99	7,056.39	145.89	146.31	88.03	1,765.63	-5,215.23	4,820.01	4,528.38	291.62	16.528		
12,900.00	7,221.74	12,103.99	7,056.11	148.65	149.09	88.03	1,764.88	-5,315.23	4,819.86	4,522.69	297.17	16.219		
13,000.00	7,221.34	12,203.99	7,055.82	151.41	151.88	88.03	1,764.13	-5,415.23	4,819.72	4,517.00	302.72	15.922		
13,100.00	7,220.93	12,303.99	7,055.54	154.18	154.66	88.03	1,763.38	-5,515.22	4,819.57	4,511.30	308.27	15.634		
13,200.00	7,220.53	12,403.99	7,055.25	156.94	157.45	88.04	1,762.62	-5,615.22	4,819.43	4,505.59	313.83	15.357		
13,300.00	7,220.12	12,503.99	7,054.97	159.72	160.25	88.04	1,761.87	-5,715.22	4,819.29	4,499.88	319.40	15.088		
13,400.00	7,219.71	12,596.01	7,054.68	162.49	162.82	88.04	1,761.12	-5,815.21	4,819.14	4,494.39	324.75	14.840		
13,500.00	7,219.31	12,703.99	7,054.40	165.27	165.84	88.04	1,760.37	-5,915.21	4,819.00	4,488.45	330.55	14.579		
13,600.00	7,218.90	12,803.99	7,054.11	168.05	168.64	88.04	1,759.61	-6,015.21	4,818.85	4,482.72	336.13	14.336		
13,700.00	7,218.50	12,903.99	7,053.83	170.83	171.44	88.04	1,758.86	-6,115.20	4,818.71	4,476.99	341.72	14.101		
13,800.00	7,218.09	13,003.99	7,053.54	173.61	174.24	88.04	1,758.11	-6,215.20	4,818.56	4,471.26	347.31	13.874		
13,900.00	7,217.69	13,096.01	7,053.26	176.40	176.82	88.04	1,757.36	-6,315.20	4,818.42	4,465.74	352.68	13.662		
14,000.00	7,217.28	13,203.99	7,052.97	179.19	179.85	88.05	1,756.60	-6,415.19	4,818.28	4,459.78	358.50	13.440		
14,100.00	7,216.87	13,296.01	7,052.69	181.98	182.44	88.05	1,755.85	-6,515.19	4,818.13	4,454.25	363.88	13.241		
14,200.00	7,216.47	13,403.99	7,052.40	184.78	185.47	88.05	1,755.10	-6,615.19	4,817.99	4,448.28	369.71	13.032		
14,300.00	7,216.06	13,503.99	7,052.12	187.57	188.28	88.05	1,754.35	-6,715.18	4,817.84	4,442.53	375.32	12.837		
14,400.00	7,215.66	13,603.99	7,051.83	190.37	191.09	88.05	1,753.59	-6,815.18	4,817.70	4,436.77	380.93	12.647		
14,500.00	7,215.25	13,703.99	7,051.55	193.17	193.91	88.05	1,752.84	-6,915.18	4,817.56	4,431.01	386.54	12.463		
14,600.00	7,214.85	13,803.99	7,051.26	195.97	196.72	88.05	1,752.09	-7,015.17	4,817.41	4,425.25	392.16	12.284		
14,700.00	7,214.44	13,903.99	7,050.98	198.77	199.54	88.06	1,751.34	-7,115.17	4,817.27	4,419.49	397.78	12.110		
14,800.00	7,214.03	14,003.99	7,050.70	201.58	202.36	88.06	1,750.58	-7,215.17	4,817.12	4,413.72	403.41	11.941		
14,900.00	7,213.63	14,103.99	7,050.41	204.38	205.18	88.06	1,749.83	-7,315.16	4,816.98	4,407.95	409.03	11.777		
15,000.00	7,213.22	14,203.99	7,050.13	207.19	208.00	88.06	1,749.08	-7,415.16	4,816.84	4,402.18	414.66	11.616		
15,100.00	7,212.82	14,296.01	7,049.84	210.00	210.59	88.06	1,748.33	-7,515.16	4,816.69	4,396.63	420.06	11.467		
15,200.00	7,212.41	14,403.99	7,049.56	212.81	213.64	88.06	1,747.57	-7,615.15	4,816.55	4,390.63	425.92	11.309		
15,300.00	7,212.01	14,503.99	7,049.27	215.62	216.46	88.06	1,746.82	-7,715.15	4,816.40	4,384.85	431.56	11.161		
15,400.00	7,211.60	14,603.99	7,048.99	218.43	219.28	88.07	1,746.07	-7,815.15	4,816.26	4,379.07	437.19	11.016		
15,500.00	7,211.19	14,703.99	7,048.70	221.25	222.11	88.07	1,745.32	-7,915.14	4,816.12	4,373.28	442.83	10.876		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,600.00	7,210.79	14,803.99	7,048.42	224.06	224.93	88.07	1,744.56	-8,015.14	4,815.97	4,367.50	448.47	10.739	
15,700.00	7,210.38	14,903.99	7,048.13	226.88	227.76	88.07	1,743.81	-8,115.14	4,815.83	4,361.71	454.12	10.605	
15,753.30	7,210.17	14,942.37	7,048.00	228.38	228.85	88.07	1,743.46	-8,161.50	4,815.76	4,359.05	456.70	10.545	
15,794.94	7,210.00	14,942.37	7,048.00	229.55	228.85	88.07	1,743.46	-8,161.50	4,815.94	4,358.07	457.87	10.518 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.46	420.04	3.34	420.05					
100.00	100.00	102.00	100.00	3.28	3.29	0.46	420.04	3.34	420.05	413.48	6.57	63.936		
200.00	200.00	202.00	200.00	3.34	3.34	0.46	420.04	3.34	420.05	413.38	6.68	62.923 CC, ES		
300.00	299.98	301.98	299.98	3.44	3.45	177.81	420.04	3.34	421.80	414.91	6.89	61.240		
400.00	399.84	401.84	399.84	3.59	3.61	177.84	420.04	3.34	427.03	419.83	7.20	59.318		
500.00	499.45	501.45	499.45	3.79	3.81	177.87	420.04	3.34	435.74	428.13	7.60	57.321		
600.00	598.70	600.70	598.70	4.03	4.05	177.92	420.04	3.34	447.91	439.83	8.08	55.417		
700.00	697.47	698.59	684.58	4.31	4.28	177.91	421.25	2.83	464.93	456.33	8.60	54.075		
800.00	795.62	771.00	768.90	4.64	4.53	177.78	424.74	1.35	488.03	478.87	9.16	53.282		
900.00	893.06	864.23	861.93	5.00	4.82	177.57	430.33	-1.01	516.28	506.50	9.78	52.793		
1,000.00	989.64	959.08	956.58	5.40	5.13	177.39	436.06	-3.43	547.92	537.47	10.44	52.478		
1,100.00	1,085.27	1,052.77	1,050.06	5.83	5.46	177.23	441.71	-5.82	582.84	571.71	11.13	52.366		
1,200.00	1,179.82	1,145.19	1,142.28	6.29	5.79	177.10	447.30	-8.18	621.02	609.17	11.84	52.434		
1,300.00	1,273.17	1,236.22	1,233.12	6.79	6.12	176.99	452.80	-10.50	662.39	649.81	12.58	52.673		
1,400.00	1,365.21	1,325.76	1,322.46	7.33	6.46	176.90	458.21	-12.78	706.91	693.59	13.32	53.067		
1,500.00	1,455.84	1,413.69	1,410.20	7.89	6.79	176.82	463.52	-15.03	754.52	740.45	14.08	53.598		
1,600.00	1,544.94	1,500.10	1,496.24	8.50	7.13	176.76	468.73	-17.23	805.17	790.33	14.84	54.250		
1,700.00	1,632.39	1,584.31	1,580.46	9.13	7.46	176.70	473.82	-19.38	858.80	843.19	15.61	55.018		
1,800.00	1,718.11	1,666.79	1,662.76	9.80	7.79	176.65	478.81	-21.49	915.33	898.95	16.38	55.884		
1,900.00	1,802.44	1,747.75	1,743.55	10.49	8.12	176.66	483.70	-23.55	974.01	956.87	17.15	56.799		
2,000.00	1,886.68	1,828.63	1,824.25	11.20	8.44	176.69	488.58	-25.62	1,032.83	1,014.91	17.92	57.645		
2,100.00	1,970.92	1,909.50	1,904.95	11.93	8.77	176.72	493.47	-27.68	1,091.64	1,072.95	18.70	58.388		
2,200.00	2,055.17	2,009.62	1,985.66	12.66	9.19	176.75	498.36	-29.74	1,150.46	1,130.89	19.56	58.805		
2,300.00	2,139.41	2,071.25	2,066.36	13.40	9.44	176.77	503.24	-31.81	1,209.27	1,188.99	20.28	59.626		
2,400.00	2,223.66	2,152.13	2,147.06	14.14	9.78	176.80	508.13	-33.87	1,268.08	1,247.00	21.08	60.144		
2,500.00	2,307.90	2,233.00	2,227.76	14.89	10.11	176.82	513.01	-35.93	1,326.90	1,305.00	21.89	60.606		
2,600.00	2,392.14	2,313.88	2,308.46	15.65	10.45	176.83	517.90	-38.00	1,385.71	1,363.00	22.71	61.020		
2,700.00	2,476.39	2,394.75	2,389.16	16.41	10.79	176.85	522.78	-40.06	1,444.53	1,421.00	23.53	61.392		
2,800.00	2,560.63	2,475.63	2,469.86	17.17	11.13	176.87	527.67	-42.12	1,503.34	1,478.99	24.35	61.728		
2,900.00	2,644.88	2,556.50	2,550.56	17.93	11.48	176.88	532.55	-44.19	1,562.16	1,536.97	25.18	62.031		
3,000.00	2,729.12	2,637.38	2,631.26	18.70	11.82	176.89	537.44	-46.25	1,620.97	1,594.95	26.02	62.307		
3,100.00	2,813.36	2,718.25	2,711.96	19.47	12.16	176.91	542.33	-48.32	1,679.78	1,652.93	26.85	62.558		
3,200.00	2,897.61	2,799.13	2,792.66	20.25	12.51	176.92	547.21	-50.38	1,738.60	1,710.91	27.69	62.787		
3,300.00	2,981.85	2,880.00	2,873.36	21.02	12.86	176.93	552.10	-52.44	1,797.41	1,768.88	28.53	62.997		
3,400.00	3,066.10	2,960.88	2,954.07	21.80	13.20	176.94	556.98	-54.51	1,856.23	1,826.85	29.38	63.189		
3,500.00	3,150.34	3,041.75	3,034.77	22.58	13.55	176.95	561.87	-56.57	1,915.04	1,884.82	30.22	63.366		
3,600.00	3,234.58	3,122.63	3,115.47	23.35	13.90	176.96	566.75	-58.63	1,973.86	1,942.79	31.07	63.529		
3,700.00	3,318.83	3,203.50	3,196.17	24.13	14.24	176.96	571.64	-60.70	2,032.67	2,000.75	31.92	63.679		
3,800.00	3,403.07	3,284.38	3,276.87	24.92	14.59	176.97	576.52	-62.76	2,091.49	2,058.72	32.77	63.818		
3,900.00	3,487.32	3,365.25	3,357.57	25.70	14.94	176.98	581.41	-64.82	2,150.30	2,116.68	33.63	63.947		
4,000.00	3,571.56	3,446.13	3,438.27	26.48	15.29	176.99	586.30	-66.89	2,209.12	2,174.64	34.48	64.066		
4,100.00	3,655.80	3,527.00	3,518.97	27.27	15.64	176.99	591.18	-68.95	2,267.93	2,232.59	35.34	64.178		
4,200.00	3,740.05	3,607.88	3,599.67	28.05	15.99	177.00	596.07	-71.02	2,326.75	2,290.55	36.20	64.281		
4,300.00	3,824.29	3,688.75	3,680.37	28.84	16.34	177.01	600.95	-73.08	2,385.56	2,348.51	37.06	64.378		
4,400.00	3,908.54	3,769.63	3,761.07	29.62	16.69	177.01	605.84	-75.14	2,444.38	2,406.46	37.92	64.468		
4,500.00	3,992.78	3,850.50	3,841.77	30.41	17.04	177.02	610.72	-77.21	2,503.19	2,464.42	38.78	64.553		
4,600.00	4,077.03	3,931.38	3,922.48	31.20	17.39	177.02	615.61	-79.27	2,562.01	2,522.37	39.64	64.632		
4,700.00	4,161.27	4,012.25	4,003.18	31.98	17.75	177.03	620.50	-81.33	2,620.82	2,580.32	40.50	64.706		
4,800.00	4,245.51	4,106.87	4,083.88	32.77	18.16	177.03	625.38	-83.40	2,679.64	2,638.21	41.43	64.682		
4,900.00	4,329.76	4,174.00	4,164.58	33.56	18.45	177.04	630.27	-85.46	2,738.45	2,696.22	42.23	64.841		
5,000.00	4,414.00	4,254.88	4,245.28	34.35	18.80	177.04	635.15	-87.52	2,797.27	2,754.17	43.10	64.902		
5,100.00	4,498.25	4,335.75	4,325.98	35.14	19.15	177.05	640.04	-89.59	2,856.08	2,812.12	43.97	64.960		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,416.63	4,406.68	35.93	19.51	177.05	644.92	-91.65	2,914.90	2,870.06	44.83	65.015		
5,300.00	4,666.73	4,497.50	4,487.38	36.72	19.86	177.05	649.81	-93.72	2,973.71	2,928.01	45.70	65.066		
5,400.00	4,750.98	4,578.38	4,568.08	37.51	20.21	177.06	654.69	-95.78	3,032.53	2,985.96	46.57	65.114		
5,500.00	4,835.22	4,659.25	4,648.78	38.30	20.57	177.06	659.58	-97.84	3,091.34	3,043.90	47.44	65.160		
5,600.00	4,919.47	4,740.13	4,729.48	39.09	20.92	177.06	664.47	-99.91	3,150.16	3,101.85	48.31	65.204		
5,700.00	5,003.71	4,821.00	4,810.18	39.88	21.27	177.07	669.35	-101.97	3,208.97	3,159.79	49.18	65.245		
5,800.00	5,088.06	4,901.99	4,891.00	40.67	21.63	177.09	674.24	-104.04	3,267.63	3,217.58	50.06	65.281		
5,900.00	5,173.83	4,984.53	4,973.37	41.44	21.99	177.16	679.23	-106.14	3,324.07	3,273.14	50.93	65.266		
6,000.00	5,261.34	5,069.00	5,057.65	42.18	22.36	177.22	684.33	-108.30	3,377.60	3,325.79	51.81	65.190		
6,100.00	5,350.49	5,155.27	5,143.74	42.88	22.74	177.27	689.54	-110.50	3,428.15	3,375.45	52.70	65.054		
6,200.00	5,441.16	5,243.26	5,231.53	43.56	23.12	177.31	694.86	-112.75	3,475.66	3,422.08	53.58	64.865		
6,300.00	5,533.25	5,332.84	5,320.93	44.20	23.52	177.35	700.27	-115.03	3,520.08	3,465.61	54.47	64.625		
6,400.00	5,626.65	5,423.92	5,411.81	44.82	23.91	177.37	705.77	-117.35	3,561.34	3,505.99	55.35	64.339		
6,500.00	5,721.23	5,516.38	5,504.07	45.40	24.32	177.39	711.36	-119.71	3,599.41	3,543.17	56.23	64.011		
6,600.00	5,816.89	5,610.11	5,597.60	45.94	24.73	177.41	717.02	-122.11	3,634.22	3,577.12	57.10	63.643		
6,700.00	5,913.51	5,705.00	5,692.28	46.45	25.15	177.41	722.75	-124.53	3,665.75	3,607.79	57.97	63.240		
6,800.00	6,010.97	5,800.92	5,788.00	46.93	25.57	177.42	728.55	-126.97	3,693.96	3,635.14	58.82	62.803		
6,900.00	6,109.15	5,902.23	5,884.63	47.38	26.01	177.41	734.40	-129.45	3,718.80	3,659.12	59.68	62.315		
7,000.00	6,207.93	5,995.42	5,982.07	47.80	26.42	177.41	740.30	-131.94	3,740.25	3,679.77	60.48	61.839		
7,100.00	6,307.19	6,106.25	6,080.20	48.18	26.91	177.39	746.24	-134.45	3,758.28	3,696.93	61.35	61.260		
7,200.00	6,406.82	6,207.35	6,178.89	48.53	27.35	177.37	752.21	-136.97	3,772.88	3,710.73	62.15	60.702		
7,300.00	6,506.68	6,292.00	6,278.02	48.84	27.73	177.35	758.21	-139.51	3,784.02	3,721.15	62.87	60.192		
7,400.00	6,606.66	6,408.33	6,377.47	49.10	28.24	90.30	764.23	-142.05	3,791.69	3,728.01	63.68	59.542		
7,500.00	6,706.21	6,508.79	6,476.80	49.35	28.68	89.84	770.25	-144.59	3,797.76	3,733.34	64.42	58.956		
7,600.00	6,803.22	6,588.62	6,574.00	49.59	29.03	89.60	776.13	-147.07	3,803.84	3,738.79	65.05	58.475		
7,700.00	6,895.32	6,683.70	6,668.83	49.82	29.45	89.55	781.88	-150.57	3,810.04	3,744.29	65.75	57.945		
7,800.00	6,980.23	6,785.00	6,768.49	50.03	29.90	89.56	787.99	-167.01	3,816.36	3,749.81	66.55	57.346		
7,900.00	7,055.85	6,893.77	6,871.13	50.21	30.38	89.61	794.40	-202.02	3,822.64	3,755.16	67.48	56.652		
8,000.00	7,120.34	7,011.43	6,973.70	50.36	30.92	89.70	800.93	-258.97	3,828.66	3,760.08	68.58	55.829		
8,100.00	7,172.10	7,139.30	7,071.22	50.47	31.56	89.81	807.30	-341.09	3,834.20	3,764.27	69.93	54.829		
8,200.00	7,209.85	7,278.14	7,156.26	50.55	32.41	89.95	813.08	-450.34	3,838.97	3,767.33	71.64	53.585		
8,300.00	7,232.68	7,427.57	7,219.07	50.61	33.63	90.07	817.67	-585.47	3,842.68	3,768.84	73.84	52.040		
8,400.00	7,240.00	7,585.39	7,249.42	50.65	35.30	90.14	820.41	-739.91	3,845.07	3,768.50	76.57	50.216		
8,500.00	7,239.60	7,703.34	7,250.74	50.69	36.78	90.16	821.19	-857.81	3,846.31	3,767.15	79.16	48.587		
8,600.00	7,239.19	7,803.33	7,250.37	50.75	38.21	90.16	821.75	-957.80	3,847.49	3,765.63	81.87	46.997		
8,700.00	7,238.78	7,903.32	7,250.01	50.85	39.80	90.16	822.32	-1,057.79	3,848.67	3,763.80	84.87	45.347		
8,800.00	7,238.38	8,003.32	7,249.64	51.02	41.53	90.16	822.89	-1,157.79	3,849.85	3,761.71	88.14	43.677		
8,900.00	7,237.97	8,103.31	7,249.27	51.32	43.37	90.17	823.45	-1,257.78	3,851.03	3,759.38	91.66	42.016		
9,000.00	7,237.57	8,203.30	7,248.91	51.95	45.33	90.17	824.02	-1,357.77	3,852.21	3,756.83	95.38	40.387		
9,100.00	7,237.16	8,303.29	7,248.54	53.10	47.37	90.17	824.59	-1,457.76	3,853.39	3,754.09	99.30	38.806		
9,200.00	7,236.76	8,403.29	7,248.18	54.69	49.50	90.17	825.15	-1,557.75	3,854.57	3,751.19	103.38	37.284		
9,300.00	7,236.35	8,503.28	7,247.81	56.53	51.69	90.17	825.72	-1,657.74	3,855.75	3,748.13	107.62	35.829		
9,400.00	7,235.94	8,603.27	7,247.44	58.53	53.95	90.17	826.29	-1,757.73	3,856.93	3,744.95	111.98	34.443		
9,500.00	7,235.54	8,703.27	7,247.08	60.62	56.27	90.17	826.85	-1,857.72	3,858.11	3,741.65	116.46	33.128		
9,600.00	7,235.13	8,803.26	7,246.71	62.80	58.63	90.17	827.42	-1,957.71	3,859.29	3,738.24	121.05	31.883		
9,700.00	7,234.73	8,903.25	7,246.34	65.03	61.04	90.17	827.99	-2,057.70	3,860.47	3,734.74	125.73	30.706		
9,800.00	7,234.32	9,003.25	7,245.98	67.32	63.48	90.17	828.55	-2,157.69	3,861.65	3,731.16	130.49	29.594		
9,900.00	7,233.92	9,103.24	7,245.61	69.66	65.96	90.17	829.12	-2,257.68	3,862.83	3,727.51	135.32	28.546		
10,000.00	7,233.51	9,203.23	7,245.25	72.03	68.46	90.17	829.69	-2,357.67	3,864.01	3,723.78	140.22	27.556		
10,100.00	7,233.10	9,303.22	7,244.88	74.45	71.00	90.17	830.25	-2,457.67	3,865.19	3,720.00	145.18	26.623		
10,200.00	7,232.70	9,403.22	7,244.51	76.89	73.55	90.17	830.82	-2,557.66	3,866.37	3,716.17	150.20	25.742		
10,300.00	7,232.29	9,503.21	7,244.15	79.36	76.13	90.17	831.39	-2,657.65	3,867.54	3,712.28	155.26	24.910		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	9,603.20	7,243.78	81.86	78.73	90.17	831.96	-2,757.64	3,868.72	3,708.35	160.37	24.124		
10,500.00	7,231.48	9,703.20	7,243.41	84.38	81.35	90.17	832.52	-2,857.63	3,869.90	3,704.38	165.52	23.380		
10,600.00	7,231.08	9,803.19	7,243.05	86.93	83.98	90.17	833.09	-2,957.62	3,871.08	3,700.38	170.70	22.677		
10,700.00	7,230.67	9,903.18	7,242.68	89.49	86.63	90.18	833.66	-3,057.61	3,872.26	3,696.34	175.92	22.011		
10,800.00	7,230.26	10,003.18	7,242.32	92.07	89.29	90.18	834.22	-3,157.60	3,873.44	3,692.27	181.17	21.380		
10,900.00	7,229.86	10,103.17	7,241.95	94.67	91.96	90.18	834.79	-3,257.59	3,874.62	3,688.18	186.44	20.782		
11,000.00	7,229.45	10,203.16	7,241.58	97.28	94.65	90.18	835.36	-3,357.58	3,875.80	3,684.06	191.74	20.213		
11,100.00	7,229.05	10,303.15	7,241.22	99.90	97.34	90.18	835.92	-3,457.57	3,876.98	3,679.91	197.07	19.673		
11,200.00	7,228.64	10,403.15	7,240.85	102.54	100.05	90.18	836.49	-3,557.56	3,878.16	3,675.74	202.41	19.159		
11,300.00	7,228.24	10,503.14	7,240.49	105.19	102.76	90.18	837.06	-3,657.55	3,879.34	3,671.56	207.78	18.670		
11,400.00	7,227.83	10,603.13	7,240.12	107.85	105.48	90.18	837.62	-3,757.55	3,880.52	3,667.35	213.16	18.204		
11,500.00	7,227.42	10,703.13	7,239.75	110.52	108.20	90.18	838.19	-3,857.54	3,881.70	3,663.13	218.57	17.760		
11,600.00	7,227.02	10,803.12	7,239.39	113.20	110.94	90.18	838.76	-3,957.53	3,882.88	3,658.89	223.98	17.336		
11,700.00	7,226.61	10,903.11	7,239.02	115.89	113.68	90.18	839.32	-4,057.52	3,884.06	3,654.64	229.41	16.930		
11,800.00	7,226.21	11,003.11	7,238.65	118.59	116.43	90.18	839.89	-4,157.51	3,885.24	3,650.38	234.86	16.543		
11,900.00	7,225.80	11,103.10	7,238.29	121.29	119.18	90.18	840.46	-4,257.50	3,886.42	3,646.10	240.32	16.172		
12,000.00	7,225.40	11,203.09	7,237.92	124.00	121.93	90.18	841.02	-4,357.49	3,887.60	3,641.81	245.79	15.817		
12,100.00	7,224.99	11,303.09	7,237.56	126.72	124.70	90.18	841.59	-4,457.48	3,888.77	3,637.50	251.27	15.476		
12,200.00	7,224.58	11,403.08	7,237.19	129.44	127.46	90.18	842.16	-4,557.47	3,889.95	3,633.19	256.76	15.150		
12,300.00	7,224.18	11,503.07	7,236.82	132.17	130.23	90.18	842.72	-4,657.46	3,891.13	3,628.87	262.26	14.837		
12,400.00	7,223.77	11,603.06	7,236.46	134.91	133.01	90.18	843.29	-4,757.45	3,892.31	3,624.54	267.77	14.536		
12,500.00	7,223.37	11,703.06	7,236.09	137.65	135.78	90.18	843.86	-4,857.44	3,893.49	3,620.20	273.29	14.247		
12,600.00	7,222.96	11,803.05	7,235.73	140.39	138.56	90.19	844.43	-4,957.43	3,894.67	3,615.85	278.82	13.968		
12,700.00	7,222.55	11,903.04	7,235.36	143.14	141.35	90.19	844.99	-5,057.43	3,895.85	3,611.49	284.36	13.701		
12,800.00	7,222.15	12,003.04	7,234.99	145.89	144.14	90.19	845.56	-5,157.42	3,897.03	3,607.13	289.90	13.443		
12,900.00	7,221.74	12,103.03	7,234.63	148.65	146.93	90.19	846.13	-5,257.41	3,898.21	3,602.76	295.45	13.194		
13,000.00	7,221.34	12,203.02	7,234.26	151.41	149.72	90.19	846.69	-5,357.40	3,899.39	3,598.39	301.00	12.955		
13,100.00	7,220.93	12,303.02	7,233.89	154.18	152.52	90.19	847.26	-5,457.39	3,900.57	3,594.00	306.56	12.723		
13,200.00	7,220.53	12,403.01	7,233.53	156.94	155.31	90.19	847.83	-5,557.38	3,901.75	3,589.62	312.13	12.500		
13,300.00	7,220.12	12,503.00	7,233.16	159.72	158.11	90.19	848.39	-5,657.37	3,902.93	3,585.22	317.70	12.285		
13,400.00	7,219.71	12,602.99	7,232.80	162.49	160.92	90.19	848.96	-5,757.36	3,904.11	3,580.82	323.28	12.076		
13,500.00	7,219.31	12,702.99	7,232.43	165.27	163.72	90.19	849.53	-5,857.35	3,905.29	3,576.42	328.87	11.875		
13,600.00	7,218.90	12,802.98	7,232.06	168.05	166.53	90.19	850.09	-5,957.34	3,906.47	3,572.01	334.45	11.680		
13,700.00	7,218.50	12,902.97	7,231.70	170.83	169.34	90.19	850.66	-6,057.33	3,907.65	3,567.60	340.05	11.492		
13,800.00	7,218.09	13,002.97	7,231.33	173.61	172.15	90.19	851.23	-6,157.32	3,908.82	3,563.18	345.64	11.309		
13,900.00	7,217.69	13,102.96	7,230.97	176.40	174.96	90.19	851.79	-6,257.31	3,910.00	3,558.76	351.24	11.132		
14,000.00	7,217.28	13,202.95	7,230.60	179.19	177.77	90.19	852.36	-6,357.30	3,911.18	3,554.34	356.85	10.960		
14,100.00	7,216.87	13,302.95	7,230.23	181.98	180.59	90.19	852.93	-6,457.30	3,912.36	3,549.91	362.45	10.794		
14,200.00	7,216.47	13,402.94	7,229.87	184.78	183.40	90.19	853.49	-6,557.29	3,913.54	3,545.48	368.06	10.633		
14,300.00	7,216.06	13,502.93	7,229.50	187.57	186.22	90.19	854.06	-6,657.28	3,914.72	3,541.04	373.68	10.476		
14,400.00	7,215.66	13,602.93	7,229.13	190.37	189.04	90.19	854.63	-6,757.27	3,915.90	3,536.61	379.30	10.324		
14,500.00	7,215.25	13,702.92	7,228.77	193.17	191.86	90.19	855.19	-6,857.26	3,917.08	3,532.16	384.92	10.176		
14,600.00	7,214.85	13,802.91	7,228.40	195.97	194.68	90.20	855.76	-6,957.25	3,918.26	3,527.72	390.54	10.033		
14,700.00	7,214.44	13,902.90	7,228.04	198.77	197.51	90.20	856.33	-7,057.24	3,919.44	3,523.27	396.17	9.893		
14,800.00	7,214.03	14,002.90	7,227.67	201.58	200.33	90.20	856.90	-7,157.23	3,920.62	3,518.82	401.80	9.758		
14,900.00	7,213.63	14,102.89	7,227.30	204.38	203.15	90.20	857.46	-7,257.22	3,921.80	3,514.37	407.43	9.626		
15,000.00	7,213.22	14,202.88	7,226.94	207.19	205.98	90.20	858.03	-7,357.21	3,922.98	3,509.92	413.06	9.497		
15,100.00	7,212.82	14,302.88	7,226.57	210.00	208.81	90.20	858.60	-7,457.20	3,924.16	3,505.46	418.70	9.372		
15,200.00	7,212.41	14,402.87	7,226.21	212.81	211.64	90.20	859.16	-7,557.19	3,925.34	3,501.00	424.34	9.251		
15,300.00	7,212.01	14,502.86	7,225.84	215.62	214.47	90.20	859.73	-7,657.18	3,926.52	3,496.54	429.98	9.132		
15,400.00	7,211.60	14,602.86	7,225.47	218.43	217.29	90.20	860.30	-7,757.18	3,927.70	3,492.08	435.62	9.016		
15,500.00	7,211.19	14,702.85	7,225.11	221.25	220.13	90.20	860.86	-7,857.17	3,928.88	3,487.61	441.26	8.904		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31C-16-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,600.00	7,210.79	14,802.84	7,224.74	224.06	222.96	90.20	861.43	-7,957.16	3,930.06	3,483.14	446.91	8.794	
15,700.00	7,210.38	14,902.83	7,224.37	226.88	225.79	90.20	862.00	-8,057.15	3,931.23	3,478.67	452.56	8.687	
15,794.94	7,210.00	14,997.77	7,224.03	229.55	228.48	90.20	862.53	-8,152.08	3,932.35	3,474.43	457.92	8.587 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.40	120.21	0.83	120.22					
100.00	100.00	101.00	100.00	3.28	3.28	0.40	120.21	0.83	120.22	113.65	6.57	18.299		
200.00	200.00	201.04	200.04	3.34	3.34	0.40	120.21	0.83	120.22	113.54	6.67	18.010		
300.00	299.98	305.41	304.39	3.44	3.45	177.71	118.28	0.67	120.11	113.21	6.90	17.412		
400.00	399.84	409.77	408.58	3.59	3.61	177.61	112.56	0.20	119.85	112.62	7.24	16.564		
500.00	499.45	514.11	512.48	3.79	3.82	177.43	103.07	-0.59	119.46	111.78	7.68	15.553		
600.00	598.70	618.43	615.95	4.03	4.08	177.18	89.81	-1.69	118.92	110.71	8.21	14.477		
700.00	697.47	722.73	718.83	4.31	4.38	176.86	72.82	-3.11	118.25	109.42	8.82	13.404		
800.00	795.62	826.99	821.00	4.64	4.73	176.47	52.11	-4.83	117.44	107.95	9.49	12.377		
900.00	893.06	931.22	922.30	5.00	5.12	176.00	27.72	-6.86	116.49	106.29	10.20	11.419		
988.99	979.06	1,022.64	1,010.43	5.35	5.49	175.53	3.47	-8.87	115.72	104.86	10.86	10.659 CC		
1,000.00	989.64	1,033.65	1,021.02	5.40	5.54	175.47	0.48	-9.12	115.74	104.81	10.94	10.583 ES		
1,100.00	1,085.27	1,133.62	1,117.19	5.83	5.97	175.06	-26.71	-11.38	117.87	106.18	11.69	10.084		
1,200.00	1,179.82	1,233.45	1,213.24	6.29	6.42	174.81	-53.85	-13.64	123.47	110.99	12.48	9.891		
1,300.00	1,273.17	1,333.04	1,309.05	6.79	6.88	174.72	-80.93	-15.89	132.55	119.23	13.32	9.955		
1,400.00	1,365.21	1,432.24	1,404.49	7.33	7.36	174.75	-107.91	-18.14	145.08	130.90	14.18	10.232		
1,500.00	1,455.84	1,530.95	1,499.45	7.89	7.84	174.89	-134.75	-20.37	161.05	145.98	15.07	10.687		
1,600.00	1,544.94	1,629.05	1,593.82	8.50	8.32	175.09	-161.43	-22.59	180.44	164.46	15.98	11.289		
1,700.00	1,632.39	1,726.41	1,687.49	9.13	8.81	175.32	-187.90	-24.79	203.23	186.32	16.92	12.013		
1,800.00	1,718.11	1,822.91	1,780.33	9.80	9.30	175.56	-214.14	-26.97	229.41	211.54	17.87	12.838		
1,900.00	1,802.44	1,918.69	1,872.48	10.49	9.80	175.82	-240.19	-29.14	258.11	239.28	18.83	13.705		
2,000.00	1,886.68	2,014.43	1,964.58	11.20	10.29	176.04	-266.22	-31.30	286.98	267.17	19.81	14.490		
2,100.00	1,970.92	2,110.17	2,056.69	11.93	10.79	176.22	-292.26	-33.47	315.84	295.05	20.79	15.192		
2,200.00	2,055.17	2,205.91	2,148.79	12.66	11.29	176.37	-318.29	-35.63	344.71	322.93	21.78	15.824		
2,300.00	2,139.41	2,301.65	2,240.90	13.40	11.79	176.50	-344.33	-37.80	373.58	350.79	22.79	16.393		
2,400.00	2,223.66	2,402.61	2,335.01	14.14	12.33	176.61	-370.36	-39.96	402.45	378.63	23.83	16.892		
2,500.00	2,307.90	2,506.87	2,425.11	14.89	12.88	176.70	-396.40	-42.13	431.32	406.44	24.88	17.333		
2,600.00	2,392.14	2,588.87	2,517.22	15.65	13.31	176.78	-422.43	-44.29	460.20	434.35	25.84	17.806		
2,700.00	2,476.39	2,684.61	2,609.32	16.41	13.83	176.86	-448.46	-46.46	489.07	462.20	26.88	18.198		
2,800.00	2,560.63	2,780.34	2,701.43	17.17	14.34	176.92	-474.50	-48.62	517.95	490.04	27.91	18.557		
2,900.00	2,644.88	2,876.08	2,793.54	17.93	14.85	176.98	-500.53	-50.79	546.82	517.87	28.95	18.888		
3,000.00	2,729.12	2,971.82	2,885.64	18.70	15.37	177.03	-526.57	-52.95	575.70	545.70	29.99	19.194		
3,100.00	2,813.36	3,067.56	2,977.75	19.47	15.88	177.08	-552.60	-55.12	604.57	573.53	31.04	19.477		
3,200.00	2,897.61	3,163.30	3,069.85	20.25	16.40	177.12	-578.63	-57.28	633.45	601.36	32.09	19.740		
3,300.00	2,981.85	3,259.04	3,161.96	21.02	16.91	177.16	-604.67	-59.45	662.33	629.18	33.14	19.984		
3,400.00	3,066.10	3,354.78	3,254.07	21.80	17.43	177.19	-630.70	-61.61	691.20	657.01	34.20	20.212		
3,500.00	3,150.34	3,450.52	3,346.17	22.58	17.95	177.23	-656.74	-63.78	720.08	684.82	35.26	20.424		
3,600.00	3,234.58	3,546.26	3,438.28	23.35	18.47	177.26	-682.77	-65.94	748.96	712.64	36.32	20.624		
3,700.00	3,318.83	3,642.00	3,530.38	24.13	18.99	177.28	-708.81	-68.11	777.84	740.46	37.38	20.811		
3,800.00	3,403.07	3,737.73	3,622.49	24.92	19.51	177.31	-734.84	-70.27	806.71	768.27	38.44	20.986		
3,900.00	3,487.32	3,833.47	3,714.59	25.70	20.03	177.33	-760.87	-72.44	835.59	796.09	39.51	21.151		
4,000.00	3,571.56	3,929.21	3,806.70	26.48	20.55	177.36	-786.91	-74.60	864.47	823.90	40.57	21.307		
4,100.00	3,655.80	4,024.95	3,898.81	27.27	21.07	177.38	-812.94	-76.77	893.35	851.71	41.64	21.454		
4,200.00	3,740.05	4,120.69	3,990.91	28.05	21.60	177.40	-838.98	-78.93	922.23	879.52	42.71	21.594		
4,300.00	3,824.29	4,216.43	4,083.02	28.84	22.12	177.42	-865.01	-81.10	951.10	907.33	43.78	21.725		
4,400.00	3,908.54	4,312.17	4,175.12	29.62	22.64	177.43	-891.04	-83.26	979.98	935.13	44.85	21.850		
4,500.00	3,992.78	4,407.91	4,267.23	30.41	23.16	177.45	-917.08	-85.43	1,008.86	962.94	45.92	21.969		
4,600.00	4,077.03	4,503.65	4,359.34	31.20	23.69	177.47	-943.11	-87.59	1,037.74	990.74	47.00	22.082		
4,700.00	4,161.27	4,600.61	4,451.44	31.98	24.22	177.48	-969.15	-89.76	1,066.62	1,018.54	48.08	22.186		
4,800.00	4,245.51	4,695.12	4,543.55	32.77	24.73	177.49	-995.18	-91.92	1,095.50	1,046.35	49.14	22.291		
4,900.00	4,329.76	4,790.86	4,635.65	33.56	25.26	177.51	-1,021.22	-94.09	1,124.38	1,074.16	50.22	22.389		
5,000.00	4,414.00	4,886.60	4,727.76	34.35	25.78	177.52	-1,047.25	-96.25	1,153.25	1,101.96	51.30	22.482		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	4,982.34	4,819.87	35.14	26.31	177.53	-1,073.28	-98.42	1,182.13	1,129.76	52.37	22.571		
5,200.00	4,582.49	5,078.08	4,911.97	35.93	26.83	177.54	-1,099.32	-100.58	1,211.01	1,157.56	53.45	22.656		
5,300.00	4,666.73	5,173.82	5,004.08	36.72	27.36	177.55	-1,125.35	-102.75	1,239.89	1,185.36	54.53	22.738		
5,400.00	4,750.98	5,269.56	5,096.18	37.51	27.88	177.57	-1,151.39	-104.91	1,268.77	1,213.16	55.61	22.816		
5,500.00	4,835.22	5,365.30	5,188.29	38.30	28.41	177.57	-1,177.42	-107.08	1,297.65	1,240.96	56.69	22.891		
5,600.00	4,919.47	5,461.04	5,280.39	39.09	28.93	177.58	-1,203.45	-109.24	1,326.53	1,268.76	57.77	22.962		
5,700.00	5,003.71	5,556.78	5,372.50	39.88	29.46	177.59	-1,229.49	-111.41	1,355.41	1,296.56	58.85	23.032		
5,800.00	5,088.06	5,652.57	5,464.66	40.67	29.98	177.61	-1,255.54	-113.58	1,384.10	1,324.17	59.93	23.095		
5,900.00	5,173.83	5,749.10	5,557.53	41.44	30.51	177.64	-1,281.79	-115.76	1,410.18	1,349.18	61.01	23.115		
6,000.00	5,261.34	5,846.49	5,651.22	42.18	31.05	177.65	-1,308.27	-117.96	1,432.89	1,370.81	62.07	23.083		
6,100.00	5,350.49	5,944.60	5,745.61	42.88	31.59	177.66	-1,334.95	-120.18	1,452.18	1,389.04	63.13	23.002		
6,200.00	5,441.16	6,043.33	5,840.59	43.56	32.13	177.66	-1,361.80	-122.41	1,468.04	1,403.85	64.18	22.873		
6,300.00	5,533.25	6,142.55	5,936.05	44.20	32.68	177.65	-1,388.78	-124.66	1,480.44	1,415.23	65.22	22.700		
6,400.00	5,626.65	6,242.15	6,031.86	44.82	33.22	177.63	-1,415.86	-126.91	1,489.38	1,423.15	66.24	22.486		
6,500.00	5,721.23	6,341.99	6,127.92	45.40	33.77	177.61	-1,443.01	-129.17	1,494.84	1,427.61	67.24	22.232		
6,600.00	5,816.89	6,441.96	6,224.09	45.94	34.32	177.57	-1,470.19	-131.43	1,496.82	1,428.60	68.22	21.941		
6,700.00	5,913.51	6,541.94	6,320.28	46.45	34.87	177.53	-1,497.38	-133.69	1,495.31	1,426.13	69.18	21.614		
6,800.00	6,010.97	6,641.80	6,416.35	46.93	35.42	177.48	-1,524.54	-135.95	1,490.32	1,420.20	70.12	21.253		
6,900.00	6,109.15	6,741.43	6,512.19	47.38	35.97	177.42	-1,551.63	-138.20	1,481.85	1,410.81	71.04	20.859		
7,000.00	6,207.93	6,840.69	6,607.70	47.80	36.52	177.35	-1,578.62	-140.44	1,469.91	1,397.98	71.93	20.435		
7,100.00	6,307.19	6,939.94	6,703.05	48.18	37.06	177.17	-1,605.59	-145.04	1,454.51	1,381.70	72.81	19.978		
7,200.00	6,406.82	7,035.96	6,793.78	48.53	37.57	176.45	-1,631.35	-162.60	1,435.75	1,362.11	73.64	19.498		
7,300.00	6,506.68	7,124.30	6,874.12	48.84	38.00	175.23	-1,654.26	-191.11	1,414.17	1,339.80	74.37	19.015		
7,400.00	6,606.66	7,202.76	6,941.66	49.10	38.35	86.76	-1,673.60	-225.91	1,390.63	1,315.66	74.96	18.551		
7,500.00	6,706.21	7,274.95	6,999.73	49.35	38.65	87.41	-1,690.30	-265.34	1,367.31	1,291.88	75.43	18.128		
7,600.00	6,803.22	7,345.10	7,051.68	49.59	38.91	88.02	-1,705.31	-309.97	1,345.77	1,270.00	75.77	17.762		
7,700.00	6,895.32	7,413.77	7,097.65	49.82	39.14	88.59	-1,718.67	-359.16	1,326.26	1,250.27	75.99	17.452		
7,800.00	6,980.23	7,481.39	7,137.67	50.03	39.36	89.08	-1,730.37	-412.36	1,308.99	1,232.87	76.13	17.195		
7,900.00	7,055.85	7,550.00	7,172.48	50.21	39.56	89.48	-1,740.64	-470.54	1,294.15	1,217.89	76.26	16.970		
8,000.00	7,120.34	7,614.65	7,199.59	50.36	39.75	89.85	-1,748.74	-528.64	1,281.87	1,205.46	76.41	16.777		
8,100.00	7,172.10	7,680.67	7,221.27	50.47	39.94	90.10	-1,755.33	-590.62	1,272.26	1,195.50	76.76	16.574		
8,200.00	7,209.85	7,750.00	7,237.26	50.55	40.17	90.25	-1,760.35	-657.86	1,265.41	1,187.95	77.46	16.335		
8,300.00	7,232.68	7,812.08	7,245.52	50.61	40.42	90.36	-1,763.15	-719.29	1,261.36	1,182.94	78.42	16.085		
8,393.18	7,240.05	7,873.77	7,248.00	50.64	40.72	90.36	-1,764.31	-780.16	1,260.14	1,180.42	79.72	15.807		
8,400.00	7,240.00	7,879.85	7,247.96	50.65	40.76	90.36	-1,764.35	-786.98	1,260.14	1,180.28	79.86	15.780		
8,500.00	7,239.60	7,979.85	7,247.36	50.69	41.46	90.35	-1,764.93	-886.98	1,260.17	1,177.99	82.18	15.335		
8,600.00	7,239.19	8,079.85	7,246.77	50.75	42.44	90.34	-1,765.51	-986.97	1,260.20	1,175.39	84.81	14.859		
8,700.00	7,238.78	8,179.85	7,246.17	50.85	43.69	90.34	-1,766.10	-1,086.97	1,260.22	1,172.49	87.73	14.364		
8,800.00	7,238.38	8,279.85	7,245.58	51.02	45.15	90.33	-1,766.68	-1,186.97	1,260.25	1,169.33	90.93	13.860		
8,900.00	7,237.97	8,379.85	7,244.98	51.32	46.79	90.32	-1,767.26	-1,286.96	1,260.28	1,165.92	94.35	13.357		
9,000.00	7,237.57	8,479.85	7,244.39	51.95	48.56	90.31	-1,767.85	-1,386.96	1,260.31	1,162.31	98.00	12.861		
9,100.00	7,237.16	8,579.85	7,243.79	53.10	50.45	90.30	-1,768.43	-1,486.96	1,260.33	1,158.50	101.83	12.377		
9,200.00	7,236.76	8,679.85	7,243.19	54.69	52.44	90.29	-1,769.02	-1,586.95	1,260.36	1,154.53	105.83	11.909		
9,300.00	7,236.35	8,779.85	7,242.60	56.53	54.51	90.28	-1,769.60	-1,686.95	1,260.39	1,150.40	109.99	11.459		
9,400.00	7,235.94	8,879.85	7,242.00	58.53	56.66	90.28	-1,770.18	-1,786.95	1,260.42	1,146.14	114.28	11.029		
9,500.00	7,235.54	8,979.85	7,241.41	60.62	58.87	90.27	-1,770.77	-1,886.94	1,260.44	1,141.76	118.69	10.620		
9,600.00	7,235.13	9,079.85	7,240.81	62.80	61.14	90.26	-1,771.35	-1,986.94	1,260.47	1,137.27	123.20	10.231		
9,700.00	7,234.73	9,179.85	7,240.21	65.03	63.45	90.25	-1,771.93	-2,086.93	1,260.50	1,132.68	127.82	9.862		
9,800.00	7,234.32	9,279.85	7,239.62	67.32	65.82	90.24	-1,772.52	-2,186.93	1,260.53	1,128.01	132.52	9.512		
9,900.00	7,233.92	9,379.85	7,239.02	69.66	68.21	90.23	-1,773.10	-2,286.93	1,260.56	1,123.26	137.29	9.182		
10,000.00	7,233.51	9,479.85	7,238.43	72.03	70.65	90.22	-1,773.69	-2,386.92	1,260.58	1,118.45	142.14	8.869		
10,100.00	7,233.10	9,579.85	7,237.83	74.45	73.12	90.21	-1,774.27	-2,486.92	1,260.61	1,113.57	147.04	8.573		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,232.70	9,679.85	7,237.23	76.89	75.61	90.21	-1,774.85	-2,586.92	1,260.64	1,108.63	152.01	8.293		
10,300.00	7,232.29	9,779.85	7,236.64	79.36	78.13	90.20	-1,775.44	-2,686.91	1,260.67	1,103.64	157.02	8.029		
10,400.00	7,231.89	9,879.85	7,236.04	81.86	80.67	90.19	-1,776.02	-2,786.91	1,260.70	1,098.61	162.09	7.778		
10,500.00	7,231.48	9,979.85	7,235.45	84.38	83.24	90.18	-1,776.60	-2,886.91	1,260.72	1,093.54	167.19	7.541		
10,600.00	7,231.08	10,079.85	7,234.85	86.93	85.82	90.17	-1,777.19	-2,986.90	1,260.75	1,088.42	172.33	7.316		
10,700.00	7,230.67	10,179.85	7,234.26	89.49	88.42	90.16	-1,777.77	-3,086.90	1,260.78	1,083.27	177.51	7.103		
10,800.00	7,230.26	10,279.85	7,233.66	92.07	91.03	90.15	-1,778.36	-3,186.89	1,260.81	1,078.09	182.72	6.900		
10,900.00	7,229.86	10,379.85	7,233.06	94.67	93.66	90.15	-1,778.94	-3,286.89	1,260.84	1,072.88	187.96	6.708		
11,000.00	7,229.45	10,479.84	7,232.47	97.28	96.31	90.14	-1,779.52	-3,386.89	1,260.86	1,067.64	193.22	6.525		
11,100.00	7,229.05	10,579.84	7,231.87	99.90	98.96	90.13	-1,780.11	-3,486.88	1,260.89	1,062.38	198.51	6.352		
11,200.00	7,228.64	10,679.84	7,231.28	102.54	101.63	90.12	-1,780.69	-3,586.88	1,260.92	1,057.10	203.83	6.186		
11,300.00	7,228.24	10,779.84	7,230.68	105.19	104.31	90.11	-1,781.28	-3,686.88	1,260.95	1,051.79	209.16	6.029		
11,400.00	7,227.83	10,879.84	7,230.08	107.85	106.99	90.10	-1,781.86	-3,786.87	1,260.98	1,046.46	214.51	5.878		
11,500.00	7,227.42	10,979.84	7,229.49	110.52	109.69	90.09	-1,782.44	-3,886.87	1,261.01	1,041.12	219.89	5.735		
11,600.00	7,227.02	11,079.84	7,228.89	113.20	112.39	90.09	-1,783.03	-3,986.86	1,261.03	1,035.76	225.28	5.598		
11,700.00	7,226.61	11,179.84	7,228.30	115.89	115.10	90.08	-1,783.61	-4,086.86	1,261.06	1,030.38	230.68	5.467		
11,800.00	7,226.21	11,279.84	7,227.70	118.59	117.82	90.07	-1,784.19	-4,186.86	1,261.09	1,024.99	236.10	5.341		
11,900.00	7,225.80	11,379.84	7,227.11	121.29	120.54	90.06	-1,784.78	-4,286.85	1,261.12	1,019.59	241.53	5.221		
12,000.00	7,225.40	11,479.84	7,226.51	124.00	123.27	90.05	-1,785.36	-4,386.85	1,261.15	1,014.17	246.98	5.106		
12,100.00	7,224.99	11,579.84	7,225.91	126.72	126.01	90.04	-1,785.95	-4,486.85	1,261.18	1,008.74	252.44	4.996		
12,200.00	7,224.58	11,679.84	7,225.32	129.44	128.75	90.03	-1,786.53	-4,586.84	1,261.21	1,003.30	257.91	4.890		
12,300.00	7,224.18	11,779.84	7,224.72	132.17	131.50	90.02	-1,787.11	-4,686.84	1,261.23	997.85	263.39	4.789		
12,400.00	7,223.77	11,879.84	7,224.13	134.91	134.25	90.02	-1,787.70	-4,786.84	1,261.26	992.39	268.88	4.691		
12,500.00	7,223.37	11,979.84	7,223.53	137.65	137.00	90.01	-1,788.28	-4,886.83	1,261.29	986.92	274.37	4.597		
12,600.00	7,222.96	12,079.84	7,222.93	140.39	139.76	90.00	-1,788.86	-4,986.83	1,261.32	981.44	279.88	4.507		
12,700.00	7,222.55	12,179.84	7,222.34	143.14	142.53	89.99	-1,789.45	-5,086.82	1,261.35	975.95	285.40	4.420		
12,800.00	7,222.15	12,279.84	7,221.74	145.89	145.29	89.98	-1,790.03	-5,186.82	1,261.38	970.46	290.92	4.336		
12,900.00	7,221.74	12,379.84	7,221.15	148.65	148.06	89.97	-1,790.62	-5,286.82	1,261.41	964.96	296.45	4.255		
13,000.00	7,221.34	12,479.84	7,220.55	151.41	150.84	89.96	-1,791.20	-5,386.81	1,261.44	959.45	301.99	4.177		
13,100.00	7,220.93	12,579.84	7,219.96	154.18	153.62	89.96	-1,791.78	-5,486.81	1,261.46	953.93	307.53	4.102		
13,200.00	7,220.53	12,679.84	7,219.36	156.94	156.40	89.95	-1,792.37	-5,586.81	1,261.49	948.41	313.08	4.029		
13,300.00	7,220.12	12,779.84	7,218.76	159.72	159.18	89.94	-1,792.95	-5,686.80	1,261.52	942.88	318.64	3.959		
13,400.00	7,219.71	12,879.84	7,218.17	162.49	161.97	89.93	-1,793.53	-5,786.80	1,261.55	937.35	324.20	3.891		
13,500.00	7,219.31	12,979.84	7,217.57	165.27	164.75	89.92	-1,794.12	-5,886.80	1,261.58	931.81	329.77	3.826		
13,600.00	7,218.90	13,079.84	7,216.98	168.05	167.54	89.91	-1,794.70	-5,986.79	1,261.61	926.27	335.34	3.762		
13,700.00	7,218.50	13,179.84	7,216.38	170.83	170.34	89.90	-1,795.29	-6,086.79	1,261.64	920.72	340.92	3.701		
13,800.00	7,218.09	13,279.84	7,215.78	173.61	173.13	89.90	-1,795.87	-6,186.78	1,261.67	915.17	346.50	3.641		
13,900.00	7,217.69	13,379.84	7,215.19	176.40	175.93	89.89	-1,796.45	-6,286.78	1,261.70	909.61	352.08	3.584		
14,000.00	7,217.28	13,479.84	7,214.59	179.19	178.73	89.88	-1,797.04	-6,386.78	1,261.72	904.05	357.67	3.528		
14,100.00	7,216.87	13,579.84	7,214.00	181.98	181.53	89.87	-1,797.62	-6,486.77	1,261.75	898.49	363.26	3.473		
14,200.00	7,216.47	13,679.84	7,213.40	184.78	184.33	89.86	-1,798.21	-6,586.77	1,261.78	892.92	368.86	3.421		
14,300.00	7,216.06	13,779.84	7,212.80	187.57	187.14	89.85	-1,798.79	-6,686.77	1,261.81	887.35	374.46	3.370		
14,400.00	7,215.66	13,879.84	7,212.21	190.37	189.94	89.84	-1,799.37	-6,786.76	1,261.84	881.78	380.07	3.320		
14,500.00	7,215.25	13,979.84	7,211.61	193.17	192.75	89.83	-1,799.96	-6,886.76	1,261.87	876.20	385.67	3.272		
14,600.00	7,214.85	14,079.84	7,211.02	195.97	195.56	89.83	-1,800.54	-6,986.76	1,261.90	870.62	391.28	3.225		
14,700.00	7,214.44	14,179.84	7,210.42	198.77	198.37	89.82	-1,801.12	-7,086.75	1,261.93	865.03	396.90	3.179		
14,800.00	7,214.03	14,279.84	7,209.83	201.58	201.18	89.81	-1,801.71	-7,186.75	1,261.96	859.44	402.51	3.135		
14,900.00	7,213.63	14,379.84	7,209.23	204.38	203.99	89.80	-1,802.29	-7,286.74	1,261.99	853.85	408.13	3.092		
15,000.00	7,213.22	14,479.84	7,208.63	207.19	206.81	89.79	-1,802.88	-7,386.74	1,262.02	848.26	413.75	3.050		
15,100.00	7,212.82	14,579.84	7,208.04	210.00	209.62	89.78	-1,803.46	-7,486.74	1,262.05	842.67	419.38	3.009		
15,200.00	7,212.41	14,679.84	7,207.44	212.81	212.44	89.77	-1,804.04	-7,586.73	1,262.08	837.07	425.01	2.970		
15,300.00	7,212.01	14,779.84	7,206.85	215.62	215.26	89.77	-1,804.63	-7,686.73	1,262.11	831.47	430.63	2.931		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33C-16-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,400.00	7,211.60	14,879.84	7,206.25	218.43	218.08	89.76	-1,805.21	-7,786.73	1,262.13	825.87	436.27	2.893	
15,500.00	7,211.19	14,979.84	7,205.65	221.25	220.90	89.75	-1,805.79	-7,886.72	1,262.16	820.27	441.90	2.856	
15,600.00	7,210.79	15,079.84	7,205.06	224.06	223.72	89.74	-1,806.38	-7,986.72	1,262.19	814.66	447.53	2.820	
15,700.00	7,210.38	15,179.84	7,204.46	226.88	226.54	89.73	-1,806.96	-8,086.71	1,262.22	809.05	453.17	2.785	
15,702.30	7,210.37	15,182.13	7,204.45	226.94	226.61	89.73	-1,806.98	-8,089.01	1,262.22	808.92	453.30	2.785	
15,794.94	7,210.00	15,258.04	7,204.00	229.55	228.75	89.72	-1,807.42	-8,164.92	1,262.36	804.50	457.86	2.757 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.46	379.97	3.06	379.98					
100.00	100.00	102.00	100.00	3.28	3.29	0.46	379.97	3.06	379.98	373.41	6.57	57.837		
200.00	200.00	202.00	200.00	3.34	3.34	0.46	379.97	3.06	379.98	373.30	6.68	56.920	CC, ES	
300.00	299.98	301.98	299.98	3.44	3.45	177.82	379.97	3.06	381.72	374.83	6.89	55.422		
400.00	399.84	401.84	399.84	3.59	3.61	177.85	379.97	3.06	386.95	379.75	7.20	53.752		
500.00	499.45	501.45	499.45	3.79	3.81	177.89	379.97	3.06	395.66	388.06	7.60	52.049		
600.00	598.70	600.70	598.70	4.03	4.05	177.94	379.97	3.06	407.84	399.76	8.08	50.459		
700.00	697.47	707.10	690.89	4.31	4.34	177.83	380.76	1.79	424.30	415.65	8.65	49.056		
800.00	795.62	809.26	788.68	4.64	4.64	177.58	382.30	-0.67	444.89	435.63	9.26	48.056		
900.00	893.06	887.80	885.70	5.00	4.88	177.36	383.82	-3.11	468.89	459.05	9.84	47.661		
1,000.00	989.64	983.97	981.83	5.40	5.20	177.18	385.34	-5.53	496.26	485.74	10.51	47.212		
1,100.00	1,085.27	1,079.13	1,076.94	5.83	5.53	177.04	386.83	-7.93	526.96	515.75	11.21	46.990		
1,200.00	1,179.82	1,173.16	1,170.93	6.29	5.86	176.91	388.31	-10.29	560.97	549.03	11.94	46.974		
1,300.00	1,273.17	1,265.95	1,263.69	6.79	6.20	176.82	389.77	-12.63	598.23	585.54	12.69	47.144		
1,400.00	1,365.21	1,357.39	1,355.08	7.33	6.55	176.74	391.21	-14.93	638.71	625.25	13.45	47.479		
1,500.00	1,455.84	1,447.36	1,445.01	7.89	6.89	176.67	392.62	-17.19	682.34	668.11	14.23	47.959		
1,600.00	1,544.94	1,535.76	1,533.37	8.50	7.23	176.62	394.01	-19.42	729.09	714.07	15.01	48.567		
1,700.00	1,632.39	1,622.47	1,620.05	9.13	7.58	176.58	395.37	-21.60	778.88	763.08	15.80	49.289		
1,800.00	1,718.11	1,707.40	1,704.94	9.80	7.91	176.55	396.71	-23.73	831.67	815.07	16.60	50.113		
1,900.00	1,802.44	1,809.09	1,788.41	10.49	8.32	176.57	398.02	-25.84	886.67	869.21	17.46	50.772		
2,000.00	1,886.68	1,874.33	1,871.80	11.20	8.59	176.62	399.33	-27.93	941.81	923.63	18.19	51.790		
2,100.00	1,970.92	1,957.75	1,955.18	11.93	8.92	176.66	400.65	-30.03	996.95	977.96	18.99	52.498		
2,200.00	2,055.17	2,041.18	2,038.57	12.66	9.27	176.69	401.96	-32.13	1,052.09	1,032.28	19.80	53.124		
2,300.00	2,139.41	2,124.60	2,121.96	13.40	9.61	176.72	403.27	-34.23	1,107.23	1,086.60	20.63	53.680		
2,400.00	2,223.66	2,208.03	2,205.34	14.14	9.95	176.75	404.58	-36.33	1,162.37	1,140.91	21.46	54.175		
2,500.00	2,307.90	2,308.55	2,288.73	14.89	10.37	176.77	405.89	-38.43	1,217.51	1,195.14	22.36	54.444		
2,600.00	2,392.14	2,374.87	2,372.12	15.65	10.65	176.80	407.20	-40.53	1,272.64	1,249.51	23.13	55.015		
2,700.00	2,476.39	2,458.30	2,455.50	16.41	11.00	176.82	408.52	-42.63	1,327.78	1,303.81	23.98	55.374		
2,800.00	2,560.63	2,541.72	2,538.89	17.17	11.35	176.84	409.83	-44.73	1,382.92	1,358.09	24.83	55.698		
2,900.00	2,644.88	2,625.14	2,622.28	17.93	11.70	176.86	411.14	-46.83	1,438.06	1,412.38	25.68	55.992		
3,000.00	2,729.12	2,708.57	2,705.66	18.70	12.05	176.87	412.45	-48.93	1,493.20	1,466.66	26.54	56.259		
3,100.00	2,813.36	2,808.01	2,789.05	19.47	12.47	176.89	413.76	-51.02	1,548.34	1,520.87	27.47	56.363		
3,200.00	2,897.61	2,875.41	2,872.44	20.25	12.76	176.90	415.07	-53.12	1,603.48	1,575.22	28.27	56.726		
3,300.00	2,981.85	2,958.84	2,955.82	21.02	13.12	176.92	416.39	-55.22	1,658.62	1,629.49	29.13	56.931		
3,400.00	3,066.10	3,042.26	3,039.21	21.80	13.47	176.93	417.70	-57.32	1,713.76	1,683.76	30.00	57.119		
3,500.00	3,150.34	3,125.68	3,122.60	22.58	13.83	176.94	419.01	-59.42	1,768.90	1,738.03	30.87	57.293		
3,600.00	3,234.58	3,209.11	3,205.98	23.35	14.18	176.95	420.32	-61.52	1,824.04	1,792.30	31.75	57.453		
3,700.00	3,318.83	3,307.47	3,289.37	24.13	14.60	176.96	421.63	-63.62	1,879.19	1,846.50	32.69	57.489		
3,800.00	3,403.07	3,375.95	3,372.76	24.92	14.90	176.97	422.94	-65.72	1,934.33	1,900.82	33.50	57.739		
3,900.00	3,487.32	3,459.38	3,456.14	25.70	15.26	176.98	424.25	-67.82	1,989.47	1,955.09	34.38	57.867		
4,000.00	3,571.56	3,542.80	3,539.53	26.48	15.62	176.99	425.57	-69.92	2,044.61	2,009.35	35.26	57.987		
4,100.00	3,655.80	3,626.22	3,622.92	27.27	15.97	177.00	426.88	-72.01	2,099.75	2,063.61	36.14	58.098		
4,200.00	3,740.05	3,709.65	3,706.30	28.05	16.33	177.01	428.19	-74.11	2,154.89	2,117.86	37.02	58.201		
4,300.00	3,824.29	3,806.93	3,789.69	28.84	16.75	177.02	429.50	-76.21	2,210.03	2,172.06	37.97	58.207		
4,400.00	3,908.54	3,876.49	3,873.08	29.62	17.05	177.02	430.81	-78.31	2,265.17	2,226.37	38.79	58.389		
4,500.00	3,992.78	3,959.92	3,956.46	30.41	17.41	177.03	432.12	-80.41	2,320.31	2,280.63	39.68	58.475		
4,600.00	4,077.03	4,043.34	4,039.85	31.20	17.77	177.04	433.44	-82.51	2,375.45	2,334.88	40.57	58.555		
4,700.00	4,161.27	4,126.76	4,123.24	31.98	18.13	177.04	434.75	-84.61	2,430.59	2,389.13	41.46	58.630		
4,800.00	4,245.51	4,210.19	4,206.62	32.77	18.50	177.05	436.06	-86.71	2,485.73	2,443.39	42.35	58.701		
4,900.00	4,329.76	4,306.39	4,290.01	33.56	18.91	177.05	437.37	-88.81	2,540.87	2,497.58	43.29	58.693		
5,000.00	4,414.00	4,377.03	4,373.40	34.35	19.22	177.06	438.68	-90.91	2,596.01	2,551.89	44.13	58.831		
5,100.00	4,498.25	4,460.46	4,456.78	35.14	19.58	177.07	439.99	-93.01	2,651.15	2,606.13	45.02	58.891		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,543.88	4,540.17	35.93	19.94	177.07	441.31	-95.10	2,706.29	2,660.38	45.91	58.947		
5,300.00	4,666.73	4,627.30	4,623.56	36.72	20.30	177.08	442.62	-97.20	2,761.43	2,714.63	46.80	59.000		
5,400.00	4,750.98	4,710.73	4,706.94	37.51	20.67	177.08	443.93	-99.30	2,816.58	2,768.88	47.70	59.051		
5,500.00	4,835.22	4,805.85	4,790.33	38.30	21.08	177.08	445.24	-101.40	2,871.72	2,823.07	48.64	59.037		
5,600.00	4,919.47	4,877.57	4,873.72	39.09	21.39	177.09	446.55	-103.50	2,926.86	2,877.37	49.49	59.144		
5,700.00	5,003.71	4,961.00	4,957.10	39.88	21.75	177.09	447.86	-105.60	2,982.00	2,931.62	50.38	59.187		
5,800.00	5,088.06	5,044.53	5,040.60	40.67	22.12	177.12	449.18	-107.70	3,036.98	2,985.70	51.28	59.225		
5,900.00	5,173.83	5,129.51	5,125.54	41.44	22.49	177.18	450.51	-109.84	3,089.67	3,037.49	52.18	59.215		
6,000.00	5,261.34	5,216.28	5,212.28	42.18	22.86	177.23	451.88	-112.02	3,139.37	3,086.29	53.08	59.145		
6,100.00	5,350.49	5,304.73	5,300.69	42.88	23.25	177.28	453.27	-114.25	3,186.01	3,132.02	53.98	59.018		
6,200.00	5,441.16	5,405.25	5,390.67	43.56	23.69	177.31	454.68	-116.51	3,229.54	3,174.60	54.93	58.790		
6,300.00	5,533.25	5,486.24	5,482.11	44.20	24.04	177.34	456.12	-118.82	3,269.90	3,214.11	55.79	58.612		
6,400.00	5,626.65	5,579.07	5,574.90	44.82	24.45	177.36	457.58	-121.15	3,307.06	3,250.37	56.69	58.339		
6,500.00	5,721.23	5,673.14	5,668.93	45.40	24.86	177.38	459.06	-123.52	3,340.95	3,283.37	57.58	58.025		
6,600.00	5,816.89	5,768.33	5,764.08	45.94	25.27	177.39	460.56	-125.91	3,371.54	3,313.08	58.46	57.673		
6,700.00	5,913.51	5,864.53	5,860.24	46.45	25.69	177.39	462.07	-128.33	3,398.80	3,339.47	59.33	57.286		
6,800.00	6,010.97	5,961.62	5,957.29	46.93	26.11	177.39	463.60	-130.78	3,422.68	3,362.49	60.19	56.865		
6,900.00	6,109.15	6,059.48	6,055.11	47.38	26.54	177.38	465.14	-133.24	3,443.17	3,382.14	61.04	56.413		
7,000.00	6,207.93	6,158.00	6,153.57	47.80	26.97	177.37	466.68	-135.72	3,460.23	3,398.37	61.86	55.932		
7,100.00	6,307.19	6,257.04	6,252.58	48.18	27.40	177.35	468.24	-138.21	3,473.85	3,411.18	62.68	55.424		
7,200.00	6,406.82	6,356.50	6,351.99	48.53	27.84	177.32	469.80	-140.71	3,484.01	3,420.54	63.47	54.890		
7,300.00	6,506.68	6,456.24	6,451.69	48.84	28.28	177.29	471.37	-143.22	3,490.70	3,426.45	64.25	54.331		
7,400.00	6,606.66	6,556.16	6,551.56	49.10	28.71	90.25	472.94	-145.74	3,493.90	3,428.91	64.99	53.761		
7,500.00	6,706.21	6,657.06	6,652.39	49.35	29.15	90.19	474.53	-148.94	3,495.51	3,429.78	65.73	53.180		
7,600.00	6,803.22	6,761.64	6,755.62	49.59	29.62	90.20	476.05	-164.85	3,497.10	3,430.59	66.51	52.581		
7,700.00	6,895.32	6,867.76	6,856.29	49.82	30.09	90.20	477.40	-198.03	3,498.59	3,431.28	67.31	51.979		
7,800.00	6,980.23	6,975.32	6,951.26	50.03	30.59	90.20	478.53	-248.22	3,499.95	3,431.82	68.13	51.368		
7,900.00	7,055.85	7,084.12	7,037.36	50.21	31.12	90.19	479.39	-314.52	3,501.14	3,432.11	69.03	50.717		
8,000.00	7,120.34	7,193.91	7,111.54	50.36	31.73	90.18	479.96	-395.27	3,502.12	3,432.05	70.08	49.974		
8,100.00	7,172.10	7,304.42	7,171.10	50.47	32.49	90.16	480.20	-488.19	3,502.86	3,431.50	71.37	49.082		
8,200.00	7,209.85	7,415.28	7,213.82	50.55	33.44	90.13	480.10	-590.34	3,503.34	3,430.36	72.98	48.005		
8,300.00	7,232.68	7,526.15	7,238.21	50.61	34.58	90.10	479.66	-698.34	3,503.54	3,428.61	74.93	46.755		
8,400.00	7,240.00	7,634.55	7,243.93	50.65	35.87	90.06	478.93	-806.48	3,503.47	3,426.30	77.18	45.396		
8,500.00	7,239.60	7,734.55	7,243.62	50.69	37.23	90.07	478.16	-906.48	3,503.32	3,423.67	79.64	43.987		
8,600.00	7,239.19	7,834.55	7,243.31	50.75	38.74	90.07	477.39	-1,006.48	3,503.16	3,420.73	82.43	42.499		
8,700.00	7,238.78	7,934.55	7,243.00	50.85	40.40	90.07	476.63	-1,106.47	3,503.01	3,417.50	85.51	40.968		
8,800.00	7,238.38	8,034.55	7,242.69	51.02	42.19	90.07	475.86	-1,206.47	3,502.85	3,414.01	88.84	39.427		
8,900.00	7,237.97	8,134.55	7,242.37	51.32	44.09	90.07	475.09	-1,306.47	3,502.70	3,410.28	92.41	37.902		
9,000.00	7,237.57	8,234.55	7,242.06	51.95	46.09	90.07	474.32	-1,406.46	3,502.54	3,406.35	96.19	36.413		
9,100.00	7,237.16	8,334.55	7,241.75	53.10	48.18	90.08	473.56	-1,506.46	3,502.39	3,402.24	100.15	34.971		
9,200.00	7,236.76	8,434.55	7,241.44	54.69	50.34	90.08	472.79	-1,606.45	3,502.23	3,397.96	104.27	33.587		
9,300.00	7,236.35	8,534.55	7,241.13	56.53	52.57	90.08	472.02	-1,706.45	3,502.08	3,393.54	108.54	32.265		
9,400.00	7,235.94	8,634.55	7,240.81	58.53	54.85	90.08	471.25	-1,806.45	3,501.92	3,388.99	112.93	31.009		
9,500.00	7,235.54	8,734.55	7,240.50	60.62	57.19	90.08	470.49	-1,906.44	3,501.77	3,384.33	117.44	29.817		
9,600.00	7,235.13	8,834.55	7,240.19	62.80	59.58	90.08	469.72	-2,006.44	3,501.61	3,379.56	122.05	28.690		
9,700.00	7,234.73	8,934.55	7,239.88	65.03	62.00	90.08	468.95	-2,106.44	3,501.46	3,374.71	126.75	27.625		
9,800.00	7,234.32	9,034.55	7,239.57	67.32	64.46	90.09	468.18	-2,206.43	3,501.30	3,369.78	131.53	26.620		
9,900.00	7,233.92	9,134.55	7,239.25	69.66	66.95	90.09	467.41	-2,306.43	3,501.15	3,364.77	136.38	25.672		
10,000.00	7,233.51	9,234.55	7,238.94	72.03	69.47	90.09	466.65	-2,406.43	3,500.99	3,359.70	141.29	24.778		
10,100.00	7,233.10	9,334.55	7,238.63	74.45	72.02	90.09	465.88	-2,506.42	3,500.84	3,354.57	146.27	23.935		
10,200.00	7,232.70	9,434.55	7,238.32	76.89	74.59	90.09	465.11	-2,606.42	3,500.68	3,349.39	151.29	23.138		
10,300.00	7,232.29	9,534.55	7,238.01	79.36	77.18	90.09	464.34	-2,706.41	3,500.53	3,344.16	156.37	22.387		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	9,634.54	7,237.69	81.86	79.78	90.10	463.58	-2,806.41	3,500.37	3,338.89	161.48	21.676		
10,500.00	7,231.48	9,734.54	7,237.38	84.38	82.41	90.10	462.81	-2,906.41	3,500.22	3,333.58	166.64	21.005		
10,600.00	7,231.08	9,834.54	7,237.07	86.93	85.04	90.10	462.04	-3,006.40	3,500.06	3,328.24	171.83	20.370		
10,700.00	7,230.67	9,934.54	7,236.76	89.49	87.70	90.10	461.27	-3,106.40	3,499.91	3,322.86	177.05	19.768		
10,800.00	7,230.26	10,034.54	7,236.45	92.07	90.36	90.10	460.51	-3,206.40	3,499.75	3,317.45	182.30	19.197		
10,900.00	7,229.86	10,134.54	7,236.13	94.67	93.04	90.10	459.74	-3,306.39	3,499.60	3,312.02	187.58	18.656		
11,000.00	7,229.45	10,234.54	7,235.82	97.28	95.73	90.10	458.97	-3,406.39	3,499.44	3,306.56	192.89	18.142		
11,100.00	7,229.05	10,334.54	7,235.51	99.90	98.42	90.11	458.20	-3,506.39	3,499.29	3,301.07	198.22	17.654		
11,200.00	7,228.64	10,434.54	7,235.20	102.54	101.13	90.11	457.44	-3,606.38	3,499.13	3,295.57	203.56	17.189		
11,300.00	7,228.24	10,534.54	7,234.89	105.19	103.84	90.11	456.67	-3,706.38	3,498.98	3,290.05	208.93	16.747		
11,400.00	7,227.83	10,634.54	7,234.58	107.85	106.56	90.11	455.90	-3,806.38	3,498.82	3,284.51	214.32	16.325		
11,500.00	7,227.42	10,734.54	7,234.26	110.52	109.29	90.11	455.13	-3,906.37	3,498.67	3,278.95	219.72	15.923		
11,600.00	7,227.02	10,834.54	7,233.95	113.20	112.03	90.11	454.37	-4,006.37	3,498.51	3,273.37	225.14	15.539		
11,700.00	7,226.61	10,934.54	7,233.64	115.89	114.77	90.12	453.60	-4,106.36	3,498.36	3,267.79	230.57	15.173		
11,800.00	7,226.21	11,034.54	7,233.33	118.59	117.51	90.12	452.83	-4,206.36	3,498.20	3,262.19	236.02	14.822		
11,900.00	7,225.80	11,134.54	7,233.02	121.29	120.26	90.12	452.06	-4,306.36	3,498.05	3,256.57	241.48	14.486		
12,000.00	7,225.40	11,234.54	7,232.70	124.00	123.02	90.12	451.30	-4,406.35	3,497.89	3,250.95	246.95	14.165		
12,100.00	7,224.99	11,334.54	7,232.39	126.72	125.78	90.12	450.53	-4,506.35	3,497.74	3,245.31	252.43	13.856		
12,200.00	7,224.58	11,434.54	7,232.08	129.44	128.55	90.12	449.76	-4,606.35	3,497.58	3,239.66	257.92	13.561		
12,300.00	7,224.18	11,534.54	7,231.77	132.17	131.32	90.12	448.99	-4,706.34	3,497.43	3,234.01	263.42	13.277		
12,400.00	7,223.77	11,634.54	7,231.46	134.91	134.09	90.13	448.22	-4,806.34	3,497.27	3,228.34	268.93	13.004		
12,500.00	7,223.37	11,734.54	7,231.14	137.65	136.87	90.13	447.46	-4,906.34	3,497.12	3,222.67	274.45	12.742		
12,600.00	7,222.96	11,834.54	7,230.83	140.39	139.65	90.13	446.69	-5,006.33	3,496.97	3,216.99	279.98	12.490		
12,700.00	7,222.55	11,934.54	7,230.52	143.14	142.43	90.13	445.92	-5,106.33	3,496.81	3,211.30	285.51	12.248		
12,800.00	7,222.15	12,034.54	7,230.21	145.89	145.21	90.13	445.15	-5,206.32	3,496.66	3,205.60	291.05	12.014		
12,900.00	7,221.74	12,134.54	7,229.90	148.65	148.00	90.13	444.39	-5,306.32	3,496.50	3,199.90	296.60	11.789		
13,000.00	7,221.34	12,234.54	7,229.58	151.41	150.79	90.14	443.62	-5,406.32	3,496.35	3,194.19	302.15	11.571		
13,100.00	7,220.93	12,334.54	7,229.27	154.18	153.59	90.14	442.85	-5,506.31	3,496.19	3,188.48	307.71	11.362		
13,200.00	7,220.53	12,434.54	7,228.96	156.94	156.38	90.14	442.08	-5,606.31	3,496.04	3,182.76	313.28	11.160		
13,300.00	7,220.12	12,534.54	7,228.65	159.72	159.18	90.14	441.32	-5,706.31	3,495.88	3,177.03	318.85	10.964		
13,400.00	7,219.71	12,634.54	7,228.34	162.49	161.98	90.14	440.55	-5,806.30	3,495.73	3,171.30	324.43	10.775		
13,500.00	7,219.31	12,734.54	7,228.02	165.27	164.78	90.14	439.78	-5,906.30	3,495.57	3,165.56	330.01	10.592		
13,600.00	7,218.90	12,834.54	7,227.71	168.05	167.59	90.14	439.01	-6,006.30	3,495.42	3,159.82	335.59	10.416		
13,700.00	7,218.50	12,934.54	7,227.40	170.83	170.39	90.15	438.25	-6,106.29	3,495.26	3,154.08	341.18	10.245		
13,800.00	7,218.09	13,034.54	7,227.09	173.61	173.20	90.15	437.48	-6,206.29	3,495.11	3,148.33	346.78	10.079		
13,900.00	7,217.69	13,134.54	7,226.78	176.40	176.01	90.15	436.71	-6,306.29	3,494.95	3,142.58	352.37	9.918		
14,000.00	7,217.28	13,234.54	7,226.47	179.19	178.82	90.15	435.94	-6,406.28	3,494.80	3,136.82	357.98	9.763		
14,100.00	7,216.87	13,334.54	7,226.15	181.98	181.64	90.15	435.18	-6,506.28	3,494.64	3,131.06	363.58	9.612		
14,200.00	7,216.47	13,434.54	7,225.84	184.78	184.45	90.15	434.41	-6,606.27	3,494.49	3,125.30	369.19	9.465		
14,300.00	7,216.06	13,534.54	7,225.53	187.57	187.26	90.16	433.64	-6,706.27	3,494.33	3,119.53	374.80	9.323		
14,400.00	7,215.66	13,634.54	7,225.22	190.37	190.08	90.16	432.87	-6,806.27	3,494.18	3,113.76	380.42	9.185		
14,500.00	7,215.25	13,734.54	7,224.91	193.17	192.90	90.16	432.11	-6,906.26	3,494.02	3,107.99	386.03	9.051		
14,600.00	7,214.85	13,834.54	7,224.59	195.97	195.72	90.16	431.34	-7,006.26	3,493.87	3,102.21	391.66	8.921		
14,700.00	7,214.44	13,934.54	7,224.28	198.77	198.54	90.16	430.57	-7,106.26	3,493.71	3,096.43	397.28	8.794		
14,800.00	7,214.03	14,034.54	7,223.97	201.58	201.36	90.16	429.80	-7,206.25	3,493.56	3,090.65	402.91	8.671		
14,900.00	7,213.63	14,134.54	7,223.66	204.38	204.18	90.16	429.04	-7,306.25	3,493.40	3,084.87	408.53	8.551		
15,000.00	7,213.22	14,234.54	7,223.35	207.19	207.00	90.17	428.27	-7,406.25	3,493.25	3,079.08	414.17	8.434		
15,100.00	7,212.82	14,334.54	7,223.03	210.00	209.83	90.17	427.50	-7,506.24	3,493.09	3,073.29	419.80	8.321		
15,200.00	7,212.41	14,434.54	7,222.72	212.81	212.65	90.17	426.73	-7,606.24	3,492.94	3,067.50	425.44	8.210		
15,300.00	7,212.01	14,534.54	7,222.41	215.62	215.48	90.17	425.96	-7,706.23	3,492.78	3,061.71	431.07	8.103		
15,400.00	7,211.60	14,634.54	7,222.10	218.43	218.30	90.17	425.20	-7,806.23	3,492.63	3,055.92	436.71	7.998		
15,500.00	7,211.19	14,734.54	7,221.79	221.25	221.13	90.17	424.43	-7,906.23	3,492.47	3,050.12	442.36	7.895		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,600.00	7,210.79	14,834.54	7,221.47	224.06	223.96	90.18	423.66	-8,006.22	3,492.32	3,044.32	448.00	7.795	
15,700.00	7,210.38	14,934.54	7,221.16	226.88	226.79	90.18	422.89	-8,106.22	3,492.16	3,038.52	453.64	7.698	
15,760.49	7,210.14	14,995.02	7,220.97	228.58	228.50	90.18	422.43	-8,166.71	3,492.07	3,035.01	457.06	7.640	
15,794.94	7,210.00	14,987.41	7,221.00	229.55	228.28	90.18	422.49	-8,159.09	3,492.27	3,034.54	457.73	7.629 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.46	139.89	1.11	139.90					
100.00	100.00	101.00	100.00	3.28	3.28	0.46	139.89	1.11	139.90	133.33	6.57	21.295		
200.00	200.00	201.05	200.05	3.34	3.34	0.46	139.89	1.11	139.90	133.22	6.67	20.959		
300.00	299.98	306.16	305.14	3.44	3.45	177.77	137.94	0.93	139.78	132.88	6.90	20.260		
400.00	399.84	411.27	410.07	3.59	3.61	177.65	132.14	0.38	139.49	132.25	7.24	19.269		
500.00	499.45	516.35	514.71	3.79	3.83	177.45	122.52	-0.52	139.04	131.35	7.69	18.088		
600.00	598.70	621.41	618.90	4.03	4.09	177.17	109.09	-1.79	138.42	130.20	8.22	16.832		
700.00	697.47	726.44	722.49	4.31	4.40	176.81	91.87	-3.41	137.65	128.81	8.83	15.581		
800.00	795.62	831.43	825.33	4.64	4.75	176.37	70.89	-5.39	136.72	127.21	9.50	14.386		
900.00	893.06	936.38	927.30	5.00	5.14	175.84	46.19	-7.71	135.64	125.42	10.22	13.270		
941.51	933.26	978.29	967.80	5.16	5.31	175.61	35.47	-8.72	135.35	124.84	10.51	12.875 CC, ES		
1,000.00	989.64	1,036.77	1,024.32	5.40	5.55	175.33	20.50	-10.13	135.95	125.02	10.93	12.437		
1,100.00	1,085.27	1,136.69	1,120.88	5.83	5.97	174.94	-5.08	-12.54	139.73	128.05	11.68	11.958		
1,200.00	1,179.82	1,236.42	1,217.25	6.29	6.42	174.70	-30.61	-14.95	146.99	134.51	12.48	11.779		
1,300.00	1,273.17	1,335.84	1,313.33	6.79	6.87	174.60	-56.06	-17.35	157.71	144.40	13.31	11.850		
1,400.00	1,365.21	1,434.82	1,408.98	7.33	7.34	174.61	-81.40	-19.73	171.88	157.71	14.17	12.130		
1,500.00	1,455.84	1,533.26	1,504.11	7.89	7.81	174.70	-106.60	-22.11	189.48	174.42	15.06	12.585		
1,600.00	1,544.94	1,631.02	1,598.58	8.50	8.28	174.86	-131.63	-24.46	210.49	194.52	15.96	13.185		
1,700.00	1,632.39	1,727.99	1,692.29	9.13	8.76	175.06	-156.46	-26.80	234.89	218.00	16.89	13.905		
1,800.00	1,718.11	1,824.04	1,785.12	9.80	9.24	175.26	-181.05	-29.12	262.65	244.81	17.84	14.726		
1,900.00	1,802.44	1,919.34	1,877.21	10.49	9.72	175.50	-205.44	-31.42	292.93	274.14	18.79	15.589		
2,000.00	1,886.68	2,014.59	1,969.26	11.20	10.20	175.71	-229.83	-33.71	323.37	303.61	19.75	16.370		
2,100.00	1,970.92	2,109.84	2,061.30	11.93	10.69	175.88	-254.21	-36.01	353.81	333.08	20.73	17.068		
2,200.00	2,055.17	2,205.09	2,153.35	12.66	11.18	176.02	-278.60	-38.31	384.25	362.53	21.71	17.696		
2,300.00	2,139.41	2,300.34	2,245.40	13.40	11.67	176.14	-302.98	-40.61	414.69	391.98	22.71	18.262		
2,400.00	2,223.66	2,404.41	2,337.44	14.14	12.21	176.25	-327.37	-42.90	445.14	421.39	23.75	18.742		
2,500.00	2,307.90	2,509.16	2,429.49	14.89	12.75	176.34	-351.75	-45.20	475.58	450.78	24.80	19.173		
2,600.00	2,392.14	2,586.09	2,521.54	15.65	13.15	176.42	-376.13	-47.50	506.03	480.30	25.73	19.664		
2,700.00	2,476.39	2,681.34	2,613.59	16.41	13.65	176.50	-400.52	-49.79	536.48	509.72	26.75	20.053		
2,800.00	2,560.63	2,776.59	2,705.63	17.17	14.15	176.56	-424.90	-52.09	566.93	539.15	27.78	20.409		
2,900.00	2,644.88	2,871.84	2,797.68	17.93	14.65	176.62	-449.29	-54.39	597.38	568.57	28.81	20.737		
3,000.00	2,729.12	2,967.09	2,889.73	18.70	15.15	176.67	-473.67	-56.68	627.82	597.99	29.84	21.040		
3,100.00	2,813.36	3,062.34	2,981.77	19.47	15.65	176.72	-498.06	-58.98	658.27	627.40	30.88	21.320		
3,200.00	2,897.61	3,157.59	3,073.82	20.25	16.15	176.76	-522.44	-61.28	688.73	656.81	31.91	21.580		
3,300.00	2,981.85	3,252.84	3,165.87	21.02	16.66	176.80	-546.82	-63.58	719.18	686.22	32.96	21.822		
3,400.00	3,066.10	3,348.09	3,257.92	21.80	17.16	176.84	-571.21	-65.87	749.63	715.63	34.00	22.047		
3,500.00	3,150.34	3,443.34	3,349.96	22.58	17.67	176.87	-595.59	-68.17	780.08	745.03	35.05	22.258		
3,600.00	3,234.58	3,538.59	3,442.01	23.35	18.17	176.90	-619.98	-70.47	810.53	774.43	36.10	22.455		
3,700.00	3,318.83	3,633.84	3,534.06	24.13	18.68	176.93	-644.36	-72.76	840.98	803.83	37.15	22.639		
3,800.00	3,403.07	3,729.09	3,626.10	24.92	19.19	176.96	-668.75	-75.06	871.43	833.23	38.20	22.813		
3,900.00	3,487.32	3,824.34	3,718.15	25.70	19.70	176.98	-693.13	-77.36	901.89	862.63	39.25	22.976		
4,000.00	3,571.56	3,919.59	3,810.20	26.48	20.20	177.00	-717.52	-79.65	932.34	892.03	40.31	23.130		
4,100.00	3,655.80	4,014.84	3,902.25	27.27	20.71	177.03	-741.90	-81.95	962.79	921.42	41.37	23.275		
4,200.00	3,740.05	4,110.09	3,994.29	28.05	21.22	177.05	-766.28	-84.25	993.24	950.82	42.42	23.413		
4,300.00	3,824.29	4,205.34	4,086.34	28.84	21.73	177.07	-790.67	-86.55	1,023.69	980.21	43.48	23.543		
4,400.00	3,908.54	4,300.59	4,178.39	29.62	22.24	177.08	-815.05	-88.84	1,054.15	1,009.60	44.54	23.666		
4,500.00	3,992.78	4,404.16	4,270.43	30.41	22.79	177.10	-839.44	-91.14	1,084.60	1,038.96	45.64	23.762		
4,600.00	4,077.03	4,508.91	4,362.48	31.20	23.35	177.12	-863.82	-93.44	1,115.05	1,068.30	46.75	23.850		
4,700.00	4,161.27	4,586.34	4,454.53	31.98	23.77	177.13	-888.21	-95.73	1,145.51	1,097.78	47.73	24.000		
4,800.00	4,245.51	4,681.59	4,546.57	32.77	24.28	177.15	-912.59	-98.03	1,175.96	1,127.17	48.79	24.101		
4,900.00	4,329.76	4,776.84	4,638.62	33.56	24.79	177.16	-936.98	-100.33	1,206.41	1,156.55	49.86	24.197		
5,000.00	4,414.00	4,872.09	4,730.67	34.35	25.30	177.17	-961.36	-102.62	1,236.86	1,185.94	50.92	24.289		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	4,967.34	4,822.72	35.14	25.81	177.19	-985.74	-104.92	1,267.32	1,215.33	51.99	24.377		
5,200.00	4,582.49	5,062.59	4,914.76	35.93	26.32	177.20	-1,010.13	-107.22	1,297.77	1,244.72	53.06	24.460		
5,300.00	4,666.73	5,157.84	5,006.81	36.72	26.84	177.21	-1,034.51	-109.51	1,328.22	1,274.10	54.12	24.541		
5,400.00	4,750.98	5,253.09	5,098.86	37.51	27.35	177.22	-1,058.90	-111.81	1,358.68	1,303.49	55.19	24.618		
5,500.00	4,835.22	5,348.34	5,190.90	38.30	27.86	177.23	-1,083.28	-114.11	1,389.13	1,332.87	56.26	24.691		
5,600.00	4,919.47	5,443.59	5,282.95	39.09	28.37	177.24	-1,107.67	-116.41	1,419.58	1,362.26	57.33	24.762		
5,700.00	5,003.71	5,538.84	5,375.00	39.88	28.88	177.25	-1,132.05	-118.70	1,450.04	1,391.64	58.40	24.830		
5,800.00	5,088.06	5,634.14	5,467.10	40.67	29.40	177.27	-1,156.45	-121.00	1,480.31	1,420.84	59.47	24.893		
5,900.00	5,173.83	5,730.23	5,559.96	41.44	29.91	177.30	-1,181.05	-123.32	1,507.98	1,447.45	60.53	24.912		
6,000.00	5,261.34	5,827.23	5,653.70	42.18	30.44	177.32	-1,205.88	-125.66	1,532.28	1,470.69	61.59	24.878		
6,100.00	5,350.49	5,925.01	5,748.19	42.88	30.96	177.33	-1,230.91	-128.02	1,553.19	1,490.55	62.64	24.795		
6,200.00	5,441.16	6,023.47	5,843.33	43.56	31.49	177.33	-1,256.12	-130.39	1,570.68	1,507.00	63.68	24.665		
6,300.00	5,533.25	6,122.47	5,939.01	44.20	32.02	177.32	-1,281.46	-132.78	1,584.73	1,520.02	64.71	24.491		
6,400.00	5,626.65	6,221.90	6,035.09	44.82	32.56	177.31	-1,306.92	-135.17	1,595.31	1,529.59	65.72	24.275		
6,500.00	5,721.23	6,321.64	6,131.48	45.40	33.10	177.28	-1,332.45	-137.58	1,602.42	1,535.71	66.71	24.020		
6,600.00	5,816.89	6,421.56	6,228.04	45.94	33.64	177.25	-1,358.03	-139.99	1,606.06	1,538.37	67.69	23.727		
6,700.00	5,913.51	6,521.55	6,324.67	46.45	34.17	177.20	-1,383.63	-142.40	1,606.20	1,537.56	68.65	23.398		
6,800.00	6,010.97	6,621.47	6,420.96	46.93	34.71	177.00	-1,409.17	-149.12	1,602.86	1,533.28	69.59	23.034		
6,900.00	6,109.15	6,717.41	6,511.43	47.38	35.20	176.28	-1,433.26	-169.67	1,596.20	1,525.73	70.47	22.651		
7,000.00	6,207.93	6,805.35	6,590.85	47.80	35.62	175.16	-1,454.51	-200.65	1,586.77	1,515.52	71.25	22.271		
7,100.00	6,307.19	6,883.21	6,657.15	48.18	35.95	173.79	-1,472.31	-237.32	1,575.38	1,503.49	71.89	21.914		
7,200.00	6,406.82	6,950.00	6,710.18	48.53	36.22	172.35	-1,486.62	-275.25	1,562.91	1,490.56	72.35	21.601		
7,300.00	6,506.68	7,008.13	6,753.00	48.84	36.44	170.90	-1,498.22	-312.79	1,550.19	1,477.56	72.64	21.342		
7,400.00	6,606.66	7,056.98	6,786.29	49.10	36.61	82.57	-1,507.27	-347.35	1,537.96	1,465.29	72.67	21.164		
7,500.00	6,706.21	7,100.00	6,813.41	49.35	36.76	82.35	-1,514.68	-379.91	1,527.40	1,454.96	72.44	21.085		
7,600.00	6,803.22	7,150.00	6,842.16	49.59	36.92	81.85	-1,522.57	-420.03	1,519.06	1,446.92	72.14	21.057		
7,700.00	6,895.32	7,200.00	6,867.79	49.82	37.07	81.31	-1,529.65	-462.36	1,512.66	1,440.99	71.67	21.105		
7,800.00	6,980.23	7,250.00	6,890.11	50.03	37.23	80.75	-1,535.87	-506.65	1,507.92	1,436.83	71.09	21.213		
7,900.00	7,055.85	7,300.00	6,909.01	50.21	37.39	80.21	-1,541.20	-552.62	1,504.54	1,434.06	70.47	21.350		
8,000.00	7,120.34	7,350.00	6,924.36	50.36	37.56	79.73	-1,545.59	-599.99	1,502.24	1,432.29	69.95	21.476		
8,100.00	7,172.10	7,389.23	6,933.86	50.47	37.71	79.43	-1,548.37	-637.95	1,500.71	1,431.26	69.45	21.609		
8,200.00	7,209.85	7,438.20	6,942.51	50.55	37.93	79.11	-1,551.00	-686.06	1,499.88	1,430.36	69.52	21.575		
8,300.00	7,232.68	7,487.30	6,947.57	50.61	38.19	78.90	-1,552.68	-734.86	1,499.53	1,429.46	70.07	21.400		
8,339.69	7,237.46	7,506.81	6,948.57	50.62	38.31	78.85	-1,553.08	-754.34	1,499.50	1,429.05	70.45	21.285		
8,400.00	7,240.00	7,539.76	6,948.98	50.65	38.54	78.81	-1,553.42	-787.28	1,499.55	1,428.36	71.19	21.064		
8,500.00	7,239.60	7,639.76	6,948.60	50.69	39.40	78.81	-1,554.02	-887.28	1,499.56	1,426.04	73.52	20.395		
8,600.00	7,239.19	7,739.76	6,948.22	50.75	40.55	78.81	-1,554.61	-987.28	1,499.57	1,423.39	76.19	19.683		
8,700.00	7,238.78	7,839.76	6,947.84	50.85	41.94	78.81	-1,555.21	-1,087.27	1,499.58	1,420.42	79.16	18.944		
8,800.00	7,238.38	7,939.76	6,947.46	51.02	43.52	78.81	-1,555.81	-1,187.27	1,499.59	1,417.18	82.41	18.198		
8,900.00	7,237.97	8,039.76	6,947.08	51.32	45.25	78.81	-1,556.41	-1,287.27	1,499.60	1,413.70	85.90	17.457		
9,000.00	7,237.57	8,139.76	6,946.70	51.95	47.10	78.82	-1,557.01	-1,387.27	1,499.60	1,409.99	89.61	16.735		
9,100.00	7,237.16	8,239.76	6,946.32	53.10	49.06	78.82	-1,557.61	-1,487.26	1,499.61	1,406.10	93.51	16.036		
9,200.00	7,236.76	8,339.76	6,945.94	54.69	51.12	78.82	-1,558.21	-1,587.26	1,499.62	1,402.04	97.58	15.367		
9,300.00	7,236.35	8,439.76	6,945.56	56.53	53.25	78.82	-1,558.80	-1,687.26	1,499.63	1,397.83	101.80	14.731		
9,400.00	7,235.94	8,539.76	6,945.19	58.53	55.45	78.82	-1,559.40	-1,787.26	1,499.64	1,393.49	106.15	14.127		
9,500.00	7,235.54	8,639.76	6,944.81	60.62	57.71	78.82	-1,560.00	-1,887.25	1,499.65	1,389.03	110.62	13.557		
9,600.00	7,235.13	8,739.76	6,944.43	62.80	60.03	78.82	-1,560.60	-1,987.25	1,499.65	1,384.47	115.18	13.020		
9,700.00	7,234.73	8,839.76	6,944.05	65.03	62.39	78.82	-1,561.20	-2,087.25	1,499.66	1,379.83	119.84	12.514		
9,800.00	7,234.32	8,939.76	6,943.67	67.32	64.79	78.82	-1,561.80	-2,187.25	1,499.67	1,375.10	124.57	12.038		
9,900.00	7,233.92	9,039.76	6,943.29	69.66	67.23	78.83	-1,562.40	-2,287.24	1,499.68	1,370.30	129.38	11.591		
10,000.00	7,233.51	9,139.76	6,942.91	72.03	69.70	78.83	-1,563.00	-2,387.24	1,499.69	1,365.44	134.25	11.171		
10,100.00	7,233.10	9,239.76	6,942.53	74.45	72.20	78.83	-1,563.59	-2,487.24	1,499.70	1,360.52	139.18	10.775		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16A-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,200.00	7,232.70	9,339.76	6,942.15	76.89	74.73	78.83	-1,564.19	-2,587.24	1,499.71	1,355.55	144.16	10.403	
10,300.00	7,232.29	9,439.76	6,941.77	79.36	77.28	78.83	-1,564.79	-2,687.23	1,499.71	1,350.53	149.18	10.053	
10,400.00	7,231.89	9,539.76	6,941.39	81.86	79.85	78.83	-1,565.39	-2,787.23	1,499.72	1,345.47	154.25	9.723	
10,500.00	7,231.48	9,639.76	6,941.01	84.38	82.44	78.83	-1,565.99	-2,887.23	1,499.73	1,340.38	159.35	9.411	
10,600.00	7,231.08	9,739.76	6,940.63	86.93	85.04	78.83	-1,566.59	-2,987.23	1,499.74	1,335.25	164.49	9.118	
10,700.00	7,230.67	9,839.76	6,940.25	89.49	87.67	78.83	-1,567.19	-3,087.22	1,499.75	1,330.09	169.66	8.840	
10,800.00	7,230.26	9,939.76	6,939.87	92.07	90.30	78.84	-1,567.78	-3,187.22	1,499.76	1,324.90	174.85	8.577	
10,900.00	7,229.86	10,039.76	6,939.50	94.67	92.96	78.84	-1,568.38	-3,287.22	1,499.76	1,319.69	180.08	8.328	
11,000.00	7,229.45	10,139.76	6,939.12	97.28	95.62	78.84	-1,568.98	-3,387.22	1,499.77	1,314.45	185.32	8.093	
11,100.00	7,229.05	10,239.76	6,938.74	99.90	98.29	78.84	-1,569.58	-3,487.21	1,499.78	1,309.19	190.59	7.869	
11,200.00	7,228.64	10,339.76	6,938.36	102.54	100.98	78.84	-1,570.18	-3,587.21	1,499.79	1,303.91	195.88	7.657	
11,300.00	7,228.24	10,439.76	6,937.98	105.19	103.67	78.84	-1,570.78	-3,687.21	1,499.80	1,298.61	201.19	7.455	
11,400.00	7,227.83	10,539.76	6,937.60	107.85	106.37	78.84	-1,571.38	-3,787.21	1,499.81	1,293.30	206.51	7.263	
11,500.00	7,227.42	10,639.76	6,937.22	110.52	109.08	78.84	-1,571.97	-3,887.20	1,499.82	1,287.97	211.85	7.080	
11,600.00	7,227.02	10,739.76	6,936.84	113.20	111.80	78.84	-1,572.57	-3,987.20	1,499.82	1,282.62	217.20	6.905	
11,700.00	7,226.61	10,839.76	6,936.46	115.89	114.53	78.85	-1,573.17	-4,087.20	1,499.83	1,277.26	222.57	6.739	
11,800.00	7,226.21	10,939.76	6,936.08	118.59	117.26	78.85	-1,573.77	-4,187.20	1,499.84	1,271.89	227.95	6.580	
11,900.00	7,225.80	11,039.76	6,935.70	121.29	119.99	78.85	-1,574.37	-4,287.19	1,499.85	1,266.51	233.34	6.428	
12,000.00	7,225.40	11,139.76	6,935.32	124.00	122.74	78.85	-1,574.97	-4,387.19	1,499.86	1,261.12	238.74	6.282	
12,100.00	7,224.99	11,239.76	6,934.94	126.72	125.48	78.85	-1,575.57	-4,487.19	1,499.87	1,255.71	244.15	6.143	
12,200.00	7,224.58	11,339.76	6,934.56	129.44	128.24	78.85	-1,576.17	-4,587.19	1,499.87	1,250.30	249.57	6.010	
12,300.00	7,224.18	11,439.76	6,934.18	132.17	130.99	78.85	-1,576.76	-4,687.18	1,499.88	1,244.88	255.00	5.882	
12,400.00	7,223.77	11,539.76	6,933.81	134.91	133.76	78.85	-1,577.36	-4,787.18	1,499.89	1,239.45	260.44	5.759	
12,500.00	7,223.37	11,639.76	6,933.43	137.65	136.52	78.85	-1,577.96	-4,887.18	1,499.90	1,234.01	265.89	5.641	
12,600.00	7,222.96	11,739.76	6,933.05	140.39	139.29	78.86	-1,578.56	-4,987.18	1,499.91	1,228.56	271.34	5.528	
12,700.00	7,222.55	11,839.76	6,932.67	143.14	142.06	78.86	-1,579.16	-5,087.17	1,499.92	1,223.11	276.80	5.419	
12,800.00	7,222.15	11,939.76	6,932.29	145.89	144.84	78.86	-1,579.76	-5,187.17	1,499.93	1,217.65	282.27	5.314	
12,900.00	7,221.74	12,039.76	6,931.91	148.65	147.62	78.86	-1,580.36	-5,287.17	1,499.93	1,212.19	287.75	5.213	
13,000.00	7,221.34	12,139.76	6,931.53	151.41	150.40	78.86	-1,580.95	-5,387.17	1,499.94	1,206.72	293.23	5.115	
13,100.00	7,220.93	12,239.76	6,931.15	154.18	153.19	78.86	-1,581.55	-5,487.16	1,499.95	1,201.24	298.71	5.021	
13,200.00	7,220.53	12,339.76	6,930.77	156.94	155.98	78.86	-1,582.15	-5,587.16	1,499.96	1,195.76	304.20	4.931	
13,300.00	7,220.12	12,439.76	6,930.39	159.72	158.77	78.86	-1,582.75	-5,687.16	1,499.97	1,190.27	309.70	4.843	
13,400.00	7,219.71	12,539.76	6,930.01	162.49	161.56	78.86	-1,583.35	-5,787.16	1,499.98	1,184.78	315.19	4.759	
13,500.00	7,219.31	12,639.76	6,929.63	165.27	164.35	78.87	-1,583.95	-5,887.15	1,499.98	1,179.29	320.70	4.677	
13,600.00	7,218.90	12,739.76	6,929.25	168.05	167.15	78.87	-1,584.55	-5,987.15	1,499.99	1,173.79	326.21	4.598	
13,700.00	7,218.50	12,839.76	6,928.87	170.83	169.95	78.87	-1,585.15	-6,087.15	1,500.00	1,168.28	331.72	4.522	
13,800.00	7,218.09	12,939.76	6,928.49	173.61	172.75	78.87	-1,585.74	-6,187.14	1,500.01	1,162.77	337.24	4.448	
13,900.00	7,217.69	13,039.76	6,928.12	176.40	175.55	78.87	-1,586.34	-6,287.14	1,500.02	1,157.26	342.76	4.376	
14,000.00	7,217.28	13,139.76	6,927.74	179.19	178.36	78.87	-1,586.94	-6,387.14	1,500.03	1,151.75	348.28	4.307	
14,100.00	7,216.87	13,239.76	6,927.36	181.98	181.17	78.87	-1,587.54	-6,487.14	1,500.04	1,146.23	353.81	4.240	
14,200.00	7,216.47	13,339.76	6,926.98	184.78	183.97	78.87	-1,588.14	-6,587.13	1,500.04	1,140.71	359.33	4.175	
14,300.00	7,216.06	13,439.76	6,926.60	187.57	186.78	78.87	-1,588.74	-6,687.13	1,500.05	1,135.18	364.87	4.111	
14,400.00	7,215.66	13,539.76	6,926.22	190.37	189.60	78.87	-1,589.34	-6,787.13	1,500.06	1,129.66	370.40	4.050	
14,500.00	7,215.25	13,639.76	6,925.84	193.17	192.41	78.88	-1,589.93	-6,887.13	1,500.07	1,124.13	375.94	3.990	
14,600.00	7,214.85	13,739.76	6,925.46	195.97	195.22	78.88	-1,590.53	-6,987.12	1,500.08	1,118.60	381.48	3.932	
14,700.00	7,214.44	13,839.76	6,925.08	198.77	198.04	78.88	-1,591.13	-7,087.12	1,500.09	1,113.06	387.03	3.876	
14,800.00	7,214.03	13,939.76	6,924.70	201.58	200.85	78.88	-1,591.73	-7,187.12	1,500.09	1,107.52	392.57	3.821	
14,900.00	7,213.63	14,039.76	6,924.32	204.38	203.67	78.88	-1,592.33	-7,287.12	1,500.10	1,101.98	398.12	3.768	
15,000.00	7,213.22	14,139.76	6,923.94	207.19	206.49	78.88	-1,592.93	-7,387.11	1,500.11	1,096.44	403.67	3.716	
15,100.00	7,212.82	14,239.76	6,923.56	210.00	209.31	78.88	-1,593.53	-7,487.11	1,500.12	1,090.90	409.22	3.666	
15,200.00	7,212.41	14,339.76	6,923.18	212.81	212.13	78.88	-1,594.12	-7,587.11	1,500.13	1,085.35	414.78	3.617	
15,300.00	7,212.01	14,439.76	6,922.80	215.62	214.95	78.88	-1,594.72	-7,687.11	1,500.14	1,079.80	420.33	3.569	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.00	7,211.60	14,539.76	6,922.43	218.43	217.78	78.89	-1,595.32	-7,787.10	1,500.15	1,074.25	425.89	3.522	
15,500.00	7,211.19	14,639.76	6,922.05	221.25	220.60	78.89	-1,595.92	-7,887.10	1,500.15	1,068.70	431.45	3.477	
15,600.00	7,210.79	14,739.76	6,921.67	224.06	223.42	78.89	-1,596.52	-7,987.10	1,500.16	1,063.15	437.01	3.433	
15,700.00	7,210.38	14,839.76	6,921.29	226.88	226.25	78.89	-1,597.12	-8,087.10	1,500.17	1,057.59	442.58	3.390	
15,702.10	7,210.37	14,841.86	6,921.28	226.94	226.31	78.89	-1,597.13	-8,089.19	1,500.17	1,057.48	442.69	3.389	
15,794.94	7,210.00	14,915.55	6,921.00	229.55	228.39	78.89	-1,597.57	-8,162.88	1,500.30	1,053.16	447.14	3.355 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.40	159.92	1.11	159.93					
100.00	100.00	101.00	100.00	3.28	3.28	0.40	159.92	1.11	159.93	153.36	6.57	24.343		
200.00	200.00	201.06	200.06	3.34	3.34	0.40	159.92	1.11	159.93	153.25	6.67	23.959		
300.00	299.98	306.94	305.91	3.44	3.45	177.71	157.94	0.90	159.79	152.89	6.90	23.157		
400.00	399.84	412.81	411.61	3.59	3.62	177.57	152.07	0.27	159.47	152.23	7.24	22.019		
500.00	499.45	518.66	517.00	3.79	3.83	177.35	142.32	-0.76	158.97	151.27	7.69	20.664		
600.00	598.70	624.48	621.92	4.03	4.10	177.04	128.71	-2.22	158.27	150.04	8.23	19.225		
700.00	697.47	730.26	726.23	4.31	4.41	176.64	111.26	-4.08	157.41	148.56	8.85	17.792		
800.00	795.62	835.99	829.78	4.64	4.76	176.15	90.01	-6.34	156.36	146.84	9.52	16.425		
845.71	840.26	882.43	875.04	4.80	4.93	175.91	79.66	-7.45	156.03	146.21	9.82	15.894 CC, ES		
900.00	893.06	936.71	927.93	5.00	5.14	175.66	67.53	-8.74	156.54	146.36	10.18	15.372		
1,000.00	989.64	1,036.64	1,025.30	5.40	5.53	175.27	45.19	-11.12	160.18	149.29	10.89	14.705		
1,100.00	1,085.27	1,136.38	1,122.48	5.83	5.94	174.99	22.89	-13.50	167.30	155.65	11.65	14.365		
1,200.00	1,179.82	1,235.81	1,219.37	6.29	6.37	174.84	0.67	-15.87	177.88	165.44	12.44	14.302		
1,300.00	1,273.17	1,334.81	1,315.84	6.79	6.81	174.79	-21.47	-18.23	191.91	178.65	13.26	14.472		
1,400.00	1,365.21	1,433.27	1,411.78	7.33	7.26	174.82	-43.48	-20.58	209.38	195.27	14.11	14.836		
1,500.00	1,455.84	1,531.06	1,507.06	7.89	7.71	174.92	-65.34	-22.91	230.26	215.27	14.99	15.363		
1,600.00	1,544.94	1,628.06	1,601.58	8.50	8.16	175.06	-87.02	-25.22	254.52	238.64	15.88	16.025		
1,700.00	1,632.39	1,724.16	1,695.22	9.13	8.62	175.22	-108.51	-27.51	282.15	265.36	16.80	16.799		
1,800.00	1,718.11	1,819.24	1,787.86	9.80	9.07	175.40	-129.76	-29.78	313.11	295.39	17.72	17.668		
1,900.00	1,802.44	1,913.47	1,879.68	10.49	9.53	175.60	-150.82	-32.03	346.56	327.90	18.66	18.573		
2,000.00	1,886.68	2,007.65	1,971.45	11.20	9.99	175.79	-171.88	-34.27	380.16	360.56	19.60	19.395		
2,100.00	1,970.92	2,101.83	2,063.22	11.93	10.45	175.94	-192.93	-36.52	413.77	393.21	20.56	20.129		
2,200.00	2,055.17	2,204.00	2,154.99	12.66	10.95	176.08	-213.98	-38.76	447.38	425.82	21.56	20.754		
2,300.00	2,139.41	2,309.82	2,246.75	13.40	11.47	176.19	-235.04	-41.01	480.99	458.41	22.58	21.300		
2,400.00	2,223.66	2,384.36	2,338.52	14.14	11.84	176.29	-256.09	-43.25	514.60	491.13	23.47	21.923		
2,500.00	2,307.90	2,478.54	2,430.29	14.89	12.31	176.38	-277.14	-45.50	548.21	523.75	24.46	22.413		
2,600.00	2,392.14	2,572.72	2,522.06	15.65	12.78	176.45	-298.20	-47.74	581.83	556.37	25.45	22.859		
2,700.00	2,476.39	2,666.90	2,613.82	16.41	13.26	176.52	-319.25	-49.99	615.44	588.99	26.45	23.267		
2,800.00	2,560.63	2,761.07	2,705.59	17.17	13.73	176.58	-340.30	-52.23	649.06	621.60	27.45	23.642		
2,900.00	2,644.88	2,855.25	2,797.36	17.93	14.20	176.64	-361.36	-54.48	682.67	654.21	28.46	23.987		
3,000.00	2,729.12	2,949.43	2,889.13	18.70	14.68	176.69	-382.41	-56.72	716.29	686.82	29.47	24.305		
3,100.00	2,813.36	3,043.61	2,980.89	19.47	15.16	176.73	-403.46	-58.97	749.91	719.42	30.48	24.600		
3,200.00	2,897.61	3,137.79	3,072.66	20.25	15.63	176.77	-424.52	-61.21	783.52	752.02	31.50	24.873		
3,300.00	2,981.85	3,231.97	3,164.43	21.02	16.11	176.81	-445.57	-63.46	817.14	784.62	32.52	25.127		
3,400.00	3,066.10	3,326.15	3,256.20	21.80	16.59	176.85	-466.62	-65.70	850.76	817.22	33.54	25.364		
3,500.00	3,150.34	3,420.32	3,347.97	22.58	17.07	176.88	-487.68	-67.95	884.38	849.81	34.57	25.585		
3,600.00	3,234.58	3,514.50	3,439.73	23.35	17.55	176.91	-508.73	-70.19	918.00	882.41	35.59	25.792		
3,700.00	3,318.83	3,608.68	3,531.50	24.13	18.03	176.94	-529.78	-72.44	951.62	915.00	36.62	25.986		
3,800.00	3,403.07	3,702.86	3,623.27	24.92	18.51	176.96	-550.84	-74.68	985.24	947.59	37.65	26.169		
3,900.00	3,487.32	3,802.96	3,715.04	25.70	19.02	176.99	-571.89	-76.93	1,018.85	980.15	38.71	26.321		
4,000.00	3,571.56	3,908.78	3,806.80	26.48	19.57	177.01	-592.94	-79.17	1,052.47	1,012.68	39.80	26.447		
4,100.00	3,655.80	3,985.40	3,898.57	27.27	19.96	177.03	-614.00	-81.42	1,086.09	1,045.35	40.75	26.655		
4,200.00	3,740.05	4,079.57	3,990.34	28.05	20.44	177.05	-635.05	-83.66	1,119.71	1,077.93	41.78	26.799		
4,300.00	3,824.29	4,173.75	4,082.11	28.84	20.92	177.07	-656.11	-85.91	1,153.33	1,110.51	42.82	26.935		
4,400.00	3,908.54	4,267.93	4,173.87	29.62	21.41	177.09	-677.16	-88.15	1,186.95	1,143.10	43.86	27.065		
4,500.00	3,992.78	4,362.11	4,265.64	30.41	21.89	177.11	-698.21	-90.40	1,220.57	1,175.68	44.89	27.188		
4,600.00	4,077.03	4,456.29	4,357.41	31.20	22.37	177.12	-719.27	-92.64	1,254.19	1,208.26	45.93	27.305		
4,700.00	4,161.27	4,550.47	4,449.18	31.98	22.86	177.14	-740.32	-94.89	1,287.81	1,240.84	46.97	27.416		
4,800.00	4,245.51	4,644.65	4,540.95	32.77	23.34	177.15	-761.37	-97.13	1,321.43	1,273.42	48.01	27.522		
4,900.00	4,329.76	4,738.82	4,632.71	33.56	23.83	177.16	-782.43	-99.38	1,355.05	1,306.00	49.06	27.622		
5,000.00	4,414.00	4,833.00	4,724.48	34.35	24.31	177.18	-803.48	-101.62	1,388.67	1,338.57	50.10	27.719		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	4,927.18	4,816.25	35.14	24.80	177.19	-824.53	-103.87	1,422.29	1,371.15	51.14	27.811		
5,200.00	4,582.49	5,021.36	4,908.02	35.93	25.28	177.20	-845.59	-106.11	1,455.91	1,403.73	52.19	27.899		
5,300.00	4,666.73	5,115.54	4,999.78	36.72	25.77	177.21	-866.64	-108.36	1,489.53	1,436.30	53.23	27.983		
5,400.00	4,750.98	5,209.72	5,091.55	37.51	26.25	177.22	-887.69	-110.60	1,523.15	1,468.88	54.27	28.064		
5,500.00	4,835.22	5,303.89	5,183.32	38.30	26.74	177.23	-908.75	-112.85	1,556.77	1,501.45	55.32	28.141		
5,600.00	4,919.47	5,401.93	5,275.09	39.09	27.25	177.24	-929.80	-115.09	1,590.40	1,534.01	56.38	28.206		
5,700.00	5,003.71	5,507.75	5,366.85	39.88	27.79	177.25	-950.85	-117.34	1,624.02	1,566.53	57.49	28.250		
5,800.00	5,088.06	5,586.49	5,458.68	40.67	28.20	177.27	-971.92	-119.59	1,657.45	1,598.99	58.46	28.352		
5,900.00	5,173.83	5,681.61	5,551.36	41.44	28.69	177.31	-993.18	-121.85	1,688.32	1,628.82	59.50	28.374		
6,000.00	5,261.34	5,777.73	5,645.03	42.18	29.19	177.33	-1,014.67	-124.15	1,715.86	1,655.32	60.54	28.343		
6,100.00	5,350.49	5,874.77	5,739.58	42.88	29.69	177.35	-1,036.36	-126.46	1,740.02	1,678.45	61.57	28.261		
6,200.00	5,441.16	5,972.58	5,834.89	43.56	30.19	177.36	-1,058.23	-128.79	1,760.79	1,698.20	62.59	28.132		
6,300.00	5,533.25	6,071.06	5,930.84	44.20	30.70	177.35	-1,080.24	-131.14	1,778.14	1,714.54	63.60	27.958		
6,400.00	5,626.65	6,170.08	6,027.33	44.82	31.21	177.34	-1,102.38	-133.50	1,792.04	1,727.45	64.60	27.742		
6,500.00	5,721.23	6,269.52	6,124.23	45.40	31.73	177.33	-1,124.61	-135.87	1,802.49	1,736.91	65.58	27.487		
6,600.00	5,816.89	6,369.27	6,221.42	45.94	32.24	177.30	-1,146.91	-138.25	1,809.46	1,742.92	66.54	27.194		
6,700.00	5,913.51	6,469.20	6,318.79	46.45	32.76	177.27	-1,169.25	-140.63	1,812.94	1,745.46	67.48	26.865		
6,800.00	6,010.97	6,569.18	6,416.22	46.93	33.28	177.22	-1,191.60	-143.01	1,812.95	1,744.54	68.41	26.503		
6,900.00	6,109.15	6,669.30	6,513.64	47.38	33.80	177.09	-1,213.96	-147.86	1,809.46	1,740.15	69.31	26.106		
7,000.00	6,207.93	6,766.34	6,606.44	47.80	34.28	176.53	-1,235.36	-165.99	1,802.58	1,732.41	70.17	25.689		
7,100.00	6,307.19	6,855.89	6,688.78	48.18	34.69	175.58	-1,254.43	-195.37	1,792.75	1,721.82	70.92	25.277		
7,200.00	6,406.82	6,935.58	6,758.02	48.53	35.04	174.40	-1,270.53	-231.26	1,780.64	1,709.10	71.54	24.889		
7,300.00	6,506.68	7,004.73	6,814.16	48.84	35.31	173.11	-1,283.65	-269.39	1,767.04	1,695.03	72.01	24.540		
7,400.00	6,606.66	7,063.87	6,858.72	49.10	35.53	84.87	-1,294.11	-306.80	1,752.69	1,680.42	72.28	24.250		
7,500.00	6,706.21	7,118.38	6,896.63	49.35	35.72	84.91	-1,303.05	-344.91	1,739.22	1,666.82	72.40	24.022		
7,600.00	6,803.22	7,172.56	6,931.03	49.59	35.90	84.88	-1,311.21	-385.95	1,727.60	1,655.19	72.40	23.861		
7,700.00	6,895.32	7,226.53	6,961.78	49.82	36.07	84.80	-1,318.54	-429.67	1,717.74	1,645.44	72.30	23.759		
7,800.00	6,980.23	7,280.39	6,988.75	50.03	36.24	84.68	-1,325.03	-475.81	1,709.54	1,637.41	72.13	23.702		
7,900.00	7,055.85	7,334.18	7,011.81	50.21	36.41	84.54	-1,330.63	-524.07	1,702.89	1,630.93	71.96	23.663		
8,000.00	7,120.34	7,387.95	7,030.80	50.36	36.61	84.40	-1,335.31	-574.15	1,697.68	1,625.78	71.90	23.610		
8,100.00	7,172.10	7,450.00	7,047.50	50.47	36.87	84.20	-1,339.52	-633.73	1,693.84	1,621.64	72.20	23.461		
8,200.00	7,209.85	7,500.00	7,056.79	50.55	37.13	84.12	-1,341.97	-682.78	1,691.18	1,618.57	72.61	23.292		
8,300.00	7,232.68	7,550.00	7,062.30	50.61	37.45	84.06	-1,343.56	-732.44	1,689.70	1,616.29	73.41	23.018		
8,400.00	7,240.00	7,606.84	7,063.99	50.65	37.90	84.02	-1,344.32	-789.23	1,689.35	1,614.61	74.74	22.604		
8,500.00	7,239.60	7,706.84	7,063.75	50.69	38.90	84.03	-1,344.92	-889.23	1,689.34	1,612.25	77.09	21.913		
8,600.00	7,239.19	7,806.84	7,063.52	50.75	40.16	84.03	-1,345.51	-989.23	1,689.34	1,609.55	79.79	21.173		
8,700.00	7,238.78	7,906.84	7,063.29	50.85	41.62	84.04	-1,346.11	-1,089.23	1,689.33	1,606.55	82.79	20.406		
8,800.00	7,238.38	8,006.84	7,063.06	51.02	43.26	84.04	-1,346.71	-1,189.23	1,689.33	1,603.27	86.06	19.630		
8,900.00	7,237.97	8,106.84	7,062.83	51.32	45.03	84.05	-1,347.31	-1,289.22	1,689.32	1,599.75	89.57	18.860		
9,000.00	7,237.57	8,206.84	7,062.60	51.95	46.91	84.06	-1,347.91	-1,389.22	1,689.32	1,596.02	93.30	18.107		
9,100.00	7,237.16	8,306.84	7,062.37	53.10	48.89	84.06	-1,348.51	-1,489.22	1,689.31	1,592.10	97.21	17.378		
9,200.00	7,236.76	8,406.84	7,062.14	54.69	50.97	84.07	-1,349.11	-1,589.22	1,689.31	1,588.00	101.30	16.675		
9,300.00	7,236.35	8,506.84	7,061.91	56.53	53.12	84.07	-1,349.71	-1,689.21	1,689.30	1,583.77	105.54	16.007		
9,400.00	7,235.94	8,606.84	7,061.68	58.53	55.34	84.08	-1,350.31	-1,789.21	1,689.30	1,579.39	109.91	15.370		
9,500.00	7,235.54	8,706.84	7,061.45	60.62	57.61	84.08	-1,350.90	-1,889.21	1,689.29	1,574.90	114.39	14.767		
9,600.00	7,235.13	8,806.84	7,061.22	62.80	59.94	84.09	-1,351.50	-1,989.21	1,689.29	1,570.31	118.98	14.198		
9,700.00	7,234.73	8,906.84	7,060.99	65.03	62.31	84.10	-1,352.10	-2,089.21	1,689.29	1,565.63	123.66	13.661		
9,800.00	7,234.32	9,006.84	7,060.76	67.32	64.72	84.10	-1,352.70	-2,189.20	1,689.28	1,560.86	128.42	13.154		
9,900.00	7,233.92	9,106.84	7,060.53	69.66	67.17	84.11	-1,353.30	-2,289.20	1,689.28	1,556.02	133.26	12.677		
10,000.00	7,233.51	9,206.84	7,060.30	72.03	69.64	84.11	-1,353.90	-2,389.20	1,689.27	1,551.11	138.16	12.227		
10,100.00	7,233.10	9,306.84	7,060.07	74.45	72.15	84.12	-1,354.50	-2,489.20	1,689.27	1,546.15	143.12	11.803		
10,200.00	7,232.70	9,406.84	7,059.84	76.89	74.68	84.13	-1,355.10	-2,589.19	1,689.26	1,541.13	148.13	11.404		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	9,506.84	7,059.61	79.36	77.24	84.13	-1,355.69	-2,689.19	1,689.26	1,536.07	153.19	11.027		
10,400.00	7,231.89	9,606.84	7,059.38	81.86	79.81	84.14	-1,356.29	-2,789.19	1,689.25	1,530.96	158.29	10.672		
10,500.00	7,231.48	9,706.84	7,059.15	84.38	82.41	84.14	-1,356.89	-2,889.19	1,689.25	1,525.82	163.43	10.336		
10,600.00	7,231.08	9,806.84	7,058.92	86.93	85.02	84.15	-1,357.49	-2,989.19	1,689.25	1,520.63	168.61	10.019		
10,700.00	7,230.67	9,906.84	7,058.69	89.49	87.65	84.16	-1,358.09	-3,089.18	1,689.24	1,515.42	173.82	9.718		
10,800.00	7,230.26	10,006.84	7,058.46	92.07	90.29	84.16	-1,358.69	-3,189.18	1,689.24	1,510.18	179.06	9.434		
10,900.00	7,229.86	10,106.84	7,058.23	94.67	92.94	84.17	-1,359.29	-3,289.18	1,689.23	1,504.90	184.33	9.164		
11,000.00	7,229.45	10,206.84	7,058.00	97.28	95.61	84.17	-1,359.89	-3,389.18	1,689.23	1,499.61	189.62	8.908		
11,100.00	7,229.05	10,306.84	7,057.76	99.90	98.28	84.18	-1,360.49	-3,489.17	1,689.22	1,494.29	194.94	8.666		
11,200.00	7,228.64	10,406.84	7,057.53	102.54	100.97	84.19	-1,361.08	-3,589.17	1,689.22	1,488.95	200.27	8.435		
11,300.00	7,228.24	10,506.84	7,057.30	105.19	103.67	84.19	-1,361.68	-3,689.17	1,689.22	1,483.59	205.63	8.215		
11,400.00	7,227.83	10,606.84	7,057.07	107.85	106.37	84.20	-1,362.28	-3,789.17	1,689.21	1,478.21	211.00	8.006		
11,500.00	7,227.42	10,706.84	7,056.84	110.52	109.09	84.20	-1,362.88	-3,889.17	1,689.21	1,472.82	216.39	7.806		
11,600.00	7,227.02	10,806.84	7,056.61	113.20	111.81	84.21	-1,363.48	-3,989.16	1,689.20	1,467.41	221.79	7.616		
11,700.00	7,226.61	10,906.84	7,056.38	115.89	114.53	84.22	-1,364.08	-4,089.16	1,689.20	1,461.99	227.21	7.434		
11,800.00	7,226.21	11,006.84	7,056.15	118.59	117.27	84.22	-1,364.68	-4,189.16	1,689.20	1,456.55	232.65	7.261		
11,900.00	7,225.80	11,106.83	7,055.92	121.29	120.00	84.23	-1,365.28	-4,289.16	1,689.19	1,451.10	238.09	7.095		
12,000.00	7,225.40	11,206.83	7,055.69	124.00	122.75	84.23	-1,365.87	-4,389.15	1,689.19	1,445.64	243.55	6.936		
12,100.00	7,224.99	11,306.83	7,055.46	126.72	125.50	84.24	-1,366.47	-4,489.15	1,689.18	1,440.17	249.02	6.783		
12,200.00	7,224.58	11,406.83	7,055.23	129.44	128.25	84.25	-1,367.07	-4,589.15	1,689.18	1,434.69	254.49	6.637		
12,300.00	7,224.18	11,506.83	7,055.00	132.17	131.01	84.25	-1,367.67	-4,689.15	1,689.18	1,429.19	259.98	6.497		
12,400.00	7,223.77	11,606.83	7,054.77	134.91	133.77	84.26	-1,368.27	-4,789.15	1,689.17	1,423.69	265.48	6.363		
12,500.00	7,223.37	11,706.83	7,054.54	137.65	136.54	84.26	-1,368.87	-4,889.14	1,689.17	1,418.19	270.98	6.233		
12,600.00	7,222.96	11,806.83	7,054.31	140.39	139.31	84.27	-1,369.47	-4,989.14	1,689.16	1,412.67	276.50	6.109		
12,700.00	7,222.55	11,906.83	7,054.08	143.14	142.09	84.28	-1,370.07	-5,089.14	1,689.16	1,407.14	282.01	5.990		
12,800.00	7,222.15	12,006.83	7,053.85	145.89	144.86	84.28	-1,370.67	-5,189.14	1,689.16	1,401.61	287.54	5.874		
12,900.00	7,221.74	12,106.83	7,053.62	148.65	147.64	84.29	-1,371.26	-5,289.13	1,689.15	1,396.08	293.08	5.764		
13,000.00	7,221.34	12,206.83	7,053.39	151.41	150.43	84.29	-1,371.86	-5,389.13	1,689.15	1,390.53	298.62	5.657		
13,100.00	7,220.93	12,306.83	7,053.16	154.18	153.21	84.30	-1,372.46	-5,489.13	1,689.14	1,384.98	304.16	5.553		
13,200.00	7,220.53	12,406.83	7,052.93	156.94	156.00	84.31	-1,373.06	-5,589.13	1,689.14	1,379.43	309.71	5.454		
13,300.00	7,220.12	12,506.83	7,052.70	159.72	158.79	84.31	-1,373.66	-5,689.13	1,689.14	1,373.87	315.27	5.358		
13,400.00	7,219.71	12,606.83	7,052.47	162.49	161.59	84.32	-1,374.26	-5,789.12	1,689.13	1,368.30	320.83	5.265		
13,500.00	7,219.31	12,706.83	7,052.24	165.27	164.38	84.32	-1,374.86	-5,889.12	1,689.13	1,362.73	326.40	5.175		
13,600.00	7,218.90	12,806.83	7,052.00	168.05	167.18	84.33	-1,375.46	-5,989.12	1,689.13	1,357.16	331.97	5.088		
13,700.00	7,218.50	12,906.83	7,051.77	170.83	169.98	84.34	-1,376.06	-6,089.12	1,689.12	1,351.58	337.54	5.004		
13,800.00	7,218.09	13,006.83	7,051.54	173.61	172.78	84.34	-1,376.65	-6,189.11	1,689.12	1,345.99	343.12	4.923		
13,900.00	7,217.69	13,106.83	7,051.31	176.40	175.59	84.35	-1,377.25	-6,289.11	1,689.11	1,340.41	348.71	4.844		
14,000.00	7,217.28	13,206.83	7,051.08	179.19	178.39	84.35	-1,377.85	-6,389.11	1,689.11	1,334.82	354.29	4.768		
14,100.00	7,216.87	13,306.83	7,050.85	181.98	181.20	84.36	-1,378.45	-6,489.11	1,689.11	1,329.22	359.89	4.693		
14,200.00	7,216.47	13,406.83	7,050.62	184.78	184.01	84.37	-1,379.05	-6,589.11	1,689.10	1,323.62	365.48	4.622		
14,300.00	7,216.06	13,506.83	7,050.39	187.57	186.82	84.37	-1,379.65	-6,689.10	1,689.10	1,318.02	371.08	4.552		
14,400.00	7,215.66	13,606.83	7,050.16	190.37	189.63	84.38	-1,380.25	-6,789.10	1,689.10	1,312.42	376.68	4.484		
14,500.00	7,215.25	13,706.83	7,049.93	193.17	192.45	84.38	-1,380.85	-6,889.10	1,689.09	1,306.81	382.28	4.418		
14,600.00	7,214.85	13,806.83	7,049.70	195.97	195.26	84.39	-1,381.44	-6,989.10	1,689.09	1,301.20	387.89	4.355		
14,700.00	7,214.44	13,906.83	7,049.47	198.77	198.08	84.40	-1,382.04	-7,089.09	1,689.08	1,295.59	393.50	4.292		
14,800.00	7,214.03	14,006.83	7,049.24	201.58	200.89	84.40	-1,382.64	-7,189.09	1,689.08	1,289.97	399.11	4.232		
14,900.00	7,213.63	14,106.83	7,049.01	204.38	203.71	84.41	-1,383.24	-7,289.09	1,689.08	1,284.35	404.72	4.173		
15,000.00	7,213.22	14,206.83	7,048.78	207.19	206.53	84.41	-1,383.84	-7,389.09	1,689.07	1,278.73	410.34	4.116		
15,100.00	7,212.82	14,306.83	7,048.55	210.00	209.35	84.42	-1,384.44	-7,489.09	1,689.07	1,273.11	415.96	4.061		
15,200.00	7,212.41	14,406.83	7,048.32	212.81	212.17	84.42	-1,385.04	-7,589.08	1,689.07	1,267.48	421.58	4.006		
15,300.00	7,212.01	14,506.83	7,048.09	215.62	215.00	84.43	-1,385.64	-7,689.08	1,689.06	1,261.86	427.21	3.954		
15,400.00	7,211.60	14,606.83	7,047.86	218.43	217.82	84.44	-1,386.24	-7,789.08	1,689.06	1,256.23	432.83	3.902		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,500.00	7,211.19	14,706.83	7,047.63	221.25	220.64	84.44	-1,386.83	-7,889.08	1,689.06	1,250.60	438.46	3.852	
15,600.00	7,210.79	14,806.83	7,047.40	224.06	223.47	84.45	-1,387.43	-7,989.07	1,689.05	1,244.96	444.09	3.803	
15,700.00	7,210.38	14,906.83	7,047.17	226.88	226.29	84.45	-1,388.03	-8,089.07	1,689.05	1,239.33	449.72	3.756	
15,776.43	7,210.07	14,983.26	7,046.99	229.03	228.46	84.46	-1,388.49	-8,165.50	1,689.05	1,235.02	454.03	3.720	
15,794.94	7,210.00	14,979.18	7,047.00	229.55	228.34	84.46	-1,388.47	-8,161.42	1,689.20	1,234.95	454.25	3.719 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.44	179.97	1.39	179.98					
100.00	100.00	101.00	100.00	3.28	3.28	0.44	179.97	1.39	179.98	173.41	6.57	27.395		
200.00	200.00	201.07	200.07	3.34	3.34	0.44	179.97	1.39	179.98	173.30	6.67	26.963		
300.00	299.98	307.72	306.69	3.44	3.45	177.74	177.96	1.13	179.84	172.93	6.90	26.058		
400.00	399.84	414.35	413.15	3.59	3.62	177.58	172.02	0.37	179.49	172.24	7.25	24.772		
500.00	499.45	520.96	519.29	3.79	3.84	177.31	162.16	-0.91	178.94	171.24	7.70	23.243		
600.00	598.70	627.54	624.96	4.03	4.11	176.93	148.39	-2.68	178.19	169.95	8.24	21.620		
700.00	697.47	733.67	729.59	4.31	4.42	176.45	130.82	-4.95	177.26	168.40	8.85	20.021		
723.01	720.11	756.68	752.21	4.39	4.49	176.33	126.64	-5.49	177.16	168.17	8.99	19.708 CC, ES		
800.00	795.62	833.65	827.88	4.64	4.75	175.98	112.67	-7.29	178.20	168.74	9.46	18.847		
900.00	893.06	933.54	926.08	5.00	5.11	175.60	94.53	-9.63	182.63	172.51	10.12	18.049		
1,000.00	989.64	1,033.22	1,024.07	5.40	5.49	175.32	76.43	-11.97	190.55	179.72	10.83	17.598		
1,100.00	1,085.27	1,132.56	1,121.74	5.83	5.88	175.14	58.39	-14.29	201.92	190.35	11.58	17.441		
1,200.00	1,179.82	1,231.45	1,218.96	6.29	6.29	175.05	40.43	-16.61	216.75	204.39	12.36	17.534		
1,300.00	1,273.17	1,329.76	1,315.61	6.79	6.71	175.03	22.58	-18.91	235.01	221.83	13.17	17.838		
1,400.00	1,365.21	1,427.38	1,411.58	7.33	7.13	175.08	4.85	-21.20	256.67	242.66	14.01	18.317		
1,500.00	1,455.84	1,524.19	1,506.75	7.89	7.55	175.17	-12.73	-23.47	281.72	266.84	14.87	18.943		
1,600.00	1,544.94	1,620.06	1,601.00	8.50	7.98	175.29	-30.14	-25.71	310.11	294.37	15.75	19.691		
1,700.00	1,632.39	1,714.89	1,694.22	9.13	8.41	175.42	-47.36	-27.93	341.83	325.19	16.64	20.542		
1,800.00	1,718.11	1,808.55	1,786.30	9.80	8.84	175.56	-64.37	-30.13	376.84	359.29	17.54	21.480		
1,900.00	1,802.44	1,901.26	1,877.44	10.49	9.26	175.74	-81.20	-32.30	414.29	395.84	18.46	22.448		
2,000.00	1,886.68	2,006.09	1,968.53	11.20	9.75	175.90	-98.03	-34.47	451.90	432.48	19.42	23.265		
2,100.00	1,970.92	2,086.56	2,059.61	11.93	10.12	176.04	-114.85	-36.64	489.51	469.21	20.30	24.115		
2,200.00	2,055.17	2,179.22	2,150.70	12.66	10.56	176.16	-131.67	-38.81	527.13	505.89	21.24	24.823		
2,300.00	2,139.41	2,271.87	2,241.78	13.40	10.99	176.27	-148.50	-40.98	564.74	542.56	22.18	25.461		
2,400.00	2,223.66	2,364.52	2,332.87	14.14	11.43	176.36	-165.32	-43.15	602.36	579.22	23.13	26.038		
2,500.00	2,307.90	2,457.17	2,423.96	14.89	11.87	176.44	-182.15	-45.32	639.97	615.88	24.09	26.563		
2,600.00	2,392.14	2,549.82	2,515.04	15.65	12.31	176.51	-198.97	-47.49	677.59	652.53	25.06	27.041		
2,700.00	2,476.39	2,642.47	2,606.13	16.41	12.75	176.57	-215.80	-49.66	715.21	689.18	26.03	27.479		
2,800.00	2,560.63	2,735.13	2,697.21	17.17	13.19	176.63	-232.62	-51.83	752.83	725.83	27.00	27.881		
2,900.00	2,644.88	2,827.78	2,788.30	17.93	13.64	176.68	-249.45	-54.00	790.45	762.47	27.98	28.251		
3,000.00	2,729.12	2,920.43	2,879.38	18.70	14.08	176.73	-266.27	-56.17	828.07	799.11	28.96	28.592		
3,100.00	2,813.36	3,013.08	2,970.47	19.47	14.53	176.77	-283.10	-58.34	865.69	835.74	29.95	28.908		
3,200.00	2,897.61	3,105.73	3,061.55	20.25	14.98	176.81	-299.92	-60.51	903.31	872.38	30.93	29.200		
3,300.00	2,981.85	3,201.62	3,152.64	21.02	15.44	176.85	-316.74	-62.68	940.93	908.99	31.94	29.459		
3,400.00	3,066.10	3,308.96	3,243.72	21.80	15.96	176.88	-333.57	-64.85	978.55	945.55	33.00	29.653		
3,500.00	3,150.34	3,383.69	3,334.81	22.58	16.32	176.91	-350.39	-67.02	1,016.18	982.26	33.91	29.964		
3,600.00	3,234.58	3,476.34	3,425.90	23.35	16.77	176.94	-367.22	-69.19	1,053.80	1,018.89	34.91	30.186		
3,700.00	3,318.83	3,568.99	3,516.98	24.13	17.22	176.96	-384.04	-71.36	1,091.42	1,055.51	35.91	30.394		
3,800.00	3,403.07	3,661.64	3,608.07	24.92	17.67	176.99	-400.87	-73.53	1,129.04	1,092.13	36.91	30.589		
3,900.00	3,487.32	3,754.29	3,699.15	25.70	18.12	177.01	-417.69	-75.70	1,166.67	1,128.75	37.91	30.773		
4,000.00	3,571.56	3,846.95	3,790.24	26.48	18.57	177.04	-434.52	-77.87	1,204.29	1,165.37	38.92	30.946		
4,100.00	3,655.80	3,939.60	3,881.32	27.27	19.02	177.06	-451.34	-80.04	1,241.91	1,201.99	39.92	31.109		
4,200.00	3,740.05	4,032.25	3,972.41	28.05	19.48	177.08	-468.17	-82.21	1,279.54	1,238.61	40.93	31.264		
4,300.00	3,824.29	4,124.90	4,063.49	28.84	19.93	177.09	-484.99	-84.38	1,317.16	1,275.23	41.93	31.410		
4,400.00	3,908.54	4,217.55	4,154.58	29.62	20.38	177.11	-501.81	-86.55	1,354.78	1,311.84	42.94	31.549		
4,500.00	3,992.78	4,310.20	4,245.66	30.41	20.83	177.13	-518.64	-88.72	1,392.41	1,348.46	43.95	31.680		
4,600.00	4,077.03	4,402.86	4,336.75	31.20	21.29	177.14	-535.46	-90.89	1,430.03	1,385.07	44.96	31.805		
4,700.00	4,161.27	4,504.49	4,427.83	31.98	21.79	177.16	-552.29	-93.06	1,467.66	1,421.64	46.02	31.895		
4,800.00	4,245.51	4,588.16	4,518.92	32.77	22.19	177.17	-569.11	-95.23	1,505.28	1,458.29	46.99	32.037		
4,900.00	4,329.76	4,680.81	4,610.01	33.56	22.65	177.18	-585.94	-97.40	1,542.90	1,494.91	48.00	32.145		
5,000.00	4,414.00	4,773.46	4,701.09	34.35	23.10	177.20	-602.76	-99.57	1,580.53	1,531.52	49.01	32.248		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	4,866.11	4,792.18	35.14	23.56	177.21	-619.59	-101.74	1,618.15	1,568.13	50.03	32.346		
5,200.00	4,582.49	4,958.76	4,883.26	35.93	24.01	177.22	-636.41	-103.91	1,655.78	1,604.74	51.04	32.440		
5,300.00	4,666.73	5,051.42	4,974.35	36.72	24.47	177.23	-653.24	-106.08	1,693.40	1,641.34	52.06	32.530		
5,400.00	4,750.98	5,144.07	5,065.43	37.51	24.92	177.24	-670.06	-108.25	1,731.02	1,677.95	53.07	32.617		
5,500.00	4,835.22	5,236.72	5,156.52	38.30	25.38	177.25	-686.88	-110.42	1,768.65	1,714.56	54.09	32.699		
5,600.00	4,919.47	5,329.37	5,247.60	39.09	25.83	177.26	-703.71	-112.60	1,806.27	1,751.17	55.11	32.779		
5,700.00	5,003.71	5,422.02	5,338.69	39.88	26.29	177.27	-720.53	-114.77	1,843.90	1,787.78	56.12	32.855		
5,800.00	5,088.06	5,514.75	5,429.85	40.67	26.74	177.29	-737.37	-116.94	1,881.34	1,824.20	57.14	32.925		
5,900.00	5,173.83	5,608.45	5,521.96	41.44	27.20	177.33	-754.39	-119.13	1,916.26	1,858.10	58.16	32.951		
6,000.00	5,261.34	5,703.31	5,615.22	42.18	27.67	177.36	-771.61	-121.35	1,947.89	1,888.72	59.17	32.922		
6,100.00	5,350.49	5,800.78	5,709.51	42.88	28.15	177.38	-789.03	-123.60	1,976.19	1,916.01	60.18	32.838		
6,200.00	5,441.16	5,903.95	5,804.70	43.56	28.66	177.39	-806.61	-125.87	2,001.13	1,939.92	61.21	32.695		
6,300.00	5,533.25	6,006.31	5,900.70	44.20	29.16	177.40	-824.34	-128.16	2,022.68	1,960.46	62.22	32.511		
6,400.00	5,626.65	6,107.97	5,997.37	44.82	29.66	177.40	-842.20	-130.46	2,040.81	1,977.60	63.21	32.288		
6,500.00	5,721.23	6,209.07	6,094.60	45.40	30.16	177.39	-860.16	-132.78	2,055.50	1,991.32	64.18	32.028		
6,600.00	5,816.89	6,309.71	6,192.28	45.94	30.65	177.37	-878.20	-135.10	2,066.74	2,001.61	65.13	31.732		
6,700.00	5,913.51	6,389.98	6,290.28	46.45	31.05	177.35	-896.30	-137.44	2,074.50	2,008.53	65.97	31.447		
6,800.00	6,010.97	6,489.87	6,388.49	46.93	31.54	177.31	-914.44	-139.78	2,078.79	2,011.91	66.88	31.083		
6,900.00	6,109.15	6,589.85	6,486.78	47.38	32.03	177.27	-932.60	-142.12	2,079.59	2,011.82	67.77	30.687		
7,000.00	6,207.93	6,692.24	6,587.28	47.80	32.54	177.15	-951.21	-147.24	2,076.87	2,008.21	68.66	30.249		
7,100.00	6,307.19	6,792.87	6,684.21	48.18	33.02	176.62	-969.40	-166.72	2,070.59	2,001.07	69.51	29.787		
7,200.00	6,406.82	6,885.15	6,769.40	48.53	33.43	175.74	-985.62	-198.03	2,061.14	1,990.89	70.25	29.340		
7,300.00	6,506.68	6,966.59	6,840.17	48.84	33.76	174.65	-999.30	-235.83	2,049.20	1,978.35	70.84	28.925		
7,400.00	6,606.66	7,036.66	6,896.81	49.10	34.03	86.53	-1,010.40	-275.48	2,035.49	1,964.22	71.27	28.560		
7,500.00	6,706.21	7,100.00	6,944.04	49.35	34.26	86.69	-1,019.79	-316.59	2,021.90	1,950.33	71.57	28.250		
7,600.00	6,803.22	7,162.73	6,986.61	49.59	34.48	86.81	-1,028.39	-361.82	2,009.74	1,937.93	71.81	27.988		
7,700.00	6,895.32	7,223.80	7,023.64	49.82	34.68	86.91	-1,036.02	-409.74	1,999.02	1,927.05	71.97	27.775		
7,800.00	6,980.23	7,284.00	7,055.56	50.03	34.88	86.98	-1,042.75	-460.32	1,989.75	1,917.64	72.11	27.595		
7,900.00	7,055.85	7,343.58	7,082.37	50.21	35.10	87.03	-1,048.57	-513.18	1,981.91	1,909.64	72.27	27.424		
8,000.00	7,120.34	7,400.00	7,103.16	50.36	35.34	87.07	-1,053.28	-565.40	1,975.48	1,902.98	72.50	27.247		
8,100.00	7,172.10	7,461.48	7,120.54	50.47	35.67	87.06	-1,057.46	-624.19	1,970.44	1,897.42	73.02	26.984		
8,200.00	7,209.85	7,520.02	7,131.84	50.55	36.07	87.06	-1,060.50	-681.54	1,966.77	1,892.99	73.78	26.657		
8,300.00	7,232.68	7,578.42	7,137.89	50.61	36.56	87.06	-1,062.59	-739.56	1,964.44	1,889.57	74.87	26.240		
8,400.00	7,240.00	7,648.71	7,138.84	50.65	37.27	87.05	-1,063.93	-809.81	1,963.35	1,886.87	76.48	25.672		
8,500.00	7,239.60	7,748.70	7,138.30	50.69	38.48	87.04	-1,065.50	-909.80	1,962.40	1,883.49	78.91	24.869		
8,600.00	7,239.19	7,848.70	7,137.76	50.75	39.89	87.04	-1,067.07	-1,009.78	1,961.45	1,879.79	81.66	24.020		
8,700.00	7,238.78	7,948.69	7,137.21	50.85	41.46	87.03	-1,068.64	-1,109.76	1,960.50	1,875.80	84.70	23.146		
8,800.00	7,238.38	8,048.69	7,136.67	51.02	43.18	87.03	-1,070.21	-1,209.74	1,959.55	1,871.54	88.01	22.265		
8,900.00	7,237.97	8,148.68	7,136.13	51.32	45.01	87.02	-1,071.78	-1,309.72	1,958.60	1,867.04	91.55	21.393		
9,000.00	7,237.57	8,248.68	7,135.59	51.95	46.96	87.02	-1,073.35	-1,409.70	1,957.65	1,862.34	95.31	20.540		
9,100.00	7,237.16	8,348.68	7,135.05	53.10	48.99	87.01	-1,074.92	-1,509.69	1,956.70	1,857.45	99.25	19.715		
9,200.00	7,236.76	8,448.67	7,134.51	54.69	51.10	87.01	-1,076.49	-1,609.67	1,955.75	1,852.40	103.35	18.923		
9,300.00	7,236.35	8,548.67	7,133.96	56.53	53.29	87.00	-1,078.06	-1,709.65	1,954.80	1,847.20	107.60	18.167		
9,400.00	7,235.94	8,648.66	7,133.42	58.53	55.54	86.99	-1,079.63	-1,809.63	1,953.85	1,841.87	111.98	17.448		
9,500.00	7,235.54	8,748.66	7,132.88	60.62	57.84	86.99	-1,081.20	-1,909.61	1,952.90	1,836.43	116.48	16.767		
9,600.00	7,235.13	8,848.65	7,132.34	62.80	60.19	86.98	-1,082.77	-2,009.59	1,951.96	1,830.88	121.07	16.122		
9,700.00	7,234.73	8,948.65	7,131.80	65.03	62.58	86.98	-1,084.34	-2,109.57	1,951.01	1,825.25	125.76	15.514		
9,800.00	7,234.32	9,048.64	7,131.25	67.32	65.01	86.97	-1,085.91	-2,209.56	1,950.06	1,819.53	130.53	14.940		
9,900.00	7,233.92	9,148.64	7,130.71	69.66	67.47	86.97	-1,087.48	-2,309.54	1,949.11	1,813.74	135.37	14.399		
10,000.00	7,233.51	9,248.63	7,130.17	72.03	69.97	86.96	-1,089.05	-2,409.52	1,948.16	1,807.89	140.27	13.889		
10,100.00	7,233.10	9,348.63	7,129.63	74.45	72.49	86.96	-1,090.62	-2,509.50	1,947.21	1,801.98	145.23	13.407		
10,200.00	7,232.70	9,448.62	7,129.09	76.89	75.03	86.95	-1,092.19	-2,609.48	1,946.26	1,796.01	150.25	12.954		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	9,548.62	7,128.54	79.36	77.60	86.94	-1,093.76	-2,709.46	1,945.31	1,790.00	155.31	12.525		
10,400.00	7,231.89	9,648.61	7,128.00	81.86	80.18	86.94	-1,095.33	-2,809.45	1,944.36	1,783.94	160.42	12.121		
10,500.00	7,231.48	9,748.61	7,127.46	84.38	82.79	86.93	-1,096.90	-2,909.43	1,943.41	1,777.85	165.56	11.738		
10,600.00	7,231.08	9,848.61	7,126.92	86.93	85.40	86.93	-1,098.47	-3,009.41	1,942.47	1,771.72	170.75	11.376		
10,700.00	7,230.67	9,948.60	7,126.38	89.49	88.04	86.92	-1,100.04	-3,109.39	1,941.52	1,765.56	175.96	11.034		
10,800.00	7,230.26	10,048.60	7,125.83	92.07	90.69	86.92	-1,101.61	-3,209.37	1,940.57	1,759.37	181.20	10.709		
10,900.00	7,229.86	10,148.59	7,125.29	94.67	93.35	86.91	-1,103.18	-3,309.35	1,939.62	1,753.15	186.47	10.402		
11,000.00	7,229.45	10,248.59	7,124.75	97.28	96.02	86.91	-1,104.75	-3,409.33	1,938.67	1,746.90	191.77	10.109		
11,100.00	7,229.05	10,348.58	7,124.21	99.90	98.70	86.90	-1,106.32	-3,509.32	1,937.72	1,740.64	197.08	9.832		
11,200.00	7,228.64	10,448.58	7,123.67	102.54	101.39	86.90	-1,107.89	-3,609.30	1,936.77	1,734.35	202.42	9.568		
11,300.00	7,228.24	10,548.57	7,123.12	105.19	104.09	86.89	-1,109.46	-3,709.28	1,935.82	1,728.04	207.78	9.317		
11,400.00	7,227.83	10,648.57	7,122.58	107.85	106.80	86.88	-1,111.03	-3,809.26	1,934.87	1,721.72	213.16	9.077		
11,500.00	7,227.42	10,748.56	7,122.04	110.52	109.52	86.88	-1,112.60	-3,909.24	1,933.93	1,715.37	218.55	8.849		
11,600.00	7,227.02	10,848.56	7,121.50	113.20	112.24	86.87	-1,114.17	-4,009.22	1,932.98	1,709.02	223.96	8.631		
11,700.00	7,226.61	10,948.55	7,120.96	115.89	114.97	86.87	-1,115.74	-4,109.21	1,932.03	1,702.65	229.38	8.423		
11,800.00	7,226.21	11,048.55	7,120.41	118.59	117.70	86.86	-1,117.31	-4,209.19	1,931.08	1,696.26	234.82	8.224		
11,900.00	7,225.80	11,148.54	7,119.87	121.29	120.44	86.86	-1,118.88	-4,309.17	1,930.13	1,689.86	240.27	8.033		
12,000.00	7,225.40	11,248.54	7,119.33	124.00	123.19	86.85	-1,120.45	-4,409.15	1,929.18	1,683.46	245.73	7.851		
12,100.00	7,224.99	11,348.54	7,118.79	126.72	125.94	86.84	-1,122.02	-4,509.13	1,928.23	1,677.04	251.20	7.676		
12,200.00	7,224.58	11,448.53	7,118.25	129.44	128.70	86.84	-1,123.59	-4,609.11	1,927.28	1,670.61	256.68	7.509		
12,300.00	7,224.18	11,548.53	7,117.71	132.17	131.45	86.83	-1,125.16	-4,709.09	1,926.34	1,664.17	262.17	7.348		
12,400.00	7,223.77	11,648.52	7,117.16	134.91	134.22	86.83	-1,126.73	-4,809.08	1,925.39	1,657.72	267.67	7.193		
12,500.00	7,223.37	11,748.52	7,116.62	137.65	136.99	86.82	-1,128.30	-4,909.06	1,924.44	1,651.26	273.18	7.045		
12,600.00	7,222.96	11,848.51	7,116.08	140.39	139.76	86.82	-1,129.87	-5,009.04	1,923.49	1,644.80	278.69	6.902		
12,700.00	7,222.55	11,948.51	7,115.54	143.14	142.53	86.81	-1,131.44	-5,109.02	1,922.54	1,638.33	284.21	6.764		
12,800.00	7,222.15	12,048.50	7,115.00	145.89	145.31	86.81	-1,133.01	-5,209.00	1,921.59	1,631.85	289.74	6.632		
12,900.00	7,221.74	12,148.50	7,114.45	148.65	148.09	86.80	-1,134.58	-5,308.98	1,920.64	1,625.36	295.28	6.504		
13,000.00	7,221.34	12,248.49	7,113.91	151.41	150.87	86.79	-1,136.15	-5,408.97	1,919.70	1,618.87	300.82	6.381		
13,100.00	7,220.93	12,348.49	7,113.37	154.18	153.66	86.79	-1,137.72	-5,508.95	1,918.75	1,612.37	306.37	6.263		
13,200.00	7,220.53	12,448.48	7,112.83	156.94	156.45	86.78	-1,139.29	-5,608.93	1,917.80	1,605.87	311.93	6.148		
13,300.00	7,220.12	12,548.48	7,112.29	159.72	159.24	86.78	-1,140.86	-5,708.91	1,916.85	1,599.36	317.49	6.038		
13,400.00	7,219.71	12,648.47	7,111.74	162.49	162.03	86.77	-1,142.43	-5,808.89	1,915.90	1,592.85	323.05	5.931		
13,500.00	7,219.31	12,748.47	7,111.20	165.27	164.83	86.77	-1,144.00	-5,908.87	1,914.95	1,586.33	328.62	5.827		
13,600.00	7,218.90	12,848.46	7,110.66	168.05	167.62	86.76	-1,145.57	-6,008.85	1,914.01	1,579.81	334.19	5.727		
13,700.00	7,218.50	12,948.46	7,110.12	170.83	170.42	86.75	-1,147.14	-6,108.84	1,913.06	1,573.29	339.77	5.630		
13,800.00	7,218.09	13,048.46	7,109.58	173.61	173.22	86.75	-1,148.71	-6,208.82	1,912.11	1,566.75	345.35	5.537		
13,900.00	7,217.69	13,148.45	7,109.03	176.40	176.03	86.74	-1,150.28	-6,308.80	1,911.16	1,560.22	350.94	5.446		
14,000.00	7,217.28	13,248.45	7,108.49	179.19	178.83	86.74	-1,151.85	-6,408.78	1,910.21	1,553.68	356.53	5.358		
14,100.00	7,216.87	13,348.44	7,107.95	181.98	181.64	86.73	-1,153.42	-6,508.76	1,909.26	1,547.14	362.12	5.272		
14,200.00	7,216.47	13,448.44	7,107.41	184.78	184.44	86.73	-1,154.99	-6,608.74	1,908.31	1,540.60	367.72	5.190		
14,300.00	7,216.06	13,548.43	7,106.87	187.57	187.25	86.72	-1,156.56	-6,708.73	1,907.37	1,534.05	373.32	5.109		
14,400.00	7,215.66	13,648.43	7,106.32	190.37	190.06	86.71	-1,158.13	-6,808.71	1,906.42	1,527.50	378.92	5.031		
14,500.00	7,215.25	13,748.42	7,105.78	193.17	192.87	86.71	-1,159.70	-6,908.69	1,905.47	1,520.94	384.53	4.955		
14,600.00	7,214.85	13,848.42	7,105.24	195.97	195.69	86.70	-1,161.27	-7,008.67	1,904.52	1,514.39	390.13	4.882		
14,700.00	7,214.44	13,948.41	7,104.70	198.77	198.50	86.70	-1,162.84	-7,108.65	1,903.57	1,507.83	395.75	4.810		
14,800.00	7,214.03	14,048.41	7,104.16	201.58	201.32	86.69	-1,164.41	-7,208.63	1,902.63	1,501.27	401.36	4.740		
14,900.00	7,213.63	14,148.40	7,103.61	204.38	204.13	86.69	-1,165.98	-7,308.61	1,901.68	1,494.70	406.98	4.673		
15,000.00	7,213.22	14,248.40	7,103.07	207.19	206.95	86.68	-1,167.55	-7,408.60	1,900.73	1,488.14	412.59	4.607		
15,100.00	7,212.82	14,348.39	7,102.53	210.00	209.77	86.67	-1,169.12	-7,508.58	1,899.78	1,481.57	418.21	4.543		
15,200.00	7,212.41	14,448.39	7,101.99	212.81	212.59	86.67	-1,170.69	-7,608.56	1,898.83	1,475.00	423.84	4.480		
15,300.00	7,212.01	14,548.39	7,101.45	215.62	215.41	86.66	-1,172.26	-7,708.54	1,897.89	1,468.42	429.46	4.419		
15,400.00	7,211.60	14,648.38	7,100.91	218.43	218.23	86.66	-1,173.83	-7,808.52	1,896.94	1,461.85	435.09	4.360		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,500.00	7,211.19	14,748.38	7,100.36	221.25	221.05	86.65	-1,175.40	-7,908.50	1,895.99	1,455.27	440.72	4.302	
15,600.00	7,210.79	14,848.37	7,099.82	224.06	223.88	86.65	-1,176.97	-8,008.49	1,895.04	1,448.69	446.35	4.246	
15,700.00	7,210.38	14,948.37	7,099.28	226.88	226.70	86.64	-1,178.54	-8,108.47	1,894.09	1,442.11	451.98	4.191	
15,770.31	7,210.10	15,000.73	7,099.00	228.86	228.18	86.64	-1,179.36	-8,160.82	1,893.51	1,438.17	455.34	4.158	
15,794.94	7,210.00	15,000.73	7,099.00	229.55	228.18	86.64	-1,179.36	-8,160.82	1,893.67	1,437.83	455.84	4.154 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.27	60.10	0.28	60.10					
100.00	100.00	100.00	100.00	3.28	3.28	0.27	60.10	0.28	60.10	53.53	6.57	9.149		
200.00	200.00	200.00	200.00	3.34	3.34	0.27	60.10	0.28	60.10	53.43	6.67	9.005		
300.00	299.98	302.14	302.12	3.44	3.44	177.59	58.29	0.16	60.07	53.17	6.89	8.714		
400.00	399.84	404.27	404.10	3.59	3.60	177.49	52.84	-0.18	59.96	52.74	7.22	8.300		
500.00	499.45	506.40	505.82	3.79	3.81	177.33	43.77	-0.76	59.78	52.12	7.66	7.804		
600.00	598.70	608.53	607.14	4.03	4.06	177.11	31.08	-1.57	59.53	51.35	8.18	7.275		
700.00	697.47	710.64	707.94	4.31	4.35	176.82	14.80	-2.60	59.22	50.44	8.78	6.744		
800.00	795.62	812.73	808.07	4.64	4.68	176.47	-5.04	-3.86	58.83	49.40	9.44	6.235		
900.00	893.06	914.81	907.42	5.00	5.06	176.04	-28.44	-5.35	58.38	48.24	10.14	5.758		
1,000.00	989.64	1,016.87	1,005.85	5.40	5.47	175.55	-55.34	-7.06	57.87	46.98	10.89	5.316		
1,100.00	1,085.27	1,118.91	1,103.23	5.83	5.91	174.97	-85.72	-8.99	57.29	45.62	11.67	4.910		
1,200.00	1,179.82	1,220.92	1,199.45	6.29	6.39	174.32	-119.53	-11.14	56.66	44.18	12.48	4.540		
1,229.37	1,207.37	1,250.50	1,227.14	6.44	6.54	174.13	-129.91	-11.80	56.53	43.80	12.72	4.443 CC, ES		
1,300.00	1,273.17	1,321.12	1,293.23	6.79	6.90	173.78	-154.74	-13.38	57.39	44.08	13.32	4.310		
1,400.00	1,365.21	1,421.03	1,386.73	7.33	7.41	173.63	-189.86	-15.61	61.58	47.39	14.19	4.340		
1,500.00	1,455.84	1,520.73	1,480.04	7.89	7.95	173.81	-224.91	-17.84	69.23	54.13	15.10	4.586		
1,600.00	1,544.94	1,620.10	1,573.05	8.50	8.49	174.22	-259.85	-20.06	80.34	64.30	16.04	5.010		
1,700.00	1,632.39	1,719.03	1,665.63	9.13	9.03	174.71	-294.63	-22.27	94.90	77.90	17.00	5.582		
1,800.00	1,718.11	1,817.39	1,757.69	9.80	9.58	175.22	-329.20	-24.47	112.90	94.91	17.99	6.276		
1,900.00	1,802.44	1,915.24	1,849.27	10.49	10.14	175.69	-363.61	-26.65	133.48	114.48	18.99	7.027		
2,000.00	1,886.68	2,013.06	1,940.82	11.20	10.70	176.04	-398.00	-28.84	154.22	134.21	20.01	7.707		
2,100.00	1,970.92	2,110.88	2,032.37	11.93	11.26	176.31	-432.39	-31.02	174.97	153.93	21.04	8.315		
2,200.00	2,055.17	2,208.70	2,123.92	12.66	11.83	176.52	-466.78	-33.21	195.72	173.64	22.09	8.862		
2,300.00	2,139.41	2,306.52	2,215.47	13.40	12.40	176.70	-501.17	-35.39	216.47	193.34	23.14	9.355		
2,400.00	2,223.66	2,404.34	2,307.02	14.14	12.98	176.84	-535.55	-37.58	237.23	213.03	24.20	9.802		
2,500.00	2,307.90	2,502.16	2,398.57	14.89	13.55	176.96	-569.94	-39.77	257.99	232.71	25.27	10.208		
2,600.00	2,392.14	2,600.02	2,490.12	15.65	14.13	177.06	-604.33	-41.95	278.74	252.39	26.35	10.578		
2,700.00	2,476.39	2,702.19	2,581.67	16.41	14.74	177.15	-638.72	-44.14	299.50	272.04	27.46	10.908		
2,800.00	2,560.63	2,795.63	2,673.22	17.17	15.30	177.22	-673.11	-46.32	320.26	291.74	28.52	11.228		
2,900.00	2,644.88	2,893.45	2,764.77	17.93	15.88	177.29	-707.50	-48.51	341.02	311.40	29.62	11.515		
3,000.00	2,729.12	3,008.73	2,856.32	18.70	16.57	177.35	-741.89	-50.69	361.78	330.97	30.80	11.745		
3,100.00	2,813.36	3,089.09	2,947.87	19.47	17.05	177.40	-776.28	-52.88	382.54	350.72	31.81	12.024		
3,200.00	2,897.61	3,186.91	3,039.42	20.25	17.64	177.45	-810.67	-55.07	403.29	370.38	32.92	12.251		
3,300.00	2,981.85	3,284.73	3,130.97	21.02	18.23	177.49	-845.06	-57.25	424.05	390.03	34.03	12.462		
3,400.00	3,066.10	3,382.55	3,222.52	21.80	18.82	177.53	-879.45	-59.44	444.81	409.68	35.14	12.659		
3,500.00	3,150.34	3,480.37	3,314.07	22.58	19.41	177.57	-913.84	-61.62	465.58	429.32	36.25	12.843		
3,600.00	3,234.58	3,578.19	3,405.63	23.35	20.00	177.60	-948.23	-63.81	486.34	448.97	37.37	13.015		
3,700.00	3,318.83	3,676.02	3,497.18	24.13	20.59	177.63	-982.62	-66.00	507.10	468.61	38.48	13.177		
3,800.00	3,403.07	3,773.84	3,588.73	24.92	21.19	177.66	-1,017.01	-68.18	527.86	488.25	39.60	13.328		
3,900.00	3,487.32	3,871.66	3,680.28	25.70	21.78	177.68	-1,051.40	-70.37	548.62	507.89	40.73	13.471		
4,000.00	3,571.56	3,969.48	3,771.83	26.48	22.37	177.70	-1,085.79	-72.55	569.38	527.53	41.85	13.606		
4,100.00	3,655.80	4,067.30	3,863.38	27.27	22.97	177.73	-1,120.18	-74.74	590.14	547.17	42.97	13.733		
4,200.00	3,740.05	4,165.12	3,954.93	28.05	23.56	177.75	-1,154.57	-76.92	610.90	566.80	44.10	13.853		
4,300.00	3,824.29	4,262.94	4,046.48	28.84	24.16	177.77	-1,188.96	-79.11	631.66	586.44	45.23	13.967		
4,400.00	3,908.54	4,360.76	4,138.03	29.62	24.75	177.78	-1,223.35	-81.30	652.42	606.07	46.35	14.075		
4,500.00	3,992.78	4,458.58	4,229.58	30.41	25.35	177.80	-1,257.74	-83.48	673.18	625.70	47.48	14.178		
4,600.00	4,077.03	4,556.40	4,321.13	31.20	25.94	177.82	-1,292.13	-85.67	693.95	645.33	48.61	14.275		
4,700.00	4,161.27	4,654.22	4,412.68	31.98	26.54	177.83	-1,326.52	-87.85	714.71	664.96	49.74	14.368		
4,800.00	4,245.51	4,752.05	4,504.23	32.77	27.14	177.84	-1,360.91	-90.04	735.47	684.59	50.88	14.456		
4,900.00	4,329.76	4,849.87	4,595.78	33.56	27.73	177.86	-1,395.30	-92.22	756.23	704.22	52.01	14.540		
5,000.00	4,414.00	4,947.69	4,687.33	34.35	28.33	177.87	-1,429.69	-94.41	776.99	723.85	53.14	14.621		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	5,045.51	4,778.88	35.14	28.93	177.88	-1,464.08	-96.60	797.75	743.47	54.28	14.698		
5,200.00	4,582.49	5,143.33	4,870.43	35.93	29.52	177.89	-1,498.47	-98.78	818.51	763.10	55.41	14.771		
5,300.00	4,666.73	5,241.15	4,961.98	36.72	30.12	177.90	-1,532.86	-100.97	839.28	782.73	56.55	14.842		
5,400.00	4,750.98	5,338.97	5,053.53	37.51	30.72	177.91	-1,567.25	-103.15	860.04	802.35	57.68	14.909		
5,500.00	4,835.22	5,436.79	5,145.09	38.30	31.32	177.92	-1,601.64	-105.34	880.80	821.98	58.82	14.974		
5,600.00	4,919.47	5,534.61	5,236.64	39.09	31.92	177.93	-1,636.03	-107.52	901.56	841.60	59.96	15.036		
5,700.00	5,003.71	5,632.43	5,328.19	39.88	32.52	177.94	-1,670.42	-109.71	922.32	861.22	61.10	15.096		
5,800.00	5,088.06	5,730.29	5,419.77	40.67	33.11	177.95	-1,704.82	-111.90	942.89	880.66	62.23	15.151		
5,900.00	5,173.83	5,828.67	5,511.85	41.44	33.72	177.97	-1,739.41	-114.09	960.80	897.44	63.37	15.163		
6,000.00	5,261.34	5,927.62	5,604.45	42.18	34.32	177.97	-1,774.19	-116.31	975.27	910.78	64.49	15.124		
6,100.00	5,350.49	6,027.00	5,697.46	42.88	34.93	177.97	-1,809.13	-118.53	986.28	920.68	65.59	15.036		
6,200.00	5,441.16	6,126.71	5,790.78	43.56	35.54	177.95	-1,844.19	-120.75	993.81	927.12	66.69	14.902		
6,300.00	5,533.25	6,226.62	5,884.29	44.20	36.15	177.93	-1,879.31	-122.99	997.86	930.10	67.76	14.725		
6,400.00	5,626.65	6,326.62	5,977.87	44.82	36.77	177.90	-1,914.46	-125.22	998.43	929.60	68.82	14.507		
6,500.00	5,721.23	6,426.57	6,071.41	45.40	37.38	177.85	-1,949.60	-127.45	995.50	925.64	69.86	14.250		
6,600.00	5,816.89	6,526.35	6,164.80	45.94	37.99	177.80	-1,984.68	-129.68	989.10	918.22	70.88	13.955		
6,700.00	5,913.51	6,625.85	6,257.93	46.45	38.60	177.73	-2,019.66	-131.91	979.22	907.35	71.87	13.625		
6,800.00	6,010.97	6,724.95	6,350.67	46.93	39.21	177.66	-2,054.50	-134.12	965.87	893.03	72.84	13.260		
6,900.00	6,109.15	6,823.51	6,442.92	47.38	39.81	177.56	-2,089.15	-136.32	949.08	875.30	73.78	12.863		
7,000.00	6,207.93	6,921.43	6,534.56	47.80	40.41	177.45	-2,123.58	-138.51	928.87	854.17	74.70	12.435		
7,100.00	6,307.19	7,018.59	6,625.48	48.18	41.01	177.33	-2,157.73	-140.68	905.26	829.67	75.58	11.977		
7,200.00	6,406.82	7,114.97	6,715.57	48.53	41.60	177.01	-2,191.59	-142.83	878.27	801.82	76.45	11.488		
7,300.00	6,506.68	7,207.59	6,800.73	48.84	42.14	175.79	-2,223.69	-144.98	848.12	770.83	77.29	10.973		
7,400.00	6,606.66	7,292.72	6,876.22	49.10	42.60	86.79	-2,252.24	-147.11	815.67	737.61	78.06	10.449		
7,500.00	6,706.21	7,372.28	6,943.12	49.35	42.99	87.56	-2,277.63	-149.23	783.44	704.69	78.75	9.949		
7,600.00	6,803.22	7,449.86	7,003.96	49.59	43.33	88.27	-2,300.80	-151.34	753.23	673.95	79.29	9.500		
7,700.00	6,895.32	7,526.14	7,058.64	49.82	43.63	88.89	-2,321.71	-153.45	725.54	645.92	79.62	9.112		
7,800.00	6,980.23	7,601.59	7,106.96	50.03	43.90	89.40	-2,340.28	-155.56	700.77	621.04	79.73	8.789		
7,900.00	7,055.85	7,676.56	7,148.60	50.21	44.13	89.81	-2,356.38	-157.66	679.28	599.62	79.66	8.527		
8,000.00	7,120.34	7,750.00	7,182.69	50.36	44.34	90.12	-2,369.67	-159.76	661.37	581.89	79.48	8.322		
8,100.00	7,172.10	7,825.92	7,210.47	50.47	44.54	90.30	-2,380.64	-161.86	647.26	567.78	79.48	8.144		
8,200.00	7,209.85	7,900.00	7,229.88	50.55	44.73	90.42	-2,388.48	-163.95	637.12	557.42	79.70	7.994		
8,300.00	7,232.68	7,975.17	7,241.55	50.61	44.92	90.47	-2,393.44	-166.04	631.07	550.65	80.42	7.847		
8,393.79	7,240.05	8,049.75	7,245.01	50.64	45.13	90.45	-2,395.27	-168.13	629.16	547.52	81.63	7.707		
8,400.00	7,240.00	8,050.72	7,244.98	50.65	45.13	90.45	-2,395.31	-168.13	629.16	547.45	81.70	7.700		
8,500.00	7,239.60	8,150.72	7,244.48	50.69	45.50	90.44	-2,395.90	-168.30	629.18	545.22	83.96	7.494		
8,600.00	7,239.19	8,250.72	7,243.98	50.75	46.04	90.44	-2,396.49	-168.30	629.21	542.69	86.52	7.272		
8,700.00	7,238.78	8,350.72	7,243.48	50.85	46.82	90.43	-2,397.08	-168.29	629.23	539.86	89.37	7.041		
8,800.00	7,238.38	8,450.72	7,242.98	51.02	47.86	90.42	-2,397.66	-168.29	629.25	536.77	92.49	6.804		
8,900.00	7,237.97	8,550.72	7,242.48	51.32	49.16	90.41	-2,398.25	-168.29	629.28	533.43	95.84	6.566		
9,000.00	7,237.57	8,650.72	7,241.98	51.95	50.67	90.40	-2,398.84	-168.29	629.30	529.88	99.42	6.330		
9,100.00	7,237.16	8,750.72	7,241.48	53.10	52.36	90.39	-2,399.43	-168.28	629.32	526.14	103.18	6.099		
9,200.00	7,236.76	8,850.72	7,240.97	54.69	54.19	90.38	-2,400.02	-168.28	629.35	522.23	107.12	5.875		
9,300.00	7,236.35	8,950.72	7,240.47	56.53	56.13	90.38	-2,400.60	-168.28	629.37	518.16	111.21	5.659		
9,400.00	7,235.94	9,050.72	7,239.97	58.53	58.16	90.37	-2,401.19	-168.27	629.40	513.95	115.44	5.452		
9,500.00	7,235.54	9,150.72	7,239.47	60.62	60.27	90.36	-2,401.78	-168.27	629.42	509.62	119.80	5.254		
9,600.00	7,235.13	9,250.72	7,238.97	62.80	62.46	90.35	-2,402.37	-168.27	629.44	505.18	124.26	5.065		
9,700.00	7,234.73	9,350.72	7,238.47	65.03	64.69	90.34	-2,402.96	-168.26	629.47	500.64	128.82	4.886		
9,800.00	7,234.32	9,450.72	7,237.97	67.32	66.99	90.33	-2,403.55	-168.26	629.49	496.01	133.48	4.716		
9,900.00	7,233.92	9,550.72	7,237.47	69.66	69.32	90.32	-2,404.13	-168.26	629.51	491.31	138.21	4.555		
10,000.00	7,233.51	9,650.72	7,236.97	72.03	71.70	90.31	-2,404.72	-168.26	629.54	486.53	143.01	4.402		
10,100.00	7,233.10	9,750.72	7,236.47	74.45	74.11	90.31	-2,405.31	-168.25	629.56	481.68	147.88	4.257		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,232.70	9,850.72	7,235.97	76.89	76.56	90.30	-2,405.90	-2,583.25	629.59	476.78	152.81	4.120		
10,300.00	7,232.29	9,950.72	7,235.47	79.36	79.03	90.29	-2,406.49	-2,683.25	629.61	471.82	157.79	3.990		
10,400.00	7,231.89	10,050.72	7,234.97	81.86	81.53	90.28	-2,407.07	-2,783.24	629.63	466.82	162.82	3.867		
10,500.00	7,231.48	10,150.72	7,234.47	84.38	84.06	90.27	-2,407.66	-2,883.24	629.66	461.77	167.89	3.750		
10,600.00	7,231.08	10,250.72	7,233.96	86.93	86.60	90.26	-2,408.25	-2,983.24	629.68	456.68	173.00	3.640		
10,700.00	7,230.67	10,350.72	7,233.46	89.49	89.17	90.25	-2,408.84	-3,083.23	629.70	451.55	178.15	3.535		
10,800.00	7,230.26	10,450.72	7,232.96	92.07	91.75	90.25	-2,409.43	-3,183.23	629.73	446.40	183.33	3.435		
10,900.00	7,229.86	10,550.72	7,232.46	94.67	94.35	90.24	-2,410.02	-3,283.23	629.75	441.21	188.55	3.340		
11,000.00	7,229.45	10,650.72	7,231.96	97.28	96.97	90.23	-2,410.60	-3,383.22	629.78	435.99	193.79	3.250		
11,100.00	7,229.05	10,750.72	7,231.46	99.90	99.59	90.22	-2,411.19	-3,483.22	629.80	430.74	199.06	3.164		
11,200.00	7,228.64	10,850.72	7,230.96	102.54	102.23	90.21	-2,411.78	-3,583.22	629.82	425.48	204.35	3.082		
11,300.00	7,228.24	10,950.72	7,230.46	105.19	104.89	90.20	-2,412.37	-3,683.22	629.85	420.19	209.66	3.004		
11,400.00	7,227.83	11,050.72	7,229.96	107.85	107.55	90.19	-2,412.96	-3,783.21	629.87	414.87	215.00	2.930		
11,500.00	7,227.42	11,150.72	7,229.46	110.52	110.22	90.19	-2,413.54	-3,883.21	629.90	409.54	220.35	2.859		
11,600.00	7,227.02	11,250.72	7,228.96	113.20	112.91	90.18	-2,414.13	-3,983.21	629.92	404.20	225.72	2.791		
11,700.00	7,226.61	11,350.72	7,228.46	115.89	115.60	90.17	-2,414.72	-4,083.20	629.94	398.83	231.11	2.726		
11,800.00	7,226.21	11,450.72	7,227.96	118.59	118.30	90.16	-2,415.31	-4,183.20	629.97	393.45	236.52	2.664		
11,900.00	7,225.80	11,550.72	7,227.46	121.29	121.00	90.15	-2,415.90	-4,283.20	629.99	388.06	241.93	2.604		
12,000.00	7,225.40	11,650.72	7,226.96	124.00	123.72	90.14	-2,416.49	-4,383.19	630.02	382.65	247.36	2.547		
12,100.00	7,224.99	11,750.72	7,226.45	126.72	126.44	90.13	-2,417.07	-4,483.19	630.04	377.23	252.81	2.492		
12,200.00	7,224.58	11,850.72	7,225.95	129.44	129.16	90.12	-2,417.66	-4,583.19	630.06	371.80	258.26	2.440		
12,300.00	7,224.18	11,950.72	7,225.45	132.17	131.89	90.12	-2,418.25	-4,683.19	630.09	366.36	263.73	2.389		
12,400.00	7,223.77	12,050.72	7,224.95	134.91	134.63	90.11	-2,418.84	-4,783.18	630.11	360.91	269.21	2.341		
12,500.00	7,223.37	12,150.72	7,224.45	137.65	137.37	90.10	-2,419.43	-4,883.18	630.14	355.44	274.69	2.294		
12,600.00	7,222.96	12,250.72	7,223.95	140.39	140.12	90.09	-2,420.01	-4,983.18	630.16	349.97	280.19	2.249		
12,700.00	7,222.55	12,350.72	7,223.45	143.14	142.87	90.08	-2,420.60	-5,083.17	630.18	344.49	285.69	2.206		
12,800.00	7,222.15	12,450.72	7,222.95	145.89	145.62	90.07	-2,421.19	-5,183.17	630.21	339.00	291.21	2.164		
12,900.00	7,221.74	12,550.72	7,222.45	148.65	148.38	90.06	-2,421.78	-5,283.17	630.23	333.51	296.73	2.124		
13,000.00	7,221.34	12,650.72	7,221.95	151.41	151.15	90.06	-2,422.37	-5,383.16	630.26	328.00	302.25	2.085		
13,100.00	7,220.93	12,750.72	7,221.45	154.18	153.91	90.05	-2,422.96	-5,483.16	630.28	322.49	307.79	2.048		
13,200.00	7,220.53	12,850.72	7,220.95	156.94	156.68	90.04	-2,423.54	-5,583.16	630.31	316.98	313.33	2.012		
13,300.00	7,220.12	12,950.72	7,220.45	159.72	159.46	90.03	-2,424.13	-5,683.16	630.33	311.45	318.88	1.977		
13,400.00	7,219.71	13,050.72	7,219.95	162.49	162.23	90.02	-2,424.72	-5,783.15	630.35	305.93	324.43	1.943		
13,500.00	7,219.31	13,150.72	7,219.45	165.27	165.01	90.01	-2,425.31	-5,883.15	630.38	300.39	329.99	1.910		
13,600.00	7,218.90	13,250.72	7,218.94	168.05	167.79	90.00	-2,425.90	-5,983.15	630.40	294.85	335.55	1.879		
13,700.00	7,218.50	13,350.72	7,218.44	170.83	170.58	90.00	-2,426.48	-6,083.14	630.43	289.31	341.12	1.848		
13,800.00	7,218.09	13,450.72	7,217.94	173.61	173.36	89.99	-2,427.07	-6,183.14	630.45	283.76	346.69	1.818		
13,900.00	7,217.69	13,550.72	7,217.44	176.40	176.15	89.98	-2,427.66	-6,283.14	630.48	278.20	352.27	1.790		
14,000.00	7,217.28	13,650.72	7,216.94	179.19	178.94	89.97	-2,428.25	-6,383.13	630.50	272.65	357.85	1.762		
14,100.00	7,216.87	13,750.72	7,216.44	181.98	181.74	89.96	-2,428.84	-6,483.13	630.52	267.08	363.44	1.735		
14,200.00	7,216.47	13,850.72	7,215.94	184.78	184.53	89.95	-2,429.43	-6,583.13	630.55	261.52	369.03	1.709		
14,300.00	7,216.06	13,950.72	7,215.44	187.57	187.33	89.94	-2,430.01	-6,683.12	630.57	255.95	374.62	1.683		
14,400.00	7,215.66	14,050.72	7,214.94	190.37	190.13	89.93	-2,430.60	-6,783.12	630.60	250.38	380.22	1.658		
14,500.00	7,215.25	14,150.72	7,214.44	193.17	192.93	89.93	-2,431.19	-6,883.12	630.62	244.80	385.82	1.634		
14,600.00	7,214.85	14,250.72	7,213.94	195.97	195.73	89.92	-2,431.78	-6,983.12	630.65	239.22	391.43	1.611		
14,700.00	7,214.44	14,350.72	7,213.44	198.77	198.54	89.91	-2,432.37	-7,083.11	630.67	233.64	397.03	1.588		
14,800.00	7,214.03	14,450.72	7,212.94	201.58	201.34	89.90	-2,432.95	-7,183.11	630.70	228.05	402.65	1.566		
14,900.00	7,213.63	14,550.72	7,212.44	204.38	204.15	89.89	-2,433.54	-7,283.11	630.72	222.46	408.26	1.545		
15,000.00	7,213.22	14,650.72	7,211.94	207.19	206.96	89.88	-2,434.13	-7,383.10	630.74	216.87	413.88	1.524		
15,100.00	7,212.82	14,750.72	7,211.43	210.00	209.77	89.87	-2,434.72	-7,483.10	630.77	211.27	419.49	1.504		
15,200.00	7,212.41	14,850.72	7,210.93	212.81	212.58	89.87	-2,435.31	-7,583.10	630.79	205.68	425.12	1.484 Level 3		
15,300.00	7,212.01	14,950.72	7,210.43	215.62	215.39	89.86	-2,435.90	-7,683.09	630.82	200.08	430.74	1.464 Level 3		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.00	7,211.60	15,050.72	7,209.93	218.43	218.20	89.85	-2,436.48	-7,783.09	630.84	194.48	436.37	1.446	Level 3
15,500.00	7,211.19	15,150.72	7,209.43	221.25	221.02	89.84	-2,437.07	-7,883.09	630.87	188.87	442.00	1.427	Level 3
15,600.00	7,210.79	15,250.72	7,208.93	224.06	223.84	89.83	-2,437.66	-7,983.09	630.89	183.27	447.63	1.409	Level 3
15,700.00	7,210.38	15,350.71	7,208.43	226.88	226.65	89.82	-2,438.25	-8,083.08	630.92	177.66	453.26	1.392	Level 3
15,706.51	7,210.36	15,357.23	7,208.40	227.06	226.84	89.82	-2,438.29	-8,089.60	630.92	177.29	453.63	1.391	Level 3
15,794.94	7,210.00	15,437.48	7,208.00	229.55	229.10	89.82	-2,438.76	-8,169.84	630.99	172.82	458.17	1.377	Level 3, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.40	40.08	0.28	40.08					
100.00	100.00	100.00	100.00	3.28	3.28	0.40	40.08	0.28	40.08	33.51	6.57	6.101		
200.00	200.00	200.00	200.00	3.34	3.34	0.40	40.08	0.28	40.08	33.40	6.67	6.005		
300.00	299.98	301.42	301.40	3.44	3.44	177.71	38.29	0.17	40.05	33.16	6.89	5.812		
400.00	399.84	402.83	402.66	3.59	3.60	177.61	32.91	-0.15	39.98	32.76	7.22	5.537		
500.00	499.45	504.24	503.67	3.79	3.80	177.43	23.97	-0.68	39.87	32.21	7.65	5.208		
600.00	598.70	605.65	604.29	4.03	4.05	177.18	11.46	-1.43	39.70	31.53	8.17	4.857		
700.00	697.47	707.05	704.40	4.31	4.34	176.85	-4.60	-2.38	39.49	30.73	8.77	4.505		
800.00	795.62	808.44	803.87	4.64	4.67	176.45	-24.18	-3.55	39.24	29.82	9.42	4.166		
900.00	893.06	909.81	902.57	5.00	5.04	175.97	-47.25	-4.93	38.95	28.83	10.12	3.848		
1,000.00	989.64	1,011.18	1,000.38	5.40	5.44	175.41	-73.80	-6.51	38.61	27.75	10.86	3.554		
1,100.00	1,085.27	1,112.53	1,097.18	5.83	5.89	174.76	-103.78	-8.29	38.23	26.59	11.64	3.284		
1,200.00	1,179.82	1,213.87	1,192.83	6.29	6.36	174.03	-137.15	-10.28	37.82	25.37	12.45	3.037		
1,300.00	1,273.17	1,315.18	1,287.23	6.79	6.87	173.20	-173.87	-12.47	37.37	24.08	13.29	2.812		
1,338.07	1,308.37	1,353.57	1,322.66	7.00	7.07	172.87	-188.62	-13.35	37.23	23.61	13.62	2.733 CC, ES		
1,400.00	1,365.21	1,415.50	1,379.75	7.33	7.41	172.51	-212.58	-14.78	37.89	23.73	14.16	2.675		
1,500.00	1,455.84	1,515.42	1,471.86	7.89	7.96	172.49	-251.23	-17.08	41.77	26.69	15.08	2.770		
1,600.00	1,544.94	1,615.14	1,563.79	8.50	8.52	172.99	-289.80	-19.38	49.10	33.07	16.02	3.064		
1,700.00	1,632.39	1,714.55	1,655.43	9.13	9.09	173.74	-328.26	-21.67	59.89	42.89	17.00	3.523		
1,800.00	1,718.11	1,813.52	1,746.67	9.80	9.67	174.52	-366.54	-23.95	74.13	56.13	18.00	4.119		
1,900.00	1,802.44	1,912.09	1,837.53	10.49	10.26	175.20	-404.67	-26.22	90.98	71.96	19.02	4.784		
2,000.00	1,886.68	2,010.62	1,928.37	11.20	10.85	175.69	-442.79	-28.49	108.00	87.94	20.05	5.385		
2,100.00	1,970.92	2,109.16	2,019.21	11.93	11.44	176.04	-480.91	-30.76	125.02	103.91	21.10	5.924		
2,200.00	2,055.17	2,207.70	2,110.05	12.66	12.04	176.31	-519.03	-33.03	142.04	119.87	22.17	6.407		
2,300.00	2,139.41	2,306.24	2,200.89	13.40	12.64	176.52	-557.14	-35.31	159.06	135.82	23.24	6.844		
2,400.00	2,223.66	2,404.78	2,291.73	14.14	13.25	176.68	-595.26	-37.58	176.09	151.76	24.33	7.239		
2,500.00	2,307.90	2,503.32	2,382.57	14.89	13.86	176.82	-633.38	-39.85	193.12	167.70	25.42	7.597		
2,600.00	2,392.14	2,601.86	2,473.41	15.65	14.47	176.94	-671.50	-42.12	210.15	183.63	26.52	7.924		
2,700.00	2,476.39	2,700.39	2,564.25	16.41	15.09	177.04	-709.61	-44.39	227.18	199.55	27.62	8.224		
2,800.00	2,560.63	2,798.93	2,655.09	17.17	15.70	177.13	-747.73	-46.66	244.21	215.47	28.74	8.498		
2,900.00	2,644.88	2,902.53	2,745.93	17.93	16.35	177.20	-785.85	-48.93	261.24	231.36	29.88	8.743		
3,000.00	2,729.12	3,003.99	2,836.76	18.70	16.99	177.27	-823.97	-51.20	278.27	247.25	31.02	8.972		
3,100.00	2,813.36	3,105.45	2,927.60	19.47	17.63	177.32	-862.09	-53.48	295.30	263.14	32.16	9.183		
3,200.00	2,897.61	3,193.09	3,018.44	20.25	18.18	177.37	-900.20	-55.75	312.33	279.10	33.23	9.399		
3,300.00	2,981.85	3,308.37	3,109.28	21.02	18.91	177.42	-938.32	-58.02	329.36	294.91	34.45	9.561		
3,400.00	3,066.10	3,409.84	3,200.12	21.80	19.55	177.46	-976.44	-60.29	346.39	310.79	35.60	9.730		
3,500.00	3,150.34	3,488.70	3,290.96	22.58	20.05	177.50	-1,014.56	-62.56	363.43	326.79	36.63	9.921		
3,600.00	3,234.58	3,587.24	3,381.80	23.35	20.68	177.53	-1,052.67	-64.83	380.46	342.69	37.77	10.072		
3,700.00	3,318.83	3,685.78	3,472.64	24.13	21.30	177.57	-1,090.79	-67.10	397.49	358.58	38.92	10.214		
3,800.00	3,403.07	3,784.32	3,563.48	24.92	21.93	177.59	-1,128.91	-69.37	414.52	374.46	40.06	10.348		
3,900.00	3,487.32	3,882.86	3,654.32	25.70	22.56	177.62	-1,167.03	-71.64	431.56	390.35	41.21	10.473		
4,000.00	3,571.56	3,981.40	3,745.15	26.48	23.18	177.65	-1,205.15	-73.92	448.59	406.23	42.35	10.592		
4,100.00	3,655.80	4,079.93	3,835.99	27.27	23.81	177.67	-1,243.26	-76.19	465.62	422.12	43.50	10.703		
4,200.00	3,740.05	4,178.47	3,926.83	28.05	24.44	177.69	-1,281.38	-78.46	482.65	438.00	44.65	10.809		
4,300.00	3,824.29	4,277.01	4,017.67	28.84	25.07	177.71	-1,319.50	-80.73	499.69	453.88	45.81	10.909		
4,400.00	3,908.54	4,375.55	4,108.51	29.62	25.70	177.73	-1,357.62	-83.00	516.72	469.76	46.96	11.004		
4,500.00	3,992.78	4,474.09	4,199.35	30.41	26.33	177.74	-1,395.74	-85.27	533.75	485.64	48.11	11.094		
4,600.00	4,077.03	4,572.63	4,290.19	31.20	26.96	177.76	-1,433.85	-87.54	550.78	501.52	49.27	11.179		
4,700.00	4,161.27	4,671.17	4,381.03	31.98	27.59	177.78	-1,471.97	-89.81	567.82	517.39	50.42	11.261		
4,800.00	4,245.51	4,769.71	4,471.87	32.77	28.22	177.79	-1,510.09	-92.08	584.85	533.27	51.58	11.338		
4,900.00	4,329.76	4,868.24	4,562.71	33.56	28.86	177.80	-1,548.21	-94.36	601.88	549.14	52.74	11.412		
5,000.00	4,414.00	4,966.78	4,653.54	34.35	29.49	177.82	-1,586.32	-96.63	618.92	565.02	53.90	11.483		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,100.00	4,498.25	5,065.32	4,744.38	35.14	30.12	177.83	-1,624.44	-98.90	635.95	580.89	55.06	11.550	
5,200.00	4,582.49	5,163.86	4,835.22	35.93	30.75	177.84	-1,662.56	-101.17	652.98	596.76	56.22	11.615	
5,300.00	4,666.73	5,262.40	4,926.06	36.72	31.38	177.85	-1,700.68	-103.44	670.02	612.64	57.38	11.677	
5,400.00	4,750.98	5,360.94	5,016.90	37.51	32.02	177.86	-1,738.80	-105.71	687.05	628.51	58.54	11.736	
5,500.00	4,835.22	5,459.48	5,107.74	38.30	32.65	177.87	-1,776.91	-107.98	704.08	644.38	59.70	11.793	
5,600.00	4,919.47	5,558.01	5,198.58	39.09	33.28	177.88	-1,815.03	-110.25	721.12	660.25	60.87	11.847	
5,700.00	5,003.71	5,656.55	5,289.42	39.88	33.92	177.89	-1,853.15	-112.53	738.15	676.12	62.03	11.900	
5,800.00	5,088.06	5,755.12	5,380.29	40.67	34.55	177.90	-1,891.28	-114.80	754.99	691.80	63.19	11.947	
5,900.00	5,173.83	5,854.11	5,471.54	41.44	35.19	177.91	-1,929.57	-117.08	769.15	704.80	64.35	11.953	
6,000.00	5,261.34	5,953.53	5,563.19	42.18	35.83	177.91	-1,968.03	-119.37	779.85	714.36	65.49	11.907	
6,100.00	5,350.49	6,053.26	5,655.13	42.88	36.47	177.90	-2,006.61	-121.67	787.08	720.46	66.62	11.814	
6,200.00	5,441.16	6,153.19	5,747.25	43.56	37.11	177.87	-2,045.26	-123.97	790.82	723.09	67.74	11.675	
6,300.00	5,533.25	6,253.18	5,839.43	44.20	37.75	177.84	-2,083.94	-126.28	791.08	722.25	68.83	11.493	
6,400.00	5,626.65	6,353.12	5,931.56	44.82	38.40	177.79	-2,122.60	-128.58	787.85	717.94	69.91	11.270	
6,500.00	5,721.23	6,452.89	6,023.53	45.40	39.04	177.73	-2,161.20	-130.88	781.14	710.17	70.96	11.008	
6,600.00	5,816.89	6,552.36	6,115.23	45.94	39.68	177.65	-2,199.67	-133.17	770.95	698.96	71.99	10.708	
6,700.00	5,913.51	6,651.41	6,206.54	46.45	40.32	177.56	-2,237.99	-135.46	757.30	684.30	73.00	10.374	
6,800.00	6,010.97	6,749.93	6,297.36	46.93	40.95	177.44	-2,276.10	-137.73	740.21	666.23	73.98	10.005	
6,900.00	6,109.15	6,847.79	6,387.57	47.38	41.58	177.31	-2,313.95	-139.98	719.70	644.76	74.94	9.604	
7,000.00	6,207.93	6,944.87	6,477.07	47.80	42.21	177.15	-2,351.51	-142.22	695.79	619.92	75.86	9.172	
7,100.00	6,307.19	7,040.60	6,565.06	48.18	42.82	176.58	-2,388.47	-144.72	668.53	591.76	76.77	8.708	
7,200.00	6,406.82	7,131.63	6,647.03	48.53	43.37	174.74	-2,422.98	-167.75	638.39	560.71	77.68	8.219	
7,300.00	6,506.68	7,214.77	6,718.99	48.84	43.83	171.75	-2,453.37	-196.04	606.69	528.13	78.56	7.722	
7,400.00	6,606.66	7,288.41	6,779.40	49.10	44.20	81.04	-2,478.95	-229.42	575.49	496.16	79.33	7.254	
7,500.00	6,706.21	7,356.59	6,831.79	49.35	44.51	79.77	-2,501.20	-266.89	547.40	467.63	79.77	6.862	
7,600.00	6,803.22	7,423.62	6,879.40	49.59	44.79	78.27	-2,521.47	-309.44	523.43	443.83	79.60	6.576	
7,700.00	6,895.32	7,489.99	6,922.20	49.82	45.04	76.59	-2,539.77	-356.71	503.61	425.01	78.60	6.407	
7,800.00	6,980.23	7,556.05	6,960.06	50.03	45.26	74.81	-2,556.02	-408.32	487.78	411.09	76.69	6.361	
7,900.00	7,055.85	7,622.05	6,992.74	50.21	45.46	73.02	-2,570.13	-463.85	475.61	401.65	73.96	6.430	
8,000.00	7,120.34	7,688.10	7,019.97	50.36	45.64	71.35	-2,581.97	-522.83	466.65	395.93	70.72	6.598	
8,100.00	7,172.10	7,750.00	7,040.23	50.47	45.80	70.01	-2,590.89	-580.61	460.43	393.33	67.10	6.862	
8,200.00	7,209.85	7,820.64	7,056.89	50.55	45.97	68.79	-2,598.37	-648.80	456.37	391.69	64.68	7.056	
8,300.00	7,232.68	7,887.10	7,066.12	50.61	46.12	68.09	-2,602.72	-714.45	454.16	391.10	63.07	7.201	
8,400.00	7,240.00	7,954.35	7,068.99	50.65	46.29	67.85	-2,604.41	-781.58	453.52	390.44	63.08	7.190	
8,500.00	7,239.60	8,054.35	7,068.69	50.69	46.60	67.86	-2,605.00	-881.58	453.49	388.26	65.23	6.952	
8,600.00	7,239.19	8,154.35	7,068.40	50.75	47.04	67.87	-2,605.60	-981.58	453.46	385.74	67.72	6.696	
8,700.00	7,238.78	8,254.35	7,068.10	50.85	47.67	67.89	-2,606.20	-1,081.57	453.43	382.91	70.53	6.429	
8,800.00	7,238.38	8,354.35	7,067.80	51.02	48.54	67.90	-2,606.80	-1,181.57	453.41	379.79	73.62	6.159	
8,900.00	7,237.97	8,454.35	7,067.50	51.32	49.67	67.91	-2,607.40	-1,281.57	453.38	376.42	76.96	5.891	
9,000.00	7,237.57	8,554.35	7,067.21	51.95	51.06	67.93	-2,607.99	-1,381.57	453.35	372.83	80.52	5.630	
9,100.00	7,237.16	8,654.35	7,066.91	53.10	52.65	67.94	-2,608.59	-1,481.56	453.33	369.05	84.27	5.379	
9,200.00	7,236.76	8,754.35	7,066.61	54.69	54.40	67.95	-2,609.19	-1,581.56	453.30	365.11	88.19	5.140	
9,300.00	7,236.35	8,854.35	7,066.31	56.53	56.29	67.97	-2,609.79	-1,681.56	453.27	361.01	92.26	4.913	
9,400.00	7,235.94	8,954.35	7,066.01	58.53	58.28	67.98	-2,610.38	-1,781.56	453.24	356.79	96.45	4.699	
9,500.00	7,235.54	9,054.35	7,065.72	60.62	60.36	67.99	-2,610.98	-1,881.56	453.22	352.46	100.76	4.498	
9,600.00	7,235.13	9,154.35	7,065.42	62.80	62.51	68.01	-2,611.58	-1,981.55	453.19	348.03	105.16	4.310	
9,700.00	7,234.73	9,254.35	7,065.12	65.03	64.73	68.02	-2,612.18	-2,081.55	453.16	343.52	109.65	4.133	
9,800.00	7,234.32	9,354.35	7,064.82	67.32	67.01	68.03	-2,612.78	-2,181.55	453.14	338.92	114.21	3.967	
9,900.00	7,233.92	9,454.35	7,064.53	69.66	69.33	68.05	-2,613.37	-2,281.55	453.11	334.26	118.85	3.813	
10,000.00	7,233.51	9,554.35	7,064.23	72.03	71.69	68.06	-2,613.97	-2,381.54	453.08	329.54	123.54	3.667	
10,100.00	7,233.10	9,654.35	7,063.93	74.45	74.10	68.07	-2,614.57	-2,481.54	453.06	324.77	128.29	3.532	
10,200.00	7,232.70	9,754.35	7,063.63	76.89	76.53	68.09	-2,615.17	-2,581.54	453.03	319.94	133.08	3.404	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	9,854.35	7,063.34	79.36	79.00	68.10	-2,615.77	-2,681.54	453.00	315.08	137.92	3.284		
10,400.00	7,231.89	9,954.35	7,063.04	81.86	81.49	68.11	-2,616.36	-2,781.54	452.98	310.17	142.80	3.172		
10,500.00	7,231.48	10,054.35	7,062.74	84.38	84.01	68.13	-2,616.96	-2,881.53	452.95	305.23	147.71	3.066		
10,600.00	7,231.08	10,154.35	7,062.44	86.93	86.55	68.14	-2,617.56	-2,981.53	452.92	300.26	152.66	2.967		
10,700.00	7,230.67	10,254.35	7,062.15	89.49	89.11	68.15	-2,618.16	-3,081.53	452.90	295.26	157.63	2.873		
10,800.00	7,230.26	10,354.35	7,061.85	92.07	91.69	68.17	-2,618.76	-3,181.53	452.87	290.24	162.63	2.785		
10,900.00	7,229.86	10,454.35	7,061.55	94.67	94.29	68.18	-2,619.35	-3,281.52	452.84	285.19	167.66	2.701		
11,000.00	7,229.45	10,554.35	7,061.25	97.28	96.90	68.19	-2,619.95	-3,381.52	452.81	280.11	172.70	2.622		
11,100.00	7,229.05	10,654.35	7,060.96	99.90	99.52	68.21	-2,620.55	-3,481.52	452.79	275.02	177.77	2.547		
11,200.00	7,228.64	10,754.35	7,060.66	102.54	102.16	68.22	-2,621.15	-3,581.52	452.76	269.91	182.85	2.476		
11,300.00	7,228.24	10,854.35	7,060.36	105.19	104.81	68.23	-2,621.75	-3,681.51	452.74	264.78	187.95	2.409		
11,400.00	7,227.83	10,954.35	7,060.06	107.85	107.47	68.25	-2,622.34	-3,781.51	452.71	259.64	193.07	2.345		
11,500.00	7,227.42	11,054.35	7,059.77	110.52	110.14	68.26	-2,622.94	-3,881.51	452.68	254.48	198.20	2.284		
11,600.00	7,227.02	11,154.35	7,059.47	113.20	112.82	68.27	-2,623.54	-3,981.51	452.66	249.30	203.35	2.226		
11,700.00	7,226.61	11,254.35	7,059.17	115.89	115.51	68.29	-2,624.14	-4,081.51	452.63	244.12	208.51	2.171		
11,800.00	7,226.21	11,354.35	7,058.87	118.59	118.21	68.30	-2,624.74	-4,181.50	452.60	238.92	213.68	2.118		
11,900.00	7,225.80	11,454.35	7,058.57	121.29	120.91	68.32	-2,625.33	-4,281.50	452.58	233.71	218.86	2.068		
12,000.00	7,225.40	11,554.35	7,058.28	124.00	123.62	68.33	-2,625.93	-4,381.50	452.55	228.49	224.05	2.020		
12,100.00	7,224.99	11,654.35	7,057.98	126.72	126.34	68.34	-2,626.53	-4,481.50	452.52	223.27	229.26	1.974		
12,200.00	7,224.58	11,754.35	7,057.68	129.44	129.06	68.36	-2,627.13	-4,581.49	452.50	218.03	234.47	1.930		
12,300.00	7,224.18	11,854.35	7,057.38	132.17	131.79	68.37	-2,627.72	-4,681.49	452.47	212.78	239.69	1.888		
12,400.00	7,223.77	11,954.35	7,057.09	134.91	134.53	68.38	-2,628.32	-4,781.49	452.44	207.53	244.92	1.847		
12,500.00	7,223.37	12,054.35	7,056.79	137.65	137.27	68.40	-2,628.92	-4,881.49	452.42	202.27	250.15	1.809		
12,600.00	7,222.96	12,154.35	7,056.49	140.39	140.02	68.41	-2,629.52	-4,981.48	452.39	197.00	255.40	1.771		
12,700.00	7,222.55	12,254.35	7,056.19	143.14	142.77	68.42	-2,630.12	-5,081.48	452.37	191.72	260.64	1.736		
12,800.00	7,222.15	12,354.35	7,055.90	145.89	145.52	68.44	-2,630.71	-5,181.48	452.34	186.44	265.90	1.701		
12,900.00	7,221.74	12,454.35	7,055.60	148.65	148.28	68.45	-2,631.31	-5,281.48	452.31	181.15	271.16	1.668		
13,000.00	7,221.34	12,554.35	7,055.30	151.41	151.04	68.46	-2,631.91	-5,381.48	452.29	175.85	276.43	1.636		
13,100.00	7,220.93	12,654.35	7,055.00	154.18	153.81	68.48	-2,632.51	-5,481.47	452.26	170.55	281.71	1.605		
13,200.00	7,220.53	12,754.35	7,054.71	156.94	156.57	68.49	-2,633.11	-5,581.47	452.23	165.25	286.99	1.576		
13,300.00	7,220.12	12,854.35	7,054.41	159.72	159.35	68.50	-2,633.70	-5,681.47	452.21	159.94	292.27	1.547		
13,400.00	7,219.71	12,954.35	7,054.11	162.49	162.12	68.52	-2,634.30	-5,781.47	452.18	154.62	297.56	1.520		
13,500.00	7,219.31	13,054.35	7,053.81	165.27	164.90	68.53	-2,634.90	-5,881.46	452.16	149.30	302.85	1.493 Level 3		
13,600.00	7,218.90	13,154.35	7,053.52	168.05	167.68	68.54	-2,635.50	-5,981.46	452.13	143.98	308.15	1.467 Level 3		
13,700.00	7,218.50	13,254.35	7,053.22	170.83	170.46	68.56	-2,636.10	-6,081.46	452.10	138.65	313.45	1.442 Level 3		
13,800.00	7,218.09	13,354.35	7,052.92	173.61	173.25	68.57	-2,636.69	-6,181.46	452.08	133.32	318.76	1.418 Level 3		
13,900.00	7,217.69	13,454.35	7,052.62	176.40	176.04	68.58	-2,637.29	-6,281.45	452.05	127.98	324.07	1.395 Level 3		
14,000.00	7,217.28	13,554.35	7,052.33	179.19	178.83	68.60	-2,637.89	-6,381.45	452.03	122.64	329.39	1.372 Level 3		
14,100.00	7,216.87	13,654.34	7,052.03	181.98	181.62	68.61	-2,638.49	-6,481.45	452.00	117.30	334.70	1.350 Level 3		
14,200.00	7,216.47	13,754.34	7,051.73	184.78	184.42	68.62	-2,639.09	-6,581.45	451.97	111.95	340.03	1.329 Level 3		
14,300.00	7,216.06	13,854.34	7,051.43	187.57	187.21	68.64	-2,639.68	-6,681.45	451.95	106.60	345.35	1.309 Level 3		
14,400.00	7,215.66	13,954.34	7,051.13	190.37	190.01	68.65	-2,640.28	-6,781.44	451.92	101.24	350.68	1.289 Level 3		
14,500.00	7,215.25	14,054.34	7,050.84	193.17	192.81	68.66	-2,640.88	-6,881.44	451.90	95.89	356.01	1.269 Level 3		
14,600.00	7,214.85	14,154.34	7,050.54	195.97	195.61	68.68	-2,641.48	-6,981.44	451.87	90.53	361.35	1.251 Level 3		
14,700.00	7,214.44	14,254.34	7,050.24	198.77	198.42	68.69	-2,642.08	-7,081.44	451.85	85.16	366.68	1.232 Level 2		
14,800.00	7,214.03	14,354.34	7,049.94	201.58	201.22	68.70	-2,642.67	-7,181.43	451.82	79.80	372.02	1.214 Level 2		
14,900.00	7,213.63	14,454.34	7,049.65	204.38	204.03	68.72	-2,643.27	-7,281.43	451.79	74.43	377.37	1.197 Level 2		
15,000.00	7,213.22	14,554.34	7,049.35	207.19	206.84	68.73	-2,643.87	-7,381.43	451.77	69.06	382.71	1.180 Level 2		
15,100.00	7,212.82	14,654.34	7,049.05	210.00	209.65	68.74	-2,644.47	-7,481.43	451.74	63.68	388.06	1.164 Level 2		
15,200.00	7,212.41	14,754.34	7,048.75	212.81	212.46	68.76	-2,645.06	-7,581.43	451.72	58.30	393.41	1.148 Level 2		
15,300.00	7,212.01	14,854.34	7,048.46	215.62	215.27	68.77	-2,645.66	-7,681.42	451.69	52.93	398.77	1.133 Level 2		
15,400.00	7,211.60	14,954.34	7,048.16	218.43	218.08	68.79	-2,646.26	-7,781.42	451.67	47.54	404.12	1.118 Level 2		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,500.00	7,211.19	15,054.34	7,047.86	221.25	220.90	68.80	-2,646.86	-7,881.42	451.64	42.16	409.48	1.103	Level 2
15,600.00	7,210.79	15,154.34	7,047.56	224.06	223.71	68.81	-2,647.46	-7,981.42	451.61	36.77	414.84	1.089	Level 2
15,700.00	7,210.38	15,254.34	7,047.27	226.88	226.53	68.83	-2,648.05	-8,081.41	451.59	31.39	420.20	1.075	Level 2
15,791.22	7,210.01	15,345.56	7,046.99	229.45	229.10	68.84	-2,648.60	-8,172.63	451.57	26.47	425.10	1.062	Level 2, SF
15,794.94	7,210.00	15,343.67	7,047.00	229.55	229.04	68.84	-2,648.59	-8,170.74	451.60	26.67	424.93	1.063	Level 2



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.48	400.02	3.34	400.03					
100.00	100.00	102.00	100.00	3.28	3.29	0.48	400.02	3.34	400.03	393.46	6.57	60.888		
200.00	200.00	202.00	200.00	3.34	3.34	0.48	400.02	3.34	400.03	393.35	6.68	59.923	CC, ES	
300.00	299.98	301.98	299.98	3.44	3.45	177.84	400.02	3.34	401.77	394.89	6.89	58.333		
400.00	399.84	401.84	399.84	3.59	3.61	177.86	400.02	3.34	407.00	399.80	7.20	56.537		
500.00	499.45	501.45	499.45	3.79	3.81	177.90	400.02	3.34	415.71	408.11	7.60	54.687		
600.00	598.70	598.94	586.93	4.03	4.02	177.86	401.24	2.70	429.27	421.21	8.06	53.261		
700.00	697.47	678.62	676.51	4.31	4.26	177.66	404.84	0.84	448.82	440.23	8.58	52.290		
800.00	795.62	775.77	773.53	4.64	4.54	177.44	409.39	-1.52	472.44	463.27	9.17	51.517		
900.00	893.06	872.04	869.67	5.00	4.84	177.25	413.90	-3.85	499.45	489.65	9.80	50.954		
1,000.00	989.64	967.31	964.80	5.40	5.16	177.09	418.36	-6.16	529.80	519.33	10.47	50.610		
1,100.00	1,085.27	1,061.47	1,058.83	5.83	5.48	176.96	422.77	-8.45	563.45	552.29	11.16	50.469		
1,200.00	1,179.82	1,154.40	1,151.63	6.29	5.82	176.85	427.12	-10.70	600.37	588.49	11.88	50.523		
1,300.00	1,273.17	1,245.99	1,243.09	6.79	6.15	176.77	431.41	-12.92	640.50	627.88	12.62	50.750		
1,400.00	1,365.21	1,336.12	1,333.10	7.33	6.49	176.70	435.63	-15.11	683.80	670.43	13.37	51.135		
1,500.00	1,455.84	1,424.69	1,421.55	7.89	6.83	176.64	439.77	-17.25	730.21	716.08	14.14	51.659		
1,600.00	1,544.94	1,511.59	1,508.33	8.50	7.17	176.59	443.84	-19.36	779.68	764.78	14.91	52.307		
1,700.00	1,632.39	1,603.28	1,593.33	9.13	7.53	176.56	447.83	-21.42	832.15	816.45	15.71	52.978		
1,800.00	1,718.11	1,679.96	1,676.46	9.80	7.84	176.52	451.73	-23.44	887.56	871.10	16.46	53.925		
1,900.00	1,802.44	1,761.72	1,758.10	10.49	8.17	176.55	455.55	-25.43	945.13	927.90	17.24	54.833		
2,000.00	1,886.68	1,843.38	1,839.65	11.20	8.50	176.60	459.38	-27.41	1,002.84	984.83	18.01	55.672		
2,100.00	1,970.92	1,925.05	1,921.21	11.93	8.83	176.64	463.20	-29.39	1,060.55	1,041.74	18.80	56.410		
2,200.00	2,055.17	2,006.72	2,002.76	12.66	9.17	176.68	467.03	-31.37	1,118.25	1,098.66	19.60	57.062		
2,300.00	2,139.41	2,088.39	2,084.32	13.40	9.50	176.71	470.85	-33.35	1,175.96	1,155.56	20.40	57.641		
2,400.00	2,223.66	2,170.05	2,165.87	14.14	9.84	176.74	474.67	-35.33	1,233.67	1,212.45	21.21	58.156		
2,500.00	2,307.90	2,251.72	2,247.42	14.89	10.18	176.77	478.50	-37.31	1,291.38	1,269.34	22.03	58.617		
2,600.00	2,392.14	2,333.39	2,328.98	15.65	10.53	176.80	482.32	-39.29	1,349.08	1,326.23	22.85	59.030		
2,700.00	2,476.39	2,415.05	2,410.53	16.41	10.87	176.82	486.14	-41.27	1,406.79	1,383.11	23.68	59.402		
2,800.00	2,560.63	2,496.72	2,492.08	17.17	11.21	176.84	489.97	-43.25	1,464.50	1,439.99	24.52	59.739		
2,900.00	2,644.88	2,578.39	2,573.64	17.93	11.56	176.86	493.79	-45.23	1,522.21	1,496.86	25.35	60.043		
3,000.00	2,729.12	2,660.06	2,655.19	18.70	11.90	176.88	497.62	-47.21	1,579.92	1,553.73	26.19	60.320		
3,100.00	2,813.36	2,741.72	2,736.74	19.47	12.25	176.90	501.44	-49.19	1,637.63	1,610.59	27.04	60.573		
3,200.00	2,897.61	2,823.39	2,818.30	20.25	12.60	176.92	505.26	-51.17	1,695.34	1,667.45	27.88	60.803		
3,300.00	2,981.85	2,905.06	2,899.85	21.02	12.95	176.93	509.09	-53.15	1,753.04	1,724.31	28.73	61.015		
3,400.00	3,066.10	2,986.72	2,981.41	21.80	13.29	176.95	512.91	-55.13	1,810.75	1,781.17	29.58	61.209		
3,500.00	3,150.34	3,068.39	3,062.96	22.58	13.64	176.96	516.73	-57.11	1,868.46	1,838.03	30.44	61.388		
3,600.00	3,234.58	3,150.06	3,144.51	23.35	13.99	176.97	520.56	-59.09	1,926.17	1,894.88	31.29	61.553		
3,700.00	3,318.83	3,231.73	3,226.07	24.13	14.34	176.98	524.38	-61.07	1,983.88	1,951.73	32.15	61.705		
3,800.00	3,403.07	3,313.39	3,307.62	24.92	14.70	177.00	528.21	-63.05	2,041.59	2,008.58	33.01	61.846		
3,900.00	3,487.32	3,404.94	3,399.17	25.70	15.09	177.01	532.03	-65.03	2,099.30	2,065.39	33.91	61.900		
4,000.00	3,571.56	3,476.73	3,470.73	26.48	15.40	177.02	535.85	-67.01	2,157.01	2,122.27	34.73	62.100		
4,100.00	3,655.80	3,558.40	3,552.28	27.27	15.75	177.03	539.68	-68.99	2,214.72	2,179.12	35.60	62.213		
4,200.00	3,740.05	3,640.06	3,633.83	28.05	16.10	177.03	543.50	-70.97	2,272.43	2,235.96	36.46	62.319		
4,300.00	3,824.29	3,721.73	3,715.39	28.84	16.46	177.04	547.33	-72.95	2,330.14	2,292.81	37.33	62.418		
4,400.00	3,908.54	3,803.40	3,796.94	29.62	16.81	177.05	551.15	-74.93	2,387.85	2,349.65	38.20	62.510		
4,500.00	3,992.78	3,885.06	3,878.50	30.41	17.16	177.06	554.97	-76.91	2,445.56	2,406.49	39.07	62.597		
4,600.00	4,077.03	3,966.73	3,960.05	31.20	17.52	177.07	558.80	-78.89	2,503.27	2,463.33	39.94	62.679		
4,700.00	4,161.27	4,048.40	4,041.60	31.98	17.87	177.07	562.62	-80.87	2,560.98	2,520.17	40.81	62.755		
4,800.00	4,245.51	4,130.07	4,123.16	32.77	18.23	177.08	566.44	-82.85	2,618.69	2,577.00	41.68	62.827		
4,900.00	4,329.76	4,211.73	4,204.71	33.56	18.58	177.09	570.27	-84.83	2,676.40	2,633.84	42.55	62.894		
5,000.00	4,414.00	4,306.60	4,296.26	34.35	18.99	177.09	574.09	-86.81	2,734.10	2,690.62	43.48	62.875		
5,100.00	4,498.25	4,375.07	4,367.82	35.14	19.29	177.10	577.92	-88.79	2,791.81	2,747.51	44.30	63.018		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,456.73	4,449.37	35.93	19.65	177.10	581.74	-90.77	2,849.52	2,804.35	45.18	63.075		
5,300.00	4,666.73	4,538.40	4,530.92	36.72	20.00	177.11	585.56	-92.75	2,907.23	2,861.18	46.05	63.128		
5,400.00	4,750.98	4,620.07	4,612.48	37.51	20.36	177.12	589.39	-94.74	2,964.94	2,918.01	46.93	63.179		
5,500.00	4,835.22	4,701.74	4,694.03	38.30	20.71	177.12	593.21	-96.72	3,022.65	2,974.85	47.81	63.227		
5,600.00	4,919.47	4,783.40	4,775.59	39.09	21.07	177.13	597.03	-98.70	3,080.36	3,031.68	48.68	63.272		
5,700.00	5,003.71	4,865.07	4,857.14	39.88	21.43	177.13	600.86	-100.68	3,138.07	3,088.51	49.56	63.315		
5,800.00	5,088.06	4,946.85	4,938.80	40.67	21.78	177.16	604.69	-102.66	3,195.62	3,145.18	50.44	63.353		
5,900.00	5,173.83	5,030.15	5,021.99	41.44	22.15	177.22	608.59	-104.68	3,250.93	3,199.61	51.32	63.341		
6,000.00	5,261.34	5,115.34	5,107.06	42.18	22.52	177.28	612.58	-106.74	3,303.31	3,251.10	52.21	63.268		
6,100.00	5,350.49	5,202.29	5,193.89	42.88	22.90	177.33	616.65	-108.85	3,352.68	3,299.58	53.10	63.137		
6,200.00	5,441.16	5,309.08	5,282.39	43.56	23.36	177.37	620.80	-111.00	3,398.99	3,344.92	54.07	62.859		
6,300.00	5,533.25	5,381.10	5,372.45	44.20	23.68	177.40	625.02	-113.19	3,442.18	3,387.30	54.88	62.717		
6,400.00	5,626.65	5,472.73	5,463.96	44.82	24.08	177.43	629.31	-115.41	3,482.20	3,426.43	55.77	62.437		
6,500.00	5,721.23	5,565.70	5,556.80	45.40	24.49	177.45	633.66	-117.67	3,519.01	3,462.35	56.65	62.114		
6,600.00	5,816.89	5,659.90	5,650.86	45.94	24.90	177.46	638.07	-119.95	3,552.55	3,495.02	57.53	61.753		
6,700.00	5,913.51	5,755.21	5,746.04	46.45	25.31	177.47	642.54	-122.26	3,582.78	3,524.39	58.39	61.356		
6,800.00	6,010.97	5,851.51	5,842.20	46.93	25.74	177.47	647.04	-124.60	3,609.67	3,550.43	59.25	60.925		
6,900.00	6,109.15	5,948.68	5,939.24	47.38	26.16	177.46	651.59	-126.95	3,633.20	3,573.11	60.09	60.464		
7,000.00	6,207.93	6,046.62	6,037.04	47.80	26.59	177.45	656.18	-129.33	3,653.31	3,592.40	60.92	59.973		
7,100.00	6,307.19	6,145.19	6,135.48	48.18	27.02	177.44	660.80	-131.72	3,670.01	3,608.28	61.73	59.455		
7,200.00	6,406.82	6,244.29	6,234.44	48.53	27.46	177.42	665.44	-134.12	3,683.25	3,620.73	62.52	58.912		
7,300.00	6,506.68	6,343.78	6,333.79	48.84	27.89	177.39	670.09	-136.53	3,693.03	3,629.74	63.30	58.344		
7,400.00	6,606.66	6,443.55	6,433.42	49.10	28.33	90.35	674.77	-138.95	3,699.34	3,635.31	64.04	57.767		
7,500.00	6,706.21	6,547.28	6,536.43	49.35	28.79	89.91	679.54	-149.10	3,704.01	3,639.20	64.81	57.152		
7,600.00	6,803.22	6,650.94	6,636.37	49.59	29.24	89.47	684.07	-175.79	3,708.54	3,642.97	65.57	56.555		
7,700.00	6,895.32	6,754.23	6,730.35	49.82	29.71	89.04	688.20	-218.17	3,712.83	3,646.51	66.33	55.977		
7,800.00	6,980.23	6,857.06	6,815.90	50.03	30.19	88.64	691.85	-274.91	3,716.78	3,649.68	67.10	55.395		
7,900.00	7,055.85	6,959.37	6,890.88	50.21	30.72	88.27	694.91	-344.30	3,720.28	3,652.35	67.93	54.764		
8,000.00	7,120.34	7,061.11	6,953.48	50.36	31.35	87.94	697.32	-424.33	3,723.26	3,654.34	68.92	54.022		
8,100.00	7,172.10	7,162.25	7,002.33	50.47	32.11	87.67	699.03	-512.75	3,725.63	3,655.48	70.15	53.112		
8,200.00	7,209.85	7,262.76	7,036.42	50.55	33.03	87.45	700.00	-607.18	3,727.35	3,655.67	71.67	52.004		
8,300.00	7,232.68	7,362.63	7,055.18	50.61	34.11	87.30	700.22	-705.17	3,728.36	3,654.84	73.52	50.710		
8,400.00	7,240.00	7,462.05	7,058.69	50.65	35.33	87.21	699.72	-804.44	3,728.66	3,652.99	75.67	49.277		
8,500.00	7,239.60	7,562.04	7,056.94	50.69	36.73	87.19	698.97	-904.41	3,728.58	3,650.42	78.16	47.702		
8,600.00	7,239.19	7,662.03	7,055.19	50.75	38.28	87.17	698.22	-1,004.39	3,728.51	3,647.53	80.97	46.045		
8,700.00	7,238.78	7,762.02	7,053.44	50.85	39.97	87.15	697.46	-1,104.36	3,728.43	3,644.36	84.08	44.345		
8,800.00	7,238.38	7,862.01	7,051.69	51.02	41.79	87.13	696.71	-1,204.33	3,728.36	3,640.92	87.44	42.638		
8,900.00	7,237.97	7,962.00	7,049.94	51.32	43.72	87.11	695.96	-1,304.30	3,728.29	3,637.25	91.04	40.953		
9,000.00	7,237.57	8,061.99	7,048.19	51.95	45.74	87.09	695.21	-1,404.28	3,728.22	3,633.37	94.84	39.310		
9,100.00	7,237.16	8,161.99	7,046.45	53.10	47.86	87.07	694.45	-1,504.25	3,728.14	3,629.32	98.83	37.724		
9,200.00	7,236.76	8,261.98	7,044.70	54.69	50.04	87.05	693.70	-1,604.22	3,728.07	3,625.10	102.97	36.204		
9,300.00	7,236.35	8,361.97	7,042.95	56.53	52.29	87.03	692.95	-1,704.19	3,728.00	3,620.74	107.26	34.756		
9,400.00	7,235.94	8,461.96	7,041.20	58.53	54.60	87.01	692.20	-1,804.17	3,727.93	3,616.25	111.68	33.381		
9,500.00	7,235.54	8,561.95	7,039.45	60.62	56.96	86.98	691.44	-1,904.14	3,727.86	3,611.66	116.21	32.080		
9,600.00	7,235.13	8,661.94	7,037.70	62.80	59.36	86.96	690.69	-2,004.11	3,727.79	3,606.96	120.83	30.851		
9,700.00	7,234.73	8,761.93	7,035.95	65.03	61.80	86.94	689.94	-2,104.09	3,727.72	3,602.18	125.55	29.692		
9,800.00	7,234.32	8,861.92	7,034.20	67.32	64.28	86.92	689.19	-2,204.06	3,727.66	3,597.32	130.34	28.599		
9,900.00	7,233.92	8,961.91	7,032.45	69.66	66.78	86.90	688.43	-2,304.03	3,727.59	3,592.38	135.20	27.570		
10,000.00	7,233.51	9,061.90	7,030.70	72.03	69.32	86.88	687.68	-2,404.00	3,727.52	3,587.39	140.13	26.600		
10,100.00	7,233.10	9,161.89	7,028.95	74.45	71.87	86.86	686.93	-2,503.98	3,727.46	3,582.34	145.12	25.686		
10,200.00	7,232.70	9,261.89	7,027.20	76.89	74.45	86.84	686.18	-2,603.95	3,727.39	3,577.24	150.15	24.824		
10,300.00	7,232.29	9,361.88	7,025.45	79.36	77.05	86.82	685.42	-2,703.92	3,727.32	3,572.09	155.23	24.011		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	9,461.87	7,023.70	81.86	79.67	86.80	684.67	-2,803.89	3,727.26	3,566.90	160.35	23.244		
10,500.00	7,231.48	9,561.86	7,021.95	84.38	82.30	86.78	683.92	-2,903.87	3,727.19	3,561.68	165.51	22.519		
10,600.00	7,231.08	9,661.85	7,020.20	86.93	84.95	86.76	683.17	-3,003.84	3,727.13	3,556.42	170.71	21.833		
10,700.00	7,230.67	9,761.84	7,018.46	89.49	87.61	86.74	682.41	-3,103.81	3,727.07	3,551.13	175.94	21.184		
10,800.00	7,230.26	9,861.83	7,016.71	92.07	90.28	86.72	681.66	-3,203.79	3,727.00	3,545.81	181.19	20.570		
10,900.00	7,229.86	9,961.82	7,014.96	94.67	92.97	86.69	680.91	-3,303.76	3,726.94	3,540.47	186.47	19.987		
11,000.00	7,229.45	10,061.81	7,013.21	97.28	95.66	86.67	680.16	-3,403.73	3,726.88	3,535.10	191.78	19.433		
11,100.00	7,229.05	10,161.80	7,011.46	99.90	98.36	86.65	679.40	-3,503.70	3,726.82	3,529.71	197.10	18.908		
11,200.00	7,228.64	10,261.79	7,009.71	102.54	101.07	86.63	678.65	-3,603.68	3,726.75	3,524.30	202.45	18.408		
11,300.00	7,228.24	10,361.78	7,007.96	105.19	103.79	86.61	677.90	-3,703.65	3,726.69	3,518.88	207.82	17.933		
11,400.00	7,227.83	10,461.78	7,006.21	107.85	106.52	86.59	677.15	-3,803.62	3,726.63	3,513.43	213.20	17.480		
11,500.00	7,227.42	10,561.77	7,004.46	110.52	109.25	86.57	676.39	-3,903.59	3,726.57	3,507.98	218.60	17.048		
11,600.00	7,227.02	10,661.76	7,002.71	113.20	111.99	86.55	675.64	-4,003.57	3,726.51	3,502.50	224.01	16.635		
11,700.00	7,226.61	10,761.75	7,000.96	115.89	114.74	86.53	674.89	-4,103.54	3,726.45	3,497.02	229.44	16.242		
11,800.00	7,226.21	10,861.74	6,999.21	118.59	117.49	86.51	674.13	-4,203.51	3,726.40	3,491.52	234.88	15.865		
11,900.00	7,225.80	10,961.73	6,997.46	121.29	120.24	86.49	673.38	-4,303.49	3,726.34	3,486.01	240.33	15.505		
12,000.00	7,225.40	11,061.72	6,995.71	124.00	123.00	86.47	672.63	-4,403.46	3,726.28	3,480.49	245.79	15.160		
12,100.00	7,224.99	11,161.71	6,993.96	126.72	125.77	86.45	671.88	-4,503.43	3,726.22	3,474.96	251.27	14.830		
12,200.00	7,224.58	11,261.70	6,992.21	129.44	128.54	86.42	671.12	-4,603.40	3,726.17	3,469.42	256.75	14.513		
12,300.00	7,224.18	11,361.69	6,990.47	132.17	131.31	86.40	670.37	-4,703.38	3,726.11	3,463.87	262.24	14.209		
12,400.00	7,223.77	11,461.68	6,988.72	134.91	134.09	86.38	669.62	-4,803.35	3,726.06	3,458.31	267.74	13.916		
12,500.00	7,223.37	11,561.68	6,986.97	137.65	136.87	86.36	668.87	-4,903.32	3,726.00	3,452.75	273.25	13.636		
12,600.00	7,222.96	11,661.67	6,985.22	140.39	139.65	86.34	668.11	-5,003.30	3,725.95	3,447.18	278.77	13.366		
12,700.00	7,222.55	11,761.66	6,983.47	143.14	142.43	86.32	667.36	-5,103.27	3,725.89	3,441.60	284.29	13.106		
12,800.00	7,222.15	11,861.65	6,981.72	145.89	145.22	86.30	666.61	-5,203.24	3,725.84	3,436.02	289.82	12.856		
12,900.00	7,221.74	11,961.64	6,979.97	148.65	148.01	86.28	665.86	-5,303.21	3,725.79	3,430.43	295.36	12.615		
13,000.00	7,221.34	12,061.63	6,978.22	151.41	150.81	86.26	665.10	-5,403.19	3,725.73	3,424.84	300.90	12.382		
13,100.00	7,220.93	12,161.62	6,976.47	154.18	153.60	86.24	664.35	-5,503.16	3,725.68	3,419.24	306.45	12.158		
13,200.00	7,220.53	12,261.61	6,974.72	156.94	156.40	86.22	663.60	-5,603.13	3,725.63	3,413.63	312.00	11.941		
13,300.00	7,220.12	12,361.60	6,972.97	159.72	159.20	86.20	662.85	-5,703.10	3,725.58	3,408.02	317.56	11.732		
13,400.00	7,219.71	12,461.59	6,971.22	162.49	162.00	86.18	662.09	-5,803.08	3,725.53	3,402.41	323.12	11.530		
13,500.00	7,219.31	12,561.58	6,969.47	165.27	164.81	86.15	661.34	-5,903.05	3,725.48	3,396.80	328.68	11.335		
13,600.00	7,218.90	12,661.57	6,967.72	168.05	167.61	86.13	660.59	-6,003.02	3,725.43	3,391.18	334.25	11.146		
13,700.00	7,218.50	12,761.57	6,965.97	170.83	170.42	86.11	659.84	-6,103.00	3,725.38	3,385.55	339.83	10.963		
13,800.00	7,218.09	12,861.56	6,964.22	173.61	173.23	86.09	659.08	-6,202.97	3,725.33	3,379.93	345.41	10.785		
13,900.00	7,217.69	12,961.55	6,962.48	176.40	176.04	86.07	658.33	-6,302.94	3,725.28	3,374.30	350.99	10.614		
14,000.00	7,217.28	13,061.54	6,960.73	179.19	178.85	86.05	657.58	-6,402.91	3,725.24	3,368.66	356.57	10.447		
14,100.00	7,216.87	13,161.53	6,958.98	181.98	181.67	86.03	656.83	-6,502.89	3,725.19	3,363.03	362.16	10.286		
14,200.00	7,216.47	13,261.52	6,957.23	184.78	184.48	86.01	656.07	-6,602.86	3,725.14	3,357.39	367.75	10.130		
14,300.00	7,216.06	13,361.51	6,955.48	187.57	187.30	85.99	655.32	-6,702.83	3,725.10	3,351.75	373.35	9.978		
14,400.00	7,215.66	13,461.50	6,953.73	190.37	190.12	85.97	654.57	-6,802.80	3,725.05	3,346.11	378.94	9.830		
14,500.00	7,215.25	13,561.49	6,951.98	193.17	192.94	85.95	653.82	-6,902.78	3,725.00	3,340.46	384.54	9.687		
14,600.00	7,214.85	13,661.48	6,950.23	195.97	195.76	85.93	653.06	-7,002.75	3,724.96	3,334.82	390.14	9.548		
14,700.00	7,214.44	13,761.47	6,948.48	198.77	198.58	85.91	652.31	-7,102.72	3,724.92	3,329.17	395.75	9.412		
14,800.00	7,214.03	13,861.47	6,946.73	201.58	201.40	85.88	651.56	-7,202.70	3,724.87	3,323.52	401.35	9.281		
14,900.00	7,213.63	13,961.46	6,944.98	204.38	204.22	85.86	650.81	-7,302.67	3,724.83	3,317.87	406.96	9.153		
15,000.00	7,213.22	14,061.45	6,943.23	207.19	207.05	85.84	650.05	-7,402.64	3,724.79	3,312.21	412.57	9.028		
15,100.00	7,212.82	14,161.44	6,941.48	210.00	209.87	85.82	649.30	-7,502.61	3,724.74	3,306.56	418.18	8.907		
15,200.00	7,212.41	14,261.43	6,939.73	212.81	212.70	85.80	648.55	-7,602.59	3,724.70	3,300.90	423.80	8.789		
15,300.00	7,212.01	14,361.42	6,937.98	215.62	215.52	85.78	647.80	-7,702.56	3,724.66	3,295.25	429.41	8.674		
15,400.00	7,211.60	14,461.41	6,936.23	218.43	218.35	85.76	647.04	-7,802.53	3,724.62	3,289.59	435.03	8.562		
15,500.00	7,211.19	14,561.40	6,934.49	221.25	221.18	85.74	646.29	-7,902.50	3,724.58	3,283.93	440.65	8.452		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1		Offset Site Error:		0.00 ft	
Survey Program: 0-MWD+IFR1														Offset Well Error:		3.28 ft	
Reference		Offset		Semi Major Axis			Distance										
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)						
15,600.00	7,210.79	14,661.39	6,932.74	224.06	224.01	85.72	645.54	-8,002.48	3,724.54	3,278.27	446.27	8.346					
15,700.00	7,210.38	14,761.38	6,930.99	226.88	226.84	85.70	644.78	-8,102.45	3,724.50	3,272.61	451.89	8.242					
15,758.14	7,210.15	14,819.51	6,929.97	228.51	228.48	85.69	644.35	-8,160.57	3,724.48	3,269.31	455.16	8.183					
15,794.94	7,210.00	14,817.75	6,930.00	229.55	228.43	85.69	644.36	-8,158.80	3,724.66	3,268.58	456.09	8.167 SF					



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.48	200.01	1.67	200.01					
100.00	100.00	101.00	100.00	3.28	3.28	0.48	200.01	1.67	200.01	193.44	6.57	30.445		
200.00	200.00	201.07	200.07	3.34	3.34	0.48	200.01	1.67	200.01	193.34	6.67	29.965		
300.00	299.98	308.51	307.48	3.44	3.45	177.77	197.97	1.38	199.86	192.96	6.90	28.955		
400.00	399.84	415.93	414.72	3.59	3.62	177.60	191.95	0.53	199.48	192.23	7.25	27.519		
500.00	499.45	523.32	521.63	3.79	3.85	177.32	181.96	-0.88	198.88	191.17	7.71	25.811		
600.00	598.70	630.67	628.05	4.03	4.15	176.93	168.02	-2.85	198.06	189.81	8.25	24.001		
667.37	665.29	700.85	697.32	4.22	4.38	176.61	156.91	-4.42	197.54	188.90	8.64	22.859 CC		
700.00	697.47	733.48	729.51	4.31	4.50	176.47	151.61	-5.17	197.73	188.89	8.83	22.391 ES		
800.00	795.62	833.42	828.10	4.64	4.88	176.08	135.38	-7.46	200.61	191.18	9.43	21.269		
900.00	893.06	933.21	926.54	5.00	5.29	175.76	119.17	-9.75	206.98	196.89	10.10	20.497		
1,000.00	989.64	1,032.71	1,024.69	5.40	5.72	175.53	103.01	-12.03	216.83	206.02	10.81	20.061		
1,100.00	1,085.27	1,131.82	1,122.46	5.83	6.18	175.38	86.91	-14.31	230.14	218.58	11.56	19.912		
1,200.00	1,179.82	1,230.40	1,219.70	6.29	6.64	175.31	70.90	-16.57	246.88	234.54	12.34	20.007		
1,300.00	1,273.17	1,328.34	1,316.32	6.79	7.12	175.30	55.00	-18.82	267.05	253.90	13.15	20.307		
1,400.00	1,365.21	1,425.52	1,412.18	7.33	7.60	175.34	39.21	-21.05	290.60	276.62	13.98	20.781		
1,500.00	1,455.84	1,521.82	1,507.18	7.89	8.09	175.42	23.57	-23.26	317.53	302.69	14.84	21.401		
1,600.00	1,544.94	1,617.12	1,601.19	8.50	8.57	175.51	8.09	-25.44	347.79	332.08	15.71	22.142		
1,700.00	1,632.39	1,711.31	1,694.10	9.13	9.06	175.62	-7.20	-27.60	381.35	364.76	16.59	22.986		
1,800.00	1,718.11	1,804.27	1,785.81	9.80	9.54	175.74	-22.30	-29.74	418.17	400.69	17.48	23.917		
1,900.00	1,802.44	1,903.76	1,876.52	10.49	10.07	175.90	-37.24	-31.85	457.43	439.01	18.42	24.836		
2,000.00	1,886.68	1,988.14	1,967.18	11.20	10.51	176.04	-52.16	-33.96	496.84	477.55	19.29	25.755		
2,100.00	1,970.92	2,080.04	2,057.84	11.93	11.00	176.17	-67.09	-36.06	536.25	516.04	20.21	26.538		
2,200.00	2,055.17	2,171.94	2,148.49	12.66	11.49	176.28	-82.02	-38.17	575.66	554.52	21.13	27.240		
2,300.00	2,139.41	2,263.84	2,239.15	13.40	11.99	176.37	-96.94	-40.28	615.07	593.00	22.07	27.873		
2,400.00	2,223.66	2,355.74	2,329.81	14.14	12.48	176.46	-111.87	-42.39	654.48	631.47	23.01	28.446		
2,500.00	2,307.90	2,447.64	2,420.46	14.89	12.98	176.53	-126.79	-44.50	693.90	669.94	23.96	28.966		
2,600.00	2,392.14	2,539.55	2,511.12	15.65	13.47	176.60	-141.72	-46.61	733.31	708.40	24.91	29.439		
2,700.00	2,476.39	2,631.45	2,601.78	16.41	13.97	176.66	-156.64	-48.72	772.73	746.86	25.87	29.873		
2,800.00	2,560.63	2,723.35	2,692.43	17.17	14.47	176.71	-171.57	-50.82	812.14	785.31	26.83	30.270		
2,900.00	2,644.88	2,815.25	2,783.09	17.93	14.98	176.76	-186.50	-52.93	851.56	823.76	27.80	30.635		
3,000.00	2,729.12	2,907.15	2,873.75	18.70	15.48	176.80	-201.42	-55.04	890.98	862.21	28.77	30.972		
3,100.00	2,813.36	3,000.95	2,964.40	19.47	15.99	176.84	-216.35	-57.15	930.40	900.65	29.75	31.275		
3,200.00	2,897.61	3,109.05	3,055.06	20.25	16.58	176.88	-231.27	-59.26	969.81	939.02	30.80	31.489		
3,300.00	2,981.85	3,182.86	3,145.72	21.02	16.99	176.91	-246.20	-61.37	1,009.23	977.54	31.70	31.841		
3,400.00	3,066.10	3,274.76	3,236.37	21.80	17.49	176.95	-261.13	-63.48	1,048.65	1,015.97	32.68	32.091		
3,500.00	3,150.34	3,366.66	3,327.03	22.58	18.00	176.98	-276.05	-65.58	1,088.07	1,054.41	33.66	32.325		
3,600.00	3,234.58	3,458.56	3,417.69	23.35	18.51	177.00	-290.98	-67.69	1,127.49	1,092.84	34.65	32.543		
3,700.00	3,318.83	3,550.46	3,508.34	24.13	19.01	177.03	-305.90	-69.80	1,166.91	1,131.28	35.63	32.747		
3,800.00	3,403.07	3,642.36	3,599.00	24.92	19.52	177.05	-320.83	-71.91	1,206.33	1,169.71	36.62	32.939		
3,900.00	3,487.32	3,734.27	3,689.66	25.70	20.03	177.07	-335.76	-74.02	1,245.75	1,208.14	37.61	33.120		
4,000.00	3,571.56	3,826.17	3,780.31	26.48	20.54	177.10	-350.68	-76.13	1,285.17	1,246.56	38.60	33.290		
4,100.00	3,655.80	3,918.07	3,870.97	27.27	21.05	177.12	-365.61	-78.24	1,324.59	1,284.99	39.60	33.451		
4,200.00	3,740.05	4,009.97	3,961.63	28.05	21.56	177.13	-380.53	-80.34	1,364.01	1,323.42	40.59	33.602		
4,300.00	3,824.29	4,101.87	4,052.28	28.84	22.06	177.15	-395.46	-82.45	1,403.43	1,361.84	41.59	33.746		
4,400.00	3,908.54	4,206.23	4,142.94	29.62	22.64	177.17	-410.39	-84.56	1,442.85	1,400.21	42.64	33.837		
4,500.00	3,992.78	4,285.67	4,233.60	30.41	23.08	177.18	-425.31	-86.67	1,482.27	1,438.69	43.58	34.011		
4,600.00	4,077.03	4,377.58	4,324.26	31.20	23.59	177.20	-440.24	-88.78	1,521.69	1,477.11	44.58	34.133		
4,700.00	4,161.27	4,469.48	4,414.91	31.98	24.10	177.21	-455.16	-90.89	1,561.11	1,515.53	45.58	34.250		
4,800.00	4,245.51	4,561.38	4,505.57	32.77	24.61	177.23	-470.09	-93.00	1,600.53	1,553.95	46.58	34.360		
4,900.00	4,329.76	4,653.28	4,596.23	33.56	25.13	177.24	-485.02	-95.10	1,639.96	1,592.37	47.58	34.466		
5,000.00	4,414.00	4,745.18	4,686.88	34.35	25.64	177.25	-499.94	-97.21	1,679.38	1,630.79	48.58	34.567		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	4,837.08	4,777.54	35.14	26.15	177.26	-514.87	-99.32	1,718.80	1,669.21	49.59	34.663		
5,200.00	4,582.49	4,928.98	4,868.20	35.93	26.66	177.27	-529.79	-101.43	1,758.22	1,707.63	50.59	34.755		
5,300.00	4,666.73	5,020.89	4,958.85	36.72	27.17	177.28	-544.72	-103.54	1,797.64	1,746.05	51.59	34.843		
5,400.00	4,750.98	5,112.79	5,049.51	37.51	27.68	177.29	-559.64	-105.65	1,837.06	1,784.46	52.60	34.927		
5,500.00	4,835.22	5,204.69	5,140.17	38.30	28.19	177.30	-574.57	-107.76	1,876.48	1,822.88	53.60	35.008		
5,600.00	4,919.47	5,296.59	5,230.82	39.09	28.71	177.31	-589.50	-109.86	1,915.90	1,861.30	54.61	35.085		
5,700.00	5,003.71	5,388.49	5,321.48	39.88	29.22	177.32	-604.42	-111.97	1,955.32	1,899.71	55.61	35.160		
5,800.00	5,088.06	5,480.47	5,412.21	40.67	29.73	177.34	-619.36	-114.08	1,994.57	1,937.95	56.62	35.228		
5,900.00	5,173.83	5,573.47	5,503.95	41.44	30.25	177.38	-634.47	-116.22	2,031.30	1,973.68	57.62	35.252		
6,000.00	5,261.34	5,667.70	5,596.91	42.18	30.77	177.42	-649.77	-118.38	2,064.77	2,006.15	58.62	35.221		
6,100.00	5,350.49	5,763.04	5,690.95	42.88	31.31	177.44	-665.25	-120.57	2,094.93	2,035.31	59.62	35.139		
6,200.00	5,441.16	5,859.37	5,785.98	43.56	31.84	177.46	-680.90	-122.78	2,121.75	2,061.14	60.61	35.008		
6,300.00	5,533.25	5,956.57	5,881.87	44.20	32.39	177.46	-696.69	-125.01	2,145.20	2,083.61	61.59	34.831		
6,400.00	5,626.65	6,054.54	5,978.50	44.82	32.93	177.46	-712.60	-127.26	2,165.24	2,102.68	62.56	34.612		
6,500.00	5,721.23	6,153.14	6,075.77	45.40	33.48	177.46	-728.61	-129.52	2,181.86	2,118.34	63.51	34.353		
6,600.00	5,816.89	6,252.26	6,173.55	45.94	34.04	177.44	-744.71	-131.79	2,195.02	2,130.57	64.45	34.056		
6,700.00	5,913.51	6,351.78	6,271.72	46.45	34.59	177.42	-760.87	-134.08	2,204.73	2,139.35	65.38	33.723		
6,800.00	6,010.97	6,451.57	6,370.16	46.93	35.15	177.40	-777.08	-136.36	2,210.95	2,144.67	66.28	33.357		
6,900.00	6,109.15	6,551.52	6,468.75	47.38	35.71	177.36	-793.31	-138.66	2,213.70	2,146.53	67.17	32.958		
7,000.00	6,207.93	6,651.49	6,567.38	47.80	36.27	177.32	-809.55	-140.95	2,212.96	2,144.93	68.03	32.528		
7,100.00	6,307.19	6,751.92	6,666.40	48.18	36.83	177.25	-825.86	-144.22	2,208.73	2,139.85	68.88	32.065		
7,200.00	6,406.82	6,850.86	6,762.73	48.53	37.39	176.85	-841.81	-159.53	2,201.03	2,131.30	69.72	31.568		
7,300.00	6,506.68	6,942.78	6,849.13	48.84	37.90	176.11	-856.20	-187.16	2,190.15	2,119.65	70.50	31.066		
7,400.00	6,606.66	7,024.92	6,922.30	49.10	38.35	88.20	-868.48	-222.28	2,176.64	2,105.47	71.17	30.584		
7,500.00	6,706.21	7,100.35	6,985.05	49.35	38.77	88.52	-879.07	-262.71	2,162.62	2,090.86	71.76	30.135		
7,600.00	6,803.22	7,173.12	7,040.69	49.59	39.17	88.85	-888.53	-308.57	2,149.72	2,077.39	72.33	29.721		
7,700.00	6,895.32	7,243.86	7,089.48	49.82	39.57	89.16	-896.89	-359.05	2,138.08	2,065.21	72.87	29.342		
7,800.00	6,980.23	7,313.04	7,131.58	50.03	39.98	89.43	-904.18	-413.43	2,127.81	2,054.39	73.42	28.982		
7,900.00	7,055.85	7,381.05	7,167.03	50.21	40.42	89.67	-910.40	-471.08	2,119.00	2,044.97	74.03	28.623		
8,000.00	7,120.34	7,450.00	7,196.58	50.36	40.91	89.85	-915.68	-533.13	2,111.75	2,036.95	74.80	28.232		
8,100.00	7,172.10	7,514.61	7,218.10	50.47	41.43	90.01	-919.63	-593.89	2,106.10	2,030.39	75.71	27.818		
8,200.00	7,209.85	7,580.59	7,233.69	50.55	42.03	90.10	-922.62	-657.90	2,102.09	2,025.18	76.92	27.329		
8,300.00	7,232.68	7,650.00	7,242.95	50.61	42.74	90.14	-924.60	-726.63	2,099.77	2,021.26	78.51	26.746		
8,385.93	7,239.96	7,708.86	7,245.02	50.64	43.43	90.14	-925.29	-777.80	2,099.11	2,019.03	80.08	26.212		
8,400.00	7,240.00	7,715.31	7,244.95	50.65	43.51	90.13	-925.37	-791.87	2,099.11	2,018.78	80.33	26.131		
8,500.00	7,239.60	7,815.31	7,244.42	50.69	44.87	90.13	-925.96	-891.87	2,099.14	2,015.87	83.27	25.210		
8,600.00	7,239.19	7,915.31	7,243.89	50.75	46.47	90.13	-926.54	-991.86	2,099.17	2,012.63	86.54	24.257		
8,700.00	7,238.78	8,015.31	7,243.36	50.85	48.28	90.12	-927.12	-1,091.86	2,099.19	2,009.08	90.12	23.294		
8,800.00	7,238.38	8,115.31	7,242.83	51.02	50.28	90.12	-927.71	-1,191.86	2,099.22	2,005.26	93.96	22.341		
8,900.00	7,237.97	8,215.31	7,242.30	51.32	52.45	90.12	-928.29	-1,291.86	2,099.25	2,001.20	98.04	21.411		
9,000.00	7,237.57	8,315.31	7,241.78	51.95	54.75	90.11	-928.88	-1,391.85	2,099.28	1,996.94	102.34	20.514		
9,100.00	7,237.16	8,415.31	7,241.25	53.10	57.16	90.11	-929.46	-1,491.85	2,099.30	1,992.49	106.81	19.654		
9,200.00	7,236.76	8,515.31	7,240.72	54.69	59.68	90.11	-930.05	-1,591.85	2,099.33	1,987.88	111.45	18.837		
9,300.00	7,236.35	8,615.30	7,240.19	56.53	62.28	90.10	-930.63	-1,691.84	2,099.36	1,983.13	116.23	18.062		
9,400.00	7,235.94	8,715.30	7,239.66	58.53	64.96	90.10	-931.21	-1,791.84	2,099.39	1,978.25	121.14	17.331		
9,500.00	7,235.54	8,815.30	7,239.13	60.62	67.70	90.10	-931.80	-1,891.84	2,099.42	1,973.26	126.15	16.642		
9,600.00	7,235.13	8,915.30	7,238.60	62.80	70.49	90.09	-932.38	-1,991.83	2,099.44	1,968.17	131.27	15.993		
9,700.00	7,234.73	9,015.30	7,238.07	65.03	73.33	90.09	-932.97	-2,091.83	2,099.47	1,963.00	136.48	15.383		
9,800.00	7,234.32	9,115.30	7,237.55	67.32	76.22	90.09	-933.55	-2,191.83	2,099.50	1,957.74	141.76	14.810		
9,900.00	7,233.92	9,215.30	7,237.02	69.66	79.14	90.08	-934.14	-2,291.82	2,099.53	1,952.41	147.11	14.271		
10,000.00	7,233.51	9,315.30	7,236.49	72.03	82.10	90.08	-934.72	-2,391.82	2,099.56	1,947.02	152.53	13.765		
10,100.00	7,233.10	9,415.30	7,235.96	74.45	85.08	90.08	-935.31	-2,491.82	2,099.58	1,941.58	158.00	13.288		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,232.70	9,515.30	7,235.43	76.89	88.10	90.07	-935.89	-2,591.81	2,099.61	1,936.08	163.53	12.839		
10,300.00	7,232.29	9,615.30	7,234.90	79.36	91.13	90.07	-936.47	-2,691.81	2,099.64	1,930.54	169.10	12.417		
10,400.00	7,231.89	9,715.30	7,234.37	81.86	94.19	90.07	-937.06	-2,791.81	2,099.67	1,924.96	174.71	12.018		
10,500.00	7,231.48	9,815.30	7,233.85	84.38	97.26	90.06	-937.64	-2,891.80	2,099.70	1,919.34	180.36	11.642		
10,600.00	7,231.08	9,915.30	7,233.32	86.93	100.35	90.06	-938.23	-2,991.80	2,099.72	1,913.68	186.04	11.286		
10,700.00	7,230.67	10,015.30	7,232.79	89.49	103.46	90.06	-938.81	-3,091.80	2,099.75	1,908.00	191.76	10.950		
10,800.00	7,230.26	10,115.30	7,232.26	92.07	106.58	90.05	-939.40	-3,191.79	2,099.78	1,902.28	197.50	10.632		
10,900.00	7,229.86	10,215.30	7,231.73	94.67	109.71	90.05	-939.98	-3,291.79	2,099.81	1,896.54	203.27	10.330		
11,000.00	7,229.45	10,315.30	7,231.20	97.28	112.86	90.05	-940.56	-3,391.79	2,099.84	1,890.77	209.06	10.044		
11,100.00	7,229.05	10,415.30	7,230.67	99.90	116.02	90.04	-941.15	-3,491.79	2,099.86	1,884.99	214.88	9.772		
11,200.00	7,228.64	10,515.30	7,230.14	102.54	119.18	90.04	-941.73	-3,591.78	2,099.89	1,879.18	220.71	9.514		
11,300.00	7,228.24	10,615.30	7,229.62	105.19	122.36	90.04	-942.32	-3,691.78	2,099.92	1,873.35	226.57	9.268		
11,400.00	7,227.83	10,715.30	7,229.09	107.85	125.54	90.03	-942.90	-3,791.78	2,099.95	1,867.51	232.44	9.034		
11,500.00	7,227.42	10,815.30	7,228.56	110.52	128.73	90.03	-943.49	-3,891.77	2,099.98	1,861.65	238.33	8.811		
11,600.00	7,227.02	10,915.30	7,228.03	113.20	131.93	90.03	-944.07	-3,991.77	2,100.00	1,855.77	244.23	8.598		
11,700.00	7,226.61	11,015.30	7,227.50	115.89	135.14	90.02	-944.66	-4,091.77	2,100.03	1,849.88	250.15	8.395		
11,800.00	7,226.21	11,115.30	7,226.97	118.59	138.35	90.02	-945.24	-4,191.76	2,100.06	1,843.98	256.08	8.201		
11,900.00	7,225.80	11,215.30	7,226.44	121.29	141.57	90.02	-945.82	-4,291.76	2,100.09	1,838.07	262.02	8.015		
12,000.00	7,225.40	11,315.30	7,225.91	124.00	144.79	90.01	-946.41	-4,391.76	2,100.12	1,832.14	267.98	7.837		
12,100.00	7,224.99	11,415.30	7,225.39	126.72	148.02	90.01	-946.99	-4,491.75	2,100.14	1,826.20	273.94	7.666		
12,200.00	7,224.58	11,515.30	7,224.86	129.44	151.25	90.01	-947.58	-4,591.75	2,100.17	1,820.26	279.91	7.503		
12,300.00	7,224.18	11,615.30	7,224.33	132.17	154.49	90.00	-948.16	-4,691.75	2,100.20	1,814.30	285.90	7.346		
12,400.00	7,223.77	11,715.30	7,223.80	134.91	157.73	90.00	-948.75	-4,791.74	2,100.23	1,808.34	291.89	7.195		
12,500.00	7,223.37	11,815.30	7,223.27	137.65	160.97	90.00	-949.33	-4,891.74	2,100.26	1,802.37	297.89	7.050		
12,600.00	7,222.96	11,915.30	7,222.74	140.39	164.22	89.99	-949.91	-4,991.74	2,100.28	1,796.39	303.90	6.911		
12,700.00	7,222.55	12,015.30	7,222.21	143.14	167.47	89.99	-950.50	-5,091.73	2,100.31	1,790.40	309.91	6.777		
12,800.00	7,222.15	12,115.30	7,221.68	145.89	170.73	89.99	-951.08	-5,191.73	2,100.34	1,784.41	315.93	6.648		
12,900.00	7,221.74	12,215.30	7,221.16	148.65	173.99	89.98	-951.67	-5,291.73	2,100.37	1,778.41	321.96	6.524		
13,000.00	7,221.34	12,315.30	7,220.63	151.41	177.25	89.98	-952.25	-5,391.72	2,100.40	1,772.40	328.00	6.404		
13,100.00	7,220.93	12,415.30	7,220.10	154.18	180.51	89.98	-952.84	-5,491.72	2,100.43	1,766.39	334.04	6.288		
13,200.00	7,220.53	12,515.30	7,219.57	156.94	183.78	89.97	-953.42	-5,591.72	2,100.45	1,760.37	340.08	6.176		
13,300.00	7,220.12	12,615.30	7,219.04	159.72	187.04	89.97	-954.00	-5,691.71	2,100.48	1,754.35	346.13	6.068		
13,400.00	7,219.71	12,715.30	7,218.51	162.49	190.32	89.97	-954.59	-5,791.71	2,100.51	1,748.32	352.19	5.964		
13,500.00	7,219.31	12,815.30	7,217.98	165.27	193.59	89.96	-955.17	-5,891.71	2,100.54	1,742.29	358.25	5.863		
13,600.00	7,218.90	12,915.30	7,217.46	168.05	196.86	89.96	-955.76	-5,991.71	2,100.57	1,736.26	364.31	5.766		
13,700.00	7,218.50	13,015.30	7,216.93	170.83	200.14	89.96	-956.34	-6,091.70	2,100.59	1,730.21	370.38	5.671		
13,800.00	7,218.09	13,115.30	7,216.40	173.61	203.42	89.95	-956.93	-6,191.70	2,100.62	1,724.17	376.45	5.580		
13,900.00	7,217.69	13,215.30	7,215.87	176.40	206.70	89.95	-957.51	-6,291.70	2,100.65	1,718.12	382.53	5.491		
14,000.00	7,217.28	13,315.30	7,215.34	179.19	209.98	89.95	-958.10	-6,391.69	2,100.68	1,712.07	388.61	5.406		
14,100.00	7,216.87	13,415.30	7,214.81	181.98	213.27	89.94	-958.68	-6,491.69	2,100.71	1,706.01	394.69	5.322		
14,200.00	7,216.47	13,515.30	7,214.28	184.78	216.55	89.94	-959.26	-6,591.69	2,100.74	1,699.96	400.78	5.242		
14,300.00	7,216.06	13,615.30	7,213.75	187.57	219.84	89.94	-959.85	-6,691.68	2,100.76	1,693.89	406.87	5.163		
14,400.00	7,215.66	13,715.30	7,213.23	190.37	223.13	89.93	-960.43	-6,791.68	2,100.79	1,687.83	412.96	5.087		
14,500.00	7,215.25	13,815.30	7,212.70	193.17	226.42	89.93	-961.02	-6,891.68	2,100.82	1,681.76	419.06	5.013		
14,600.00	7,214.85	13,915.30	7,212.17	195.97	229.71	89.93	-961.60	-6,991.67	2,100.85	1,675.69	425.16	4.941		
14,700.00	7,214.44	14,015.30	7,211.64	198.77	233.00	89.92	-962.19	-7,091.67	2,100.88	1,669.62	431.26	4.871		
14,800.00	7,214.03	14,115.30	7,211.11	201.58	236.29	89.92	-962.77	-7,191.67	2,100.91	1,663.54	437.36	4.804		
14,900.00	7,213.63	14,215.30	7,210.58	204.38	239.59	89.92	-963.35	-7,291.66	2,100.93	1,657.46	443.47	4.737		
15,000.00	7,213.22	14,315.30	7,210.05	207.19	242.88	89.91	-963.94	-7,391.66	2,100.96	1,651.38	449.58	4.673		
15,100.00	7,212.82	14,415.30	7,209.52	210.00	246.18	89.91	-964.52	-7,491.66	2,100.99	1,645.30	455.69	4.611		
15,200.00	7,212.41	14,515.30	7,209.00	212.81	249.47	89.91	-965.11	-7,591.65	2,101.02	1,639.22	461.80	4.550		
15,300.00	7,212.01	14,615.30	7,208.47	215.62	252.77	89.90	-965.69	-7,691.65	2,101.05	1,633.13	467.92	4.490		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M - OH - PLAN #1		Offset Site Error:		0.00 ft	
Survey Program: 0-MWD														Offset Well Error:		3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor					
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)						
15,400.00	7,211.60	14,715.30	7,207.94	218.43	256.07	89.90	-966.28	-7,791.65	2,101.08	1,627.04	474.03	4.432					
15,500.00	7,211.19	14,815.30	7,207.41	221.25	259.37	89.90	-966.86	-7,891.64	2,101.10	1,620.95	480.15	4.376					
15,600.00	7,210.79	14,915.30	7,206.88	224.06	262.67	89.89	-967.45	-7,991.64	2,101.13	1,614.86	486.27	4.321					
15,700.00	7,210.38	15,015.30	7,206.35	226.88	265.98	89.89	-968.03	-8,091.64	2,101.16	1,608.76	492.40	4.267					
15,700.04	7,210.38	15,015.34	7,206.35	226.88	265.98	89.89	-968.03	-8,091.68	2,101.16	1,608.76	492.40	4.267					
15,794.94	7,210.00	15,081.89	7,206.00	229.55	268.17	89.89	-968.42	-8,158.22	2,101.38	1,604.40	496.98	4.228 SF					



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M2 - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.45	319.86	2.50	319.87					
100.00	100.00	102.00	100.00	3.28	3.29	0.45	319.86	2.50	319.87	313.30	6.57	48.688		
200.00	200.00	202.00	200.00	3.34	3.34	0.45	319.86	2.50	319.87	313.20	6.68	47.916 CC, ES		
300.00	299.98	301.98	299.98	3.44	3.45	177.81	319.86	2.50	321.62	314.73	6.89	46.695		
400.00	399.84	401.84	399.84	3.59	3.61	177.84	319.86	2.50	326.85	319.65	7.20	45.402		
500.00	499.45	501.63	499.63	3.79	3.81	177.89	319.86	2.50	335.56	327.95	7.60	44.141		
600.00	598.70	613.82	611.79	4.03	4.07	177.85	317.72	1.80	345.83	337.72	8.11	42.659		
700.00	697.47	726.45	724.21	4.31	4.36	177.63	311.36	-0.29	355.85	347.16	8.69	40.957		
800.00	795.62	825.58	823.04	4.64	4.65	177.36	303.97	-2.71	367.53	358.25	9.28	39.602		
900.00	893.06	924.41	921.56	5.00	4.95	177.14	296.61	-5.13	382.68	372.75	9.92	38.562		
1,000.00	989.64	1,022.66	1,019.51	5.40	5.28	176.95	289.28	-7.53	401.26	390.65	10.61	37.828		
1,100.00	1,085.27	1,120.20	1,116.75	5.83	5.62	176.80	282.01	-9.92	423.26	411.93	11.33	37.367		
1,200.00	1,179.82	1,216.91	1,213.17	6.29	5.97	176.69	274.80	-12.28	448.64	436.57	12.08	37.153		
1,300.00	1,273.17	1,312.69	1,308.65	6.79	6.32	176.60	267.66	-14.62	477.39	464.54	12.85	37.155		
1,400.00	1,365.21	1,407.41	1,403.07	7.33	6.68	176.54	260.60	-16.94	509.45	495.80	13.64	37.345		
1,500.00	1,455.84	1,500.95	1,496.32	7.89	7.05	176.50	253.62	-19.23	544.79	530.33	14.45	37.699		
1,600.00	1,544.94	1,606.80	1,588.29	8.50	7.47	176.47	246.75	-21.49	583.36	568.04	15.33	38.062		
1,700.00	1,632.39	1,684.05	1,678.87	9.13	7.78	176.46	239.97	-23.71	625.13	609.02	16.11	38.814		
1,800.00	1,718.11	1,773.40	1,767.93	9.80	8.14	176.46	233.31	-25.89	670.04	653.09	16.95	39.540		
1,900.00	1,802.44	1,861.53	1,855.79	10.49	8.51	176.51	226.74	-28.05	717.28	699.49	17.79	40.319		
2,000.00	1,886.68	1,949.59	1,943.58	11.20	8.87	176.57	220.18	-30.20	764.67	746.03	18.64	41.031		
2,100.00	1,970.92	2,037.64	2,031.36	11.93	9.24	176.62	213.61	-32.36	812.06	792.56	19.49	41.658		
2,200.00	2,055.17	2,125.70	2,119.15	12.66	9.61	176.66	207.05	-34.51	859.44	839.08	20.36	42.212		
2,300.00	2,139.41	2,213.76	2,206.94	13.40	9.98	176.71	200.48	-36.66	906.83	885.59	21.23	42.705		
2,400.00	2,223.66	2,301.82	2,294.72	14.14	10.36	176.74	193.92	-38.82	954.22	932.10	22.12	43.144		
2,500.00	2,307.90	2,389.87	2,382.51	14.89	10.73	176.78	187.35	-40.97	1,001.60	978.60	23.01	43.538		
2,600.00	2,392.14	2,477.93	2,470.30	15.65	11.11	176.81	180.79	-43.13	1,048.99	1,025.09	23.90	43.892		
2,700.00	2,476.39	2,565.99	2,558.08	16.41	11.49	176.84	174.22	-45.28	1,096.38	1,071.58	24.80	44.212		
2,800.00	2,560.63	2,654.05	2,645.87	17.17	11.87	176.86	167.66	-47.43	1,143.77	1,118.06	25.70	44.501		
2,900.00	2,644.88	2,742.10	2,733.66	17.93	12.25	176.89	161.09	-49.59	1,191.15	1,164.55	26.61	44.764		
3,000.00	2,729.12	2,830.16	2,821.44	18.70	12.63	176.91	154.53	-51.74	1,238.54	1,211.02	27.52	45.004		
3,100.00	2,813.36	2,918.22	2,909.23	19.47	13.01	176.93	147.96	-53.90	1,285.93	1,257.50	28.43	45.224		
3,200.00	2,897.61	3,006.28	2,997.01	20.25	13.40	176.95	141.40	-56.05	1,333.32	1,303.97	29.35	45.425		
3,300.00	2,981.85	3,105.66	3,084.80	21.02	13.83	176.97	134.83	-58.20	1,380.71	1,350.39	30.32	45.536		
3,400.00	3,066.10	3,182.39	3,172.59	21.80	14.17	176.98	128.27	-60.36	1,428.10	1,396.90	31.19	45.780		
3,500.00	3,150.34	3,270.45	3,260.37	22.58	14.55	177.00	121.70	-62.51	1,475.49	1,443.37	32.12	45.938		
3,600.00	3,234.58	3,358.51	3,348.16	23.35	14.94	177.01	115.14	-64.66	1,522.88	1,489.83	33.05	46.084		
3,700.00	3,318.83	3,446.57	3,435.95	24.13	15.33	177.03	108.57	-66.82	1,570.27	1,536.29	33.97	46.219		
3,800.00	3,403.07	3,534.62	3,523.73	24.92	15.72	177.04	102.01	-68.97	1,617.65	1,582.75	34.90	46.345		
3,900.00	3,487.32	3,622.68	3,611.52	25.70	16.10	177.05	95.44	-71.13	1,665.04	1,629.21	35.84	46.462		
4,000.00	3,571.56	3,710.74	3,699.30	26.48	16.49	177.06	88.88	-73.28	1,712.43	1,675.66	36.77	46.572		
4,100.00	3,655.80	3,801.20	3,787.09	27.27	16.89	177.07	82.31	-75.43	1,759.82	1,722.11	37.71	46.661		
4,200.00	3,740.05	3,886.86	3,874.88	28.05	17.27	177.08	75.75	-77.59	1,807.21	1,768.57	38.64	46.770		
4,300.00	3,824.29	3,974.91	3,962.66	28.84	17.66	177.09	69.18	-79.74	1,854.60	1,815.02	39.58	46.860		
4,400.00	3,908.54	4,062.97	4,050.45	29.62	18.05	177.10	62.62	-81.90	1,901.99	1,861.47	40.52	46.944		
4,500.00	3,992.78	4,151.03	4,138.24	30.41	18.44	177.11	56.05	-84.05	1,949.38	1,907.93	41.46	47.024		
4,600.00	4,077.03	4,239.09	4,226.02	31.20	18.83	177.12	49.49	-86.20	1,996.77	1,954.37	42.40	47.099		
4,700.00	4,161.27	4,327.14	4,313.81	31.98	19.23	177.13	42.92	-88.36	2,044.16	2,000.82	43.34	47.170		
4,800.00	4,245.51	4,415.20	4,401.59	32.77	19.62	177.13	36.36	-90.51	2,091.55	2,047.27	44.28	47.236		
4,900.00	4,329.76	4,503.26	4,489.38	33.56	20.01	177.14	29.79	-92.67	2,138.94	2,093.72	45.22	47.299		
5,000.00	4,414.00	4,608.68	4,577.17	34.35	20.48	177.15	23.23	-94.82	2,186.33	2,140.09	46.24	47.281		
5,100.00	4,498.25	4,679.38	4,664.95	35.14	20.79	177.15	16.66	-96.97	2,233.72	2,186.61	47.11	47.416		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M2 - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,767.43	4,752.74	35.93	21.19	177.16	10.10	-99.13	2,281.11	2,233.05	48.05	47.470		
5,300.00	4,666.73	4,855.49	4,840.53	36.72	21.58	177.17	3.53	-101.28	2,328.50	2,279.50	49.00	47.521		
5,400.00	4,750.98	4,943.55	4,928.31	37.51	21.97	177.17	-3.03	-103.43	2,375.89	2,325.94	49.95	47.569		
5,500.00	4,835.22	5,031.61	5,016.10	38.30	22.36	177.18	-9.60	-105.59	2,423.28	2,372.38	50.89	47.615		
5,600.00	4,919.47	5,119.66	5,103.88	39.09	22.76	177.18	-16.16	-107.74	2,470.67	2,418.83	51.84	47.659		
5,700.00	5,003.71	5,207.72	5,191.67	39.88	23.15	177.19	-22.73	-109.90	2,518.06	2,465.27	52.79	47.701		
5,800.00	5,088.06	5,304.13	5,279.55	40.67	23.58	177.21	-29.30	-112.05	2,565.28	2,511.50	53.77	47.706		
5,900.00	5,173.83	5,385.26	5,368.67	41.44	23.94	177.26	-35.96	-114.24	2,610.08	2,555.40	54.68	47.730		
6,000.00	5,261.34	5,476.16	5,459.29	42.18	24.35	177.30	-42.74	-116.46	2,651.75	2,596.12	55.63	47.665		
6,100.00	5,350.49	5,568.46	5,551.30	42.88	24.76	177.33	-49.62	-118.72	2,690.22	2,633.64	56.58	47.547		
6,200.00	5,441.16	5,662.04	5,644.59	43.56	25.18	177.36	-56.60	-121.01	2,725.45	2,667.93	57.52	47.380		
6,300.00	5,533.25	5,756.80	5,739.05	44.20	25.61	177.38	-63.66	-123.33	2,757.40	2,698.94	58.46	47.166		
6,400.00	5,626.65	5,852.60	5,834.56	44.82	26.04	177.39	-70.80	-125.67	2,786.02	2,726.63	59.39	46.910		
6,500.00	5,721.23	5,949.35	5,931.01	45.40	26.47	177.39	-78.02	-128.04	2,811.29	2,750.98	60.31	46.614		
6,600.00	5,816.89	6,046.92	6,028.28	45.94	26.91	177.39	-85.29	-130.42	2,833.17	2,771.95	61.22	46.281		
6,700.00	5,913.51	6,145.18	6,126.24	46.45	27.35	177.38	-92.62	-132.83	2,851.63	2,789.52	62.11	45.912		
6,800.00	6,010.97	6,244.03	6,224.79	46.93	27.79	177.37	-99.99	-135.24	2,866.66	2,803.67	62.99	45.511		
6,900.00	6,109.15	6,343.34	6,323.79	47.38	28.23	177.35	-107.39	-137.67	2,878.23	2,814.39	63.85	45.079		
7,000.00	6,207.93	6,442.99	6,423.13	47.80	28.68	177.32	-114.82	-140.11	2,886.34	2,821.65	64.69	44.617		
7,100.00	6,307.19	6,542.86	6,522.70	48.18	29.13	177.29	-122.26	-142.55	2,890.96	2,825.45	65.51	44.127		
7,200.00	6,406.82	6,642.84	6,622.37	48.53	29.58	177.25	-129.72	-145.00	2,892.11	2,825.79	66.32	43.611		
7,300.00	6,506.68	6,744.41	6,722.99	48.84	30.03	177.04	-137.31	-155.60	2,889.73	2,822.62	67.11	43.059		
7,400.00	6,606.66	6,840.19	6,815.20	49.10	30.45	89.57	-144.39	-180.18	2,883.97	2,816.17	67.80	42.536		
7,500.00	6,706.21	6,929.98	6,897.39	49.35	30.82	89.63	-150.80	-215.56	2,876.92	2,808.52	68.40	42.058		
7,600.00	6,803.22	7,016.37	6,971.03	49.59	31.16	89.71	-156.66	-260.23	2,870.33	2,801.38	68.95	41.627		
7,700.00	6,895.32	7,099.98	7,035.92	49.82	31.48	89.79	-161.92	-312.59	2,864.30	2,794.83	69.47	41.229		
7,800.00	6,980.23	7,181.34	7,091.97	50.03	31.80	89.86	-166.58	-371.30	2,858.93	2,788.92	70.01	40.838		
7,900.00	7,055.85	7,260.87	7,139.11	50.21	32.18	89.93	-170.61	-435.17	2,854.27	2,783.66	70.61	40.424		
8,000.00	7,120.34	7,338.97	7,177.31	50.36	32.67	89.98	-174.01	-503.14	2,850.40	2,779.05	71.35	39.949		
8,100.00	7,172.10	7,415.94	7,206.57	50.47	33.26	90.02	-176.77	-574.22	2,847.34	2,775.03	72.31	39.378		
8,200.00	7,209.85	7,492.07	7,226.89	50.55	33.96	90.04	-178.88	-647.52	2,845.14	2,771.61	73.53	38.695		
8,300.00	7,232.68	7,567.63	7,238.28	50.61	34.77	90.04	-180.34	-722.15	2,843.81	2,768.77	75.04	37.897		
8,400.00	7,240.00	7,647.39	7,240.93	50.65	35.71	90.02	-181.18	-801.82	2,843.34	2,766.44	76.90	36.975		
8,500.00	7,239.60	7,747.39	7,240.53	50.69	37.06	90.02	-181.97	-901.82	2,843.17	2,763.80	79.37	35.822		
8,600.00	7,239.19	7,847.39	7,240.14	50.75	38.57	90.02	-182.75	-1,001.82	2,843.00	2,760.85	82.15	34.607		
8,700.00	7,238.78	7,947.39	7,239.75	50.85	40.22	90.02	-183.53	-1,101.81	2,842.83	2,757.61	85.23	33.356		
8,800.00	7,238.38	8,047.38	7,239.35	51.02	42.00	90.02	-184.31	-1,201.81	2,842.66	2,754.10	88.56	32.097		
8,900.00	7,237.97	8,147.38	7,238.96	51.32	43.90	90.02	-185.09	-1,301.80	2,842.49	2,750.36	92.14	30.851		
9,000.00	7,237.57	8,247.38	7,238.57	51.95	45.89	90.02	-185.88	-1,401.80	2,842.32	2,746.41	95.91	29.634		
9,100.00	7,237.16	8,347.38	7,238.17	53.10	47.98	90.02	-186.66	-1,501.80	2,842.15	2,742.28	99.87	28.457		
9,200.00	7,236.76	8,447.38	7,237.78	54.69	50.14	90.02	-187.44	-1,601.79	2,841.99	2,737.99	104.00	27.327		
9,300.00	7,236.35	8,547.38	7,237.39	56.53	52.37	90.02	-188.22	-1,701.79	2,841.82	2,733.55	108.27	26.248		
9,400.00	7,235.94	8,647.38	7,236.99	58.53	54.65	90.02	-189.01	-1,801.78	2,841.65	2,728.98	112.66	25.222		
9,500.00	7,235.54	8,747.38	7,236.60	60.62	56.99	90.02	-189.79	-1,901.78	2,841.48	2,724.30	117.17	24.250		
9,600.00	7,235.13	8,847.38	7,236.21	62.80	59.38	90.02	-190.57	-2,001.78	2,841.31	2,719.52	121.78	23.331		
9,700.00	7,234.73	8,947.38	7,235.81	65.03	61.80	90.02	-191.35	-2,101.77	2,841.14	2,714.65	126.48	22.462		
9,800.00	7,234.32	9,047.38	7,235.42	67.32	64.26	90.02	-192.13	-2,201.77	2,840.97	2,709.70	131.27	21.643		
9,900.00	7,233.92	9,147.38	7,235.03	69.66	66.75	90.02	-192.92	-2,301.76	2,840.80	2,704.68	136.12	20.870		
10,000.00	7,233.51	9,247.38	7,234.63	72.03	69.27	90.02	-193.70	-2,401.76	2,840.63	2,699.59	141.04	20.141		
10,100.00	7,233.10	9,347.38	7,234.24	74.45	71.82	90.02	-194.48	-2,501.76	2,840.46	2,694.45	146.01	19.454		
10,200.00	7,232.70	9,447.38	7,233.85	76.89	74.39	90.02	-195.26	-2,601.75	2,840.29	2,689.25	151.04	18.805		
10,300.00	7,232.29	9,547.38	7,233.46	79.36	76.98	90.02	-196.05	-2,701.75	2,840.12	2,684.00	156.11	18.193		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M2 - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	9,647.38	7,233.06	81.86	79.58	90.02	-196.83	-2,801.74	2,839.95	2,678.72	161.23	17.614		
10,500.00	7,231.48	9,747.38	7,232.67	84.38	82.21	90.02	-197.61	-2,901.74	2,839.78	2,673.39	166.39	17.067		
10,600.00	7,231.08	9,847.38	7,232.28	86.93	84.85	90.02	-198.39	-3,001.74	2,839.61	2,668.03	171.58	16.550		
10,700.00	7,230.67	9,947.38	7,231.88	89.49	87.50	90.02	-199.17	-3,101.73	2,839.44	2,662.63	176.81	16.060		
10,800.00	7,230.26	10,047.38	7,231.49	92.07	90.16	90.03	-199.96	-3,201.73	2,839.27	2,657.21	182.06	15.595		
10,900.00	7,229.86	10,147.38	7,231.10	94.67	92.84	90.03	-200.74	-3,301.72	2,839.10	2,651.76	187.34	15.155		
11,000.00	7,229.45	10,247.38	7,230.70	97.28	95.53	90.03	-201.52	-3,401.72	2,838.93	2,646.28	192.65	14.736		
11,100.00	7,229.05	10,347.38	7,230.31	99.90	98.23	90.03	-202.30	-3,501.72	2,838.76	2,640.78	197.98	14.339		
11,200.00	7,228.64	10,447.38	7,229.92	102.54	100.93	90.03	-203.09	-3,601.71	2,838.59	2,635.26	203.33	13.961		
11,300.00	7,228.24	10,547.38	7,229.52	105.19	103.65	90.03	-203.87	-3,701.71	2,838.42	2,629.73	208.69	13.601		
11,400.00	7,227.83	10,647.38	7,229.13	107.85	106.37	90.03	-204.65	-3,801.70	2,838.25	2,624.17	214.08	13.258		
11,500.00	7,227.42	10,747.38	7,228.74	110.52	109.10	90.03	-205.43	-3,901.70	2,838.08	2,618.60	219.49	12.931		
11,600.00	7,227.02	10,847.38	7,228.34	113.20	111.83	90.03	-206.21	-4,001.70	2,837.91	2,613.01	224.91	12.618		
11,700.00	7,226.61	10,947.38	7,227.95	115.89	114.57	90.03	-207.00	-4,101.69	2,837.74	2,607.40	230.34	12.320		
11,800.00	7,226.21	11,047.38	7,227.56	118.59	117.32	90.03	-207.78	-4,201.69	2,837.57	2,601.79	235.79	12.035		
11,900.00	7,225.80	11,147.38	7,227.16	121.29	120.07	90.03	-208.56	-4,301.68	2,837.40	2,596.16	241.25	11.761		
12,000.00	7,225.40	11,247.38	7,226.77	124.00	122.83	90.03	-209.34	-4,401.68	2,837.23	2,590.52	246.72	11.500		
12,100.00	7,224.99	11,347.38	7,226.38	126.72	125.59	90.03	-210.13	-4,501.68	2,837.06	2,584.86	252.20	11.249		
12,200.00	7,224.58	11,447.38	7,225.98	129.44	128.36	90.03	-210.91	-4,601.67	2,836.89	2,579.20	257.69	11.009		
12,300.00	7,224.18	11,547.38	7,225.59	132.17	131.13	90.03	-211.69	-4,701.67	2,836.72	2,573.53	263.19	10.778		
12,400.00	7,223.77	11,647.38	7,225.20	134.91	133.90	90.03	-212.47	-4,801.66	2,836.55	2,567.85	268.70	10.556		
12,500.00	7,223.37	11,747.38	7,224.80	137.65	136.68	90.03	-213.25	-4,901.66	2,836.38	2,562.16	274.22	10.343		
12,600.00	7,222.96	11,847.38	7,224.41	140.39	139.46	90.03	-214.04	-5,001.66	2,836.21	2,556.46	279.75	10.138		
12,700.00	7,222.55	11,947.38	7,224.02	143.14	142.24	90.03	-214.82	-5,101.65	2,836.04	2,550.76	285.28	9.941		
12,800.00	7,222.15	12,047.38	7,223.62	145.89	145.03	90.03	-215.60	-5,201.65	2,835.87	2,545.05	290.83	9.751		
12,900.00	7,221.74	12,147.38	7,223.23	148.65	147.81	90.03	-216.38	-5,301.64	2,835.70	2,539.33	296.37	9.568		
13,000.00	7,221.34	12,247.38	7,222.84	151.41	150.61	90.03	-217.17	-5,401.64	2,835.53	2,533.61	301.93	9.391		
13,100.00	7,220.93	12,347.38	7,222.44	154.18	153.40	90.03	-217.95	-5,501.64	2,835.37	2,527.88	307.49	9.221		
13,200.00	7,220.53	12,447.38	7,222.05	156.94	156.20	90.03	-218.73	-5,601.63	2,835.20	2,522.14	313.06	9.057		
13,300.00	7,220.12	12,547.38	7,221.66	159.72	158.99	90.03	-219.51	-5,701.63	2,835.03	2,516.40	318.63	8.898		
13,400.00	7,219.71	12,647.38	7,221.26	162.49	161.79	90.03	-220.29	-5,801.62	2,834.86	2,510.65	324.20	8.744		
13,500.00	7,219.31	12,747.38	7,220.87	165.27	164.60	90.03	-221.08	-5,901.62	2,834.69	2,504.90	329.79	8.596		
13,600.00	7,218.90	12,847.38	7,220.48	168.05	167.40	90.03	-221.86	-6,001.62	2,834.52	2,499.14	335.37	8.452		
13,700.00	7,218.50	12,947.38	7,220.08	170.83	170.21	90.03	-222.64	-6,101.61	2,834.35	2,493.38	340.96	8.313		
13,800.00	7,218.09	13,047.38	7,219.69	173.61	173.02	90.03	-223.42	-6,201.61	2,834.18	2,487.62	346.56	8.178		
13,900.00	7,217.69	13,147.38	7,219.30	176.40	175.83	90.03	-224.21	-6,301.60	2,834.01	2,481.85	352.15	8.048		
14,000.00	7,217.28	13,247.38	7,218.90	179.19	178.64	90.03	-224.99	-6,401.60	2,833.84	2,476.08	357.76	7.921		
14,100.00	7,216.87	13,347.38	7,218.51	181.98	181.45	90.03	-225.77	-6,501.60	2,833.67	2,470.31	363.36	7.798		
14,200.00	7,216.47	13,447.38	7,218.12	184.78	184.26	90.03	-226.55	-6,601.59	2,833.50	2,464.53	368.97	7.679		
14,300.00	7,216.06	13,547.38	7,217.72	187.57	187.08	90.03	-227.33	-6,701.59	2,833.33	2,458.74	374.58	7.564		
14,400.00	7,215.66	13,647.38	7,217.33	190.37	189.90	90.03	-228.12	-6,801.58	2,833.16	2,452.96	380.20	7.452		
14,500.00	7,215.25	13,747.38	7,216.94	193.17	192.71	90.03	-228.90	-6,901.58	2,832.99	2,447.17	385.82	7.343		
14,600.00	7,214.85	13,847.38	7,216.54	195.97	195.53	90.03	-229.68	-7,001.58	2,832.82	2,441.38	391.44	7.237		
14,700.00	7,214.44	13,947.38	7,216.15	198.77	198.35	90.03	-230.46	-7,101.57	2,832.65	2,435.59	397.06	7.134		
14,800.00	7,214.03	14,047.38	7,215.76	201.58	201.17	90.04	-231.25	-7,201.57	2,832.48	2,429.79	402.69	7.034		
14,900.00	7,213.63	14,147.38	7,215.36	204.38	204.00	90.04	-232.03	-7,301.56	2,832.31	2,423.99	408.32	6.937		
15,000.00	7,213.22	14,247.38	7,214.97	207.19	206.82	90.04	-232.81	-7,401.56	2,832.14	2,418.19	413.95	6.842		
15,100.00	7,212.82	14,347.38	7,214.58	210.00	209.64	90.04	-233.59	-7,501.56	2,831.97	2,412.39	419.58	6.749		
15,200.00	7,212.41	14,447.38	7,214.18	212.81	212.47	90.04	-234.37	-7,601.55	2,831.80	2,406.58	425.22	6.660		
15,300.00	7,212.01	14,547.38	7,213.79	215.62	215.29	90.04	-235.16	-7,701.55	2,831.63	2,400.77	430.86	6.572		
15,400.00	7,211.60	14,647.38	7,213.40	218.43	218.12	90.04	-235.94	-7,801.54	2,831.46	2,394.96	436.50	6.487		
15,500.00	7,211.19	14,747.38	7,213.00	221.25	220.95	90.04	-236.72	-7,901.54	2,831.29	2,389.15	442.14	6.404		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,600.00	7,210.79	14,847.38	7,212.61	224.06	223.78	90.04	-237.50	-8,001.54	2,831.12	2,383.34	447.79	6.322	
15,700.00	7,210.38	14,947.38	7,212.22	226.88	226.61	90.04	-238.29	-8,101.53	2,830.95	2,377.52	453.43	6.243	
15,765.03	7,210.12	15,012.40	7,211.96	228.71	228.45	90.04	-238.79	-8,166.56	2,830.84	2,373.74	457.10	6.193	
15,794.94	7,210.00	15,002.44	7,212.00	229.55	228.16	90.04	-238.72	-8,156.59	2,831.07	2,373.54	457.53	6.188 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.43	220.04	1.67	220.05					
100.00	100.00	101.00	100.00	3.28	3.28	0.43	220.04	1.67	220.05	213.48	6.57	33.495		
200.00	200.00	201.00	200.00	3.34	3.34	0.43	220.04	1.67	220.05	213.38	6.67	32.967	CC, ES	
300.00	299.98	301.06	300.06	3.44	3.45	177.80	220.04	1.67	221.79	214.91	6.89	32.208		
400.00	399.84	409.34	408.31	3.59	3.61	177.77	217.99	1.31	225.13	217.91	7.21	31.214		
500.00	499.45	517.75	516.54	3.79	3.83	177.60	211.89	0.25	228.21	220.57	7.65	29.848		
600.00	598.70	626.28	624.57	4.03	4.09	177.31	201.76	-1.51	231.06	222.89	8.18	28.261		
700.00	697.47	732.64	730.02	4.31	4.38	176.92	188.03	-3.89	233.79	225.03	8.77	26.671		
800.00	795.62	832.49	828.86	4.64	4.69	176.55	174.11	-6.31	239.00	229.63	9.37	25.506		
900.00	893.06	932.10	927.47	5.00	5.03	176.25	160.23	-8.72	247.68	237.66	10.02	24.710		
1,000.00	989.64	1,031.35	1,025.72	5.40	5.39	176.02	146.39	-11.12	259.84	249.11	10.73	24.227		
1,100.00	1,085.27	1,130.12	1,123.49	5.83	5.76	175.85	132.63	-13.51	275.44	263.98	11.46	24.026		
1,200.00	1,179.82	1,228.28	1,220.67	6.29	6.14	175.75	118.94	-15.88	294.48	282.25	12.24	24.068		
1,300.00	1,273.17	1,325.73	1,317.14	6.79	6.53	175.69	105.36	-18.24	316.92	303.89	13.03	24.315		
1,400.00	1,365.21	1,422.33	1,412.77	7.33	6.92	175.68	91.89	-20.58	342.74	328.89	13.85	24.738		
1,500.00	1,455.84	1,517.98	1,507.45	7.89	7.32	175.70	78.56	-22.89	371.90	357.21	14.69	25.309		
1,600.00	1,544.94	1,612.55	1,601.07	8.50	7.72	175.75	65.38	-25.18	404.38	388.83	15.55	26.004		
1,700.00	1,632.39	1,705.93	1,693.52	9.13	8.12	175.81	52.36	-27.44	440.13	423.71	16.42	26.806		
1,800.00	1,718.11	1,801.99	1,784.67	9.80	8.54	175.88	39.52	-29.67	479.11	461.80	17.31	27.672		
1,900.00	1,802.44	1,889.04	1,874.78	10.49	8.92	175.99	26.84	-31.87	520.50	502.32	18.18	28.626		
2,000.00	1,886.68	1,980.00	1,964.82	11.20	9.32	176.11	14.16	-34.08	562.04	542.97	19.07	29.471		
2,100.00	1,970.92	2,070.96	2,054.87	11.93	9.73	176.21	1.48	-36.28	603.58	583.61	19.97	30.223		
2,200.00	2,055.17	2,161.92	2,144.91	12.66	10.13	176.30	-11.20	-38.48	645.12	624.24	20.88	30.897		
2,300.00	2,139.41	2,252.87	2,234.96	13.40	10.54	176.37	-23.88	-40.68	686.67	664.87	21.80	31.503		
2,400.00	2,223.66	2,343.83	2,325.00	14.14	10.95	176.44	-36.56	-42.88	728.21	705.49	22.72	32.049		
2,500.00	2,307.90	2,434.79	2,415.05	14.89	11.36	176.50	-49.24	-45.08	769.75	746.10	23.65	32.544		
2,600.00	2,392.14	2,525.75	2,505.09	15.65	11.77	176.55	-61.92	-47.28	811.30	786.71	24.59	32.994		
2,700.00	2,476.39	2,616.71	2,595.13	16.41	12.19	176.60	-74.60	-49.48	852.84	827.31	25.53	33.405		
2,800.00	2,560.63	2,707.67	2,685.18	17.17	12.60	176.65	-87.28	-51.69	894.39	867.91	26.48	33.780		
2,900.00	2,644.88	2,801.37	2,775.22	17.93	13.03	176.69	-99.96	-53.89	935.93	908.49	27.44	34.110		
3,000.00	2,729.12	2,889.59	2,865.27	18.70	13.44	176.72	-112.64	-56.09	977.48	949.10	28.38	34.443		
3,100.00	2,813.36	2,980.55	2,955.31	19.47	13.85	176.76	-125.32	-58.29	1,019.02	989.69	29.34	34.736		
3,200.00	2,897.61	3,071.51	3,045.36	20.25	14.27	176.79	-138.00	-60.49	1,060.57	1,030.27	30.30	35.007		
3,300.00	2,981.85	3,162.47	3,135.40	21.02	14.69	176.82	-150.68	-62.69	1,102.12	1,070.86	31.26	35.258		
3,400.00	3,066.10	3,253.43	3,225.45	21.80	15.11	176.84	-163.36	-64.89	1,143.66	1,111.44	32.22	35.492		
3,500.00	3,150.34	3,344.39	3,315.49	22.58	15.54	176.87	-176.04	-67.09	1,185.21	1,152.02	33.19	35.710		
3,600.00	3,234.58	3,435.35	3,405.53	23.35	15.96	176.89	-188.72	-69.30	1,226.76	1,192.60	34.16	35.914		
3,700.00	3,318.83	3,526.31	3,495.58	24.13	16.38	176.91	-201.39	-71.50	1,268.31	1,233.18	35.13	36.104		
3,800.00	3,403.07	3,617.27	3,585.62	24.92	16.80	176.93	-214.07	-73.70	1,309.85	1,273.75	36.10	36.283		
3,900.00	3,487.32	3,708.23	3,675.67	25.70	17.23	176.95	-226.75	-75.90	1,351.40	1,314.33	37.08	36.451		
4,000.00	3,571.56	3,800.82	3,765.71	26.48	17.66	176.97	-239.43	-78.10	1,392.95	1,354.89	38.06	36.601		
4,100.00	3,655.80	3,909.86	3,855.76	27.27	18.16	176.99	-252.11	-80.30	1,434.50	1,395.38	39.11	36.674		
4,200.00	3,740.05	3,981.10	3,945.80	28.05	18.50	177.00	-264.79	-82.50	1,476.05	1,436.04	40.00	36.897		
4,300.00	3,824.29	4,072.06	4,035.85	28.84	18.92	177.02	-277.47	-84.71	1,517.60	1,476.61	40.98	37.029		
4,400.00	3,908.54	4,163.02	4,125.89	29.62	19.35	177.03	-290.15	-86.91	1,559.14	1,517.18	41.96	37.155		
4,500.00	3,992.78	4,253.98	4,215.93	30.41	19.77	177.05	-302.83	-89.11	1,600.69	1,557.75	42.94	37.273		
4,600.00	4,077.03	4,344.94	4,305.98	31.20	20.20	177.06	-315.51	-91.31	1,642.24	1,598.31	43.93	37.386		
4,700.00	4,161.27	4,435.90	4,396.02	31.98	20.62	177.07	-328.19	-93.51	1,683.79	1,638.88	44.91	37.493		
4,800.00	4,245.51	4,526.86	4,486.07	32.77	21.05	177.08	-340.87	-95.71	1,725.34	1,679.44	45.89	37.595		
4,900.00	4,329.76	4,617.82	4,576.11	33.56	21.48	177.09	-353.55	-97.91	1,766.89	1,720.01	46.88	37.692		
5,000.00	4,414.00	4,708.78	4,666.16	34.35	21.90	177.10	-366.23	-100.11	1,808.44	1,760.57	47.86	37.784		
5,100.00	4,498.25	4,800.26	4,756.20	35.14	22.33	177.11	-378.91	-102.32	1,849.98	1,801.13	48.85	37.870		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,909.30	4,846.25	35.93	22.84	177.12	-391.59	-104.52	1,891.53	1,841.61	49.92	37.892		
5,300.00	4,666.73	4,981.66	4,936.29	36.72	23.18	177.13	-404.27	-106.72	1,933.08	1,882.26	50.82	38.036		
5,400.00	4,750.98	5,072.62	5,026.33	37.51	23.61	177.14	-416.94	-108.92	1,974.63	1,922.82	51.81	38.113		
5,500.00	4,835.22	5,163.58	5,116.38	38.30	24.04	177.15	-429.62	-111.12	2,016.18	1,963.38	52.80	38.187		
5,600.00	4,919.47	5,254.54	5,206.42	39.09	24.47	177.16	-442.30	-113.32	2,057.73	2,003.94	53.79	38.257		
5,700.00	5,003.71	5,345.49	5,296.47	39.88	24.89	177.17	-454.98	-115.52	2,099.28	2,044.50	54.78	38.325		
5,800.00	5,088.06	5,436.53	5,386.59	40.67	25.32	177.19	-467.67	-117.73	2,140.65	2,084.88	55.77	38.387		
5,900.00	5,173.83	5,528.66	5,477.79	41.44	25.76	177.23	-480.52	-119.96	2,179.54	2,122.78	56.75	38.404		
6,000.00	5,261.34	5,622.08	5,570.27	42.18	26.20	177.27	-493.54	-122.22	2,215.19	2,157.45	57.74	38.366		
6,100.00	5,350.49	5,716.69	5,663.93	42.88	26.64	177.29	-506.73	-124.51	2,247.56	2,188.84	58.72	38.276		
6,200.00	5,441.16	5,812.37	5,758.65	43.56	27.09	177.31	-520.06	-126.82	2,276.62	2,216.92	59.70	38.137		
6,300.00	5,533.25	5,909.00	5,854.31	44.20	27.55	177.32	-533.53	-129.16	2,302.32	2,241.66	60.66	37.953		
6,400.00	5,626.65	6,006.47	5,950.80	44.82	28.01	177.33	-547.12	-131.52	2,324.64	2,263.02	61.62	37.726		
6,500.00	5,721.23	6,104.66	6,048.00	45.40	28.47	177.32	-560.81	-133.90	2,343.55	2,280.99	62.56	37.459		
6,600.00	5,816.89	6,203.44	6,145.79	45.94	28.94	177.31	-574.58	-136.29	2,359.02	2,295.53	63.49	37.154		
6,700.00	5,913.51	6,302.71	6,244.05	46.45	29.40	177.29	-588.42	-138.69	2,371.04	2,306.64	64.41	36.813		
6,800.00	6,010.97	6,402.33	6,342.67	46.93	29.87	177.27	-602.30	-141.10	2,379.60	2,314.29	65.30	36.439		
6,900.00	6,109.15	6,502.18	6,441.52	47.38	30.35	177.24	-616.22	-143.52	2,384.67	2,318.49	66.18	36.033		
7,000.00	6,207.93	6,603.39	6,541.21	47.80	30.82	177.03	-630.32	-152.74	2,386.24	2,319.19	67.05	35.589		
7,100.00	6,307.19	6,699.72	6,633.62	48.18	31.25	176.48	-643.51	-176.18	2,384.41	2,316.57	67.84	35.147		
7,200.00	6,406.82	6,787.25	6,713.66	48.53	31.62	175.68	-655.06	-209.46	2,379.63	2,311.12	68.51	34.734		
7,300.00	6,506.68	6,864.16	6,779.69	48.84	31.93	174.74	-664.67	-247.63	2,372.45	2,303.42	69.04	34.366		
7,400.00	6,606.66	6,930.32	6,832.48	49.10	32.18	86.80	-672.43	-286.69	2,363.50	2,294.09	69.40	34.055		
7,500.00	6,706.21	6,990.83	6,877.01	49.35	32.39	86.70	-679.04	-327.09	2,354.56	2,284.90	69.67	33.798		
7,600.00	6,803.22	7,050.00	6,916.69	49.59	32.60	86.59	-685.00	-370.55	2,346.90	2,277.03	69.87	33.591		
7,700.00	6,895.32	7,108.49	6,951.81	49.82	32.81	86.45	-690.34	-416.99	2,340.42	2,270.39	70.03	33.419		
7,800.00	6,980.23	7,166.19	6,982.17	50.03	33.03	86.30	-695.03	-465.80	2,335.05	2,264.86	70.19	33.267		
7,900.00	7,055.85	7,223.39	7,007.83	50.21	33.30	86.15	-699.08	-516.74	2,330.71	2,260.31	70.40	33.108		
8,000.00	7,120.34	7,280.22	7,028.73	50.36	33.63	86.00	-702.48	-569.46	2,327.31	2,256.58	70.72	32.907		
8,100.00	7,172.10	7,336.78	7,044.83	50.47	34.05	85.87	-705.21	-623.59	2,324.78	2,253.52	71.26	32.625		
8,200.00	7,209.85	7,400.00	7,057.12	50.55	34.61	85.74	-707.47	-685.54	2,323.07	2,250.91	72.16	32.192		
8,300.00	7,232.68	7,450.00	7,062.49	50.61	35.12	85.69	-708.66	-735.23	2,322.07	2,248.87	73.20	31.721		
8,400.00	7,240.00	7,512.49	7,063.93	50.65	35.84	85.65	-709.41	-797.68	2,321.79	2,247.03	74.76	31.056		
8,500.00	7,239.60	7,612.49	7,063.54	50.69	37.13	85.65	-710.22	-897.67	2,321.59	2,244.39	77.20	30.074		
8,600.00	7,239.19	7,712.49	7,063.15	50.75	38.60	85.65	-711.03	-997.67	2,321.39	2,241.43	79.96	29.031		
8,700.00	7,238.78	7,812.49	7,062.76	50.85	40.22	85.65	-711.84	-1,097.67	2,321.19	2,238.16	83.03	27.955		
8,800.00	7,238.38	7,912.49	7,062.36	51.02	41.98	85.65	-712.65	-1,197.66	2,320.99	2,234.62	86.37	26.874		
8,900.00	7,237.97	8,012.49	7,061.97	51.32	43.86	85.65	-713.46	-1,297.66	2,320.79	2,230.85	89.94	25.804		
9,000.00	7,237.57	8,112.49	7,061.58	51.95	45.84	85.65	-714.28	-1,397.65	2,320.59	2,226.87	93.72	24.760		
9,100.00	7,237.16	8,212.49	7,061.18	53.10	47.92	85.65	-715.09	-1,497.65	2,320.39	2,222.70	97.69	23.752		
9,200.00	7,236.76	8,312.49	7,060.79	54.69	50.07	85.65	-715.90	-1,597.64	2,320.19	2,218.37	101.82	22.786		
9,300.00	7,236.35	8,412.49	7,060.40	56.53	52.28	85.65	-716.71	-1,697.64	2,319.99	2,213.89	106.10	21.865		
9,400.00	7,235.94	8,512.49	7,060.00	58.53	54.56	85.65	-717.52	-1,797.64	2,319.79	2,209.28	110.51	20.992		
9,500.00	7,235.54	8,612.49	7,059.61	60.62	56.89	85.65	-718.33	-1,897.63	2,319.59	2,204.56	115.03	20.165		
9,600.00	7,235.13	8,712.49	7,059.22	62.80	59.27	85.65	-719.15	-1,997.63	2,319.39	2,199.74	119.65	19.385		
9,700.00	7,234.73	8,812.49	7,058.82	65.03	61.69	85.65	-719.96	-2,097.62	2,319.19	2,194.83	124.36	18.649		
9,800.00	7,234.32	8,912.49	7,058.43	67.32	64.14	85.65	-720.77	-2,197.62	2,318.99	2,189.84	129.15	17.956		
9,900.00	7,233.92	9,012.49	7,058.04	69.66	66.63	85.65	-721.58	-2,297.61	2,318.80	2,184.78	134.01	17.303		
10,000.00	7,233.51	9,112.49	7,057.64	72.03	69.14	85.65	-722.39	-2,397.61	2,318.60	2,179.66	138.94	16.688		
10,100.00	7,233.10	9,212.49	7,057.25	74.45	71.69	85.65	-723.21	-2,497.61	2,318.40	2,174.47	143.92	16.109		
10,200.00	7,232.70	9,312.49	7,056.86	76.89	74.25	85.65	-724.02	-2,597.60	2,318.20	2,169.24	148.96	15.563		
10,300.00	7,232.29	9,412.49	7,056.46	79.36	76.84	85.65	-724.83	-2,697.60	2,318.00	2,163.96	154.04	15.048		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	9,512.49	7,056.07	81.86	79.44	85.65	-725.64	-2,797.59	2,317.80	2,158.64	159.16	14.563		
10,500.00	7,231.48	9,612.49	7,055.68	84.38	82.06	85.65	-726.45	-2,897.59	2,317.60	2,153.28	164.32	14.104		
10,600.00	7,231.08	9,712.49	7,055.28	86.93	84.70	85.65	-727.26	-2,997.58	2,317.40	2,147.88	169.52	13.671		
10,700.00	7,230.67	9,812.49	7,054.89	89.49	87.35	85.65	-728.08	-3,097.58	2,317.20	2,142.45	174.74	13.260		
10,800.00	7,230.26	9,912.49	7,054.50	92.07	90.01	85.65	-728.89	-3,197.58	2,317.00	2,137.00	180.00	12.872		
10,900.00	7,229.86	10,012.49	7,054.11	94.67	92.68	85.65	-729.70	-3,297.57	2,316.80	2,131.51	185.28	12.504		
11,000.00	7,229.45	10,112.49	7,053.71	97.28	95.37	85.65	-730.51	-3,397.57	2,316.60	2,126.01	190.59	12.155		
11,100.00	7,229.05	10,212.49	7,053.32	99.90	98.07	85.65	-731.32	-3,497.56	2,316.40	2,120.48	195.92	11.823		
11,200.00	7,228.64	10,312.49	7,052.93	102.54	100.77	85.65	-732.13	-3,597.56	2,316.20	2,114.93	201.27	11.508		
11,300.00	7,228.24	10,412.49	7,052.53	105.19	103.48	85.65	-732.95	-3,697.55	2,316.00	2,109.36	206.64	11.208		
11,400.00	7,227.83	10,512.49	7,052.14	107.85	106.20	85.65	-733.76	-3,797.55	2,315.80	2,103.78	212.02	10.922		
11,500.00	7,227.42	10,612.49	7,051.75	110.52	108.93	85.65	-734.57	-3,897.55	2,315.60	2,098.17	217.43	10.650		
11,600.00	7,227.02	10,712.49	7,051.35	113.20	111.66	85.65	-735.38	-3,997.54	2,315.40	2,092.56	222.84	10.390		
11,700.00	7,226.61	10,812.49	7,050.96	115.89	114.40	85.65	-736.19	-4,097.54	2,315.20	2,086.93	228.27	10.142		
11,800.00	7,226.21	10,912.49	7,050.57	118.59	117.15	85.65	-737.00	-4,197.53	2,315.00	2,081.28	233.72	9.905		
11,900.00	7,225.80	11,012.48	7,050.17	121.29	119.90	85.65	-737.82	-4,297.53	2,314.80	2,075.63	239.17	9.678		
12,000.00	7,225.40	11,112.48	7,049.78	124.00	122.65	85.65	-738.63	-4,397.53	2,314.60	2,069.96	244.64	9.461		
12,100.00	7,224.99	11,212.48	7,049.39	126.72	125.41	85.65	-739.44	-4,497.52	2,314.40	2,064.28	250.12	9.253		
12,200.00	7,224.58	11,312.48	7,048.99	129.44	128.18	85.65	-740.25	-4,597.52	2,314.20	2,058.60	255.61	9.054		
12,300.00	7,224.18	11,412.48	7,048.60	132.17	130.95	85.65	-741.06	-4,697.51	2,314.00	2,052.90	261.10	8.862		
12,400.00	7,223.77	11,512.48	7,048.21	134.91	133.72	85.65	-741.88	-4,797.51	2,313.80	2,047.19	266.61	8.679		
12,500.00	7,223.37	11,612.48	7,047.81	137.65	136.50	85.65	-742.69	-4,897.50	2,313.60	2,041.48	272.12	8.502		
12,600.00	7,222.96	11,712.48	7,047.42	140.39	139.27	85.65	-743.50	-4,997.50	2,313.40	2,035.76	277.65	8.332		
12,700.00	7,222.55	11,812.48	7,047.03	143.14	142.06	85.65	-744.31	-5,097.50	2,313.21	2,030.03	283.17	8.169		
12,800.00	7,222.15	11,912.48	7,046.64	145.89	144.84	85.65	-745.12	-5,197.49	2,313.01	2,024.30	288.71	8.012		
12,900.00	7,221.74	12,012.48	7,046.24	148.65	147.63	85.65	-745.93	-5,297.49	2,312.81	2,018.55	294.25	7.860		
13,000.00	7,221.34	12,112.48	7,045.85	151.41	150.42	85.65	-746.75	-5,397.48	2,312.61	2,012.81	299.80	7.714		
13,100.00	7,220.93	12,212.48	7,045.46	154.18	153.21	85.65	-747.56	-5,497.48	2,312.41	2,007.05	305.35	7.573		
13,200.00	7,220.53	12,312.48	7,045.06	156.94	156.01	85.65	-748.37	-5,597.47	2,312.21	2,001.29	310.91	7.437		
13,300.00	7,220.12	12,412.48	7,044.67	159.72	158.81	85.65	-749.18	-5,697.47	2,312.01	1,995.53	316.48	7.305		
13,400.00	7,219.71	12,512.48	7,044.28	162.49	161.61	85.65	-749.99	-5,797.47	2,311.81	1,989.76	322.05	7.178		
13,500.00	7,219.31	12,612.48	7,043.88	165.27	164.41	85.65	-750.80	-5,897.46	2,311.61	1,983.99	327.62	7.056		
13,600.00	7,218.90	12,712.48	7,043.49	168.05	167.21	85.65	-751.62	-5,997.46	2,311.41	1,978.21	333.20	6.937		
13,700.00	7,218.50	12,812.48	7,043.10	170.83	170.02	85.65	-752.43	-6,097.45	2,311.21	1,972.43	338.78	6.822		
13,800.00	7,218.09	12,912.48	7,042.70	173.61	172.83	85.65	-753.24	-6,197.45	2,311.01	1,966.64	344.37	6.711		
13,900.00	7,217.69	13,012.48	7,042.31	176.40	175.63	85.65	-754.05	-6,297.44	2,310.81	1,960.85	349.96	6.603		
14,000.00	7,217.28	13,112.48	7,041.92	179.19	178.45	85.65	-754.86	-6,397.44	2,310.61	1,955.06	355.55	6.499		
14,100.00	7,216.87	13,212.48	7,041.52	181.98	181.26	85.65	-755.67	-6,497.43	2,310.41	1,949.26	361.15	6.397		
14,200.00	7,216.47	13,312.48	7,041.13	184.78	184.07	85.65	-756.49	-6,597.43	2,310.21	1,943.46	366.75	6.299		
14,300.00	7,216.06	13,412.48	7,040.74	187.57	186.89	85.65	-757.30	-6,697.43	2,310.01	1,937.66	372.35	6.204		
14,400.00	7,215.66	13,512.48	7,040.34	190.37	189.70	85.65	-758.11	-6,797.42	2,309.81	1,931.85	377.96	6.111		
14,500.00	7,215.25	13,612.48	7,039.95	193.17	192.52	85.65	-758.92	-6,897.42	2,309.61	1,926.04	383.57	6.021		
14,600.00	7,214.85	13,712.48	7,039.56	195.97	195.34	85.65	-759.73	-6,997.41	2,309.41	1,920.23	389.18	5.934		
14,700.00	7,214.44	13,812.48	7,039.17	198.77	198.16	85.65	-760.54	-7,097.41	2,309.21	1,914.42	394.79	5.849		
14,800.00	7,214.03	13,912.48	7,038.77	201.58	200.98	85.65	-761.36	-7,197.41	2,309.01	1,908.60	400.41	5.767		
14,900.00	7,213.63	14,012.48	7,038.38	204.38	203.80	85.65	-762.17	-7,297.40	2,308.81	1,902.78	406.03	5.686		
15,000.00	7,213.22	14,112.48	7,037.99	207.19	206.62	85.65	-762.98	-7,397.40	2,308.61	1,896.96	411.65	5.608		
15,100.00	7,212.82	14,212.48	7,037.59	210.00	209.45	85.65	-763.79	-7,497.39	2,308.41	1,891.14	417.28	5.532		
15,200.00	7,212.41	14,312.48	7,037.20	212.81	212.27	85.65	-764.60	-7,597.39	2,308.21	1,885.31	422.90	5.458		
15,300.00	7,212.01	14,412.48	7,036.81	215.62	215.10	85.65	-765.42	-7,697.38	2,308.01	1,879.48	428.53	5.386		
15,400.00	7,211.60	14,512.48	7,036.41	218.43	217.92	85.65	-766.23	-7,797.38	2,307.81	1,873.65	434.16	5.316		
15,500.00	7,211.19	14,612.48	7,036.02	221.25	220.75	85.65	-767.04	-7,897.38	2,307.62	1,867.82	439.79	5.247		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design													HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16B-M - OH - PLAN #1		Offset Site Error:		0.00 ft	
Survey Program: 0-MWD+IFR1															Offset Well Error:		3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning				
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor						
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)							
15,600.00	7,210.79	14,712.48	7,035.63	224.06	223.58	85.65	-767.85	-7,997.37	2,307.42	1,861.99	445.43	5.180						
15,700.00	7,210.38	14,812.48	7,035.23	226.88	226.41	85.65	-768.66	-8,097.37	2,307.22	1,856.15	451.06	5.115						
15,766.39	7,210.11	14,878.86	7,034.97	228.75	228.28	85.65	-769.20	-8,163.75	2,307.08	1,852.28	454.80	5.073						
15,794.94	7,210.00	14,871.88	7,035.00	229.55	228.09	85.65	-769.14	-8,156.77	2,307.30	1,852.07	455.23	5.068 SF						



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.48	300.20	2.50	300.21					
100.00	100.00	102.00	100.00	3.28	3.29	0.48	300.20	2.50	300.21	293.64	6.57	45.694		
200.00	200.00	202.00	200.00	3.34	3.34	0.48	300.20	2.50	300.21	293.53	6.68	44.970	CC, ES	
300.00	299.98	301.98	299.98	3.44	3.45	177.84	300.20	2.50	301.95	295.06	6.89	43.840		
400.00	399.84	401.84	399.84	3.59	3.61	177.87	300.20	2.50	307.18	299.98	7.20	42.670		
500.00	499.45	501.45	499.45	3.79	3.81	177.93	300.20	2.50	315.89	308.29	7.60	41.555		
600.00	598.70	603.31	601.31	4.03	4.05	177.99	300.10	2.48	327.99	319.90	8.09	40.564		
700.00	697.47	715.22	713.17	4.31	4.33	177.97	297.09	1.78	340.95	332.30	8.65	39.415		
800.00	795.62	827.73	825.42	4.64	4.65	177.82	289.77	0.07	353.58	344.29	9.29	38.048		
900.00	893.06	935.51	932.63	5.00	4.99	177.58	278.98	-2.46	366.13	356.16	9.97	36.710		
1,000.00	989.64	1,034.33	1,030.84	5.40	5.31	177.36	268.31	-4.95	381.40	370.74	10.66	35.779		
1,100.00	1,085.27	1,132.55	1,128.45	5.83	5.66	177.17	257.71	-7.43	400.11	388.72	11.38	35.153		
1,200.00	1,179.82	1,230.06	1,225.36	6.29	6.01	177.02	247.18	-9.89	422.23	410.09	12.14	34.789		
1,300.00	1,273.17	1,326.75	1,321.45	6.79	6.38	176.91	236.74	-12.32	447.74	434.82	12.92	34.661		
1,400.00	1,365.21	1,422.49	1,416.60	7.33	6.75	176.82	226.40	-14.74	476.60	462.88	13.72	34.736		
1,500.00	1,455.84	1,517.16	1,510.69	7.89	7.13	176.76	216.18	-17.13	508.79	494.25	14.54	34.988		
1,600.00	1,544.94	1,610.66	1,603.61	8.50	7.50	176.71	206.09	-19.49	544.25	528.87	15.38	35.391		
1,700.00	1,632.39	1,702.86	1,695.24	9.13	7.88	176.68	196.14	-21.81	582.95	566.72	16.23	35.927		
1,800.00	1,718.11	1,806.34	1,785.48	9.80	8.31	176.67	186.33	-24.10	624.84	607.70	17.13	36.466		
1,900.00	1,802.44	1,883.32	1,874.60	10.49	8.64	176.70	176.65	-26.37	669.10	651.16	17.95	37.284		
2,000.00	1,886.68	1,972.92	1,963.64	11.20	9.01	176.74	166.98	-28.63	713.51	694.70	18.81	37.929		
2,100.00	1,970.92	2,062.52	2,052.69	11.93	9.40	176.78	157.31	-30.89	757.92	738.23	19.69	38.495		
2,200.00	2,055.17	2,152.12	2,141.73	12.66	9.78	176.82	147.64	-33.15	802.32	781.75	20.57	38.995		
2,300.00	2,139.41	2,241.72	2,230.78	13.40	10.17	176.85	137.96	-35.41	846.73	825.26	21.47	39.438		
2,400.00	2,223.66	2,331.31	2,319.82	14.14	10.56	176.87	128.29	-37.67	891.14	868.77	22.37	39.833		
2,500.00	2,307.90	2,420.91	2,408.87	14.89	10.95	176.90	118.62	-39.93	935.55	912.27	23.28	40.186		
2,600.00	2,392.14	2,510.51	2,497.92	15.65	11.34	176.92	108.95	-42.19	979.96	955.76	24.20	40.502		
2,700.00	2,476.39	2,600.11	2,586.96	16.41	11.73	176.94	99.27	-44.45	1,024.36	999.25	25.11	40.788		
2,800.00	2,560.63	2,689.71	2,676.01	17.17	12.13	176.96	89.60	-46.71	1,068.77	1,042.73	26.04	41.046		
2,900.00	2,644.88	2,779.30	2,765.05	17.93	12.53	176.98	79.93	-48.97	1,113.18	1,086.21	26.97	41.280		
3,000.00	2,729.12	2,868.90	2,854.10	18.70	12.92	176.99	70.25	-51.23	1,157.59	1,129.69	27.90	41.493		
3,100.00	2,813.36	2,958.50	2,943.14	19.47	13.32	177.01	60.58	-53.49	1,202.00	1,173.17	28.83	41.687		
3,200.00	2,897.61	3,048.10	3,032.19	20.25	13.72	177.02	50.91	-55.75	1,246.41	1,216.64	29.77	41.866		
3,300.00	2,981.85	3,137.69	3,121.24	21.02	14.12	177.03	41.24	-58.01	1,290.82	1,260.10	30.71	42.029		
3,400.00	3,066.10	3,227.29	3,210.28	21.80	14.52	177.05	31.56	-60.27	1,335.23	1,303.57	31.66	42.180		
3,500.00	3,150.34	3,316.89	3,299.33	22.58	14.93	177.06	21.89	-62.53	1,379.63	1,347.03	32.60	42.319		
3,600.00	3,234.58	3,406.49	3,388.37	23.35	15.33	177.07	12.22	-64.79	1,424.04	1,390.50	33.55	42.448		
3,700.00	3,318.83	3,503.91	3,477.42	24.13	15.77	177.08	2.55	-67.05	1,468.45	1,433.92	34.53	42.524		
3,800.00	3,403.07	3,585.68	3,566.46	24.92	16.14	177.09	-7.13	-69.31	1,512.86	1,477.41	35.45	42.677		
3,900.00	3,487.32	3,675.28	3,655.51	25.70	16.54	177.09	-16.80	-71.57	1,557.27	1,520.87	36.40	42.781		
4,000.00	3,571.56	3,764.88	3,744.55	26.48	16.95	177.10	-26.47	-73.83	1,601.68	1,564.32	37.36	42.877		
4,100.00	3,655.80	3,854.48	3,833.60	27.27	17.35	177.11	-36.15	-76.09	1,646.09	1,607.78	38.31	42.966		
4,200.00	3,740.05	3,944.08	3,922.65	28.05	17.76	177.12	-45.82	-78.35	1,690.50	1,651.23	39.27	43.050		
4,300.00	3,824.29	4,033.67	4,011.69	28.84	18.16	177.13	-55.49	-80.61	1,734.91	1,694.68	40.23	43.129		
4,400.00	3,908.54	4,123.27	4,100.74	29.62	18.57	177.13	-65.16	-82.87	1,779.32	1,738.13	41.18	43.203		
4,500.00	3,992.78	4,212.87	4,189.78	30.41	18.98	177.14	-74.84	-85.13	1,823.73	1,781.58	42.14	43.273		
4,600.00	4,077.03	4,302.47	4,278.83	31.20	19.38	177.14	-84.51	-87.39	1,868.14	1,825.03	43.11	43.338		
4,700.00	4,161.27	4,407.93	4,367.87	31.98	19.86	177.15	-94.18	-89.65	1,912.54	1,868.41	44.14	43.331		
4,800.00	4,245.51	4,481.66	4,456.92	32.77	20.20	177.16	-103.85	-91.91	1,956.95	1,911.92	45.03	43.458		
4,900.00	4,329.76	4,571.26	4,545.96	33.56	20.61	177.16	-113.53	-94.17	2,001.36	1,955.37	45.99	43.513		
5,000.00	4,414.00	4,660.86	4,635.01	34.35	21.01	177.17	-123.20	-96.43	2,045.77	1,998.81	46.96	43.565		
5,100.00	4,498.25	4,750.46	4,724.06	35.14	21.42	177.17	-132.87	-98.69	2,090.18	2,042.26	47.92	43.615		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,840.06	4,813.10	35.93	21.83	177.18	-142.55	-100.95	2,134.59	2,085.70	48.89	43.661		
5,300.00	4,666.73	4,929.65	4,902.15	36.72	22.24	177.18	-152.22	-103.21	2,179.00	2,129.14	49.86	43.706		
5,400.00	4,750.98	5,019.25	4,991.19	37.51	22.65	177.18	-161.89	-105.47	2,223.41	2,172.59	50.82	43.748		
5,500.00	4,835.22	5,108.85	5,080.24	38.30	23.06	177.19	-171.56	-107.74	2,267.82	2,216.03	51.79	43.788		
5,600.00	4,919.47	5,201.55	5,169.28	39.09	23.48	177.19	-181.24	-110.00	2,312.23	2,259.46	52.77	43.815		
5,700.00	5,003.71	5,288.04	5,258.33	39.88	23.88	177.20	-190.91	-112.26	2,356.64	2,302.91	53.73	43.862		
5,800.00	5,088.06	5,377.73	5,347.46	40.67	24.29	177.21	-200.59	-114.52	2,400.87	2,346.18	54.70	43.894		
5,900.00	5,173.83	5,468.57	5,437.75	41.44	24.70	177.26	-210.40	-116.81	2,442.66	2,386.99	55.67	43.881		
6,000.00	5,261.34	5,560.82	5,529.42	42.18	25.12	177.29	-220.36	-119.14	2,481.25	2,424.62	56.63	43.813		
6,100.00	5,350.49	5,654.36	5,622.38	42.88	25.55	177.32	-230.46	-121.50	2,516.61	2,459.01	57.60	43.694		
6,200.00	5,441.16	5,749.07	5,716.51	43.56	25.99	177.34	-240.68	-123.89	2,548.68	2,490.12	58.56	43.526		
6,300.00	5,533.25	5,844.84	5,811.69	44.20	26.43	177.35	-251.02	-126.30	2,577.43	2,517.92	59.51	43.312		
6,400.00	5,626.65	5,941.55	5,907.81	44.82	26.87	177.36	-261.46	-128.74	2,602.82	2,542.37	60.45	43.057		
6,500.00	5,721.23	6,039.09	6,004.74	45.40	27.32	177.36	-271.99	-131.20	2,624.83	2,563.45	61.38	42.762		
6,600.00	5,816.89	6,137.33	6,102.38	45.94	27.77	177.35	-282.60	-133.68	2,643.43	2,581.13	62.30	42.430		
6,700.00	5,913.51	6,236.16	6,200.60	46.45	28.22	177.34	-293.27	-136.17	2,658.58	2,595.38	63.20	42.063		
6,800.00	6,010.97	6,335.46	6,299.29	46.93	28.68	177.31	-303.99	-138.68	2,670.29	2,606.20	64.09	41.664		
6,900.00	6,109.15	6,435.10	6,398.32	47.38	29.13	177.29	-314.74	-141.19	2,678.52	2,613.56	64.96	41.234		
7,000.00	6,207.93	6,534.97	6,497.57	47.80	29.59	177.25	-325.52	-143.71	2,683.28	2,617.47	65.81	40.774		
7,100.00	6,307.19	6,636.42	6,597.98	48.18	30.05	177.09	-336.48	-152.10	2,684.53	2,617.88	66.65	40.277		
7,200.00	6,406.82	6,733.38	6,691.57	48.53	30.48	176.61	-346.81	-174.84	2,682.35	2,614.93	67.42	39.785		
7,300.00	6,506.68	6,821.61	6,772.86	48.84	30.86	175.90	-355.90	-207.74	2,677.13	2,609.06	68.07	39.329		
7,400.00	6,606.66	6,899.21	6,840.01	49.10	31.17	88.09	-363.49	-245.77	2,669.36	2,600.80	68.57	38.931		
7,500.00	6,706.21	6,970.09	6,896.92	49.35	31.43	88.04	-370.01	-287.47	2,661.07	2,592.10	68.97	38.583		
7,600.00	6,803.22	7,038.55	6,947.17	49.59	31.68	87.99	-375.83	-333.54	2,653.73	2,584.40	69.33	38.279		
7,700.00	6,895.32	7,105.17	6,991.08	49.82	31.93	87.93	-381.00	-383.33	2,647.33	2,577.67	69.65	38.007		
7,800.00	6,980.23	7,170.38	7,028.81	50.03	32.21	87.88	-385.53	-436.29	2,641.87	2,571.87	69.99	37.745		
7,900.00	7,055.85	7,234.52	7,060.48	50.21	32.55	87.82	-389.42	-491.90	2,637.32	2,566.93	70.39	37.467		
8,000.00	7,120.34	7,300.00	7,086.91	50.36	32.98	87.75	-392.78	-551.68	2,633.67	2,562.73	70.94	37.125		
8,100.00	7,172.10	7,360.56	7,105.79	50.47	33.48	87.70	-395.30	-609.14	2,630.89	2,559.24	71.65	36.720		
8,200.00	7,209.85	7,422.83	7,119.47	50.55	34.07	87.65	-397.29	-669.84	2,628.95	2,556.31	72.64	36.191		
8,300.00	7,232.68	7,484.82	7,127.15	50.61	34.73	87.61	-398.63	-731.31	2,627.82	2,553.89	73.93	35.545		
8,400.00	7,240.00	7,553.07	7,128.92	50.65	35.54	87.58	-399.38	-799.50	2,627.48	2,551.88	75.61	34.752		
8,500.00	7,239.60	7,653.07	7,128.49	50.69	36.88	87.58	-400.16	-899.50	2,627.32	2,549.24	78.08	33.651		
8,600.00	7,239.19	7,753.07	7,128.06	50.75	38.38	87.58	-400.94	-999.50	2,627.16	2,546.30	80.86	32.491		
8,700.00	7,238.78	7,853.07	7,127.62	50.85	40.03	87.58	-401.71	-1,099.49	2,626.99	2,543.05	83.94	31.297		
8,800.00	7,238.38	7,953.07	7,127.19	51.02	41.81	87.57	-402.49	-1,199.49	2,626.83	2,539.55	87.28	30.095		
8,900.00	7,237.97	8,053.07	7,126.75	51.32	43.71	87.57	-403.27	-1,299.48	2,626.67	2,535.80	90.86	28.908		
9,000.00	7,237.57	8,153.07	7,126.32	51.95	45.70	87.57	-404.04	-1,399.48	2,626.50	2,531.85	94.65	27.749		
9,100.00	7,237.16	8,253.07	7,125.89	53.10	47.79	87.57	-404.82	-1,499.47	2,626.34	2,527.71	98.63	26.629		
9,200.00	7,236.76	8,353.07	7,125.45	54.69	49.95	87.57	-405.60	-1,599.47	2,626.18	2,523.41	102.76	25.555		
9,300.00	7,236.35	8,453.07	7,125.02	56.53	52.18	87.57	-406.38	-1,699.47	2,626.01	2,518.97	107.05	24.532		
9,400.00	7,235.94	8,553.07	7,124.58	58.53	54.47	87.57	-407.15	-1,799.46	2,625.85	2,514.39	111.46	23.560		
9,500.00	7,235.54	8,653.07	7,124.15	60.62	56.81	87.57	-407.93	-1,899.46	2,625.68	2,509.71	115.98	22.639		
9,600.00	7,235.13	8,753.07	7,123.72	62.80	59.20	87.57	-408.71	-1,999.45	2,625.52	2,504.92	120.60	21.770		
9,700.00	7,234.73	8,853.07	7,123.28	65.03	61.62	87.57	-409.49	-2,099.45	2,625.36	2,500.04	125.31	20.950		
9,800.00	7,234.32	8,953.07	7,122.85	67.32	64.09	87.57	-410.26	-2,199.45	2,625.19	2,495.09	130.11	20.177		
9,900.00	7,233.92	9,053.07	7,122.41	69.66	66.58	87.57	-411.04	-2,299.44	2,625.03	2,490.06	134.97	19.449		
10,000.00	7,233.51	9,153.07	7,121.98	72.03	69.10	87.57	-411.82	-2,399.44	2,624.87	2,484.97	139.90	18.762		
10,100.00	7,233.10	9,253.07	7,121.55	74.45	71.65	87.56	-412.60	-2,499.43	2,624.70	2,479.82	144.89	18.116		
10,200.00	7,232.70	9,353.07	7,121.11	76.89	74.22	87.56	-413.37	-2,599.43	2,624.54	2,474.62	149.92	17.506		
10,300.00	7,232.29	9,453.07	7,120.68	79.36	76.81	87.56	-414.15	-2,699.43	2,624.38	2,469.37	155.01	16.931		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	9,553.07	7,120.24	81.86	79.42	87.56	-414.93	-2,799.42	2,624.21	2,464.08	160.13	16.388		
10,500.00	7,231.48	9,653.07	7,119.81	84.38	82.05	87.56	-415.71	-2,899.42	2,624.05	2,458.75	165.30	15.875		
10,600.00	7,231.08	9,753.06	7,119.38	86.93	84.69	87.56	-416.48	-2,999.41	2,623.89	2,453.39	170.50	15.390		
10,700.00	7,230.67	9,853.06	7,118.94	89.49	87.34	87.56	-417.26	-3,099.41	2,623.72	2,447.99	175.73	14.930		
10,800.00	7,230.26	9,953.06	7,118.51	92.07	90.01	87.56	-418.04	-3,199.41	2,623.56	2,442.57	180.99	14.496		
10,900.00	7,229.86	10,053.06	7,118.08	94.67	92.69	87.56	-418.81	-3,299.40	2,623.39	2,437.12	186.28	14.083		
11,000.00	7,229.45	10,153.06	7,117.64	97.28	95.37	87.56	-419.59	-3,399.40	2,623.23	2,431.64	191.59	13.692		
11,100.00	7,229.05	10,253.06	7,117.21	99.90	98.07	87.56	-420.37	-3,499.39	2,623.07	2,426.15	196.92	13.320		
11,200.00	7,228.64	10,353.06	7,116.77	102.54	100.78	87.56	-421.15	-3,599.39	2,622.90	2,420.63	202.28	12.967		
11,300.00	7,228.24	10,453.06	7,116.34	105.19	103.50	87.56	-421.92	-3,699.38	2,622.74	2,415.09	207.65	12.631		
11,400.00	7,227.83	10,553.06	7,115.91	107.85	106.22	87.55	-422.70	-3,799.38	2,622.58	2,409.54	213.04	12.310		
11,500.00	7,227.42	10,653.06	7,115.47	110.52	108.95	87.55	-423.48	-3,899.38	2,622.41	2,403.96	218.45	12.005		
11,600.00	7,227.02	10,753.06	7,115.04	113.20	111.68	87.55	-424.26	-3,999.37	2,622.25	2,398.38	223.87	11.713		
11,700.00	7,226.61	10,853.06	7,114.60	115.89	114.43	87.55	-425.03	-4,099.37	2,622.09	2,392.78	229.31	11.435		
11,800.00	7,226.21	10,953.06	7,114.17	118.59	117.17	87.55	-425.81	-4,199.36	2,621.92	2,387.17	234.76	11.169		
11,900.00	7,225.80	11,053.06	7,113.74	121.29	119.93	87.55	-426.59	-4,299.36	2,621.76	2,381.54	240.22	10.914		
12,000.00	7,225.40	11,153.06	7,113.30	124.00	122.69	87.55	-427.37	-4,399.36	2,621.60	2,375.90	245.69	10.670		
12,100.00	7,224.99	11,253.06	7,112.87	126.72	125.45	87.55	-428.14	-4,499.35	2,621.43	2,370.26	251.18	10.437		
12,200.00	7,224.58	11,353.06	7,112.43	129.44	128.21	87.55	-428.92	-4,599.35	2,621.27	2,364.60	256.67	10.213		
12,300.00	7,224.18	11,453.06	7,112.00	132.17	130.98	87.55	-429.70	-4,699.34	2,621.10	2,358.93	262.17	9.998		
12,400.00	7,223.77	11,553.06	7,111.57	134.91	133.76	87.55	-430.48	-4,799.34	2,620.94	2,353.25	267.69	9.791		
12,500.00	7,223.37	11,653.06	7,111.13	137.65	136.54	87.55	-431.25	-4,899.34	2,620.78	2,347.57	273.21	9.593		
12,600.00	7,222.96	11,753.06	7,110.70	140.39	139.32	87.55	-432.03	-4,999.33	2,620.61	2,341.88	278.73	9.402		
12,700.00	7,222.55	11,853.06	7,110.26	143.14	142.10	87.54	-432.81	-5,099.33	2,620.45	2,336.18	284.27	9.218		
12,800.00	7,222.15	11,953.06	7,109.83	145.89	144.89	87.54	-433.58	-5,199.32	2,620.29	2,330.47	289.81	9.041		
12,900.00	7,221.74	12,053.06	7,109.40	148.65	147.68	87.54	-434.36	-5,299.32	2,620.12	2,324.76	295.36	8.871		
13,000.00	7,221.34	12,153.06	7,108.96	151.41	150.47	87.54	-435.14	-5,399.31	2,619.96	2,319.04	300.92	8.707		
13,100.00	7,220.93	12,253.06	7,108.53	154.18	153.26	87.54	-435.92	-5,499.31	2,619.80	2,313.32	306.48	8.548		
13,200.00	7,220.53	12,353.06	7,108.10	156.94	156.06	87.54	-436.69	-5,599.31	2,619.63	2,307.59	312.04	8.395		
13,300.00	7,220.12	12,453.06	7,107.66	159.72	158.86	87.54	-437.47	-5,699.30	2,619.47	2,301.86	317.61	8.247		
13,400.00	7,219.71	12,553.06	7,107.23	162.49	161.66	87.54	-438.25	-5,799.30	2,619.31	2,296.12	323.19	8.105		
13,500.00	7,219.31	12,653.06	7,106.79	165.27	164.46	87.54	-439.03	-5,899.29	2,619.14	2,290.37	328.77	7.966		
13,600.00	7,218.90	12,753.06	7,106.36	168.05	167.27	87.54	-439.80	-5,999.29	2,618.98	2,284.62	334.36	7.833		
13,700.00	7,218.50	12,853.06	7,105.93	170.83	170.08	87.54	-440.58	-6,099.29	2,618.82	2,278.87	339.95	7.704		
13,800.00	7,218.09	12,953.06	7,105.49	173.61	172.88	87.54	-441.36	-6,199.28	2,618.65	2,273.11	345.54	7.578		
13,900.00	7,217.69	13,053.06	7,105.06	176.40	175.69	87.54	-442.14	-6,299.28	2,618.49	2,267.35	351.14	7.457		
14,000.00	7,217.28	13,153.06	7,104.62	179.19	178.51	87.53	-442.91	-6,399.27	2,618.32	2,261.59	356.74	7.340		
14,100.00	7,216.87	13,253.06	7,104.19	181.98	181.32	87.53	-443.69	-6,499.27	2,618.16	2,255.82	362.34	7.226		
14,200.00	7,216.47	13,353.06	7,103.76	184.78	184.13	87.53	-444.47	-6,599.27	2,618.00	2,250.05	367.95	7.115		
14,300.00	7,216.06	13,453.06	7,103.32	187.57	186.95	87.53	-445.25	-6,699.26	2,617.83	2,244.27	373.56	7.008		
14,400.00	7,215.66	13,553.06	7,102.89	190.37	189.77	87.53	-446.02	-6,799.26	2,617.67	2,238.49	379.18	6.904		
14,500.00	7,215.25	13,653.06	7,102.45	193.17	192.58	87.53	-446.80	-6,899.25	2,617.51	2,232.71	384.79	6.802		
14,600.00	7,214.85	13,753.06	7,102.02	195.97	195.40	87.53	-447.58	-6,999.25	2,617.34	2,226.93	390.41	6.704		
14,700.00	7,214.44	13,853.06	7,101.59	198.77	198.22	87.53	-448.35	-7,099.25	2,617.18	2,221.14	396.04	6.608		
14,800.00	7,214.03	13,953.06	7,101.15	201.58	201.05	87.53	-449.13	-7,199.24	2,617.02	2,215.36	401.66	6.516		
14,900.00	7,213.63	14,053.06	7,100.72	204.38	203.87	87.53	-449.91	-7,299.24	2,616.85	2,209.57	407.29	6.425		
15,000.00	7,213.22	14,153.06	7,100.28	207.19	206.69	87.53	-450.69	-7,399.23	2,616.69	2,203.77	412.92	6.337		
15,100.00	7,212.82	14,253.06	7,099.85	210.00	209.52	87.53	-451.46	-7,499.23	2,616.53	2,197.98	418.55	6.251		
15,200.00	7,212.41	14,353.06	7,099.42	212.81	212.34	87.53	-452.24	-7,599.22	2,616.36	2,192.18	424.18	6.168		
15,300.00	7,212.01	14,453.06	7,098.98	215.62	215.17	87.52	-453.02	-7,699.22	2,616.20	2,186.38	429.82	6.087		
15,400.00	7,211.60	14,553.06	7,098.55	218.43	218.00	87.52	-453.80	-7,799.22	2,616.04	2,180.58	435.46	6.008		
15,500.00	7,211.19	14,653.06	7,098.11	221.25	220.82	87.52	-454.57	-7,899.21	2,615.87	2,174.77	441.10	5.930		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design													HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1		Offset Site Error:		0.00 ft	
Survey Program: 0-MWD+IFR1													Offset Well Error:		3.28 ft			
Reference		Offset		Semi Major Axis			Distance							Warning				
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor						
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)							
15,600.00	7,210.79	14,753.06	7,097.68	224.06	223.65	87.52	-455.35	-7,999.21	2,615.71	2,168.97	446.74	5.855						
15,700.00	7,210.38	14,853.06	7,097.25	226.88	226.48	87.52	-456.13	-8,099.20	2,615.54	2,163.16	452.38	5.782						
15,766.16	7,210.11	14,919.21	7,096.96	228.74	228.35	87.52	-456.64	-8,165.36	2,615.44	2,159.32	456.12	5.734						
15,794.94	7,210.00	14,909.96	7,097.00	229.55	228.09	87.52	-456.57	-8,156.11	2,615.67	2,159.16	456.51	5.730 SF						



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.48	100.19	0.83	100.20					
100.00	100.00	101.00	100.00	3.28	3.28	0.48	100.19	0.83	100.20	93.63	6.57	15.251		
200.00	200.00	201.04	200.04	3.34	3.34	0.48	100.19	0.83	100.20	93.52	6.67	15.011		
300.00	299.98	304.65	303.63	3.44	3.45	177.79	98.29	0.69	100.10	93.20	6.90	14.514		
400.00	399.84	408.26	407.07	3.59	3.61	177.69	92.65	0.26	99.88	92.65	7.23	13.810		
500.00	499.45	511.85	510.24	3.79	3.82	177.52	83.28	-0.46	99.55	91.87	7.67	12.972		
600.00	598.70	615.43	612.98	4.03	4.08	177.28	70.21	-1.47	99.10	90.89	8.21	12.077		
700.00	697.47	718.99	715.16	4.31	4.37	176.96	53.45	-2.75	98.53	89.72	8.81	11.185		
800.00	795.62	822.52	816.63	4.64	4.72	176.58	33.02	-4.32	97.85	88.37	9.47	10.330		
900.00	893.06	926.02	917.27	5.00	5.10	176.12	8.95	-6.17	97.06	86.87	10.18	9.532		
1,000.00	989.64	1,029.49	1,016.94	5.40	5.52	175.58	-18.71	-8.29	96.16	85.23	10.94	8.793		
1,091.36	1,077.05	1,122.99	1,106.15	5.79	5.93	175.03	-46.64	-10.43	95.40	83.76	11.64	8.194 CC		
1,100.00	1,085.27	1,131.63	1,114.37	5.83	5.97	174.98	-49.29	-10.63	95.42	83.71	11.71	8.148 ES		
1,200.00	1,179.82	1,231.60	1,209.51	6.29	6.44	174.53	-79.89	-12.98	97.46	84.96	12.50	7.794		
1,300.00	1,273.17	1,331.44	1,304.53	6.79	6.92	174.30	-110.46	-15.33	102.98	89.64	13.34	7.720		
1,400.00	1,365.21	1,431.03	1,399.31	7.33	7.41	174.26	-140.95	-17.67	111.96	97.75	14.21	7.879		
1,500.00	1,455.84	1,530.25	1,493.73	7.89	7.91	174.38	-171.32	-20.00	124.40	109.29	15.11	8.233		
1,600.00	1,544.94	1,628.97	1,587.69	8.50	8.42	174.61	-201.55	-22.32	140.27	124.24	16.04	8.747		
1,700.00	1,632.39	1,727.08	1,681.06	9.13	8.94	174.89	-231.58	-24.62	159.57	142.59	16.99	9.395		
1,800.00	1,718.11	1,824.46	1,773.74	9.80	9.46	175.20	-261.40	-26.91	182.28	164.32	17.95	10.153		
1,900.00	1,802.44	1,921.21	1,865.81	10.49	9.97	175.51	-291.02	-29.18	207.54	188.60	18.94	10.960		
2,000.00	1,886.68	2,017.92	1,957.85	11.20	10.50	175.77	-320.62	-31.45	232.96	213.03	19.93	11.689		
2,100.00	1,970.92	2,114.63	2,049.89	11.93	11.02	175.98	-350.23	-33.73	258.38	237.45	20.93	12.343		
2,200.00	2,055.17	2,211.34	2,141.93	12.66	11.55	176.15	-379.84	-36.00	283.81	261.86	21.95	12.929		
2,300.00	2,139.41	2,308.05	2,233.97	13.40	12.08	176.30	-409.45	-38.27	309.24	286.26	22.98	13.459		
2,400.00	2,223.66	2,404.76	2,326.01	14.14	12.62	176.42	-439.05	-40.54	334.67	310.66	24.01	13.938		
2,500.00	2,307.90	2,501.47	2,418.04	14.89	13.15	176.52	-468.66	-42.81	360.10	335.05	25.05	14.373		
2,600.00	2,392.14	2,598.18	2,510.08	15.65	13.69	176.61	-498.27	-45.09	385.53	359.43	26.10	14.771		
2,700.00	2,476.39	2,705.11	2,602.12	16.41	14.29	176.69	-527.88	-47.36	410.96	383.76	27.20	15.106		
2,800.00	2,560.63	2,791.60	2,694.16	17.17	14.77	176.76	-557.48	-49.63	436.40	408.18	28.21	15.468		
2,900.00	2,644.88	2,888.31	2,786.20	17.93	15.32	176.83	-587.09	-51.90	461.83	432.55	29.28	15.775		
3,000.00	2,729.12	2,985.02	2,878.24	18.70	15.86	176.88	-616.70	-54.17	487.27	456.92	30.34	16.058		
3,100.00	2,813.36	3,081.74	2,970.28	19.47	16.41	176.93	-646.31	-56.44	512.70	481.29	31.41	16.321		
3,200.00	2,897.61	3,178.45	3,062.31	20.25	16.95	176.98	-675.92	-58.72	538.14	505.65	32.49	16.564		
3,300.00	2,981.85	3,275.16	3,154.35	21.02	17.50	177.02	-705.52	-60.99	563.57	530.01	33.56	16.791		
3,400.00	3,066.10	3,371.87	3,246.39	21.80	18.05	177.06	-735.13	-63.26	589.01	554.36	34.64	17.002		
3,500.00	3,150.34	3,468.58	3,338.43	22.58	18.60	177.09	-764.74	-65.53	614.44	578.72	35.73	17.199		
3,600.00	3,234.58	3,565.29	3,430.47	23.35	19.14	177.13	-794.35	-67.80	639.88	603.07	36.81	17.383		
3,700.00	3,318.83	3,662.00	3,522.51	24.13	19.69	177.16	-823.95	-70.08	665.31	627.42	37.90	17.557		
3,800.00	3,403.07	3,758.71	3,614.55	24.92	20.24	177.18	-853.56	-72.35	690.75	651.77	38.98	17.719		
3,900.00	3,487.32	3,855.42	3,706.59	25.70	20.80	177.21	-883.17	-74.62	716.19	676.12	40.07	17.872		
4,000.00	3,571.56	3,952.13	3,798.62	26.48	21.35	177.23	-912.78	-76.89	741.62	700.46	41.16	18.017		
4,100.00	3,655.80	4,048.84	3,890.66	27.27	21.90	177.25	-942.38	-79.16	767.06	724.81	42.26	18.153		
4,200.00	3,740.05	4,145.55	3,982.70	28.05	22.45	177.27	-971.99	-81.43	792.50	749.15	43.35	18.282		
4,300.00	3,824.29	4,242.26	4,074.74	28.84	23.00	177.29	-1,001.60	-83.71	817.93	773.49	44.44	18.404		
4,400.00	3,908.54	4,338.97	4,166.78	29.62	23.56	177.31	-1,031.21	-85.98	843.37	797.83	45.54	18.519		
4,500.00	3,992.78	4,435.68	4,258.82	30.41	24.11	177.33	-1,060.81	-88.25	868.81	822.17	46.64	18.629		
4,600.00	4,077.03	4,532.39	4,350.86	31.20	24.66	177.35	-1,090.42	-90.52	894.25	846.51	47.73	18.734		
4,700.00	4,161.27	4,629.10	4,442.89	31.98	25.22	177.36	-1,120.03	-92.79	919.68	870.85	48.83	18.833		
4,800.00	4,245.51	4,725.81	4,534.93	32.77	25.77	177.38	-1,149.64	-95.06	945.12	895.19	49.93	18.928		
4,900.00	4,329.76	4,822.52	4,626.97	33.56	26.33	177.39	-1,179.25	-97.34	970.56	919.52	51.03	19.018		
5,000.00	4,414.00	4,919.23	4,719.01	34.35	26.88	177.40	-1,208.85	-99.61	996.00	943.86	52.13	19.104		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	5,015.94	4,811.05	35.14	27.43	177.41	-1,238.46	-101.88	1,021.43	968.20	53.24	19.187		
5,200.00	4,582.49	5,112.65	4,903.09	35.93	27.99	177.43	-1,268.07	-104.15	1,046.87	992.53	54.34	19.265		
5,300.00	4,666.73	5,209.36	4,995.13	36.72	28.55	177.44	-1,297.68	-106.42	1,072.31	1,016.87	55.44	19.341		
5,400.00	4,750.98	5,306.07	5,087.17	37.51	29.10	177.45	-1,327.28	-108.70	1,097.75	1,041.20	56.55	19.413		
5,500.00	4,835.22	5,402.78	5,179.20	38.30	29.66	177.46	-1,356.89	-110.97	1,123.18	1,065.53	57.65	19.483		
5,600.00	4,919.47	5,500.51	5,271.24	39.09	30.22	177.47	-1,386.50	-113.24	1,148.62	1,089.86	58.76	19.547		
5,700.00	5,003.71	5,603.80	5,363.28	39.88	30.81	177.48	-1,416.11	-115.51	1,174.06	1,114.16	59.90	19.600		
5,800.00	5,088.06	5,707.04	5,455.37	40.67	31.40	177.49	-1,445.73	-117.78	1,199.31	1,138.27	61.04	19.649		
5,900.00	5,173.83	5,809.63	5,548.07	41.44	31.99	177.52	-1,475.55	-120.07	1,221.92	1,159.76	62.16	19.657		
6,000.00	5,261.34	5,888.50	5,641.46	42.18	32.45	177.53	-1,505.59	-122.38	1,241.13	1,177.97	63.16	19.652		
6,100.00	5,350.49	5,987.24	5,735.43	42.88	33.02	177.53	-1,535.82	-124.70	1,256.90	1,192.67	64.24	19.567		
6,200.00	5,441.16	6,086.48	5,829.87	43.56	33.59	177.52	-1,566.20	-127.03	1,269.22	1,203.92	65.30	19.435		
6,300.00	5,533.25	6,186.08	5,924.66	44.20	34.16	177.51	-1,596.69	-129.37	1,278.08	1,211.72	66.36	19.260		
6,400.00	5,626.65	6,285.92	6,019.68	44.82	34.74	177.48	-1,627.26	-131.71	1,283.45	1,216.06	67.39	19.044		
6,500.00	5,721.23	6,385.90	6,114.83	45.40	35.31	177.44	-1,657.87	-134.06	1,285.34	1,216.93	68.41	18.788		
6,600.00	5,816.89	6,485.87	6,209.98	45.94	35.89	177.40	-1,688.48	-136.41	1,283.75	1,214.34	69.41	18.495		
6,700.00	5,913.51	6,585.73	6,305.01	46.45	36.46	177.34	-1,719.05	-138.76	1,278.67	1,208.28	70.39	18.166		
6,800.00	6,010.97	6,685.35	6,399.82	46.93	37.04	177.27	-1,749.55	-141.10	1,270.11	1,198.77	71.34	17.804		
6,900.00	6,109.15	6,784.67	6,494.34	47.38	37.61	177.19	-1,779.95	-143.53	1,258.09	1,185.82	72.27	17.409		
7,000.00	6,207.93	6,882.62	6,586.81	47.80	38.16	176.66	-1,809.77	-155.06	1,242.64	1,169.46	73.18	16.981		
7,100.00	6,307.19	6,974.56	6,671.11	48.18	38.65	175.50	-1,837.06	-179.32	1,224.16	1,150.14	74.02	16.539		
7,200.00	6,406.82	7,057.50	6,743.57	48.53	39.05	173.86	-1,860.61	-211.95	1,203.52	1,128.77	74.75	16.100		
7,300.00	6,506.68	7,130.17	6,803.25	48.84	39.37	171.96	-1,880.08	-248.47	1,181.82	1,106.49	75.33	15.688		
7,400.00	6,606.66	7,192.68	6,851.13	49.10	39.62	83.03	-1,895.76	-285.44	1,160.21	1,084.53	75.69	15.329		
7,500.00	6,706.21	7,250.00	6,891.80	49.35	39.84	83.01	-1,909.13	-323.52	1,140.41	1,064.62	75.79	15.047		
7,600.00	6,803.22	7,307.46	6,929.12	49.59	40.04	82.86	-1,921.45	-365.42	1,123.25	1,047.60	75.65	14.848		
7,700.00	6,895.32	7,364.35	6,962.37	49.82	40.22	82.64	-1,932.48	-410.21	1,108.65	1,033.42	75.24	14.735		
7,800.00	6,980.23	7,421.13	6,991.63	50.03	40.40	82.36	-1,942.26	-457.86	1,096.49	1,021.89	74.61	14.697		
7,900.00	7,055.85	7,477.89	7,016.71	50.21	40.56	82.06	-1,950.71	-508.05	1,086.62	1,012.77	73.85	14.713		
8,000.00	7,120.34	7,534.68	7,037.44	50.36	40.72	81.76	-1,957.78	-560.43	1,078.88	1,005.75	73.13	14.754		
8,100.00	7,172.10	7,591.54	7,053.66	50.47	40.89	81.48	-1,963.41	-614.61	1,073.09	1,000.48	72.61	14.779		
8,200.00	7,209.85	7,650.00	7,065.47	50.55	41.07	81.25	-1,967.65	-671.69	1,069.12	996.61	72.51	14.744		
8,300.00	7,232.68	7,700.00	7,071.58	50.61	41.25	81.13	-1,970.00	-721.24	1,066.88	994.09	72.78	14.659		
8,400.00	7,240.00	7,764.91	7,073.98	50.65	41.52	81.04	-1,971.27	-786.07	1,066.20	992.24	73.96	14.416		
8,500.00	7,239.60	7,864.91	7,073.65	50.69	42.09	81.05	-1,971.93	-886.07	1,066.13	989.88	76.25	13.982		
8,600.00	7,239.19	7,964.91	7,073.33	50.75	42.92	81.05	-1,972.60	-986.06	1,066.06	987.20	78.86	13.518		
8,700.00	7,238.78	8,064.91	7,073.00	50.85	44.03	81.05	-1,973.27	-1,086.06	1,066.00	984.22	81.78	13.035		
8,800.00	7,238.38	8,164.91	7,072.68	51.02	45.39	81.06	-1,973.94	-1,186.06	1,065.93	980.95	84.98	12.544		
8,900.00	7,237.97	8,264.91	7,072.35	51.32	46.95	81.06	-1,974.60	-1,286.05	1,065.86	977.44	88.42	12.054		
9,000.00	7,237.57	8,364.91	7,072.03	51.95	48.68	81.06	-1,975.27	-1,386.05	1,065.80	973.71	92.09	11.574		
9,100.00	7,237.16	8,464.91	7,071.70	53.10	50.53	81.07	-1,975.94	-1,486.05	1,065.73	969.79	95.94	11.108		
9,200.00	7,236.76	8,564.91	7,071.38	54.69	52.49	81.07	-1,976.61	-1,586.05	1,065.66	965.69	99.97	10.659		
9,300.00	7,236.35	8,664.91	7,071.05	56.53	54.54	81.08	-1,977.27	-1,686.04	1,065.60	961.44	104.16	10.231		
9,400.00	7,235.94	8,764.91	7,070.73	58.53	56.67	81.08	-1,977.94	-1,786.04	1,065.53	957.06	108.47	9.823		
9,500.00	7,235.54	8,864.91	7,070.40	60.62	58.86	81.08	-1,978.61	-1,886.04	1,065.46	952.56	112.91	9.437		
9,600.00	7,235.13	8,964.91	7,070.08	62.80	61.12	81.09	-1,979.28	-1,986.04	1,065.40	947.95	117.45	9.071		
9,700.00	7,234.73	9,064.91	7,069.76	65.03	63.42	81.09	-1,979.94	-2,086.03	1,065.33	943.25	122.08	8.726		
9,800.00	7,234.32	9,164.91	7,069.43	67.32	65.78	81.10	-1,980.61	-2,186.03	1,065.26	938.46	126.80	8.401		
9,900.00	7,233.92	9,264.91	7,069.11	69.66	68.17	81.10	-1,981.28	-2,286.03	1,065.19	933.61	131.59	8.095		
10,000.00	7,233.51	9,364.91	7,068.78	72.03	70.60	81.10	-1,981.95	-2,386.02	1,065.13	928.68	136.45	7.806		
10,100.00	7,233.10	9,464.91	7,068.46	74.45	73.06	81.11	-1,982.61	-2,486.02	1,065.06	923.70	141.37	7.534		
10,200.00	7,232.70	9,564.91	7,068.13	76.89	75.55	81.11	-1,983.28	-2,586.02	1,064.99	918.66	146.34	7.278		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	9,664.91	7,067.81	79.36	78.06	81.11	-1,983.95	-2,686.02	1,064.93	913.57	151.36	7.036		
10,400.00	7,231.89	9,764.91	7,067.48	81.86	80.60	81.12	-1,984.62	-2,786.01	1,064.86	908.44	156.42	6.808		
10,500.00	7,231.48	9,864.91	7,067.16	84.38	83.16	81.12	-1,985.28	-2,886.01	1,064.79	903.27	161.53	6.592		
10,600.00	7,231.08	9,964.91	7,066.83	86.93	85.74	81.13	-1,985.95	-2,986.01	1,064.73	898.06	166.67	6.388		
10,700.00	7,230.67	10,064.91	7,066.51	89.49	88.33	81.13	-1,986.62	-3,086.00	1,064.66	892.82	171.84	6.196		
10,800.00	7,230.26	10,164.91	7,066.18	92.07	90.95	81.13	-1,987.29	-3,186.00	1,064.59	887.55	177.04	6.013		
10,900.00	7,229.86	10,264.91	7,065.86	94.67	93.57	81.14	-1,987.95	-3,286.00	1,064.53	882.25	182.27	5.840		
11,000.00	7,229.45	10,364.91	7,065.53	97.28	96.21	81.14	-1,988.62	-3,386.00	1,064.46	876.93	187.53	5.676		
11,100.00	7,229.05	10,464.91	7,065.21	99.90	98.87	81.15	-1,989.29	-3,485.99	1,064.39	871.59	192.81	5.521		
11,200.00	7,228.64	10,564.91	7,064.88	102.54	101.53	81.15	-1,989.96	-3,585.99	1,064.33	866.22	198.11	5.372		
11,300.00	7,228.24	10,664.91	7,064.56	105.19	104.21	81.15	-1,990.62	-3,685.99	1,064.26	860.83	203.43	5.232		
11,400.00	7,227.83	10,764.91	7,064.23	107.85	106.89	81.16	-1,991.29	-3,785.98	1,064.19	855.43	208.76	5.098		
11,500.00	7,227.42	10,864.91	7,063.91	110.52	109.58	81.16	-1,991.96	-3,885.98	1,064.13	850.01	214.12	4.970		
11,600.00	7,227.02	10,964.91	7,063.58	113.20	112.28	81.16	-1,992.63	-3,985.98	1,064.06	844.57	219.49	4.848		
11,700.00	7,226.61	11,064.91	7,063.26	115.89	114.99	81.17	-1,993.29	-4,085.98	1,063.99	839.12	224.87	4.732		
11,800.00	7,226.21	11,164.91	7,062.93	118.59	117.71	81.17	-1,993.96	-4,185.97	1,063.93	833.65	230.27	4.620		
11,900.00	7,225.80	11,264.91	7,062.61	121.29	120.43	81.18	-1,994.63	-4,285.97	1,063.86	828.18	235.68	4.514		
12,000.00	7,225.40	11,364.91	7,062.28	124.00	123.16	81.18	-1,995.30	-4,385.97	1,063.79	822.69	241.10	4.412		
12,100.00	7,224.99	11,464.91	7,061.96	126.72	125.90	81.18	-1,995.96	-4,485.97	1,063.73	817.19	246.54	4.315		
12,200.00	7,224.58	11,564.91	7,061.63	129.44	128.64	81.19	-1,996.63	-4,585.96	1,063.66	811.68	251.98	4.221		
12,300.00	7,224.18	11,664.91	7,061.31	132.17	131.38	81.19	-1,997.30	-4,685.96	1,063.59	806.16	257.43	4.132		
12,400.00	7,223.77	11,764.91	7,060.98	134.91	134.13	81.20	-1,997.97	-4,785.96	1,063.52	800.63	262.89	4.045		
12,500.00	7,223.37	11,864.91	7,060.66	137.65	136.89	81.20	-1,998.63	-4,885.95	1,063.46	795.09	268.36	3.963		
12,600.00	7,222.96	11,964.91	7,060.33	140.39	139.65	81.20	-1,999.30	-4,985.95	1,063.39	789.55	273.84	3.883		
12,700.00	7,222.55	12,064.91	7,060.01	143.14	142.41	81.21	-1,999.97	-5,085.95	1,063.32	784.00	279.33	3.807		
12,800.00	7,222.15	12,164.91	7,059.68	145.89	145.17	81.21	-2,000.64	-5,185.95	1,063.26	778.44	284.82	3.733		
12,900.00	7,221.74	12,264.91	7,059.36	148.65	147.94	81.21	-2,001.30	-5,285.94	1,063.19	772.87	290.32	3.662		
13,000.00	7,221.34	12,364.91	7,059.03	151.41	150.72	81.22	-2,001.97	-5,385.94	1,063.12	767.30	295.82	3.594		
13,100.00	7,220.93	12,464.91	7,058.71	154.18	153.49	81.22	-2,002.64	-5,485.94	1,063.06	761.72	301.34	3.528		
13,200.00	7,220.53	12,564.91	7,058.38	156.94	156.27	81.23	-2,003.31	-5,585.93	1,062.99	756.14	306.85	3.464		
13,300.00	7,220.12	12,664.91	7,058.06	159.72	159.06	81.23	-2,003.97	-5,685.93	1,062.92	750.55	312.38	3.403		
13,400.00	7,219.71	12,764.91	7,057.73	162.49	161.84	81.23	-2,004.64	-5,785.93	1,062.86	744.95	317.90	3.343		
13,500.00	7,219.31	12,864.91	7,057.41	165.27	164.63	81.24	-2,005.31	-5,885.93	1,062.79	739.35	323.44	3.286		
13,600.00	7,218.90	12,964.91	7,057.08	168.05	167.42	81.24	-2,005.98	-5,985.92	1,062.72	733.75	328.97	3.230		
13,700.00	7,218.50	13,064.91	7,056.76	170.83	170.21	81.25	-2,006.64	-6,085.92	1,062.66	728.14	334.51	3.177		
13,800.00	7,218.09	13,164.91	7,056.43	173.61	173.00	81.25	-2,007.31	-6,185.92	1,062.59	722.53	340.06	3.125		
13,900.00	7,217.69	13,264.91	7,056.11	176.40	175.80	81.25	-2,007.98	-6,285.91	1,062.52	716.91	345.61	3.074		
14,000.00	7,217.28	13,364.91	7,055.78	179.19	178.60	81.26	-2,008.65	-6,385.91	1,062.46	711.29	351.16	3.026		
14,100.00	7,216.87	13,464.91	7,055.46	181.98	181.40	81.26	-2,009.31	-6,485.91	1,062.39	705.67	356.72	2.978		
14,200.00	7,216.47	13,564.91	7,055.13	184.78	184.20	81.26	-2,009.98	-6,585.91	1,062.32	700.04	362.28	2.932		
14,300.00	7,216.06	13,664.91	7,054.81	187.57	187.01	81.27	-2,010.65	-6,685.90	1,062.26	694.41	367.84	2.888		
14,400.00	7,215.66	13,764.91	7,054.48	190.37	189.81	81.27	-2,011.32	-6,785.90	1,062.19	688.78	373.41	2.845		
14,500.00	7,215.25	13,864.91	7,054.16	193.17	192.62	81.28	-2,011.98	-6,885.90	1,062.12	683.14	378.98	2.803		
14,600.00	7,214.85	13,964.91	7,053.83	195.97	195.43	81.28	-2,012.65	-6,985.90	1,062.06	677.50	384.55	2.762		
14,700.00	7,214.44	14,064.91	7,053.51	198.77	198.24	81.28	-2,013.32	-7,085.89	1,061.99	671.86	390.13	2.722		
14,800.00	7,214.03	14,164.91	7,053.18	201.58	201.05	81.29	-2,013.99	-7,185.89	1,061.92	666.22	395.71	2.684		
14,900.00	7,213.63	14,264.91	7,052.86	204.38	203.86	81.29	-2,014.65	-7,285.89	1,061.86	660.57	401.29	2.646		
15,000.00	7,213.22	14,364.91	7,052.54	207.19	206.67	81.30	-2,015.32	-7,385.88	1,061.79	654.92	406.87	2.610		
15,100.00	7,212.82	14,464.91	7,052.21	210.00	209.49	81.30	-2,015.99	-7,485.88	1,061.72	649.27	412.46	2.574		
15,200.00	7,212.41	14,564.91	7,051.89	212.81	212.31	81.30	-2,016.66	-7,585.88	1,061.66	643.61	418.04	2.540		
15,300.00	7,212.01	14,664.91	7,051.56	215.62	215.12	81.31	-2,017.32	-7,685.88	1,061.59	637.96	423.63	2.506		
15,400.00	7,211.60	14,764.91	7,051.24	218.43	217.94	81.31	-2,017.99	-7,785.87	1,061.52	632.30	429.23	2.473		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,500.00	7,211.19	14,864.91	7,050.91	221.25	220.76	81.32	-2,018.66	-7,885.87	1,061.46	626.64	434.82	2.441	
15,600.00	7,210.79	14,964.91	7,050.59	224.06	223.58	81.32	-2,019.33	-7,985.87	1,061.39	620.98	440.42	2.410	
15,700.00	7,210.38	15,064.91	7,050.26	226.88	226.40	81.32	-2,019.99	-8,085.86	1,061.33	615.31	446.01	2.380	
15,783.15	7,210.05	15,148.06	7,049.99	229.22	228.75	81.33	-2,020.55	-8,169.01	1,061.27	610.60	450.67	2.355 SF	
15,794.94	7,210.00	15,145.13	7,050.00	229.55	228.67	81.33	-2,020.53	-8,166.08	1,061.36	610.66	450.70	2.355	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.40	80.14	0.56	80.14					
100.00	100.00	100.00	100.00	3.28	3.28	0.40	80.14	0.56	80.14	73.57	6.57	12.199		
200.00	200.00	200.00	200.00	3.34	3.34	0.40	80.14	0.56	80.14	73.47	6.67	12.008		
300.00	299.98	302.87	302.85	3.44	3.44	177.72	78.30	0.43	80.09	73.20	6.89	11.617		
400.00	399.84	405.74	405.56	3.59	3.60	177.62	72.77	0.05	79.95	72.72	7.23	11.062		
500.00	499.45	508.60	508.00	3.79	3.81	177.46	63.57	-0.59	79.71	72.04	7.67	10.398		
600.00	598.70	611.45	610.03	4.03	4.06	177.24	50.71	-1.48	79.38	71.19	8.19	9.689		
700.00	697.47	714.28	711.52	4.31	4.36	176.95	34.21	-2.62	78.95	70.16	8.79	8.979		
800.00	795.62	817.09	812.33	4.64	4.70	176.59	14.09	-4.01	78.43	68.98	9.45	8.298		
900.00	893.06	919.88	912.33	5.00	5.08	176.17	-9.62	-5.65	77.83	67.67	10.16	7.662		
1,000.00	989.64	1,022.65	1,011.39	5.40	5.49	175.67	-36.89	-7.54	77.14	66.23	10.91	7.072		
1,100.00	1,085.27	1,125.38	1,109.37	5.83	5.94	175.09	-67.67	-9.67	76.37	64.67	11.69	6.531		
1,163.38	1,145.33	1,189.82	1,170.28	6.12	6.24	174.70	-88.67	-11.12	75.94	63.74	12.20	6.224 CC		
1,200.00	1,179.82	1,226.44	1,204.83	6.29	6.42	174.51	-100.75	-11.96	76.17	63.68	12.50	6.096 ES		
1,300.00	1,273.17	1,326.39	1,299.16	6.79	6.91	174.16	-133.72	-14.24	79.19	65.86	13.33	5.940		
1,400.00	1,365.21	1,426.17	1,393.33	7.33	7.42	174.09	-166.64	-16.51	85.67	71.47	14.20	6.031		
1,500.00	1,455.84	1,525.67	1,487.23	7.89	7.94	174.23	-199.47	-18.79	95.61	80.50	15.11	6.328		
1,600.00	1,544.94	1,624.76	1,580.74	8.50	8.46	174.52	-232.17	-21.05	109.01	92.96	16.04	6.795		
1,700.00	1,632.39	1,723.33	1,673.76	9.13	8.99	174.88	-264.69	-23.30	125.84	108.84	17.00	7.402		
1,800.00	1,718.11	1,821.24	1,766.17	9.80	9.53	175.26	-296.99	-25.53	146.09	128.11	17.98	8.126		
1,900.00	1,802.44	1,918.60	1,858.05	10.49	10.07	175.63	-329.11	-27.75	168.92	149.95	18.97	8.903		
2,000.00	1,886.68	2,015.92	1,949.89	11.20	10.61	175.93	-361.22	-29.97	191.91	171.93	19.98	9.605		
2,100.00	1,970.92	2,113.23	2,041.73	11.93	11.15	176.17	-393.33	-32.19	214.90	193.90	21.00	10.234		
2,200.00	2,055.17	2,210.55	2,133.57	12.66	11.70	176.35	-425.44	-34.42	237.89	215.87	22.03	10.799		
2,300.00	2,139.41	2,307.87	2,225.41	13.40	12.26	176.51	-457.54	-36.64	260.89	237.82	23.07	11.308		
2,400.00	2,223.66	2,405.19	2,317.25	14.14	12.81	176.64	-489.65	-38.86	283.89	259.77	24.12	11.770		
2,500.00	2,307.90	2,502.50	2,409.09	14.89	13.37	176.75	-521.76	-41.08	306.89	281.71	25.18	12.189		
2,600.00	2,392.14	2,600.18	2,500.94	15.65	13.93	176.85	-553.87	-43.30	329.89	303.65	26.24	12.571		
2,700.00	2,476.39	2,697.14	2,592.78	16.41	14.49	176.93	-585.98	-45.52	352.89	325.58	27.31	12.922		
2,800.00	2,560.63	2,805.54	2,684.62	17.17	15.12	177.00	-618.09	-47.74	375.89	347.45	28.44	13.217		
2,900.00	2,644.88	2,908.23	2,776.46	17.93	15.71	177.07	-650.19	-49.96	398.89	369.34	29.55	13.501		
3,000.00	2,729.12	2,989.09	2,868.30	18.70	16.18	177.12	-682.30	-52.18	421.89	391.35	30.55	13.812		
3,100.00	2,813.36	3,086.41	2,960.14	19.47	16.75	177.17	-714.41	-54.40	444.90	413.26	31.63	14.064		
3,200.00	2,897.61	3,183.73	3,051.99	20.25	17.32	177.22	-746.52	-56.63	467.90	435.17	32.72	14.299		
3,300.00	2,981.85	3,281.05	3,143.83	21.02	17.88	177.26	-778.63	-58.85	490.90	457.08	33.82	14.517		
3,400.00	3,066.10	3,378.36	3,235.67	21.80	18.45	177.30	-810.73	-61.07	513.90	478.99	34.91	14.720		
3,500.00	3,150.34	3,475.68	3,327.51	22.58	19.02	177.34	-842.84	-63.29	536.91	500.90	36.01	14.910		
3,600.00	3,234.58	3,573.00	3,419.35	23.35	19.60	177.37	-874.95	-65.51	559.91	522.80	37.11	15.088		
3,700.00	3,318.83	3,670.32	3,511.19	24.13	20.17	177.40	-907.06	-67.73	582.91	544.70	38.21	15.254		
3,800.00	3,403.07	3,767.63	3,603.04	24.92	20.74	177.43	-939.17	-69.95	605.92	566.60	39.32	15.411		
3,900.00	3,487.32	3,864.95	3,694.88	25.70	21.31	177.45	-971.28	-72.17	628.92	588.50	40.42	15.558		
4,000.00	3,571.56	3,962.27	3,786.72	26.48	21.88	177.47	-1,003.38	-74.39	651.93	610.40	41.53	15.697		
4,100.00	3,655.80	4,059.59	3,878.56	27.27	22.46	177.50	-1,035.49	-76.61	674.93	632.29	42.64	15.828		
4,200.00	3,740.05	4,156.91	3,970.40	28.05	23.03	177.52	-1,067.60	-78.84	697.94	654.18	43.75	15.953		
4,300.00	3,824.29	4,254.22	4,062.24	28.84	23.61	177.54	-1,099.71	-81.06	720.94	676.08	44.86	16.070		
4,400.00	3,908.54	4,351.54	4,154.08	29.62	24.18	177.55	-1,131.82	-83.28	743.94	697.97	45.98	16.181		
4,500.00	3,992.78	4,448.86	4,245.93	30.41	24.76	177.57	-1,163.93	-85.50	766.95	719.86	47.09	16.287		
4,600.00	4,077.03	4,546.18	4,337.77	31.20	25.33	177.59	-1,196.03	-87.72	789.95	741.75	48.20	16.388		
4,700.00	4,161.27	4,643.49	4,429.61	31.98	25.91	177.60	-1,228.14	-89.94	812.96	763.64	49.32	16.483		
4,800.00	4,245.51	4,740.81	4,521.45	32.77	26.48	177.62	-1,260.25	-92.16	835.96	785.53	50.44	16.575		
4,900.00	4,329.76	4,838.13	4,613.29	33.56	27.06	177.63	-1,292.36	-94.38	858.97	807.41	51.55	16.662		
5,000.00	4,414.00	4,935.45	4,705.13	34.35	27.64	177.64	-1,324.47	-96.60	881.97	829.30	52.67	16.745		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	5,032.77	4,796.98	35.14	28.21	177.65	-1,356.57	-98.83	904.98	851.19	53.79	16.824		
5,200.00	4,582.49	5,130.08	4,888.82	35.93	28.79	177.67	-1,388.68	-101.05	927.98	873.07	54.91	16.900		
5,300.00	4,666.73	5,227.40	4,980.66	36.72	29.37	177.68	-1,420.79	-103.27	950.99	894.96	56.03	16.973		
5,400.00	4,750.98	5,324.72	5,072.50	37.51	29.94	177.69	-1,452.90	-105.49	973.99	916.84	57.15	17.042		
5,500.00	4,835.22	5,422.04	5,164.34	38.30	30.52	177.70	-1,485.01	-107.71	997.00	938.72	58.27	17.109		
5,600.00	4,919.47	5,519.35	5,256.18	39.09	31.10	177.71	-1,517.12	-109.93	1,020.00	960.61	59.40	17.173		
5,700.00	5,003.71	5,616.67	5,348.03	39.88	31.68	177.72	-1,549.22	-112.15	1,043.01	982.49	60.52	17.235		
5,800.00	5,088.06	5,714.03	5,439.91	40.67	32.26	177.73	-1,581.35	-114.37	1,065.82	1,004.18	61.64	17.291		
5,900.00	5,173.83	5,811.97	5,532.34	41.44	32.84	177.75	-1,613.66	-116.61	1,085.99	1,023.23	62.76	17.305		
6,000.00	5,261.34	5,910.56	5,625.37	42.18	33.42	177.76	-1,646.19	-118.86	1,102.73	1,038.87	63.86	17.267		
6,100.00	5,350.49	6,009.67	5,718.90	42.88	34.01	177.75	-1,678.89	-121.12	1,116.02	1,051.06	64.96	17.181		
6,200.00	5,441.16	6,109.18	5,812.82	43.56	34.60	177.74	-1,711.72	-123.39	1,125.84	1,059.81	66.04	17.048		
6,300.00	5,533.25	6,208.97	5,906.99	44.20	35.20	177.72	-1,744.64	-125.67	1,132.19	1,065.09	67.10	16.872		
6,400.00	5,626.65	6,308.92	6,001.32	44.82	35.79	177.69	-1,777.62	-127.95	1,135.06	1,066.91	68.15	16.655		
6,500.00	5,721.23	6,408.91	6,095.68	45.40	36.39	177.65	-1,810.61	-130.23	1,134.44	1,065.26	69.18	16.398		
6,600.00	5,816.89	6,508.82	6,189.97	45.94	36.98	177.60	-1,843.57	-132.51	1,130.33	1,060.15	70.19	16.104		
6,700.00	5,913.51	6,608.52	6,284.06	46.45	37.57	177.54	-1,876.47	-134.79	1,122.75	1,051.57	71.17	15.775		
6,800.00	6,010.97	6,707.89	6,377.84	46.93	38.17	177.47	-1,909.25	-137.06	1,111.69	1,039.56	72.13	15.411		
6,900.00	6,109.15	6,806.82	6,471.20	47.38	38.76	177.38	-1,941.89	-139.31	1,097.18	1,024.11	73.07	15.015		
7,000.00	6,207.93	6,905.22	6,564.07	47.80	39.34	177.28	-1,974.36	-141.59	1,079.23	1,005.24	73.98	14.588		
7,100.00	6,307.19	7,002.47	6,655.21	48.18	39.91	176.70	-2,006.29	-152.13	1,057.86	982.99	74.87	14.129		
7,200.00	6,406.82	7,093.82	6,738.49	48.53	40.41	175.35	-2,035.58	-175.32	1,033.52	957.81	75.71	13.651		
7,300.00	6,506.68	7,176.30	6,810.28	48.84	40.82	173.40	-2,060.92	-206.91	1,007.18	930.73	76.45	13.174		
7,400.00	6,606.66	7,248.66	6,869.60	49.10	41.15	84.18	-2,081.93	-242.53	980.13	903.09	77.03	12.723		
7,500.00	6,706.21	7,315.29	6,920.53	49.35	41.43	84.33	-2,100.04	-281.45	954.51	877.10	77.41	12.330		
7,600.00	6,803.22	7,380.60	6,966.43	49.59	41.67	84.40	-2,116.43	-324.88	931.54	854.01	77.53	12.015		
7,700.00	6,895.32	7,445.05	7,007.37	49.82	41.90	84.39	-2,131.12	-372.40	911.34	833.98	77.36	11.780		
7,800.00	6,980.23	7,508.96	7,043.27	50.03	42.10	84.30	-2,144.08	-423.63	893.97	817.05	76.91	11.623		
7,900.00	7,055.85	7,572.57	7,074.00	50.21	42.29	84.16	-2,155.26	-478.16	879.43	803.16	76.27	11.530		
8,000.00	7,120.34	7,636.01	7,099.37	50.36	42.46	84.00	-2,164.59	-535.52	867.71	792.12	75.59	11.479		
8,100.00	7,172.10	7,700.00	7,119.37	50.47	42.64	83.82	-2,172.07	-595.82	858.75	783.66	75.08	11.437		
8,200.00	7,209.85	7,762.73	7,133.33	50.55	42.81	83.67	-2,177.44	-656.71	852.46	777.55	74.92	11.379		
8,300.00	7,232.68	7,826.08	7,141.61	50.61	42.99	83.56	-2,180.85	-719.39	848.80	773.49	75.31	11.270		
8,399.05	7,240.06	7,890.01	7,143.98	50.65	43.21	83.49	-2,182.19	-783.24	847.72	771.35	76.36	11.101		
8,400.00	7,240.00	7,890.96	7,143.97	50.65	43.22	83.50	-2,182.20	-784.20	847.71	771.33	76.38	11.098		
8,500.00	7,239.60	8,009.04	7,143.40	50.69	43.78	83.48	-2,182.81	-884.19	847.73	768.87	78.86	10.750		
8,600.00	7,239.19	8,109.04	7,142.84	50.75	44.50	83.47	-2,183.42	-984.19	847.75	766.28	81.47	10.406		
8,700.00	7,238.78	8,209.04	7,142.27	50.85	45.49	83.46	-2,184.04	-1,084.18	847.77	763.39	84.38	10.047		
8,800.00	7,238.38	8,309.04	7,141.70	51.02	46.75	83.45	-2,184.65	-1,184.18	847.78	760.22	87.56	9.682		
8,900.00	7,237.97	8,409.04	7,141.13	51.32	48.24	83.44	-2,185.26	-1,284.18	847.80	756.81	90.99	9.317		
9,000.00	7,237.57	8,509.04	7,140.56	51.95	49.90	83.43	-2,185.88	-1,384.17	847.82	753.18	94.64	8.959		
9,100.00	7,237.16	8,609.04	7,139.99	53.10	51.70	83.42	-2,186.49	-1,484.17	847.84	749.36	98.47	8.610		
9,200.00	7,236.76	8,709.04	7,139.42	54.69	53.62	83.41	-2,187.10	-1,584.17	847.86	745.37	102.48	8.273		
9,300.00	7,236.35	8,809.04	7,138.86	56.53	55.64	83.40	-2,187.71	-1,684.16	847.87	741.23	106.64	7.951		
9,400.00	7,235.94	8,909.04	7,138.29	58.53	57.74	83.39	-2,188.33	-1,784.16	847.89	736.95	110.94	7.643		
9,500.00	7,235.54	9,009.04	7,137.72	60.62	59.91	83.38	-2,188.94	-1,884.16	847.91	732.56	115.35	7.351		
9,600.00	7,235.13	9,109.04	7,137.15	62.80	62.15	83.36	-2,189.55	-1,984.15	847.93	728.05	119.88	7.073		
9,700.00	7,234.73	9,209.04	7,136.58	65.03	64.43	83.35	-2,190.17	-2,084.15	847.95	723.45	124.49	6.811		
9,800.00	7,234.32	9,309.04	7,136.01	67.32	66.76	83.34	-2,190.78	-2,184.14	847.97	718.77	129.19	6.564		
9,900.00	7,233.92	9,390.96	7,135.45	69.66	68.71	83.33	-2,191.39	-2,284.14	847.98	714.45	133.53	6.350		
10,000.00	7,233.51	9,509.04	7,134.88	72.03	71.55	83.32	-2,192.01	-2,384.14	848.00	709.19	138.82	6.109		
10,100.00	7,233.10	9,609.04	7,134.31	74.45	73.99	83.31	-2,192.62	-2,484.13	848.02	704.30	143.72	5.900		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,232.70	9,709.04	7,133.74	76.89	76.47	83.30	-2,193.23	-2,584.13	848.04	699.36	148.68	5.704		
10,300.00	7,232.29	9,809.04	7,133.17	79.36	78.97	83.29	-2,193.84	-2,684.13	848.06	694.36	153.69	5.518		
10,400.00	7,231.89	9,909.04	7,132.60	81.86	81.50	83.28	-2,194.46	-2,784.12	848.08	689.33	158.75	5.342		
10,500.00	7,231.48	10,009.04	7,132.03	84.38	84.04	83.27	-2,195.07	-2,884.12	848.09	684.25	163.84	5.176		
10,600.00	7,231.08	10,109.04	7,131.47	86.93	86.61	83.26	-2,195.68	-2,984.12	848.11	679.14	168.98	5.019		
10,700.00	7,230.67	10,209.04	7,130.90	89.49	89.20	83.24	-2,196.30	-3,084.11	848.13	673.99	174.14	4.870		
10,800.00	7,230.26	10,309.04	7,130.33	92.07	91.80	83.23	-2,196.91	-3,184.11	848.15	668.81	179.34	4.729		
10,900.00	7,229.86	10,409.04	7,129.76	94.67	94.42	83.22	-2,197.52	-3,284.10	848.17	663.60	184.57	4.595		
11,000.00	7,229.45	10,509.04	7,129.19	97.28	97.05	83.21	-2,198.13	-3,384.10	848.19	658.37	189.82	4.468		
11,100.00	7,229.05	10,609.04	7,128.62	99.90	99.69	83.20	-2,198.75	-3,484.10	848.21	653.11	195.09	4.348		
11,200.00	7,228.64	10,709.04	7,128.06	102.54	102.35	83.19	-2,199.36	-3,584.09	848.23	647.84	200.39	4.233		
11,300.00	7,228.24	10,809.04	7,127.49	105.19	105.01	83.18	-2,199.97	-3,684.09	848.24	642.54	205.71	4.124		
11,400.00	7,227.83	10,909.04	7,126.92	107.85	107.69	83.17	-2,200.59	-3,784.09	848.26	637.22	211.04	4.019		
11,500.00	7,227.42	11,009.04	7,126.35	110.52	110.37	83.16	-2,201.20	-3,884.08	848.28	631.89	216.39	3.920		
11,600.00	7,227.02	11,109.04	7,125.78	113.20	113.07	83.15	-2,201.81	-3,984.08	848.30	626.54	221.76	3.825		
11,700.00	7,226.61	11,209.04	7,125.21	115.89	115.77	83.13	-2,202.43	-4,084.08	848.32	621.17	227.15	3.735		
11,800.00	7,226.21	11,309.04	7,124.65	118.59	118.48	83.12	-2,203.04	-4,184.07	848.34	615.79	232.54	3.648		
11,900.00	7,225.80	11,409.04	7,124.08	121.29	121.20	83.11	-2,203.65	-4,284.07	848.36	610.40	237.95	3.565		
12,000.00	7,225.40	11,509.04	7,123.51	124.00	123.92	83.10	-2,204.26	-4,384.06	848.38	605.00	243.38	3.486		
12,100.00	7,224.99	11,609.04	7,122.94	126.72	126.65	83.09	-2,204.88	-4,484.06	848.40	599.59	248.81	3.410		
12,200.00	7,224.58	11,709.04	7,122.37	129.44	129.38	83.08	-2,205.49	-4,584.06	848.41	594.16	254.25	3.337		
12,300.00	7,224.18	11,790.96	7,121.80	132.17	131.63	83.07	-2,206.10	-4,684.05	848.43	589.22	259.21	3.273		
12,400.00	7,223.77	11,909.04	7,121.23	134.91	134.87	83.06	-2,206.72	-4,784.05	848.45	583.29	265.17	3.200		
12,500.00	7,223.37	12,009.04	7,120.67	137.65	137.62	83.05	-2,207.33	-4,884.05	848.47	577.84	270.64	3.135		
12,600.00	7,222.96	12,109.04	7,120.10	140.39	140.37	83.04	-2,207.94	-4,984.04	848.49	572.38	276.12	3.073		
12,700.00	7,222.55	12,209.04	7,119.53	143.14	143.13	83.03	-2,208.56	-5,084.04	848.51	566.91	281.60	3.013		
12,800.00	7,222.15	12,309.04	7,118.96	145.89	145.89	83.01	-2,209.17	-5,184.04	848.53	561.44	287.09	2.956		
12,900.00	7,221.74	12,409.04	7,118.39	148.65	148.66	83.00	-2,209.78	-5,284.03	848.55	555.96	292.59	2.900		
13,000.00	7,221.34	12,509.04	7,117.82	151.41	151.43	82.99	-2,210.39	-5,384.03	848.57	550.47	298.10	2.847		
13,100.00	7,220.93	12,609.04	7,117.26	154.18	154.20	82.98	-2,211.01	-5,484.02	848.59	544.98	303.61	2.795		
13,200.00	7,220.53	12,709.04	7,116.69	156.94	156.98	82.97	-2,211.62	-5,584.02	848.61	539.48	309.13	2.745		
13,300.00	7,220.12	12,809.04	7,116.12	159.72	159.76	82.96	-2,212.23	-5,684.02	848.63	533.97	314.65	2.697		
13,400.00	7,219.71	12,909.04	7,115.55	162.49	162.54	82.95	-2,212.85	-5,784.01	848.65	528.47	320.18	2.651		
13,500.00	7,219.31	13,009.04	7,114.98	165.27	165.32	82.94	-2,213.46	-5,884.01	848.67	522.95	325.71	2.606		
13,600.00	7,218.90	13,109.04	7,114.41	168.05	168.11	82.93	-2,214.07	-5,984.01	848.69	517.43	331.25	2.562		
13,700.00	7,218.50	13,209.04	7,113.84	170.83	170.90	82.92	-2,214.69	-6,084.00	848.70	511.91	336.79	2.520		
13,800.00	7,218.09	13,309.04	7,113.28	173.61	173.69	82.91	-2,215.30	-6,184.00	848.72	506.39	342.34	2.479		
13,900.00	7,217.69	13,409.04	7,112.71	176.40	176.48	82.89	-2,215.91	-6,284.00	848.74	500.86	347.89	2.440		
14,000.00	7,217.28	13,509.05	7,112.14	179.19	179.28	82.88	-2,216.52	-6,383.99	848.76	495.32	353.44	2.401		
14,100.00	7,216.87	13,609.05	7,111.57	181.98	182.08	82.87	-2,217.14	-6,483.99	848.78	489.79	359.00	2.364		
14,200.00	7,216.47	13,709.05	7,111.00	184.78	184.87	82.86	-2,217.75	-6,583.98	848.80	484.25	364.56	2.328		
14,300.00	7,216.06	13,809.05	7,110.43	187.57	187.68	82.85	-2,218.36	-6,683.98	848.82	478.70	370.12	2.293		
14,400.00	7,215.66	13,909.05	7,109.87	190.37	190.48	82.84	-2,218.98	-6,783.98	848.84	473.16	375.68	2.259		
14,500.00	7,215.25	14,009.05	7,109.30	193.17	193.28	82.83	-2,219.59	-6,883.97	848.86	467.61	381.25	2.227		
14,600.00	7,214.85	14,109.05	7,108.73	195.97	196.09	82.82	-2,220.20	-6,983.97	848.88	462.06	386.82	2.194		
14,700.00	7,214.44	14,209.05	7,108.16	198.77	198.90	82.81	-2,220.82	-7,083.97	848.90	456.50	392.40	2.163		
14,800.00	7,214.03	14,309.05	7,107.59	201.58	201.71	82.80	-2,221.43	-7,183.96	848.92	450.95	397.97	2.133		
14,900.00	7,213.63	14,409.05	7,107.02	204.38	204.52	82.79	-2,222.04	-7,283.96	848.94	445.39	403.55	2.104		
15,000.00	7,213.22	14,509.05	7,106.45	207.19	207.33	82.78	-2,222.65	-7,383.96	848.96	439.83	409.13	2.075		
15,100.00	7,212.82	14,609.05	7,105.89	210.00	210.14	82.76	-2,223.27	-7,483.95	848.98	434.27	414.72	2.047		
15,200.00	7,212.41	14,709.05	7,105.32	212.81	212.96	82.75	-2,223.88	-7,583.95	849.00	428.70	420.30	2.020		
15,300.00	7,212.01	14,809.05	7,104.75	215.62	215.77	82.74	-2,224.49	-7,683.95	849.02	423.13	425.89	1.994		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,400.00	7,211.60	14,909.05	7,104.18	218.43	218.59	82.73	-2,225.11	-7,783.94	849.04	417.56	431.48	1.968	
15,500.00	7,211.19	15,009.05	7,103.61	221.25	221.41	82.72	-2,225.72	-7,883.94	849.06	411.99	437.07	1.943	
15,600.00	7,210.79	15,109.05	7,103.04	224.06	224.22	82.71	-2,226.33	-7,983.93	849.08	406.42	442.66	1.918	
15,700.00	7,210.38	15,190.95	7,102.48	226.88	226.53	82.70	-2,226.94	-8,083.93	849.10	401.36	447.75	1.896	
15,705.37	7,210.36	15,196.33	7,102.44	227.03	226.68	82.70	-2,226.98	-8,089.30	849.10	401.06	448.05	1.895	
15,794.94	7,210.00	15,274.57	7,102.00	229.55	228.89	82.69	-2,227.46	-8,167.54	849.20	396.67	452.53	1.877 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.00	20.04	0.00	20.04					
100.00	100.00	100.00	100.00	3.28	3.28	0.00	20.04	0.00	20.04	13.47	6.57	3.051		
200.00	200.00	200.00	200.00	3.34	3.34	0.00	20.04	0.00	20.04	13.37	6.67	3.003		
300.00	299.98	300.70	300.68	3.44	3.44	177.31	18.27	-0.10	20.03	13.14	6.89	2.907		
400.00	399.84	401.41	401.24	3.59	3.59	177.17	12.97	-0.39	19.99	12.78	7.22	2.770		
500.00	499.45	502.11	501.55	3.79	3.80	176.95	4.15	-0.87	19.94	12.29	7.65	2.607		
600.00	598.70	602.80	601.48	4.03	4.04	176.63	-8.19	-1.55	19.86	11.69	8.17	2.432		
700.00	697.47	703.50	700.91	4.31	4.32	176.23	-24.03	-2.41	19.76	11.00	8.76	2.257		
800.00	795.62	804.19	799.72	4.64	4.65	175.72	-43.34	-3.47	19.64	10.23	9.40	2.088		
900.00	893.06	904.87	897.78	5.00	5.02	175.12	-66.11	-4.72	19.49	9.39	10.10	1.930		
1,000.00	989.64	1,005.55	994.98	5.40	5.42	174.42	-92.30	-6.15	19.33	8.49	10.84	1.783		
1,100.00	1,085.27	1,106.22	1,091.19	5.83	5.86	173.61	-121.89	-7.77	19.16	7.54	11.62	1.649		
1,200.00	1,179.82	1,206.89	1,186.28	6.29	6.33	172.70	-154.83	-9.57	18.96	6.54	12.42	1.526		
1,300.00	1,273.17	1,307.54	1,280.16	6.79	6.83	171.67	-191.08	-11.56	18.76	5.50	13.26	1.414	Level 3	
1,400.00	1,365.21	1,408.19	1,372.69	7.33	7.37	170.52	-230.60	-13.72	18.54	4.41	14.13	1.312	Level 3	
1,408.43	1,372.91	1,416.67	1,380.42	7.37	7.42	170.41	-234.08	-13.91	18.52	4.32	14.20	1.304	Level 3, CC	
1,500.00	1,455.84	1,508.15	1,463.93	7.89	7.93	170.26	-271.38	-15.96	20.12	5.08	15.04	1.337	Level 3	
1,600.00	1,544.94	1,608.02	1,555.08	8.50	8.51	171.41	-312.12	-18.19	25.15	9.16	15.99	1.573		
1,700.00	1,632.39	1,707.65	1,646.02	9.13	9.10	172.98	-352.77	-20.41	33.63	16.67	16.97	1.982		
1,800.00	1,718.11	1,806.93	1,736.63	9.80	9.69	174.36	-393.26	-22.63	45.59	27.62	17.97	2.537		
1,900.00	1,802.44	1,905.85	1,826.92	10.49	10.29	175.39	-433.62	-24.84	60.17	41.17	19.00	3.167		
2,000.00	1,886.68	2,004.76	1,917.20	11.20	10.90	176.04	-473.97	-27.05	74.91	54.87	20.04	3.738		
2,100.00	1,970.92	2,103.66	2,007.47	11.93	11.51	176.47	-514.32	-29.26	89.66	68.56	21.10	4.249		
2,200.00	2,055.17	2,202.57	2,097.74	12.66	12.13	176.78	-554.67	-31.47	104.42	82.24	22.17	4.709		
2,300.00	2,139.41	2,301.47	2,188.02	13.40	12.75	177.01	-595.02	-33.68	119.17	95.91	23.26	5.123		
2,400.00	2,223.66	2,400.37	2,278.29	14.14	13.38	177.19	-635.36	-35.88	133.93	109.57	24.36	5.499		
2,500.00	2,307.90	2,499.28	2,368.56	14.89	14.01	177.34	-675.71	-38.09	148.69	123.23	25.46	5.840		
2,600.00	2,392.14	2,601.82	2,458.83	15.65	14.66	177.46	-716.06	-40.30	163.45	136.86	26.59	6.146		
2,700.00	2,476.39	2,702.91	2,549.11	16.41	15.31	177.55	-756.41	-42.51	178.21	150.48	27.72	6.428		
2,800.00	2,560.63	2,804.01	2,639.38	17.17	15.96	177.64	-796.76	-44.72	192.97	164.11	28.86	6.686		
2,900.00	2,644.88	2,905.10	2,729.65	17.93	16.61	177.71	-837.11	-46.93	207.73	177.73	30.00	6.924		
3,000.00	2,729.12	2,993.80	2,819.92	18.70	17.19	177.77	-877.45	-49.14	222.49	191.41	31.08	7.158		
3,100.00	2,813.36	3,092.70	2,910.20	19.47	17.83	177.83	-917.80	-51.35	237.25	205.03	32.22	7.363		
3,200.00	2,897.61	3,208.39	3,000.47	20.25	18.58	177.88	-958.15	-53.56	252.01	218.56	33.45	7.533		
3,300.00	2,981.85	3,309.49	3,090.74	21.02	19.24	177.92	-998.50	-55.77	266.78	232.16	34.61	7.708		
3,400.00	3,066.10	3,389.42	3,181.02	21.80	19.76	177.96	-1,038.85	-57.98	281.54	245.88	35.66	7.896		
3,500.00	3,150.34	3,488.32	3,271.29	22.58	20.40	177.99	-1,079.20	-60.18	296.30	259.49	36.81	8.050		
3,600.00	3,234.58	3,587.23	3,361.56	23.35	21.05	178.02	-1,119.54	-62.39	311.06	273.10	37.96	8.194		
3,700.00	3,318.83	3,686.13	3,451.83	24.13	21.70	178.05	-1,159.89	-64.60	325.82	286.70	39.12	8.329		
3,800.00	3,403.07	3,785.03	3,542.11	24.92	22.34	178.08	-1,200.24	-66.81	340.59	300.31	40.28	8.456		
3,900.00	3,487.32	3,883.94	3,632.38	25.70	22.99	178.10	-1,240.59	-69.02	355.35	313.91	41.44	8.575		
4,000.00	3,571.56	3,982.84	3,722.65	26.48	23.64	178.13	-1,280.94	-71.23	370.11	327.51	42.60	8.688		
4,100.00	3,655.80	4,081.75	3,812.93	27.27	24.29	178.15	-1,321.29	-73.44	384.87	341.11	43.76	8.794		
4,200.00	3,740.05	4,180.65	3,903.20	28.05	24.94	178.16	-1,361.63	-75.65	399.64	354.71	44.93	8.895		
4,300.00	3,824.29	4,279.56	3,993.47	28.84	25.59	178.18	-1,401.98	-77.86	414.40	368.30	46.10	8.990		
4,400.00	3,908.54	4,378.46	4,083.74	29.62	26.24	178.20	-1,442.33	-80.07	429.16	381.90	47.26	9.080		
4,500.00	3,992.78	4,477.36	4,174.02	30.41	26.89	178.21	-1,482.68	-82.28	443.92	395.49	48.43	9.166		
4,600.00	4,077.03	4,576.27	4,264.29	31.20	27.55	178.23	-1,523.03	-84.49	458.69	409.08	49.60	9.247		
4,700.00	4,161.27	4,675.17	4,354.56	31.98	28.20	178.24	-1,563.38	-86.69	473.45	422.67	50.77	9.325		
4,800.00	4,245.51	4,774.08	4,444.84	32.77	28.85	178.25	-1,603.72	-88.90	488.21	436.26	51.95	9.398		
4,900.00	4,329.76	4,872.98	4,535.11	33.56	29.50	178.27	-1,644.07	-91.11	502.97	449.85	53.12	9.469		
5,000.00	4,414.00	4,971.89	4,625.38	34.35	30.16	178.28	-1,684.42	-93.32	517.74	463.44	54.29	9.536		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	5,070.79	4,715.65	35.14	30.81	178.29	-1,724.77	-95.53	532.50	477.03	55.47	9.600		
5,200.00	4,582.49	5,169.69	4,805.93	35.93	31.46	178.30	-1,765.12	-97.74	547.26	490.62	56.64	9.662		
5,300.00	4,666.73	5,268.60	4,896.20	36.72	32.12	178.31	-1,805.47	-99.95	562.02	504.21	57.82	9.720		
5,400.00	4,750.98	5,367.50	4,986.47	37.51	32.77	178.32	-1,845.81	-102.16	576.79	517.79	59.00	9.777		
5,500.00	4,835.22	5,466.41	5,076.75	38.30	33.43	178.32	-1,886.16	-104.37	591.55	531.38	60.17	9.831		
5,600.00	4,919.47	5,565.31	5,167.02	39.09	34.08	178.33	-1,926.51	-106.58	606.31	544.96	61.35	9.883		
5,700.00	5,003.71	5,664.21	5,257.29	39.88	34.73	178.34	-1,966.86	-108.79	621.08	558.55	62.53	9.933		
5,800.00	5,088.06	5,763.15	5,347.59	40.67	35.39	178.35	-2,007.22	-111.00	635.65	571.94	63.71	9.978		
5,900.00	5,173.83	5,862.43	5,438.21	41.44	36.05	178.36	-2,047.72	-113.21	647.53	582.65	64.88	9.981		
6,000.00	5,261.34	5,962.07	5,529.16	42.18	36.71	178.35	-2,088.37	-115.44	655.94	589.90	66.03	9.934		
6,100.00	5,350.49	6,061.95	5,620.31	42.88	37.37	178.34	-2,129.12	-117.67	660.87	593.69	67.17	9.838		
6,200.00	5,441.16	6,161.93	5,711.57	43.56	38.03	178.31	-2,169.90	-119.90	662.31	594.01	68.30	9.697		
6,300.00	5,533.25	6,261.90	5,802.82	44.20	38.69	178.27	-2,210.69	-122.14	660.26	590.85	69.41	9.513		
6,400.00	5,626.65	6,361.75	5,893.95	44.82	39.36	178.23	-2,251.42	-124.37	654.73	584.24	70.49	9.288		
6,500.00	5,721.23	6,461.33	5,984.84	45.40	40.02	178.16	-2,292.05	-126.59	645.72	574.16	71.56	9.024		
6,600.00	5,816.89	6,560.54	6,075.39	45.94	40.67	178.09	-2,332.52	-128.81	633.24	560.64	72.59	8.723		
6,700.00	5,913.51	6,659.26	6,165.49	46.45	41.33	178.00	-2,372.79	-131.01	617.31	543.70	73.61	8.386		
6,800.00	6,010.97	6,757.35	6,255.03	46.93	41.98	177.88	-2,412.81	-133.20	597.94	523.35	74.60	8.016		
6,900.00	6,109.15	6,854.71	6,343.89	47.38	42.63	177.75	-2,452.53	-135.38	575.17	499.62	75.56	7.613		
7,000.00	6,207.93	6,951.22	6,431.98	47.80	43.27	177.58	-2,491.90	-137.53	549.02	472.54	76.49	7.178		
7,100.00	6,307.19	7,046.75	6,519.17	48.18	43.90	177.38	-2,530.87	-139.67	519.53	442.14	77.39	6.713		
7,200.00	6,406.82	7,141.23	6,605.38	48.53	44.53	177.03	-2,569.41	-142.50	486.72	408.46	78.26	6.219		
7,300.00	6,506.68	7,232.77	6,688.00	48.84	45.12	175.23	-2,606.43	-155.43	450.84	371.68	79.16	5.695		
7,400.00	6,606.66	7,317.72	6,762.41	49.10	45.62	84.59	-2,639.86	-178.93	413.15	333.04	80.11	5.157		
7,500.00	6,706.21	7,397.71	6,829.25	49.35	46.06	83.51	-2,669.99	-210.80	376.81	295.75	81.06	4.649		
7,600.00	6,803.22	7,476.19	6,896.74	49.59	46.44	81.98	-2,697.79	-250.75	343.75	262.06	81.69	4.208		
7,700.00	6,895.32	7,553.82	6,946.68	49.82	46.77	79.99	-2,723.18	-298.15	314.61	233.00	81.60	3.855		
7,800.00	6,980.23	7,631.13	6,996.72	50.03	47.06	77.57	-2,745.98	-352.41	289.86	209.45	80.41	3.605		
7,900.00	7,055.85	7,708.44	7,040.37	50.21	47.32	74.86	-2,765.98	-412.95	269.73	191.87	77.86	3.464		
8,000.00	7,120.34	7,785.98	7,077.08	50.36	47.55	72.05	-2,782.94	-479.06	254.19	180.17	74.02	3.434		
8,100.00	7,172.10	7,863.86	7,106.28	50.47	47.75	69.43	-2,796.57	-549.90	242.93	173.58	69.35	3.503		
8,200.00	7,209.85	7,942.07	7,127.43	50.55	47.94	67.28	-2,806.64	-624.47	235.48	170.69	64.80	3.634		
8,300.00	7,232.68	8,020.55	7,140.10	50.61	48.11	65.85	-2,812.93	-701.61	231.34	169.78	61.56	3.758		
8,396.82	7,240.06	8,096.67	7,144.01	50.64	48.27	65.33	-2,815.31	-777.55	230.11	169.39	60.72	3.790		
8,400.00	7,240.00	8,100.59	7,144.00	50.65	48.28	65.34	-2,815.33	-780.29	230.10	169.32	60.78	3.786		
8,500.00	7,239.60	8,200.59	7,143.46	50.69	48.54	65.31	-2,815.92	-880.28	230.17	167.35	62.83	3.664		
8,600.00	7,239.19	8,299.41	7,142.92	50.75	48.89	65.28	-2,816.51	-980.28	230.25	165.03	65.22	3.530		
8,700.00	7,238.78	8,400.59	7,142.37	50.85	49.41	65.26	-2,817.09	-1,080.28	230.33	162.36	67.97	3.389		
8,800.00	7,238.38	8,500.59	7,141.83	51.02	50.12	65.23	-2,817.68	-1,180.28	230.41	159.43	70.98	3.246		
8,900.00	7,237.97	8,599.41	7,141.29	51.32	51.07	65.20	-2,818.27	-1,280.27	230.49	156.27	74.22	3.105		
9,000.00	7,237.57	8,700.59	7,140.75	51.95	52.31	65.17	-2,818.86	-1,380.27	230.57	152.85	77.72	2.967		
9,100.00	7,237.16	8,800.59	7,140.21	53.10	53.76	65.14	-2,819.45	-1,480.27	230.65	149.26	81.38	2.834		
9,200.00	7,236.76	8,900.59	7,139.67	54.69	55.41	65.12	-2,820.03	-1,580.26	230.73	145.51	85.21	2.708		
9,300.00	7,236.35	9,000.59	7,139.13	56.53	57.21	65.09	-2,820.62	-1,680.26	230.81	141.62	89.18	2.588		
9,400.00	7,235.94	9,100.59	7,138.59	58.53	59.14	65.06	-2,821.21	-1,780.26	230.89	137.61	93.28	2.475		
9,500.00	7,235.54	9,200.59	7,138.05	60.62	61.17	65.03	-2,821.80	-1,880.25	230.96	133.49	97.48	2.369		
9,600.00	7,235.13	9,300.59	7,137.50	62.80	63.28	65.00	-2,822.39	-1,980.25	231.04	129.27	101.78	2.270		
9,700.00	7,234.73	9,400.59	7,136.96	65.03	65.45	64.98	-2,822.97	-2,080.25	231.12	124.97	106.15	2.177		
9,800.00	7,234.32	9,500.59	7,136.42	67.32	67.69	64.95	-2,823.56	-2,180.24	231.20	120.60	110.60	2.090		
9,900.00	7,233.92	9,600.59	7,135.88	69.66	69.99	64.92	-2,824.15	-2,280.24	231.28	116.16	115.12	2.009		
10,000.00	7,233.51	9,700.59	7,135.34	72.03	72.32	64.89	-2,824.74	-2,380.24	231.36	111.67	119.69	1.933		
10,100.00	7,233.10	9,800.59	7,134.80	74.45	74.70	64.86	-2,825.33	-2,480.23	231.44	107.13	124.31	1.862		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,232.70	9,900.59	7,134.26	76.89	77.11	64.84	-2,825.91	-2,580.23	231.52	102.55	128.97	1.795		
10,300.00	7,232.29	10,000.59	7,133.72	79.36	79.56	64.81	-2,826.50	-2,680.23	231.60	97.93	133.68	1.733		
10,400.00	7,231.89	10,100.59	7,133.18	81.86	82.03	64.78	-2,827.09	-2,780.22	231.68	93.27	138.41	1.674		
10,500.00	7,231.48	10,200.59	7,132.64	84.38	84.53	64.75	-2,827.68	-2,880.22	231.76	88.58	143.18	1.619		
10,600.00	7,231.08	10,300.59	7,132.09	86.93	87.06	64.73	-2,828.27	-2,980.22	231.84	83.86	147.98	1.567		
10,700.00	7,230.67	10,400.59	7,131.55	89.49	89.60	64.70	-2,828.85	-3,080.21	231.92	79.12	152.81	1.518		
10,800.00	7,230.26	10,500.59	7,131.01	92.07	92.16	64.67	-2,829.44	-3,180.21	232.00	74.35	157.65	1.472 Level 3		
10,900.00	7,229.86	10,600.59	7,130.47	94.67	94.74	64.64	-2,830.03	-3,280.21	232.08	69.56	162.52	1.428 Level 3		
11,000.00	7,229.45	10,700.59	7,129.93	97.28	97.34	64.62	-2,830.62	-3,380.20	232.16	64.76	167.40	1.387 Level 3		
11,100.00	7,229.05	10,800.59	7,129.39	99.90	99.95	64.59	-2,831.20	-3,480.20	232.24	59.94	172.30	1.348 Level 3		
11,200.00	7,228.64	10,900.59	7,128.85	102.54	102.58	64.56	-2,831.79	-3,580.20	232.32	55.10	177.22	1.311 Level 3		
11,300.00	7,228.24	11,000.59	7,128.31	105.19	105.22	64.53	-2,832.38	-3,680.19	232.40	50.25	182.15	1.276 Level 3		
11,400.00	7,227.83	11,100.59	7,127.77	107.85	107.87	64.51	-2,832.97	-3,780.19	232.48	45.39	187.09	1.243 Level 2		
11,500.00	7,227.42	11,199.41	7,127.22	110.52	110.50	64.48	-2,833.56	-3,880.19	232.56	40.55	192.02	1.211 Level 2		
11,600.00	7,227.02	11,300.59	7,126.68	113.20	113.20	64.45	-2,834.14	-3,980.18	232.64	35.63	197.01	1.181 Level 2		
11,700.00	7,226.61	11,400.59	7,126.14	115.89	115.88	64.42	-2,834.73	-4,080.18	232.72	30.74	201.99	1.152 Level 2		
11,800.00	7,226.21	11,500.59	7,125.60	118.59	118.57	64.40	-2,835.32	-4,180.18	232.80	25.84	206.97	1.125 Level 2		
11,900.00	7,225.80	11,600.59	7,125.06	121.29	121.26	64.37	-2,835.91	-4,280.17	232.89	20.93	211.96	1.099 Level 2		
12,000.00	7,225.40	11,700.59	7,124.52	124.00	123.97	64.34	-2,836.50	-4,380.17	232.97	16.01	216.96	1.074 Level 2		
12,100.00	7,224.99	11,800.59	7,123.98	126.72	126.68	64.31	-2,837.08	-4,480.17	233.05	11.09	221.96	1.050 Level 2		
12,200.00	7,224.58	11,900.59	7,123.44	129.44	129.39	64.29	-2,837.67	-4,580.16	233.13	6.16	226.97	1.027 Level 2		
12,300.00	7,224.18	12,000.59	7,122.90	132.17	132.12	64.26	-2,838.26	-4,680.16	233.21	1.22	231.99	1.005 Level 2		
12,400.00	7,223.77	12,100.59	7,122.35	134.91	134.85	64.23	-2,838.85	-4,780.16	233.29	-3.72	237.01	0.984 Level 1		
12,500.00	7,223.37	12,200.59	7,121.81	137.65	137.58	64.20	-2,839.44	-4,880.15	233.37	-8.66	242.03	0.964 Level 1		
12,600.00	7,222.96	12,300.59	7,121.27	140.39	140.32	64.18	-2,840.02	-4,980.15	233.45	-13.61	247.06	0.945 Level 1		
12,700.00	7,222.55	12,399.41	7,120.73	143.14	143.03	64.15	-2,840.61	-5,080.15	233.53	-18.53	252.06	0.926 Level 1		
12,800.00	7,222.15	12,500.59	7,120.19	145.89	145.81	64.12	-2,841.20	-5,180.14	233.61	-23.51	257.13	0.909 Level 1		
12,900.00	7,221.74	12,600.59	7,119.65	148.65	148.56	64.10	-2,841.79	-5,280.14	233.69	-28.47	262.17	0.891 Level 1		
13,000.00	7,221.34	12,700.59	7,119.11	151.41	151.32	64.07	-2,842.38	-5,380.14	233.78	-33.43	267.21	0.875 Level 1		
13,100.00	7,220.93	12,800.59	7,118.57	154.18	154.08	64.04	-2,842.96	-5,480.13	233.86	-38.40	272.25	0.859 Level 1		
13,200.00	7,220.53	12,900.59	7,118.03	156.94	156.85	64.01	-2,843.55	-5,580.13	233.94	-43.36	277.30	0.844 Level 1		
13,300.00	7,220.12	13,000.59	7,117.48	159.72	159.61	63.99	-2,844.14	-5,680.13	234.02	-48.33	282.35	0.829 Level 1		
13,400.00	7,219.71	13,100.59	7,116.94	162.49	162.38	63.96	-2,844.73	-5,780.12	234.10	-53.30	287.40	0.815 Level 1		
13,500.00	7,219.31	13,200.59	7,116.40	165.27	165.16	63.93	-2,845.32	-5,880.12	234.18	-58.27	292.45	0.801 Level 1		
13,600.00	7,218.90	13,300.59	7,115.86	168.05	167.93	63.91	-2,845.90	-5,980.12	234.26	-63.24	297.50	0.787 Level 1		
13,700.00	7,218.50	13,400.59	7,115.32	170.83	170.71	63.88	-2,846.49	-6,080.11	234.35	-68.21	302.56	0.775 Level 1		
13,800.00	7,218.09	13,500.59	7,114.78	173.61	173.49	63.85	-2,847.08	-6,180.11	234.43	-73.19	307.61	0.762 Level 1		
13,900.00	7,217.69	13,600.59	7,114.24	176.40	176.28	63.82	-2,847.67	-6,280.11	234.51	-78.16	312.67	0.750 Level 1		
14,000.00	7,217.28	13,700.59	7,113.70	179.19	179.07	63.80	-2,848.25	-6,380.10	234.59	-83.14	317.73	0.738 Level 1		
14,100.00	7,216.87	13,800.59	7,113.16	181.98	181.86	63.77	-2,848.84	-6,480.10	234.67	-88.11	322.79	0.727 Level 1		
14,200.00	7,216.47	13,900.59	7,112.62	184.78	184.65	63.74	-2,849.43	-6,580.10	234.75	-93.09	327.84	0.716 Level 1		
14,300.00	7,216.06	14,000.59	7,112.07	187.57	187.44	63.72	-2,850.02	-6,680.09	234.84	-98.07	332.90	0.705 Level 1		
14,400.00	7,215.66	14,099.41	7,111.53	190.37	190.20	63.69	-2,850.61	-6,780.09	234.92	-103.01	337.93	0.695 Level 1		
14,500.00	7,215.25	14,200.59	7,110.99	193.17	193.03	63.66	-2,851.19	-6,880.09	235.00	-108.02	343.02	0.685 Level 1		
14,600.00	7,214.85	14,300.60	7,110.45	195.97	195.83	63.64	-2,851.78	-6,980.08	235.08	-113.00	348.08	0.675 Level 1		
14,700.00	7,214.44	14,400.60	7,109.91	198.77	198.63	63.61	-2,852.37	-7,080.08	235.16	-117.97	353.14	0.666 Level 1		
14,800.00	7,214.03	14,500.60	7,109.37	201.58	201.43	63.58	-2,852.96	-7,180.08	235.25	-122.95	358.20	0.657 Level 1		
14,900.00	7,213.63	14,600.60	7,108.83	204.38	204.24	63.55	-2,853.55	-7,280.07	235.33	-127.93	363.26	0.648 Level 1		
15,000.00	7,213.22	14,700.60	7,108.29	207.19	207.04	63.53	-2,854.13	-7,380.07	235.41	-132.90	368.32	0.639 Level 1		
15,100.00	7,212.82	14,800.60	7,107.75	210.00	209.85	63.50	-2,854.72	-7,480.07	235.49	-137.88	373.37	0.631 Level 1		
15,200.00	7,212.41	14,900.60	7,107.20	212.81	212.66	63.47	-2,855.31	-7,580.06	235.58	-142.86	378.43	0.623 Level 1		
15,300.00	7,212.01	15,000.60	7,106.66	215.62	215.47	63.45	-2,855.90	-7,680.06	235.66	-147.83	383.49	0.615 Level 1		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.00	7,211.60	15,100.60	7,106.12	218.43	218.28	63.42	-2,856.49	-7,780.06	235.74	-152.80	388.55	0.607	Level 1
15,500.00	7,211.19	15,200.60	7,105.58	221.25	221.09	63.39	-2,857.07	-7,880.05	235.82	-157.78	393.60	0.599	Level 1
15,600.00	7,210.79	15,300.60	7,105.04	224.06	223.90	63.37	-2,857.66	-7,980.05	235.91	-162.75	398.66	0.592	Level 1
15,700.00	7,210.38	15,400.60	7,104.50	226.88	226.72	63.34	-2,858.25	-8,080.05	235.99	-167.72	403.71	0.585	Level 1
15,794.94	7,210.00	15,494.35	7,103.99	229.55	229.36	63.32	-2,858.81	-8,174.99	236.07	-172.41	408.48	0.578	Level 1, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	3.00	0.00	3.28	0.01	0.46	480.15	3.89	480.17					
100.00	100.00	103.00	100.00	3.28	0.19	0.46	480.15	3.89	480.17	476.69	3.47	138.242		
200.00	200.00	203.00	200.00	3.34	0.63	0.46	480.15	3.89	480.17	476.20	3.96	121.117	CC, ES	
300.00	299.98	302.98	299.98	3.44	1.07	177.82	480.15	3.89	481.91	477.40	4.51	106.944		
400.00	399.84	402.84	399.84	3.59	1.50	177.84	480.15	3.89	487.14	482.04	5.10	95.583		
500.00	499.45	502.45	499.45	3.79	1.94	177.87	480.15	3.89	495.85	490.11	5.73	86.478		
600.00	598.70	586.49	583.48	4.03	2.31	177.89	481.44	3.72	509.55	503.19	6.36	80.150		
700.00	697.47	669.57	666.47	4.31	2.68	177.86	485.12	3.22	529.53	522.51	7.02	75.425		
800.00	795.62	750.85	747.53	4.64	3.04	177.81	491.03	2.41	555.67	547.97	7.70	72.123		
900.00	893.06	829.93	826.20	5.00	3.39	177.74	498.95	1.34	587.80	579.40	8.40	70.006		
1,000.00	989.64	906.43	902.06	5.40	3.73	177.64	508.67	0.01	625.71	616.62	9.09	68.863		
1,100.00	1,085.27	980.01	974.77	5.83	4.06	177.53	519.90	-1.51	669.17	659.41	9.77	68.510		
1,200.00	1,179.82	1,054.88	1,048.43	6.29	4.40	177.41	533.15	-3.32	717.87	707.42	10.45	68.692		
1,300.00	1,273.17	1,140.11	1,132.20	6.79	4.78	177.28	548.75	-5.44	770.16	758.97	11.18	68.857		
1,400.00	1,365.21	1,223.47	1,214.12	7.33	5.15	177.17	564.02	-7.52	825.39	813.46	11.93	69.209		
1,500.00	1,455.84	1,304.85	1,294.10	7.89	5.52	177.07	578.92	-9.54	883.49	870.82	12.67	69.741		
1,600.00	1,544.94	1,384.16	1,372.04	8.50	5.89	176.98	593.44	-11.52	944.39	930.98	13.41	70.430		
1,700.00	1,632.39	1,461.30	1,447.85	9.13	6.25	176.90	607.57	-13.44	1,008.02	993.87	14.15	71.258		
1,800.00	1,718.11	1,536.18	1,521.44	9.80	6.60	176.82	621.28	-15.31	1,074.29	1,059.42	14.88	72.212		
1,900.00	1,802.44	1,609.28	1,593.29	10.49	6.94	176.81	634.67	-17.13	1,142.52	1,126.92	15.60	73.234		
2,000.00	1,886.68	1,682.28	1,665.03	11.20	7.28	176.83	648.04	-18.95	1,210.87	1,194.55	16.32	74.191		
2,100.00	1,970.92	1,755.28	1,736.77	11.93	7.62	176.85	661.40	-20.76	1,279.21	1,262.16	17.05	75.027		
2,200.00	2,055.17	1,828.28	1,808.51	12.66	7.96	176.87	674.77	-22.58	1,347.56	1,329.77	17.79	75.762		
2,300.00	2,139.41	1,901.28	1,880.25	13.40	8.31	176.88	688.14	-24.40	1,415.90	1,397.37	18.53	76.410		
2,400.00	2,223.66	1,974.28	1,951.99	14.14	8.65	176.90	701.51	-26.22	1,484.25	1,464.97	19.28	76.983		
2,500.00	2,307.90	2,047.28	2,023.73	14.89	9.00	176.91	714.88	-28.04	1,552.59	1,532.56	20.04	77.492		
2,600.00	2,392.14	2,120.28	2,095.48	15.65	9.34	176.93	728.24	-29.86	1,620.94	1,600.14	20.80	77.947		
2,700.00	2,476.39	2,206.73	2,167.22	16.41	9.75	176.94	741.61	-31.68	1,689.28	1,667.66	21.62	78.128		
2,800.00	2,560.63	2,266.27	2,238.96	17.17	10.03	176.95	754.98	-33.49	1,757.63	1,735.30	22.33	78.718		
2,900.00	2,644.88	2,339.27	2,310.70	17.93	10.38	176.96	768.35	-35.31	1,825.97	1,802.87	23.10	79.046		
3,000.00	2,729.12	2,412.27	2,382.44	18.70	10.72	176.97	781.71	-37.13	1,894.32	1,870.45	23.87	79.343		
3,100.00	2,813.36	2,485.27	2,454.18	19.47	11.07	176.97	795.08	-38.95	1,962.67	1,938.01	24.65	79.612		
3,200.00	2,897.61	2,558.27	2,525.93	20.25	11.41	176.98	808.45	-40.77	2,031.01	2,005.58	25.43	79.857		
3,300.00	2,981.85	2,631.27	2,597.67	21.02	11.76	176.99	821.82	-42.59	2,099.36	2,073.14	26.22	80.079		
3,400.00	3,066.10	2,704.27	2,669.41	21.80	12.11	177.00	835.19	-44.41	2,167.70	2,140.70	27.00	80.282		
3,500.00	3,150.34	2,777.27	2,741.15	22.58	12.45	177.00	848.55	-46.22	2,236.05	2,208.26	27.79	80.468		
3,600.00	3,234.58	2,850.27	2,812.89	23.35	12.80	177.01	861.92	-48.04	2,304.39	2,275.82	28.58	80.638		
3,700.00	3,318.83	2,923.26	2,884.63	24.13	13.15	177.01	875.29	-49.86	2,372.74	2,343.37	29.37	80.795		
3,800.00	3,403.07	3,003.74	2,956.38	24.92	13.53	177.02	888.66	-51.68	2,441.08	2,410.89	30.19	80.846		
3,900.00	3,487.32	3,069.26	3,028.12	25.70	13.84	177.02	902.02	-53.50	2,509.43	2,478.48	30.95	81.072		
4,000.00	3,571.56	3,142.26	3,099.86	26.48	14.19	177.03	915.39	-55.32	2,577.78	2,546.03	31.75	81.195		
4,100.00	3,655.80	3,215.26	3,171.60	27.27	14.53	177.03	928.76	-57.14	2,646.12	2,613.58	32.54	81.309		
4,200.00	3,740.05	3,288.26	3,243.34	28.05	14.88	177.04	942.13	-58.95	2,714.47	2,681.13	33.34	81.414		
4,300.00	3,824.29	3,361.26	3,315.08	28.84	15.23	177.04	955.50	-60.77	2,782.81	2,748.67	34.14	81.512		
4,400.00	3,908.54	3,434.26	3,386.82	29.62	15.58	177.05	968.86	-62.59	2,851.16	2,816.22	34.94	81.603		
4,500.00	3,992.78	3,507.26	3,458.57	30.41	15.92	177.05	982.23	-64.41	2,919.50	2,883.76	35.74	81.687		
4,600.00	4,077.03	3,580.26	3,530.31	31.20	16.27	177.05	995.60	-66.23	2,987.85	2,951.31	36.54	81.766		
4,700.00	4,161.27	3,653.25	3,602.05	31.98	16.62	177.06	1,008.97	-68.05	3,056.19	3,018.85	37.34	81.839		
4,800.00	4,245.51	3,726.25	3,673.79	32.77	16.97	177.06	1,022.33	-69.87	3,124.54	3,086.39	38.15	81.907		
4,900.00	4,329.76	3,800.75	3,745.53	33.56	17.32	177.06	1,035.70	-71.68	3,192.89	3,153.93	38.96	81.956		
5,000.00	4,414.00	3,872.25	3,817.27	34.35	17.66	177.07	1,049.07	-73.50	3,261.23	3,221.48	39.76	82.031		
5,100.00	4,498.25	3,945.25	3,889.02	35.14	18.01	177.07	1,062.44	-75.32	3,329.58	3,289.02	40.56	82.086		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,018.25	3,960.76	35.93	18.36	177.07	1,075.80	-77.14	3,397.92	3,356.55	41.37	82.139		
5,300.00	4,666.73	4,108.75	4,032.50	36.72	18.79	177.07	1,089.17	-78.96	3,466.27	3,424.01	42.26	82.029		
5,400.00	4,750.98	4,164.25	4,104.24	37.51	19.05	177.08	1,102.54	-80.78	3,534.61	3,491.63	42.98	82.233		
5,500.00	4,835.22	4,237.25	4,175.98	38.30	19.40	177.08	1,115.91	-82.60	3,602.96	3,559.17	43.79	82.276		
5,600.00	4,919.47	4,310.25	4,247.72	39.09	19.75	177.08	1,129.28	-84.41	3,671.31	3,626.71	44.60	82.316		
5,700.00	5,003.71	4,383.24	4,319.47	39.88	20.10	177.08	1,142.64	-86.23	3,739.65	3,694.24	45.41	82.353		
5,800.00	5,088.06	4,456.38	4,391.34	40.67	20.44	177.12	1,156.04	-88.05	3,807.86	3,761.64	46.22	82.386		
5,900.00	5,173.83	4,531.33	4,465.00	41.44	20.80	177.20	1,169.76	-89.92	3,874.05	3,827.01	47.04	82.360		
6,000.00	5,261.34	4,608.54	4,540.88	42.18	21.17	177.28	1,183.90	-91.84	3,937.59	3,889.72	47.87	82.261		
6,100.00	5,350.49	4,687.92	4,618.89	42.88	21.55	177.34	1,198.44	-93.82	3,998.40	3,949.69	48.71	82.094		
6,200.00	5,441.16	4,769.37	4,698.93	43.56	21.94	177.40	1,213.35	-95.85	4,056.40	4,006.85	49.55	81.864		
6,300.00	5,533.25	4,852.79	4,780.92	44.20	22.33	177.45	1,228.63	-97.93	4,111.54	4,061.13	50.40	81.576		
6,400.00	5,626.65	4,938.08	4,864.74	44.82	22.74	177.49	1,244.25	-100.05	4,163.72	4,112.47	51.25	81.237		
6,500.00	5,721.23	5,025.13	4,950.30	45.40	23.16	177.52	1,260.19	-102.22	4,212.91	4,160.80	52.11	80.850		
6,600.00	5,816.89	5,113.85	5,037.49	45.94	23.58	177.55	1,276.43	-104.43	4,259.03	4,206.07	52.96	80.420		
6,700.00	5,913.51	5,204.12	5,126.20	46.45	24.01	177.57	1,292.96	-106.68	4,302.02	4,248.22	53.81	79.952		
6,800.00	6,010.97	5,304.17	5,216.33	46.93	24.49	177.58	1,309.76	-108.97	4,341.85	4,287.16	54.69	79.391		
6,900.00	6,109.15	5,388.87	5,307.77	47.38	24.89	177.59	1,326.80	-111.28	4,378.45	4,322.96	55.49	78.912		
7,000.00	6,207.93	5,483.13	5,400.40	47.80	25.34	177.59	1,344.06	-113.63	4,411.78	4,355.47	56.31	78.346		
7,100.00	6,307.19	5,578.49	5,494.12	48.18	25.80	177.59	1,361.52	-116.01	4,441.81	4,384.69	57.13	77.754		
7,200.00	6,406.82	5,674.83	5,588.80	48.53	26.26	177.59	1,379.16	-118.41	4,468.50	4,410.57	57.93	77.136		
7,300.00	6,506.68	5,772.04	5,684.34	48.84	26.72	177.58	1,396.96	-120.83	4,491.81	4,433.09	58.72	76.496		
7,400.00	6,606.66	5,870.01	5,780.62	49.10	27.19	90.51	1,414.90	-123.27	4,511.72	4,452.24	59.48	75.854		
7,500.00	6,706.21	5,968.04	5,876.96	49.35	27.66	88.91	1,432.85	-125.71	4,530.03	4,469.80	60.23	75.211		
7,600.00	6,803.22	6,063.95	5,971.22	49.59	28.11	87.52	1,450.42	-128.10	4,548.10	4,487.14	60.96	74.609		
7,700.00	6,895.32	6,155.38	6,061.07	49.82	28.55	86.34	1,467.16	-130.38	4,565.70	4,504.05	61.65	74.058		
7,800.00	6,980.23	6,240.08	6,144.31	50.03	28.95	85.34	1,482.67	-132.49	4,582.73	4,520.42	62.30	73.554		
7,900.00	7,055.85	6,315.95	6,218.88	50.21	29.32	84.45	1,496.57	-134.38	4,599.21	4,536.27	62.94	73.072		
8,000.00	7,120.34	6,381.14	6,282.95	50.36	29.63	83.61	1,508.50	-136.00	4,615.22	4,551.62	63.59	72.573		
8,100.00	7,172.10	6,434.04	6,334.94	50.47	29.88	82.76	1,518.19	-137.32	4,630.85	4,566.54	64.30	72.015		
8,200.00	7,209.85	6,473.35	6,373.57	50.55	30.07	81.82	1,525.39	-138.30	4,646.16	4,581.06	65.10	71.367		
8,300.00	7,232.68	6,501.91	6,397.88	50.61	30.20	80.77	1,529.92	-138.92	4,661.14	4,595.12	66.02	70.607		
8,400.00	7,240.00	6,507.66	6,407.29	50.65	30.23	79.60	1,531.67	-139.16	4,675.65	4,608.68	66.97	69.817		
8,500.00	7,239.60	6,509.64	6,409.23	50.69	30.24	79.63	1,532.03	-139.21	4,690.91	4,622.86	68.05	68.930		
8,600.00	7,239.19	8,011.80	7,257.86	50.75	41.30	90.23	1,675.99	-1,057.65	4,702.34	4,617.70	84.64	55.559		
8,700.00	7,238.78	8,111.80	7,257.44	50.85	42.96	90.23	1,674.33	-1,157.63	4,701.29	4,613.55	87.74	53.581		
8,800.00	7,238.38	8,211.79	7,257.02	51.02	44.75	90.23	1,672.67	-1,257.61	4,700.24	4,609.15	91.10	51.596		
8,900.00	7,237.97	8,311.78	7,256.60	51.32	46.64	90.23	1,671.01	-1,357.59	4,699.20	4,604.52	94.68	49.634		
9,000.00	7,237.57	8,411.78	7,256.18	51.95	48.63	90.23	1,669.35	-1,457.57	4,698.15	4,599.69	98.46	47.717		
9,100.00	7,237.16	8,511.77	7,255.76	53.10	50.70	90.23	1,667.69	-1,557.55	4,697.10	4,594.68	102.42	45.862		
9,200.00	7,236.76	8,611.77	7,255.34	54.69	52.85	90.23	1,666.03	-1,657.53	4,696.06	4,589.52	106.54	44.079		
9,300.00	7,236.35	8,711.76	7,254.92	56.53	55.06	90.23	1,664.38	-1,757.51	4,695.01	4,584.21	110.80	42.375		
9,400.00	7,235.94	8,811.76	7,254.50	58.53	57.32	90.23	1,662.72	-1,857.49	4,693.97	4,578.78	115.18	40.752		
9,500.00	7,235.54	8,911.75	7,254.08	60.62	59.64	90.23	1,661.06	-1,957.47	4,692.92	4,573.24	119.68	39.212		
9,600.00	7,235.13	9,011.75	7,253.66	62.80	62.00	90.23	1,659.40	-2,057.45	4,691.87	4,567.60	124.28	37.753		
9,700.00	7,234.73	9,111.74	7,253.24	65.03	64.41	90.23	1,657.74	-2,157.42	4,690.83	4,561.86	128.96	36.373		
9,800.00	7,234.32	9,211.74	7,252.82	67.32	66.84	90.23	1,656.08	-2,257.40	4,689.78	4,556.05	133.73	35.069		
9,900.00	7,233.92	9,311.73	7,252.40	69.66	69.31	90.23	1,654.42	-2,357.38	4,688.73	4,550.17	138.57	33.837		
10,000.00	7,233.51	9,411.72	7,251.98	72.03	71.81	90.23	1,652.77	-2,457.36	4,687.69	4,544.22	143.47	32.674		
10,100.00	7,233.10	9,511.72	7,251.56	74.45	74.34	90.23	1,651.11	-2,557.34	4,686.64	4,538.21	148.43	31.575		
10,200.00	7,232.70	9,611.71	7,251.14	76.89	76.88	90.23	1,649.45	-2,657.32	4,685.59	4,532.16	153.44	30.537		
10,300.00	7,232.29	9,711.71	7,250.72	79.36	79.45	90.23	1,647.79	-2,757.30	4,684.55	4,526.05	158.50	29.556		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	9,811.70	7,250.30	81.86	82.04	90.23	1,646.13	-2,857.28	4,683.50	4,519.90	163.60	28.627		
10,500.00	7,231.48	9,911.70	7,249.88	84.38	84.65	90.23	1,644.47	-2,957.26	4,682.46	4,513.71	168.74	27.749		
10,600.00	7,231.08	10,011.69	7,249.46	86.93	87.27	90.23	1,642.81	-3,057.24	4,681.41	4,507.49	173.92	26.917		
10,700.00	7,230.67	10,111.69	7,249.03	89.49	89.90	90.23	1,641.16	-3,157.22	4,680.36	4,501.23	179.13	26.128		
10,800.00	7,230.26	10,211.68	7,248.61	92.07	92.55	90.23	1,639.50	-3,257.20	4,679.32	4,494.95	184.37	25.380		
10,900.00	7,229.86	10,311.68	7,248.19	94.67	95.21	90.23	1,637.84	-3,357.18	4,678.27	4,488.63	189.64	24.670		
11,000.00	7,229.45	10,411.67	7,247.77	97.28	97.88	90.23	1,636.18	-3,457.16	4,677.22	4,482.30	194.93	23.994		
11,100.00	7,229.05	10,511.66	7,247.35	99.90	100.56	90.23	1,634.52	-3,557.14	4,676.18	4,475.93	200.25	23.352		
11,200.00	7,228.64	10,611.66	7,246.93	102.54	103.25	90.23	1,632.86	-3,657.12	4,675.13	4,469.55	205.58	22.741		
11,300.00	7,228.24	10,711.65	7,246.51	105.19	105.95	90.23	1,631.20	-3,757.10	4,674.09	4,463.15	210.94	22.159		
11,400.00	7,227.83	10,811.65	7,246.09	107.85	108.66	90.23	1,629.55	-3,857.08	4,673.04	4,456.73	216.31	21.603		
11,500.00	7,227.42	10,911.64	7,245.67	110.52	111.37	90.23	1,627.89	-3,957.06	4,671.99	4,450.29	221.70	21.073		
11,600.00	7,227.02	11,011.64	7,245.25	113.20	114.09	90.23	1,626.23	-4,057.04	4,670.95	4,443.83	227.11	20.567		
11,700.00	7,226.61	11,111.63	7,244.83	115.89	116.82	90.23	1,624.57	-4,157.02	4,669.90	4,437.37	232.53	20.083		
11,800.00	7,226.21	11,211.63	7,244.41	118.59	119.55	90.23	1,622.91	-4,257.00	4,668.85	4,430.88	237.97	19.620		
11,900.00	7,225.80	11,311.62	7,243.99	121.29	122.29	90.23	1,621.25	-4,356.98	4,667.81	4,424.39	243.42	19.176		
12,000.00	7,225.40	11,411.62	7,243.57	124.00	125.03	90.23	1,619.59	-4,456.96	4,666.76	4,417.88	248.88	18.751		
12,100.00	7,224.99	11,511.61	7,243.15	126.72	127.78	90.23	1,617.94	-4,556.94	4,665.72	4,411.37	254.35	18.344		
12,200.00	7,224.58	11,611.60	7,242.73	129.44	130.54	90.23	1,616.28	-4,656.92	4,664.67	4,404.84	259.83	17.953		
12,300.00	7,224.18	11,711.60	7,242.31	132.17	133.30	90.23	1,614.62	-4,756.90	4,663.62	4,398.30	265.32	17.577		
12,400.00	7,223.77	11,811.59	7,241.89	134.91	136.06	90.23	1,612.96	-4,856.88	4,662.58	4,391.75	270.82	17.216		
12,500.00	7,223.37	11,911.59	7,241.47	137.65	138.82	90.22	1,611.30	-4,956.86	4,661.53	4,385.20	276.33	16.869		
12,600.00	7,222.96	12,011.58	7,241.05	140.39	141.59	90.22	1,609.64	-5,056.84	4,660.48	4,378.63	281.85	16.535		
12,700.00	7,222.55	12,111.58	7,240.63	143.14	144.37	90.22	1,607.99	-5,156.82	4,659.44	4,372.06	287.38	16.214		
12,800.00	7,222.15	12,211.57	7,240.21	145.89	147.14	90.22	1,606.33	-5,256.80	4,658.39	4,365.48	292.91	15.904		
12,900.00	7,221.74	12,311.57	7,239.79	148.65	149.92	90.22	1,604.67	-5,356.78	4,657.35	4,358.90	298.45	15.605		
13,000.00	7,221.34	12,411.56	7,239.37	151.41	152.70	90.22	1,603.01	-5,456.76	4,656.30	4,352.30	303.99	15.317		
13,100.00	7,220.93	12,511.56	7,238.95	154.18	155.49	90.22	1,601.35	-5,556.74	4,655.25	4,345.71	309.55	15.039		
13,200.00	7,220.53	12,611.55	7,238.53	156.94	158.27	90.22	1,599.69	-5,656.72	4,654.21	4,339.10	315.10	14.770		
13,300.00	7,220.12	12,711.54	7,238.11	159.72	161.06	90.22	1,598.03	-5,756.70	4,653.16	4,332.49	320.67	14.511		
13,400.00	7,219.71	12,811.54	7,237.69	162.49	163.85	90.22	1,596.38	-5,856.68	4,652.11	4,325.88	326.24	14.260		
13,500.00	7,219.31	12,911.53	7,237.27	165.27	166.65	90.22	1,594.72	-5,956.66	4,651.07	4,319.26	331.81	14.017		
13,600.00	7,218.90	13,011.53	7,236.85	168.05	169.44	90.22	1,593.06	-6,056.64	4,650.02	4,312.63	337.39	13.782		
13,700.00	7,218.50	13,111.52	7,236.43	170.83	172.24	90.22	1,591.40	-6,156.62	4,648.98	4,306.01	342.97	13.555		
13,800.00	7,218.09	13,211.52	7,236.01	173.61	175.04	90.22	1,589.74	-6,256.60	4,647.93	4,299.37	348.56	13.335		
13,900.00	7,217.69	13,311.51	7,235.59	176.40	177.84	90.22	1,588.08	-6,356.58	4,646.88	4,292.74	354.15	13.121		
14,000.00	7,217.28	13,411.51	7,235.17	179.19	180.64	90.22	1,586.42	-6,456.56	4,645.84	4,286.09	359.74	12.914		
14,100.00	7,216.87	13,511.50	7,234.75	181.98	183.45	90.22	1,584.77	-6,556.54	4,644.79	4,279.45	365.34	12.714		
14,200.00	7,216.47	13,611.49	7,234.32	184.78	186.25	90.22	1,583.11	-6,656.52	4,643.74	4,272.80	370.94	12.519		
14,300.00	7,216.06	13,711.49	7,233.90	187.57	189.06	90.22	1,581.45	-6,756.50	4,642.70	4,266.15	376.55	12.330		
14,400.00	7,215.66	13,811.48	7,233.48	190.37	191.87	90.22	1,579.79	-6,856.48	4,641.65	4,259.50	382.16	12.146		
14,500.00	7,215.25	13,911.48	7,233.06	193.17	194.68	90.22	1,578.13	-6,956.46	4,640.61	4,252.84	387.77	11.968		
14,600.00	7,214.85	14,011.47	7,232.64	195.97	197.49	90.22	1,576.47	-7,056.44	4,639.56	4,246.18	393.38	11.794		
14,700.00	7,214.44	14,111.47	7,232.22	198.77	200.31	90.22	1,574.81	-7,156.42	4,638.51	4,239.51	399.00	11.625		
14,800.00	7,214.03	14,211.46	7,231.80	201.58	203.12	90.22	1,573.16	-7,256.40	4,637.47	4,232.85	404.62	11.461		
14,900.00	7,213.63	14,311.46	7,231.38	204.38	205.93	90.22	1,571.50	-7,356.38	4,636.42	4,226.18	410.24	11.302		
15,000.00	7,213.22	14,411.45	7,230.96	207.19	208.75	90.22	1,569.84	-7,456.36	4,635.37	4,219.51	415.87	11.146		
15,100.00	7,212.82	14,511.45	7,230.54	210.00	211.57	90.22	1,568.18	-7,556.34	4,634.33	4,212.83	421.49	10.995		
15,200.00	7,212.41	14,611.44	7,230.12	212.81	214.39	90.22	1,566.52	-7,656.32	4,633.28	4,206.16	427.12	10.848		
15,300.00	7,212.01	14,711.43	7,229.70	215.62	217.21	90.22	1,564.86	-7,756.30	4,632.24	4,199.48	432.76	10.704		
15,400.00	7,211.60	14,811.43	7,229.28	218.43	220.03	90.22	1,563.20	-7,856.28	4,631.19	4,192.80	438.39	10.564		
15,500.00	7,211.19	14,911.42	7,228.86	221.25	222.85	90.22	1,561.55	-7,956.26	4,630.14	4,186.12	444.03	10.428		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4C-16-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,600.00	7,210.79	15,011.42	7,228.44	224.06	225.67	90.22	1,559.89	-8,056.24	4,629.10	4,179.43	449.66	10.295	
15,700.00	7,210.38	15,111.41	7,228.02	226.88	228.49	90.22	1,558.23	-8,156.22	4,628.05	4,172.75	455.30	10.165	
15,753.22	7,210.17	15,116.21	7,228.00	228.38	228.63	90.22	1,558.15	-8,161.02	4,627.75	4,170.80	456.94	10.128	
15,794.94	7,210.00	15,116.21	7,228.00	229.55	228.63	90.22	1,558.15	-8,161.02	4,627.93	4,169.85	458.09	10.103 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.47	440.08	3.62	440.10					
100.00	100.00	102.00	100.00	3.28	3.29	0.47	440.08	3.62	440.10	433.53	6.57	66.987		
200.00	200.00	202.00	200.00	3.34	3.34	0.47	440.08	3.62	440.10	433.42	6.68	65.925 CC, ES		
300.00	299.98	301.98	299.98	3.44	3.45	177.83	440.08	3.62	441.84	434.95	6.89	64.150		
400.00	399.84	401.84	399.84	3.59	3.61	177.85	440.08	3.62	447.07	439.87	7.20	62.102		
500.00	499.45	501.45	499.45	3.79	3.81	177.89	440.08	3.62	455.78	448.18	7.60	59.957		
600.00	598.70	600.70	598.70	4.03	4.05	177.93	440.08	3.62	467.96	459.87	8.08	57.897		
700.00	697.47	695.45	683.44	4.31	4.28	177.94	441.32	3.32	485.03	476.43	8.60	56.429		
800.00	795.62	768.70	766.60	4.64	4.52	177.88	444.91	2.46	508.30	499.15	9.15	55.527		
900.00	893.06	849.91	847.60	5.00	4.78	177.78	450.67	1.08	537.63	527.89	9.74	55.185		
1,000.00	989.64	939.10	925.05	5.40	5.07	177.63	458.29	-0.75	572.82	562.44	10.38	55.176		
1,100.00	1,085.27	1,019.48	1,016.15	5.83	5.35	177.44	468.65	-3.23	612.63	601.62	11.01	55.632		
1,200.00	1,179.82	1,109.76	1,105.81	6.29	5.67	177.29	478.84	-5.67	655.62	643.92	11.70	56.035		
1,300.00	1,273.17	1,201.52	1,193.93	6.79	6.00	177.15	488.86	-8.07	701.73	689.31	12.42	56.505		
1,400.00	1,365.21	1,285.54	1,280.41	7.33	6.32	177.04	498.69	-10.42	750.91	737.78	13.13	57.199		
1,500.00	1,455.84	1,370.84	1,365.13	7.89	6.64	176.94	508.33	-12.73	803.09	789.23	13.86	57.951		
1,600.00	1,544.94	1,454.27	1,448.00	8.50	6.97	176.85	517.75	-14.99	858.21	843.62	14.59	58.805		
1,700.00	1,632.39	1,535.73	1,528.90	9.13	7.29	176.77	526.95	-17.19	916.21	900.88	15.33	59.752		
1,800.00	1,718.11	1,615.12	1,607.75	9.80	7.61	176.70	535.91	-19.34	977.01	960.94	16.07	60.787		
1,900.00	1,802.44	1,692.88	1,684.99	10.49	7.93	176.69	544.70	-21.44	1,039.88	1,023.07	16.81	61.860		
2,000.00	1,886.68	1,770.54	1,762.13	11.20	8.25	176.71	553.47	-23.54	1,102.88	1,085.33	17.55	62.854		
2,100.00	1,970.92	1,848.20	1,839.26	11.93	8.57	176.73	562.24	-25.64	1,165.87	1,147.58	18.29	63.731		
2,200.00	2,055.17	1,925.87	1,916.40	12.66	8.89	176.75	571.01	-27.75	1,228.87	1,209.82	19.05	64.508		
2,300.00	2,139.41	2,003.53	1,993.54	13.40	9.22	176.77	579.78	-29.85	1,291.86	1,272.05	19.81	65.198		
2,400.00	2,223.66	2,081.19	2,070.68	14.14	9.54	176.78	588.55	-31.95	1,354.86	1,334.27	20.59	65.813		
2,500.00	2,307.90	2,158.86	2,147.81	14.89	9.87	176.79	597.32	-34.05	1,417.85	1,396.49	21.36	66.364		
2,600.00	2,392.14	2,236.52	2,224.95	15.65	10.20	176.80	606.09	-36.15	1,480.85	1,458.70	22.15	66.858		
2,700.00	2,476.39	2,314.18	2,302.09	16.41	10.54	176.82	614.86	-38.25	1,543.84	1,520.90	22.94	67.303		
2,800.00	2,560.63	2,408.15	2,379.23	17.17	10.94	176.82	623.63	-40.35	1,606.84	1,583.03	23.80	67.507		
2,900.00	2,644.88	2,469.51	2,456.37	17.93	11.20	176.83	632.40	-42.45	1,669.83	1,645.30	24.53	68.071		
3,000.00	2,729.12	2,547.17	2,533.50	18.70	11.54	176.84	641.17	-44.55	1,732.83	1,707.49	25.33	68.402		
3,100.00	2,813.36	2,624.84	2,610.64	19.47	11.88	176.85	649.94	-46.65	1,795.82	1,769.68	26.14	68.704		
3,200.00	2,897.61	2,702.50	2,687.78	20.25	12.21	176.86	658.71	-48.75	1,858.82	1,831.87	26.95	68.980		
3,300.00	2,981.85	2,780.16	2,764.92	21.02	12.55	176.86	667.48	-50.86	1,921.81	1,894.05	27.76	69.233		
3,400.00	3,066.10	2,857.83	2,842.06	21.80	12.89	176.87	676.26	-52.96	1,984.81	1,956.23	28.57	69.465		
3,500.00	3,150.34	2,935.49	2,919.19	22.58	13.23	176.88	685.03	-55.06	2,047.80	2,018.41	29.39	69.679		
3,600.00	3,234.58	3,013.15	2,996.33	23.35	13.57	176.88	693.80	-57.16	2,110.80	2,080.59	30.21	69.876		
3,700.00	3,318.83	3,109.18	3,073.47	24.13	13.99	176.89	702.57	-59.26	2,173.79	2,142.68	31.11	69.877		
3,800.00	3,403.07	3,168.48	3,150.61	24.92	14.25	176.89	711.34	-61.36	2,236.79	2,204.94	31.85	70.226		
3,900.00	3,487.32	3,246.14	3,227.74	25.70	14.59	176.90	720.11	-63.46	2,299.78	2,267.11	32.68	70.382		
4,000.00	3,571.56	3,323.81	3,304.88	26.48	14.94	176.90	728.88	-65.56	2,362.78	2,329.28	33.50	70.527		
4,100.00	3,655.80	3,401.47	3,382.02	27.27	15.28	176.91	737.65	-67.66	2,425.77	2,391.44	34.33	70.662		
4,200.00	3,740.05	3,479.13	3,459.16	28.05	15.62	176.91	746.42	-69.76	2,488.77	2,453.61	35.16	70.788		
4,300.00	3,824.29	3,556.80	3,536.30	28.84	15.96	176.91	755.19	-71.86	2,551.76	2,515.78	35.99	70.905		
4,400.00	3,908.54	3,634.46	3,613.43	29.62	16.31	176.92	763.96	-73.96	2,614.76	2,577.94	36.82	71.015		
4,500.00	3,992.78	3,712.12	3,690.57	30.41	16.65	176.92	772.73	-76.07	2,677.75	2,640.10	37.65	71.117		
4,600.00	4,077.03	3,789.79	3,767.71	31.20	17.00	176.92	781.50	-78.17	2,740.75	2,702.26	38.49	71.213		
4,700.00	4,161.27	3,867.45	3,844.85	31.98	17.34	176.93	790.27	-80.27	2,803.74	2,764.42	39.32	71.303		
4,800.00	4,245.51	3,945.11	3,921.99	32.77	17.69	176.93	799.04	-82.37	2,866.74	2,826.58	40.16	71.388		
4,900.00	4,329.76	4,022.78	3,999.12	33.56	18.03	176.93	807.81	-84.47	2,929.74	2,888.74	40.99	71.467		
5,000.00	4,414.00	4,100.44	4,076.26	34.35	18.38	176.94	816.59	-86.57	2,992.73	2,950.90	41.83	71.542		
5,100.00	4,498.25	4,178.10	4,153.40	35.14	18.72	176.94	825.36	-88.67	3,055.73	3,013.06	42.67	71.613		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,255.77	4,230.54	35.93	19.07	176.94	834.13	-90.77	3,118.72	3,075.21	43.51	71.679		
5,300.00	4,666.73	4,333.43	4,307.67	36.72	19.41	176.94	842.90	-92.87	3,181.72	3,137.37	44.35	71.741		
5,400.00	4,750.98	4,411.09	4,384.81	37.51	19.76	176.95	851.67	-94.97	3,244.71	3,199.52	45.19	71.800		
5,500.00	4,835.22	4,488.76	4,461.95	38.30	20.11	176.95	860.44	-97.07	3,307.71	3,261.67	46.03	71.856		
5,600.00	4,919.47	4,566.42	4,539.09	39.09	20.45	176.95	869.21	-99.18	3,370.70	3,323.83	46.87	71.909		
5,700.00	5,003.71	4,644.08	4,616.23	39.88	20.80	176.95	877.98	-101.28	3,433.70	3,385.98	47.72	71.958		
5,800.00	5,088.06	4,721.87	4,693.48	40.67	21.15	176.98	886.76	-103.38	3,496.54	3,447.98	48.56	72.003		
5,900.00	5,173.83	4,801.32	4,772.40	41.44	21.50	177.06	895.74	-105.53	3,557.25	3,507.84	49.41	71.994		
6,000.00	5,261.34	4,882.85	4,853.38	42.18	21.87	177.13	904.94	-107.74	3,615.16	3,564.89	50.27	71.919		
6,100.00	5,350.49	4,966.34	4,936.30	42.88	22.24	177.19	914.37	-109.99	3,670.18	3,619.05	51.13	71.781		
6,200.00	5,441.16	5,051.70	5,021.08	43.56	22.62	177.24	924.01	-112.30	3,722.27	3,670.27	52.00	71.586		
6,300.00	5,533.25	5,138.82	5,107.61	44.20	23.01	177.28	933.85	-114.66	3,771.34	3,718.48	52.87	71.337		
6,400.00	5,626.65	5,227.59	5,195.79	44.82	23.41	177.31	943.88	-117.06	3,817.35	3,763.62	53.73	71.041		
6,500.00	5,721.23	5,317.92	5,285.50	45.40	23.82	177.34	954.08	-119.50	3,860.24	3,805.64	54.60	70.700		
6,600.00	5,816.89	5,409.68	5,376.64	45.94	24.23	177.35	964.44	-121.99	3,899.95	3,844.49	55.46	70.319		
6,700.00	5,913.51	5,502.77	5,469.10	46.45	24.65	177.37	974.95	-124.50	3,936.44	3,880.12	56.32	69.900		
6,800.00	6,010.97	5,602.93	5,562.77	46.93	25.09	177.38	985.60	-127.06	3,969.66	3,912.47	57.19	69.415		
6,900.00	6,109.15	5,707.53	5,657.52	47.38	25.56	177.38	996.38	-129.64	3,999.57	3,941.51	58.06	68.882		
7,000.00	6,207.93	5,788.85	5,753.25	47.80	25.93	177.37	1,007.26	-132.24	4,026.14	3,967.32	58.82	68.448		
7,100.00	6,307.19	5,886.10	5,849.84	48.18	26.37	177.37	1,018.24	-134.87	4,049.34	3,989.71	59.63	67.907		
7,200.00	6,406.82	5,984.09	5,947.16	48.53	26.81	177.35	1,029.31	-137.52	4,069.13	4,008.70	60.43	67.341		
7,300.00	6,506.68	6,082.70	6,045.11	48.84	27.25	177.33	1,040.45	-140.19	4,085.49	4,024.29	61.21	66.750		
7,400.00	6,606.66	6,181.83	6,143.57	49.10	27.69	90.27	1,051.64	-142.87	4,098.41	4,036.46	61.95	66.154		
7,500.00	6,706.21	6,280.92	6,241.99	49.35	28.14	89.33	1,062.83	-145.55	4,109.71	4,047.02	62.69	65.556		
7,600.00	6,803.22	6,378.38	6,338.79	49.59	28.58	88.61	1,073.84	-148.22	4,120.88	4,057.47	63.41	64.987		
7,700.00	6,895.32	6,485.07	6,443.92	49.82	29.06	88.04	1,085.72	-160.96	4,131.71	4,067.47	64.23	64.323		
7,800.00	6,980.23	6,597.62	6,550.90	50.03	29.56	87.53	1,097.68	-193.32	4,141.86	4,076.73	65.13	63.592		
7,900.00	7,055.85	6,716.51	6,655.90	50.21	30.07	87.10	1,109.25	-247.49	4,151.04	4,084.90	66.13	62.768		
8,000.00	7,120.34	6,841.88	6,753.77	50.36	30.66	86.74	1,119.86	-324.80	4,158.96	4,091.66	67.30	61.799		
8,100.00	7,172.10	6,973.34	6,838.18	50.47	31.43	86.45	1,128.77	-424.87	4,165.35	4,096.62	68.73	60.602		
8,200.00	7,209.85	7,109.75	6,902.30	50.55	32.47	86.23	1,135.23	-544.80	4,169.99	4,099.44	70.54	59.112		
8,300.00	7,232.68	7,249.25	6,940.15	50.61	33.87	86.08	1,138.59	-678.74	4,172.69	4,099.87	72.82	57.302		
8,400.00	7,240.00	7,380.43	6,948.93	50.65	35.45	86.00	1,138.67	-809.42	4,173.38	4,098.02	75.36	55.379		
8,500.00	7,239.60	7,480.43	6,948.63	50.69	36.84	86.00	1,137.94	-909.42	4,173.25	4,095.39	77.86	53.599		
8,600.00	7,239.19	7,580.43	6,948.34	50.75	38.39	86.00	1,137.20	-1,009.42	4,173.12	4,092.44	80.68	51.726		
8,700.00	7,238.78	7,680.43	6,948.04	50.85	40.08	86.01	1,136.46	-1,109.42	4,172.99	4,089.20	83.79	49.803		
8,800.00	7,238.38	7,780.43	6,947.74	51.02	41.89	86.01	1,135.72	-1,209.41	4,172.85	4,085.69	87.16	47.875		
8,900.00	7,237.97	7,880.43	6,947.44	51.32	43.82	86.01	1,134.99	-1,309.41	4,172.72	4,081.95	90.77	45.972		
9,000.00	7,237.57	7,980.43	6,947.14	51.95	45.84	86.01	1,134.25	-1,409.41	4,172.59	4,078.01	94.58	44.118		
9,100.00	7,237.16	8,080.43	6,946.84	53.10	47.95	86.01	1,133.51	-1,509.40	4,172.46	4,073.88	98.57	42.329		
9,200.00	7,236.76	8,180.43	6,946.55	54.69	50.13	86.01	1,132.77	-1,609.40	4,172.32	4,069.60	102.73	40.616		
9,300.00	7,236.35	8,280.43	6,946.25	56.53	52.38	86.01	1,132.03	-1,709.40	4,172.19	4,065.17	107.02	38.984		
9,400.00	7,235.94	8,380.43	6,945.95	58.53	54.68	86.01	1,131.30	-1,809.39	4,172.06	4,060.61	111.45	37.435		
9,500.00	7,235.54	8,480.43	6,945.65	60.62	57.04	86.02	1,130.56	-1,909.39	4,171.93	4,055.94	115.98	35.970		
9,600.00	7,235.13	8,580.43	6,945.35	62.80	59.44	86.02	1,129.82	-2,009.39	4,171.79	4,051.18	120.62	34.587		
9,700.00	7,234.73	8,680.43	6,945.05	65.03	61.88	86.02	1,129.08	-2,109.38	4,171.66	4,046.32	125.34	33.283		
9,800.00	7,234.32	8,780.43	6,944.76	67.32	64.35	86.02	1,128.35	-2,209.38	4,171.53	4,041.39	130.14	32.054		
9,900.00	7,233.92	8,880.43	6,944.46	69.66	66.85	86.02	1,127.61	-2,309.38	4,171.40	4,036.39	135.01	30.897		
10,000.00	7,233.51	8,980.42	6,944.16	72.03	69.39	86.02	1,126.87	-2,409.37	4,171.26	4,031.32	139.94	29.806		
10,100.00	7,233.10	9,080.42	6,943.86	74.45	71.94	86.02	1,126.13	-2,509.37	4,171.13	4,026.20	144.94	28.779		
10,200.00	7,232.70	9,180.42	6,943.56	76.89	74.52	86.03	1,125.39	-2,609.37	4,171.00	4,021.02	149.98	27.811		
10,300.00	7,232.29	9,280.42	6,943.26	79.36	77.12	86.03	1,124.66	-2,709.36	4,170.87	4,015.80	155.07	26.898		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	9,380.42	6,942.97	81.86	79.73	86.03	1,123.92	-2,809.36	4,170.73	4,010.54	160.19	26.035		
10,500.00	7,231.48	9,480.42	6,942.67	84.38	82.36	86.03	1,123.18	-2,909.36	4,170.60	4,005.24	165.36	25.221		
10,600.00	7,231.08	9,580.42	6,942.37	86.93	85.01	86.03	1,122.44	-3,009.35	4,170.47	3,999.91	170.56	24.451		
10,700.00	7,230.67	9,680.42	6,942.07	89.49	87.67	86.03	1,121.71	-3,109.35	4,170.34	3,994.54	175.80	23.723		
10,800.00	7,230.26	9,780.42	6,941.77	92.07	90.34	86.03	1,120.97	-3,209.35	4,170.20	3,989.15	181.06	23.033		
10,900.00	7,229.86	9,880.42	6,941.47	94.67	93.02	86.03	1,120.23	-3,309.34	4,170.07	3,983.73	186.34	22.378		
11,000.00	7,229.45	9,980.42	6,941.18	97.28	95.72	86.04	1,119.49	-3,409.34	4,169.94	3,978.28	191.66	21.757		
11,100.00	7,229.05	10,080.42	6,940.88	99.90	98.42	86.04	1,118.75	-3,509.34	4,169.81	3,972.82	196.99	21.168		
11,200.00	7,228.64	10,180.42	6,940.58	102.54	101.13	86.04	1,118.02	-3,609.33	4,169.67	3,967.33	202.34	20.607		
11,300.00	7,228.24	10,280.42	6,940.28	105.19	103.85	86.04	1,117.28	-3,709.33	4,169.54	3,961.83	207.72	20.073		
11,400.00	7,227.83	10,380.42	6,939.98	107.85	106.57	86.04	1,116.54	-3,809.33	4,169.41	3,956.30	213.11	19.565		
11,500.00	7,227.42	10,480.42	6,939.68	110.52	109.31	86.04	1,115.80	-3,909.32	4,169.28	3,950.77	218.51	19.080		
11,600.00	7,227.02	10,580.42	6,939.39	113.20	112.05	86.04	1,115.07	-4,009.32	4,169.15	3,945.21	223.93	18.618		
11,700.00	7,226.61	10,680.42	6,939.09	115.89	114.79	86.05	1,114.33	-4,109.32	4,169.01	3,939.64	229.37	18.176		
11,800.00	7,226.21	10,780.42	6,938.79	118.59	117.54	86.05	1,113.59	-4,209.31	4,168.88	3,934.06	234.82	17.754		
11,900.00	7,225.80	10,880.42	6,938.49	121.29	120.30	86.05	1,112.85	-4,309.31	4,168.75	3,928.47	240.28	17.350		
12,000.00	7,225.40	10,980.42	6,938.19	124.00	123.06	86.05	1,112.11	-4,409.31	4,168.62	3,922.87	245.75	16.963		
12,100.00	7,224.99	11,080.42	6,937.89	126.72	125.82	86.05	1,111.38	-4,509.30	4,168.48	3,917.25	251.23	16.592		
12,200.00	7,224.58	11,180.42	6,937.59	129.44	128.59	86.05	1,110.64	-4,609.30	4,168.35	3,911.63	256.72	16.237		
12,300.00	7,224.18	11,280.42	6,937.30	132.17	131.36	86.05	1,109.90	-4,709.30	4,168.22	3,906.00	262.22	15.896		
12,400.00	7,223.77	11,380.42	6,937.00	134.91	134.14	86.06	1,109.16	-4,809.29	4,168.09	3,900.36	267.73	15.568		
12,500.00	7,223.37	11,480.42	6,936.70	137.65	136.92	86.06	1,108.43	-4,909.29	4,167.95	3,894.71	273.25	15.253		
12,600.00	7,222.96	11,580.42	6,936.40	140.39	139.70	86.06	1,107.69	-5,009.29	4,167.82	3,889.05	278.77	14.951		
12,700.00	7,222.55	11,680.42	6,936.10	143.14	142.49	86.06	1,106.95	-5,109.28	4,167.69	3,883.38	284.30	14.659		
12,800.00	7,222.15	11,780.42	6,935.80	145.89	145.27	86.06	1,106.21	-5,209.28	4,167.56	3,877.71	289.84	14.379		
12,900.00	7,221.74	11,880.42	6,935.51	148.65	148.07	86.06	1,105.47	-5,309.28	4,167.42	3,872.04	295.39	14.108		
13,000.00	7,221.34	11,980.42	6,935.21	151.41	150.86	86.06	1,104.74	-5,409.27	4,167.29	3,866.35	300.94	13.848		
13,100.00	7,220.93	12,080.42	6,934.91	154.18	153.66	86.06	1,104.00	-5,509.27	4,167.16	3,860.66	306.50	13.596		
13,200.00	7,220.53	12,180.42	6,934.61	156.94	156.45	86.07	1,103.26	-5,609.27	4,167.03	3,854.97	312.06	13.353		
13,300.00	7,220.12	12,280.42	6,934.31	159.72	159.25	86.07	1,102.52	-5,709.26	4,166.89	3,849.27	317.63	13.119		
13,400.00	7,219.71	12,380.42	6,934.01	162.49	162.06	86.07	1,101.79	-5,809.26	4,166.76	3,843.56	323.20	12.892		
13,500.00	7,219.31	12,480.42	6,933.72	165.27	164.86	86.07	1,101.05	-5,909.26	4,166.63	3,837.85	328.78	12.673		
13,600.00	7,218.90	12,580.42	6,933.42	168.05	167.67	86.07	1,100.31	-6,009.25	4,166.50	3,832.14	334.36	12.461		
13,700.00	7,218.50	12,680.42	6,933.12	170.83	170.47	86.07	1,099.57	-6,109.25	4,166.37	3,826.42	339.94	12.256		
13,800.00	7,218.09	12,780.42	6,932.82	173.61	173.28	86.07	1,098.83	-6,209.25	4,166.23	3,820.70	345.53	12.057		
13,900.00	7,217.69	12,880.42	6,932.52	176.40	176.10	86.08	1,098.10	-6,309.24	4,166.10	3,814.97	351.13	11.865		
14,000.00	7,217.28	12,980.42	6,932.22	179.19	178.91	86.08	1,097.36	-6,409.24	4,165.97	3,809.24	356.72	11.678		
14,100.00	7,216.87	13,080.42	6,931.93	181.98	181.72	86.08	1,096.62	-6,509.24	4,165.84	3,803.51	362.33	11.498		
14,200.00	7,216.47	13,180.42	6,931.63	184.78	184.54	86.08	1,095.88	-6,609.23	4,165.70	3,797.77	367.93	11.322		
14,300.00	7,216.06	13,280.42	6,931.33	187.57	187.35	86.08	1,095.15	-6,709.23	4,165.57	3,792.04	373.54	11.152		
14,400.00	7,215.66	13,380.42	6,931.03	190.37	190.17	86.08	1,094.41	-6,809.23	4,165.44	3,786.29	379.15	10.986		
14,500.00	7,215.25	13,480.42	6,930.73	193.17	192.99	86.08	1,093.67	-6,909.22	4,165.31	3,780.55	384.76	10.826		
14,600.00	7,214.85	13,580.42	6,930.43	195.97	195.81	86.08	1,092.93	-7,009.22	4,165.17	3,774.80	390.37	10.670		
14,700.00	7,214.44	13,680.42	6,930.14	198.77	198.63	86.09	1,092.19	-7,109.22	4,165.04	3,769.05	395.99	10.518		
14,800.00	7,214.03	13,780.42	6,929.84	201.58	201.46	86.09	1,091.46	-7,209.21	4,164.91	3,763.30	401.61	10.370		
14,900.00	7,213.63	13,880.42	6,929.54	204.38	204.28	86.09	1,090.72	-7,309.21	4,164.78	3,757.54	407.24	10.227		
15,000.00	7,213.22	13,980.42	6,929.24	207.19	207.10	86.09	1,089.98	-7,409.21	4,164.64	3,751.78	412.86	10.087		
15,100.00	7,212.82	14,080.42	6,928.94	210.00	209.93	86.09	1,089.24	-7,509.20	4,164.51	3,746.02	418.49	9.951		
15,200.00	7,212.41	14,180.42	6,928.64	212.81	212.75	86.09	1,088.51	-7,609.20	4,164.38	3,740.26	424.12	9.819		
15,300.00	7,212.01	14,280.42	6,928.35	215.62	215.58	86.09	1,087.77	-7,709.20	4,164.25	3,734.50	429.75	9.690		
15,400.00	7,211.60	14,380.42	6,928.05	218.43	218.41	86.10	1,087.03	-7,809.19	4,164.12	3,728.73	435.39	9.564		
15,500.00	7,211.19	14,480.42	6,927.75	221.25	221.24	86.10	1,086.29	-7,909.19	4,163.98	3,722.96	441.02	9.442		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16A-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,600.00	7,210.79	14,580.42	6,927.45	224.06	224.07	86.10	1,085.55	-8,009.19	4,163.85	3,717.19	446.66	9.322	
15,700.00	7,210.38	14,680.42	6,927.15	226.88	226.90	86.10	1,084.82	-8,109.18	4,163.72	3,711.42	452.30	9.206	
15,757.21	7,210.15	14,732.12	6,927.00	228.49	228.36	86.10	1,084.44	-8,160.89	4,163.65	3,708.28	455.37	9.144	
15,794.94	7,210.00	14,732.12	6,927.00	229.55	228.36	86.10	1,084.44	-8,160.89	4,163.82	3,707.43	456.39	9.123 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.45	460.13	3.62	460.14					
100.00	100.00	102.00	100.00	3.28	3.29	0.45	460.13	3.62	460.14	453.57	6.57	70.038		
200.00	200.00	202.00	200.00	3.34	3.34	0.45	460.13	3.62	460.14	453.46	6.68	68.928 CC, ES		
300.00	299.98	301.98	299.98	3.44	3.45	177.81	460.13	3.62	461.88	455.00	6.89	67.060		
400.00	399.84	401.84	399.84	3.59	3.61	177.83	460.13	3.62	467.11	459.91	7.20	64.887		
500.00	499.45	501.45	499.45	3.79	3.81	177.86	460.13	3.62	475.82	468.22	7.60	62.594		
600.00	598.70	600.70	598.70	4.03	4.05	177.91	460.13	3.62	488.00	479.92	8.08	60.377		
700.00	697.47	698.75	697.47	4.31	4.27	177.93	461.36	3.42	505.08	496.49	8.59	58.775		
800.00	795.62	797.32	795.62	4.64	4.52	177.90	464.95	2.84	528.39	519.24	9.15	57.746		
900.00	893.06	895.86	893.06	5.00	4.77	177.85	470.70	1.91	557.77	548.03	9.74	57.288		
1,000.00	989.64	992.97	989.64	5.40	5.03	177.76	478.41	0.67	593.03	582.69	10.34	57.361		
1,100.00	1,085.27	1,088.30	1,085.27	5.83	5.29	177.65	487.83	-0.85	633.95	623.01	10.95	57.917		
1,200.00	1,179.82	1,183.44	1,179.82	6.29	5.55	177.52	498.97	-2.64	680.29	668.73	11.56	58.854		
1,300.00	1,273.17	1,277.19	1,273.17	6.79	5.86	177.38	512.78	-4.86	730.54	718.30	12.24	59.705		
1,400.00	1,365.21	1,369.54	1,365.21	7.33	6.18	177.26	526.30	-7.04	783.77	770.84	12.93	60.603		
1,500.00	1,455.84	1,460.28	1,455.84	7.89	6.49	177.15	539.51	-9.17	839.92	826.28	13.64	61.596		
1,600.00	1,544.94	1,549.01	1,544.94	8.50	6.81	177.06	552.41	-11.25	898.92	884.57	14.34	62.667		
1,700.00	1,632.39	1,637.64	1,632.39	9.13	7.13	176.97	564.96	-13.27	960.70	945.64	15.05	63.814		
1,800.00	1,718.11	1,723.07	1,718.11	9.80	7.44	176.89	577.17	-15.24	1,025.18	1,009.41	15.76	65.032		
1,900.00	1,802.44	1,807.77	1,802.44	10.49	7.75	176.88	589.10	-17.16	1,091.65	1,075.18	16.47	66.278		
2,000.00	1,886.68	1,892.37	1,886.68	11.20	8.06	176.89	601.02	-19.08	1,158.24	1,141.07	17.18	67.433		
2,100.00	1,970.92	1,977.98	1,970.92	11.93	8.37	176.91	612.93	-21.00	1,224.83	1,206.94	17.89	68.455		
2,200.00	2,055.17	2,062.58	2,055.17	12.66	8.69	176.92	624.85	-22.92	1,291.43	1,272.81	18.62	69.363		
2,300.00	2,139.41	2,147.18	2,139.41	13.40	9.01	176.93	636.76	-24.84	1,358.02	1,338.67	19.35	70.170		
2,400.00	2,223.66	2,231.78	2,223.66	14.14	9.33	176.94	648.68	-26.75	1,424.61	1,404.51	20.10	70.892		
2,500.00	2,307.90	2,316.39	2,307.90	14.89	9.65	176.95	660.59	-28.67	1,491.20	1,470.36	20.84	71.539		
2,600.00	2,392.14	2,401.99	2,392.14	15.65	9.98	176.96	672.51	-30.59	1,557.79	1,536.19	21.60	72.121		
2,700.00	2,476.39	2,486.59	2,476.39	16.41	10.31	176.97	684.43	-32.51	1,624.39	1,602.03	22.36	72.646		
2,800.00	2,560.63	2,571.19	2,560.63	17.17	10.63	176.98	696.34	-34.43	1,690.98	1,667.85	23.13	73.121		
2,900.00	2,644.88	2,655.79	2,644.88	17.93	10.96	176.98	708.26	-36.35	1,757.57	1,733.67	23.90	73.552		
3,000.00	2,729.12	2,740.40	2,729.12	18.70	11.30	176.99	720.17	-38.27	1,824.16	1,799.49	24.67	73.944		
3,100.00	2,813.36	2,825.00	2,813.36	19.47	11.63	176.99	732.09	-40.19	1,890.75	1,865.31	25.45	74.301		
3,200.00	2,897.61	2,909.60	2,897.61	20.25	11.96	177.00	744.00	-42.11	1,957.35	1,931.12	26.23	74.628		
3,300.00	2,981.85	2,994.20	2,981.85	21.02	12.29	177.00	755.92	-44.03	2,023.94	1,996.93	27.01	74.928		
3,400.00	3,066.10	3,079.81	3,066.10	21.80	12.63	177.01	767.83	-45.95	2,090.53	2,062.73	27.80	75.203		
3,500.00	3,150.34	3,164.41	3,150.34	22.58	12.96	177.01	779.75	-47.87	2,157.12	2,128.53	28.59	75.456		
3,600.00	3,234.58	3,249.01	3,234.58	23.35	13.30	177.02	791.66	-49.78	2,223.71	2,194.33	29.38	75.689		
3,700.00	3,318.83	3,333.61	3,318.83	24.13	13.64	177.02	803.58	-51.70	2,290.31	2,260.13	30.17	75.905		
3,800.00	3,403.07	3,418.21	3,403.07	24.92	13.97	177.03	815.49	-53.62	2,356.90	2,325.93	30.97	76.105		
3,900.00	3,487.32	3,502.82	3,487.32	25.70	14.31	177.03	827.41	-55.54	2,423.49	2,391.72	31.77	76.291		
4,000.00	3,571.56	3,587.42	3,571.56	26.48	14.65	177.03	839.32	-57.46	2,490.08	2,457.52	32.57	76.463		
4,100.00	3,655.80	3,672.02	3,655.80	27.27	14.99	177.04	851.24	-59.38	2,556.67	2,523.31	33.37	76.623		
4,200.00	3,740.05	3,756.62	3,740.05	28.05	15.33	177.04	863.15	-61.30	2,623.27	2,589.10	34.17	76.772		
4,300.00	3,824.29	3,841.22	3,824.29	28.84	15.67	177.04	875.07	-63.22	2,689.86	2,654.89	34.97	76.912		
4,400.00	3,908.54	3,925.83	3,908.54	29.62	16.01	177.04	886.99	-65.14	2,756.45	2,720.67	35.78	77.042		
4,500.00	3,992.78	3,999.43	3,992.78	30.41	16.35	177.05	898.90	-67.06	2,823.04	2,786.46	36.59	77.164		
4,600.00	4,077.03	4,084.03	4,077.03	31.20	16.69	177.05	910.82	-68.98	2,889.64	2,852.24	37.39	77.278		
4,700.00	4,161.27	4,168.63	4,161.27	31.98	17.03	177.05	922.73	-70.90	2,956.23	2,918.03	38.20	77.384		
4,800.00	4,245.51	4,252.24	4,245.51	32.77	17.37	177.05	934.65	-72.81	3,022.82	2,983.81	39.01	77.485		
4,900.00	4,329.76	4,336.84	4,329.76	33.56	17.72	177.06	946.56	-74.73	3,089.41	3,049.59	39.82	77.579		
5,000.00	4,414.00	4,421.37	4,414.00	34.35	18.06	177.06	958.48	-76.65	3,156.00	3,115.37	40.63	77.668		
5,100.00	4,498.25	4,505.04	4,498.25	35.14	18.40	177.06	970.39	-78.57	3,222.60	3,181.15	41.45	77.751		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,101.64	4,057.60	35.93	18.74	177.06	982.31	-80.49	3,289.19	3,246.93	42.26	77.830		
5,300.00	4,666.73	4,176.25	4,131.22	36.72	19.09	177.06	994.22	-82.41	3,355.78	3,312.70	43.08	77.904		
5,400.00	4,750.98	4,250.85	4,204.84	37.51	19.43	177.07	1,006.14	-84.33	3,422.37	3,378.48	43.89	77.974		
5,500.00	4,835.22	4,325.45	4,278.46	38.30	19.77	177.07	1,018.05	-86.25	3,488.96	3,444.26	44.71	78.040		
5,600.00	4,919.47	4,400.05	4,352.08	39.09	20.12	177.07	1,029.97	-88.17	3,555.56	3,510.03	45.52	78.102		
5,700.00	5,003.71	4,474.66	4,425.70	39.88	20.46	177.07	1,041.88	-90.09	3,622.15	3,575.81	46.34	78.161		
5,800.00	5,088.06	4,549.39	4,499.45	40.67	20.81	177.10	1,053.82	-92.01	3,688.60	3,641.43	47.16	78.213		
5,900.00	5,173.83	4,625.89	4,574.94	41.44	21.16	177.18	1,066.04	-93.98	3,752.99	3,705.00	47.99	78.209		
6,000.00	5,261.34	4,704.59	4,652.60	42.18	21.52	177.25	1,078.61	-96.00	3,814.68	3,765.86	48.82	78.135		
6,100.00	5,350.49	4,785.39	4,732.34	42.88	21.89	177.32	1,091.51	-98.08	3,873.58	3,823.92	49.67	77.994		
6,200.00	5,441.16	4,868.19	4,814.05	43.56	22.28	177.37	1,104.74	-100.21	3,929.64	3,879.12	50.52	77.792		
6,300.00	5,533.25	4,952.90	4,897.64	44.20	22.67	177.41	1,118.27	-102.39	3,982.77	3,931.40	51.37	77.533		
6,400.00	5,626.65	5,039.40	4,983.01	44.82	23.07	177.45	1,132.08	-104.62	4,032.92	3,980.70	52.22	77.224		
6,500.00	5,721.23	5,127.60	5,070.05	45.40	23.48	177.48	1,146.17	-106.89	4,080.02	4,026.94	53.08	76.867		
6,600.00	5,816.89	5,217.39	5,158.65	45.94	23.89	177.50	1,160.51	-109.19	4,124.02	4,070.09	53.93	76.469		
6,700.00	5,913.51	5,308.65	5,248.71	46.45	24.31	177.52	1,175.09	-111.54	4,164.86	4,110.08	54.78	76.031		
6,800.00	6,010.97	5,401.28	5,340.12	46.93	24.74	177.53	1,189.88	-113.93	4,202.50	4,146.88	55.62	75.559		
6,900.00	6,109.15	5,495.17	5,432.77	47.38	25.18	177.54	1,204.88	-116.34	4,236.88	4,180.43	56.45	75.053		
7,000.00	6,207.93	5,609.81	5,526.54	47.80	25.71	177.54	1,220.05	-118.79	4,267.97	4,210.60	57.36	74.402		
7,100.00	6,307.19	5,686.23	5,621.32	48.18	26.06	177.54	1,235.39	-121.26	4,295.72	4,237.64	58.08	73.956		
7,200.00	6,406.82	5,783.18	5,716.99	48.53	26.51	177.53	1,250.88	-123.75	4,320.11	4,261.23	58.88	73.368		
7,300.00	6,506.68	5,880.92	5,813.44	48.84	26.97	177.52	1,266.49	-126.26	4,341.11	4,281.44	59.67	72.757		
7,400.00	6,606.66	5,979.32	5,910.55	49.10	27.42	90.45	1,282.21	-128.80	4,358.69	4,298.27	60.42	72.141		
7,500.00	6,706.21	6,077.77	6,007.70	49.35	27.88	89.07	1,297.93	-131.33	4,374.66	4,313.50	61.16	71.524		
7,600.00	6,803.22	6,174.09	6,102.76	49.59	28.33	87.91	1,313.31	-133.81	4,390.44	4,328.55	61.89	70.944		
7,700.00	6,895.32	6,265.93	6,193.39	49.82	28.76	86.94	1,327.98	-136.17	4,405.85	4,343.28	62.57	70.413		
7,800.00	6,980.23	6,351.03	6,277.36	50.03	29.15	86.15	1,341.57	-138.36	4,420.87	4,357.65	63.22	69.925		
7,900.00	7,055.85	6,427.27	6,352.60	50.21	29.50	85.44	1,353.75	-140.32	4,435.58	4,371.72	63.86	69.459		
8,000.00	7,120.34	6,507.20	6,417.26	50.36	29.88	84.76	1,364.22	-142.01	4,450.11	4,385.53	64.58	68.908		
8,100.00	7,172.10	6,545.99	6,469.75	50.47	30.06	84.03	1,372.71	-143.37	4,464.63	4,399.40	65.23	68.446		
8,200.00	7,209.85	6,585.54	6,508.78	50.55	30.24	83.18	1,379.03	-144.39	4,479.23	4,413.20	66.03	67.835		
8,300.00	7,232.68	7,637.90	7,138.80	50.61	37.17	88.57	1,458.14	-834.73	4,485.62	4,408.66	76.97	58.281		
8,400.00	7,240.00	7,737.46	7,138.37	50.65	38.53	88.71	1,454.69	-934.23	4,482.95	4,403.69	79.27	56.556		
8,500.00	7,239.60	7,837.42	7,137.93	50.69	40.05	88.71	1,451.23	-1,034.12	4,480.11	4,398.19	81.91	54.694		
8,600.00	7,239.19	7,937.38	7,137.50	50.75	41.71	88.70	1,447.78	-1,134.02	4,477.26	4,392.40	84.86	52.762		
8,700.00	7,238.78	8,037.34	7,137.06	50.85	43.49	88.70	1,444.32	-1,233.92	4,474.41	4,386.34	88.07	50.804		
8,800.00	7,238.38	8,137.30	7,136.63	51.02	45.38	88.70	1,440.86	-1,333.82	4,471.57	4,380.04	91.53	48.854		
8,900.00	7,237.97	8,237.26	7,136.20	51.32	47.37	88.70	1,437.40	-1,433.72	4,468.72	4,373.52	95.20	46.940		
9,000.00	7,237.57	8,337.22	7,135.76	51.95	49.44	88.70	1,433.94	-1,533.62	4,465.87	4,366.81	99.06	45.081		
9,100.00	7,237.16	8,437.18	7,135.33	53.10	51.58	88.70	1,430.48	-1,633.52	4,463.03	4,359.93	103.10	43.290		
9,200.00	7,236.76	8,537.13	7,134.90	54.69	53.79	88.70	1,427.02	-1,733.41	4,460.18	4,352.90	107.28	41.575		
9,300.00	7,236.35	8,637.09	7,134.46	56.53	56.06	88.70	1,423.56	-1,833.31	4,457.33	4,345.73	111.60	39.941		
9,400.00	7,235.94	8,737.05	7,134.03	58.53	58.38	88.70	1,420.10	-1,933.21	4,454.49	4,338.45	116.04	38.389		
9,500.00	7,235.54	8,837.01	7,133.60	60.62	60.74	88.69	1,416.64	-2,033.11	4,451.64	4,331.06	120.58	36.919		
9,600.00	7,235.13	8,936.97	7,133.16	62.80	63.14	88.69	1,413.19	-2,133.01	4,448.79	4,323.57	125.22	35.528		
9,700.00	7,234.73	9,036.93	7,132.73	65.03	65.58	88.69	1,409.73	-2,232.91	4,445.95	4,316.00	129.94	34.215		
9,800.00	7,234.32	9,136.89	7,132.29	67.32	68.05	88.69	1,406.27	-2,332.81	4,443.10	4,308.36	134.74	32.975		
9,900.00	7,233.92	9,236.85	7,131.86	69.66	70.55	88.69	1,402.81	-2,432.71	4,440.25	4,300.64	139.61	31.805		
10,000.00	7,233.51	9,336.81	7,131.43	72.03	73.08	88.69	1,399.35	-2,532.60	4,437.40	4,292.87	144.54	30.701		
10,100.00	7,233.10	9,436.77	7,130.99	74.45	75.62	88.69	1,395.89	-2,632.50	4,434.56	4,285.04	149.52	29.658		
10,200.00	7,232.70	9,536.73	7,130.56	76.89	78.19	88.69	1,392.43	-2,732.40	4,431.71	4,277.16	154.55	28.674		
10,300.00	7,232.29	9,636.69	7,130.13	79.36	80.78	88.68	1,388.97	-2,832.30	4,428.86	4,269.23	159.63	27.744		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	9,736.65	7,129.69	81.86	83.38	88.68	1,385.51	-2,932.20	4,426.02	4,261.26	164.75	26.865		
10,500.00	7,231.48	9,836.61	7,129.26	84.38	86.00	88.68	1,382.06	-3,032.10	4,423.17	4,253.26	169.91	26.032		
10,600.00	7,231.08	9,936.57	7,128.83	86.93	88.64	88.68	1,378.60	-3,132.00	4,420.32	4,245.22	175.10	25.244		
10,700.00	7,230.67	10,036.53	7,128.39	89.49	91.28	88.68	1,375.14	-3,231.89	4,417.48	4,237.15	180.32	24.498		
10,800.00	7,230.26	10,136.49	7,127.96	92.07	93.94	88.68	1,371.68	-3,331.79	4,414.63	4,229.06	185.57	23.789		
10,900.00	7,229.86	10,236.45	7,127.53	94.67	96.61	88.68	1,368.22	-3,431.69	4,411.78	4,220.93	190.85	23.117		
11,000.00	7,229.45	10,336.40	7,127.09	97.28	99.29	88.68	1,364.76	-3,531.59	4,408.94	4,212.79	196.15	22.477		
11,100.00	7,229.05	10,436.36	7,126.66	99.90	101.98	88.67	1,361.30	-3,631.49	4,406.09	4,204.62	201.47	21.869		
11,200.00	7,228.64	10,536.32	7,126.22	102.54	104.67	88.67	1,357.84	-3,731.39	4,403.24	4,196.43	206.82	21.291		
11,300.00	7,228.24	10,636.28	7,125.79	105.19	107.38	88.67	1,354.38	-3,831.29	4,400.40	4,188.22	212.18	20.739		
11,400.00	7,227.83	10,736.24	7,125.36	107.85	110.09	88.67	1,350.92	-3,931.18	4,397.55	4,179.99	217.56	20.213		
11,500.00	7,227.42	10,836.20	7,124.92	110.52	112.81	88.67	1,347.47	-4,031.08	4,394.70	4,171.75	222.95	19.712		
11,600.00	7,227.02	10,936.16	7,124.49	113.20	115.53	88.67	1,344.01	-4,130.98	4,391.86	4,163.49	228.36	19.232		
11,700.00	7,226.61	11,036.12	7,124.06	115.89	118.26	88.67	1,340.55	-4,230.88	4,389.01	4,155.22	233.79	18.774		
11,800.00	7,226.21	11,136.08	7,123.62	118.59	121.00	88.67	1,337.09	-4,330.78	4,386.16	4,146.94	239.22	18.335		
11,900.00	7,225.80	11,236.04	7,123.19	121.29	123.74	88.66	1,333.63	-4,430.68	4,383.32	4,138.64	244.67	17.915		
12,000.00	7,225.40	11,336.00	7,122.76	124.00	126.48	88.66	1,330.17	-4,530.58	4,380.47	4,130.34	250.13	17.513		
12,100.00	7,224.99	11,435.96	7,122.32	126.72	129.23	88.66	1,326.71	-4,630.47	4,377.62	4,122.02	255.60	17.127		
12,200.00	7,224.58	11,535.92	7,121.89	129.44	131.99	88.66	1,323.25	-4,730.37	4,374.78	4,113.69	261.09	16.756		
12,300.00	7,224.18	11,635.88	7,121.45	132.17	134.75	88.66	1,319.79	-4,830.27	4,371.93	4,105.35	266.58	16.400		
12,400.00	7,223.77	11,735.84	7,121.02	134.91	137.51	88.66	1,316.33	-4,930.17	4,369.08	4,097.01	272.08	16.058		
12,500.00	7,223.37	11,835.80	7,120.59	137.65	140.27	88.66	1,312.88	-5,030.07	4,366.24	4,088.65	277.58	15.729		
12,600.00	7,222.96	11,935.76	7,120.15	140.39	143.04	88.66	1,309.42	-5,129.97	4,363.39	4,080.29	283.10	15.413		
12,700.00	7,222.55	12,035.71	7,119.72	143.14	145.81	88.65	1,305.96	-5,229.87	4,360.54	4,071.92	288.62	15.108		
12,800.00	7,222.15	12,135.67	7,119.29	145.89	148.59	88.65	1,302.50	-5,329.77	4,357.70	4,063.54	294.15	14.814		
12,900.00	7,221.74	12,235.63	7,118.85	148.65	151.36	88.65	1,299.04	-5,429.66	4,354.85	4,055.16	299.69	14.531		
13,000.00	7,221.34	12,335.59	7,118.42	151.41	154.14	88.65	1,295.58	-5,529.56	4,352.00	4,046.77	305.23	14.258		
13,100.00	7,220.93	12,435.55	7,117.99	154.18	156.92	88.65	1,292.12	-5,629.46	4,349.16	4,038.38	310.78	13.994		
13,200.00	7,220.53	12,535.51	7,117.55	156.94	159.71	88.65	1,288.66	-5,729.36	4,346.31	4,029.98	316.33	13.740		
13,300.00	7,220.12	12,635.47	7,117.12	159.72	162.49	88.65	1,285.20	-5,829.26	4,343.46	4,021.57	321.89	13.494		
13,400.00	7,219.71	12,735.43	7,116.69	162.49	165.28	88.65	1,281.75	-5,929.16	4,340.61	4,013.16	327.46	13.256		
13,500.00	7,219.31	12,835.39	7,116.25	165.27	168.07	88.64	1,278.29	-6,029.06	4,337.77	4,004.74	333.02	13.025		
13,600.00	7,218.90	12,935.35	7,115.82	168.05	170.87	88.64	1,274.83	-6,128.95	4,334.92	3,996.32	338.60	12.803		
13,700.00	7,218.50	13,035.31	7,115.38	170.83	173.66	88.64	1,271.37	-6,228.85	4,332.07	3,987.90	344.18	12.587		
13,800.00	7,218.09	13,135.27	7,114.95	173.61	176.46	88.64	1,267.91	-6,328.75	4,329.23	3,979.47	349.76	12.378		
13,900.00	7,217.69	13,235.23	7,114.52	176.40	179.25	88.64	1,264.45	-6,428.65	4,326.38	3,971.04	355.34	12.175		
14,000.00	7,217.28	13,335.19	7,114.08	179.19	182.05	88.64	1,260.99	-6,528.55	4,323.53	3,962.60	360.93	11.979		
14,100.00	7,216.87	13,435.15	7,113.65	181.98	184.85	88.64	1,257.53	-6,628.45	4,320.69	3,954.16	366.52	11.788		
14,200.00	7,216.47	13,535.11	7,113.22	184.78	187.65	88.64	1,254.07	-6,728.35	4,317.84	3,945.72	372.12	11.603		
14,300.00	7,216.06	13,635.07	7,112.78	187.57	190.46	88.63	1,250.61	-6,828.24	4,314.99	3,937.27	377.72	11.424		
14,400.00	7,215.66	13,735.03	7,112.35	190.37	193.26	88.63	1,247.16	-6,928.14	4,312.15	3,928.82	383.32	11.249		
14,500.00	7,215.25	13,834.98	7,111.92	193.17	196.07	88.63	1,243.70	-7,028.04	4,309.30	3,920.37	388.93	11.080		
14,600.00	7,214.85	13,934.94	7,111.48	195.97	198.87	88.63	1,240.24	-7,127.94	4,306.45	3,911.92	394.54	10.915		
14,700.00	7,214.44	14,034.90	7,111.05	198.77	201.68	88.63	1,236.78	-7,227.84	4,303.61	3,903.46	400.15	10.755		
14,800.00	7,214.03	14,134.86	7,110.61	201.58	204.49	88.63	1,233.32	-7,327.74	4,300.76	3,895.00	405.76	10.599		
14,900.00	7,213.63	14,234.82	7,110.18	204.38	207.30	88.63	1,229.86	-7,427.64	4,297.91	3,886.54	411.38	10.448		
15,000.00	7,213.22	14,334.78	7,109.75	207.19	210.11	88.63	1,226.40	-7,527.54	4,295.07	3,878.07	416.99	10.300		
15,100.00	7,212.82	14,434.74	7,109.31	210.00	212.93	88.62	1,222.94	-7,627.43	4,292.22	3,869.61	422.62	10.156		
15,200.00	7,212.41	14,534.70	7,108.88	212.81	215.74	88.62	1,219.48	-7,727.33	4,289.37	3,861.14	428.24	10.016		
15,300.00	7,212.01	14,634.66	7,108.45	215.62	218.55	88.62	1,216.02	-7,827.23	4,286.53	3,852.66	433.86	9.880		
15,400.00	7,211.60	14,734.62	7,108.01	218.43	221.37	88.62	1,212.57	-7,927.13	4,283.68	3,844.19	439.49	9.747		
15,500.00	7,211.19	14,834.58	7,107.58	221.25	224.18	88.62	1,209.11	-8,027.03	4,280.83	3,835.72	445.12	9.617		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,600.00	7,210.79	14,934.54	7,107.15	224.06	227.00	88.62	1,205.65	-8,126.93	4,277.99	3,827.24	450.75	9.491	
15,700.00	7,210.38	14,969.16	7,107.00	226.88	227.97	88.62	1,204.45	-8,161.53	4,275.64	3,821.06	454.58	9.406	
15,756.39	7,210.15	14,969.16	7,107.00	228.47	227.97	88.62	1,204.45	-8,161.53	4,275.27	3,819.15	456.12	9.373	
15,794.94	7,210.00	14,969.16	7,107.00	229.55	227.97	88.62	1,204.45	-8,161.53	4,275.44	3,818.32	457.12	9.353 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.47	339.90	2.78	339.92					
100.00	100.00	102.00	100.00	3.28	3.29	0.47	339.90	2.78	339.92	333.35	6.57	51.739		
200.00	200.00	202.00	200.00	3.34	3.34	0.47	339.90	2.78	339.92	333.24	6.68	50.919	CC, ES	
300.00	299.98	301.98	299.98	3.44	3.45	177.83	339.90	2.78	341.66	334.77	6.89	49.605		
400.00	399.84	402.03	400.03	3.59	3.61	177.86	339.90	2.78	346.89	339.69	7.20	48.185		
500.00	499.45	512.45	510.43	3.79	3.82	177.69	338.17	1.42	354.02	346.41	7.62	46.468		
600.00	598.70	612.27	610.16	4.03	4.05	177.37	335.02	-1.06	363.05	354.97	8.09	44.886		
700.00	697.47	711.46	709.28	4.31	4.31	177.09	331.90	-3.52	375.56	366.93	8.63	43.540		
800.00	795.62	810.17	807.90	4.64	4.60	176.85	328.78	-5.97	391.52	382.30	9.22	42.465		
900.00	893.06	908.25	905.91	5.00	4.90	176.65	325.69	-8.41	410.92	401.06	9.86	41.669		
1,000.00	989.64	1,005.61	1,003.18	5.40	5.22	176.49	322.62	-10.82	433.73	423.18	10.54	41.141		
1,100.00	1,085.27	1,102.11	1,099.61	5.83	5.56	176.37	319.57	-13.22	459.91	448.66	11.26	40.861		
1,200.00	1,179.82	1,202.35	1,195.07	6.29	5.92	176.28	316.56	-15.59	489.44	477.43	12.01	40.744		
1,300.00	1,273.17	1,307.91	1,289.44	6.79	6.31	176.21	313.58	-17.93	522.28	509.47	12.82	40.752		
1,400.00	1,365.21	1,385.34	1,382.61	7.33	6.60	176.17	310.64	-20.25	558.39	544.86	13.54	41.250		
1,500.00	1,455.84	1,477.28	1,474.47	7.89	6.95	176.14	307.74	-22.53	597.73	583.40	14.33	41.711		
1,600.00	1,544.94	1,567.78	1,564.90	8.50	7.31	176.13	304.89	-24.77	640.24	625.10	15.14	42.302		
1,700.00	1,632.39	1,656.75	1,653.80	9.13	7.66	176.12	302.08	-26.98	685.88	669.93	15.95	43.007		
1,800.00	1,718.11	1,744.08	1,741.06	9.80	8.01	176.12	299.33	-29.15	734.59	717.82	16.77	43.814		
1,900.00	1,802.44	1,830.09	1,827.00	10.49	8.36	176.18	296.62	-31.28	785.58	768.00	17.59	44.668		
2,000.00	1,886.68	1,916.03	1,912.87	11.20	8.71	176.26	293.91	-33.42	836.71	818.30	18.41	45.452		
2,100.00	1,970.92	2,001.96	1,998.73	11.93	9.06	176.32	291.20	-35.55	887.84	868.60	19.24	46.143		
2,200.00	2,055.17	2,087.90	2,084.60	12.66	9.41	176.38	288.49	-37.68	938.98	918.89	20.08	46.756		
2,300.00	2,139.41	2,173.83	2,170.47	13.40	9.77	176.43	285.78	-39.81	990.11	969.18	20.93	47.300		
2,400.00	2,223.66	2,259.77	2,256.33	14.14	10.13	176.48	283.07	-41.95	1,041.24	1,019.45	21.79	47.787		
2,500.00	2,307.90	2,345.70	2,342.20	14.89	10.49	176.52	280.35	-44.08	1,092.38	1,069.72	22.65	48.224		
2,600.00	2,392.14	2,431.64	2,428.06	15.65	10.85	176.56	277.64	-46.21	1,143.51	1,119.99	23.52	48.617		
2,700.00	2,476.39	2,517.57	2,513.93	16.41	11.21	176.59	274.93	-48.35	1,194.64	1,170.25	24.39	48.972		
2,800.00	2,560.63	2,603.51	2,599.80	17.17	11.58	176.63	272.22	-50.48	1,245.78	1,220.51	25.27	49.294		
2,900.00	2,644.88	2,689.45	2,685.66	17.93	11.94	176.66	269.51	-52.61	1,296.91	1,270.76	26.15	49.587		
3,000.00	2,729.12	2,775.38	2,771.53	18.70	12.31	176.68	266.80	-54.74	1,348.05	1,321.01	27.04	49.854		
3,100.00	2,813.36	2,861.32	2,857.40	19.47	12.67	176.71	264.09	-56.88	1,399.18	1,371.25	27.93	50.098		
3,200.00	2,897.61	2,947.25	2,943.26	20.25	13.04	176.73	261.38	-59.01	1,450.32	1,421.50	28.82	50.323		
3,300.00	2,981.85	3,033.19	3,029.13	21.02	13.41	176.76	258.67	-61.14	1,501.46	1,471.74	29.71	50.529		
3,400.00	3,066.10	3,119.12	3,114.99	21.80	13.78	176.78	255.96	-63.27	1,552.59	1,521.98	30.61	50.719		
3,500.00	3,150.34	3,205.06	3,200.86	22.58	14.15	176.80	253.25	-65.41	1,603.73	1,572.22	31.51	50.895		
3,600.00	3,234.58	3,309.01	3,286.73	23.35	14.59	176.81	250.54	-67.54	1,654.86	1,622.37	32.49	50.937		
3,700.00	3,318.83	3,376.93	3,372.59	24.13	14.89	176.83	247.83	-69.67	1,706.00	1,672.69	33.31	51.209		
3,800.00	3,403.07	3,462.86	3,458.46	24.92	15.26	176.85	245.12	-71.81	1,757.14	1,722.92	34.22	51.350		
3,900.00	3,487.32	3,548.80	3,544.32	25.70	15.63	176.86	242.41	-73.94	1,808.27	1,773.15	35.12	51.481		
4,000.00	3,571.56	3,634.73	3,630.19	26.48	16.00	176.88	239.70	-76.07	1,859.41	1,823.38	36.03	51.604		
4,100.00	3,655.80	3,720.67	3,716.06	27.27	16.37	176.89	236.99	-78.20	1,910.55	1,873.60	36.94	51.718		
4,200.00	3,740.05	3,806.61	3,801.92	28.05	16.75	176.90	234.28	-80.34	1,961.68	1,923.83	37.85	51.825		
4,300.00	3,824.29	3,907.46	3,887.79	28.84	17.19	176.92	231.57	-82.47	2,012.82	1,973.99	38.83	51.840		
4,400.00	3,908.54	3,978.48	3,973.66	29.62	17.49	176.93	228.86	-84.60	2,063.96	2,024.28	39.68	52.021		
4,500.00	3,992.78	4,064.41	4,059.52	30.41	17.87	176.94	226.15	-86.73	2,115.09	2,074.50	40.59	52.110		
4,600.00	4,077.03	4,150.35	4,145.39	31.20	18.24	176.95	223.44	-88.87	2,166.23	2,124.73	41.50	52.193		
4,700.00	4,161.27	4,236.28	4,231.25	31.98	18.62	176.96	220.73	-91.00	2,217.37	2,174.95	42.42	52.272		
4,800.00	4,245.51	4,322.22	4,317.12	32.77	18.99	176.97	218.02	-93.13	2,268.50	2,225.17	43.34	52.347		
4,900.00	4,329.76	4,408.15	4,402.99	33.56	19.37	176.98	215.31	-95.27	2,319.64	2,275.39	44.25	52.418		
5,000.00	4,414.00	4,505.91	4,488.85	34.35	19.79	176.99	212.60	-97.40	2,370.78	2,325.56	45.22	52.425		
5,100.00	4,498.25	4,580.02	4,574.72	35.14	20.12	176.99	209.89	-99.53	2,421.92	2,375.83	46.09	52.548		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,665.96	4,660.58	35.93	20.49	177.00	207.18	-101.66	2,473.05	2,426.04	47.01	52.608		
5,300.00	4,666.73	4,751.89	4,746.45	36.72	20.87	177.01	204.47	-103.80	2,524.19	2,476.26	47.93	52.665		
5,400.00	4,750.98	4,837.83	4,832.32	37.51	21.24	177.02	201.76	-105.93	2,575.33	2,526.48	48.85	52.719		
5,500.00	4,835.22	4,923.77	4,918.18	38.30	21.62	177.03	199.05	-108.06	2,626.47	2,576.69	49.77	52.771		
5,600.00	4,919.47	5,009.70	5,004.05	39.09	22.00	177.03	196.34	-110.19	2,677.60	2,626.91	50.69	52.820		
5,700.00	5,003.71	5,104.36	5,089.92	39.88	22.41	177.04	193.63	-112.33	2,728.74	2,677.09	51.65	52.828		
5,800.00	5,088.06	5,181.67	5,175.88	40.67	22.75	177.06	190.91	-114.46	2,779.71	2,727.17	52.54	52.909		
5,900.00	5,173.83	5,269.05	5,263.19	41.44	23.13	177.12	188.16	-116.63	2,828.33	2,774.87	53.46	52.903		
6,000.00	5,261.34	5,358.07	5,352.14	42.18	23.52	177.17	185.35	-118.84	2,873.87	2,819.48	54.39	52.840		
6,100.00	5,350.49	5,448.63	5,442.62	42.88	23.92	177.21	182.50	-121.09	2,916.28	2,860.97	55.31	52.722		
6,200.00	5,441.16	5,540.61	5,534.53	43.56	24.32	177.25	179.59	-123.37	2,955.51	2,899.27	56.24	52.554		
6,300.00	5,533.25	5,633.89	5,627.74	44.20	24.73	177.27	176.65	-125.69	2,991.51	2,934.35	57.16	52.338		
6,400.00	5,626.65	5,728.38	5,722.15	44.82	25.15	177.29	173.67	-128.03	3,024.24	2,966.16	58.07	52.078		
6,500.00	5,721.23	5,823.95	5,817.64	45.40	25.57	177.30	170.66	-130.40	3,053.65	2,994.67	58.98	51.778		
6,600.00	5,816.89	5,920.48	5,914.09	45.94	25.99	177.31	167.61	-132.80	3,079.71	3,019.84	59.87	51.440		
6,700.00	5,913.51	6,017.86	6,011.40	46.45	26.42	177.30	164.54	-135.21	3,102.39	3,041.64	60.75	51.066		
6,800.00	6,010.97	6,115.97	6,109.43	46.93	26.85	177.30	161.45	-137.65	3,121.66	3,060.04	61.62	50.659		
6,900.00	6,109.15	6,214.69	6,208.07	47.38	27.28	177.28	158.34	-140.10	3,137.51	3,075.03	62.47	50.221		
7,000.00	6,207.93	6,313.90	6,307.20	47.80	27.72	177.26	155.21	-142.56	3,149.90	3,086.59	63.31	49.754		
7,100.00	6,307.19	6,413.48	6,406.69	48.18	28.16	177.24	152.07	-145.03	3,158.82	3,094.70	64.13	49.259		
7,200.00	6,406.82	6,514.25	6,507.16	48.53	28.60	177.14	148.87	-151.25	3,164.26	3,099.33	64.93	48.731		
7,300.00	6,506.68	6,611.77	6,602.40	48.84	29.03	176.78	145.76	-171.51	3,166.25	3,100.57	65.68	48.206		
7,400.00	6,606.66	6,701.29	6,686.18	49.10	29.41	89.22	142.93	-202.72	3,165.08	3,098.78	66.30	47.737		
7,500.00	6,706.21	6,784.16	6,759.14	49.35	29.76	88.82	140.40	-241.83	3,162.81	3,095.97	66.84	47.322		
7,600.00	6,803.22	6,863.73	6,823.84	49.59	30.10	88.45	138.09	-287.99	3,161.01	3,093.68	67.32	46.955		
7,700.00	6,895.32	6,940.67	6,880.46	49.82	30.45	88.10	135.99	-339.97	3,159.63	3,091.85	67.78	46.614		
7,800.00	6,980.23	7,015.52	6,929.15	50.03	30.85	87.78	134.11	-396.74	3,158.63	3,090.36	68.26	46.271		
7,900.00	7,055.85	7,088.73	6,970.00	50.21	31.31	87.49	132.46	-457.42	3,157.94	3,089.12	68.81	45.890		
8,000.00	7,120.34	7,160.66	7,003.11	50.36	31.84	87.24	131.03	-521.22	3,157.50	3,087.99	69.51	45.428		
8,100.00	7,172.10	7,231.62	7,028.51	50.47	32.46	87.04	129.82	-587.42	3,157.26	3,086.85	70.41	44.842		
8,200.00	7,209.85	7,300.00	7,045.88	50.55	33.13	86.88	128.87	-653.52	3,157.16	3,085.62	71.54	44.130		
8,232.52	7,218.95	7,324.59	7,050.38	50.57	33.40	86.83	128.58	-677.69	3,157.16	3,085.13	72.03	43.830		
8,300.00	7,232.68	7,371.63	7,056.38	50.61	33.93	86.77	128.11	-724.33	3,157.18	3,084.15	73.03	43.234		
8,400.00	7,240.00	7,445.05	7,058.94	50.65	34.83	86.71	127.58	-797.67	3,157.27	3,082.45	74.81	42.201		
8,500.00	7,239.60	7,545.05	7,058.51	50.69	36.22	86.71	126.98	-897.66	3,157.28	3,079.98	77.31	40.841		
8,600.00	7,239.19	7,645.05	7,058.07	50.75	37.75	86.71	126.38	-997.66	3,157.30	3,077.18	80.11	39.410		
8,700.00	7,238.78	7,745.05	7,057.64	50.85	39.44	86.71	125.78	-1,097.66	3,157.31	3,074.10	83.22	37.940		
8,800.00	7,238.38	7,845.05	7,057.20	51.02	41.25	86.71	125.19	-1,197.66	3,157.33	3,070.74	86.59	36.464		
8,900.00	7,237.97	7,945.05	7,056.77	51.32	43.18	86.71	124.59	-1,297.65	3,157.35	3,067.15	90.19	35.007		
9,000.00	7,237.57	8,045.05	7,056.34	51.95	45.20	86.71	123.99	-1,397.65	3,157.36	3,063.36	94.00	33.588		
9,100.00	7,237.16	8,145.05	7,055.90	53.10	47.32	86.71	123.39	-1,497.65	3,157.38	3,059.38	98.00	32.218		
9,200.00	7,236.76	8,245.05	7,055.47	54.69	49.50	86.71	122.79	-1,597.64	3,157.39	3,055.23	102.16	30.907		
9,300.00	7,236.35	8,345.05	7,055.03	56.53	51.76	86.71	122.19	-1,697.64	3,157.41	3,050.95	106.46	29.659		
9,400.00	7,235.94	8,445.05	7,054.60	58.53	54.07	86.71	121.59	-1,797.64	3,157.42	3,046.54	110.89	28.475		
9,500.00	7,235.54	8,545.05	7,054.17	60.62	56.43	86.71	120.99	-1,897.64	3,157.44	3,042.01	115.42	27.355		
9,600.00	7,235.13	8,645.05	7,053.73	62.80	58.84	86.71	120.40	-1,997.63	3,157.45	3,037.39	120.06	26.298		
9,700.00	7,234.73	8,745.05	7,053.30	65.03	61.28	86.71	119.80	-2,097.63	3,157.47	3,032.68	124.79	25.302		
9,800.00	7,234.32	8,845.05	7,052.86	67.32	63.76	86.71	119.20	-2,197.63	3,157.48	3,027.88	129.60	24.364		
9,900.00	7,233.92	8,945.05	7,052.43	69.66	66.27	86.70	118.60	-2,297.63	3,157.50	3,023.02	134.47	23.480		
10,000.00	7,233.51	9,045.05	7,052.00	72.03	68.81	86.70	118.00	-2,397.62	3,157.51	3,018.10	139.41	22.648		
10,100.00	7,233.10	9,145.05	7,051.56	74.45	71.37	86.70	117.40	-2,497.62	3,157.53	3,013.12	144.41	21.865		
10,200.00	7,232.70	9,245.05	7,051.13	76.89	73.95	86.70	116.80	-2,597.62	3,157.54	3,008.09	149.46	21.127		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	9,345.05	7,050.69	79.36	76.55	86.70	116.20	-2,697.61	3,157.56	3,003.01	154.55	20.430		
10,400.00	7,231.89	9,445.05	7,050.26	81.86	79.17	86.70	115.61	-2,797.61	3,157.57	2,997.89	159.69	19.774		
10,500.00	7,231.48	9,545.05	7,049.83	84.38	81.81	86.70	115.01	-2,897.61	3,157.59	2,992.73	164.86	19.153		
10,600.00	7,231.08	9,645.05	7,049.39	86.93	84.46	86.70	114.41	-2,997.61	3,157.61	2,987.54	170.07	18.567		
10,700.00	7,230.67	9,745.05	7,048.96	89.49	87.12	86.70	113.81	-3,097.60	3,157.62	2,982.32	175.30	18.012		
10,800.00	7,230.26	9,845.05	7,048.52	92.07	89.80	86.70	113.21	-3,197.60	3,157.64	2,977.06	180.57	17.487		
10,900.00	7,229.86	9,945.05	7,048.09	94.67	92.49	86.70	112.61	-3,297.60	3,157.65	2,971.79	185.86	16.989		
11,000.00	7,229.45	10,045.05	7,047.66	97.28	95.19	86.70	112.01	-3,397.60	3,157.67	2,966.49	191.18	16.517		
11,100.00	7,229.05	10,145.05	7,047.22	99.90	97.89	86.70	111.41	-3,497.59	3,157.68	2,961.16	196.52	16.068		
11,200.00	7,228.64	10,245.05	7,046.79	102.54	100.61	86.70	110.82	-3,597.59	3,157.70	2,955.82	201.88	15.642		
11,300.00	7,228.24	10,345.05	7,046.35	105.19	103.33	86.70	110.22	-3,697.59	3,157.71	2,950.46	207.26	15.236		
11,400.00	7,227.83	10,445.05	7,045.92	107.85	106.06	86.70	109.62	-3,797.58	3,157.73	2,945.08	212.65	14.849		
11,500.00	7,227.42	10,545.05	7,045.49	110.52	108.79	86.70	109.02	-3,897.58	3,157.74	2,939.68	218.06	14.481		
11,600.00	7,227.02	10,645.05	7,045.05	113.20	111.54	86.70	108.42	-3,997.58	3,157.76	2,934.27	223.49	14.129		
11,700.00	7,226.61	10,745.05	7,044.62	115.89	114.28	86.70	107.82	-4,097.58	3,157.77	2,928.85	228.93	13.794		
11,800.00	7,226.21	10,845.05	7,044.18	118.59	117.04	86.70	107.22	-4,197.57	3,157.79	2,923.41	234.38	13.473		
11,900.00	7,225.80	10,945.05	7,043.75	121.29	119.80	86.69	106.62	-4,297.57	3,157.80	2,917.96	239.84	13.166		
12,000.00	7,225.40	11,045.05	7,043.32	124.00	122.56	86.69	106.03	-4,397.57	3,157.82	2,912.50	245.32	12.872		
12,100.00	7,224.99	11,145.05	7,042.88	126.72	125.33	86.69	105.43	-4,497.57	3,157.83	2,907.03	250.81	12.591		
12,200.00	7,224.58	11,245.05	7,042.45	129.44	128.10	86.69	104.83	-4,597.56	3,157.85	2,901.55	256.30	12.321		
12,300.00	7,224.18	11,345.05	7,042.01	132.17	130.87	86.69	104.23	-4,697.56	3,157.87	2,896.06	261.81	12.062		
12,400.00	7,223.77	11,445.05	7,041.58	134.91	133.65	86.69	103.63	-4,797.56	3,157.88	2,890.56	267.32	11.813		
12,500.00	7,223.37	11,545.05	7,041.15	137.65	136.43	86.69	103.03	-4,897.55	3,157.90	2,885.05	272.84	11.574		
12,600.00	7,222.96	11,645.05	7,040.71	140.39	139.22	86.69	102.43	-4,997.55	3,157.91	2,879.54	278.37	11.344		
12,700.00	7,222.55	11,745.05	7,040.28	143.14	142.01	86.69	101.83	-5,097.55	3,157.93	2,874.02	283.91	11.123		
12,800.00	7,222.15	11,845.05	7,039.84	145.89	144.80	86.69	101.24	-5,197.55	3,157.94	2,868.49	289.45	10.910		
12,900.00	7,221.74	11,945.05	7,039.41	148.65	147.59	86.69	100.64	-5,297.54	3,157.96	2,862.96	295.00	10.705		
13,000.00	7,221.34	12,045.05	7,038.98	151.41	150.39	86.69	100.04	-5,397.54	3,157.97	2,857.42	300.56	10.507		
13,100.00	7,220.93	12,145.05	7,038.54	154.18	153.18	86.69	99.44	-5,497.54	3,157.99	2,851.87	306.12	10.316		
13,200.00	7,220.53	12,245.05	7,038.11	156.94	155.99	86.69	98.84	-5,597.53	3,158.00	2,846.32	311.68	10.132		
13,300.00	7,220.12	12,345.05	7,037.67	159.72	158.79	86.69	98.24	-5,697.53	3,158.02	2,840.76	317.26	9.954		
13,400.00	7,219.71	12,445.05	7,037.24	162.49	161.59	86.69	97.64	-5,797.53	3,158.03	2,835.20	322.83	9.782		
13,500.00	7,219.31	12,545.05	7,036.81	165.27	164.40	86.69	97.04	-5,897.53	3,158.05	2,829.64	328.41	9.616		
13,600.00	7,218.90	12,645.05	7,036.37	168.05	167.21	86.69	96.45	-5,997.52	3,158.06	2,824.07	334.00	9.455		
13,700.00	7,218.50	12,745.05	7,035.94	170.83	170.02	86.69	95.85	-6,097.52	3,158.08	2,818.49	339.59	9.300		
13,800.00	7,218.09	12,845.05	7,035.50	173.61	172.83	86.69	95.25	-6,197.52	3,158.10	2,812.91	345.18	9.149		
13,900.00	7,217.69	12,945.05	7,035.07	176.40	175.64	86.69	94.65	-6,297.52	3,158.11	2,807.33	350.78	9.003		
14,000.00	7,217.28	13,045.05	7,034.64	179.19	178.45	86.68	94.05	-6,397.51	3,158.13	2,801.75	356.38	8.862		
14,100.00	7,216.87	13,145.05	7,034.20	181.98	181.27	86.68	93.45	-6,497.51	3,158.14	2,796.16	361.98	8.725		
14,200.00	7,216.47	13,245.05	7,033.77	184.78	184.09	86.68	92.85	-6,597.51	3,158.16	2,790.57	367.59	8.592		
14,300.00	7,216.06	13,345.05	7,033.33	187.57	186.91	86.68	92.25	-6,697.50	3,158.17	2,784.97	373.20	8.462		
14,400.00	7,215.66	13,445.05	7,032.90	190.37	189.73	86.68	91.65	-6,797.50	3,158.19	2,779.37	378.81	8.337		
14,500.00	7,215.25	13,545.05	7,032.47	193.17	192.55	86.68	91.06	-6,897.50	3,158.20	2,773.77	384.43	8.215		
14,600.00	7,214.85	13,645.05	7,032.03	195.97	195.37	86.68	90.46	-6,997.50	3,158.22	2,768.17	390.05	8.097		
14,700.00	7,214.44	13,745.05	7,031.60	198.77	198.19	86.68	89.86	-7,097.49	3,158.23	2,762.56	395.67	7.982		
14,800.00	7,214.03	13,845.05	7,031.16	201.58	201.01	86.68	89.26	-7,197.49	3,158.25	2,756.95	401.30	7.870		
14,900.00	7,213.63	13,945.05	7,030.73	204.38	203.84	86.68	88.66	-7,297.49	3,158.26	2,751.34	406.92	7.761		
15,000.00	7,213.22	14,045.05	7,030.30	207.19	206.67	86.68	88.06	-7,397.49	3,158.28	2,745.73	412.55	7.656		
15,100.00	7,212.82	14,145.05	7,029.86	210.00	209.49	86.68	87.46	-7,497.48	3,158.29	2,740.11	418.18	7.552		
15,200.00	7,212.41	14,245.05	7,029.43	212.81	212.32	86.68	86.86	-7,597.48	3,158.31	2,734.50	423.81	7.452		
15,300.00	7,212.01	14,345.05	7,028.99	215.62	215.15	86.68	86.27	-7,697.48	3,158.32	2,728.88	429.45	7.354		
15,400.00	7,211.60	14,445.05	7,028.56	218.43	217.98	86.68	85.67	-7,797.47	3,158.34	2,723.25	435.09	7.259		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,500.00	7,211.19	14,545.05	7,028.13	221.25	220.81	86.68	85.07	-7,897.47	3,158.36	2,717.63	440.72	7.166	
15,600.00	7,210.79	14,645.05	7,027.69	224.06	223.64	86.68	84.47	-7,997.47	3,158.37	2,712.01	446.37	7.076	
15,700.00	7,210.38	14,745.05	7,027.26	226.88	226.47	86.68	83.87	-8,097.47	3,158.39	2,706.38	452.01	6.987	
15,700.09	7,210.38	14,745.13	7,027.26	226.88	226.47	86.68	83.87	-8,097.55	3,158.39	2,706.37	452.01	6.987	
15,794.94	7,210.00	14,805.04	7,027.00	229.55	228.17	86.68	83.51	-8,157.46	3,158.59	2,702.31	456.28	6.922 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.44	359.94	2.78	359.95					
100.00	100.00	102.00	100.00	3.28	3.29	0.44	359.94	2.78	359.95	353.38	6.57	54.788		
200.00	200.00	202.00	200.00	3.34	3.34	0.44	359.94	2.78	359.95	353.27	6.68	53.919	CC, ES	
300.00	299.98	301.98	299.98	3.44	3.45	177.80	359.94	2.78	361.69	354.80	6.89	52.513		
400.00	399.84	401.84	399.84	3.59	3.61	177.83	359.94	2.78	366.92	359.72	7.20	50.969		
500.00	499.45	501.45	499.45	3.79	3.81	177.88	359.94	2.78	375.63	368.03	7.60	49.414		
600.00	598.70	600.78	598.76	4.03	4.04	177.69	359.94	1.16	387.80	379.72	8.08	48.021		
700.00	697.47	700.47	697.48	4.31	4.30	177.41	359.94	-1.31	403.41	394.80	8.61	46.828		
800.00	795.62	802.32	795.60	4.64	4.60	177.17	359.94	-3.76	422.47	413.26	9.22	45.831		
900.00	893.06	904.89	893.00	5.00	4.92	176.97	359.94	-6.20	444.95	435.08	9.87	45.066		
1,000.00	989.64	1,008.31	989.56	5.40	5.26	176.80	359.94	-8.61	470.81	460.24	10.57	44.528		
1,100.00	1,085.27	1,087.32	1,085.16	5.83	5.53	176.67	359.94	-11.00	500.02	488.80	11.22	44.552		
1,200.00	1,179.82	1,181.88	1,179.68	6.29	5.87	176.57	359.94	-13.36	532.55	520.59	11.95	44.547		
1,300.00	1,273.17	1,275.24	1,273.02	6.79	6.21	176.49	359.94	-15.70	568.35	555.64	12.71	44.729		
1,400.00	1,365.21	1,367.31	1,365.05	7.33	6.56	176.43	359.94	-18.00	607.38	593.91	13.47	45.076		
1,500.00	1,455.84	1,457.95	1,455.67	7.89	6.90	176.38	359.94	-20.26	649.60	635.34	14.26	45.568		
1,600.00	1,544.94	1,547.07	1,544.76	8.50	7.25	176.35	359.94	-22.49	694.95	679.90	15.05	46.187		
1,700.00	1,632.39	1,634.56	1,632.22	9.13	7.59	176.33	359.94	-24.67	743.37	727.53	15.84	46.918		
1,800.00	1,718.11	1,720.31	1,717.94	9.80	7.93	176.31	359.94	-26.82	794.81	778.17	16.65	47.749		
1,900.00	1,802.44	1,804.67	1,802.28	10.49	8.27	176.35	359.94	-28.92	848.49	831.05	17.45	48.628		
2,000.00	1,886.68	1,888.95	1,886.53	11.20	8.61	176.41	359.94	-31.03	902.31	884.06	18.25	49.436		
2,100.00	1,970.92	1,973.23	1,970.78	11.93	8.96	176.46	359.94	-33.14	956.13	937.06	19.07	50.149		
2,200.00	2,055.17	2,057.51	2,055.04	12.66	9.30	176.51	359.94	-35.24	1,009.95	990.06	19.89	50.779		
2,300.00	2,139.41	2,141.79	2,139.29	13.40	9.65	176.55	359.94	-37.35	1,063.77	1,043.05	20.72	51.340		
2,400.00	2,223.66	2,226.07	2,223.55	14.14	10.00	176.59	359.94	-39.45	1,117.59	1,096.03	21.56	51.840		
2,500.00	2,307.90	2,310.35	2,307.80	14.89	10.35	176.62	359.94	-41.56	1,171.41	1,149.00	22.40	52.288		
2,600.00	2,392.14	2,405.37	2,392.05	15.65	10.74	176.66	359.94	-43.67	1,225.23	1,201.93	23.30	52.589		
2,700.00	2,476.39	2,478.91	2,476.31	16.41	11.05	176.68	359.94	-45.77	1,279.05	1,254.94	24.11	53.055		
2,800.00	2,560.63	2,563.19	2,560.56	17.17	11.41	176.71	359.94	-47.88	1,332.87	1,307.90	24.97	53.384		
2,900.00	2,644.88	2,647.47	2,644.81	17.93	11.76	176.74	359.94	-49.98	1,386.69	1,360.86	25.83	53.683		
3,000.00	2,729.12	2,731.75	2,729.07	18.70	12.12	176.76	359.94	-52.09	1,440.51	1,413.81	26.70	53.956		
3,100.00	2,813.36	2,816.03	2,813.32	19.47	12.47	176.78	359.94	-54.19	1,494.33	1,466.76	27.57	54.205		
3,200.00	2,897.61	2,900.31	2,897.57	20.25	12.83	176.80	359.94	-56.30	1,548.15	1,519.71	28.44	54.433		
3,300.00	2,981.85	2,984.59	2,981.83	21.02	13.19	176.82	359.94	-58.41	1,601.97	1,572.65	29.32	54.643		
3,400.00	3,066.10	3,068.87	3,066.08	21.80	13.55	176.83	359.94	-60.51	1,655.79	1,625.60	30.20	54.836		
3,500.00	3,150.34	3,153.15	3,150.34	22.58	13.91	176.85	359.94	-62.62	1,709.61	1,678.54	31.08	55.014		
3,600.00	3,234.58	3,237.43	3,234.59	23.35	14.27	176.86	359.94	-64.72	1,763.44	1,731.48	31.96	55.179		
3,700.00	3,318.83	3,321.71	3,318.84	24.13	14.63	176.88	359.94	-66.83	1,817.26	1,784.41	32.84	55.332		
3,800.00	3,403.07	3,405.99	3,403.10	24.92	14.99	176.89	359.94	-68.94	1,871.08	1,837.35	33.73	55.474		
3,900.00	3,487.32	3,509.73	3,487.35	25.70	15.44	176.90	359.94	-71.04	1,924.90	1,890.20	34.70	55.472		
4,000.00	3,571.56	3,574.55	3,571.60	26.48	15.72	176.92	359.94	-73.15	1,978.72	1,943.22	35.51	55.729		
4,100.00	3,655.80	3,658.83	3,655.86	27.27	16.08	176.93	359.94	-75.25	2,032.54	1,996.15	36.40	55.845		
4,200.00	3,740.05	3,743.11	3,740.11	28.05	16.44	176.94	359.94	-77.36	2,086.36	2,049.08	37.29	55.952		
4,300.00	3,824.29	3,827.39	3,824.36	28.84	16.81	176.95	359.94	-79.47	2,140.19	2,102.01	38.18	56.053		
4,400.00	3,908.54	3,911.67	3,908.62	29.62	17.17	176.96	359.94	-81.57	2,194.01	2,154.93	39.08	56.148		
4,500.00	3,992.78	4,004.05	3,992.87	30.41	17.57	176.97	359.94	-83.68	2,247.83	2,207.82	40.01	56.187		
4,600.00	4,077.03	4,080.23	4,077.13	31.20	17.90	176.98	359.94	-85.78	2,301.65	2,260.79	40.87	56.320		
4,700.00	4,161.27	4,164.51	4,161.38	31.98	18.26	176.98	359.94	-87.89	2,355.47	2,313.71	41.76	56.399		
4,800.00	4,245.51	4,248.79	4,245.63	32.77	18.63	176.99	359.94	-90.00	2,409.30	2,366.63	42.66	56.473		
4,900.00	4,329.76	4,333.07	4,329.89	33.56	18.99	177.00	359.94	-92.10	2,463.12	2,419.56	43.56	56.544		
5,000.00	4,414.00	4,417.35	4,414.14	34.35	19.36	177.01	359.94	-94.21	2,516.94	2,472.48	44.46	56.610		
5,100.00	4,498.25	4,501.63	4,498.39	35.14	19.72	177.01	359.94	-96.31	2,570.76	2,525.40	45.36	56.673		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,585.91	4,582.65	35.93	20.09	177.02	359.94	-98.42	2,624.58	2,578.32	46.26	56.732		
5,300.00	4,666.73	4,670.19	4,666.90	36.72	20.46	177.03	359.94	-100.52	2,678.41	2,631.24	47.16	56.788		
5,400.00	4,750.98	4,754.47	4,751.15	37.51	20.82	177.03	359.94	-102.63	2,732.23	2,684.16	48.07	56.842		
5,500.00	4,835.22	4,838.75	4,835.41	38.30	21.19	177.04	359.94	-104.74	2,786.05	2,737.08	48.97	56.892		
5,600.00	4,919.47	4,923.03	4,919.66	39.09	21.55	177.05	359.94	-106.84	2,839.87	2,790.00	49.87	56.941		
5,700.00	5,003.71	5,007.31	5,003.92	39.88	21.92	177.05	359.94	-108.95	2,893.70	2,842.92	50.78	56.986		
5,800.00	5,088.06	5,108.31	5,088.27	40.67	22.36	177.08	359.94	-111.06	2,947.35	2,895.60	51.76	56.948		
5,900.00	5,173.83	5,177.50	5,174.05	41.44	22.66	177.14	359.94	-113.20	2,998.70	2,946.11	52.59	57.020		
6,000.00	5,261.34	5,265.04	5,261.56	42.18	23.04	177.19	359.94	-115.39	3,047.03	2,993.53	53.50	56.954		
6,100.00	5,350.49	5,354.21	5,350.71	42.88	23.43	177.24	359.94	-117.62	3,092.28	3,037.87	54.41	56.831		
6,200.00	5,441.16	5,444.90	5,441.37	43.56	23.83	177.27	359.94	-119.88	3,134.39	3,079.06	55.32	56.657		
6,300.00	5,533.25	5,537.01	5,533.45	44.20	24.23	177.30	359.94	-122.18	3,173.31	3,117.08	56.23	56.435		
6,400.00	5,626.65	5,630.42	5,626.83	44.82	24.64	177.32	359.94	-124.52	3,209.00	3,151.87	57.13	56.168		
6,500.00	5,721.23	5,725.01	5,721.39	45.40	25.05	177.34	359.94	-126.88	3,241.41	3,183.38	58.03	55.860		
6,600.00	5,816.89	5,820.67	5,817.03	45.94	25.47	177.34	359.94	-129.27	3,270.50	3,211.59	58.91	55.514		
6,700.00	5,913.51	5,917.29	5,913.61	46.45	25.89	177.35	359.94	-131.69	3,296.24	3,236.46	59.79	55.132		
6,800.00	6,010.97	6,014.74	6,011.03	46.93	26.31	177.34	359.94	-134.12	3,318.60	3,257.95	60.65	54.718		
6,900.00	6,109.15	6,112.91	6,109.17	47.38	26.74	177.33	359.94	-136.57	3,337.55	3,276.05	61.50	54.272		
7,000.00	6,207.93	6,211.68	6,207.91	47.80	27.17	177.32	359.94	-139.04	3,353.06	3,290.73	62.33	53.796		
7,100.00	6,307.19	6,310.93	6,307.13	48.18	27.61	177.29	359.94	-141.52	3,365.12	3,301.98	63.14	53.294		
7,200.00	6,406.82	6,410.53	6,406.70	48.53	28.04	177.27	359.94	-144.01	3,373.72	3,309.78	63.94	52.765		
7,300.00	6,506.68	6,510.37	6,506.51	48.84	28.48	177.23	359.94	-146.51	3,378.83	3,314.12	64.71	52.211		
7,400.00	6,606.66	6,610.33	6,614.31	49.10	28.96	90.04	359.76	-158.13	3,380.34	3,314.80	65.54	51.574		
7,500.00	6,706.21	6,723.53	6,714.88	49.35	29.43	89.73	359.26	-186.49	3,380.06	3,313.74	66.32	50.966		
7,600.00	6,803.22	6,824.77	6,806.52	49.59	29.89	89.43	358.47	-229.24	3,379.67	3,312.62	67.05	50.405		
7,700.00	6,895.32	6,922.91	6,887.82	49.82	30.35	89.15	357.43	-284.03	3,379.20	3,311.45	67.75	49.879		
7,800.00	6,980.23	7,018.27	6,957.84	50.03	30.84	88.89	356.21	-348.62	3,378.64	3,310.18	68.45	49.356		
7,900.00	7,055.85	7,111.16	7,016.05	50.21	31.40	88.66	354.82	-420.90	3,378.00	3,308.76	69.23	48.792		
8,000.00	7,120.34	7,201.92	7,062.17	50.36	32.04	88.47	353.32	-498.96	3,377.27	3,307.12	70.16	48.140		
8,100.00	7,172.10	7,290.86	7,096.16	50.47	32.81	88.31	351.73	-581.05	3,376.47	3,305.17	71.30	47.355		
8,200.00	7,209.85	7,378.26	7,118.10	50.55	33.69	88.19	350.08	-665.57	3,375.58	3,302.87	72.72	46.421		
8,300.00	7,232.68	7,464.42	7,128.21	50.61	34.67	88.12	348.42	-751.05	3,374.61	3,300.21	74.41	45.353		
8,400.00	7,240.00	7,558.51	7,128.78	50.65	35.88	88.11	346.58	-845.11	3,373.49	3,296.96	76.53	44.082		
8,500.00	7,239.60	7,658.50	7,128.42	50.69	37.32	88.11	344.62	-945.08	3,372.15	3,293.07	79.07	42.646		
8,600.00	7,239.19	7,758.49	7,128.05	50.75	38.91	88.11	342.67	-1,045.05	3,370.80	3,288.86	81.94	41.139		
8,700.00	7,238.78	7,858.48	7,127.68	50.85	40.63	88.11	340.71	-1,145.02	3,369.46	3,284.37	85.09	39.600		
8,800.00	7,238.38	7,958.47	7,127.32	51.02	42.48	88.11	338.76	-1,244.99	3,368.11	3,279.62	88.49	38.061		
8,900.00	7,237.97	8,058.46	7,126.95	51.32	44.44	88.11	336.80	-1,344.96	3,366.77	3,274.65	92.12	36.546		
9,000.00	7,237.57	8,158.46	7,126.59	51.95	46.49	88.11	334.85	-1,444.93	3,365.43	3,269.47	95.96	35.072		
9,100.00	7,237.16	8,258.45	7,126.22	53.10	48.62	88.11	332.89	-1,544.90	3,364.08	3,264.11	99.97	33.651		
9,200.00	7,236.76	8,358.44	7,125.85	54.69	50.82	88.11	330.94	-1,644.88	3,362.74	3,258.60	104.14	32.291		
9,300.00	7,236.35	8,458.43	7,125.49	56.53	53.09	88.11	328.98	-1,744.85	3,361.40	3,252.95	108.45	30.996		
9,400.00	7,235.94	8,558.42	7,125.12	58.53	55.41	88.11	327.02	-1,844.82	3,360.05	3,247.17	112.88	29.766		
9,500.00	7,235.54	8,658.41	7,124.75	60.62	57.77	88.11	325.07	-1,944.79	3,358.71	3,241.28	117.42	28.603		
9,600.00	7,235.13	8,758.40	7,124.39	62.80	60.18	88.11	323.11	-2,044.76	3,357.36	3,235.30	122.06	27.505		
9,700.00	7,234.73	8,858.39	7,124.02	65.03	62.63	88.11	321.16	-2,144.73	3,356.02	3,229.23	126.79	26.469		
9,800.00	7,234.32	8,958.38	7,123.66	67.32	65.11	88.11	319.20	-2,244.70	3,354.68	3,223.08	131.60	25.492		
9,900.00	7,233.92	9,058.37	7,123.29	69.66	67.62	88.11	317.25	-2,344.67	3,353.33	3,216.86	136.47	24.572		
10,000.00	7,233.51	9,158.37	7,122.92	72.03	70.15	88.11	315.29	-2,444.65	3,351.99	3,210.58	141.41	23.704		
10,100.00	7,233.10	9,258.36	7,122.56	74.45	72.71	88.11	313.34	-2,544.62	3,350.65	3,204.24	146.40	22.887		
10,200.00	7,232.70	9,358.35	7,122.19	76.89	75.29	88.11	311.38	-2,644.59	3,349.30	3,197.86	151.44	22.116		
10,300.00	7,232.29	9,458.34	7,121.83	79.36	77.89	88.11	309.43	-2,744.56	3,347.96	3,191.42	156.53	21.388		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+HFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	9,558.33	7,121.46	81.86	80.51	88.11	307.47	-2,844.53	3,346.61	3,184.95	161.66	20.701		
10,500.00	7,231.48	9,658.32	7,121.09	84.38	83.14	88.11	305.52	-2,944.50	3,345.27	3,178.44	166.83	20.052		
10,600.00	7,231.08	9,758.31	7,120.73	86.93	85.79	88.11	303.56	-3,044.47	3,343.93	3,171.89	172.03	19.438		
10,700.00	7,230.67	9,858.30	7,120.36	89.49	88.45	88.11	301.60	-3,144.44	3,342.58	3,165.31	177.27	18.856		
10,800.00	7,230.26	9,958.29	7,119.99	92.07	91.12	88.11	299.65	-3,244.41	3,341.24	3,158.71	182.53	18.305		
10,900.00	7,229.86	10,058.28	7,119.63	94.67	93.80	88.11	297.69	-3,344.39	3,339.90	3,152.08	187.82	17.783		
11,000.00	7,229.45	10,158.28	7,119.26	97.28	96.49	88.11	295.74	-3,444.36	3,338.55	3,145.42	193.13	17.286		
11,100.00	7,229.05	10,258.27	7,118.90	99.90	99.20	88.11	293.78	-3,544.33	3,337.21	3,138.74	198.47	16.815		
11,200.00	7,228.64	10,358.26	7,118.53	102.54	101.90	88.11	291.83	-3,644.30	3,335.86	3,132.04	203.82	16.367		
11,300.00	7,228.24	10,458.25	7,118.16	105.19	104.62	88.11	289.87	-3,744.27	3,334.52	3,125.33	209.19	15.940		
11,400.00	7,227.83	10,558.24	7,117.80	107.85	107.35	88.11	287.92	-3,844.24	3,333.18	3,118.59	214.58	15.533		
11,500.00	7,227.42	10,658.23	7,117.43	110.52	110.08	88.11	285.96	-3,944.21	3,331.83	3,111.84	219.99	15.145		
11,600.00	7,227.02	10,758.22	7,117.07	113.20	112.81	88.11	284.01	-4,044.18	3,330.49	3,105.08	225.41	14.775		
11,700.00	7,226.61	10,858.21	7,116.70	115.89	115.56	88.11	282.05	-4,144.16	3,329.15	3,098.30	230.85	14.421		
11,800.00	7,226.21	10,958.20	7,116.33	118.59	118.30	88.11	280.10	-4,244.13	3,327.80	3,091.50	236.30	14.083		
11,900.00	7,225.80	11,058.19	7,115.97	121.29	121.06	88.11	278.14	-4,344.10	3,326.46	3,084.70	241.76	13.759		
12,000.00	7,225.40	11,158.18	7,115.60	124.00	123.81	88.11	276.18	-4,444.07	3,325.11	3,077.88	247.23	13.449		
12,100.00	7,224.99	11,258.18	7,115.23	126.72	126.57	88.11	274.23	-4,544.04	3,323.77	3,071.06	252.71	13.152		
12,200.00	7,224.58	11,358.17	7,114.87	129.44	129.34	88.11	272.27	-4,644.01	3,322.43	3,064.22	258.21	12.867		
12,300.00	7,224.18	11,458.16	7,114.50	132.17	132.11	88.11	270.32	-4,743.98	3,321.08	3,057.38	263.71	12.594		
12,400.00	7,223.77	11,558.15	7,114.14	134.91	134.88	88.11	268.36	-4,843.95	3,319.74	3,050.52	269.22	12.331		
12,500.00	7,223.37	11,658.14	7,113.77	137.65	137.66	88.11	266.41	-4,943.92	3,318.40	3,043.66	274.74	12.078		
12,600.00	7,222.96	11,758.13	7,113.40	140.39	140.44	88.11	264.45	-5,043.90	3,317.05	3,036.79	280.26	11.835		
12,700.00	7,222.55	11,858.12	7,113.04	143.14	143.22	88.11	262.50	-5,143.87	3,315.71	3,029.91	285.80	11.602		
12,800.00	7,222.15	11,958.11	7,112.67	145.89	146.01	88.11	260.54	-5,243.84	3,314.36	3,023.03	291.34	11.376		
12,900.00	7,221.74	12,058.10	7,112.31	148.65	148.79	88.11	258.59	-5,343.81	3,313.02	3,016.14	296.88	11.159		
13,000.00	7,221.34	12,158.09	7,111.94	151.41	151.58	88.11	256.63	-5,443.78	3,311.68	3,009.24	302.44	10.950		
13,100.00	7,220.93	12,258.09	7,111.57	154.18	154.38	88.11	254.68	-5,543.75	3,310.33	3,002.34	307.99	10.748		
13,200.00	7,220.53	12,358.08	7,111.21	156.94	157.17	88.11	252.72	-5,643.72	3,308.99	2,995.43	313.56	10.553		
13,300.00	7,220.12	12,458.07	7,110.84	159.72	159.97	88.11	250.76	-5,743.69	3,307.65	2,988.52	319.13	10.365		
13,400.00	7,219.71	12,558.06	7,110.47	162.49	162.77	88.11	248.81	-5,843.67	3,306.30	2,981.60	324.70	10.183		
13,500.00	7,219.31	12,658.05	7,110.11	165.27	165.57	88.11	246.85	-5,943.64	3,304.96	2,974.68	330.28	10.007		
13,600.00	7,218.90	12,758.04	7,109.74	168.05	168.37	88.11	244.90	-6,043.61	3,303.61	2,967.75	335.86	9.836		
13,700.00	7,218.50	12,858.03	7,109.38	170.83	171.17	88.11	242.94	-6,143.58	3,302.27	2,960.82	341.45	9.671		
13,800.00	7,218.09	12,958.02	7,109.01	173.61	173.98	88.11	240.99	-6,243.55	3,300.93	2,953.88	347.04	9.512		
13,900.00	7,217.69	13,058.01	7,108.64	176.40	176.79	88.11	239.03	-6,343.52	3,299.58	2,946.95	352.64	9.357		
14,000.00	7,217.28	13,158.00	7,108.28	179.19	179.59	88.11	237.08	-6,443.49	3,298.24	2,940.00	358.24	9.207		
14,100.00	7,216.87	13,258.00	7,107.91	181.98	182.40	88.11	235.12	-6,543.46	3,296.90	2,933.06	363.84	9.061		
14,200.00	7,216.47	13,357.99	7,107.55	184.78	185.22	88.11	233.17	-6,643.43	3,295.55	2,926.11	369.44	8.920		
14,300.00	7,216.06	13,457.98	7,107.18	187.57	188.03	88.11	231.21	-6,743.41	3,294.21	2,919.15	375.05	8.783		
14,400.00	7,215.66	13,557.97	7,106.81	190.37	190.84	88.11	229.26	-6,843.38	3,292.86	2,912.20	380.66	8.650		
14,500.00	7,215.25	13,657.96	7,106.45	193.17	193.66	88.11	227.30	-6,943.35	3,291.52	2,905.24	386.28	8.521		
14,600.00	7,214.85	13,757.95	7,106.08	195.97	196.47	88.11	225.34	-7,043.32	3,290.18	2,898.28	391.90	8.396		
14,700.00	7,214.44	13,857.94	7,105.71	198.77	199.29	88.11	223.39	-7,143.29	3,288.83	2,891.32	397.52	8.273		
14,800.00	7,214.03	13,957.93	7,105.35	201.58	202.11	88.11	221.43	-7,243.26	3,287.49	2,884.35	403.14	8.155		
14,900.00	7,213.63	14,057.92	7,104.98	204.38	204.93	88.11	219.48	-7,343.23	3,286.15	2,877.38	408.76	8.039		
15,000.00	7,213.22	14,157.91	7,104.62	207.19	207.75	88.11	217.52	-7,443.20	3,284.80	2,870.41	414.39	7.927		
15,100.00	7,212.82	14,257.91	7,104.25	210.00	210.57	88.11	215.57	-7,543.18	3,283.46	2,863.44	420.02	7.817		
15,200.00	7,212.41	14,357.90	7,103.88	212.81	213.39	88.11	213.61	-7,643.15	3,282.11	2,856.46	425.65	7.711		
15,300.00	7,212.01	14,457.89	7,103.52	215.62	216.22	88.11	211.66	-7,743.12	3,280.77	2,849.48	431.29	7.607		
15,400.00	7,211.60	14,557.88	7,103.15	218.43	219.04	88.11	209.70	-7,843.09	3,279.43	2,842.50	436.92	7.506		
15,500.00	7,211.19	14,657.87	7,102.79	221.25	221.86	88.11	207.75	-7,943.06	3,278.08	2,835.52	442.56	7.407		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16C-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,600.00	7,210.79	14,757.86	7,102.42	224.06	224.69	88.11	205.79	-8,043.03	3,276.74	2,828.54	448.20	7.311	
15,700.00	7,210.38	14,857.85	7,102.05	226.88	227.51	88.11	203.84	-8,143.00	3,275.40	2,821.56	453.84	7.217	
15,758.48	7,210.15	14,872.41	7,102.00	228.52	227.93	88.11	203.55	-8,157.56	3,274.90	2,819.07	455.83	7.184	
15,794.94	7,210.00	14,872.41	7,102.00	229.55	227.93	88.11	203.55	-8,157.56	3,275.11	2,818.36	456.74	7.171 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 41-20(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	59.00	3.28	3.28	-113.53	-3,915.73	-8,992.09	9,807.86				
100.00	100.00	41.00	100.00	3.28	3.36	-113.53	-3,915.73	-8,992.09	9,807.68	9,801.04	6.64	1,476.640	
200.00	200.00	141.00	200.00	3.34	4.57	-113.53	-3,915.73	-8,992.09	9,807.68	9,799.78	7.90	1,240.965	
300.00	299.98	240.98	299.98	3.44	7.43	63.84	-3,915.73	-8,992.09	9,806.91	9,796.04	10.87	902.225	
400.00	399.84	340.84	399.84	3.59	10.67	63.91	-3,915.73	-8,992.09	9,804.60	9,790.35	14.26	687.615	
500.00	499.45	440.45	499.45	3.79	14.02	64.03	-3,915.73	-8,992.09	9,800.77	9,782.96	17.81	550.388	
600.00	598.70	539.70	598.70	4.03	17.41	64.19	-3,915.73	-8,992.09	9,795.41	9,773.98	21.44	456.936	
700.00	697.47	638.47	697.47	4.31	20.80	64.39	-3,915.73	-8,992.09	9,788.56	9,763.44	25.12	389.723	
800.00	795.62	736.62	795.62	4.64	24.19	64.64	-3,915.73	-8,992.09	9,780.22	9,751.40	28.83	339.269	
900.00	893.06	834.06	893.06	5.00	27.57	64.94	-3,915.73	-8,992.09	9,770.44	9,737.88	32.56	300.102	
1,000.00	989.64	930.64	989.64	5.40	30.92	65.28	-3,915.73	-8,992.09	9,759.23	9,722.93	36.30	268.872	
1,100.00	1,085.27	1,026.27	1,085.27	5.83	34.24	65.66	-3,915.73	-8,992.09	9,746.63	9,706.59	40.04	243.423	
1,200.00	1,179.82	1,120.82	1,179.82	6.29	37.53	66.08	-3,915.73	-8,992.09	9,732.69	9,688.91	43.78	222.311	
1,300.00	1,273.17	1,214.17	1,273.17	6.79	40.77	66.55	-3,915.73	-8,992.09	9,717.45	9,669.94	47.51	204.529	
1,400.00	1,365.21	1,306.21	1,365.21	7.33	43.98	67.05	-3,915.73	-8,992.09	9,700.96	9,649.73	51.23	189.361	
1,500.00	1,455.84	1,403.16	1,455.84	7.89	47.35	67.60	-3,915.73	-8,992.09	9,683.26	9,628.11	55.15	175.576	
1,600.00	1,544.94	1,485.94	1,544.94	8.50	50.24	68.18	-3,915.73	-8,992.09	9,664.43	9,605.81	58.61	164.890	
1,700.00	1,632.39	1,573.39	1,632.39	9.13	53.28	68.79	-3,915.73	-8,992.09	9,644.50	9,582.24	62.27	154.891	
1,800.00	1,718.11	1,659.11	1,718.11	9.80	56.27	69.45	-3,915.73	-8,992.09	9,623.56	9,557.67	65.89	146.050	
1,900.00	1,802.44	1,743.44	1,802.44	10.49	59.21	69.83	-3,915.73	-8,992.09	9,601.95	9,532.46	69.49	138.168	
2,000.00	1,886.68	1,827.68	1,886.68	11.20	62.15	70.09	-3,915.73	-8,992.09	9,580.54	9,507.43	73.11	131.040	
2,100.00	1,970.92	1,911.92	1,970.92	11.93	65.08	70.35	-3,915.73	-8,992.09	9,559.39	9,482.65	76.74	124.567	
2,200.00	2,055.17	2,003.83	2,055.17	12.66	68.29	70.61	-3,915.73	-8,992.09	9,538.50	9,457.85	80.65	118.272	
2,300.00	2,139.41	2,080.41	2,139.41	13.40	70.96	70.88	-3,915.73	-8,992.09	9,517.86	9,433.83	84.03	113.265	
2,400.00	2,223.66	2,164.66	2,223.66	14.14	73.90	71.14	-3,915.73	-8,992.09	9,497.49	9,409.80	87.69	108.307	
2,500.00	2,307.90	2,248.90	2,307.90	14.89	76.83	71.41	-3,915.73	-8,992.09	9,477.37	9,386.02	91.36	103.741	
2,600.00	2,392.14	2,333.14	2,392.14	15.65	79.77	71.67	-3,915.73	-8,992.09	9,457.52	9,362.50	95.03	99.523	
2,700.00	2,476.39	2,417.39	2,476.39	16.41	82.71	71.94	-3,915.73	-8,992.09	9,437.94	9,339.24	98.71	95.616	
2,800.00	2,560.63	2,501.63	2,560.63	17.17	85.65	72.21	-3,915.73	-8,992.09	9,418.63	9,316.24	102.39	91.987	
2,900.00	2,644.88	2,585.88	2,644.88	17.93	88.59	72.48	-3,915.73	-8,992.09	9,399.58	9,293.50	106.08	88.610	
3,000.00	2,729.12	2,670.12	2,729.12	18.70	91.53	72.74	-3,915.73	-8,992.09	9,380.81	9,271.03	109.77	85.458	
3,100.00	2,813.36	2,754.36	2,813.36	19.47	94.47	73.01	-3,915.73	-8,992.09	9,362.30	9,248.84	113.47	82.511	
3,200.00	2,897.61	2,838.61	2,897.61	20.25	97.41	73.28	-3,915.73	-8,992.09	9,344.07	9,226.91	117.17	79.749	
3,300.00	2,981.85	2,922.85	2,981.85	21.02	100.35	73.56	-3,915.73	-8,992.09	9,326.12	9,205.25	120.87	77.157	
3,400.00	3,066.10	3,007.10	3,066.10	21.80	103.28	73.83	-3,915.73	-8,992.09	9,308.45	9,183.87	124.58	74.720	
3,500.00	3,150.34	3,108.66	3,150.34	22.58	106.83	74.10	-3,915.73	-8,992.09	9,291.05	9,162.16	128.89	72.084	
3,600.00	3,234.58	3,175.58	3,234.58	23.35	109.16	74.37	-3,915.73	-8,992.09	9,273.93	9,141.93	132.00	70.257	
3,700.00	3,318.83	3,259.83	3,318.83	24.13	112.10	74.65	-3,915.73	-8,992.09	9,257.10	9,121.38	135.72	68.209	
3,800.00	3,403.07	3,344.07	3,403.07	24.92	115.04	74.92	-3,915.73	-8,992.09	9,240.55	9,101.11	139.43	66.272	
3,900.00	3,487.32	3,428.32	3,487.32	25.70	117.98	75.20	-3,915.73	-8,992.09	9,224.28	9,081.13	143.15	64.436	
4,000.00	3,571.56	3,512.56	3,571.56	26.48	120.92	75.48	-3,915.73	-8,992.09	9,208.30	9,061.42	146.88	62.695	
4,100.00	3,655.80	3,603.20	3,655.80	27.27	124.09	75.75	-3,915.73	-8,992.09	9,192.61	9,041.79	150.82	60.950	
4,200.00	3,740.05	3,681.05	3,740.05	28.05	126.80	76.03	-3,915.73	-8,992.09	9,177.21	9,022.88	154.33	59.466	
4,300.00	3,824.29	3,765.29	3,824.29	28.84	129.74	76.31	-3,915.73	-8,992.09	9,162.09	9,004.04	158.05	57.968	
4,400.00	3,908.54	3,849.54	3,908.54	29.62	132.68	76.59	-3,915.73	-8,992.09	9,147.28	8,985.49	161.78	56.540	
4,500.00	3,992.78	3,933.78	3,992.78	30.41	135.62	76.87	-3,915.73	-8,992.09	9,132.75	8,967.24	165.51	55.178	
4,600.00	4,077.03	4,018.03	4,077.03	31.20	138.56	77.15	-3,915.73	-8,992.09	9,118.52	8,949.27	169.25	53.877	
4,700.00	4,161.27	4,102.27	4,161.27	31.98	141.50	77.43	-3,915.73	-8,992.09	9,104.59	8,931.61	172.98	52.633	
4,800.00	4,245.51	4,186.51	4,245.51	32.77	144.44	77.71	-3,915.73	-8,992.09	9,090.95	8,914.23	176.72	51.443	
4,900.00	4,329.76	4,270.76	4,329.76	33.56	147.38	78.00	-3,915.73	-8,992.09	9,077.62	8,897.16	180.45	50.304	
5,000.00	4,414.00	4,355.00	4,414.00	34.35	150.32	78.28	-3,915.73	-8,992.09	9,064.58	8,880.39	184.19	49.212	
5,100.00	4,498.25	4,439.25	4,498.25	35.14	153.26	78.56	-3,915.73	-8,992.09	9,051.85	8,863.92	187.93	48.165	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	4,582.49	4,523.49	4,582.49	35.93	156.20	78.85	-3,915.73	-8,992.09	9,039.42	8,847.74	191.67	47.161	
5,300.00	4,666.73	4,607.73	4,666.73	36.72	159.14	79.13	-3,915.73	-8,992.09	9,027.29	8,831.88	195.41	46.196	
5,400.00	4,750.98	4,708.02	4,750.98	37.51	162.64	79.42	-3,915.73	-8,992.09	9,015.47	8,815.75	199.72	45.141	
5,500.00	4,835.22	4,776.22	4,835.22	38.30	165.03	79.70	-3,915.73	-8,992.09	9,003.96	8,801.06	202.90	44.376	
5,600.00	4,919.47	4,860.47	4,919.47	39.09	167.97	79.99	-3,915.73	-8,992.09	8,992.75	8,786.11	206.65	43.518	
5,700.00	5,003.71	4,944.71	5,003.71	39.88	170.91	80.28	-3,915.73	-8,992.09	8,981.86	8,771.47	210.39	42.691	
5,800.00	5,088.06	5,029.06	5,088.06	40.67	173.85	80.49	-3,915.73	-8,992.09	8,971.30	8,757.17	214.14	41.895	
5,900.00	5,173.83	5,114.83	5,173.83	41.44	176.84	80.58	-3,915.73	-8,992.09	8,961.49	8,743.58	217.91	41.124	
6,000.00	5,261.34	5,202.34	5,261.34	42.18	179.90	80.67	-3,915.73	-8,992.09	8,952.52	8,730.80	221.72	40.378	
6,100.00	5,350.49	5,308.51	5,350.49	42.88	183.60	80.76	-3,915.73	-8,992.09	8,944.35	8,718.21	226.14	39.552	
6,200.00	5,441.16	5,382.16	5,441.16	43.56	186.18	80.86	-3,915.73	-8,992.09	8,936.94	8,707.54	229.40	38.957	
6,300.00	5,533.25	5,474.25	5,533.25	44.20	189.39	80.95	-3,915.73	-8,992.09	8,930.27	8,697.00	233.27	38.282	
6,400.00	5,626.65	5,567.65	5,626.65	44.82	192.65	81.05	-3,915.73	-8,992.09	8,924.30	8,687.14	237.16	37.631	
6,500.00	5,721.23	5,662.23	5,721.23	45.40	195.95	81.14	-3,915.73	-8,992.09	8,918.99	8,677.95	241.05	37.001	
6,600.00	5,816.89	5,757.89	5,816.89	45.94	199.29	81.22	-3,915.73	-8,992.09	8,914.33	8,669.39	244.94	36.394	
6,700.00	5,913.51	5,854.51	5,913.51	46.45	202.66	81.30	-3,915.73	-8,992.09	8,910.28	8,661.44	248.83	35.808	
6,800.00	6,010.97	5,951.97	6,010.97	46.93	206.06	81.37	-3,915.73	-8,992.09	8,906.82	8,654.10	252.72	35.243	
6,900.00	6,109.15	6,050.15	6,109.15	47.38	209.49	81.43	-3,915.73	-8,992.09	8,903.93	8,647.33	256.60	34.699	
7,000.00	6,207.93	6,148.93	6,207.93	47.80	212.94	81.48	-3,915.73	-8,992.09	8,901.60	8,641.13	260.47	34.175	
7,100.00	6,307.19	6,248.19	6,307.19	48.18	216.40	81.52	-3,915.73	-8,992.09	8,899.80	8,635.48	264.32	33.670	
7,200.00	6,406.82	6,347.82	6,406.82	48.53	219.88	81.55	-3,915.73	-8,992.09	8,898.53	8,630.38	268.15	33.185	
7,300.00	6,506.68	6,447.68	6,506.68	48.84	223.37	81.57	-3,915.73	-8,992.09	8,897.78	8,625.82	271.95	32.718	
7,400.00	6,606.66	6,547.66	6,606.66	49.10	226.86	-5.42	-3,915.73	-8,992.09	8,897.53	8,621.83	275.70	32.272	
7,500.00	6,706.21	6,647.21	6,706.21	49.35	230.33	-5.50	-3,915.73	-8,992.09	8,889.22	8,609.79	279.42	31.813	
7,600.00	6,803.22	6,744.22	6,803.22	49.59	233.72	-5.73	-3,915.73	-8,992.09	8,885.51	8,582.45	283.06	31.321	
7,700.00	6,895.32	6,836.32	6,895.32	49.82	236.93	-6.15	-3,915.73	-8,992.09	8,882.98	8,540.47	286.51	30.809	
7,800.00	6,980.23	6,921.23	6,980.23	50.03	239.90	-6.81	-3,915.73	-8,992.09	8,874.59	8,484.90	289.69	30.290	
7,900.00	7,055.85	7,003.15	7,055.85	50.21	242.76	-7.85	-3,915.73	-8,992.09	8,709.62	8,416.89	292.73	29.753	
8,000.00	7,120.34	7,061.34	7,120.34	50.36	244.79	-9.52	-3,915.73	-8,992.09	8,633.69	8,338.77	294.92	29.275	
8,100.00	7,172.10	7,113.10	7,172.10	50.47	246.60	-12.41	-3,915.73	-8,992.09	8,548.65	8,251.82	296.83	28.799	
8,200.00	7,209.85	7,150.85	7,209.85	50.55	247.91	-18.19	-3,915.73	-8,992.09	8,456.62	8,158.40	298.22	28.357	
8,300.00	7,232.68	7,173.68	7,232.68	50.61	248.71	-33.74	-3,915.73	-8,992.09	8,359.85	8,060.80	299.05	27.955	
8,400.00	7,240.00	7,181.00	7,240.00	50.65	248.97	-92.27	-3,915.73	-8,992.09	8,260.73	7,961.43	299.30	27.600	
8,500.00	7,239.60	7,180.60	7,239.60	50.69	248.95	-92.24	-3,915.73	-8,992.09	8,161.26	7,861.99	299.27	27.271	
8,600.00	7,239.19	7,180.19	7,239.19	50.75	248.94	-92.22	-3,915.73	-8,992.09	8,061.80	7,762.56	299.24	26.941	
8,700.00	7,238.78	7,179.78	7,238.78	50.85	248.92	-92.19	-3,915.73	-8,992.09	7,962.35	7,663.14	299.21	26.611	
8,800.00	7,238.38	7,179.38	7,238.38	51.02	248.91	-92.16	-3,915.73	-8,992.09	7,862.92	7,563.73	299.19	26.281	
8,900.00	7,237.97	7,178.97	7,237.97	51.32	248.89	-92.13	-3,915.73	-8,992.09	7,763.50	7,464.34	299.17	25.950	
9,000.00	7,237.57	7,178.57	7,237.57	51.95	248.88	-92.10	-3,915.73	-8,992.09	7,664.10	7,364.95	299.15	25.620	
9,100.00	7,237.16	7,178.16	7,237.16	53.10	248.87	-92.08	-3,915.73	-8,992.09	7,564.71	7,265.58	299.13	25.289	
9,200.00	7,236.76	7,177.76	7,236.76	54.69	248.85	-92.05	-3,915.73	-8,992.09	7,465.34	7,166.22	299.12	24.958	
9,300.00	7,236.35	7,177.35	7,236.35	56.53	248.84	-92.02	-3,915.73	-8,992.09	7,365.99	7,066.88	299.11	24.626	
9,400.00	7,235.94	7,176.94	7,235.94	58.53	248.82	-91.99	-3,915.73	-8,992.09	7,266.65	6,967.55	299.10	24.295	
9,500.00	7,235.54	7,176.54	7,235.54	60.62	248.81	-91.97	-3,915.73	-8,992.09	7,167.33	6,868.23	299.10	23.963	
9,600.00	7,235.13	7,176.13	7,235.13	62.80	248.80	-91.94	-3,915.73	-8,992.09	7,068.03	6,768.93	299.10	23.631	
9,700.00	7,234.73	7,175.73	7,234.73	65.03	248.78	-91.91	-3,915.73	-8,992.09	6,968.76	6,669.65	299.11	23.298	
9,800.00	7,234.32	7,175.32	7,234.32	67.32	248.77	-91.88	-3,915.73	-8,992.09	6,869.50	6,570.38	299.12	22.966	
9,900.00	7,233.92	7,174.92	7,233.92	69.66	248.75	-91.86	-3,915.73	-8,992.09	6,770.26	6,471.13	299.13	22.633	
10,000.00	7,233.51	7,174.51	7,233.51	72.03	248.74	-91.83	-3,915.73	-8,992.09	6,671.05	6,371.89	299.16	22.300	
10,100.00	7,233.10	7,174.10	7,233.10	74.45	248.72	-91.80	-3,915.73	-8,992.09	6,571.86	6,272.68	299.18	21.966	
10,200.00	7,232.70	7,173.70	7,232.70	76.89	248.71	-91.77	-3,915.73	-8,992.09	6,472.70	6,173.48	299.21	21.632	
10,300.00	7,232.29	7,173.29	7,232.29	79.36	248.70	-91.75	-3,915.73	-8,992.09	6,373.56	6,074.30	299.25	21.298	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 41-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	7,172.89	7,231.89	81.86	248.68	-91.72	-3,915.73	-8,992.09	6,274.45	5,975.15	299.30	20.964		
10,500.00	7,231.48	7,172.48	7,231.48	84.38	248.67	-91.69	-3,915.73	-8,992.09	6,175.36	5,876.01	299.35	20.629		
10,600.00	7,231.08	7,172.08	7,231.08	86.93	248.65	-91.66	-3,915.73	-8,992.09	6,076.31	5,776.90	299.42	20.294		
10,700.00	7,230.67	7,171.67	7,230.67	89.49	248.64	-91.64	-3,915.73	-8,992.09	5,977.29	5,677.80	299.49	19.958		
10,800.00	7,230.26	7,171.26	7,230.26	92.07	248.63	-91.61	-3,915.73	-8,992.09	5,878.30	5,578.74	299.57	19.623		
10,900.00	7,229.86	7,170.86	7,229.86	94.67	248.61	-91.58	-3,915.73	-8,992.09	5,779.35	5,479.69	299.66	19.286		
11,000.00	7,229.45	7,170.45	7,229.45	97.28	248.60	-91.55	-3,915.73	-8,992.09	5,680.43	5,380.67	299.76	18.950		
11,100.00	7,229.05	7,170.05	7,229.05	99.90	248.58	-91.52	-3,915.73	-8,992.09	5,581.56	5,281.68	299.87	18.613		
11,200.00	7,228.64	7,169.64	7,228.64	102.54	248.57	-91.50	-3,915.73	-8,992.09	5,482.72	5,182.72	300.00	18.276		
11,300.00	7,228.24	7,169.24	7,228.24	105.19	248.55	-91.47	-3,915.73	-8,992.09	5,383.93	5,083.78	300.14	17.938		
11,400.00	7,227.83	7,168.83	7,227.83	107.85	248.54	-91.44	-3,915.73	-8,992.09	5,285.18	4,984.88	300.30	17.600		
11,500.00	7,227.42	7,168.42	7,227.42	110.52	248.53	-91.41	-3,915.73	-8,992.09	5,186.48	4,886.00	300.47	17.261		
11,600.00	7,227.02	7,168.02	7,227.02	113.20	248.51	-91.39	-3,915.73	-8,992.09	5,087.83	4,787.16	300.66	16.922		
11,700.00	7,226.61	7,167.61	7,226.61	115.89	248.50	-91.36	-3,915.73	-8,992.09	4,989.23	4,688.36	300.87	16.582		
11,800.00	7,226.21	7,167.21	7,226.21	118.59	248.48	-91.33	-3,915.73	-8,992.09	4,890.69	4,589.59	301.11	16.242		
11,900.00	7,225.80	7,166.80	7,225.80	121.29	248.47	-91.30	-3,915.73	-8,992.09	4,792.21	4,490.85	301.36	15.902		
12,000.00	7,225.40	7,166.40	7,225.40	124.00	248.46	-91.28	-3,915.73	-8,992.09	4,693.80	4,392.16	301.64	15.561		
12,100.00	7,224.99	7,165.99	7,224.99	126.72	248.44	-91.25	-3,915.73	-8,992.09	4,595.45	4,293.50	301.95	15.219		
12,200.00	7,224.58	7,165.58	7,224.58	129.44	248.43	-91.22	-3,915.73	-8,992.09	4,497.18	4,194.89	302.29	14.877		
12,300.00	7,224.18	7,165.18	7,224.18	132.17	248.41	-91.19	-3,915.73	-8,992.09	4,398.98	4,096.33	302.65	14.535		
12,400.00	7,223.77	7,164.77	7,223.77	134.91	248.40	-91.17	-3,915.73	-8,992.09	4,300.87	3,997.81	303.06	14.191		
12,500.00	7,223.37	7,164.37	7,223.37	137.65	248.38	-91.14	-3,915.73	-8,992.09	4,202.85	3,899.34	303.50	13.848		
12,600.00	7,222.96	7,163.96	7,222.96	140.39	248.37	-91.11	-3,915.73	-8,992.09	4,104.92	3,800.93	303.99	13.503		
12,700.00	7,222.55	7,163.55	7,222.55	143.14	248.36	-91.08	-3,915.73	-8,992.09	4,007.09	3,702.57	304.52	13.159		
12,800.00	7,222.15	7,163.15	7,222.15	145.89	248.34	-91.06	-3,915.73	-8,992.09	3,909.38	3,604.27	305.11	12.813		
12,900.00	7,221.74	7,162.74	7,221.74	148.65	248.33	-91.03	-3,915.73	-8,992.09	3,811.78	3,506.03	305.75	12.467		
13,000.00	7,221.34	7,162.34	7,221.34	151.41	248.31	-91.00	-3,915.73	-8,992.09	3,714.31	3,407.86	306.45	12.121		
13,100.00	7,220.93	7,161.93	7,220.93	154.18	248.30	-90.97	-3,915.73	-8,992.09	3,616.98	3,309.76	307.22	11.773		
13,200.00	7,220.53	7,161.53	7,220.53	156.94	248.29	-90.94	-3,915.73	-8,992.09	3,519.80	3,211.74	308.06	11.426		
13,300.00	7,220.12	7,161.12	7,220.12	159.72	248.27	-90.92	-3,915.73	-8,992.09	3,422.78	3,113.80	308.98	11.078		
13,400.00	7,219.71	7,160.71	7,219.71	162.49	248.26	-90.89	-3,915.73	-8,992.09	3,325.93	3,015.94	309.99	10.729		
13,500.00	7,219.31	7,160.31	7,219.31	165.27	248.24	-90.86	-3,915.73	-8,992.09	3,229.28	2,918.18	311.10	10.380		
13,600.00	7,218.90	7,159.90	7,218.90	168.05	248.23	-90.83	-3,915.73	-8,992.09	3,132.84	2,820.52	312.32	10.031		
13,700.00	7,218.50	7,159.50	7,218.50	170.83	248.21	-90.81	-3,915.73	-8,992.09	3,036.63	2,722.97	313.66	9.681		
13,800.00	7,218.09	7,159.09	7,218.09	173.61	248.20	-90.78	-3,915.73	-8,992.09	2,940.68	2,625.55	315.13	9.332		
13,900.00	7,217.69	7,158.69	7,217.69	176.40	248.19	-90.75	-3,915.73	-8,992.09	2,845.00	2,528.25	316.74	8.982		
14,000.00	7,217.28	7,158.28	7,217.28	179.19	248.17	-90.72	-3,915.73	-8,992.09	2,749.63	2,431.10	318.52	8.632		
14,100.00	7,216.87	7,157.87	7,216.87	181.98	248.16	-90.70	-3,915.73	-8,992.09	2,654.59	2,334.12	320.48	8.283		
14,200.00	7,216.47	7,157.47	7,216.47	184.78	248.14	-90.67	-3,915.73	-8,992.09	2,559.94	2,237.31	322.63	7.934		
14,300.00	7,216.06	7,157.06	7,216.06	187.57	248.13	-90.64	-3,915.73	-8,992.09	2,465.71	2,140.70	325.01	7.587		
14,400.00	7,215.66	7,156.66	7,215.66	190.37	248.12	-90.61	-3,915.73	-8,992.09	2,371.95	2,044.32	327.63	7.240		
14,500.00	7,215.25	7,156.25	7,215.25	193.17	248.10	-90.59	-3,915.73	-8,992.09	2,278.73	1,948.20	330.53	6.894		
14,600.00	7,214.85	7,155.85	7,214.85	195.97	248.09	-90.56	-3,915.73	-8,992.09	2,186.10	1,852.37	333.73	6.551		
14,700.00	7,214.44	7,155.44	7,214.44	198.77	248.07	-90.53	-3,915.73	-8,992.09	2,094.15	1,756.88	337.27	6.209		
14,800.00	7,214.03	7,155.03	7,214.03	201.58	248.06	-90.50	-3,915.73	-8,992.09	2,002.97	1,661.78	341.19	5.870		
14,900.00	7,213.63	7,154.63	7,213.63	204.38	248.04	-90.47	-3,915.73	-8,992.09	1,912.67	1,567.13	345.54	5.535		
15,000.00	7,213.22	7,154.22	7,213.22	207.19	248.03	-90.45	-3,915.73	-8,992.09	1,823.39	1,473.02	350.36	5.204		
15,100.00	7,212.82	7,153.82	7,212.82	210.00	248.02	-90.42	-3,915.73	-8,992.09	1,735.27	1,379.56	355.72	4.878		
15,200.00	7,212.41	7,153.41	7,212.41	212.81	248.00	-90.39	-3,915.73	-8,992.09	1,648.51	1,286.85	361.66	4.558		
15,300.00	7,212.01	7,153.01	7,212.01	215.62	247.99	-90.36	-3,915.73	-8,992.09	1,563.34	1,195.08	368.26	4.245		
15,400.00	7,211.60	7,152.60	7,211.60	218.43	247.97	-90.34	-3,915.73	-8,992.09	1,480.02	1,104.43	375.58	3.941		
15,500.00	7,211.19	7,152.19	7,211.19	221.25	247.96	-90.31	-3,915.73	-8,992.09	1,398.89	1,015.19	383.70	3.646		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design	HARVESTERS STATE 7-15 PAD - HOOD 41-20(PR_150CC) - OH - OH											Offset Site Error:	0.00 ft
Survey Program:	100-2" Cone@2.448 Sigma											Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,600.00	7,210.79	7,151.79	7,210.79	224.06	247.95	-90.28	-3,915.73	-8,992.09	1,320.34	927.68	392.66	3.363	
15,700.00	7,210.38	7,151.38	7,210.38	226.88	247.93	-90.25	-3,915.73	-8,992.09	1,244.88	842.36	402.52	3.093	
15,794.94	7,210.00	7,151.00	7,210.00	229.55	247.92	-90.23	-3,915.73	-8,992.09	1,176.63	763.92	412.71	2.851	CC, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 6-2-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWDD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	686.79	718.51	3.28	4.38	-106.17	-2,590.26	-8,932.42	9,328.12					
100.00	100.00	724.00	755.32	3.28	4.49	-106.20	-2,593.93	-8,928.50	9,320.73	9,312.98	7.75	1,203.044		
200.00	200.00	724.00	755.32	3.34	4.49	-106.20	-2,593.93	-8,928.50	9,314.23	9,306.44	7.79	1,195.934		
300.00	299.98	724.00	755.32	3.44	4.49	71.27	-2,593.93	-8,928.50	9,308.24	9,300.36	7.88	1,180.963		
400.00	399.84	771.15	801.91	3.59	4.65	71.36	-2,599.62	-8,924.05	9,301.42	9,293.24	8.18	1,137.233		
500.00	499.45	818.00	848.05	3.79	4.81	71.46	-2,606.93	-8,920.53	9,295.11	9,286.58	8.53	1,089.398		
600.00	598.70	818.00	848.05	4.03	4.81	71.60	-2,606.93	-8,920.53	9,287.99	9,279.22	8.77	1,059.038		
700.00	697.47	818.00	848.05	4.31	4.81	71.73	-2,606.93	-8,920.53	9,280.84	9,271.79	9.05	1,025.400		
800.00	795.62	818.00	848.05	4.64	4.81	71.87	-2,606.93	-8,920.53	9,273.67	9,264.30	9.37	989.563		
900.00	893.06	818.00	848.05	5.00	4.81	72.01	-2,606.93	-8,920.53	9,266.50	9,256.77	9.73	952.418		
1,000.00	989.64	862.10	891.37	5.40	4.97	72.17	-2,614.84	-8,918.18	9,258.62	9,248.34	10.28	900.464		
1,100.00	1,085.27	912.00	940.33	5.83	5.15	72.34	-2,624.37	-8,916.82	9,251.33	9,240.43	10.90	849.125		
1,200.00	1,179.82	912.00	940.33	6.29	5.15	72.50	-2,624.37	-8,916.82	9,243.16	9,231.81	11.35	814.027		
1,300.00	1,273.17	912.00	940.33	6.79	5.15	72.66	-2,624.37	-8,916.82	9,235.03	9,223.18	11.85	779.474		
1,400.00	1,365.21	912.00	940.33	7.33	5.15	72.81	-2,624.37	-8,916.82	9,226.93	9,214.56	12.37	745.697		
1,500.00	1,455.84	912.00	940.33	7.89	5.15	72.97	-2,624.37	-8,916.82	9,218.88	9,205.95	12.93	712.868		
1,600.00	1,544.94	912.00	940.33	8.50	5.15	73.12	-2,624.37	-8,916.82	9,210.89	9,197.37	13.52	681.113		
1,700.00	1,632.39	963.04	990.38	9.13	5.34	73.37	-2,634.35	-8,917.04	9,201.99	9,187.65	14.34	641.597		
1,800.00	1,718.11	1,006.00	1,032.51	9.80	5.50	73.62	-2,642.62	-8,918.60	9,193.88	9,178.71	15.17	606.209		
1,900.00	1,802.44	1,006.00	1,032.51	10.49	5.50	73.67	-2,642.62	-8,918.60	9,185.41	9,169.57	15.85	579.655		
2,000.00	1,886.68	1,006.00	1,032.51	11.20	5.50	73.67	-2,642.62	-8,918.60	9,177.98	9,161.44	16.54	554.779		
2,100.00	1,970.92	1,006.00	1,032.51	11.93	5.50	73.67	-2,642.62	-8,918.60	9,171.64	9,154.39	17.25	531.639		
2,200.00	2,055.17	1,006.00	1,032.51	12.66	5.50	73.67	-2,642.62	-8,918.60	9,166.38	9,148.41	17.97	510.134		
2,300.00	2,139.41	1,053.95	1,079.53	13.40	5.67	73.79	-2,651.48	-8,921.70	9,161.53	9,142.65	18.88	485.242		
2,400.00	2,223.66	1,101.00	1,125.68	14.14	5.85	73.90	-2,659.58	-8,925.97	9,158.14	9,138.35	19.80	462.573		
2,500.00	2,307.90	1,101.00	1,125.68	14.89	5.85	73.90	-2,659.58	-8,925.97	9,155.20	9,134.66	20.53	445.890		
2,600.00	2,392.14	1,101.00	1,125.68	15.65	5.85	73.90	-2,659.58	-8,925.97	9,153.34	9,132.07	21.27	430.341		
2,700.00	2,476.39	1,101.00	1,125.68	16.41	5.85	73.90	-2,659.58	-8,925.97	9,152.57	9,130.56	22.01	415.839		
2,787.08	2,549.74	1,138.06	1,161.94	17.07	5.99	73.99	-2,665.99	-8,930.09	9,152.41	9,129.60	22.81	401.254		
2,800.00	2,560.63	1,140.36	1,164.19	17.17	6.00	74.00	-2,666.40	-8,930.36	9,152.46	9,129.55	22.91	399.409		
2,900.00	2,644.88	1,158.17	1,181.56	17.93	6.07	74.04	-2,669.68	-8,932.54	9,153.40	9,129.67	23.73	385.681		
3,000.00	2,729.12	1,197.00	1,219.30	18.70	6.23	74.13	-2,677.20	-8,937.72	9,155.37	9,130.73	24.64	371.528		
3,100.00	2,813.36	1,197.00	1,219.30	19.47	6.23	74.13	-2,677.20	-8,937.72	9,158.00	9,132.62	25.39	360.745		
3,200.00	2,897.61	1,197.00	1,219.30	20.25	6.23	74.13	-2,677.20	-8,937.72	9,161.73	9,135.60	26.13	350.630		
3,300.00	2,981.85	1,233.79	1,254.89	21.02	6.38	74.21	-2,684.80	-8,943.13	9,166.21	9,139.16	27.04	338.965		
3,400.00	3,066.10	1,253.94	1,274.31	21.80	6.47	74.26	-2,689.14	-8,946.28	9,171.63	9,143.76	27.88	328.997		
3,500.00	3,150.34	1,292.00	1,310.86	22.58	6.64	74.34	-2,697.66	-8,952.61	9,178.03	9,149.23	28.80	318.694		
3,600.00	3,234.58	1,292.00	1,310.86	23.35	6.64	74.34	-2,697.66	-8,952.61	9,185.14	9,155.60	29.54	310.976		
3,700.00	3,318.83	1,292.00	1,310.86	24.13	6.64	74.34	-2,697.66	-8,952.61	9,193.33	9,163.06	30.27	303.699		
3,800.00	3,403.07	1,335.28	1,352.19	24.92	6.86	74.44	-2,707.89	-8,960.39	9,202.14	9,170.91	31.23	294.700		
3,900.00	3,487.32	1,387.00	1,401.23	25.70	7.12	74.54	-2,720.83	-8,970.50	9,212.18	9,179.95	32.23	285.802		
4,000.00	3,571.56	1,387.00	1,401.23	26.48	7.12	74.54	-2,720.83	-8,970.50	9,222.64	9,189.68	32.96	279.814		
4,100.00	3,655.80	1,433.12	1,444.75	27.27	7.38	74.64	-2,732.90	-8,979.87	9,234.05	9,200.10	33.95	271.978		
4,200.00	3,740.05	1,502.46	1,510.01	28.05	7.79	74.77	-2,751.69	-8,993.87	9,245.76	9,210.67	35.09	263.518		
4,300.00	3,824.29	1,545.34	1,550.17	28.84	8.07	74.85	-2,763.87	-9,002.64	9,258.02	9,221.95	36.07	256.635		
4,400.00	3,908.54	1,727.26	1,719.31	29.62	9.35	75.16	-2,820.40	-9,038.49	9,270.04	9,232.01	38.03	243.764		
4,500.00	3,992.78	2,475.44	2,393.38	30.41	16.06	75.91	-3,126.12	-9,140.33	9,276.23	9,231.01	45.22	205.121		
4,600.00	4,077.03	2,513.00	2,427.24	31.20	16.42	75.94	-3,141.88	-9,144.33	9,281.52	9,235.19	46.33	200.352		
4,700.00	4,161.27	2,543.91	2,455.10	31.98	16.71	75.97	-3,154.80	-9,147.84	9,287.51	9,240.15	47.37	196.081		
4,800.00	4,245.51	2,583.08	2,490.43	32.77	17.09	76.01	-3,171.05	-9,152.55	9,294.17	9,245.69	48.48	191.712		
4,900.00	4,329.76	2,626.53	2,529.63	33.56	17.50	76.05	-3,188.95	-9,158.08	9,301.48	9,251.85	49.63	187.405		
5,000.00	4,414.00	2,677.66	2,575.67	34.35	18.00	76.10	-3,210.14	-9,164.82	9,309.34	9,258.48	50.86	183.045		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 6-2-20(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 82-MWDD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,100.00	4,498.25	2,703.00	2,598.44	35.14	18.24	76.12	-3,220.72	-9,168.24	9,317.79	9,265.96	51.84	179.745	
5,200.00	4,582.49	2,750.88	2,641.28	35.93	18.72	76.16	-3,241.02	-9,174.96	9,326.87	9,273.82	53.04	175.837	
5,300.00	4,666.73	2,798.00	2,683.12	36.72	19.20	76.20	-3,261.52	-9,181.96	9,336.75	9,282.51	54.24	172.145	
5,400.00	4,750.98	3,048.04	2,903.99	37.51	21.78	76.39	-3,373.06	-9,217.75	9,347.14	9,289.65	57.49	162.582	
5,500.00	4,835.22	3,106.65	2,956.81	38.30	22.37	76.45	-3,397.11	-9,225.90	9,355.79	9,296.98	58.81	159.094	
5,600.00	4,919.47	3,360.39	3,183.32	39.09	24.95	76.66	-3,506.25	-9,259.98	9,365.02	9,302.96	62.07	150.887	
5,700.00	5,003.71	3,483.72	3,293.49	39.88	26.20	76.76	-3,559.72	-9,274.58	9,372.05	9,308.00	64.05	146.325	
5,800.00	5,088.06	3,550.00	3,352.63	40.67	26.88	76.86	-3,588.56	-9,282.53	9,379.34	9,313.87	65.46	143.274	
5,900.00	5,173.83	3,597.01	3,394.55	41.44	27.36	77.05	-3,609.02	-9,288.38	9,387.70	9,321.04	66.66	140.827	
6,000.00	5,261.34	3,801.02	3,578.33	42.18	29.40	77.34	-3,693.97	-9,313.22	9,395.90	9,326.55	69.35	135.476	
6,100.00	5,350.49	3,831.00	3,605.48	42.88	29.69	77.53	-3,706.12	-9,316.94	9,405.32	9,335.01	70.30	133.784	
6,200.00	5,441.16	3,901.85	3,669.47	43.56	30.39	77.76	-3,735.14	-9,326.06	9,415.96	9,344.34	71.62	131.480	
6,300.00	5,533.25	3,925.00	3,690.33	44.20	30.62	77.99	-3,744.72	-9,329.09	9,427.88	9,355.46	72.42	130.179	
6,400.00	5,626.65	3,968.85	3,729.54	44.82	31.08	78.24	-3,763.42	-9,335.04	9,441.15	9,367.74	73.41	128.601	
6,500.00	5,721.23	4,020.00	3,774.58	45.40	31.62	78.49	-3,786.51	-9,342.41	9,456.05	9,381.61	74.44	127.026	
6,600.00	5,816.89	4,031.13	3,784.29	45.94	31.75	78.80	-3,791.70	-9,344.06	9,472.16	9,397.14	75.02	126.264	
6,700.00	5,913.51	4,550.66	4,236.40	46.45	37.48	78.41	-4,039.26	-9,407.04	9,486.04	9,404.93	81.11	116.956	
6,800.00	6,010.97	4,588.00	4,269.61	46.93	37.86	78.64	-4,055.81	-9,411.28	9,500.06	9,418.17	81.90	116.000	
6,900.00	6,109.15	4,588.00	4,269.61	47.38	37.86	78.94	-4,055.81	-9,411.28	9,515.53	9,433.27	82.26	115.679	
7,000.00	6,207.93	6,500.40	6,087.48	47.80	51.12	78.05	-4,535.75	-9,540.80	9,528.83	9,433.59	95.25	100.042	
7,100.00	6,307.19	6,651.31	6,238.36	48.18	51.52	78.11	-4,538.74	-9,541.83	9,527.32	9,431.28	96.04	99.203	
7,200.00	6,406.82	6,802.51	6,389.55	48.53	51.93	78.15	-4,540.74	-9,542.19	9,526.00	9,429.21	96.79	98.419	
7,282.09	6,488.78	6,823.44	6,410.47	48.79	51.99	78.14	-4,541.16	-9,542.41	9,525.67	9,428.52	97.15	98.047	
7,300.00	6,506.68	6,834.44	6,421.47	48.84	52.02	78.14	-4,541.33	-9,542.48	9,525.69	9,428.44	97.25	97.954	
7,400.00	6,606.66	6,895.86	6,482.88	49.10	52.19	-8.84	-4,542.40	-9,542.99	9,526.44	9,428.74	97.70	97.507	
7,500.00	6,706.21	6,957.06	6,544.06	49.35	52.36	-8.95	-4,543.64	-9,543.72	9,519.69	9,421.56	98.13	97.007	
7,600.00	6,803.22	7,037.00	6,623.97	49.59	52.59	-9.30	-4,545.52	-9,545.01	9,498.04	9,399.43	98.61	96.321	
7,700.00	6,895.32	7,097.74	6,684.68	49.82	52.76	-9.92	-4,546.99	-9,546.14	9,461.81	9,362.78	99.03	95.548	
7,800.00	6,980.23	7,184.62	6,771.52	50.03	53.01	-10.93	-4,548.83	-9,547.79	9,411.72	9,312.23	99.48	94.605	
7,900.00	7,055.85	7,262.41	6,849.29	50.21	53.24	-12.50	-4,550.22	-9,549.31	9,348.95	9,249.06	99.89	93.596	
8,000.00	7,120.34	7,329.21	6,916.07	50.36	53.43	-14.97	-4,551.22	-9,550.64	9,275.06	9,174.84	100.22	92.547	
8,100.00	7,172.10	7,375.02	6,961.87	50.47	53.55	-19.06	-4,551.81	-9,551.58	9,191.90	9,091.45	100.45	91.510	
8,200.00	7,209.85	7,410.09	6,996.92	50.55	53.65	-26.68	-4,552.22	-9,552.34	9,101.51	9,000.92	100.60	90.473	
8,300.00	7,232.68	7,432.15	7,018.98	50.61	53.71	-43.46	-4,552.46	-9,552.82	9,006.12	8,905.45	100.67	89.461	
8,400.00	7,240.00	7,440.62	7,027.44	50.65	53.73	-83.16	-4,552.55	-9,553.01	8,908.06	8,807.39	100.67	88.491	
8,500.00	7,239.60	7,442.26	7,029.08	50.69	53.74	-83.22	-4,552.56	-9,553.05	8,809.47	8,708.84	100.63	87.545	
8,600.00	7,239.19	7,443.90	7,030.72	50.75	53.74	-83.28	-4,552.58	-9,553.09	8,710.92	8,610.32	100.59	86.595	
8,700.00	7,238.78	7,445.55	7,032.37	50.85	53.75	-83.35	-4,552.60	-9,553.12	8,612.40	8,511.83	100.56	85.641	
8,800.00	7,238.38	7,447.21	7,034.03	51.02	53.75	-83.41	-4,552.61	-9,553.16	8,513.91	8,413.37	100.54	84.682	
8,900.00	7,237.97	7,448.87	7,035.69	51.32	53.76	-83.47	-4,552.63	-9,553.20	8,415.46	8,314.94	100.52	83.718	
9,000.00	7,237.57	7,450.54	7,037.36	51.95	53.76	-83.54	-4,552.65	-9,553.24	8,317.04	8,216.54	100.51	82.749	
9,100.00	7,237.16	7,452.22	7,039.04	53.10	53.76	-83.60	-4,552.66	-9,553.27	8,218.67	8,118.16	100.50	81.775	
9,200.00	7,236.76	7,453.90	7,040.72	54.69	53.77	-83.67	-4,552.68	-9,553.31	8,120.33	8,019.83	100.51	80.795	
9,300.00	7,236.35	7,455.58	7,042.40	56.53	53.77	-83.73	-4,552.69	-9,553.35	8,022.03	7,921.52	100.51	79.810	
9,400.00	7,235.94	7,457.28	7,044.10	58.53	53.78	-83.80	-4,552.71	-9,553.39	7,923.78	7,823.25	100.53	78.819	
9,500.00	7,235.54	7,458.98	7,045.80	60.62	53.78	-83.86	-4,552.73	-9,553.43	7,825.57	7,725.01	100.56	77.823	
9,600.00	7,235.13	7,460.68	7,047.50	62.80	53.79	-83.93	-4,552.74	-9,553.47	7,727.41	7,626.82	100.59	76.821	
9,700.00	7,234.73	7,462.39	7,049.21	65.03	53.79	-83.99	-4,552.76	-9,553.51	7,629.29	7,528.65	100.63	75.812	
9,800.00	7,234.32	7,464.11	7,050.93	67.32	53.80	-84.06	-4,552.78	-9,553.55	7,531.22	7,430.53	100.69	74.797	
9,900.00	7,233.92	7,465.84	7,052.65	69.66	53.80	-84.13	-4,552.79	-9,553.59	7,433.20	7,332.45	100.75	73.776	
10,000.00	7,233.51	7,467.57	7,054.38	72.03	53.81	-84.19	-4,552.81	-9,553.63	7,335.24	7,234.41	100.83	72.748	
10,100.00	7,233.10	7,469.30	7,056.12	74.45	53.81	-84.26	-4,552.82	-9,553.67	7,237.33	7,136.41	100.92	71.714	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 6-2-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWDD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,232.70	7,471.05	7,057.86	76.89	53.82	-84.33	-4,552.84	-9,553.71	7,139.48	7,038.45	101.02	70.672		
10,300.00	7,232.29	7,472.80	7,059.61	79.36	53.82	-84.39	-4,552.86	-9,553.75	7,041.68	6,940.55	101.14	69.624		
10,400.00	7,231.89	7,474.55	7,061.37	81.86	53.83	-84.46	-4,552.87	-9,553.79	6,943.96	6,842.68	101.27	68.568		
10,500.00	7,231.48	7,476.32	7,063.13	84.38	53.83	-84.53	-4,552.89	-9,553.83	6,846.29	6,744.87	101.42	67.505		
10,600.00	7,231.08	7,478.09	7,064.90	86.93	53.84	-84.60	-4,552.90	-9,553.87	6,748.69	6,647.11	101.58	66.434		
10,700.00	7,230.67	7,479.86	7,066.67	89.49	53.84	-84.67	-4,552.92	-9,553.91	6,651.17	6,549.40	101.77	65.356		
10,800.00	7,230.26	7,481.64	7,068.46	92.07	53.85	-84.73	-4,552.93	-9,553.95	6,553.72	6,451.75	101.97	64.270		
10,900.00	7,229.86	7,483.43	7,070.24	94.67	53.85	-84.80	-4,552.95	-9,553.99	6,456.34	6,354.15	102.19	63.177		
11,000.00	7,229.45	7,485.23	7,072.04	97.28	53.85	-84.87	-4,552.97	-9,554.03	6,359.05	6,256.61	102.44	62.075		
11,100.00	7,229.05	7,487.03	7,073.84	99.90	53.86	-84.94	-4,552.98	-9,554.08	6,261.84	6,159.13	102.71	60.966		
11,200.00	7,228.64	7,488.84	7,075.65	102.54	53.86	-85.01	-4,553.00	-9,554.12	6,164.72	6,061.72	103.00	59.849		
11,300.00	7,228.24	7,490.66	7,077.47	105.19	53.87	-85.08	-4,553.01	-9,554.16	6,067.70	5,964.37	103.33	58.724		
11,400.00	7,227.83	7,492.48	7,079.29	107.85	53.87	-85.15	-4,553.03	-9,554.20	5,970.77	5,867.09	103.68	57.591		
11,500.00	7,227.42	7,494.31	7,081.12	110.52	53.88	-85.22	-4,553.04	-9,554.25	5,873.94	5,769.89	104.05	56.451		
11,600.00	7,227.02	7,496.15	7,082.95	113.20	53.88	-85.29	-4,553.06	-9,554.29	5,777.22	5,672.75	104.47	55.302		
11,700.00	7,226.61	7,497.99	7,084.80	115.89	53.89	-85.37	-4,553.07	-9,554.33	5,680.61	5,575.70	104.91	54.146		
11,800.00	7,226.21	7,499.84	7,086.65	118.59	53.89	-85.44	-4,553.09	-9,554.38	5,584.13	5,478.73	105.39	52.983		
11,900.00	7,225.80	7,501.70	7,088.50	121.29	53.90	-85.51	-4,553.10	-9,554.42	5,487.76	5,381.85	105.92	51.813		
12,000.00	7,225.40	7,503.56	7,090.37	124.00	53.91	-85.58	-4,553.12	-9,554.47	5,391.53	5,285.06	106.48	50.636		
12,100.00	7,224.99	7,505.44	7,092.24	126.72	53.91	-85.65	-4,553.13	-9,554.51	5,295.44	5,188.36	107.08	49.452		
12,200.00	7,224.58	7,507.31	7,094.12	129.44	53.92	-85.73	-4,553.15	-9,554.56	5,199.50	5,091.76	107.73	48.262		
12,300.00	7,224.18	7,509.20	7,096.00	132.17	53.92	-85.80	-4,553.16	-9,554.60	5,103.71	4,995.27	108.44	47.067		
12,400.00	7,223.77	7,511.09	7,097.90	134.91	53.93	-85.87	-4,553.18	-9,554.65	5,008.08	4,898.89	109.19	45.866		
12,500.00	7,223.37	7,512.99	7,099.80	137.65	53.93	-85.95	-4,553.19	-9,554.69	4,912.63	4,802.63	110.00	44.661		
12,600.00	7,222.96	7,514.90	7,101.70	140.39	53.94	-86.02	-4,553.21	-9,554.74	4,817.36	4,706.49	110.87	43.452		
12,700.00	7,222.55	7,516.82	7,103.62	143.14	53.94	-86.09	-4,553.22	-9,554.78	4,722.29	4,610.49	111.80	42.240		
12,800.00	7,222.15	7,518.74	7,105.54	145.89	53.95	-86.17	-4,553.24	-9,554.83	4,627.42	4,514.62	112.79	41.025		
12,900.00	7,221.74	7,520.67	7,107.47	148.65	53.95	-86.24	-4,553.25	-9,554.88	4,532.77	4,418.91	113.86	39.809		
13,000.00	7,221.34	7,522.61	7,109.41	151.41	53.96	-86.32	-4,553.27	-9,554.92	4,438.36	4,323.35	115.01	38.592		
13,100.00	7,220.93	7,524.55	7,111.35	154.18	53.96	-86.39	-4,553.28	-9,554.97	4,344.19	4,227.96	116.23	37.376		
13,200.00	7,220.53	7,526.51	7,113.30	156.94	53.97	-86.47	-4,553.29	-9,555.02	4,250.29	4,132.76	117.54	36.161		
13,300.00	7,220.12	7,528.47	7,115.26	159.72	53.97	-86.54	-4,553.31	-9,555.06	4,156.68	4,037.75	118.93	34.949		
13,400.00	7,219.71	7,530.43	7,117.23	162.49	53.98	-86.62	-4,553.32	-9,555.11	4,063.37	3,942.94	120.43	33.741		
13,500.00	7,219.31	7,532.41	7,119.21	165.27	53.98	-86.70	-4,553.34	-9,555.16	3,970.38	3,848.36	122.02	32.538		
13,600.00	7,218.90	7,534.39	7,121.19	168.05	53.99	-86.77	-4,553.35	-9,555.21	3,877.74	3,754.02	123.73	31.341		
13,700.00	7,218.50	7,536.38	7,123.18	170.83	53.99	-86.85	-4,553.37	-9,555.26	3,785.48	3,659.93	125.54	30.153		
13,800.00	7,218.09	7,538.38	7,125.18	173.61	54.00	-86.93	-4,553.38	-9,555.31	3,693.61	3,566.13	127.48	28.973		
13,900.00	7,217.69	7,540.39	7,127.18	176.40	54.01	-87.01	-4,553.39	-9,555.35	3,602.18	3,472.63	129.55	27.805		
14,000.00	7,217.28	7,542.41	7,129.20	179.19	54.01	-87.08	-4,553.41	-9,555.40	3,511.21	3,379.45	131.76	26.649		
14,100.00	7,216.87	7,544.43	7,131.22	181.98	54.02	-87.16	-4,553.42	-9,555.45	3,420.75	3,286.64	134.11	25.506		
14,200.00	7,216.47	7,546.46	7,133.25	184.78	54.02	-87.24	-4,553.43	-9,555.50	3,330.83	3,194.21	136.62	24.380		
14,300.00	7,216.06	7,548.50	7,135.29	187.57	54.03	-87.32	-4,553.45	-9,555.55	3,241.50	3,102.20	139.30	23.270		
14,400.00	7,215.66	7,550.55	7,137.34	190.37	54.03	-87.40	-4,553.46	-9,555.60	3,152.81	3,010.66	142.15	22.179		
14,500.00	7,215.25	7,552.60	7,139.39	193.17	54.04	-87.48	-4,553.47	-9,555.66	3,064.82	2,919.63	145.19	21.109		
14,600.00	7,214.85	7,554.66	7,141.45	195.97	54.04	-87.56	-4,553.49	-9,555.71	2,977.58	2,829.15	148.43	20.061		
14,700.00	7,214.44	7,556.74	7,143.52	198.77	54.05	-87.64	-4,553.50	-9,555.76	2,891.17	2,739.29	151.88	19.036		
14,800.00	7,214.03	7,558.82	7,145.60	201.58	54.06	-87.72	-4,553.51	-9,555.81	2,805.66	2,650.10	155.55	18.037		
14,900.00	7,213.63	7,560.91	7,147.69	204.38	54.06	-87.80	-4,553.53	-9,555.86	2,721.13	2,561.67	159.46	17.064		
15,000.00	7,213.22	7,563.00	7,149.79	207.19	54.07	-87.88	-4,553.54	-9,555.91	2,637.69	2,474.06	163.63	16.120		
15,100.00	7,212.82	7,565.11	7,151.89	210.00	54.07	-87.96	-4,553.55	-9,555.97	2,555.43	2,387.38	168.05	15.206		
15,200.00	7,212.41	7,567.22	7,154.01	212.81	54.08	-88.05	-4,553.57	-9,556.02	2,474.48	2,301.72	172.76	14.323		
15,300.00	7,212.01	7,569.34	7,156.13	215.62	54.09	-88.13	-4,553.58	-9,556.07	2,394.96	2,217.21	177.75	13.474		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 6-2-20(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 82-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.00	7,211.60	7,571.48	7,158.26	218.43	54.09	-88.21	-4,553.59	-9,556.13	2,317.04	2,133.99	183.05	12.658	
15,500.00	7,211.19	7,573.61	7,160.40	221.25	54.10	-88.29	-4,553.60	-9,556.18	2,240.86	2,052.20	188.66	11.878	
15,600.00	7,210.79	7,575.76	7,162.54	224.06	54.10	-88.38	-4,553.62	-9,556.23	2,166.62	1,972.03	194.59	11.134	
15,700.00	7,210.38	7,577.92	7,164.70	226.88	54.11	-88.46	-4,553.63	-9,556.29	2,094.52	1,893.68	200.84	10.429	
15,794.94	7,210.00	7,579.98	7,166.76	229.55	54.11	-88.54	-4,553.64	-9,556.34	2,028.26	1,821.18	207.08	9.795 CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 1 21-2(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	62.00	3.28	3.28	-128.03	-3,842.93	-4,913.87	6,238.43					
100.00	100.00	47.80	109.80	3.28	3.28	-128.03	-3,842.77	-4,913.94	6,238.09	6,231.52	6.57	949.994		
200.00	200.00	175.38	237.37	3.34	3.33	-128.01	-3,841.03	-4,914.69	6,237.72	6,231.05	6.66	936.019		
300.00	299.98	273.35	335.31	3.44	3.42	49.40	-3,839.14	-4,915.39	6,235.95	6,229.09	6.86	908.550		
400.00	399.84	371.39	433.34	3.59	3.57	49.51	-3,837.56	-4,915.96	6,232.01	6,224.86	7.16	870.760		
500.00	499.45	474.83	536.77	3.79	3.76	49.68	-3,836.11	-4,916.35	6,225.79	6,218.24	7.55	824.542		
600.00	598.70	591.45	653.38	4.03	4.03	49.93	-3,834.53	-4,916.51	6,217.17	6,209.11	8.06	771.396		
700.00	697.47	681.34	743.26	4.31	4.26	50.20	-3,833.38	-4,916.46	6,206.23	6,197.66	8.57	723.807		
800.00	795.62	780.39	842.31	4.64	4.54	50.55	-3,832.34	-4,916.36	6,193.20	6,184.03	9.17	675.196		
900.00	893.06	868.62	930.53	5.00	4.81	50.94	-3,831.42	-4,916.28	6,178.04	6,168.25	9.79	631.062		
1,000.00	989.64	958.29	1,020.19	5.40	5.10	51.38	-3,830.56	-4,916.33	6,160.93	6,150.47	10.46	589.193		
1,100.00	1,085.27	1,058.81	1,120.71	5.83	5.43	51.92	-3,829.59	-4,916.43	6,141.78	6,130.58	11.20	548.325		
1,200.00	1,179.82	1,151.00	1,212.90	6.29	5.75	52.49	-3,828.64	-4,916.44	6,120.52	6,108.56	11.96	511.886		
1,300.00	1,273.17	1,232.52	1,294.41	6.79	6.04	53.10	-3,827.82	-4,916.59	6,097.46	6,084.75	12.71	479.692		
1,400.00	1,365.21	1,312.67	1,374.56	7.33	6.34	53.76	-3,827.23	-4,916.78	6,072.69	6,059.19	13.49	450.038		
1,500.00	1,455.84	1,394.69	1,456.58	7.89	6.64	54.49	-3,826.84	-4,916.98	6,046.24	6,031.93	14.31	422.372		
1,600.00	1,544.94	1,493.33	1,555.21	8.50	7.01	55.33	-3,826.42	-4,917.18	6,018.04	6,002.81	15.23	395.185		
1,700.00	1,632.39	1,578.61	1,640.49	9.13	7.34	56.20	-3,826.08	-4,917.25	5,988.11	5,971.98	16.13	371.346		
1,800.00	1,718.11	1,667.11	1,729.00	9.80	7.68	57.14	-3,825.85	-4,917.26	5,956.60	5,939.53	17.07	349.048		
1,900.00	1,802.44	1,750.21	1,812.10	10.49	8.00	57.70	-3,825.53	-4,917.28	5,923.98	5,905.97	18.01	328.925		
2,000.00	1,886.68	1,824.46	1,886.34	11.20	8.29	58.05	-3,825.35	-4,917.30	5,891.68	5,872.74	18.94	311.076		
2,100.00	1,970.92	1,889.69	1,951.58	11.93	8.55	58.36	-3,825.33	-4,917.45	5,859.92	5,840.07	19.85	295.180		
2,200.00	2,055.17	1,963.35	2,025.23	12.66	8.84	58.71	-3,825.41	-4,917.78	5,828.71	5,807.90	20.81	280.098		
2,300.00	2,139.41	2,042.02	2,103.90	13.40	9.15	59.08	-3,825.55	-4,918.23	5,797.96	5,776.16	21.80	265.980		
2,400.00	2,223.66	2,124.33	2,186.21	14.14	9.48	59.48	-3,825.79	-4,918.70	5,767.58	5,744.77	22.81	252.823		
2,500.00	2,307.90	2,207.28	2,269.16	14.89	9.81	59.89	-3,825.97	-4,919.23	5,737.57	5,713.73	23.84	240.667		
2,600.00	2,392.14	2,283.75	2,345.63	15.65	10.12	60.26	-3,826.11	-4,919.82	5,707.98	5,683.13	24.85	229.659		
2,700.00	2,476.39	2,368.15	2,430.02	16.41	10.46	60.68	-3,826.26	-4,920.54	5,678.81	5,652.91	25.91	219.206		
2,800.00	2,560.63	2,450.25	2,512.12	17.17	10.79	61.09	-3,826.40	-4,921.25	5,650.00	5,623.04	26.96	209.581		
2,900.00	2,644.88	2,528.85	2,590.71	17.93	11.11	61.49	-3,826.57	-4,921.97	5,621.61	5,593.60	28.01	200.729		
3,000.00	2,729.12	2,605.19	2,667.05	18.70	11.43	61.87	-3,826.65	-4,922.83	5,593.70	5,564.65	29.05	192.537		
3,100.00	2,813.36	2,677.44	2,739.29	19.47	11.72	62.25	-3,826.73	-4,923.80	5,566.33	5,536.24	30.09	184.981		
3,200.00	2,897.61	2,753.84	2,815.69	20.25	12.04	62.64	-3,826.92	-4,924.93	5,539.50	5,508.35	31.15	177.821		
3,300.00	2,981.85	2,833.23	2,895.07	21.02	12.37	63.05	-3,827.23	-4,926.14	5,513.16	5,480.93	32.23	171.057		
3,400.00	3,066.10	2,913.75	2,975.58	21.80	12.70	63.47	-3,827.73	-4,927.34	5,487.28	5,453.96	33.32	164.695		
3,500.00	3,150.34	2,991.58	3,053.39	22.58	13.02	63.88	-3,828.26	-4,928.56	5,461.88	5,427.48	34.40	158.768		
3,600.00	3,234.58	3,084.89	3,146.69	23.35	13.41	64.37	-3,828.87	-4,930.04	5,436.88	5,401.33	35.55	152.947		
3,700.00	3,318.83	3,228.78	3,290.57	24.13	14.00	65.14	-3,829.43	-4,931.32	5,411.60	5,374.72	36.88	146.731		
3,800.00	3,403.07	3,301.94	3,363.73	24.92	14.31	65.53	-3,829.57	-4,931.77	5,386.51	5,348.55	37.96	141.885		
3,900.00	3,487.32	3,401.91	3,463.69	25.70	14.73	66.07	-3,829.64	-4,932.38	5,361.80	5,322.65	39.15	136.964		
4,000.00	3,571.56	3,482.42	3,544.21	26.48	15.06	66.51	-3,829.71	-4,932.77	5,337.43	5,297.17	40.27	132.554		
4,100.00	3,655.80	3,551.26	3,613.05	27.27	15.35	66.89	-3,829.88	-4,933.17	5,313.62	5,272.27	41.35	128.511		
4,200.00	3,740.05	3,617.19	3,678.97	28.05	15.63	67.25	-3,830.03	-4,933.81	5,290.54	5,248.12	42.42	124.710		
4,300.00	3,824.29	3,684.56	3,746.34	28.84	15.91	67.63	-3,830.17	-4,934.72	5,268.19	5,224.69	43.51	121.089		
4,400.00	3,908.54	3,759.58	3,821.35	29.62	16.22	68.05	-3,830.36	-4,935.93	5,246.52	5,201.90	44.62	117.575		
4,500.00	3,992.78	3,839.00	3,900.75	30.41	16.56	68.50	-3,830.69	-4,937.27	5,225.42	5,179.66	45.76	114.197		
4,600.00	4,077.03	3,915.96	3,977.70	31.20	16.88	68.93	-3,831.21	-4,938.55	5,204.85	5,157.96	46.89	111.007		
4,700.00	4,161.27	3,978.78	4,040.51	31.98	17.14	69.29	-3,831.86	-4,939.73	5,185.01	5,137.04	47.97	108.092		
4,800.00	4,245.51	4,046.42	4,108.12	32.77	17.43	69.67	-3,832.81	-4,941.19	5,165.97	5,116.90	49.07	105.279		
4,900.00	4,329.76	4,115.59	4,177.26	33.56	17.72	70.06	-3,834.12	-4,942.78	5,147.65	5,097.48	50.18	102.588		
5,000.00	4,414.00	4,181.32	4,242.96	34.35	18.00	70.42	-3,835.61	-4,944.44	5,130.10	5,078.83	51.28	100.049		
5,100.00	4,498.25	4,281.23	4,342.80	35.14	18.42	70.99	-3,837.98	-4,947.09	5,113.14	5,060.64	52.51	97.383		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 1 21-2(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,376.09	4,437.62	35.93	18.82	71.53	-3,839.77	-4,949.41	5,096.35	5,042.63	53.72	94.872		
5,300.00	4,666.73	4,462.72	4,524.21	36.72	19.19	72.03	-3,841.03	-4,951.56	5,079.97	5,025.06	54.90	92.526		
5,400.00	4,750.98	4,577.70	4,639.15	37.51	19.67	72.70	-3,842.30	-4,954.30	5,063.94	5,007.74	56.20	90.111		
5,500.00	4,835.22	4,689.81	4,751.24	38.30	20.14	73.36	-3,843.24	-4,956.25	5,047.78	4,990.30	57.48	87.817		
5,600.00	4,919.47	4,804.93	4,866.35	39.09	20.63	74.05	-3,843.94	-4,957.68	5,031.69	4,972.91	58.78	85.607		
5,700.00	5,003.71	4,883.85	4,945.26	39.88	20.96	74.52	-3,844.45	-4,958.47	5,015.91	4,955.97	59.94	83.679		
5,800.00	5,088.06	4,968.93	5,030.34	40.67	21.32	74.93	-3,844.89	-4,959.38	5,000.74	4,939.61	61.13	81.806		
5,900.00	5,173.83	5,060.39	5,121.80	41.44	21.71	75.18	-3,845.11	-4,960.37	4,986.72	4,924.41	62.32	80.019		
6,000.00	5,261.34	5,146.22	5,207.62	42.18	22.08	75.40	-3,845.07	-4,961.28	4,973.98	4,910.52	63.46	78.380		
6,100.00	5,350.49	5,231.58	5,292.97	42.88	22.44	75.62	-3,844.72	-4,962.38	4,962.63	4,898.06	64.57	76.860		
6,200.00	5,441.16	5,323.08	5,384.46	43.56	22.83	75.86	-3,844.22	-4,963.53	4,952.47	4,886.80	65.67	75.420		
6,300.00	5,533.25	5,403.86	5,465.23	44.20	23.17	76.05	-3,844.02	-4,964.63	4,943.62	4,876.93	66.69	74.128		
6,400.00	5,626.65	5,518.45	5,579.81	44.82	23.65	76.37	-3,843.60	-4,966.01	4,935.70	4,867.90	67.81	72.790		
6,500.00	5,721.23	5,601.13	5,662.49	45.40	24.01	76.54	-3,843.55	-4,966.92	4,928.82	4,860.05	68.77	71.670		
6,600.00	5,816.89	5,680.41	5,741.76	45.94	24.34	76.69	-3,843.79	-4,967.97	4,923.20	4,853.51	69.69	70.648		
6,700.00	5,913.51	5,777.77	5,839.11	46.45	24.76	76.89	-3,844.13	-4,969.46	4,918.73	4,848.09	70.63	69.636		
6,800.00	6,010.97	5,856.74	5,918.07	46.93	25.09	77.02	-3,844.49	-4,970.70	4,915.24	4,843.76	71.48	68.766		
6,900.00	6,109.15	5,937.78	5,999.09	47.38	25.44	77.15	-3,844.66	-4,972.42	4,913.07	4,840.78	72.29	67.962		
7,000.00	6,207.93	6,042.77	6,104.05	47.80	25.88	77.32	-3,844.73	-4,974.81	4,911.88	4,838.71	73.16	67.136		
7,100.00	6,307.19	6,139.30	6,200.56	48.18	26.29	77.44	-3,844.93	-4,976.73	4,911.24	4,837.27	73.97	66.398		
7,105.67	6,312.83	6,143.35	6,204.62	48.20	26.31	77.45	-3,844.93	-4,976.82	4,911.24	4,837.23	74.01	66.363		
7,200.00	6,406.82	6,214.90	6,276.14	48.53	26.62	77.53	-3,844.83	-4,978.64	4,911.83	4,837.17	74.65	65.796		
7,300.00	6,506.68	6,312.85	6,374.05	48.84	27.03	77.62	-3,845.11	-4,981.25	4,913.40	4,838.01	75.39	65.172		
7,400.00	6,606.66	6,408.81	6,469.98	49.10	27.44	-9.31	-3,845.34	-4,983.88	4,915.79	4,839.73	76.06	64.629		
7,500.00	6,706.21	6,507.41	6,568.54	49.35	27.86	-9.40	-3,845.38	-4,986.67	4,910.34	4,833.61	76.73	63.996		
7,600.00	6,803.22	6,616.12	6,677.21	49.59	28.32	-9.78	-3,845.96	-4,989.54	4,889.46	4,812.02	77.44	63.141		
7,700.00	6,895.32	6,674.94	6,736.01	49.82	28.57	-10.43	-3,846.26	-4,991.30	4,854.05	4,776.12	77.94	62.282		
7,800.00	6,980.23	6,734.80	6,795.83	50.03	28.83	-11.46	-3,846.36	-4,993.45	4,805.20	4,726.77	78.42	61.273		
7,900.00	7,055.85	6,788.61	6,849.58	50.21	29.06	-13.05	-3,846.27	-4,995.70	4,743.99	4,665.14	78.85	60.161		
8,000.00	7,120.34	6,838.35	6,899.27	50.36	29.27	-15.53	-3,846.14	-4,998.02	4,671.81	4,592.57	79.24	58.961		
8,100.00	7,172.10	6,880.18	6,941.05	50.47	29.45	-19.60	-3,846.13	-5,000.10	4,590.27	4,510.72	79.54	57.708		
8,200.00	7,209.85	6,900.01	6,960.86	50.55	29.53	-26.70	-3,846.16	-5,001.12	4,501.30	4,421.58	79.72	56.467		
8,300.00	7,232.68	6,928.59	6,989.39	50.61	29.66	-41.63	-3,846.25	-5,002.66	4,406.97	4,327.09	79.87	55.173		
8,400.00	7,240.00	6,936.99	6,997.78	50.65	29.69	-74.21	-3,846.29	-5,003.13	4,309.58	4,229.67	79.91	53.931		
8,500.00	7,239.60	6,940.44	7,001.22	50.69	29.71	-74.44	-3,846.31	-5,003.32	4,211.48	4,131.58	79.91	52.706		
8,600.00	7,239.19	6,943.93	7,004.71	50.75	29.72	-74.68	-3,846.33	-5,003.52	4,113.47	4,033.56	79.91	51.477		
8,700.00	7,238.78	6,947.48	7,008.25	50.85	29.74	-74.91	-3,846.35	-5,003.72	4,015.55	3,935.63	79.92	50.245		
8,800.00	7,238.38	6,951.08	7,011.84	51.02	29.75	-75.15	-3,846.37	-5,003.93	3,917.73	3,837.79	79.94	49.009		
8,900.00	7,237.97	6,954.73	7,015.49	51.32	29.77	-75.40	-3,846.40	-5,004.14	3,820.02	3,740.05	79.97	47.768		
9,000.00	7,237.57	6,958.44	7,019.19	51.95	29.78	-75.65	-3,846.42	-5,004.36	3,722.43	3,642.41	80.01	46.522		
9,100.00	7,237.16	6,962.20	7,022.94	53.10	29.80	-75.91	-3,846.45	-5,004.58	3,624.96	3,544.89	80.07	45.271		
9,200.00	7,236.76	6,966.02	7,026.75	54.69	29.82	-76.16	-3,846.48	-5,004.81	3,527.63	3,447.48	80.15	44.015		
9,300.00	7,236.35	6,969.89	7,030.62	56.53	29.83	-76.43	-3,846.51	-5,005.04	3,430.44	3,350.20	80.24	42.753		
9,400.00	7,235.94	6,973.83	7,034.55	58.53	29.85	-76.70	-3,846.54	-5,005.27	3,333.42	3,253.06	80.35	41.485		
9,500.00	7,235.54	6,977.82	7,038.54	60.62	29.87	-76.97	-3,846.57	-5,005.51	3,236.56	3,156.07	80.49	40.210		
9,600.00	7,235.13	6,981.88	7,042.59	62.80	29.88	-77.25	-3,846.61	-5,005.76	3,139.90	3,059.24	80.66	38.929		
9,700.00	7,234.73	6,986.01	7,046.71	65.03	29.90	-77.53	-3,846.65	-5,006.01	3,043.45	2,962.59	80.86	37.639		
9,800.00	7,234.32	6,990.20	7,050.89	67.32	29.92	-77.82	-3,846.68	-5,006.27	2,947.22	2,866.13	81.10	36.342		
9,900.00	7,233.92	7,000.01	7,060.69	69.66	29.96	-78.49	-3,846.78	-5,006.89	2,851.26	2,769.87	81.39	35.032		
10,000.00	7,233.51	7,000.01	7,060.69	72.03	29.96	-78.49	-3,846.78	-5,006.89	2,755.55	2,673.84	81.71	33.722		
10,100.00	7,233.10	7,004.02	7,064.69	74.45	29.98	-78.77	-3,846.82	-5,007.14	2,660.16	2,578.06	82.11	32.399		
10,200.00	7,232.70	7,009.62	7,070.28	76.89	30.00	-79.16	-3,846.88	-5,007.49	2,565.11	2,482.54	82.57	31.066		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 1 21-2(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	7,015.23	7,075.87	79.36	30.03	-79.55	-3,846.95	-5,007.85	2,470.44	2,387.32	83.11	29.724		
10,400.00	7,231.89	7,020.84	7,081.47	81.86	30.05	-79.94	-3,847.01	-5,008.20	2,376.18	2,292.44	83.75	28.373		
10,500.00	7,231.48	7,026.46	7,087.08	84.38	30.07	-80.33	-3,847.08	-5,008.56	2,282.41	2,197.91	84.49	27.013		
10,600.00	7,231.08	7,032.08	7,092.69	86.93	30.10	-80.72	-3,847.14	-5,008.91	2,189.16	2,103.80	85.36	25.645		
10,700.00	7,230.67	7,037.71	7,098.30	89.49	30.12	-81.12	-3,847.21	-5,009.27	2,096.53	2,010.15	86.38	24.271		
10,800.00	7,230.26	7,043.34	7,103.92	92.07	30.15	-81.51	-3,847.28	-5,009.62	2,004.59	1,917.02	87.57	22.891		
10,900.00	7,229.86	7,048.98	7,109.55	94.67	30.17	-81.91	-3,847.35	-5,009.98	1,913.43	1,824.47	88.96	21.509		
11,000.00	7,229.45	7,054.62	7,115.18	97.28	30.19	-82.31	-3,847.43	-5,010.34	1,823.19	1,732.61	90.58	20.127		
11,100.00	7,229.05	7,060.27	7,120.82	99.90	30.22	-82.71	-3,847.51	-5,010.70	1,734.00	1,641.52	92.48	18.750		
11,200.00	7,228.64	7,065.92	7,126.46	102.54	30.24	-83.11	-3,847.58	-5,011.06	1,646.03	1,551.34	94.69	17.383		
11,300.00	7,228.24	7,071.58	7,132.11	105.19	30.27	-83.51	-3,847.66	-5,011.41	1,559.49	1,462.22	97.27	16.033		
11,400.00	7,227.83	7,077.25	7,137.76	107.85	30.29	-83.91	-3,847.74	-5,011.77	1,474.63	1,374.37	100.26	14.708		
11,500.00	7,227.42	7,082.92	7,143.42	110.52	30.32	-84.31	-3,847.83	-5,012.13	1,391.76	1,288.03	103.73	13.417		
11,600.00	7,227.02	7,088.59	7,149.08	113.20	30.34	-84.72	-3,847.91	-5,012.49	1,311.25	1,203.52	107.73	12.171		
11,700.00	7,226.61	7,094.28	7,154.75	115.89	30.36	-85.12	-3,848.00	-5,012.85	1,233.57	1,121.24	112.33	10.982		
11,800.00	7,226.21	7,099.96	7,160.43	118.59	30.39	-85.53	-3,848.09	-5,013.22	1,159.29	1,041.72	117.57	9.860		
11,900.00	7,225.80	7,105.92	7,166.37	121.29	30.41	-85.95	-3,848.18	-5,013.59	1,089.10	965.63	123.47	8.821		
12,000.00	7,225.40	7,111.88	7,172.32	124.00	30.44	-86.38	-3,848.28	-5,013.97	1,023.85	893.83	130.02	7.875		
12,100.00	7,224.99	7,117.84	7,178.27	126.72	30.47	-86.81	-3,848.37	-5,014.35	964.52	827.39	137.13	7.034		
12,200.00	7,224.58	7,123.80	7,184.21	129.44	30.49	-87.23	-3,848.46	-5,014.73	912.29	767.67	144.62	6.308		
12,300.00	7,224.18	7,129.76	7,190.16	132.17	30.52	-87.66	-3,848.56	-5,015.11	868.44	716.25	152.19	5.706		
12,400.00	7,223.77	7,135.72	7,196.11	134.91	30.54	-88.09	-3,848.65	-5,015.49	834.27	674.88	159.39	5.234		
12,500.00	7,223.37	7,141.68	7,202.05	137.65	30.57	-88.51	-3,848.75	-5,015.87	811.03	645.32	165.72	4.894		
12,600.00	7,222.96	7,147.64	7,208.00	140.39	30.59	-88.94	-3,848.84	-5,016.24	799.66	629.03	170.63	4.686		
12,641.88	7,222.79	7,150.13	7,210.49	141.54	30.60	-89.12	-3,848.88	-5,016.40	798.57	626.39	172.18	4.638 CC, ES		
12,700.00	7,222.55	7,153.59	7,213.94	143.14	30.62	-89.37	-3,848.93	-5,016.62	800.67	626.92	173.76	4.608 SF		
12,800.00	7,222.15	7,159.55	7,219.89	145.89	30.64	-89.79	-3,849.03	-5,017.00	814.02	639.07	174.95	4.653		
12,900.00	7,221.74	7,165.51	7,225.83	148.65	30.67	-90.22	-3,849.12	-5,017.38	839.11	664.79	174.32	4.814		
13,000.00	7,221.34	7,171.47	7,231.78	151.41	30.70	-90.64	-3,849.22	-5,017.76	874.93	702.73	172.21	5.081		
13,100.00	7,220.93	7,177.42	7,237.72	154.18	30.72	-91.07	-3,849.31	-5,018.14	920.24	751.21	169.03	5.444		
13,200.00	7,220.53	7,183.38	7,243.66	156.94	30.75	-91.50	-3,849.40	-5,018.52	973.71	808.52	165.19	5.894		
13,300.00	7,220.12	7,189.33	7,249.61	159.72	30.77	-91.92	-3,849.50	-5,018.89	1,034.07	873.03	161.04	6.421		
13,400.00	7,219.71	7,195.29	7,255.55	162.49	30.80	-92.35	-3,849.59	-5,019.27	1,100.19	943.37	156.82	7.016		
13,500.00	7,219.31	7,201.25	7,261.49	165.27	30.82	-92.77	-3,849.69	-5,019.65	1,171.10	1,018.40	152.70	7.669		
13,600.00	7,218.90	7,207.20	7,267.44	168.05	30.85	-93.20	-3,849.78	-5,020.03	1,245.97	1,097.19	148.78	8.375		
13,700.00	7,218.50	7,213.16	7,273.38	170.83	30.88	-93.62	-3,849.87	-5,020.41	1,324.14	1,179.03	145.11	9.125		
13,800.00	7,218.09	7,219.11	7,279.32	173.61	30.90	-94.05	-3,849.97	-5,020.78	1,405.06	1,263.34	141.72	9.915		
13,900.00	7,217.69	7,225.06	7,285.26	176.40	30.93	-94.47	-3,850.06	-5,021.16	1,488.28	1,349.68	138.60	10.738		
14,000.00	7,217.28	7,231.02	7,291.20	179.19	30.95	-94.89	-3,850.15	-5,021.54	1,573.42	1,437.68	135.74	11.592		
14,100.00	7,216.87	7,236.97	7,297.14	181.98	30.98	-95.31	-3,850.25	-5,021.92	1,660.21	1,527.08	133.13	12.471		
14,200.00	7,216.47	7,242.92	7,303.08	184.78	31.00	-95.73	-3,850.34	-5,022.30	1,748.38	1,617.63	130.75	13.372		
14,300.00	7,216.06	7,248.88	7,309.02	187.57	31.03	-96.15	-3,850.44	-5,022.68	1,837.75	1,709.17	128.58	14.293		
14,400.00	7,215.66	7,254.83	7,314.96	190.37	31.05	-96.57	-3,850.53	-5,023.05	1,928.14	1,801.54	126.60	15.230		
14,500.00	7,215.25	7,260.78	7,320.90	193.17	31.08	-96.99	-3,850.62	-5,023.43	2,019.42	1,894.63	124.79	16.182		
14,600.00	7,214.85	7,266.73	7,326.84	195.97	31.11	-97.41	-3,850.72	-5,023.81	2,111.48	1,988.34	123.14	17.147		
14,700.00	7,214.44	7,272.68	7,332.78	198.77	31.13	-97.83	-3,850.81	-5,024.19	2,204.21	2,082.59	121.62	18.123		
14,800.00	7,214.03	7,278.63	7,338.72	201.58	31.16	-98.24	-3,850.91	-5,024.56	2,297.54	2,177.30	120.23	19.109		
14,900.00	7,213.63	7,284.58	7,344.65	204.38	31.18	-98.66	-3,851.00	-5,024.94	2,391.39	2,272.43	118.96	20.103		
15,000.00	7,213.22	7,290.53	7,350.59	207.19	31.21	-99.07	-3,851.09	-5,025.32	2,485.70	2,367.92	117.79	21.104		
15,100.00	7,212.82	7,296.48	7,356.53	210.00	31.23	-99.48	-3,851.19	-5,025.70	2,580.43	2,463.73	116.70	22.111		
15,200.00	7,212.41	7,302.43	7,362.47	212.81	31.26	-99.90	-3,851.28	-5,026.08	2,675.53	2,559.83	115.71	23.123		
15,300.00	7,212.01	7,308.38	7,368.40	215.62	31.29	-100.31	-3,851.37	-5,026.45	2,770.97	2,656.18	114.79	24.140		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 1 21-2(SI_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,400.00	7,211.60	7,314.33	7,374.34	218.43	31.31	-100.72	-3,851.47	-5,026.83	2,866.70	2,752.76	113.93	25.161	
15,500.00	7,211.19	7,320.28	7,380.27	221.25	31.34	-101.12	-3,851.56	-5,027.21	2,962.70	2,849.56	113.14	26.185	
15,600.00	7,210.79	7,326.23	7,386.21	224.06	31.36	-101.53	-3,851.66	-5,027.59	3,058.95	2,946.53	112.41	27.212	
15,700.00	7,210.38	7,332.18	7,392.14	226.88	31.39	-101.94	-3,851.75	-5,027.96	3,155.42	3,043.68	111.73	28.241	
15,794.94	7,210.00	7,337.82	7,397.78	229.55	31.41	-102.32	-3,851.84	-5,028.32	3,247.19	3,136.06	111.13	29.219	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	25.00	71.00	3.28	3.28	-146.51	-4,973.22	-3,290.81	5,963.83					
100.00	100.00	90.77	136.77	3.28	3.28	-146.51	-4,973.06	-3,290.68	5,963.32	5,956.75	6.57	907.926		
200.00	200.00	191.67	237.67	3.34	3.33	-146.50	-4,972.31	-3,290.48	5,962.60	5,955.93	6.67	894.568		
300.00	299.98	263.75	309.74	3.44	3.39	30.88	-4,971.80	-3,290.70	5,960.68	5,953.85	6.83	872.262		
400.00	399.84	354.94	400.94	3.59	3.51	30.95	-4,971.71	-3,290.82	5,956.18	5,949.07	7.11	838.241		
500.00	499.45	1,478.15	1,510.91	3.79	7.53	32.64	-4,832.09	-3,321.54	5,937.07	5,925.83	11.24	528.206		
600.00	598.70	1,536.35	1,567.56	4.03	7.84	33.07	-4,818.93	-3,323.69	5,910.29	5,898.55	11.74	503.638		
700.00	697.47	1,612.16	1,641.41	4.31	8.25	33.60	-4,802.09	-3,326.70	5,881.24	5,868.88	12.36	475.867		
800.00	795.62	1,678.96	1,706.45	4.64	8.62	34.15	-4,787.15	-3,329.79	5,849.78	5,836.80	12.98	450.731		
900.00	893.06	1,740.83	1,766.77	5.00	8.97	34.74	-4,773.67	-3,332.74	5,816.18	5,802.57	13.61	427.463		
1,000.00	989.64	1,872.75	1,895.18	5.40	9.72	35.63	-4,744.13	-3,339.20	5,779.56	5,764.93	14.62	395.197		
1,100.00	1,085.27	1,959.29	1,979.38	5.83	10.22	36.45	-4,724.63	-3,343.43	5,740.47	5,725.02	15.44	371.732		
1,200.00	1,179.82	2,044.03	2,061.84	6.29	10.71	37.34	-4,705.53	-3,347.57	5,698.99	5,682.71	16.28	350.089		
1,300.00	1,273.17	2,126.89	2,142.46	6.79	11.20	38.30	-4,686.86	-3,351.62	5,655.21	5,638.08	17.13	330.116		
1,400.00	1,365.21	2,207.75	2,221.14	7.33	11.68	39.33	-4,668.64	-3,355.57	5,609.20	5,591.20	18.00	311.664		
1,500.00	1,455.84	2,286.51	2,297.79	7.89	12.15	40.44	-4,650.89	-3,359.42	5,561.07	5,542.19	18.88	294.589		
1,600.00	1,544.94	2,363.09	2,372.30	8.50	12.62	41.63	-4,633.64	-3,363.16	5,510.90	5,491.13	19.77	278.762		
1,700.00	1,632.39	2,437.39	2,444.60	9.13	13.06	42.89	-4,616.90	-3,366.80	5,458.79	5,438.12	20.67	264.063		
1,800.00	1,718.11	2,509.32	2,514.59	9.80	13.50	44.25	-4,600.69	-3,370.31	5,404.85	5,383.27	21.59	250.385		
1,900.00	1,802.44	2,579.39	2,582.78	10.49	13.93	45.01	-4,584.90	-3,373.73	5,349.70	5,327.19	22.51	237.659		
2,000.00	1,886.68	2,654.65	2,650.86	11.20	14.39	45.50	-4,569.13	-3,377.15	5,294.83	5,271.36	23.48	225.532		
2,100.00	1,970.92	2,719.33	2,718.94	11.93	14.78	46.00	-4,553.36	-3,380.57	5,240.37	5,215.96	24.41	214.724		
2,200.00	2,055.17	2,789.30	2,787.02	12.66	15.21	46.51	-4,537.60	-3,383.99	5,186.32	5,160.94	25.38	204.336		
2,300.00	2,139.41	2,859.27	2,855.11	13.40	15.64	47.03	-4,521.83	-3,387.41	5,132.69	5,106.32	26.37	194.605		
2,400.00	2,223.66	2,929.23	2,923.19	14.14	16.07	47.55	-4,506.06	-3,390.83	5,079.50	5,052.12	27.39	185.482		
2,500.00	2,307.90	3,000.80	2,991.27	14.89	16.52	48.08	-4,490.30	-3,394.25	5,026.77	4,998.35	28.42	176.869		
2,600.00	2,392.14	3,069.17	3,059.35	15.65	16.94	48.61	-4,474.53	-3,397.67	4,974.50	4,945.05	29.45	168.893		
2,700.00	2,476.39	3,139.14	3,127.44	16.41	17.37	49.16	-4,458.77	-3,401.09	4,922.71	4,892.20	30.51	161.346		
2,800.00	2,560.63	3,209.10	3,195.52	17.17	17.81	49.71	-4,443.00	-3,404.51	4,871.42	4,839.84	31.58	154.248		
2,900.00	2,644.88	3,279.07	3,263.60	17.93	18.24	50.27	-4,427.23	-3,407.92	4,820.65	4,787.98	32.67	147.567		
3,000.00	2,729.12	3,349.04	3,331.68	18.70	18.68	50.84	-4,411.47	-3,411.34	4,770.40	4,736.64	33.77	141.273		
3,100.00	2,813.36	3,419.01	3,399.76	19.47	19.11	51.42	-4,395.70	-3,414.76	4,720.70	4,685.82	34.88	135.337		
3,200.00	2,897.61	3,488.97	3,467.85	20.25	19.55	52.00	-4,379.93	-3,418.18	4,671.57	4,635.56	36.01	129.735		
3,300.00	2,981.85	3,558.94	3,535.93	21.02	19.99	52.59	-4,364.17	-3,421.60	4,623.01	4,585.87	37.15	124.443		
3,400.00	3,066.10	3,628.91	3,604.01	21.80	20.42	53.19	-4,348.40	-3,425.02	4,575.06	4,536.76	38.30	119.440		
3,500.00	3,150.34	3,701.12	3,672.09	22.58	20.88	53.80	-4,332.63	-3,428.44	4,527.73	4,488.24	39.49	114.669		
3,600.00	3,234.58	3,768.84	3,740.18	23.35	21.30	54.41	-4,316.87	-3,431.86	4,481.03	4,440.38	40.65	110.226		
3,700.00	3,318.83	10,686.69	7,243.86	24.13	119.78	-157.28	-3,492.07	8.45	4,421.75	4,349.70	72.04	61.377		
3,800.00	3,403.07	10,682.54	7,243.93	24.92	119.65	-157.77	-3,492.09	4.30	4,322.25	4,250.49	71.76	60.230		
3,900.00	3,487.32	10,678.39	7,244.00	25.70	119.51	-158.27	-3,492.10	0.15	4,222.78	4,151.29	71.48	59.074		
4,000.00	3,571.56	10,674.24	7,244.08	26.48	119.38	-158.77	-3,492.12	-4.00	4,123.32	4,052.12	71.20	57.910		
4,100.00	3,655.80	10,670.09	7,244.15	27.27	119.25	-159.27	-3,492.13	-8.15	4,023.89	3,952.97	70.92	56.737		
4,200.00	3,740.05	10,665.94	7,244.22	28.05	119.12	-159.78	-3,492.14	-12.30	3,924.48	3,853.84	70.64	55.555		
4,300.00	3,824.29	10,661.79	7,244.30	28.84	118.99	-160.29	-3,492.16	-16.45	3,825.10	3,754.74	70.36	54.364		
4,400.00	3,908.54	10,657.64	7,244.37	29.62	118.86	-160.81	-3,492.17	-20.60	3,725.75	3,655.67	70.08	53.164		
4,500.00	3,992.78	10,653.49	7,244.44	30.41	118.73	-161.33	-3,492.19	-24.75	3,626.43	3,556.63	69.80	51.955		
4,600.00	4,077.03	10,654.71	7,244.52	31.20	118.76	-161.85	-3,492.20	-28.89	3,527.14	3,457.54	69.60	50.674		
4,700.00	4,161.27	10,645.19	7,244.59	31.98	118.46	-162.38	-3,492.21	-33.04	3,427.89	3,358.65	69.24	49.510		
4,800.00	4,245.51	10,641.03	7,244.66	32.77	118.33	-162.91	-3,492.23	-37.19	3,328.68	3,259.72	68.95	48.274		
4,900.00	4,329.76	10,636.88	7,244.73	33.56	118.20	-163.44	-3,492.24	-41.34	3,229.51	3,160.84	68.67	47.030		
5,000.00	4,414.00	10,632.73	7,244.81	34.35	118.07	-163.98	-3,492.25	-45.49	3,130.39	3,062.01	68.38	45.778		
5,100.00	4,498.25	10,628.58	7,244.88	35.14	117.94	-164.52	-3,492.27	-49.64	3,031.32	2,963.23	68.09	44.518		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER PLAN												Offset Site Error:	0.00 ft
Survey Program: 25-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	4,582.49	10,624.43	7,244.95	35.93	117.81	-165.06	-3,492.28	-53.79	2,932.31	2,864.51	67.80	43.251	
5,300.00	4,666.73	10,620.28	7,245.03	36.72	117.68	-165.61	-3,492.30	-57.94	2,833.36	2,765.86	67.50	41.977	
5,400.00	4,750.98	10,616.13	7,245.10	37.51	117.54	-166.16	-3,492.31	-62.09	2,734.48	2,667.29	67.19	40.697	
5,500.00	4,835.22	10,611.98	7,245.17	38.30	117.41	-166.71	-3,492.32	-66.24	2,635.68	2,568.80	66.88	39.412	
5,600.00	4,919.47	10,607.83	7,245.25	39.09	117.28	-167.27	-3,492.34	-70.39	2,536.97	2,470.42	66.55	38.121	
5,700.00	5,003.71	10,603.68	7,245.32	39.88	117.15	-167.82	-3,492.35	-74.54	2,438.35	2,372.14	66.21	36.827	
5,800.00	5,088.06	10,599.53	7,245.39	40.67	117.02	-167.57	-3,492.37	-78.69	2,339.81	2,273.95	65.87	35.524	
5,900.00	5,173.83	10,604.52	7,245.46	41.44	117.18	-165.13	-3,492.38	-82.74	2,240.96	2,175.26	65.70	34.111	
6,000.00	5,261.34	10,591.54	7,245.53	42.18	116.77	-161.26	-3,492.39	-86.68	2,141.72	2,076.39	65.32	32.786	
6,100.00	5,350.49	10,587.73	7,245.60	42.88	116.65	-154.31	-3,492.41	-90.49	2,042.17	1,977.02	65.15	31.347	
6,200.00	5,441.16	10,584.05	7,245.66	43.56	116.53	-139.21	-3,492.42	-94.17	1,942.39	1,877.35	65.04	29.864	
6,300.00	5,533.25	10,580.50	7,245.73	44.20	116.42	-100.52	-3,492.43	-97.72	1,842.48	1,777.47	65.02	28.338	
6,400.00	5,626.65	10,577.09	7,245.79	44.82	116.31	-49.89	-3,492.44	-101.13	1,742.55	1,677.46	65.09	26.771	
6,500.00	5,721.23	10,573.82	7,245.84	45.40	116.21	-27.43	-3,492.45	-104.40	1,642.74	1,577.45	65.29	25.162	
6,600.00	5,816.89	10,570.69	7,245.90	45.94	116.11	-18.06	-3,492.46	-107.53	1,543.18	1,477.55	65.63	23.513	
6,700.00	5,913.51	10,567.71	7,245.95	46.45	116.02	-13.21	-3,492.47	-110.50	1,444.08	1,377.91	66.17	21.824	
6,800.00	6,010.97	10,564.89	7,246.00	46.93	115.93	-10.29	-3,492.48	-113.33	1,345.67	1,278.70	66.97	20.094	
6,900.00	6,109.15	10,562.22	7,246.05	47.38	115.84	-8.36	-3,492.49	-115.99	1,248.25	1,180.12	68.13	18.322	
7,000.00	6,207.93	10,559.72	7,246.09	47.80	115.76	-7.00	-3,492.50	-118.50	1,152.20	1,082.39	69.81	16.504	
7,100.00	6,307.19	10,557.37	7,246.13	48.18	115.69	-6.01	-3,492.51	-120.84	1,058.03	985.77	72.26	14.642	
7,200.00	6,406.82	10,555.19	7,246.17	48.53	115.62	-5.25	-3,492.51	-123.02	966.43	890.60	75.83	12.745	
7,300.00	6,506.68	10,553.18	7,246.21	48.84	115.56	-4.66	-3,492.52	-125.03	878.32	797.40	80.92	10.854	
7,400.00	6,606.66	10,551.34	7,246.24	49.10	115.50	-91.60	-3,492.53	-126.88	794.99	707.12	87.87	9.047	
7,500.00	6,706.21	10,541.24	7,246.42	49.35	115.18	-101.42	-3,492.56	-136.98	717.44	620.96	96.48	7.436	
7,600.00	6,803.22	10,515.71	7,246.87	49.59	114.38	-107.12	-3,492.65	-162.49	647.78	541.73	106.05	6.108	
7,700.00	6,895.32	10,475.40	7,247.58	49.82	113.11	-109.37	-3,492.78	-202.80	588.87	473.02	115.85	5.083	
7,800.00	6,980.23	10,421.28	7,248.53	50.03	111.40	-108.91	-3,492.96	-256.91	542.69	417.86	124.83	4.348	
7,900.00	7,055.85	10,352.55	7,249.56	50.21	109.25	-106.27	-3,493.19	-325.64	509.76	378.01	131.75	3.869	
8,000.00	7,120.34	10,274.99	7,249.62	50.36	106.82	-102.47	-3,493.45	-403.20	488.72	352.43	136.28	3.586	
8,100.00	7,172.10	10,189.55	7,249.62	50.47	104.16	-98.29	-3,493.73	-488.64	477.41	339.15	138.25	3.453	
8,200.00	7,209.85	10,102.94	7,249.62	50.55	101.47	-94.55	-3,494.04	-581.13	472.49	334.10	138.39	3.414 SF	
8,300.00	7,232.68	10,000.20	7,249.62	50.61	98.29	-92.01	-3,494.37	-678.38	470.85	333.90	136.95	3.438 ES	
8,400.00	7,240.00	9,900.18	7,249.62	50.65	95.21	-91.17	-3,494.70	-778.01	470.36	335.32	135.04	3.483	
8,500.00	7,239.60	9,800.18	7,249.62	50.69	92.16	-91.22	-3,495.04	-878.01	470.09	337.05	133.04	3.533	
8,600.00	7,239.19	9,700.18	7,249.62	50.75	89.12	-91.27	-3,495.37	-978.00	469.82	338.60	131.22	3.580	
8,700.00	7,238.78	9,600.18	7,249.62	50.85	86.10	-91.32	-3,495.70	-1,078.00	469.55	339.99	129.57	3.624	
8,800.00	7,238.38	9,500.18	7,249.62	51.02	83.11	-91.37	-3,496.04	-1,178.00	469.29	341.21	128.07	3.664	
8,900.00	7,237.97	9,400.18	7,249.62	51.32	80.15	-91.42	-3,496.37	-1,278.00	469.02	342.30	126.72	3.701	
9,000.00	7,237.57	9,300.18	7,249.62	51.95	77.22	-91.47	-3,496.71	-1,378.00	468.75	343.25	125.50	3.735	
9,100.00	7,237.16	9,200.18	7,249.62	53.10	74.32	-91.52	-3,497.04	-1,478.00	468.48	344.07	124.41	3.766	
9,200.00	7,236.76	9,100.19	7,249.62	54.69	71.46	-91.58	-3,497.37	-1,577.99	468.21	344.77	123.44	3.793	
9,300.00	7,236.35	9,000.19	7,249.62	56.53	68.65	-91.63	-3,497.71	-1,677.99	467.95	345.36	122.59	3.817	
9,400.00	7,235.94	8,900.19	7,249.62	58.53	65.89	-91.68	-3,498.04	-1,777.99	467.68	345.83	121.85	3.838	
9,500.00	7,235.54	8,800.19	7,249.62	60.62	63.18	-91.73	-3,498.38	-1,877.99	467.41	346.19	121.23	3.856	
9,600.00	7,235.13	8,700.19	7,249.62	62.80	60.55	-91.78	-3,498.71	-1,977.99	467.15	346.43	120.71	3.870	
9,700.00	7,234.73	8,600.19	7,249.62	65.03	58.00	-91.83	-3,499.04	-2,077.98	466.88	346.57	120.32	3.880	
9,800.00	7,234.32	8,500.19	7,249.62	67.32	55.54	-91.88	-3,499.38	-2,177.98	466.62	346.58	120.04	3.887	
9,900.00	7,233.92	8,400.19	7,249.62	69.66	53.20	-91.93	-3,499.71	-2,277.98	466.35	346.47	119.89	3.890	
10,000.00	7,233.51	8,300.19	7,249.62	72.03	51.00	-91.98	-3,500.04	-2,377.98	466.09	346.22	119.87	3.888	
10,100.00	7,233.10	8,200.20	7,249.62	74.45	48.99	-92.03	-3,500.38	-2,477.98	465.82	345.82	120.00	3.882	
10,200.00	7,232.70	8,100.20	7,249.62	76.89	47.21	-92.08	-3,500.71	-2,577.98	465.56	345.27	120.29	3.870	
10,300.00	7,232.29	8,000.20	7,249.62	79.36	45.73	-92.14	-3,501.05	-2,677.97	465.30	344.53	120.77	3.853	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	7,900.20	7,249.62	81.86	44.60	-92.19	-3,501.38	-2,777.97	465.03	343.60	121.44	3.829		
10,500.00	7,231.48	7,800.20	7,249.62	84.38	43.83	-92.24	-3,501.71	-2,877.97	464.77	342.44	122.33	3.799		
10,572.48	7,231.19	7,728.97	7,249.56	86.23	43.46	-92.27	-3,501.97	-2,949.20	464.59	341.42	123.18	3.772 CC		
10,600.00	7,231.08	7,704.77	7,248.77	86.93	43.36	-92.18	-3,502.23	-2,973.38	464.69	341.06	123.63	3.759		
10,700.00	7,230.67	7,618.10	7,238.64	89.49	43.08	-90.97	-3,504.87	-3,059.35	466.84	341.32	125.52	3.719		
10,800.00	7,230.26	7,535.58	7,218.51	92.07	42.88	-88.55	-3,509.80	-3,139.17	472.53	344.93	127.61	3.703		
10,900.00	7,229.86	7,459.43	7,191.15	94.67	42.72	-85.33	-3,516.37	-3,209.88	483.23	353.75	129.49	3.732		
11,000.00	7,229.45	7,390.83	7,159.62	97.28	42.59	-81.74	-3,523.88	-3,270.30	500.59	369.84	130.75	3.829		
11,100.00	7,229.05	7,330.07	7,126.54	99.90	42.46	-78.15	-3,531.72	-3,320.64	525.90	394.77	131.13	4.011		
11,200.00	7,228.64	7,276.80	7,093.81	102.54	42.33	-74.79	-3,539.44	-3,361.93	559.80	429.15	130.64	4.285		
11,300.00	7,228.24	7,230.34	7,062.60	105.19	42.22	-71.77	-3,546.78	-3,395.54	602.22	472.75	129.47	4.651		
11,400.00	7,227.83	7,189.87	7,033.53	107.85	42.10	-69.12	-3,553.61	-3,422.84	652.59	524.73	127.86	5.104		
11,500.00	7,227.42	7,152.01	7,004.86	110.52	41.99	-66.65	-3,560.34	-3,446.62	710.01	584.01	126.00	5.635		
11,600.00	7,227.02	7,123.69	6,982.53	113.20	41.90	-64.83	-3,565.57	-3,463.24	773.49	649.38	124.11	6.232		
11,700.00	7,226.61	7,100.00	6,963.32	115.89	41.82	-63.33	-3,570.06	-3,476.35	842.12	719.88	122.24	6.889		
11,800.00	7,226.21	7,072.64	6,940.55	118.59	41.72	-61.64	-3,575.39	-3,490.56	915.01	794.56	120.46	7.596		
11,900.00	7,225.80	7,051.43	6,922.51	121.29	41.64	-60.36	-3,579.60	-3,500.87	991.50	872.71	118.80	8.346		
12,000.00	7,225.40	7,032.55	6,906.17	124.00	41.57	-59.24	-3,583.42	-3,509.54	1,070.98	953.70	117.28	9.132		
12,100.00	7,224.99	7,010.76	6,887.02	126.72	41.48	-57.98	-3,587.89	-3,518.91	1,152.98	1,037.09	115.89	9.949		
12,200.00	7,224.58	7,000.00	6,877.45	129.44	41.44	-57.37	-3,590.12	-3,523.29	1,237.03	1,122.40	114.63	10.791		
12,300.00	7,224.18	7,000.00	6,877.45	132.17	41.44	-57.37	-3,590.12	-3,523.29	1,323.08	1,209.61	113.46	11.661		
12,400.00	7,223.77	6,974.32	6,854.32	134.91	41.33	-55.95	-3,595.51	-3,533.06	1,410.24	1,297.78	112.46	12.540		
12,500.00	7,223.37	6,952.01	6,833.94	137.65	41.23	-54.76	-3,600.26	-3,540.77	1,499.02	1,387.47	111.55	13.438		
12,600.00	7,222.96	6,952.01	6,833.94	140.39	41.23	-54.76	-3,600.26	-3,540.77	1,588.65	1,477.96	110.68	14.353		
12,700.00	7,222.55	6,952.01	6,833.94	143.14	41.23	-54.76	-3,600.26	-3,540.77	1,679.45	1,569.55	109.89	15.282		
12,800.00	7,222.15	6,952.01	6,833.94	145.89	41.23	-54.76	-3,600.26	-3,540.77	1,771.24	1,662.06	109.18	16.224		
12,900.00	7,221.74	6,926.49	6,810.31	148.65	41.11	-53.44	-3,605.76	-3,548.68	1,863.20	1,754.62	108.59	17.159		
13,000.00	7,221.34	6,919.08	6,803.38	151.41	41.07	-53.07	-3,607.38	-3,550.80	1,956.13	1,848.12	108.01	18.111		
13,100.00	7,220.93	6,900.00	6,785.47	154.18	40.98	-52.13	-3,611.54	-3,555.86	2,049.77	1,942.26	107.51	19.066		
13,200.00	7,220.53	6,900.00	6,785.47	156.94	40.98	-52.13	-3,611.54	-3,555.86	2,143.65	2,036.64	107.01	20.032		
13,300.00	7,220.12	6,900.00	6,785.47	159.72	40.98	-52.13	-3,611.54	-3,555.86	2,238.06	2,131.50	106.56	21.004		
13,400.00	7,219.71	6,900.00	6,785.47	162.49	40.98	-52.13	-3,611.54	-3,555.86	2,332.93	2,226.79	106.14	21.980		
13,500.00	7,219.31	6,900.00	6,785.47	165.27	40.98	-52.13	-3,611.54	-3,555.86	2,428.22	2,322.46	105.75	22.961		
13,600.00	7,218.90	6,900.00	6,785.47	168.05	40.98	-52.13	-3,611.54	-3,555.86	2,523.87	2,418.47	105.40	23.946		
13,700.00	7,218.50	6,879.59	6,766.15	170.83	40.88	-51.16	-3,616.04	-3,560.66	2,619.44	2,514.33	105.11	24.920		
13,800.00	7,218.09	6,875.27	6,762.04	173.61	40.86	-50.96	-3,616.99	-3,561.60	2,715.52	2,610.71	104.82	25.907		
13,900.00	7,217.69	6,871.20	6,758.16	176.40	40.84	-50.77	-3,617.90	-3,562.45	2,811.85	2,707.30	104.55	26.896		
14,000.00	7,217.28	6,852.01	6,739.83	179.19	40.74	-49.91	-3,622.16	-3,566.13	2,908.61	2,804.29	104.32	27.882		
14,100.00	7,216.87	6,852.01	6,739.83	181.98	40.74	-49.91	-3,622.16	-3,566.13	3,005.26	2,901.18	104.08	28.875		
14,200.00	7,216.47	6,852.01	6,739.83	184.78	40.74	-49.91	-3,622.16	-3,566.13	3,102.12	2,998.26	103.86	29.869		
14,300.00	7,216.06	6,852.01	6,739.83	187.57	40.74	-49.91	-3,622.16	-3,566.13	3,199.17	3,095.52	103.65	30.864		
14,400.00	7,215.66	6,852.01	6,739.83	190.37	40.74	-49.91	-3,622.16	-3,566.13	3,296.40	3,192.94	103.46	31.861		
14,500.00	7,215.25	6,852.01	6,739.83	193.17	40.74	-49.91	-3,622.16	-3,566.13	3,393.80	3,290.51	103.29	32.858		
14,600.00	7,214.85	6,852.01	6,739.83	195.97	40.74	-49.91	-3,622.16	-3,566.13	3,491.33	3,388.21	103.12	33.855		
14,700.00	7,214.44	6,852.01	6,739.83	198.77	40.74	-49.91	-3,622.16	-3,566.13	3,589.01	3,486.03	102.97	34.854		
14,800.00	7,214.03	6,852.01	6,739.83	201.58	40.74	-49.91	-3,622.16	-3,566.13	3,686.81	3,583.97	102.83	35.852		
14,900.00	7,213.63	6,852.01	6,739.83	204.38	40.74	-49.91	-3,622.16	-3,566.13	3,784.72	3,682.02	102.70	36.851		
15,000.00	7,213.22	6,852.01	6,739.83	207.19	40.74	-49.91	-3,622.16	-3,566.13	3,882.74	3,780.16	102.58	37.849		
15,100.00	7,212.82	6,852.01	6,739.83	210.00	40.74	-49.91	-3,622.16	-3,566.13	3,980.86	3,878.39	102.47	38.848		
15,200.00	7,212.41	6,852.01	6,739.83	212.81	40.74	-49.91	-3,622.16	-3,566.13	4,079.07	3,976.70	102.37	39.846		
15,300.00	7,212.01	6,852.01	6,739.83	215.62	40.74	-49.91	-3,622.16	-3,566.13	4,177.36	4,075.09	102.28	40.844		
15,400.00	7,211.60	6,829.75	6,718.42	218.43	40.62	-48.93	-3,627.13	-3,569.70	4,275.29	4,173.10	102.20	41.834		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER PLAN												Offset Site Error:	0.00 ft
Survey Program: 25-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,500.00	7,211.19	6,827.86	6,716.60	221.25	40.60	-48.85	-3,627.55	-3,569.96	4,373.66	4,271.55	102.12	42.831	
15,600.00	7,210.79	6,826.04	6,714.84	224.06	40.59	-48.78	-3,627.96	-3,570.22	4,472.10	4,370.06	102.04	43.827	
15,700.00	7,210.38	6,824.30	6,713.16	226.88	40.59	-48.70	-3,628.35	-3,570.45	4,570.60	4,468.63	101.97	44.823	
15,794.94	7,210.00	6,822.70	6,711.62	229.55	40.58	-48.63	-3,628.71	-3,570.66	4,664.17	4,562.26	101.91	45.767	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	25.00	71.00	3.28	3.28	-146.40	-4,953.18	-3,290.80	5,947.13					
100.00	100.00	1,159.55	1,190.99	3.28	6.51	-145.38	-4,808.04	-3,318.76	5,943.20	5,933.45	9.76	609.239		
200.00	200.00	1,250.15	1,278.24	3.34	7.03	-145.21	-4,784.36	-3,324.52	5,924.96	5,914.71	10.25	578.318		
300.00	299.98	1,387.58	1,410.70	3.44	7.86	32.64	-4,748.54	-3,332.27	5,905.02	5,893.96	11.06	534.007		
400.00	399.84	1,462.00	1,482.54	3.59	8.31	33.06	-4,729.42	-3,335.80	5,882.11	5,870.52	11.58	507.846		
500.00	499.45	1,572.96	1,589.76	3.79	8.99	33.61	-4,701.24	-3,340.34	5,856.30	5,843.95	12.36	474.000		
600.00	598.70	1,629.51	1,644.50	4.03	9.33	34.07	-4,687.21	-3,342.46	5,828.10	5,815.23	12.87	452.811		
700.00	697.47	1,726.28	1,738.27	4.31	9.93	34.70	-4,663.57	-3,346.13	5,797.56	5,783.91	13.65	424.857		
800.00	795.62	1,866.56	1,873.64	4.64	10.83	35.55	-4,627.35	-3,352.41	5,763.59	5,748.87	14.72	391.611		
900.00	893.06	1,954.65	1,958.56	5.00	11.40	36.31	-4,604.30	-3,356.50	5,727.04	5,711.51	15.53	368.713		
1,000.00	989.64	2,041.05	2,041.86	5.40	11.97	37.14	-4,581.68	-3,360.51	5,688.06	5,671.69	16.37	347.500		
1,100.00	1,085.27	2,125.66	2,123.42	5.83	12.52	38.05	-4,559.54	-3,364.44	5,646.72	5,629.49	17.22	327.861		
1,200.00	1,179.82	2,208.36	2,203.14	6.29	13.07	39.02	-4,537.89	-3,368.28	5,603.10	5,585.01	18.09	309.675		
1,300.00	1,273.17	2,289.06	2,280.94	6.79	13.61	40.07	-4,516.77	-3,372.03	5,557.29	5,538.31	18.98	292.821		
1,400.00	1,365.21	2,367.66	2,356.72	7.33	14.13	41.19	-4,496.20	-3,375.68	5,509.39	5,489.51	19.88	277.181		
1,500.00	1,455.84	2,444.07	2,430.38	7.89	14.64	42.39	-4,476.20	-3,379.23	5,459.48	5,438.69	20.79	262.643		
1,600.00	1,544.94	2,518.19	2,501.83	8.50	15.14	43.67	-4,456.80	-3,382.67	5,407.68	5,385.97	21.71	249.104		
1,700.00	1,632.39	2,589.93	2,570.99	9.13	15.62	45.04	-4,438.02	-3,386.00	5,354.08	5,331.44	22.64	236.475		
1,800.00	1,718.11	2,659.20	2,637.77	9.80	16.09	46.49	-4,419.89	-3,389.22	5,298.79	5,275.21	23.58	224.672		
1,900.00	1,802.44	2,726.56	2,702.70	10.49	16.54	47.30	-4,402.26	-3,392.34	5,242.42	5,217.88	24.54	213.642		
2,000.00	1,886.68	2,793.80	2,767.52	11.20	17.00	47.82	-4,384.66	-3,395.47	5,186.39	5,160.89	25.51	203.326		
2,100.00	1,970.92	2,861.04	2,832.35	11.93	17.45	48.35	-4,367.06	-3,398.59	5,130.83	5,104.33	26.50	193.628		
2,200.00	2,055.17	2,928.29	2,897.17	12.66	17.91	48.88	-4,349.46	-3,401.71	5,075.73	5,048.22	27.51	184.510		
2,300.00	2,139.41	2,995.53	2,961.99	13.40	18.36	49.43	-4,331.86	-3,404.84	5,021.12	4,992.58	28.54	175.938		
2,400.00	2,223.66	3,062.77	3,026.81	14.14	18.82	49.98	-4,314.26	-3,407.96	4,967.01	4,937.42	29.59	167.876		
2,500.00	2,307.90	3,140.00	3,091.64	14.89	19.31	50.53	-4,296.66	-3,411.08	4,913.42	4,882.71	30.71	159.969		
2,600.00	2,392.14	3,202.75	3,156.46	15.65	19.77	51.10	-4,279.06	-3,414.20	4,860.37	4,828.60	31.77	152.985		
2,700.00	2,476.39	3,264.49	3,221.28	16.41	20.19	51.68	-4,261.46	-3,417.33	4,807.87	4,775.03	32.84	146.422		
2,800.00	2,560.63	3,338.28	3,286.10	17.17	20.70	52.26	-4,243.86	-3,420.45	4,755.94	4,721.95	33.99	139.912		
2,900.00	2,644.88	3,401.02	3,350.92	17.93	21.12	52.85	-4,226.26	-3,423.57	4,704.61	4,669.51	35.10	134.049		
3,000.00	2,729.12	3,466.22	3,415.75	18.70	21.57	53.44	-4,208.66	-3,426.69	4,653.89	4,617.66	36.23	128.450		
3,100.00	2,813.36	3,536.55	3,480.57	19.47	22.05	54.05	-4,191.06	-3,429.82	4,603.79	4,566.38	37.41	123.051		
3,200.00	2,897.61	3,600.70	3,545.39	20.25	22.49	54.66	-4,173.46	-3,432.94	4,554.35	4,515.78	38.57	118.072		
3,300.00	2,981.85	3,667.94	3,610.21	21.02	22.95	55.28	-4,155.86	-3,436.06	4,505.59	4,465.82	39.77	113.302		
3,400.00	3,066.10	3,734.18	3,675.03	21.80	23.41	55.91	-4,138.26	-3,439.18	4,456.82	4,416.95	40.99	108.632		
3,500.00	3,150.34	3,800.42	3,740.27	22.58	23.87	56.54	-4,120.66	-3,442.30	4,407.95	4,368.07	42.24	104.062		
3,600.00	3,234.58	3,866.66	3,806.51	23.35	24.33	57.17	-4,103.06	-3,445.42	4,359.07	4,319.19	43.51	99.492		
3,700.00	3,318.83	3,932.90	3,872.75	24.13	24.79	57.80	-4,085.46	-3,448.54	4,310.19	4,270.31	44.79	94.922		
3,800.00	3,403.07	4,000.14	3,940.99	24.92	25.25	58.43	-4,067.86	-3,451.66	4,261.31	4,221.43	46.07	90.352		
3,900.00	3,487.32	4,066.38	3,997.23	25.70	25.71	59.06	-4,050.26	-3,454.78	4,212.43	4,172.55	47.34	85.782		
4,000.00	3,571.56	4,132.62	4,053.47	26.48	26.17	59.69	-4,032.66	-3,457.90	4,163.55	4,123.67	48.61	81.212		
4,100.00	3,655.80	4,198.86	4,119.71	27.27	26.63	60.32	-4,015.06	-3,461.02	4,114.67	4,074.79	49.89	76.642		
4,200.00	3,740.05	4,265.10	4,186.95	28.05	27.09	60.95	-4,000.00	-3,464.14	4,065.79	4,025.91	51.17	72.072		
4,300.00	3,824.29	4,331.34	4,254.19	28.84	27.55	61.58	-3,985.00	-3,467.26	4,016.91	4,000.00	52.44	67.502		
4,400.00	3,908.54	4,397.58	4,320.43	29.62	28.01	62.21	-3,970.00	-3,470.38	3,968.03	3,953.11	53.81	62.932		
4,500.00	3,992.78	4,463.82	4,386.67	30.41	28.47	62.84	-3,955.00	-3,473.50	3,919.15	3,904.23	55.18	58.362		
4,600.00	4,077.03	4,530.06	4,452.91	31.20	28.93	63.47	-3,940.00	-3,476.62	3,870.27	3,855.35	56.55	53.792		
4,700.00	4,161.27	4,596.30	4,519.15	31.98	29.39	64.10	-3,925.00	-3,479.74	3,821.39	3,806.47	57.92	49.222		
4,800.00	4,245.51	4,662.54	4,585.39	32.77	29.85	64.73	-3,910.00	-3,482.86	3,772.51	3,757.59	59.29	44.652		
4,900.00	4,329.76	4,728.78	4,651.63	33.56	30.31	65.36	-3,895.00	-3,485.98	3,723.63	3,708.71	60.66	40.082		
5,000.00	4,414.00	4,795.02	4,717.87	34.35	30.77	65.99	-3,880.00	-3,489.10	3,674.75	3,659.83	62.03	35.512		
5,100.00	4,498.25	4,861.26	4,784.11	35.14	31.23	66.62	-3,865.00	-3,492.22	3,625.87	3,610.95	63.40	30.942		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	10,435.59	7,075.91	35.93	116.33	-175.73	-3,228.99	-109.60	2,673.41	2,609.47	63.94	41.813		
5,300.00	4,666.73	10,436.72	7,075.91	36.72	116.37	-175.97	-3,228.98	-111.88	2,575.50	2,511.85	63.64	40.467		
5,400.00	4,750.98	10,439.00	7,075.90	37.51	116.44	-176.22	-3,228.98	-114.15	2,477.75	2,414.39	63.35	39.109		
5,500.00	4,835.22	10,441.27	7,075.90	38.30	116.51	-176.46	-3,228.97	-116.42	2,380.18	2,317.13	63.05	37.752		
5,600.00	4,919.47	10,426.50	7,075.90	39.09	116.05	-176.70	-3,228.96	-118.69	2,282.82	2,220.33	62.49	36.528		
5,700.00	5,003.71	10,424.23	7,075.90	39.88	115.98	-176.95	-3,228.96	-120.97	2,185.70	2,123.61	62.09	35.201		
5,800.00	5,088.06	10,421.96	7,075.89	40.67	115.91	-177.06	-3,228.95	-123.23	2,088.80	2,027.13	61.67	33.869		
5,900.00	5,173.83	10,419.80	7,075.89	41.44	115.84	-176.87	-3,228.95	-125.39	1,991.53	1,930.25	61.28	32.498		
6,000.00	5,261.34	10,417.77	7,075.89	42.18	115.77	-176.63	-3,228.94	-127.42	1,893.73	1,832.80	60.92	31.083		
6,100.00	5,350.49	10,415.88	7,075.89	42.88	115.71	-176.29	-3,228.94	-129.32	1,795.45	1,734.84	60.60	29.626		
6,200.00	5,441.16	10,414.13	7,075.89	43.56	115.66	-175.79	-3,228.93	-131.07	1,696.73	1,636.41	60.32	28.128		
6,300.00	5,533.25	10,412.52	7,075.88	44.20	115.61	-175.02	-3,228.93	-132.68	1,597.63	1,537.55	60.08	26.591		
6,400.00	5,626.65	10,411.05	7,075.88	44.82	115.56	-173.69	-3,228.93	-134.15	1,498.20	1,438.31	59.89	25.016		
6,500.00	5,721.23	10,409.72	7,075.88	45.40	115.52	-170.94	-3,228.92	-135.48	1,398.50	1,338.75	59.75	23.405		
6,600.00	5,816.89	10,408.54	7,075.88	45.94	115.48	-162.32	-3,228.92	-136.65	1,298.62	1,238.94	59.68	21.759		
6,700.00	5,913.51	10,407.51	7,075.88	46.45	115.45	-71.61	-3,228.92	-137.68	1,198.64	1,138.94	59.69	20.080		
6,800.00	6,010.97	10,406.63	7,075.88	46.93	115.42	-13.75	-3,228.92	-138.57	1,098.67	1,038.86	59.81	18.369		
6,900.00	6,109.15	10,405.90	7,075.88	47.38	115.40	-7.10	-3,228.91	-139.30	998.86	938.79	60.07	16.628		
7,000.00	6,207.93	10,405.32	7,075.88	47.80	115.38	-4.76	-3,228.91	-139.88	899.41	838.87	60.54	14.857		
7,100.00	6,307.19	10,404.89	7,075.88	48.18	115.37	-3.61	-3,228.91	-140.31	800.58	739.27	61.32	13.057		
7,200.00	6,406.82	10,404.61	7,075.88	48.53	115.36	-2.97	-3,228.91	-140.59	702.80	640.20	62.60	11.228		
7,300.00	6,506.68	10,404.49	7,075.88	48.84	115.36	-2.59	-3,228.91	-140.71	606.71	541.95	64.76	9.368		
7,400.00	6,606.66	10,404.51	7,075.88	49.10	115.36	-90.04	-3,228.91	-140.69	513.41	444.69	68.72	7.471		
7,500.00	6,706.21	10,396.26	7,075.87	49.35	115.10	-105.45	-3,228.89	-148.94	424.32	347.97	76.35	5.558		
7,600.00	6,803.22	10,372.53	7,075.84	49.59	114.35	-111.89	-3,228.83	-172.66	342.98	253.13	89.85	3.817		
7,700.00	6,895.32	10,336.12	7,075.81	49.82	113.21	-111.30	-3,228.74	-211.27	275.23	165.74	109.49	2.514		
7,800.00	6,980.23	10,281.38	7,075.75	50.03	111.50	-104.87	-3,228.61	-263.82	228.28	97.25	131.03	1.742		
7,900.00	7,055.85	10,216.19	7,075.69	50.21	109.46	-93.55	-3,228.44	-329.01	207.72	63.29	144.42	1.438 Level 3		
7,931.79	7,077.65	10,193.07	7,075.67	50.26	108.74	-89.26	-3,228.39	-352.13	206.58	61.02	145.56	1.419 Level 3, CC, ES, SF		
8,000.00	7,120.34	10,139.96	7,075.61	50.36	107.09	-79.73	-3,228.26	-405.23	210.91	67.51	143.40	1.471 Level 3		
8,100.00	7,172.10	10,054.57	7,075.53	50.47	104.44	-67.04	-3,228.05	-490.62	226.95	92.52	134.43	1.688		
8,200.00	7,209.85	9,962.12	7,075.44	50.55	101.58	-57.86	-3,227.82	-583.07	244.79	119.55	125.24	1.955		
8,300.00	7,232.68	9,864.90	7,075.34	50.61	98.59	-52.60	-3,227.58	-680.30	257.42	138.60	118.82	2.166		
8,400.00	7,240.00	9,765.28	7,075.24	50.65	95.54	-50.92	-3,227.33	-779.92	261.36	145.73	115.63	2.260		
8,500.00	7,239.60	9,665.28	7,075.14	50.69	92.51	-50.85	-3,227.08	-879.91	260.50	146.43	114.07	2.284		
8,600.00	7,239.19	9,565.29	7,075.04	50.75	89.49	-50.79	-3,226.84	-979.91	259.64	147.03	112.61	2.306		
8,700.00	7,238.78	9,465.29	7,074.94	50.85	86.50	-50.72	-3,226.59	-1,079.90	258.78	147.53	111.25	2.326		
8,800.00	7,238.38	9,365.30	7,074.84	51.02	83.54	-50.65	-3,226.34	-1,179.90	257.93	147.94	109.98	2.345		
8,900.00	7,237.97	9,265.30	7,074.74	51.32	80.60	-50.58	-3,226.09	-1,279.89	257.07	148.27	108.80	2.363		
9,000.00	7,237.57	9,166.49	7,074.27	51.95	77.74	-50.45	-3,225.85	-1,378.70	256.45	148.72	107.73	2.380		
9,100.00	7,237.16	9,066.50	7,073.44	53.10	74.88	-50.25	-3,225.60	-1,478.69	256.06	149.48	106.58	2.402		
9,200.00	7,236.76	8,966.50	7,072.61	54.69	72.06	-50.06	-3,225.36	-1,578.68	255.67	150.16	105.51	2.423		
9,300.00	7,236.35	8,866.50	7,071.79	56.53	69.30	-49.86	-3,225.11	-1,678.67	255.28	150.77	104.51	2.443		
9,400.00	7,235.94	8,766.51	7,070.96	58.53	66.60	-49.66	-3,224.86	-1,778.67	254.90	151.30	103.59	2.461		
9,500.00	7,235.54	8,666.51	7,070.13	60.62	63.97	-49.47	-3,224.61	-1,878.66	254.52	151.77	102.75	2.477		
9,600.00	7,235.13	8,566.52	7,069.30	62.80	61.42	-49.27	-3,224.37	-1,978.65	254.14	152.16	101.98	2.492		
9,700.00	7,234.73	8,466.52	7,068.48	65.03	58.98	-49.07	-3,224.12	-2,078.64	253.76	152.47	101.29	2.505		
9,800.00	7,234.32	8,366.53	7,067.65	67.32	56.67	-48.87	-3,223.87	-2,178.63	253.39	152.71	100.68	2.517		
9,900.00	7,233.92	8,266.53	7,066.82	69.66	54.51	-48.67	-3,223.63	-2,278.63	253.02	152.86	100.17	2.526		
10,000.00	7,233.51	8,166.54	7,066.00	72.03	52.55	-48.47	-3,223.38	-2,378.62	252.66	152.91	99.75	2.533		
10,100.00	7,233.10	8,066.54	7,065.17	74.45	50.84	-48.27	-3,223.13	-2,478.61	252.29	152.86	99.44	2.537		
10,200.00	7,232.70	7,966.55	7,064.34	76.89	49.43	-48.07	-3,222.88	-2,578.60	251.94	152.68	99.25	2.538		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	7,866.55	7,063.51	79.36	48.34	-47.87	-3,222.64	-2,678.59	251.58	152.37	99.21	2.536		
10,400.00	7,231.89	7,766.55	7,062.69	81.86	47.56	-47.66	-3,222.39	-2,778.58	251.23	151.90	99.33	2.529		
10,500.00	7,231.48	7,666.56	7,061.86	84.38	47.03	-47.46	-3,222.14	-2,878.58	250.88	151.23	99.64	2.518		
10,564.13	7,231.22	7,607.74	7,061.33	86.01	46.81	-47.33	-3,221.98	-2,942.70	250.65	150.65	100.01	2.506		
10,600.00	7,231.08	7,576.22	7,060.48	86.93	46.71	-47.20	-3,222.09	-2,968.90	251.27	150.76	100.51	2.500		
10,700.00	7,230.67	7,502.13	7,052.49	89.49	46.52	-46.15	-3,223.91	-3,042.49	259.78	158.46	101.33	2.564		
10,800.00	7,230.26	7,430.78	7,037.04	92.07	46.36	-44.33	-3,227.77	-3,112.00	278.34	176.91	101.44	2.744		
10,900.00	7,229.86	7,363.67	7,015.75	94.67	46.22	-42.14	-3,233.25	-3,175.38	306.80	205.55	101.25	3.030		
11,000.00	7,229.45	7,300.00	6,989.71	97.28	46.08	-39.85	-3,240.04	-3,233.05	344.67	243.75	100.91	3.416		
11,100.00	7,229.05	7,245.52	6,963.11	99.90	45.96	-37.85	-3,247.03	-3,280.06	391.10	290.17	100.93	3.875		
11,200.00	7,228.64	7,194.94	6,935.03	102.54	45.84	-36.05	-3,254.46	-3,321.45	445.09	344.23	100.86	4.413		
11,300.00	7,228.24	7,150.00	6,907.49	105.19	45.72	-34.52	-3,261.76	-3,356.19	505.58	404.73	100.84	5.013		
11,400.00	7,227.83	7,109.56	6,880.75	107.85	45.60	-33.24	-3,268.88	-3,385.67	571.55	470.74	100.81	5.669		
11,500.00	7,227.42	7,073.81	6,855.65	110.52	45.49	-32.17	-3,275.57	-3,410.22	642.13	541.35	100.79	6.371		
11,600.00	7,227.02	7,042.02	6,832.23	113.20	45.39	-31.28	-3,281.83	-3,430.79	716.57	615.82	100.75	7.113		
11,700.00	7,226.61	7,013.69	6,810.56	115.89	45.29	-30.53	-3,287.62	-3,448.09	794.23	693.53	100.70	7.887		
11,800.00	7,226.21	7,000.00	6,799.83	118.59	45.24	-30.18	-3,290.50	-3,456.08	874.79	773.99	100.80	8.679		
11,900.00	7,225.80	6,965.71	6,772.24	121.29	45.11	-29.36	-3,297.89	-3,475.05	957.26	856.68	100.58	9.518		
12,000.00	7,225.40	6,945.33	6,755.38	124.00	45.03	-28.89	-3,302.42	-3,485.58	1,041.86	941.35	100.51	10.366		
12,100.00	7,224.99	6,935.01	6,746.73	126.72	44.98	-28.67	-3,304.74	-3,490.70	1,128.18	1,027.69	100.50	11.226		
12,200.00	7,224.58	6,910.30	6,726.69	129.44	44.88	-28.15	-3,310.39	-3,502.36	1,215.76	1,115.39	100.37	12.113		
12,300.00	7,224.18	6,900.00	6,716.80	132.17	44.83	-27.94	-3,312.78	-3,506.97	1,304.66	1,204.35	100.32	13.006		
12,400.00	7,223.77	6,881.41	6,700.56	134.91	44.75	-27.58	-3,317.15	-3,514.91	1,394.56	1,294.34	100.22	13.915		
12,500.00	7,223.37	6,868.81	6,689.44	137.65	44.69	-27.34	-3,320.14	-3,520.01	1,485.40	1,385.25	100.15	14.832		
12,600.00	7,222.96	6,850.00	6,672.66	140.39	44.60	-27.00	-3,324.66	-3,527.20	1,577.11	1,477.04	100.06	15.761		
12,700.00	7,222.55	6,850.00	6,672.66	143.14	44.60	-27.00	-3,324.66	-3,527.20	1,669.41	1,569.38	100.03	16.689		
12,800.00	7,222.15	6,835.01	6,659.14	145.89	44.53	-26.74	-3,328.30	-3,532.56	1,762.37	1,662.42	99.96	17.632		
12,900.00	7,221.74	6,835.01	6,659.14	148.65	44.53	-26.74	-3,328.30	-3,532.56	1,855.94	1,756.03	99.91	18.575		
13,000.00	7,221.34	6,819.37	6,644.91	151.41	44.45	-26.48	-3,332.14	-3,537.79	1,949.90	1,850.05	99.85	19.529		
13,100.00	7,220.93	6,800.00	6,627.13	154.18	44.35	-26.16	-3,336.93	-3,543.78	2,044.49	1,944.70	99.78	20.490		
13,200.00	7,220.53	6,800.00	6,627.13	156.94	44.35	-26.16	-3,336.93	-3,543.78	2,139.21	2,039.46	99.75	21.447		
13,300.00	7,220.12	6,800.00	6,627.13	159.72	44.35	-26.16	-3,336.93	-3,543.78	2,234.39	2,134.68	99.71	22.409		
13,400.00	7,219.71	6,800.00	6,627.13	162.49	44.35	-26.16	-3,336.93	-3,543.78	2,329.98	2,230.30	99.68	23.375		
13,500.00	7,219.31	6,800.00	6,627.13	165.27	44.35	-26.16	-3,336.93	-3,543.78	2,425.92	2,326.27	99.65	24.345		
13,600.00	7,218.90	6,779.59	6,608.20	168.05	44.24	-25.85	-3,342.04	-3,549.47	2,521.77	2,422.17	99.60	25.319		
13,700.00	7,218.50	6,774.32	6,603.29	170.83	44.21	-25.77	-3,343.37	-3,550.84	2,618.08	2,518.50	99.57	26.293		
13,800.00	7,218.09	6,750.56	6,581.01	173.61	44.08	-25.43	-3,349.38	-3,556.49	2,714.94	2,615.41	99.53	27.277		
13,900.00	7,217.69	6,750.56	6,581.01	176.40	44.08	-25.43	-3,349.38	-3,556.49	2,811.51	2,712.00	99.51	28.253		
14,000.00	7,217.28	6,750.56	6,581.01	179.19	44.08	-25.43	-3,349.38	-3,556.49	2,908.32	2,808.82	99.50	29.230		
14,100.00	7,216.87	6,750.56	6,581.01	181.98	44.08	-25.43	-3,349.38	-3,556.49	3,005.33	2,905.85	99.49	30.209		
14,200.00	7,216.47	6,750.56	6,581.01	184.78	44.08	-25.43	-3,349.38	-3,556.49	3,102.53	3,003.06	99.48	31.189		
14,300.00	7,216.06	6,750.56	6,581.01	187.57	44.08	-25.43	-3,349.38	-3,556.49	3,199.91	3,100.44	99.47	32.170		
14,400.00	7,215.66	6,750.56	6,581.01	190.37	44.08	-25.43	-3,349.38	-3,556.49	3,297.44	3,197.98	99.46	33.152		
14,500.00	7,215.25	6,741.33	6,572.30	193.17	44.03	-25.30	-3,351.74	-3,558.45	3,395.04	3,295.58	99.45	34.137		
14,600.00	7,214.85	6,735.01	6,566.33	195.97	44.00	-25.21	-3,353.35	-3,559.71	3,492.79	3,393.34	99.45	35.122		
14,700.00	7,214.44	6,735.01	6,566.33	198.77	44.00	-25.21	-3,353.35	-3,559.71	3,590.63	3,491.18	99.45	36.105		
14,800.00	7,214.03	6,735.01	6,566.33	201.58	44.00	-25.21	-3,353.35	-3,559.71	3,688.58	3,589.13	99.45	37.088		
14,900.00	7,213.63	6,735.01	6,566.33	204.38	44.00	-25.21	-3,353.35	-3,559.71	3,786.65	3,687.19	99.46	38.072		
15,000.00	7,213.22	6,735.01	6,566.33	207.19	44.00	-25.21	-3,353.35	-3,559.71	3,884.81	3,785.34	99.47	39.055		
15,100.00	7,212.82	6,735.01	6,566.33	210.00	44.00	-25.21	-3,353.35	-3,559.71	3,983.06	3,883.58	99.48	40.038		
15,200.00	7,212.41	6,735.01	6,566.33	212.81	44.00	-25.21	-3,353.35	-3,559.71	4,081.40	3,981.90	99.49	41.021		
15,300.00	7,212.01	6,719.05	6,551.18	215.62	43.90	-25.00	-3,357.45	-3,562.64	4,179.58	4,080.09	99.49	42.010		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 25-MWD												Offset Well Error:	3.28 ft
HARVESTERS STATE 7-15 PAD - LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.00	7,211.60	6,716.76	6,549.00	218.43	43.89	-24.97	-3,358.03	-3,563.02	4,278.00	4,178.50	99.50	42.994	
15,500.00	7,211.19	6,700.00	6,533.02	221.25	43.79	-24.76	-3,362.36	-3,565.61	4,376.68	4,277.18	99.50	43.986	
15,600.00	7,210.79	6,700.00	6,533.02	224.06	43.79	-24.76	-3,362.36	-3,565.61	4,475.17	4,375.65	99.52	44.967	
15,700.00	7,210.38	6,700.00	6,533.02	226.88	43.79	-24.76	-3,362.36	-3,565.61	4,573.72	4,474.18	99.54	45.948	
15,794.94	7,210.00	6,700.00	6,533.02	229.55	43.79	-24.76	-3,362.36	-3,565.61	4,667.35	4,567.79	99.56	46.878	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER FARM 1-21(PA_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	64.00	3.28	3.28	-122.69	-4,070.65	-6,342.13	7,536.37					
100.00	100.00	36.00	100.00	3.28	3.34	-122.69	-4,070.65	-6,342.13	7,536.10	7,529.47	6.62	1,137.632		
200.00	200.00	136.00	200.00	3.34	4.45	-122.69	-4,070.65	-6,342.13	7,536.10	7,528.31	7.78	968.202		
300.00	299.98	235.98	299.98	3.44	7.27	54.69	-4,070.65	-6,342.13	7,535.09	7,524.38	10.71	703.320		
400.00	399.84	335.84	399.84	3.59	10.50	54.77	-4,070.65	-6,342.13	7,532.06	7,517.97	14.09	534.437		
500.00	499.45	435.45	499.45	3.79	13.85	54.90	-4,070.65	-6,342.13	7,527.03	7,509.39	17.64	426.744		
600.00	598.70	534.70	598.70	4.03	17.24	55.09	-4,070.65	-6,342.13	7,520.01	7,498.74	21.27	353.608		
700.00	697.47	633.47	697.47	4.31	20.63	55.34	-4,070.65	-6,342.13	7,511.01	7,486.06	24.94	301.114		
800.00	795.62	731.62	795.62	4.64	24.02	55.64	-4,070.65	-6,342.13	7,500.06	7,471.41	28.65	261.764		
900.00	893.06	829.06	893.06	5.00	27.39	55.99	-4,070.65	-6,342.13	7,487.20	7,454.82	32.38	231.246		
1,000.00	989.64	925.64	989.64	5.40	30.74	56.40	-4,070.65	-6,342.13	7,472.45	7,436.34	36.11	206.925		
1,100.00	1,085.27	1,021.27	1,085.27	5.83	34.07	56.87	-4,070.65	-6,342.13	7,455.87	7,416.02	39.85	187.112		
1,200.00	1,179.82	1,115.82	1,179.82	6.29	37.35	57.38	-4,070.65	-6,342.13	7,437.49	7,393.92	43.58	170.673		
1,300.00	1,273.17	1,209.17	1,273.17	6.79	40.60	57.95	-4,070.65	-6,342.13	7,417.38	7,370.09	47.30	156.825		
1,400.00	1,365.21	1,301.21	1,365.21	7.33	43.80	58.57	-4,070.65	-6,342.13	7,395.59	7,344.59	51.00	145.007		
1,500.00	1,455.84	1,408.16	1,455.84	7.89	47.53	59.25	-4,070.65	-6,342.13	7,372.18	7,316.92	55.25	133.421		
1,600.00	1,544.94	1,480.94	1,544.94	8.50	50.06	59.97	-4,070.65	-6,342.13	7,347.22	7,288.87	58.35	125.921		
1,700.00	1,632.39	1,568.39	1,632.39	9.13	53.11	60.75	-4,070.65	-6,342.13	7,320.78	7,258.80	61.98	118.112		
1,800.00	1,718.11	1,654.11	1,718.11	9.80	56.10	61.57	-4,070.65	-6,342.13	7,292.94	7,227.36	65.58	111.200		
1,900.00	1,802.44	1,738.44	1,802.44	10.49	59.03	62.06	-4,070.65	-6,342.13	7,264.16	7,195.00	69.16	105.032		
2,000.00	1,886.68	1,822.68	1,886.68	11.20	61.97	62.39	-4,070.65	-6,342.13	7,235.60	7,162.85	72.75	99.456		
2,100.00	1,970.92	1,906.92	1,970.92	11.93	64.91	62.72	-4,070.65	-6,342.13	7,207.33	7,130.97	76.36	94.391		
2,200.00	2,055.17	2,008.83	2,055.17	12.66	68.46	63.06	-4,070.65	-6,342.13	7,179.35	7,098.76	80.59	89.087		
2,300.00	2,139.41	2,075.41	2,139.41	13.40	70.78	63.40	-4,070.65	-6,342.13	7,151.66	7,068.06	83.60	85.547		
2,400.00	2,223.66	2,159.66	2,223.66	14.14	73.72	63.73	-4,070.65	-6,342.13	7,124.28	7,037.05	87.24	81.667		
2,500.00	2,307.90	2,243.90	2,307.90	14.89	76.66	64.08	-4,070.65	-6,342.13	7,097.20	7,006.32	90.88	78.094		
2,600.00	2,392.14	2,328.14	2,392.14	15.65	79.60	64.42	-4,070.65	-6,342.13	7,070.43	6,975.89	94.53	74.794		
2,700.00	2,476.39	2,412.39	2,476.39	16.41	82.54	64.76	-4,070.65	-6,342.13	7,043.96	6,945.77	98.19	71.737		
2,800.00	2,560.63	2,503.37	2,560.63	17.17	85.71	65.11	-4,070.65	-6,342.13	7,017.82	6,915.72	102.09	68.740		
2,900.00	2,644.88	2,580.88	2,644.88	17.93	88.41	65.46	-4,070.65	-6,342.13	6,991.98	6,886.46	105.53	66.257		
3,000.00	2,729.12	2,665.12	2,729.12	18.70	91.35	65.81	-4,070.65	-6,342.13	6,966.47	6,857.27	109.21	63.792		
3,100.00	2,813.36	2,749.36	2,813.36	19.47	94.29	66.16	-4,070.65	-6,342.13	6,941.29	6,828.40	112.89	61.488		
3,200.00	2,897.61	2,833.61	2,897.61	20.25	97.23	66.52	-4,070.65	-6,342.13	6,916.43	6,799.85	116.57	59.330		
3,300.00	2,981.85	2,917.85	2,981.85	21.02	100.17	66.88	-4,070.65	-6,342.13	6,891.90	6,771.64	120.27	57.305		
3,400.00	3,066.10	3,002.10	3,066.10	21.80	103.11	67.24	-4,070.65	-6,342.13	6,867.71	6,743.75	123.96	55.402		
3,500.00	3,150.34	3,086.34	3,150.34	22.58	106.05	67.60	-4,070.65	-6,342.13	6,843.86	6,716.20	127.66	53.609		
3,600.00	3,234.58	3,170.58	3,234.58	23.35	108.99	67.96	-4,070.65	-6,342.13	6,820.35	6,688.98	131.37	51.919		
3,700.00	3,318.83	3,254.83	3,318.83	24.13	111.93	68.32	-4,070.65	-6,342.13	6,797.18	6,662.11	135.07	50.322		
3,800.00	3,403.07	3,339.07	3,403.07	24.92	114.87	68.69	-4,070.65	-6,342.13	6,774.37	6,635.58	138.78	48.812		
3,900.00	3,487.32	3,423.32	3,487.32	25.70	117.81	69.06	-4,070.65	-6,342.13	6,751.90	6,609.40	142.50	47.382		
4,000.00	3,571.56	3,507.56	3,571.56	26.48	120.75	69.43	-4,070.65	-6,342.13	6,729.80	6,583.58	146.22	46.026		
4,100.00	3,655.80	3,608.20	3,655.80	27.27	124.26	69.80	-4,070.65	-6,342.13	6,708.05	6,557.54	150.51	44.569		
4,200.00	3,740.05	3,676.05	3,740.05	28.05	126.63	70.17	-4,070.65	-6,342.13	6,686.67	6,533.01	153.66	43.515		
4,300.00	3,824.29	3,760.29	3,824.29	28.84	129.57	70.55	-4,070.65	-6,342.13	6,665.65	6,508.26	157.39	42.351		
4,400.00	3,908.54	3,844.54	3,908.54	29.62	132.51	70.92	-4,070.65	-6,342.13	6,645.01	6,483.89	161.12	41.243		
4,500.00	3,992.78	3,928.78	3,992.78	30.41	135.45	71.30	-4,070.65	-6,342.13	6,624.74	6,459.88	164.85	40.186		
4,600.00	4,077.03	4,013.03	4,077.03	31.20	138.39	71.68	-4,070.65	-6,342.13	6,604.84	6,436.25	168.59	39.178		
4,700.00	4,161.27	4,102.73	4,161.27	31.98	141.52	72.07	-4,070.65	-6,342.13	6,585.33	6,412.81	172.51	38.173		
4,800.00	4,245.51	4,181.51	4,245.51	32.77	144.27	72.45	-4,070.65	-6,342.13	6,566.20	6,390.13	176.06	37.294		
4,900.00	4,329.76	4,265.76	4,329.76	33.56	147.21	72.84	-4,070.65	-6,342.13	6,547.46	6,367.65	179.81	36.414		
5,000.00	4,414.00	4,350.00	4,414.00	34.35	150.15	73.22	-4,070.65	-6,342.13	6,529.10	6,345.55	183.55	35.571		
5,100.00	4,498.25	4,434.25	4,498.25	35.14	153.09	73.61	-4,070.65	-6,342.13	6,511.15	6,323.85	187.30	34.764		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER FARM 1-21(PA_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,200.00	4,582.49	4,518.49	4,582.49	35.93	156.03	74.00	-4,070.65	-6,342.13	6,493.59	6,302.54	191.04	33.990		
5,300.00	4,666.73	4,602.73	4,666.73	36.72	158.97	74.39	-4,070.65	-6,342.13	6,476.43	6,281.63	194.79	33.247		
5,400.00	4,750.98	4,686.98	4,750.98	37.51	161.91	74.79	-4,070.65	-6,342.13	6,459.67	6,261.13	198.55	32.535		
5,500.00	4,835.22	4,771.22	4,835.22	38.30	164.85	75.18	-4,070.65	-6,342.13	6,443.32	6,241.02	202.30	31.850		
5,600.00	4,919.47	4,855.47	4,919.47	39.09	167.79	75.58	-4,070.65	-6,342.13	6,427.39	6,221.33	206.06	31.193		
5,700.00	5,003.71	4,939.71	5,003.71	39.88	170.73	75.97	-4,070.65	-6,342.13	6,411.86	6,202.05	209.81	30.560		
5,800.00	5,088.06	5,024.06	5,088.06	40.67	173.68	76.27	-4,070.65	-6,342.13	6,396.80	6,183.23	213.57	29.952		
5,900.00	5,173.83	5,109.83	5,173.83	41.44	176.67	76.39	-4,070.65	-6,342.13	6,382.77	6,165.41	217.36	29.365		
6,000.00	5,261.34	5,202.66	5,261.34	42.18	179.91	76.51	-4,070.65	-6,342.13	6,369.92	6,148.56	221.36	28.776		
6,100.00	5,350.49	5,286.49	5,350.49	42.88	182.84	76.64	-4,070.65	-6,342.13	6,358.20	6,133.18	225.02	28.256		
6,200.00	5,441.16	5,377.16	5,441.16	43.56	186.00	76.76	-4,070.65	-6,342.13	6,347.57	6,118.68	228.88	27.733		
6,300.00	5,533.25	5,469.25	5,533.25	44.20	189.21	76.89	-4,070.65	-6,342.13	6,337.97	6,105.20	232.76	27.229		
6,400.00	5,626.65	5,562.65	5,626.65	44.82	192.47	77.02	-4,070.65	-6,342.13	6,329.36	6,092.71	236.66	26.745		
6,500.00	5,721.23	5,657.23	5,721.23	45.40	195.78	77.14	-4,070.65	-6,342.13	6,321.72	6,081.16	240.56	26.279		
6,600.00	5,816.89	5,752.89	5,816.89	45.94	199.12	77.26	-4,070.65	-6,342.13	6,314.98	6,070.52	244.46	25.832		
6,700.00	5,913.51	5,849.51	5,913.51	46.45	202.49	77.36	-4,070.65	-6,342.13	6,309.14	6,060.77	248.36	25.403		
6,800.00	6,010.97	5,946.97	6,010.97	46.93	205.89	77.46	-4,070.65	-6,342.13	6,304.14	6,051.88	252.26	24.991		
6,900.00	6,109.15	6,045.15	6,109.15	47.38	209.32	77.54	-4,070.65	-6,342.13	6,299.96	6,043.81	256.15	24.595		
7,000.00	6,207.93	6,143.93	6,207.93	47.80	212.76	77.61	-4,070.65	-6,342.13	6,296.58	6,036.56	260.02	24.216		
7,100.00	6,307.19	6,243.19	6,307.19	48.18	216.23	77.67	-4,070.65	-6,342.13	6,293.98	6,030.10	263.87	23.852		
7,200.00	6,406.82	6,342.82	6,406.82	48.53	219.71	77.71	-4,070.65	-6,342.13	6,292.14	6,024.43	267.70	23.504		
7,300.00	6,506.68	6,442.68	6,506.68	48.84	223.19	77.73	-4,070.65	-6,342.13	6,291.04	6,019.53	271.51	23.171		
7,400.00	6,606.66	6,542.66	6,606.66	49.10	226.68	-9.26	-4,070.65	-6,342.13	6,290.69	6,015.43	275.26	22.854		
7,500.00	6,706.21	6,642.21	6,706.21	49.35	230.16	-9.39	-4,070.65	-6,342.13	6,282.45	6,003.47	278.98	22.519		
7,600.00	6,803.22	6,739.22	6,803.22	49.59	233.54	-9.79	-4,070.65	-6,342.13	6,258.94	5,976.33	282.61	22.147		
7,700.00	6,895.32	6,831.32	6,895.32	49.82	236.76	-10.51	-4,070.65	-6,342.13	6,220.75	5,934.69	286.06	21.746		
7,800.00	6,980.23	6,916.23	6,980.23	50.03	239.72	-11.66	-4,070.65	-6,342.13	6,168.83	5,879.58	289.24	21.328		
7,900.00	7,055.85	7,008.15	7,055.85	50.21	242.93	-13.44	-4,070.65	-6,342.13	6,104.45	5,811.82	292.64	20.860		
8,000.00	7,120.34	7,056.34	7,120.34	50.36	244.61	-16.27	-4,070.65	-6,342.13	6,029.23	5,734.76	294.47	20.475		
8,100.00	7,172.10	7,108.10	7,172.10	50.47	246.42	-21.03	-4,070.65	-6,342.13	5,945.01	5,648.63	296.38	20.058		
8,200.00	7,209.85	7,145.85	7,209.85	50.55	247.74	-29.99	-4,070.65	-6,342.13	5,853.90	5,556.13	297.77	19.659		
8,300.00	7,232.68	7,168.68	7,232.68	50.61	248.54	-49.71	-4,070.65	-6,342.13	5,758.13	5,459.54	298.59	19.285		
8,400.00	7,240.00	7,176.00	7,240.00	50.65	248.79	-91.28	-4,070.65	-6,342.13	5,660.08	5,361.25	298.83	18.941		
8,500.00	7,239.60	7,175.60	7,239.60	50.69	248.78	-91.26	-4,070.65	-6,342.13	5,561.72	5,262.94	298.79	18.614		
8,600.00	7,239.19	7,175.19	7,239.19	50.75	248.76	-91.23	-4,070.65	-6,342.13	5,463.42	5,164.67	298.75	18.288		
8,700.00	7,238.78	7,174.78	7,238.78	50.85	248.75	-91.21	-4,070.65	-6,342.13	5,365.19	5,066.47	298.72	17.961		
8,800.00	7,238.38	7,174.38	7,238.38	51.02	248.73	-91.19	-4,070.65	-6,342.13	5,267.02	4,968.32	298.70	17.633		
8,900.00	7,237.97	7,173.97	7,237.97	51.32	248.72	-91.16	-4,070.65	-6,342.13	5,168.92	4,870.23	298.68	17.306		
9,000.00	7,237.57	7,173.57	7,237.57	51.95	248.71	-91.14	-4,070.65	-6,342.13	5,070.89	4,772.21	298.68	16.978		
9,100.00	7,237.16	7,173.16	7,237.16	53.10	248.69	-91.12	-4,070.65	-6,342.13	4,972.94	4,674.26	298.69	16.649		
9,200.00	7,236.76	7,172.76	7,236.76	54.69	248.68	-91.10	-4,070.65	-6,342.13	4,875.08	4,576.38	298.70	16.321		
9,300.00	7,236.35	7,172.35	7,236.35	56.53	248.66	-91.07	-4,070.65	-6,342.13	4,777.31	4,478.57	298.73	15.992		
9,400.00	7,235.94	7,171.94	7,235.94	58.53	248.65	-91.05	-4,070.65	-6,342.13	4,679.62	4,380.85	298.78	15.663		
9,500.00	7,235.54	7,171.54	7,235.54	60.62	248.64	-91.03	-4,070.65	-6,342.13	4,582.04	4,283.20	298.84	15.333		
9,600.00	7,235.13	7,171.13	7,235.13	62.80	248.62	-91.00	-4,070.65	-6,342.13	4,484.57	4,185.65	298.92	15.003		
9,700.00	7,234.73	7,170.73	7,234.73	65.03	248.61	-90.98	-4,070.65	-6,342.13	4,387.21	4,088.19	299.01	14.672		
9,800.00	7,234.32	7,170.32	7,234.32	67.32	248.59	-90.96	-4,070.65	-6,342.13	4,289.97	3,990.83	299.13	14.341		
9,900.00	7,233.92	7,169.92	7,233.92	69.66	248.58	-90.93	-4,070.65	-6,342.13	4,192.86	3,893.58	299.28	14.010		
10,000.00	7,233.51	7,169.51	7,233.51	72.03	248.56	-90.91	-4,070.65	-6,342.13	4,095.89	3,796.44	299.45	13.678		
10,100.00	7,233.10	7,169.10	7,233.10	74.45	248.55	-90.89	-4,070.65	-6,342.13	3,999.07	3,699.42	299.65	13.346		
10,200.00	7,232.70	7,168.70	7,232.70	76.89	248.54	-90.87	-4,070.65	-6,342.13	3,902.40	3,602.52	299.88	13.013		
10,300.00	7,232.29	7,168.29	7,232.29	79.36	248.52	-90.84	-4,070.65	-6,342.13	3,805.91	3,505.76	300.15	12.680		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER FARM 1-21(PA_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,400.00	7,231.89	7,167.89	7,231.89	81.86	248.51	-90.82	-4,070.65	-6,342.13	3,709.61	3,409.14	300.47	12.346	
10,500.00	7,231.48	7,167.48	7,231.48	84.38	248.49	-90.80	-4,070.65	-6,342.13	3,613.51	3,312.68	300.83	12.012	
10,600.00	7,231.08	7,167.08	7,231.08	86.93	248.48	-90.77	-4,070.65	-6,342.13	3,517.62	3,216.38	301.24	11.677	
10,700.00	7,230.67	7,166.67	7,230.67	89.49	248.47	-90.75	-4,070.65	-6,342.13	3,421.98	3,120.26	301.71	11.342	
10,800.00	7,230.26	7,166.26	7,230.26	92.07	248.45	-90.73	-4,070.65	-6,342.13	3,326.58	3,024.33	302.25	11.006	
10,900.00	7,229.86	7,165.86	7,229.86	94.67	248.44	-90.70	-4,070.65	-6,342.13	3,231.47	2,928.61	302.86	10.670	
11,000.00	7,229.45	7,165.45	7,229.45	97.28	248.42	-90.68	-4,070.65	-6,342.13	3,136.66	2,833.11	303.55	10.333	
11,100.00	7,229.05	7,165.05	7,229.05	99.90	248.41	-90.66	-4,070.65	-6,342.13	3,042.18	2,737.85	304.33	9.996	
11,200.00	7,228.64	7,164.64	7,228.64	102.54	248.39	-90.64	-4,070.65	-6,342.13	2,948.06	2,642.85	305.21	9.659	
11,300.00	7,228.24	7,164.24	7,228.24	105.19	248.38	-90.61	-4,070.65	-6,342.13	2,854.35	2,548.14	306.21	9.322	
11,400.00	7,227.83	7,163.83	7,227.83	107.85	248.37	-90.59	-4,070.65	-6,342.13	2,761.07	2,453.75	307.33	8.984	
11,500.00	7,227.42	7,163.42	7,227.42	110.52	248.35	-90.57	-4,070.65	-6,342.13	2,668.29	2,359.70	308.59	8.647	
11,600.00	7,227.02	7,163.02	7,227.02	113.20	248.34	-90.54	-4,070.65	-6,342.13	2,576.04	2,266.03	310.01	8.310	
11,700.00	7,226.61	7,162.61	7,226.61	115.89	248.32	-90.52	-4,070.65	-6,342.13	2,484.39	2,172.79	311.60	7.973	
11,800.00	7,226.21	7,162.21	7,226.21	118.59	248.31	-90.50	-4,070.65	-6,342.13	2,393.41	2,080.03	313.39	7.637	
11,900.00	7,225.80	7,161.80	7,225.80	121.29	248.30	-90.48	-4,070.65	-6,342.13	2,303.19	1,987.79	315.39	7.303	
12,000.00	7,225.40	7,161.40	7,225.40	124.00	248.28	-90.45	-4,070.65	-6,342.13	2,213.80	1,896.15	317.64	6.969	
12,100.00	7,224.99	7,160.99	7,224.99	126.72	248.27	-90.43	-4,070.65	-6,342.13	2,125.35	1,805.20	320.15	6.639	
12,200.00	7,224.58	7,160.58	7,224.58	129.44	248.25	-90.41	-4,070.65	-6,342.13	2,037.97	1,715.01	322.96	6.310	
12,300.00	7,224.18	7,160.18	7,224.18	132.17	248.24	-90.38	-4,070.65	-6,342.13	1,951.81	1,625.71	326.10	5.985	
12,400.00	7,223.77	7,159.77	7,223.77	134.91	248.22	-90.36	-4,070.65	-6,342.13	1,867.03	1,537.43	329.60	5.665	
12,500.00	7,223.37	7,159.37	7,223.37	137.65	248.21	-90.34	-4,070.65	-6,342.13	1,783.82	1,450.34	333.49	5.349	
12,600.00	7,222.96	7,158.96	7,222.96	140.39	248.20	-90.31	-4,070.65	-6,342.13	1,702.42	1,364.62	337.80	5.040	
12,700.00	7,222.55	7,158.55	7,222.55	143.14	248.18	-90.29	-4,070.65	-6,342.13	1,623.10	1,280.52	342.58	4.738	
12,800.00	7,222.15	7,158.15	7,222.15	145.89	248.17	-90.27	-4,070.65	-6,342.13	1,546.19	1,198.34	347.85	4.445	
12,900.00	7,221.74	7,157.74	7,221.74	148.65	248.15	-90.25	-4,070.65	-6,342.13	1,472.04	1,118.41	353.63	4.163	
13,000.00	7,221.34	7,157.34	7,221.34	151.41	248.14	-90.22	-4,070.65	-6,342.13	1,401.12	1,041.19	359.93	3.893	
13,100.00	7,220.93	7,156.93	7,220.93	154.18	248.13	-90.20	-4,070.65	-6,342.13	1,333.93	967.18	366.75	3.637	
13,200.00	7,220.53	7,156.53	7,220.53	156.94	248.11	-90.18	-4,070.65	-6,342.13	1,271.06	897.04	374.02	3.398	
13,300.00	7,220.12	7,156.12	7,220.12	159.72	248.10	-90.15	-4,070.65	-6,342.13	1,213.18	831.50	381.68	3.179	
13,400.00	7,219.71	7,155.71	7,219.71	162.49	248.08	-90.13	-4,070.65	-6,342.13	1,161.05	771.47	389.58	2.980	
13,500.00	7,219.31	7,155.31	7,219.31	165.27	248.07	-90.11	-4,070.65	-6,342.13	1,115.46	717.95	397.51	2.806	
13,600.00	7,218.90	7,154.90	7,218.90	168.05	248.05	-90.08	-4,070.65	-6,342.13	1,077.25	672.04	405.22	2.658	
13,700.00	7,218.50	7,154.50	7,218.50	170.83	248.04	-90.06	-4,070.65	-6,342.13	1,047.23	634.86	412.37	2.540	
13,800.00	7,218.09	7,154.09	7,218.09	173.61	248.03	-90.04	-4,070.65	-6,342.13	1,026.12	607.50	418.62	2.451	
13,900.00	7,217.69	7,153.69	7,217.69	176.40	248.01	-90.02	-4,070.65	-6,342.13	1,014.46	590.82	423.64	2.395	
13,968.90	7,217.41	7,153.41	7,217.41	178.32	248.00	-90.00	-4,070.65	-6,342.13	1,012.12	585.87	426.25	2.374	CC
14,000.00	7,217.28	7,153.28	7,217.28	179.19	248.00	-89.99	-4,070.65	-6,342.13	1,012.60	585.41	427.19	2.370	ES, SF
14,100.00	7,216.87	7,152.87	7,216.87	181.98	247.98	-89.97	-4,070.65	-6,342.13	1,020.58	591.45	429.13	2.378	
14,200.00	7,216.47	7,152.47	7,216.47	184.78	247.97	-89.95	-4,070.65	-6,342.13	1,038.17	608.68	429.49	2.417	
14,300.00	7,216.06	7,152.06	7,216.06	187.57	247.96	-89.92	-4,070.65	-6,342.13	1,064.90	636.51	428.39	2.486	
14,400.00	7,215.66	7,151.66	7,215.66	190.37	247.94	-89.90	-4,070.65	-6,342.13	1,100.11	674.02	426.09	2.582	
14,500.00	7,215.25	7,151.25	7,215.25	193.17	247.93	-89.88	-4,070.65	-6,342.13	1,143.00	720.15	422.85	2.703	
14,600.00	7,214.85	7,150.85	7,214.85	195.97	247.91	-89.86	-4,070.65	-6,342.13	1,192.76	773.81	418.95	2.847	
14,700.00	7,214.44	7,150.44	7,214.44	198.77	247.90	-89.83	-4,070.65	-6,342.13	1,248.56	833.92	414.63	3.011	
14,800.00	7,214.03	7,150.03	7,214.03	201.58	247.88	-89.81	-4,070.65	-6,342.13	1,309.62	899.51	410.11	3.193	
14,900.00	7,213.63	7,149.63	7,213.63	204.38	247.87	-89.79	-4,070.65	-6,342.13	1,375.25	969.71	405.54	3.391	
15,000.00	7,213.22	7,149.22	7,213.22	207.19	247.86	-89.76	-4,070.65	-6,342.13	1,444.83	1,043.80	401.03	3.603	
15,100.00	7,212.82	7,148.82	7,212.82	210.00	247.84	-89.74	-4,070.65	-6,342.13	1,517.81	1,121.16	396.65	3.827	
15,200.00	7,212.41	7,148.41	7,212.41	212.81	247.83	-89.72	-4,070.65	-6,342.13	1,593.73	1,201.27	392.46	4.061	
15,300.00	7,212.01	7,148.01	7,212.01	215.62	247.81	-89.69	-4,070.65	-6,342.13	1,672.18	1,283.69	388.49	4.304	
15,400.00	7,211.60	7,147.60	7,211.60	218.43	247.80	-89.67	-4,070.65	-6,342.13	1,752.83	1,368.09	384.74	4.556	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,500.00	7,211.19	7,147.19	7,211.19	221.25	247.79	-89.65	-4,070.65	-6,342.13	1,835.38	1,454.16	381.22	4.814	
15,600.00	7,210.79	7,146.79	7,210.79	224.06	247.77	-89.63	-4,070.65	-6,342.13	1,919.59	1,541.67	377.93	5.079	
15,700.00	7,210.38	7,146.38	7,210.38	226.88	247.76	-89.60	-4,070.65	-6,342.13	2,005.26	1,630.41	374.85	5.350	
15,794.94	7,210.00	7,146.00	7,210.00	229.55	247.74	-89.58	-4,070.65	-6,342.13	2,087.77	1,715.65	372.12	5.611	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 1(AB_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	17.00	3.28	3.28	-66.76	2,728.38	-6,354.56	6,915.55				
100.00	100.00	83.00	100.00	3.28	3.59	-66.76	2,728.38	-6,354.56	6,915.53	6,908.66	6.87	1,006.565	
200.00	200.00	183.00	200.00	3.34	5.68	-66.76	2,728.38	-6,354.56	6,915.53	6,906.51	9.02	766.539	
300.00	299.98	282.98	299.98	3.44	8.77	110.59	2,728.38	-6,354.56	6,916.14	6,903.93	12.21	566.470	
400.00	399.84	382.84	399.84	3.59	12.07	110.60	2,728.38	-6,354.56	6,917.98	6,902.32	15.66	441.698	
500.00	499.45	482.45	499.45	3.79	15.45	110.61	2,728.38	-6,354.56	6,921.06	6,901.83	19.24	359.797	
600.00	598.70	581.70	598.70	4.03	18.85	110.62	2,728.38	-6,354.56	6,925.38	6,902.50	22.88	302.695	
700.00	697.47	680.47	697.47	4.31	22.25	110.63	2,728.38	-6,354.56	6,930.95	6,904.39	26.57	260.891	
800.00	795.62	778.62	795.62	4.64	25.65	110.65	2,728.38	-6,354.56	6,937.79	6,907.51	30.28	229.099	
900.00	893.06	876.06	893.06	5.00	29.02	110.67	2,728.38	-6,354.56	6,945.91	6,911.89	34.02	204.186	
1,000.00	989.64	972.64	989.64	5.40	32.38	110.69	2,728.38	-6,354.56	6,955.33	6,917.57	37.76	184.188	
1,100.00	1,085.27	1,068.27	1,085.27	5.83	35.70	110.70	2,728.38	-6,354.56	6,966.07	6,924.56	41.51	167.819	
1,200.00	1,179.82	1,162.82	1,179.82	6.29	38.99	110.71	2,728.38	-6,354.56	6,978.16	6,932.90	45.25	154.201	
1,300.00	1,273.17	1,256.17	1,273.17	6.79	42.23	110.72	2,728.38	-6,354.56	6,991.61	6,942.62	48.99	142.717	
1,400.00	1,365.21	1,348.21	1,365.21	7.33	45.44	110.71	2,728.38	-6,354.56	7,006.46	6,953.75	52.71	132.922	
1,500.00	1,455.84	1,438.84	1,455.84	7.89	48.60	110.70	2,728.38	-6,354.56	7,022.73	6,966.32	56.41	124.484	
1,600.00	1,544.94	1,527.94	1,544.94	8.50	51.70	110.68	2,728.38	-6,354.56	7,040.45	6,980.35	60.10	117.155	
1,700.00	1,632.39	1,615.39	1,632.39	9.13	54.75	110.64	2,728.38	-6,354.56	7,059.64	6,995.90	63.75	110.743	
1,800.00	1,718.11	1,701.11	1,718.11	9.80	57.73	110.59	2,728.38	-6,354.56	7,080.34	7,012.98	67.37	105.099	
1,900.00	1,802.44	1,785.44	1,802.44	10.49	60.67	110.81	2,728.38	-6,354.56	7,102.28	7,031.32	70.96	100.087	
2,000.00	1,886.68	1,869.68	1,886.68	11.20	63.61	111.16	2,728.38	-6,354.56	7,124.61	7,050.04	74.56	95.550	
2,100.00	1,970.92	1,953.92	1,970.92	11.93	66.55	111.51	2,728.38	-6,354.56	7,147.27	7,069.09	78.18	91.425	
2,200.00	2,055.17	2,038.17	2,055.17	12.66	69.48	111.86	2,728.38	-6,354.56	7,170.27	7,088.47	81.79	87.662	
2,300.00	2,139.41	2,122.41	2,139.41	13.40	72.42	112.20	2,728.38	-6,354.56	7,193.60	7,108.18	85.42	84.216	
2,400.00	2,223.66	2,206.66	2,223.66	14.14	75.36	112.55	2,728.38	-6,354.56	7,217.25	7,128.20	89.05	81.050	
2,500.00	2,307.90	2,309.10	2,307.90	14.89	78.93	112.89	2,728.38	-6,354.56	7,241.23	7,147.91	93.31	77.601	
2,600.00	2,392.14	2,375.14	2,392.14	15.65	81.24	113.23	2,728.38	-6,354.56	7,265.53	7,169.21	96.31	75.437	
2,700.00	2,476.39	2,459.39	2,476.39	16.41	84.18	113.57	2,728.38	-6,354.56	7,290.14	7,190.19	99.95	72.940	
2,800.00	2,560.63	2,543.63	2,560.63	17.17	87.11	113.90	2,728.38	-6,354.56	7,315.07	7,211.49	103.58	70.620	
2,900.00	2,644.88	2,627.88	2,644.88	17.93	90.05	114.24	2,728.38	-6,354.56	7,340.31	7,233.09	107.22	68.460	
3,000.00	2,729.12	2,712.12	2,729.12	18.70	92.99	114.57	2,728.38	-6,354.56	7,365.86	7,255.00	110.86	66.444	
3,100.00	2,813.36	2,803.64	2,813.36	19.47	96.19	114.90	2,728.38	-6,354.56	7,391.71	7,276.96	114.75	64.416	
3,200.00	2,897.61	2,880.61	2,897.61	20.25	98.87	115.23	2,728.38	-6,354.56	7,417.87	7,299.73	118.13	62.792	
3,300.00	2,981.85	2,964.85	2,981.85	21.02	101.81	115.56	2,728.38	-6,354.56	7,444.32	7,322.55	121.77	61.134	
3,400.00	3,066.10	3,049.10	3,066.10	21.80	104.75	115.89	2,728.38	-6,354.56	7,471.07	7,345.66	125.41	59.575	
3,500.00	3,150.34	3,133.34	3,150.34	22.58	107.69	116.21	2,728.38	-6,354.56	7,498.10	7,369.06	129.04	58.107	
3,600.00	3,234.58	3,217.58	3,234.58	23.35	110.63	116.53	2,728.38	-6,354.56	7,525.43	7,392.76	132.67	56.721	
3,700.00	3,318.83	3,301.83	3,318.83	24.13	113.57	116.85	2,728.38	-6,354.56	7,553.04	7,416.74	136.31	55.412	
3,800.00	3,403.07	3,386.07	3,403.07	24.92	116.51	117.17	2,728.38	-6,354.56	7,580.94	7,441.00	139.94	54.173	
3,900.00	3,487.32	3,470.32	3,487.32	25.70	119.45	117.49	2,728.38	-6,354.56	7,609.11	7,465.54	143.57	53.000	
4,000.00	3,571.56	3,554.56	3,571.56	26.48	122.39	117.80	2,728.38	-6,354.56	7,637.56	7,490.37	147.20	51.887	
4,100.00	3,655.80	3,638.80	3,655.80	27.27	125.33	118.12	2,728.38	-6,354.56	7,666.29	7,515.46	150.82	50.829	
4,200.00	3,740.05	3,723.05	3,740.05	28.05	128.27	118.43	2,728.38	-6,354.56	7,695.28	7,540.83	154.45	49.824	
4,300.00	3,824.29	3,807.29	3,824.29	28.84	131.21	118.74	2,728.38	-6,354.56	7,724.54	7,566.47	158.07	48.867	
4,400.00	3,908.54	3,908.46	3,908.54	29.62	134.74	119.05	2,728.38	-6,354.56	7,754.07	7,591.78	162.28	47.781	
4,500.00	3,992.78	3,975.78	3,992.78	30.41	137.09	119.35	2,728.38	-6,354.56	7,783.85	7,618.54	165.31	47.085	
4,600.00	4,077.03	4,060.03	4,077.03	31.20	140.03	119.66	2,728.38	-6,354.56	7,813.89	7,644.96	168.93	46.255	
4,700.00	4,161.27	4,144.27	4,161.27	31.98	142.97	119.96	2,728.38	-6,354.56	7,844.19	7,671.64	172.55	45.461	
4,800.00	4,245.51	4,228.51	4,245.51	32.77	145.91	120.26	2,728.38	-6,354.56	7,874.74	7,698.58	176.16	44.701	
4,900.00	4,329.76	4,312.76	4,329.76	33.56	148.85	120.56	2,728.38	-6,354.56	7,905.54	7,725.77	179.78	43.974	
5,000.00	4,414.00	4,403.00	4,414.00	34.35	152.00	120.86	2,728.38	-6,354.56	7,936.59	7,752.99	183.60	43.229	
5,100.00	4,498.25	4,481.25	4,498.25	35.14	154.73	121.15	2,728.38	-6,354.56	7,967.88	7,780.88	187.00	42.610	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,565.49	4,582.49	35.93	157.67	121.44	2,728.38	-6,354.56	7,999.41	7,808.80	190.60	41.969		
5,300.00	4,666.73	4,649.73	4,666.73	36.72	160.61	121.74	2,728.38	-6,354.56	8,031.17	7,836.97	194.21	41.354		
5,400.00	4,750.98	4,733.98	4,750.98	37.51	163.55	122.03	2,728.38	-6,354.56	8,063.18	7,865.37	197.81	40.762		
5,500.00	4,835.22	4,818.22	4,835.22	38.30	166.49	122.31	2,728.38	-6,354.56	8,095.41	7,894.00	201.41	40.193		
5,600.00	4,919.47	4,902.47	4,919.47	39.09	169.43	122.60	2,728.38	-6,354.56	8,127.88	7,922.86	205.01	39.646		
5,700.00	5,003.71	4,986.71	5,003.71	39.88	172.37	122.88	2,728.38	-6,354.56	8,160.57	7,951.96	208.61	39.119		
5,800.00	5,088.06	5,071.06	5,088.06	40.67	175.32	123.36	2,728.38	-6,354.56	8,193.38	7,981.17	212.21	38.610		
5,900.00	5,173.83	5,156.83	5,173.83	41.44	178.31	124.18	2,728.38	-6,354.56	8,224.99	8,009.15	215.84	38.107		
6,000.00	5,261.34	5,244.34	5,261.34	42.18	181.36	124.95	2,728.38	-6,354.56	8,254.92	8,035.41	219.51	37.606		
6,100.00	5,350.49	5,333.49	5,350.49	42.88	184.48	125.67	2,728.38	-6,354.56	8,283.10	8,059.88	223.22	37.108		
6,200.00	5,441.16	5,424.16	5,441.16	43.56	187.64	126.33	2,728.38	-6,354.56	8,309.46	8,082.50	226.96	36.613		
6,300.00	5,533.25	5,516.25	5,533.25	44.20	190.86	126.94	2,728.38	-6,354.56	8,333.94	8,103.22	230.72	36.121		
6,400.00	5,626.65	5,609.65	5,626.65	44.82	194.12	127.50	2,728.38	-6,354.56	8,356.49	8,121.98	234.51	35.633		
6,500.00	5,721.23	5,704.23	5,721.23	45.40	197.42	128.00	2,728.38	-6,354.56	8,377.04	8,138.72	238.32	35.150		
6,600.00	5,816.89	5,800.11	5,816.89	45.94	200.76	128.45	2,728.38	-6,354.56	8,395.56	8,153.41	242.15	34.671		
6,700.00	5,913.51	5,903.49	5,913.51	46.45	204.37	128.84	2,728.38	-6,354.56	8,411.99	8,165.77	246.22	34.164		
6,800.00	6,010.97	6,006.03	6,010.97	46.93	207.95	129.19	2,728.38	-6,354.56	8,426.30	8,176.06	250.24	33.673		
6,900.00	6,109.15	6,107.85	6,109.15	47.38	211.51	129.47	2,728.38	-6,354.56	8,438.45	8,184.25	254.20	33.196		
7,000.00	6,207.93	6,209.07	6,207.93	47.80	215.04	129.71	2,728.38	-6,354.56	8,448.42	8,190.30	258.13	32.730		
7,100.00	6,307.19	6,309.81	6,307.19	48.18	218.55	129.89	2,728.38	-6,354.56	8,456.19	8,194.18	262.01	32.275		
7,200.00	6,406.82	6,389.82	6,406.82	48.53	221.35	130.02	2,728.38	-6,354.56	8,461.72	8,196.58	265.14	31.914		
7,300.00	6,506.68	6,489.68	6,506.68	48.84	224.83	130.10	2,728.38	-6,354.56	8,465.02	8,196.08	268.94	31.475		
7,400.00	6,606.66	6,589.66	6,606.66	49.10	228.32	130.12	2,728.38	-6,354.56	8,466.07	8,193.37	272.70	31.045		
7,500.00	6,706.21	6,689.21	6,706.21	49.35	231.80	130.14	2,728.38	-6,354.56	8,465.97	8,183.54	276.43	30.605		
7,600.00	6,803.22	6,786.22	6,803.22	49.59	235.18	130.16	2,728.38	-6,354.56	8,462.61	8,162.57	280.04	30.148		
7,700.00	6,895.32	6,878.32	6,895.32	49.82	238.40	130.18	2,728.38	-6,354.56	8,454.47	8,131.03	283.44	29.687		
7,800.00	6,980.23	6,963.23	6,980.23	50.03	241.36	130.19	2,728.38	-6,354.56	8,436.34	8,089.78	286.56	29.231		
7,900.00	7,055.85	7,038.85	7,055.85	50.21	244.00	130.20	2,728.38	-6,354.56	8,429.28	8,039.94	289.34	28.787		
8,000.00	7,120.34	7,103.34	7,120.34	50.36	246.25	130.21	2,728.38	-6,354.56	8,424.57	7,982.83	291.74	28.363		
8,100.00	7,172.10	7,155.10	7,172.10	50.47	248.06	130.22	2,728.38	-6,354.56	8,413.72	7,919.98	293.74	27.963		
8,200.00	7,209.85	7,207.15	7,209.85	50.55	249.88	130.23	2,728.38	-6,354.56	8,408.34	7,852.52	295.82	27.545		
8,300.00	7,232.68	7,215.68	7,232.68	50.61	250.18	130.24	2,728.38	-6,354.56	8,400.17	7,783.68	296.49	27.253		
8,400.00	7,240.00	7,223.00	7,240.00	50.65	250.43	130.25	2,728.38	-6,354.56	8,400.95	7,713.73	297.22	26.953		
8,500.00	7,239.60	7,222.60	7,239.60	50.69	250.42	130.26	2,728.38	-6,354.56	7,942.13	7,644.33	297.80	26.669		
8,600.00	7,239.19	7,222.19	7,239.19	50.75	250.40	130.27	2,728.38	-6,354.56	7,873.98	7,575.49	298.48	26.380		
8,700.00	7,238.78	7,221.78	7,238.78	50.85	250.39	130.28	2,728.38	-6,354.56	7,806.51	7,507.25	299.27	26.086		
8,800.00	7,238.38	7,221.38	7,238.38	51.02	250.37	130.29	2,728.38	-6,354.56	7,739.75	7,439.60	300.15	25.786		
8,900.00	7,237.97	7,220.97	7,237.97	51.32	250.36	130.30	2,728.38	-6,354.56	7,673.71	7,372.57	301.13	25.483		
9,000.00	7,237.57	7,220.57	7,237.57	51.95	250.35	130.31	2,728.38	-6,354.56	7,608.41	7,306.19	302.22	25.175		
9,100.00	7,237.16	7,220.16	7,237.16	53.10	250.33	130.32	2,728.38	-6,354.56	7,543.87	7,240.47	303.40	24.865		
9,200.00	7,236.76	7,219.76	7,236.76	54.69	250.32	130.33	2,728.38	-6,354.56	7,480.11	7,175.43	304.68	24.551		
9,300.00	7,236.35	7,219.35	7,236.35	56.53	250.30	130.34	2,728.38	-6,354.56	7,417.15	7,111.09	306.06	24.235		
9,400.00	7,235.94	7,218.94	7,235.94	58.53	250.29	130.35	2,728.38	-6,354.56	7,355.01	7,047.48	307.52	23.917		
9,500.00	7,235.54	7,218.54	7,235.54	60.62	250.28	130.36	2,728.38	-6,354.56	7,293.71	6,984.63	309.09	23.598		
9,600.00	7,235.13	7,218.13	7,235.13	62.80	250.26	130.37	2,728.38	-6,354.56	7,233.28	6,922.54	310.73	23.278		
9,700.00	7,234.73	7,217.73	7,234.73	65.03	250.25	130.38	2,728.38	-6,354.56	7,173.73	6,861.26	312.47	22.958		
9,800.00	7,234.32	7,217.32	7,234.32	67.32	250.23	130.39	2,728.38	-6,354.56	7,115.09	6,800.80	314.29	22.639		
9,900.00	7,233.92	7,216.92	7,233.92	69.66	250.22	130.40	2,728.38	-6,354.56	7,057.37	6,741.19	316.19	22.320		
10,000.00	7,233.51	7,216.51	7,233.51	72.03	250.20	130.41	2,728.38	-6,354.56	7,000.61	6,682.45	318.17	22.003		
10,100.00	7,233.10	7,216.10	7,233.10	74.45	250.19	130.42	2,728.38	-6,354.56	6,944.83	6,624.61	320.22	21.688		
10,200.00	7,232.70	7,215.70	7,232.70	76.89	250.18	130.43	2,728.38	-6,354.56	6,890.05	6,567.70	322.35	21.375		
10,300.00	7,232.29	7,215.29	7,232.29	79.36	250.16	130.44	2,728.38	-6,354.56	6,836.29	6,511.74	324.54	21.064		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	7,214.89	7,231.89	81.86	250.15	90.14	2,728.38	-6,354.56	6,783.58	6,456.77	326.81	20.757		
10,500.00	7,231.48	7,214.48	7,231.48	84.38	250.13	90.14	2,728.38	-6,354.56	6,731.94	6,402.80	329.14	20.453		
10,600.00	7,231.08	7,214.08	7,231.08	86.93	250.12	90.13	2,728.38	-6,354.56	6,681.40	6,349.87	331.53	20.153		
10,700.00	7,230.67	7,213.67	7,230.67	89.49	250.11	90.13	2,728.38	-6,354.56	6,631.98	6,298.00	333.98	19.857		
10,800.00	7,230.26	7,213.26	7,230.26	92.07	250.09	90.13	2,728.38	-6,354.56	6,583.71	6,247.22	336.49	19.566		
10,900.00	7,229.86	7,212.86	7,229.86	94.67	250.08	90.12	2,728.38	-6,354.56	6,536.61	6,197.56	339.05	19.279		
11,000.00	7,229.45	7,212.45	7,229.45	97.28	250.06	90.12	2,728.38	-6,354.56	6,490.71	6,149.05	341.66	18.998		
11,100.00	7,229.05	7,212.05	7,229.05	99.90	250.05	90.11	2,728.38	-6,354.56	6,446.04	6,101.72	344.32	18.721		
11,200.00	7,228.64	7,211.64	7,228.64	102.54	250.03	90.11	2,728.38	-6,354.56	6,402.62	6,055.59	347.03	18.450		
11,300.00	7,228.24	7,211.24	7,228.24	105.19	250.02	90.11	2,728.38	-6,354.56	6,360.47	6,010.69	349.78	18.184		
11,400.00	7,227.83	7,210.83	7,227.83	107.85	250.01	90.10	2,728.38	-6,354.56	6,319.62	5,967.05	352.57	17.924		
11,500.00	7,227.42	7,210.42	7,227.42	110.52	249.99	90.10	2,728.38	-6,354.56	6,280.10	5,924.71	355.40	17.671		
11,600.00	7,227.02	7,210.02	7,227.02	113.20	249.98	90.09	2,728.38	-6,354.56	6,241.94	5,883.68	358.26	17.423		
11,700.00	7,226.61	7,209.61	7,226.61	115.89	249.96	90.09	2,728.38	-6,354.56	6,205.15	5,843.99	361.15	17.181		
11,800.00	7,226.21	7,209.21	7,226.21	118.59	249.95	90.09	2,728.38	-6,354.56	6,169.76	5,805.68	364.08	16.946		
11,900.00	7,225.80	7,208.80	7,225.80	121.29	249.94	90.08	2,728.38	-6,354.56	6,135.79	5,768.77	367.02	16.718		
12,000.00	7,225.40	7,208.40	7,225.40	124.00	249.92	90.08	2,728.38	-6,354.56	6,103.28	5,733.29	369.99	16.496		
12,100.00	7,224.99	7,207.99	7,224.99	126.72	249.91	90.07	2,728.38	-6,354.56	6,072.24	5,699.26	372.98	16.280		
12,200.00	7,224.58	7,207.58	7,224.58	129.44	249.89	90.07	2,728.38	-6,354.56	6,042.70	5,666.71	375.98	16.072		
12,300.00	7,224.18	7,207.18	7,224.18	132.17	249.88	90.07	2,728.38	-6,354.56	6,014.67	5,635.67	379.00	15.870		
12,400.00	7,223.77	7,206.77	7,223.77	134.91	249.86	90.06	2,728.38	-6,354.56	5,988.18	5,606.16	382.02	15.675		
12,500.00	7,223.37	7,206.37	7,223.37	137.65	249.85	90.06	2,728.38	-6,354.56	5,963.25	5,578.20	385.05	15.487		
12,600.00	7,222.96	7,205.96	7,222.96	140.39	249.84	90.05	2,728.38	-6,354.56	5,939.90	5,551.82	388.08	15.306		
12,700.00	7,222.55	7,205.55	7,222.55	143.14	249.82	90.05	2,728.38	-6,354.56	5,918.15	5,527.04	391.11	15.132		
12,800.00	7,222.15	7,205.15	7,222.15	145.89	249.81	90.05	2,728.38	-6,354.56	5,898.01	5,503.89	394.13	14.965		
12,900.00	7,221.74	7,204.74	7,221.74	148.65	249.79	90.04	2,728.38	-6,354.56	5,879.51	5,482.37	397.14	14.805		
13,000.00	7,221.34	7,204.34	7,221.34	151.41	249.78	90.04	2,728.38	-6,354.56	5,862.65	5,462.51	400.14	14.651		
13,100.00	7,220.93	7,203.93	7,220.93	154.18	249.77	90.03	2,728.38	-6,354.56	5,847.46	5,444.33	403.13	14.505		
13,200.00	7,220.53	7,203.53	7,220.53	156.94	249.75	90.03	2,728.38	-6,354.56	5,833.94	5,427.85	406.09	14.366		
13,300.00	7,220.12	7,203.12	7,220.12	159.72	249.74	90.03	2,728.38	-6,354.56	5,822.10	5,413.07	409.03	14.234		
13,400.00	7,219.71	7,202.71	7,219.71	162.49	249.72	90.02	2,728.38	-6,354.56	5,811.97	5,400.02	411.95	14.108		
13,500.00	7,219.31	7,202.31	7,219.31	165.27	249.71	90.02	2,728.38	-6,354.56	5,803.54	5,388.70	414.83	13.990		
13,600.00	7,218.90	7,201.90	7,218.90	168.05	249.69	90.01	2,728.38	-6,354.56	5,796.82	5,379.13	417.69	13.878		
13,700.00	7,218.50	7,201.50	7,218.50	170.83	249.68	90.01	2,728.38	-6,354.56	5,791.82	5,371.32	420.50	13.774		
13,800.00	7,218.09	7,201.09	7,218.09	173.61	249.67	90.01	2,728.38	-6,354.56	5,788.54	5,365.26	423.28	13.676		
13,900.00	7,217.69	7,200.69	7,217.69	176.40	249.65	90.00	2,728.38	-6,354.56	5,786.99	5,360.98	426.01	13.584		
13,939.69	7,217.53	7,200.53	7,217.53	177.51	249.65	90.00	2,728.38	-6,354.56	5,786.86	5,359.77	427.08	13.550 CC		
14,000.00	7,217.28	7,200.28	7,217.28	179.19	249.64	90.00	2,728.38	-6,354.56	5,787.17	5,358.47	428.70	13.499		
14,100.00	7,216.87	7,200.13	7,216.87	181.98	249.63	89.99	2,728.38	-6,354.56	5,789.08	5,357.73	431.35	13.421 ES		
14,200.00	7,216.47	7,200.53	7,216.47	184.78	249.65	89.99	2,728.38	-6,354.56	5,792.71	5,358.74	433.97	13.348		
14,300.00	7,216.06	7,200.94	7,216.06	187.57	249.66	89.99	2,728.38	-6,354.56	5,798.06	5,361.53	436.53	13.282		
14,400.00	7,215.66	7,201.34	7,215.66	190.37	249.68	89.98	2,728.38	-6,354.56	5,805.13	5,366.09	439.04	13.222		
14,500.00	7,215.25	7,201.75	7,215.25	193.17	249.69	89.98	2,728.38	-6,354.56	5,813.92	5,372.43	441.49	13.169		
14,600.00	7,214.85	7,202.15	7,214.85	195.97	249.70	89.97	2,728.38	-6,354.56	5,824.41	5,380.52	443.89	13.121		
14,700.00	7,214.44	7,202.56	7,214.44	198.77	249.72	89.97	2,728.38	-6,354.56	5,836.59	5,390.37	446.22	13.080		
14,800.00	7,214.03	7,202.97	7,214.03	201.58	249.73	89.97	2,728.38	-6,354.56	5,850.45	5,401.96	448.49	13.045		
14,900.00	7,213.63	7,203.37	7,213.63	204.38	249.75	89.96	2,728.38	-6,354.56	5,865.99	5,415.30	450.70	13.015		
15,000.00	7,213.22	7,203.78	7,213.22	207.19	249.76	89.96	2,728.38	-6,354.56	5,883.19	5,430.35	452.84	12.992		
15,100.00	7,212.82	7,204.18	7,212.82	210.00	249.77	89.95	2,728.38	-6,354.56	5,902.03	5,447.11	454.92	12.974		
15,200.00	7,212.41	7,204.59	7,212.41	212.81	249.79	89.95	2,728.38	-6,354.56	5,922.50	5,465.57	456.93	12.961		
15,300.00	7,212.01	7,204.99	7,212.01	215.62	249.80	89.95	2,728.38	-6,354.56	5,944.59	5,485.71	458.88	12.955		
15,400.00	7,211.60	7,205.40	7,211.60	218.43	249.82	89.94	2,728.38	-6,354.56	5,968.26	5,507.51	460.76	12.953 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,500.00	7,211.19	7,205.81	7,211.19	221.25	249.83	89.94	2,728.38	-6,354.56	5,993.52	5,530.95	462.57	12.957	
15,600.00	7,210.79	7,206.21	7,210.79	224.06	249.85	89.93	2,728.38	-6,354.56	6,020.32	5,556.01	464.31	12.966	
15,700.00	7,210.38	7,206.62	7,210.38	226.88	249.86	89.93	2,728.38	-6,354.56	6,048.66	5,582.67	465.99	12.980	
15,794.94	7,210.00	7,207.00	7,210.00	229.55	249.87	89.93	2,728.38	-6,354.56	6,076.97	5,609.45	467.52	12.998	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 14-9(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	14.00	3.28	3.28	-71.26	2,663.23	-7,850.82	8,290.26					
100.00	100.00	86.00	100.00	3.28	3.61	-71.26	2,663.23	-7,850.82	8,290.25	8,283.36	6.89	1,202.898		
200.00	200.00	186.00	200.00	3.34	5.77	-71.26	2,663.23	-7,850.82	8,290.25	8,281.14	9.11	910.255		
300.00	299.98	285.98	299.98	3.44	8.87	106.09	2,663.23	-7,850.82	8,290.73	8,278.43	12.31	673.695		
400.00	399.84	385.84	399.84	3.59	12.17	106.10	2,663.23	-7,850.82	8,292.19	8,276.42	15.76	526.058		
500.00	499.45	485.45	499.45	3.79	15.55	106.11	2,663.23	-7,850.82	8,294.61	8,275.27	19.34	428.926		
600.00	598.70	584.70	598.70	4.03	18.95	106.13	2,663.23	-7,850.82	8,298.02	8,275.04	22.98	361.067		
700.00	697.47	683.47	697.47	4.31	22.36	106.14	2,663.23	-7,850.82	8,302.42	8,275.75	26.67	311.301		
800.00	795.62	781.62	795.62	4.64	25.75	106.16	2,663.23	-7,850.82	8,307.82	8,277.43	30.39	273.396		
900.00	893.06	879.06	893.06	5.00	29.13	106.19	2,663.23	-7,850.82	8,314.24	8,280.11	34.12	243.651		
1,000.00	989.64	975.64	989.64	5.40	32.48	106.21	2,663.23	-7,850.82	8,321.69	8,283.82	37.87	219.743		
1,100.00	1,085.27	1,071.27	1,085.27	5.83	35.80	106.23	2,663.23	-7,850.82	8,330.20	8,288.58	41.62	200.147		
1,200.00	1,179.82	1,165.82	1,179.82	6.29	39.09	106.25	2,663.23	-7,850.82	8,339.78	8,294.42	45.37	183.824		
1,300.00	1,273.17	1,259.17	1,273.17	6.79	42.34	106.26	2,663.23	-7,850.82	8,350.47	8,301.36	49.11	170.041		
1,400.00	1,365.21	1,351.21	1,365.21	7.33	45.54	106.27	2,663.23	-7,850.82	8,362.28	8,309.44	52.84	158.267		
1,500.00	1,455.84	1,441.84	1,455.84	7.89	48.70	106.28	2,663.23	-7,850.82	8,375.24	8,318.69	56.55	148.110		
1,600.00	1,544.94	1,530.94	1,544.94	8.50	51.80	106.27	2,663.23	-7,850.82	8,389.38	8,329.14	60.24	139.273		
1,700.00	1,632.39	1,618.39	1,632.39	9.13	54.85	106.25	2,663.23	-7,850.82	8,404.72	8,340.82	63.90	131.529		
1,800.00	1,718.11	1,704.11	1,718.11	9.80	57.84	106.22	2,663.23	-7,850.82	8,421.29	8,353.76	67.53	124.699		
1,900.00	1,802.44	1,788.44	1,802.44	10.49	60.78	106.42	2,663.23	-7,850.82	8,438.89	8,367.75	71.14	118.624		
2,000.00	1,886.68	1,872.68	1,886.68	11.20	63.71	106.72	2,663.23	-7,850.82	8,456.83	8,382.07	74.76	113.121		
2,100.00	1,970.92	1,956.92	1,970.92	11.93	66.65	107.02	2,663.23	-7,850.82	8,475.08	8,396.69	78.39	108.118		
2,200.00	2,055.17	2,041.17	2,055.17	12.66	69.59	107.32	2,663.23	-7,850.82	8,493.63	8,411.61	82.02	103.552		
2,300.00	2,139.41	2,125.41	2,139.41	13.40	72.53	107.62	2,663.23	-7,850.82	8,512.49	8,426.82	85.66	99.370		
2,400.00	2,223.66	2,209.66	2,223.66	14.14	75.47	107.91	2,663.23	-7,850.82	8,531.64	8,442.33	89.31	95.527		
2,500.00	2,307.90	2,306.10	2,307.90	14.89	78.83	108.21	2,663.23	-7,850.82	8,551.08	8,457.70	93.39	91.566		
2,600.00	2,392.14	2,378.14	2,392.14	15.65	81.34	108.50	2,663.23	-7,850.82	8,570.83	8,474.21	96.62	88.711		
2,700.00	2,476.39	2,462.39	2,476.39	16.41	84.28	108.79	2,663.23	-7,850.82	8,590.86	8,490.59	100.27	85.676		
2,800.00	2,560.63	2,546.63	2,560.63	17.17	87.22	109.09	2,663.23	-7,850.82	8,611.19	8,507.26	103.93	82.857		
2,900.00	2,644.88	2,630.88	2,644.88	17.93	90.16	109.38	2,663.23	-7,850.82	8,631.80	8,524.21	107.59	80.231		
3,000.00	2,729.12	2,715.12	2,729.12	18.70	93.10	109.67	2,663.23	-7,850.82	8,652.70	8,541.46	111.25	77.779		
3,100.00	2,813.36	2,800.64	2,813.36	19.47	96.08	109.96	2,663.23	-7,850.82	8,673.89	8,558.94	114.95	75.457		
3,200.00	2,897.61	2,883.61	2,897.61	20.25	98.98	110.24	2,663.23	-7,850.82	8,695.35	8,576.79	118.57	73.337		
3,300.00	2,981.85	2,967.85	2,981.85	21.02	101.92	110.53	2,663.23	-7,850.82	8,717.10	8,594.87	122.23	71.319		
3,400.00	3,066.10	3,052.10	3,066.10	21.80	104.85	110.82	2,663.23	-7,850.82	8,739.13	8,613.24	125.89	69.420		
3,500.00	3,150.34	3,136.34	3,150.34	22.58	107.79	111.10	2,663.23	-7,850.82	8,761.43	8,631.88	129.55	67.631		
3,600.00	3,234.58	3,220.58	3,234.58	23.35	110.73	111.39	2,663.23	-7,850.82	8,784.00	8,650.80	133.21	65.943		
3,700.00	3,318.83	3,304.83	3,318.83	24.13	113.67	111.67	2,663.23	-7,850.82	8,806.85	8,669.99	136.86	64.347		
3,800.00	3,403.07	3,389.07	3,403.07	24.92	116.61	111.95	2,663.23	-7,850.82	8,829.97	8,689.44	140.52	62.837		
3,900.00	3,487.32	3,473.32	3,487.32	25.70	119.55	112.23	2,663.23	-7,850.82	8,853.35	8,709.17	144.18	61.405		
4,000.00	3,571.56	3,557.56	3,571.56	26.48	122.49	112.51	2,663.23	-7,850.82	8,877.00	8,729.17	147.83	60.047		
4,100.00	3,655.80	3,641.80	3,655.80	27.27	125.43	112.79	2,663.23	-7,850.82	8,900.91	8,749.42	151.49	58.756		
4,200.00	3,740.05	3,726.05	3,740.05	28.05	128.37	113.06	2,663.23	-7,850.82	8,925.09	8,769.94	155.14	57.529		
4,300.00	3,824.29	3,810.29	3,824.29	28.84	131.31	113.34	2,663.23	-7,850.82	8,949.52	8,790.73	158.79	56.360		
4,400.00	3,908.54	3,905.46	3,908.54	29.62	134.63	113.61	2,663.23	-7,850.82	8,974.21	8,811.38	162.82	55.116		
4,500.00	3,992.78	3,978.78	3,992.78	30.41	137.19	113.89	2,663.23	-7,850.82	8,999.15	8,833.06	166.09	54.182		
4,600.00	4,077.03	4,063.03	4,077.03	31.20	140.13	114.16	2,663.23	-7,850.82	9,024.35	8,854.61	169.74	53.166		
4,700.00	4,161.27	4,147.27	4,161.27	31.98	143.07	114.43	2,663.23	-7,850.82	9,049.80	8,876.41	173.39	52.194		
4,800.00	4,245.51	4,231.51	4,245.51	32.77	146.01	114.70	2,663.23	-7,850.82	9,075.50	8,898.47	177.03	51.265		
4,900.00	4,329.76	4,315.76	4,329.76	33.56	148.95	114.97	2,663.23	-7,850.82	9,101.44	8,920.77	180.67	50.375		
5,000.00	4,414.00	4,400.00	4,414.00	34.35	151.89	115.24	2,663.23	-7,850.82	9,127.63	8,943.31	184.31	49.522		
5,100.00	4,498.25	4,484.25	4,498.25	35.14	154.83	115.50	2,663.23	-7,850.82	9,154.06	8,966.10	187.95	48.704		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 14-9(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,568.49	4,582.49	35.93	157.77	115.77	2,663.23	-7,850.82	9,180.73	8,989.13	191.59	47.918		
5,300.00	4,666.73	4,652.73	4,666.73	36.72	160.72	116.03	2,663.23	-7,850.82	9,207.63	9,012.41	195.23	47.163		
5,400.00	4,750.98	4,736.98	4,750.98	37.51	163.66	116.30	2,663.23	-7,850.82	9,234.78	9,035.91	198.86	46.438		
5,500.00	4,835.22	4,821.22	4,835.22	38.30	166.60	116.56	2,663.23	-7,850.82	9,262.16	9,059.66	202.50	45.740		
5,600.00	4,919.47	4,905.47	4,919.47	39.09	169.54	116.82	2,663.23	-7,850.82	9,289.76	9,083.64	206.13	45.068		
5,700.00	5,003.71	4,989.71	5,003.71	39.88	172.48	117.08	2,663.23	-7,850.82	9,317.60	9,107.85	209.76	44.421		
5,800.00	5,088.06	5,074.06	5,088.06	40.67	175.42	117.51	2,663.23	-7,850.82	9,345.58	9,132.20	213.39	43.796		
5,900.00	5,173.83	5,159.83	5,173.83	41.44	178.41	118.25	2,663.23	-7,850.82	9,372.57	9,155.52	217.05	43.182		
6,000.00	5,261.34	5,247.34	5,261.34	42.18	181.47	118.95	2,663.23	-7,850.82	9,398.16	9,177.41	220.75	42.574		
6,100.00	5,350.49	5,336.49	5,350.49	42.88	184.58	119.61	2,663.23	-7,850.82	9,422.27	9,197.79	224.48	41.974		
6,200.00	5,441.16	5,427.16	5,441.16	43.56	187.75	120.21	2,663.23	-7,850.82	9,444.86	9,216.62	228.24	41.381		
6,300.00	5,533.25	5,519.25	5,533.25	44.20	190.96	120.78	2,663.23	-7,850.82	9,465.85	9,233.83	232.03	40.796		
6,400.00	5,626.65	5,612.65	5,626.65	44.82	194.22	121.29	2,663.23	-7,850.82	9,485.20	9,249.37	235.84	40.220		
6,500.00	5,721.23	5,707.23	5,721.23	45.40	197.52	121.76	2,663.23	-7,850.82	9,502.86	9,263.20	239.66	39.652		
6,600.00	5,816.89	5,802.89	5,816.89	45.94	200.86	122.17	2,663.23	-7,850.82	9,518.77	9,275.28	243.49	39.092		
6,700.00	5,913.51	5,900.49	5,913.51	46.45	204.27	122.54	2,663.23	-7,850.82	9,532.91	9,285.54	247.37	38.537		
6,800.00	6,010.97	6,003.03	6,010.97	46.93	207.85	122.86	2,663.23	-7,850.82	9,545.22	9,293.83	251.40	37.969		
6,900.00	6,109.15	6,104.85	6,109.15	47.38	211.40	123.13	2,663.23	-7,850.82	9,555.69	9,300.32	255.37	37.419		
7,000.00	6,207.93	6,206.07	6,207.93	47.80	214.93	123.36	2,663.23	-7,850.82	9,564.27	9,304.98	259.29	36.886		
7,100.00	6,307.19	6,306.81	6,307.19	48.18	218.45	123.53	2,663.23	-7,850.82	9,570.96	9,307.78	263.18	36.367		
7,200.00	6,406.82	6,407.19	6,406.82	48.53	221.95	123.65	2,663.23	-7,850.82	9,575.73	9,308.71	267.02	35.861		
7,300.00	6,506.68	6,507.32	6,506.68	48.84	225.45	123.72	2,663.23	-7,850.82	9,578.58	9,307.74	270.83	35.367		
7,400.00	6,606.66	6,607.34	6,606.66	49.10	228.94	123.74	2,663.23	-7,850.82	9,579.48	9,304.89	274.59	34.887		
7,500.00	6,706.21	6,707.79	6,706.21	49.35	232.45	123.74	2,663.23	-7,850.82	9,572.79	9,294.44	278.35	34.392		
7,600.00	6,803.22	6,803.22	6,803.22	49.59	235.29	123.74	2,663.23	-7,850.82	9,553.72	9,272.30	281.42	33.949		
7,700.00	6,895.32	6,881.32	6,895.32	49.82	238.50	123.65	2,663.23	-7,850.82	9,522.78	9,237.95	284.83	33.433		
7,800.00	6,980.23	6,966.23	6,980.23	50.03	241.47	123.47	2,663.23	-7,850.82	9,480.80	9,192.84	287.96	32.924		
7,900.00	7,055.85	7,041.85	7,055.85	50.21	244.11	123.13	2,663.23	-7,850.82	9,428.89	9,138.14	290.74	32.430		
8,000.00	7,120.34	7,106.34	7,120.34	50.36	246.36	122.66	2,663.23	-7,850.82	9,368.42	9,075.27	293.14	31.959		
8,100.00	7,172.10	7,158.10	7,172.10	50.47	248.17	122.03	2,663.23	-7,850.82	9,300.97	9,005.85	295.12	31.515		
8,200.00	7,209.85	7,204.15	7,209.85	50.55	249.77	121.29	2,663.23	-7,850.82	9,228.30	8,931.34	296.96	31.076		
8,300.00	7,232.68	7,218.68	7,232.68	50.61	250.28	120.78	2,663.23	-7,850.82	9,152.27	8,854.50	297.77	30.736		
8,400.00	7,240.00	7,226.00	7,240.00	50.65	250.54	120.29	2,663.23	-7,850.82	9,074.81	8,776.38	298.42	30.409		
8,500.00	7,239.60	7,225.60	7,239.60	50.69	250.52	120.28	2,663.23	-7,850.82	8,997.49	8,698.60	298.89	30.103		
8,600.00	7,239.19	7,225.19	7,239.19	50.75	250.51	120.28	2,663.23	-7,850.82	8,920.63	8,621.20	299.43	29.792		
8,700.00	7,238.78	7,224.78	7,238.78	50.85	250.49	120.27	2,663.23	-7,850.82	8,844.23	8,544.17	300.06	29.475		
8,800.00	7,238.38	7,224.38	7,238.38	51.02	250.48	120.27	2,663.23	-7,850.82	8,768.30	8,467.55	300.76	29.154		
8,900.00	7,237.97	7,223.97	7,237.97	51.32	250.47	120.27	2,663.23	-7,850.82	8,692.87	8,391.33	301.54	28.828		
9,000.00	7,237.57	7,223.57	7,237.57	51.95	250.45	120.26	2,663.23	-7,850.82	8,617.93	8,315.52	302.40	28.498		
9,100.00	7,237.16	7,223.16	7,237.16	53.10	250.44	120.26	2,663.23	-7,850.82	8,543.50	8,240.16	303.35	28.164		
9,200.00	7,236.76	7,222.76	7,236.76	54.69	250.42	120.25	2,663.23	-7,850.82	8,469.60	8,165.23	304.37	27.827		
9,300.00	7,236.35	7,222.35	7,236.35	56.53	250.41	120.25	2,663.23	-7,850.82	8,396.24	8,090.77	305.47	27.486		
9,400.00	7,235.94	7,221.94	7,235.94	58.53	250.39	120.24	2,663.23	-7,850.82	8,323.44	8,016.78	306.66	27.143		
9,500.00	7,235.54	7,221.54	7,235.54	60.62	250.38	120.24	2,663.23	-7,850.82	8,251.21	7,943.29	307.92	26.797		
9,600.00	7,235.13	7,221.13	7,235.13	62.80	250.37	120.24	2,663.23	-7,850.82	8,179.56	7,870.30	309.26	26.449		
9,700.00	7,234.73	7,220.73	7,234.73	65.03	250.35	120.23	2,663.23	-7,850.82	8,108.51	7,797.83	310.68	26.099		
9,800.00	7,234.32	7,220.32	7,234.32	67.32	250.34	120.23	2,663.23	-7,850.82	8,038.08	7,725.90	312.17	25.749		
9,900.00	7,233.92	7,219.92	7,233.92	69.66	250.32	120.22	2,663.23	-7,850.82	7,968.28	7,654.53	313.74	25.397		
10,000.00	7,233.51	7,219.51	7,233.51	72.03	250.31	120.22	2,663.23	-7,850.82	7,899.13	7,583.74	315.39	25.046		
10,100.00	7,233.10	7,219.10	7,233.10	74.45	250.30	120.22	2,663.23	-7,850.82	7,830.64	7,513.54	317.10	24.694		
10,200.00	7,232.70	7,218.70	7,232.70	76.89	250.28	120.21	2,663.23	-7,850.82	7,762.84	7,443.95	318.89	24.343		
10,300.00	7,232.29	7,218.29	7,232.29	79.36	250.27	120.21	2,663.23	-7,850.82	7,695.74	7,374.99	320.75	23.993		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 14-9(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	7,217.89	7,231.89	81.86	250.25	90.20	2,663.23	-7,850.82	7,629.36	7,306.69	322.68	23.644		
10,500.00	7,231.48	7,217.48	7,231.48	84.38	250.24	90.20	2,663.23	-7,850.82	7,563.73	7,239.05	324.67	23.297		
10,600.00	7,231.08	7,217.08	7,231.08	86.93	250.22	90.20	2,663.23	-7,850.82	7,498.85	7,172.11	326.73	22.951		
10,700.00	7,230.67	7,216.67	7,230.67	89.49	250.21	90.19	2,663.23	-7,850.82	7,434.75	7,105.89	328.86	22.608		
10,800.00	7,230.26	7,216.26	7,230.26	92.07	250.20	90.19	2,663.23	-7,850.82	7,371.44	7,040.39	331.05	22.267		
10,900.00	7,229.86	7,215.86	7,229.86	94.67	250.18	90.18	2,663.23	-7,850.82	7,308.96	6,975.66	333.30	21.929		
11,000.00	7,229.45	7,215.45	7,229.45	97.28	250.17	90.18	2,663.23	-7,850.82	7,247.32	6,911.70	335.62	21.594		
11,100.00	7,229.05	7,215.05	7,229.05	99.90	250.15	90.18	2,663.23	-7,850.82	7,186.55	6,848.55	337.99	21.262		
11,200.00	7,228.64	7,214.64	7,228.64	102.54	250.14	90.17	2,663.23	-7,850.82	7,126.65	6,786.23	340.43	20.935		
11,300.00	7,228.24	7,214.24	7,228.24	105.19	250.13	90.17	2,663.23	-7,850.82	7,067.67	6,724.75	342.92	20.610		
11,400.00	7,227.83	7,213.83	7,227.83	107.85	250.11	90.16	2,663.23	-7,850.82	7,009.61	6,664.15	345.46	20.291		
11,500.00	7,227.42	7,213.42	7,227.42	110.52	250.10	90.16	2,663.23	-7,850.82	6,952.51	6,604.45	348.06	19.975		
11,600.00	7,227.02	7,213.02	7,227.02	113.20	250.08	90.16	2,663.23	-7,850.82	6,896.39	6,545.67	350.72	19.664		
11,700.00	7,226.61	7,212.61	7,226.61	115.89	250.07	90.15	2,663.23	-7,850.82	6,841.27	6,487.84	353.42	19.357		
11,800.00	7,226.21	7,212.21	7,226.21	118.59	250.05	90.15	2,663.23	-7,850.82	6,787.17	6,430.99	356.18	19.056		
11,900.00	7,225.80	7,211.80	7,225.80	121.29	250.04	90.14	2,663.23	-7,850.82	6,734.12	6,375.14	358.98	18.759		
12,000.00	7,225.40	7,211.40	7,225.40	124.00	250.03	90.14	2,663.23	-7,850.82	6,682.15	6,320.32	361.83	18.468		
12,100.00	7,224.99	7,210.99	7,224.99	126.72	250.01	90.14	2,663.23	-7,850.82	6,631.28	6,266.56	364.72	18.182		
12,200.00	7,224.58	7,210.58	7,224.58	129.44	250.00	90.13	2,663.23	-7,850.82	6,581.54	6,213.88	367.66	17.901		
12,300.00	7,224.18	7,210.18	7,224.18	132.17	249.98	90.13	2,663.23	-7,850.82	6,532.95	6,162.31	370.64	17.626		
12,400.00	7,223.77	7,209.77	7,223.77	134.91	249.97	90.12	2,663.23	-7,850.82	6,485.53	6,111.87	373.66	17.357		
12,500.00	7,223.37	7,209.37	7,223.37	137.65	249.96	90.12	2,663.23	-7,850.82	6,439.32	6,062.61	376.71	17.094		
12,600.00	7,222.96	7,208.96	7,222.96	140.39	249.94	90.12	2,663.23	-7,850.82	6,394.34	6,014.54	379.80	16.836		
12,700.00	7,222.55	7,208.55	7,222.55	143.14	249.93	90.11	2,663.23	-7,850.82	6,350.62	5,967.70	382.92	16.585		
12,800.00	7,222.15	7,208.15	7,222.15	145.89	249.91	90.11	2,663.23	-7,850.82	6,308.18	5,922.11	386.07	16.340		
12,900.00	7,221.74	7,207.74	7,221.74	148.65	249.90	90.10	2,663.23	-7,850.82	6,267.04	5,877.80	389.24	16.101		
13,000.00	7,221.34	7,207.34	7,221.34	151.41	249.88	90.10	2,663.23	-7,850.82	6,227.24	5,834.80	392.45	15.868		
13,100.00	7,220.93	7,206.93	7,220.93	154.18	249.87	90.09	2,663.23	-7,850.82	6,188.81	5,793.14	395.67	15.641		
13,200.00	7,220.53	7,206.53	7,220.53	156.94	249.86	90.09	2,663.23	-7,850.82	6,151.75	5,752.84	398.91	15.421		
13,300.00	7,220.12	7,206.12	7,220.12	159.72	249.84	90.09	2,663.23	-7,850.82	6,116.11	5,713.94	402.17	15.208		
13,400.00	7,219.71	7,205.71	7,219.71	162.49	249.83	90.08	2,663.23	-7,850.82	6,081.90	5,676.47	405.43	15.001		
13,500.00	7,219.31	7,205.31	7,219.31	165.27	249.81	90.08	2,663.23	-7,850.82	6,049.16	5,640.44	408.71	14.801		
13,600.00	7,218.90	7,204.90	7,218.90	168.05	249.80	90.07	2,663.23	-7,850.82	6,017.89	5,605.90	411.99	14.607		
13,700.00	7,218.50	7,204.50	7,218.50	170.83	249.79	90.07	2,663.23	-7,850.82	5,988.13	5,572.85	415.28	14.419		
13,800.00	7,218.09	7,204.09	7,218.09	173.61	249.77	90.07	2,663.23	-7,850.82	5,959.91	5,541.34	418.56	14.239		
13,900.00	7,217.69	7,203.69	7,217.69	176.40	249.76	90.06	2,663.23	-7,850.82	5,933.23	5,511.39	421.84	14.065		
14,000.00	7,217.28	7,203.28	7,217.28	179.19	249.74	90.06	2,663.23	-7,850.82	5,908.13	5,483.01	425.12	13.898		
14,100.00	7,216.87	7,202.87	7,216.87	181.98	249.73	90.05	2,663.23	-7,850.82	5,884.62	5,456.24	428.37	13.737		
14,200.00	7,216.47	7,202.47	7,216.47	184.78	249.71	90.05	2,663.23	-7,850.82	5,862.72	5,431.10	431.62	13.583		
14,300.00	7,216.06	7,202.06	7,216.06	187.57	249.70	90.05	2,663.23	-7,850.82	5,842.45	5,407.61	434.84	13.436		
14,400.00	7,215.66	7,201.66	7,215.66	190.37	249.69	90.04	2,663.23	-7,850.82	5,823.82	5,385.78	438.04	13.295		
14,500.00	7,215.25	7,201.25	7,215.25	193.17	249.67	90.04	2,663.23	-7,850.82	5,806.86	5,365.65	441.21	13.161		
14,600.00	7,214.85	7,200.85	7,214.85	195.97	249.66	90.03	2,663.23	-7,850.82	5,791.58	5,347.22	444.36	13.034		
14,700.00	7,214.44	7,200.44	7,214.44	198.77	249.64	90.03	2,663.23	-7,850.82	5,777.99	5,330.52	447.46	12.913		
14,800.00	7,214.03	7,200.03	7,214.03	201.58	249.63	90.03	2,663.23	-7,850.82	5,766.10	5,315.57	450.53	12.798		
14,900.00	7,213.63	7,200.37	7,213.63	204.38	249.64	90.02	2,663.23	-7,850.82	5,755.92	5,302.33	453.58	12.690		
15,000.00	7,213.22	7,200.78	7,213.22	207.19	249.66	90.02	2,663.23	-7,850.82	5,747.46	5,290.87	456.59	12.588		
15,100.00	7,212.82	7,201.18	7,212.82	210.00	249.67	90.01	2,663.23	-7,850.82	5,740.74	5,281.18	459.55	12.492		
15,200.00	7,212.41	7,201.59	7,212.41	212.81	249.68	90.01	2,663.23	-7,850.82	5,735.75	5,273.28	462.46	12.403		
15,300.00	7,212.01	7,201.99	7,212.01	215.62	249.70	90.01	2,663.23	-7,850.82	5,732.50	5,267.18	465.32	12.320		
15,400.00	7,211.60	7,202.40	7,211.60	218.43	249.71	90.00	2,663.23	-7,850.82	5,730.99	5,262.88	468.11	12.243		
15,436.33	7,211.45	7,202.55	7,211.45	219.45	249.72	90.00	2,663.23	-7,850.82	5,730.88	5,261.76	469.11	12.216 CC		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 14-9(AB_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,500.00	7,211.19	7,202.81	7,211.19	221.25	249.73	90.00	2,663.23	-7,850.82	5,731.23	5,260.38	470.85	12.172	
15,600.00	7,210.79	7,203.21	7,210.79	224.06	249.74	89.99	2,663.23	-7,850.82	5,733.21	5,259.69	473.52	12.108 ES	
15,700.00	7,210.38	7,203.62	7,210.38	226.88	249.75	89.99	2,663.23	-7,850.82	5,736.94	5,260.81	476.13	12.049	
15,794.94	7,210.00	7,204.00	7,210.00	229.55	249.77	89.99	2,663.23	-7,850.82	5,742.09	5,263.55	478.54	11.999 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 1(TA_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	3.00	0.00	3.28	3.28	-52.54	2,778.83	-3,626.28	4,568.57				
100.00	100.00	103.00	100.00	3.28	3.77	-52.54	2,778.83	-3,626.28	4,568.57	4,561.52	7.05	647.973	
200.00	200.00	203.00	200.00	3.34	6.27	-52.54	2,778.83	-3,626.28	4,568.57	4,558.97	9.60	475.646 CC	
300.00	299.98	302.98	299.98	3.44	9.42	124.82	2,778.83	-3,626.28	4,569.57	4,556.71	12.86	355.318	
400.00	399.84	402.84	399.84	3.59	12.75	124.82	2,778.83	-3,626.28	4,572.56	4,556.22	16.34	279.900 ES	
500.00	499.45	502.45	499.45	3.79	16.13	124.83	2,778.83	-3,626.28	4,577.55	4,557.63	19.92	229.793	
600.00	598.70	601.70	598.70	4.03	19.54	124.84	2,778.83	-3,626.28	4,584.54	4,560.98	23.57	194.522	
700.00	697.47	700.47	697.47	4.31	22.94	124.85	2,778.83	-3,626.28	4,593.56	4,566.30	27.26	168.527	
800.00	795.62	801.38	795.62	4.64	26.43	124.86	2,778.83	-3,626.28	4,604.60	4,573.53	31.07	148.212	
900.00	893.06	903.94	893.06	5.00	29.99	124.87	2,778.83	-3,626.28	4,617.68	4,582.71	34.98	132.023	
1,000.00	989.64	1,007.36	989.64	5.40	33.58	124.87	2,778.83	-3,626.28	4,632.83	4,593.88	38.95	118.940	
1,100.00	1,085.27	1,088.27	1,085.27	5.83	36.39	124.87	2,778.83	-3,626.28	4,650.05	4,607.87	42.18	110.253	
1,200.00	1,179.82	1,182.82	1,179.82	6.29	39.68	124.87	2,778.83	-3,626.28	4,669.36	4,623.46	45.91	101.717	
1,300.00	1,273.17	1,276.17	1,273.17	6.79	42.93	124.85	2,778.83	-3,626.28	4,690.79	4,641.17	49.62	94.531	
1,400.00	1,365.21	1,368.21	1,365.21	7.33	46.14	124.82	2,778.83	-3,626.28	4,714.36	4,661.04	53.32	88.417	
1,500.00	1,455.84	1,458.84	1,455.84	7.89	49.29	124.78	2,778.83	-3,626.28	4,740.08	4,683.09	56.99	83.169	
1,600.00	1,544.94	1,547.94	1,544.94	8.50	52.40	124.72	2,778.83	-3,626.28	4,767.97	4,707.34	60.64	78.630	
1,700.00	1,632.39	1,635.39	1,632.39	9.13	55.44	124.64	2,778.83	-3,626.28	4,798.06	4,733.81	64.25	74.679	
1,800.00	1,718.11	1,721.11	1,718.11	9.80	58.43	124.53	2,778.83	-3,626.28	4,830.34	4,762.52	67.82	71.222	
1,900.00	1,802.44	1,805.44	1,802.44	10.49	61.37	124.83	2,778.83	-3,626.28	4,864.39	4,793.03	71.36	68.168	
2,000.00	1,886.68	1,889.68	1,886.68	11.20	64.31	125.29	2,778.83	-3,626.28	4,898.87	4,823.97	74.90	65.404	
2,100.00	1,970.92	1,973.92	1,970.92	11.93	67.24	125.75	2,778.83	-3,626.28	4,933.70	4,855.25	78.45	62.889	
2,200.00	2,055.17	2,058.17	2,055.17	12.66	70.18	126.20	2,778.83	-3,626.28	4,968.87	4,886.86	82.01	60.592	
2,300.00	2,139.41	2,142.41	2,139.41	13.40	73.12	126.65	2,778.83	-3,626.28	5,004.37	4,918.81	85.56	58.487	
2,400.00	2,223.66	2,226.66	2,223.66	14.14	76.06	127.10	2,778.83	-3,626.28	5,040.20	4,951.08	89.13	56.552	
2,500.00	2,307.90	2,310.90	2,307.90	14.89	79.00	127.53	2,778.83	-3,626.28	5,076.35	4,983.66	92.69	54.768	
2,600.00	2,392.14	2,404.86	2,392.14	15.65	82.27	127.97	2,778.83	-3,626.28	5,112.81	5,016.22	96.59	52.932	
2,700.00	2,476.39	2,479.39	2,476.39	16.41	84.87	128.40	2,778.83	-3,626.28	5,149.58	5,049.76	99.82	51.590	
2,800.00	2,560.63	2,563.63	2,560.63	17.17	87.81	128.82	2,778.83	-3,626.28	5,186.64	5,083.26	103.38	50.169	
2,900.00	2,644.88	2,647.88	2,644.88	17.93	90.75	129.24	2,778.83	-3,626.28	5,224.00	5,117.05	106.95	48.846	
3,000.00	2,729.12	2,732.12	2,729.12	18.70	93.69	129.65	2,778.83	-3,626.28	5,261.65	5,151.13	110.51	47.611	
3,100.00	2,813.36	2,816.36	2,813.36	19.47	96.63	130.06	2,778.83	-3,626.28	5,299.57	5,185.50	114.08	46.456	
3,200.00	2,897.61	2,900.61	2,897.61	20.25	99.57	130.46	2,778.83	-3,626.28	5,337.77	5,220.13	117.64	45.374	
3,300.00	2,981.85	2,984.85	2,981.85	21.02	102.51	130.86	2,778.83	-3,626.28	5,376.24	5,255.04	121.20	44.358	
3,400.00	3,066.10	3,069.10	3,066.10	21.80	105.45	131.26	2,778.83	-3,626.28	5,414.97	5,290.21	124.76	43.402	
3,500.00	3,150.34	3,153.34	3,150.34	22.58	108.39	131.65	2,778.83	-3,626.28	5,453.96	5,325.64	128.32	42.502	
3,600.00	3,234.58	3,237.58	3,234.58	23.35	111.33	132.03	2,778.83	-3,626.28	5,493.20	5,361.32	131.88	41.653	
3,700.00	3,318.83	3,321.83	3,318.83	24.13	114.27	132.41	2,778.83	-3,626.28	5,532.68	5,397.25	135.44	40.851	
3,800.00	3,403.07	3,406.07	3,403.07	24.92	117.21	132.79	2,778.83	-3,626.28	5,572.41	5,433.42	138.99	40.092	
3,900.00	3,487.32	3,509.68	3,487.32	25.70	120.82	133.16	2,778.83	-3,626.28	5,612.38	5,469.16	143.22	39.188	
4,000.00	3,571.56	3,574.56	3,571.56	26.48	123.09	133.53	2,778.83	-3,626.28	5,652.57	5,506.48	146.09	38.691	
4,100.00	3,655.80	3,658.80	3,655.80	27.27	126.03	133.89	2,778.83	-3,626.28	5,692.99	5,543.35	149.64	38.044	
4,200.00	3,740.05	3,743.05	3,740.05	28.05	128.97	134.25	2,778.83	-3,626.28	5,733.63	5,580.44	153.19	37.428	
4,300.00	3,824.29	3,827.29	3,824.29	28.84	131.91	134.60	2,778.83	-3,626.28	5,774.49	5,617.75	156.74	36.842	
4,400.00	3,908.54	3,911.54	3,908.54	29.62	134.85	134.95	2,778.83	-3,626.28	5,815.56	5,655.28	160.28	36.283	
4,500.00	3,992.78	4,004.22	3,992.78	30.41	138.08	135.29	2,778.83	-3,626.28	5,856.84	5,692.72	164.12	35.686	
4,600.00	4,077.03	4,080.03	4,077.03	31.20	140.73	135.64	2,778.83	-3,626.28	5,898.32	5,730.95	167.37	35.242	
4,700.00	4,161.27	4,164.27	4,161.27	31.98	143.67	135.97	2,778.83	-3,626.28	5,940.00	5,769.10	170.91	34.756	
4,800.00	4,245.51	4,248.51	4,245.51	32.77	146.61	136.30	2,778.83	-3,626.28	5,981.88	5,807.43	174.44	34.291	
4,900.00	4,329.76	4,332.76	4,329.76	33.56	149.55	136.63	2,778.83	-3,626.28	6,023.94	5,845.96	177.98	33.846	
5,000.00	4,414.00	4,417.00	4,414.00	34.35	152.49	136.96	2,778.83	-3,626.28	6,066.20	5,884.68	181.52	33.420	
5,100.00	4,498.25	4,501.25	4,498.25	35.14	155.43	137.28	2,778.83	-3,626.28	6,108.63	5,923.58	185.05	33.011	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 1(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,585.49	4,582.49	35.93	158.37	137.60	2,778.83	-3,626.28	6,151.25	5,962.67	188.58	32.619		
5,300.00	4,666.73	4,669.73	4,666.73	36.72	161.31	137.91	2,778.83	-3,626.28	6,194.04	6,001.93	192.11	32.242		
5,400.00	4,750.98	4,753.98	4,750.98	37.51	164.25	138.22	2,778.83	-3,626.28	6,237.00	6,041.36	195.64	31.880		
5,500.00	4,835.22	4,838.22	4,835.22	38.30	167.19	138.53	2,778.83	-3,626.28	6,280.13	6,080.96	199.17	31.532		
5,600.00	4,919.47	4,922.47	4,919.47	39.09	170.13	138.83	2,778.83	-3,626.28	6,323.43	6,120.73	202.69	31.197		
5,700.00	5,003.71	5,006.71	5,003.71	39.88	173.07	139.13	2,778.83	-3,626.28	6,366.89	6,160.67	206.22	30.874		
5,800.00	5,088.06	5,108.94	5,088.06	40.67	176.64	139.63	2,778.83	-3,626.28	6,410.37	6,200.00	210.37	30.472		
5,900.00	5,173.83	5,176.83	5,173.83	41.44	179.01	140.50	2,778.83	-3,626.28	6,452.12	6,238.81	213.31	30.248		
6,000.00	5,261.34	5,264.34	5,261.34	42.18	182.06	141.30	2,778.83	-3,626.28	6,491.55	6,274.63	216.92	29.926		
6,100.00	5,350.49	5,353.49	5,350.49	42.88	185.17	142.03	2,778.83	-3,626.28	6,528.57	6,307.99	220.58	29.598		
6,200.00	5,441.16	5,444.16	5,441.16	43.56	188.34	142.69	2,778.83	-3,626.28	6,563.12	6,338.85	224.27	29.264		
6,300.00	5,533.25	5,536.25	5,533.25	44.20	191.55	143.30	2,778.83	-3,626.28	6,595.13	6,367.13	228.00	28.926		
6,400.00	5,626.65	5,629.65	5,626.65	44.82	194.81	143.84	2,778.83	-3,626.28	6,624.55	6,392.79	231.76	28.584		
6,500.00	5,721.23	5,724.23	5,721.23	45.40	198.12	144.33	2,778.83	-3,626.28	6,651.32	6,415.78	235.54	28.238		
6,600.00	5,816.89	5,819.89	5,816.89	45.94	201.45	144.76	2,778.83	-3,626.28	6,675.40	6,436.05	239.35	27.890		
6,700.00	5,913.51	5,916.51	5,913.51	46.45	204.83	145.14	2,778.83	-3,626.28	6,696.73	6,453.57	243.16	27.540		
6,800.00	6,010.97	6,013.97	6,010.97	46.93	208.23	145.46	2,778.83	-3,626.28	6,715.28	6,468.29	246.99	27.189		
6,900.00	6,109.15	6,112.15	6,109.15	47.38	211.66	145.73	2,778.83	-3,626.28	6,731.03	6,480.20	250.82	26.836		
7,000.00	6,207.93	6,210.93	6,207.93	47.80	215.10	145.95	2,778.83	-3,626.28	6,743.93	6,489.27	254.66	26.483		
7,100.00	6,307.19	6,310.19	6,307.19	48.18	218.57	146.12	2,778.83	-3,626.28	6,753.96	6,495.48	258.49	26.129		
7,200.00	6,406.82	6,409.82	6,406.82	48.53	222.05	146.24	2,778.83	-3,626.28	6,761.12	6,498.81	262.31	25.776		
7,300.00	6,506.68	6,509.68	6,506.68	48.84	225.53	146.31	2,778.83	-3,626.28	6,765.38	6,499.26	266.11	25.423		
7,400.00	6,606.66	6,609.66	6,606.66	49.10	229.02	59.34	2,778.83	-3,626.28	6,766.73	6,496.85	269.89	25.073		
7,500.00	6,706.21	6,709.21	6,706.21	49.35	232.50	59.73	2,778.83	-3,626.28	6,762.48	6,488.85	273.62	24.715		
7,600.00	6,803.22	6,806.22	6,803.22	49.59	235.88	60.85	2,778.83	-3,626.28	6,750.38	6,473.15	277.23	24.349		
7,700.00	6,895.32	6,901.68	6,895.32	49.82	239.22	62.70	2,778.83	-3,626.28	6,730.86	6,450.12	280.74	23.975		
7,800.00	6,980.23	6,983.23	6,980.23	50.03	242.06	65.26	2,778.83	-3,626.28	6,704.59	6,420.85	283.74	23.629		
7,900.00	7,055.85	7,058.85	7,055.85	50.21	244.70	68.48	2,778.83	-3,626.28	6,672.44	6,385.92	286.52	23.288		
8,000.00	7,120.34	7,123.34	7,120.34	50.36	246.95	72.28	2,778.83	-3,626.28	6,635.47	6,346.52	288.95	22.964		
8,100.00	7,172.10	7,175.10	7,172.10	50.47	248.76	76.54	2,778.83	-3,626.28	6,594.87	6,303.86	291.01	22.662		
8,200.00	7,209.85	7,212.85	7,209.85	50.55	250.08	81.07	2,778.83	-3,626.28	6,551.90	6,259.18	292.72	22.383		
8,300.00	7,232.68	7,235.68	7,232.68	50.61	250.87	85.67	2,778.83	-3,626.28	6,507.82	6,213.77	294.05	22.131		
8,400.00	7,240.00	7,243.00	7,240.00	50.65	251.13	90.11	2,778.83	-3,626.28	6,463.87	6,168.86	295.02	21.910		
8,500.00	7,239.60	7,242.60	7,239.60	50.69	251.12	90.11	2,778.83	-3,626.28	6,421.02	6,125.15	295.87	21.702		
8,600.00	7,239.19	7,242.19	7,239.19	50.75	251.10	90.10	2,778.83	-3,626.28	6,379.44	6,082.57	296.87	21.489		
8,700.00	7,238.78	7,241.78	7,238.78	50.85	251.09	90.10	2,778.83	-3,626.28	6,339.16	6,041.15	298.01	21.271		
8,800.00	7,238.38	7,241.38	7,238.38	51.02	251.07	90.10	2,778.83	-3,626.28	6,300.22	6,000.93	299.29	21.050		
8,900.00	7,237.97	7,240.97	7,237.97	51.32	251.06	90.09	2,778.83	-3,626.28	6,262.63	5,961.92	300.71	20.826		
9,000.00	7,237.57	7,240.57	7,237.57	51.95	251.04	90.09	2,778.83	-3,626.28	6,226.42	5,924.18	302.25	20.600		
9,100.00	7,237.16	7,240.16	7,237.16	53.10	251.03	90.08	2,778.83	-3,626.28	6,191.62	5,887.71	303.90	20.374		
9,200.00	7,236.76	7,239.76	7,236.76	54.69	251.02	90.08	2,778.83	-3,626.28	6,158.24	5,852.57	305.67	20.147		
9,300.00	7,236.35	7,239.35	7,236.35	56.53	251.00	90.08	2,778.83	-3,626.28	6,126.31	5,818.78	307.53	19.921		
9,400.00	7,235.94	7,238.94	7,235.94	58.53	250.99	90.07	2,778.83	-3,626.28	6,095.86	5,786.37	309.49	19.696		
9,500.00	7,235.54	7,238.54	7,235.54	60.62	250.97	90.07	2,778.83	-3,626.28	6,066.90	5,755.36	311.54	19.474		
9,600.00	7,235.13	7,238.13	7,235.13	62.80	250.96	90.06	2,778.83	-3,626.28	6,039.46	5,725.80	313.66	19.255		
9,700.00	7,234.73	7,237.73	7,234.73	65.03	250.95	90.06	2,778.83	-3,626.28	6,013.55	5,697.70	315.85	19.039		
9,800.00	7,234.32	7,237.32	7,234.32	67.32	250.93	90.06	2,778.83	-3,626.28	5,989.21	5,671.10	318.11	18.828		
9,900.00	7,233.92	7,236.92	7,233.92	69.66	250.92	90.05	2,778.83	-3,626.28	5,966.44	5,646.01	320.42	18.621		
10,000.00	7,233.51	7,236.51	7,233.51	72.03	250.90	90.05	2,778.83	-3,626.28	5,945.26	5,622.47	322.79	18.418		
10,100.00	7,233.10	7,236.10	7,233.10	74.45	250.89	90.04	2,778.83	-3,626.28	5,925.70	5,600.50	325.20	18.222		
10,200.00	7,232.70	7,235.70	7,232.70	76.89	250.87	90.04	2,778.83	-3,626.28	5,907.77	5,580.12	327.65	18.031		
10,300.00	7,232.29	7,235.29	7,232.29	79.36	250.86	90.04	2,778.83	-3,626.28	5,891.48	5,561.35	330.13	17.846		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 1(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	7,234.89	7,231.89	81.86	250.85	90.03	2,778.83	-3,626.28	5,876.84	5,544.20	332.64	17.667		
10,500.00	7,231.48	7,234.48	7,231.48	84.38	250.83	90.03	2,778.83	-3,626.28	5,863.88	5,528.70	335.17	17.495		
10,600.00	7,231.08	7,234.08	7,231.08	86.93	250.82	90.02	2,778.83	-3,626.28	5,852.59	5,514.87	337.72	17.329		
10,700.00	7,230.67	7,233.67	7,230.67	89.49	250.80	90.02	2,778.83	-3,626.28	5,842.99	5,502.71	340.29	17.171		
10,800.00	7,230.26	7,233.26	7,230.26	92.07	250.79	90.02	2,778.83	-3,626.28	5,835.10	5,492.24	342.86	17.019		
10,900.00	7,229.86	7,232.86	7,229.86	94.67	250.78	90.01	2,778.83	-3,626.28	5,828.90	5,483.47	345.44	16.874		
11,000.00	7,229.45	7,232.45	7,229.45	97.28	250.76	90.01	2,778.83	-3,626.28	5,824.42	5,476.41	348.01	16.736		
11,100.00	7,229.05	7,232.05	7,229.05	99.90	250.75	90.00	2,778.83	-3,626.28	5,821.66	5,471.07	350.58	16.606		
11,200.00	7,228.64	7,231.64	7,228.64	102.54	250.73	90.00	2,778.83	-3,626.28	5,820.61	5,467.46	353.15	16.482		
11,211.13	7,228.60	7,231.60	7,228.60	102.84	250.73	90.00	2,778.83	-3,626.28	5,820.60	5,467.16	353.43	16.469		
11,300.00	7,228.24	7,231.24	7,228.24	105.19	250.72	90.00	2,778.83	-3,626.28	5,821.27	5,465.57	355.70	16.366		
11,400.00	7,227.83	7,230.83	7,227.83	107.85	250.70	89.99	2,778.83	-3,626.28	5,823.66	5,465.42	358.23	16.257		
11,500.00	7,227.42	7,230.42	7,227.42	110.52	250.69	89.99	2,778.83	-3,626.28	5,827.76	5,467.01	360.75	16.154		
11,600.00	7,227.02	7,230.02	7,227.02	113.20	250.68	89.98	2,778.83	-3,626.28	5,833.57	5,470.32	363.25	16.059		
11,700.00	7,226.61	7,229.61	7,226.61	115.89	250.66	89.98	2,778.83	-3,626.28	5,841.09	5,475.37	365.72	15.972		
11,800.00	7,226.21	7,229.21	7,226.21	118.59	250.65	89.98	2,778.83	-3,626.28	5,850.31	5,482.15	368.16	15.891		
11,900.00	7,225.80	7,228.80	7,225.80	121.29	250.63	89.97	2,778.83	-3,626.28	5,861.22	5,490.64	370.57	15.817		
12,000.00	7,225.40	7,228.40	7,225.40	124.00	250.62	89.97	2,778.83	-3,626.28	5,873.81	5,500.86	372.95	15.750		
12,100.00	7,224.99	7,227.99	7,224.99	126.72	250.61	89.96	2,778.83	-3,626.28	5,888.07	5,512.78	375.29	15.689		
12,200.00	7,224.58	7,227.58	7,224.58	129.44	250.59	89.96	2,778.83	-3,626.28	5,904.00	5,526.40	377.60	15.636		
12,300.00	7,224.18	7,227.18	7,224.18	132.17	250.58	89.96	2,778.83	-3,626.28	5,921.57	5,541.70	379.87	15.588		
12,400.00	7,223.77	7,226.77	7,223.77	134.91	250.56	89.95	2,778.83	-3,626.28	5,940.77	5,558.67	382.09	15.548		
12,500.00	7,223.37	7,226.37	7,223.37	137.65	250.55	89.95	2,778.83	-3,626.28	5,961.58	5,577.31	384.28	15.514		
12,600.00	7,222.96	7,225.96	7,222.96	140.39	250.53	89.94	2,778.83	-3,626.28	5,984.00	5,597.58	386.42	15.486		
12,700.00	7,222.55	7,225.55	7,222.55	143.14	250.52	89.94	2,778.83	-3,626.28	6,008.00	5,619.48	388.51	15.464		
12,800.00	7,222.15	7,225.15	7,222.15	145.89	250.51	89.94	2,778.83	-3,626.28	6,033.56	5,643.00	390.56	15.448		
12,900.00	7,221.74	7,224.74	7,221.74	148.65	250.49	89.93	2,778.83	-3,626.28	6,060.66	5,668.10	392.56	15.439		
13,000.00	7,221.34	7,224.34	7,221.34	151.41	250.48	89.93	2,778.83	-3,626.28	6,089.28	5,694.77	394.51	15.435 SF		
13,100.00	7,220.93	7,223.93	7,220.93	154.18	250.46	89.92	2,778.83	-3,626.28	6,119.40	5,722.99	396.42	15.437		
13,200.00	7,220.53	7,223.53	7,220.53	156.94	250.45	89.92	2,778.83	-3,626.28	6,151.00	5,752.73	398.27	15.444		
13,300.00	7,220.12	7,223.12	7,220.12	159.72	250.44	89.92	2,778.83	-3,626.28	6,184.06	5,783.98	400.08	15.457		
13,400.00	7,219.71	7,222.71	7,219.71	162.49	250.42	89.91	2,778.83	-3,626.28	6,218.55	5,816.72	401.84	15.475		
13,500.00	7,219.31	7,222.31	7,219.31	165.27	250.41	89.91	2,778.83	-3,626.28	6,254.45	5,850.91	403.54	15.499		
13,600.00	7,218.90	7,221.90	7,218.90	168.05	250.39	89.90	2,778.83	-3,626.28	6,291.73	5,886.53	405.20	15.527		
13,700.00	7,218.50	7,221.50	7,218.50	170.83	250.38	89.90	2,778.83	-3,626.28	6,330.38	5,923.57	406.81	15.561		
13,800.00	7,218.09	7,221.09	7,218.09	173.61	250.36	89.90	2,778.83	-3,626.28	6,370.36	5,961.99	408.37	15.599		
13,900.00	7,217.69	7,220.69	7,217.69	176.40	250.35	89.89	2,778.83	-3,626.28	6,411.65	6,001.76	409.88	15.643		
14,000.00	7,217.28	7,220.28	7,217.28	179.19	250.34	89.89	2,778.83	-3,626.28	6,454.22	6,042.88	411.35	15.690		
14,100.00	7,216.87	7,219.87	7,216.87	181.98	250.32	89.88	2,778.83	-3,626.28	6,498.06	6,085.29	412.76	15.743		
14,200.00	7,216.47	7,219.47	7,216.47	184.78	250.31	89.88	2,778.83	-3,626.28	6,543.13	6,129.00	414.13	15.800		
14,300.00	7,216.06	7,219.06	7,216.06	187.57	250.29	89.88	2,778.83	-3,626.28	6,589.41	6,173.95	415.46	15.861		
14,400.00	7,215.66	7,218.66	7,215.66	190.37	250.28	89.87	2,778.83	-3,626.28	6,636.87	6,220.14	416.73	15.926		
14,500.00	7,215.25	7,218.25	7,215.25	193.17	250.27	89.87	2,778.83	-3,626.28	6,685.49	6,267.52	417.97	15.995		
14,600.00	7,214.85	7,217.85	7,214.85	195.97	250.25	89.86	2,778.83	-3,626.28	6,735.25	6,316.09	419.16	16.069		
14,700.00	7,214.44	7,217.44	7,214.44	198.77	250.24	89.86	2,778.83	-3,626.28	6,786.11	6,365.81	420.30	16.146		
14,800.00	7,214.03	7,217.03	7,214.03	201.58	250.22	89.86	2,778.83	-3,626.28	6,838.06	6,416.65	421.41	16.227		
14,900.00	7,213.63	7,216.63	7,213.63	204.38	250.21	89.85	2,778.83	-3,626.28	6,891.07	6,468.60	422.47	16.311		
15,000.00	7,213.22	7,216.22	7,213.22	207.19	250.19	89.85	2,778.83	-3,626.28	6,945.11	6,521.62	423.50	16.399		
15,100.00	7,212.82	7,215.82	7,212.82	210.00	250.18	89.84	2,778.83	-3,626.28	7,000.17	6,575.69	424.48	16.491		
15,200.00	7,212.41	7,215.41	7,212.41	212.81	250.17	89.84	2,778.83	-3,626.28	7,056.21	6,630.78	425.43	16.586		
15,300.00	7,212.01	7,215.01	7,212.01	215.62	250.15	89.84	2,778.83	-3,626.28	7,113.22	6,686.88	426.34	16.684		
15,400.00	7,211.60	7,214.60	7,211.60	218.43	250.14	89.83	2,778.83	-3,626.28	7,171.17	6,743.95	427.22	16.786		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 1(TA_150CC) - OH - OH		Offset Site Error:		0.00 ft	
Survey Program: 100-2" Cone@2.448 Sigma														Offset Well Error:		3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)						
15,500.00	7,211.19	7,214.19	7,211.19	221.25	250.12	89.83	2,778.83	-3,626.28	7,230.04	6,801.98	428.06	16.890					
15,600.00	7,210.79	7,213.79	7,210.79	224.06	250.11	89.82	2,778.83	-3,626.28	7,289.80	6,860.94	428.86	16.998					
15,700.00	7,210.38	7,213.38	7,210.38	226.88	250.10	89.82	2,778.83	-3,626.28	7,350.44	6,920.80	429.64	17.108					
15,794.94	7,210.00	7,213.00	7,210.00	229.55	250.08	89.82	2,778.83	-3,626.28	7,408.80	6,978.46	430.34	17.216					



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 34-9(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	37.00	3.28	3.28	-60.40	2,749.89	-4,841.63	5,568.19					
100.00	100.00	63.00	100.00	3.28	3.46	-60.40	2,749.89	-4,841.63	5,568.06	5,561.32	6.74	825.613		
200.00	200.00	163.00	200.00	3.34	5.13	-60.40	2,749.89	-4,841.63	5,568.06	5,559.60	8.47	657.593 CC		
300.00	299.98	262.98	299.98	3.44	8.13	116.95	2,749.89	-4,841.63	5,568.85	5,557.29	11.57	481.488		
400.00	399.84	362.84	399.84	3.59	11.40	116.95	2,749.89	-4,841.63	5,571.23	5,556.24	14.99	371.608		
500.00	499.45	462.45	499.45	3.79	14.77	116.96	2,749.89	-4,841.63	5,575.19	5,556.64	18.56	300.468		
600.00	598.70	561.70	598.70	4.03	18.16	116.98	2,749.89	-4,841.63	5,580.75	5,558.56	22.19	251.471		
700.00	697.47	660.47	697.47	4.31	21.56	116.99	2,749.89	-4,841.63	5,587.92	5,562.05	25.88	215.949		
800.00	795.62	758.62	795.62	4.64	24.95	117.00	2,749.89	-4,841.63	5,596.71	5,567.12	29.59	189.147		
900.00	893.06	856.06	893.06	5.00	28.33	117.02	2,749.89	-4,841.63	5,607.14	5,573.82	33.32	168.280		
1,000.00	989.64	952.64	989.64	5.40	31.68	117.03	2,749.89	-4,841.63	5,619.23	5,582.17	37.06	151.623		
1,100.00	1,085.27	1,048.27	1,085.27	5.83	35.00	117.04	2,749.89	-4,841.63	5,632.99	5,592.19	40.80	138.055		
1,200.00	1,179.82	1,142.82	1,179.82	6.29	38.29	117.04	2,749.89	-4,841.63	5,648.46	5,603.92	44.54	126.818		
1,300.00	1,273.17	1,236.17	1,273.17	6.79	41.54	117.04	2,749.89	-4,841.63	5,665.65	5,617.38	48.27	117.381		
1,400.00	1,365.21	1,328.21	1,365.21	7.33	44.74	117.02	2,749.89	-4,841.63	5,684.59	5,632.61	51.98	109.364		
1,500.00	1,455.84	1,418.84	1,455.84	7.89	47.90	117.00	2,749.89	-4,841.63	5,705.31	5,649.64	55.67	102.485		
1,600.00	1,544.94	1,507.94	1,544.94	8.50	51.00	116.95	2,749.89	-4,841.63	5,727.83	5,668.50	59.33	96.534		
1,700.00	1,632.39	1,604.61	1,632.39	9.13	54.37	116.90	2,749.89	-4,841.63	5,752.18	5,688.89	63.29	90.885		
1,800.00	1,718.11	1,681.11	1,718.11	9.80	57.04	116.82	2,749.89	-4,841.63	5,778.38	5,711.81	66.57	86.803		
1,900.00	1,802.44	1,765.44	1,802.44	10.49	59.98	117.08	2,749.89	-4,841.63	5,806.08	5,735.94	70.14	82.780		
2,000.00	1,886.68	1,849.68	1,886.68	11.20	62.91	117.49	2,749.89	-4,841.63	5,834.21	5,760.50	73.72	79.145		
2,100.00	1,970.92	1,933.92	1,970.92	11.93	65.85	117.90	2,749.89	-4,841.63	5,862.71	5,785.41	77.30	75.843		
2,200.00	2,055.17	2,018.17	2,055.17	12.66	68.79	118.31	2,749.89	-4,841.63	5,891.56	5,810.67	80.89	72.833		
2,300.00	2,139.41	2,102.41	2,139.41	13.40	71.72	118.72	2,749.89	-4,841.63	5,920.76	5,836.27	84.49	70.079		
2,400.00	2,223.66	2,186.66	2,223.66	14.14	74.66	119.12	2,749.89	-4,841.63	5,950.31	5,862.22	88.09	67.552		
2,500.00	2,307.90	2,270.90	2,307.90	14.89	77.60	119.52	2,749.89	-4,841.63	5,980.19	5,888.50	91.69	65.225		
2,600.00	2,392.14	2,355.14	2,392.14	15.65	80.54	119.91	2,749.89	-4,841.63	6,010.41	5,915.12	95.29	63.076		
2,700.00	2,476.39	2,439.39	2,476.39	16.41	83.48	120.30	2,749.89	-4,841.63	6,040.96	5,942.06	98.89	61.086		
2,800.00	2,560.63	2,523.63	2,560.63	17.17	86.42	120.69	2,749.89	-4,841.63	6,071.83	5,969.33	102.50	59.239		
2,900.00	2,644.88	2,607.88	2,644.88	17.93	89.36	121.08	2,749.89	-4,841.63	6,103.02	5,996.92	106.10	57.521		
3,000.00	2,729.12	2,707.88	2,729.12	18.70	92.84	121.46	2,749.89	-4,841.63	6,134.53	6,024.27	110.25	55.640		
3,100.00	2,813.36	2,776.36	2,813.36	19.47	95.23	121.84	2,749.89	-4,841.63	6,166.34	6,053.04	113.31	54.421		
3,200.00	2,897.61	2,860.61	2,897.61	20.25	98.17	122.22	2,749.89	-4,841.63	6,198.46	6,081.55	116.91	53.019		
3,300.00	2,981.85	2,944.85	2,981.85	21.02	101.11	122.59	2,749.89	-4,841.63	6,230.89	6,110.38	120.51	51.704		
3,400.00	3,066.10	3,029.10	3,066.10	21.80	104.05	122.96	2,749.89	-4,841.63	6,263.60	6,139.49	124.11	50.467		
3,500.00	3,150.34	3,113.34	3,150.34	22.58	106.99	123.33	2,749.89	-4,841.63	6,296.61	6,168.90	127.71	49.304		
3,600.00	3,234.58	3,202.42	3,234.58	23.35	110.10	123.69	2,749.89	-4,841.63	6,329.91	6,198.43	131.48	48.145		
3,700.00	3,318.83	3,281.83	3,318.83	24.13	112.87	124.05	2,749.89	-4,841.63	6,363.48	6,228.58	134.90	47.171		
3,800.00	3,403.07	3,366.07	3,403.07	24.92	115.81	124.41	2,749.89	-4,841.63	6,397.34	6,258.84	138.50	46.191		
3,900.00	3,487.32	3,450.32	3,487.32	25.70	118.75	124.77	2,749.89	-4,841.63	6,431.47	6,289.38	142.09	45.263		
4,000.00	3,571.56	3,534.56	3,571.56	26.48	121.69	125.12	2,749.89	-4,841.63	6,465.86	6,320.18	145.68	44.384		
4,100.00	3,655.80	3,618.80	3,655.80	27.27	124.63	125.47	2,749.89	-4,841.63	6,500.52	6,351.25	149.27	43.549		
4,200.00	3,740.05	3,703.05	3,740.05	28.05	127.57	125.81	2,749.89	-4,841.63	6,535.45	6,382.59	152.86	42.756		
4,300.00	3,824.29	3,787.29	3,824.29	28.84	130.51	126.16	2,749.89	-4,841.63	6,570.62	6,414.18	156.44	42.001		
4,400.00	3,908.54	3,871.54	3,908.54	29.62	133.45	126.50	2,749.89	-4,841.63	6,606.05	6,446.03	160.02	41.282		
4,500.00	3,992.78	3,955.78	3,992.78	30.41	136.39	126.83	2,749.89	-4,841.63	6,641.73	6,478.12	163.61	40.596		
4,600.00	4,077.03	4,040.03	4,077.03	31.20	139.33	127.17	2,749.89	-4,841.63	6,677.65	6,510.47	167.18	39.942		
4,700.00	4,161.27	4,124.27	4,161.27	31.98	142.27	127.50	2,749.89	-4,841.63	6,713.81	6,543.05	170.76	39.317		
4,800.00	4,245.51	4,208.51	4,245.51	32.77	145.21	127.83	2,749.89	-4,841.63	6,750.21	6,575.88	174.34	38.719		
4,900.00	4,329.76	4,307.24	4,329.76	33.56	148.66	128.15	2,749.89	-4,841.63	6,786.84	6,608.43	178.42	38.040		
5,000.00	4,414.00	4,377.00	4,414.00	34.35	151.09	128.48	2,749.89	-4,841.63	6,823.70	6,642.22	181.48	37.600		
5,100.00	4,498.25	4,461.25	4,498.25	35.14	154.03	128.80	2,749.89	-4,841.63	6,860.79	6,675.74	185.05	37.075		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 34-9(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,545.49	4,582.49	35.93	156.97	129.11	2,749.89	-4,841.63	6,898.09	6,709.48	188.62	36.572		
5,300.00	4,666.73	4,629.73	4,666.73	36.72	159.91	129.43	2,749.89	-4,841.63	6,935.62	6,743.43	192.18	36.089		
5,400.00	4,750.98	4,713.98	4,750.98	37.51	162.85	129.74	2,749.89	-4,841.63	6,973.36	6,777.61	195.75	35.624		
5,500.00	4,835.22	4,801.78	4,835.22	38.30	165.92	130.05	2,749.89	-4,841.63	7,011.31	6,811.87	199.43	35.156		
5,600.00	4,919.47	4,882.47	4,919.47	39.09	168.73	130.35	2,749.89	-4,841.63	7,049.46	6,846.59	202.87	34.749		
5,700.00	5,003.71	4,966.71	5,003.71	39.88	171.67	130.66	2,749.89	-4,841.63	7,087.82	6,881.40	206.43	34.336		
5,800.00	5,088.06	5,051.06	5,088.06	40.67	174.62	131.16	2,749.89	-4,841.63	7,126.27	6,916.28	209.99	33.937		
5,900.00	5,173.83	5,136.83	5,173.83	41.44	177.61	132.04	2,749.89	-4,841.63	7,163.24	6,949.66	213.58	33.539		
6,000.00	5,261.34	5,224.34	5,261.34	42.18	180.67	132.86	2,749.89	-4,841.63	7,198.20	6,980.98	217.22	33.138		
6,100.00	5,350.49	5,313.49	5,350.49	42.88	183.78	133.61	2,749.89	-4,841.63	7,231.07	7,010.18	220.90	32.735		
6,200.00	5,441.16	5,404.16	5,441.16	43.56	186.94	134.31	2,749.89	-4,841.63	7,261.79	7,037.18	224.61	32.330		
6,300.00	5,533.25	5,503.75	5,533.25	44.20	190.42	134.94	2,749.89	-4,841.63	7,290.28	7,061.66	228.62	31.888		
6,400.00	5,626.65	5,589.65	5,626.65	44.82	193.42	135.51	2,749.89	-4,841.63	7,316.49	7,084.36	232.13	31.519		
6,500.00	5,721.23	5,684.23	5,721.23	45.40	196.72	136.03	2,749.89	-4,841.63	7,340.36	7,104.44	235.92	31.114		
6,600.00	5,816.89	5,779.89	5,816.89	45.94	200.06	136.49	2,749.89	-4,841.63	7,361.85	7,122.11	239.73	30.709		
6,700.00	5,913.51	5,876.51	5,913.51	46.45	203.43	136.89	2,749.89	-4,841.63	7,380.90	7,137.34	243.55	30.305		
6,800.00	6,010.97	5,973.97	6,010.97	46.93	206.83	137.23	2,749.89	-4,841.63	7,397.48	7,150.09	247.38	29.903		
6,900.00	6,109.15	6,072.15	6,109.15	47.38	210.26	137.53	2,749.89	-4,841.63	7,411.55	7,160.34	251.22	29.502		
7,000.00	6,207.93	6,170.93	6,207.93	47.80	213.71	137.76	2,749.89	-4,841.63	7,423.09	7,168.04	255.05	29.104		
7,100.00	6,307.19	6,270.19	6,307.19	48.18	217.17	137.95	2,749.89	-4,841.63	7,432.08	7,173.20	258.88	28.709		
7,200.00	6,406.82	6,369.82	6,406.82	48.53	220.65	138.08	2,749.89	-4,841.63	7,438.48	7,175.78	262.70	28.316		
7,300.00	6,506.68	6,469.68	6,506.68	48.84	224.14	138.15	2,749.89	-4,841.63	7,442.29	7,175.79	266.50	27.926		
7,400.00	6,606.66	6,569.66	6,606.66	49.10	227.63	138.18	2,749.89	-4,841.63	7,443.51	7,173.24	270.27	27.541		
7,500.00	6,706.21	6,669.21	6,706.21	49.35	231.10	138.15	2,749.89	-4,841.63	7,438.27	7,164.27	274.00	27.147		
7,600.00	6,803.22	6,766.22	6,803.22	49.59	234.49	138.08	2,749.89	-4,841.63	7,423.38	7,145.77	277.61	26.741		
7,700.00	6,895.32	6,858.32	6,895.32	49.82	237.70	137.95	2,749.89	-4,841.63	7,399.28	7,118.28	281.00	26.332		
7,800.00	6,980.23	6,943.23	6,980.23	50.03	240.67	137.76	2,749.89	-4,841.63	7,366.71	7,082.59	284.11	25.929		
7,900.00	7,055.85	7,018.85	7,055.85	50.21	243.31	137.53	2,749.89	-4,841.63	7,326.64	7,039.75	286.89	25.538		
8,000.00	7,120.34	7,083.34	7,120.34	50.36	245.56	137.23	2,749.89	-4,841.63	7,280.26	6,990.97	289.29	25.166		
8,100.00	7,172.10	7,135.10	7,172.10	50.47	247.36	136.89	2,749.89	-4,841.63	7,228.92	6,937.61	291.32	24.815		
8,200.00	7,209.85	7,172.85	7,209.85	50.55	248.68	136.49	2,749.89	-4,841.63	7,174.09	6,881.13	292.96	24.489		
8,300.00	7,232.68	7,204.32	7,232.68	50.61	249.78	136.03	2,749.89	-4,841.63	7,117.27	6,822.76	294.51	24.167		
8,400.00	7,240.00	7,203.00	7,240.00	50.65	249.73	135.51	2,749.89	-4,841.63	7,059.97	6,764.92	295.06	23.927		
8,500.00	7,239.60	7,202.60	7,239.60	50.69	249.72	134.94	2,749.89	-4,841.63	7,003.42	6,707.64	295.78	23.678		
8,600.00	7,239.19	7,202.19	7,239.19	50.75	249.71	134.31	2,749.89	-4,841.63	6,947.85	6,651.22	296.62	23.423		
8,700.00	7,238.78	7,201.78	7,238.78	50.85	249.69	133.61	2,749.89	-4,841.63	6,893.28	6,595.68	297.60	23.163		
8,800.00	7,238.38	7,201.38	7,238.38	51.02	249.68	132.86	2,749.89	-4,841.63	6,839.73	6,541.04	298.70	22.899		
8,900.00	7,237.97	7,200.97	7,237.97	51.32	249.66	132.04	2,749.89	-4,841.63	6,787.24	6,487.32	299.92	22.630		
9,000.00	7,237.57	7,200.57	7,237.57	51.95	249.65	131.16	2,749.89	-4,841.63	6,735.82	6,434.57	301.26	22.359		
9,100.00	7,237.16	7,200.16	7,237.16	53.10	249.63	130.35	2,749.89	-4,841.63	6,685.51	6,382.80	302.71	22.086		
9,200.00	7,236.76	7,200.24	7,236.76	54.69	249.64	130.05	2,749.89	-4,841.63	6,636.32	6,332.03	304.29	21.809		
9,300.00	7,236.35	7,200.65	7,236.35	56.53	249.65	129.74	2,749.89	-4,841.63	6,588.27	6,282.29	305.98	21.532		
9,400.00	7,235.94	7,201.06	7,235.94	58.53	249.67	129.43	2,749.89	-4,841.63	6,541.41	6,233.63	307.78	21.254		
9,500.00	7,235.54	7,201.46	7,235.54	60.62	249.68	129.05	2,749.89	-4,841.63	6,495.75	6,186.08	309.67	20.977		
9,600.00	7,235.13	7,201.87	7,235.13	62.80	249.69	128.66	2,749.89	-4,841.63	6,451.31	6,139.67	311.64	20.701		
9,700.00	7,234.73	7,202.27	7,234.73	65.03	249.71	128.27	2,749.89	-4,841.63	6,408.13	6,094.42	313.71	20.427		
9,800.00	7,234.32	7,202.68	7,234.32	67.32	249.72	127.88	2,749.89	-4,841.63	6,366.22	6,050.37	315.85	20.156		
9,900.00	7,233.92	7,203.08	7,233.92	69.66	249.74	127.49	2,749.89	-4,841.63	6,325.62	6,007.55	318.07	19.888		
10,000.00	7,233.51	7,203.49	7,233.51	72.03	249.75	127.10	2,749.89	-4,841.63	6,286.34	5,965.99	320.36	19.623		
10,100.00	7,233.10	7,203.90	7,233.10	74.45	249.76	126.71	2,749.89	-4,841.63	6,248.42	5,925.72	322.71	19.362		
10,200.00	7,232.70	7,204.30	7,232.70	76.89	249.78	126.32	2,749.89	-4,841.63	6,211.88	5,886.76	325.12	19.106		
10,300.00	7,232.29	7,204.71	7,232.29	79.36	249.79	125.93	2,749.89	-4,841.63	6,176.74	5,849.15	327.59	18.855		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 34-9(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	7,205.11	7,231.89	81.86	249.81	90.08	2,749.89	-4,841.63	6,143.03	5,812.92	330.11	18.609		
10,500.00	7,231.48	7,205.52	7,231.48	84.38	249.82	90.08	2,749.89	-4,841.63	6,110.77	5,778.09	332.68	18.368		
10,600.00	7,231.08	7,205.92	7,231.08	86.93	249.84	90.07	2,749.89	-4,841.63	6,079.98	5,744.69	335.29	18.134		
10,700.00	7,230.67	7,206.33	7,230.67	89.49	249.85	90.07	2,749.89	-4,841.63	6,050.69	5,712.75	337.94	17.905		
10,800.00	7,230.26	7,206.74	7,230.26	92.07	249.86	90.07	2,749.89	-4,841.63	6,022.92	5,682.30	340.62	17.682		
10,900.00	7,229.86	7,207.14	7,229.86	94.67	249.88	90.06	2,749.89	-4,841.63	5,996.68	5,653.35	343.33	17.466		
11,000.00	7,229.45	7,207.55	7,229.45	97.28	249.89	90.06	2,749.89	-4,841.63	5,972.01	5,625.94	346.07	17.257		
11,100.00	7,229.05	7,207.95	7,229.05	99.90	249.91	90.05	2,749.89	-4,841.63	5,948.91	5,600.08	348.83	17.054		
11,200.00	7,228.64	7,208.36	7,228.64	102.54	249.92	90.05	2,749.89	-4,841.63	5,927.41	5,575.81	351.61	16.858		
11,300.00	7,228.24	7,208.76	7,228.24	105.19	249.93	90.05	2,749.89	-4,841.63	5,907.53	5,553.13	354.40	16.669		
11,400.00	7,227.83	7,209.17	7,227.83	107.85	249.95	90.04	2,749.89	-4,841.63	5,889.28	5,532.08	357.20	16.487		
11,500.00	7,227.42	7,209.58	7,227.42	110.52	249.96	90.04	2,749.89	-4,841.63	5,872.67	5,512.66	360.01	16.313		
11,600.00	7,227.02	7,209.98	7,227.02	113.20	249.98	90.03	2,749.89	-4,841.63	5,857.72	5,494.91	362.82	16.145		
11,700.00	7,226.61	7,189.61	7,226.61	115.89	249.27	90.03	2,749.89	-4,841.63	5,844.45	5,479.55	364.90	16.017		
11,800.00	7,226.21	7,189.21	7,226.21	118.59	249.25	90.03	2,749.89	-4,841.63	5,832.86	5,465.19	367.67	15.864		
11,900.00	7,225.80	7,188.80	7,225.80	121.29	249.24	90.02	2,749.89	-4,841.63	5,822.97	5,452.53	370.43	15.719		
12,000.00	7,225.40	7,188.40	7,225.40	124.00	249.22	90.02	2,749.89	-4,841.63	5,814.78	5,441.59	373.19	15.581		
12,100.00	7,224.99	7,187.99	7,224.99	126.72	249.21	90.01	2,749.89	-4,841.63	5,808.30	5,432.37	375.92	15.451		
12,200.00	7,224.58	7,187.58	7,224.58	129.44	249.20	90.01	2,749.89	-4,841.63	5,803.53	5,424.89	378.64	15.327		
12,300.00	7,224.18	7,187.18	7,224.18	132.17	249.18	90.01	2,749.89	-4,841.63	5,800.49	5,419.16	381.33	15.211		
12,400.00	7,223.77	7,186.77	7,223.77	134.91	249.17	90.00	2,749.89	-4,841.63	5,799.17	5,415.17	384.00	15.102		
12,426.65	7,223.66	7,186.66	7,223.66	135.64	249.16	90.00	2,749.89	-4,841.63	5,799.10	5,414.40	384.70	15.074		
12,500.00	7,223.37	7,186.37	7,223.37	137.65	249.15	90.00	2,749.89	-4,841.63	5,799.57	5,412.93	386.63	15.000		
12,600.00	7,222.96	7,185.96	7,222.96	140.39	249.14	89.99	2,749.89	-4,841.63	5,801.69	5,412.45	389.24	14.905 ES		
12,700.00	7,222.55	7,185.55	7,222.55	143.14	249.12	89.99	2,749.89	-4,841.63	5,805.54	5,413.73	391.81	14.817		
12,800.00	7,222.15	7,185.15	7,222.15	145.89	249.11	89.99	2,749.89	-4,841.63	5,811.11	5,416.77	394.34	14.736		
12,900.00	7,221.74	7,184.74	7,221.74	148.65	249.10	89.98	2,749.89	-4,841.63	5,818.39	5,421.55	396.84	14.662		
13,000.00	7,221.34	7,184.34	7,221.34	151.41	249.08	89.98	2,749.89	-4,841.63	5,827.38	5,428.09	399.29	14.594		
13,100.00	7,220.93	7,183.93	7,220.93	154.18	249.07	89.97	2,749.89	-4,841.63	5,838.07	5,436.37	401.69	14.534		
13,200.00	7,220.53	7,183.53	7,220.53	156.94	249.05	89.97	2,749.89	-4,841.63	5,850.44	5,446.39	404.05	14.479		
13,300.00	7,220.12	7,183.12	7,220.12	159.72	249.04	89.96	2,749.89	-4,841.63	5,864.50	5,458.13	406.37	14.432		
13,400.00	7,219.71	7,182.71	7,219.71	162.49	249.03	89.96	2,749.89	-4,841.63	5,880.22	5,471.59	408.63	14.390		
13,500.00	7,219.31	7,182.31	7,219.31	165.27	249.01	89.96	2,749.89	-4,841.63	5,897.60	5,486.76	410.84	14.355		
13,600.00	7,218.90	7,181.90	7,218.90	168.05	249.00	89.95	2,749.89	-4,841.63	5,916.62	5,503.62	413.00	14.326		
13,700.00	7,218.50	7,181.50	7,218.50	170.83	248.98	89.95	2,749.89	-4,841.63	5,937.26	5,522.16	415.10	14.303		
13,800.00	7,218.09	7,181.09	7,218.09	173.61	248.97	89.94	2,749.89	-4,841.63	5,959.50	5,542.35	417.15	14.286		
13,900.00	7,217.69	7,180.69	7,217.69	176.40	248.95	89.94	2,749.89	-4,841.63	5,983.34	5,564.20	419.14	14.275		
14,000.00	7,217.28	7,180.28	7,217.28	179.19	248.94	89.94	2,749.89	-4,841.63	6,008.74	5,587.66	421.08	14.270 SF		
14,100.00	7,216.87	7,179.87	7,216.87	181.98	248.93	89.93	2,749.89	-4,841.63	6,035.70	5,612.74	422.96	14.270		
14,200.00	7,216.47	7,179.47	7,216.47	184.78	248.91	89.93	2,749.89	-4,841.63	6,064.18	5,639.40	424.79	14.276		
14,300.00	7,216.06	7,179.06	7,216.06	187.57	248.90	89.92	2,749.89	-4,841.63	6,094.18	5,667.62	426.55	14.287		
14,400.00	7,215.66	7,178.66	7,215.66	190.37	248.88	89.92	2,749.89	-4,841.63	6,125.66	5,697.39	428.26	14.303		
14,500.00	7,215.25	7,178.25	7,215.25	193.17	248.87	89.92	2,749.89	-4,841.63	6,158.60	5,728.68	429.92	14.325		
14,600.00	7,214.85	7,177.85	7,214.85	195.97	248.86	89.91	2,749.89	-4,841.63	6,192.98	5,761.46	431.52	14.352		
14,700.00	7,214.44	7,177.44	7,214.44	198.77	248.84	89.91	2,749.89	-4,841.63	6,228.78	5,795.72	433.06	14.383		
14,800.00	7,214.03	7,177.03	7,214.03	201.58	248.83	89.90	2,749.89	-4,841.63	6,265.97	5,831.42	434.54	14.420		
14,900.00	7,213.63	7,176.63	7,213.63	204.38	248.81	89.90	2,749.89	-4,841.63	6,304.52	5,868.55	435.97	14.461		
15,000.00	7,213.22	7,176.22	7,213.22	207.19	248.80	89.90	2,749.89	-4,841.63	6,344.42	5,907.07	437.35	14.507		
15,100.00	7,212.82	7,175.82	7,212.82	210.00	248.78	89.89	2,749.89	-4,841.63	6,385.63	5,946.96	438.67	14.557		
15,200.00	7,212.41	7,175.41	7,212.41	212.81	248.77	89.89	2,749.89	-4,841.63	6,428.14	5,988.20	439.94	14.611		
15,300.00	7,212.01	7,175.01	7,212.01	215.62	248.76	89.88	2,749.89	-4,841.63	6,471.91	6,030.75	441.16	14.670		
15,400.00	7,211.60	7,174.60	7,211.60	218.43	248.74	89.88	2,749.89	-4,841.63	6,516.92	6,074.59	442.33	14.733		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 34-9(TA_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,500.00	7,211.19	7,174.19	7,211.19	221.25	248.73	89.88	2,749.89	-4,841.63	6,563.15	6,119.70	443.45	14.800	
15,600.00	7,210.79	7,173.79	7,210.79	224.06	248.71	89.87	2,749.89	-4,841.63	6,610.57	6,166.05	444.52	14.871	
15,700.00	7,210.38	7,173.38	7,210.38	226.88	248.70	89.87	2,749.89	-4,841.63	6,659.15	6,213.61	445.54	14.946	
15,794.94	7,210.00	7,173.00	7,210.00	229.55	248.69	89.86	2,749.89	-4,841.63	6,706.33	6,259.86	446.47	15.021	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MAURICE LEFFLER 1(AB_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	64.00	3.28	3.28	-121.38	-3,871.74	-6,348.75	7,436.47				
100.00	100.00	36.00	100.00	3.28	3.34	-121.38	-3,871.74	-6,348.75	7,436.20	7,429.57	6.62	1,122.551	
200.00	200.00	136.00	200.00	3.34	4.45	-121.38	-3,871.74	-6,348.75	7,436.20	7,428.41	7.78	955.368	
300.00	299.98	235.98	299.98	3.44	7.27	56.00	-3,871.74	-6,348.75	7,435.22	7,424.51	10.71	694.000	
400.00	399.84	335.84	399.84	3.59	10.50	56.08	-3,871.74	-6,348.75	7,432.29	7,418.20	14.09	527.361	
500.00	499.45	435.45	499.45	3.79	13.85	56.22	-3,871.74	-6,348.75	7,427.43	7,409.79	17.64	421.100	
600.00	598.70	534.70	598.70	4.03	17.24	56.41	-3,871.74	-6,348.75	7,420.63	7,399.37	21.27	348.937	
700.00	697.47	633.47	697.47	4.31	20.63	56.66	-3,871.74	-6,348.75	7,411.93	7,386.99	24.94	297.142	
800.00	795.62	731.62	795.62	4.64	24.02	56.96	-3,871.74	-6,348.75	7,401.35	7,372.70	28.65	258.316	
900.00	893.06	829.06	893.06	5.00	27.39	57.31	-3,871.74	-6,348.75	7,388.92	7,356.54	32.38	228.204	
1,000.00	989.64	925.64	989.64	5.40	30.74	57.72	-3,871.74	-6,348.75	7,374.67	7,338.56	36.11	204.207	
1,100.00	1,085.27	1,021.27	1,085.27	5.83	34.07	58.18	-3,871.74	-6,348.75	7,358.66	7,318.81	39.85	184.658	
1,200.00	1,179.82	1,115.82	1,179.82	6.29	37.35	58.70	-3,871.74	-6,348.75	7,340.92	7,297.34	43.58	168.440	
1,300.00	1,273.17	1,209.17	1,273.17	6.79	40.60	59.26	-3,871.74	-6,348.75	7,321.51	7,274.21	47.30	154.777	
1,400.00	1,365.21	1,301.21	1,365.21	7.33	43.80	59.88	-3,871.74	-6,348.75	7,300.50	7,249.49	51.01	143.117	
1,500.00	1,455.84	1,408.16	1,455.84	7.89	47.53	60.55	-3,871.74	-6,348.75	7,277.93	7,222.67	55.27	131.688	
1,600.00	1,544.94	1,480.94	1,544.94	8.50	50.06	61.27	-3,871.74	-6,348.75	7,253.89	7,195.53	58.36	124.289	
1,700.00	1,632.39	1,568.39	1,632.39	9.13	53.11	62.04	-3,871.74	-6,348.75	7,228.44	7,166.44	62.00	116.587	
1,800.00	1,718.11	1,654.11	1,718.11	9.80	56.10	62.86	-3,871.74	-6,348.75	7,201.66	7,136.05	65.61	109.769	
1,900.00	1,802.44	1,738.44	1,802.44	10.49	59.03	63.35	-3,871.74	-6,348.75	7,174.01	7,104.82	69.19	103.686	
2,000.00	1,886.68	1,822.68	1,886.68	11.20	61.97	63.69	-3,871.74	-6,348.75	7,146.58	7,073.79	72.79	98.187	
2,100.00	1,970.92	1,906.92	1,970.92	11.93	64.91	64.03	-3,871.74	-6,348.75	7,119.45	7,043.06	76.39	93.193	
2,200.00	2,055.17	2,008.83	2,055.17	12.66	68.46	64.37	-3,871.74	-6,348.75	7,092.63	7,012.00	80.63	87.963	
2,300.00	2,139.41	2,075.41	2,139.41	13.40	70.78	64.71	-3,871.74	-6,348.75	7,066.12	6,982.48	83.65	84.474	
2,400.00	2,223.66	2,159.66	2,223.66	14.14	73.72	65.06	-3,871.74	-6,348.75	7,039.93	6,952.64	87.29	80.650	
2,500.00	2,307.90	2,243.90	2,307.90	14.89	76.66	65.41	-3,871.74	-6,348.75	7,014.04	6,923.11	90.94	77.129	
2,600.00	2,392.14	2,328.14	2,392.14	15.65	79.60	65.76	-3,871.74	-6,348.75	6,988.48	6,893.89	94.60	73.877	
2,700.00	2,476.39	2,412.39	2,476.39	16.41	82.54	66.11	-3,871.74	-6,348.75	6,963.24	6,864.98	98.26	70.865	
2,800.00	2,560.63	2,503.37	2,560.63	17.17	85.71	66.46	-3,871.74	-6,348.75	6,938.33	6,836.16	102.17	67.912	
2,900.00	2,644.88	2,580.88	2,644.88	17.93	88.41	66.82	-3,871.74	-6,348.75	6,913.75	6,808.14	105.61	65.466	
3,000.00	2,729.12	2,665.12	2,729.12	18.70	91.35	67.17	-3,871.74	-6,348.75	6,889.50	6,780.21	109.29	63.039	
3,100.00	2,813.36	2,749.36	2,813.36	19.47	94.29	67.53	-3,871.74	-6,348.75	6,865.59	6,752.61	112.98	60.770	
3,200.00	2,897.61	2,833.61	2,897.61	20.25	97.23	67.89	-3,871.74	-6,348.75	6,842.02	6,725.35	116.67	58.645	
3,300.00	2,981.85	2,917.85	2,981.85	21.02	100.17	68.26	-3,871.74	-6,348.75	6,818.79	6,698.43	120.36	56.652	
3,400.00	3,066.10	3,002.10	3,066.10	21.80	103.11	68.62	-3,871.74	-6,348.75	6,795.91	6,671.85	124.06	54.777	
3,500.00	3,150.34	3,086.34	3,150.34	22.58	106.05	68.99	-3,871.74	-6,348.75	6,773.39	6,645.62	127.77	53.013	
3,600.00	3,234.58	3,170.58	3,234.58	23.35	108.99	69.36	-3,871.74	-6,348.75	6,751.21	6,619.74	131.48	51.349	
3,700.00	3,318.83	3,254.83	3,318.83	24.13	111.93	69.73	-3,871.74	-6,348.75	6,729.40	6,594.21	135.19	49.778	
3,800.00	3,403.07	3,339.07	3,403.07	24.92	114.87	70.10	-3,871.74	-6,348.75	6,707.95	6,569.04	138.90	48.292	
3,900.00	3,487.32	3,423.32	3,487.32	25.70	117.81	70.47	-3,871.74	-6,348.75	6,686.86	6,544.24	142.62	46.885	
4,000.00	3,571.56	3,507.56	3,571.56	26.48	120.75	70.85	-3,871.74	-6,348.75	6,666.14	6,519.80	146.34	45.552	
4,100.00	3,655.80	3,608.20	3,655.80	27.27	124.26	71.23	-3,871.74	-6,348.75	6,645.79	6,495.16	150.64	44.117	
4,200.00	3,740.05	3,676.05	3,740.05	28.05	126.63	71.61	-3,871.74	-6,348.75	6,625.82	6,472.03	153.79	43.082	
4,300.00	3,824.29	3,760.29	3,824.29	28.84	129.57	71.99	-3,871.74	-6,348.75	6,606.23	6,448.71	157.52	41.938	
4,400.00	3,908.54	3,844.54	3,908.54	29.62	132.51	72.37	-3,871.74	-6,348.75	6,587.02	6,425.77	161.26	40.848	
4,500.00	3,992.78	3,928.78	3,992.78	30.41	135.45	72.75	-3,871.74	-6,348.75	6,568.20	6,403.21	164.99	39.809	
4,600.00	4,077.03	4,013.03	4,077.03	31.20	138.39	73.14	-3,871.74	-6,348.75	6,549.77	6,381.04	168.73	38.818	
4,700.00	4,161.27	4,102.73	4,161.27	31.98	141.52	73.53	-3,871.74	-6,348.75	6,531.72	6,359.06	172.66	37.830	
4,800.00	4,245.51	4,181.51	4,245.51	32.77	144.27	73.92	-3,871.74	-6,348.75	6,514.08	6,337.87	176.21	36.967	
4,900.00	4,329.76	4,265.76	4,329.76	33.56	147.21	74.31	-3,871.74	-6,348.75	6,496.83	6,316.88	179.96	36.102	
5,000.00	4,414.00	4,350.00	4,414.00	34.35	150.15	74.70	-3,871.74	-6,348.75	6,479.99	6,296.29	183.70	35.275	
5,100.00	4,498.25	4,434.25	4,498.25	35.14	153.09	75.09	-3,871.74	-6,348.75	6,463.55	6,276.10	187.45	34.482	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MAURICE LEFFLER 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,452.00	4,516.00	35.93	153.71	75.17	-3,871.74	-6,348.75	6,447.86	6,258.96	188.90	34.134		
5,300.00	4,666.73	4,452.00	4,516.00	36.72	153.71	75.17	-3,871.74	-6,348.75	6,433.66	6,243.96	189.71	33.914		
5,400.00	4,750.98	4,452.00	4,516.00	37.51	153.71	75.17	-3,871.74	-6,348.75	6,420.99	6,230.51	190.48	33.709		
5,500.00	4,835.22	4,452.00	4,516.00	38.30	153.71	75.17	-3,871.74	-6,348.75	6,409.86	6,218.63	191.23	33.520		
5,600.00	4,919.47	4,452.00	4,516.00	39.09	153.71	75.17	-3,871.74	-6,348.75	6,400.26	6,208.33	191.94	33.345		
5,700.00	5,003.71	4,452.00	4,516.00	39.88	153.71	75.17	-3,871.74	-6,348.75	6,392.22	6,199.61	192.62	33.186		
5,800.00	5,088.06	4,452.00	4,516.00	40.67	153.71	75.14	-3,871.74	-6,348.75	6,385.79	6,192.53	193.25	33.043		
5,900.00	5,173.83	4,452.00	4,516.00	41.44	153.71	75.06	-3,871.74	-6,348.75	6,381.61	6,187.77	193.83	32.923		
6,000.00	5,261.34	4,452.00	4,516.00	42.18	153.71	75.02	-3,871.74	-6,348.75	6,379.89	6,185.56	194.34	32.829		
6,019.42	5,278.53	4,452.00	4,516.00	42.32	153.71	75.02	-3,871.74	-6,348.75	6,379.85	6,185.42	194.42	32.814		
6,100.00	5,350.49	4,452.00	4,516.00	42.88	153.71	75.04	-3,871.74	-6,348.75	6,380.65	6,185.88	194.77	32.760		
6,200.00	5,441.16	4,452.00	4,516.00	43.56	153.71	75.10	-3,871.74	-6,348.75	6,383.87	6,188.75	195.12	32.718		
6,300.00	5,533.25	4,452.00	4,516.00	44.20	153.71	75.21	-3,871.74	-6,348.75	6,389.55	6,194.16	195.39	32.701		
6,400.00	5,626.65	4,452.00	4,516.00	44.82	153.71	75.37	-3,871.74	-6,348.75	6,397.68	6,202.10	195.58	32.711		
6,500.00	5,721.23	4,452.00	4,516.00	45.40	153.71	75.57	-3,871.74	-6,348.75	6,408.23	6,212.54	195.69	32.747		
6,600.00	5,816.89	4,452.00	4,516.00	45.94	153.71	75.83	-3,871.74	-6,348.75	6,421.19	6,225.47	195.72	32.808		
6,700.00	5,913.51	4,452.00	4,516.00	46.45	153.71	76.13	-3,871.74	-6,348.75	6,436.52	6,240.86	195.66	32.896		
6,800.00	6,010.97	4,452.00	4,516.00	46.93	153.71	76.48	-3,871.74	-6,348.75	6,454.19	6,258.65	195.53	33.008		
6,900.00	6,109.15	4,452.00	4,516.00	47.38	153.71	76.87	-3,871.74	-6,348.75	6,474.15	6,278.83	195.32	33.146		
7,000.00	6,207.93	4,452.00	4,516.00	47.80	153.71	77.32	-3,871.74	-6,348.75	6,496.36	6,301.33	195.03	33.309		
7,100.00	6,307.19	4,452.00	4,516.00	48.18	153.71	77.81	-3,871.74	-6,348.75	6,520.77	6,326.10	194.67	33.497		
7,200.00	6,406.82	4,452.00	4,516.00	48.53	153.71	78.35	-3,871.74	-6,348.75	6,547.33	6,353.09	194.23	33.709		
7,300.00	6,506.68	4,452.00	4,516.00	48.84	153.71	78.93	-3,871.74	-6,348.75	6,575.97	6,382.24	193.73	33.944		
7,400.00	6,606.66	4,452.00	4,516.00	49.10	153.71	-7.44	-3,871.74	-6,348.75	6,606.64	6,413.50	193.14	34.207		
7,500.00	6,706.21	4,452.00	4,516.00	49.35	153.71	-7.15	-3,871.74	-6,348.75	6,631.00	6,438.51	192.49	34.448		
7,600.00	6,803.22	4,452.00	4,516.00	49.59	153.71	-7.04	-3,871.74	-6,348.75	6,641.49	6,449.68	191.81	34.625		
7,700.00	6,895.32	4,452.00	4,516.00	49.82	153.71	-7.08	-3,871.74	-6,348.75	6,637.94	6,446.83	191.11	34.734		
7,800.00	6,980.23	4,452.00	4,516.00	50.03	153.71	-7.28	-3,871.74	-6,348.75	6,620.39	6,429.99	190.39	34.772		
7,900.00	7,055.85	4,452.00	4,516.00	50.21	153.71	-7.66	-3,871.74	-6,348.75	6,589.17	6,399.49	189.68	34.738		
8,000.00	7,120.34	4,452.00	4,516.00	50.36	153.71	-8.28	-3,871.74	-6,348.75	6,544.87	6,355.89	188.98	34.632		
8,100.00	7,172.10	4,452.00	4,516.00	50.47	153.71	-9.22	-3,871.74	-6,348.75	6,488.32	6,300.00	188.32	34.454		
8,200.00	7,209.85	4,452.00	4,516.00	50.55	153.71	-10.66	-3,871.74	-6,348.75	6,420.61	6,232.91	187.70	34.207		
8,300.00	7,232.68	4,452.00	4,516.00	50.61	153.71	-12.92	-3,871.74	-6,348.75	6,343.07	6,155.92	187.15	33.893		
8,400.00	7,240.00	4,452.00	4,516.00	50.65	153.71	-16.75	-3,871.74	-6,348.75	6,257.30	6,070.62	186.68	33.518		
8,500.00	7,239.60	4,452.00	4,516.00	50.69	153.71	-16.75	-3,871.74	-6,348.75	6,168.21	5,981.95	186.25	33.117		
8,600.00	7,239.19	4,452.00	4,516.00	50.75	153.71	-16.75	-3,871.74	-6,348.75	6,079.45	5,893.64	185.81	32.718		
8,700.00	7,238.78	4,452.00	4,516.00	50.85	153.71	-16.75	-3,871.74	-6,348.75	5,991.05	5,805.69	185.36	32.321		
8,800.00	7,238.38	4,452.00	4,516.00	51.02	153.71	-16.75	-3,871.74	-6,348.75	5,903.02	5,718.12	184.90	31.926		
8,900.00	7,237.97	4,452.00	4,516.00	51.32	153.71	-16.75	-3,871.74	-6,348.75	5,815.37	5,630.95	184.42	31.533		
9,000.00	7,237.57	4,452.00	4,516.00	51.95	153.71	-16.75	-3,871.74	-6,348.75	5,728.13	5,544.20	183.94	31.142		
9,100.00	7,237.16	4,452.00	4,516.00	53.10	153.71	-16.75	-3,871.74	-6,348.75	5,641.32	5,457.88	183.44	30.753		
9,200.00	7,236.76	4,452.00	4,516.00	54.69	153.71	-16.75	-3,871.74	-6,348.75	5,554.94	5,372.01	182.93	30.367		
9,300.00	7,236.35	4,452.00	4,516.00	56.53	153.71	-16.75	-3,871.74	-6,348.75	5,469.03	5,286.63	182.41	29.982		
9,400.00	7,235.94	4,452.00	4,516.00	58.53	153.71	-16.75	-3,871.74	-6,348.75	5,383.61	5,201.74	181.87	29.601		
9,500.00	7,235.54	4,452.00	4,516.00	60.62	153.71	-16.75	-3,871.74	-6,348.75	5,298.70	5,117.37	181.33	29.222		
9,600.00	7,235.13	4,452.00	4,516.00	62.80	153.71	-16.75	-3,871.74	-6,348.75	5,214.32	5,033.56	180.76	28.846		
9,700.00	7,234.73	4,452.00	4,516.00	65.03	153.71	-16.75	-3,871.74	-6,348.75	5,130.51	4,950.32	180.19	28.473		
9,800.00	7,234.32	4,452.00	4,516.00	67.32	153.71	-16.75	-3,871.74	-6,348.75	5,047.28	4,867.69	179.59	28.104		
9,900.00	7,233.92	4,452.00	4,516.00	69.66	153.71	-16.75	-3,871.74	-6,348.75	4,964.68	4,785.69	178.99	27.738		
10,000.00	7,233.51	4,452.00	4,516.00	72.03	153.71	-16.75	-3,871.74	-6,348.75	4,882.72	4,704.36	178.36	27.375		
10,100.00	7,233.10	4,452.00	4,516.00	74.45	153.71	-16.75	-3,871.74	-6,348.75	4,801.45	4,623.73	177.72	27.017		
10,200.00	7,232.70	4,452.00	4,516.00	76.89	153.71	-16.75	-3,871.74	-6,348.75	4,720.90	4,543.84	177.06	26.663		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MAURICE LEFFLER 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	4,452.00	4,516.00	79.36	153.71	-16.75	-3,871.74	-6,348.75	4,641.10	4,464.72	176.38	26.313		
10,400.00	7,231.89	4,452.00	4,516.00	81.86	153.71	-16.75	-3,871.74	-6,348.75	4,562.10	4,386.42	175.68	25.969		
10,500.00	7,231.48	4,452.00	4,516.00	84.38	153.71	-16.75	-3,871.74	-6,348.75	4,483.94	4,308.98	174.96	25.629		
10,600.00	7,231.08	4,452.00	4,516.00	86.93	153.71	-16.75	-3,871.74	-6,348.75	4,406.66	4,232.45	174.21	25.295		
10,700.00	7,230.67	4,452.00	4,516.00	89.49	153.71	-16.75	-3,871.74	-6,348.75	4,330.31	4,156.87	173.44	24.967		
10,800.00	7,230.26	4,452.00	4,516.00	92.07	153.71	-16.75	-3,871.74	-6,348.75	4,254.94	4,082.30	172.64	24.646		
10,900.00	7,229.86	4,452.00	4,516.00	94.67	153.71	-16.75	-3,871.74	-6,348.75	4,180.61	4,008.79	171.82	24.331		
11,000.00	7,229.45	4,452.00	4,516.00	97.28	153.71	-16.75	-3,871.74	-6,348.75	4,107.36	3,936.40	170.97	24.024		
11,100.00	7,229.05	4,452.00	4,516.00	99.90	153.71	-16.75	-3,871.74	-6,348.75	4,035.27	3,865.19	170.08	23.726		
11,200.00	7,228.64	4,452.00	4,516.00	102.54	153.71	-16.75	-3,871.74	-6,348.75	3,964.38	3,795.22	169.16	23.436		
11,300.00	7,228.24	4,452.00	4,516.00	105.19	153.71	-16.75	-3,871.74	-6,348.75	3,894.77	3,726.57	168.21	23.155		
11,400.00	7,227.83	4,452.00	4,516.00	107.85	153.71	-16.75	-3,871.74	-6,348.75	3,826.51	3,659.30	167.21	22.884		
11,500.00	7,227.42	4,452.00	4,516.00	110.52	153.71	-16.75	-3,871.74	-6,348.75	3,759.68	3,593.50	166.18	22.625		
11,600.00	7,227.02	4,452.00	4,516.00	113.20	153.71	-16.75	-3,871.74	-6,348.75	3,694.33	3,529.24	165.10	22.377		
11,700.00	7,226.61	4,452.00	4,516.00	115.89	153.71	-16.75	-3,871.74	-6,348.75	3,630.57	3,466.60	163.97	22.142		
11,800.00	7,226.21	4,452.00	4,516.00	118.59	153.71	-16.75	-3,871.74	-6,348.75	3,568.47	3,405.68	162.80	21.920		
11,900.00	7,225.80	4,452.00	4,516.00	121.29	153.71	-16.75	-3,871.74	-6,348.75	3,508.13	3,346.55	161.57	21.713		
12,000.00	7,225.40	4,452.00	4,516.00	124.00	153.71	-16.75	-3,871.74	-6,348.75	3,449.62	3,289.33	160.29	21.521		
12,100.00	7,224.99	4,452.00	4,516.00	126.72	153.71	-16.75	-3,871.74	-6,348.75	3,393.06	3,234.10	158.96	21.346		
12,200.00	7,224.58	4,452.00	4,516.00	129.44	153.71	-16.75	-3,871.74	-6,348.75	3,338.53	3,180.96	157.57	21.188		
12,300.00	7,224.18	4,452.00	4,516.00	132.17	153.71	-16.75	-3,871.74	-6,348.75	3,286.14	3,130.02	156.12	21.049		
12,400.00	7,223.77	4,452.00	4,516.00	134.91	153.71	-16.75	-3,871.74	-6,348.75	3,236.00	3,081.38	154.62	20.929		
12,500.00	7,223.37	4,452.00	4,516.00	137.65	153.71	-16.75	-3,871.74	-6,348.75	3,188.20	3,035.13	153.07	20.829		
12,600.00	7,222.96	4,452.00	4,516.00	140.39	153.71	-16.75	-3,871.74	-6,348.75	3,142.86	2,991.39	151.47	20.749		
12,700.00	7,222.55	4,452.00	4,516.00	143.14	153.71	-16.75	-3,871.74	-6,348.75	3,100.08	2,950.25	149.83	20.691		
12,800.00	7,222.15	4,452.00	4,516.00	145.89	153.71	-16.75	-3,871.74	-6,348.75	3,059.98	2,911.82	148.16	20.653		
12,900.00	7,221.74	4,452.00	4,516.00	148.65	153.71	-16.75	-3,871.74	-6,348.75	3,022.65	2,876.17	146.48	20.635		
13,000.00	7,221.34	4,452.00	4,516.00	151.41	153.71	-16.75	-3,871.74	-6,348.75	2,988.20	2,843.40	144.81	20.636		
13,100.00	7,220.93	4,452.00	4,516.00	154.18	153.71	-16.75	-3,871.74	-6,348.75	2,956.74	2,813.57	143.17	20.652		
13,200.00	7,220.53	4,452.00	4,516.00	156.94	153.71	-16.75	-3,871.74	-6,348.75	2,928.35	2,786.76	141.60	20.681		
13,300.00	7,220.12	4,452.00	4,516.00	159.72	153.71	-16.75	-3,871.74	-6,348.75	2,903.14	2,763.00	140.14	20.716		
13,400.00	7,219.71	4,452.00	4,516.00	162.49	153.71	-16.75	-3,871.74	-6,348.75	2,881.17	2,742.33	138.84	20.751		
13,500.00	7,219.31	4,452.00	4,516.00	165.27	153.71	-16.75	-3,871.74	-6,348.75	2,862.53	2,724.76	137.78	20.777		
13,600.00	7,218.90	4,452.00	4,516.00	168.05	153.71	-16.75	-3,871.74	-6,348.75	2,847.29	2,710.28	137.00	20.783		
13,700.00	7,218.50	4,452.00	4,516.00	170.83	153.71	-16.75	-3,871.74	-6,348.75	2,835.49	2,698.89	136.60	20.758		
13,800.00	7,218.09	4,452.00	4,516.00	173.61	153.71	-16.75	-3,871.74	-6,348.75	2,827.18	2,690.55	136.63	20.692		
13,900.00	7,217.69	4,452.00	4,516.00	176.40	153.71	-16.75	-3,871.74	-6,348.75	2,822.39	2,685.23	137.16	20.578		
13,985.27	7,217.34	4,452.00	4,516.00	178.78	153.71	-16.75	-3,871.74	-6,348.75	2,821.10	2,683.08	138.02	20.439 CC		
14,000.00	7,217.28	4,452.00	4,516.00	179.19	153.71	-16.75	-3,871.74	-6,348.75	2,821.14	2,682.93	138.21	20.412 ES		
14,100.00	7,216.87	4,452.00	4,516.00	181.98	153.71	-16.75	-3,871.74	-6,348.75	2,823.43	2,683.64	139.80	20.197		
14,200.00	7,216.47	4,452.00	4,516.00	184.78	153.71	-16.75	-3,871.74	-6,348.75	2,829.26	2,687.38	141.88	19.941		
14,300.00	7,216.06	4,452.00	4,516.00	187.57	153.71	-16.75	-3,871.74	-6,348.75	2,838.60	2,694.20	144.40	19.657		
14,400.00	7,215.66	4,452.00	4,516.00	190.37	153.71	-16.75	-3,871.74	-6,348.75	2,851.42	2,704.13	147.30	19.358		
14,500.00	7,215.25	4,452.00	4,516.00	193.17	153.71	-16.75	-3,871.74	-6,348.75	2,867.67	2,717.20	150.47	19.058		
14,600.00	7,214.85	4,452.00	4,516.00	195.97	153.71	-16.75	-3,871.74	-6,348.75	2,887.30	2,733.44	153.86	18.766		
14,700.00	7,214.44	4,452.00	4,516.00	198.77	153.71	-16.75	-3,871.74	-6,348.75	2,910.23	2,752.86	157.37	18.493		
14,800.00	7,214.03	4,452.00	4,516.00	201.58	153.71	-16.75	-3,871.74	-6,348.75	2,936.39	2,775.44	160.95	18.244		
14,900.00	7,213.63	4,452.00	4,516.00	204.38	153.71	-16.75	-3,871.74	-6,348.75	2,965.69	2,801.16	164.54	18.024		
15,000.00	7,213.22	4,452.00	4,516.00	207.19	153.71	-16.75	-3,871.74	-6,348.75	2,998.05	2,829.95	168.10	17.835		
15,100.00	7,212.82	4,452.00	4,516.00	210.00	153.71	-16.75	-3,871.74	-6,348.75	3,033.35	2,861.77	171.59	17.678		
15,200.00	7,212.41	4,452.00	4,516.00	212.81	153.71	-16.75	-3,871.74	-6,348.75	3,071.51	2,896.53	174.98	17.553		
15,300.00	7,212.01	4,452.00	4,516.00	215.62	153.71	-16.75	-3,871.74	-6,348.75	3,112.42	2,934.15	178.26	17.460		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
HARVESTERS STATE 7-15 PAD - MAURICE LEFFLER 1(AB_150CC) - OH - OH												Offset Well Error:	3.28 ft
Survey Program: 100-2" Cone@2.448 Sigma													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.00	7,211.60	4,452.00	4,516.00	218.43	153.71	-16.75	-3,871.74	-6,348.75	3,155.96	2,974.54	181.42	17.396	
15,500.00	7,211.19	4,452.00	4,516.00	221.25	153.71	-16.75	-3,871.74	-6,348.75	3,202.03	3,017.61	184.43	17.362	
15,600.00	7,210.79	4,452.00	4,516.00	224.06	153.71	-16.75	-3,871.74	-6,348.75	3,250.53	3,063.24	187.30	17.355 SF	
15,700.00	7,210.38	4,452.00	4,516.00	226.88	153.71	-16.75	-3,871.74	-6,348.75	3,301.35	3,111.33	190.02	17.374	
15,794.94	7,210.00	4,452.00	4,516.00	229.55	153.71	-16.75	-3,871.74	-6,348.75	3,351.65	3,159.18	192.47	17.414	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 82-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1,350.85	1,279.47	3.28	7.26	-105.54	-2,452.10	-8,815.25	9,238.96					
100.00	100.00	1,377.00	1,305.28	3.28	7.39	-105.53	-2,449.09	-8,812.38	9,225.45	9,215.29	10.15	908.480		
200.00	200.00	1,432.22	1,359.84	3.34	7.66	-105.50	-2,442.63	-8,806.72	9,212.49	9,202.06	10.43	883.497		
300.00	299.98	1,471.00	1,398.14	3.44	7.85	72.12	-2,437.82	-8,803.14	9,199.69	9,189.01	10.68	861.385		
400.00	399.84	400.00	1,592.18	3.59	3.56	72.57	-2,414.42	-8,784.29	9,185.62	9,178.39	7.23	1,270.323		
500.00	499.45	1,698.74	1,623.20	3.79	8.96	72.89	-2,411.08	-8,780.92	9,170.20	9,158.19	12.01	763.660		
600.00	598.70	1,716.92	1,641.20	4.03	9.05	73.21	-2,409.18	-8,779.22	9,154.76	9,142.44	12.31	743.485		
700.00	697.47	700.00	1,700.08	4.31	4.60	73.60	-2,403.09	-8,774.32	9,139.28	9,130.64	8.65	1,057.079		
800.00	795.62	1,970.59	1,892.17	4.64	10.30	74.28	-2,379.74	-8,757.18	9,121.92	9,107.88	14.04	649.635		
900.00	893.06	2,287.91	2,204.96	5.00	11.97	75.31	-2,337.35	-8,724.95	9,102.21	9,086.33	15.89	572.978		
1,000.00	989.64	1,000.00	2,388.68	5.40	5.28	76.17	-2,311.46	-8,703.38	9,080.73	9,070.18	10.55	861.029		
1,100.00	1,085.27	2,543.51	2,456.32	5.83	13.37	76.80	-2,302.14	-8,694.78	9,057.64	9,039.74	17.90	505.912		
1,200.00	1,179.82	2,568.74	2,481.16	6.29	13.51	77.33	-2,298.95	-8,691.75	9,034.53	9,016.05	18.48	489.005		
1,300.00	1,273.17	2,747.24	2,656.91	6.79	14.49	78.32	-2,276.43	-8,670.24	9,010.97	8,991.17	19.80	455.048		
1,400.00	1,365.21	2,792.00	2,700.94	7.33	14.74	78.96	-2,270.57	-8,664.68	8,986.43	8,965.89	20.54	437.537		
1,500.00	1,455.84	2,792.00	2,700.94	7.89	14.74	79.45	-2,270.57	-8,664.68	8,962.10	8,941.00	21.10	424.752		
1,600.00	1,544.94	2,792.00	2,700.94	8.50	14.74	79.94	-2,270.57	-8,664.68	8,938.20	8,916.50	21.70	411.970		
1,700.00	1,632.39	2,838.36	2,746.65	9.13	14.98	80.59	-2,264.90	-8,659.47	8,914.10	8,891.56	22.54	395.466		
1,800.00	1,718.11	2,887.00	2,794.81	9.80	15.23	81.26	-2,259.75	-8,654.99	8,891.05	8,867.61	23.43	379.452		
1,900.00	1,802.44	2,887.00	2,794.81	10.49	15.23	81.40	-2,259.75	-8,654.99	8,867.94	8,843.81	24.13	367.550		
2,000.00	1,886.68	3,027.18	2,933.45	11.20	15.96	81.97	-2,243.67	-8,642.03	8,845.45	8,819.96	25.49	347.072		
2,100.00	1,970.92	3,076.82	2,982.50	11.93	16.22	82.18	-2,237.61	-8,637.35	8,823.03	8,796.58	26.45	333.601		
2,200.00	2,055.17	3,203.76	3,107.80	12.66	16.89	82.71	-2,221.40	-8,625.10	8,800.68	8,772.90	27.79	316.741		
2,300.00	2,139.41	3,262.00	3,165.33	13.40	17.20	82.95	-2,214.33	-8,619.44	8,778.89	8,750.08	28.81	304.698		
2,400.00	2,223.66	3,373.21	3,275.18	14.14	17.79	83.41	-2,200.94	-8,608.39	8,757.34	8,727.25	30.09	291.032		
2,500.00	2,307.90	3,418.89	3,320.29	14.89	18.03	83.60	-2,195.37	-8,603.87	8,736.27	8,705.19	31.08	281.121		
2,600.00	2,392.14	3,496.24	3,396.72	15.65	18.44	83.92	-2,186.05	-8,596.43	8,715.84	8,683.62	32.22	270.540		
2,700.00	2,476.39	3,543.00	3,442.90	16.41	18.69	84.12	-2,180.33	-8,591.84	8,695.74	8,662.52	33.22	261.747		
2,800.00	2,560.63	4,109.00	3,998.00	17.17	21.92	86.60	-2,095.63	-8,525.87	8,674.77	8,638.03	36.74	236.086		
2,900.00	2,644.88	4,488.00	4,366.51	17.93	24.30	88.32	-2,031.95	-8,465.34	8,650.70	8,611.29	39.41	219.516		
3,000.00	2,729.12	4,530.03	4,407.27	18.70	24.57	88.51	-2,025.06	-8,457.72	8,625.46	8,585.02	40.44	213.293		
3,100.00	2,813.36	4,551.56	4,428.19	19.47	24.70	88.60	-2,021.62	-8,454.00	8,601.20	8,559.82	41.38	207.864		
3,200.00	2,897.61	4,583.00	4,458.81	20.25	24.90	88.75	-2,016.73	-8,448.77	8,577.88	8,535.51	42.37	202.450		
3,300.00	2,981.85	4,583.00	4,458.81	21.02	24.90	88.75	-2,016.73	-8,448.77	8,555.46	8,512.25	43.21	197.976		
3,400.00	3,066.10	4,583.00	4,458.81	21.80	24.90	88.75	-2,016.73	-8,448.77	8,534.16	8,490.10	44.06	193.690		
3,500.00	3,150.34	4,583.00	4,458.81	22.58	24.90	88.75	-2,016.73	-8,448.77	8,513.98	8,469.07	44.91	189.584		
3,600.00	3,234.58	4,633.40	4,508.10	23.35	25.20	88.97	-2,009.46	-8,441.17	8,494.16	8,448.17	45.99	184.682		
3,700.00	3,318.83	4,678.00	4,551.95	24.13	25.46	89.17	-2,003.78	-8,435.41	8,476.01	8,428.96	47.05	180.135		
3,800.00	3,403.07	4,678.00	4,551.95	24.92	25.46	89.17	-2,003.78	-8,435.41	8,458.40	8,410.49	47.91	176.560		
3,900.00	3,487.32	4,678.00	4,551.95	25.70	25.46	89.17	-2,003.78	-8,435.41	8,441.94	8,393.18	48.76	173.135		
4,000.00	3,571.56	4,712.07	4,585.56	26.48	25.64	89.32	-1,999.82	-8,431.43	8,426.48	8,376.71	49.76	169.326		
4,100.00	3,655.80	4,747.52	4,620.57	27.27	25.83	89.47	-1,995.93	-8,427.45	8,411.86	8,361.08	50.78	165.661		
4,200.00	3,740.05	4,786.44	4,659.06	28.05	26.04	89.64	-1,991.91	-8,423.26	8,398.07	8,346.26	51.80	162.109		
4,300.00	3,824.29	4,832.38	4,704.52	28.84	26.28	89.83	-1,987.39	-8,418.48	8,385.05	8,332.19	52.86	158.627		
4,400.00	3,908.54	4,867.00	4,738.81	29.62	26.45	89.98	-1,984.14	-8,414.99	8,372.79	8,318.92	53.87	155.437		
4,500.00	3,992.78	4,905.74	4,777.21	30.41	26.65	90.14	-1,980.64	-8,411.27	8,361.35	8,306.47	54.89	152.341		
4,600.00	4,077.03	4,961.00	4,832.06	31.20	26.92	90.37	-1,975.92	-8,406.44	8,350.91	8,294.93	55.98	149.183		
4,700.00	4,161.27	4,973.45	4,844.42	31.98	26.98	90.43	-1,974.90	-8,405.42	8,341.17	8,284.29	56.88	146.647		
4,800.00	4,245.51	5,027.33	4,897.96	32.77	27.24	90.65	-1,970.61	-8,401.09	8,332.26	8,274.30	57.96	143.761		
4,900.00	4,329.76	5,056.00	4,926.46	33.56	27.37	90.77	-1,968.41	-8,398.85	8,324.09	8,265.16	58.93	141.257		
5,000.00	4,414.00	5,090.95	4,961.22	34.35	27.53	90.92	-1,965.86	-8,396.33	8,316.79	8,256.87	59.92	138.800		
5,100.00	4,498.25	5,114.91	4,985.07	35.14	27.64	91.02	-1,964.21	-8,394.80	8,310.48	8,249.62	60.86	136.551		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	5,150.00	5,020.04	35.93	27.80	91.16	-1,961.93	-8,392.85	8,305.17	8,243.32	61.85	134.286		
5,300.00	4,666.73	5,188.72	5,058.63	36.72	27.97	91.32	-1,959.62	-8,390.91	8,300.71	8,237.87	62.84	132.090		
5,400.00	4,750.98	5,243.00	5,112.77	37.51	28.20	91.54	-1,956.70	-8,388.25	8,296.85	8,232.95	63.90	129.841		
5,500.00	4,835.22	5,279.50	5,149.19	38.30	28.35	91.68	-1,954.66	-8,386.63	8,293.77	8,228.89	64.87	127.842		
5,600.00	4,919.47	5,309.13	5,178.78	39.09	28.48	91.80	-1,953.68	-8,385.52	8,291.61	8,225.79	65.82	125.978		
5,700.00	5,003.71	5,342.04	5,211.65	39.88	28.61	91.93	-1,952.39	-8,384.52	8,290.36	8,223.59	66.77	124.162		
5,800.00	5,088.06	5,403.99	5,273.55	40.67	28.85	92.17	-1,950.50	-8,382.91	8,289.83	8,222.00	67.83	122.213		
5,850.34	5,131.01	5,430.00	5,299.54	41.06	28.95	92.27	-1,949.94	-8,382.30	8,289.75	8,221.42	68.33	121.317		
5,900.00	5,173.83	5,430.00	5,299.54	41.44	28.95	92.27	-1,949.94	-8,382.30	8,289.88	8,221.16	68.72	120.637		
6,000.00	5,261.34	5,512.91	5,382.41	42.18	29.26	92.57	-1,948.18	-8,380.66	8,290.26	8,220.46	69.80	118.769		
6,100.00	5,350.49	5,566.20	5,435.69	42.88	29.47	92.77	-1,946.84	-8,379.87	8,291.23	8,220.50	70.73	117.224		
6,200.00	5,441.16	5,620.32	5,489.78	43.56	29.67	92.96	-1,945.32	-8,379.28	8,292.66	8,221.03	71.63	115.777		
6,300.00	5,533.25	5,711.00	5,580.41	44.20	30.01	93.26	-1,942.39	-8,378.78	8,294.65	8,222.01	72.64	114.187		
6,400.00	5,626.65	5,735.04	5,604.44	44.82	30.10	93.36	-1,941.56	-8,378.74	8,296.78	8,223.44	73.34	113.131		
6,500.00	5,721.23	5,803.54	5,672.90	45.40	30.36	93.58	-1,939.25	-8,378.77	8,299.30	8,225.11	74.19	111.871		
6,600.00	5,816.89	5,872.98	5,742.30	45.94	30.61	93.79	-1,937.00	-8,379.03	8,302.03	8,227.03	75.00	110.689		
6,700.00	5,913.51	5,943.26	5,812.55	46.45	30.87	93.99	-1,934.82	-8,379.51	8,304.93	8,229.14	75.79	109.581		
6,800.00	6,010.97	6,025.61	5,894.86	46.93	31.18	94.19	-1,932.37	-8,380.34	8,307.96	8,231.37	76.59	108.475		
6,900.00	6,109.15	6,139.35	6,008.55	47.38	31.60	94.41	-1,929.17	-8,381.44	8,310.73	8,233.24	77.49	107.251		
7,000.00	6,207.93	6,253.98	6,123.13	47.80	32.02	94.60	-1,926.13	-8,382.33	8,313.10	8,234.74	78.36	106.091		
7,100.00	6,307.19	6,339.78	6,208.90	48.18	32.34	94.73	-1,923.79	-8,382.94	8,315.16	8,236.08	79.08	105.153		
7,200.00	6,406.82	6,418.06	6,287.13	48.53	32.64	94.83	-1,921.15	-8,383.63	8,317.19	8,237.46	79.73	104.316		
7,300.00	6,506.68	6,496.51	6,365.52	48.84	32.94	94.92	-1,918.00	-8,384.45	8,319.20	8,238.85	80.35	103.535		
7,400.00	6,606.66	6,580.44	6,449.34	49.10	33.26	9.99	-1,914.06	-8,385.47	8,321.15	8,240.21	80.94	102.803		
7,500.00	6,706.21	6,693.28	6,561.99	49.35	33.72	8.13	-1,907.72	-8,386.68	8,314.69	8,233.01	81.68	101.798		
7,600.00	6,803.22	6,803.14	6,671.61	49.59	34.16	8.50	-1,900.36	-8,387.51	8,292.72	8,210.32	82.40	100.642		
7,700.00	6,895.32	6,882.95	6,751.18	49.82	34.49	9.12	-1,894.32	-8,387.97	8,255.89	8,172.92	82.97	99.504		
7,800.00	6,980.23	6,941.04	6,809.10	50.03	34.74	10.08	-1,889.76	-8,388.46	8,205.44	8,122.02	83.42	98.359		
7,900.00	7,055.85	6,993.11	6,860.99	50.21	34.95	11.54	-1,885.58	-8,389.05	8,142.57	8,058.74	83.83	97.136		
8,000.00	7,120.34	7,037.90	6,905.63	50.36	35.14	13.83	-1,881.93	-8,389.67	8,068.75	7,984.58	84.17	95.862		
8,100.00	7,172.10	7,074.29	6,941.89	50.47	35.29	17.62	-1,878.92	-8,390.25	7,985.72	7,901.27	84.45	94.559		
8,200.00	7,209.85	7,101.34	6,968.84	50.55	35.41	24.66	-1,876.66	-8,390.73	7,895.45	7,810.78	84.67	93.249		
8,300.00	7,232.68	7,129.00	6,996.40	50.61	35.52	40.53	-1,874.32	-8,391.26	7,800.09	7,715.21	84.88	91.895		
8,400.00	7,240.00	7,129.00	6,996.40	50.65	35.52	79.92	-1,874.32	-8,391.26	7,701.93	7,616.98	84.95	90.663		
8,500.00	7,239.60	7,129.00	6,996.40	50.69	35.52	79.92	-1,874.32	-8,391.26	7,603.20	7,518.18	85.03	89.422		
8,600.00	7,239.19	7,129.00	6,996.40	50.75	35.52	79.92	-1,874.32	-8,391.26	7,504.51	7,419.40	85.11	88.177		
8,700.00	7,238.78	7,129.00	6,996.40	50.85	35.52	79.92	-1,874.32	-8,391.26	7,405.84	7,320.65	85.20	86.927		
8,800.00	7,238.38	7,129.00	6,996.40	51.02	35.52	79.92	-1,874.32	-8,391.26	7,307.22	7,221.93	85.29	85.672		
8,900.00	7,237.97	7,130.80	6,998.19	51.32	35.53	80.00	-1,874.17	-8,391.29	7,208.63	7,123.22	85.41	84.404		
9,000.00	7,237.57	7,132.65	7,000.04	51.95	35.54	80.09	-1,874.01	-8,391.33	7,110.08	7,024.55	85.53	83.130		
9,100.00	7,237.16	7,134.51	7,001.89	53.10	35.55	80.18	-1,873.86	-8,391.37	7,011.57	6,925.91	85.66	81.852		
9,200.00	7,236.76	7,136.37	7,003.74	54.69	35.55	80.27	-1,873.70	-8,391.40	6,913.11	6,827.30	85.80	80.569		
9,300.00	7,236.35	7,138.22	7,005.59	56.53	35.56	80.35	-1,873.55	-8,391.44	6,814.69	6,728.73	85.96	79.281		
9,400.00	7,235.94	7,140.08	7,007.43	58.53	35.57	80.44	-1,873.39	-8,391.48	6,716.31	6,630.19	86.12	77.989		
9,500.00	7,235.54	7,141.93	7,009.28	60.62	35.58	80.53	-1,873.24	-8,391.51	6,617.98	6,531.69	86.29	76.691		
9,600.00	7,235.13	7,143.78	7,011.12	62.80	35.58	80.61	-1,873.08	-8,391.55	6,519.71	6,433.23	86.48	75.387		
9,700.00	7,234.73	7,145.63	7,012.97	65.03	35.59	80.70	-1,872.93	-8,391.59	6,421.48	6,334.80	86.68	74.079		
9,800.00	7,234.32	7,147.48	7,014.81	67.32	35.60	80.79	-1,872.78	-8,391.62	6,323.32	6,236.42	86.90	72.766		
9,900.00	7,233.92	7,149.32	7,016.65	69.66	35.61	80.87	-1,872.63	-8,391.66	6,225.21	6,138.07	87.13	71.447		
10,000.00	7,233.51	7,151.17	7,018.49	72.03	35.61	80.96	-1,872.47	-8,391.70	6,127.16	6,039.78	87.38	70.123		
10,100.00	7,233.10	7,153.01	7,020.32	74.45	35.62	81.05	-1,872.32	-8,391.73	6,029.17	5,941.53	87.64	68.794		
10,200.00	7,232.70	7,154.85	7,022.16	76.89	35.63	81.14	-1,872.17	-8,391.77	5,931.25	5,843.33	87.92	67.459		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program:		82-MWD											Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,300.00	7,232.29	7,156.70	7,023.99	79.36	35.64	81.22	-1,872.02	-8,391.81	5,833.40	5,745.17	88.23	66.119		
10,400.00	7,231.89	7,158.54	7,025.83	81.86	35.64	81.31	-1,871.87	-8,391.84	5,735.62	5,647.07	88.55	64.773		
10,500.00	7,231.48	7,160.37	7,027.66	84.38	35.65	81.40	-1,871.72	-8,391.88	5,637.93	5,549.03	88.89	63.423		
10,600.00	7,231.08	7,162.21	7,029.49	86.93	35.66	81.48	-1,871.58	-8,391.92	5,540.31	5,451.05	89.26	62.067		
10,700.00	7,230.67	7,164.05	7,031.32	89.49	35.67	81.57	-1,871.43	-8,391.95	5,442.78	5,353.12	89.66	60.706		
10,800.00	7,230.26	7,165.88	7,033.15	92.07	35.67	81.65	-1,871.28	-8,391.99	5,345.34	5,255.26	90.08	59.340		
10,900.00	7,229.86	7,167.71	7,034.97	94.67	35.68	81.74	-1,871.13	-8,392.02	5,247.99	5,157.46	90.53	57.970		
11,000.00	7,229.45	7,169.54	7,036.80	97.28	35.69	81.83	-1,870.99	-8,392.06	5,150.75	5,059.74	91.01	56.594		
11,100.00	7,229.05	7,171.37	7,038.62	99.90	35.70	81.91	-1,870.84	-8,392.10	5,053.62	4,962.09	91.53	55.215		
11,200.00	7,228.64	7,173.20	7,040.44	102.54	35.70	82.00	-1,870.70	-8,392.13	4,956.59	4,864.52	92.08	53.831		
11,300.00	7,228.24	7,175.03	7,042.26	105.19	35.71	82.09	-1,870.55	-8,392.17	4,859.69	4,767.02	92.67	52.443		
11,400.00	7,227.83	7,176.86	7,044.08	107.85	35.72	82.17	-1,870.41	-8,392.20	4,762.92	4,669.62	93.30	51.052		
11,500.00	7,227.42	7,178.68	7,045.90	110.52	35.73	82.26	-1,870.27	-8,392.24	4,666.28	4,572.31	93.97	49.658		
11,600.00	7,227.02	7,180.50	7,047.72	113.20	35.73	82.34	-1,870.12	-8,392.28	4,569.78	4,475.09	94.69	48.261		
11,700.00	7,226.61	7,182.32	7,049.54	115.89	35.74	82.43	-1,869.98	-8,392.31	4,473.44	4,377.98	95.46	46.862		
11,800.00	7,226.21	7,184.15	7,051.35	118.59	35.75	82.52	-1,869.84	-8,392.35	4,377.26	4,280.97	96.29	45.461		
11,900.00	7,225.80	7,185.96	7,053.16	121.29	35.75	82.60	-1,869.70	-8,392.38	4,281.26	4,184.09	97.17	44.060		
12,000.00	7,225.40	7,187.78	7,054.98	124.00	35.76	82.69	-1,869.56	-8,392.42	4,185.44	4,087.32	98.11	42.659		
12,100.00	7,224.99	7,189.60	7,056.79	126.72	35.77	82.77	-1,869.42	-8,392.45	4,089.82	3,990.69	99.13	41.259		
12,200.00	7,224.58	7,191.41	7,058.60	129.44	35.78	82.86	-1,869.28	-8,392.49	3,994.41	3,894.20	100.21	39.860		
12,300.00	7,224.18	7,193.23	7,060.40	132.17	35.78	82.95	-1,869.14	-8,392.53	3,899.24	3,797.87	101.37	38.464		
12,400.00	7,223.77	7,195.04	7,062.21	134.91	35.79	83.03	-1,869.00	-8,392.56	3,804.31	3,701.69	102.62	37.072		
12,500.00	7,223.37	7,196.85	7,064.01	137.65	35.80	83.12	-1,868.86	-8,392.60	3,709.65	3,605.69	103.96	35.685		
12,600.00	7,222.96	7,198.66	7,065.82	140.39	35.81	83.20	-1,868.72	-8,392.63	3,615.27	3,509.89	105.39	34.304		
12,700.00	7,222.55	7,200.47	7,067.62	143.14	35.81	83.29	-1,868.58	-8,392.67	3,521.21	3,414.28	106.93	32.931		
12,800.00	7,222.15	7,202.27	7,069.42	145.89	35.82	83.37	-1,868.45	-8,392.70	3,427.48	3,318.90	108.58	31.567		
12,900.00	7,221.74	7,204.08	7,071.22	148.65	35.83	83.46	-1,868.31	-8,392.74	3,334.11	3,223.76	110.35	30.214		
13,000.00	7,221.34	7,205.88	7,073.02	151.41	35.84	83.54	-1,868.18	-8,392.77	3,241.14	3,128.89	112.25	28.873		
13,100.00	7,220.93	7,207.69	7,074.82	154.18	35.84	83.63	-1,868.04	-8,392.81	3,148.60	3,034.30	114.30	27.547		
13,200.00	7,220.53	7,209.49	7,076.61	156.94	35.85	83.71	-1,867.91	-8,392.84	3,056.52	2,940.03	116.50	26.237		
13,300.00	7,220.12	7,211.29	7,078.41	159.72	35.86	83.80	-1,867.77	-8,392.88	2,964.96	2,846.10	118.86	24.945		
13,400.00	7,219.71	7,213.09	7,080.20	162.49	35.86	83.88	-1,867.64	-8,392.92	2,873.96	2,752.56	121.41	23.672		
13,500.00	7,219.31	7,214.88	7,081.99	165.27	35.87	83.97	-1,867.51	-8,392.95	2,783.58	2,659.44	124.14	22.422		
13,600.00	7,218.90	7,216.68	7,083.79	168.05	35.88	84.05	-1,867.37	-8,392.99	2,693.88	2,566.79	127.09	21.197		
13,700.00	7,218.50	7,218.48	7,085.58	170.83	35.89	84.14	-1,867.24	-8,393.02	2,604.92	2,474.66	130.26	19.998		
13,800.00	7,218.09	7,220.27	7,087.36	173.61	35.89	84.22	-1,867.11	-8,393.06	2,516.80	2,383.12	133.68	18.828		
13,900.00	7,217.69	7,222.06	7,089.15	176.40	35.90	84.31	-1,866.98	-8,393.09	2,429.59	2,292.24	137.36	17.688		
14,000.00	7,217.28	7,223.85	7,090.94	179.19	35.91	84.39	-1,866.85	-8,393.13	2,343.40	2,202.09	141.32	16.583		
14,100.00	7,216.87	7,225.64	7,092.72	181.98	35.92	84.48	-1,866.72	-8,393.16	2,258.36	2,112.77	145.58	15.513		
14,200.00	7,216.47	7,227.43	7,094.50	184.78	35.92	84.56	-1,866.59	-8,393.20	2,174.58	2,024.41	150.17	14.481		
14,300.00	7,216.06	7,229.22	7,096.28	187.57	35.93	84.65	-1,866.46	-8,393.23	2,092.23	1,937.12	155.11	13.489		
14,400.00	7,215.66	7,231.00	7,098.07	190.37	35.94	84.73	-1,866.33	-8,393.26	2,011.47	1,851.06	160.41	12.540		
14,500.00	7,215.25	7,232.78	7,099.84	193.17	35.95	84.82	-1,866.20	-8,393.30	1,932.52	1,766.42	166.10	11.635		
14,600.00	7,214.85	7,234.57	7,101.62	195.97	35.95	84.90	-1,866.08	-8,393.33	1,855.59	1,683.41	172.18	10.777		
14,700.00	7,214.44	7,236.35	7,103.40	198.77	35.96	84.99	-1,865.95	-8,393.37	1,780.96	1,602.29	178.67	9.968		
14,800.00	7,214.03	7,238.13	7,105.17	201.58	35.97	85.07	-1,865.82	-8,393.40	1,708.92	1,523.36	185.56	9.210		
14,900.00	7,213.63	7,239.91	7,106.95	204.38	35.97	85.15	-1,865.70	-8,393.44	1,639.81	1,446.97	192.84	8.503		
15,000.00	7,213.22	7,241.69	7,108.72	207.19	35.98	85.24	-1,865.57	-8,393.47	1,574.03	1,373.55	200.48	7.851		
15,100.00	7,212.82	7,243.46	7,110.49	210.00	35.99	85.32	-1,865.45	-8,393.51	1,512.00	1,303.58	208.42	7.255		
15,200.00	7,212.41	7,245.24	7,112.26	212.81	36.00	85.41	-1,865.32	-8,393.54	1,454.20	1,237.63	216.57	6.715		
15,300.00	7,212.01	7,247.01	7,114.03	215.62	36.00	85.49	-1,865.20	-8,393.58	1,401.17	1,176.35	224.82	6.232		
15,400.00	7,211.60	7,248.78	7,115.80	218.43	36.01	85.57	-1,865.07	-8,393.61	1,353.45	1,120.45	233.00	5.809		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 82-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,500.00	7,211.19	7,250.55	7,117.56	221.25	36.02	85.66	-1,864.95	-8,393.64	1,311.63	1,070.72	240.91	5.445	
15,600.00	7,210.79	7,252.32	7,119.33	224.06	36.02	85.74	-1,864.83	-8,393.68	1,276.29	1,027.98	248.31	5.140	
15,700.00	7,210.38	7,254.09	7,121.09	226.88	36.03	85.83	-1,864.71	-8,393.71	1,247.98	993.02	254.96	4.895	
15,794.94	7,210.00	7,255.77	7,122.77	229.55	36.04	85.91	-1,864.59	-8,393.75	1,228.05	967.72	260.33	4.717	CC, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 17-11(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	28.00	3.28	3.28	-80.45	1,537.97	-9,141.68	9,270.19					
100.00	100.00	72.00	100.00	3.28	3.51	-80.45	1,537.97	-9,141.68	9,270.15	9,263.35	6.80	1,363.810		
200.00	200.00	172.00	200.00	3.34	5.38	-80.45	1,537.97	-9,141.68	9,270.15	9,261.44	8.71	1,063.983		
300.00	299.98	271.98	299.98	3.44	8.41	96.91	1,537.97	-9,141.68	9,270.36	9,258.50	11.85	782.032		
400.00	399.84	371.84	399.84	3.59	11.70	96.93	1,537.97	-9,141.68	9,270.99	9,255.70	15.29	606.236		
500.00	499.45	471.45	499.45	3.79	15.07	96.96	1,537.97	-9,141.68	9,272.05	9,253.19	18.86	491.618		
600.00	598.70	570.70	598.70	4.03	18.47	97.00	1,537.97	-9,141.68	9,273.54	9,251.04	22.50	412.151		
700.00	697.47	669.47	697.47	4.31	21.87	97.06	1,537.97	-9,141.68	9,275.48	9,249.29	26.19	354.206		
800.00	795.62	767.62	795.62	4.64	25.27	97.13	1,537.97	-9,141.68	9,277.88	9,247.98	29.90	310.259		
900.00	893.06	865.06	893.06	5.00	28.64	97.21	1,537.97	-9,141.68	9,280.76	9,247.12	33.64	275.880		
1,000.00	989.64	961.64	989.64	5.40	31.99	97.29	1,537.97	-9,141.68	9,284.14	9,246.75	37.39	248.312		
1,100.00	1,085.27	1,057.27	1,085.27	5.83	35.32	97.38	1,537.97	-9,141.68	9,288.04	9,246.90	41.14	225.755		
1,200.00	1,179.82	1,151.82	1,179.82	6.29	38.60	97.49	1,537.97	-9,141.68	9,292.49	9,247.60	44.89	206.985		
1,300.00	1,273.17	1,245.17	1,273.17	6.79	41.85	97.59	1,537.97	-9,141.68	9,297.52	9,248.88	48.64	191.146		
1,400.00	1,365.21	1,337.21	1,365.21	7.33	45.06	97.70	1,537.97	-9,141.68	9,303.16	9,250.79	52.38	177.621		
1,500.00	1,455.84	1,427.84	1,455.84	7.89	48.21	97.81	1,537.97	-9,141.68	9,309.44	9,253.34	56.10	165.954		
1,600.00	1,544.94	1,516.94	1,544.94	8.50	51.32	97.92	1,537.97	-9,141.68	9,316.39	9,256.60	59.80	155.800		
1,700.00	1,632.39	1,604.39	1,632.39	9.13	54.36	98.02	1,537.97	-9,141.68	9,324.06	9,260.59	63.47	146.896		
1,800.00	1,718.11	1,709.89	1,718.11	9.80	58.04	98.12	1,537.97	-9,141.68	9,332.47	9,264.66	67.81	137.622		
1,900.00	1,802.44	1,774.44	1,802.44	10.49	60.29	98.35	1,537.97	-9,141.68	9,341.54	9,270.80	70.75	132.039		
2,000.00	1,886.68	1,858.68	1,886.68	11.20	63.23	98.62	1,537.97	-9,141.68	9,350.94	9,276.55	74.39	125.706		
2,100.00	1,970.92	1,942.92	1,970.92	11.93	66.16	98.90	1,537.97	-9,141.68	9,360.64	9,282.60	78.04	119.951		
2,200.00	2,055.17	2,027.17	2,055.17	12.66	69.10	99.18	1,537.97	-9,141.68	9,370.63	9,288.94	81.69	114.703		
2,300.00	2,139.41	2,111.41	2,139.41	13.40	72.04	99.45	1,537.97	-9,141.68	9,380.93	9,295.57	85.36	109.899		
2,400.00	2,223.66	2,204.34	2,223.66	14.14	75.28	99.73	1,537.97	-9,141.68	9,391.52	9,302.19	89.33	105.130		
2,500.00	2,307.90	2,279.90	2,307.90	14.89	77.92	100.00	1,537.97	-9,141.68	9,402.41	9,309.71	92.70	101.423		
2,600.00	2,392.14	2,364.14	2,392.14	15.65	80.85	100.27	1,537.97	-9,141.68	9,413.60	9,317.22	96.38	97.668		
2,700.00	2,476.39	2,448.39	2,476.39	16.41	83.79	100.55	1,537.97	-9,141.68	9,425.08	9,325.02	100.06	94.190		
2,800.00	2,560.63	2,532.63	2,560.63	17.17	86.73	100.82	1,537.97	-9,141.68	9,436.85	9,333.11	103.75	90.959		
2,900.00	2,644.88	2,616.88	2,644.88	17.93	89.67	101.09	1,537.97	-9,141.68	9,448.92	9,341.49	107.43	87.950		
3,000.00	2,729.12	2,701.12	2,729.12	18.70	92.61	101.36	1,537.97	-9,141.68	9,461.28	9,350.16	111.12	85.143		
3,100.00	2,813.36	2,785.36	2,813.36	19.47	95.55	101.64	1,537.97	-9,141.68	9,473.93	9,359.12	114.81	82.518		
3,200.00	2,897.61	2,869.61	2,897.61	20.25	98.49	101.91	1,537.97	-9,141.68	9,486.87	9,368.37	118.50	80.057		
3,300.00	2,981.85	2,953.85	2,981.85	21.02	101.43	102.18	1,537.97	-9,141.68	9,500.09	9,377.90	122.19	77.748		
3,400.00	3,066.10	3,038.10	3,066.10	21.80	104.37	102.45	1,537.97	-9,141.68	9,513.61	9,387.72	125.88	75.576		
3,500.00	3,150.34	3,122.34	3,150.34	22.58	107.31	102.72	1,537.97	-9,141.68	9,527.40	9,397.83	129.57	73.529		
3,600.00	3,234.58	3,206.58	3,234.58	23.35	110.25	102.98	1,537.97	-9,141.68	9,541.49	9,408.22	133.26	71.599		
3,700.00	3,318.83	3,309.17	3,318.83	24.13	113.83	103.25	1,537.97	-9,141.68	9,555.85	9,418.26	137.59	69.450		
3,800.00	3,403.07	3,375.07	3,403.07	24.92	116.12	103.52	1,537.97	-9,141.68	9,570.50	9,429.85	140.64	68.047		
3,900.00	3,487.32	3,459.32	3,487.32	25.70	119.06	103.79	1,537.97	-9,141.68	9,585.43	9,441.09	144.33	66.411		
4,000.00	3,571.56	3,543.56	3,571.56	26.48	122.00	104.05	1,537.97	-9,141.68	9,600.63	9,452.61	148.02	64.859		
4,100.00	3,655.80	3,627.80	3,655.80	27.27	124.94	104.32	1,537.97	-9,141.68	9,616.12	9,464.41	151.71	63.384		
4,200.00	3,740.05	3,712.05	3,740.05	28.05	127.88	104.58	1,537.97	-9,141.68	9,631.88	9,476.48	155.40	61.981		
4,300.00	3,824.29	3,803.71	3,824.29	28.84	131.08	104.85	1,537.97	-9,141.68	9,647.92	9,488.57	159.35	60.547		
4,400.00	3,908.54	3,880.54	3,908.54	29.62	133.76	105.11	1,537.97	-9,141.68	9,664.23	9,501.45	162.77	59.372		
4,500.00	3,992.78	3,964.78	3,992.78	30.41	136.70	105.37	1,537.97	-9,141.68	9,680.81	9,514.35	166.46	58.157		
4,600.00	4,077.03	4,049.03	4,077.03	31.20	139.64	105.64	1,537.97	-9,141.68	9,697.66	9,527.52	170.14	56.997		
4,700.00	4,161.27	4,133.27	4,161.27	31.98	142.58	105.90	1,537.97	-9,141.68	9,714.78	9,540.96	173.83	55.887		
4,800.00	4,245.51	4,217.51	4,245.51	32.77	145.53	106.16	1,537.97	-9,141.68	9,732.18	9,554.67	177.51	54.826		
4,900.00	4,329.76	4,301.76	4,329.76	33.56	148.47	106.42	1,537.97	-9,141.68	9,749.83	9,568.64	181.19	53.810		
5,000.00	4,414.00	4,386.00	4,414.00	34.35	151.41	106.68	1,537.97	-9,141.68	9,767.76	9,582.89	184.87	52.836		
5,100.00	4,498.25	4,470.25	4,498.25	35.14	154.35	106.94	1,537.97	-9,141.68	9,785.94	9,597.40	188.55	51.901		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 17-11(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,200.00	4,582.49	4,554.49	4,582.49	35.93	157.29	107.20	1,537.97	-9,141.68	9,804.39	9,612.17	192.23	51.004		
5,300.00	4,666.73	4,638.73	4,666.73	36.72	160.23	107.45	1,537.97	-9,141.68	9,823.10	9,627.20	195.90	50.143		
5,400.00	4,750.98	4,722.98	4,750.98	37.51	163.17	107.71	1,537.97	-9,141.68	9,842.07	9,642.50	199.58	49.315		
5,500.00	4,835.22	4,807.22	4,835.22	38.30	166.11	107.97	1,537.97	-9,141.68	9,861.30	9,658.05	203.25	48.518		
5,600.00	4,919.47	4,908.53	4,919.47	39.09	169.64	108.22	1,537.97	-9,141.68	9,880.79	9,673.27	207.52	47.614		
5,700.00	5,003.71	4,975.71	5,003.71	39.88	171.99	108.48	1,537.97	-9,141.68	9,900.52	9,689.93	210.59	47.013		
5,800.00	5,088.06	5,060.06	5,088.06	40.67	174.93	108.86	1,537.97	-9,141.68	9,920.46	9,706.19	214.26	46.301		
5,900.00	5,173.83	5,145.83	5,173.83	41.44	177.93	109.48	1,537.97	-9,141.68	9,939.76	9,721.80	217.96	45.604		
6,000.00	5,261.34	5,233.34	5,261.34	42.18	180.98	110.06	1,537.97	-9,141.68	9,958.14	9,736.45	221.69	44.918		
6,100.00	5,350.49	5,322.49	5,350.49	42.88	184.09	110.61	1,537.97	-9,141.68	9,975.53	9,750.07	225.46	44.246		
6,200.00	5,441.16	5,413.16	5,441.16	43.56	187.26	111.13	1,537.97	-9,141.68	9,991.87	9,762.63	229.25	43.585		
7,800.00	6,980.23	6,952.23	6,980.23	50.03	240.98	32.89	1,537.97	-9,141.68	9,980.68	9,691.57	289.11	34.522		
7,900.00	7,055.85	7,027.85	7,055.85	50.21	243.62	36.74	1,537.97	-9,141.68	9,922.85	9,630.95	291.90	33.994		
8,000.00	7,120.34	7,107.66	7,120.34	50.36	246.41	42.23	1,537.97	-9,141.68	9,855.37	9,560.53	294.83	33.427		
8,100.00	7,172.10	7,144.10	7,172.10	50.47	247.68	49.97	1,537.97	-9,141.68	9,779.95	9,483.69	296.25	33.012		
8,200.00	7,209.85	7,181.85	7,209.85	50.55	249.00	60.65	1,537.97	-9,141.68	9,698.49	9,400.75	297.74	32.573		
8,300.00	7,232.68	7,204.68	7,232.68	50.61	249.79	74.53	1,537.97	-9,141.68	9,613.06	9,314.31	298.75	32.177		
8,400.00	7,240.00	7,212.00	7,240.00	50.65	250.05	90.42	1,537.97	-9,141.68	9,525.77	9,226.50	299.27	31.830		
8,500.00	7,239.60	7,211.60	7,239.60	50.69	250.03	90.41	1,537.97	-9,141.68	9,438.41	9,138.83	299.58	31.506		
8,600.00	7,239.19	7,211.19	7,239.19	50.75	250.02	90.41	1,537.97	-9,141.68	9,351.30	9,051.37	299.93	31.178		
8,700.00	7,238.78	7,210.78	7,238.78	50.85	250.01	90.40	1,537.97	-9,141.68	9,264.45	8,964.12	300.33	30.848		
8,800.00	7,238.38	7,210.38	7,238.38	51.02	249.99	90.40	1,537.97	-9,141.68	9,177.86	8,877.09	300.78	30.514		
8,900.00	7,237.97	7,209.97	7,237.97	51.32	249.98	90.39	1,537.97	-9,141.68	9,091.56	8,790.28	301.28	30.177		
9,000.00	7,237.57	7,209.57	7,237.57	51.95	249.96	90.39	1,537.97	-9,141.68	9,005.53	8,703.70	301.83	29.836		
9,100.00	7,237.16	7,209.16	7,237.16	53.10	249.95	90.38	1,537.97	-9,141.68	8,919.80	8,617.36	302.44	29.493		
9,200.00	7,236.76	7,208.76	7,236.76	54.69	249.93	90.38	1,537.97	-9,141.68	8,834.37	8,531.26	303.10	29.146		
9,300.00	7,236.35	7,208.35	7,236.35	56.53	249.92	90.37	1,537.97	-9,141.68	8,749.24	8,445.42	303.82	28.797		
9,400.00	7,235.94	7,207.94	7,235.94	58.53	249.91	90.37	1,537.97	-9,141.68	8,664.44	8,359.84	304.60	28.445		
9,500.00	7,235.54	7,207.54	7,235.54	60.62	249.89	90.36	1,537.97	-9,141.68	8,579.96	8,274.52	305.43	28.091		
9,600.00	7,235.13	7,207.13	7,235.13	62.80	249.88	90.36	1,537.97	-9,141.68	8,495.82	8,189.49	306.33	27.735		
9,700.00	7,234.73	7,206.73	7,234.73	65.03	249.86	90.35	1,537.97	-9,141.68	8,412.02	8,104.74	307.28	27.376		
9,800.00	7,234.32	7,206.32	7,234.32	67.32	249.85	90.35	1,537.97	-9,141.68	8,328.58	8,020.29	308.29	27.015		
9,900.00	7,233.92	7,205.92	7,233.92	69.66	249.84	90.34	1,537.97	-9,141.68	8,245.52	7,936.15	309.36	26.653		
10,000.00	7,233.51	7,205.51	7,233.51	72.03	249.82	90.34	1,537.97	-9,141.68	8,162.83	7,852.33	310.50	26.289		
10,100.00	7,233.10	7,205.10	7,233.10	74.45	249.81	90.33	1,537.97	-9,141.68	8,080.53	7,768.83	311.69	25.925		
10,200.00	7,232.70	7,204.70	7,232.70	76.89	249.79	90.33	1,537.97	-9,141.68	7,998.63	7,685.68	312.95	25.559		
10,300.00	7,232.29	7,204.29	7,232.29	79.36	249.78	90.32	1,537.97	-9,141.68	7,917.16	7,602.88	314.27	25.192		
10,400.00	7,231.89	7,203.89	7,231.89	81.86	249.76	90.32	1,537.97	-9,141.68	7,836.11	7,520.45	315.66	24.825		
10,500.00	7,231.48	7,203.48	7,231.48	84.38	249.75	90.31	1,537.97	-9,141.68	7,755.50	7,438.40	317.10	24.457		
10,600.00	7,231.08	7,203.08	7,231.08	86.93	249.74	90.31	1,537.97	-9,141.68	7,675.35	7,356.74	318.61	24.090		
10,700.00	7,230.67	7,202.67	7,230.67	89.49	249.72	90.30	1,537.97	-9,141.68	7,595.67	7,275.48	320.19	23.723		
10,800.00	7,230.26	7,202.26	7,230.26	92.07	249.71	90.30	1,537.97	-9,141.68	7,516.47	7,194.65	321.82	23.356		
10,900.00	7,229.86	7,201.86	7,229.86	94.67	249.69	90.29	1,537.97	-9,141.68	7,437.78	7,114.26	323.53	22.990		
11,000.00	7,229.45	7,201.45	7,229.45	97.28	249.68	90.29	1,537.97	-9,141.68	7,359.61	7,034.31	325.29	22.625		
11,100.00	7,229.05	7,201.05	7,229.05	99.90	249.67	90.28	1,537.97	-9,141.68	7,281.96	6,954.84	327.12	22.261		
11,200.00	7,228.64	7,200.64	7,228.64	102.54	249.65	90.28	1,537.97	-9,141.68	7,204.87	6,875.86	329.02	21.898		
11,300.00	7,228.24	7,200.24	7,228.24	105.19	249.64	90.27	1,537.97	-9,141.68	7,128.35	6,797.37	330.98	21.537		
11,400.00	7,227.83	7,200.17	7,227.83	107.85	249.63	90.27	1,537.97	-9,141.68	7,052.42	6,719.40	333.02	21.177		
11,500.00	7,227.42	7,200.58	7,227.42	110.52	249.65	90.26	1,537.97	-9,141.68	6,977.09	6,641.96	335.13	20.819		
11,600.00	7,227.02	7,200.98	7,227.02	113.20	249.66	90.26	1,537.97	-9,141.68	6,902.39	6,565.07	337.32	20.463		
11,700.00	7,226.61	7,201.39	7,226.61	115.89	249.68	90.25	1,537.97	-9,141.68	6,828.34	6,488.77	339.57	20.109		
11,800.00	7,226.21	7,201.79	7,226.21	118.59	249.69	90.25	1,537.97	-9,141.68	6,754.96	6,413.07	341.88	19.758		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 17-11(PR_75CC) - OH - OH												Offset Site Error: 0.00 ft	
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)		Separation Factor
11,900.00	7,225.80	7,202.20	7,225.80	121.29	249.71	90.24	1,537.97	-9,141.68	6,682.26	6,338.00	344.27	19.410	
12,000.00	7,225.40	7,202.61	7,225.40	124.00	249.72	90.24	1,537.97	-9,141.68	6,610.28	6,263.57	346.71	19.066	
12,100.00	7,224.99	7,203.01	7,224.99	126.72	249.73	90.23	1,537.97	-9,141.68	6,539.04	6,189.81	349.23	18.724	
12,200.00	7,224.58	7,203.42	7,224.58	129.44	249.75	90.23	1,537.97	-9,141.68	6,468.56	6,116.75	351.80	18.387	
12,300.00	7,224.18	7,203.82	7,224.18	132.17	249.76	90.22	1,537.97	-9,141.68	6,398.86	6,044.42	354.45	18.053	
12,400.00	7,223.77	7,204.23	7,223.77	134.91	249.78	90.22	1,537.97	-9,141.68	6,329.98	5,972.82	357.16	17.723	
12,500.00	7,223.37	7,204.63	7,223.37	137.65	249.79	90.21	1,537.97	-9,141.68	6,261.94	5,902.01	359.93	17.398	
12,600.00	7,222.96	7,205.04	7,222.96	140.39	249.80	90.21	1,537.97	-9,141.68	6,194.76	5,831.99	362.77	17.076	
12,700.00	7,222.55	7,205.45	7,222.55	143.14	249.82	90.20	1,537.97	-9,141.68	6,128.48	5,762.81	365.67	16.760	
12,800.00	7,222.15	7,205.85	7,222.15	145.89	249.83	90.20	1,537.97	-9,141.68	6,063.12	5,694.49	368.63	16.447	
12,900.00	7,221.74	7,206.26	7,221.74	148.65	249.85	90.19	1,537.97	-9,141.68	5,998.72	5,627.06	371.66	16.140	
13,000.00	7,221.34	7,206.66	7,221.34	151.41	249.86	90.19	1,537.97	-9,141.68	5,935.30	5,560.55	374.75	15.838	
13,100.00	7,220.93	7,207.07	7,220.93	154.18	249.88	90.18	1,537.97	-9,141.68	5,872.91	5,495.00	377.91	15.541	
13,200.00	7,220.53	7,207.47	7,220.53	156.94	249.89	90.18	1,537.97	-9,141.68	5,811.56	5,430.44	381.12	15.249	
13,300.00	7,220.12	7,207.88	7,220.12	159.72	249.90	90.17	1,537.97	-9,141.68	5,751.30	5,366.91	384.39	14.962	
13,400.00	7,219.71	7,208.29	7,219.71	162.49	249.92	90.17	1,537.97	-9,141.68	5,692.15	5,304.44	387.71	14.681	
13,500.00	7,219.31	7,208.69	7,219.31	165.27	249.93	90.16	1,537.97	-9,141.68	5,634.17	5,243.07	391.10	14.406	
13,600.00	7,218.90	7,209.10	7,218.90	168.05	249.95	90.16	1,537.97	-9,141.68	5,577.37	5,182.83	394.53	14.137	
13,700.00	7,218.50	7,209.50	7,218.50	170.83	249.96	90.15	1,537.97	-9,141.68	5,521.79	5,123.77	398.02	13.873	
13,800.00	7,218.09	7,209.91	7,218.09	173.61	249.97	90.15	1,537.97	-9,141.68	5,467.49	5,065.93	401.56	13.616	
13,900.00	7,217.69	7,209.69	7,217.69	176.40	249.27	90.14	1,537.97	-9,141.68	5,414.48	5,010.06	404.42	13.388	
14,000.00	7,217.28	7,189.28	7,217.28	179.19	249.25	90.14	1,537.97	-9,141.68	5,362.82	4,954.80	408.02	13.143	
14,100.00	7,216.87	7,188.87	7,216.87	181.98	249.24	90.13	1,537.97	-9,141.68	5,312.53	4,900.87	411.66	12.905	
14,200.00	7,216.47	7,188.47	7,216.47	184.78	249.23	90.13	1,537.97	-9,141.68	5,263.67	4,848.33	415.34	12.673	
14,300.00	7,216.06	7,188.06	7,216.06	187.57	249.21	90.12	1,537.97	-9,141.68	5,216.26	4,797.22	419.05	12.448	
14,400.00	7,215.66	7,187.66	7,215.66	190.37	249.20	90.12	1,537.97	-9,141.68	5,170.36	4,747.57	422.78	12.229	
14,500.00	7,215.25	7,187.25	7,215.25	193.17	249.18	90.11	1,537.97	-9,141.68	5,125.99	4,699.44	426.55	12.017	
14,600.00	7,214.85	7,186.85	7,214.85	195.97	249.17	90.11	1,537.97	-9,141.68	5,083.20	4,652.87	430.33	11.812	
14,700.00	7,214.44	7,186.44	7,214.44	198.77	249.16	90.10	1,537.97	-9,141.68	5,042.04	4,607.91	434.13	11.614	
14,800.00	7,214.03	7,186.03	7,214.03	201.58	249.14	90.10	1,537.97	-9,141.68	5,002.53	4,564.59	437.94	11.423	
14,900.00	7,213.63	7,185.63	7,213.63	204.38	249.13	90.09	1,537.97	-9,141.68	4,964.73	4,522.97	441.76	11.239	
15,000.00	7,213.22	7,185.22	7,213.22	207.19	249.11	90.09	1,537.97	-9,141.68	4,928.66	4,483.09	445.57	11.061	
15,100.00	7,212.82	7,184.82	7,212.82	210.00	249.10	90.08	1,537.97	-9,141.68	4,894.38	4,445.00	449.38	10.891	
15,200.00	7,212.41	7,184.41	7,212.41	212.81	249.08	90.08	1,537.97	-9,141.68	4,861.90	4,408.74	453.17	10.729	
15,300.00	7,212.01	7,184.01	7,212.01	215.62	249.07	90.07	1,537.97	-9,141.68	4,831.28	4,374.34	456.94	10.573	
15,400.00	7,211.60	7,183.60	7,211.60	218.43	249.06	90.07	1,537.97	-9,141.68	4,802.55	4,341.86	460.69	10.425	
15,500.00	7,211.19	7,183.19	7,211.19	221.25	249.04	90.06	1,537.97	-9,141.68	4,775.74	4,311.34	464.40	10.284	
15,600.00	7,210.79	7,182.79	7,210.79	224.06	249.03	90.06	1,537.97	-9,141.68	4,750.88	4,282.80	468.08	10.150	
15,700.00	7,210.38	7,182.38	7,210.38	226.88	249.01	90.05	1,537.97	-9,141.68	4,728.01	4,256.30	471.71	10.023	
15,794.94	7,210.00	7,182.00	7,210.00	229.55	249.00	90.05	1,537.97	-9,141.68	4,708.16	4,233.06	475.10	9.910 CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MONTERA 10-34 (PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	16.60	1.60	3.28	3.28	2.67	2,584.38	120.42	2,587.18					
100.00	100.00	128.32	113.32	3.28	3.30	2.66	2,584.09	120.03	2,586.91	2,580.32	6.58	393.021		
200.00	200.00	237.89	222.89	3.34	3.38	2.66	2,583.26	119.91	2,586.14	2,579.43	6.72	385.119		
225.54	225.54	263.61	248.60	3.36	3.41	-179.99	2,583.03	119.91	2,586.03	2,579.26	6.76	382.283 CC, ES		
300.00	299.98	334.46	319.46	3.44	3.50	-179.99	2,582.42	119.87	2,587.02	2,580.08	6.94	372.785		
400.00	399.84	423.86	408.85	3.59	3.65	180.00	2,581.95	119.32	2,591.70	2,584.45	7.24	357.834		
500.00	499.45	512.04	497.02	3.79	3.83	179.98	2,581.88	118.55	2,600.29	2,592.67	7.62	341.061		
600.00	598.70	602.27	587.25	4.03	4.05	179.96	2,582.16	117.68	2,612.74	2,604.66	8.08	323.383		
700.00	697.47	690.39	675.36	4.31	4.28	179.95	2,582.74	117.24	2,629.02	2,620.43	8.59	306.132		
800.00	795.62	811.39	796.36	4.64	4.62	179.95	2,583.30	117.28	2,648.56	2,639.32	9.24	286.565		
900.00	893.06	889.94	874.92	5.00	4.87	179.95	2,583.63	117.43	2,671.45	2,661.63	9.82	272.073		
1,000.00	989.64	1,008.00	992.98	5.40	5.25	179.96	2,584.02	117.77	2,697.68	2,687.12	10.56	255.464		
1,100.00	1,085.27	1,100.88	1,085.85	5.83	5.56	179.97	2,583.97	118.18	2,726.88	2,715.63	11.25	242.345		
1,200.00	1,179.82	1,188.67	1,173.64	6.29	5.87	179.99	2,584.03	118.85	2,759.53	2,747.58	11.95	230.872		
1,300.00	1,273.17	1,296.48	1,281.45	6.79	6.26	-180.00	2,584.00	119.59	2,795.38	2,782.63	12.75	219.202		
1,400.00	1,365.21	1,380.99	1,365.96	7.33	6.57	-179.99	2,583.84	119.77	2,834.29	2,820.81	13.48	210.199		
1,500.00	1,455.84	1,481.80	1,466.77	7.89	6.94	-179.99	2,583.70	119.85	2,876.43	2,862.13	14.30	201.168		
1,600.00	1,544.94	1,581.43	1,566.40	8.50	7.32	-179.99	2,583.12	120.12	2,921.32	2,906.19	15.13	193.119		
1,700.00	1,632.39	1,670.26	1,655.22	9.13	7.66	-179.99	2,582.43	120.03	2,969.11	2,953.19	15.92	186.450		
1,800.00	1,718.11	1,760.36	1,745.32	9.80	8.01	-180.00	2,581.73	119.51	3,019.92	3,003.18	16.74	180.403		
1,900.00	1,802.44	1,840.43	1,825.38	10.49	8.33	179.99	2,581.03	118.82	3,072.90	3,055.39	17.52	175.417		
2,000.00	1,886.68	1,916.70	1,901.64	11.20	8.63	179.97	2,580.65	118.17	3,126.33	3,108.05	18.28	171.056		
2,100.00	1,970.92	2,020.53	2,005.47	11.93	9.04	179.96	2,579.87	117.41	3,179.54	3,160.37	19.18	165.786		
2,200.00	2,055.17	2,085.88	2,070.82	12.66	9.30	179.95	2,579.49	116.69	3,232.86	3,212.96	19.90	162.442		
2,300.00	2,139.41	2,161.62	2,146.55	13.40	9.60	179.93	2,579.28	115.70	3,286.46	3,265.77	20.68	158.912		
2,400.00	2,223.66	2,231.98	2,216.91	14.14	9.89	179.91	2,579.27	114.99	3,340.29	3,318.85	21.44	155.819		
2,500.00	2,307.90	2,300.00	2,284.93	14.89	10.16	179.90	2,579.65	114.46	3,394.59	3,372.41	22.18	153.027		
2,600.00	2,392.14	2,366.62	2,351.54	15.65	10.43	179.89	2,580.35	113.82	3,449.31	3,426.38	22.92	150.471		
2,700.00	2,476.39	2,435.41	2,420.31	16.41	10.71	179.87	2,581.34	112.82	3,504.34	3,480.66	23.68	148.004		
2,800.00	2,560.63	2,501.80	2,486.68	17.17	10.98	179.85	2,582.61	111.84	3,559.76	3,535.34	24.42	145.778		
2,900.00	2,644.88	2,571.01	2,555.87	17.93	11.27	179.83	2,584.22	110.79	3,615.54	3,590.36	25.18	143.599		
3,000.00	2,729.12	2,670.12	2,654.93	18.70	11.68	179.80	2,586.66	109.22	3,671.43	3,645.32	26.12	140.586		
3,100.00	2,813.36	2,755.30	2,740.08	19.47	12.03	179.78	2,588.32	107.90	3,726.88	3,699.90	26.97	138.161		
3,200.00	2,897.61	2,840.27	2,825.02	20.25	12.38	179.75	2,590.12	106.31	3,782.46	3,754.63	27.84	135.880		
3,300.00	2,981.85	2,937.88	2,922.59	21.02	12.78	179.72	2,591.86	104.06	3,837.75	3,808.97	28.78	133.350		
3,400.00	3,066.10	3,020.21	3,004.89	21.80	13.13	179.69	2,593.17	102.31	3,892.89	3,863.25	29.63	131.374		
3,500.00	3,150.34	3,086.73	3,071.38	22.58	13.40	179.67	2,594.41	101.00	3,948.26	3,917.87	30.39	129.932		
3,600.00	3,234.58	3,181.39	3,166.01	23.35	13.80	179.64	2,596.30	99.29	4,003.75	3,972.43	31.32	127.833		
3,700.00	3,318.83	3,247.94	3,232.54	24.13	14.07	179.63	2,597.55	98.24	4,059.17	4,027.09	32.08	126.546		
3,800.00	3,403.07	3,306.41	3,290.99	24.92	14.32	179.62	2,599.01	97.31	4,115.08	4,082.30	32.78	125.538		
3,900.00	3,487.32	3,366.74	3,351.28	25.70	14.57	179.60	2,600.85	96.46	4,171.45	4,137.96	33.49	124.549		
4,000.00	3,571.56	3,476.35	3,460.83	26.48	15.03	179.59	2,604.39	95.55	4,228.06	4,193.52	34.53	122.438		
4,100.00	3,655.80	3,557.96	3,542.41	27.27	15.37	179.59	2,606.42	95.38	4,284.01	4,248.62	35.39	121.057		
4,200.00	3,740.05	3,718.33	3,702.74	28.05	16.04	179.58	2,609.84	94.19	4,339.92	4,303.15	36.77	118.026		
4,300.00	3,824.29	3,776.97	3,761.38	28.84	16.29	179.58	2,610.68	93.65	4,394.91	4,357.42	37.48	117.258		
4,400.00	3,908.54	3,873.41	3,857.79	29.62	16.69	179.56	2,612.04	92.42	4,449.93	4,411.49	38.44	115.753		
4,500.00	3,992.78	4,001.83	3,986.17	30.41	17.23	179.53	2,613.04	89.40	4,504.40	4,464.78	39.62	113.680		
4,600.00	4,077.03	4,088.92	4,073.23	31.20	17.60	179.50	2,613.24	87.02	4,558.38	4,517.85	40.53	112.473		
4,700.00	4,161.27	4,157.69	4,141.98	31.98	17.88	179.47	2,613.46	85.17	4,612.45	4,571.14	41.31	111.654		
4,800.00	4,245.51	4,228.50	4,212.77	32.77	18.18	179.46	2,613.94	83.70	4,666.82	4,624.72	42.10	110.838		
4,900.00	4,329.76	4,306.48	4,290.74	33.56	18.51	179.44	2,614.58	82.30	4,721.33	4,678.38	42.95	109.930		
5,000.00	4,414.00	4,368.43	4,352.67	34.35	18.77	179.43	2,615.26	81.45	4,776.09	4,732.41	43.68	109.343		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MONTERA 10-34 (PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	4,437.19	4,421.42	35.14	19.06	179.43	2,616.30	80.86	4,831.21	4,786.75	44.46	108.670		
5,200.00	4,582.49	4,510.33	4,494.55	35.93	19.37	179.42	2,617.55	80.07	4,886.48	4,841.22	45.27	107.950		
5,300.00	4,666.73	4,569.28	4,553.48	36.72	19.62	179.42	2,618.79	79.23	4,942.07	4,896.10	45.97	107.501		
5,400.00	4,750.98	4,669.63	4,653.79	37.51	20.04	179.40	2,621.17	77.51	4,997.90	4,950.93	46.98	106.391		
5,500.00	4,835.22	4,783.13	4,767.25	38.30	20.52	179.38	2,623.06	75.31	5,053.10	5,005.02	48.08	105.102		
5,600.00	4,919.47	4,917.87	4,901.94	39.09	21.09	179.34	2,624.35	72.04	5,107.72	5,058.39	49.33	103.536		
5,700.00	5,003.71	4,969.75	4,953.80	39.88	21.31	179.33	2,624.84	70.60	5,162.24	5,112.25	49.99	103.260		
5,800.00	5,088.06	5,059.89	5,043.89	40.67	21.69	179.31	2,625.86	68.03	5,216.83	5,165.90	50.93	102.436		
5,900.00	5,173.83	5,145.66	5,129.64	41.44	22.06	179.30	2,626.56	66.18	5,268.86	5,217.04	51.82	101.671		
6,000.00	5,261.34	5,216.99	5,200.96	42.18	22.36	179.31	2,627.31	65.23	5,318.11	5,265.51	52.60	101.102		
6,100.00	5,350.49	5,295.00	5,278.96	42.88	22.69	179.32	2,628.31	64.23	5,364.50	5,311.08	53.42	100.425		
6,200.00	5,441.16	5,386.76	5,370.70	43.56	23.08	179.32	2,629.56	63.32	5,407.85	5,353.52	54.32	99.548		
6,300.00	5,533.25	5,474.76	5,458.70	44.20	23.45	179.33	2,630.73	63.03	5,448.03	5,392.84	55.19	98.717		
6,400.00	5,626.65	5,548.34	5,532.27	44.82	23.76	179.34	2,631.84	62.90	5,485.16	5,429.23	55.93	98.071		
6,500.00	5,721.23	5,634.28	5,618.19	45.40	24.13	179.36	2,633.49	63.17	5,519.41	5,462.66	56.75	97.262		
6,600.00	5,816.89	5,794.18	5,778.08	45.94	24.80	179.38	2,635.56	64.44	5,549.83	5,491.73	58.10	95.522		
6,700.00	5,913.51	5,932.91	5,916.80	46.45	25.39	179.39	2,636.08	64.51	5,575.98	5,516.71	59.27	94.075		
6,800.00	6,010.97	6,078.26	6,062.15	46.93	26.01	179.40	2,635.23	63.95	5,597.73	5,537.26	60.47	92.574		
6,900.00	6,109.15	6,185.39	6,169.27	47.38	26.46	179.40	2,634.17	63.39	5,615.70	5,554.34	61.37	91.513		
7,000.00	6,207.93	6,274.85	6,258.73	47.80	26.84	179.40	2,633.29	62.85	5,630.24	5,568.12	62.12	90.642		
7,100.00	6,307.19	6,360.24	6,344.11	48.18	27.20	179.39	2,632.65	62.02	5,641.53	5,578.72	62.81	89.812		
7,200.00	6,406.82	6,434.04	6,417.91	48.53	27.51	179.38	2,632.32	61.04	5,649.66	5,586.25	63.41	89.099		
7,300.00	6,506.68	6,500.01	6,483.87	48.84	27.80	179.38	2,632.44	60.10	5,654.90	5,590.98	63.92	88.465		
7,400.00	6,606.66	6,636.94	6,620.78	49.10	28.38	92.36	2,632.55	58.42	5,656.56	5,591.64	64.92	87.130		
7,451.15	6,657.74	6,693.97	6,677.81	49.23	28.62	92.38	2,632.41	57.56	5,656.50	5,591.17	65.33	86.582		
7,500.00	6,706.21	6,748.56	6,732.39	49.35	28.85	92.44	2,632.22	56.63	5,656.56	5,590.83	65.72	86.065		
7,600.00	6,803.22	6,850.84	6,834.65	49.59	29.29	92.62	2,631.73	55.01	5,657.09	5,590.63	66.46	85.118		
7,700.00	6,895.32	6,940.84	6,924.64	49.82	29.67	92.83	2,631.30	53.64	5,658.51	5,591.39	67.12	84.306		
7,800.00	6,980.23	7,028.33	7,012.13	50.03	30.04	93.05	2,630.90	52.88	5,661.10	5,593.31	67.79	83.513		
7,900.00	7,055.85	7,146.46	7,130.26	50.21	30.55	93.50	2,629.94	52.59	5,664.94	5,596.20	68.74	82.412		
8,000.00	7,120.34	7,245.34	7,229.12	50.36	30.96	93.80	2,628.21	52.52	5,669.87	5,600.21	69.66	81.398		
8,100.00	7,172.10	7,297.15	7,280.92	50.47	31.18	93.61	2,627.21	52.49	5,676.93	5,606.55	70.38	80.657		
8,200.00	7,209.85	7,334.97	7,318.73	50.55	31.35	93.12	2,626.49	52.46	5,686.36	5,615.16	71.19	79.874		
8,300.00	7,232.68	7,357.86	7,341.62	50.61	31.44	92.27	2,626.05	52.45	5,698.19	5,626.11	72.08	79.050		
8,400.00	7,240.00	7,365.26	7,349.02	50.65	31.47	91.07	2,625.91	52.44	5,712.32	5,639.28	73.04	78.210		
8,500.00	7,239.60	7,364.93	7,348.69	50.69	31.47	91.07	2,625.91	52.45	5,728.35	5,654.26	74.09	77.318		
8,600.00	7,239.19	7,364.60	7,348.36	50.75	31.47	91.06	2,625.92	52.45	5,746.07	5,670.80	75.28	76.333		
8,700.00	7,238.78	7,364.27	7,348.03	50.85	31.47	91.06	2,625.93	52.45	5,765.48	5,688.90	76.59	75.280		
8,800.00	7,238.38	7,363.94	7,347.70	51.02	31.47	91.06	2,625.93	52.45	5,786.55	5,708.55	78.00	74.184		
8,900.00	7,237.97	7,363.62	7,347.37	51.32	31.47	91.05	2,625.94	52.45	5,809.27	5,729.76	79.51	73.063		
9,000.00	7,237.57	7,363.29	7,347.04	51.95	31.47	91.05	2,625.94	52.45	5,833.61	5,752.52	81.10	71.935		
9,100.00	7,237.16	7,362.96	7,346.71	53.10	31.46	91.05	2,625.95	52.45	5,859.56	5,776.81	82.74	70.815		
9,200.00	7,236.76	7,362.63	7,346.39	54.69	31.46	91.04	2,625.96	52.45	5,887.09	5,802.64	84.45	69.713		
9,300.00	7,236.35	7,362.30	7,346.06	56.53	31.46	91.04	2,625.96	52.45	5,916.18	5,829.99	86.19	68.639		
9,400.00	7,235.94	7,361.97	7,345.73	58.53	31.46	91.04	2,625.97	52.45	5,946.82	5,858.85	87.97	67.599		
9,500.00	7,235.54	7,361.64	7,345.40	60.62	31.46	91.03	2,625.98	52.45	5,978.97	5,889.19	89.78	66.599		
9,600.00	7,235.13	7,361.31	7,345.07	62.80	31.46	91.03	2,625.98	52.45	6,012.61	5,921.01	91.60	65.642		
9,700.00	7,234.73	7,360.98	7,344.74	65.03	31.46	91.03	2,625.99	52.45	6,047.72	5,954.29	93.43	64.731		
9,800.00	7,234.32	7,360.65	7,344.41	67.32	31.45	91.02	2,626.00	52.45	6,084.26	5,989.00	95.26	63.867		
9,900.00	7,233.92	7,360.32	7,344.08	69.66	31.45	91.02	2,626.00	52.45	6,122.23	6,025.13	97.10	63.050		
10,000.00	7,233.51	7,359.99	7,343.75	72.03	31.45	91.02	2,626.01	52.45	6,161.58	6,062.65	98.93	62.281		
10,100.00	7,233.10	7,359.66	7,343.42	74.45	31.45	91.01	2,626.01	52.45	6,202.30	6,101.54	100.75	61.558		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MONTERA 10-34 (PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,232.70	7,359.33	7,343.09	76.89	31.45	91.01	2,626.02	52.45	6,244.35	6,141.78	102.56	60.882		
10,300.00	7,232.29	7,359.00	7,342.76	79.36	31.45	91.01	2,626.03	52.45	6,287.71	6,183.35	104.36	60.251		
10,400.00	7,231.89	7,358.68	7,342.43	81.86	31.45	91.00	2,626.03	52.45	6,332.35	6,226.22	106.14	59.663		
10,500.00	7,231.48	7,358.35	7,342.11	84.38	31.44	91.00	2,626.04	52.45	6,378.25	6,270.36	107.89	59.117		
10,600.00	7,231.08	7,358.02	7,341.78	86.93	31.44	91.00	2,626.05	52.45	6,425.38	6,315.75	109.63	58.611		
10,700.00	7,230.67	7,357.69	7,341.45	89.49	31.44	90.99	2,626.05	52.45	6,473.71	6,362.37	111.34	58.145		
10,800.00	7,230.26	7,357.36	7,341.12	92.07	31.44	90.99	2,626.06	52.45	6,523.21	6,410.19	113.02	57.716		
10,900.00	7,229.86	7,357.03	7,340.79	94.67	31.44	90.99	2,626.06	52.45	6,573.87	6,459.19	114.68	57.323		
11,000.00	7,229.45	7,356.70	7,340.46	97.28	31.44	90.98	2,626.07	52.45	6,625.64	6,509.33	116.31	56.964		
11,100.00	7,229.05	7,356.37	7,340.13	99.90	31.44	90.98	2,626.08	52.45	6,678.51	6,560.60	117.92	56.638		
11,200.00	7,228.64	7,356.04	7,339.80	102.54	31.43	90.98	2,626.08	52.45	6,732.45	6,612.96	119.49	56.343		
11,300.00	7,228.24	7,355.71	7,339.47	105.19	31.43	90.97	2,626.09	52.45	6,787.44	6,666.40	121.04	56.078		
11,400.00	7,227.83	7,355.38	7,339.14	107.85	31.43	90.97	2,626.10	52.45	6,843.45	6,720.89	122.55	55.841		
11,500.00	7,227.42	7,355.05	7,338.81	110.52	31.43	90.97	2,626.10	52.45	6,900.45	6,776.41	124.04	55.631		
11,600.00	7,227.02	7,354.72	7,338.48	113.20	31.43	90.96	2,626.11	52.45	6,958.42	6,832.92	125.49	55.448		
11,700.00	7,226.61	7,354.39	7,338.15	115.89	31.43	90.96	2,626.12	52.45	7,017.33	6,890.41	126.92	55.289		
11,800.00	7,226.21	7,354.07	7,337.82	118.59	31.43	90.96	2,626.12	52.45	7,077.17	6,948.85	128.32	55.153		
11,900.00	7,225.80	7,353.74	7,337.50	121.29	31.43	90.95	2,626.13	52.45	7,137.91	7,008.23	129.68	55.040		
12,000.00	7,225.40	7,353.41	7,337.17	124.00	31.42	90.95	2,626.13	52.45	7,199.53	7,068.50	131.02	54.949		
12,100.00	7,224.99	7,353.08	7,336.84	126.72	31.42	90.95	2,626.14	52.45	7,262.00	7,129.67	132.33	54.878		
12,200.00	7,224.58	7,352.75	7,336.51	129.44	31.42	90.94	2,626.15	52.45	7,325.30	7,191.69	133.61	54.826		
12,300.00	7,224.18	7,352.42	7,336.18	132.17	31.42	90.94	2,626.15	52.45	7,389.41	7,254.55	134.86	54.793		
12,400.00	7,223.77	7,352.09	7,335.85	134.91	31.42	90.94	2,626.16	52.45	7,454.31	7,318.23	136.08	54.778 SF		
12,500.00	7,223.37	7,351.76	7,335.52	137.65	31.42	90.93	2,626.17	52.45	7,519.99	7,382.71	137.28	54.780		
12,600.00	7,222.96	7,351.43	7,335.19	140.39	31.42	90.93	2,626.17	52.45	7,586.41	7,447.96	138.44	54.798		
12,700.00	7,222.55	7,351.10	7,334.86	143.14	31.41	90.93	2,626.18	52.45	7,653.56	7,513.98	139.58	54.832		
12,800.00	7,222.15	7,350.77	7,334.53	145.89	31.41	90.92	2,626.18	52.45	7,721.42	7,580.73	140.70	54.880		
12,900.00	7,221.74	7,350.44	7,334.20	148.65	31.41	90.92	2,626.19	52.45	7,789.98	7,648.20	141.78	54.943		
13,000.00	7,221.34	7,350.11	7,333.87	151.41	31.41	90.92	2,626.20	52.45	7,859.21	7,716.36	142.85	55.019		
13,100.00	7,220.93	7,349.78	7,333.54	154.18	31.41	90.91	2,626.20	52.45	7,929.10	7,785.21	143.88	55.108		
13,200.00	7,220.53	7,349.45	7,333.21	156.94	31.41	90.91	2,626.21	52.46	7,999.62	7,854.73	144.90	55.209		
13,300.00	7,220.12	7,349.13	7,332.89	159.72	31.41	90.91	2,626.22	52.46	8,070.77	7,924.89	145.88	55.323		
13,400.00	7,219.71	7,348.80	7,332.56	162.49	31.40	90.90	2,626.22	52.46	8,142.53	7,995.68	146.85	55.448		
13,500.00	7,219.31	7,348.47	7,332.23	165.27	31.40	90.90	2,626.23	52.46	8,214.88	8,067.08	147.79	55.584		
13,600.00	7,218.90	7,348.14	7,331.90	168.05	31.40	90.90	2,626.24	52.46	8,287.80	8,139.08	148.71	55.730		
13,700.00	7,218.50	7,347.81	7,331.57	170.83	31.40	90.89	2,626.24	52.46	8,361.28	8,211.67	149.61	55.887		
13,800.00	7,218.09	7,347.48	7,331.24	173.61	31.40	90.89	2,626.25	52.46	8,435.31	8,284.82	150.49	56.053		
13,900.00	7,217.69	7,347.15	7,330.91	176.40	31.40	90.89	2,626.25	52.46	8,509.86	8,358.52	151.35	56.228		
14,000.00	7,217.28	7,346.82	7,330.58	179.19	31.40	90.88	2,626.26	52.46	8,584.94	8,432.76	152.18	56.412		
14,100.00	7,216.87	7,346.49	7,330.25	181.98	31.39	90.88	2,626.27	52.46	8,660.52	8,507.52	153.00	56.605		
14,200.00	7,216.47	7,346.16	7,329.92	184.78	31.39	90.88	2,626.27	52.46	8,736.59	8,582.79	153.80	56.807		
14,300.00	7,216.06	7,345.83	7,329.59	187.57	31.39	90.87	2,626.28	52.46	8,813.14	8,658.56	154.57	57.016		
14,400.00	7,215.66	7,345.50	7,329.26	190.37	31.39	90.87	2,626.29	52.46	8,890.15	8,734.82	155.33	57.232		
14,500.00	7,215.25	7,345.17	7,328.93	193.17	31.39	90.87	2,626.29	52.46	8,967.62	8,811.54	156.08	57.456		
14,600.00	7,214.85	7,344.84	7,328.61	195.97	31.39	90.86	2,626.30	52.46	9,045.53	8,888.73	156.80	57.688		
14,700.00	7,214.44	7,344.51	7,328.28	198.77	31.39	90.86	2,626.30	52.46	9,123.87	8,966.36	157.51	57.926		
14,800.00	7,214.03	7,344.19	7,327.95	201.58	31.38	90.86	2,626.31	52.46	9,202.63	9,044.43	158.20	58.170		
14,900.00	7,213.63	7,343.86	7,327.62	204.38	31.38	90.85	2,626.32	52.46	9,281.80	9,122.92	158.88	58.421		
15,000.00	7,213.22	7,343.53	7,327.29	207.19	31.38	90.85	2,626.32	52.46	9,361.36	9,201.83	159.54	58.678		
15,100.00	7,212.82	7,343.20	7,326.96	210.00	31.38	90.85	2,626.33	52.46	9,441.32	9,281.14	160.18	58.941		
15,200.00	7,212.41	7,342.87	7,326.63	212.81	31.38	90.84	2,626.34	52.46	9,521.66	9,360.84	160.81	59.209		
15,300.00	7,212.01	7,342.54	7,326.30	215.62	31.38	90.84	2,626.34	52.46	9,602.36	9,440.93	161.43	59.483		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design													HARVESTERS STATE 7-15 PAD - MONTERA 10-34 (PR_75CC) - OH - OH		Offset Site Error:		0.00 ft	
Survey Program: 100-GYRO-NS													Offset Well Error:		3.28 ft			
Reference		Offset		Semi Major Axis			Distance							Warning				
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor						
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)							
15,400.00	7,211.60	7,342.21	7,325.97	218.43	31.38	90.84	2,626.35	52.46	9,683.43	9,521.39	162.03	59.762						
15,500.00	7,211.19	7,341.88	7,325.64	221.25	31.37	90.83	2,626.36	52.46	9,764.84	9,602.22	162.62	60.046						
15,600.00	7,210.79	7,341.55	7,325.31	224.06	31.37	90.83	2,626.36	52.46	9,846.60	9,683.40	163.20	60.335						
15,700.00	7,210.38	7,341.22	7,324.98	226.88	31.37	90.83	2,626.37	52.46	9,928.69	9,764.93	163.76	60.629						



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - RUTT-ADAMS HEIRS 2-22 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	58.00	3.28	3.28	-164.80	-3,839.75	-1,043.47	3,979.43					
100.00	100.00	42.00	100.00	3.28	3.36	-164.80	-3,839.75	-1,043.47	3,979.01	3,972.36	6.65	598.738		
200.00	200.00	142.00	200.00	3.34	4.59	-164.80	-3,839.75	-1,043.47	3,979.01	3,971.08	7.93	501.917		
300.00	299.98	241.98	299.98	3.44	7.46	12.57	-3,839.75	-1,043.47	3,977.30	3,966.40	10.90	364.836		
400.00	399.84	341.84	399.84	3.59	10.70	12.61	-3,839.75	-1,043.47	3,972.19	3,957.90	14.30	277.871		
500.00	499.45	441.45	499.45	3.79	14.05	12.67	-3,839.75	-1,043.47	3,963.69	3,945.84	17.85	222.107		
600.00	598.70	540.70	598.70	4.03	17.44	12.76	-3,839.75	-1,043.47	3,951.80	3,930.32	21.48	184.012		
700.00	697.47	639.47	697.47	4.31	20.84	12.88	-3,839.75	-1,043.47	3,936.54	3,911.38	25.15	156.521		
800.00	795.62	737.62	795.62	4.64	24.23	13.03	-3,839.75	-1,043.47	3,917.92	3,889.07	28.85	135.807		
900.00	893.06	835.06	893.06	5.00	27.60	13.21	-3,839.75	-1,043.47	3,895.99	3,863.43	32.56	119.659		
1,000.00	989.64	931.64	989.64	5.40	30.95	13.41	-3,839.75	-1,043.47	3,870.76	3,834.49	36.27	106.724		
1,100.00	1,085.27	1,027.27	1,085.27	5.83	34.27	13.65	-3,839.75	-1,043.47	3,842.27	3,802.30	39.97	96.129		
1,200.00	1,179.82	1,121.82	1,179.82	6.29	37.56	13.93	-3,839.75	-1,043.47	3,810.55	3,766.90	43.65	87.289		
1,300.00	1,273.17	1,215.17	1,273.17	6.79	40.81	14.24	-3,839.75	-1,043.47	3,775.66	3,728.35	47.32	79.796		
1,400.00	1,365.21	1,307.21	1,365.21	7.33	44.01	14.60	-3,839.75	-1,043.47	3,737.64	3,686.69	50.95	73.360		
1,500.00	1,455.84	1,402.16	1,455.84	7.89	47.32	14.99	-3,839.75	-1,043.47	3,696.54	3,641.85	54.70	67.582		
1,600.00	1,544.94	1,486.94	1,544.94	8.50	50.27	15.43	-3,839.75	-1,043.47	3,652.42	3,594.32	58.10	62.859		
1,700.00	1,632.39	1,574.39	1,632.39	9.13	53.32	15.93	-3,839.75	-1,043.47	3,605.34	3,543.72	61.62	58.512		
1,800.00	1,718.11	1,660.11	1,718.11	9.80	56.30	16.48	-3,839.75	-1,043.47	3,555.36	3,490.29	65.08	54.632		
1,900.00	1,802.44	1,744.44	1,802.44	10.49	59.24	16.83	-3,839.75	-1,043.47	3,503.26	3,434.76	68.50	51.143		
2,000.00	1,886.68	1,828.68	1,886.68	11.20	62.18	17.08	-3,839.75	-1,043.47	3,451.07	3,379.16	71.92	47.987		
2,100.00	1,970.92	1,912.92	1,970.92	11.93	65.12	17.35	-3,839.75	-1,043.47	3,398.94	3,323.59	75.35	45.111		
2,200.00	2,055.17	2,002.83	2,055.17	12.66	68.25	17.62	-3,839.75	-1,043.47	3,346.86	3,267.88	78.98	42.376		
2,300.00	2,139.41	2,081.41	2,139.41	13.40	70.99	17.90	-3,839.75	-1,043.47	3,294.84	3,212.62	82.23	40.069		
2,400.00	2,223.66	2,165.66	2,223.66	14.14	73.93	18.19	-3,839.75	-1,043.47	3,242.89	3,157.20	85.68	37.848		
2,500.00	2,307.90	2,249.90	2,307.90	14.89	76.87	18.49	-3,839.75	-1,043.47	3,190.99	3,101.85	89.14	35.797		
2,600.00	2,392.14	2,334.14	2,392.14	15.65	79.81	18.79	-3,839.75	-1,043.47	3,139.16	3,046.56	92.61	33.898		
2,700.00	2,476.39	2,418.39	2,476.39	16.41	82.75	19.11	-3,839.75	-1,043.47	3,087.41	2,991.33	96.08	32.134		
2,800.00	2,560.63	2,502.63	2,560.63	17.17	85.68	19.43	-3,839.75	-1,043.47	3,035.72	2,936.17	99.56	30.493		
2,900.00	2,644.88	2,586.88	2,644.88	17.93	88.62	19.77	-3,839.75	-1,043.47	2,984.12	2,881.08	103.04	28.961		
3,000.00	2,729.12	2,671.12	2,729.12	18.70	91.56	20.12	-3,839.75	-1,043.47	2,932.59	2,826.07	106.53	27.530		
3,100.00	2,813.36	2,755.36	2,813.36	19.47	94.50	20.49	-3,839.75	-1,043.47	2,881.15	2,771.14	110.02	26.188		
3,200.00	2,897.61	2,839.61	2,897.61	20.25	97.44	20.86	-3,839.75	-1,043.47	2,829.81	2,716.29	113.52	24.929		
3,300.00	2,981.85	2,923.85	2,981.85	21.02	100.38	21.25	-3,839.75	-1,043.47	2,778.55	2,661.54	117.02	23.745		
3,400.00	3,066.10	3,008.10	3,066.10	21.80	103.32	21.65	-3,839.75	-1,043.47	2,727.40	2,606.88	120.53	22.629		
3,500.00	3,150.34	3,107.66	3,150.34	22.58	106.79	22.07	-3,839.75	-1,043.47	2,676.36	2,551.79	124.57	21.484		
3,600.00	3,234.58	3,176.58	3,234.58	23.35	109.20	22.50	-3,839.75	-1,043.47	2,625.43	2,497.87	127.56	20.582		
3,700.00	3,318.83	3,260.83	3,318.83	24.13	112.14	22.95	-3,839.75	-1,043.47	2,574.62	2,443.54	131.08	19.642		
3,800.00	3,403.07	3,345.07	3,403.07	24.92	115.08	23.41	-3,839.75	-1,043.47	2,523.94	2,389.33	134.61	18.750		
3,900.00	3,487.32	3,429.32	3,487.32	25.70	118.02	23.90	-3,839.75	-1,043.47	2,473.39	2,335.25	138.14	17.905		
4,000.00	3,571.56	3,513.56	3,571.56	26.48	120.96	24.40	-3,839.75	-1,043.47	2,422.99	2,281.30	141.68	17.101		
4,100.00	3,655.80	3,602.20	3,655.80	27.27	124.05	24.92	-3,839.75	-1,043.47	2,372.74	2,227.35	145.38	16.320		
4,200.00	3,740.05	3,682.05	3,740.05	28.05	126.84	25.47	-3,839.75	-1,043.47	2,322.65	2,173.86	148.78	15.611		
4,300.00	3,824.29	3,766.29	3,824.29	28.84	129.78	26.04	-3,839.75	-1,043.47	2,272.73	2,120.39	152.35	14.918		
4,400.00	3,908.54	3,850.54	3,908.54	29.62	132.72	26.63	-3,839.75	-1,043.47	2,223.00	2,067.09	155.91	14.258		
4,500.00	3,992.78	3,934.78	3,992.78	30.41	135.66	27.24	-3,839.75	-1,043.47	2,173.47	2,013.98	159.49	13.628		
4,600.00	4,077.03	4,019.03	4,077.03	31.20	138.60	27.89	-3,839.75	-1,043.47	2,124.15	1,961.07	163.08	13.025		
4,700.00	4,161.27	4,103.27	4,161.27	31.98	141.54	28.56	-3,839.75	-1,043.47	2,075.06	1,908.39	166.67	12.450		
4,800.00	4,245.51	4,187.51	4,245.51	32.77	144.48	29.26	-3,839.75	-1,043.47	2,026.21	1,855.93	170.28	11.899		
4,900.00	4,329.76	4,271.76	4,329.76	33.56	147.42	30.00	-3,839.75	-1,043.47	1,977.62	1,803.72	173.89	11.373		
5,000.00	4,414.00	4,356.00	4,414.00	34.35	150.36	30.77	-3,839.75	-1,043.47	1,929.31	1,751.79	177.52	10.868		
5,100.00	4,498.25	4,440.25	4,498.25	35.14	153.30	31.57	-3,839.75	-1,043.47	1,881.30	1,700.14	181.16	10.385		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - RUTT-ADAMS HEIRS 2-22 - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	4,582.49	4,524.49	4,582.49	35.93	156.24	32.42	-3,839.75	-1,043.47	1,833.62	1,648.81	184.82	9.921	
5,300.00	4,666.73	4,608.73	4,666.73	36.72	159.18	33.30	-3,839.75	-1,043.47	1,786.30	1,597.81	188.49	9.477	
5,400.00	4,750.98	4,707.02	4,750.98	37.51	162.61	34.23	-3,839.75	-1,043.47	1,739.35	1,546.69	192.66	9.028	
5,500.00	4,835.22	4,777.22	4,835.22	38.30	165.06	35.21	-3,839.75	-1,043.47	1,692.82	1,496.94	195.88	8.642	
5,600.00	4,919.47	4,861.47	4,919.47	39.09	168.00	36.23	-3,839.75	-1,043.47	1,646.74	1,447.14	199.60	8.250	
5,700.00	5,003.71	4,945.71	5,003.71	39.88	170.94	37.31	-3,839.75	-1,043.47	1,601.14	1,397.80	203.34	7.874	
5,800.00	5,088.06	5,030.06	5,088.06	40.67	173.89	38.23	-3,839.75	-1,043.47	1,556.21	1,349.10	207.11	7.514	
5,900.00	5,173.83	5,115.83	5,173.83	41.44	176.88	38.78	-3,839.75	-1,043.47	1,513.74	1,302.82	210.93	7.177	
6,000.00	5,261.34	5,203.34	5,261.34	42.18	179.93	39.35	-3,839.75	-1,043.47	1,474.30	1,259.50	214.80	6.864	
6,100.00	5,350.49	5,307.51	5,350.49	42.88	183.57	39.94	-3,839.75	-1,043.47	1,437.86	1,218.62	219.25	6.558	
6,200.00	5,441.16	5,383.16	5,441.16	43.56	186.21	40.54	-3,839.75	-1,043.47	1,404.42	1,181.74	222.68	6.307	
6,300.00	5,533.25	5,475.25	5,533.25	44.20	189.42	41.14	-3,839.75	-1,043.47	1,373.93	1,147.26	226.67	6.061	
6,400.00	5,626.65	5,568.65	5,626.65	44.82	192.68	41.73	-3,839.75	-1,043.47	1,346.36	1,115.68	230.68	5.837	
6,500.00	5,721.23	5,663.23	5,721.23	45.40	195.99	42.29	-3,839.75	-1,043.47	1,321.66	1,086.96	234.70	5.631	
6,600.00	5,816.89	5,758.89	5,816.89	45.94	199.32	42.84	-3,839.75	-1,043.47	1,299.77	1,061.05	238.72	5.445	
6,700.00	5,913.51	5,855.51	5,913.51	46.45	202.70	43.34	-3,839.75	-1,043.47	1,280.65	1,037.91	242.74	5.276	
6,800.00	6,010.97	5,952.97	6,010.97	46.93	206.10	43.80	-3,839.75	-1,043.47	1,264.24	1,017.49	246.75	5.124	
6,900.00	6,109.15	6,051.15	6,109.15	47.38	209.53	44.20	-3,839.75	-1,043.47	1,250.47	999.74	250.73	4.987	
7,000.00	6,207.93	6,149.93	6,207.93	47.80	212.97	44.54	-3,839.75	-1,043.47	1,239.30	984.61	254.69	4.866	
7,100.00	6,307.19	6,249.19	6,307.19	48.18	216.44	44.81	-3,839.75	-1,043.47	1,230.68	972.07	258.62	4.759	
7,200.00	6,406.82	6,348.82	6,406.82	48.53	219.92	45.00	-3,839.75	-1,043.47	1,224.58	962.07	262.51	4.665	
7,300.00	6,506.68	6,448.68	6,506.68	48.84	223.40	45.12	-3,839.75	-1,043.47	1,220.96	954.61	266.35	4.584	
7,400.00	6,606.66	6,548.66	6,606.66	49.10	226.89	45.18	-3,839.75	-1,043.47	1,219.80	949.68	270.13	4.516	
7,500.00	6,706.21	6,648.21	6,706.21	49.35	230.37	45.18	-3,839.75	-1,043.47	1,213.60	939.79	273.81	4.432	
7,600.00	6,803.22	6,745.22	6,803.22	49.59	233.75	45.12	-3,839.75	-1,043.47	1,196.03	918.73	277.30	4.313	
7,700.00	6,895.32	6,837.32	6,895.32	49.82	236.97	45.00	-3,839.75	-1,043.47	1,167.96	887.45	280.51	4.164	
7,800.00	6,980.23	6,922.23	6,980.23	50.03	239.93	45.12	-3,839.75	-1,043.47	1,130.80	847.45	283.34	3.991	
7,900.00	7,055.85	7,002.15	7,055.85	50.21	242.72	45.10	-3,839.75	-1,043.47	1,086.49	800.61	285.88	3.801	
8,000.00	7,120.34	7,062.34	7,120.34	50.36	244.82	45.22	-3,839.75	-1,043.47	1,037.50	749.90	287.60	3.607	
8,100.00	7,172.10	7,114.10	7,172.10	50.47	246.63	45.26	-3,839.75	-1,043.47	986.77	697.80	288.97	3.415	
8,200.00	7,209.85	7,151.85	7,209.85	50.55	247.95	45.12	-3,839.75	-1,043.47	937.55	647.69	289.86	3.234	
8,300.00	7,232.68	7,174.68	7,232.68	50.61	248.74	45.08	-3,839.75	-1,043.47	893.23	602.83	290.40	3.076	
8,400.00	7,240.00	7,182.00	7,240.00	50.65	249.00	45.08	-3,839.75	-1,043.47	856.95	566.21	290.74	2.947	
8,500.00	7,239.60	7,181.60	7,239.60	50.69	248.99	45.05	-3,839.75	-1,043.47	831.02	539.69	291.32	2.853	
8,600.00	7,239.19	7,181.19	7,239.19	50.75	248.97	45.02	-3,839.75	-1,043.47	816.59	524.10	292.49	2.792	
8,668.89	7,238.91	7,180.91	7,238.91	50.82	248.96	45.00	-3,839.75	-1,043.47	813.68	520.07	293.60	2.771 CC, ES	
8,700.00	7,238.78	7,180.78	7,238.78	50.85	248.96	45.00	-3,839.75	-1,043.47	814.27	520.12	294.15	2.768 SF	
8,800.00	7,238.38	7,180.38	7,238.38	51.02	248.94	45.00	-3,839.75	-1,043.47	824.17	528.05	296.12	2.783	
8,900.00	7,237.97	7,179.97	7,237.97	51.32	248.93	45.00	-3,839.75	-1,043.47	845.86	547.66	298.20	2.837	
9,000.00	7,237.57	7,179.57	7,237.57	51.95	248.92	45.00	-3,839.75	-1,043.47	878.47	578.28	300.18	2.926	
9,100.00	7,237.16	7,179.16	7,237.16	53.10	248.90	45.00	-3,839.75	-1,043.47	920.83	618.88	301.95	3.050	
9,200.00	7,236.76	7,178.76	7,236.76	54.69	248.89	45.00	-3,839.75	-1,043.47	971.67	668.21	303.46	3.202	
9,300.00	7,236.35	7,178.35	7,236.35	56.53	248.87	45.00	-3,839.75	-1,043.47	1,029.74	725.05	304.69	3.380	
9,400.00	7,235.94	7,177.94	7,235.94	58.53	248.86	45.00	-3,839.75	-1,043.47	1,093.89	788.21	305.67	3.579	
9,500.00	7,235.54	7,177.54	7,235.54	60.62	248.84	45.00	-3,839.75	-1,043.47	1,163.10	856.65	306.45	3.795	
9,600.00	7,235.13	7,177.13	7,235.13	62.80	248.83	45.00	-3,839.75	-1,043.47	1,236.54	929.49	307.05	4.027	
9,700.00	7,234.73	7,176.73	7,234.73	65.03	248.82	45.00	-3,839.75	-1,043.47	1,313.49	1,005.98	307.51	4.271	
9,800.00	7,234.32	7,176.32	7,234.32	67.32	248.80	45.00	-3,839.75	-1,043.47	1,393.36	1,085.50	307.86	4.526	
9,900.00	7,233.92	7,175.92	7,233.92	69.66	248.79	45.00	-3,839.75	-1,043.47	1,475.70	1,167.57	308.13	4.789	
10,000.00	7,233.51	7,175.51	7,233.51	72.03	248.77	45.00	-3,839.75	-1,043.47	1,560.10	1,251.77	308.33	5.060	
10,100.00	7,233.10	7,175.10	7,233.10	74.45	248.76	45.00	-3,839.75	-1,043.47	1,646.24	1,337.77	308.48	5.337	
10,200.00	7,232.70	7,174.70	7,232.70	76.89	248.75	45.00	-3,839.75	-1,043.47	1,733.88	1,425.30	308.58	5.619	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - RUTT-ADAMS HEIRS 2-22 - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,300.00	7,232.29	7,174.29	7,232.29	79.36	248.73	-89.53	-3,839.75	-1,043.47	1,822.79	1,514.13	308.66	5.905	
10,400.00	7,231.89	7,173.89	7,231.89	81.86	248.72	-89.51	-3,839.75	-1,043.47	1,912.79	1,604.08	308.71	6.196	
10,500.00	7,231.48	7,173.48	7,231.48	84.38	248.70	-89.48	-3,839.75	-1,043.47	2,003.74	1,695.00	308.75	6.490	
10,600.00	7,231.08	7,173.08	7,231.08	86.93	248.69	-89.45	-3,839.75	-1,043.47	2,095.52	1,786.75	308.77	6.787	
10,700.00	7,230.67	7,172.67	7,230.67	89.49	248.67	-89.42	-3,839.75	-1,043.47	2,188.02	1,879.24	308.78	7.086	
10,800.00	7,230.26	7,172.26	7,230.26	92.07	248.66	-89.39	-3,839.75	-1,043.47	2,281.15	1,972.37	308.78	7.388	
10,900.00	7,229.86	7,171.86	7,229.86	94.67	248.65	-89.36	-3,839.75	-1,043.47	2,374.84	2,066.06	308.77	7.691	
11,000.00	7,229.45	7,171.45	7,229.45	97.28	248.63	-89.33	-3,839.75	-1,043.47	2,469.02	2,160.26	308.76	7.996	
11,100.00	7,229.05	7,171.05	7,229.05	99.90	248.62	-89.31	-3,839.75	-1,043.47	2,563.65	2,254.90	308.75	8.303	
11,200.00	7,228.64	7,170.64	7,228.64	102.54	248.60	-89.28	-3,839.75	-1,043.47	2,658.67	2,349.93	308.74	8.611	
11,300.00	7,228.24	7,170.24	7,228.24	105.19	248.59	-89.25	-3,839.75	-1,043.47	2,754.04	2,445.32	308.72	8.921	
11,400.00	7,227.83	7,169.83	7,227.83	107.85	248.58	-89.22	-3,839.75	-1,043.47	2,849.72	2,541.03	308.70	9.231	
11,500.00	7,227.42	7,169.42	7,227.42	110.52	248.56	-89.19	-3,839.75	-1,043.47	2,945.70	2,637.02	308.68	9.543	
11,600.00	7,227.02	7,169.02	7,227.02	113.20	248.55	-89.16	-3,839.75	-1,043.47	3,041.93	2,733.27	308.66	9.855	
11,700.00	7,226.61	7,168.61	7,226.61	115.89	248.53	-89.13	-3,839.75	-1,043.47	3,138.40	2,829.76	308.64	10.168	
11,800.00	7,226.21	7,168.21	7,226.21	118.59	248.52	-89.11	-3,839.75	-1,043.47	3,235.09	2,926.46	308.62	10.482	
11,900.00	7,225.80	7,167.80	7,225.80	121.29	248.50	-89.08	-3,839.75	-1,043.47	3,331.97	3,023.36	308.60	10.797	
12,000.00	7,225.40	7,167.40	7,225.40	124.00	248.49	-89.05	-3,839.75	-1,043.47	3,429.02	3,120.44	308.59	11.112	
12,100.00	7,224.99	7,166.99	7,224.99	126.72	248.48	-89.02	-3,839.75	-1,043.47	3,526.25	3,217.68	308.57	11.428	
12,200.00	7,224.58	7,166.58	7,224.58	129.44	248.46	-88.99	-3,839.75	-1,043.47	3,623.62	3,315.07	308.56	11.744	
12,300.00	7,224.18	7,166.18	7,224.18	132.17	248.45	-88.96	-3,839.75	-1,043.47	3,721.13	3,412.59	308.54	12.060	
12,400.00	7,223.77	7,165.77	7,223.77	134.91	248.43	-88.93	-3,839.75	-1,043.47	3,818.78	3,510.25	308.53	12.377	
12,500.00	7,223.37	7,165.37	7,223.37	137.65	248.42	-88.91	-3,839.75	-1,043.47	3,916.54	3,608.02	308.51	12.695	
12,600.00	7,222.96	7,164.96	7,222.96	140.39	248.41	-88.88	-3,839.75	-1,043.47	4,014.41	3,705.90	308.50	13.013	
12,700.00	7,222.55	7,164.55	7,222.55	143.14	248.39	-88.85	-3,839.75	-1,043.47	4,112.38	3,803.89	308.49	13.331	
12,800.00	7,222.15	7,164.15	7,222.15	145.89	248.38	-88.82	-3,839.75	-1,043.47	4,210.45	3,901.97	308.48	13.649	
12,900.00	7,221.74	7,163.74	7,221.74	148.65	248.36	-88.79	-3,839.75	-1,043.47	4,308.61	4,000.13	308.48	13.967	
13,000.00	7,221.34	7,163.34	7,221.34	151.41	248.35	-88.76	-3,839.75	-1,043.47	4,406.85	4,098.38	308.47	14.286	
13,100.00	7,220.93	7,162.93	7,220.93	154.18	248.33	-88.73	-3,839.75	-1,043.47	4,505.17	4,196.70	308.47	14.605	
13,200.00	7,220.53	7,162.53	7,220.53	156.94	248.32	-88.71	-3,839.75	-1,043.47	4,603.56	4,295.09	308.46	14.924	
13,300.00	7,220.12	7,162.12	7,220.12	159.72	248.31	-88.68	-3,839.75	-1,043.47	4,702.01	4,393.55	308.46	15.244	
13,400.00	7,219.71	7,161.71	7,219.71	162.49	248.29	-88.65	-3,839.75	-1,043.47	4,800.54	4,492.08	308.46	15.563	
13,500.00	7,219.31	7,161.31	7,219.31	165.27	248.28	-88.62	-3,839.75	-1,043.47	4,899.12	4,590.66	308.46	15.883	
13,600.00	7,218.90	7,160.90	7,218.90	168.05	248.26	-88.59	-3,839.75	-1,043.47	4,997.76	4,689.30	308.46	16.202	
13,700.00	7,218.50	7,160.50	7,218.50	170.83	248.25	-88.56	-3,839.75	-1,043.47	5,096.45	4,787.99	308.46	16.522	
13,800.00	7,218.09	7,160.09	7,218.09	173.61	248.24	-88.53	-3,839.75	-1,043.47	5,195.19	4,886.72	308.46	16.842	
13,900.00	7,217.69	7,159.69	7,217.69	176.40	248.22	-88.51	-3,839.75	-1,043.47	5,293.98	4,985.51	308.47	17.162	
14,000.00	7,217.28	7,159.28	7,217.28	179.19	248.21	-88.48	-3,839.75	-1,043.47	5,392.81	5,084.34	308.47	17.482	
14,100.00	7,216.87	7,158.87	7,216.87	181.98	248.19	-88.45	-3,839.75	-1,043.47	5,491.68	5,183.21	308.48	17.803	
14,200.00	7,216.47	7,158.47	7,216.47	184.78	248.18	-88.42	-3,839.75	-1,043.47	5,590.60	5,282.11	308.48	18.123	
14,300.00	7,216.06	7,158.06	7,216.06	187.57	248.16	-88.39	-3,839.75	-1,043.47	5,689.55	5,381.06	308.49	18.443	
14,400.00	7,215.66	7,157.66	7,215.66	190.37	248.15	-88.36	-3,839.75	-1,043.47	5,788.54	5,480.04	308.50	18.763	
14,500.00	7,215.25	7,157.25	7,215.25	193.17	248.14	-88.33	-3,839.75	-1,043.47	5,887.56	5,579.05	308.51	19.084	
14,600.00	7,214.85	7,156.85	7,214.85	195.97	248.12	-88.31	-3,839.75	-1,043.47	5,986.62	5,678.09	308.52	19.404	
14,700.00	7,214.44	7,156.44	7,214.44	198.77	248.11	-88.28	-3,839.75	-1,043.47	6,085.71	5,777.17	308.54	19.724	
14,800.00	7,214.03	7,156.03	7,214.03	201.58	248.09	-88.25	-3,839.75	-1,043.47	6,184.82	5,876.27	308.55	20.045	
14,900.00	7,213.63	7,155.63	7,213.63	204.38	248.08	-88.22	-3,839.75	-1,043.47	6,283.96	5,975.40	308.56	20.365	
15,000.00	7,213.22	7,155.22	7,213.22	207.19	248.07	-88.19	-3,839.75	-1,043.47	6,383.14	6,074.56	308.58	20.686	
15,100.00	7,212.82	7,154.82	7,212.82	210.00	248.05	-88.16	-3,839.75	-1,043.47	6,482.33	6,173.74	308.60	21.006	
15,200.00	7,212.41	7,154.41	7,212.41	212.81	248.04	-88.13	-3,839.75	-1,043.47	6,581.55	6,272.94	308.61	21.326	
15,300.00	7,212.01	7,154.01	7,212.01	215.62	248.02	-88.11	-3,839.75	-1,043.47	6,680.80	6,372.16	308.63	21.647	
15,400.00	7,211.60	7,153.60	7,211.60	218.43	248.01	-88.08	-3,839.75	-1,043.47	6,780.06	6,471.41	308.65	21.967	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - RUTT-ADAMS HEIRS 2-22 - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,500.00	7,211.19	7,153.19	7,211.19	221.25	247.99	-88.05	-3,839.75	-1,043.47	6,879.35	6,570.68	308.67	22.287	
15,600.00	7,210.79	7,152.79	7,210.79	224.06	247.98	-88.02	-3,839.75	-1,043.47	6,978.65	6,669.96	308.69	22.607	
15,700.00	7,210.38	7,152.38	7,210.38	226.88	247.97	-87.99	-3,839.75	-1,043.47	7,077.98	6,769.27	308.71	22.927	
15,794.94	7,210.00	7,152.00	7,210.00	229.55	247.95	-87.96	-3,839.75	-1,043.47	7,172.30	6,863.57	308.73	23.231	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-21(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	3.00	0.00	3.28	3.28	-36.78	1,550.88	-1,159.50	1,936.41					
100.00	100.00	103.00	100.00	3.28	3.77	-36.78	1,550.88	-1,159.50	1,936.41	1,929.36	7.05	274.646		
200.00	200.00	203.00	200.00	3.34	6.27	-36.78	1,550.88	-1,159.50	1,936.41	1,926.80	9.60	201.604	CC	
300.00	299.98	303.02	299.98	3.44	9.42	140.58	1,550.88	-1,159.50	1,937.75	1,924.89	12.86	150.657	ES	
400.00	399.84	403.16	399.84	3.59	12.76	140.63	1,550.88	-1,159.50	1,941.80	1,925.45	16.35	118.776		
500.00	499.45	503.55	499.45	3.79	16.17	140.71	1,550.88	-1,159.50	1,948.55	1,928.59	19.96	97.625		
600.00	598.70	604.30	598.70	4.03	19.63	140.81	1,550.88	-1,159.50	1,958.02	1,934.36	23.66	82.760		
700.00	697.47	705.53	697.47	4.31	23.12	140.94	1,550.88	-1,159.50	1,970.22	1,942.78	27.43	71.822		
800.00	795.62	807.38	795.62	4.64	26.64	141.10	1,550.88	-1,159.50	1,985.16	1,953.89	31.27	63.483		
900.00	893.06	909.94	893.06	5.00	30.20	141.27	1,550.88	-1,159.50	2,002.86	1,967.69	35.17	56.944		
1,000.00	989.64	986.64	989.64	5.40	32.86	141.47	1,550.88	-1,159.50	2,023.35	1,985.14	38.21	52.957		
1,100.00	1,085.27	1,082.27	1,085.27	5.83	36.19	141.67	1,550.88	-1,159.50	2,046.64	2,004.72	41.93	48.814		
1,200.00	1,179.82	1,176.82	1,179.82	6.29	39.47	141.89	1,550.88	-1,159.50	2,072.76	2,027.12	45.64	45.420		
1,300.00	1,273.17	1,270.17	1,273.17	6.79	42.72	142.10	1,550.88	-1,159.50	2,101.71	2,052.39	49.32	42.610		
1,400.00	1,365.21	1,362.21	1,365.21	7.33	45.93	142.32	1,550.88	-1,159.50	2,133.51	2,080.53	52.99	40.265		
1,500.00	1,455.84	1,452.84	1,455.84	7.89	49.08	142.53	1,550.88	-1,159.50	2,168.18	2,111.56	56.62	38.294		
1,600.00	1,544.94	1,541.94	1,544.94	8.50	52.19	142.74	1,550.88	-1,159.50	2,205.72	2,145.50	60.21	36.632		
1,700.00	1,632.39	1,629.39	1,632.39	9.13	55.23	142.92	1,550.88	-1,159.50	2,246.12	2,182.36	63.76	35.225		
1,800.00	1,718.11	1,715.11	1,718.11	9.80	58.22	143.09	1,550.88	-1,159.50	2,289.39	2,222.12	67.27	34.034		
1,900.00	1,802.44	1,800.56	1,802.44	10.49	61.20	143.66	1,550.88	-1,159.50	2,334.90	2,264.13	70.77	32.994		
2,000.00	1,886.68	1,883.68	1,886.68	11.20	64.10	144.39	1,550.88	-1,159.50	2,380.87	2,306.68	74.19	32.093		
2,100.00	1,970.92	1,967.92	1,970.92	11.93	67.04	145.10	1,550.88	-1,159.50	2,427.16	2,349.51	77.65	31.257		
2,200.00	2,055.17	2,052.17	2,055.17	12.66	69.97	145.78	1,550.88	-1,159.50	2,473.76	2,392.64	81.12	30.496		
2,300.00	2,139.41	2,136.41	2,139.41	13.40	72.91	146.43	1,550.88	-1,159.50	2,520.65	2,436.06	84.59	29.799		
2,400.00	2,223.66	2,220.66	2,223.66	14.14	75.85	147.07	1,550.88	-1,159.50	2,567.82	2,479.75	88.06	29.159		
2,500.00	2,307.90	2,304.90	2,307.90	14.89	78.79	147.68	1,550.88	-1,159.50	2,615.24	2,523.70	91.54	28.571		
2,600.00	2,392.14	2,389.14	2,392.14	15.65	81.73	148.28	1,550.88	-1,159.50	2,662.91	2,567.90	95.01	28.027		
2,700.00	2,476.39	2,473.39	2,476.39	16.41	84.66	148.85	1,550.88	-1,159.50	2,710.81	2,612.32	98.49	27.524		
2,800.00	2,560.63	2,557.63	2,560.63	17.17	87.60	149.41	1,550.88	-1,159.50	2,758.93	2,656.97	101.97	27.057		
2,900.00	2,644.88	2,641.88	2,644.88	17.93	90.54	149.95	1,550.88	-1,159.50	2,807.26	2,701.82	105.45	26.623		
3,000.00	2,729.12	2,726.12	2,729.12	18.70	93.48	150.47	1,550.88	-1,159.50	2,855.80	2,746.87	108.92	26.218		
3,100.00	2,813.36	2,810.36	2,813.36	19.47	96.42	150.98	1,550.88	-1,159.50	2,904.51	2,792.11	112.40	25.840		
3,200.00	2,897.61	2,905.39	2,897.61	20.25	99.74	151.47	1,550.88	-1,159.50	2,953.41	2,837.15	116.26	25.404		
3,300.00	2,981.85	2,978.85	2,981.85	21.02	102.30	151.94	1,550.88	-1,159.50	3,002.48	2,883.12	119.36	25.155		
3,400.00	3,066.10	3,063.10	3,066.10	21.80	105.24	152.40	1,550.88	-1,159.50	3,051.71	2,928.87	122.84	24.843		
3,500.00	3,150.34	3,147.34	3,150.34	22.58	108.18	152.85	1,550.88	-1,159.50	3,101.10	2,974.78	126.32	24.550		
3,600.00	3,234.58	3,231.58	3,234.58	23.35	111.12	153.28	1,550.88	-1,159.50	3,150.63	3,020.83	129.80	24.273		
3,700.00	3,318.83	3,315.83	3,318.83	24.13	114.06	153.70	1,550.88	-1,159.50	3,200.30	3,067.03	133.28	24.013		
3,800.00	3,403.07	3,400.07	3,403.07	24.92	117.00	154.11	1,550.88	-1,159.50	3,250.11	3,113.36	136.75	23.766		
3,900.00	3,487.32	3,484.32	3,487.32	25.70	119.94	154.51	1,550.88	-1,159.50	3,300.05	3,159.81	140.23	23.533		
4,000.00	3,571.56	3,568.56	3,571.56	26.48	122.88	154.90	1,550.88	-1,159.50	3,350.10	3,206.39	143.71	23.311		
4,100.00	3,655.80	3,652.80	3,655.80	27.27	125.82	155.27	1,550.88	-1,159.50	3,400.28	3,253.09	147.19	23.101		
4,200.00	3,740.05	3,737.05	3,740.05	28.05	128.76	155.64	1,550.88	-1,159.50	3,450.56	3,299.89	150.67	22.902		
4,300.00	3,824.29	3,821.29	3,824.29	28.84	131.70	155.99	1,550.88	-1,159.50	3,500.96	3,346.81	154.15	22.712		
4,400.00	3,908.54	3,905.54	3,908.54	29.62	134.64	156.34	1,550.88	-1,159.50	3,551.45	3,393.83	157.62	22.531		
4,500.00	3,992.78	3,989.78	3,992.78	30.41	137.58	156.67	1,550.88	-1,159.50	3,602.04	3,440.94	161.10	22.359		
4,600.00	4,077.03	4,074.03	4,077.03	31.20	140.52	157.00	1,550.88	-1,159.50	3,652.73	3,488.15	164.58	22.194		
4,700.00	4,161.27	4,158.27	4,161.27	31.98	143.46	157.32	1,550.88	-1,159.50	3,703.51	3,535.45	168.06	22.037		
4,800.00	4,245.51	4,242.51	4,245.51	32.77	146.40	157.63	1,550.88	-1,159.50	3,754.37	3,582.84	171.54	21.887		
4,900.00	4,329.76	4,326.76	4,329.76	33.56	149.34	157.93	1,550.88	-1,159.50	3,805.32	3,630.30	175.01	21.743		
5,000.00	4,414.00	4,411.00	4,414.00	34.35	152.28	158.23	1,550.88	-1,159.50	3,856.34	3,677.85	178.49	21.605		
5,100.00	4,498.25	4,504.75	4,498.25	35.14	155.55	158.51	1,550.88	-1,159.50	3,907.45	3,725.15	182.30	21.434		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-21(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,579.49	4,582.49	35.93	158.16	158.79	1,550.88	-1,159.50	3,958.62	3,773.18	185.45	21.346		
5,300.00	4,666.73	4,663.73	4,666.73	36.72	161.10	159.07	1,550.88	-1,159.50	4,009.87	3,820.95	188.92	21.225		
5,400.00	4,750.98	4,747.98	4,750.98	37.51	164.04	159.33	1,550.88	-1,159.50	4,061.19	3,868.78	192.40	21.108		
5,500.00	4,835.22	4,832.22	4,835.22	38.30	166.98	159.59	1,550.88	-1,159.50	4,112.57	3,916.69	195.88	20.995		
5,600.00	4,919.47	4,916.47	4,919.47	39.09	169.92	159.85	1,550.88	-1,159.50	4,164.01	3,964.65	199.36	20.887		
5,700.00	5,003.71	5,000.71	5,003.71	39.88	172.86	160.10	1,550.88	-1,159.50	4,215.52	4,012.68	202.84	20.783		
5,800.00	5,088.06	5,085.06	5,088.06	40.67	175.80	160.47	1,550.88	-1,159.50	4,266.92	4,060.61	206.32	20.681		
5,900.00	5,173.83	5,170.83	5,173.83	41.44	178.80	161.07	1,550.88	-1,159.50	4,316.17	4,106.33	209.84	20.569		
6,000.00	5,261.34	5,258.34	5,261.34	42.18	181.85	161.60	1,550.88	-1,159.50	4,362.57	4,149.14	213.42	20.441		
6,100.00	5,350.49	5,347.49	5,350.49	42.88	184.96	162.09	1,550.88	-1,159.50	4,406.04	4,188.99	217.05	20.299		
6,200.00	5,441.16	5,438.16	5,441.16	43.56	188.13	162.52	1,550.88	-1,159.50	4,446.54	4,225.81	220.73	20.145		
6,300.00	5,533.25	5,530.25	5,533.25	44.20	191.34	162.91	1,550.88	-1,159.50	4,484.00	4,259.56	224.44	19.978		
6,400.00	5,626.65	5,623.65	5,626.65	44.82	194.60	163.25	1,550.88	-1,159.50	4,518.37	4,290.18	228.19	19.801		
6,500.00	5,721.23	5,718.23	5,721.23	45.40	197.91	163.56	1,550.88	-1,159.50	4,549.60	4,317.63	231.97	19.613		
6,600.00	5,816.89	5,813.89	5,816.89	45.94	201.24	163.82	1,550.88	-1,159.50	4,577.65	4,341.88	235.77	19.416		
6,700.00	5,913.51	5,910.51	5,913.51	46.45	204.62	164.05	1,550.88	-1,159.50	4,602.47	4,362.89	239.58	19.210		
6,800.00	6,010.97	6,007.97	6,010.97	46.93	208.02	164.25	1,550.88	-1,159.50	4,624.05	4,380.63	243.42	18.997		
6,900.00	6,109.15	6,106.15	6,109.15	47.38	211.45	164.41	1,550.88	-1,159.50	4,642.33	4,395.08	247.25	18.776		
7,000.00	6,207.93	6,204.93	6,207.93	47.80	214.89	164.55	1,550.88	-1,159.50	4,657.31	4,406.22	251.09	18.548		
7,100.00	6,307.19	6,304.19	6,307.19	48.18	218.36	164.65	1,550.88	-1,159.50	4,668.96	4,414.02	254.93	18.314		
7,200.00	6,406.82	6,403.82	6,406.82	48.53	221.84	164.72	1,550.88	-1,159.50	4,677.25	4,418.49	258.77	18.075		
7,300.00	6,506.68	6,503.68	6,506.68	48.84	225.32	164.76	1,550.88	-1,159.50	4,682.19	4,419.61	262.59	17.831		
7,400.00	6,606.66	6,603.66	6,606.66	49.10	228.81	77.78	1,550.88	-1,159.50	4,683.77	4,417.39	266.37	17.584		
7,500.00	6,706.21	6,703.21	6,706.21	49.35	232.29	78.03	1,550.88	-1,159.50	4,682.01	4,411.88	270.12	17.333		
7,600.00	6,803.22	6,800.22	6,803.22	49.59	235.67	78.74	1,550.88	-1,159.50	4,677.06	4,403.31	273.75	17.085		
7,700.00	6,895.32	6,907.68	6,895.32	49.82	239.42	79.86	1,550.88	-1,159.50	4,669.27	4,391.56	277.71	16.813		
7,800.00	6,980.23	6,977.23	6,980.23	50.03	241.85	81.31	1,550.88	-1,159.50	4,659.18	4,378.85	280.33	16.620		
7,900.00	7,055.85	7,052.85	7,055.85	50.21	244.49	82.97	1,550.88	-1,159.50	4,647.46	4,364.28	283.18	16.412		
8,000.00	7,120.34	7,117.34	7,120.34	50.36	246.74	84.71	1,550.88	-1,159.50	4,634.89	4,349.19	285.69	16.223		
8,100.00	7,172.10	7,169.10	7,172.10	50.47	248.55	86.40	1,550.88	-1,159.50	4,622.26	4,334.38	287.88	16.056		
8,200.00	7,209.85	7,206.85	7,209.85	50.55	249.87	87.91	1,550.88	-1,159.50	4,610.34	4,320.59	289.74	15.912		
8,300.00	7,232.68	7,229.68	7,232.68	50.61	250.66	89.14	1,550.88	-1,159.50	4,599.77	4,308.51	291.26	15.793		
8,400.00	7,240.00	7,237.00	7,240.00	50.65	250.92	90.02	1,550.88	-1,159.50	4,591.07	4,298.66	292.41	15.701		
8,500.00	7,239.60	7,236.60	7,239.60	50.69	250.91	90.01	1,550.88	-1,159.50	4,584.49	4,291.04	293.45	15.623		
8,600.00	7,239.19	7,236.19	7,239.19	50.75	250.89	90.01	1,550.88	-1,159.50	4,580.08	4,285.43	294.64	15.544		
8,700.00	7,238.78	7,235.78	7,238.78	50.85	250.88	90.00	1,550.88	-1,159.50	4,577.85	4,281.86	295.99	15.466		
8,751.90	7,238.57	7,235.57	7,238.57	50.93	250.87	90.00	1,550.88	-1,159.50	4,577.56	4,280.80	296.76	15.425		
8,800.00	7,238.38	7,235.38	7,238.38	51.02	250.86	90.00	1,550.88	-1,159.50	4,577.81	4,280.35	297.46	15.389		
8,900.00	7,237.97	7,234.97	7,237.97	51.32	250.85	89.99	1,550.88	-1,159.50	4,579.96	4,280.90	299.05	15.315		
9,000.00	7,237.57	7,234.57	7,237.57	51.95	250.84	89.99	1,550.88	-1,159.50	4,584.28	4,283.54	300.74	15.243		
9,100.00	7,237.16	7,234.16	7,237.16	53.10	250.82	89.98	1,550.88	-1,159.50	4,590.78	4,288.27	302.51	15.176		
9,200.00	7,236.76	7,233.76	7,236.76	54.69	250.81	89.98	1,550.88	-1,159.50	4,599.44	4,295.10	304.34	15.113		
9,300.00	7,236.35	7,233.35	7,236.35	56.53	250.79	89.97	1,550.88	-1,159.50	4,610.26	4,304.02	306.23	15.055		
9,400.00	7,235.94	7,232.94	7,235.94	58.53	250.78	89.97	1,550.88	-1,159.50	4,623.21	4,315.04	308.17	15.002		
9,500.00	7,235.54	7,232.54	7,235.54	60.62	250.76	89.96	1,550.88	-1,159.50	4,638.29	4,328.15	310.14	14.956		
9,600.00	7,235.13	7,232.13	7,235.13	62.80	250.75	89.96	1,550.88	-1,159.50	4,655.46	4,343.34	312.13	14.915		
9,700.00	7,234.73	7,231.73	7,234.73	65.03	250.74	89.95	1,550.88	-1,159.50	4,674.71	4,360.59	314.13	14.882		
9,800.00	7,234.32	7,231.32	7,234.32	67.32	250.72	89.95	1,550.88	-1,159.50	4,696.02	4,379.88	316.13	14.854		
9,900.00	7,233.92	7,230.92	7,233.92	69.66	250.71	89.94	1,550.88	-1,159.50	4,719.34	4,401.20	318.14	14.834		
10,000.00	7,233.51	7,230.51	7,233.51	72.03	250.69	89.94	1,550.88	-1,159.50	4,744.66	4,424.53	320.13	14.821		
10,100.00	7,233.10	7,230.10	7,233.10	74.45	250.68	89.93	1,550.88	-1,159.50	4,771.94	4,449.83	322.11	14.814 SF		
10,200.00	7,232.70	7,229.70	7,232.70	76.89	250.67	89.93	1,550.88	-1,159.50	4,801.15	4,477.07	324.08	14.815		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-21(PR_75CC) - OH - OH													Offset Site Error: 0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error: 3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,300.00	7,232.29	7,229.29	7,232.29	79.36	250.65	89.92	1,550.88	-1,159.50	4,832.25	4,506.24	326.01	14.822	
10,400.00	7,231.89	7,228.89	7,231.89	81.86	250.64	89.92	1,550.88	-1,159.50	4,865.21	4,537.29	327.92	14.837	
10,500.00	7,231.48	7,228.48	7,231.48	84.38	250.62	89.91	1,550.88	-1,159.50	4,899.99	4,570.19	329.79	14.858	
10,600.00	7,231.08	7,228.08	7,231.08	86.93	250.61	89.91	1,550.88	-1,159.50	4,936.55	4,604.91	331.64	14.885	
10,700.00	7,230.67	7,227.67	7,230.67	89.49	250.59	89.90	1,550.88	-1,159.50	4,974.85	4,641.41	333.44	14.920	
10,800.00	7,230.26	7,227.26	7,230.26	92.07	250.58	89.90	1,550.88	-1,159.50	5,014.85	4,679.64	335.21	14.960	
10,900.00	7,229.86	7,226.86	7,229.86	94.67	250.57	89.89	1,550.88	-1,159.50	5,056.51	4,719.58	336.93	15.007	
11,000.00	7,229.45	7,226.45	7,229.45	97.28	250.55	89.89	1,550.88	-1,159.50	5,099.80	4,761.18	338.62	15.061	
11,100.00	7,229.05	7,226.05	7,229.05	99.90	250.54	89.88	1,550.88	-1,159.50	5,144.66	4,804.41	340.26	15.120	
11,200.00	7,228.64	7,225.64	7,228.64	102.54	250.52	89.88	1,550.88	-1,159.50	5,191.07	4,849.21	341.86	15.185	
11,300.00	7,228.24	7,225.24	7,228.24	105.19	250.51	89.87	1,550.88	-1,159.50	5,238.97	4,895.56	343.41	15.256	
11,400.00	7,227.83	7,224.83	7,227.83	107.85	250.50	89.87	1,550.88	-1,159.50	5,288.33	4,943.41	344.92	15.332	
11,500.00	7,227.42	7,224.42	7,227.42	110.52	250.48	89.86	1,550.88	-1,159.50	5,339.10	4,992.72	346.38	15.414	
11,600.00	7,227.02	7,224.02	7,227.02	113.20	250.47	89.86	1,550.88	-1,159.50	5,391.25	5,043.45	347.81	15.501	
11,700.00	7,226.61	7,223.61	7,226.61	115.89	250.45	89.85	1,550.88	-1,159.50	5,444.74	5,095.56	349.19	15.593	
11,800.00	7,226.21	7,223.21	7,226.21	118.59	250.44	89.85	1,550.88	-1,159.50	5,499.53	5,149.01	350.52	15.690	
11,900.00	7,225.80	7,222.80	7,225.80	121.29	250.42	89.84	1,550.88	-1,159.50	5,555.58	5,203.77	351.81	15.791	
12,000.00	7,225.40	7,222.40	7,225.40	124.00	250.41	89.84	1,550.88	-1,159.50	5,612.85	5,259.78	353.06	15.898	
12,100.00	7,224.99	7,221.99	7,224.99	126.72	250.40	89.83	1,550.88	-1,159.50	5,671.30	5,317.03	354.27	16.008	
12,200.00	7,224.58	7,221.58	7,224.58	129.44	250.38	89.82	1,550.88	-1,159.50	5,730.91	5,375.46	355.44	16.123	
12,300.00	7,224.18	7,221.18	7,224.18	132.17	250.37	89.82	1,550.88	-1,159.50	5,791.62	5,435.05	356.57	16.242	
12,400.00	7,223.77	7,220.77	7,223.77	134.91	250.35	89.81	1,550.88	-1,159.50	5,853.42	5,495.75	357.66	16.366	
12,500.00	7,223.37	7,220.37	7,223.37	137.65	250.34	89.81	1,550.88	-1,159.50	5,916.26	5,557.54	358.72	16.493	
12,600.00	7,222.96	7,219.96	7,222.96	140.39	250.33	89.80	1,550.88	-1,159.50	5,980.11	5,620.37	359.74	16.624	
12,700.00	7,222.55	7,219.55	7,222.55	143.14	250.31	89.80	1,550.88	-1,159.50	6,044.94	5,684.22	360.72	16.758	
12,800.00	7,222.15	7,219.15	7,222.15	145.89	250.30	89.79	1,550.88	-1,159.50	6,110.72	5,749.06	361.67	16.896	
12,900.00	7,221.74	7,218.74	7,221.74	148.65	250.28	89.79	1,550.88	-1,159.50	6,177.42	5,814.84	362.58	17.037	
13,000.00	7,221.34	7,218.34	7,221.34	151.41	250.27	89.78	1,550.88	-1,159.50	6,245.01	5,881.55	363.46	17.182	
13,100.00	7,220.93	7,217.93	7,220.93	154.18	250.25	89.78	1,550.88	-1,159.50	6,313.46	5,949.15	364.31	17.330	
13,200.00	7,220.53	7,217.53	7,220.53	156.94	250.24	89.77	1,550.88	-1,159.50	6,382.74	6,017.61	365.13	17.481	
13,300.00	7,220.12	7,217.12	7,220.12	159.72	250.23	89.77	1,550.88	-1,159.50	6,452.83	6,086.90	365.92	17.634	
13,400.00	7,219.71	7,216.71	7,219.71	162.49	250.21	89.76	1,550.88	-1,159.50	6,523.69	6,157.01	366.68	17.791	
13,500.00	7,219.31	7,216.31	7,219.31	165.27	250.20	89.76	1,550.88	-1,159.50	6,595.32	6,227.90	367.42	17.950	
13,600.00	7,218.90	7,215.90	7,218.90	168.05	250.18	89.75	1,550.88	-1,159.50	6,667.67	6,299.54	368.13	18.112	
13,700.00	7,218.50	7,215.50	7,218.50	170.83	250.17	89.75	1,550.88	-1,159.50	6,740.73	6,371.92	368.81	18.277	
13,800.00	7,218.09	7,215.09	7,218.09	173.61	250.16	89.74	1,550.88	-1,159.50	6,814.47	6,445.00	369.47	18.444	
13,900.00	7,217.69	7,214.69	7,217.69	176.40	250.14	89.74	1,550.88	-1,159.50	6,888.87	6,518.77	370.10	18.613	
14,000.00	7,217.28	7,214.28	7,217.28	179.19	250.13	89.73	1,550.88	-1,159.50	6,963.92	6,593.21	370.72	18.785	
14,100.00	7,216.87	7,213.87	7,216.87	181.98	250.11	89.73	1,550.88	-1,159.50	7,039.59	6,668.28	371.31	18.959	
14,200.00	7,216.47	7,213.47	7,216.47	184.78	250.10	89.72	1,550.88	-1,159.50	7,115.86	6,743.98	371.87	19.135	
14,300.00	7,216.06	7,213.06	7,216.06	187.57	250.08	89.72	1,550.88	-1,159.50	7,192.71	6,820.28	372.42	19.313	
14,400.00	7,215.66	7,212.66	7,215.66	190.37	250.07	89.71	1,550.88	-1,159.50	7,270.12	6,897.17	372.95	19.493	
14,500.00	7,215.25	7,212.25	7,215.25	193.17	250.06	89.71	1,550.88	-1,159.50	7,348.08	6,974.61	373.46	19.676	
14,600.00	7,214.85	7,211.85	7,214.85	195.97	250.04	89.70	1,550.88	-1,159.50	7,426.56	7,052.61	373.95	19.860	
14,700.00	7,214.44	7,211.44	7,214.44	198.77	250.03	89.70	1,550.88	-1,159.50	7,505.56	7,131.13	374.43	20.045	
14,800.00	7,214.03	7,211.03	7,214.03	201.58	250.01	89.69	1,550.88	-1,159.50	7,585.05	7,210.16	374.89	20.233	
14,900.00	7,213.63	7,210.63	7,213.63	204.38	250.00	89.69	1,550.88	-1,159.50	7,665.03	7,289.70	375.33	20.422	
15,000.00	7,213.22	7,210.22	7,213.22	207.19	249.99	89.68	1,550.88	-1,159.50	7,745.46	7,369.71	375.76	20.613	
15,100.00	7,212.82	7,209.82	7,212.82	210.00	249.97	89.68	1,550.88	-1,159.50	7,826.35	7,450.19	376.17	20.805	
15,200.00	7,212.41	7,209.41	7,212.41	212.81	249.96	89.67	1,550.88	-1,159.50	7,907.68	7,531.11	376.57	20.999	
15,300.00	7,212.01	7,209.01	7,212.01	215.62	249.94	89.67	1,550.88	-1,159.50	7,989.43	7,612.48	376.95	21.195	
15,400.00	7,211.60	7,208.60	7,211.60	218.43	249.93	89.66	1,550.88	-1,159.50	8,071.59	7,694.27	377.32	21.392	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
HARVESTERS STATE 7-15 PAD - SENA 15-21(PR_75CC) - OH - OH												Offset Well Error:	3.28 ft
Survey Program: 100-2" Cone@2.448 Sigma													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,500.00	7,211.19	7,208.19	7,211.19	221.25	249.91	89.66	1,550.88	-1,159.50	8,154.15	7,776.47	377.68	21.590	
15,600.00	7,210.79	7,207.79	7,210.79	224.06	249.90	89.65	1,550.88	-1,159.50	8,237.10	7,859.07	378.03	21.790	
15,700.00	7,210.38	7,207.38	7,210.38	226.88	249.89	89.65	1,550.88	-1,159.50	8,320.42	7,942.06	378.36	21.991	
15,794.94	7,210.00	7,207.00	7,210.00	229.55	249.87	89.64	1,550.88	-1,159.50	8,399.87	8,021.20	378.67	22.183	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-24(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	17.00	3.28	3.28	-77.37	246.66	-1,101.15	1,128.57					
100.00	100.00	83.00	100.00	3.28	3.59	-77.37	246.66	-1,101.15	1,128.44	1,121.57	6.87	164.246		
200.00	200.00	183.00	200.00	3.34	5.68	-77.37	246.66	-1,101.15	1,128.44	1,119.42	9.02	125.080 CC		
300.00	299.98	282.98	299.98	3.44	8.77	100.06	246.66	-1,101.15	1,128.75	1,116.54	12.21	92.451		
400.00	399.84	382.84	399.84	3.59	12.07	100.30	246.66	-1,101.15	1,129.67	1,114.01	15.66	72.129		
500.00	499.45	482.45	499.45	3.79	15.45	100.70	246.66	-1,101.15	1,131.27	1,112.03	19.24	58.812		
600.00	598.70	581.70	598.70	4.03	18.85	101.26	246.66	-1,101.15	1,133.61	1,110.73	22.88	49.549		
700.00	697.47	680.47	697.47	4.31	22.25	101.96	246.66	-1,101.15	1,136.79	1,110.22	26.57	42.790 ES		
800.00	795.62	778.62	795.62	4.64	25.65	102.80	246.66	-1,101.15	1,140.96	1,110.67	30.28	37.675		
900.00	893.06	876.06	893.06	5.00	29.02	103.77	246.66	-1,101.15	1,146.25	1,112.23	34.02	33.693		
1,000.00	989.64	972.64	989.64	5.40	32.38	104.85	246.66	-1,101.15	1,152.86	1,115.10	37.77	30.526		
1,100.00	1,085.27	1,068.27	1,085.27	5.83	35.70	106.03	246.66	-1,101.15	1,160.98	1,119.46	41.52	27.964		
1,200.00	1,179.82	1,162.82	1,179.82	6.29	38.99	107.30	246.66	-1,101.15	1,170.81	1,125.55	45.26	25.868		
1,300.00	1,273.17	1,256.17	1,273.17	6.79	42.23	108.63	246.66	-1,101.15	1,182.57	1,133.57	49.00	24.136		
1,400.00	1,365.21	1,348.21	1,365.21	7.33	45.44	110.02	246.66	-1,101.15	1,196.49	1,143.77	52.71	22.697		
1,500.00	1,455.84	1,438.84	1,455.84	7.89	48.60	111.44	246.66	-1,101.15	1,212.77	1,156.36	56.41	21.499		
1,600.00	1,544.94	1,527.94	1,544.94	8.50	51.70	112.87	246.66	-1,101.15	1,231.65	1,171.57	60.07	20.502		
1,700.00	1,632.39	1,615.39	1,632.39	9.13	54.75	114.30	246.66	-1,101.15	1,253.31	1,189.61	63.70	19.675		
1,800.00	1,718.11	1,701.11	1,718.11	9.80	57.73	115.70	246.66	-1,101.15	1,277.93	1,210.64	67.29	18.993		
1,900.00	1,802.44	1,785.44	1,802.44	10.49	60.67	117.43	246.66	-1,101.15	1,305.30	1,234.47	70.83	18.429		
2,000.00	1,886.68	1,869.68	1,886.68	11.20	63.61	119.24	246.66	-1,101.15	1,334.34	1,259.98	74.37	17.943		
2,100.00	1,970.92	1,953.92	1,970.92	11.93	66.55	120.99	246.66	-1,101.15	1,364.90	1,287.00	77.90	17.520		
2,200.00	2,055.17	2,038.17	2,055.17	12.66	69.48	122.68	246.66	-1,101.15	1,396.87	1,315.43	81.44	17.153		
2,300.00	2,139.41	2,122.41	2,139.41	13.40	72.42	124.31	246.66	-1,101.15	1,430.15	1,345.19	84.96	16.833		
2,400.00	2,223.66	2,206.66	2,223.66	14.14	75.36	125.87	246.66	-1,101.15	1,464.66	1,376.17	88.48	16.553		
2,500.00	2,307.90	2,309.10	2,307.90	14.89	78.93	127.38	246.66	-1,101.15	1,500.31	1,407.67	92.63	16.196		
2,600.00	2,392.14	2,375.14	2,392.14	15.65	81.24	128.83	246.66	-1,101.15	1,537.02	1,441.51	95.51	16.093		
2,700.00	2,476.39	2,459.39	2,476.39	16.41	84.18	130.22	246.66	-1,101.15	1,574.72	1,475.71	99.01	15.904		
2,800.00	2,560.63	2,543.63	2,560.63	17.17	87.11	131.56	246.66	-1,101.15	1,613.34	1,510.83	102.51	15.738		
2,900.00	2,644.88	2,627.88	2,644.88	17.93	90.05	132.84	246.66	-1,101.15	1,652.81	1,546.81	106.01	15.592		
3,000.00	2,729.12	2,712.12	2,729.12	18.70	92.99	134.07	246.66	-1,101.15	1,693.08	1,583.58	109.50	15.462		
3,100.00	2,813.36	2,803.64	2,813.36	19.47	96.19	135.26	246.66	-1,101.15	1,734.09	1,620.85	113.24	15.314		
3,200.00	2,897.61	2,880.61	2,897.61	20.25	98.87	136.39	246.66	-1,101.15	1,775.78	1,659.32	116.46	15.247		
3,300.00	2,981.85	2,964.85	2,981.85	21.02	101.81	137.48	246.66	-1,101.15	1,818.12	1,698.17	119.94	15.158		
3,400.00	3,066.10	3,049.10	3,066.10	21.80	104.75	138.53	246.66	-1,101.15	1,861.05	1,737.63	123.42	15.079		
3,500.00	3,150.34	3,133.34	3,150.34	22.58	107.69	139.54	246.66	-1,101.15	1,904.54	1,777.64	126.89	15.009		
3,600.00	3,234.58	3,217.58	3,234.58	23.35	110.63	140.50	246.66	-1,101.15	1,948.54	1,818.18	130.36	14.947		
3,700.00	3,318.83	3,301.83	3,318.83	24.13	113.57	141.43	246.66	-1,101.15	1,993.04	1,859.20	133.83	14.892		
3,800.00	3,403.07	3,386.07	3,403.07	24.92	116.51	142.32	246.66	-1,101.15	2,037.98	1,900.68	137.30	14.843		
3,900.00	3,487.32	3,470.32	3,487.32	25.70	119.45	143.18	246.66	-1,101.15	2,083.35	1,942.59	140.77	14.800		
4,000.00	3,571.56	3,554.56	3,571.56	26.48	122.39	144.00	246.66	-1,101.15	2,129.12	1,984.89	144.23	14.762		
4,100.00	3,655.80	3,638.80	3,655.80	27.27	125.33	144.80	246.66	-1,101.15	2,175.26	2,027.56	147.70	14.728		
4,200.00	3,740.05	3,723.05	3,740.05	28.05	128.27	145.56	246.66	-1,101.15	2,221.74	2,070.59	151.16	14.698		
4,300.00	3,824.29	3,807.29	3,824.29	28.84	131.21	146.29	246.66	-1,101.15	2,268.56	2,113.94	154.62	14.672		
4,400.00	3,908.54	3,908.46	3,908.54	29.62	134.74	147.00	246.66	-1,101.15	2,315.68	2,157.01	158.67	14.594		
4,500.00	3,992.78	3,975.78	3,992.78	30.41	137.09	147.68	246.66	-1,101.15	2,363.09	2,201.55	161.54	14.628		
4,600.00	4,077.03	4,060.03	4,077.03	31.20	140.03	148.34	246.66	-1,101.15	2,410.77	2,245.77	165.00	14.610		
4,700.00	4,161.27	4,144.27	4,161.27	31.98	142.97	148.97	246.66	-1,101.15	2,458.71	2,290.24	168.46	14.595		
4,800.00	4,245.51	4,228.51	4,245.51	32.77	145.91	149.58	246.66	-1,101.15	2,506.89	2,334.96	171.92	14.581		
4,900.00	4,329.76	4,312.76	4,329.76	33.56	148.85	150.17	246.66	-1,101.15	2,555.29	2,379.91	175.38	14.570		
5,000.00	4,414.00	4,403.00	4,414.00	34.35	152.00	150.74	246.66	-1,101.15	2,603.91	2,424.86	179.05	14.543		
5,100.00	4,498.25	4,481.25	4,498.25	35.14	154.73	151.29	246.66	-1,101.15	2,652.74	2,470.44	182.30	14.551		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-24(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,565.49	4,582.49	35.93	157.67	151.82	246.66	-1,101.15	2,701.76	2,515.99	185.76	14.544		
5,300.00	4,666.73	4,649.73	4,666.73	36.72	160.61	152.33	246.66	-1,101.15	2,750.95	2,561.73	189.22	14.538		
5,400.00	4,750.98	4,733.98	4,750.98	37.51	163.55	152.83	246.66	-1,101.15	2,800.32	2,607.64	192.68	14.533		
5,500.00	4,835.22	4,818.22	4,835.22	38.30	166.49	153.31	246.66	-1,101.15	2,849.86	2,653.71	196.15	14.529		
5,600.00	4,919.47	4,902.47	4,919.47	39.09	169.43	153.78	246.66	-1,101.15	2,899.55	2,699.94	199.61	14.526		
5,700.00	5,003.71	4,986.71	5,003.71	39.88	172.37	154.22	246.66	-1,101.15	2,949.38	2,746.32	203.07	14.524		
5,800.00	5,088.06	5,071.06	5,088.06	40.67	175.32	154.82	246.66	-1,101.15	2,999.21	2,792.68	206.53	14.522		
5,900.00	5,173.83	5,156.83	5,173.83	41.44	178.31	155.68	246.66	-1,101.15	3,047.01	2,836.97	210.04	14.507		
6,000.00	5,261.34	5,244.34	5,261.34	42.18	181.36	156.44	246.66	-1,101.15	3,092.11	2,878.50	213.61	14.476		
6,100.00	5,350.49	5,333.49	5,350.49	42.88	184.48	157.14	246.66	-1,101.15	3,134.42	2,917.20	217.22	14.430		
6,200.00	5,441.16	5,424.16	5,441.16	43.56	187.64	157.76	246.66	-1,101.15	3,173.87	2,952.99	220.88	14.369		
6,300.00	5,533.25	5,516.25	5,533.25	44.20	190.86	158.31	246.66	-1,101.15	3,210.40	2,985.82	224.58	14.295		
6,400.00	5,626.65	5,609.65	5,626.65	44.82	194.12	158.80	246.66	-1,101.15	3,243.94	3,015.62	228.32	14.208		
6,500.00	5,721.23	5,704.23	5,721.23	45.40	197.42	159.23	246.66	-1,101.15	3,274.44	3,042.36	232.08	14.109		
6,600.00	5,816.89	5,800.11	5,816.89	45.94	200.76	159.61	246.66	-1,101.15	3,301.86	3,065.98	235.88	13.998		
6,700.00	5,913.51	5,903.49	5,913.51	46.45	204.37	159.93	246.66	-1,101.15	3,326.13	3,086.21	239.92	13.863		
6,800.00	6,010.97	6,006.03	6,010.97	46.93	207.95	160.21	246.66	-1,101.15	3,347.24	3,103.32	243.92	13.722		
6,900.00	6,109.15	6,107.85	6,109.15	47.38	211.51	160.44	246.66	-1,101.15	3,365.14	3,117.26	247.88	13.576		
7,000.00	6,207.93	6,209.07	6,207.93	47.80	215.04	160.63	246.66	-1,101.15	3,379.80	3,128.00	251.80	13.423		
7,100.00	6,307.19	6,309.81	6,307.19	48.18	218.55	160.77	246.66	-1,101.15	3,391.20	3,135.52	255.68	13.263		
7,200.00	6,406.82	6,389.82	6,406.82	48.53	221.35	160.88	246.66	-1,101.15	3,399.33	3,140.50	258.83	13.134		
7,300.00	6,506.68	6,489.68	6,506.68	48.84	224.83	160.94	246.66	-1,101.15	3,404.17	3,141.53	262.64	12.961		
7,400.00	6,606.66	6,589.66	6,606.66	49.10	228.32	73.95	246.66	-1,101.15	3,405.71	3,139.28	266.43	12.783		
7,500.00	6,706.21	6,689.21	6,706.21	49.35	231.80	74.29	246.66	-1,101.15	3,403.41	3,133.24	270.17	12.597		
7,600.00	6,803.22	6,786.22	6,803.22	49.59	235.18	75.22	246.66	-1,101.15	3,396.96	3,123.19	273.77	12.408		
7,700.00	6,895.32	6,878.32	6,895.32	49.82	238.40	76.70	246.66	-1,101.15	3,386.80	3,109.65	277.15	12.220		
7,800.00	6,980.23	6,963.23	6,980.23	50.03	241.36	78.61	246.66	-1,101.15	3,373.66	3,093.41	280.25	12.038		
7,900.00	7,055.85	7,038.85	7,055.85	50.21	244.00	80.81	246.66	-1,101.15	3,358.43	3,075.40	283.04	11.866		
8,000.00	7,120.34	7,103.34	7,120.34	50.36	246.25	83.12	246.66	-1,101.15	3,342.16	3,056.68	285.49	11.707		
8,100.00	7,172.10	7,155.10	7,172.10	50.47	248.06	85.36	246.66	-1,101.15	3,325.92	3,038.32	287.61	11.564		
8,200.00	7,209.85	7,207.15	7,209.85	50.55	249.88	87.35	246.66	-1,101.15	3,310.74	3,020.84	289.90	11.420		
8,300.00	7,232.68	7,215.68	7,232.68	50.61	250.18	88.94	246.66	-1,101.15	3,297.50	3,006.64	290.87	11.337		
8,400.00	7,240.00	7,223.00	7,240.00	50.65	250.43	90.02	246.66	-1,101.15	3,286.87	2,994.90	291.97	11.258		
8,500.00	7,239.60	7,222.60	7,239.60	50.69	250.42	90.01	246.66	-1,101.15	3,279.21	2,986.23	292.98	11.193		
8,600.00	7,239.19	7,222.19	7,239.19	50.75	250.40	90.01	246.66	-1,101.15	3,274.59	2,980.44	294.15	11.132		
8,700.00	7,238.78	7,221.78	7,238.78	50.85	250.39	90.00	246.66	-1,101.15	3,273.01	2,977.54	295.47	11.077		
8,701.54	7,238.78	7,221.78	7,238.78	50.85	250.39	90.00	246.66	-1,101.15	3,273.01	2,977.52	295.49	11.076		
8,800.00	7,238.38	7,221.38	7,238.38	51.02	250.37	89.99	246.66	-1,101.15	3,274.49	2,977.57	296.92	11.028		
8,900.00	7,237.97	7,220.97	7,237.97	51.32	250.36	89.99	246.66	-1,101.15	3,279.02	2,980.54	298.48	10.986		
9,000.00	7,237.57	7,220.57	7,237.57	51.95	250.35	89.98	246.66	-1,101.15	3,286.59	2,986.46	300.13	10.950		
9,100.00	7,237.16	7,220.16	7,237.16	53.10	250.33	89.97	246.66	-1,101.15	3,297.18	2,995.32	301.85	10.923		
9,200.00	7,236.76	7,219.76	7,236.76	54.69	250.32	89.96	246.66	-1,101.15	3,310.75	3,007.12	303.63	10.904		
9,300.00	7,236.35	7,219.35	7,236.35	56.53	250.30	89.96	246.66	-1,101.15	3,327.27	3,021.84	305.43	10.894		
9,400.00	7,235.94	7,218.94	7,235.94	58.53	250.29	89.95	246.66	-1,101.15	3,346.71	3,039.44	307.26	10.892 SF		
9,500.00	7,235.54	7,218.54	7,235.54	60.62	250.28	89.94	246.66	-1,101.15	3,369.00	3,059.90	309.10	10.899		
9,600.00	7,235.13	7,218.13	7,235.13	62.80	250.26	89.94	246.66	-1,101.15	3,394.09	3,083.16	310.93	10.916		
9,700.00	7,234.73	7,217.73	7,234.73	65.03	250.25	89.93	246.66	-1,101.15	3,421.92	3,109.18	312.74	10.942		
9,800.00	7,234.32	7,217.32	7,234.32	67.32	250.23	89.92	246.66	-1,101.15	3,452.42	3,137.89	314.53	10.976		
9,900.00	7,233.92	7,216.92	7,233.92	69.66	250.22	89.91	246.66	-1,101.15	3,485.53	3,169.24	316.28	11.020		
10,000.00	7,233.51	7,216.51	7,233.51	72.03	250.20	89.91	246.66	-1,101.15	3,521.16	3,203.16	318.00	11.073		
10,100.00	7,233.10	7,216.10	7,233.10	74.45	250.19	89.90	246.66	-1,101.15	3,559.25	3,239.58	319.67	11.134		
10,200.00	7,232.70	7,215.70	7,232.70	76.89	250.18	89.89	246.66	-1,101.15	3,599.72	3,278.42	321.29	11.204		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-24(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	7,215.29	7,232.29	79.36	250.16	89.89	246.66	-1,101.15	3,642.48	3,319.62	322.86	11.282		
10,400.00	7,231.89	7,214.89	7,231.89	81.86	250.15	89.88	246.66	-1,101.15	3,687.46	3,363.08	324.38	11.368		
10,500.00	7,231.48	7,214.48	7,231.48	84.38	250.13	89.87	246.66	-1,101.15	3,734.57	3,408.73	325.84	11.461		
10,600.00	7,231.08	7,214.08	7,231.08	86.93	250.12	89.87	246.66	-1,101.15	3,783.74	3,456.50	327.24	11.563		
10,700.00	7,230.67	7,213.67	7,230.67	89.49	250.11	89.86	246.66	-1,101.15	3,834.89	3,506.31	328.58	11.671		
10,800.00	7,230.26	7,213.26	7,230.26	92.07	250.09	89.85	246.66	-1,101.15	3,887.94	3,558.07	329.87	11.786		
10,900.00	7,229.86	7,212.86	7,229.86	94.67	250.08	89.84	246.66	-1,101.15	3,942.81	3,611.71	331.10	11.908		
11,000.00	7,229.45	7,212.45	7,229.45	97.28	250.06	89.84	246.66	-1,101.15	3,999.43	3,667.15	332.28	12.036		
11,100.00	7,229.05	7,212.05	7,229.05	99.90	250.05	89.83	246.66	-1,101.15	4,057.73	3,724.32	333.40	12.171		
11,200.00	7,228.64	7,211.64	7,228.64	102.54	250.03	89.82	246.66	-1,101.15	4,117.62	3,783.15	334.47	12.311		
11,300.00	7,228.24	7,211.24	7,228.24	105.19	250.02	89.82	246.66	-1,101.15	4,179.06	3,843.57	335.49	12.457		
11,400.00	7,227.83	7,210.83	7,227.83	107.85	250.01	89.81	246.66	-1,101.15	4,241.96	3,905.50	336.46	12.608		
11,500.00	7,227.42	7,210.42	7,227.42	110.52	249.99	89.80	246.66	-1,101.15	4,306.26	3,968.88	337.38	12.764		
11,600.00	7,227.02	7,210.02	7,227.02	113.20	249.98	89.79	246.66	-1,101.15	4,371.90	4,033.65	338.25	12.925		
11,700.00	7,226.61	7,209.61	7,226.61	115.89	249.96	89.79	246.66	-1,101.15	4,438.83	4,099.75	339.08	13.091		
11,800.00	7,226.21	7,209.21	7,226.21	118.59	249.95	89.78	246.66	-1,101.15	4,506.99	4,167.12	339.87	13.261		
11,900.00	7,225.80	7,208.80	7,225.80	121.29	249.94	89.77	246.66	-1,101.15	4,576.31	4,235.69	340.62	13.435		
12,000.00	7,225.40	7,208.40	7,225.40	124.00	249.92	89.77	246.66	-1,101.15	4,646.75	4,305.42	341.33	13.614		
12,100.00	7,224.99	7,207.99	7,224.99	126.72	249.91	89.76	246.66	-1,101.15	4,718.26	4,376.26	342.00	13.796		
12,200.00	7,224.58	7,207.58	7,224.58	129.44	249.89	89.75	246.66	-1,101.15	4,790.79	4,448.15	342.64	13.982		
12,300.00	7,224.18	7,207.18	7,224.18	132.17	249.88	89.74	246.66	-1,101.15	4,864.29	4,521.05	343.24	14.172		
12,400.00	7,223.77	7,206.77	7,223.77	134.91	249.86	89.74	246.66	-1,101.15	4,938.73	4,594.91	343.82	14.364		
12,500.00	7,223.37	7,206.37	7,223.37	137.65	249.85	89.73	246.66	-1,101.15	5,014.05	4,669.69	344.36	14.561		
12,600.00	7,222.96	7,205.96	7,222.96	140.39	249.84	89.72	246.66	-1,101.15	5,090.22	4,745.35	344.87	14.760		
12,700.00	7,222.55	7,205.55	7,222.55	143.14	249.82	89.72	246.66	-1,101.15	5,167.21	4,821.84	345.36	14.962		
12,800.00	7,222.15	7,205.15	7,222.15	145.89	249.81	89.71	246.66	-1,101.15	5,244.97	4,899.14	345.83	15.166		
12,900.00	7,221.74	7,204.74	7,221.74	148.65	249.79	89.70	246.66	-1,101.15	5,323.48	4,977.21	346.27	15.374		
13,000.00	7,221.34	7,204.34	7,221.34	151.41	249.78	89.69	246.66	-1,101.15	5,402.69	5,056.01	346.69	15.584		
13,100.00	7,220.93	7,203.93	7,220.93	154.18	249.77	89.69	246.66	-1,101.15	5,482.59	5,135.51	347.08	15.796		
13,200.00	7,220.53	7,203.53	7,220.53	156.94	249.75	89.68	246.66	-1,101.15	5,563.13	5,215.67	347.46	16.011		
13,300.00	7,220.12	7,203.12	7,220.12	159.72	249.74	89.67	246.66	-1,101.15	5,644.30	5,296.48	347.82	16.228		
13,400.00	7,219.71	7,202.71	7,219.71	162.49	249.72	89.67	246.66	-1,101.15	5,726.06	5,377.91	348.15	16.447		
13,500.00	7,219.31	7,202.31	7,219.31	165.27	249.71	89.66	246.66	-1,101.15	5,808.40	5,459.92	348.48	16.668		
13,600.00	7,218.90	7,201.90	7,218.90	168.05	249.69	89.65	246.66	-1,101.15	5,891.28	5,542.49	348.78	16.891		
13,700.00	7,218.50	7,201.50	7,218.50	170.83	249.68	89.64	246.66	-1,101.15	5,974.68	5,625.61	349.07	17.116		
13,800.00	7,218.09	7,201.09	7,218.09	173.61	249.67	89.64	246.66	-1,101.15	6,058.59	5,709.24	349.35	17.342		
13,900.00	7,217.69	7,200.69	7,217.69	176.40	249.65	89.63	246.66	-1,101.15	6,142.98	5,793.36	349.61	17.571		
14,000.00	7,217.28	7,200.28	7,217.28	179.19	249.64	89.62	246.66	-1,101.15	6,227.83	5,877.96	349.87	17.801		
14,100.00	7,216.87	7,200.13	7,216.87	181.98	249.63	89.62	246.66	-1,101.15	6,313.12	5,963.01	350.11	18.032		
14,200.00	7,216.47	7,200.53	7,216.47	184.78	249.65	89.61	246.66	-1,101.15	6,398.84	6,048.48	350.37	18.263		
14,300.00	7,216.06	7,200.94	7,216.06	187.57	249.66	89.60	246.66	-1,101.15	6,484.97	6,134.36	350.61	18.496		
14,400.00	7,215.66	7,201.34	7,215.66	190.37	249.68	89.60	246.66	-1,101.15	6,571.50	6,220.65	350.85	18.730		
14,500.00	7,215.25	7,201.75	7,215.25	193.17	249.69	89.59	246.66	-1,101.15	6,658.40	6,307.32	351.07	18.966		
14,600.00	7,214.85	7,202.15	7,214.85	195.97	249.70	89.58	246.66	-1,101.15	6,745.66	6,394.37	351.29	19.203		
14,700.00	7,214.44	7,202.56	7,214.44	198.77	249.72	89.57	246.66	-1,101.15	6,833.27	6,481.77	351.50	19.440		
14,800.00	7,214.03	7,202.97	7,214.03	201.58	249.73	89.57	246.66	-1,101.15	6,921.22	6,569.52	351.70	19.679		
14,900.00	7,213.63	7,203.37	7,213.63	204.38	249.75	89.56	246.66	-1,101.15	7,009.49	6,657.60	351.89	19.920		
15,000.00	7,213.22	7,203.78	7,213.22	207.19	249.76	89.55	246.66	-1,101.15	7,098.07	6,745.99	352.07	20.161		
15,100.00	7,212.82	7,204.18	7,212.82	210.00	249.77	89.55	246.66	-1,101.15	7,186.95	6,834.70	352.25	20.403		
15,200.00	7,212.41	7,204.59	7,212.41	212.81	249.79	89.54	246.66	-1,101.15	7,276.12	6,923.70	352.42	20.646		
15,300.00	7,212.01	7,204.99	7,212.01	215.62	249.80	89.53	246.66	-1,101.15	7,365.57	7,012.98	352.59	20.890		
15,400.00	7,211.60	7,205.40	7,211.60	218.43	249.82	89.52	246.66	-1,101.15	7,455.29	7,102.54	352.75	21.135		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												HARVESTERS STATE 7-15 PAD - SENA 15-24(PR_75CC) - OH - OH		Offset Site Error:		0.00 ft	
Survey Program: 100-2" Cone@2.448 Sigma														Offset Well Error:		3.28 ft	
Reference		Offset		Semi Major Axis			Distance						Warning				
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)						
15,500.00	7,211.19	7,205.81	7,211.19	221.25	249.83	89.52	246.66	-1,101.15	7,545.26	7,192.36	352.90	21.380					
15,600.00	7,210.79	7,206.21	7,210.79	224.06	249.85	89.51	246.66	-1,101.15	7,635.48	7,282.43	353.05	21.627					
15,700.00	7,210.38	7,206.62	7,210.38	226.88	249.86	89.50	246.66	-1,101.15	7,725.95	7,372.75	353.20	21.874					
15,794.94	7,210.00	7,207.00	7,210.00	229.55	249.87	89.50	246.66	-1,101.15	7,812.05	7,458.72	353.33	22.110					



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-25(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	10.00	0.00	3.28	3.28	-57.90	927.93	-1,479.38	1,746.32					
100.00	100.00	110.00	100.00	3.28	3.89	-57.90	927.93	-1,479.38	1,746.32	1,739.14	7.18	243.340		
200.00	200.00	210.00	200.00	3.34	6.48	-57.90	927.93	-1,479.38	1,746.32	1,736.50	9.81	177.933 CC		
300.00	299.98	289.98	299.98	3.44	9.00	119.48	927.93	-1,479.38	1,747.18	1,734.74	12.44	140.489		
400.00	399.84	389.84	399.84	3.59	12.31	119.59	927.93	-1,479.38	1,749.76	1,733.86	15.90	110.061 ES		
500.00	499.45	489.45	499.45	3.79	15.69	119.76	927.93	-1,479.38	1,754.09	1,734.61	19.48	90.065		
600.00	598.70	588.70	598.70	4.03	19.09	120.00	927.93	-1,479.38	1,760.19	1,737.07	23.12	76.131		
700.00	697.47	687.47	697.47	4.31	22.49	120.29	927.93	-1,479.38	1,768.12	1,741.32	26.81	65.955		
800.00	795.62	785.62	795.62	4.64	25.89	120.65	927.93	-1,479.38	1,777.93	1,747.41	30.52	58.249		
900.00	893.06	883.06	893.06	5.00	29.27	121.05	927.93	-1,479.38	1,789.69	1,755.44	34.25	52.247		
1,000.00	989.64	979.64	989.64	5.40	32.62	121.50	927.93	-1,479.38	1,803.47	1,765.48	37.99	47.469		
1,100.00	1,085.27	1,075.27	1,085.27	5.83	35.94	121.99	927.93	-1,479.38	1,819.36	1,777.63	41.73	43.598		
1,200.00	1,179.82	1,169.82	1,179.82	6.29	39.23	122.51	927.93	-1,479.38	1,837.43	1,791.97	45.46	40.417		
1,300.00	1,273.17	1,263.17	1,273.17	6.79	42.48	123.05	927.93	-1,479.38	1,857.78	1,808.60	49.18	37.777		
1,400.00	1,365.21	1,355.21	1,365.21	7.33	45.68	123.61	927.93	-1,479.38	1,880.50	1,827.62	52.88	35.565		
1,500.00	1,455.84	1,445.84	1,455.84	7.89	48.84	124.17	927.93	-1,479.38	1,905.67	1,849.12	56.55	33.701		
1,600.00	1,544.94	1,534.94	1,544.94	8.50	51.94	124.73	927.93	-1,479.38	1,933.37	1,873.18	60.19	32.124		
1,700.00	1,632.39	1,622.39	1,632.39	9.13	54.99	125.28	927.93	-1,479.38	1,963.67	1,899.89	63.79	30.785		
1,800.00	1,718.11	1,708.11	1,718.11	9.80	57.98	125.81	927.93	-1,479.38	1,996.66	1,929.31	67.34	29.649		
1,900.00	1,802.44	1,807.56	1,802.44	10.49	61.44	126.74	927.93	-1,479.38	2,031.90	1,960.51	71.39	28.463		
2,000.00	1,886.68	1,876.68	1,886.68	11.20	63.85	127.83	927.93	-1,479.38	2,068.03	1,993.65	74.38	27.804		
2,100.00	1,970.92	1,960.92	1,970.92	11.93	66.79	128.88	927.93	-1,479.38	2,104.91	2,027.02	77.90	27.022		
2,200.00	2,055.17	2,045.17	2,055.17	12.66	69.73	129.90	927.93	-1,479.38	2,142.52	2,061.10	81.42	26.315		
2,300.00	2,139.41	2,129.41	2,139.41	13.40	72.67	130.89	927.93	-1,479.38	2,180.81	2,095.87	84.94	25.676		
2,400.00	2,223.66	2,213.66	2,223.66	14.14	75.60	131.85	927.93	-1,479.38	2,219.75	2,131.29	88.46	25.095		
2,500.00	2,307.90	2,302.10	2,307.90	14.89	78.69	132.79	927.93	-1,479.38	2,259.30	2,167.18	92.12	24.526		
2,600.00	2,392.14	2,382.14	2,392.14	15.65	81.48	133.70	927.93	-1,479.38	2,299.43	2,203.94	95.49	24.081		
2,700.00	2,476.39	2,466.39	2,476.39	16.41	84.42	134.58	927.93	-1,479.38	2,340.12	2,241.12	99.00	23.637		
2,800.00	2,560.63	2,550.63	2,560.63	17.17	87.36	135.43	927.93	-1,479.38	2,381.33	2,278.82	102.51	23.229		
2,900.00	2,644.88	2,634.88	2,644.88	17.93	90.30	136.26	927.93	-1,479.38	2,423.04	2,317.01	106.02	22.854		
3,000.00	2,729.12	2,719.12	2,729.12	18.70	93.24	137.07	927.93	-1,479.38	2,465.21	2,355.69	109.53	22.507		
3,100.00	2,813.36	2,803.36	2,813.36	19.47	96.18	137.85	927.93	-1,479.38	2,507.84	2,394.81	113.03	22.187		
3,200.00	2,897.61	2,887.61	2,897.61	20.25	99.12	138.61	927.93	-1,479.38	2,550.89	2,434.36	116.54	21.889		
3,300.00	2,981.85	2,971.85	2,981.85	21.02	102.05	139.35	927.93	-1,479.38	2,594.35	2,474.32	120.04	21.613		
3,400.00	3,066.10	3,056.10	3,066.10	21.80	104.99	140.06	927.93	-1,479.38	2,638.19	2,514.66	123.53	21.356		
3,500.00	3,150.34	3,140.34	3,150.34	22.58	107.93	140.76	927.93	-1,479.38	2,682.40	2,555.37	127.03	21.116		
3,600.00	3,234.58	3,224.58	3,234.58	23.35	110.87	141.43	927.93	-1,479.38	2,726.96	2,596.43	130.52	20.892		
3,700.00	3,318.83	3,308.83	3,318.83	24.13	113.81	142.08	927.93	-1,479.38	2,771.84	2,637.83	134.02	20.683		
3,800.00	3,403.07	3,406.93	3,403.07	24.92	117.24	142.72	927.93	-1,479.38	2,817.05	2,679.06	137.99	20.415		
3,900.00	3,487.32	3,477.32	3,487.32	25.70	119.69	143.34	927.93	-1,479.38	2,862.55	2,721.55	141.00	20.302		
4,000.00	3,571.56	3,561.56	3,571.56	26.48	122.63	143.94	927.93	-1,479.38	2,908.34	2,763.85	144.48	20.129		
4,100.00	3,655.80	3,645.80	3,655.80	27.27	125.57	144.53	927.93	-1,479.38	2,954.40	2,806.43	147.97	19.966		
4,200.00	3,740.05	3,730.05	3,740.05	28.05	128.51	145.09	927.93	-1,479.38	3,000.72	2,849.27	151.45	19.813		
4,300.00	3,824.29	3,814.29	3,824.29	28.84	131.45	145.65	927.93	-1,479.38	3,047.29	2,892.35	154.94	19.668		
4,400.00	3,908.54	3,901.46	3,908.54	29.62	134.49	146.18	927.93	-1,479.38	3,094.10	2,935.58	158.52	19.518		
4,500.00	3,992.78	3,982.78	3,992.78	30.41	137.33	146.71	927.93	-1,479.38	3,141.13	2,979.23	161.90	19.402		
4,600.00	4,077.03	4,067.03	4,077.03	31.20	140.27	147.21	927.93	-1,479.38	3,188.38	3,023.00	165.38	19.279		
4,700.00	4,161.27	4,151.27	4,161.27	31.98	143.21	147.71	927.93	-1,479.38	3,235.84	3,066.98	168.86	19.163		
4,800.00	4,245.51	4,235.51	4,245.51	32.77	146.15	148.19	927.93	-1,479.38	3,283.50	3,111.16	172.34	19.053		
4,900.00	4,329.76	4,319.76	4,329.76	33.56	149.09	148.66	927.93	-1,479.38	3,331.34	3,155.53	175.82	18.948		
5,000.00	4,414.00	4,404.00	4,414.00	34.35	152.03	149.12	927.93	-1,479.38	3,379.37	3,200.08	179.29	18.848		
5,100.00	4,498.25	4,488.25	4,498.25	35.14	154.97	149.56	927.93	-1,479.38	3,427.57	3,244.80	182.77	18.753		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-25(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,572.49	4,582.49	35.93	157.91	149.99	927.93	-1,479.38	3,475.94	3,289.69	186.25	18.663		
5,300.00	4,666.73	4,656.73	4,666.73	36.72	160.85	150.42	927.93	-1,479.38	3,524.47	3,334.75	189.72	18.577		
5,400.00	4,750.98	4,740.98	4,750.98	37.51	163.80	150.83	927.93	-1,479.38	3,573.15	3,379.95	193.20	18.495		
5,500.00	4,835.22	4,825.22	4,835.22	38.30	166.74	151.23	927.93	-1,479.38	3,621.98	3,425.30	196.67	18.416		
5,600.00	4,919.47	4,909.47	4,919.47	39.09	169.68	151.62	927.93	-1,479.38	3,670.95	3,470.80	200.15	18.341		
5,700.00	5,003.71	5,006.29	5,003.71	39.88	173.06	152.00	927.93	-1,479.38	3,720.05	3,515.99	204.06	18.230		
5,800.00	5,088.06	5,078.06	5,088.06	40.67	175.56	152.55	927.93	-1,479.38	3,769.14	3,562.04	207.10	18.200		
5,900.00	5,173.83	5,163.83	5,173.83	41.44	178.55	153.37	927.93	-1,479.38	3,816.23	3,605.61	210.62	18.119		
6,000.00	5,261.34	5,251.34	5,261.34	42.18	181.61	154.12	927.93	-1,479.38	3,860.65	3,646.46	214.20	18.024		
6,100.00	5,350.49	5,340.49	5,350.49	42.88	184.72	154.80	927.93	-1,479.38	3,902.33	3,684.51	217.82	17.915		
6,200.00	5,441.16	5,431.16	5,441.16	43.56	187.89	155.41	927.93	-1,479.38	3,941.18	3,719.70	221.49	17.794		
6,300.00	5,533.25	5,523.25	5,533.25	44.20	191.10	155.96	927.93	-1,479.38	3,977.16	3,751.97	225.19	17.661		
6,400.00	5,626.65	5,616.65	5,626.65	44.82	194.36	156.45	927.93	-1,479.38	4,010.20	3,781.26	228.93	17.517		
6,500.00	5,721.23	5,711.23	5,721.23	45.40	197.66	156.88	927.93	-1,479.38	4,040.24	3,807.54	232.70	17.362		
6,600.00	5,816.89	5,806.89	5,816.89	45.94	201.00	157.26	927.93	-1,479.38	4,067.24	3,830.75	236.49	17.198		
6,700.00	5,913.51	5,903.51	5,913.51	46.45	204.37	157.58	927.93	-1,479.38	4,091.15	3,850.85	240.30	17.025		
6,800.00	6,010.97	6,000.97	6,010.97	46.93	207.77	157.86	927.93	-1,479.38	4,111.94	3,867.81	244.13	16.843		
6,900.00	6,109.15	6,100.85	6,109.15	47.38	211.26	158.09	927.93	-1,479.38	4,129.57	3,881.55	248.02	16.650		
7,000.00	6,207.93	6,202.07	6,207.93	47.80	214.79	158.28	927.93	-1,479.38	4,144.01	3,892.07	251.94	16.449		
7,100.00	6,307.19	6,302.81	6,307.19	48.18	218.31	158.43	927.93	-1,479.38	4,155.24	3,899.42	255.82	16.243		
7,200.00	6,406.82	6,403.19	6,406.82	48.53	221.81	158.53	927.93	-1,479.38	4,163.25	3,903.58	259.67	16.033		
7,300.00	6,506.68	6,503.32	6,506.68	48.84	225.31	158.59	927.93	-1,479.38	4,168.02	3,904.52	263.50	15.818		
7,400.00	6,606.66	6,603.34	6,606.66	49.10	228.80	71.61	927.93	-1,479.38	4,169.53	3,902.25	267.28	15.600		
7,500.00	6,706.21	6,703.79	6,706.21	49.35	232.31	71.94	927.93	-1,479.38	4,166.91	3,895.85	271.06	15.373		
7,600.00	6,803.22	6,806.78	6,803.22	49.59	235.90	72.88	927.93	-1,479.38	4,159.50	3,884.63	274.87	15.133		
7,700.00	6,895.32	6,885.32	6,895.32	49.82	238.64	74.38	927.93	-1,479.38	4,147.72	3,869.93	277.79	14.931		
7,800.00	6,980.23	6,970.23	6,980.23	50.03	241.61	76.35	927.93	-1,479.38	4,132.23	3,851.34	280.89	14.711		
7,900.00	7,055.85	7,045.85	7,055.85	50.21	244.25	78.67	927.93	-1,479.38	4,113.88	3,830.20	283.68	14.502		
8,000.00	7,120.34	7,110.34	7,120.34	50.36	246.50	81.19	927.93	-1,479.38	4,093.64	3,807.51	286.13	14.307		
8,100.00	7,172.10	7,162.10	7,172.10	50.47	248.31	83.75	927.93	-1,479.38	4,072.56	3,784.31	288.25	14.129		
8,200.00	7,209.85	7,200.15	7,209.85	50.55	249.63	86.16	927.93	-1,479.38	4,051.64	3,761.60	290.04	13.969		
8,300.00	7,232.68	7,222.68	7,232.68	50.61	250.42	88.30	927.93	-1,479.38	4,031.81	3,740.34	291.47	13.833		
8,400.00	7,240.00	7,230.00	7,240.00	50.65	250.68	90.04	927.93	-1,479.38	4,013.85	3,721.29	292.56	13.720		
8,500.00	7,239.60	7,229.60	7,239.60	50.69	250.66	90.03	927.93	-1,479.38	3,998.23	3,704.69	293.55	13.620		
8,600.00	7,239.19	7,229.19	7,239.19	50.75	250.65	90.03	927.93	-1,479.38	3,985.07	3,690.36	294.70	13.522		
8,700.00	7,238.78	7,228.78	7,238.78	50.85	250.63	90.02	927.93	-1,479.38	3,974.37	3,678.36	296.02	13.426		
8,800.00	7,238.38	7,228.38	7,238.38	51.02	250.62	90.02	927.93	-1,479.38	3,966.17	3,668.70	297.47	13.333		
8,900.00	7,237.97	7,227.97	7,237.97	51.32	250.61	90.01	927.93	-1,479.38	3,960.48	3,661.44	299.04	13.244		
9,000.00	7,237.57	7,227.57	7,237.57	51.95	250.59	90.00	927.93	-1,479.38	3,957.31	3,656.58	300.73	13.159		
9,075.59	7,237.26	7,227.26	7,237.26	52.77	250.58	90.00	927.93	-1,479.38	3,956.59	3,654.51	302.07	13.098		
9,100.00	7,237.16	7,227.16	7,237.16	53.10	250.58	90.00	927.93	-1,479.38	3,956.66	3,654.16	302.50	13.080		
9,200.00	7,236.76	7,226.76	7,236.76	54.69	250.56	89.99	927.93	-1,479.38	3,958.54	3,654.18	304.36	13.006		
9,300.00	7,236.35	7,226.35	7,236.35	56.53	250.55	89.99	927.93	-1,479.38	3,962.94	3,656.67	306.27	12.939		
9,400.00	7,235.94	7,225.94	7,235.94	58.53	250.53	89.98	927.93	-1,479.38	3,969.86	3,661.63	308.23	12.879		
9,500.00	7,235.54	7,225.54	7,235.54	60.62	250.52	89.98	927.93	-1,479.38	3,979.28	3,669.05	310.23	12.827		
9,600.00	7,235.13	7,225.13	7,235.13	62.80	250.51	89.97	927.93	-1,479.38	3,991.19	3,678.94	312.25	12.782		
9,700.00	7,234.73	7,224.73	7,234.73	65.03	250.49	89.96	927.93	-1,479.38	4,005.55	3,691.27	314.28	12.745		
9,800.00	7,234.32	7,224.32	7,234.32	67.32	250.48	89.96	927.93	-1,479.38	4,022.35	3,706.04	316.31	12.716		
9,900.00	7,233.92	7,223.92	7,233.92	69.66	250.46	89.95	927.93	-1,479.38	4,041.56	3,723.22	318.34	12.696		
10,000.00	7,233.51	7,223.51	7,233.51	72.03	250.45	89.95	927.93	-1,479.38	4,063.14	3,742.79	320.35	12.683		
10,100.00	7,233.10	7,223.10	7,233.10	74.45	250.44	89.94	927.93	-1,479.38	4,087.05	3,764.71	322.34	12.679 SF		
10,200.00	7,232.70	7,222.70	7,232.70	76.89	250.42	89.93	927.93	-1,479.38	4,113.25	3,788.95	324.31	12.683		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-25(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	7,222.29	7,232.29	79.36	250.41	89.93	927.93	-1,479.38	4,141.71	3,815.47	326.23	12.695		
10,400.00	7,231.89	7,221.89	7,231.89	81.86	250.39	89.92	927.93	-1,479.38	4,172.36	3,844.24	328.13	12.716		
10,500.00	7,231.48	7,221.48	7,231.48	84.38	250.38	89.92	927.93	-1,479.38	4,205.17	3,875.20	329.97	12.744		
10,600.00	7,231.08	7,221.08	7,231.08	86.93	250.36	89.91	927.93	-1,479.38	4,240.09	3,908.31	331.78	12.780		
10,700.00	7,230.67	7,220.67	7,230.67	89.49	250.35	89.90	927.93	-1,479.38	4,277.06	3,943.52	333.54	12.823		
10,800.00	7,230.26	7,220.26	7,230.26	92.07	250.34	89.90	927.93	-1,479.38	4,316.03	3,980.79	335.24	12.874		
10,900.00	7,229.86	7,219.86	7,229.86	94.67	250.32	89.89	927.93	-1,479.38	4,356.95	4,020.05	336.90	12.933		
11,000.00	7,229.45	7,219.45	7,229.45	97.28	250.31	89.89	927.93	-1,479.38	4,399.76	4,061.26	338.50	12.998		
11,100.00	7,229.05	7,219.05	7,229.05	99.90	250.29	89.88	927.93	-1,479.38	4,444.41	4,104.36	340.05	13.070		
11,200.00	7,228.64	7,218.64	7,228.64	102.54	250.28	89.88	927.93	-1,479.38	4,490.84	4,149.29	341.55	13.149		
11,300.00	7,228.24	7,218.24	7,228.24	105.19	250.27	89.87	927.93	-1,479.38	4,539.00	4,196.01	342.99	13.234		
11,400.00	7,227.83	7,217.83	7,227.83	107.85	250.25	89.86	927.93	-1,479.38	4,588.83	4,244.45	344.38	13.325		
11,500.00	7,227.42	7,217.42	7,227.42	110.52	250.24	89.86	927.93	-1,479.38	4,640.28	4,294.57	345.72	13.422		
11,600.00	7,227.02	7,217.02	7,227.02	113.20	250.22	89.85	927.93	-1,479.38	4,693.31	4,346.31	347.00	13.525		
11,700.00	7,226.61	7,216.61	7,226.61	115.89	250.21	89.85	927.93	-1,479.38	4,747.84	4,399.61	348.23	13.634		
11,800.00	7,226.21	7,216.21	7,226.21	118.59	250.19	89.84	927.93	-1,479.38	4,803.84	4,454.42	349.42	13.748		
11,900.00	7,225.80	7,215.80	7,225.80	121.29	250.18	89.83	927.93	-1,479.38	4,861.25	4,510.70	350.55	13.867		
12,000.00	7,225.40	7,215.40	7,225.40	124.00	250.17	89.83	927.93	-1,479.38	4,920.02	4,568.38	351.64	13.992		
12,100.00	7,224.99	7,214.99	7,224.99	126.72	250.15	89.82	927.93	-1,479.38	4,980.11	4,627.43	352.68	14.121		
12,200.00	7,224.58	7,214.58	7,224.58	129.44	250.14	89.82	927.93	-1,479.38	5,041.46	4,687.79	353.67	14.255		
12,300.00	7,224.18	7,214.18	7,224.18	132.17	250.12	89.81	927.93	-1,479.38	5,104.04	4,749.42	354.63	14.393		
12,400.00	7,223.77	7,213.77	7,223.77	134.91	250.11	89.80	927.93	-1,479.38	5,167.79	4,812.26	355.54	14.535		
12,500.00	7,223.37	7,213.37	7,223.37	137.65	250.10	89.80	927.93	-1,479.38	5,232.68	4,876.28	356.41	14.682		
12,600.00	7,222.96	7,212.96	7,222.96	140.39	250.08	89.79	927.93	-1,479.38	5,298.66	4,941.43	357.24	14.832		
12,700.00	7,222.55	7,212.55	7,222.55	143.14	250.07	89.79	927.93	-1,479.38	5,365.70	5,007.67	358.03	14.987		
12,800.00	7,222.15	7,212.15	7,222.15	145.89	250.05	89.78	927.93	-1,479.38	5,433.74	5,074.96	358.79	15.145		
12,900.00	7,221.74	7,211.74	7,221.74	148.65	250.04	89.78	927.93	-1,479.38	5,502.77	5,143.26	359.51	15.306		
13,000.00	7,221.34	7,211.34	7,221.34	151.41	250.02	89.77	927.93	-1,479.38	5,572.73	5,212.53	360.20	15.471		
13,100.00	7,220.93	7,210.93	7,220.93	154.18	250.01	89.76	927.93	-1,479.38	5,643.60	5,282.74	360.86	15.639		
13,200.00	7,220.53	7,210.53	7,220.53	156.94	250.00	89.76	927.93	-1,479.38	5,715.34	5,353.85	361.49	15.811		
13,300.00	7,220.12	7,210.12	7,220.12	159.72	249.98	89.75	927.93	-1,479.38	5,787.91	5,425.83	362.09	15.985		
13,400.00	7,219.71	7,209.71	7,219.71	162.49	249.97	89.75	927.93	-1,479.38	5,861.30	5,498.64	362.66	16.162		
13,500.00	7,219.31	7,209.31	7,219.31	165.27	249.95	89.74	927.93	-1,479.38	5,935.46	5,572.25	363.20	16.342		
13,600.00	7,218.90	7,208.90	7,218.90	168.05	249.94	89.73	927.93	-1,479.38	6,010.37	5,646.64	363.72	16.524		
13,700.00	7,218.50	7,208.50	7,218.50	170.83	249.93	89.73	927.93	-1,479.38	6,086.00	5,721.78	364.22	16.710		
13,800.00	7,218.09	7,208.09	7,218.09	173.61	249.91	89.72	927.93	-1,479.38	6,162.33	5,797.63	364.69	16.897		
13,900.00	7,217.69	7,207.69	7,217.69	176.40	249.90	89.72	927.93	-1,479.38	6,239.32	5,874.18	365.15	17.087		
14,000.00	7,217.28	7,207.28	7,217.28	179.19	249.88	89.71	927.93	-1,479.38	6,316.96	5,951.38	365.58	17.279		
14,100.00	7,216.87	7,206.87	7,216.87	181.98	249.87	89.70	927.93	-1,479.38	6,395.22	6,029.23	365.99	17.474		
14,200.00	7,216.47	7,206.47	7,216.47	184.78	249.85	89.70	927.93	-1,479.38	6,474.08	6,107.70	366.38	17.670		
14,300.00	7,216.06	7,206.06	7,216.06	187.57	249.84	89.69	927.93	-1,479.38	6,553.52	6,186.76	366.76	17.869		
14,400.00	7,215.66	7,205.66	7,215.66	190.37	249.83	89.69	927.93	-1,479.38	6,633.51	6,266.40	367.11	18.069		
14,500.00	7,215.25	7,205.25	7,215.25	193.17	249.81	89.68	927.93	-1,479.38	6,714.04	6,346.58	367.45	18.272		
14,600.00	7,214.85	7,204.85	7,214.85	195.97	249.80	89.68	927.93	-1,479.38	6,795.09	6,427.31	367.78	18.476		
14,700.00	7,214.44	7,204.44	7,214.44	198.77	249.78	89.67	927.93	-1,479.38	6,876.63	6,508.54	368.09	18.682		
14,800.00	7,214.03	7,204.03	7,214.03	201.58	249.77	89.66	927.93	-1,479.38	6,958.66	6,590.27	368.39	18.889		
14,900.00	7,213.63	7,203.63	7,213.63	204.38	249.76	89.66	927.93	-1,479.38	7,041.15	6,672.48	368.67	19.099		
15,000.00	7,213.22	7,203.22	7,213.22	207.19	249.74	89.65	927.93	-1,479.38	7,124.09	6,755.15	368.94	19.309		
15,100.00	7,212.82	7,202.82	7,212.82	210.00	249.73	89.65	927.93	-1,479.38	7,207.46	6,838.26	369.20	19.522		
15,200.00	7,212.41	7,202.41	7,212.41	212.81	249.71	89.64	927.93	-1,479.38	7,291.25	6,921.80	369.45	19.735		
15,300.00	7,212.01	7,202.01	7,212.01	215.62	249.70	89.63	927.93	-1,479.38	7,375.45	7,005.76	369.69	19.951		
15,400.00	7,211.60	7,201.60	7,211.60	218.43	249.68	89.63	927.93	-1,479.38	7,460.03	7,090.12	369.91	20.167		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
HARVESTERS STATE 7-15 PAD - SENA 15-25(PR_75CC) - OH - OH												Offset Well Error:	3.28 ft
Survey Program: 100-2" Cone@2.448 Sigma													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,500.00	7,211.19	7,201.19	7,211.19	221.25	249.67	89.62	927.93	-1,479.38	7,545.00	7,174.87	370.13	20.385	
15,600.00	7,210.79	7,200.79	7,210.79	224.06	249.66	89.62	927.93	-1,479.38	7,630.32	7,259.99	370.34	20.604	
15,700.00	7,210.38	7,200.38	7,210.38	226.88	249.64	89.61	927.93	-1,479.38	7,716.00	7,345.47	370.54	20.824	
15,794.94	7,210.00	7,200.00	7,210.00	229.55	249.63	89.61	927.93	-1,479.38	7,797.66	7,426.95	370.72	21.034	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE 1(AB_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	47.00	3.28	3.28	-73.94	1,435.87	-4,987.35	5,190.15				
100.00	100.00	53.00	100.00	3.28	3.41	-73.94	1,435.87	-4,987.35	5,189.93	5,183.24	6.69	775.463	
200.00	200.00	153.00	200.00	3.34	4.87	-73.94	1,435.87	-4,987.35	5,189.93	5,181.73	8.20	632.608	
300.00	299.98	252.98	299.98	3.44	7.81	103.42	1,435.87	-4,987.35	5,190.34	5,179.09	11.25	461.459	
400.00	399.84	352.84	399.84	3.59	11.07	103.46	1,435.87	-4,987.35	5,191.56	5,176.90	14.66	354.186	
500.00	499.45	452.45	499.45	3.79	14.43	103.51	1,435.87	-4,987.35	5,193.60	5,175.38	18.21	285.145	
600.00	598.70	551.70	598.70	4.03	17.82	103.58	1,435.87	-4,987.35	5,196.47	5,174.62	21.85	237.844	
700.00	697.47	650.47	697.47	4.31	21.22	103.68	1,435.87	-4,987.35	5,200.20	5,174.67	25.53	203.680	
800.00	795.62	748.62	795.62	4.64	24.61	103.79	1,435.87	-4,987.35	5,204.81	5,175.57	29.25	177.969	
900.00	893.06	846.06	893.06	5.00	27.98	103.91	1,435.87	-4,987.35	5,210.33	5,177.35	32.98	157.984	
1,000.00	989.64	942.64	989.64	5.40	31.33	104.06	1,435.87	-4,987.35	5,216.79	5,180.07	36.73	142.047	
1,100.00	1,085.27	1,038.27	1,085.27	5.83	34.66	104.21	1,435.87	-4,987.35	5,224.24	5,183.76	40.48	129.071	
1,200.00	1,179.82	1,132.82	1,179.82	6.29	37.94	104.37	1,435.87	-4,987.35	5,232.71	5,188.49	44.22	118.323	
1,300.00	1,273.17	1,226.17	1,273.17	6.79	41.19	104.54	1,435.87	-4,987.35	5,242.25	5,194.29	47.97	109.293	
1,400.00	1,365.21	1,318.21	1,365.21	7.33	44.39	104.72	1,435.87	-4,987.35	5,252.91	5,201.22	51.69	101.616	
1,500.00	1,455.84	1,408.84	1,455.84	7.89	47.55	104.89	1,435.87	-4,987.35	5,264.75	5,209.34	55.41	95.022	
1,600.00	1,544.94	1,502.06	1,544.94	8.50	50.80	105.07	1,435.87	-4,987.35	5,277.81	5,218.57	59.24	89.093	
1,700.00	1,632.39	1,585.39	1,632.39	9.13	53.70	105.24	1,435.87	-4,987.35	5,292.15	5,229.39	62.76	84.324	
1,800.00	1,718.11	1,671.11	1,718.11	9.80	56.69	105.40	1,435.87	-4,987.35	5,307.83	5,241.44	66.39	79.946	
1,900.00	1,802.44	1,755.44	1,802.44	10.49	59.63	105.78	1,435.87	-4,987.35	5,324.67	5,254.67	70.00	76.067	
2,000.00	1,886.68	1,839.68	1,886.68	11.20	62.56	106.25	1,435.87	-4,987.35	5,342.05	5,268.43	73.62	72.565	
2,100.00	1,970.92	1,923.92	1,970.92	11.93	65.50	106.73	1,435.87	-4,987.35	5,359.91	5,282.67	77.24	69.390	
2,200.00	2,055.17	2,008.17	2,055.17	12.66	68.44	107.20	1,435.87	-4,987.35	5,378.25	5,297.37	80.88	66.500	
2,300.00	2,139.41	2,107.59	2,139.41	13.40	71.91	107.67	1,435.87	-4,987.35	5,397.07	5,312.02	85.04	63.464	
2,400.00	2,223.66	2,176.66	2,223.66	14.14	74.31	108.13	1,435.87	-4,987.35	5,416.35	5,328.20	88.15	61.442	
2,500.00	2,307.90	2,260.90	2,307.90	14.89	77.25	108.60	1,435.87	-4,987.35	5,436.11	5,344.31	91.80	59.219	
2,600.00	2,392.14	2,345.14	2,392.14	15.65	80.19	109.06	1,435.87	-4,987.35	5,456.32	5,360.88	95.44	57.169	
2,700.00	2,476.39	2,429.39	2,476.39	16.41	83.13	109.52	1,435.87	-4,987.35	5,476.99	5,377.90	99.09	55.273	
2,800.00	2,560.63	2,513.63	2,560.63	17.17	86.07	109.97	1,435.87	-4,987.35	5,498.11	5,395.37	102.74	53.517	
2,900.00	2,644.88	2,602.12	2,644.88	17.93	89.16	110.43	1,435.87	-4,987.35	5,519.67	5,413.14	106.53	51.813	
3,000.00	2,729.12	2,682.12	2,729.12	18.70	91.95	110.88	1,435.87	-4,987.35	5,541.67	5,431.64	110.03	50.365	
3,100.00	2,813.36	2,766.36	2,813.36	19.47	94.89	111.33	1,435.87	-4,987.35	5,564.11	5,450.44	113.68	48.947	
3,200.00	2,897.61	2,850.61	2,897.61	20.25	97.82	111.77	1,435.87	-4,987.35	5,586.98	5,469.66	117.32	47.622	
3,300.00	2,981.85	2,934.85	2,981.85	21.02	100.76	112.21	1,435.87	-4,987.35	5,610.27	5,489.31	120.96	46.380	
3,400.00	3,066.10	3,019.10	3,066.10	21.80	103.70	112.65	1,435.87	-4,987.35	5,633.98	5,509.38	124.61	45.215	
3,500.00	3,150.34	3,103.34	3,150.34	22.58	106.64	113.09	1,435.87	-4,987.35	5,658.11	5,529.86	128.25	44.119	
3,600.00	3,234.58	3,187.58	3,234.58	23.35	109.58	113.53	1,435.87	-4,987.35	5,682.64	5,550.76	131.88	43.088	
3,700.00	3,318.83	3,271.83	3,318.83	24.13	112.52	113.96	1,435.87	-4,987.35	5,707.58	5,572.06	135.52	42.116	
3,800.00	3,403.07	3,356.07	3,403.07	24.92	115.46	114.39	1,435.87	-4,987.35	5,732.91	5,593.76	139.15	41.198	
3,900.00	3,487.32	3,440.32	3,487.32	25.70	118.40	114.81	1,435.87	-4,987.35	5,758.64	5,615.85	142.79	40.330	
4,000.00	3,571.56	3,524.56	3,571.56	26.48	121.34	115.24	1,435.87	-4,987.35	5,784.76	5,638.34	146.42	39.509	
4,100.00	3,655.80	3,608.80	3,655.80	27.27	124.28	115.66	1,435.87	-4,987.35	5,811.25	5,661.21	150.04	38.730	
4,200.00	3,740.05	3,706.95	3,740.05	28.05	127.71	116.07	1,435.87	-4,987.35	5,838.13	5,683.97	154.15	37.872	
4,300.00	3,824.29	3,777.29	3,824.29	28.84	130.16	116.49	1,435.87	-4,987.35	5,865.37	5,708.08	157.29	37.290	
4,400.00	3,908.54	3,861.54	3,908.54	29.62	133.10	116.90	1,435.87	-4,987.35	5,892.98	5,732.07	160.91	36.623	
4,500.00	3,992.78	3,945.78	3,992.78	30.41	136.04	117.31	1,435.87	-4,987.35	5,920.96	5,756.43	164.53	35.988	
4,600.00	4,077.03	4,030.03	4,077.03	31.20	138.98	117.71	1,435.87	-4,987.35	5,949.29	5,781.15	168.14	35.382	
4,700.00	4,161.27	4,114.27	4,161.27	31.98	141.92	118.11	1,435.87	-4,987.35	5,977.97	5,806.22	171.75	34.805	
4,800.00	4,245.51	4,201.49	4,245.51	32.77	144.97	118.51	1,435.87	-4,987.35	6,007.00	5,831.53	175.47	34.234	
4,900.00	4,329.76	4,282.76	4,329.76	33.56	147.80	118.91	1,435.87	-4,987.35	6,036.37	5,857.40	178.97	33.728	
5,000.00	4,414.00	4,367.00	4,414.00	34.35	150.74	119.30	1,435.87	-4,987.35	6,066.07	5,883.50	182.58	33.225	
5,100.00	4,498.25	4,451.25	4,498.25	35.14	153.68	119.69	1,435.87	-4,987.35	6,096.11	5,909.93	186.18	32.744	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,535.49	4,582.49	35.93	156.62	120.08	1,435.87	-4,987.35	6,126.47	5,936.70	189.78	32.283		
5,300.00	4,666.73	4,619.73	4,666.73	36.72	159.56	120.46	1,435.87	-4,987.35	6,157.16	5,963.79	193.37	31.841		
5,400.00	4,750.98	4,703.98	4,750.98	37.51	162.50	120.85	1,435.87	-4,987.35	6,188.16	5,991.20	196.97	31.417		
5,500.00	4,835.22	4,788.22	4,835.22	38.30	165.44	121.22	1,435.87	-4,987.35	6,219.48	6,018.92	200.56	31.011		
5,600.00	4,919.47	4,872.47	4,919.47	39.09	168.38	121.60	1,435.87	-4,987.35	6,251.10	6,046.95	204.15	30.621		
5,700.00	5,003.71	4,956.71	5,003.71	39.88	171.32	121.97	1,435.87	-4,987.35	6,283.02	6,075.29	207.73	30.246		
5,800.00	5,088.06	5,041.06	5,088.06	40.67	174.27	122.53	1,435.87	-4,987.35	6,315.15	6,103.83	211.32	29.885		
5,900.00	5,173.83	5,126.83	5,173.83	41.44	177.26	123.43	1,435.87	-4,987.35	6,346.16	6,131.23	214.94	29.526		
6,000.00	5,261.34	5,214.34	5,261.34	42.18	180.32	124.27	1,435.87	-4,987.35	6,375.60	6,157.00	218.59	29.166		
6,100.00	5,350.49	5,303.49	5,350.49	42.88	183.43	125.06	1,435.87	-4,987.35	6,403.36	6,181.07	222.29	28.806		
6,200.00	5,441.16	5,405.84	5,441.16	43.56	187.00	125.78	1,435.87	-4,987.35	6,429.38	6,202.95	226.43	28.395		
6,300.00	5,533.25	5,486.25	5,533.25	44.20	189.81	126.45	1,435.87	-4,987.35	6,453.58	6,223.81	229.77	28.087		
6,400.00	5,626.65	5,579.65	5,626.65	44.82	193.07	127.06	1,435.87	-4,987.35	6,475.90	6,242.34	233.55	27.728		
6,500.00	5,721.23	5,674.23	5,721.23	45.40	196.37	127.61	1,435.87	-4,987.35	6,496.27	6,258.92	237.35	27.370		
6,600.00	5,816.89	5,769.89	5,816.89	45.94	199.71	128.11	1,435.87	-4,987.35	6,514.64	6,273.47	241.17	27.013		
6,700.00	5,913.51	5,866.51	5,913.51	46.45	203.08	128.54	1,435.87	-4,987.35	6,530.96	6,285.97	244.99	26.658		
6,800.00	6,010.97	5,963.97	6,010.97	46.93	206.48	128.91	1,435.87	-4,987.35	6,545.18	6,296.36	248.82	26.304		
6,900.00	6,109.15	6,062.15	6,109.15	47.38	209.91	129.23	1,435.87	-4,987.35	6,557.27	6,304.61	252.66	25.953		
7,000.00	6,207.93	6,160.93	6,207.93	47.80	213.36	129.49	1,435.87	-4,987.35	6,567.19	6,310.70	256.49	25.604		
7,100.00	6,307.19	6,260.19	6,307.19	48.18	216.82	129.69	1,435.87	-4,987.35	6,574.92	6,314.60	260.32	25.257		
7,200.00	6,406.82	6,359.82	6,406.82	48.53	220.30	129.83	1,435.87	-4,987.35	6,580.43	6,316.30	264.13	24.914		
7,300.00	6,506.68	6,459.68	6,506.68	48.84	223.79	129.92	1,435.87	-4,987.35	6,583.72	6,315.79	267.93	24.572		
7,400.00	6,606.66	6,559.66	6,606.66	49.10	227.28	129.94	1,435.87	-4,987.35	6,584.76	6,313.07	271.69	24.236		
7,500.00	6,706.21	6,659.21	6,706.21	49.35	230.75	130.00	1,435.87	-4,987.35	6,578.65	6,303.24	275.42	23.886		
7,600.00	6,803.22	6,756.22	6,803.22	49.59	234.14	130.00	1,435.87	-4,987.35	6,561.25	6,282.23	279.02	23.515		
7,700.00	6,895.32	6,848.32	6,895.32	49.82	237.35	130.00	1,435.87	-4,987.35	6,533.06	6,250.65	282.41	23.133		
7,800.00	6,980.23	6,933.23	6,980.23	50.03	240.32	130.00	1,435.87	-4,987.35	6,494.90	6,209.38	285.52	22.748		
7,900.00	7,055.85	7,008.85	7,055.85	50.21	242.96	130.00	1,435.87	-4,987.35	6,447.86	6,159.58	288.28	22.367		
8,000.00	7,120.34	7,073.34	7,120.34	50.36	245.21	130.00	1,435.87	-4,987.35	6,393.27	6,102.62	290.65	21.996		
8,100.00	7,172.10	7,125.10	7,172.10	50.47	247.01	130.00	1,435.87	-4,987.35	6,332.68	6,040.05	292.63	21.641		
8,200.00	7,209.85	7,162.85	7,209.85	50.55	248.33	130.00	1,435.87	-4,987.35	6,267.74	5,973.55	294.19	21.305		
8,300.00	7,232.68	7,185.68	7,232.68	50.61	249.13	130.00	1,435.87	-4,987.35	6,200.21	5,904.88	295.33	20.994		
8,400.00	7,240.00	7,207.00	7,240.00	50.65	249.87	130.00	1,435.87	-4,987.35	6,131.86	5,835.32	296.54	20.678		
8,500.00	7,239.60	7,207.40	7,239.60	50.69	249.89	130.00	1,435.87	-4,987.35	6,064.13	5,766.99	297.14	20.408		
8,600.00	7,239.19	7,207.81	7,239.19	50.75	249.90	130.00	1,435.87	-4,987.35	5,997.30	5,699.45	297.85	20.136		
8,700.00	7,238.78	7,208.22	7,238.78	50.85	249.92	130.00	1,435.87	-4,987.35	5,931.40	5,632.74	298.66	19.860		
8,800.00	7,238.38	7,208.62	7,238.38	51.02	249.93	130.00	1,435.87	-4,987.35	5,866.47	5,566.88	299.59	19.581		
8,900.00	7,237.97	7,209.03	7,237.97	51.32	249.94	130.00	1,435.87	-4,987.35	5,802.53	5,501.90	300.63	19.301		
9,000.00	7,237.57	7,209.43	7,237.57	51.95	249.96	130.00	1,435.87	-4,987.35	5,739.63	5,437.84	301.79	19.019		
9,100.00	7,237.16	7,209.84	7,237.16	53.10	249.97	130.00	1,435.87	-4,987.35	5,677.79	5,374.73	303.06	18.735		
9,200.00	7,236.76	7,189.76	7,236.76	54.69	249.27	130.00	1,435.87	-4,987.35	5,617.04	5,313.32	303.72	18.494		
9,300.00	7,236.35	7,189.35	7,236.35	56.53	249.26	130.00	1,435.87	-4,987.35	5,557.44	5,252.25	305.18	18.210		
9,400.00	7,235.94	7,188.94	7,235.94	58.53	249.24	130.00	1,435.87	-4,987.35	5,499.00	5,192.25	306.75	17.927		
9,500.00	7,235.54	7,188.54	7,235.54	60.62	249.23	130.00	1,435.87	-4,987.35	5,441.78	5,133.36	308.42	17.644		
9,600.00	7,235.13	7,188.13	7,235.13	62.80	249.21	130.00	1,435.87	-4,987.35	5,385.80	5,075.61	310.20	17.362		
9,700.00	7,234.73	7,187.73	7,234.73	65.03	249.20	130.00	1,435.87	-4,987.35	5,331.12	5,019.05	312.07	17.083		
9,800.00	7,234.32	7,187.32	7,234.32	67.32	249.19	130.00	1,435.87	-4,987.35	5,277.76	4,963.72	314.04	16.806		
9,900.00	7,233.92	7,186.92	7,233.92	69.66	249.17	130.00	1,435.87	-4,987.35	5,225.77	4,909.67	316.10	16.532		
10,000.00	7,233.51	7,186.51	7,233.51	72.03	249.16	130.00	1,435.87	-4,987.35	5,175.19	4,856.94	318.26	16.261		
10,100.00	7,233.10	7,186.10	7,233.10	74.45	249.14	130.00	1,435.87	-4,987.35	5,126.06	4,805.57	320.49	15.994		
10,200.00	7,232.70	7,185.70	7,232.70	76.89	249.13	130.00	1,435.87	-4,987.35	5,078.43	4,755.62	322.81	15.732		
10,300.00	7,232.29	7,185.29	7,232.29	79.36	249.12	130.00	1,435.87	-4,987.35	5,032.33	4,707.14	325.20	15.475		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	7,184.89	7,231.89	81.86	249.10	90.11	1,435.87	-4,987.35	4,987.82	4,660.16	327.66	15.223		
10,500.00	7,231.48	7,184.48	7,231.48	84.38	249.09	90.11	1,435.87	-4,987.35	4,944.92	4,614.73	330.19	14.976		
10,600.00	7,231.08	7,184.08	7,231.08	86.93	249.07	90.10	1,435.87	-4,987.35	4,903.69	4,570.91	332.78	14.736		
10,700.00	7,230.67	7,183.67	7,230.67	89.49	249.06	90.10	1,435.87	-4,987.35	4,864.16	4,528.74	335.43	14.501		
10,800.00	7,230.26	7,183.26	7,230.26	92.07	249.04	90.09	1,435.87	-4,987.35	4,826.39	4,488.26	338.13	14.274		
10,900.00	7,229.86	7,182.86	7,229.86	94.67	249.03	90.09	1,435.87	-4,987.35	4,790.40	4,449.53	340.87	14.053		
11,000.00	7,229.45	7,182.45	7,229.45	97.28	249.02	90.08	1,435.87	-4,987.35	4,756.24	4,412.58	343.66	13.840		
11,100.00	7,229.05	7,182.05	7,229.05	99.90	249.00	90.08	1,435.87	-4,987.35	4,723.96	4,377.47	346.48	13.634		
11,200.00	7,228.64	7,181.64	7,228.64	102.54	248.99	90.07	1,435.87	-4,987.35	4,693.58	4,344.24	349.34	13.436		
11,300.00	7,228.24	7,181.24	7,228.24	105.19	248.97	90.07	1,435.87	-4,987.35	4,665.15	4,312.93	352.21	13.245		
11,400.00	7,227.83	7,180.83	7,227.83	107.85	248.96	90.06	1,435.87	-4,987.35	4,638.70	4,283.59	355.11	13.063		
11,500.00	7,227.42	7,180.42	7,227.42	110.52	248.95	90.06	1,435.87	-4,987.35	4,614.27	4,256.25	358.02	12.888		
11,600.00	7,227.02	7,180.02	7,227.02	113.20	248.93	90.05	1,435.87	-4,987.35	4,591.88	4,230.95	360.93	12.722		
11,700.00	7,226.61	7,179.61	7,226.61	115.89	248.92	90.05	1,435.87	-4,987.35	4,571.57	4,207.73	363.84	12.565		
11,800.00	7,226.21	7,179.21	7,226.21	118.59	248.90	90.04	1,435.87	-4,987.35	4,553.37	4,186.62	366.75	12.415		
11,900.00	7,225.80	7,178.80	7,225.80	121.29	248.89	90.04	1,435.87	-4,987.35	4,537.31	4,167.66	369.65	12.275		
12,000.00	7,225.40	7,178.40	7,225.40	124.00	248.87	90.03	1,435.87	-4,987.35	4,523.39	4,150.87	372.52	12.143		
12,100.00	7,224.99	7,177.99	7,224.99	126.72	248.86	90.02	1,435.87	-4,987.35	4,511.65	4,136.27	375.37	12.019		
12,200.00	7,224.58	7,177.58	7,224.58	129.44	248.85	90.02	1,435.87	-4,987.35	4,502.10	4,123.90	378.20	11.904		
12,300.00	7,224.18	7,177.18	7,224.18	132.17	248.83	90.01	1,435.87	-4,987.35	4,494.75	4,113.77	380.98	11.798		
12,400.00	7,223.77	7,176.77	7,223.77	134.91	248.82	90.01	1,435.87	-4,987.35	4,489.63	4,105.90	383.72	11.700		
12,500.00	7,223.37	7,176.37	7,223.37	137.65	248.80	90.00	1,435.87	-4,987.35	4,486.72	4,100.30	386.42	11.611		
12,580.41	7,223.04	7,176.04	7,223.04	139.85	248.79	90.00	1,435.87	-4,987.35	4,486.00	4,097.45	388.55	11.545 CC		
12,600.00	7,222.96	7,175.96	7,222.96	140.39	248.79	90.00	1,435.87	-4,987.35	4,486.04	4,096.98	389.07	11.530		
12,700.00	7,222.55	7,175.55	7,222.55	143.14	248.78	89.99	1,435.87	-4,987.35	4,487.59	4,095.94	391.65	11.458 ES		
12,800.00	7,222.15	7,175.15	7,222.15	145.89	248.76	89.99	1,435.87	-4,987.35	4,491.37	4,097.19	394.18	11.394		
12,900.00	7,221.74	7,174.74	7,221.74	148.65	248.75	89.98	1,435.87	-4,987.35	4,497.37	4,100.73	396.64	11.339		
13,000.00	7,221.34	7,174.34	7,221.34	151.41	248.73	89.98	1,435.87	-4,987.35	4,505.58	4,106.55	399.03	11.291		
13,100.00	7,220.93	7,173.93	7,220.93	154.18	248.72	89.97	1,435.87	-4,987.35	4,515.99	4,114.64	401.35	11.252		
13,200.00	7,220.53	7,173.53	7,220.53	156.94	248.70	89.97	1,435.87	-4,987.35	4,528.58	4,124.99	403.59	11.221		
13,300.00	7,220.12	7,173.12	7,220.12	159.72	248.69	89.96	1,435.87	-4,987.35	4,543.35	4,137.58	405.76	11.197		
13,400.00	7,219.71	7,172.71	7,219.71	162.49	248.68	89.96	1,435.87	-4,987.35	4,560.25	4,152.41	407.85	11.181		
13,500.00	7,219.31	7,172.31	7,219.31	165.27	248.66	89.95	1,435.87	-4,987.35	4,579.28	4,169.43	409.85	11.173		
13,600.00	7,218.90	7,171.90	7,218.90	168.05	248.65	89.95	1,435.87	-4,987.35	4,600.41	4,188.63	411.77	11.172 SF		
13,700.00	7,218.50	7,171.50	7,218.50	170.83	248.63	89.94	1,435.87	-4,987.35	4,623.60	4,209.98	413.61	11.179		
13,800.00	7,218.09	7,171.09	7,218.09	173.61	248.62	89.94	1,435.87	-4,987.35	4,648.82	4,233.46	415.37	11.192		
13,900.00	7,217.69	7,170.69	7,217.69	176.40	248.61	89.93	1,435.87	-4,987.35	4,676.05	4,259.01	417.04	11.213		
14,000.00	7,217.28	7,170.28	7,217.28	179.19	248.59	89.93	1,435.87	-4,987.35	4,705.25	4,286.63	418.63	11.240		
14,100.00	7,216.87	7,169.87	7,216.87	181.98	248.58	89.92	1,435.87	-4,987.35	4,736.38	4,316.25	420.13	11.274		
14,200.00	7,216.47	7,169.47	7,216.47	184.78	248.56	89.92	1,435.87	-4,987.35	4,769.40	4,347.85	421.55	11.314		
14,300.00	7,216.06	7,169.06	7,216.06	187.57	248.55	89.91	1,435.87	-4,987.35	4,804.28	4,381.39	422.89	11.361		
14,400.00	7,215.66	7,168.66	7,215.66	190.37	248.53	89.91	1,435.87	-4,987.35	4,840.98	4,416.82	424.15	11.413		
14,500.00	7,215.25	7,168.25	7,215.25	193.17	248.52	89.90	1,435.87	-4,987.35	4,879.44	4,454.11	425.33	11.472		
14,600.00	7,214.85	7,167.85	7,214.85	195.97	248.51	89.90	1,435.87	-4,987.35	4,919.64	4,493.20	426.44	11.536		
14,700.00	7,214.44	7,167.44	7,214.44	198.77	248.49	89.89	1,435.87	-4,987.35	4,961.53	4,534.06	427.47	11.607		
14,800.00	7,214.03	7,167.03	7,214.03	201.58	248.48	89.88	1,435.87	-4,987.35	5,005.07	4,576.63	428.43	11.682		
14,900.00	7,213.63	7,166.63	7,213.63	204.38	248.46	89.88	1,435.87	-4,987.35	5,050.21	4,620.88	429.32	11.763		
15,000.00	7,213.22	7,166.22	7,213.22	207.19	248.45	89.87	1,435.87	-4,987.35	5,096.91	4,666.76	430.15	11.849		
15,100.00	7,212.82	7,165.82	7,212.82	210.00	248.44	89.87	1,435.87	-4,987.35	5,145.14	4,714.23	430.91	11.940		
15,200.00	7,212.41	7,165.41	7,212.41	212.81	248.42	89.86	1,435.87	-4,987.35	5,194.84	4,763.23	431.60	12.036		
15,300.00	7,212.01	7,165.01	7,212.01	215.62	248.41	89.86	1,435.87	-4,987.35	5,245.97	4,813.73	432.24	12.137		
15,400.00	7,211.60	7,164.60	7,211.60	218.43	248.39	89.85	1,435.87	-4,987.35	5,298.50	4,865.69	432.82	12.242		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE 1(AB_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,500.00	7,211.19	7,164.19	7,211.19	221.25	248.38	89.85	1,435.87	-4,987.35	5,352.39	4,919.04	433.34	12.351	
15,600.00	7,210.79	7,163.79	7,210.79	224.06	248.36	89.84	1,435.87	-4,987.35	5,407.58	4,973.77	433.81	12.465	
15,700.00	7,210.38	7,163.38	7,210.38	226.88	248.35	89.84	1,435.87	-4,987.35	5,464.05	5,029.82	434.24	12.583	
15,794.94	7,210.00	7,163.00	7,210.00	229.55	248.34	89.83	1,435.87	-4,987.35	5,518.81	5,084.21	434.59	12.699	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 16-1(AB_150CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.00	0.00	0.00	45.00	3.28	3.28	-74.11	1,456.66	-5,117.23	5,320.71					
100.00	100.00	55.00	100.00	3.28	3.42	-74.11	1,456.66	-5,117.23	5,320.52	5,313.82	6.70	793.831		
200.00	200.00	155.00	200.00	3.34	4.92	-74.11	1,456.66	-5,117.23	5,320.52	5,312.26	8.26	644.455		
300.00	299.98	254.98	299.98	3.44	7.87	103.25	1,456.66	-5,117.23	5,320.92	5,309.61	11.31	470.416		
400.00	399.84	354.84	399.84	3.59	11.14	103.28	1,456.66	-5,117.23	5,322.12	5,307.40	14.72	361.449		
500.00	499.45	454.45	499.45	3.79	14.50	103.33	1,456.66	-5,117.23	5,324.14	5,305.85	18.28	291.225		
600.00	598.70	553.70	598.70	4.03	17.89	103.41	1,456.66	-5,117.23	5,326.97	5,305.06	21.92	243.053		
700.00	697.47	652.47	697.47	4.31	21.29	103.50	1,456.66	-5,117.23	5,330.66	5,305.06	25.60	208.227		
800.00	795.62	750.62	795.62	4.64	24.68	103.60	1,456.66	-5,117.23	5,335.21	5,305.89	29.31	181.997		
900.00	893.06	848.06	893.06	5.00	28.05	103.73	1,456.66	-5,117.23	5,340.65	5,307.60	33.05	161.596		
1,000.00	989.64	944.64	989.64	5.40	31.40	103.86	1,456.66	-5,117.23	5,347.03	5,310.23	36.80	145.318		
1,100.00	1,085.27	1,040.27	1,085.27	5.83	34.73	104.01	1,456.66	-5,117.23	5,354.38	5,313.83	40.55	132.058		
1,200.00	1,179.82	1,134.82	1,179.82	6.29	38.01	104.17	1,456.66	-5,117.23	5,362.73	5,318.44	44.29	121.071		
1,300.00	1,273.17	1,228.17	1,273.17	6.79	41.26	104.33	1,456.66	-5,117.23	5,372.14	5,324.10	48.04	111.837		
1,400.00	1,365.21	1,320.21	1,365.21	7.33	44.46	104.50	1,456.66	-5,117.23	5,382.65	5,330.89	51.76	103.984		
1,500.00	1,455.84	1,410.84	1,455.84	7.89	47.62	104.67	1,456.66	-5,117.23	5,394.32	5,338.84	55.48	97.236		
1,600.00	1,544.94	1,500.06	1,544.94	8.50	50.73	104.84	1,456.66	-5,117.23	5,407.19	5,348.02	59.17	91.382		
1,700.00	1,632.39	1,587.39	1,632.39	9.13	53.77	105.00	1,456.66	-5,117.23	5,421.32	5,358.49	62.83	86.283		
1,800.00	1,718.11	1,673.11	1,718.11	9.80	56.76	105.15	1,456.66	-5,117.23	5,436.77	5,370.30	66.47	81.799		
1,900.00	1,802.44	1,757.44	1,802.44	10.49	59.70	105.52	1,456.66	-5,117.23	5,453.36	5,383.28	70.07	77.824		
2,000.00	1,886.68	1,841.68	1,886.68	11.20	62.63	105.99	1,456.66	-5,117.23	5,470.47	5,396.78	73.69	74.235		
2,100.00	1,970.92	1,925.92	1,970.92	11.93	65.57	106.45	1,456.66	-5,117.23	5,488.06	5,410.74	77.32	70.980		
2,200.00	2,055.17	2,010.17	2,055.17	12.66	68.51	106.91	1,456.66	-5,117.23	5,506.11	5,425.16	80.95	68.017		
2,300.00	2,139.41	2,105.59	2,139.41	13.40	71.84	107.37	1,456.66	-5,117.23	5,524.64	5,439.66	84.98	65.011		
2,400.00	2,223.66	2,178.66	2,223.66	14.14	74.38	107.83	1,456.66	-5,117.23	5,543.63	5,455.39	88.23	62.829		
2,500.00	2,307.90	2,262.90	2,307.90	14.89	77.32	108.28	1,456.66	-5,117.23	5,563.07	5,471.19	91.88	60.548		
2,600.00	2,392.14	2,347.14	2,392.14	15.65	80.26	108.73	1,456.66	-5,117.23	5,582.97	5,487.44	95.52	58.445		
2,700.00	2,476.39	2,431.39	2,476.39	16.41	83.20	109.18	1,456.66	-5,117.23	5,603.31	5,504.14	99.17	56.500		
2,800.00	2,560.63	2,515.63	2,560.63	17.17	86.14	109.63	1,456.66	-5,117.23	5,624.10	5,521.27	102.82	54.697		
2,900.00	2,644.88	2,600.12	2,644.88	17.93	89.09	110.07	1,456.66	-5,117.23	5,645.32	5,538.84	106.48	53.018		
3,000.00	2,729.12	2,684.12	2,729.12	18.70	92.02	110.52	1,456.66	-5,117.23	5,666.98	5,556.86	110.12	51.462		
3,100.00	2,813.36	2,768.36	2,813.36	19.47	94.95	110.95	1,456.66	-5,117.23	5,689.06	5,575.29	113.77	50.006		
3,200.00	2,897.61	2,852.61	2,897.61	20.25	97.89	111.39	1,456.66	-5,117.23	5,711.57	5,594.15	117.41	48.645		
3,300.00	2,981.85	2,936.85	2,981.85	21.02	100.83	111.83	1,456.66	-5,117.23	5,734.49	5,613.43	121.06	47.369		
3,400.00	3,066.10	3,021.10	3,066.10	21.80	103.77	112.26	1,456.66	-5,117.23	5,757.83	5,633.13	124.70	46.172		
3,500.00	3,150.34	3,105.34	3,150.34	22.58	106.71	112.69	1,456.66	-5,117.23	5,781.58	5,653.23	128.35	45.047		
3,600.00	3,234.58	3,189.58	3,234.58	23.35	109.65	113.11	1,456.66	-5,117.23	5,805.72	5,673.74	131.99	43.987		
3,700.00	3,318.83	3,273.83	3,318.83	24.13	112.59	113.54	1,456.66	-5,117.23	5,830.27	5,694.64	135.63	42.988		
3,800.00	3,403.07	3,358.07	3,403.07	24.92	115.53	113.96	1,456.66	-5,117.23	5,855.21	5,715.95	139.26	42.044		
3,900.00	3,487.32	3,442.32	3,487.32	25.70	118.47	114.37	1,456.66	-5,117.23	5,880.54	5,737.64	142.90	41.152		
4,000.00	3,571.56	3,526.56	3,571.56	26.48	121.41	114.79	1,456.66	-5,117.23	5,906.25	5,759.72	146.53	40.307		
4,100.00	3,655.80	3,610.80	3,655.80	27.27	124.35	115.20	1,456.66	-5,117.23	5,932.34	5,782.18	150.16	39.506		
4,200.00	3,740.05	3,704.95	3,740.05	28.05	127.64	115.61	1,456.66	-5,117.23	5,958.80	5,804.66	154.13	38.660		
4,300.00	3,824.29	3,779.29	3,824.29	28.84	130.23	116.02	1,456.66	-5,117.23	5,985.63	5,828.21	157.41	38.025		
4,400.00	3,908.54	3,863.54	3,908.54	29.62	133.17	116.42	1,456.66	-5,117.23	6,012.82	5,851.78	161.04	37.338		
4,500.00	3,992.78	3,947.78	3,992.78	30.41	136.11	116.82	1,456.66	-5,117.23	6,040.37	5,875.71	164.66	36.684		
4,600.00	4,077.03	4,032.03	4,077.03	31.20	139.05	117.22	1,456.66	-5,117.23	6,068.27	5,900.00	168.28	36.061		
4,700.00	4,161.27	4,116.27	4,161.27	31.98	141.99	117.62	1,456.66	-5,117.23	6,096.53	5,924.64	171.89	35.467		
4,800.00	4,245.51	4,200.51	4,245.51	32.77	144.93	118.01	1,456.66	-5,117.23	6,125.12	5,949.62	175.50	34.900		
4,900.00	4,329.76	4,284.76	4,329.76	33.56	147.87	118.40	1,456.66	-5,117.23	6,154.06	5,974.94	179.11	34.358		
5,000.00	4,414.00	4,369.00	4,414.00	34.35	150.81	118.79	1,456.66	-5,117.23	6,183.33	6,000.60	182.72	33.840		
5,100.00	4,498.25	4,453.25	4,498.25	35.14	153.75	119.17	1,456.66	-5,117.23	6,212.92	6,026.60	186.33	33.344		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 16-1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,537.49	4,582.49	35.93	156.69	119.55	1,456.66	-5,117.23	6,242.85	6,052.92	189.93	32.869		
5,300.00	4,666.73	4,621.73	4,666.73	36.72	159.63	119.93	1,456.66	-5,117.23	6,273.09	6,079.56	193.53	32.414		
5,400.00	4,750.98	4,705.98	4,750.98	37.51	162.57	120.31	1,456.66	-5,117.23	6,303.65	6,106.52	197.13	31.978		
5,500.00	4,835.22	4,809.78	4,835.22	38.30	166.20	120.68	1,456.66	-5,117.23	6,334.52	6,133.11	201.40	31.452		
5,600.00	4,919.47	4,874.47	4,919.47	39.09	168.45	121.05	1,456.66	-5,117.23	6,365.69	6,161.38	204.31	31.157		
5,700.00	5,003.71	4,958.71	5,003.71	39.88	171.39	121.42	1,456.66	-5,117.23	6,397.17	6,189.27	207.90	30.770		
5,800.00	5,088.06	5,043.06	5,088.06	40.67	174.34	121.97	1,456.66	-5,117.23	6,428.85	6,217.36	211.49	30.398		
5,900.00	5,173.83	5,128.83	5,173.83	41.44	177.33	122.86	1,456.66	-5,117.23	6,459.44	6,244.32	215.11	30.028		
6,000.00	5,261.34	5,216.34	5,261.34	42.18	180.39	123.69	1,456.66	-5,117.23	6,488.46	6,269.69	218.78	29.658		
6,100.00	5,350.49	5,305.49	5,350.49	42.88	183.50	124.47	1,456.66	-5,117.23	6,515.85	6,293.37	222.48	29.288		
6,200.00	5,441.16	5,403.84	5,441.16	43.56	186.93	125.19	1,456.66	-5,117.23	6,541.52	6,315.04	226.47	28.884		
6,300.00	5,533.25	5,488.25	5,533.25	44.20	189.88	125.86	1,456.66	-5,117.23	6,565.39	6,335.43	229.96	28.550		
6,400.00	5,626.65	5,581.65	5,626.65	44.82	193.14	126.46	1,456.66	-5,117.23	6,587.41	6,353.67	233.75	28.182		
6,500.00	5,721.23	5,676.23	5,721.23	45.40	196.44	127.01	1,456.66	-5,117.23	6,607.51	6,369.96	237.55	27.816		
6,600.00	5,816.89	5,771.89	5,816.89	45.94	199.78	127.50	1,456.66	-5,117.23	6,625.64	6,384.28	241.36	27.451		
6,700.00	5,913.51	5,868.51	5,913.51	46.45	203.15	127.93	1,456.66	-5,117.23	6,641.74	6,396.55	245.19	27.088		
6,800.00	6,010.97	5,965.97	6,010.97	46.93	206.55	128.30	1,456.66	-5,117.23	6,655.78	6,406.76	249.02	26.728		
6,900.00	6,109.15	6,064.15	6,109.15	47.38	209.98	128.61	1,456.66	-5,117.23	6,667.71	6,414.85	252.86	26.370		
7,000.00	6,207.93	6,162.93	6,207.93	47.80	213.43	128.87	1,456.66	-5,117.23	6,677.50	6,420.81	256.69	26.014		
7,100.00	6,307.19	6,262.19	6,307.19	48.18	216.89	129.07	1,456.66	-5,117.23	6,685.13	6,424.61	260.51	25.661		
7,200.00	6,406.82	6,361.82	6,406.82	48.53	220.37	129.21	1,456.66	-5,117.23	6,690.57	6,426.24	264.33	25.311		
7,300.00	6,506.68	6,461.68	6,506.68	48.84	223.86	129.30	1,456.66	-5,117.23	6,693.81	6,425.68	268.13	24.965		
7,400.00	6,606.66	6,561.66	6,606.66	49.10	227.35	129.30	1,456.66	-5,117.23	6,694.84	6,422.95	271.89	24.624		
7,500.00	6,706.21	6,661.21	6,706.21	49.35	230.82	129.30	1,456.66	-5,117.23	6,688.67	6,413.06	275.61	24.268		
7,600.00	6,803.22	6,758.22	6,803.22	49.59	234.21	129.30	1,456.66	-5,117.23	6,671.09	6,391.87	279.22	23.892		
7,700.00	6,895.32	6,850.32	6,895.32	49.82	237.42	129.30	1,456.66	-5,117.23	6,642.61	6,360.00	282.61	23.504		
7,800.00	6,980.23	6,935.23	6,980.23	50.03	240.39	129.30	1,456.66	-5,117.23	6,604.05	6,318.33	285.72	23.114		
7,900.00	7,055.85	7,010.85	7,055.85	50.21	243.03	129.30	1,456.66	-5,117.23	6,556.50	6,268.02	288.48	22.728		
8,000.00	7,120.34	7,075.34	7,120.34	50.36	245.28	129.30	1,456.66	-5,117.23	6,501.31	6,210.45	290.86	22.352		
8,100.00	7,172.10	7,127.10	7,172.10	50.47	247.08	129.30	1,456.66	-5,117.23	6,440.01	6,147.18	292.83	21.992		
8,200.00	7,209.85	7,164.85	7,209.85	50.55	248.40	129.30	1,456.66	-5,117.23	6,374.28	6,079.89	294.39	21.653		
8,300.00	7,232.68	7,187.68	7,232.68	50.61	249.20	129.30	1,456.66	-5,117.23	6,305.89	6,010.36	295.53	21.338		
8,400.00	7,240.00	7,205.00	7,240.00	50.65	249.80	129.30	1,456.66	-5,117.23	6,236.62	5,940.03	296.59	21.028		
8,500.00	7,239.60	7,205.40	7,239.60	50.69	249.82	129.30	1,456.66	-5,117.23	6,167.94	5,870.76	297.18	20.755		
8,600.00	7,239.19	7,205.81	7,239.19	50.75	249.83	129.30	1,456.66	-5,117.23	6,100.12	5,802.25	297.87	20.479		
8,700.00	7,238.78	7,206.22	7,238.78	50.85	249.85	129.30	1,456.66	-5,117.23	6,033.19	5,734.52	298.67	20.200		
8,800.00	7,238.38	7,206.62	7,238.38	51.02	249.86	129.30	1,456.66	-5,117.23	5,967.19	5,667.61	299.58	19.918		
8,900.00	7,237.97	7,207.03	7,237.97	51.32	249.87	129.30	1,456.66	-5,117.23	5,902.15	5,601.55	300.61	19.634		
9,000.00	7,237.57	7,207.43	7,237.57	51.95	249.89	129.30	1,456.66	-5,117.23	5,838.10	5,536.36	301.74	19.348		
9,100.00	7,237.16	7,207.84	7,237.16	53.10	249.90	129.30	1,456.66	-5,117.23	5,775.06	5,472.08	302.98	19.061		
9,200.00	7,236.76	7,208.24	7,236.76	54.69	249.92	129.30	1,456.66	-5,117.23	5,713.08	5,408.75	304.33	18.772		
9,300.00	7,236.35	7,208.65	7,236.35	56.53	249.93	129.30	1,456.66	-5,117.23	5,652.20	5,346.40	305.79	18.484		
9,400.00	7,235.94	7,209.06	7,235.94	58.53	249.94	129.30	1,456.66	-5,117.23	5,592.43	5,285.07	307.36	18.195		
9,500.00	7,235.54	7,209.46	7,235.54	60.62	249.96	129.30	1,456.66	-5,117.23	5,533.83	5,224.80	309.03	17.907		
9,600.00	7,235.13	7,209.87	7,235.13	62.80	249.97	129.30	1,456.66	-5,117.23	5,476.43	5,165.62	310.81	17.620		
9,700.00	7,234.73	7,189.73	7,234.73	65.03	249.27	129.30	1,456.66	-5,117.23	5,420.26	5,108.30	311.96	17.375		
9,800.00	7,234.32	7,189.32	7,234.32	67.32	249.26	129.30	1,456.66	-5,117.23	5,365.37	5,051.47	313.90	17.093		
9,900.00	7,233.92	7,188.92	7,233.92	69.66	249.24	129.30	1,456.66	-5,117.23	5,311.80	4,995.87	315.93	16.813		
10,000.00	7,233.51	7,188.51	7,233.51	72.03	249.23	129.30	1,456.66	-5,117.23	5,259.58	4,941.53	318.05	16.537		
10,100.00	7,233.10	7,188.10	7,233.10	74.45	249.21	129.30	1,456.66	-5,117.23	5,208.76	4,888.50	320.26	16.264		
10,200.00	7,232.70	7,187.70	7,232.70	76.89	249.20	129.30	1,456.66	-5,117.23	5,159.37	4,836.83	322.54	15.996		
10,300.00	7,232.29	7,187.29	7,232.29	79.36	249.18	129.30	1,456.66	-5,117.23	5,111.47	4,786.56	324.91	15.732		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 16-1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	7,186.89	7,231.89	81.86	249.17	90.12	1,456.66	-5,117.23	5,065.08	4,737.74	327.35	15.473		
10,500.00	7,231.48	7,186.48	7,231.48	84.38	249.16	90.11	1,456.66	-5,117.23	5,020.26	4,690.41	329.85	15.220		
10,600.00	7,231.08	7,186.08	7,231.08	86.93	249.14	90.11	1,456.66	-5,117.23	4,977.05	4,644.63	332.42	14.972		
10,700.00	7,230.67	7,185.67	7,230.67	89.49	249.13	90.10	1,456.66	-5,117.23	4,935.48	4,600.43	335.05	14.730		
10,800.00	7,230.26	7,185.26	7,230.26	92.07	249.11	90.10	1,456.66	-5,117.23	4,895.61	4,557.87	337.74	14.495		
10,900.00	7,229.86	7,184.86	7,229.86	94.67	249.10	90.09	1,456.66	-5,117.23	4,857.46	4,516.99	340.48	14.267		
11,000.00	7,229.45	7,184.45	7,229.45	97.28	249.09	90.09	1,456.66	-5,117.23	4,821.09	4,477.83	343.26	14.045		
11,100.00	7,229.05	7,184.05	7,229.05	99.90	249.07	90.08	1,456.66	-5,117.23	4,786.53	4,440.45	346.08	13.831		
11,200.00	7,228.64	7,183.64	7,228.64	102.54	249.06	90.08	1,456.66	-5,117.23	4,753.82	4,404.89	348.93	13.624		
11,300.00	7,228.24	7,183.24	7,228.24	105.19	249.04	90.07	1,456.66	-5,117.23	4,723.01	4,371.19	351.82	13.425		
11,400.00	7,227.83	7,182.83	7,227.83	107.85	249.03	90.07	1,456.66	-5,117.23	4,694.12	4,339.40	354.72	13.233		
11,500.00	7,227.42	7,182.42	7,227.42	110.52	249.02	90.06	1,456.66	-5,117.23	4,667.20	4,309.55	357.65	13.050		
11,600.00	7,227.02	7,182.02	7,227.02	113.20	249.00	90.06	1,456.66	-5,117.23	4,642.28	4,281.69	360.58	12.874		
11,700.00	7,226.61	7,181.61	7,226.61	115.89	248.99	90.05	1,456.66	-5,117.23	4,619.38	4,255.86	363.52	12.707		
11,800.00	7,226.21	7,181.21	7,226.21	118.59	248.97	90.05	1,456.66	-5,117.23	4,598.55	4,232.09	366.46	12.548		
11,900.00	7,225.80	7,180.80	7,225.80	121.29	248.96	90.04	1,456.66	-5,117.23	4,579.81	4,210.41	369.40	12.398		
12,000.00	7,225.40	7,180.40	7,225.40	124.00	248.94	90.04	1,456.66	-5,117.23	4,563.18	4,190.86	372.32	12.256		
12,100.00	7,224.99	7,179.99	7,224.99	126.72	248.93	90.03	1,456.66	-5,117.23	4,548.69	4,173.47	375.22	12.123		
12,200.00	7,224.58	7,179.58	7,224.58	129.44	248.92	90.03	1,456.66	-5,117.23	4,536.36	4,158.26	378.10	11.998		
12,300.00	7,224.18	7,179.18	7,224.18	132.17	248.90	90.02	1,456.66	-5,117.23	4,526.20	4,145.26	380.94	11.882		
12,400.00	7,223.77	7,178.77	7,223.77	134.91	248.89	90.02	1,456.66	-5,117.23	4,518.24	4,134.49	383.75	11.774		
12,500.00	7,223.37	7,178.37	7,223.37	137.65	248.87	90.01	1,456.66	-5,117.23	4,512.48	4,125.96	386.52	11.675		
12,600.00	7,222.96	7,177.96	7,222.96	140.39	248.86	90.01	1,456.66	-5,117.23	4,508.93	4,119.69	389.24	11.584		
12,700.00	7,222.55	7,177.55	7,222.55	143.14	248.85	90.00	1,456.66	-5,117.23	4,507.59	4,115.69	391.90	11.502		
12,710.16	7,222.51	7,177.51	7,222.51	143.42	248.84	90.00	1,456.66	-5,117.23	4,507.58	4,115.41	392.17	11.494	CC	
12,800.00	7,222.15	7,177.15	7,222.15	145.89	248.83	90.00	1,456.66	-5,117.23	4,508.48	4,113.96	394.51	11.428	ES	
12,900.00	7,221.74	7,176.74	7,221.74	148.65	248.82	89.99	1,456.66	-5,117.23	4,511.58	4,114.51	397.06	11.362		
13,000.00	7,221.34	7,176.34	7,221.34	151.41	248.80	89.99	1,456.66	-5,117.23	4,516.89	4,117.35	399.55	11.305		
13,100.00	7,220.93	7,175.93	7,220.93	154.18	248.79	89.98	1,456.66	-5,117.23	4,524.41	4,122.45	401.96	11.256		
13,200.00	7,220.53	7,175.53	7,220.53	156.94	248.77	89.97	1,456.66	-5,117.23	4,534.12	4,129.82	404.30	11.215		
13,300.00	7,220.12	7,175.12	7,220.12	159.72	248.76	89.97	1,456.66	-5,117.23	4,546.01	4,139.45	406.56	11.182		
13,400.00	7,219.71	7,174.71	7,219.71	162.49	248.75	89.96	1,456.66	-5,117.23	4,560.06	4,151.31	408.75	11.156		
13,500.00	7,219.31	7,174.31	7,219.31	165.27	248.73	89.96	1,456.66	-5,117.23	4,576.26	4,165.40	410.86	11.138		
13,600.00	7,218.90	7,173.90	7,218.90	168.05	248.72	89.95	1,456.66	-5,117.23	4,594.57	4,181.69	412.88	11.128		
13,700.00	7,218.50	7,173.50	7,218.50	170.83	248.70	89.95	1,456.66	-5,117.23	4,614.98	4,200.16	414.82	11.125	SF	
13,800.00	7,218.09	7,173.09	7,218.09	173.61	248.69	89.94	1,456.66	-5,117.23	4,637.46	4,220.78	416.68	11.130		
13,900.00	7,217.69	7,172.69	7,217.69	176.40	248.68	89.94	1,456.66	-5,117.23	4,661.97	4,243.53	418.45	11.141		
14,000.00	7,217.28	7,172.28	7,217.28	179.19	248.66	89.93	1,456.66	-5,117.23	4,688.49	4,268.36	420.13	11.160		
14,100.00	7,216.87	7,171.87	7,216.87	181.98	248.65	89.93	1,456.66	-5,117.23	4,716.98	4,295.25	421.73	11.185		
14,200.00	7,216.47	7,171.47	7,216.47	184.78	248.63	89.92	1,456.66	-5,117.23	4,747.41	4,324.16	423.25	11.217		
14,300.00	7,216.06	7,171.06	7,216.06	187.57	248.62	89.92	1,456.66	-5,117.23	4,779.73	4,355.05	424.69	11.255		
14,400.00	7,215.66	7,170.66	7,215.66	190.37	248.60	89.91	1,456.66	-5,117.23	4,813.92	4,387.88	426.04	11.299		
14,500.00	7,215.25	7,170.25	7,215.25	193.17	248.59	89.91	1,456.66	-5,117.23	4,849.92	4,422.62	427.31	11.350		
14,600.00	7,214.85	7,169.85	7,214.85	195.97	248.58	89.90	1,456.66	-5,117.23	4,887.71	4,459.21	428.50	11.407		
14,700.00	7,214.44	7,169.44	7,214.44	198.77	248.56	89.90	1,456.66	-5,117.23	4,927.24	4,497.62	429.61	11.469		
14,800.00	7,214.03	7,169.03	7,214.03	201.58	248.55	89.89	1,456.66	-5,117.23	4,968.47	4,537.81	430.65	11.537		
14,900.00	7,213.63	7,168.63	7,213.63	204.38	248.53	89.89	1,456.66	-5,117.23	5,011.35	4,579.73	431.62	11.611		
15,000.00	7,213.22	7,168.22	7,213.22	207.19	248.52	89.88	1,456.66	-5,117.23	5,055.85	4,623.33	432.52	11.689		
15,100.00	7,212.82	7,167.82	7,212.82	210.00	248.51	89.88	1,456.66	-5,117.23	5,101.91	4,668.57	433.34	11.773		
15,200.00	7,212.41	7,167.41	7,212.41	212.81	248.49	89.87	1,456.66	-5,117.23	5,149.51	4,715.41	434.10	11.862		
15,300.00	7,212.01	7,167.01	7,212.01	215.62	248.48	89.87	1,456.66	-5,117.23	5,198.60	4,763.80	434.80	11.956		
15,400.00	7,211.60	7,166.60	7,211.60	218.43	248.46	89.86	1,456.66	-5,117.23	5,249.13	4,813.70	435.44	12.055		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
HARVESTERS STATE 7-15 PAD - STATE BEATRICE 16-1(AB_150CC) - OH - OH												Offset Well Error:	3.28 ft
Survey Program: 100-2" Cone@2.448 Sigma													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,500.00	7,211.19	7,166.19	7,211.19	221.25	248.45	89.86	1,456.66	-5,117.23	5,301.07	4,865.06	436.02	12.158	
15,600.00	7,210.79	7,165.79	7,210.79	224.06	248.43	89.85	1,456.66	-5,117.23	5,354.37	4,917.84	436.54	12.266	
15,700.00	7,210.38	7,165.38	7,210.38	226.88	248.42	89.85	1,456.66	-5,117.23	5,409.00	4,971.99	437.01	12.377	
15,794.94	7,210.00	7,165.00	7,210.00	229.55	248.41	89.84	1,456.66	-5,117.23	5,462.05	5,024.65	437.41	12.487	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 32-16(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	52.00	3.28	3.28	-90.18	-15.17	-4,914.49	4,914.79					
100.00	100.00	48.00	100.00	3.28	3.39	-90.18	-15.17	-4,914.49	4,914.52	4,907.85	6.67	736.805		
200.00	200.00	148.00	200.00	3.34	4.74	-90.18	-15.17	-4,914.49	4,914.52	4,906.44	8.08	608.494		
300.00	299.98	247.98	299.98	3.44	7.65	87.20	-15.17	-4,914.49	4,914.43	4,903.34	11.09	443.158		
400.00	399.84	347.84	399.84	3.59	10.90	87.26	-15.17	-4,914.49	4,914.18	4,899.69	14.49	339.122		
500.00	499.45	447.45	499.45	3.79	14.26	87.37	-15.17	-4,914.49	4,913.77	4,895.73	18.04	272.328		
600.00	598.70	546.70	598.70	4.03	17.65	87.52	-15.17	-4,914.49	4,913.22	4,891.55	21.68	226.663		
700.00	697.47	645.47	697.47	4.31	21.04	87.72	-15.17	-4,914.49	4,912.56	4,887.21	25.36	193.724		
800.00	795.62	743.62	795.62	4.64	24.44	87.95	-15.17	-4,914.49	4,911.83	4,882.76	29.07	168.947		
900.00	893.06	841.06	893.06	5.00	27.81	88.22	-15.17	-4,914.49	4,911.06	4,878.25	32.81	149.688		
1,000.00	989.64	937.64	989.64	5.40	31.16	88.53	-15.17	-4,914.49	4,910.30	4,873.74	36.56	134.321		
1,100.00	1,085.27	1,033.27	1,085.27	5.83	34.48	88.87	-15.17	-4,914.49	4,909.60	4,869.29	40.31	121.797		
1,200.00	1,179.82	1,127.82	1,179.82	6.29	37.77	89.24	-15.17	-4,914.49	4,909.04	4,864.97	44.06	111.410		
1,300.00	1,273.17	1,221.17	1,273.17	6.79	41.02	89.64	-15.17	-4,914.49	4,908.66	4,860.85	47.81	102.669		
1,386.49	1,352.86	1,300.86	1,352.86	7.25	43.79	90.00	-15.17	-4,914.49	4,908.54	4,857.50	51.05	96.161		
1,400.00	1,365.21	1,313.21	1,365.21	7.33	44.22	90.06	-15.17	-4,914.49	4,908.55	4,857.00	51.55	95.223		
1,500.00	1,455.84	1,403.84	1,455.84	7.89	47.38	90.50	-15.17	-4,914.49	4,908.78	4,853.51	55.27	88.813		
1,600.00	1,544.94	1,507.06	1,544.94	8.50	50.97	90.96	-15.17	-4,914.49	4,909.43	4,849.96	59.47	82.556		
1,700.00	1,632.39	1,580.39	1,632.39	9.13	53.53	91.43	-15.17	-4,914.49	4,910.59	4,847.93	62.66	78.373		
1,800.00	1,718.11	1,666.11	1,718.11	9.80	56.51	91.91	-15.17	-4,914.49	4,912.34	4,846.03	66.31	74.080		
1,900.00	1,802.44	1,750.44	1,802.44	10.49	59.45	92.43	-15.17	-4,914.49	4,914.75	4,844.81	69.94	70.268		
2,000.00	1,886.68	1,834.68	1,886.68	11.20	62.39	92.95	-15.17	-4,914.49	4,917.75	4,844.16	73.59	66.827		
2,100.00	1,970.92	1,918.92	1,970.92	11.93	65.33	93.48	-15.17	-4,914.49	4,921.34	4,844.09	77.25	63.711		
2,200.00	2,055.17	2,003.17	2,055.17	12.66	68.26	94.01	-15.17	-4,914.49	4,925.51	4,844.60	80.91	60.877		
2,300.00	2,139.41	2,087.41	2,139.41	13.40	71.20	94.54	-15.17	-4,914.49	4,930.27	4,845.69	84.58	58.290		
2,400.00	2,223.66	2,171.66	2,223.66	14.14	74.14	95.06	-15.17	-4,914.49	4,935.62	4,847.36	88.26	55.923		
2,500.00	2,307.90	2,255.90	2,307.90	14.89	77.08	95.59	-15.17	-4,914.49	4,941.54	4,849.60	91.94	53.748		
2,600.00	2,392.14	2,340.14	2,392.14	15.65	80.02	96.11	-15.17	-4,914.49	4,948.05	4,852.43	95.62	51.745		
2,700.00	2,476.39	2,424.39	2,476.39	16.41	82.95	96.64	-15.17	-4,914.49	4,955.13	4,855.82	99.31	49.896		
2,800.00	2,560.63	2,508.63	2,560.63	17.17	85.89	97.16	-15.17	-4,914.49	4,962.79	4,859.79	103.00	48.184		
2,900.00	2,644.88	2,607.12	2,644.88	17.93	89.33	97.68	-15.17	-4,914.49	4,971.02	4,863.84	107.18	46.378		
3,000.00	2,729.12	2,677.12	2,729.12	18.70	91.77	98.20	-15.17	-4,914.49	4,979.82	4,869.44	110.38	45.117		
3,100.00	2,813.36	2,761.36	2,813.36	19.47	94.71	98.72	-15.17	-4,914.49	4,989.18	4,875.12	114.07	43.739		
3,200.00	2,897.61	2,845.61	2,897.61	20.25	97.65	99.23	-15.17	-4,914.49	4,999.11	4,881.36	117.76	42.453		
3,300.00	2,981.85	2,929.85	2,981.85	21.02	100.59	99.75	-15.17	-4,914.49	5,009.60	4,888.16	121.45	41.250		
3,400.00	3,066.10	3,014.10	3,066.10	21.80	103.53	100.26	-15.17	-4,914.49	5,020.65	4,895.51	125.13	40.122		
3,500.00	3,150.34	3,101.66	3,150.34	22.58	106.58	100.78	-15.17	-4,914.49	5,032.25	4,903.31	128.94	39.028		
3,600.00	3,234.58	3,182.58	3,234.58	23.35	109.41	101.29	-15.17	-4,914.49	5,044.39	4,911.88	132.51	38.069		
3,700.00	3,318.83	3,266.83	3,318.83	24.13	112.35	101.79	-15.17	-4,914.49	5,057.08	4,920.89	136.19	37.132		
3,800.00	3,403.07	3,351.07	3,403.07	24.92	115.29	102.30	-15.17	-4,914.49	5,070.32	4,930.44	139.87	36.249		
3,900.00	3,487.32	3,435.32	3,487.32	25.70	118.23	102.81	-15.17	-4,914.49	5,084.08	4,940.53	143.56	35.416		
4,000.00	3,571.56	3,519.56	3,571.56	26.48	121.17	103.31	-15.17	-4,914.49	5,098.39	4,951.15	147.23	34.628		
4,100.00	3,655.80	3,603.80	3,655.80	27.27	124.11	103.81	-15.17	-4,914.49	5,113.21	4,962.30	150.91	33.883		
4,200.00	3,740.05	3,688.05	3,740.05	28.05	127.05	104.31	-15.17	-4,914.49	5,128.57	4,973.98	154.58	33.177		
4,300.00	3,824.29	3,772.29	3,824.29	28.84	129.99	104.80	-15.17	-4,914.49	5,144.44	4,986.18	158.25	32.507		
4,400.00	3,908.54	3,856.54	3,908.54	29.62	132.93	105.30	-15.17	-4,914.49	5,160.82	4,998.90	161.92	31.872		
4,500.00	3,992.78	3,940.78	3,992.78	30.41	135.87	105.79	-15.17	-4,914.49	5,177.71	5,012.13	165.59	31.269		
4,600.00	4,077.03	4,025.03	4,077.03	31.20	138.81	106.28	-15.17	-4,914.49	5,195.11	5,025.86	169.25	30.695		
4,700.00	4,161.27	4,109.27	4,161.27	31.98	141.75	106.77	-15.17	-4,914.49	5,213.01	5,040.10	172.91	30.149		
4,800.00	4,245.51	4,206.49	4,245.51	32.77	145.14	107.25	-15.17	-4,914.49	5,231.40	5,054.38	177.02	29.553		
4,900.00	4,329.76	4,277.76	4,329.76	33.56	147.63	107.73	-15.17	-4,914.49	5,250.27	5,070.05	180.22	29.133		
5,000.00	4,414.00	4,362.00	4,414.00	34.35	150.57	108.21	-15.17	-4,914.49	5,269.64	5,085.77	183.87	28.660		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 32-16(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	4,446.25	4,498.25	35.14	153.51	108.69	-15.17	-4,914.49	5,289.47	5,101.96	187.52	28.208		
5,200.00	4,582.49	4,530.49	4,582.49	35.93	156.45	109.16	-15.17	-4,914.49	5,309.79	5,118.63	191.16	27.777		
5,300.00	4,666.73	4,614.73	4,666.73	36.72	159.39	109.63	-15.17	-4,914.49	5,330.57	5,135.77	194.80	27.364		
5,400.00	4,750.98	4,701.02	4,750.98	37.51	162.40	110.10	-15.17	-4,914.49	5,351.81	5,153.30	198.51	26.960		
5,500.00	4,835.22	4,783.22	4,835.22	38.30	165.27	110.57	-15.17	-4,914.49	5,373.50	5,171.43	202.07	26.592		
5,600.00	4,919.47	4,867.47	4,919.47	39.09	168.21	111.03	-15.17	-4,914.49	5,395.65	5,189.95	205.70	26.230		
5,700.00	5,003.71	4,951.71	5,003.71	39.88	171.15	111.49	-15.17	-4,914.49	5,418.24	5,208.92	209.33	25.884		
5,800.00	5,088.06	5,036.06	5,088.06	40.67	174.09	112.09	-15.17	-4,914.49	5,441.21	5,228.25	212.95	25.551		
5,900.00	5,173.83	5,121.83	5,173.83	41.44	177.09	112.96	-15.17	-4,914.49	5,463.59	5,246.98	216.61	25.223		
6,000.00	5,261.34	5,209.34	5,261.34	42.18	180.14	113.78	-15.17	-4,914.49	5,485.00	5,264.70	220.30	24.898		
6,100.00	5,350.49	5,301.51	5,350.49	42.88	183.36	114.55	-15.17	-4,914.49	5,505.37	5,281.24	224.13	24.563		
6,200.00	5,441.16	5,389.16	5,441.16	43.56	186.42	115.27	-15.17	-4,914.49	5,524.58	5,296.81	227.78	24.255		
6,300.00	5,533.25	5,481.25	5,533.25	44.20	189.63	115.94	-15.17	-4,914.49	5,542.57	5,311.02	231.55	23.937		
6,400.00	5,626.65	5,574.65	5,626.65	44.82	192.89	116.56	-15.17	-4,914.49	5,559.26	5,323.91	235.35	23.621		
6,500.00	5,721.23	5,669.23	5,721.23	45.40	196.20	117.12	-15.17	-4,914.49	5,574.56	5,335.40	239.16	23.309		
6,600.00	5,816.89	5,764.89	5,816.89	45.94	199.53	117.62	-15.17	-4,914.49	5,588.43	5,345.44	242.98	22.999		
6,700.00	5,913.51	5,861.51	5,913.51	46.45	202.91	118.07	-15.17	-4,914.49	5,600.79	5,353.97	246.82	22.692		
6,800.00	6,010.97	5,958.97	6,010.97	46.93	206.31	118.46	-15.17	-4,914.49	5,611.61	5,360.95	250.65	22.388		
6,900.00	6,109.15	6,057.15	6,109.15	47.38	209.74	118.79	-15.17	-4,914.49	5,620.82	5,366.33	254.49	22.086		
7,000.00	6,207.93	6,155.93	6,207.93	47.80	213.18	119.06	-15.17	-4,914.49	5,628.41	5,370.08	258.33	21.788		
7,100.00	6,307.19	6,255.19	6,307.19	48.18	216.65	119.27	-15.17	-4,914.49	5,634.32	5,372.17	262.15	21.493		
7,200.00	6,406.82	6,354.82	6,406.82	48.53	220.13	119.42	-15.17	-4,914.49	5,638.55	5,372.59	265.96	21.200		
7,300.00	6,506.68	6,454.68	6,506.68	48.84	223.61	119.51	-15.17	-4,914.49	5,641.07	5,371.31	269.76	20.911		
7,400.00	6,606.66	6,554.66	6,606.66	49.10	227.10	120.00	-15.17	-4,914.49	5,641.87	5,368.36	273.51	20.627		
7,500.00	6,706.21	6,654.21	6,706.21	49.35	230.58	120.33	-15.17	-4,914.49	5,634.83	5,357.60	277.23	20.325		
7,600.00	6,803.22	6,751.22	6,803.22	49.59	233.96	120.48	-15.17	-4,914.49	5,614.78	5,333.94	280.84	19.993		
7,700.00	6,895.32	6,843.32	6,895.32	49.82	237.18	120.60	-15.17	-4,914.49	5,582.25	5,298.01	284.24	19.639		
7,800.00	6,980.23	6,928.23	6,980.23	50.03	240.14	120.69	-15.17	-4,914.49	5,538.15	5,250.80	287.35	19.273		
7,900.00	7,055.85	7,003.85	7,055.85	50.21	242.78	120.75	-15.17	-4,914.49	5,483.67	5,193.56	290.11	18.902		
8,000.00	7,120.34	7,068.34	7,120.34	50.36	245.03	120.79	-15.17	-4,914.49	5,420.29	5,127.81	292.48	18.532		
8,100.00	7,172.10	7,120.10	7,172.10	50.47	246.84	120.81	-15.17	-4,914.49	5,349.70	5,055.29	294.41	18.171		
8,200.00	7,209.85	7,157.85	7,209.85	50.55	248.16	120.83	-15.17	-4,914.49	5,273.79	4,977.90	295.89	17.823		
8,300.00	7,232.68	7,180.68	7,232.68	50.61	248.95	120.84	-15.17	-4,914.49	5,194.55	4,897.63	296.92	17.495		
8,400.00	7,240.00	7,188.00	7,240.00	50.65	249.21	120.85	-15.17	-4,914.49	5,114.02	4,816.53	297.49	17.190		
8,500.00	7,239.60	7,187.60	7,239.60	50.69	249.20	120.85	-15.17	-4,914.49	5,033.88	4,736.00	297.88	16.899		
8,600.00	7,239.19	7,187.19	7,239.19	50.75	249.18	120.85	-15.17	-4,914.49	4,954.46	4,656.12	298.34	16.607		
8,700.00	7,238.78	7,186.78	7,238.78	50.85	249.17	120.85	-15.17	-4,914.49	4,875.80	4,576.91	298.89	16.313		
8,800.00	7,238.38	7,186.38	7,238.38	51.02	249.15	120.85	-15.17	-4,914.49	4,797.93	4,498.41	299.52	16.019		
8,900.00	7,237.97	7,185.97	7,237.97	51.32	249.14	120.85	-15.17	-4,914.49	4,720.89	4,420.64	300.25	15.723		
9,000.00	7,237.57	7,185.57	7,237.57	51.95	249.12	120.85	-15.17	-4,914.49	4,644.74	4,343.66	301.08	15.427		
9,100.00	7,237.16	7,185.16	7,237.16	53.10	249.11	120.85	-15.17	-4,914.49	4,569.50	4,267.49	302.00	15.131		
9,200.00	7,236.76	7,184.76	7,236.76	54.69	249.10	120.85	-15.17	-4,914.49	4,495.22	4,192.19	303.04	14.834		
9,300.00	7,236.35	7,184.35	7,236.35	56.53	249.08	120.85	-15.17	-4,914.49	4,421.96	4,117.79	304.17	14.538		
9,400.00	7,235.94	7,183.94	7,235.94	58.53	249.07	120.85	-15.17	-4,914.49	4,349.77	4,044.34	305.42	14.242		
9,500.00	7,235.54	7,183.54	7,235.54	60.62	249.05	120.85	-15.17	-4,914.49	4,278.69	3,971.91	306.78	13.947		
9,600.00	7,235.13	7,183.13	7,235.13	62.80	249.04	120.85	-15.17	-4,914.49	4,208.79	3,900.53	308.26	13.653		
9,700.00	7,234.73	7,182.73	7,234.73	65.03	249.03	120.85	-15.17	-4,914.49	4,140.12	3,830.27	309.85	13.362		
9,800.00	7,234.32	7,182.32	7,234.32	67.32	249.01	120.85	-15.17	-4,914.49	4,072.76	3,761.20	311.56	13.072		
9,900.00	7,233.92	7,181.92	7,233.92	69.66	249.00	120.85	-15.17	-4,914.49	4,006.75	3,693.37	313.38	12.786		
10,000.00	7,233.51	7,181.51	7,233.51	72.03	248.98	120.85	-15.17	-4,914.49	3,942.18	3,626.86	315.32	12.502		
10,100.00	7,233.10	7,181.10	7,233.10	74.45	248.97	120.85	-15.17	-4,914.49	3,879.11	3,561.73	317.38	12.222		
10,200.00	7,232.70	7,180.70	7,232.70	76.89	248.95	120.85	-15.17	-4,914.49	3,817.62	3,498.07	319.55	11.947		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 32-16(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,300.00	7,232.29	7,180.29	7,232.29	79.36	248.94	90.17	-15.17	-4,914.49	3,757.78	3,435.95	321.83	11.676	
10,400.00	7,231.89	7,179.89	7,231.89	81.86	248.93	90.16	-15.17	-4,914.49	3,699.68	3,375.46	324.22	11.411	
10,500.00	7,231.48	7,179.48	7,231.48	84.38	248.91	90.15	-15.17	-4,914.49	3,643.40	3,316.68	326.72	11.151	
10,600.00	7,231.08	7,179.08	7,231.08	86.93	248.90	90.15	-15.17	-4,914.49	3,589.02	3,259.71	329.32	10.898	
10,700.00	7,230.67	7,178.67	7,230.67	89.49	248.88	90.14	-15.17	-4,914.49	3,536.64	3,204.62	332.01	10.652	
10,800.00	7,230.26	7,178.26	7,230.26	92.07	248.87	90.13	-15.17	-4,914.49	3,486.34	3,151.53	334.80	10.413	
10,900.00	7,229.86	7,177.86	7,229.86	94.67	248.86	90.12	-15.17	-4,914.49	3,438.20	3,100.53	337.67	10.182	
11,000.00	7,229.45	7,177.45	7,229.45	97.28	248.84	90.12	-15.17	-4,914.49	3,392.34	3,051.72	340.62	9.959	
11,100.00	7,229.05	7,177.05	7,229.05	99.90	248.83	90.11	-15.17	-4,914.49	3,348.83	3,005.20	343.63	9.745	
11,200.00	7,228.64	7,176.64	7,228.64	102.54	248.81	90.10	-15.17	-4,914.49	3,307.78	2,961.08	346.70	9.541	
11,300.00	7,228.24	7,176.24	7,228.24	105.19	248.80	90.09	-15.17	-4,914.49	3,269.27	2,919.45	349.82	9.346	
11,400.00	7,227.83	7,175.83	7,227.83	107.85	248.78	90.09	-15.17	-4,914.49	3,233.39	2,880.42	352.98	9.160	
11,500.00	7,227.42	7,175.42	7,227.42	110.52	248.77	90.08	-15.17	-4,914.49	3,200.24	2,844.09	356.15	8.986	
11,600.00	7,227.02	7,175.02	7,227.02	113.20	248.76	90.07	-15.17	-4,914.49	3,169.90	2,810.56	359.34	8.821	
11,700.00	7,226.61	7,174.61	7,226.61	115.89	248.74	90.06	-15.17	-4,914.49	3,142.45	2,779.92	362.53	8.668	
11,800.00	7,226.21	7,174.21	7,226.21	118.59	248.73	90.05	-15.17	-4,914.49	3,117.96	2,752.27	365.70	8.526	
11,900.00	7,225.80	7,173.80	7,225.80	121.29	248.71	90.05	-15.17	-4,914.49	3,096.52	2,727.68	368.84	8.395	
12,000.00	7,225.40	7,173.40	7,225.40	124.00	248.70	90.04	-15.17	-4,914.49	3,078.17	2,706.24	371.93	8.276	
12,100.00	7,224.99	7,172.99	7,224.99	126.72	248.69	90.03	-15.17	-4,914.49	3,062.98	2,688.02	374.96	8.169	
12,200.00	7,224.58	7,172.58	7,224.58	129.44	248.67	90.02	-15.17	-4,914.49	3,050.99	2,673.08	377.91	8.073	
12,300.00	7,224.18	7,172.18	7,224.18	132.17	248.66	90.02	-15.17	-4,914.49	3,042.25	2,661.46	380.78	7.989	
12,400.00	7,223.77	7,171.77	7,223.77	134.91	248.64	90.01	-15.17	-4,914.49	3,036.77	2,653.22	383.55	7.918	
12,500.00	7,223.37	7,171.37	7,223.37	137.65	248.63	90.00	-15.17	-4,914.49	3,034.58	2,648.38	386.20	7.857	
12,516.44	7,223.30	7,171.30	7,223.30	138.10	248.63	90.00	-15.17	-4,914.49	3,034.54	2,647.91	386.63	7.849	CC
12,600.00	7,222.96	7,170.96	7,222.96	140.39	248.61	89.99	-15.17	-4,914.49	3,035.69	2,646.95	388.74	7.809	ES
12,700.00	7,222.55	7,170.55	7,222.55	143.14	248.60	89.99	-15.17	-4,914.49	3,040.08	2,648.95	391.13	7.772	
12,800.00	7,222.15	7,170.15	7,222.15	145.89	248.59	89.98	-15.17	-4,914.49	3,047.76	2,654.36	393.39	7.747	
12,900.00	7,221.74	7,169.74	7,221.74	148.65	248.57	89.97	-15.17	-4,914.49	3,058.68	2,663.18	395.50	7.734	
13,000.00	7,221.34	7,169.34	7,221.34	151.41	248.56	89.96	-15.17	-4,914.49	3,072.82	2,675.36	397.46	7.731	SF
13,100.00	7,220.93	7,168.93	7,220.93	154.18	248.54	89.96	-15.17	-4,914.49	3,090.14	2,690.87	399.27	7.739	
13,200.00	7,220.53	7,168.53	7,220.53	156.94	248.53	89.95	-15.17	-4,914.49	3,110.57	2,709.65	400.92	7.759	
13,300.00	7,220.12	7,168.12	7,220.12	159.72	248.52	89.94	-15.17	-4,914.49	3,134.07	2,731.65	402.42	7.788	
13,400.00	7,219.71	7,167.71	7,219.71	162.49	248.50	89.93	-15.17	-4,914.49	3,160.55	2,756.79	403.76	7.828	
13,500.00	7,219.31	7,167.31	7,219.31	165.27	248.49	89.92	-15.17	-4,914.49	3,189.95	2,785.00	404.95	7.877	
13,600.00	7,218.90	7,166.90	7,218.90	168.05	248.47	89.92	-15.17	-4,914.49	3,222.19	2,816.19	406.00	7.936	
13,700.00	7,218.50	7,166.50	7,218.50	170.83	248.46	89.91	-15.17	-4,914.49	3,257.18	2,850.27	406.91	8.005	
13,800.00	7,218.09	7,166.09	7,218.09	173.61	248.44	89.90	-15.17	-4,914.49	3,294.83	2,887.16	407.67	8.082	
13,900.00	7,217.69	7,165.69	7,217.69	176.40	248.43	89.89	-15.17	-4,914.49	3,335.06	2,926.74	408.31	8.168	
14,000.00	7,217.28	7,165.28	7,217.28	179.19	248.42	89.89	-15.17	-4,914.49	3,377.77	2,968.94	408.83	8.262	
14,100.00	7,216.87	7,164.87	7,216.87	181.98	248.40	89.88	-15.17	-4,914.49	3,422.87	3,013.63	409.24	8.364	
14,200.00	7,216.47	7,164.47	7,216.47	184.78	248.39	89.87	-15.17	-4,914.49	3,470.27	3,060.73	409.53	8.474	
14,300.00	7,216.06	7,164.06	7,216.06	187.57	248.37	89.86	-15.17	-4,914.49	3,519.86	3,110.13	409.73	8.591	
14,400.00	7,215.66	7,163.66	7,215.66	190.37	248.36	89.86	-15.17	-4,914.49	3,571.58	3,161.74	409.84	8.715	
14,500.00	7,215.25	7,163.25	7,215.25	193.17	248.35	89.85	-15.17	-4,914.49	3,625.31	3,215.45	409.86	8.845	
14,600.00	7,214.85	7,162.85	7,214.85	195.97	248.33	89.84	-15.17	-4,914.49	3,680.97	3,271.17	409.80	8.982	
14,700.00	7,214.44	7,162.44	7,214.44	198.77	248.32	89.83	-15.17	-4,914.49	3,738.48	3,328.81	409.67	9.126	
14,800.00	7,214.03	7,162.03	7,214.03	201.58	248.30	89.83	-15.17	-4,914.49	3,797.76	3,388.28	409.48	9.275	
14,900.00	7,213.63	7,161.63	7,213.63	204.38	248.29	89.82	-15.17	-4,914.49	3,858.71	3,449.48	409.24	9.429	
15,000.00	7,213.22	7,161.22	7,213.22	207.19	248.27	89.81	-15.17	-4,914.49	3,921.27	3,512.34	408.94	9.589	
15,100.00	7,212.82	7,160.82	7,212.82	210.00	248.26	89.80	-15.17	-4,914.49	3,985.36	3,576.77	408.59	9.754	
15,200.00	7,212.41	7,160.41	7,212.41	212.81	248.25	89.79	-15.17	-4,914.49	4,050.90	3,642.69	408.20	9.924	
15,300.00	7,212.01	7,160.01	7,212.01	215.62	248.23	89.79	-15.17	-4,914.49	4,117.83	3,710.04	407.78	10.098	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.00	7,211.60	7,159.60	7,211.60	218.43	248.22	89.78	-15.17	-4,914.49	4,186.07	3,778.74	407.33	10.277	
15,500.00	7,211.19	7,159.19	7,211.19	221.25	248.20	89.77	-15.17	-4,914.49	4,255.57	3,848.72	406.85	10.460	
15,600.00	7,210.79	7,158.79	7,210.79	224.06	248.19	89.76	-15.17	-4,914.49	4,326.27	3,919.92	406.35	10.647	
15,700.00	7,210.38	7,158.38	7,210.38	226.88	248.18	89.76	-15.17	-4,914.49	4,398.10	3,992.28	405.82	10.837	
15,794.94	7,210.00	7,158.00	7,210.00	229.55	248.16	89.75	-15.17	-4,914.49	4,467.31	4,061.99	405.31	11.022	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-1(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.00	0.00	0.00	55.00	3.28	3.28	-109.59	-2,722.72	-7,652.25	8,122.39					
100.00	100.00	45.00	100.00	3.28	3.37	-109.59	-2,722.72	-7,652.25	8,122.20	8,115.54	6.66	1,220.014		
200.00	200.00	145.00	200.00	3.34	4.66	-109.59	-2,722.72	-7,652.25	8,122.20	8,114.20	8.00	1,015.085		
300.00	299.98	244.98	299.98	3.44	7.56	67.79	-2,722.72	-7,652.25	8,121.54	8,110.55	11.00	738.644		
400.00	399.84	344.84	399.84	3.59	10.80	67.86	-2,722.72	-7,652.25	8,119.56	8,105.17	14.39	564.187		
500.00	499.45	444.45	499.45	3.79	14.16	67.98	-2,722.72	-7,652.25	8,116.28	8,098.33	17.94	452.349		
600.00	598.70	543.70	598.70	4.03	17.54	68.14	-2,722.72	-7,652.25	8,111.69	8,090.12	21.57	375.993		
700.00	697.47	642.47	697.47	4.31	20.94	68.35	-2,722.72	-7,652.25	8,105.83	8,080.58	25.25	320.963		
800.00	795.62	740.62	795.62	4.64	24.33	68.61	-2,722.72	-7,652.25	8,098.72	8,069.75	28.97	279.588		
900.00	893.06	838.06	893.06	5.00	27.71	68.91	-2,722.72	-7,652.25	8,090.39	8,057.69	32.70	247.427		
1,000.00	989.64	934.64	989.64	5.40	31.06	69.26	-2,722.72	-7,652.25	8,080.86	8,044.42	36.44	221.756		
1,100.00	1,085.27	1,030.27	1,085.27	5.83	34.38	69.64	-2,722.72	-7,652.25	8,070.19	8,030.00	40.19	200.820		
1,200.00	1,179.82	1,124.82	1,179.82	6.29	37.66	70.07	-2,722.72	-7,652.25	8,058.42	8,014.49	43.93	183.438		
1,300.00	1,273.17	1,218.17	1,273.17	6.79	40.91	70.54	-2,722.72	-7,652.25	8,045.59	7,997.92	47.67	168.789		
1,400.00	1,365.21	1,310.21	1,365.21	7.33	44.12	71.05	-2,722.72	-7,652.25	8,031.76	7,980.37	51.39	156.287		
1,500.00	1,455.84	1,400.84	1,455.84	7.89	47.27	71.60	-2,722.72	-7,652.25	8,016.99	7,961.89	55.10	145.500		
1,600.00	1,544.94	1,489.94	1,544.94	8.50	50.38	72.17	-2,722.72	-7,652.25	8,001.34	7,942.55	58.79	136.105		
1,700.00	1,632.39	1,577.39	1,632.39	9.13	53.42	72.79	-2,722.72	-7,652.25	7,984.88	7,922.43	62.45	127.856		
1,800.00	1,718.11	1,663.11	1,718.11	9.80	56.41	73.43	-2,722.72	-7,652.25	7,967.68	7,901.59	66.09	120.560		
1,900.00	1,802.44	1,747.44	1,802.44	10.49	59.35	73.85	-2,722.72	-7,652.25	7,950.05	7,880.34	69.70	114.056		
2,000.00	1,886.68	1,831.68	1,886.68	11.20	62.28	74.17	-2,722.72	-7,652.25	7,932.70	7,859.36	73.33	108.174		
2,100.00	1,970.92	1,915.92	1,970.92	11.93	65.22	74.49	-2,722.72	-7,652.25	7,915.67	7,838.70	76.98	102.834		
2,200.00	2,055.17	2,000.17	2,055.17	12.66	68.16	74.81	-2,722.72	-7,652.25	7,898.98	7,818.36	80.63	97.968		
2,300.00	2,139.41	2,084.41	2,139.41	13.40	71.10	75.13	-2,722.72	-7,652.25	7,882.63	7,798.33	84.29	93.516		
2,400.00	2,223.66	2,168.66	2,223.66	14.14	74.04	75.46	-2,722.72	-7,652.25	7,866.60	7,778.64	87.96	89.431		
2,500.00	2,307.90	2,252.90	2,307.90	14.89	76.97	75.78	-2,722.72	-7,652.25	7,850.92	7,759.28	91.64	85.670		
2,600.00	2,392.14	2,337.14	2,392.14	15.65	79.91	76.11	-2,722.72	-7,652.25	7,835.57	7,740.24	95.33	82.198		
2,700.00	2,476.39	2,421.39	2,476.39	16.41	82.85	76.44	-2,722.72	-7,652.25	7,820.56	7,721.55	99.02	78.982		
2,800.00	2,560.63	2,505.63	2,560.63	17.17	85.79	76.76	-2,722.72	-7,652.25	7,805.90	7,703.19	102.71	75.998		
2,900.00	2,644.88	2,589.88	2,644.88	17.93	88.73	77.09	-2,722.72	-7,652.25	7,791.58	7,685.17	106.41	73.221		
3,000.00	2,729.12	2,674.12	2,729.12	18.70	91.67	77.42	-2,722.72	-7,652.25	7,777.61	7,667.50	110.12	70.631		
3,100.00	2,813.36	2,758.36	2,813.36	19.47	94.61	77.75	-2,722.72	-7,652.25	7,763.99	7,650.17	113.82	68.210		
3,200.00	2,897.61	2,842.61	2,897.61	20.25	97.55	78.08	-2,722.72	-7,652.25	7,750.72	7,633.18	117.54	65.943		
3,300.00	2,981.85	2,926.85	2,981.85	21.02	100.48	78.41	-2,722.72	-7,652.25	7,737.80	7,616.55	121.25	63.817		
3,400.00	3,066.10	3,011.10	3,066.10	21.80	103.42	78.74	-2,722.72	-7,652.25	7,725.23	7,600.27	124.97	61.818		
3,500.00	3,150.34	3,104.66	3,150.34	22.58	106.69	79.08	-2,722.72	-7,652.25	7,713.03	7,584.01	129.01	59.785		
3,600.00	3,234.58	3,179.58	3,234.58	23.35	109.30	79.41	-2,722.72	-7,652.25	7,701.17	7,568.76	132.41	58.161		
3,700.00	3,318.83	3,263.83	3,318.83	24.13	112.24	79.75	-2,722.72	-7,652.25	7,689.68	7,553.55	136.14	56.486		
3,800.00	3,403.07	3,348.07	3,403.07	24.92	115.18	80.08	-2,722.72	-7,652.25	7,678.55	7,538.69	139.86	54.901		
3,900.00	3,487.32	3,432.32	3,487.32	25.70	118.12	80.42	-2,722.72	-7,652.25	7,667.78	7,524.19	143.59	53.400		
4,000.00	3,571.56	3,516.56	3,571.56	26.48	121.06	80.75	-2,722.72	-7,652.25	7,657.38	7,510.06	147.32	51.978		
4,100.00	3,655.80	3,600.80	3,655.80	27.27	124.00	81.09	-2,722.72	-7,652.25	7,647.34	7,496.28	151.05	50.627		
4,200.00	3,740.05	3,685.05	3,740.05	28.05	126.94	81.43	-2,722.72	-7,652.25	7,637.66	7,482.88	154.79	49.344		
4,300.00	3,824.29	3,769.29	3,824.29	28.84	129.88	81.77	-2,722.72	-7,652.25	7,628.36	7,469.84	158.52	48.122		
4,400.00	3,908.54	3,853.54	3,908.54	29.62	132.82	82.11	-2,722.72	-7,652.25	7,619.43	7,457.17	162.26	46.959		
4,500.00	3,992.78	3,937.78	3,992.78	30.41	135.76	82.45	-2,722.72	-7,652.25	7,610.86	7,444.87	165.99	45.851		
4,600.00	4,077.03	4,022.03	4,077.03	31.20	138.70	82.79	-2,722.72	-7,652.25	7,602.67	7,432.94	169.73	44.793		
4,700.00	4,161.27	4,106.27	4,161.27	31.98	141.64	83.13	-2,722.72	-7,652.25	7,594.85	7,421.38	173.47	43.782		
4,800.00	4,245.51	4,209.49	4,245.51	32.77	145.25	83.47	-2,722.72	-7,652.25	7,587.41	7,409.54	177.87	42.657		
4,900.00	4,329.76	4,274.76	4,329.76	33.56	147.52	83.81	-2,722.72	-7,652.25	7,580.34	7,399.39	180.95	41.893		
5,000.00	4,414.00	4,359.00	4,414.00	34.35	150.46	84.15	-2,722.72	-7,652.25	7,573.65	7,388.96	184.69	41.008		
5,100.00	4,498.25	4,443.25	4,498.25	35.14	153.40	84.49	-2,722.72	-7,652.25	7,567.34	7,378.91	188.43	40.161		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-1(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,582.49	4,527.49	4,582.49	35.93	156.34	84.84	-2,722.72	-7,652.25	7,561.40	7,369.23	192.17	39.348		
5,300.00	4,666.73	4,611.73	4,666.73	36.72	159.28	85.18	-2,722.72	-7,652.25	7,555.85	7,359.94	195.91	38.568		
5,400.00	4,750.98	4,704.02	4,750.98	37.51	162.51	85.52	-2,722.72	-7,652.25	7,550.67	7,350.74	199.93	37.766		
5,500.00	4,835.22	4,780.22	4,835.22	38.30	165.16	85.87	-2,722.72	-7,652.25	7,545.88	7,342.48	203.39	37.100		
5,600.00	4,919.47	4,864.47	4,919.47	39.09	168.11	86.21	-2,722.72	-7,652.25	7,541.46	7,334.33	207.13	36.409		
5,700.00	5,003.71	4,948.71	5,003.71	39.88	171.05	86.56	-2,722.72	-7,652.25	7,537.44	7,326.56	210.87	35.744		
5,800.00	5,088.06	5,033.06	5,088.06	40.67	173.99	86.88	-2,722.72	-7,652.25	7,533.80	7,319.18	214.62	35.104		
5,900.00	5,173.83	5,118.83	5,173.83	41.44	176.98	87.15	-2,722.72	-7,652.25	7,530.68	7,312.29	218.39	34.483		
6,000.00	5,261.34	5,206.34	5,261.34	42.18	180.04	87.42	-2,722.72	-7,652.25	7,528.06	7,305.87	222.18	33.882		
6,100.00	5,350.49	5,304.51	5,350.49	42.88	183.46	87.68	-2,722.72	-7,652.25	7,525.89	7,299.56	226.32	33.253		
6,200.00	5,441.16	5,386.16	5,441.16	43.56	186.31	87.94	-2,722.72	-7,652.25	7,524.11	7,294.26	229.85	32.734		
6,300.00	5,533.25	5,478.25	5,533.25	44.20	189.53	88.18	-2,722.72	-7,652.25	7,522.68	7,288.96	233.72	32.187		
6,400.00	5,626.65	5,571.65	5,626.65	44.82	192.79	88.42	-2,722.72	-7,652.25	7,521.54	7,283.95	237.59	31.657		
6,500.00	5,721.23	5,666.23	5,721.23	45.40	196.09	88.63	-2,722.72	-7,652.25	7,520.66	7,279.18	241.48	31.145		
6,600.00	5,816.89	5,761.89	5,816.89	45.94	199.43	88.83	-2,722.72	-7,652.25	7,519.98	7,274.62	245.36	30.648		
6,700.00	5,913.51	5,858.51	5,913.51	46.45	202.80	89.01	-2,722.72	-7,652.25	7,519.48	7,270.23	249.25	30.168		
6,800.00	6,010.97	5,955.97	6,010.97	46.93	206.20	89.17	-2,722.72	-7,652.25	7,519.12	7,265.98	253.13	29.704		
6,900.00	6,109.15	6,054.15	6,109.15	47.38	209.63	89.31	-2,722.72	-7,652.25	7,518.86	7,261.85	257.01	29.255		
7,000.00	6,207.93	6,152.93	6,207.93	47.80	213.08	89.42	-2,722.72	-7,652.25	7,518.68	7,257.81	260.87	28.821		
7,100.00	6,307.19	6,252.19	6,307.19	48.18	216.54	89.51	-2,722.72	-7,652.25	7,518.57	7,253.85	264.72	28.402		
7,200.00	6,406.82	6,351.82	6,406.82	48.53	220.02	89.57	-2,722.72	-7,652.25	7,518.50	7,249.96	268.55	27.997		
7,300.00	6,506.68	6,451.68	6,506.68	48.84	223.51	89.61	-2,722.72	-7,652.25	7,518.46	7,246.12	272.35	27.606		
7,400.00	6,606.66	6,551.66	6,606.66	49.10	227.00	2.62	-2,722.72	-7,652.25	7,518.44	7,242.35	276.10	27.231		
7,500.00	6,706.21	6,651.21	6,706.21	49.35	230.47	2.66	-2,722.72	-7,652.25	7,510.10	7,230.29	279.82	26.839		
7,600.00	6,803.22	6,748.22	6,803.22	49.59	233.86	2.77	-2,722.72	-7,652.25	7,486.31	7,202.86	283.45	26.412		
7,700.00	6,895.32	6,840.32	6,895.32	49.82	237.07	2.98	-2,722.72	-7,652.25	7,447.65	7,160.76	286.89	25.960		
7,800.00	6,980.23	6,925.23	6,980.23	50.03	240.04	3.30	-2,722.72	-7,652.25	7,395.07	7,105.01	290.06	25.495		
7,900.00	7,055.85	7,000.85	7,055.85	50.21	242.68	3.82	-2,722.72	-7,652.25	7,329.88	7,036.99	292.89	25.026		
8,000.00	7,120.34	7,065.34	7,120.34	50.36	244.93	4.65	-2,722.72	-7,652.25	7,253.67	6,958.38	295.28	24.565		
8,100.00	7,172.10	7,117.10	7,172.10	50.47	246.73	6.10	-2,722.72	-7,652.25	7,168.32	6,871.11	297.21	24.119		
8,200.00	7,209.85	7,154.85	7,209.85	50.55	248.05	9.09	-2,722.72	-7,652.25	7,075.94	6,777.34	298.60	23.697		
8,300.00	7,232.68	7,177.68	7,232.68	50.61	248.85	18.05	-2,722.72	-7,652.25	6,978.80	6,679.35	299.45	23.305		
8,400.00	7,240.00	7,185.00	7,240.00	50.65	249.11	94.64	-2,722.72	-7,652.25	6,879.29	6,579.56	299.74	22.951		
8,500.00	7,239.60	7,184.60	7,239.60	50.69	249.09	94.57	-2,722.72	-7,652.25	6,779.42	6,479.68	299.75	22.617		
8,600.00	7,239.19	7,184.19	7,239.19	50.75	249.08	94.50	-2,722.72	-7,652.25	6,679.55	6,379.80	299.76	22.283		
8,700.00	7,238.78	7,183.78	7,238.78	50.85	249.06	94.43	-2,722.72	-7,652.25	6,579.69	6,279.92	299.77	21.949		
8,800.00	7,238.38	7,183.38	7,238.38	51.02	249.05	94.37	-2,722.72	-7,652.25	6,479.83	6,180.05	299.78	21.615		
8,900.00	7,237.97	7,182.97	7,237.97	51.32	249.03	94.30	-2,722.72	-7,652.25	6,379.97	6,080.17	299.80	21.281		
9,000.00	7,237.57	7,182.57	7,237.57	51.95	249.02	94.23	-2,722.72	-7,652.25	6,280.12	5,980.30	299.82	20.947		
9,100.00	7,237.16	7,182.16	7,237.16	53.10	249.01	94.17	-2,722.72	-7,652.25	6,180.27	5,880.44	299.84	20.612		
9,200.00	7,236.76	7,181.76	7,236.76	54.69	248.99	94.10	-2,722.72	-7,652.25	6,080.43	5,780.57	299.86	20.278		
9,300.00	7,236.35	7,181.35	7,236.35	56.53	248.98	94.03	-2,722.72	-7,652.25	5,980.60	5,680.71	299.88	19.943		
9,400.00	7,235.94	7,180.94	7,235.94	58.53	248.96	93.96	-2,722.72	-7,652.25	5,880.76	5,580.85	299.91	19.608		
9,500.00	7,235.54	7,180.54	7,235.54	60.62	248.95	93.90	-2,722.72	-7,652.25	5,780.94	5,481.00	299.94	19.274		
9,600.00	7,235.13	7,180.13	7,235.13	62.80	248.94	93.83	-2,722.72	-7,652.25	5,681.12	5,381.15	299.97	18.939		
9,700.00	7,234.73	7,179.73	7,234.73	65.03	248.92	93.76	-2,722.72	-7,652.25	5,581.31	5,281.30	300.01	18.604		
9,800.00	7,234.32	7,179.32	7,234.32	67.32	248.91	93.69	-2,722.72	-7,652.25	5,481.50	5,181.46	300.04	18.269		
9,900.00	7,233.92	7,178.92	7,233.92	69.66	248.89	93.63	-2,722.72	-7,652.25	5,381.70	5,081.62	300.09	17.934		
10,000.00	7,233.51	7,178.51	7,233.51	72.03	248.88	93.56	-2,722.72	-7,652.25	5,281.91	4,981.78	300.13	17.599		
10,100.00	7,233.10	7,178.10	7,233.10	74.45	248.86	93.49	-2,722.72	-7,652.25	5,182.13	4,881.95	300.18	17.264		
10,200.00	7,232.70	7,177.70	7,232.70	76.89	248.85	93.42	-2,722.72	-7,652.25	5,082.35	4,782.12	300.23	16.928		
10,300.00	7,232.29	7,177.29	7,232.29	79.36	248.84	93.36	-2,722.72	-7,652.25	4,982.59	4,682.30	300.29	16.593		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-1(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,231.89	7,176.89	7,231.89	81.86	248.82	93.29	-2,722.72	-7,652.25	4,882.83	4,582.49	300.35	16.257		
10,500.00	7,231.48	7,176.48	7,231.48	84.38	248.81	93.22	-2,722.72	-7,652.25	4,783.09	4,482.68	300.41	15.922		
10,600.00	7,231.08	7,176.08	7,231.08	86.93	248.79	93.15	-2,722.72	-7,652.25	4,683.35	4,382.87	300.48	15.586		
10,700.00	7,230.67	7,175.67	7,230.67	89.49	248.78	93.09	-2,722.72	-7,652.25	4,583.63	4,283.07	300.56	15.251		
10,800.00	7,230.26	7,175.26	7,230.26	92.07	248.77	93.02	-2,722.72	-7,652.25	4,483.92	4,183.28	300.64	14.915		
10,900.00	7,229.86	7,174.86	7,229.86	94.67	248.75	92.95	-2,722.72	-7,652.25	4,384.22	4,083.50	300.72	14.579		
11,000.00	7,229.45	7,174.45	7,229.45	97.28	248.74	92.89	-2,722.72	-7,652.25	4,284.54	3,983.72	300.82	14.243		
11,100.00	7,229.05	7,174.05	7,229.05	99.90	248.72	92.82	-2,722.72	-7,652.25	4,184.87	3,883.95	300.92	13.907		
11,200.00	7,228.64	7,173.64	7,228.64	102.54	248.71	92.75	-2,722.72	-7,652.25	4,085.21	3,784.18	301.03	13.571		
11,300.00	7,228.24	7,173.24	7,228.24	105.19	248.69	92.68	-2,722.72	-7,652.25	3,985.58	3,684.43	301.15	13.235		
11,400.00	7,227.83	7,172.83	7,227.83	107.85	248.68	92.62	-2,722.72	-7,652.25	3,885.96	3,584.68	301.28	12.898		
11,500.00	7,227.42	7,172.42	7,227.42	110.52	248.67	92.55	-2,722.72	-7,652.25	3,786.36	3,484.95	301.42	12.562		
11,600.00	7,227.02	7,172.02	7,227.02	113.20	248.65	92.48	-2,722.72	-7,652.25	3,686.79	3,385.22	301.57	12.225		
11,700.00	7,226.61	7,171.61	7,226.61	115.89	248.64	92.41	-2,722.72	-7,652.25	3,587.24	3,285.51	301.73	11.889		
11,800.00	7,226.21	7,171.21	7,226.21	118.59	248.62	92.35	-2,722.72	-7,652.25	3,487.71	3,185.80	301.91	11.552		
11,900.00	7,225.80	7,170.80	7,225.80	121.29	248.61	92.28	-2,722.72	-7,652.25	3,388.22	3,086.11	302.11	11.215		
12,000.00	7,225.40	7,170.40	7,225.40	124.00	248.60	92.21	-2,722.72	-7,652.25	3,288.75	2,986.43	302.32	10.878		
12,100.00	7,224.99	7,169.99	7,224.99	126.72	248.58	92.14	-2,722.72	-7,652.25	3,189.31	2,886.76	302.55	10.541		
12,200.00	7,224.58	7,169.58	7,224.58	129.44	248.57	92.08	-2,722.72	-7,652.25	3,089.92	2,787.10	302.81	10.204		
12,300.00	7,224.18	7,169.18	7,224.18	132.17	248.55	92.01	-2,722.72	-7,652.25	2,990.56	2,687.47	303.09	9.867		
12,400.00	7,223.77	7,168.77	7,223.77	134.91	248.54	91.94	-2,722.72	-7,652.25	2,891.25	2,587.84	303.40	9.529		
12,500.00	7,223.37	7,168.37	7,223.37	137.65	248.52	91.87	-2,722.72	-7,652.25	2,791.98	2,488.23	303.75	9.192		
12,600.00	7,222.96	7,167.96	7,222.96	140.39	248.51	91.81	-2,722.72	-7,652.25	2,692.77	2,388.64	304.13	8.854		
12,700.00	7,222.55	7,167.55	7,222.55	143.14	248.50	91.74	-2,722.72	-7,652.25	2,593.62	2,289.07	304.55	8.516		
12,800.00	7,222.15	7,167.15	7,222.15	145.89	248.48	91.67	-2,722.72	-7,652.25	2,494.54	2,189.51	305.03	8.178		
12,900.00	7,221.74	7,166.74	7,221.74	148.65	248.47	91.60	-2,722.72	-7,652.25	2,395.54	2,089.97	305.56	7.840		
13,000.00	7,221.34	7,166.34	7,221.34	151.41	248.45	91.54	-2,722.72	-7,652.25	2,296.62	1,990.46	306.16	7.501		
13,100.00	7,220.93	7,165.93	7,220.93	154.18	248.44	91.47	-2,722.72	-7,652.25	2,197.79	1,890.96	306.83	7.163		
13,200.00	7,220.53	7,165.53	7,220.53	156.94	248.43	91.40	-2,722.72	-7,652.25	2,099.08	1,791.49	307.60	6.824		
13,300.00	7,220.12	7,165.12	7,220.12	159.72	248.41	91.33	-2,722.72	-7,652.25	2,000.50	1,692.03	308.47	6.485		
13,400.00	7,219.71	7,164.71	7,219.71	162.49	248.40	91.26	-2,722.72	-7,652.25	1,902.07	1,592.60	309.47	6.146		
13,500.00	7,219.31	7,164.31	7,219.31	165.27	248.38	91.20	-2,722.72	-7,652.25	1,803.81	1,493.19	310.62	5.807		
13,600.00	7,218.90	7,163.90	7,218.90	168.05	248.37	91.13	-2,722.72	-7,652.25	1,705.75	1,393.79	311.96	5.468		
13,700.00	7,218.50	7,163.50	7,218.50	170.83	248.35	91.06	-2,722.72	-7,652.25	1,607.93	1,294.42	313.51	5.129		
13,800.00	7,218.09	7,163.09	7,218.09	173.61	248.34	90.99	-2,722.72	-7,652.25	1,510.39	1,195.06	315.33	4.790		
13,900.00	7,217.69	7,162.69	7,217.69	176.40	248.33	90.93	-2,722.72	-7,652.25	1,413.20	1,095.72	317.48	4.451		
14,000.00	7,217.28	7,162.28	7,217.28	179.19	248.31	90.86	-2,722.72	-7,652.25	1,316.43	996.39	320.04	4.113		
14,100.00	7,216.87	7,161.87	7,216.87	181.98	248.30	90.79	-2,722.72	-7,652.25	1,220.18	897.07	323.11	3.776		
14,200.00	7,216.47	7,161.47	7,216.47	184.78	248.28	90.72	-2,722.72	-7,652.25	1,124.59	797.76	326.83	3.441		
14,300.00	7,216.06	7,161.06	7,216.06	187.57	248.27	90.66	-2,722.72	-7,652.25	1,029.83	698.46	331.37	3.108		
14,400.00	7,215.66	7,160.66	7,215.66	190.37	248.26	90.59	-2,722.72	-7,652.25	936.17	599.19	336.97	2.778		
14,500.00	7,215.25	7,160.25	7,215.25	193.17	248.24	90.52	-2,722.72	-7,652.25	843.95	500.00	343.95	2.454		
14,600.00	7,214.85	7,159.85	7,214.85	195.97	248.23	90.45	-2,722.72	-7,652.25	753.73	401.00	352.73	2.137		
14,700.00	7,214.44	7,159.44	7,214.44	198.77	248.21	90.39	-2,722.72	-7,652.25	666.30	302.44	363.86	1.831		
14,800.00	7,214.03	7,159.03	7,214.03	201.58	248.20	90.32	-2,722.72	-7,652.25	582.93	204.94	377.99	1.542		
14,900.00	7,213.63	7,158.63	7,213.63	204.38	248.18	90.25	-2,722.72	-7,652.25	505.63	109.90	395.73	1.278 Level 3		
15,000.00	7,213.22	7,158.22	7,213.22	207.19	248.17	90.18	-2,722.72	-7,652.25	437.62	20.59	417.03	1.049 Level 2		
15,100.00	7,212.82	7,157.82	7,212.82	210.00	248.16	90.12	-2,722.72	-7,652.25	383.88	-55.88	439.76	0.873 Level 1		
15,200.00	7,212.41	7,157.41	7,212.41	212.81	248.14	90.05	-2,722.72	-7,652.25	351.02	-106.75	457.77	0.767 Level 1		
15,270.75	7,212.12	7,157.12	7,212.12	214.80	248.13	90.00	-2,722.72	-7,652.25	343.81	-119.06	462.87	0.743 Level 1, CC, ES, SF		
15,300.00	7,212.01	7,157.01	7,212.01	215.62	248.13	89.98	-2,722.72	-7,652.25	345.05	-117.49	462.55	0.746 Level 1		
15,400.00	7,211.60	7,156.60	7,211.60	218.43	248.11	89.91	-2,722.72	-7,652.25	367.30	-84.35	451.65	0.813 Level 1		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-1(SI_75CC) - OH - OH												Offset Well Error:	3.28 ft
Survey Program: 100-2" Cone@2.448 Sigma													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,500.00	7,211.19	7,156.19	7,211.19	221.25	248.10	89.84	-2,722.72	-7,652.25	413.23	-18.53	431.76	0.957	Level 1
15,600.00	7,210.79	7,155.79	7,210.79	224.06	248.09	89.78	-2,722.72	-7,652.25	476.03	65.41	410.63	1.159	Level 2
15,700.00	7,210.38	7,155.38	7,210.38	226.88	248.07	89.71	-2,722.72	-7,652.25	549.96	157.90	392.06	1.403	Level 3
15,794.94	7,210.00	7,155.00	7,210.00	229.55	248.06	89.65	-2,722.72	-7,652.25	626.88	249.30	377.58	1.660	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	42.00	3.28	3.28	-100.70	-1,230.85	-6,516.64	6,631.99					
100.00	100.00	58.00	100.00	3.28	3.43	-100.70	-1,230.85	-6,516.64	6,631.86	6,625.14	6.72	987.264		
200.00	200.00	158.00	200.00	3.34	5.00	-100.70	-1,230.85	-6,516.64	6,631.86	6,623.52	8.33	795.724		
300.00	299.98	257.98	299.98	3.44	7.97	76.68	-1,230.85	-6,516.64	6,631.45	6,620.05	11.41	581.379		
400.00	399.84	357.84	399.84	3.59	11.24	76.75	-1,230.85	-6,516.64	6,630.25	6,615.43	14.82	447.249		
500.00	499.45	457.45	499.45	3.79	14.60	76.86	-1,230.85	-6,516.64	6,628.25	6,609.87	18.38	360.548		
600.00	598.70	556.70	598.70	4.03	17.99	77.01	-1,230.85	-6,516.64	6,625.48	6,603.46	22.02	300.889		
700.00	697.47	655.47	697.47	4.31	21.39	77.21	-1,230.85	-6,516.64	6,621.95	6,596.24	25.70	257.630		
800.00	795.62	753.62	795.62	4.64	24.78	77.45	-1,230.85	-6,516.64	6,617.69	6,588.27	29.42	224.953		
900.00	893.06	851.06	893.06	5.00	28.16	77.74	-1,230.85	-6,516.64	6,612.74	6,579.58	33.15	199.462		
1,000.00	989.64	947.64	989.64	5.40	31.51	78.06	-1,230.85	-6,516.64	6,607.13	6,570.23	36.90	179.058		
1,100.00	1,085.27	1,043.27	1,085.27	5.83	34.83	78.42	-1,230.85	-6,516.64	6,600.91	6,560.26	40.65	162.382		
1,200.00	1,179.82	1,137.82	1,179.82	6.29	38.12	78.81	-1,230.85	-6,516.64	6,594.13	6,549.73	44.40	148.513		
1,300.00	1,273.17	1,231.17	1,273.17	6.79	41.36	79.24	-1,230.85	-6,516.64	6,586.84	6,538.70	48.15	136.812		
1,400.00	1,365.21	1,323.21	1,365.21	7.33	44.57	79.71	-1,230.85	-6,516.64	6,579.11	6,527.23	51.88	126.816		
1,500.00	1,455.84	1,413.84	1,455.84	7.89	47.72	80.20	-1,230.85	-6,516.64	6,571.00	6,515.40	55.60	118.186		
1,600.00	1,544.94	1,502.94	1,544.94	8.50	50.83	80.71	-1,230.85	-6,516.64	6,562.58	6,503.28	59.30	110.669		
1,700.00	1,632.39	1,609.61	1,632.39	9.13	54.54	81.25	-1,230.85	-6,516.64	6,553.92	6,490.28	63.65	102.974		
1,800.00	1,718.11	1,676.11	1,718.11	9.80	58.86	81.81	-1,230.85	-6,516.64	6,545.11	6,478.48	66.63	98.232		
1,900.00	1,802.44	1,760.44	1,802.44	10.49	59.80	82.26	-1,230.85	-6,516.64	6,536.33	6,466.07	70.26	93.032		
2,000.00	1,886.68	1,844.68	1,886.68	11.20	62.74	82.65	-1,230.85	-6,516.64	6,527.96	6,454.06	73.90	88.329		
2,100.00	1,970.92	1,928.92	1,970.92	11.93	65.68	83.05	-1,230.85	-6,516.64	6,520.03	6,442.46	77.56	84.061		
2,200.00	2,055.17	2,013.17	2,055.17	12.66	68.61	83.45	-1,230.85	-6,516.64	6,512.53	6,431.30	81.23	80.173		
2,300.00	2,139.41	2,102.59	2,139.41	13.40	71.73	83.84	-1,230.85	-6,516.64	6,505.47	6,420.38	85.09	76.455		
2,400.00	2,223.66	2,181.66	2,223.66	14.14	74.49	84.24	-1,230.85	-6,516.64	6,498.85	6,410.25	88.59	73.356		
2,500.00	2,307.90	2,265.90	2,307.90	14.89	77.43	84.64	-1,230.85	-6,516.64	6,492.66	6,400.38	92.28	70.356		
2,600.00	2,392.14	2,350.14	2,392.14	15.65	80.37	85.04	-1,230.85	-6,516.64	6,486.92	6,390.95	95.98	67.587		
2,700.00	2,476.39	2,434.39	2,476.39	16.41	83.30	85.44	-1,230.85	-6,516.64	6,481.63	6,381.95	99.68	65.025		
2,800.00	2,560.63	2,518.63	2,560.63	17.17	86.24	85.84	-1,230.85	-6,516.64	6,476.78	6,373.39	103.38	62.648		
2,900.00	2,644.88	2,602.88	2,644.88	17.93	89.18	86.24	-1,230.85	-6,516.64	6,472.37	6,365.28	107.09	60.438		
3,000.00	2,729.12	2,687.12	2,729.12	18.70	92.12	86.65	-1,230.85	-6,516.64	6,468.41	6,357.60	110.80	58.378		
3,100.00	2,813.36	2,771.36	2,813.36	19.47	95.06	87.05	-1,230.85	-6,516.64	6,464.89	6,350.37	114.52	56.454		
3,200.00	2,897.61	2,855.61	2,897.61	20.25	98.00	87.45	-1,230.85	-6,516.64	6,461.82	6,343.59	118.23	54.654		
3,300.00	2,981.85	2,939.85	2,981.85	21.02	100.94	87.85	-1,230.85	-6,516.64	6,459.20	6,337.25	121.95	52.967		
3,400.00	3,066.10	3,024.10	3,066.10	21.80	103.88	88.25	-1,230.85	-6,516.64	6,457.03	6,331.36	125.67	51.382		
3,500.00	3,150.34	3,108.34	3,150.34	22.58	106.82	88.66	-1,230.85	-6,516.64	6,455.31	6,325.92	129.39	49.891		
3,600.00	3,234.58	3,202.42	3,234.58	23.35	110.27	89.06	-1,230.85	-6,516.64	6,454.03	6,320.41	133.63	48.299		
3,700.00	3,318.83	3,276.83	3,318.83	24.13	112.70	89.46	-1,230.85	-6,516.64	6,453.21	6,316.38	136.83	47.162		
3,800.00	3,403.07	3,361.07	3,403.07	24.92	115.64	89.87	-1,230.85	-6,516.64	6,452.84	6,312.28	140.55	45.911		
3,833.14	3,430.99	3,388.99	3,430.99	25.18	116.61	90.00	-1,230.85	-6,516.64	6,452.81	6,311.03	141.79	45.511		
3,900.00	3,487.32	3,445.32	3,487.32	25.70	118.58	90.27	-1,230.85	-6,516.64	6,452.91	6,308.64	144.27	44.727		
4,000.00	3,571.56	3,529.56	3,571.56	26.48	121.52	90.67	-1,230.85	-6,516.64	6,453.44	6,305.44	148.00	43.605		
4,100.00	3,655.80	3,613.80	3,655.80	27.27	124.46	91.08	-1,230.85	-6,516.64	6,454.41	6,302.69	151.72	42.542		
4,200.00	3,740.05	3,701.95	3,740.05	28.05	127.53	91.48	-1,230.85	-6,516.64	6,455.84	6,300.26	155.58	41.496		
4,300.00	3,824.29	3,782.29	3,824.29	28.84	130.34	91.88	-1,230.85	-6,516.64	6,457.71	6,298.55	159.16	40.573		
4,400.00	3,908.54	3,866.54	3,908.54	29.62	133.28	92.28	-1,230.85	-6,516.64	6,460.03	6,297.15	162.89	39.660		
4,500.00	3,992.78	3,950.78	3,992.78	30.41	136.22	92.69	-1,230.85	-6,516.64	6,462.81	6,296.20	166.61	38.791		
4,600.00	4,077.03	4,035.03	4,077.03	31.20	139.16	93.09	-1,230.85	-6,516.64	6,466.02	6,295.70	170.33	37.962		
4,700.00	4,161.27	4,119.27	4,161.27	31.98	142.10	93.49	-1,230.85	-6,516.64	6,469.69	6,295.64	174.05	37.172		
4,800.00	4,245.51	4,203.51	4,245.51	32.77	145.04	93.89	-1,230.85	-6,516.64	6,473.80	6,296.04	177.77	36.418		
4,900.00	4,329.76	4,287.76	4,329.76	33.56	147.98	94.29	-1,230.85	-6,516.64	6,478.36	6,296.88	181.48	35.697		
5,000.00	4,414.00	4,372.00	4,414.00	34.35	150.92	94.69	-1,230.85	-6,516.64	6,483.36	6,298.16	185.20	35.007		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-2(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	4,456.25	4,498.25	35.14	153.86	95.09	-1,230.85	-6,516.64	6,488.81	6,299.90	188.91	34.348		
5,200.00	4,582.49	4,540.49	4,582.49	35.93	156.80	95.49	-1,230.85	-6,516.64	6,494.70	6,302.07	192.63	33.716		
5,300.00	4,666.73	4,624.73	4,666.73	36.72	159.74	95.89	-1,230.85	-6,516.64	6,501.03	6,304.69	196.34	33.111		
5,400.00	4,750.98	4,708.98	4,750.98	37.51	162.68	96.29	-1,230.85	-6,516.64	6,507.80	6,307.75	200.05	32.531		
5,500.00	4,835.22	4,806.78	4,835.22	38.30	166.09	96.69	-1,230.85	-6,516.64	6,515.01	6,310.78	204.23	31.900		
5,600.00	4,919.47	4,877.47	4,919.47	39.09	168.56	97.08	-1,230.85	-6,516.64	6,522.65	6,315.19	207.47	31.440		
5,700.00	5,003.71	4,961.71	5,003.71	39.88	171.50	97.48	-1,230.85	-6,516.64	6,530.73	6,319.56	211.17	30.926		
5,800.00	5,088.06	5,046.06	5,088.06	40.67	174.44	97.93	-1,230.85	-6,516.64	6,539.22	6,324.35	214.88	30.433		
5,900.00	5,173.83	5,131.83	5,173.83	41.44	177.44	98.49	-1,230.85	-6,516.64	6,547.75	6,329.14	218.61	29.952		
6,000.00	5,261.34	5,219.34	5,261.34	42.18	180.49	99.02	-1,230.85	-6,516.64	6,556.13	6,333.76	222.37	29.483		
6,100.00	5,350.49	5,308.49	5,350.49	42.88	183.60	99.53	-1,230.85	-6,516.64	6,564.29	6,338.13	226.16	29.025		
6,200.00	5,441.16	5,400.84	5,441.16	43.56	186.83	100.02	-1,230.85	-6,516.64	6,572.16	6,342.13	230.03	28.571		
6,300.00	5,533.25	5,508.75	5,533.25	44.20	190.59	100.47	-1,230.85	-6,516.64	6,579.66	6,345.25	234.41	28.069		
6,400.00	5,626.65	5,584.65	5,626.65	44.82	193.24	100.90	-1,230.85	-6,516.64	6,586.74	6,349.09	237.65	27.716		
6,500.00	5,721.23	5,679.23	5,721.23	45.40	196.54	101.29	-1,230.85	-6,516.64	6,593.32	6,351.82	241.51	27.301		
6,600.00	5,816.89	5,774.89	5,816.89	45.94	199.88	101.65	-1,230.85	-6,516.64	6,599.37	6,353.99	245.37	26.896		
6,700.00	5,913.51	5,871.51	5,913.51	46.45	203.26	101.96	-1,230.85	-6,516.64	6,604.81	6,355.58	249.24	26.500		
6,800.00	6,010.97	5,968.97	6,010.97	46.93	206.66	102.24	-1,230.85	-6,516.64	6,609.62	6,356.52	253.10	26.115		
6,900.00	6,109.15	6,067.15	6,109.15	47.38	210.08	102.48	-1,230.85	-6,516.64	6,613.76	6,356.80	256.96	25.738		
7,000.00	6,207.93	6,165.93	6,207.93	47.80	213.53	102.68	-1,230.85	-6,516.64	6,617.18	6,356.37	260.81	25.371		
7,100.00	6,307.19	6,265.19	6,307.19	48.18	217.00	102.83	-1,230.85	-6,516.64	6,619.86	6,355.22	264.65	25.014		
7,200.00	6,406.82	6,364.82	6,406.82	48.53	220.48	102.94	-1,230.85	-6,516.64	6,621.79	6,353.32	268.47	24.665		
7,300.00	6,506.68	6,464.68	6,506.68	48.84	223.96	103.01	-1,230.85	-6,516.64	6,622.94	6,350.67	272.27	24.325		
7,400.00	6,606.66	6,564.66	6,606.66	49.10	227.45	16.03	-1,230.85	-6,516.64	6,623.30	6,347.29	276.02	23.996		
7,500.00	6,706.21	6,664.21	6,706.21	49.35	230.93	16.25	-1,230.85	-6,516.64	6,615.28	6,335.54	279.74	23.648		
7,600.00	6,803.22	6,761.22	6,803.22	49.59	234.31	16.91	-1,230.85	-6,516.64	6,592.39	6,309.03	283.36	23.265		
7,700.00	6,895.32	6,853.32	6,895.32	49.82	237.53	18.10	-1,230.85	-6,516.64	6,555.21	6,268.42	286.79	22.857		
7,800.00	6,980.23	6,938.23	6,980.23	50.03	240.49	19.97	-1,230.85	-6,516.64	6,504.69	6,214.74	289.94	22.434		
7,900.00	7,055.85	7,013.85	7,055.85	50.21	243.13	22.82	-1,230.85	-6,516.64	6,442.08	6,149.33	292.74	22.006		
8,000.00	7,120.34	7,078.34	7,120.34	50.36	245.38	27.18	-1,230.85	-6,516.64	6,368.96	6,073.83	295.13	21.580		
8,100.00	7,172.10	7,130.10	7,172.10	50.47	247.19	34.08	-1,230.85	-6,516.64	6,287.16	5,990.10	297.06	21.165		
8,200.00	7,209.85	7,167.85	7,209.85	50.55	248.51	45.43	-1,230.85	-6,516.64	6,198.73	5,900.24	298.49	20.767		
8,300.00	7,232.68	7,209.32	7,232.68	50.61	249.95	64.26	-1,230.85	-6,516.64	6,105.87	5,805.81	300.06	20.349		
8,400.00	7,240.00	7,202.00	7,240.00	50.65	249.70	90.73	-1,230.85	-6,516.64	6,010.89	5,710.95	299.94	20.041		
8,500.00	7,239.60	7,202.40	7,239.60	50.69	249.71	90.72	-1,230.85	-6,516.64	5,915.71	5,615.60	300.11	19.712		
8,600.00	7,239.19	7,202.81	7,239.19	50.75	249.73	90.70	-1,230.85	-6,516.64	5,820.69	5,520.39	300.30	19.383		
8,700.00	7,238.78	7,203.22	7,238.78	50.85	249.74	90.69	-1,230.85	-6,516.64	5,725.84	5,425.32	300.52	19.053		
8,800.00	7,238.38	7,203.62	7,238.38	51.02	249.75	90.68	-1,230.85	-6,516.64	5,631.17	5,330.40	300.77	18.723		
8,900.00	7,237.97	7,204.03	7,237.97	51.32	249.77	90.66	-1,230.85	-6,516.64	5,536.68	5,235.64	301.04	18.392		
9,000.00	7,237.57	7,204.43	7,237.57	51.95	249.78	90.65	-1,230.85	-6,516.64	5,442.40	5,141.05	301.35	18.060		
9,100.00	7,237.16	7,204.84	7,237.16	53.10	249.80	90.64	-1,230.85	-6,516.64	5,348.32	5,046.63	301.69	17.728		
9,200.00	7,236.76	7,205.24	7,236.76	54.69	249.81	90.63	-1,230.85	-6,516.64	5,254.46	4,952.39	302.06	17.395		
9,300.00	7,236.35	7,205.65	7,236.35	56.53	249.83	90.61	-1,230.85	-6,516.64	5,160.83	4,858.35	302.48	17.062		
9,400.00	7,235.94	7,206.06	7,235.94	58.53	249.84	90.60	-1,230.85	-6,516.64	5,067.44	4,764.51	302.93	16.728		
9,500.00	7,235.54	7,206.46	7,235.54	60.62	249.85	90.59	-1,230.85	-6,516.64	4,974.31	4,670.88	303.43	16.394		
9,600.00	7,235.13	7,206.87	7,235.13	62.80	249.87	90.58	-1,230.85	-6,516.64	4,881.45	4,577.48	303.98	16.059		
9,700.00	7,234.73	7,207.27	7,234.73	65.03	249.88	90.56	-1,230.85	-6,516.64	4,788.88	4,484.31	304.57	15.723		
9,800.00	7,234.32	7,207.68	7,234.32	67.32	249.90	90.55	-1,230.85	-6,516.64	4,696.61	4,391.39	305.22	15.387		
9,900.00	7,233.92	7,208.08	7,233.92	69.66	249.91	90.54	-1,230.85	-6,516.64	4,604.67	4,298.74	305.93	15.051		
10,000.00	7,233.51	7,208.49	7,233.51	72.03	249.92	90.52	-1,230.85	-6,516.64	4,513.07	4,206.37	306.70	14.715		
10,100.00	7,233.10	7,208.90	7,233.10	74.45	249.94	90.51	-1,230.85	-6,516.64	4,421.83	4,114.30	307.54	14.378		
10,200.00	7,232.70	7,209.30	7,232.70	76.89	249.95	90.50	-1,230.85	-6,516.64	4,330.99	4,022.54	308.45	14.041		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-2(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	7,209.71	7,232.29	79.36	249.97	90.49	-1,230.85	-6,516.64	4,240.55	3,931.12	309.43	13.705		
10,400.00	7,231.89	7,189.89	7,231.89	81.86	249.28	90.47	-1,230.85	-6,516.64	4,150.55	3,840.77	309.78	13.398		
10,500.00	7,231.48	7,189.48	7,231.48	84.38	249.26	90.46	-1,230.85	-6,516.64	4,061.02	3,750.12	310.90	13.062		
10,600.00	7,231.08	7,189.08	7,231.08	86.93	249.25	90.45	-1,230.85	-6,516.64	3,971.99	3,659.88	312.11	12.726		
10,700.00	7,230.67	7,188.67	7,230.67	89.49	249.23	90.44	-1,230.85	-6,516.64	3,883.49	3,570.08	313.41	12.391		
10,800.00	7,230.26	7,188.26	7,230.26	92.07	249.22	90.42	-1,230.85	-6,516.64	3,795.56	3,480.75	314.81	12.057		
10,900.00	7,229.86	7,187.86	7,229.86	94.67	249.20	90.41	-1,230.85	-6,516.64	3,708.25	3,391.93	316.32	11.723		
11,000.00	7,229.45	7,187.45	7,229.45	97.28	249.19	90.40	-1,230.85	-6,516.64	3,621.59	3,303.64	317.94	11.391		
11,100.00	7,229.05	7,187.05	7,229.05	99.90	249.18	90.38	-1,230.85	-6,516.64	3,535.64	3,215.95	319.69	11.060		
11,200.00	7,228.64	7,186.64	7,228.64	102.54	249.16	90.37	-1,230.85	-6,516.64	3,450.44	3,128.88	321.56	10.730		
11,300.00	7,228.24	7,186.24	7,228.24	105.19	249.15	90.36	-1,230.85	-6,516.64	3,366.06	3,042.50	323.56	10.403		
11,400.00	7,227.83	7,185.83	7,227.83	107.85	249.13	90.35	-1,230.85	-6,516.64	3,282.55	2,956.85	325.70	10.078		
11,500.00	7,227.42	7,185.42	7,227.42	110.52	249.12	90.33	-1,230.85	-6,516.64	3,199.99	2,872.00	327.99	9.756		
11,600.00	7,227.02	7,185.02	7,227.02	113.20	249.11	90.32	-1,230.85	-6,516.64	3,118.45	2,788.02	330.43	9.438		
11,700.00	7,226.61	7,184.61	7,226.61	115.89	249.09	90.31	-1,230.85	-6,516.64	3,038.02	2,704.99	333.03	9.122		
11,800.00	7,226.21	7,184.21	7,226.21	118.59	249.08	90.30	-1,230.85	-6,516.64	2,958.78	2,622.98	335.80	8.811		
11,900.00	7,225.80	7,183.80	7,225.80	121.29	249.06	90.28	-1,230.85	-6,516.64	2,880.83	2,542.09	338.74	8.505		
12,000.00	7,225.40	7,183.40	7,225.40	124.00	249.05	90.27	-1,230.85	-6,516.64	2,804.28	2,462.42	341.86	8.203		
12,100.00	7,224.99	7,182.99	7,224.99	126.72	249.03	90.26	-1,230.85	-6,516.64	2,729.24	2,384.08	345.16	7.907		
12,200.00	7,224.58	7,182.58	7,224.58	129.44	249.02	90.24	-1,230.85	-6,516.64	2,655.86	2,307.20	348.65	7.617		
12,300.00	7,224.18	7,182.18	7,224.18	132.17	249.01	90.23	-1,230.85	-6,516.64	2,584.26	2,231.92	352.33	7.335		
12,400.00	7,223.77	7,181.77	7,223.77	134.91	248.99	90.22	-1,230.85	-6,516.64	2,514.59	2,158.39	356.20	7.059		
12,500.00	7,223.37	7,181.37	7,223.37	137.65	248.98	90.21	-1,230.85	-6,516.64	2,447.04	2,086.78	360.26	6.792		
12,600.00	7,222.96	7,180.96	7,222.96	140.39	248.96	90.19	-1,230.85	-6,516.64	2,381.76	2,017.27	364.50	6.534		
12,700.00	7,222.55	7,180.55	7,222.55	143.14	248.95	90.18	-1,230.85	-6,516.64	2,318.96	1,950.06	368.90	6.286		
12,800.00	7,222.15	7,180.15	7,222.15	145.89	248.94	90.17	-1,230.85	-6,516.64	2,258.85	1,885.38	373.47	6.048		
12,900.00	7,221.74	7,179.74	7,221.74	148.65	248.92	90.16	-1,230.85	-6,516.64	2,201.64	1,823.45	378.18	5.822		
13,000.00	7,221.34	7,179.34	7,221.34	151.41	248.91	90.14	-1,230.85	-6,516.64	2,147.56	1,764.55	383.01	5.607		
13,100.00	7,220.93	7,178.93	7,220.93	154.18	248.89	90.13	-1,230.85	-6,516.64	2,096.86	1,708.94	387.92	5.405		
13,200.00	7,220.53	7,178.53	7,220.53	156.94	248.88	90.12	-1,230.85	-6,516.64	2,049.78	1,656.90	392.88	5.217		
13,300.00	7,220.12	7,178.12	7,220.12	159.72	248.86	90.11	-1,230.85	-6,516.64	2,006.59	1,608.75	397.84	5.044		
13,400.00	7,219.71	7,177.71	7,219.71	162.49	248.85	90.09	-1,230.85	-6,516.64	1,967.54	1,564.78	402.75	4.885		
13,500.00	7,219.31	7,177.31	7,219.31	165.27	248.84	90.08	-1,230.85	-6,516.64	1,932.87	1,525.31	407.56	4.743		
13,600.00	7,218.90	7,176.90	7,218.90	168.05	248.82	90.07	-1,230.85	-6,516.64	1,902.84	1,490.64	412.20	4.616		
13,700.00	7,218.50	7,176.50	7,218.50	170.83	248.81	90.05	-1,230.85	-6,516.64	1,877.66	1,461.05	416.61	4.507		
13,800.00	7,218.09	7,176.09	7,218.09	173.61	248.79	90.04	-1,230.85	-6,516.64	1,857.53	1,436.80	420.73	4.415		
13,900.00	7,217.69	7,175.69	7,217.69	176.40	248.78	90.03	-1,230.85	-6,516.64	1,842.61	1,418.12	424.48	4.341		
14,000.00	7,217.28	7,175.28	7,217.28	179.19	248.77	90.02	-1,230.85	-6,516.64	1,833.03	1,405.20	427.83	4.284		
14,100.00	7,216.87	7,174.87	7,216.87	181.98	248.75	90.00	-1,230.85	-6,516.64	1,828.88	1,398.16	430.72	4.246		
14,126.01	7,216.77	7,174.77	7,216.77	182.71	248.75	90.00	-1,230.85	-6,516.64	1,828.69	1,397.31	431.39	4.239 CC		
14,200.00	7,216.47	7,174.47	7,216.47	184.78	248.74	89.99	-1,230.85	-6,516.64	1,830.19	1,397.08	433.11	4.226 ES		
14,300.00	7,216.06	7,174.06	7,216.06	187.57	248.72	89.98	-1,230.85	-6,516.64	1,836.95	1,401.96	434.99	4.223 SF		
14,400.00	7,215.66	7,173.66	7,215.66	190.37	248.71	89.97	-1,230.85	-6,516.64	1,849.10	1,412.75	436.35	4.238		
14,500.00	7,215.25	7,173.25	7,215.25	193.17	248.69	89.95	-1,230.85	-6,516.64	1,866.54	1,429.34	437.20	4.269		
14,600.00	7,214.85	7,172.85	7,214.85	195.97	248.68	89.94	-1,230.85	-6,516.64	1,889.12	1,451.57	437.56	4.317		
14,700.00	7,214.44	7,172.44	7,214.44	198.77	248.67	89.93	-1,230.85	-6,516.64	1,916.66	1,479.21	437.45	4.381		
14,800.00	7,214.03	7,172.03	7,214.03	201.58	248.65	89.91	-1,230.85	-6,516.64	1,948.94	1,512.02	436.92	4.461		
14,900.00	7,213.63	7,171.63	7,213.63	204.38	248.64	89.90	-1,230.85	-6,516.64	1,985.74	1,549.73	436.02	4.554		
15,000.00	7,213.22	7,171.22	7,213.22	207.19	248.62	89.89	-1,230.85	-6,516.64	2,026.81	1,592.03	434.78	4.662		
15,100.00	7,212.82	7,170.82	7,212.82	210.00	248.61	89.88	-1,230.85	-6,516.64	2,071.90	1,638.63	433.27	4.782		
15,200.00	7,212.41	7,170.41	7,212.41	212.81	248.60	89.86	-1,230.85	-6,516.64	2,120.74	1,689.23	431.52	4.915		
15,300.00	7,212.01	7,170.01	7,212.01	215.62	248.58	89.85	-1,230.85	-6,516.64	2,173.10	1,743.51	429.58	5.059		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,400.00	7,211.60	7,169.60	7,211.60	218.43	248.57	89.84	-1,230.85	-6,516.64	2,228.71	1,801.21	427.50	5.213	
15,500.00	7,211.19	7,169.19	7,211.19	221.25	248.55	89.83	-1,230.85	-6,516.64	2,287.34	1,862.04	425.31	5.378	
15,600.00	7,210.79	7,168.79	7,210.79	224.06	248.54	89.81	-1,230.85	-6,516.64	2,348.77	1,925.73	423.04	5.552	
15,700.00	7,210.38	7,168.38	7,210.38	226.88	248.52	89.80	-1,230.85	-6,516.64	2,412.78	1,992.06	420.72	5.735	
15,794.94	7,210.00	7,168.00	7,210.00	229.55	248.51	89.79	-1,230.85	-6,516.64	2,475.76	2,057.27	418.50	5.916	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-3(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	37.00	3.28	3.28	-90.71	-94.26	-7,655.33	7,656.00					
100.00	100.00	100.00	125.26	3.28	3.29	-90.70	-93.97	-7,655.04	7,655.66	7,649.09	6.57	1,164.916		
200.00	200.00	181.41	218.41	3.34	3.33	-90.70	-93.37	-7,654.65	7,655.24	7,648.57	6.67	1,148.488		
300.00	299.98	255.31	292.30	3.44	3.40	86.67	-92.92	-7,654.60	7,655.07	7,648.23	6.84	1,119.867		
388.17	388.03	322.09	358.08	3.57	3.48	86.70	-92.73	-7,654.77	7,655.03	7,647.98	7.05	1,085.868		
400.00	399.84	331.34	368.33	3.59	3.49	86.70	-92.72	-7,654.81	7,655.03	7,647.95	7.08	1,080.761		
500.00	499.45	413.67	450.66	3.79	3.63	86.75	-92.79	-7,655.26	7,655.08	7,647.66	7.42	1,032.094		
600.00	598.70	521.94	558.93	4.03	3.85	86.85	-93.06	-7,655.86	7,654.95	7,647.07	7.88	971.319		
700.00	697.47	612.95	649.94	4.31	4.07	86.96	-93.74	-7,656.37	7,654.67	7,646.29	8.38	913.039		
800.00	795.62	700.10	737.08	4.64	4.30	87.08	-94.61	-7,656.97	7,654.37	7,645.43	8.94	856.234		
900.00	893.06	800.08	837.05	5.00	4.59	87.25	-95.63	-7,657.72	7,654.00	7,644.41	9.59	798.154		
1,000.00	989.64	901.31	938.28	5.40	4.90	87.45	-96.63	-7,658.43	7,653.48	7,643.18	10.30	743.077		
1,100.00	1,085.27	1,001.33	1,038.29	5.83	5.23	87.68	-97.48	-7,659.07	7,652.86	7,641.80	11.06	692.092		
1,200.00	1,179.82	1,096.05	1,133.01	6.29	5.55	87.92	-98.02	-7,659.66	7,652.18	7,640.34	11.85	646.020		
1,300.00	1,273.17	1,186.54	1,223.49	6.79	5.87	88.17	-98.36	-7,660.23	7,651.54	7,638.88	12.66	604.290		
1,400.00	1,365.21	1,288.90	1,325.85	7.33	6.24	88.48	-98.65	-7,660.84	7,650.95	7,637.38	13.56	564.064		
1,500.00	1,455.84	1,374.86	1,411.81	7.89	6.55	88.76	-98.86	-7,661.30	7,650.41	7,635.97	14.45	529.537		
1,600.00	1,544.94	1,462.66	1,499.61	8.50	6.88	89.06	-99.20	-7,661.84	7,650.11	7,634.74	15.38	497.518		
1,672.53	1,608.54	1,524.64	1,561.59	8.96	7.12	89.28	-99.44	-7,662.21	7,650.03	7,633.96	16.07	476.026		
1,700.00	1,632.39	1,546.67	1,583.62	9.13	7.20	89.37	-99.52	-7,662.35	7,650.05	7,633.72	16.33	468.478		
1,800.00	1,718.11	1,629.81	1,666.76	9.80	7.52	89.68	-99.78	-7,662.92	7,650.33	7,633.01	17.32	441.793		
1,900.00	1,802.44	1,718.10	1,755.04	10.49	7.86	90.03	-99.89	-7,663.49	7,650.92	7,632.57	18.35	416.890		
2,000.00	1,886.68	1,800.81	1,837.75	11.20	8.19	90.36	-99.99	-7,664.02	7,651.89	7,632.50	19.39	394.691		
2,100.00	1,970.92	1,889.27	1,926.21	11.93	8.53	90.72	-100.17	-7,664.57	7,653.22	7,632.76	20.46	374.102		
2,200.00	2,055.17	1,967.13	2,004.07	12.66	8.84	91.03	-100.35	-7,665.07	7,654.93	7,633.44	21.50	356.093		
2,300.00	2,139.41	2,074.63	2,111.56	13.40	9.27	91.46	-100.49	-7,665.71	7,657.01	7,634.35	22.66	337.838		
2,400.00	2,223.66	2,174.71	2,211.64	14.14	9.68	91.87	-100.58	-7,665.94	7,659.15	7,635.34	23.81	321.669		
2,500.00	2,307.90	2,277.42	2,314.35	14.89	10.09	92.28	-101.15	-7,666.05	7,661.52	7,636.54	24.97	306.788		
2,600.00	2,392.14	2,361.60	2,398.53	15.65	10.43	92.61	-101.67	-7,666.00	7,664.12	7,638.05	26.07	294.023		
2,700.00	2,476.39	2,443.52	2,480.45	16.41	10.76	92.94	-102.06	-7,665.99	7,667.14	7,639.99	27.15	282.350		
2,800.00	2,560.63	2,539.07	2,576.00	17.17	11.15	93.32	-102.43	-7,665.95	7,670.52	7,642.22	28.30	271.018		
2,900.00	2,644.88	2,646.13	2,683.06	17.93	11.59	93.75	-102.68	-7,665.58	7,674.03	7,644.53	29.50	260.129		
3,000.00	2,729.12	2,734.47	2,771.39	18.70	11.95	94.11	-102.63	-7,665.08	7,677.75	7,647.13	30.63	250.700		
3,100.00	2,813.36	2,800.01	2,836.93	19.47	12.22	94.37	-102.43	-7,664.72	7,681.92	7,650.26	31.66	242.652		
3,200.00	2,897.61	2,849.95	2,886.87	20.25	12.42	94.57	-102.15	-7,664.60	7,686.76	7,654.13	32.63	235.588		
3,300.00	2,981.85	2,900.01	2,936.93	21.02	12.63	94.78	-101.72	-7,664.76	7,692.43	7,658.84	33.60	228.953		
3,400.00	3,066.10	2,942.13	2,979.05	21.80	12.80	94.95	-101.27	-7,665.09	7,698.89	7,664.36	34.54	222.929		
3,500.00	3,150.34	3,000.01	3,036.91	22.58	13.04	95.18	-100.61	-7,665.80	7,706.12	7,670.59	35.54	216.839		
3,600.00	3,234.58	3,060.09	3,096.99	23.35	13.29	95.43	-99.83	-7,666.72	7,714.01	7,677.46	36.55	211.047		
3,700.00	3,318.83	3,120.55	3,157.43	24.13	13.54	95.67	-98.96	-7,667.72	7,722.43	7,684.87	37.56	205.577		
3,800.00	3,403.07	3,166.31	3,203.18	24.92	13.73	95.86	-98.23	-7,668.67	7,731.61	7,693.09	38.51	200.753		
3,900.00	3,487.32	3,215.84	3,252.68	25.70	13.94	96.06	-97.39	-7,669.94	7,741.56	7,702.09	39.48	196.108		
4,000.00	3,571.56	3,276.01	3,312.82	26.48	14.19	96.30	-96.28	-7,671.68	7,752.19	7,711.70	40.48	191.484		
4,100.00	3,655.80	3,346.35	3,383.11	27.27	14.49	96.59	-94.84	-7,673.86	7,763.41	7,721.88	41.54	186.901		
4,200.00	3,740.05	3,431.42	3,468.11	28.05	14.84	96.94	-92.74	-7,676.50	7,775.09	7,732.43	42.66	182.274		
4,300.00	3,824.29	3,538.62	3,575.23	28.84	15.29	97.38	-89.79	-7,679.54	7,786.98	7,743.11	43.87	177.484		
4,400.00	3,908.54	3,641.62	3,678.16	29.62	15.73	97.80	-87.15	-7,682.16	7,798.99	7,753.91	45.07	173.029		
4,500.00	3,992.78	3,732.56	3,769.05	30.41	16.11	98.17	-85.13	-7,684.40	7,811.26	7,765.04	46.22	169.012		
4,600.00	4,077.03	3,823.43	3,859.88	31.20	16.49	98.53	-83.32	-7,686.60	7,823.81	7,776.45	47.36	165.198		
4,700.00	4,161.27	3,913.87	3,950.28	31.98	16.87	98.89	-81.69	-7,688.75	7,836.67	7,788.17	48.50	161.579		
4,800.00	4,245.51	4,013.54	4,049.91	32.77	17.29	99.29	-80.27	-7,691.05	7,849.77	7,800.09	49.68	157.999		
4,900.00	4,329.76	4,106.58	4,142.91	33.56	17.68	99.66	-78.90	-7,693.04	7,863.09	7,812.26	50.83	154.685		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-3(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.00	4,414.00	4,191.43	4,227.74	34.35	18.04	99.99	-77.71	-7,694.80	7,876.72	7,824.78	51.95	151.636		
5,100.00	4,498.25	4,285.77	4,322.05	35.14	18.44	100.36	-76.65	-7,696.77	7,890.65	7,837.55	53.10	148.600		
5,200.00	4,582.49	4,385.29	4,421.56	35.93	18.86	100.75	-75.81	-7,698.74	7,904.79	7,850.51	54.28	145.636		
5,300.00	4,666.73	4,485.69	4,521.93	36.72	19.28	101.14	-75.28	-7,700.61	7,919.10	7,863.64	55.46	142.793		
5,400.00	4,750.98	4,618.96	4,655.18	37.51	19.84	101.65	-74.79	-7,702.53	7,933.38	7,876.59	56.79	139.695		
5,500.00	4,835.22	4,700.16	4,736.38	38.30	20.18	101.97	-74.55	-7,703.50	7,947.78	7,889.90	57.88	137.313		
5,600.00	4,919.47	4,780.46	4,816.68	39.09	20.52	102.27	-74.30	-7,704.49	7,962.57	7,903.60	58.97	135.038		
5,700.00	5,003.71	4,871.39	4,907.60	39.88	20.91	102.62	-74.02	-7,705.61	7,977.69	7,917.59	60.10	132.746		
5,800.00	5,088.06	4,956.94	4,993.14	40.67	21.27	103.05	-73.71	-7,706.56	7,993.04	7,931.84	61.20	130.604		
5,900.00	5,173.83	5,046.35	5,082.54	41.44	21.65	103.67	-73.32	-7,707.55	8,008.10	7,945.80	62.30	128.540		
6,000.00	5,261.34	5,139.77	5,175.96	42.18	22.04	104.27	-72.90	-7,708.48	8,022.55	7,959.16	63.39	126.558		
6,100.00	5,350.49	5,231.07	5,267.26	42.88	22.43	104.83	-72.60	-7,709.40	8,036.38	7,971.94	64.44	124.708		
6,200.00	5,441.16	5,350.53	5,386.71	43.56	22.94	105.43	-72.20	-7,710.44	8,049.44	7,983.85	65.60	122.712		
6,300.00	5,533.25	5,476.27	5,512.44	44.20	23.47	106.00	-71.38	-7,710.68	8,061.25	7,994.50	66.75	120.769		
6,400.00	5,626.65	5,558.73	5,594.90	44.82	23.82	106.42	-70.83	-7,710.73	8,072.18	8,004.52	67.67	119.288		
6,500.00	5,721.23	5,644.54	5,680.71	45.40	24.18	106.81	-70.56	-7,711.07	8,082.44	8,013.87	68.58	117.861		
6,600.00	5,816.89	5,736.10	5,772.27	45.94	24.57	107.17	-70.27	-7,711.45	8,091.83	8,022.35	69.48	116.462		
6,700.00	5,913.51	5,822.61	5,858.78	46.45	24.93	107.49	-69.93	-7,711.90	8,100.39	8,030.06	70.33	115.177		
6,800.00	6,010.97	5,914.35	5,950.51	46.93	25.32	107.77	-69.53	-7,712.44	8,108.05	8,036.87	71.17	113.917		
6,900.00	6,109.15	5,993.69	6,029.86	47.38	25.66	108.01	-69.28	-7,713.07	8,114.84	8,042.91	71.93	112.815		
7,000.00	6,207.93	6,112.65	6,148.81	47.80	26.17	108.24	-69.08	-7,714.10	8,120.61	8,047.76	72.85	111.474		
7,100.00	6,307.19	6,177.35	6,213.51	48.18	26.44	108.38	-69.01	-7,714.77	8,125.41	8,051.93	73.47	110.589		
7,200.00	6,406.82	6,274.26	6,310.40	48.53	26.85	108.51	-69.03	-7,716.05	8,129.36	8,055.14	74.23	109.521		
7,300.00	6,506.68	6,374.82	6,410.96	48.84	27.28	108.59	-69.26	-7,717.39	8,132.16	8,057.20	74.97	108.474		
7,400.00	6,606.66	6,516.17	6,552.30	49.10	27.88	21.62	-69.76	-7,719.06	8,133.67	8,057.82	75.85	107.228		
7,500.00	6,706.21	6,620.36	6,656.48	49.35	28.33	21.88	-70.29	-7,720.03	8,126.58	8,050.03	76.55	106.164		
7,600.00	6,803.22	6,721.23	6,757.34	49.59	28.76	22.69	-71.31	-7,721.02	8,104.98	8,027.77	77.21	104.969		
7,700.00	6,895.32	6,796.61	6,832.71	49.82	29.08	24.12	-72.34	-7,721.97	8,069.65	7,991.91	77.74	103.809		
7,800.00	6,980.23	6,866.89	6,902.98	50.03	29.38	26.35	-73.27	-7,722.99	8,021.54	7,943.33	78.21	102.564		
7,900.00	7,055.85	6,922.78	6,958.86	50.21	29.62	29.65	-73.88	-7,723.87	7,961.83	7,883.24	78.59	101.302		
8,000.00	7,120.34	6,964.18	7,000.24	50.36	29.79	34.47	-74.27	-7,724.64	7,892.08	7,813.18	78.90	100.029		
8,100.00	7,172.10	7,000.01	7,036.07	50.47	29.94	41.65	-74.57	-7,725.40	7,813.94	7,734.77	79.17	98.695		
8,200.00	7,209.85	7,031.05	7,067.10	50.55	30.08	52.42	-74.78	-7,726.09	7,729.29	7,649.85	79.44	97.298		
8,300.00	7,232.68	7,052.32	7,088.36	50.61	30.17	68.04	-74.90	-7,726.57	7,640.15	7,560.46	79.69	95.878		
8,400.00	7,240.00	7,060.48	7,096.52	50.65	30.20	87.79	-74.95	-7,726.76	7,548.74	7,468.83	79.91	94.463		
8,500.00	7,239.60	7,062.08	7,098.11	50.69	30.21	87.82	-74.95	-7,726.80	7,457.05	7,376.90	80.15	93.042		
8,600.00	7,239.19	7,063.67	7,099.71	50.75	30.22	87.85	-74.96	-7,726.83	7,365.57	7,285.15	80.42	91.594		
8,700.00	7,238.78	7,065.27	7,101.31	50.85	30.22	87.88	-74.97	-7,726.87	7,274.32	7,193.60	80.72	90.117		
8,800.00	7,238.38	7,066.87	7,102.91	51.02	30.23	87.91	-74.98	-7,726.91	7,183.30	7,102.23	81.07	88.612		
8,900.00	7,237.97	7,068.47	7,104.51	51.32	30.24	87.94	-74.98	-7,726.94	7,092.52	7,011.07	81.45	87.079		
9,000.00	7,237.57	7,070.07	7,106.11	51.95	30.24	87.98	-74.99	-7,726.98	7,001.99	6,920.12	81.88	85.519		
9,100.00	7,237.16	7,071.68	7,107.72	53.10	30.25	88.01	-75.00	-7,727.02	6,911.73	6,829.38	82.35	83.934		
9,200.00	7,236.76	7,073.28	7,109.32	54.69	30.26	88.04	-75.01	-7,727.05	6,821.73	6,738.87	82.86	82.324		
9,300.00	7,236.35	7,074.89	7,110.93	56.53	30.26	88.07	-75.01	-7,727.09	6,732.02	6,648.59	83.43	80.690		
9,400.00	7,235.94	7,076.50	7,112.54	58.53	30.27	88.10	-75.02	-7,727.13	6,642.60	6,558.55	84.05	79.035		
9,500.00	7,235.54	7,078.12	7,114.15	60.62	30.28	88.13	-75.03	-7,727.16	6,553.48	6,468.77	84.72	77.359		
9,600.00	7,235.13	7,079.73	7,115.76	62.80	30.28	88.16	-75.03	-7,727.20	6,464.69	6,379.25	85.44	75.665		
9,700.00	7,234.73	7,081.34	7,117.38	65.03	30.29	88.19	-75.04	-7,727.24	6,376.22	6,290.00	86.22	73.954		
9,800.00	7,234.32	7,082.96	7,118.99	67.32	30.30	88.22	-75.05	-7,727.27	6,288.10	6,201.04	87.06	72.229		
9,900.00	7,233.92	7,084.58	7,120.61	69.66	30.31	88.25	-75.05	-7,727.31	6,200.34	6,112.38	87.96	70.492		
10,000.00	7,233.51	7,086.20	7,122.23	72.03	30.31	88.28	-75.06	-7,727.35	6,112.96	6,024.04	88.92	68.746		
10,100.00	7,233.10	7,087.82	7,123.85	74.45	30.32	88.31	-75.07	-7,727.39	6,025.96	5,936.01	89.95	66.994		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-3(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,200.00	7,232.70	7,089.45	7,125.48	76.89	30.33	88.35	-75.07	-7,727.42	5,939.38	5,848.34	91.04	65.237		
10,300.00	7,232.29	7,091.07	7,127.10	79.36	30.33	88.38	-75.08	-7,727.46	5,853.22	5,761.01	92.21	63.479		
10,400.00	7,231.89	7,092.70	7,128.73	81.86	30.34	88.41	-75.08	-7,727.50	5,767.51	5,674.07	93.44	61.722		
10,500.00	7,231.48	7,094.33	7,130.36	84.38	30.35	88.44	-75.09	-7,727.53	5,682.27	5,587.52	94.75	59.970		
10,600.00	7,231.08	7,095.96	7,131.99	86.93	30.35	88.47	-75.10	-7,727.57	5,597.51	5,501.37	96.14	58.225		
10,700.00	7,230.67	7,097.59	7,133.62	89.49	30.36	88.50	-75.10	-7,727.61	5,513.26	5,415.67	97.60	56.490		
10,800.00	7,230.26	7,099.23	7,135.26	92.07	30.37	88.53	-75.11	-7,727.65	5,429.55	5,330.41	99.14	54.767		
10,900.00	7,229.86	7,101.40	7,137.43	94.67	30.38	88.57	-75.11	-7,727.70	5,346.40	5,245.63	100.76	53.058		
11,000.00	7,229.45	7,104.06	7,140.09	97.28	30.39	88.63	-75.12	-7,727.76	5,263.83	5,161.35	102.48	51.366		
11,100.00	7,229.05	7,106.69	7,142.72	99.90	30.40	88.68	-75.13	-7,727.82	5,181.88	5,077.60	104.28	49.694		
11,200.00	7,228.64	7,109.29	7,145.32	102.54	30.41	88.73	-75.14	-7,727.88	5,100.57	4,994.40	106.16	48.046		
11,300.00	7,228.24	7,111.87	7,147.90	105.19	30.42	88.77	-75.15	-7,727.94	5,019.93	4,911.79	108.14	46.423		
11,400.00	7,227.83	7,114.43	7,150.46	107.85	30.43	88.82	-75.16	-7,727.99	4,940.00	4,829.80	110.20	44.827		
11,500.00	7,227.42	7,116.96	7,152.99	110.52	30.44	88.87	-75.17	-7,728.05	4,860.81	4,748.45	112.36	43.261		
11,600.00	7,227.02	7,119.47	7,155.50	113.20	30.45	88.92	-75.18	-7,728.11	4,782.40	4,667.78	114.62	41.726		
11,700.00	7,226.61	7,121.96	7,157.98	115.89	30.46	88.97	-75.19	-7,728.16	4,704.81	4,587.84	116.97	40.224		
11,800.00	7,226.21	7,124.42	7,160.44	118.59	30.47	89.02	-75.20	-7,728.22	4,628.08	4,508.66	119.42	38.756		
11,900.00	7,225.80	7,126.86	7,162.88	121.29	30.49	89.06	-75.21	-7,728.27	4,552.24	4,430.28	121.96	37.324		
12,000.00	7,225.40	7,129.28	7,165.30	124.00	30.50	89.11	-75.22	-7,728.32	4,477.36	4,352.75	124.61	35.930		
12,100.00	7,224.99	7,131.68	7,167.70	126.72	30.51	89.15	-75.23	-7,728.38	4,403.48	4,276.11	127.37	34.573		
12,200.00	7,224.58	7,134.05	7,170.07	129.44	30.52	89.20	-75.25	-7,728.43	4,330.64	4,200.42	130.22	33.256		
12,300.00	7,224.18	7,136.41	7,172.43	132.17	30.53	89.24	-75.26	-7,728.48	4,258.90	4,125.72	133.18	31.978		
12,400.00	7,223.77	7,138.74	7,174.76	134.91	30.54	89.29	-75.27	-7,728.53	4,188.33	4,052.08	136.25	30.741		
12,500.00	7,223.37	7,141.05	7,177.07	137.65	30.55	89.33	-75.28	-7,728.58	4,118.97	3,979.55	139.41	29.545		
12,600.00	7,222.96	7,143.34	7,179.36	140.39	30.56	89.38	-75.29	-7,728.63	4,050.88	3,908.20	142.69	28.390		
12,700.00	7,222.55	7,145.61	7,181.63	143.14	30.57	89.42	-75.30	-7,728.68	3,984.15	3,838.09	146.06	27.277		
12,800.00	7,222.15	7,147.87	7,183.88	145.89	30.57	89.46	-75.32	-7,728.73	3,918.83	3,769.29	149.54	26.206		
12,900.00	7,221.74	7,150.10	7,186.11	148.65	30.58	89.51	-75.33	-7,728.78	3,855.00	3,701.88	153.11	25.177		
13,000.00	7,221.34	7,152.31	7,188.32	151.41	30.59	89.55	-75.34	-7,728.82	3,792.73	3,635.94	156.79	24.191		
13,100.00	7,220.93	7,154.50	7,190.52	154.18	30.60	89.59	-75.35	-7,728.87	3,732.09	3,571.54	160.55	23.246		
13,200.00	7,220.53	7,156.68	7,192.69	156.94	30.61	89.63	-75.37	-7,728.91	3,673.18	3,508.78	164.41	22.342		
13,300.00	7,220.12	7,158.83	7,194.85	159.72	30.62	89.67	-75.38	-7,728.96	3,616.08	3,447.73	168.34	21.480		
13,400.00	7,219.71	7,160.97	7,196.98	162.49	30.63	89.71	-75.39	-7,729.00	3,560.86	3,388.51	172.36	20.660		
13,500.00	7,219.31	7,163.09	7,199.10	165.27	30.64	89.76	-75.41	-7,729.05	3,507.63	3,331.19	176.44	19.880		
13,600.00	7,218.90	7,165.19	7,201.20	168.05	30.65	89.80	-75.42	-7,729.09	3,456.47	3,275.89	180.58	19.140		
13,700.00	7,218.50	7,167.27	7,203.28	170.83	30.66	89.84	-75.43	-7,729.14	3,407.48	3,222.70	184.78	18.441		
13,800.00	7,218.09	7,169.34	7,205.35	173.61	30.67	89.87	-75.44	-7,729.18	3,360.75	3,171.73	189.01	17.780		
13,900.00	7,217.69	7,171.38	7,207.40	176.40	30.68	89.91	-75.46	-7,729.22	3,316.37	3,123.10	193.27	17.159		
14,000.00	7,217.28	7,173.42	7,209.43	179.19	30.68	89.95	-75.47	-7,729.26	3,274.45	3,076.90	197.55	16.575		
14,100.00	7,216.87	7,175.43	7,211.44	181.98	30.69	89.99	-75.48	-7,729.30	3,235.07	3,033.25	201.82	16.030		
14,200.00	7,216.47	7,177.43	7,213.44	184.78	30.70	90.03	-75.50	-7,729.34	3,198.34	2,992.26	206.07	15.520		
14,300.00	7,216.06	7,179.41	7,215.42	187.57	30.71	90.07	-75.51	-7,729.38	3,164.34	2,954.05	210.29	15.047		
14,400.00	7,215.66	7,181.37	7,217.38	190.37	30.72	90.11	-75.53	-7,729.42	3,133.16	2,918.71	214.45	14.610		
14,500.00	7,215.25	7,183.32	7,219.33	193.17	30.73	90.14	-75.54	-7,729.46	3,104.89	2,886.35	218.55	14.207		
14,600.00	7,214.85	7,185.26	7,221.26	195.97	30.73	90.18	-75.55	-7,729.50	3,079.61	2,857.07	222.55	13.838		
14,700.00	7,214.44	7,187.17	7,223.18	198.77	30.74	90.22	-75.57	-7,729.54	3,057.39	2,830.96	226.43	13.502		
14,800.00	7,214.03	7,189.07	7,225.08	201.58	30.75	90.25	-75.58	-7,729.58	3,038.30	2,808.11	230.19	13.199		
14,900.00	7,213.63	7,190.96	7,226.97	204.38	30.76	90.29	-75.60	-7,729.62	3,022.40	2,788.60	233.80	12.927		
15,000.00	7,213.22	7,192.83	7,228.84	207.19	30.77	90.32	-75.61	-7,729.65	3,009.74	2,772.50	237.24	12.686		
15,100.00	7,212.82	7,194.69	7,230.69	210.00	30.77	90.36	-75.62	-7,729.69	3,000.36	2,759.86	240.50	12.475		
15,200.00	7,212.41	7,196.53	7,232.54	212.81	30.78	90.40	-75.64	-7,729.73	2,994.29	2,750.73	243.56	12.294		
15,300.00	7,212.01	7,198.36	7,234.36	215.62	30.79	90.43	-75.65	-7,729.76	2,991.56	2,745.15	246.41	12.141		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-3(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,331.97	7,211.88	7,198.94	7,234.94	216.52	30.79	90.44	-75.66	-7,729.77	2,991.39	2,744.11	247.27	12.098	CC
15,400.00	7,211.60	7,200.17	7,236.17	218.43	30.80	90.47	-75.67	-7,729.80	2,992.16	2,743.13	249.03	12.015	ES
15,500.00	7,211.19	7,201.97	7,237.97	221.25	30.81	90.50	-75.68	-7,729.83	2,996.10	2,744.68	251.42	11.917	
15,600.00	7,210.79	7,203.75	7,239.76	224.06	30.81	90.53	-75.69	-7,729.87	3,003.37	2,749.79	253.58	11.844	
15,700.00	7,210.38	7,205.52	7,241.53	226.88	30.82	90.57	-75.71	-7,729.90	3,013.93	2,758.45	255.49	11.797	
15,794.94	7,210.00	7,207.19	7,243.19	229.55	30.83	90.60	-75.72	-7,729.94	3,026.99	2,769.92	257.07	11.775	SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STOCKOVER 16-1(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	60.00	3.28	3.28	-108.39	-1,185.19	-3,565.12	3,757.44				
100.00	100.00	40.00	100.00	3.28	3.35	-108.39	-1,185.19	-3,565.12	3,756.96	3,750.32	6.64	565.959	
200.00	200.00	140.00	200.00	3.34	4.54	-108.39	-1,185.19	-3,565.12	3,756.96	3,749.08	7.88	476.829	
300.00	299.98	239.98	299.98	3.44	7.40	69.00	-1,185.19	-3,565.12	3,756.33	3,745.49	10.84	346.578	
400.00	399.84	339.84	399.84	3.59	10.64	69.11	-1,185.19	-3,565.12	3,754.46	3,740.23	14.23	263.927	
500.00	499.45	439.45	499.45	3.79	13.99	69.29	-1,185.19	-3,565.12	3,751.35	3,733.58	17.77	211.074	
600.00	598.70	538.70	598.70	4.03	17.37	69.55	-1,185.19	-3,565.12	3,747.04	3,725.64	21.40	175.074	
700.00	697.47	637.47	697.47	4.31	20.77	69.87	-1,185.19	-3,565.12	3,741.55	3,716.47	25.08	149.171	
800.00	795.62	735.62	795.62	4.64	24.16	70.27	-1,185.19	-3,565.12	3,734.94	3,706.15	28.79	129.712	
900.00	893.06	833.06	893.06	5.00	27.53	70.73	-1,185.19	-3,565.12	3,727.26	3,694.73	32.53	114.594	
1,000.00	989.64	929.64	989.64	5.40	30.88	71.26	-1,185.19	-3,565.12	3,718.56	3,682.29	36.27	102.528	
1,100.00	1,085.27	1,025.27	1,085.27	5.83	34.20	71.85	-1,185.19	-3,565.12	3,708.93	3,668.92	40.02	92.686	
1,200.00	1,179.82	1,119.82	1,179.82	6.29	37.49	72.51	-1,185.19	-3,565.12	3,698.46	3,654.69	43.76	84.513	
1,300.00	1,273.17	1,213.17	1,273.17	6.79	40.74	73.23	-1,185.19	-3,565.12	3,687.22	3,639.72	47.50	77.622	
1,400.00	1,365.21	1,305.21	1,365.21	7.33	43.94	74.00	-1,185.19	-3,565.12	3,675.33	3,624.10	51.23	71.740	
1,500.00	1,455.84	1,404.16	1,455.84	7.89	47.39	74.82	-1,185.19	-3,565.12	3,662.89	3,607.65	55.24	66.314	
1,600.00	1,544.94	1,484.94	1,544.94	8.50	50.20	75.69	-1,185.19	-3,565.12	3,650.03	3,591.39	58.64	62.243	
1,700.00	1,632.39	1,572.39	1,632.39	9.13	53.25	76.60	-1,185.19	-3,565.12	3,636.87	3,574.55	62.32	58.362	
1,800.00	1,718.11	1,658.11	1,718.11	9.80	56.23	77.54	-1,185.19	-3,565.12	3,623.54	3,557.58	65.96	54.932	
1,900.00	1,802.44	1,742.44	1,802.44	10.49	59.17	78.33	-1,185.19	-3,565.12	3,610.37	3,540.78	69.59	51.880	
2,000.00	1,886.68	1,826.68	1,886.68	11.20	62.11	79.04	-1,185.19	-3,565.12	3,597.93	3,524.69	73.24	49.128	
2,100.00	1,970.92	1,910.92	1,970.92	11.93	65.05	79.76	-1,185.19	-3,565.12	3,586.24	3,509.35	76.89	46.639	
2,200.00	2,055.17	2,004.83	2,055.17	12.66	68.32	80.48	-1,185.19	-3,565.12	3,575.34	3,494.44	80.90	44.194	
2,300.00	2,139.41	2,079.41	2,139.41	13.40	70.92	81.20	-1,185.19	-3,565.12	3,565.21	3,480.97	84.24	42.320	
2,400.00	2,223.66	2,163.66	2,223.66	14.14	73.86	81.93	-1,185.19	-3,565.12	3,555.87	3,467.94	87.93	40.439	
2,500.00	2,307.90	2,247.90	2,307.90	14.89	76.80	82.66	-1,185.19	-3,565.12	3,547.33	3,455.70	91.63	38.715	
2,600.00	2,392.14	2,332.14	2,392.14	15.65	79.74	83.39	-1,185.19	-3,565.12	3,539.58	3,444.26	95.33	37.131	
2,700.00	2,476.39	2,416.39	2,476.39	16.41	82.68	84.12	-1,185.19	-3,565.12	3,532.64	3,433.61	99.03	35.671	
2,800.00	2,560.63	2,500.63	2,560.63	17.17	85.61	84.86	-1,185.19	-3,565.12	3,526.51	3,423.77	102.74	34.324	
2,900.00	2,644.88	2,584.88	2,644.88	17.93	88.55	85.59	-1,185.19	-3,565.12	3,521.20	3,414.74	106.46	33.077	
3,000.00	2,729.12	2,669.12	2,729.12	18.70	91.49	86.33	-1,185.19	-3,565.12	3,516.70	3,406.53	110.17	31.920	
3,100.00	2,813.36	2,753.36	2,813.36	19.47	94.43	87.07	-1,185.19	-3,565.12	3,513.02	3,399.13	113.89	30.846	
3,200.00	2,897.61	2,837.61	2,897.61	20.25	97.37	87.81	-1,185.19	-3,565.12	3,510.16	3,392.56	117.61	29.847	
3,300.00	2,981.85	2,921.85	2,981.85	21.02	100.31	88.55	-1,185.19	-3,565.12	3,508.13	3,386.81	121.33	28.915	
3,400.00	3,066.10	3,006.10	3,066.10	21.80	103.25	89.29	-1,185.19	-3,565.12	3,506.93	3,381.88	125.05	28.045	
3,495.39	3,146.45	3,086.45	3,146.45	22.54	106.05	90.00	-1,185.19	-3,565.12	3,506.55	3,377.96	128.59	27.269	
3,500.00	3,150.34	3,109.66	3,150.34	22.58	106.86	90.03	-1,185.19	-3,565.12	3,506.55	3,377.12	129.44	27.091	
3,600.00	3,234.58	3,174.58	3,234.58	23.35	109.13	90.78	-1,185.19	-3,565.12	3,507.01	3,374.52	132.48	26.471	
3,700.00	3,318.83	3,258.83	3,318.83	24.13	112.07	91.52	-1,185.19	-3,565.12	3,508.29	3,372.09	136.20	25.758	
3,800.00	3,403.07	3,343.07	3,403.07	24.92	115.01	92.26	-1,185.19	-3,565.12	3,510.39	3,370.48	139.91	25.089	
3,900.00	3,487.32	3,427.32	3,487.32	25.70	117.95	93.00	-1,185.19	-3,565.12	3,513.32	3,369.70	143.63	24.461	
4,000.00	3,571.56	3,511.56	3,571.56	26.48	120.89	93.74	-1,185.19	-3,565.12	3,517.08	3,369.74	147.34	23.871	
4,100.00	3,655.80	3,604.20	3,655.80	27.27	124.12	94.48	-1,185.19	-3,565.12	3,521.65	3,370.31	151.34	23.270	
4,200.00	3,740.05	3,680.05	3,740.05	28.05	126.77	95.21	-1,185.19	-3,565.12	3,527.04	3,372.29	154.75	22.792	
4,300.00	3,824.29	3,764.29	3,824.29	28.84	129.71	95.95	-1,185.19	-3,565.12	3,533.25	3,374.80	158.45	22.298	
4,400.00	3,908.54	3,848.54	3,908.54	29.62	132.65	96.68	-1,185.19	-3,565.12	3,540.26	3,378.11	162.15	21.833	
4,500.00	3,992.78	3,932.78	3,992.78	30.41	135.59	97.41	-1,185.19	-3,565.12	3,548.08	3,382.24	165.85	21.394	
4,600.00	4,077.03	4,017.03	4,077.03	31.20	138.53	98.14	-1,185.19	-3,565.12	3,556.70	3,387.17	169.54	20.979	
4,700.00	4,161.27	4,101.27	4,161.27	31.98	141.47	98.86	-1,185.19	-3,565.12	3,566.11	3,392.89	173.22	20.587	
4,800.00	4,245.51	4,185.51	4,245.51	32.77	144.41	99.59	-1,185.19	-3,565.12	3,576.31	3,399.41	176.90	20.216	
4,900.00	4,329.76	4,269.76	4,329.76	33.56	147.35	100.30	-1,185.19	-3,565.12	3,587.29	3,406.71	180.58	19.866	
5,000.00	4,414.00	4,354.00	4,414.00	34.35	150.29	101.02	-1,185.19	-3,565.12	3,599.04	3,414.79	184.25	19.534	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STOCKOVER 16-1(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	4,438.25	4,498.25	35.14	153.23	101.73	-1,185.19	-3,565.12	3,611.56	3,423.65	187.91	19.219		
5,200.00	4,582.49	4,522.49	4,582.49	35.93	156.17	102.44	-1,185.19	-3,565.12	3,624.83	3,433.26	191.57	18.921		
5,300.00	4,666.73	4,606.73	4,666.73	36.72	159.11	103.15	-1,185.19	-3,565.12	3,638.86	3,443.63	195.23	18.639		
5,400.00	4,750.98	4,709.02	4,750.98	37.51	162.68	103.85	-1,185.19	-3,565.12	3,653.62	3,454.12	199.51	18.313		
5,500.00	4,835.22	4,775.22	4,835.22	38.30	164.99	104.55	-1,185.19	-3,565.12	3,669.12	3,466.60	202.52	18.117		
5,600.00	4,919.47	4,859.47	4,919.47	39.09	167.93	105.24	-1,185.19	-3,565.12	3,685.34	3,479.18	206.16	17.876		
5,700.00	5,003.71	4,943.71	5,003.71	39.88	170.87	105.93	-1,185.19	-3,565.12	3,702.27	3,492.48	209.79	17.647		
5,800.00	5,088.06	5,028.06	5,088.06	40.67	173.82	106.72	-1,185.19	-3,565.12	3,719.86	3,506.44	213.42	17.430		
5,900.00	5,173.83	5,113.83	5,173.83	41.44	176.81	107.72	-1,185.19	-3,565.12	3,737.33	3,520.25	217.08	17.217		
6,000.00	5,261.34	5,201.34	5,261.34	42.18	179.86	108.67	-1,185.19	-3,565.12	3,754.34	3,533.57	220.77	17.006		
6,100.00	5,350.49	5,309.51	5,350.49	42.88	183.64	109.58	-1,185.19	-3,565.12	3,770.76	3,545.61	225.15	16.748		
6,200.00	5,441.16	5,381.16	5,441.16	43.56	186.14	110.43	-1,185.19	-3,565.12	3,786.46	3,558.23	228.23	16.591		
6,300.00	5,533.25	5,473.25	5,533.25	44.20	189.35	111.22	-1,185.19	-3,565.12	3,801.34	3,569.34	232.00	16.385		
6,400.00	5,626.65	5,566.65	5,626.65	44.82	192.61	111.95	-1,185.19	-3,565.12	3,815.27	3,579.49	235.79	16.181		
6,500.00	5,721.23	5,661.23	5,721.23	45.40	195.92	112.62	-1,185.19	-3,565.12	3,828.18	3,588.59	239.59	15.978		
6,600.00	5,816.89	5,756.89	5,816.89	45.94	199.25	113.23	-1,185.19	-3,565.12	3,839.96	3,596.55	243.41	15.776		
6,700.00	5,913.51	5,853.51	5,913.51	46.45	202.63	113.76	-1,185.19	-3,565.12	3,850.53	3,603.30	247.23	15.575		
6,800.00	6,010.97	5,950.97	6,010.97	46.93	206.03	114.23	-1,185.19	-3,565.12	3,859.83	3,608.77	251.06	15.374		
6,900.00	6,109.15	6,049.15	6,109.15	47.38	209.46	114.63	-1,185.19	-3,565.12	3,867.80	3,612.91	254.89	15.174		
7,000.00	6,207.93	6,147.93	6,207.93	47.80	212.90	114.96	-1,185.19	-3,565.12	3,874.38	3,615.66	258.72	14.975		
7,100.00	6,307.19	6,247.19	6,307.19	48.18	216.37	115.21	-1,185.19	-3,565.12	3,879.53	3,616.99	262.54	14.777		
7,200.00	6,406.82	6,346.82	6,406.82	48.53	219.85	115.39	-1,185.19	-3,565.12	3,883.21	3,616.87	266.34	14.580		
7,300.00	6,506.68	6,446.68	6,506.68	48.84	223.33	115.50	-1,185.19	-3,565.12	3,885.42	3,615.28	270.14	14.383		
7,400.00	6,606.66	6,546.66	6,606.66	49.10	226.82	28.53	-1,185.19	-3,565.12	3,886.11	3,612.22	273.89	14.189		
7,500.00	6,706.21	6,646.21	6,706.21	49.35	230.30	28.91	-1,185.19	-3,565.12	3,878.78	3,601.17	277.61	13.972		
7,600.00	6,803.22	6,743.22	6,803.22	49.59	233.68	30.03	-1,185.19	-3,565.12	3,857.88	3,576.67	281.21	13.719		
7,700.00	6,895.32	6,835.32	6,895.32	49.82	236.90	32.00	-1,185.19	-3,565.12	3,824.00	3,539.40	284.60	13.436		
7,800.00	6,980.23	6,920.23	6,980.23	50.03	239.86	34.99	-1,185.19	-3,565.12	3,778.07	3,490.37	287.70	13.132		
7,900.00	7,055.85	7,004.15	7,055.85	50.21	242.79	39.29	-1,185.19	-3,565.12	3,721.36	3,430.63	290.74	12.800		
8,000.00	7,120.34	7,060.34	7,120.34	50.36	244.75	45.29	-1,185.19	-3,565.12	3,655.43	3,362.65	292.78	12.485		
8,100.00	7,172.10	7,112.10	7,172.10	50.47	246.56	53.44	-1,185.19	-3,565.12	3,582.09	3,287.41	294.68	12.156		
8,200.00	7,209.85	7,149.85	7,209.85	50.55	247.88	64.04	-1,185.19	-3,565.12	3,503.32	3,207.21	296.11	11.831		
8,300.00	7,232.68	7,172.68	7,232.68	50.61	248.67	76.81	-1,185.19	-3,565.12	3,421.23	3,124.16	297.07	11.517		
8,400.00	7,240.00	7,180.00	7,240.00	50.65	248.93	90.35	-1,185.19	-3,565.12	3,337.97	3,040.41	297.57	11.218		
8,500.00	7,239.60	7,179.60	7,239.60	50.69	248.92	90.33	-1,185.19	-3,565.12	3,255.34	2,957.47	297.87	10.929		
8,600.00	7,239.19	7,179.19	7,239.19	50.75	248.90	90.32	-1,185.19	-3,565.12	3,173.70	2,875.45	298.26	10.641		
8,700.00	7,238.78	7,178.78	7,238.78	50.85	248.89	90.31	-1,185.19	-3,565.12	3,093.15	2,794.41	298.73	10.354		
8,800.00	7,238.38	7,178.38	7,238.38	51.02	248.87	90.30	-1,185.19	-3,565.12	3,013.75	2,714.44	299.31	10.069		
8,900.00	7,237.97	7,177.97	7,237.97	51.32	248.86	90.28	-1,185.19	-3,565.12	2,935.62	2,635.63	299.99	9.786		
9,000.00	7,237.57	7,177.57	7,237.57	51.95	248.85	90.27	-1,185.19	-3,565.12	2,858.85	2,558.05	300.80	9.504		
9,100.00	7,237.16	7,177.16	7,237.16	53.10	248.83	90.26	-1,185.19	-3,565.12	2,783.56	2,481.83	301.73	9.225		
9,200.00	7,236.76	7,176.76	7,236.76	54.69	248.82	90.25	-1,185.19	-3,565.12	2,709.86	2,407.06	302.80	8.949		
9,300.00	7,236.35	7,176.35	7,236.35	56.53	248.80	90.23	-1,185.19	-3,565.12	2,637.90	2,333.88	304.02	8.677		
9,400.00	7,235.94	7,175.94	7,235.94	58.53	248.79	90.22	-1,185.19	-3,565.12	2,567.81	2,262.42	305.40	8.408		
9,500.00	7,235.54	7,175.54	7,235.54	60.62	248.77	90.21	-1,185.19	-3,565.12	2,499.76	2,192.83	306.94	8.144		
9,600.00	7,235.13	7,175.13	7,235.13	62.80	248.76	90.20	-1,185.19	-3,565.12	2,433.92	2,125.28	308.64	7.886		
9,700.00	7,234.73	7,174.73	7,234.73	65.03	248.75	90.18	-1,185.19	-3,565.12	2,370.47	2,059.95	310.52	7.634		
9,800.00	7,234.32	7,174.32	7,234.32	67.32	248.73	90.17	-1,185.19	-3,565.12	2,309.61	1,997.03	312.58	7.389		
9,900.00	7,233.92	7,173.92	7,233.92	69.66	248.72	90.16	-1,185.19	-3,565.12	2,251.54	1,936.74	314.80	7.152		
10,000.00	7,233.51	7,173.51	7,233.51	72.03	248.70	90.15	-1,185.19	-3,565.12	2,196.50	1,879.31	317.19	6.925		
10,100.00	7,233.10	7,173.10	7,233.10	74.45	248.69	90.13	-1,185.19	-3,565.12	2,144.70	1,824.97	319.74	6.708		
10,200.00	7,232.70	7,172.70	7,232.70	76.89	248.68	90.12	-1,185.19	-3,565.12	2,096.40	1,773.98	322.42	6.502		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STOCKOVER 16-1(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,300.00	7,232.29	7,172.29	7,232.29	79.36	248.66	90.11	-1,185.19	-3,565.12	2,051.84	1,726.61	325.23	6.309	
10,400.00	7,231.89	7,171.89	7,231.89	81.86	248.65	90.10	-1,185.19	-3,565.12	2,011.27	1,683.13	328.14	6.129	
10,500.00	7,231.48	7,171.48	7,231.48	84.38	248.63	90.08	-1,185.19	-3,565.12	1,974.94	1,643.81	331.12	5.964	
10,600.00	7,231.08	7,171.08	7,231.08	86.93	248.62	90.07	-1,185.19	-3,565.12	1,943.07	1,608.93	334.14	5.815	
10,700.00	7,230.67	7,170.67	7,230.67	89.49	248.60	90.06	-1,185.19	-3,565.12	1,915.90	1,578.75	337.15	5.683	
10,800.00	7,230.26	7,170.26	7,230.26	92.07	248.59	90.05	-1,185.19	-3,565.12	1,893.63	1,553.50	340.13	5.567	
10,900.00	7,229.86	7,169.86	7,229.86	94.67	248.58	90.03	-1,185.19	-3,565.12	1,876.43	1,533.40	343.03	5.470	
11,000.00	7,229.45	7,169.45	7,229.45	97.28	248.56	90.02	-1,185.19	-3,565.12	1,864.44	1,518.63	345.81	5.391	
11,100.00	7,229.05	7,169.05	7,229.05	99.90	248.55	90.01	-1,185.19	-3,565.12	1,857.76	1,509.33	348.43	5.332	
11,174.24	7,228.75	7,168.75	7,228.75	101.86	248.54	90.00	-1,185.19	-3,565.12	1,856.28	1,506.02	350.26	5.300 CC	
11,200.00	7,228.64	7,168.64	7,228.64	102.54	248.53	90.00	-1,185.19	-3,565.12	1,856.46	1,505.59	350.87	5.291 ES	
11,300.00	7,228.24	7,168.24	7,228.24	105.19	248.52	89.98	-1,185.19	-3,565.12	1,860.53	1,507.45	353.08	5.269	
11,400.00	7,227.83	7,167.83	7,227.83	107.85	248.51	89.97	-1,185.19	-3,565.12	1,869.96	1,514.90	355.06	5.267 SF	
11,500.00	7,227.42	7,167.42	7,227.42	110.52	248.49	89.96	-1,185.19	-3,565.12	1,884.64	1,527.86	356.78	5.282	
11,600.00	7,227.02	7,167.02	7,227.02	113.20	248.48	89.95	-1,185.19	-3,565.12	1,904.48	1,546.23	358.25	5.316	
11,700.00	7,226.61	7,166.61	7,226.61	115.89	248.46	89.93	-1,185.19	-3,565.12	1,929.30	1,569.84	359.45	5.367	
11,800.00	7,226.21	7,166.21	7,226.21	118.59	248.45	89.92	-1,185.19	-3,565.12	1,958.91	1,598.50	360.41	5.435	
11,900.00	7,225.80	7,165.80	7,225.80	121.29	248.43	89.91	-1,185.19	-3,565.12	1,993.11	1,631.98	361.12	5.519	
12,000.00	7,225.40	7,165.40	7,225.40	124.00	248.42	89.90	-1,185.19	-3,565.12	2,031.66	1,670.04	361.62	5.618	
12,100.00	7,224.99	7,164.99	7,224.99	126.72	248.41	89.88	-1,185.19	-3,565.12	2,074.31	1,712.40	361.92	5.731	
12,200.00	7,224.58	7,164.58	7,224.58	129.44	248.39	89.87	-1,185.19	-3,565.12	2,120.83	1,758.80	362.03	5.858	
12,300.00	7,224.18	7,164.18	7,224.18	132.17	248.38	89.86	-1,185.19	-3,565.12	2,170.96	1,808.98	361.98	5.997	
12,400.00	7,223.77	7,163.77	7,223.77	134.91	248.36	89.85	-1,185.19	-3,565.12	2,224.46	1,862.66	361.80	6.148	
12,500.00	7,223.37	7,163.37	7,223.37	137.65	248.35	89.83	-1,185.19	-3,565.12	2,281.09	1,919.59	361.50	6.310	
12,600.00	7,222.96	7,162.96	7,222.96	140.39	248.34	89.82	-1,185.19	-3,565.12	2,340.62	1,979.52	361.10	6.482	
12,700.00	7,222.55	7,162.55	7,222.55	143.14	248.32	89.81	-1,185.19	-3,565.12	2,402.84	2,042.22	360.62	6.663	
12,800.00	7,222.15	7,162.15	7,222.15	145.89	248.31	89.80	-1,185.19	-3,565.12	2,467.55	2,107.47	360.08	6.853	
12,900.00	7,221.74	7,161.74	7,221.74	148.65	248.29	89.78	-1,185.19	-3,565.12	2,534.55	2,175.07	359.48	7.051	
13,000.00	7,221.34	7,161.34	7,221.34	151.41	248.28	89.77	-1,185.19	-3,565.12	2,603.67	2,244.83	358.84	7.256	
13,100.00	7,220.93	7,160.93	7,220.93	154.18	248.26	89.76	-1,185.19	-3,565.12	2,674.74	2,316.57	358.17	7.468	
13,200.00	7,220.53	7,160.53	7,220.53	156.94	248.25	89.75	-1,185.19	-3,565.12	2,747.62	2,390.13	357.48	7.686	
13,300.00	7,220.12	7,160.12	7,220.12	159.72	248.24	89.73	-1,185.19	-3,565.12	2,822.15	2,465.37	356.78	7.910	
13,400.00	7,219.71	7,159.71	7,219.71	162.49	248.22	89.72	-1,185.19	-3,565.12	2,898.22	2,542.15	356.07	8.139	
13,500.00	7,219.31	7,159.31	7,219.31	165.27	248.21	89.71	-1,185.19	-3,565.12	2,975.71	2,620.34	355.36	8.374	
13,600.00	7,218.90	7,158.90	7,218.90	168.05	248.19	89.70	-1,185.19	-3,565.12	3,054.50	2,699.85	354.65	8.613	
13,700.00	7,218.50	7,158.50	7,218.50	170.83	248.18	89.68	-1,185.19	-3,565.12	3,134.50	2,780.55	353.95	8.856	
13,800.00	7,218.09	7,158.09	7,218.09	173.61	248.17	89.67	-1,185.19	-3,565.12	3,215.63	2,862.37	353.26	9.103	
13,900.00	7,217.69	7,157.69	7,217.69	176.40	248.15	89.66	-1,185.19	-3,565.12	3,297.79	2,945.21	352.57	9.353	
14,000.00	7,217.28	7,157.28	7,217.28	179.19	248.14	89.65	-1,185.19	-3,565.12	3,380.91	3,029.01	351.90	9.608	
14,100.00	7,216.87	7,156.87	7,216.87	181.98	248.12	89.63	-1,185.19	-3,565.12	3,464.92	3,113.68	351.24	9.865	
14,200.00	7,216.47	7,156.47	7,216.47	184.78	248.11	89.62	-1,185.19	-3,565.12	3,549.76	3,199.16	350.60	10.125	
14,300.00	7,216.06	7,156.06	7,216.06	187.57	248.09	89.61	-1,185.19	-3,565.12	3,635.38	3,285.40	349.98	10.387	
14,400.00	7,215.66	7,155.66	7,215.66	190.37	248.08	89.60	-1,185.19	-3,565.12	3,721.71	3,372.34	349.37	10.653	
14,500.00	7,215.25	7,155.25	7,215.25	193.17	248.07	89.58	-1,185.19	-3,565.12	3,808.71	3,459.93	348.77	10.920	
14,600.00	7,214.85	7,154.85	7,214.85	195.97	248.05	89.57	-1,185.19	-3,565.12	3,896.33	3,548.13	348.20	11.190	
14,700.00	7,214.44	7,154.44	7,214.44	198.77	248.04	89.56	-1,185.19	-3,565.12	3,984.53	3,636.90	347.64	11.462	
14,800.00	7,214.03	7,154.03	7,214.03	201.58	248.02	89.55	-1,185.19	-3,565.12	4,073.29	3,726.19	347.09	11.735	
14,900.00	7,213.63	7,153.63	7,213.63	204.38	248.01	89.53	-1,185.19	-3,565.12	4,162.55	3,815.98	346.57	12.011	
15,000.00	7,213.22	7,153.22	7,213.22	207.19	248.00	89.52	-1,185.19	-3,565.12	4,252.29	3,906.23	346.05	12.288	
15,100.00	7,212.82	7,152.82	7,212.82	210.00	247.98	89.51	-1,185.19	-3,565.12	4,342.47	3,996.91	345.56	12.566	
15,200.00	7,212.41	7,152.41	7,212.41	212.81	247.97	89.50	-1,185.19	-3,565.12	4,433.08	4,088.00	345.08	12.847	
15,300.00	7,212.01	7,152.01	7,212.01	215.62	247.95	89.48	-1,185.19	-3,565.12	4,524.09	4,179.47	344.62	13.128	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												HARVESTERS STATE 7-15 PAD - STOCKOVER 16-1(PR_75CC) - OH - OH		Offset Site Error:		0.00 ft			
Survey Program:												100-2° Cone@2.448 Sigma				Offset Well Error:		3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning					
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor							
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)								
15,400.00	7,211.60	7,151.60	7,211.60	218.43	247.94	89.47	-1,185.19	-3,565.12	4,615.46	4,271.30	344.17	13.411							
15,500.00	7,211.19	7,151.19	7,211.19	221.25	247.92	89.46	-1,185.19	-3,565.12	4,707.19	4,363.46	343.73	13.694							
15,600.00	7,210.79	7,150.79	7,210.79	224.06	247.91	89.45	-1,185.19	-3,565.12	4,799.25	4,455.94	343.31	13.979							
15,700.00	7,210.38	7,150.38	7,210.38	226.88	247.90	89.43	-1,185.19	-3,565.12	4,891.62	4,548.72	342.90	14.265							
15,794.94	7,210.00	7,150.00	7,210.00	229.55	247.88	89.42	-1,185.19	-3,565.12	4,979.59	4,637.06	342.52	14.538							



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-07D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	57.29	3.28	3.28	-89.83	26.34	-9,142.03	9,142.25					
100.00	100.00	184.81	208.80	3.28	3.34	-89.83	27.79	-9,140.47	9,141.16	9,134.53	6.62	1,380.459		
200.00	200.00	289.93	313.90	3.34	3.45	-89.82	28.31	-9,139.13	9,139.88	9,133.09	6.79	1,346.442		
300.00	299.98	370.47	394.44	3.44	3.58	87.56	28.48	-9,138.21	9,138.67	9,131.66	7.02	1,302.681		
400.00	399.84	465.52	489.49	3.59	3.76	87.62	28.72	-9,137.26	9,137.44	9,130.09	7.35	1,243.280		
500.00	499.45	548.69	572.64	3.79	3.95	87.69	28.94	-9,136.50	9,136.18	9,128.44	7.74	1,180.829		
600.00	598.70	625.21	649.17	4.03	4.15	87.77	28.81	-9,135.97	9,135.00	9,126.82	8.17	1,117.499		
700.00	697.47	738.28	762.23	4.31	4.47	87.91	28.66	-9,135.41	9,133.91	9,125.13	8.78	1,040.691		
800.00	795.62	846.02	869.97	4.64	4.80	88.07	28.81	-9,134.58	9,132.45	9,123.02	9.43	968.091		
900.00	893.06	927.16	951.11	5.00	5.06	88.21	28.94	-9,133.98	9,130.95	9,120.89	10.06	907.729		
1,000.00	989.64	984.00	1,007.95	5.40	5.26	88.33	28.88	-9,133.66	9,129.62	9,118.98	10.65	857.426		
1,100.00	1,085.27	984.00	1,007.95	5.83	5.26	88.34	28.88	-9,133.66	9,129.08	9,118.00	11.08	823.916		
1,156.33	1,138.67	1,033.22	1,057.17	6.09	5.42	88.44	28.86	-9,133.76	9,128.73	9,117.23	11.50	793.604		
1,200.00	1,179.82	1,044.77	1,068.72	6.29	5.46	88.46	28.87	-9,133.88	9,128.80	9,117.06	11.75	777.132		
1,300.00	1,273.17	1,112.00	1,135.93	6.79	5.68	88.60	29.11	-9,135.33	9,129.82	9,117.34	12.47	731.939		
1,400.00	1,365.21	1,112.00	1,135.93	7.33	5.68	88.58	29.11	-9,135.33	9,130.96	9,117.95	13.01	702.014		
1,500.00	1,455.84	1,112.00	1,135.93	7.89	5.68	88.54	29.11	-9,135.33	9,133.11	9,119.54	13.57	672.888		
1,600.00	1,544.94	1,112.00	1,135.93	8.50	5.68	88.48	29.11	-9,135.33	9,136.26	9,122.09	14.17	644.681		
1,700.00	1,632.39	1,165.19	1,189.08	9.13	5.86	88.56	29.37	-9,137.44	9,139.80	9,124.82	14.98	610.098		
1,800.00	1,718.11	1,186.64	1,210.50	9.80	5.93	88.54	29.46	-9,138.55	9,144.35	9,128.64	15.72	581.816		
1,900.00	1,802.44	1,241.00	1,264.74	10.49	6.12	88.69	29.63	-9,142.05	9,149.97	9,133.38	16.59	551.492		
2,000.00	1,886.68	1,241.00	1,264.74	11.20	6.12	88.69	29.63	-9,142.05	9,156.04	9,138.74	17.29	529.428		
2,100.00	1,970.92	1,241.00	1,264.74	11.93	6.12	88.69	29.63	-9,142.05	9,163.19	9,145.18	18.01	508.909		
2,200.00	2,055.17	1,241.00	1,264.74	12.66	6.12	88.69	29.63	-9,142.05	9,171.42	9,152.70	18.72	489.842		
2,300.00	2,139.41	1,288.99	1,312.57	13.40	6.29	88.85	29.75	-9,145.97	9,180.20	9,160.59	19.62	467.938		
2,400.00	2,223.66	1,308.76	1,332.26	14.14	6.36	88.92	29.80	-9,147.82	9,190.07	9,169.65	20.42	450.126		
2,500.00	2,307.90	1,369.00	1,392.14	14.89	6.58	89.12	29.95	-9,154.31	9,201.21	9,179.84	21.37	430.618		
2,600.00	2,392.14	1,369.00	1,392.14	15.65	6.58	89.12	29.95	-9,154.31	9,212.59	9,190.49	22.10	416.899		
2,700.00	2,476.39	1,369.00	1,392.14	16.41	6.58	89.12	29.95	-9,154.31	9,225.03	9,202.20	22.83	404.104		
2,800.00	2,560.63	1,369.00	1,392.14	17.17	6.58	89.12	29.95	-9,154.31	9,238.54	9,214.99	23.56	392.158		
2,900.00	2,644.88	1,412.86	1,435.66	17.93	6.74	89.27	29.96	-9,159.80	9,252.73	9,228.27	24.46	378.344		
3,000.00	2,729.12	1,435.44	1,458.03	18.70	6.83	89.34	29.88	-9,162.85	9,267.86	9,242.59	25.27	366.726		
3,100.00	2,813.36	1,498.00	1,519.90	19.47	7.07	89.55	29.38	-9,172.12	9,284.16	9,257.91	26.25	353.706		
3,200.00	2,897.61	1,498.00	1,519.90	20.25	7.07	89.55	29.38	-9,172.12	9,300.72	9,273.75	26.97	344.819		
3,300.00	2,981.85	1,498.00	1,519.90	21.02	7.07	89.55	29.38	-9,172.12	9,318.33	9,290.63	27.69	336.476		
3,400.00	3,066.10	1,498.00	1,519.90	21.80	7.07	89.55	29.38	-9,172.12	9,336.97	9,308.56	28.41	328.635		
3,500.00	3,150.34	1,543.90	1,565.16	22.58	7.26	89.69	28.84	-9,179.72	9,356.18	9,326.87	29.32	319.132		
3,600.00	3,234.58	1,564.38	1,585.32	23.35	7.34	89.76	28.57	-9,183.33	9,376.38	9,346.27	30.12	311.349		
3,700.00	3,318.83	1,626.00	1,645.80	24.13	7.60	89.96	27.70	-9,195.06	9,397.79	9,366.70	31.09	302.291		
3,800.00	3,403.07	1,626.00	1,645.80	24.92	7.60	89.96	27.70	-9,195.06	9,419.38	9,387.59	31.79	296.279		
3,900.00	3,487.32	1,626.00	1,645.80	25.70	7.60	89.96	27.70	-9,195.06	9,441.98	9,409.49	32.49	290.605		
4,000.00	3,571.56	1,626.00	1,645.80	26.48	7.60	89.96	27.70	-9,195.06	9,465.58	9,432.40	33.18	285.247		
4,100.00	3,655.80	1,626.00	1,645.80	27.27	7.60	89.96	27.70	-9,195.06	9,490.18	9,456.31	33.87	280.184		
4,200.00	3,740.05	1,684.12	1,702.60	28.05	7.87	90.14	26.73	-9,207.31	9,515.01	9,480.18	34.82	273.242		
4,300.00	3,824.29	1,703.56	1,721.54	28.84	7.96	90.20	26.36	-9,211.68	9,540.98	9,505.39	35.59	268.066		
4,400.00	3,908.54	1,754.00	1,770.54	29.62	8.19	90.36	25.29	-9,223.64	9,567.97	9,531.47	36.50	262.105		
4,500.00	3,992.78	1,754.00	1,770.54	30.41	8.19	90.36	25.29	-9,223.64	9,595.36	9,558.19	37.17	258.129		
4,600.00	4,077.03	1,754.00	1,770.54	31.20	8.19	90.36	25.29	-9,223.64	9,623.71	9,585.88	37.83	254.363		
4,700.00	4,161.27	1,754.00	1,770.54	31.98	8.19	90.36	25.29	-9,223.64	9,653.02	9,614.53	38.49	250.795		
4,800.00	4,245.51	1,809.44	1,824.16	32.77	8.48	90.52	24.13	-9,237.66	9,682.69	9,643.27	39.42	245.638		
4,900.00	4,329.76	1,832.37	1,846.28	33.56	8.60	90.59	23.70	-9,243.69	9,713.30	9,673.12	40.18	241.740		
5,000.00	4,414.00	1,883.00	1,894.99	34.35	8.86	90.75	22.89	-9,257.47	9,744.79	9,703.71	41.08	237.192		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-07D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	1,883.00	1,894.99	35.14	8.86	90.75	22.89	-9,257.47	9,776.73	9,735.02	41.72	234.355		
5,200.00	4,582.49	1,883.00	1,894.99	35.93	8.86	90.75	22.89	-9,257.47	9,809.59	9,767.24	42.34	231.663		
5,300.00	4,666.73	1,931.20	1,941.20	36.72	9.14	90.89	22.17	-9,271.15	9,842.99	9,799.76	43.23	227.700		
5,400.00	4,750.98	1,958.26	1,967.08	37.51	9.29	90.98	21.74	-9,279.03	9,877.13	9,833.14	43.99	224.516		
5,500.00	4,835.22	2,011.00	2,017.39	38.30	9.60	91.13	20.88	-9,294.84	9,912.05	9,867.15	44.90	220.760		
5,600.00	4,919.47	2,011.00	2,017.39	39.09	9.60	91.13	20.88	-9,294.84	9,947.42	9,901.91	45.50	218.607		
5,700.00	5,003.71	2,050.12	2,054.61	39.88	9.84	91.25	20.21	-9,306.87	9,983.50	9,937.17	46.33	215.487		
8,400.00	7,240.00	7,166.68	7,016.52	50.65	40.21	86.55	-16.04	-10,307.03	9,993.64	9,910.63	83.00	120.403		
8,500.00	7,239.60	7,170.84	7,020.68	50.69	40.22	86.63	-16.09	-10,307.14	9,988.53	9,815.32	83.20	118.972		
8,600.00	7,239.19	7,174.92	7,024.76	50.75	40.23	86.70	-16.14	-10,307.25	9,803.51	9,720.09	83.42	117.520		
8,700.00	7,238.78	7,178.92	7,028.75	50.85	40.25	86.78	-16.19	-10,307.36	9,708.60	9,624.94	83.66	116.047		
8,800.00	7,238.38	7,182.83	7,032.67	51.02	40.26	86.85	-16.23	-10,307.46	9,613.78	9,529.86	83.92	114.554		
8,900.00	7,237.97	7,186.67	7,036.50	51.32	40.28	86.92	-16.28	-10,307.56	9,519.08	9,434.87	84.21	113.039		
9,000.00	7,237.57	7,190.43	7,040.26	51.95	40.29	86.99	-16.32	-10,307.66	9,424.48	9,339.96	84.52	111.504		
9,100.00	7,237.16	7,194.12	7,043.95	53.10	40.30	87.06	-16.36	-10,307.76	9,329.99	9,245.14	84.86	109.950		
9,200.00	7,236.76	7,197.74	7,047.56	54.69	40.32	87.13	-16.41	-10,307.85	9,235.62	9,150.40	85.22	108.375		
9,300.00	7,236.35	7,201.28	7,051.11	56.53	40.33	87.19	-16.45	-10,307.94	9,141.37	9,055.76	85.61	106.781		
9,400.00	7,235.94	7,204.77	7,054.59	58.53	40.34	87.26	-16.48	-10,308.03	9,047.24	8,961.21	86.03	105.169		
9,500.00	7,235.54	7,208.18	7,058.00	60.62	40.35	87.32	-16.52	-10,308.12	8,953.23	8,866.76	86.47	103.539		
9,600.00	7,235.13	7,211.53	7,061.36	62.80	40.37	87.38	-16.56	-10,308.20	8,859.36	8,772.41	86.95	101.891		
9,700.00	7,234.73	7,214.82	7,064.64	65.03	40.38	87.45	-16.59	-10,308.28	8,765.62	8,678.16	87.46	100.227		
9,800.00	7,234.32	7,218.05	7,067.87	67.32	40.39	87.51	-16.63	-10,308.36	8,672.02	8,584.02	88.00	98.547		
9,900.00	7,233.92	7,221.22	7,071.04	69.66	40.40	87.57	-16.66	-10,308.44	8,578.57	8,489.99	88.57	96.853		
10,000.00	7,233.51	7,224.34	7,074.16	72.03	40.41	87.62	-16.69	-10,308.51	8,485.26	8,396.08	89.18	95.145		
10,100.00	7,233.10	7,227.40	7,077.22	74.45	40.42	87.68	-16.73	-10,308.58	8,392.11	8,302.28	89.83	93.425		
10,200.00	7,232.70	7,230.40	7,080.22	76.89	40.43	87.74	-16.76	-10,308.66	8,299.11	8,208.60	90.51	91.694		
10,300.00	7,232.29	7,233.36	7,083.17	79.36	40.44	87.79	-16.79	-10,308.73	8,206.28	8,115.05	91.23	89.953		
10,400.00	7,231.89	7,236.26	7,086.07	81.86	40.46	87.85	-16.81	-10,308.79	8,113.62	8,021.63	91.99	88.203		
10,500.00	7,231.48	7,239.11	7,088.92	84.38	40.47	87.90	-16.84	-10,308.86	8,021.13	7,928.34	92.79	86.446		
10,600.00	7,231.08	7,241.91	7,091.73	86.93	40.48	87.95	-16.87	-10,308.92	7,928.83	7,835.20	93.63	84.684		
10,700.00	7,230.67	7,244.67	7,094.48	89.49	40.49	88.00	-16.90	-10,308.99	7,836.71	7,742.20	94.51	82.917		
10,800.00	7,230.26	7,247.38	7,097.19	92.07	40.50	88.05	-16.92	-10,309.05	7,744.79	7,649.35	95.44	81.148		
10,900.00	7,229.86	7,250.05	7,099.86	94.67	40.50	88.10	-16.95	-10,309.11	7,653.07	7,556.66	96.41	79.377		
11,000.00	7,229.45	7,252.67	7,102.48	97.28	40.51	88.15	-16.97	-10,309.17	7,561.56	7,464.13	97.43	77.607		
11,100.00	7,229.05	7,255.25	7,105.05	99.90	40.52	88.20	-17.00	-10,309.23	7,470.27	7,371.77	98.50	75.838		
11,200.00	7,228.64	7,257.78	7,107.59	102.54	40.53	88.25	-17.02	-10,309.28	7,379.20	7,279.58	99.62	74.073		
11,300.00	7,228.24	7,260.28	7,110.09	105.19	40.54	88.29	-17.04	-10,309.34	7,288.37	7,187.58	100.79	72.314		
11,400.00	7,227.83	7,262.73	7,112.54	107.85	40.55	88.34	-17.07	-10,309.39	7,197.77	7,095.77	102.01	70.561		
11,500.00	7,227.42	7,265.15	7,114.96	110.52	40.56	88.38	-17.09	-10,309.44	7,107.43	7,004.15	103.28	68.816		
11,600.00	7,227.02	7,267.53	7,117.34	113.20	40.57	88.43	-17.11	-10,309.50	7,017.36	6,912.75	104.61	67.081		
11,700.00	7,226.61	7,269.87	7,119.68	115.89	40.58	88.47	-17.13	-10,309.55	6,927.55	6,821.55	105.99	65.358		
11,800.00	7,226.21	7,272.18	7,121.98	118.59	40.58	88.52	-17.15	-10,309.59	6,838.02	6,730.59	107.44	63.647		
11,900.00	7,225.80	7,274.45	7,124.25	121.29	40.59	88.56	-17.17	-10,309.64	6,748.79	6,639.85	108.94	61.950		
12,000.00	7,225.40	7,276.79	7,126.59	124.00	40.60	88.60	-17.19	-10,309.69	6,659.87	6,549.36	110.50	60.269		
12,100.00	7,224.99	7,279.32	7,129.13	126.72	40.61	88.65	-17.21	-10,309.74	6,571.26	6,459.13	112.13	58.605		
12,200.00	7,224.58	7,281.81	7,131.62	129.44	40.62	88.70	-17.23	-10,309.80	6,482.98	6,369.16	113.82	56.958		
12,300.00	7,224.18	7,284.26	7,134.06	132.17	40.63	88.74	-17.25	-10,309.85	6,395.05	6,279.47	115.58	55.332		
12,400.00	7,223.77	7,286.67	7,136.47	134.91	40.64	88.79	-17.27	-10,309.90	6,307.47	6,190.07	117.40	53.726		
12,500.00	7,223.37	7,289.03	7,138.83	137.65	40.64	88.83	-17.29	-10,309.94	6,220.28	6,100.98	119.30	52.142		
12,600.00	7,222.96	7,291.35	7,141.15	140.39	40.65	88.87	-17.31	-10,309.99	6,133.47	6,012.20	121.26	50.581		
12,700.00	7,222.55	7,293.64	7,143.44	143.14	40.66	88.92	-17.33	-10,310.04	6,047.06	5,923.76	123.30	49.044		
12,800.00	7,222.15	7,295.89	7,145.69	145.89	40.67	88.96	-17.35	-10,310.08	5,961.08	5,835.67	125.41	47.532		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-07D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
12,900.00	7,221.74	7,298.10	7,147.90	148.65	40.68	89.00	-17.37	-10,310.13	5,875.55	5,747.95	127.60	46.045		
13,000.00	7,221.34	7,300.27	7,150.07	151.41	40.68	89.04	-17.39	-10,310.17	5,790.48	5,660.60	129.87	44.585		
13,100.00	7,220.93	7,302.42	7,152.21	154.18	40.69	89.08	-17.40	-10,310.21	5,705.89	5,573.66	132.23	43.153		
13,200.00	7,220.53	7,304.52	7,154.32	156.94	40.70	89.12	-17.42	-10,310.25	5,621.81	5,487.15	134.66	41.748		
13,300.00	7,220.12	7,306.60	7,156.39	159.72	40.71	89.16	-17.44	-10,310.29	5,538.25	5,401.07	137.18	40.372		
13,400.00	7,219.71	7,308.64	7,158.43	162.49	40.71	89.20	-17.46	-10,310.33	5,455.25	5,315.46	139.79	39.025		
13,500.00	7,219.31	7,310.64	7,160.44	165.27	40.72	89.23	-17.47	-10,310.37	5,372.83	5,230.34	142.49	37.707		
13,600.00	7,218.90	7,312.62	7,162.42	168.05	40.73	89.27	-17.49	-10,310.41	5,291.01	5,145.73	145.28	36.420		
13,700.00	7,218.50	7,314.57	7,164.36	170.83	40.73	89.31	-17.51	-10,310.44	5,209.83	5,061.66	148.16	35.163		
13,800.00	7,218.09	7,316.49	7,166.28	173.61	40.74	89.34	-17.52	-10,310.48	5,129.31	4,978.16	151.14	33.937		
13,900.00	7,217.69	7,318.38	7,168.17	176.40	40.75	89.38	-17.54	-10,310.51	5,049.48	4,895.26	154.22	32.742		
14,000.00	7,217.28	7,320.24	7,170.03	179.19	40.75	89.41	-17.55	-10,310.55	4,970.39	4,812.99	157.40	31.578		
14,100.00	7,216.87	7,322.07	7,171.86	181.98	40.76	89.45	-17.57	-10,310.58	4,892.06	4,731.38	160.68	30.446		
14,200.00	7,216.47	7,323.87	7,173.67	184.78	40.77	89.48	-17.58	-10,310.62	4,814.53	4,650.47	164.06	29.345		
14,300.00	7,216.06	7,325.65	7,175.45	187.57	40.77	89.51	-17.60	-10,310.65	4,737.85	4,570.29	167.56	28.276		
14,400.00	7,215.66	7,327.41	7,177.20	190.37	40.78	89.55	-17.61	-10,310.68	4,662.04	4,490.89	171.15	27.239		
14,500.00	7,215.25	7,329.14	7,178.93	193.17	40.78	89.58	-17.63	-10,310.71	4,587.17	4,412.31	174.86	26.233		
14,600.00	7,214.85	7,330.84	7,180.63	195.97	40.79	89.61	-17.64	-10,310.74	4,513.27	4,334.59	178.68	25.259		
14,700.00	7,214.44	7,332.52	7,182.31	198.77	40.80	89.64	-17.65	-10,310.77	4,440.39	4,257.78	182.61	24.317		
14,800.00	7,214.03	7,334.17	7,183.96	201.58	40.80	89.67	-17.67	-10,310.80	4,368.58	4,181.93	186.65	23.406		
14,900.00	7,213.63	7,335.80	7,185.59	204.38	40.81	89.70	-17.68	-10,310.83	4,297.90	4,107.10	190.80	22.526		
15,000.00	7,213.22	7,337.41	7,187.20	207.19	40.81	89.73	-17.69	-10,310.86	4,228.40	4,033.34	195.06	21.678		
15,100.00	7,212.82	7,339.00	7,188.79	210.00	40.82	89.76	-17.71	-10,310.88	4,160.14	3,960.72	199.43	20.861		
15,200.00	7,212.41	7,340.57	7,190.35	212.81	40.82	89.79	-17.72	-10,310.91	4,093.19	3,889.29	203.90	20.074		
15,300.00	7,212.01	7,342.11	7,191.90	215.62	40.83	89.82	-17.73	-10,310.94	4,027.61	3,819.12	208.48	19.318		
15,400.00	7,211.60	7,343.63	7,193.42	218.43	40.84	89.85	-17.75	-10,310.96	3,963.47	3,750.30	213.17	18.593		
15,500.00	7,211.19	7,345.13	7,194.92	221.25	40.84	89.88	-17.76	-10,310.99	3,900.83	3,682.88	217.95	17.898		
15,600.00	7,210.79	7,346.62	7,196.40	224.06	40.85	89.91	-17.77	-10,311.01	3,839.78	3,616.95	222.83	17.232		
15,700.00	7,210.38	7,348.08	7,197.87	226.88	40.85	89.93	-17.78	-10,311.04	3,780.38	3,552.59	227.79	16.596		
15,794.94	7,210.00	7,349.45	7,199.24	229.55	40.86	89.96	-17.79	-10,311.06	3,725.60	3,493.03	232.57	16.019	CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-08(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	37.00	3.28	3.28	-89.49	80.75	-9,145.00	9,145.43					
100.00	100.00	63.00	100.00	3.28	3.46	-89.49	80.75	-9,145.00	9,145.36	9,138.61	6.74	1,356.042		
200.00	200.00	163.00	200.00	3.34	5.13	-89.49	80.75	-9,145.00	9,145.36	9,136.89	8.47	1,080.074		
300.00	299.98	262.98	299.98	3.44	8.13	87.87	80.75	-9,145.00	9,145.29	9,133.73	11.57	790.721		
400.00	399.84	362.84	399.84	3.59	11.40	87.91	80.75	-9,145.00	9,145.10	9,130.11	14.99	610.024		
500.00	499.45	462.45	499.45	3.79	14.77	87.97	80.75	-9,145.00	9,144.78	9,126.23	18.55	492.883		
600.00	598.70	561.70	598.70	4.03	18.16	88.05	80.75	-9,145.00	9,144.36	9,122.17	22.19	412.073		
700.00	697.47	660.47	697.47	4.31	21.56	88.16	80.75	-9,145.00	9,143.83	9,117.96	25.88	353.371		
800.00	795.62	758.62	795.62	4.64	24.95	88.29	80.75	-9,145.00	9,143.23	9,113.64	29.59	308.974		
900.00	893.06	856.06	893.06	5.00	28.33	88.44	80.75	-9,145.00	9,142.57	9,109.24	33.33	274.315		
1,000.00	989.64	952.64	989.64	5.40	31.68	88.61	80.75	-9,145.00	9,141.88	9,104.80	37.08	246.563		
1,100.00	1,085.27	1,048.27	1,085.27	5.83	35.00	88.80	80.75	-9,145.00	9,141.19	9,100.36	40.83	223.878		
1,200.00	1,179.82	1,142.82	1,179.82	6.29	38.29	89.00	80.75	-9,145.00	9,140.53	9,095.95	44.58	205.016		
1,300.00	1,273.17	1,236.17	1,273.17	6.79	41.54	89.23	80.75	-9,145.00	9,139.94	9,091.61	48.33	189.106		
1,400.00	1,365.21	1,328.21	1,365.21	7.33	44.74	89.46	80.75	-9,145.00	9,139.45	9,087.38	52.07	175.522		
1,500.00	1,455.84	1,418.84	1,455.84	7.89	47.90	89.71	80.75	-9,145.00	9,139.11	9,083.32	55.79	163.803		
1,600.00	1,544.94	1,507.94	1,544.94	8.50	51.00	89.96	80.75	-9,145.00	9,138.97	9,079.47	59.50	153.601		
1,613.80	1,557.11	1,520.11	1,557.11	8.58	51.43	90.00	80.75	-9,145.00	9,138.97	9,078.96	60.01	152.293		
1,700.00	1,632.39	1,604.61	1,632.39	9.13	54.37	90.23	80.75	-9,145.00	9,139.06	9,075.56	63.50	143.921		
1,800.00	1,718.11	1,681.11	1,718.11	9.80	57.04	90.50	80.75	-9,145.00	9,139.44	9,072.61	66.83	136.747		
1,900.00	1,802.44	1,765.44	1,802.44	10.49	59.98	90.78	80.75	-9,145.00	9,140.15	9,069.68	70.47	129.707		
2,000.00	1,886.68	1,849.68	1,886.68	11.20	62.91	91.06	80.75	-9,145.00	9,141.18	9,067.06	74.12	123.337		
2,100.00	1,970.92	1,933.92	1,970.92	11.93	65.85	91.35	80.75	-9,145.00	9,142.52	9,064.75	77.77	117.552		
2,200.00	2,055.17	2,018.17	2,055.17	12.66	68.79	91.63	80.75	-9,145.00	9,144.18	9,062.74	81.44	112.278		
2,300.00	2,139.41	2,102.41	2,139.41	13.40	71.72	91.92	80.75	-9,145.00	9,146.16	9,061.04	85.12	107.452		
2,400.00	2,223.66	2,186.66	2,223.66	14.14	74.66	92.20	80.75	-9,145.00	9,148.46	9,059.66	88.80	103.023		
2,500.00	2,307.90	2,270.90	2,307.90	14.89	77.60	92.48	80.75	-9,145.00	9,151.07	9,058.58	92.49	98.944		
2,600.00	2,392.14	2,355.14	2,392.14	15.65	80.54	92.77	80.75	-9,145.00	9,154.00	9,057.82	96.18	95.177		
2,700.00	2,476.39	2,439.39	2,476.39	16.41	83.48	93.05	80.75	-9,145.00	9,157.24	9,057.37	99.87	91.688		
2,800.00	2,560.63	2,523.63	2,560.63	17.17	86.42	93.33	80.75	-9,145.00	9,160.80	9,057.23	103.57	88.448		
2,900.00	2,644.88	2,607.88	2,644.88	17.93	89.36	93.62	80.75	-9,145.00	9,164.68	9,057.40	107.27	85.433		
3,000.00	2,729.12	2,707.88	2,729.12	18.70	92.84	93.90	80.75	-9,145.00	9,168.87	9,057.34	111.53	82.212		
3,100.00	2,813.36	2,776.36	2,813.36	19.47	95.23	94.18	80.75	-9,145.00	9,173.37	9,058.69	114.68	79.990		
3,200.00	2,897.61	2,860.61	2,897.61	20.25	98.17	94.47	80.75	-9,145.00	9,178.19	9,059.80	118.39	77.526		
3,300.00	2,981.85	2,944.85	2,981.85	21.02	101.11	94.75	80.75	-9,145.00	9,183.32	9,061.23	122.10	75.214		
3,400.00	3,066.10	3,029.10	3,066.10	21.80	104.05	95.03	80.75	-9,145.00	9,188.77	9,062.96	125.81	73.040		
3,500.00	3,150.34	3,113.34	3,150.34	22.58	106.99	95.32	80.75	-9,145.00	9,194.53	9,065.01	129.51	70.992		
3,600.00	3,234.58	3,202.42	3,234.58	23.35	110.10	95.60	80.75	-9,145.00	9,200.60	9,067.20	133.39	68.973		
3,700.00	3,318.83	3,281.83	3,318.83	24.13	112.87	95.88	80.75	-9,145.00	9,206.98	9,070.04	136.94	67.236		
3,800.00	3,403.07	3,366.07	3,403.07	24.92	115.81	96.16	80.75	-9,145.00	9,213.67	9,073.03	140.65	65.510		
3,900.00	3,487.32	3,450.32	3,487.32	25.70	118.75	96.44	80.75	-9,145.00	9,220.67	9,076.32	144.36	63.874		
4,000.00	3,571.56	3,534.56	3,571.56	26.48	121.69	96.72	80.75	-9,145.00	9,227.99	9,079.92	148.07	62.323		
4,100.00	3,655.80	3,618.80	3,655.80	27.27	124.63	97.00	80.75	-9,145.00	9,235.61	9,083.83	151.78	60.849		
4,200.00	3,740.05	3,703.05	3,740.05	28.05	127.57	97.28	80.75	-9,145.00	9,243.53	9,088.04	155.49	59.448		
4,300.00	3,824.29	3,787.29	3,824.29	28.84	130.51	97.56	80.75	-9,145.00	9,251.77	9,092.57	159.20	58.115		
4,400.00	3,908.54	3,871.54	3,908.54	29.62	133.45	97.84	80.75	-9,145.00	9,260.31	9,097.40	162.91	56.844		
4,500.00	3,992.78	3,955.78	3,992.78	30.41	136.39	98.12	80.75	-9,145.00	9,269.15	9,102.54	166.62	55.631		
4,600.00	4,077.03	4,040.03	4,077.03	31.20	139.33	98.40	80.75	-9,145.00	9,278.30	9,107.98	170.33	54.474		
4,700.00	4,161.27	4,124.27	4,161.27	31.98	142.27	98.68	80.75	-9,145.00	9,287.76	9,113.73	174.03	53.368		
4,800.00	4,245.51	4,208.51	4,245.51	32.77	145.21	98.96	80.75	-9,145.00	9,297.52	9,119.78	177.74	52.310		
4,900.00	4,329.76	4,307.24	4,329.76	33.56	148.66	99.23	80.75	-9,145.00	9,307.57	9,125.62	181.95	51.154		
5,000.00	4,414.00	4,377.00	4,414.00	34.35	151.09	99.51	80.75	-9,145.00	9,317.93	9,132.78	185.15	50.326		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-08(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,498.25	4,461.25	4,498.25	35.14	154.03	99.79	80.75	-9,145.00	9,328.59	9,139.74	188.86	49.395		
5,200.00	4,582.49	4,545.49	4,582.49	35.93	156.97	100.06	80.75	-9,145.00	9,339.55	9,146.99	192.56	48.502		
5,300.00	4,666.73	4,629.73	4,666.73	36.72	159.91	100.34	80.75	-9,145.00	9,350.80	9,154.54	196.26	47.645		
5,400.00	4,750.98	4,713.98	4,750.98	37.51	162.85	100.61	80.75	-9,145.00	9,362.36	9,162.39	199.96	46.821		
5,500.00	4,835.22	4,801.78	4,835.22	38.30	165.92	100.89	80.75	-9,145.00	9,374.20	9,170.42	203.79	46.000		
5,600.00	4,919.47	4,882.47	4,919.47	39.09	168.73	101.16	80.75	-9,145.00	9,386.34	9,178.98	207.36	45.266		
5,700.00	5,003.71	4,966.71	5,003.71	39.88	171.67	101.44	80.75	-9,145.00	9,398.78	9,187.72	211.06	44.532		
5,800.00	5,088.06	5,051.06	5,088.06	40.67	174.62	101.79	80.75	-9,145.00	9,411.47	9,196.71	214.75	43.824		
5,900.00	5,173.83	5,136.83	5,173.83	41.44	177.61	102.30	80.75	-9,145.00	9,423.88	9,205.40	218.48	43.134		
6,000.00	5,261.34	5,224.34	5,261.34	42.18	180.67	102.79	80.75	-9,145.00	9,435.80	9,213.56	222.24	42.458		
6,100.00	5,350.49	5,313.49	5,350.49	42.88	183.78	103.25	80.75	-9,145.00	9,447.17	9,221.15	226.02	41.797		
6,200.00	5,441.16	5,404.16	5,441.16	43.56	186.94	103.69	80.75	-9,145.00	9,457.94	9,228.11	229.83	41.151		
6,300.00	5,533.25	5,503.75	5,533.25	44.20	190.42	104.10	80.75	-9,145.00	9,468.05	9,234.13	233.93	40.475		
6,400.00	5,626.65	5,589.65	5,626.65	44.82	193.42	104.48	80.75	-9,145.00	9,477.45	9,239.94	237.51	39.904		
6,500.00	5,721.23	5,684.23	5,721.23	45.40	196.72	104.83	80.75	-9,145.00	9,486.10	9,244.73	241.36	39.302		
6,600.00	5,816.89	5,779.89	5,816.89	45.94	200.06	105.14	80.75	-9,145.00	9,493.95	9,248.72	245.23	38.715		
6,700.00	5,913.51	5,876.51	5,913.51	46.45	203.43	105.42	80.75	-9,145.00	9,500.96	9,251.87	249.09	38.142		
6,800.00	6,010.97	5,973.97	6,010.97	46.93	206.83	105.67	80.75	-9,145.00	9,507.10	9,254.14	252.96	37.583		
6,900.00	6,109.15	6,072.15	6,109.15	47.38	210.26	105.88	80.75	-9,145.00	9,512.35	9,255.53	256.82	37.039		
7,000.00	6,207.93	6,170.93	6,207.93	47.80	213.71	106.05	80.75	-9,145.00	9,516.67	9,256.00	260.67	36.508		
7,100.00	6,307.19	6,270.19	6,307.19	48.18	217.17	106.18	80.75	-9,145.00	9,520.04	9,255.53	264.51	35.991		
7,200.00	6,406.82	6,369.82	6,406.82	48.53	220.65	106.28	80.75	-9,145.00	9,522.46	9,254.12	268.33	35.488		
7,300.00	6,506.68	6,469.68	6,506.68	48.84	224.14	106.34	80.75	-9,145.00	9,523.90	9,251.76	272.13	34.997		
7,400.00	6,606.66	6,569.66	6,606.66	49.10	227.63	19.35	80.75	-9,145.00	9,524.35	9,248.47	275.88	34.524		
7,500.00	6,706.21	6,669.21	6,706.21	49.35	231.10	19.61	80.75	-9,145.00	9,516.47	9,236.87	279.60	34.036		
7,600.00	6,803.22	6,766.22	6,803.22	49.59	234.49	20.37	80.75	-9,145.00	9,494.00	9,210.78	283.22	33.521		
7,700.00	6,895.32	6,858.32	6,895.32	49.82	237.70	21.72	80.75	-9,145.00	9,457.51	9,170.86	286.65	32.993		
7,800.00	6,980.23	6,943.23	6,980.23	50.03	240.67	23.84	80.75	-9,145.00	9,407.91	9,118.11	289.80	32.463		
7,900.00	7,055.85	7,018.85	7,055.85	50.21	243.31	27.02	80.75	-9,145.00	9,346.45	9,053.85	292.61	31.942		
8,000.00	7,120.34	7,083.34	7,120.34	50.36	245.56	31.80	80.75	-9,145.00	9,274.68	8,979.68	295.00	31.440		
8,100.00	7,172.10	7,135.10	7,172.10	50.47	247.36	39.12	80.75	-9,145.00	9,194.38	8,897.44	296.94	30.964		
8,200.00	7,209.85	7,172.85	7,209.85	50.55	248.68	50.54	80.75	-9,145.00	9,107.57	8,809.18	298.39	30.523		
8,300.00	7,232.68	7,204.32	7,232.68	50.61	249.78	67.95	80.75	-9,145.00	9,016.40	8,716.77	299.63	30.092		
8,400.00	7,240.00	7,203.00	7,240.00	50.65	249.73	90.61	80.75	-9,145.00	8,923.15	8,623.39	299.76	29.768		
8,500.00	7,239.60	7,202.60	7,239.60	50.69	249.72	90.61	80.75	-9,145.00	8,829.68	8,529.74	299.94	29.438		
8,600.00	7,239.19	7,202.19	7,239.19	50.75	249.71	90.60	80.75	-9,145.00	8,736.36	8,436.21	300.15	29.106		
8,700.00	7,238.78	7,201.78	7,238.78	50.85	249.69	90.59	80.75	-9,145.00	8,643.19	8,342.80	300.39	28.773		
8,800.00	7,238.38	7,201.38	7,238.38	51.02	249.68	90.59	80.75	-9,145.00	8,550.18	8,249.51	300.67	28.438		
8,900.00	7,237.97	7,200.97	7,237.97	51.32	249.66	90.58	80.75	-9,145.00	8,457.32	8,156.36	300.97	28.101		
9,000.00	7,237.57	7,200.57	7,237.57	51.95	249.65	90.57	80.75	-9,145.00	8,364.63	8,063.33	301.30	27.762		
9,100.00	7,237.16	7,200.16	7,237.16	53.10	249.63	90.56	80.75	-9,145.00	8,272.11	7,970.45	301.67	27.421		
9,200.00	7,236.76	7,200.24	7,236.76	54.69	249.64	90.56	80.75	-9,145.00	8,179.77	7,877.68	302.09	27.078		
9,300.00	7,236.35	7,200.65	7,236.35	56.53	249.65	90.55	80.75	-9,145.00	8,087.61	7,785.05	302.55	26.731		
9,400.00	7,235.94	7,201.06	7,235.94	58.53	249.67	90.54	80.75	-9,145.00	7,995.63	7,692.58	303.06	26.383		
9,500.00	7,235.54	7,201.46	7,235.54	60.62	249.68	90.53	80.75	-9,145.00	7,903.85	7,600.25	303.60	26.034		
9,600.00	7,235.13	7,201.87	7,235.13	62.80	249.69	90.53	80.75	-9,145.00	7,812.28	7,508.09	304.18	25.683		
9,700.00	7,234.73	7,202.27	7,234.73	65.03	249.71	90.52	80.75	-9,145.00	7,720.91	7,416.10	304.81	25.330		
9,800.00	7,234.32	7,202.68	7,234.32	67.32	249.72	90.51	80.75	-9,145.00	7,629.76	7,324.28	305.48	24.977		
9,900.00	7,233.92	7,203.08	7,233.92	69.66	249.74	90.50	80.75	-9,145.00	7,538.83	7,232.64	306.19	24.622		
10,000.00	7,233.51	7,203.49	7,233.51	72.03	249.75	90.50	80.75	-9,145.00	7,448.13	7,141.19	306.95	24.265		
10,100.00	7,233.10	7,203.90	7,233.10	74.45	249.76	90.49	80.75	-9,145.00	7,357.68	7,049.93	307.75	23.908		
10,200.00	7,232.70	7,204.30	7,232.70	76.89	249.78	90.48	80.75	-9,145.00	7,267.48	6,958.87	308.61	23.549		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-08(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,232.29	7,204.71	7,232.29	79.36	249.79	90.47	80.75	-9,145.00	7,177.53	6,868.02	309.52	23.190		
10,400.00	7,231.89	7,205.11	7,231.89	81.86	249.81	90.47	80.75	-9,145.00	7,087.86	6,777.39	310.47	22.829		
10,500.00	7,231.48	7,205.52	7,231.48	84.38	249.82	90.46	80.75	-9,145.00	6,998.46	6,686.98	311.48	22.468		
10,600.00	7,231.08	7,205.92	7,231.08	86.93	249.84	90.45	80.75	-9,145.00	6,909.36	6,596.81	312.55	22.106		
10,700.00	7,230.67	7,206.33	7,230.67	89.49	249.85	90.45	80.75	-9,145.00	6,820.56	6,506.89	313.67	21.744		
10,800.00	7,230.26	7,206.74	7,230.26	92.07	249.86	90.44	80.75	-9,145.00	6,732.07	6,417.22	314.85	21.382		
10,900.00	7,229.86	7,207.14	7,229.86	94.67	249.88	90.43	80.75	-9,145.00	6,643.91	6,327.82	316.09	21.019		
11,000.00	7,229.45	7,207.55	7,229.45	97.28	249.89	90.42	80.75	-9,145.00	6,556.09	6,238.69	317.39	20.656		
11,100.00	7,229.05	7,207.95	7,229.05	99.90	249.91	90.42	80.75	-9,145.00	6,468.62	6,149.86	318.76	20.293		
11,200.00	7,228.64	7,208.36	7,228.64	102.54	249.92	90.41	80.75	-9,145.00	6,381.52	6,061.34	320.18	19.931		
11,300.00	7,228.24	7,208.76	7,228.24	105.19	249.93	90.40	80.75	-9,145.00	6,294.80	5,973.13	321.67	19.569		
11,400.00	7,227.83	7,209.17	7,227.83	107.85	249.95	90.39	80.75	-9,145.00	6,208.49	5,885.25	323.23	19.207		
11,500.00	7,227.42	7,209.58	7,227.42	110.52	249.96	90.39	80.75	-9,145.00	6,122.59	5,797.72	324.86	18.847		
11,600.00	7,227.02	7,209.98	7,227.02	113.20	249.98	90.38	80.75	-9,145.00	6,037.12	5,710.56	326.56	18.487		
11,700.00	7,226.61	7,189.61	7,226.61	115.89	249.27	90.37	80.75	-9,145.00	5,952.11	5,624.50	327.61	18.168		
11,800.00	7,226.21	7,189.21	7,226.21	118.59	249.25	90.36	80.75	-9,145.00	5,867.56	5,538.14	329.42	17.812		
11,900.00	7,225.80	7,188.80	7,225.80	121.29	249.24	90.36	80.75	-9,145.00	5,783.52	5,452.20	331.31	17.456		
12,000.00	7,225.40	7,188.40	7,225.40	124.00	249.22	90.35	80.75	-9,145.00	5,699.98	5,366.70	333.28	17.103		
12,100.00	7,224.99	7,187.99	7,224.99	126.72	249.21	90.34	80.75	-9,145.00	5,616.99	5,281.66	335.33	16.751		
12,200.00	7,224.58	7,187.58	7,224.58	129.44	249.20	90.33	80.75	-9,145.00	5,534.56	5,197.10	337.46	16.401		
12,300.00	7,224.18	7,187.18	7,224.18	132.17	249.18	90.33	80.75	-9,145.00	5,452.71	5,113.04	339.67	16.053		
12,400.00	7,223.77	7,186.77	7,223.77	134.91	249.17	90.32	80.75	-9,145.00	5,371.48	5,029.52	341.97	15.708		
12,500.00	7,223.37	7,186.37	7,223.37	137.65	249.15	90.31	80.75	-9,145.00	5,290.90	4,946.55	344.35	15.365		
12,600.00	7,222.96	7,185.96	7,222.96	140.39	249.14	90.31	80.75	-9,145.00	5,210.98	4,864.16	346.82	15.025		
12,700.00	7,222.55	7,185.55	7,222.55	143.14	249.12	90.30	80.75	-9,145.00	5,131.77	4,782.39	349.38	14.688		
12,800.00	7,222.15	7,185.15	7,222.15	145.89	249.11	90.29	80.75	-9,145.00	5,053.30	4,701.27	352.03	14.355		
12,900.00	7,221.74	7,184.74	7,221.74	148.65	249.10	90.28	80.75	-9,145.00	4,975.60	4,620.83	354.77	14.025		
13,000.00	7,221.34	7,184.34	7,221.34	151.41	249.08	90.28	80.75	-9,145.00	4,898.71	4,541.10	357.61	13.699		
13,100.00	7,220.93	7,183.93	7,220.93	154.18	249.07	90.27	80.75	-9,145.00	4,822.66	4,462.12	360.54	13.376		
13,200.00	7,220.53	7,183.53	7,220.53	156.94	249.05	90.26	80.75	-9,145.00	4,747.51	4,383.94	363.57	13.058		
13,300.00	7,220.12	7,183.12	7,220.12	159.72	249.04	90.25	80.75	-9,145.00	4,673.28	4,306.59	366.69	12.744		
13,400.00	7,219.71	7,182.71	7,219.71	162.49	249.03	90.25	80.75	-9,145.00	4,600.04	4,230.11	369.92	12.435		
13,500.00	7,219.31	7,182.31	7,219.31	165.27	249.01	90.24	80.75	-9,145.00	4,527.81	4,154.57	373.24	12.131		
13,600.00	7,218.90	7,181.90	7,218.90	168.05	249.00	90.23	80.75	-9,145.00	4,456.66	4,079.99	376.67	11.832		
13,700.00	7,218.50	7,181.50	7,218.50	170.83	248.98	90.22	80.75	-9,145.00	4,386.63	4,006.44	380.19	11.538		
13,800.00	7,218.09	7,181.09	7,218.09	173.61	248.97	90.22	80.75	-9,145.00	4,317.79	3,933.97	383.82	11.250		
13,900.00	7,217.69	7,180.69	7,217.69	176.40	248.95	90.21	80.75	-9,145.00	4,250.18	3,862.65	387.54	10.967		
14,000.00	7,217.28	7,180.28	7,217.28	179.19	248.94	90.20	80.75	-9,145.00	4,183.87	3,792.52	391.36	10.691		
14,100.00	7,216.87	7,179.87	7,216.87	181.98	248.93	90.19	80.75	-9,145.00	4,118.93	3,723.65	395.27	10.420		
14,200.00	7,216.47	7,179.47	7,216.47	184.78	248.91	90.19	80.75	-9,145.00	4,055.40	3,656.12	399.28	10.157		
14,300.00	7,216.06	7,179.06	7,216.06	187.57	248.90	90.18	80.75	-9,145.00	3,993.37	3,590.00	403.38	9.900		
14,400.00	7,215.66	7,178.66	7,215.66	190.37	248.88	90.17	80.75	-9,145.00	3,932.91	3,525.35	407.56	9.650		
14,500.00	7,215.25	7,178.25	7,215.25	193.17	248.87	90.17	80.75	-9,145.00	3,874.08	3,462.26	411.82	9.407		
14,600.00	7,214.85	7,177.85	7,214.85	195.97	248.86	90.16	80.75	-9,145.00	3,816.97	3,400.81	416.16	9.172		
14,700.00	7,214.44	7,177.44	7,214.44	198.77	248.84	90.15	80.75	-9,145.00	3,761.65	3,341.08	420.57	8.944		
14,800.00	7,214.03	7,177.03	7,214.03	201.58	248.83	90.14	80.75	-9,145.00	3,708.20	3,283.16	425.04	8.724		
14,900.00	7,213.63	7,176.63	7,213.63	204.38	248.81	90.14	80.75	-9,145.00	3,656.71	3,227.15	429.56	8.513		
15,000.00	7,213.22	7,176.22	7,213.22	207.19	248.80	90.13	80.75	-9,145.00	3,607.25	3,173.12	434.12	8.309		
15,100.00	7,212.82	7,175.82	7,212.82	210.00	248.78	90.12	80.75	-9,145.00	3,559.91	3,121.20	438.72	8.114		
15,200.00	7,212.41	7,175.41	7,212.41	212.81	248.77	90.11	80.75	-9,145.00	3,514.79	3,071.46	443.33	7.928		
15,300.00	7,212.01	7,175.01	7,212.01	215.62	248.76	90.11	80.75	-9,145.00	3,471.96	3,024.01	447.95	7.751		
15,400.00	7,211.60	7,174.60	7,211.60	218.43	248.74	90.10	80.75	-9,145.00	3,431.50	2,978.94	452.56	7.582		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-08(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,500.00	7,211.19	7,174.19	7,211.19	221.25	248.73	90.09	80.75	-9,145.00	3,393.52	2,936.38	457.14	7.423	
15,600.00	7,210.79	7,173.79	7,210.79	224.06	248.71	90.08	80.75	-9,145.00	3,358.08	2,896.40	461.68	7.274	
15,700.00	7,210.38	7,173.38	7,210.38	226.88	248.70	90.08	80.75	-9,145.00	3,325.27	2,859.11	466.16	7.133	
15,794.94	7,210.00	7,173.00	7,210.00	229.55	248.69	90.07	80.75	-9,145.00	3,296.63	2,826.28	470.35	7.009	CC, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I17-17D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	24.00	3.28	3.28	-89.68	51.61	-9,142.23	9,142.41					
100.00	100.00	112.38	136.38	3.28	3.29	-89.68	51.33	-9,141.86	9,142.08	9,135.50	6.58	1,389.853		
200.00	200.00	186.22	210.21	3.34	3.34	-89.68	51.41	-9,141.68	9,141.83	9,135.15	6.67	1,370.001		
282.52	282.51	247.86	271.86	3.42	3.39	87.68	51.47	-9,141.68	9,141.78	9,134.97	6.81	1,342.214		
300.00	299.98	261.39	285.39	3.44	3.41	87.68	51.46	-9,141.70	9,141.78	9,134.93	6.85	1,335.059		
400.00	399.84	348.38	372.38	3.59	3.53	87.71	51.37	-9,141.90	9,141.80	9,134.69	7.12	1,284.833		
500.00	499.45	436.58	460.57	3.79	3.68	87.76	51.24	-9,142.22	9,141.82	9,134.35	7.47	1,223.829		
600.00	598.70	617.44	641.44	4.03	4.10	87.90	50.72	-9,142.48	9,141.63	9,133.51	8.13	1,125.062		
700.00	697.47	679.69	703.69	4.31	4.26	87.98	50.41	-9,142.32	9,140.80	9,132.22	8.58	1,065.817		
800.00	795.62	727.00	750.99	4.64	4.40	88.04	50.18	-9,142.36	9,140.28	9,131.24	9.03	1,011.811		
823.26	818.36	727.00	750.99	4.72	4.40	88.04	50.18	-9,142.36	9,140.25	9,131.13	9.12	1,002.695		
900.00	893.06	727.00	750.99	5.00	4.40	88.04	50.18	-9,142.36	9,140.54	9,131.14	9.40	972.811		
1,000.00	989.64	796.51	820.50	5.40	4.60	88.13	50.27	-9,143.08	9,140.94	9,130.95	10.00	914.298		
1,100.00	1,085.27	856.00	879.96	5.83	4.78	88.22	51.02	-9,144.59	9,142.41	9,131.80	10.61	861.456		
1,200.00	1,179.82	856.00	879.96	6.29	4.78	88.19	51.02	-9,144.59	9,144.26	9,133.18	11.08	825.337		
1,300.00	1,273.17	856.00	879.96	6.79	4.78	88.13	51.02	-9,144.59	9,147.09	9,135.51	11.58	789.934		
1,400.00	1,365.21	856.00	879.96	7.33	4.78	88.05	51.02	-9,144.59	9,150.89	9,138.78	12.11	755.483		
1,500.00	1,455.84	923.03	946.91	7.89	5.00	88.15	52.55	-9,147.49	9,154.66	9,141.77	12.89	710.183		
1,600.00	1,544.94	984.00	1,007.72	8.50	5.20	88.24	54.53	-9,151.44	9,160.01	9,146.32	13.69	669.135		
1,700.00	1,632.39	984.00	1,007.72	9.13	5.20	88.13	54.53	-9,151.44	9,165.51	9,151.19	14.32	640.077		
1,800.00	1,718.11	984.00	1,007.72	9.80	5.20	88.00	54.53	-9,151.44	9,171.98	9,157.00	14.98	612.235		
1,900.00	1,802.44	984.00	1,007.72	10.49	5.20	87.96	54.53	-9,151.44	9,179.45	9,163.78	15.67	585.934		
2,000.00	1,886.68	1,028.52	1,052.05	11.20	5.35	88.11	56.47	-9,155.06	9,187.58	9,171.06	16.52	556.134		
2,100.00	1,970.92	1,049.81	1,073.22	11.93	5.43	88.19	57.61	-9,156.99	9,196.72	9,179.41	17.30	531.471		
2,200.00	2,055.17	1,112.00	1,134.95	12.66	5.65	88.42	61.68	-9,163.37	9,207.09	9,188.85	18.24	504.720		
2,300.00	2,139.41	1,112.00	1,134.95	13.40	5.65	88.42	61.68	-9,163.37	9,217.74	9,198.78	18.96	486.103		
2,400.00	2,223.66	1,112.00	1,134.95	14.14	5.65	88.42	61.68	-9,163.37	9,229.46	9,209.77	19.69	468.832		
2,500.00	2,307.90	1,112.00	1,134.95	14.89	5.65	88.42	61.68	-9,163.37	9,242.24	9,221.83	20.41	452.797		
2,600.00	2,392.14	1,170.97	1,193.32	15.65	5.88	88.64	66.53	-9,170.21	9,255.58	9,234.22	21.36	433.305		
2,700.00	2,476.39	1,199.60	1,221.61	16.41	5.99	88.75	69.20	-9,173.72	9,269.86	9,247.66	22.20	417.601		
2,800.00	2,560.63	1,241.00	1,262.44	17.17	6.15	88.91	73.45	-9,179.04	9,284.98	9,261.90	23.09	402.172		
2,900.00	2,644.88	1,241.00	1,262.44	17.93	6.15	88.91	73.45	-9,179.04	9,300.90	9,277.09	23.81	390.579		
3,000.00	2,729.12	1,303.45	1,323.88	18.70	6.41	89.16	80.96	-9,187.34	9,317.47	9,292.68	24.79	375.783		
3,100.00	2,813.36	1,342.82	1,362.49	19.47	6.58	89.31	86.50	-9,192.65	9,334.81	9,309.12	25.68	363.467		
3,200.00	2,897.61	1,369.00	1,388.11	20.25	6.70	89.42	90.53	-9,196.22	9,352.88	9,326.37	26.51	352.747		
3,300.00	2,981.85	1,405.75	1,424.01	21.02	6.87	89.57	96.54	-9,201.33	9,371.73	9,344.33	27.40	342.070		
3,400.00	3,066.10	1,433.17	1,450.73	21.80	7.00	89.69	101.24	-9,205.26	9,391.40	9,363.16	28.24	332.602		
3,500.00	3,150.34	1,460.21	1,477.04	22.58	7.12	89.80	106.06	-9,209.24	9,411.87	9,382.80	29.07	323.754		
3,600.00	3,234.58	1,498.00	1,513.73	23.35	7.31	89.96	113.10	-9,214.96	9,433.18	9,403.23	29.95	314.934		
3,700.00	3,318.83	1,498.00	1,513.73	24.13	7.31	89.96	113.10	-9,214.96	9,455.29	9,424.63	30.66	308.426		
3,800.00	3,403.07	1,538.88	1,553.31	24.92	7.52	90.13	121.05	-9,221.39	9,478.16	9,446.60	31.56	300.356		
3,900.00	3,487.32	1,564.45	1,578.02	25.70	7.65	90.24	126.16	-9,225.53	9,501.87	9,469.49	32.38	293.470		
4,000.00	3,571.56	1,626.00	1,637.33	26.48	7.98	90.50	138.90	-9,235.92	9,526.57	9,493.19	33.38	285.440		
4,100.00	3,655.80	1,626.00	1,637.33	27.27	7.98	90.50	138.90	-9,235.92	9,551.70	9,517.64	34.06	280.433		
4,200.00	3,740.05	1,626.00	1,637.33	28.05	7.98	90.50	138.90	-9,235.92	9,577.81	9,543.07	34.74	275.698		
4,300.00	3,824.29	1,664.89	1,674.67	28.84	8.20	90.67	147.37	-9,242.75	9,604.67	9,569.05	35.62	269.620		
4,400.00	3,908.54	1,689.43	1,698.16	29.62	8.34	90.77	152.94	-9,247.15	9,632.35	9,595.92	36.42	264.449		
4,500.00	3,992.78	1,713.57	1,721.21	30.41	8.48	90.88	158.59	-9,251.54	9,660.81	9,623.59	37.22	259.573		
4,600.00	4,077.03	1,754.00	1,759.70	31.20	8.72	91.05	168.44	-9,259.05	9,690.09	9,651.99	38.10	254.361		
4,700.00	4,161.27	1,754.00	1,759.70	31.98	8.72	91.05	168.44	-9,259.05	9,720.07	9,681.32	38.75	250.859		
4,800.00	4,245.51	1,754.00	1,759.70	32.77	8.72	91.05	168.44	-9,259.05	9,750.98	9,711.59	39.39	247.539		
4,900.00	4,329.76	1,754.00	1,759.70	33.56	8.72	91.05	168.44	-9,259.05	9,782.82	9,742.79	40.03	244.391		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I17-17D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.00	4,414.00	1,810.09	1,812.82	34.35	9.08	91.30	182.73	-9,269.97	9,814.94	9,773.95	40.99	239.441		
5,100.00	4,498.25	1,826.82	1,828.61	35.14	9.19	91.38	187.10	-9,273.38	9,848.17	9,806.46	41.72	236.080		
5,200.00	4,582.49	1,883.00	1,881.40	35.93	9.56	91.62	202.15	-9,285.32	9,882.50	9,839.84	42.67	231.612		
5,300.00	4,666.73	1,883.00	1,881.40	36.72	9.56	91.62	202.15	-9,285.32	9,917.10	9,873.82	43.28	229.132		
5,400.00	4,750.98	1,883.00	1,881.40	37.51	9.56	91.62	202.15	-9,285.32	9,952.57	9,908.69	43.89	226.779		
5,500.00	4,835.22	1,989.18	1,980.89	38.30	10.31	92.10	231.41	-9,308.14	9,988.73	9,943.58	45.15	221.215		
8,300.00	7,232.68	7,580.00	7,423.85	50.61	39.83	73.17	878.20	-9,860.62	9,977.32	9,893.66	83.66	119.256		
8,400.00	7,240.00	7,580.00	7,423.85	50.65	39.83	93.19	878.20	-9,860.62	9,885.83	9,801.99	83.85	117.905		
8,500.00	7,239.60	7,580.00	7,423.85	50.69	39.83	93.19	878.20	-9,860.62	9,794.31	9,710.24	84.06	116.510		
8,600.00	7,239.19	7,580.00	7,423.85	50.75	39.83	93.19	878.20	-9,860.62	9,702.95	9,618.63	84.32	115.079		
8,700.00	7,238.78	7,580.00	7,423.85	50.85	39.83	93.19	878.20	-9,860.62	9,611.76	9,527.16	84.60	113.613		
8,800.00	7,238.38	7,583.51	7,427.36	51.02	39.84	93.24	878.15	-9,860.56	9,520.75	9,435.82	84.93	112.095		
8,900.00	7,237.97	7,581.58	7,425.42	51.32	39.83	93.21	878.17	-9,860.59	9,429.93	9,344.64	85.28	110.570		
9,000.00	7,237.57	7,579.64	7,423.49	51.95	39.82	93.18	878.20	-9,860.62	9,339.29	9,253.61	85.67	109.011		
9,100.00	7,237.16	7,577.71	7,421.56	53.10	39.82	93.16	878.23	-9,860.65	9,248.84	9,162.74	86.10	107.421		
9,200.00	7,236.76	7,575.78	7,419.62	54.69	39.81	93.13	878.26	-9,860.68	9,158.59	9,072.03	86.57	105.799		
9,300.00	7,236.35	7,573.84	7,417.69	56.53	39.81	93.10	878.28	-9,860.71	9,068.55	8,981.47	87.07	104.148		
9,400.00	7,235.94	7,571.91	7,415.76	58.53	39.80	93.07	878.31	-9,860.74	8,978.71	8,891.09	87.62	102.470		
9,500.00	7,235.54	7,569.98	7,413.83	60.62	39.79	93.05	878.34	-9,860.77	8,889.10	8,800.88	88.22	100.765		
9,600.00	7,235.13	7,568.05	7,411.89	62.80	39.79	93.02	878.37	-9,860.80	8,799.70	8,710.85	88.85	99.036		
9,700.00	7,234.73	7,566.11	7,409.96	65.03	39.78	92.99	878.39	-9,860.83	8,710.54	8,621.00	89.54	97.285		
9,800.00	7,234.32	7,564.18	7,408.03	67.32	39.78	92.96	878.42	-9,860.86	8,621.61	8,531.35	90.26	95.515		
9,900.00	7,233.92	7,562.25	7,406.10	69.66	39.77	92.93	878.45	-9,860.89	8,532.93	8,441.89	91.04	93.726		
10,000.00	7,233.51	7,560.31	7,404.16	72.03	39.76	92.91	878.48	-9,860.92	8,444.50	8,352.64	91.87	91.922		
10,100.00	7,233.10	7,558.38	7,402.23	74.45	39.76	92.88	878.50	-9,860.95	8,356.33	8,263.59	92.74	90.105		
10,200.00	7,232.70	7,556.45	7,400.30	76.89	39.75	92.85	878.53	-9,860.98	8,268.43	8,174.77	93.66	88.278		
10,300.00	7,232.29	7,554.52	7,398.37	79.36	39.74	92.82	878.56	-9,861.01	8,180.81	8,086.17	94.64	86.443		
10,400.00	7,231.89	7,552.59	7,401.79	81.86	39.76	92.87	878.51	-9,860.95	8,093.47	7,997.78	95.69	84.583		
10,500.00	7,231.48	7,550.66	7,399.22	84.38	39.75	92.83	878.55	-9,860.99	8,006.43	7,909.66	96.76	82.742		
10,600.00	7,231.08	7,548.73	7,396.67	86.93	39.74	92.80	878.59	-9,861.03	7,919.69	7,821.80	97.89	80.900		
10,700.00	7,230.67	7,546.80	7,394.15	89.49	39.73	92.76	878.62	-9,861.07	7,833.28	7,734.20	99.08	79.060		
10,800.00	7,230.26	7,544.87	7,391.66	92.07	39.72	92.72	878.66	-9,861.11	7,747.19	7,646.86	100.32	77.223		
10,900.00	7,229.86	7,542.94	7,389.18	94.67	39.72	92.69	878.69	-9,861.15	7,661.43	7,559.81	101.62	75.393		
11,000.00	7,229.45	7,541.01	7,386.73	97.28	39.71	92.65	878.72	-9,861.19	7,576.02	7,473.05	102.97	73.572		
11,100.00	7,229.05	7,539.08	7,384.31	99.90	39.70	92.62	878.76	-9,861.22	7,490.98	7,386.59	104.39	71.762		
11,200.00	7,228.64	7,537.15	7,381.90	102.54	39.69	92.58	878.79	-9,861.26	7,406.31	7,300.45	105.86	69.964		
11,300.00	7,228.24	7,535.22	7,379.52	105.19	39.68	92.55	878.83	-9,861.30	7,322.02	7,214.63	107.39	68.182		
11,400.00	7,227.83	7,533.29	7,377.16	107.85	39.68	92.52	878.86	-9,861.34	7,238.13	7,129.15	108.98	66.416		
11,500.00	7,227.42	7,531.36	7,374.83	110.52	39.67	92.48	878.89	-9,861.37	7,154.66	7,044.03	110.64	64.669		
11,600.00	7,227.02	7,529.43	7,372.51	113.20	39.66	92.45	878.93	-9,861.41	7,071.62	6,959.26	112.35	62.942		
11,700.00	7,226.61	7,527.50	7,370.22	115.89	39.66	92.41	878.96	-9,861.44	6,989.01	6,874.88	114.13	61.237		
11,800.00	7,226.21	7,525.57	7,367.95	118.59	39.65	92.38	878.99	-9,861.48	6,906.87	6,790.90	115.97	59.556		
11,900.00	7,225.80	7,523.64	7,365.69	121.29	39.64	92.35	879.02	-9,861.51	6,825.21	6,707.32	117.88	57.899		
12,000.00	7,225.40	7,521.71	7,363.46	124.00	39.63	92.32	879.06	-9,861.54	6,744.03	6,624.18	119.86	56.268		
12,100.00	7,224.99	7,519.78	7,361.25	126.72	39.63	92.29	879.09	-9,861.58	6,663.37	6,541.47	121.90	54.664		
12,200.00	7,224.58	7,517.85	7,359.06	129.44	39.62	92.25	879.12	-9,861.61	6,583.24	6,459.23	124.01	53.088		
12,300.00	7,224.18	7,515.92	7,356.89	132.17	39.61	92.22	879.15	-9,861.64	6,503.66	6,377.47	126.18	51.542		
12,400.00	7,223.77	7,514.00	7,354.74	134.91	39.61	92.19	879.18	-9,861.67	6,424.64	6,296.21	128.43	50.025		
12,500.00	7,223.37	7,512.07	7,352.60	137.65	39.60	92.16	879.21	-9,861.70	6,346.22	6,215.48	130.75	48.538		
12,600.00	7,222.96	7,510.14	7,350.49	140.39	39.59	92.13	879.25	-9,861.73	6,268.42	6,135.28	133.14	47.082		
12,700.00	7,222.55	7,508.21	7,348.40	143.14	39.59	92.10	879.28	-9,861.76	6,191.25	6,055.65	135.60	45.659		
12,800.00	7,222.15	7,506.28	7,346.32	145.89	39.58	92.07	879.31	-9,861.79	6,114.74	5,976.60	138.13	44.267		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I17-17D(PR_75CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 78-MWD													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
12,900.00	7,221.74	7,500.40	7,344.26	148.65	39.57	92.04	879.34	-9,861.82	6,038.91	5,898.17	140.74	42.908		
13,000.00	7,221.34	7,498.36	7,342.22	151.41	39.57	92.01	879.37	-9,861.85	5,963.80	5,820.38	143.43	41.581		
13,100.00	7,220.93	7,496.33	7,340.20	154.18	39.56	91.98	879.40	-9,861.88	5,889.43	5,743.25	146.19	40.287		
13,200.00	7,220.53	7,494.33	7,338.19	156.94	39.55	91.95	879.43	-9,861.91	5,815.83	5,666.81	149.02	39.027		
13,300.00	7,220.12	7,492.34	7,336.20	159.72	39.55	91.92	879.46	-9,861.93	5,743.02	5,591.09	151.93	37.800		
13,400.00	7,219.71	7,490.37	7,334.23	162.49	39.54	91.89	879.49	-9,861.96	5,671.04	5,516.12	154.92	36.606		
13,500.00	7,219.31	7,488.41	7,332.28	165.27	39.53	91.87	879.51	-9,861.99	5,599.92	5,441.93	157.99	35.445		
13,600.00	7,218.90	7,486.48	7,330.34	168.05	39.53	91.84	879.54	-9,862.01	5,529.70	5,368.56	161.14	34.317		
13,700.00	7,218.50	7,484.55	7,328.42	170.83	39.52	91.81	879.57	-9,862.04	5,460.40	5,296.04	164.36	33.222		
13,800.00	7,218.09	7,482.65	7,326.51	173.61	39.52	91.78	879.60	-9,862.07	5,392.07	5,224.41	167.66	32.161		
13,900.00	7,217.69	7,480.76	7,324.63	176.40	39.51	91.76	879.63	-9,862.09	5,324.73	5,153.69	171.04	31.131		
14,000.00	7,217.28	7,478.88	7,322.75	179.19	39.50	91.73	879.66	-9,862.12	5,258.44	5,083.94	174.50	30.135		
14,100.00	7,216.87	7,477.03	7,320.89	181.98	39.50	91.70	879.68	-9,862.14	5,193.22	5,015.19	178.03	29.170		
14,200.00	7,216.47	7,475.18	7,319.05	184.78	39.49	91.68	879.71	-9,862.16	5,129.13	4,947.49	181.64	28.238		
14,300.00	7,216.06	7,473.36	7,317.23	187.57	39.49	91.65	879.74	-9,862.19	5,066.20	4,880.87	185.33	27.337		
14,400.00	7,215.66	7,471.54	7,315.41	190.37	39.48	91.62	879.77	-9,862.21	5,004.47	4,815.39	189.08	26.467		
14,500.00	7,215.25	7,469.75	7,313.62	193.17	39.48	91.60	879.79	-9,862.24	4,943.99	4,751.08	192.91	25.628		
14,600.00	7,214.85	7,467.96	7,311.83	195.97	39.47	91.57	879.82	-9,862.26	4,884.82	4,688.01	196.81	24.820		
14,700.00	7,214.44	7,466.20	7,310.07	198.77	39.46	91.55	879.85	-9,862.28	4,826.98	4,626.21	200.78	24.042		
14,800.00	7,214.03	7,464.44	7,308.31	201.58	39.46	91.52	879.88	-9,862.30	4,770.55	4,565.74	204.80	23.293		
14,900.00	7,213.63	7,462.70	7,306.57	204.38	39.45	91.49	879.90	-9,862.33	4,715.56	4,506.66	208.89	22.574		
15,000.00	7,213.22	7,460.97	7,304.85	207.19	39.45	91.47	879.93	-9,862.35	4,662.06	4,449.02	213.04	21.884		
15,100.00	7,212.82	7,459.26	7,303.13	210.00	39.44	91.44	879.95	-9,862.37	4,610.11	4,392.88	217.23	21.222		
15,200.00	7,212.41	7,457.56	7,301.44	212.81	39.44	91.42	879.98	-9,862.39	4,559.76	4,338.29	221.48	20.588		
15,300.00	7,212.01	7,455.88	7,299.75	215.62	39.43	91.40	880.01	-9,862.41	4,511.07	4,285.31	225.76	19.982		
15,400.00	7,211.60	7,454.21	7,298.08	218.43	39.43	91.37	880.03	-9,862.43	4,464.09	4,234.01	230.08	19.402		
15,500.00	7,211.19	7,452.55	7,296.42	221.25	39.42	91.35	880.06	-9,862.45	4,418.87	4,184.44	234.43	18.849		
15,600.00	7,210.79	7,450.90	7,294.77	224.06	39.42	91.32	880.08	-9,862.47	4,375.46	4,136.67	238.80	18.323		
15,700.00	7,210.38	7,449.27	7,293.14	226.88	39.41	91.30	880.11	-9,862.49	4,333.93	4,090.75	243.18	17.822		
15,794.94	7,210.00	7,447.73	7,291.60	229.55	39.41	91.28	880.13	-9,862.51	4,296.28	4,048.94	247.35	17.370	CC, ES, SF	

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to KB @ 4819.00ft

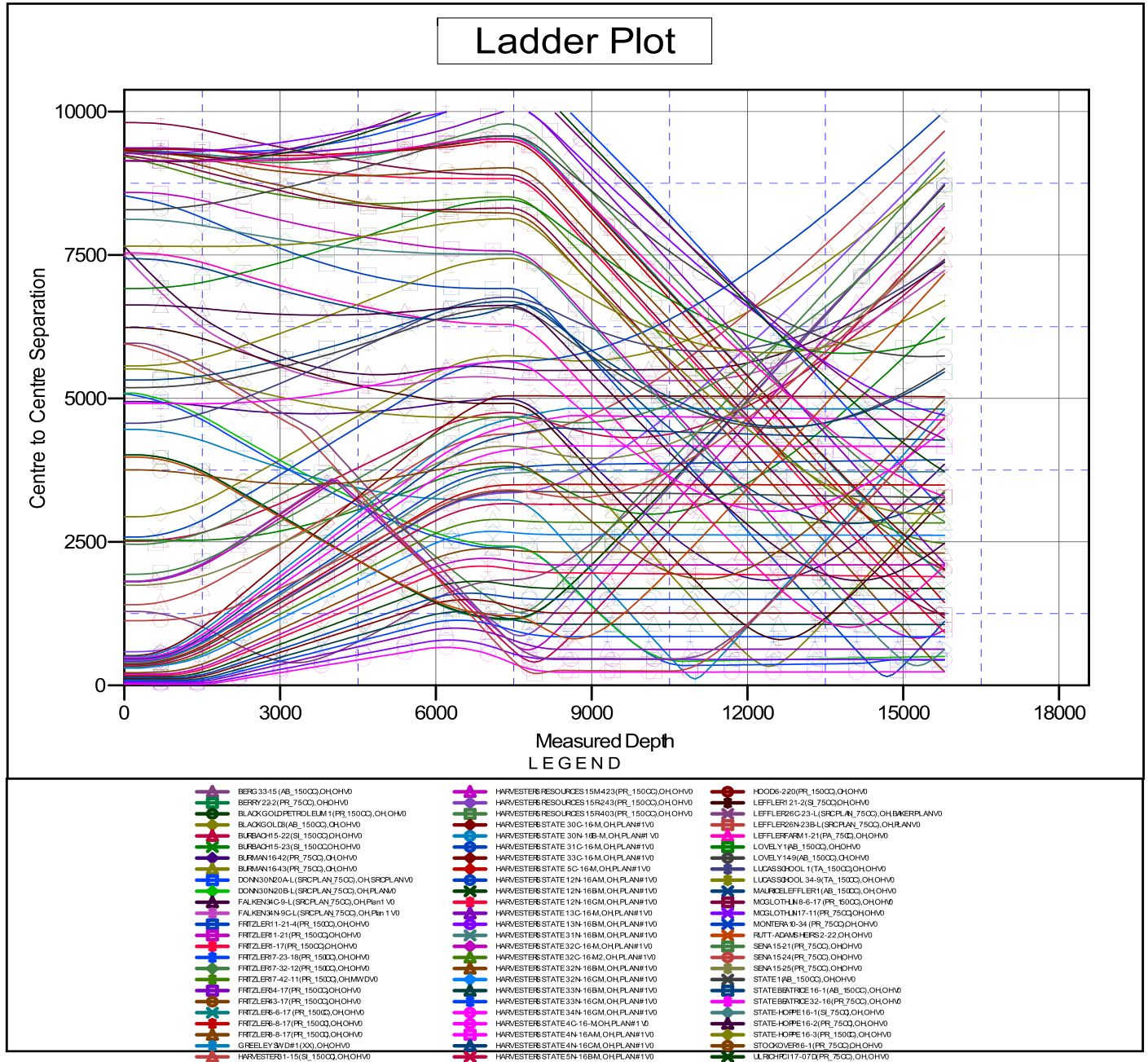
Offset Depths are relative to Offset Datum

Central Meridian is -105.5000000

Coordinates are relative to: HARVESTERS STATE 34C-16-M

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.48°



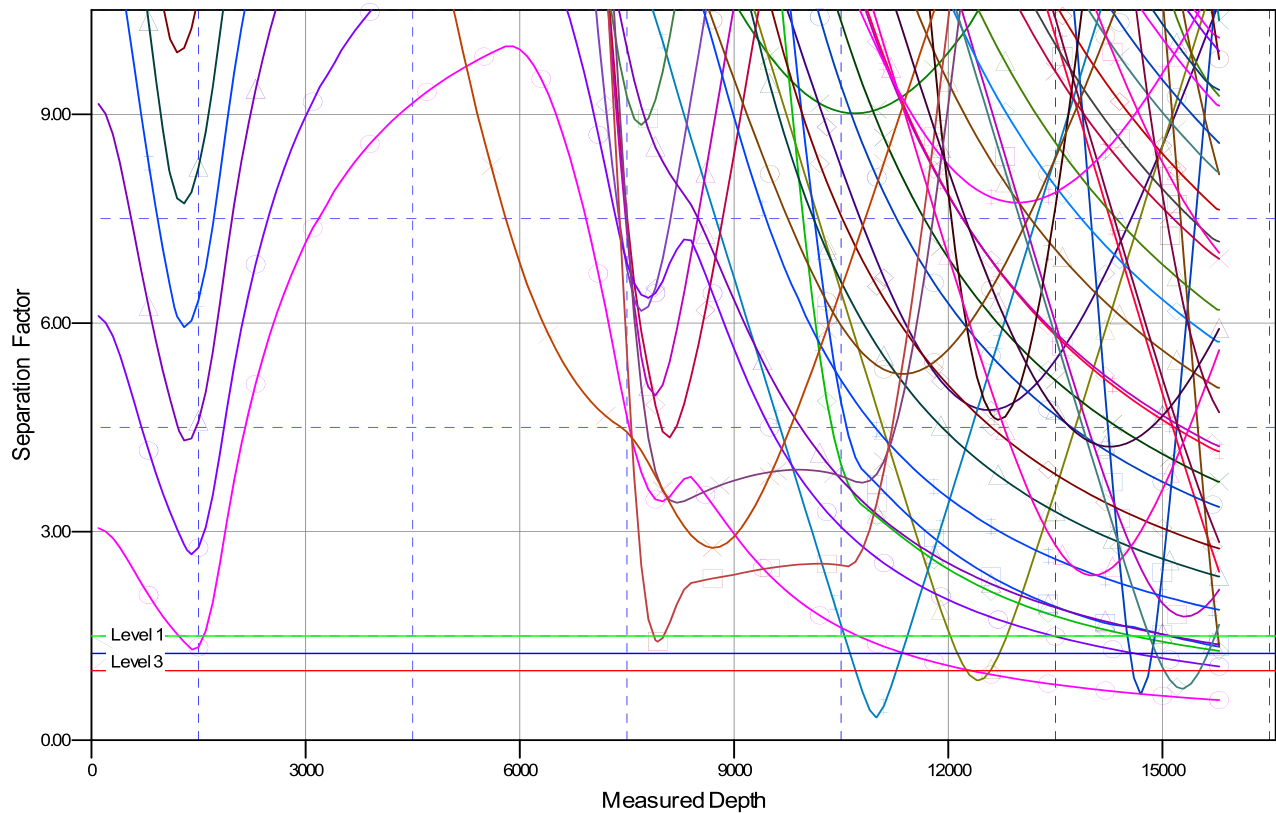
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to KB @ 4819.00ft
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.5000000

Coordinates are relative to: HARVESTERS STATE 34C-16-M
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.48°

Separation Factor Plot



LEGEND

BERG 33-45 (AB, 1500Q, OH, OHV0)	HARVESTERS RESOURCES 15M423 (PR, 1500Q, OH, OHV0)	HOD06-220 (PR, 1500Q, OH, OHV0)
BERR 22-21 (PR, 750Q, OH, OHV0)	HARVESTERS RESOURCES 15M433 (PR, 1500Q, OH, OHV0)	LEFFLER 21-21 (SL, 750Q, OH, OHV0)
BLACK GOLD PETROLEUM 1 (PR, 1500Q, OH, OHV0)	HARVESTERS RESOURCES 15M403 (PR, 1500Q, OH, OHV0)	LEFFLER 26-23 (L, SRC PLAN, 750Q, OH, OHV0)
BLACK GOLD (AB, 1500Q, OH, OHV0)	HARVESTERS STATE 30C-16M, OH, PLAN#1 V0	LEFFLER 26N-23B (L, SRC PLAN, 750Q, OH, OHV0)
BURBACH 15-22 (SL, 1500Q, OH, OHV0)	HARVESTERS STATE 30N-16M, OH, PLAN#1 V0	LEFFLER FARM 1-21 (PA, 750Q, OH, OHV0)
BURBACH 15-23 (SL, 1500Q, OH, OHV0)	HARVESTERS STATE 31C-16M, OH, PLAN#1 V0	LOVELY 1 (AB, 1500Q, OH, OHV0)
BURMAN 16-42 (PR, 750Q, OH, OHV0)	HARVESTERS STATE 33C-16M, OH, PLAN#1 V0	LOVELY 149 (AB, 1500Q, OH, OHV0)
BURMAN 16-43 (PR, 750Q, OH, OHV0)	HARVESTERS STATE 35C-16M, OH, PLAN#1 V0	LUCAS SCHOOL 1 (TA, 1500Q, OH, OHV0)
DOHN 02020-4 (SRC PLAN, 750Q, OH, SRC PLAN V0)	HARVESTERS STATE 12N-16M, OH, PLAN#1 V0	LUCAS SCHOOL 34-9 (TA, 1500Q, OH, OHV0)
DOHN 02020-4 (SRC PLAN, 750Q, OH, PLAN#1 V0)	HARVESTERS STATE 12N-16M, OH, PLAN#1 V0	MAURICE LEFFLER 1 (AB, 1500Q, OH, OHV0)
FALKEN 31G-9 (L, SRC PLAN, 750Q, OH, PLAN#1 V0)	HARVESTERS STATE 12N-16M, OH, PLAN#1 V0	MOGLOTHUN 6-17 (PR, 600Q, OH, OHV0)
FALKEN 31N-9C (L, SRC PLAN, 750Q, OH, PLAN#1 V0)	HARVESTERS STATE 13C-16M, OH, PLAN#1 V0	MOGLOTHUN 17-11 (PR, 750Q, OH, OHV0)
FRIEZLER 1-21-4 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 13N-16M, OH, PLAN#1 V0	MONTERA 10-34 (PR, 750Q, OH, OHV0)
FRIEZLER 1-21 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 31N-16M, OH, PLAN#1 V0	RUTT-ADAMS HERS 2-22 (OH, OHV0)
FRIEZLER 6-17 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 32C-16M, OH, PLAN#1 V0	SENA 15-21 (PR, 750Q, OH, OHV0)
FRIEZLER 7-22-16 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 32C-16M, OH, PLAN#1 V0	SENA 15-24 (PR, 750Q, OH, OHV0)
FRIEZLER 7-32-12 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 32N-16M, OH, PLAN#1 V0	SENA 15-25 (PR, 750Q, OH, OHV0)
FRIEZLER 7-42-11 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 32N-16M, OH, PLAN#1 V0	STATE 1 (AB, 1500Q, OH, OHV0)
FRIEZLER 8-17 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 33N-16M, OH, PLAN#1 V0	STATEBATRICE 16-11 (AB, 1500Q, OH, OHV0)
FRIEZLER 8-17 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 33N-16M, OH, PLAN#1 V0	STATEBATRICE 32-16 (PR, 750Q, OH, OHV0)
FRIEZLER 8-17 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 34N-16M, OH, PLAN#1 V0	STATEHOPE 16-11 (SL, 750Q, OH, OHV0)
FRIEZLER 8-17 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 42-16M, OH, PLAN#1 V0	STATEHOPE 16-21 (PR, 750Q, OH, OHV0)
FRIEZLER 8-17 (PR, 1500Q, OH, OHV0)	HARVESTERS STATE 44N-16M, OH, PLAN#1 V0	STATEHOPE 16-31 (PR, 1500Q, OH, OHV0)
GRIELEY 30D-1 (OH, OHV0)	HARVESTERS STATE 4N-16M, OH, PLAN#1 V0	STOCKOVER 6-11 (PR, 750Q, OH, OHV0)
HARVESTERS 1-15 (SL, 1500Q, OH, OHV0)	HARVESTERS STATE 5N-16M, OH, PLAN#1 V0	ULRICH 17-07 (PR, 750Q, OH, OHV0)