



SRC ENERGY

**SECTION 15, T6N, R66W
HARVESTERS STATE 7-15 PAD
HARVESTERS STATE 30C-16-M**

**OH
PLAN #1**

Anticollision Report

04 October, 2017





Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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	15,216.01	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	100.00	57.48	1,794.19	1,787.63	273.212	CC, ES
BERG 33-15 (AB_150CC) - OH - OH	9,200.00	7,173.12	4,102.01	4,018.33	49.018	SF
BERRY 22-2(PR_75CC) - OH - OH	100.00	28.31	4,531.95	4,525.38	690.292	CC
BERRY 22-2(PR_75CC) - OH - OH	200.00	123.67	4,531.99	4,525.36	683.335	ES
BERRY 22-2(PR_75CC) - OH - OH	12,200.00	7,112.51	8,200.49	8,065.49	60.747	SF
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	0.00	19.24	4,531.95			
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	12,200.00	7,400.00	8,205.25	8,068.65	60.071	SF
BLACKGOLD 3(AB_150CC) - OH - OH	8,251.07	7,278.07	612.95	537.93	8.170	CC, ES
BLACKGOLD 3(AB_150CC) - OH - OH	8,300.00	7,278.42	614.90	538.80	8.080	SF
BURBACH 15-22(SI_150CC) - OH - OH	9,222.74	7,233.75	724.30	408.68	2.295	CC, ES, SF
BURBACH 15-23(SI_150CC) - OH - OH	9,603.21	7,217.30	2,054.69	1,730.20	6.332	CC, ES
BURBACH 15-23(SI_150CC) - OH - OH	9,900.00	7,216.18	2,076.02	1,745.34	6.278	SF
BURMAN 16-42(PR_75CC) - OH - OH	11,873.82	7,202.32	3,206.05	2,821.18	8.330	CC
BURMAN 16-42(PR_75CC) - OH - OH	12,000.00	7,202.79	3,208.54	2,820.47	8.268	ES
BURMAN 16-42(PR_75CC) - OH - OH	12,400.00	7,204.31	3,248.94	2,852.14	8.188	SF
BURMAN 16-43(PR_75CC) - OH - OH	11,891.42	7,205.38	4,706.90	4,321.43	12.211	CC
BURMAN 16-43(PR_75CC) - OH - OH	12,000.00	7,205.79	4,708.15	4,319.83	12.124	ES
BURMAN 16-43(PR_75CC) - OH - OH	13,000.00	7,209.59	4,835.68	4,424.68	11.766	SF
DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN	10,199.84	7,284.21	5,237.88	5,113.77	42.201	CC
DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN	15,216.01	12,349.24	5,370.95	4,961.85	13.129	ES, SF
DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN	10,169.15	7,367.17	5,430.33	5,306.75	43.939	CC
DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN	15,216.01	12,327.84	5,508.74	5,103.14	13.582	ES, SF
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	7,644.59	16,407.16	443.36	142.67	1.474	Level 3, CC
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	10,400.00	19,118.26	471.43	35.14	1.081	Level 2, ES, SF
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	7,435.25	16,126.00	276.13	-17.60	0.940	Level 1, CC
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	10,355.25	19,020.09	289.57	-120.11	0.707	Level 1, ES, SF
FRITZLER 11-21-4(PR_150CC) - OH - OH	14,168.13	7,362.48	5,186.35	4,952.57	22.185	CC
FRITZLER 11-21-4(PR_150CC) - OH - OH	14,300.00	7,366.44	5,188.02	4,950.62	21.853	ES
FRITZLER 11-21-4(PR_150CC) - OH - OH	15,216.01	7,393.91	5,291.06	5,032.29	20.447	SF
FRITZLER 11-21(PR_150CC) - OH - OH	14,759.66	7,165.73	5,856.85	5,392.46	12.612	CC
FRITZLER 11-21(PR_150CC) - OH - OH	14,900.00	7,165.20	5,858.53	5,390.39	12.515	ES
FRITZLER 11-21(PR_150CC) - OH - OH	15,216.01	7,164.00	5,874.60	5,398.49	12.339	SF
FRITZLER 11-17(PR_150CC) - OH - OH	15,216.01	7,179.00	4,605.39	4,130.33	9.694	CC, ES, SF
FRITZLER 17-23-18(PR_150CC) - OH - OH	15,216.01	7,386.00	4,859.05	4,614.95	19.906	CC, ES, SF
FRITZLER 17-32-12(PR_150CC) - OH - OH	15,216.01	7,614.09	2,966.85	2,718.76	11.959	CC, ES, SF
FRITZLER 17-42-11(PR_150CC) - OH - MWD	15,216.01	7,603.78	2,561.70	2,295.95	9.640	CC, ES, SF
FRITZLER 34-17(PR_150CC) - OH - OH	15,216.01	7,140.42	5,056.45	4,806.90	20.262	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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 43-17(PR_150CC) - OH - OH	15,216.01	7,402.08	3,307.14	3,050.51	12.887	CC, ES, SF
FRITZLER 6-6-17 (PR_150CC) - OH - OH	15,216.01	7,268.20	4,177.78	3,926.09	16.599	CC, ES, SF
FRITZLER 6-8-17(PR_150CC) - OH - OH	15,216.01	7,381.72	5,345.56	5,090.40	20.951	CC, ES, SF
FRITZLER 8-8-17(PR_150CC) - OH - OH	15,216.01	7,190.16	5,189.48	4,927.17	19.784	CC, ES, SF
GREELEY SWD #1(XX) - OH - OH	200.00	134.00	4,821.82	4,814.08	623.235	CC
GREELEY SWD #1(XX) - OH - OH	10,600.00	7,184.52	4,927.97	4,578.68	14.109	ES
GREELEY SWD #1(XX) - OH - OH	11,800.00	7,179.96	5,104.86	4,728.52	13.564	SF
HARVESTER 31-15(SI_150CC) - OH - OH	3,272.44	3,161.92	576.21	545.94	19.034	CC
HARVESTER 31-15(SI_150CC) - OH - OH	3,300.00	3,187.45	576.28	545.76	18.882	ES
HARVESTER 31-15(SI_150CC) - OH - OH	7,000.00	6,799.30	942.54	880.55	15.204	SF
HARVESTER 32-15(SI_150CC) - OH - OH	254.06	237.80	577.05	570.28	85.240	CC, ES
HARVESTER 32-15(SI_150CC) - OH - OH	7,200.00	6,947.33	1,902.00	1,839.26	30.320	SF
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	6,816.96	6,637.70	52.34	-10.47	0.833	Level 1, CC, ES, SF
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	6,844.40	6,661.96	285.03	222.48	4.557	CC
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	6,900.00	6,715.18	285.10	222.20	4.532	ES, SF
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	6,797.68	6,611.10	759.59	697.33	12.200	CC
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	6,800.00	6,613.09	759.59	697.32	12.197	ES
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	6,900.00	6,697.80	763.95	701.05	12.145	SF
HARVESTERS RESOURCES 15R-403(PR_150CC) - OH	6,900.00	6,875.49	1,108.37	1,043.95	17.206	CC, ES, SF
HARVESTERS STATE 30N-16B-M - OH - PLAN #1	200.00	200.00	19.67	12.99	2.947	CC
HARVESTERS STATE 30N-16B-M - OH - PLAN #1	15,216.01	14,940.97	284.72	-74.12	0.793	Level 1, ES, SF
HARVESTERS STATE 31C-16-M - OH - PLAN #1	200.00	201.00	99.82	93.15	14.955	CC, ES
HARVESTERS STATE 31C-16-M - OH - PLAN #1	15,216.01	15,014.16	1,099.83	642.05	2.403	SF
HARVESTERS STATE 33C-16-M - OH - PLAN #1	200.00	198.00	399.66	392.99	59.897	CC, ES
HARVESTERS STATE 33C-16-M - OH - PLAN #1	15,216.01	15,233.22	3,769.85	3,313.07	8.253	SF
HARVESTERS STATE 34C-16-M - OH - PLAN #1	200.00	197.00	519.88	513.20	77.923	CC, ES
HARVESTERS STATE 34C-16-M - OH - PLAN #1	15,216.01	15,751.98	5,032.02	4,574.88	11.007	SF
HARVESTERS STATE 5C-16-M - OH - PLAN #1	200.00	201.00	139.90	133.22	20.959	CC, ES
HARVESTERS STATE 5C-16-M - OH - PLAN #1	15,216.01	14,978.73	1,539.94	1,083.11	3.371	SF
HARVESTERS STATE 12N-16A-M - OH - PLAN #1	200.00	198.00	379.98	373.31	56.947	CC, ES
HARVESTERS STATE 12N-16A-M - OH - PLAN #1	15,216.01	14,892.44	3,573.30	3,118.37	7.855	SF
HARVESTERS STATE 12N-16B-M - OH - PLAN #1	200.00	198.00	359.95	353.28	53.946	CC, ES
HARVESTERS STATE 12N-16B-M - OH - PLAN #1	15,216.01	14,959.53	3,355.82	2,899.94	7.361	SF
HARVESTERS STATE 12N-16C-M - OH - PLAN #1	200.00	198.00	339.90	333.23	50.941	CC, ES
HARVESTERS STATE 12N-16C-M - OH - PLAN #1	15,216.01	14,952.13	3,144.14	2,689.05	6.909	SF
HARVESTERS STATE 13C-16-M - OH - PLAN #1	200.00	197.00	459.77	453.10	68.915	CC, ES
HARVESTERS STATE 13C-16-M - OH - PLAN #1	15,216.01	15,403.90	4,401.11	3,944.26	9.634	SF
HARVESTERS STATE 13N-16B-M - OH - PLAN #1	200.00	197.00	479.80	473.13	71.916	CC, ES
HARVESTERS STATE 13N-16B-M - OH - PLAN #1	15,216.01	15,307.08	4,614.50	4,158.01	10.109	SF
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	200.00	201.00	119.85	113.17	17.955	CC, ES
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	15,216.01	14,806.04	1,351.72	906.65	3.037	SF
HARVESTERS STATE 32C-16-M - OH - PLAN #1	200.00	198.00	319.86	313.19	47.938	CC, ES
HARVESTERS STATE 32C-16-M - OH - PLAN #1	15,216.01	15,068.67	2,930.91	2,434.73	5.907	SF
HARVESTERS STATE 32C-16-M2 - OH - PLAN #1	200.00	201.00	200.00	193.33	29.964	CC, ES
HARVESTERS STATE 32C-16-M2 - OH - PLAN #1	15,216.01	14,990.82	2,201.19	1,744.58	4.821	SF
HARVESTERS STATE 32N-16B-M - OH - PLAN #1	200.00	202.00	299.83	293.15	44.913	CC, ES
HARVESTERS STATE 32N-16B-M - OH - PLAN #1	15,216.01	14,854.43	2,738.47	2,283.35	6.017	SF
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	200.00	201.00	219.67	213.00	32.910	CC, ES
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	15,216.01	14,896.74	2,422.62	1,966.93	5.316	SF
HARVESTERS STATE 33N-16B-M - OH - PLAN #1	200.00	198.00	419.68	413.01	62.898	CC, ES
HARVESTERS STATE 33N-16B-M - OH - PLAN #1	15,216.01	15,114.14	3,986.89	3,530.76	8.741	SF
HARVESTERS STATE 33N-16C-M - OH - PLAN #1	200.00	197.00	439.74	433.06	65.911	CC, ES
HARVESTERS STATE 33N-16C-M - OH - PLAN #1	15,216.01	15,242.88	4,191.71	3,735.15	9.181	SF

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

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Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
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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 34N-16C-M - OH - PLAN #1	200.00	197.00	499.84	493.16	74.919	CC, ES
HARVESTERS STATE 34N-16C-M - OH - PLAN #1	15,216.01	15,452.59	4,822.71	4,365.91	10.558	SF
HARVESTERS STATE 4C-16-M - OH - PLAN #1	200.00	200.00	39.71	35.76	10.050	CC
HARVESTERS STATE 4C-16-M - OH - PLAN #1	15,216.01	15,110.74	404.24	-52.88	0.884	Level 1, ES, SF
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	200.00	201.00	79.78	73.11	11.952	CC, ES
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	15,216.01	14,726.12	928.78	496.88	2.150	SF
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	200.00	201.00	59.74	53.06	8.949	CC, ES
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	15,216.01	14,943.13	767.44	318.56	1.710	SF
HARVESTERS STATE 5N-16B-M - OH - PLAN #1	200.00	201.00	179.96	173.29	26.961	CC, ES
HARVESTERS STATE 5N-16B-M - OH - PLAN #1	15,216.01	14,797.71	1,889.83	1,436.03	4.164	SF
HARVESTERS STATE 5N-16C-M - OH - PLAN #1	200.00	201.00	159.93	153.25	23.960	CC, ES
HARVESTERS STATE 5N-16C-M - OH - PLAN #1	15,216.01	14,842.25	1,763.27	1,309.01	3.882	SF
HOOD 41-20(PR_150CC) - OH - OH	15,216.01	7,171.00	5,936.43	5,460.60	12.476	CC, ES, SF
HOOD 6-2-20(PR_150CC) - OH - OH	15,216.01	7,569.72	6,663.81	6,404.39	25.687	CC, ES, SF
LEFFLER 1 21-2(SI_75CC) - OH - OH	12,112.42	7,093.93	5,835.52	5,663.56	33.936	CC
LEFFLER 1 21-2(SI_75CC) - OH - OH	12,300.00	7,103.25	5,838.52	5,661.55	32.991	ES
LEFFLER 1 21-2(SI_75CC) - OH - OH	14,600.00	7,240.92	6,341.90	6,117.80	28.300	SF
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	7,400.00	10,316.55	5,518.29	5,376.97	39.049	ES
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	10,049.31	7,725.46	5,504.98	5,381.77	44.677	CC
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	13,500.00	7,049.69	6,295.80	6,104.74	32.952	SF
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	10,056.90	7,583.35	5,228.37	5,105.69	42.619	CC
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	10,200.00	7,541.89	5,229.76	5,103.91	41.556	ES
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	13,200.00	7,000.00	5,931.96	5,746.60	32.003	SF
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,443.10	7,172.73	6,047.12	5,619.54	14.143	CC
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,600.00	7,172.13	6,049.15	5,617.39	14.010	ES
LEFFLER FARM 1-21(PA_75CC) - OH - OH	15,000.00	7,166.82	6,244.32	5,781.31	13.486	SF
LOVELY 1(AB_150CC) - OH - OH	13,402.37	7,219.88	751.80	323.72	1.756	CC, ES, SF
LOVELY 14-9(AB_150CC) - OH - OH	14,899.10	7,217.20	698.36	228.24	1.486	Level 3, CC
LOVELY 14-9(AB_150CC) - OH - OH	14,900.00	7,217.20	698.36	228.21	1.485	Level 3, ES, SF
LUCAS SCHOOL 1(TA_150CC) - OH - OH	10,673.76	7,250.24	780.91	427.17	2.208	CC
LUCAS SCHOOL 1(TA_150CC) - OH - OH	10,700.00	7,250.14	781.36	426.78	2.204	ES, SF
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	11,889.31	7,205.63	761.48	376.07	1.976	CC
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	11,900.00	7,205.58	761.56	375.79	1.974	ES, SF
MAURICE LEFFLER 1(AB_150CC) - OH - OH	13,458.50	4,452.00	6,450.05	6,148.62	21.398	CC
MAURICE LEFFLER 1(AB_150CC) - OH - OH	13,600.00	4,452.00	6,451.60	6,146.68	21.158	ES
MAURICE LEFFLER 1(AB_150CC) - OH - OH	15,216.01	4,452.00	6,685.21	6,345.84	19.699	SF
MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH	15,216.01	7,434.00	3,824.50	3,561.59	14.547	CC, ES, SF
MCGLOTHLIN 17-11(PR_75CC) - OH - OH	15,216.01	7,202.00	1,067.43	716.82	3.044	CC, ES, SF
MONTERA 10-34 (PR_75CC) - OH - OH	6,817.06	6,621.13	641.38	581.22	10.661	CC
MONTERA 10-34 (PR_75CC) - OH - OH	6,900.00	6,706.03	641.77	580.95	10.553	ES
MONTERA 10-34 (PR_75CC) - OH - OH	7,000.00	6,805.36	646.87	585.22	10.494	SF
RUTT-ADAMS HEIRS 2-22 - OH - OH	200.00	139.00	4,483.72	4,475.86	570.813	CC
RUTT-ADAMS HEIRS 2-22 - OH - OH	300.00	238.98	4,485.37	4,474.55	414.806	ES
RUTT-ADAMS HEIRS 2-22 - OH - OH	10,400.00	7,209.72	6,277.51	5,939.76	18.586	SF
SENA 15-21(PR_75CC) - OH - OH	8,216.63	7,253.56	466.29	171.55	1.582	CC, ES, SF
SENA 15-24(PR_75CC) - OH - OH	200.00	180.00	1,138.59	1,129.65	127.408	CC
SENA 15-24(PR_75CC) - OH - OH	800.00	775.62	1,149.13	1,118.94	38.061	ES
SENA 15-24(PR_75CC) - OH - OH	8,300.00	7,239.25	1,775.80	1,480.38	6.011	SF
SENA 15-25(PR_75CC) - OH - OH	8,541.38	7,245.33	1,086.71	786.09	3.615	CC, ES
SENA 15-25(PR_75CC) - OH - OH	8,600.00	7,245.11	1,088.29	786.72	3.609	SF
STATE 1(AB_150CC) - OH - OH	12,045.30	7,204.97	551.36	161.65	1.415	Level 3, CC, ES, SF
STATE BEATRICE 16-1(AB_150CC) - OH - OH	12,175.01	7,203.46	529.56	136.30	1.347	Level 3, CC, ES, SF
STATE BEATRICE 32-16(PR_75CC) - OH - OH	11,983.79	7,209.73	2,002.93	1,614.76	5.160	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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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						
STATE BEATRICE 32-16(PR_75CC) - OH - OH	12,000.00	7,209.79	2,002.99	1,614.42	5.155	ES
STATE BEATRICE 32-16(PR_75CC) - OH - OH	12,200.00	7,189.45	2,014.56	1,622.46	5.138	SF
STATE-HOPPE 16-1(SI_75CC) - OH - OH	14,742.65	7,176.80	4,688.98	4,224.69	10.099	CC
STATE-HOPPE 16-1(SI_75CC) - OH - OH	14,900.00	7,176.20	4,691.62	4,223.22	10.016	ES
STATE-HOPPE 16-1(SI_75CC) - OH - OH	15,216.01	7,175.00	4,712.81	4,236.90	9.903	SF
STATE-HOPPE 16-2(PR_75CC) - OH - OH	13,595.40	7,205.85	3,206.04	2,773.03	7.404	CC
STATE-HOPPE 16-2(PR_75CC) - OH - OH	13,700.00	7,206.25	3,207.75	2,772.06	7.363	ES
STATE-HOPPE 16-2(PR_75CC) - OH - OH	14,000.00	7,207.39	3,231.47	2,789.20	7.306	SF
STATE-HOPPE 16-3(PR_150CC) - OH - OH	14,799.18	7,181.56	2,041.32	1,793.64	8.242	CC
STATE-HOPPE 16-3(PR_150CC) - OH - OH	14,800.00	7,181.57	2,041.32	1,793.62	8.241	ES
STATE-HOPPE 16-3(PR_150CC) - OH - OH	15,000.00	7,184.56	2,051.17	1,799.37	8.146	SF
STOCKOVER 16-1(PR_75CC) - OH - OH	10,643.59	7,187.35	3,183.46	2,832.72	9.076	CC
STOCKOVER 16-1(PR_75CC) - OH - OH	10,700.00	7,187.14	3,183.96	2,831.82	9.042	ES
STOCKOVER 16-1(PR_75CC) - OH - OH	11,200.00	7,185.24	3,231.72	2,868.45	8.896	SF
ULRICH PC I 17-07D(PR_75CC) - OH - OH	15,216.01	7,324.71	2,922.16	2,725.94	14.892	CC, ES, SF
ULRICH PC I 17-08(PR_75CC) - OH - OH	15,216.01	7,207.00	2,122.84	1,667.57	4.663	CC, ES, SF
ULRICH PC I17-17D(PR_75CC) - OH - OH	15,216.01	7,387.51	2,015.54	1,846.34	11.912	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							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	0.00	39.00	3.28	3.28	168.80	-1,759.96	348.53	1,794.56						
100.00	100.00	57.48	96.48	3.28	3.28	168.80	-1,760.01	348.53	1,794.19	1,787.63	6.57	273.212	CC, ES		
200.00	200.00	155.29	194.29	3.34	3.31	168.80	-1,760.32	348.52	1,794.50	1,787.85	6.65	269.928			
300.00	299.98	258.04	297.04	3.45	3.40	174.54	-1,760.64	348.31	1,796.50	1,789.65	6.84	262.466			
400.00	399.84	359.11	398.11	3.61	3.54	174.55	-1,760.75	348.23	1,801.80	1,794.66	7.15	252.166			
500.00	499.45	458.39	497.39	3.82	3.72	174.56	-1,760.86	348.25	1,810.59	1,803.06	7.53	240.298			
600.00	598.70	553.41	592.41	4.07	3.93	174.57	-1,761.01	348.38	1,822.90	1,814.91	7.99	228.070			
700.00	697.47	648.02	687.01	4.35	4.16	174.58	-1,761.47	348.49	1,838.97	1,830.46	8.51	216.004			
800.00	795.62	748.09	787.09	4.67	4.44	174.61	-1,762.06	348.36	1,858.51	1,849.41	9.10	204.148			
900.00	893.06	849.34	888.34	5.01	4.74	174.65	-1,762.51	347.83	1,881.24	1,871.50	9.75	193.046			
1,000.00	989.64	948.07	987.06	5.38	5.06	174.69	-1,762.80	347.32	1,907.20	1,896.78	10.42	183.055			
1,100.00	1,085.42	1,042.38	1,081.37	5.78	5.37	174.77	-1,763.04	346.67	1,935.96	1,924.85	11.11	174.250			
1,200.00	1,181.09	1,134.91	1,173.89	6.20	5.69	174.86	-1,763.45	346.12	1,965.27	1,953.46	11.81	166.410			
1,300.00	1,276.76	1,230.67	1,269.66	6.65	6.03	174.96	-1,763.91	345.51	1,994.61	1,982.07	12.54	159.001			
1,400.00	1,372.43	1,326.97	1,365.95	7.11	6.38	175.06	-1,764.41	344.75	2,023.97	2,010.67	13.30	152.162			
1,500.00	1,468.10	1,427.20	1,466.18	7.57	6.75	175.15	-1,764.77	343.94	2,053.18	2,039.09	14.09	145.706			
1,600.00	1,563.77	1,527.23	1,566.20	8.05	7.13	175.25	-1,764.87	343.24	2,082.17	2,067.27	14.89	139.792			
1,700.00	1,659.44	1,622.90	1,661.87	8.53	7.50	175.34	-1,764.91	342.26	2,111.05	2,095.36	15.69	134.534			
1,800.00	1,755.11	1,714.60	1,753.56	9.02	7.85	175.42	-1,765.05	341.35	2,140.06	2,123.58	16.48	129.853			
1,900.00	1,850.78	1,807.21	1,846.16	9.52	8.21	175.51	-1,765.35	340.48	2,169.22	2,151.94	17.28	125.520			
2,000.00	1,946.45	1,904.06	1,943.01	10.02	8.60	175.60	-1,765.70	339.54	2,198.43	2,180.32	18.11	121.390			
2,100.00	2,042.12	1,994.76	2,033.71	10.52	8.96	175.68	-1,766.12	338.53	2,227.72	2,208.81	18.92	117.769			
2,200.00	2,137.78	2,091.18	2,130.11	11.03	9.34	175.77	-1,766.67	337.41	2,257.11	2,237.35	19.75	114.256			
2,300.00	2,233.45	2,185.44	2,224.37	11.54	9.72	175.84	-1,767.16	336.58	2,286.49	2,265.90	20.59	111.060			
2,400.00	2,329.12	2,278.54	2,317.46	12.05	10.10	175.91	-1,767.69	335.95	2,315.96	2,294.54	21.42	108.126			
2,500.00	2,424.79	2,381.81	2,420.74	12.56	10.52	175.99	-1,768.26	335.01	2,345.37	2,323.07	22.31	105.142			

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
2,600.00	2,520.46	2,481.23	2,520.15	13.08	10.93	176.07	-1,768.48	334.10	2,374.48	2,351.31	23.18	102.446		
2,700.00	2,616.13	2,579.54	2,618.45	13.60	11.33	176.13	-1,768.54	333.48	2,403.49	2,379.45	24.05	99.952		
2,800.00	2,711.80	2,670.68	2,709.60	14.12	11.70	176.19	-1,768.59	333.00	2,432.51	2,407.63	24.88	97.770		
2,900.00	2,807.47	2,763.63	2,802.54	14.64	12.09	176.25	-1,768.83	332.51	2,461.72	2,436.00	25.73	95.692		
3,000.00	2,903.14	2,860.81	2,899.72	15.16	12.49	176.30	-1,769.10	332.01	2,490.95	2,464.36	26.60	93.658		
3,100.00	2,998.81	2,954.67	2,993.58	15.68	12.88	176.35	-1,769.29	331.61	2,520.14	2,492.69	27.45	91.806		
3,200.00	3,094.48	3,045.62	3,084.53	16.21	13.25	176.41	-1,769.64	331.17	2,549.48	2,521.19	28.29	90.116		
3,300.00	3,190.15	3,141.87	3,180.77	16.73	13.65	176.46	-1,770.14	330.71	2,578.96	2,549.79	29.16	88.434		
3,400.00	3,285.82	3,247.56	3,286.47	17.26	14.09	176.51	-1,770.37	330.50	2,608.20	2,578.11	30.09	86.682		
3,500.00	3,381.49	3,355.50	3,394.40	17.78	14.54	176.57	-1,770.18	329.88	2,637.01	2,605.98	31.03	84.984		
3,600.00	3,477.16	3,451.26	3,490.17	18.31	14.94	176.61	-1,769.72	329.26	2,665.51	2,633.61	31.90	83.553		
3,700.00	3,572.83	3,538.90	3,577.80	18.84	15.31	176.66	-1,769.53	328.58	2,694.25	2,661.53	32.73	82.319		
3,800.00	3,668.50	3,624.40	3,663.29	19.37	15.67	176.71	-1,769.60	327.95	2,723.29	2,689.75	33.54	81.183		
3,900.00	3,764.17	3,704.65	3,743.54	19.89	16.00	176.75	-1,770.09	327.31	2,752.82	2,718.49	34.33	80.188		
4,000.00	3,859.84	3,798.12	3,837.00	20.42	16.40	176.81	-1,770.96	326.55	2,782.64	2,747.44	35.19	79.068		
4,100.00	3,955.51	3,905.13	3,944.01	20.95	16.85	176.86	-1,771.74	325.78	2,812.30	2,776.16	36.14	77.819		
4,200.00	4,051.18	4,001.27	4,040.15	21.48	17.25	176.91	-1,772.25	325.09	2,841.76	2,804.74	37.02	76.762		
4,300.00	4,146.85	4,096.80	4,135.67	22.01	17.65	176.96	-1,772.74	324.32	2,871.20	2,833.30	37.90	75.760		
4,400.00	4,242.52	4,199.07	4,237.94	22.55	18.09	177.01	-1,773.13	323.60	2,900.54	2,861.72	38.82	74.720		
4,500.00	4,338.19	4,324.46	4,363.32	23.08	18.61	177.06	-1,772.67	322.62	2,929.11	2,889.23	39.88	73.453		
4,600.00	4,433.86	4,414.31	4,453.17	23.61	18.99	177.10	-1,772.12	321.88	2,957.48	2,916.76	40.72	72.623		
4,700.00	4,529.53	4,517.39	4,556.24	24.14	19.43	177.15	-1,771.52	320.91	2,985.88	2,944.23	41.65	71.690		
4,800.00	4,625.19	4,631.99	4,670.83	24.67	19.91	177.20	-1,770.12	319.66	3,013.61	2,970.97	42.65	70.666		
4,900.00	4,720.86	4,719.14	4,757.96	25.21	20.27	177.23	-1,768.95	319.68	3,041.42	2,997.94	43.48	69.953		
5,000.00	4,816.53	4,812.05	4,850.86	25.74	20.67	177.26	-1,767.86	319.11	3,069.29	3,024.95	44.35	69.213		
5,100.00	4,912.20	4,876.13	4,914.94	26.27	20.94	177.29	-1,767.59	318.27	3,097.79	3,052.76	45.04	68.786		
5,200.00	5,007.87	4,954.65	4,993.46	26.80	21.27	177.33	-1,767.94	317.43	3,127.14	3,081.32	45.81	68.261		
5,300.00	5,103.54	5,084.18	5,122.99	27.34	21.81	177.36	-1,768.16	317.59	3,156.48	3,109.57	46.91	67.288		
5,400.00	5,199.22	5,206.92	5,245.71	27.87	22.33	177.38	-1,766.71	318.14	3,184.47	3,136.51	47.96	66.396		
5,500.00	5,295.46	5,301.10	5,339.88	28.39	22.72	177.41	-1,765.26	318.96	3,210.23	3,161.39	48.83	65.741		
5,600.00	5,392.60	5,375.63	5,414.40	28.89	23.04	177.42	-1,764.36	319.86	3,232.96	3,183.39	49.57	65.223		
5,700.00	5,490.50	5,451.95	5,490.71	29.37	23.36	177.43	-1,763.95	320.92	3,252.96	3,202.66	50.30	64.671		
5,800.00	5,589.05	5,551.41	5,590.16	29.83	23.77	177.45	-1,764.03	321.70	3,270.05	3,218.88	51.17	63.908		
5,900.00	5,688.14	5,660.77	5,699.52	30.26	24.23	177.45	-1,763.52	322.73	3,283.16	3,231.08	52.09	63.033		
6,000.00	5,787.63	5,761.20	5,799.94	30.68	24.66	177.45	-1,763.02	323.91	3,292.83	3,239.90	52.93	62.208		
6,100.00	5,887.41	5,858.36	5,897.10	31.07	25.07	177.46	-1,762.63	324.00	3,298.97	3,245.23	53.74	61.382		
6,200.00	5,987.36	5,951.56	5,990.30	31.44	25.46	177.45	-1,762.35	324.71	3,301.82	3,247.30	54.52	60.565		
6,300.00	6,087.36	6,037.75	6,076.47	31.80	25.82	171.69	-1,762.16	326.35	3,302.12	3,246.89	55.23	59.787		
6,400.00	6,187.36	6,127.04	6,165.74	32.15	26.20	171.66	-1,762.47	328.17	3,302.75	3,246.78	55.97	59.012		
6,500.00	6,287.36	6,247.18	6,285.87	32.51	26.71	171.63	-1,762.55	329.86	3,303.00	3,246.09	56.91	58.044		
6,600.00	6,387.36	6,340.10	6,378.77	32.87	27.10	171.59	-1,762.33	331.69	3,303.05	3,245.39	57.67	57.277		
6,700.00	6,487.36	6,416.73	6,455.38	33.23	27.42	171.57	-1,762.55	333.09	3,303.62	3,245.30	58.32	56.642		
6,800.00	6,587.36	6,482.07	6,520.71	33.59	27.70	171.55	-1,763.35	334.34	3,305.12	3,246.21	58.90	56.110		
6,900.00	6,687.26	6,594.22	6,632.83	33.95	28.17	-97.95	-1,765.38	336.01	3,307.58	3,247.78	59.79	55.318		
7,000.00	6,785.58	6,724.46	6,763.06	34.31	28.73	-98.01	-1,766.52	335.96	3,310.86	3,250.05	60.81	54.450		
7,100.00	6,879.94	6,803.39	6,841.99	34.65	29.06	-97.93	-1,767.35	336.16	3,316.78	3,255.28	61.49	53.936		
7,200.00	6,968.01	6,891.30	6,929.89	34.97	29.44	-97.87	-1,768.32	336.45	3,325.44	3,263.17	62.27	53.406		
7,300.00	7,047.61	6,970.71	7,009.30	35.27	29.78	-97.65	-1,769.20	336.71	3,337.09	3,274.07	63.03	52.948		
7,400.00	7,116.80	7,039.66	7,078.24	35.54	30.07	-97.15	-1,769.96	336.93	3,352.10	3,288.31	63.78	52.554		
7,500.00	7,173.86	7,096.46	7,135.04	35.81	30.31	-96.25	-1,770.59	337.11	3,370.72	3,306.16	64.56	52.209		
7,600.00	7,217.38	7,139.70	7,178.28	36.17	30.50	-94.87	-1,771.07	337.25	3,393.10	3,327.72	65.38	51.901		
7,700.00	7,246.31	7,168.33	7,206.90	36.80	30.62	-92.92	-1,771.38	337.35	3,419.14	3,352.91	66.23	51.626		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
7,800.00	7,259.92	7,181.63	7,220.20	37.72	30.67	-90.39	-1,771.53	337.39	3,448.49	3,381.39	67.10	51.395		
7,900.00	7,260.77	7,182.15	7,220.72	38.86	30.68	-89.22	-1,771.54	337.39	3,480.60	3,412.62	67.98	51.201		
8,000.00	7,260.39	7,181.46	7,220.03	40.19	30.67	-89.21	-1,771.53	337.39	3,515.26	3,446.30	68.96	50.974		
8,100.00	7,260.01	7,180.76	7,219.33	41.67	30.67	-89.20	-1,771.52	337.39	3,552.40	3,482.36	70.03	50.723		
8,200.00	7,259.63	7,180.07	7,218.64	43.30	30.67	-89.19	-1,771.51	337.38	3,591.93	3,520.75	71.18	50.463		
8,300.00	7,259.25	7,179.37	7,217.94	45.05	30.66	-89.18	-1,771.50	337.38	3,633.79	3,561.41	72.38	50.206		
8,400.00	7,258.87	7,178.68	7,217.25	46.91	30.66	-89.16	-1,771.50	337.38	3,677.89	3,604.28	73.62	49.961		
8,500.00	7,258.49	7,177.98	7,216.56	48.87	30.66	-89.15	-1,771.49	337.38	3,724.16	3,649.28	74.88	49.736		
8,600.00	7,258.11	7,177.29	7,215.86	50.92	30.66	-89.14	-1,771.48	337.38	3,772.51	3,696.35	76.16	49.536		
8,700.00	7,257.73	7,176.59	7,215.17	53.04	30.65	-89.13	-1,771.47	337.37	3,822.86	3,745.42	77.44	49.366		
8,800.00	7,257.35	7,175.90	7,214.47	55.23	30.65	-89.11	-1,771.47	337.37	3,875.14	3,796.42	78.72	49.228		
8,900.00	7,256.97	7,175.20	7,213.78	57.47	30.65	-89.10	-1,771.46	337.37	3,929.27	3,849.28	79.99	49.123		
9,000.00	7,256.59	7,174.51	7,213.08	59.77	30.64	-89.09	-1,771.45	337.37	3,985.17	3,903.93	81.24	49.054		
9,100.00	7,256.21	7,173.81	7,212.39	62.12	30.64	-89.08	-1,771.44	337.36	4,042.78	3,960.31	82.47	49.019		
9,200.00	7,255.83	7,173.12	7,211.69	64.50	30.64	-89.07	-1,771.44	337.36	4,102.01	4,018.33	83.68	49.018 SF		
9,300.00	7,255.45	7,172.43	7,211.00	66.93	30.63	-89.05	-1,771.43	337.36	4,162.81	4,077.94	84.87	49.051		
9,400.00	7,255.07	7,171.73	7,210.30	69.38	30.63	-89.04	-1,771.42	337.36	4,225.09	4,139.07	86.02	49.117		
9,500.00	7,254.69	7,171.04	7,209.61	71.87	30.63	-89.03	-1,771.41	337.36	4,288.81	4,201.66	87.14	49.215		
9,600.00	7,254.31	7,170.34	7,208.91	74.38	30.63	-89.02	-1,771.40	337.35	4,353.88	4,265.65	88.24	49.343		
9,700.00	7,253.93	7,169.65	7,208.22	76.92	30.62	-89.01	-1,771.40	337.35	4,420.27	4,330.97	89.30	49.500		
9,800.00	7,253.55	7,168.95	7,207.52	79.48	30.62	-88.99	-1,771.39	337.35	4,487.89	4,397.57	90.33	49.685		
9,900.00	7,253.18	7,168.26	7,206.83	82.06	30.62	-88.98	-1,771.38	337.35	4,556.71	4,465.39	91.32	49.896		
10,000.00	7,252.80	7,167.56	7,206.13	84.65	30.61	-88.97	-1,771.37	337.34	4,626.67	4,534.38	92.29	50.133		
10,100.00	7,252.42	7,166.87	7,205.44	87.27	30.61	-88.96	-1,771.37	337.34	4,697.71	4,604.49	93.22	50.393		
10,200.00	7,252.04	7,166.17	7,204.74	89.89	30.61	-88.94	-1,771.36	337.34	4,769.80	4,675.67	94.12	50.676		
10,300.00	7,251.66	7,165.48	7,204.05	92.54	30.60	-88.93	-1,771.35	337.34	4,842.87	4,747.88	94.99	50.981		
10,400.00	7,251.28	7,164.78	7,203.36	95.19	30.60	-88.92	-1,771.34	337.34	4,916.89	4,821.06	95.84	51.305		
10,500.00	7,250.90	7,164.09	7,202.66	97.86	30.60	-88.91	-1,771.34	337.33	4,991.82	4,895.17	96.65	51.649		
10,600.00	7,250.52	7,163.39	7,201.97	100.53	30.60	-88.90	-1,771.33	337.33	5,067.61	4,970.18	97.43	52.011		
10,700.00	7,250.14	7,162.70	7,201.27	103.22	30.59	-88.88	-1,771.32	337.33	5,144.23	5,046.05	98.19	52.391		
10,800.00	7,249.76	7,162.00	7,200.58	105.91	30.59	-88.87	-1,771.31	337.33	5,221.65	5,122.73	98.92	52.786		
10,900.00	7,249.38	7,161.31	7,199.88	108.62	30.59	-88.86	-1,771.31	337.32	5,299.81	5,200.19	99.63	53.197		
11,000.00	7,249.00	7,160.61	7,199.19	111.33	30.58	-88.85	-1,771.30	337.32	5,378.70	5,278.40	100.31	53.623		
11,100.00	7,248.62	7,159.92	7,198.49	114.04	30.58	-88.84	-1,771.29	337.32	5,458.29	5,357.32	100.96	54.062		
11,200.00	7,248.24	7,159.22	7,197.80	116.77	30.58	-88.82	-1,771.28	337.32	5,538.53	5,436.93	101.60	54.514		
11,300.00	7,247.86	7,158.53	7,197.10	119.50	30.58	-88.81	-1,771.27	337.31	5,619.41	5,517.20	102.21	54.979		
11,400.00	7,247.48	7,157.84	7,196.41	122.24	30.57	-88.80	-1,771.27	337.31	5,700.89	5,598.09	102.80	55.456		
11,500.00	7,247.10	7,157.14	7,195.71	124.98	30.57	-88.79	-1,771.26	337.31	5,782.96	5,679.59	103.37	55.943		
11,600.00	7,246.72	7,156.45	7,195.02	127.73	30.57	-88.77	-1,771.25	337.31	5,865.58	5,761.66	103.92	56.441		
11,700.00	7,246.34	7,155.75	7,194.32	130.48	30.56	-88.76	-1,771.24	337.31	5,948.74	5,844.28	104.46	56.949		
11,800.00	7,245.96	7,155.06	7,193.63	133.24	30.56	-88.75	-1,771.24	337.30	6,032.40	5,927.43	104.97	57.467		
11,900.00	7,245.58	7,154.36	7,192.93	136.00	30.56	-88.74	-1,771.23	337.30	6,116.56	6,011.09	105.47	57.993		
12,000.00	7,245.21	7,153.67	7,192.24	138.76	30.55	-88.73	-1,771.22	337.30	6,201.19	6,095.24	105.95	58.528		
12,100.00	7,244.83	7,152.97	7,191.55	141.53	30.55	-88.71	-1,771.21	337.30	6,286.27	6,179.85	106.42	59.071		
12,200.00	7,244.45	7,152.28	7,190.85	144.30	30.55	-88.70	-1,771.21	337.29	6,371.78	6,264.91	106.87	59.622		
12,300.00	7,244.07	7,151.58	7,190.16	147.08	30.55	-88.69	-1,771.20	337.29	6,457.71	6,350.40	107.31	60.180		
12,400.00	7,243.69	7,150.89	7,189.46	149.86	30.54	-88.68	-1,771.19	337.29	6,544.04	6,436.31	107.73	60.745		
12,500.00	7,243.31	7,150.19	7,188.77	152.64	30.54	-88.67	-1,771.18	337.29	6,630.75	6,522.61	108.14	61.317		
12,600.00	7,242.93	7,149.50	7,188.07	155.42	30.54	-88.65	-1,771.17	337.29	6,717.83	6,609.29	108.54	61.895		
12,700.00	7,242.55	7,148.80	7,187.38	158.21	30.53	-88.64	-1,771.17	337.28	6,805.27	6,696.35	108.92	62.479		
12,800.00	7,242.17	7,148.11	7,186.68	161.00	30.53	-88.63	-1,771.16	337.28	6,893.05	6,783.75	109.29	63.069		
12,900.00	7,241.79	7,147.41	7,185.99	163.79	30.53	-88.62	-1,771.15	337.28	6,981.15	6,871.50	109.66	63.664		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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
13,000.00	7,241.41	7,146.72	7,185.29	166.58	30.53	-88.60	-1,771.14	337.28	7,069.58	6,959.57	110.01	64.264	
13,100.00	7,241.03	7,146.02	7,184.60	169.38	30.52	-88.59	-1,771.14	337.27	7,158.30	7,047.95	110.35	64.870	
13,200.00	7,240.65	7,145.33	7,183.90	172.18	30.52	-88.58	-1,771.13	337.27	7,247.33	7,136.64	110.68	65.480	
13,300.00	7,240.27	7,144.63	7,183.21	174.98	30.52	-88.57	-1,771.12	337.27	7,336.63	7,225.63	111.00	66.094	
13,400.00	7,239.89	7,143.94	7,182.51	177.78	30.51	-88.56	-1,771.11	337.27	7,426.21	7,314.89	111.32	66.713	
13,500.00	7,239.51	7,143.25	7,181.82	180.58	30.51	-88.54	-1,771.11	337.27	7,516.05	7,404.43	111.62	67.336	
13,600.00	7,239.13	7,142.55	7,181.12	183.39	30.51	-88.53	-1,771.10	337.26	7,606.14	7,494.22	111.92	67.963	
13,700.00	7,238.75	7,141.86	7,180.43	186.20	30.50	-88.52	-1,771.09	337.26	7,696.48	7,584.27	112.20	68.593	
13,800.00	7,238.37	7,141.16	7,179.74	189.00	30.50	-88.51	-1,771.08	337.26	7,787.05	7,674.57	112.49	69.227	
13,900.00	7,237.99	7,140.47	7,179.04	191.81	30.50	-88.50	-1,771.07	337.26	7,877.85	7,765.09	112.76	69.865	
14,000.00	7,237.62	7,139.77	7,178.35	194.63	30.50	-88.48	-1,771.07	337.25	7,968.88	7,855.85	113.03	70.505	
14,100.00	7,237.24	7,139.08	7,177.65	197.44	30.49	-88.47	-1,771.06	337.25	8,060.11	7,946.83	113.28	71.149	
14,200.00	7,236.86	7,138.38	7,176.96	200.25	30.49	-88.46	-1,771.05	337.25	8,151.55	8,038.01	113.54	71.796	
14,300.00	7,236.48	7,137.69	7,176.26	203.07	30.49	-88.45	-1,771.04	337.25	8,243.19	8,129.41	113.78	72.445	
14,400.00	7,236.10	7,136.99	7,175.57	205.88	30.48	-88.44	-1,771.04	337.25	8,335.02	8,221.00	114.03	73.098	
14,500.00	7,235.72	7,136.30	7,174.87	208.70	30.48	-88.42	-1,771.03	337.24	8,427.04	8,312.78	114.26	73.752	
14,600.00	7,235.34	7,135.60	7,174.18	211.52	30.48	-88.41	-1,771.02	337.24	8,519.24	8,404.75	114.49	74.410	
14,700.00	7,234.96	7,134.91	7,173.48	214.34	30.47	-88.40	-1,771.01	337.24	8,611.61	8,496.89	114.72	75.069	
14,800.00	7,234.58	7,134.21	7,172.79	217.16	30.47	-88.39	-1,771.01	337.24	8,704.15	8,589.21	114.93	75.731	
14,900.00	7,234.20	7,133.52	7,172.09	219.98	30.47	-88.37	-1,771.00	337.23	8,796.85	8,681.70	115.15	76.395	
15,000.00	7,233.82	7,132.82	7,171.40	222.81	30.47	-88.36	-1,770.99	337.23	8,889.71	8,774.35	115.36	77.061	
15,100.00	7,233.44	7,132.13	7,170.70	225.63	30.46	-88.35	-1,770.98	337.23	8,982.73	8,867.16	115.56	77.729	
15,200.00	7,233.06	7,131.43	7,170.01	228.45	30.46	-88.34	-1,770.97	337.23	9,075.89	8,960.12	115.77	78.399	
15,216.01	7,233.00	7,131.32	7,169.90	228.91	30.46	-88.34	-1,770.97	337.23	9,090.82	8,975.02	115.80	78.506	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
0.00	0.00	0.00	71.00	3.28	3.28	173.10	-4,499.16	544.13	4,532.50					
100.00	100.00	28.31	99.31	3.28	3.28	173.10	-4,499.16	544.12	4,531.95	4,525.38	6.57	690.292 CC		
200.00	200.00	123.67	194.67	3.34	3.30	173.11	-4,499.23	543.91	4,531.99	4,525.36	6.63	683.335 ES		
300.00	299.98	213.41	284.40	3.45	3.35	178.84	-4,499.48	543.65	4,533.97	4,527.18	6.80	666.809		
400.00	399.84	307.67	378.67	3.61	3.46	178.84	-4,499.88	543.55	4,539.62	4,532.55	7.07	642.184		
500.00	499.45	410.72	481.71	3.82	3.63	178.84	-4,500.32	543.59	4,548.76	4,541.32	7.44	611.119		
600.00	598.70	507.67	578.67	4.07	3.82	178.84	-4,500.74	543.60	4,561.36	4,553.48	7.89	578.207		
700.00	697.47	609.66	680.66	4.35	4.06	178.84	-4,501.18	543.37	4,577.41	4,568.99	8.41	543.998		
800.00	795.62	712.61	783.61	4.67	4.34	178.85	-4,501.55	542.89	4,596.77	4,587.77	9.00	510.617		
900.00	893.06	801.58	872.57	5.01	4.60	178.85	-4,501.94	542.23	4,619.60	4,610.01	9.60	481.249		
1,000.00	989.64	901.40	972.38	5.38	4.91	178.86	-4,502.48	541.19	4,645.87	4,635.61	10.27	452.435		
1,100.00	1,085.42	977.69	1,048.66	5.78	5.16	178.87	-4,503.05	540.17	4,675.18	4,664.28	10.89	429.150		
1,200.00	1,181.09	1,060.13	1,131.09	6.20	5.43	178.90	-4,503.99	538.81	4,705.18	4,693.63	11.55	407.317		
1,300.00	1,276.76	1,149.13	1,220.07	6.65	5.74	178.93	-4,505.21	537.24	4,735.39	4,723.13	12.25	386.410		
1,400.00	1,372.43	1,248.97	1,319.88	7.11	6.10	178.96	-4,506.63	535.41	4,765.63	4,752.61	13.02	366.064		
1,500.00	1,468.10	1,353.99	1,424.87	7.57	6.49	179.00	-4,507.93	533.21	4,795.67	4,781.85	13.82	346.978		
1,600.00	1,563.77	1,451.62	1,522.47	8.05	6.85	179.03	-4,509.01	531.18	4,825.60	4,810.99	14.61	330.279		
1,700.00	1,659.44	1,542.07	1,612.89	8.53	7.19	179.06	-4,510.03	529.37	4,855.55	4,840.17	15.38	315.644		
1,800.00	1,755.11	1,641.76	1,712.56	9.02	7.58	179.09	-4,511.25	527.50	4,885.62	4,869.41	16.20	301.517		
1,900.00	1,850.78	1,743.66	1,814.44	9.52	7.97	179.12	-4,512.18	525.58	4,915.38	4,898.34	17.04	288.416		
2,000.00	1,946.45	1,827.28	1,898.04	10.02	8.30	179.14	-4,513.08	524.21	4,945.33	4,927.52	17.81	277.649		
2,100.00	2,042.12	1,916.94	1,987.68	10.52	8.66	179.16	-4,514.18	522.73	4,975.42	4,956.81	18.61	267.322		
2,200.00	2,137.78	2,003.73	2,074.45	11.03	9.00	179.19	-4,515.39	521.17	5,005.65	4,986.25	19.41	257.952		
2,300.00	2,233.45	2,087.32	2,158.01	11.54	9.34	179.21	-4,516.73	519.60	5,036.08	5,015.89	20.19	249.449		
2,400.00	2,329.12	2,182.87	2,253.54	12.05	9.72	179.24	-4,518.40	517.76	5,066.63	5,045.60	21.03	240.920		
2,500.00	2,424.79	2,342.89	2,413.52	12.56	10.37	179.29	-4,520.20	514.87	5,096.65	5,074.48	22.17	229.886		
2,600.00	2,520.46	2,523.41	2,594.01	13.08	11.11	179.32	-4,519.29	512.20	5,125.07	5,101.66	23.41	218.953		
2,700.00	2,616.13	2,621.00	2,691.58	13.60	11.51	179.34	-4,518.03	510.72	5,152.79	5,128.52	24.27	212.297		
2,800.00	2,711.80	2,716.58	2,787.14	14.12	11.90	179.36	-4,516.79	509.15	5,180.48	5,155.35	25.13	206.147		
2,900.00	2,807.47	2,805.99	2,876.53	14.64	12.27	179.38	-4,515.72	507.58	5,208.26	5,182.30	25.96	200.606		
3,000.00	2,903.14	2,901.17	2,971.69	15.16	12.66	179.40	-4,514.65	505.84	5,236.11	5,209.28	26.82	195.201		
3,100.00	2,998.81	2,988.10	3,058.60	15.68	13.02	179.42	-4,513.76	504.20	5,264.04	5,236.39	27.65	190.388		
3,200.00	3,094.48	3,090.99	3,161.46	16.21	13.45	179.45	-4,512.77	502.15	5,292.02	5,263.47	28.55	185.352		
3,300.00	3,190.15	3,197.81	3,268.26	16.73	13.89	179.47	-4,511.53	500.02	5,319.82	5,290.34	29.47	180.490		
3,400.00	3,285.82	3,277.45	3,347.88	17.26	14.23	179.49	-4,510.64	498.48	5,347.66	5,317.39	30.27	176.673		
3,500.00	3,381.49	3,357.96	3,428.36	17.78	14.56	179.51	-4,510.00	496.82	5,375.80	5,344.73	31.07	173.034		
3,600.00	3,477.16	3,441.98	3,512.36	18.31	14.91	179.54	-4,509.59	494.83	5,404.19	5,372.31	31.88	169.490		
3,700.00	3,572.83	3,529.01	3,599.36	18.84	15.28	179.56	-4,509.34	492.52	5,432.75	5,400.04	32.72	166.050		
3,800.00	3,668.50	3,617.61	3,687.93	19.37	15.65	179.59	-4,509.22	490.26	5,461.47	5,427.91	33.56	162.744		
3,900.00	3,764.17	3,713.06	3,783.36	19.89	16.05	179.61	-4,509.08	488.26	5,490.23	5,455.79	34.43	159.441		
4,000.00	3,859.84	3,797.51	3,867.79	20.42	16.40	179.63	-4,509.06	486.53	5,519.10	5,483.84	35.26	156.548		
4,100.00	3,955.51	3,898.99	3,969.25	20.95	16.83	179.66	-4,509.07	484.53	5,548.02	5,511.86	36.16	153.419		
4,200.00	4,051.18	3,997.85	4,068.09	21.48	17.25	179.68	-4,508.98	482.85	5,576.87	5,539.81	37.06	150.492		
4,300.00	4,146.85	4,095.32	4,165.55	22.01	17.66	179.69	-4,508.81	481.48	5,605.67	5,567.73	37.95	147.728		
4,400.00	4,242.52	4,210.62	4,280.85	22.55	18.14	179.70	-4,508.27	481.18	5,634.31	5,595.38	38.93	144.745		
4,500.00	4,338.19	4,358.15	4,428.37	23.08	18.75	179.69	-4,506.58	482.25	5,662.44	5,622.37	40.07	141.312		
4,600.00	4,433.86	4,471.44	4,541.64	23.61	19.23	179.68	-4,504.37	483.06	5,689.73	5,648.69	41.04	138.630		
4,700.00	4,529.53	4,544.42	4,614.60	24.14	19.53	179.67	-4,503.01	483.70	5,717.17	5,675.36	41.81	136.740		
4,800.00	4,625.19	4,600.01	4,670.18	24.67	19.77	179.67	-4,502.27	484.03	5,745.13	5,702.64	42.49	135.220		
4,900.00	4,720.86	4,666.19	4,736.36	25.21	20.04	179.67	-4,501.81	484.35	5,773.66	5,730.44	43.22	133.598		
5,000.00	4,816.53	4,740.55	4,810.73	25.74	20.35	179.66	-4,501.79	484.71	5,802.76	5,758.78	43.99	131.918		
5,100.00	4,912.20	4,836.45	4,906.62	26.27	20.76	179.66	-4,501.83	485.22	5,831.96	5,787.09	44.87	129.968		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	4,930.59	5,000.75	26.80	21.15	179.66	-4,501.91	485.45	5,861.17	5,815.43	45.75	128.119	
5,300.00	5,103.54	5,027.93	5,098.10	27.34	21.56	179.66	-4,501.99	485.81	5,890.40	5,843.76	46.64	126.292	
5,400.00	5,199.22	5,135.27	5,205.44	27.87	22.01	179.65	-4,501.93	486.46	5,919.51	5,871.92	47.59	124.390	
5,500.00	5,295.46	5,289.25	5,359.41	28.39	22.66	179.65	-4,501.07	487.58	5,946.23	5,897.45	48.78	121.904	
5,600.00	5,392.60	5,528.68	5,598.69	28.89	23.67	179.60	-4,495.07	492.78	5,967.79	5,917.39	50.40	118.410	
5,700.00	5,490.50	5,600.01	5,669.95	29.37	23.97	179.58	-4,492.71	494.86	5,985.14	5,934.00	51.14	117.044	
5,800.00	5,589.05	5,640.16	5,710.07	29.83	24.14	179.57	-4,491.69	495.82	5,999.68	5,947.98	51.69	116.061	
5,900.00	5,688.14	5,700.01	5,769.90	30.26	24.39	179.56	-4,490.58	496.92	6,011.49	5,959.16	52.34	114.856	
6,000.00	5,787.63	5,764.09	5,833.97	30.68	24.66	179.55	-4,489.84	497.68	6,020.46	5,967.47	52.99	113.613	
6,100.00	5,887.41	5,842.16	5,912.04	31.07	24.99	179.55	-4,489.38	498.07	6,026.44	5,972.74	53.70	112.219	
6,200.00	5,987.36	5,947.74	6,017.62	31.44	25.44	179.55	-4,488.95	498.33	6,029.11	5,974.56	54.55	110.528	
6,300.00	6,087.36	6,054.59	6,124.47	31.80	25.89	173.82	-4,488.27	498.28	6,028.70	5,973.31	55.39	108.842	
6,400.00	6,187.36	6,162.72	6,232.59	32.15	26.35	173.82	-4,487.63	498.09	6,028.10	5,971.86	56.24	107.188	
6,500.00	6,287.36	6,283.64	6,353.51	32.51	26.87	173.82	-4,486.52	497.80	6,027.16	5,970.00	57.16	105.448	
6,600.00	6,387.36	6,373.29	6,443.15	32.87	27.25	173.82	-4,485.60	497.56	6,026.11	5,968.20	57.91	104.060	
6,700.00	6,487.36	6,464.05	6,533.91	33.23	27.63	173.82	-4,484.87	497.31	6,025.28	5,966.61	58.67	102.697	
6,800.00	6,587.36	6,563.89	6,633.74	33.59	28.06	173.83	-4,484.18	496.71	6,024.53	5,965.05	59.48	101.285	
6,900.00	6,687.26	6,688.47	6,758.32	33.95	28.59	-95.79	-4,483.03	496.61	6,023.93	5,963.51	60.42	99.705	
6,918.31	6,705.45	6,713.17	6,783.01	34.02	28.69	-95.82	-4,482.71	496.72	6,023.91	5,963.31	60.60	99.405	
7,000.00	6,785.58	6,794.70	6,864.54	34.31	29.04	-95.92	-4,481.67	496.72	6,024.48	5,963.22	61.26	98.343	
7,100.00	6,879.94	6,885.81	6,955.64	34.65	29.42	-96.00	-4,480.52	496.45	6,026.74	5,964.70	62.03	97.152	
7,200.00	6,968.01	6,980.96	7,050.78	34.97	29.83	-96.06	-4,479.23	496.73	6,030.89	5,968.05	62.85	95.959	
7,300.00	7,047.61	7,037.23	7,107.04	35.27	30.07	-95.81	-4,478.42	497.48	6,037.24	5,973.75	63.49	95.090	
7,400.00	7,116.80	7,078.39	7,148.20	35.54	30.24	-95.28	-4,478.02	498.11	6,046.25	5,982.14	64.11	94.307	
7,500.00	7,173.86	7,119.93	7,189.72	35.81	30.42	-94.56	-4,477.78	498.79	6,057.93	5,993.09	64.84	93.435	
7,600.00	7,217.38	7,161.95	7,231.74	36.17	30.60	-93.63	-4,477.55	499.49	6,072.11	6,006.41	65.69	92.431	
7,700.00	7,246.31	7,189.28	7,259.07	36.80	30.71	-92.38	-4,477.41	499.94	6,088.66	6,022.05	66.62	91.399	
7,800.00	7,259.92	7,201.24	7,271.03	37.72	30.76	-90.78	-4,477.34	500.14	6,107.37	6,039.78	67.59	90.360	
7,900.00	7,260.77	7,200.42	7,270.21	38.86	30.76	-90.04	-4,477.35	500.13	6,127.86	6,059.26	68.61	89.316	
8,000.00	7,260.39	7,198.38	7,268.16	40.19	30.75	-90.02	-4,477.36	500.09	6,149.92	6,080.16	69.77	88.152	
8,100.00	7,260.01	7,196.33	7,266.12	41.67	30.74	-90.00	-4,477.37	500.06	6,173.52	6,102.47	71.05	86.892	
8,200.00	7,259.63	7,194.29	7,264.08	43.30	30.73	-89.98	-4,477.38	500.03	6,198.64	6,126.20	72.44	85.568	
8,300.00	7,259.25	7,192.24	7,262.03	45.05	30.73	-89.96	-4,477.39	499.99	6,225.26	6,151.34	73.93	84.209	
8,400.00	7,258.87	7,190.20	7,259.99	46.91	30.72	-89.95	-4,477.40	499.96	6,253.37	6,177.88	75.49	82.836	
8,500.00	7,258.49	7,188.15	7,257.94	48.87	30.71	-89.93	-4,477.41	499.92	6,282.95	6,205.83	77.12	81.469	
8,600.00	7,258.11	7,186.11	7,255.90	50.92	30.70	-89.91	-4,477.42	499.89	6,313.97	6,235.17	78.80	80.123	
8,700.00	7,257.73	7,184.07	7,253.85	53.04	30.69	-89.89	-4,477.43	499.86	6,346.41	6,265.89	80.53	78.810	
8,800.00	7,257.35	7,182.02	7,251.81	55.23	30.68	-89.87	-4,477.44	499.82	6,380.26	6,297.97	82.29	77.538	
8,900.00	7,256.97	7,179.98	7,249.77	57.47	30.67	-89.85	-4,477.45	499.79	6,415.48	6,331.42	84.07	76.314	
9,000.00	7,256.59	7,177.93	7,247.72	59.77	30.66	-89.83	-4,477.47	499.75	6,452.07	6,366.20	85.86	75.142	
9,100.00	7,256.21	7,175.89	7,245.68	62.12	30.66	-89.81	-4,477.48	499.72	6,489.98	6,402.31	87.67	74.025	
9,200.00	7,255.83	7,173.84	7,243.63	64.50	30.65	-89.79	-4,477.49	499.69	6,529.21	6,439.72	89.49	72.963	
9,300.00	7,255.45	7,171.80	7,241.59	66.93	30.64	-89.77	-4,477.50	499.65	6,569.73	6,478.43	91.30	71.958	
9,400.00	7,255.07	7,169.75	7,239.55	69.38	30.63	-89.75	-4,477.51	499.62	6,611.50	6,518.40	93.11	71.009	
9,500.00	7,254.69	7,167.71	7,237.50	71.87	30.62	-89.73	-4,477.52	499.58	6,654.52	6,559.61	94.91	70.115	
9,600.00	7,254.31	7,165.67	7,235.46	74.38	30.61	-89.71	-4,477.53	499.55	6,698.76	6,602.06	96.70	69.275	
9,700.00	7,253.93	7,163.62	7,233.41	76.92	30.60	-89.69	-4,477.54	499.52	6,744.18	6,645.71	98.47	68.487	
9,800.00	7,253.55	7,161.58	7,231.37	79.48	30.60	-89.67	-4,477.55	499.48	6,790.78	6,690.55	100.23	67.750	
9,900.00	7,253.18	7,159.53	7,229.33	82.06	30.59	-89.65	-4,477.56	499.45	6,838.52	6,736.55	101.97	67.063	
10,000.00	7,252.80	7,157.49	7,227.28	84.65	30.58	-89.63	-4,477.57	499.41	6,887.38	6,783.69	103.69	66.422	
10,100.00	7,252.42	7,155.44	7,225.24	87.27	30.57	-89.61	-4,477.59	499.38	6,937.33	6,831.94	105.39	65.826	
10,200.00	7,252.04	7,153.40	7,223.19	89.89	30.56	-89.59	-4,477.60	499.35	6,988.36	6,881.30	107.06	65.273	

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,251.66	7,151.35	7,221.15	92.54	30.55	-89.57	-4,477.61	499.31	7,040.44	6,931.73	108.71	64.761	
10,400.00	7,251.28	7,149.31	7,219.11	95.19	30.54	-89.55	-4,477.62	499.28	7,093.55	6,983.21	110.34	64.288	
10,500.00	7,250.90	7,147.27	7,217.06	97.86	30.53	-89.53	-4,477.63	499.24	7,147.66	7,035.72	111.94	63.853	
10,600.00	7,250.52	7,145.22	7,215.02	100.53	30.53	-89.51	-4,477.64	499.21	7,202.75	7,089.24	113.51	63.454	
10,700.00	7,250.14	7,143.18	7,212.97	103.22	30.52	-89.50	-4,477.65	499.18	7,258.80	7,143.75	115.06	63.088	
10,800.00	7,249.76	7,141.13	7,210.93	105.91	30.51	-89.48	-4,477.66	499.14	7,315.79	7,199.21	116.58	62.755	
10,900.00	7,249.38	7,139.09	7,208.88	108.62	30.50	-89.46	-4,477.67	499.11	7,373.70	7,255.63	118.07	62.452	
11,000.00	7,249.00	7,137.04	7,206.84	111.33	30.49	-89.44	-4,477.68	499.08	7,432.49	7,312.96	119.53	62.179	
11,100.00	7,248.62	7,135.00	7,204.80	114.04	30.48	-89.42	-4,477.69	499.04	7,492.16	7,371.19	120.97	61.934	
11,200.00	7,248.24	7,132.96	7,202.75	116.77	30.47	-89.40	-4,477.71	499.01	7,552.68	7,430.31	122.38	61.716	
11,300.00	7,247.86	7,130.91	7,200.71	119.50	30.47	-89.38	-4,477.72	498.97	7,614.04	7,490.28	123.76	61.522	
11,400.00	7,247.48	7,128.87	7,198.66	122.24	30.46	-89.36	-4,477.73	498.94	7,676.20	7,551.09	125.11	61.353	
11,500.00	7,247.10	7,126.82	7,196.62	124.98	30.45	-89.34	-4,477.74	498.91	7,739.16	7,612.72	126.44	61.208	
11,600.00	7,246.72	7,124.78	7,194.58	127.73	30.44	-89.32	-4,477.75	498.87	7,802.89	7,675.15	127.74	61.083	
11,700.00	7,246.34	7,122.73	7,192.53	130.48	30.43	-89.30	-4,477.76	498.84	7,867.38	7,738.36	129.01	60.980	
11,800.00	7,245.96	7,120.69	7,190.49	133.24	30.42	-89.28	-4,477.77	498.80	7,932.60	7,802.34	130.26	60.897	
11,900.00	7,245.58	7,118.64	7,188.44	136.00	30.41	-89.26	-4,477.78	498.77	7,998.54	7,867.05	131.48	60.833	
12,000.00	7,245.21	7,116.60	7,186.40	138.76	30.40	-89.24	-4,477.79	498.74	8,065.18	7,932.50	132.68	60.787	
12,100.00	7,244.83	7,114.56	7,184.36	141.53	30.40	-89.22	-4,477.80	498.70	8,132.50	7,998.65	133.85	60.759	
12,200.00	7,244.45	7,112.51	7,182.31	144.30	30.39	-89.20	-4,477.81	498.67	8,200.49	8,065.49	134.99	60.747 SF	
12,300.00	7,244.07	7,110.47	7,180.27	147.08	30.38	-89.18	-4,477.83	498.63	8,269.13	8,133.01	136.11	60.751	
12,400.00	7,243.69	7,108.42	7,178.22	149.86	30.37	-89.16	-4,477.84	498.60	8,338.40	8,201.19	137.21	60.771	
12,500.00	7,243.31	7,106.38	7,176.18	152.64	30.36	-89.14	-4,477.85	498.57	8,408.29	8,270.00	138.28	60.804	
12,600.00	7,242.93	7,104.33	7,174.13	155.42	30.35	-89.12	-4,477.86	498.53	8,478.78	8,339.45	139.33	60.852	
12,700.00	7,242.55	7,102.29	7,172.09	158.21	30.34	-89.10	-4,477.87	498.50	8,549.86	8,409.50	140.36	60.913	
12,800.00	7,242.17	7,100.24	7,170.05	161.00	30.34	-89.08	-4,477.88	498.46	8,621.52	8,480.15	141.37	60.987	
12,900.00	7,241.79	7,101.83	7,168.00	163.79	30.34	-89.07	-4,477.89	498.43	8,693.73	8,551.37	142.36	61.067	
13,000.00	7,241.41	7,103.87	7,165.96	166.58	30.35	-89.05	-4,477.90	498.40	8,766.49	8,623.15	143.34	61.157	
13,100.00	7,241.03	7,105.92	7,163.91	169.38	30.36	-89.03	-4,477.91	498.36	8,839.78	8,695.48	144.30	61.259	
13,200.00	7,240.65	7,107.96	7,161.87	172.18	30.37	-89.01	-4,477.92	498.33	8,913.59	8,768.35	145.24	61.372	
13,300.00	7,240.27	7,110.01	7,159.83	174.98	30.38	-88.99	-4,477.93	498.29	8,987.91	8,841.75	146.16	61.495	
13,400.00	7,239.89	7,112.05	7,157.78	177.78	30.39	-88.97	-4,477.95	498.26	9,062.72	8,915.66	147.06	61.628	
13,500.00	7,239.51	7,114.10	7,155.74	180.58	30.39	-88.95	-4,477.96	498.23	9,138.01	8,990.07	147.93	61.771	
13,600.00	7,239.13	7,116.14	7,153.69	183.39	30.40	-88.93	-4,477.97	498.19	9,213.77	9,064.97	148.79	61.923	
13,700.00	7,238.75	7,118.18	7,151.65	186.20	30.41	-88.91	-4,477.98	498.16	9,289.99	9,140.35	149.64	62.084	
13,800.00	7,238.37	7,120.23	7,149.61	189.00	30.42	-88.89	-4,477.99	498.12	9,366.65	9,216.19	150.46	62.253	
13,900.00	7,237.99	7,122.27	7,147.56	191.81	30.43	-88.87	-4,478.00	498.09	9,443.76	9,292.49	151.27	62.431	
14,000.00	7,237.62	7,100.01	7,169.82	194.63	30.33	-89.08	-4,477.88	498.46	9,521.31	9,369.34	151.97	62.652	
14,100.00	7,237.24	7,100.01	7,169.82	197.44	30.33	-89.08	-4,477.88	498.46	9,599.26	9,446.52	152.74	62.848	
14,200.00	7,236.86	7,100.01	7,169.82	200.25	30.33	-89.08	-4,477.88	498.46	9,677.61	9,524.13	153.49	63.051	
14,300.00	7,236.48	7,100.01	7,169.82	203.07	30.33	-89.08	-4,477.88	498.46	9,756.36	9,602.14	154.22	63.262	
14,400.00	7,236.10	7,100.01	7,169.82	205.88	30.33	-89.08	-4,477.88	498.46	9,835.50	9,680.56	154.94	63.479	
14,500.00	7,235.72	7,081.63	7,151.44	208.70	30.26	-88.91	-4,478.00	498.16	9,914.98	9,759.43	155.55	63.740	
14,600.00	7,235.34	7,080.58	7,150.38	211.52	30.25	-88.90	-4,478.00	498.14	9,994.86	9,838.62	156.24	63.973	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	19.24	-1.76	3.28	3.28	173.10	-4,499.16	544.13	4,531.95					
100.00	100.00	111.58	90.58	3.28	3.29	173.11	-4,499.30	544.03	4,532.08	4,525.50	6.58	689.255		
200.00	200.00	210.24	189.24	3.34	3.35	173.11	-4,499.54	543.91	4,532.31	4,525.62	6.69	677.660		
300.00	299.98	316.98	295.98	3.45	3.47	178.84	-4,499.73	543.71	4,534.20	4,527.28	6.92	655.310		
400.00	399.84	416.98	395.97	3.61	3.64	178.85	-4,499.86	543.37	4,539.53	4,532.28	7.24	626.598		
500.00	499.45	519.22	498.22	3.82	3.85	178.85	-4,499.95	543.06	4,548.29	4,540.62	7.66	593.556		
600.00	598.70	616.44	595.43	4.07	4.08	178.85	-4,500.05	542.69	4,560.53	4,552.38	8.14	559.940		
700.00	697.47	717.38	696.38	4.35	4.35	178.85	-4,500.12	542.40	4,576.20	4,567.50	8.70	526.069		
800.00	795.62	811.56	790.55	4.67	4.63	178.85	-4,500.21	542.20	4,595.35	4,586.06	9.29	494.835		
900.00	893.06	911.07	890.07	5.01	4.94	178.85	-4,500.34	541.89	4,617.93	4,607.99	9.93	464.843		
1,000.00	989.64	1,005.04	984.04	5.38	5.25	178.85	-4,500.47	541.61	4,643.90	4,633.30	10.60	438.037		
1,100.00	1,085.42	1,105.19	1,084.19	5.78	5.59	178.86	-4,500.58	541.34	4,672.72	4,661.40	11.32	412.754		
1,200.00	1,181.09	1,195.57	1,174.56	6.20	5.91	178.87	-4,500.69	541.01	4,701.91	4,689.89	12.02	391.201		
1,300.00	1,276.76	1,282.35	1,261.34	6.65	6.22	178.88	-4,500.94	540.64	4,731.23	4,718.50	12.73	371.792		
1,400.00	1,372.43	1,377.95	1,356.94	7.11	6.57	178.89	-4,501.33	540.20	4,760.66	4,747.18	13.48	353.081		
1,500.00	1,468.10	1,480.86	1,459.85	7.57	6.96	178.91	-4,501.66	539.61	4,790.02	4,775.73	14.29	335.297		
1,600.00	1,563.77	1,576.47	1,555.46	8.05	7.32	178.92	-4,501.89	538.97	4,819.27	4,804.20	15.07	319.718		
1,700.00	1,659.44	1,671.17	1,650.15	8.53	7.69	178.94	-4,502.14	538.35	4,848.55	4,832.68	15.87	305.542		
1,800.00	1,755.11	1,763.01	1,741.99	9.02	8.05	178.95	-4,502.41	537.76	4,877.87	4,861.20	16.66	292.762		
1,900.00	1,850.78	1,852.65	1,831.62	9.52	8.40	178.97	-4,502.79	537.07	4,907.28	4,889.83	17.45	281.171		
2,000.00	1,946.45	1,944.08	1,923.05	10.02	8.76	178.98	-4,503.30	536.24	4,936.81	4,918.55	18.26	270.378		
2,100.00	2,042.12	2,043.90	2,022.87	10.52	9.16	179.00	-4,503.90	535.07	4,966.36	4,947.25	19.11	259.913		
2,200.00	2,137.78	2,148.74	2,127.69	11.03	9.58	179.03	-4,504.34	533.79	4,995.73	4,975.75	19.98	249.976		
2,300.00	2,233.45	2,255.90	2,234.85	11.54	10.02	179.05	-4,504.64	532.34	5,024.95	5,004.07	20.88	240.682		
2,400.00	2,329.12	2,365.47	2,344.41	12.05	10.46	179.07	-4,504.60	530.92	5,053.88	5,032.09	21.79	231.969		
2,500.00	2,424.79	2,464.03	2,442.96	12.56	10.86	179.09	-4,504.38	529.76	5,082.64	5,059.99	22.65	224.398		
2,600.00	2,520.46	2,562.21	2,541.13	13.08	11.27	179.11	-4,504.13	528.82	5,111.40	5,087.88	23.51	217.369		
2,700.00	2,616.13	2,659.59	2,638.51	13.60	11.67	179.12	-4,503.80	528.00	5,140.09	5,115.71	24.38	210.840		
2,800.00	2,711.80	2,750.00	2,728.92	14.12	12.04	179.14	-4,503.52	527.22	5,168.81	5,143.60	25.21	205.001		
2,900.00	2,807.47	2,843.56	2,822.47	14.64	12.42	179.15	-4,503.35	526.47	5,197.66	5,171.59	26.06	199.412		
3,000.00	2,903.14	2,935.05	2,913.96	15.16	12.80	179.16	-4,503.14	525.83	5,226.47	5,199.56	26.91	194.231		
3,100.00	2,998.81	3,013.88	2,992.79	15.68	13.13	179.17	-4,503.16	525.42	5,255.54	5,227.85	27.69	189.778		
3,200.00	3,094.48	3,100.40	3,079.31	16.21	13.49	179.18	-4,503.39	525.01	5,284.84	5,256.32	28.52	185.330		
3,300.00	3,190.15	3,202.06	3,180.97	16.73	13.91	179.19	-4,503.68	524.46	5,314.17	5,284.75	29.41	180.672		
3,400.00	3,285.82	3,282.85	3,261.76	17.26	14.25	179.20	-4,503.99	524.00	5,343.57	5,313.36	30.21	176.878		
3,500.00	3,381.49	3,366.88	3,345.78	17.78	14.60	179.21	-4,504.53	523.49	5,373.22	5,342.19	31.02	173.195		
3,600.00	3,477.16	3,521.59	3,500.49	18.31	15.25	179.22	-4,505.00	522.64	5,402.63	5,370.44	32.19	167.844		
3,700.00	3,572.83	3,648.81	3,627.70	18.84	15.78	179.23	-4,504.03	522.48	5,430.98	5,397.76	33.22	163.496		
3,800.00	3,668.50	3,760.97	3,739.86	19.37	16.24	179.24	-4,502.75	522.22	5,458.98	5,424.80	34.18	159.735		
3,900.00	3,764.17	3,852.42	3,831.30	19.89	16.63	179.24	-4,501.54	522.04	5,486.81	5,451.78	35.03	156.623		
4,000.00	3,859.84	3,934.62	3,913.49	20.42	16.97	179.25	-4,500.68	521.76	5,514.87	5,479.03	35.84	153.862		
4,100.00	3,955.51	4,020.55	3,999.42	20.95	17.33	179.25	-4,499.96	521.40	5,543.14	5,506.47	36.67	151.150		
4,200.00	4,051.18	4,107.10	4,085.96	21.48	17.69	179.26	-4,499.39	520.92	5,571.56	5,534.05	37.51	148.549		
4,300.00	4,146.85	4,180.16	4,159.03	22.01	18.00	179.27	-4,499.13	520.46	5,600.26	5,561.99	38.27	146.330		
4,400.00	4,242.52	4,273.18	4,252.04	22.55	18.39	179.28	-4,499.06	519.92	5,629.23	5,590.09	39.14	143.829		
4,500.00	4,338.19	4,364.65	4,343.51	23.08	18.78	179.29	-4,498.97	519.42	5,658.19	5,618.19	40.00	141.463		
4,600.00	4,433.86	4,458.83	4,437.68	23.61	19.18	179.30	-4,498.97	518.97	5,687.24	5,646.37	40.87	139.149		
4,700.00	4,529.53	4,558.01	4,536.87	24.14	19.60	179.30	-4,498.92	518.54	5,716.25	5,674.48	41.77	136.844		
4,800.00	4,625.19	4,648.81	4,627.67	24.67	19.98	179.31	-4,498.86	518.09	5,745.25	5,702.62	42.63	134.772		
4,900.00	4,720.86	4,732.42	4,711.27	25.21	20.34	179.32	-4,498.96	517.66	5,774.41	5,730.96	43.45	132.901		
5,000.00	4,816.53	4,817.64	4,796.49	25.74	20.69	179.32	-4,499.20	517.57	5,803.78	5,759.50	44.28	131.079		
5,100.00	4,912.20	4,914.03	4,892.89	26.27	21.10	179.33	-4,499.53	517.60	5,833.21	5,788.04	45.16	129.154		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	5,009.58	4,988.43	26.80	21.50	179.33	-4,499.84	517.63	5,862.63	5,816.58	46.05	127.315		
5,300.00	5,103.54	5,099.05	5,077.90	27.34	21.88	179.33	-4,500.19	517.66	5,892.11	5,845.21	46.90	125.632		
5,400.00	5,199.22	5,192.06	5,170.92	27.87	22.27	179.34	-4,500.61	517.73	5,921.64	5,873.87	47.77	123.960		
5,500.00	5,295.46	5,295.04	5,273.89	28.39	22.71	179.35	-4,501.05	517.75	5,949.18	5,900.49	48.69	122.188		
5,600.00	5,392.60	5,394.29	5,373.14	28.89	23.13	179.36	-4,501.40	517.65	5,973.26	5,923.68	49.58	120.486		
5,700.00	5,490.50	5,484.81	5,463.66	29.37	23.51	179.36	-4,501.75	517.61	5,993.98	5,943.57	50.41	118.914		
5,800.00	5,589.05	5,654.60	5,633.45	29.83	24.22	179.37	-4,501.28	517.89	6,010.56	5,958.91	51.65	116.363		
5,900.00	5,688.14	5,739.70	5,718.54	30.26	24.58	179.37	-4,500.66	518.05	6,023.34	5,970.91	52.43	114.883		
6,000.00	5,787.63	5,813.28	5,792.13	30.68	24.89	179.37	-4,500.47	518.05	6,033.07	5,979.94	53.13	113.550		
6,100.00	5,887.41	5,901.53	5,880.37	31.07	25.27	179.38	-4,500.50	517.96	6,039.62	5,985.72	53.90	112.058		
6,200.00	5,987.36	6,008.25	5,987.09	31.44	25.72	179.38	-4,500.60	517.65	6,042.72	5,987.97	54.75	110.369		
6,300.00	6,087.36	6,099.54	6,078.38	31.80	26.11	173.65	-4,500.72	517.23	6,043.04	5,987.54	55.51	108.870		
6,400.00	6,187.36	6,201.01	6,179.85	32.15	26.54	173.66	-4,500.93	516.69	6,043.18	5,986.86	56.32	107.300		
6,500.00	6,287.36	6,336.77	6,315.61	32.51	27.12	173.67	-4,500.76	515.66	6,042.96	5,985.64	57.32	105.423		
6,600.00	6,387.36	6,444.91	6,423.74	32.87	27.58	173.67	-4,500.26	514.55	6,042.39	5,984.21	58.17	103.868		
6,700.00	6,487.36	6,553.05	6,531.87	33.23	28.04	173.68	-4,499.70	513.44	6,041.77	5,982.74	59.03	102.356		
6,800.00	6,587.36	6,659.60	6,638.41	33.59	28.49	173.70	-4,498.96	512.02	6,040.93	5,981.05	59.87	100.894		
6,888.48	6,675.72	6,744.14	6,722.94	33.91	28.85	-95.90	-4,498.40	510.81	6,040.60	5,980.04	60.56	99.738		
6,900.00	6,687.26	6,755.05	6,733.85	33.95	28.90	-95.89	-4,498.34	510.63	6,040.43	5,979.78	60.65	99.588		
7,000.00	6,785.58	6,864.31	6,843.08	34.31	29.37	-95.96	-4,497.70	508.44	6,041.48	5,979.96	61.51	98.214		
7,100.00	6,879.94	6,978.72	6,957.44	34.65	29.85	-96.07	-4,496.77	505.21	6,043.93	5,981.52	62.41	96.839		
7,200.00	6,968.01	7,082.40	7,061.06	34.97	30.30	-96.13	-4,495.72	501.75	6,048.03	5,984.75	63.27	95.587		
7,300.00	7,047.61	7,166.69	7,145.28	35.27	30.66	-96.04	-4,494.81	498.40	6,054.09	5,990.02	64.07	94.494		
7,400.00	7,116.80	7,238.68	7,217.21	35.54	30.96	-95.76	-4,494.02	495.53	6,062.45	5,997.59	64.86	93.463		
7,500.00	7,173.86	7,298.96	7,277.43	35.81	31.22	-95.24	-4,493.37	493.13	6,073.29	6,007.59	65.70	92.443		
7,600.00	7,217.38	7,346.03	7,324.46	36.17	31.42	-94.42	-4,492.86	491.25	6,086.68	6,020.09	66.59	91.406		
7,700.00	7,246.31	7,378.74	7,357.15	36.80	31.56	-93.26	-4,492.50	489.95	6,102.60	6,035.05	67.55	90.346		
7,800.00	7,259.92	7,396.28	7,374.67	37.72	31.64	-91.75	-4,492.31	489.25	6,120.87	6,052.31	68.56	89.283		
7,900.00	7,260.77	7,401.10	7,379.49	38.86	31.66	-91.09	-4,492.26	489.05	6,141.12	6,071.51	69.61	88.221		
8,000.00	7,260.39	7,404.70	7,383.09	40.19	31.67	-91.12	-4,492.22	488.91	6,162.96	6,092.16	70.80	87.045		
8,100.00	7,260.01	7,408.30	7,386.69	41.67	31.69	-91.16	-4,492.18	488.77	6,186.33	6,114.21	72.12	85.779		
8,200.00	7,259.63	7,411.90	7,390.28	43.30	31.71	-91.19	-4,492.14	488.62	6,211.22	6,137.67	73.55	84.454		
8,300.00	7,259.25	7,415.51	7,393.88	45.05	31.72	-91.22	-4,492.10	488.48	6,237.61	6,162.55	75.07	83.096		
8,400.00	7,258.87	7,419.11	7,397.48	46.91	31.74	-91.26	-4,492.06	488.33	6,265.49	6,188.83	76.66	81.728		
8,500.00	7,258.49	7,422.71	7,401.08	48.87	31.75	-91.29	-4,492.02	488.19	6,294.83	6,216.50	78.33	80.367		
8,600.00	7,258.11	7,426.31	7,404.68	50.92	31.77	-91.33	-4,491.98	488.05	6,325.61	6,245.57	80.04	79.029		
8,700.00	7,257.73	7,429.91	7,408.28	53.04	31.78	-91.36	-4,491.94	487.90	6,357.82	6,276.02	81.80	77.725		
8,800.00	7,257.35	7,400.00	7,378.39	55.23	31.65	-91.08	-4,492.27	489.10	6,391.51	6,308.11	83.40	76.634		
8,900.00	7,256.97	7,400.00	7,378.39	57.47	31.65	-91.08	-4,492.27	489.10	6,426.51	6,341.31	85.20	75.430		
9,000.00	7,256.59	7,400.00	7,378.39	59.77	31.65	-91.08	-4,492.27	489.10	6,462.87	6,375.86	87.01	74.278		
9,100.00	7,256.21	7,400.00	7,378.39	62.12	31.65	-91.08	-4,492.27	489.10	6,500.57	6,411.74	88.83	73.179		
9,200.00	7,255.83	7,400.00	7,378.39	64.50	31.65	-91.08	-4,492.27	489.10	6,539.58	6,448.92	90.66	72.134		
9,300.00	7,255.45	7,400.00	7,378.39	66.93	31.65	-91.08	-4,492.27	489.10	6,579.87	6,487.39	92.49	71.145		
9,400.00	7,255.07	7,400.00	7,378.39	69.38	31.65	-91.08	-4,492.27	489.10	6,621.43	6,527.13	94.31	70.211		
9,500.00	7,254.69	7,400.00	7,378.39	71.87	31.65	-91.08	-4,492.27	489.10	6,664.24	6,568.12	96.12	69.331		
9,600.00	7,254.31	7,400.00	7,378.39	74.38	31.65	-91.08	-4,492.27	489.10	6,708.26	6,610.33	97.93	68.504		
9,700.00	7,253.93	7,400.00	7,378.39	76.92	31.65	-91.08	-4,492.27	489.10	6,753.47	6,653.76	99.71	67.728		
9,800.00	7,253.55	7,400.00	7,378.39	79.48	31.65	-91.08	-4,492.27	489.10	6,799.86	6,698.37	101.49	67.002		
9,900.00	7,253.18	7,400.00	7,378.39	82.06	31.65	-91.08	-4,492.27	489.10	6,847.39	6,744.15	103.24	66.324		
10,000.00	7,252.80	7,400.00	7,378.39	84.65	31.65	-91.08	-4,492.27	489.10	6,896.04	6,791.07	104.98	65.692		
10,100.00	7,252.42	7,400.00	7,378.39	87.27	31.65	-91.08	-4,492.27	489.10	6,945.79	6,839.11	106.69	65.104		
10,200.00	7,252.04	7,400.00	7,378.39	89.89	31.65	-91.08	-4,492.27	489.10	6,996.62	6,888.25	108.38	64.559		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,251.66	7,400.00	7,378.39	92.54	31.65	-91.08	-4,492.27	489.10	7,048.50	6,938.46	110.04	64.053		
10,400.00	7,251.28	7,400.00	7,378.39	95.19	31.65	-91.08	-4,492.27	489.10	7,101.41	6,989.73	111.68	63.587		
10,500.00	7,250.90	7,400.00	7,378.39	97.86	31.65	-91.08	-4,492.27	489.10	7,155.33	7,042.03	113.29	63.157		
10,600.00	7,250.52	7,400.00	7,378.39	100.53	31.65	-91.08	-4,492.27	489.10	7,210.23	7,095.35	114.88	62.762		
10,700.00	7,250.14	7,400.00	7,378.39	103.22	31.65	-91.08	-4,492.27	489.10	7,266.09	7,149.65	116.44	62.400		
10,800.00	7,249.76	7,400.00	7,378.39	105.91	31.65	-91.08	-4,492.27	489.10	7,322.89	7,204.91	117.98	62.071		
10,900.00	7,249.38	7,400.00	7,378.39	108.62	31.65	-91.08	-4,492.27	489.10	7,380.61	7,261.13	119.48	61.771		
11,000.00	7,249.00	7,400.00	7,378.39	111.33	31.65	-91.08	-4,492.27	489.10	7,439.22	7,318.26	120.96	61.501		
11,100.00	7,248.62	7,400.00	7,378.39	114.04	31.65	-91.08	-4,492.27	489.10	7,498.72	7,376.30	122.41	61.258		
11,200.00	7,248.24	7,400.00	7,378.39	116.77	31.65	-91.08	-4,492.27	489.10	7,559.06	7,435.22	123.84	61.041		
11,300.00	7,247.86	7,400.00	7,378.39	119.50	31.65	-91.08	-4,492.27	489.10	7,620.24	7,495.01	125.23	60.849		
11,400.00	7,247.48	7,400.00	7,378.39	122.24	31.65	-91.08	-4,492.27	489.10	7,682.23	7,555.63	126.60	60.681		
11,500.00	7,247.10	7,400.00	7,378.39	124.98	31.65	-91.08	-4,492.27	489.10	7,745.02	7,617.08	127.94	60.536		
11,600.00	7,246.72	7,400.00	7,378.39	127.73	31.65	-91.08	-4,492.27	489.10	7,808.59	7,679.33	129.26	60.412		
11,700.00	7,246.34	7,400.00	7,378.39	130.48	31.65	-91.08	-4,492.27	489.10	7,872.91	7,742.37	130.54	60.309		
11,800.00	7,245.96	7,400.00	7,378.39	133.24	31.65	-91.08	-4,492.27	489.10	7,937.97	7,806.17	131.80	60.225		
11,900.00	7,245.58	7,400.00	7,378.39	136.00	31.65	-91.08	-4,492.27	489.10	8,003.75	7,870.71	133.04	60.161		
12,000.00	7,245.21	7,400.00	7,378.39	138.76	31.65	-91.08	-4,492.27	489.10	8,070.24	7,935.99	134.25	60.114		
12,100.00	7,244.83	7,400.00	7,378.39	141.53	31.65	-91.08	-4,492.27	489.10	8,137.41	8,001.97	135.43	60.084		
12,200.00	7,244.45	7,400.00	7,378.39	144.30	31.65	-91.08	-4,492.27	489.10	8,205.25	8,068.65	136.59	60.071 SF		
12,300.00	7,244.07	7,400.00	7,378.39	147.08	31.65	-91.08	-4,492.27	489.10	8,273.74	8,136.01	137.73	60.074		
12,400.00	7,243.69	7,400.00	7,378.39	149.86	31.65	-91.08	-4,492.27	489.10	8,342.86	8,204.03	138.84	60.091		
12,500.00	7,243.31	7,400.00	7,378.39	152.64	31.65	-91.08	-4,492.27	489.10	8,412.61	8,272.69	139.92	60.123		
12,600.00	7,242.93	7,400.00	7,378.39	155.42	31.65	-91.08	-4,492.27	489.10	8,482.97	8,341.98	140.99	60.168		
12,700.00	7,242.55	7,400.00	7,378.39	158.21	31.65	-91.08	-4,492.27	489.10	8,553.91	8,411.88	142.03	60.227		
12,800.00	7,242.17	7,400.00	7,378.39	161.00	31.65	-91.08	-4,492.27	489.10	8,625.43	8,482.38	143.05	60.298		
12,900.00	7,241.79	7,400.00	7,378.39	163.79	31.65	-91.08	-4,492.27	489.10	8,697.51	8,553.47	144.04	60.381		
13,000.00	7,241.41	7,400.00	7,378.39	166.58	31.65	-91.08	-4,492.27	489.10	8,770.14	8,625.12	145.02	60.476		
13,100.00	7,241.03	7,400.00	7,378.39	169.38	31.65	-91.08	-4,492.27	489.10	8,843.31	8,697.33	145.97	60.582		
13,200.00	7,240.65	7,400.00	7,378.39	172.18	31.65	-91.08	-4,492.27	489.10	8,916.99	8,770.09	146.91	60.699		
13,300.00	7,240.27	7,400.00	7,378.39	174.98	31.65	-91.08	-4,492.27	489.10	8,991.18	8,843.37	147.82	60.826		
13,400.00	7,239.89	7,400.00	7,378.39	177.78	31.65	-91.08	-4,492.27	489.10	9,065.87	8,917.16	148.71	60.963		
13,500.00	7,239.51	7,400.00	7,378.39	180.58	31.65	-91.08	-4,492.27	489.10	9,141.05	8,991.46	149.59	61.109		
13,600.00	7,239.13	7,400.00	7,378.39	183.39	31.65	-91.08	-4,492.27	489.10	9,216.69	9,066.25	150.44	61.264		
13,700.00	7,238.75	7,400.00	7,378.39	186.20	31.65	-91.08	-4,492.27	489.10	9,292.80	9,141.52	151.28	61.428		
13,800.00	7,238.37	7,400.00	7,378.39	189.00	31.65	-91.08	-4,492.27	489.10	9,369.35	9,217.25	152.10	61.600		
13,900.00	7,237.99	7,400.00	7,378.39	191.81	31.65	-91.08	-4,492.27	489.10	9,446.34	9,293.44	152.90	61.781		
14,000.00	7,237.62	7,400.00	7,378.39	194.63	31.65	-91.08	-4,492.27	489.10	9,523.76	9,370.08	153.69	61.969		
14,100.00	7,237.24	7,400.00	7,378.39	197.44	31.65	-91.08	-4,492.27	489.10	9,601.60	9,447.15	154.45	62.165		
14,200.00	7,236.86	7,400.00	7,378.39	200.25	31.65	-91.08	-4,492.27	489.10	9,679.84	9,524.64	155.21	62.368		
14,300.00	7,236.48	7,400.00	7,378.39	203.07	31.65	-91.08	-4,492.27	489.10	9,758.49	9,602.54	155.94	62.578		
14,400.00	7,236.10	7,400.00	7,378.39	205.88	31.65	-91.08	-4,492.27	489.10	9,837.52	9,680.85	156.66	62.794		
14,500.00	7,235.72	7,400.00	7,378.39	208.70	31.65	-91.08	-4,492.27	489.10	9,916.92	9,759.56	157.37	63.017		
14,600.00	7,235.34	7,400.00	7,378.39	211.52	31.65	-91.08	-4,492.27	489.10	9,996.70	9,838.64	158.06	63.247		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	21.79	-0.21	3.28	3.28	-27.93	2,182.95	-1,157.23	2,470.72					
100.00	100.00	119.87	97.87	3.28	3.29	-27.93	2,182.88	-1,157.43	2,470.75	2,464.17	6.58	375.590		
200.00	200.00	218.11	196.11	3.34	3.36	-27.93	2,183.04	-1,157.52	2,470.93	2,464.24	6.69	369.076		
300.00	299.98	327.31	305.30	3.45	3.49	-22.22	2,183.03	-1,157.17	2,469.16	2,462.22	6.93	356.137		
400.00	399.84	418.97	396.97	3.61	3.64	-22.30	2,183.12	-1,157.05	2,464.33	2,457.08	7.25	340.075		
500.00	499.45	526.32	504.32	3.82	3.86	-22.44	2,183.06	-1,156.99	2,456.18	2,448.51	7.68	319.994		
600.00	598.70	631.47	609.47	4.07	4.12	-22.64	2,182.91	-1,156.73	2,444.68	2,436.50	8.18	298.893		
700.00	697.47	736.79	714.78	4.35	4.40	-22.91	2,182.35	-1,156.13	2,429.49	2,420.75	8.75	277.683		
800.00	795.62	831.39	809.38	4.67	4.68	-23.22	2,182.06	-1,155.67	2,411.38	2,402.04	9.34	258.139		
900.00	893.06	937.42	915.41	5.01	5.02	-23.61	2,181.44	-1,154.86	2,389.79	2,379.77	10.01	238.642		
1,000.00	989.64	1,027.32	1,005.30	5.38	5.31	-24.05	2,180.94	-1,154.28	2,365.21	2,354.53	10.67	221.608		
1,100.00	1,085.42	1,118.82	1,096.80	5.78	5.63	-24.42	2,180.64	-1,153.80	2,338.28	2,326.91	11.37	205.693		
1,200.00	1,181.09	1,217.23	1,195.21	6.20	5.98	-24.71	2,180.30	-1,153.29	2,311.07	2,298.96	12.10	190.960		
1,300.00	1,276.76	1,312.37	1,290.35	6.65	6.32	-25.01	2,179.87	-1,152.86	2,283.86	2,271.01	12.85	177.745		
1,400.00	1,372.43	1,404.52	1,382.49	7.11	6.66	-25.30	2,179.65	-1,152.30	2,256.81	2,243.20	13.60	165.884		
1,500.00	1,468.10	1,500.64	1,478.62	7.57	7.02	-25.61	2,179.50	-1,151.68	2,229.87	2,215.48	14.39	154.959		
1,600.00	1,563.77	1,602.06	1,580.03	8.05	7.41	-25.95	2,179.05	-1,151.22	2,202.86	2,187.65	15.21	144.855		
1,700.00	1,659.44	1,692.41	1,670.38	8.53	7.76	-26.27	2,178.41	-1,151.21	2,175.90	2,159.90	16.00	136.000		
1,800.00	1,755.11	1,782.04	1,760.01	9.02	8.11	-26.61	2,177.85	-1,151.50	2,149.26	2,132.46	16.80	127.941		
1,900.00	1,850.78	1,889.86	1,867.82	9.52	8.53	-27.01	2,177.19	-1,151.68	2,122.63	2,104.97	17.67	120.147		
2,000.00	1,946.45	1,977.48	1,955.44	10.02	8.88	-27.36	2,176.35	-1,151.91	2,095.86	2,077.38	18.48	113.428		
2,100.00	2,042.12	2,072.17	2,050.13	10.52	9.26	-27.75	2,175.61	-1,152.46	2,069.47	2,050.15	19.32	107.129		
2,200.00	2,137.78	2,173.95	2,151.91	11.03	9.66	-28.17	2,174.77	-1,152.81	2,043.02	2,022.83	20.19	101.209		
2,300.00	2,233.45	2,267.34	2,245.28	11.54	10.04	-28.57	2,173.84	-1,153.04	2,016.48	1,995.44	21.03	95.868		
2,400.00	2,329.12	2,361.10	2,339.04	12.05	10.42	-28.98	2,172.96	-1,153.50	1,990.21	1,968.32	21.89	90.926		
2,500.00	2,424.79	2,455.09	2,433.03	12.56	10.80	-29.42	2,171.94	-1,154.21	1,964.07	1,941.33	22.75	86.342		
2,600.00	2,520.46	2,548.17	2,526.09	13.08	11.18	-29.86	2,170.95	-1,155.09	1,938.16	1,914.55	23.61	82.094		
2,700.00	2,616.13	2,640.45	2,618.37	13.60	11.56	-30.32	2,170.08	-1,155.98	1,912.49	1,888.02	24.47	78.151		
2,800.00	2,711.80	2,730.29	2,708.20	14.12	11.93	-30.76	2,169.56	-1,156.75	1,887.16	1,861.83	25.33	74.499		
2,900.00	2,807.47	2,820.17	2,798.08	14.64	12.30	-31.21	2,169.35	-1,157.65	1,862.30	1,836.11	26.19	71.095		
3,000.00	2,903.14	2,917.46	2,895.37	15.16	12.70	-31.71	2,169.15	-1,158.64	1,837.61	1,810.53	27.08	67.856		
3,100.00	2,998.81	3,009.76	2,987.65	15.68	13.08	-32.21	2,168.79	-1,159.95	1,813.13	1,785.18	27.96	64.852		
3,200.00	3,094.48	3,106.09	3,083.97	16.21	13.48	-32.75	2,168.38	-1,161.46	1,788.86	1,760.02	28.85	62.008		
3,300.00	3,190.15	3,195.15	3,173.01	16.73	13.85	-33.27	2,168.07	-1,163.01	1,764.92	1,735.19	29.72	59.376		
3,400.00	3,285.82	3,285.58	3,263.43	17.26	14.23	-33.82	2,167.81	-1,164.99	1,741.45	1,710.84	30.61	56.897		
3,500.00	3,381.49	3,379.66	3,357.47	17.78	14.62	-34.40	2,167.58	-1,167.31	1,718.36	1,686.85	31.50	54.547		
3,600.00	3,477.16	3,478.80	3,456.59	18.31	15.03	-35.04	2,167.33	-1,169.71	1,695.41	1,662.99	32.41	52.307		
3,700.00	3,572.83	3,573.57	3,551.33	18.84	15.43	-35.66	2,167.04	-1,171.83	1,672.52	1,639.20	33.32	50.203		
3,800.00	3,668.50	3,681.73	3,659.46	19.37	15.88	-36.39	2,166.45	-1,174.23	1,649.65	1,615.40	34.25	48.164		
3,900.00	3,764.17	3,785.71	3,763.41	19.89	16.32	-37.14	2,164.81	-1,176.50	1,626.22	1,591.04	35.18	46.228		
4,000.00	3,859.84	3,882.93	3,860.58	20.42	16.73	-37.87	2,163.02	-1,178.45	1,602.73	1,566.64	36.09	44.404		
4,100.00	3,955.51	3,976.92	3,954.54	20.95	17.12	-38.59	2,161.25	-1,180.36	1,579.48	1,542.47	37.01	42.680		
4,200.00	4,051.18	4,072.22	4,049.80	21.48	17.53	-39.34	2,159.41	-1,182.42	1,556.55	1,518.62	37.93	41.042		
4,300.00	4,146.85	4,168.35	4,145.89	22.01	17.93	-40.13	2,157.50	-1,184.49	1,533.84	1,494.99	38.85	39.483		
4,400.00	4,242.52	4,264.63	4,242.13	22.55	18.34	-40.94	2,155.54	-1,186.51	1,511.35	1,471.58	39.77	37.998		
4,500.00	4,338.19	4,359.80	4,337.26	23.08	18.74	-41.76	2,153.57	-1,188.47	1,489.12	1,448.42	40.70	36.586		
4,600.00	4,433.86	4,454.30	4,431.72	23.61	19.14	-42.61	2,151.62	-1,190.44	1,467.23	1,425.60	41.63	35.244		
4,700.00	4,529.53	4,549.45	4,526.82	24.14	19.54	-43.48	2,149.57	-1,192.54	1,445.70	1,403.13	42.56	33.965		
4,800.00	4,625.19	4,644.37	4,621.69	24.67	19.94	-44.38	2,147.50	-1,194.64	1,424.49	1,380.99	43.50	32.746		
4,900.00	4,720.86	4,741.62	4,718.90	25.21	20.35	-45.33	2,145.38	-1,196.79	1,403.67	1,359.22	44.44	31.583		
5,000.00	4,816.53	4,841.09	4,818.32	25.74	20.77	-46.34	2,142.82	-1,198.86	1,382.89	1,337.50	45.39	30.465		
5,100.00	4,912.20	4,936.18	4,913.35	26.27	21.18	-47.33	2,140.24	-1,200.77	1,362.38	1,316.04	46.34	29.400		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	5,030.16	5,007.28	26.80	21.58	-48.34	2,137.84	-1,202.62	1,342.36	1,295.07	47.29	28.387		
5,300.00	5,103.54	5,124.64	5,101.72	27.34	21.98	-49.37	2,135.62	-1,204.36	1,322.80	1,274.56	48.24	27.421		
5,400.00	5,199.22	5,217.54	5,194.58	27.87	22.37	-50.37	2,133.66	-1,206.05	1,303.83	1,254.64	49.19	26.504		
5,500.00	5,295.46	5,313.30	5,290.31	28.39	22.78	-51.11	2,131.89	-1,207.73	1,286.67	1,236.52	50.14	25.660		
5,600.00	5,392.60	5,412.58	5,389.57	28.89	23.20	-51.79	2,130.50	-1,209.02	1,271.91	1,220.83	51.08	24.902		
5,700.00	5,490.50	5,509.53	5,486.51	29.37	23.61	-52.38	2,129.34	-1,210.08	1,259.52	1,207.53	51.99	24.226		
5,800.00	5,589.05	5,604.50	5,581.46	29.83	24.01	-52.87	2,128.31	-1,211.27	1,249.64	1,196.75	52.88	23.630		
5,900.00	5,688.14	5,704.97	5,681.93	30.26	24.44	-53.30	2,127.73	-1,212.31	1,242.08	1,188.32	53.76	23.105		
6,000.00	5,787.63	5,819.11	5,796.07	30.68	24.92	-53.65	2,127.05	-1,212.45	1,235.89	1,181.27	54.62	22.626		
6,100.00	5,887.41	5,919.20	5,896.16	31.07	25.35	-53.86	2,126.15	-1,212.25	1,231.40	1,175.95	55.45	22.206		
6,200.00	5,987.36	6,034.44	6,011.38	31.44	25.84	-53.96	2,125.06	-1,211.27	1,228.42	1,172.16	56.26	21.834		
6,300.00	6,087.36	6,149.76	6,126.66	31.80	26.33	-59.73	2,122.65	-1,208.93	1,225.44	1,168.39	57.05	21.482		
6,400.00	6,187.36	6,267.10	6,243.91	32.15	26.83	-59.79	2,119.42	-1,205.84	1,221.82	1,164.00	57.82	21.132		
6,500.00	6,287.36	6,366.84	6,343.51	32.51	27.25	-59.88	2,115.31	-1,202.52	1,216.87	1,158.26	58.61	20.762		
6,600.00	6,387.36	6,447.95	6,424.52	32.87	27.60	-59.97	2,111.90	-1,200.76	1,212.91	1,153.49	59.42	20.412		
6,700.00	6,487.36	6,527.53	6,504.07	33.23	27.94	-60.05	2,109.70	-1,200.09	1,210.78	1,150.56	60.22	20.106		
6,800.00	6,587.36	6,615.36	6,591.89	33.59	28.31	-60.10	2,108.43	-1,199.99	1,209.95	1,148.94	61.01	19.832		
6,900.00	6,687.26	6,710.54	6,687.07	33.95	28.72	30.51	2,107.62	-1,200.24	1,207.08	1,145.28	61.80	19.532		
7,000.00	6,785.58	6,802.35	6,778.87	34.31	29.11	31.57	2,107.08	-1,200.87	1,192.18	1,129.61	62.57	19.054		
7,100.00	6,879.94	6,885.58	6,862.10	34.65	29.46	33.66	2,107.13	-1,201.86	1,165.11	1,101.82	63.29	18.410		
7,200.00	6,968.01	6,974.91	6,951.41	34.97	29.84	37.16	2,107.71	-1,203.16	1,126.61	1,062.66	63.95	17.616		
7,300.00	7,047.61	7,055.82	7,032.31	35.27	30.18	42.24	2,108.20	-1,204.21	1,077.52	1,012.99	64.54	16.697		
7,400.00	7,116.80	7,126.45	7,102.94	35.54	30.48	49.20	2,108.69	-1,205.10	1,019.98	954.95	65.03	15.685		
7,500.00	7,173.86	7,185.97	7,162.45	35.81	30.73	58.11	2,109.17	-1,205.69	956.36	890.91	65.45	14.611		
7,600.00	7,217.38	7,229.94	7,206.42	36.17	30.92	68.21	2,109.54	-1,206.05	889.67	823.81	65.86	13.508		
7,700.00	7,246.31	7,259.25	7,235.72	36.80	31.04	78.22	2,109.79	-1,206.33	823.34	757.00	66.34	12.411		
7,800.00	7,259.92	7,273.69	7,250.16	37.72	31.10	86.64	2,109.90	-1,206.48	761.00	694.00	67.00	11.358		
7,900.00	7,260.77	7,275.59	7,252.07	38.86	31.11	89.31	2,109.92	-1,206.50	706.37	638.37	68.00	10.388		
8,000.00	7,260.39	7,276.29	7,252.77	40.19	31.11	89.38	2,109.92	-1,206.51	662.38	592.87	69.51	9.530		
8,100.00	7,260.01	7,276.99	7,253.47	41.67	31.12	89.44	2,109.93	-1,206.52	631.29	559.78	71.51	8.828		
8,200.00	7,259.63	7,277.71	7,254.18	43.30	31.12	89.51	2,109.93	-1,206.53	615.07	541.26	73.82	8.333		
8,251.07	7,259.43	7,278.07	7,254.55	44.19	31.12	89.54	2,109.94	-1,206.53	612.95	537.93	75.02	8.170 CC, ES		
8,300.00	7,259.25	7,278.42	7,254.90	45.05	31.12	89.58	2,109.94	-1,206.54	614.90	538.80	76.10	8.080 SF		
8,400.00	7,258.87	7,279.15	7,255.62	46.91	31.13	89.64	2,109.94	-1,206.54	630.78	552.74	78.04	8.083		
8,500.00	7,258.49	7,279.88	7,256.35	48.87	31.13	89.71	2,109.95	-1,206.55	661.57	582.10	79.47	8.325		
8,600.00	7,258.11	7,280.61	7,257.09	50.92	31.13	89.78	2,109.96	-1,206.56	705.30	624.94	80.36	8.777		
8,700.00	7,257.73	7,281.36	7,257.83	53.04	31.14	89.85	2,109.96	-1,206.57	759.76	678.95	80.81	9.402		
8,800.00	7,257.35	7,282.10	7,258.58	55.23	31.14	89.92	2,109.97	-1,206.58	822.81	741.86	80.94	10.165		
8,900.00	7,256.97	7,282.86	7,259.34	57.47	31.14	89.99	2,109.97	-1,206.58	892.63	811.76	80.87	11.037		
9,000.00	7,256.59	7,283.62	7,260.10	59.77	31.15	90.06	2,109.98	-1,206.59	967.76	887.08	80.68	11.995		
9,100.00	7,256.21	7,284.39	7,260.87	62.12	31.15	90.13	2,109.99	-1,206.60	1,047.06	966.64	80.43	13.019		
9,200.00	7,255.83	7,285.16	7,261.64	64.50	31.15	90.21	2,109.99	-1,206.61	1,129.65	1,049.51	80.14	14.096		
9,300.00	7,255.45	7,285.95	7,262.42	66.93	31.15	90.28	2,110.00	-1,206.62	1,214.86	1,135.01	79.85	15.214		
9,400.00	7,255.07	7,286.73	7,263.21	69.38	31.16	90.35	2,110.00	-1,206.63	1,302.18	1,222.61	79.57	16.365		
9,500.00	7,254.69	7,287.53	7,264.01	71.87	31.16	90.43	2,110.01	-1,206.64	1,391.20	1,311.90	79.30	17.543		
9,600.00	7,254.31	7,288.33	7,264.81	74.38	31.17	90.50	2,110.02	-1,206.65	1,481.62	1,402.57	79.05	18.742		
9,700.00	7,253.93	7,289.14	7,265.62	76.92	31.17	90.58	2,110.02	-1,206.66	1,573.21	1,494.39	78.82	19.960		
9,800.00	7,253.55	7,289.96	7,266.43	79.48	31.17	90.65	2,110.03	-1,206.66	1,665.76	1,587.15	78.61	21.191		
9,900.00	7,253.18	7,290.78	7,267.26	82.06	31.18	90.73	2,110.04	-1,206.67	1,759.12	1,680.71	78.41	22.435		
10,000.00	7,252.80	7,291.61	7,268.09	84.65	31.18	90.81	2,110.04	-1,206.68	1,853.18	1,774.95	78.23	23.689		
10,100.00	7,252.42	7,292.45	7,268.93	87.27	31.18	90.89	2,110.05	-1,206.69	1,947.83	1,869.76	78.07	24.951		
10,200.00	7,252.04	7,293.30	7,269.77	89.89	31.19	90.97	2,110.05	-1,206.70	2,042.99	1,965.07	77.92	26.219		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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	7,251.66	7,294.15	7,270.63	92.54	31.19	91.05	2,110.06	-1,206.71	2,138.59	2,060.81	77.78	27.494		
10,400.00	7,251.28	7,295.02	7,271.49	95.19	31.19	91.13	2,110.07	-1,206.72	2,234.58	2,156.91	77.66	28.773		
10,500.00	7,250.90	7,295.89	7,272.36	97.86	31.20	91.21	2,110.07	-1,206.73	2,330.90	2,253.35	77.55	30.056		
10,600.00	7,250.52	7,296.76	7,273.24	100.53	31.20	91.29	2,110.08	-1,206.74	2,427.52	2,350.07	77.45	31.343		
10,700.00	7,250.14	7,297.65	7,274.13	103.22	31.20	91.37	2,110.09	-1,206.75	2,524.40	2,447.04	77.36	32.632		
10,800.00	7,249.76	7,298.55	7,275.02	105.91	31.21	91.46	2,110.10	-1,206.77	2,621.52	2,544.24	77.28	33.923		
10,900.00	7,249.38	7,299.45	7,275.92	108.62	31.21	91.54	2,110.10	-1,206.78	2,718.84	2,641.64	77.21	35.216		
11,000.00	7,249.00	7,300.36	7,276.83	111.33	31.22	91.63	2,110.11	-1,206.79	2,816.36	2,739.22	77.14	36.510		
11,100.00	7,248.62	7,301.28	7,277.75	114.04	31.22	91.71	2,110.12	-1,206.80	2,914.04	2,836.96	77.08	37.805		
11,200.00	7,248.24	7,302.21	7,278.68	116.77	31.22	91.80	2,110.12	-1,206.81	3,011.87	2,934.84	77.03	39.101		
11,300.00	7,247.86	7,303.15	7,279.62	119.50	31.23	91.89	2,110.13	-1,206.82	3,109.84	3,032.86	76.98	40.397		
11,400.00	7,247.48	7,304.09	7,280.57	122.24	31.23	91.97	2,110.14	-1,206.83	3,207.94	3,130.99	76.94	41.693		
11,500.00	7,247.10	7,305.05	7,281.52	124.98	31.24	92.06	2,110.14	-1,206.84	3,306.15	3,229.24	76.91	42.989		
11,600.00	7,246.72	7,306.01	7,282.49	127.73	31.24	92.15	2,110.15	-1,206.85	3,404.46	3,327.58	76.88	44.284		
11,700.00	7,246.34	7,306.99	7,283.46	130.48	31.24	92.24	2,110.16	-1,206.87	3,502.87	3,426.02	76.85	45.580		
11,800.00	7,245.96	7,307.97	7,284.45	133.24	31.25	92.34	2,110.17	-1,206.88	3,601.36	3,524.53	76.83	46.874		
11,900.00	7,245.58	7,308.97	7,285.44	136.00	31.25	92.43	2,110.17	-1,206.89	3,699.94	3,623.13	76.81	48.168		
12,000.00	7,245.21	7,309.97	7,286.44	138.76	31.26	92.52	2,110.18	-1,206.90	3,798.59	3,721.79	76.80	49.461		
12,100.00	7,244.83	7,310.98	7,287.46	141.53	31.26	92.62	2,110.19	-1,206.92	3,897.31	3,820.52	76.79	50.752		
12,200.00	7,244.45	7,312.01	7,288.48	144.30	31.27	92.71	2,110.20	-1,206.93	3,996.09	3,919.31	76.79	52.043		
12,300.00	7,244.07	7,313.04	7,289.52	147.08	31.27	92.81	2,110.20	-1,206.94	4,094.94	4,018.15	76.78	53.332		
12,400.00	7,243.69	7,314.09	7,290.56	149.86	31.27	92.91	2,110.21	-1,206.95	4,193.83	4,117.05	76.78	54.619		
12,500.00	7,243.31	7,315.14	7,291.62	152.64	31.28	93.00	2,110.22	-1,206.97	4,292.78	4,215.99	76.79	55.905		
12,600.00	7,242.93	7,316.21	7,292.68	155.42	31.28	93.10	2,110.23	-1,206.98	4,391.77	4,314.98	76.79	57.190		
12,700.00	7,242.55	7,317.28	7,293.76	158.21	31.29	93.20	2,110.24	-1,206.99	4,490.81	4,414.01	76.80	58.473		
12,800.00	7,242.17	7,318.37	7,294.85	161.00	31.29	93.31	2,110.24	-1,207.01	4,589.89	4,513.08	76.81	59.754		
12,900.00	7,241.79	7,319.47	7,295.94	163.79	31.30	93.41	2,110.25	-1,207.02	4,689.01	4,612.19	76.83	61.033		
13,000.00	7,241.41	7,320.58	7,297.05	166.58	31.30	93.51	2,110.26	-1,207.04	4,788.17	4,711.33	76.84	62.310		
13,100.00	7,241.03	7,321.70	7,298.17	169.38	31.29	93.60	2,110.27	-1,207.05	4,887.37	4,810.53	76.84	63.587		
13,200.00	7,240.65	7,322.83	7,299.30	172.18	31.29	93.70	2,110.28	-1,207.06	4,986.59	4,909.73	76.86	64.873		
13,300.00	7,240.27	7,323.97	7,300.44	174.98	31.29	93.80	2,110.28	-1,207.07	5,085.84	5,008.96	76.88	66.151		
13,400.00	7,239.89	7,325.11	7,301.59	177.78	31.30	93.90	2,110.29	-1,207.08	5,185.13	5,108.22	76.91	67.422		
13,500.00	7,239.51	7,326.26	7,302.74	180.58	31.30	94.00	2,110.29	-1,207.09	5,284.43	5,207.50	76.93	68.690		
13,600.00	7,239.13	7,327.41	7,303.89	183.39	31.30	94.10	2,110.29	-1,207.10	5,383.77	5,306.81	76.96	69.957		
13,700.00	7,238.75	7,328.56	7,305.04	186.20	31.31	94.20	2,110.29	-1,207.11	5,483.13	5,406.14	76.99	71.221		
13,800.00	7,238.37	7,329.71	7,306.19	189.00	31.31	94.30	2,110.28	-1,207.12	5,582.51	5,505.49	77.02	72.482		
13,900.00	7,237.99	7,330.86	7,307.34	191.81	31.31	94.40	2,110.29	-1,207.13	5,681.91	5,604.86	77.05	73.742		
14,000.00	7,237.61	7,332.01	7,308.49	194.63	31.32	94.50	2,110.29	-1,207.14	5,781.33	5,704.25	77.09	74.998		
14,100.00	7,237.24	7,333.16	7,309.64	197.44	31.32	94.60	2,110.30	-1,207.15	5,880.78	5,803.65	77.12	76.253		
14,200.00	7,236.86	7,334.31	7,310.79	200.25	31.32	94.70	2,110.31	-1,207.16	5,980.24	5,903.08	77.16	77.505		
14,300.00	7,236.48	7,335.46	7,311.94	203.07	31.33	94.80	2,110.31	-1,207.17	6,079.72	6,002.52	77.20	78.754		
14,400.00	7,236.10	7,336.61	7,313.09	205.88	31.33	94.90	2,110.32	-1,207.18	6,179.21	6,101.97	77.24	80.001		
14,500.00	7,235.72	7,337.76	7,314.24	208.70	31.34	95.00	2,110.32	-1,207.19	6,278.72	6,201.44	77.28	81.245		
14,600.00	7,235.34	7,338.91	7,315.39	211.52	31.34	95.10	2,110.33	-1,207.20	6,378.25	6,300.93	77.32	82.486		
14,700.00	7,234.96	7,340.06	7,316.53	214.34	31.34	95.20	2,110.34	-1,207.21	6,477.79	6,400.42	77.37	83.725		
14,800.00	7,234.58	7,341.21	7,317.68	217.16	31.35	95.30	2,110.34	-1,207.22	6,577.35	6,499.93	77.42	84.961		
14,900.00	7,234.20	7,342.36	7,318.83	219.98	31.35	95.40	2,110.35	-1,207.23	6,676.91	6,599.45	77.46	86.194		
15,000.00	7,233.82	7,343.51	7,319.98	222.81	31.35	95.50	2,110.35	-1,207.24	6,776.50	6,698.98	77.51	87.425		
15,100.00	7,233.44	7,344.66	7,321.13	225.63	31.36	95.60	2,110.36	-1,207.25	6,876.09	6,798.53	77.56	88.652		
15,200.00	7,233.06	7,345.81	7,322.28	228.45	31.36	95.70	2,110.37	-1,207.26	6,975.69	6,898.08	77.61	89.877		
15,300.00	7,232.68	7,346.96	7,323.43	231.27	31.37	95.80	2,110.37	-1,207.27	7,075.28	6,997.62	77.66	91.104		
15,400.00	7,232.30	7,348.11	7,324.58	234.09	31.37	95.90	2,110.38	-1,207.28	7,174.87	7,097.17	77.71	92.331		
15,500.00	7,231.92	7,349.26	7,325.73	236.91	31.38	96.00	2,110.39	-1,207.29	7,274.46	7,196.72	77.76	93.558		
15,600.00	7,231.54	7,350.41	7,326.88	239.73	31.38	96.10	2,110.40	-1,207.30	7,374.05	7,296.27	77.81	94.785		
15,700.00	7,231.16	7,351.56	7,328.03	242.55	31.39	96.20	2,110.41	-1,207.31	7,473.64	7,395.82	77.86	96.012		
15,800.00	7,230.78	7,352.71	7,329.18	245.37	31.39	96.30	2,110.42	-1,207.32	7,573.23	7,495.37	77.91	97.239		
15,900.00	7,230.40	7,353.86	7,330.33	248.19	31.40	96.40	2,110.43	-1,207.33	7,672.82	7,594.92	77.96	98.466		
16,000.00	7,230.02	7,355.01	7,331.48	251.01	31.40	96.50	2,110.44	-1,207.34	7,772.41	7,694.47	78.01	99.693		
16,100.00	7,229.64	7,356.16	7,332.63	253.83	31.41	96.60	2,110.45	-1,207.35	7,872.00	7,794.02	78.06	100.920		
16,200.00	7,229.26	7,357.31	7,333.78	256.65	31.41	96.70	2,110.46	-1,207.36	7,971.59	7,893.57	78.11	102.147		
16,300.00	7,228.88	7,358.46	7,334.93	259.47	31.42	96.80	2,110.47	-1,207.37	8,071.18	7,993.12	78.16	103.374		
16,400.00	7,228.50	7,359.61	7,336.08	262.29	31.42	96.90	2,110.48	-1,207.38	8,170.77	8,092.67	78.21	104.601		
16,500.00	7,228.12	7,360.76	7,337.23	265.11	31.43	97.00	2,110.49	-1,207.39	8,270.36	8,192.22	78.26	105.828		
16,600.00	7,227.74	7,361.91	7,338.38	267.93	31.43	97.10	2,110.50	-1,207.40	8,369.95	8,291.77	78.31	107.055		
16,700.00	7,227.36	7,363.06	7,339.53	270.75	31.44	97.20	2,110.51	-1,207.41	8,469.54	8,391.32	78.36	108.282		
16,800.00	7,226.98	7,364.21	7,340.68	273.57	31.44	97.30	2,110.52	-1,207.42	8,569.13	8,490.87	78.41	109.509		
16,900.00	7,226.60	7,365.36	7,341.83	276.39	31.45	97.40	2,110.53	-1,207.43	8,668.72	8,590.42	78.46	110.736		
17,000.00	7,226.22	7,366.51	7,342.98	279.21	31.45	97.50	2,110.54	-1,207.44	8,768.31	8,690.97	78.51	111.963		
17,100.00	7,225.84	7,367.66	7,344.13	282.03	31.46	97.60	2,110.55	-1,207.45	8,867.90	8,790.52	78.56	113.190		
17,200.00	7,225.46	7,368.81	7,345.28	2										



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	22.00	3.28	3.28	-70.56	765.14	-2,167.73	2,298.91					
100.00	100.00	78.00	100.00	3.28	3.55	-70.56	765.14	-2,167.73	2,298.80	2,291.96	6.84	336.276		
200.00	200.00	178.00	200.00	3.34	5.54	-70.56	765.14	-2,167.73	2,298.80	2,289.92	8.88	258.871		
300.00	299.98	277.98	299.98	3.45	8.61	-64.88	765.14	-2,167.73	2,298.06	2,286.01	12.05	190.663		
400.00	399.84	377.84	399.84	3.61	11.91	-65.04	765.14	-2,167.73	2,295.84	2,280.33	15.51	148.032		
500.00	499.45	477.45	499.45	3.82	15.28	-65.30	765.14	-2,167.73	2,292.17	2,273.08	19.09	120.095		
600.00	598.70	576.70	598.70	4.07	18.68	-65.67	765.14	-2,167.73	2,287.08	2,264.35	22.73	100.621		
700.00	697.47	675.47	697.47	4.35	22.08	-66.14	765.14	-2,167.73	2,280.63	2,254.21	26.41	86.344		
800.00	795.62	773.62	795.62	4.67	25.47	-66.72	765.14	-2,167.73	2,272.88	2,242.76	30.12	75.458		
900.00	893.06	871.06	893.06	5.01	28.85	-67.39	765.14	-2,167.73	2,263.91	2,230.07	33.84	66.896		
1,000.00	989.64	967.64	989.64	5.38	32.20	-68.17	765.14	-2,167.73	2,253.83	2,216.26	37.57	59.992		
1,100.00	1,085.42	1,063.42	1,085.42	5.78	35.53	-68.92	765.14	-2,167.73	2,242.93	2,201.63	41.30	54.313		
1,200.00	1,181.09	1,159.09	1,181.09	6.20	38.86	-69.59	765.14	-2,167.73	2,232.22	2,187.17	45.04	49.556		
1,300.00	1,276.76	1,254.76	1,276.76	6.65	42.19	-70.27	765.14	-2,167.73	2,221.83	2,173.02	48.81	45.520		
1,400.00	1,372.43	1,350.43	1,372.43	7.11	45.52	-70.95	765.14	-2,167.73	2,211.78	2,159.19	52.59	42.056		
1,500.00	1,468.10	1,446.10	1,468.10	7.57	48.85	-71.64	765.14	-2,167.73	2,202.07	2,145.68	56.39	39.053		
1,600.00	1,563.77	1,541.77	1,563.77	8.05	52.18	-72.33	765.14	-2,167.73	2,192.70	2,132.51	60.19	36.429		
1,700.00	1,659.44	1,637.44	1,659.44	8.53	55.51	-73.03	765.14	-2,167.73	2,183.68	2,119.68	64.00	34.117		
1,800.00	1,755.11	1,733.11	1,755.11	9.02	58.85	-73.74	765.14	-2,167.73	2,175.02	2,107.19	67.83	32.067		
1,900.00	1,850.78	1,828.78	1,850.78	9.52	62.18	-74.45	765.14	-2,167.73	2,166.70	2,095.05	71.65	30.238		
2,000.00	1,946.45	1,924.45	1,946.45	10.02	65.52	-75.16	765.14	-2,167.73	2,158.75	2,083.27	75.49	28.597		
2,100.00	2,042.12	2,020.12	2,042.12	10.52	68.86	-75.88	765.14	-2,167.73	2,151.17	2,071.84	79.33	27.118		
2,200.00	2,137.78	2,115.78	2,137.78	11.03	72.19	-76.60	765.14	-2,167.73	2,143.95	2,060.78	83.17	25.778		
2,300.00	2,233.45	2,211.45	2,233.45	11.54	75.53	-77.33	765.14	-2,167.73	2,137.11	2,050.09	87.02	24.560		
2,400.00	2,329.12	2,307.12	2,329.12	12.05	78.86	-78.06	765.14	-2,167.73	2,130.64	2,039.77	90.87	23.448		
2,500.00	2,424.79	2,402.79	2,424.79	12.56	82.20	-78.80	765.14	-2,167.73	2,124.55	2,029.83	94.72	22.430		
2,600.00	2,520.46	2,501.54	2,520.46	13.08	85.65	-79.54	765.14	-2,167.73	2,118.84	2,020.16	98.68	21.471		
2,700.00	2,616.13	2,605.87	2,616.13	13.60	89.29	-80.28	765.14	-2,167.73	2,113.51	2,010.67	102.84	20.551		
2,800.00	2,711.80	2,699.80	2,711.80	14.12	92.21	-81.03	765.14	-2,167.73	2,108.58	2,002.29	106.29	19.838		
2,900.00	2,807.47	2,785.47	2,807.47	14.64	95.55	-81.78	765.14	-2,167.73	2,104.04	1,993.88	110.15	19.101		
3,000.00	2,903.14	2,881.14	2,903.14	15.16	98.89	-82.53	765.14	-2,167.73	2,099.89	1,985.87	114.02	18.417		
3,100.00	2,998.81	2,976.81	2,998.81	15.68	102.23	-83.29	765.14	-2,167.73	2,096.14	1,978.25	117.88	17.782		
3,200.00	3,094.48	3,072.48	3,094.48	16.21	105.57	-84.04	765.14	-2,167.73	2,092.78	1,971.03	121.75	17.190		
3,300.00	3,190.15	3,168.15	3,190.15	16.73	108.90	-84.80	765.14	-2,167.73	2,089.83	1,964.21	125.61	16.637		
3,400.00	3,285.82	3,263.82	3,285.82	17.26	112.24	-85.57	765.14	-2,167.73	2,087.27	1,957.79	129.48	16.120		
3,500.00	3,381.49	3,359.49	3,381.49	17.78	115.58	-86.33	765.14	-2,167.73	2,085.12	1,951.77	133.35	15.637		
3,600.00	3,477.16	3,455.16	3,477.16	18.31	118.92	-87.09	765.14	-2,167.73	2,083.38	1,946.16	137.22	15.183		
3,700.00	3,572.83	3,550.83	3,572.83	18.84	122.26	-87.86	765.14	-2,167.73	2,082.04	1,940.95	141.09	14.757		
3,800.00	3,668.50	3,646.50	3,668.50	19.37	125.60	-88.63	765.14	-2,167.73	2,081.10	1,936.15	144.96	14.357		
3,900.00	3,764.17	3,742.17	3,764.17	19.89	128.94	-89.39	765.14	-2,167.73	2,080.58	1,931.75	148.83	13.980		
3,979.30	3,840.03	3,818.03	3,840.03	20.31	131.58	-90.00	765.14	-2,167.73	2,080.45	1,928.55	151.90	13.697		
4,000.00	3,859.84	3,837.84	3,859.84	20.42	132.27	-90.16	765.14	-2,167.73	2,080.46	1,927.76	152.70	13.625		
4,100.00	3,955.51	3,933.51	3,955.51	20.95	135.61	-90.93	765.14	-2,167.73	2,080.75	1,924.18	156.57	13.290		
4,200.00	4,051.18	4,029.18	4,051.18	21.48	138.95	-91.69	765.14	-2,167.73	2,081.44	1,921.01	160.44	12.974		
4,300.00	4,146.85	4,124.85	4,146.85	22.01	142.29	-92.46	765.14	-2,167.73	2,082.54	1,918.24	164.31	12.675		
4,400.00	4,242.52	4,220.52	4,242.52	22.55	145.63	-93.22	765.14	-2,167.73	2,084.05	1,915.88	168.18	12.392		
4,500.00	4,338.19	4,316.19	4,338.19	23.08	148.97	-93.99	765.14	-2,167.73	2,085.96	1,913.92	172.04	12.125		
4,600.00	4,433.86	4,411.86	4,433.86	23.61	152.31	-94.75	765.14	-2,167.73	2,088.28	1,912.37	175.91	11.871		
4,700.00	4,529.53	4,507.53	4,529.53	24.14	155.65	-95.51	765.14	-2,167.73	2,091.00	1,911.22	179.78	11.631		
4,800.00	4,625.19	4,603.19	4,625.19	24.67	158.99	-96.27	765.14	-2,167.73	2,094.12	1,910.47	183.65	11.403		
4,900.00	4,720.86	4,701.14	4,720.86	25.21	162.40	-97.03	765.14	-2,167.73	2,097.64	1,910.05	187.59	11.182		
5,000.00	4,816.53	4,805.47	4,816.53	25.74	166.05	-97.78	765.14	-2,167.73	2,101.56	1,909.80	191.76	10.959		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	4,912.20	4,909.80	4,912.20	26.27	169.69	-98.53	765.14	-2,167.73	2,105.87	1,909.94	195.93	10.748		
5,200.00	5,007.87	4,985.87	5,007.87	26.80	172.34	-99.28	765.14	-2,167.73	2,110.58	1,911.46	199.11	10.600		
5,300.00	5,103.54	5,081.54	5,103.54	27.34	175.68	-100.03	765.14	-2,167.73	2,115.67	1,912.70	202.98	10.423		
5,400.00	5,199.22	5,177.22	5,199.22	27.87	179.02	-100.78	765.14	-2,167.73	2,121.15	1,914.31	206.84	10.255		
5,500.00	5,295.46	5,273.46	5,295.46	28.39	182.38	-101.58	765.14	-2,167.73	2,126.61	1,915.90	210.71	10.093		
5,600.00	5,392.60	5,370.60	5,392.60	28.89	185.77	-102.28	765.14	-2,167.73	2,131.65	1,917.06	214.59	9.934		
5,700.00	5,490.50	5,468.50	5,490.50	29.37	189.19	-102.89	765.14	-2,167.73	2,136.18	1,917.70	218.48	9.778		
5,800.00	5,589.05	5,567.05	5,589.05	29.83	192.63	-103.41	765.14	-2,167.73	2,140.08	1,917.71	222.37	9.624		
5,900.00	5,688.14	5,666.14	5,688.14	30.26	196.09	-103.82	765.14	-2,167.73	2,143.28	1,917.02	226.26	9.473		
6,000.00	5,787.63	5,765.63	5,787.63	30.68	199.56	-104.12	765.14	-2,167.73	2,145.71	1,915.57	230.14	9.323		
6,100.00	5,887.41	5,865.41	5,887.41	31.07	203.04	-104.32	765.14	-2,167.73	2,147.31	1,913.30	234.01	9.176		
6,200.00	5,987.36	5,965.36	5,987.36	31.44	206.53	-104.41	765.14	-2,167.73	2,148.07	1,910.19	237.87	9.030		
6,300.00	6,087.36	6,065.36	6,087.36	31.80	210.02	-110.15	765.14	-2,167.73	2,148.12	1,906.40	241.72	8.887		
6,400.00	6,187.36	6,165.36	6,187.36	32.15	213.51	-110.15	765.14	-2,167.73	2,148.12	1,902.56	245.57	8.748		
6,500.00	6,287.36	6,265.36	6,287.36	32.51	217.00	-110.15	765.14	-2,167.73	2,148.12	1,898.71	249.42	8.613		
6,600.00	6,387.36	6,365.36	6,387.36	32.87	220.49	-110.15	765.14	-2,167.73	2,148.12	1,894.85	253.27	8.482		
6,700.00	6,487.36	6,465.36	6,487.36	33.23	223.98	-110.15	765.14	-2,167.73	2,148.12	1,891.00	257.12	8.354		
6,800.00	6,587.36	6,565.36	6,587.36	33.59	227.48	-110.15	765.14	-2,167.73	2,148.12	1,887.15	260.98	8.231		
6,900.00	6,687.26	6,665.26	6,687.26	33.95	230.96	-19.82	765.14	-2,167.73	2,145.19	1,880.37	264.82	8.100		
7,000.00	6,785.58	6,763.58	6,785.58	34.31	234.39	-20.51	765.14	-2,167.73	2,128.60	1,859.99	268.61	7.925		
7,100.00	6,879.94	6,857.94	6,879.94	34.65	237.69	-21.88	765.14	-2,167.73	2,097.79	1,825.54	272.25	7.706		
7,200.00	6,968.01	6,946.01	6,968.01	34.97	240.76	-24.12	765.14	-2,167.73	2,053.60	1,777.95	275.65	7.450		
7,300.00	7,047.61	7,025.61	7,047.61	35.27	243.54	-27.52	765.14	-2,167.73	1,997.24	1,718.50	278.74	7.165		
7,400.00	7,116.80	7,105.20	7,116.80	35.54	246.32	-32.57	765.14	-2,167.73	1,930.25	1,648.43	281.82	6.849		
7,500.00	7,173.86	7,151.86	7,173.86	35.81	247.95	-40.03	765.14	-2,167.73	1,854.50	1,570.75	283.75	6.536		
7,600.00	7,217.38	7,204.62	7,217.38	36.17	249.79	-50.91	765.14	-2,167.73	1,772.08	1,486.16	285.92	6.198		
7,700.00	7,246.31	7,224.31	7,246.31	36.80	250.48	-65.83	765.14	-2,167.73	1,685.27	1,398.29	286.97	5.873		
7,800.00	7,259.92	7,237.92	7,259.92	37.72	250.95	-83.49	765.14	-2,167.73	1,596.47	1,308.59	287.89	5.546		
7,900.00	7,260.77	7,238.77	7,260.77	38.86	250.98	-90.40	765.14	-2,167.73	1,508.06	1,219.61	288.45	5.228		
8,000.00	7,260.39	7,238.39	7,260.39	40.19	250.97	-90.37	765.14	-2,167.73	1,421.16	1,132.06	289.10	4.916		
8,100.00	7,260.01	7,238.01	7,260.01	41.67	250.96	-90.34	765.14	-2,167.73	1,336.09	1,046.17	289.93	4.608		
8,200.00	7,259.63	7,237.63	7,259.63	43.30	250.94	-90.31	765.14	-2,167.73	1,253.24	962.28	290.96	4.307		
8,300.00	7,259.25	7,237.25	7,259.25	45.05	250.93	-90.28	765.14	-2,167.73	1,173.06	880.81	292.24	4.014		
8,400.00	7,258.87	7,236.87	7,258.87	46.91	250.92	-90.25	765.14	-2,167.73	1,096.14	802.32	293.81	3.731		
8,500.00	7,258.49	7,236.49	7,258.49	48.87	250.90	-90.22	765.14	-2,167.73	1,023.21	727.49	295.72	3.460		
8,600.00	7,258.11	7,236.11	7,258.11	50.92	250.89	-90.19	765.14	-2,167.73	955.21	657.21	298.00	3.205		
8,700.00	7,257.73	7,235.73	7,257.73	53.04	250.88	-90.16	765.14	-2,167.73	893.24	592.59	300.64	2.971		
8,800.00	7,257.35	7,235.35	7,257.35	55.23	250.86	-90.13	765.14	-2,167.73	838.64	535.03	303.61	2.762		
8,900.00	7,256.97	7,234.97	7,256.97	57.47	250.85	-90.10	765.14	-2,167.73	792.95	486.17	306.79	2.585		
9,000.00	7,256.59	7,234.59	7,256.59	59.77	250.84	-90.07	765.14	-2,167.73	757.78	447.82	309.96	2.445		
9,100.00	7,256.21	7,234.21	7,256.21	62.12	250.82	-90.04	765.14	-2,167.73	734.63	421.76	312.87	2.348		
9,200.00	7,255.83	7,233.83	7,255.83	64.50	250.81	-90.01	765.14	-2,167.73	724.66	409.46	315.20	2.299		
9,222.74	7,255.75	7,233.75	7,255.75	65.05	250.81	-90.00	765.14	-2,167.73	724.30	408.68	315.63	2.295 CC, ES, SF		
9,300.00	7,255.45	7,233.45	7,255.45	66.93	250.80	-89.98	765.14	-2,167.73	728.41	411.68	316.73	2.300		
9,400.00	7,255.07	7,233.07	7,255.07	69.38	250.78	-89.95	765.14	-2,167.73	745.68	428.29	317.38	2.349		
9,500.00	7,254.69	7,232.69	7,254.69	71.87	250.77	-89.92	765.14	-2,167.73	775.56	458.33	317.22	2.445		
9,600.00	7,254.31	7,232.31	7,254.31	74.38	250.76	-89.89	765.14	-2,167.73	816.66	500.23	316.43	2.581		
9,700.00	7,253.93	7,231.93	7,253.93	76.92	250.74	-89.86	765.14	-2,167.73	867.40	552.19	315.21	2.752		
9,800.00	7,253.55	7,231.55	7,253.55	79.48	250.73	-89.83	765.14	-2,167.73	926.19	612.44	313.76	2.952		
9,900.00	7,253.18	7,231.18	7,253.18	82.06	250.72	-89.80	765.14	-2,167.73	991.61	679.39	312.22	3.176		
10,000.00	7,252.80	7,230.80	7,252.80	84.65	250.70	-89.77	765.14	-2,167.73	1,062.42	751.73	310.69	3.420		
10,100.00	7,252.42	7,230.42	7,252.42	87.27	250.69	-89.74	765.14	-2,167.73	1,137.62	828.39	309.23	3.679		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
10,200.00	7,252.04	7,230.04	7,252.04	89.89	250.68	-89.71	765.14	-2,167.73	1,216.40	908.54	307.87	3.951	
10,300.00	7,251.66	7,229.66	7,251.66	92.54	250.66	-89.68	765.14	-2,167.73	1,298.11	991.49	306.61	4.234	
10,400.00	7,251.28	7,229.28	7,251.28	95.19	250.65	-89.65	765.14	-2,167.73	1,382.22	1,076.75	305.47	4.525	
10,500.00	7,250.90	7,228.90	7,250.90	97.86	250.64	-89.62	765.14	-2,167.73	1,468.32	1,163.89	304.44	4.823	
10,600.00	7,250.52	7,228.52	7,250.52	100.53	250.62	-89.59	765.14	-2,167.73	1,556.09	1,252.59	303.51	5.127	
10,700.00	7,250.14	7,228.14	7,250.14	103.22	250.61	-89.56	765.14	-2,167.73	1,645.26	1,342.59	302.66	5.436	
10,800.00	7,249.76	7,227.76	7,249.76	105.91	250.60	-89.53	765.14	-2,167.73	1,735.60	1,433.70	301.90	5.749	
10,900.00	7,249.38	7,227.38	7,249.38	108.62	250.58	-89.50	765.14	-2,167.73	1,826.96	1,525.74	301.22	6.065	
11,000.00	7,249.00	7,227.00	7,249.00	111.33	250.57	-89.47	765.14	-2,167.73	1,919.17	1,618.57	300.60	6.385	
11,100.00	7,248.62	7,226.62	7,248.62	114.04	250.56	-89.44	765.14	-2,167.73	2,012.13	1,712.09	300.03	6.706	
11,200.00	7,248.24	7,226.24	7,248.24	116.77	250.54	-89.41	765.14	-2,167.73	2,105.73	1,806.21	299.52	7.030	
11,300.00	7,247.86	7,225.86	7,247.86	119.50	250.53	-89.38	765.14	-2,167.73	2,199.90	1,900.84	299.06	7.356	
11,400.00	7,247.48	7,225.48	7,247.48	122.24	250.52	-89.35	765.14	-2,167.73	2,294.56	1,995.92	298.64	7.683	
11,500.00	7,247.10	7,225.10	7,247.10	124.98	250.50	-89.32	765.14	-2,167.73	2,389.65	2,091.40	298.25	8.012	
11,600.00	7,246.72	7,224.72	7,246.72	127.73	250.49	-89.29	765.14	-2,167.73	2,485.13	2,187.23	297.90	8.342	
11,700.00	7,246.34	7,224.34	7,246.34	130.48	250.48	-89.26	765.14	-2,167.73	2,580.95	2,283.37	297.58	8.673	
11,800.00	7,245.96	7,223.96	7,245.96	133.24	250.47	-89.23	765.14	-2,167.73	2,677.08	2,379.80	297.29	9.005	
11,900.00	7,245.58	7,223.58	7,245.58	136.00	250.45	-89.20	765.14	-2,167.73	2,773.48	2,476.47	297.02	9.338	
12,000.00	7,245.21	7,223.21	7,245.21	138.76	250.44	-89.17	765.14	-2,167.73	2,870.13	2,573.36	296.77	9.671	
12,100.00	7,244.83	7,222.83	7,244.83	141.53	250.43	-89.14	765.14	-2,167.73	2,967.00	2,670.46	296.54	10.005	
12,200.00	7,244.45	7,222.45	7,244.45	144.30	250.41	-89.11	765.14	-2,167.73	3,064.07	2,767.74	296.33	10.340	
12,300.00	7,244.07	7,222.07	7,244.07	147.08	250.40	-89.08	765.14	-2,167.73	3,161.33	2,865.19	296.14	10.675	
12,400.00	7,243.69	7,221.69	7,243.69	149.86	250.39	-89.05	765.14	-2,167.73	3,258.75	2,962.79	295.96	11.011	
12,500.00	7,243.31	7,221.31	7,243.31	152.64	250.37	-89.02	765.14	-2,167.73	3,356.32	3,060.52	295.80	11.347	
12,600.00	7,242.93	7,220.93	7,242.93	155.42	250.36	-88.99	765.14	-2,167.73	3,454.03	3,158.38	295.64	11.683	
12,700.00	7,242.55	7,220.55	7,242.55	158.21	250.35	-88.96	765.14	-2,167.73	3,551.87	3,256.36	295.51	12.020	
12,800.00	7,242.17	7,220.17	7,242.17	161.00	250.33	-88.93	765.14	-2,167.73	3,649.82	3,354.44	295.38	12.356	
12,900.00	7,241.79	7,219.79	7,241.79	163.79	250.32	-88.90	765.14	-2,167.73	3,747.88	3,452.62	295.26	12.694	
13,000.00	7,241.41	7,219.41	7,241.41	166.58	250.31	-88.87	765.14	-2,167.73	3,846.05	3,550.90	295.15	13.031	
13,100.00	7,241.03	7,219.03	7,241.03	169.38	250.29	-88.84	765.14	-2,167.73	3,944.30	3,649.25	295.05	13.368	
13,200.00	7,240.65	7,218.65	7,240.65	172.18	250.28	-88.81	765.14	-2,167.73	4,042.64	3,747.68	294.96	13.706	
13,300.00	7,240.27	7,218.27	7,240.27	174.98	250.27	-88.78	765.14	-2,167.73	4,141.06	3,846.19	294.88	14.043	
13,400.00	7,239.89	7,217.89	7,239.89	177.78	250.25	-88.75	765.14	-2,167.73	4,239.56	3,944.76	294.80	14.381	
13,500.00	7,239.51	7,217.51	7,239.51	180.58	250.24	-88.72	765.14	-2,167.73	4,338.12	4,043.39	294.73	14.719	
13,600.00	7,239.13	7,217.13	7,239.13	183.39	250.23	-88.69	765.14	-2,167.73	4,436.75	4,142.08	294.67	15.057	
13,700.00	7,238.75	7,216.75	7,238.75	186.20	250.21	-88.66	765.14	-2,167.73	4,535.43	4,240.83	294.61	15.395	
13,800.00	7,238.37	7,216.37	7,238.37	189.00	250.20	-88.63	765.14	-2,167.73	4,634.18	4,339.62	294.56	15.733	
13,900.00	7,237.99	7,215.99	7,237.99	191.81	250.19	-88.60	765.14	-2,167.73	4,732.97	4,438.46	294.51	16.071	
14,000.00	7,237.62	7,215.62	7,237.62	194.63	250.17	-88.57	765.14	-2,167.73	4,831.82	4,537.35	294.47	16.409	
14,100.00	7,237.24	7,215.24	7,237.24	197.44	250.16	-88.54	765.14	-2,167.73	4,930.71	4,636.28	294.43	16.747	
14,200.00	7,236.86	7,214.86	7,236.86	200.25	250.15	-88.51	765.14	-2,167.73	5,029.65	4,735.25	294.40	17.085	
14,300.00	7,236.48	7,214.48	7,236.48	203.07	250.13	-88.48	765.14	-2,167.73	5,128.62	4,834.26	294.37	17.423	
14,400.00	7,236.10	7,214.10	7,236.10	205.88	250.12	-88.45	765.14	-2,167.73	5,227.64	4,933.30	294.34	17.760	
14,500.00	7,235.72	7,213.72	7,235.72	208.70	250.11	-88.42	765.14	-2,167.73	5,326.69	5,032.37	294.32	18.098	
14,600.00	7,235.34	7,213.34	7,235.34	211.52	250.09	-88.39	765.14	-2,167.73	5,425.78	5,131.48	294.30	18.436	
14,700.00	7,234.96	7,212.96	7,234.96	214.34	250.08	-88.36	765.14	-2,167.73	5,524.90	5,230.61	294.29	18.774	
14,800.00	7,234.58	7,212.58	7,234.58	217.16	250.07	-88.33	765.14	-2,167.73	5,624.05	5,329.77	294.28	19.111	
14,900.00	7,234.20	7,212.20	7,234.20	219.98	250.05	-88.30	765.14	-2,167.73	5,723.23	5,428.96	294.27	19.449	
15,000.00	7,233.82	7,211.82	7,233.82	222.81	250.04	-88.27	765.14	-2,167.73	5,822.44	5,528.17	294.27	19.786	
15,100.00	7,233.44	7,211.44	7,233.44	225.63	250.03	-88.24	765.14	-2,167.73	5,921.68	5,627.41	294.27	20.124	
15,200.00	7,233.06	7,211.06	7,233.06	228.45	250.01	-88.21	765.14	-2,167.73	6,020.94	5,726.67	294.27	20.461	
15,216.01	7,233.00	7,211.00	7,233.00	228.91	250.01	-88.20	765.14	-2,167.73	6,036.84	5,742.57	294.27	20.515	

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	37.00	3.28	3.28	-102.62	-568.18	-2,537.77	2,600.86				
100.00	100.00	63.00	100.00	3.28	3.46	-102.62	-568.18	-2,537.77	2,600.60	2,593.85	6.74	385.608	
200.00	200.00	163.00	200.00	3.34	5.13	-102.62	-568.18	-2,537.77	2,600.60	2,592.13	8.47	307.133	
300.00	299.98	262.98	299.98	3.45	8.13	-96.92	-568.18	-2,537.77	2,600.81	2,589.24	11.57	224.766	
400.00	399.84	362.84	399.84	3.61	11.40	-97.02	-568.18	-2,537.77	2,601.44	2,586.44	15.01	173.361	
500.00	499.45	462.45	499.45	3.82	14.77	-97.19	-568.18	-2,537.77	2,602.53	2,583.95	18.57	140.116	
600.00	598.70	561.70	598.70	4.07	18.16	-97.42	-568.18	-2,537.77	2,604.09	2,581.88	22.21	117.232	
700.00	697.47	660.47	697.47	4.35	21.56	-97.72	-568.18	-2,537.77	2,606.18	2,580.28	25.89	100.645	
800.00	795.62	758.62	795.62	4.67	24.95	-98.07	-568.18	-2,537.77	2,608.85	2,579.24	29.60	88.129	
900.00	893.06	856.06	893.06	5.01	28.33	-98.48	-568.18	-2,537.77	2,612.17	2,578.84	33.33	78.384	
1,000.00	989.64	952.64	989.64	5.38	31.68	-98.95	-568.18	-2,537.77	2,616.23	2,579.17	37.06	70.604	
1,100.00	1,085.42	1,048.42	1,085.42	5.78	35.01	-99.50	-568.18	-2,537.77	2,621.03	2,580.24	40.79	64.262	
1,200.00	1,181.09	1,144.09	1,181.09	6.20	38.34	-100.10	-568.18	-2,537.77	2,626.20	2,581.66	44.54	58.963	
1,300.00	1,276.76	1,239.76	1,276.76	6.65	41.66	-100.70	-568.18	-2,537.77	2,631.68	2,583.37	48.31	54.474	
1,400.00	1,372.43	1,335.43	1,372.43	7.11	44.99	-101.29	-568.18	-2,537.77	2,637.47	2,585.38	52.10	50.627	
1,500.00	1,468.10	1,431.10	1,468.10	7.57	48.33	-101.89	-568.18	-2,537.77	2,643.58	2,587.68	55.89	47.297	
1,600.00	1,563.77	1,526.77	1,563.77	8.05	51.66	-102.48	-568.18	-2,537.77	2,649.98	2,590.28	59.70	44.389	
1,700.00	1,659.44	1,622.44	1,659.44	8.53	54.99	-103.06	-568.18	-2,537.77	2,656.69	2,593.18	63.51	41.829	
1,800.00	1,755.11	1,718.11	1,755.11	9.02	58.33	-103.65	-568.18	-2,537.77	2,663.70	2,596.37	67.33	39.559	
1,900.00	1,850.78	1,813.78	1,850.78	9.52	61.66	-104.23	-568.18	-2,537.77	2,671.01	2,599.85	71.16	37.535	
2,000.00	1,946.45	1,909.45	1,946.45	10.02	65.00	-104.81	-568.18	-2,537.77	2,678.62	2,603.63	74.99	35.719	
2,100.00	2,042.12	2,005.12	2,042.12	10.52	68.33	-105.39	-568.18	-2,537.77	2,686.52	2,607.70	78.82	34.082	
2,200.00	2,137.78	2,100.78	2,137.78	11.03	71.67	-105.96	-568.18	-2,537.77	2,694.71	2,612.05	82.66	32.599	
2,300.00	2,233.45	2,203.55	2,233.45	11.54	75.25	-106.53	-568.18	-2,537.77	2,703.19	2,616.45	86.75	31.161	
2,400.00	2,329.12	2,307.88	2,329.12	12.05	78.89	-107.10	-568.18	-2,537.77	2,711.96	2,621.07	90.89	29.837	
2,500.00	2,424.79	2,387.79	2,424.79	12.56	81.68	-107.66	-568.18	-2,537.77	2,721.01	2,626.82	94.19	28.890	
2,600.00	2,520.46	2,483.46	2,520.46	13.08	85.02	-108.22	-568.18	-2,537.77	2,730.34	2,632.31	98.03	27.852	
2,700.00	2,616.13	2,579.13	2,616.13	13.60	88.35	-108.77	-568.18	-2,537.77	2,739.95	2,638.07	101.88	26.894	
2,800.00	2,711.80	2,674.80	2,711.80	14.12	91.69	-109.33	-568.18	-2,537.77	2,749.83	2,644.10	105.73	26.009	
2,900.00	2,807.47	2,770.47	2,807.47	14.64	95.03	-109.87	-568.18	-2,537.77	2,759.98	2,650.41	109.57	25.188	
3,000.00	2,903.14	2,866.14	2,903.14	15.16	98.37	-110.42	-568.18	-2,537.77	2,770.41	2,656.98	113.42	24.426	
3,100.00	2,998.81	2,961.81	2,998.81	15.68	101.70	-110.96	-568.18	-2,537.77	2,781.09	2,663.82	117.27	23.715	
3,200.00	3,094.48	3,057.48	3,094.48	16.21	105.04	-111.50	-568.18	-2,537.77	2,792.04	2,670.92	121.12	23.052	
3,300.00	3,190.15	3,153.15	3,190.15	16.73	108.38	-112.03	-568.18	-2,537.77	2,803.25	2,678.28	124.97	22.431	
3,400.00	3,285.82	3,248.82	3,285.82	17.26	111.72	-112.56	-568.18	-2,537.77	2,814.72	2,685.90	128.82	21.850	
3,500.00	3,381.49	3,344.49	3,381.49	17.78	115.06	-113.08	-568.18	-2,537.77	2,826.44	2,693.77	132.67	21.304	
3,600.00	3,477.16	3,440.16	3,477.16	18.31	118.40	-113.60	-568.18	-2,537.77	2,838.41	2,701.89	136.52	20.791	
3,700.00	3,572.83	3,535.83	3,572.83	18.84	121.73	-114.12	-568.18	-2,537.77	2,850.63	2,710.26	140.37	20.308	
3,800.00	3,668.50	3,631.50	3,668.50	19.37	125.07	-114.63	-568.18	-2,537.77	2,863.09	2,718.87	144.22	19.852	
3,900.00	3,764.17	3,727.17	3,764.17	19.89	128.41	-115.14	-568.18	-2,537.77	2,875.79	2,727.72	148.07	19.422	
4,000.00	3,859.84	3,822.84	3,859.84	20.42	131.75	-115.65	-568.18	-2,537.77	2,888.73	2,736.81	151.92	19.015	
4,100.00	3,955.51	3,918.51	3,955.51	20.95	135.09	-116.15	-568.18	-2,537.77	2,901.90	2,746.13	155.77	18.629	
4,200.00	4,051.18	4,014.18	4,051.18	21.48	138.43	-116.64	-568.18	-2,537.77	2,915.31	2,755.69	159.62	18.264	
4,300.00	4,146.85	4,109.85	4,146.85	22.01	141.77	-117.13	-568.18	-2,537.77	2,928.94	2,765.47	163.47	17.918	
4,400.00	4,242.52	4,205.52	4,242.52	22.55	145.11	-117.62	-568.18	-2,537.77	2,942.80	2,775.48	167.32	17.588	
4,500.00	4,338.19	4,301.19	4,338.19	23.08	148.45	-118.10	-568.18	-2,537.77	2,956.87	2,785.71	171.16	17.275	
4,600.00	4,433.86	4,403.14	4,433.86	23.61	152.00	-118.58	-568.18	-2,537.77	2,971.17	2,795.94	175.23	16.956	
4,700.00	4,529.53	4,507.48	4,529.53	24.14	155.65	-119.06	-568.18	-2,537.77	2,985.68	2,806.30	179.38	16.644	
4,800.00	4,625.19	4,588.19	4,625.19	24.67	158.46	-119.53	-568.18	-2,537.77	3,000.41	2,817.70	182.70	16.422	
4,900.00	4,720.86	4,683.86	4,720.86	25.21	161.80	-119.99	-568.18	-2,537.77	3,015.34	2,828.79	186.55	16.164	
5,000.00	4,816.53	4,779.53	4,816.53	25.74	165.14	-120.46	-568.18	-2,537.77	3,030.48	2,840.08	190.40	15.917	
5,100.00	4,912.20	4,875.20	4,912.20	26.27	168.48	-120.91	-568.18	-2,537.77	3,045.82	2,851.58	194.24	15.681	

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	4,970.87	5,007.87	26.80	171.82	-121.36	-568.18	-2,537.77	3,061.37	2,863.28	198.09	15.455		
5,300.00	5,103.54	5,066.54	5,103.54	27.34	175.16	-121.81	-568.18	-2,537.77	3,077.11	2,875.18	201.93	15.238		
5,400.00	5,199.22	5,162.22	5,199.22	27.87	178.50	-122.28	-568.18	-2,537.77	3,093.03	2,887.26	205.77	15.031		
5,500.00	5,295.46	5,258.46	5,295.46	28.39	181.86	-122.95	-568.18	-2,537.77	3,108.05	2,898.42	209.63	14.826		
5,600.00	5,392.60	5,355.60	5,392.60	28.89	185.25	-123.53	-568.18	-2,537.77	3,121.34	2,907.84	213.50	14.620		
5,700.00	5,490.50	5,453.50	5,490.50	29.37	188.67	-124.03	-568.18	-2,537.77	3,132.82	2,915.44	217.38	14.412		
5,800.00	5,589.05	5,552.05	5,589.05	29.83	192.10	-124.44	-568.18	-2,537.77	3,142.43	2,921.17	221.26	14.202		
5,900.00	5,688.14	5,651.14	5,688.14	30.26	195.56	-124.77	-568.18	-2,537.77	3,150.13	2,924.98	225.15	13.991		
6,000.00	5,787.63	5,750.63	5,787.63	30.68	199.04	-125.01	-568.18	-2,537.77	3,155.87	2,926.84	229.03	13.779		
6,100.00	5,887.41	5,850.41	5,887.41	31.07	202.52	-125.17	-568.18	-2,537.77	3,159.62	2,926.72	232.91	13.566		
6,200.00	5,987.36	5,950.36	5,987.36	31.44	206.01	-125.24	-568.18	-2,537.77	3,161.38	2,924.60	236.77	13.352		
6,300.00	6,087.36	6,050.36	6,087.36	31.80	209.50	-130.98	-568.18	-2,537.77	3,161.51	2,920.89	240.62	13.139		
6,400.00	6,187.36	6,150.36	6,187.36	32.15	212.99	-130.98	-568.18	-2,537.77	3,161.51	2,917.03	244.48	12.932		
6,500.00	6,287.36	6,250.36	6,287.36	32.51	216.48	-130.98	-568.18	-2,537.77	3,161.51	2,913.18	248.34	12.731		
6,600.00	6,387.36	6,350.36	6,387.36	32.87	219.97	-130.98	-568.18	-2,537.77	3,161.51	2,909.32	252.19	12.536		
6,700.00	6,487.36	6,450.36	6,487.36	33.23	223.46	-130.98	-568.18	-2,537.77	3,161.51	2,905.46	256.05	12.347		
6,800.00	6,587.36	6,550.36	6,587.36	33.59	226.95	-130.98	-568.18	-2,537.77	3,161.51	2,901.60	259.92	12.164		
6,900.00	6,687.26	6,650.26	6,687.26	33.95	230.44	-40.71	-568.18	-2,537.77	3,159.15	2,895.38	263.76	11.977		
7,000.00	6,785.58	6,748.58	6,785.58	34.31	233.87	-41.72	-568.18	-2,537.77	3,145.77	2,878.23	267.55	11.758		
7,100.00	6,879.94	6,842.94	6,879.94	34.65	237.16	-43.68	-568.18	-2,537.77	3,121.01	2,849.82	271.19	11.509		
7,200.00	6,968.01	6,931.01	6,968.01	34.97	240.24	-46.68	-568.18	-2,537.77	3,085.67	2,811.06	274.61	11.237		
7,300.00	7,047.61	7,010.61	7,047.61	35.27	243.02	-50.82	-568.18	-2,537.77	3,040.91	2,763.16	277.75	10.948		
7,400.00	7,116.80	7,079.80	7,116.80	35.54	245.43	-56.21	-568.18	-2,537.77	2,988.18	2,707.63	280.56	10.651		
7,500.00	7,173.86	7,136.86	7,173.86	35.81	247.42	-62.84	-568.18	-2,537.77	2,929.19	2,646.18	283.00	10.350		
7,600.00	7,217.38	7,180.38	7,217.38	36.17	248.94	-70.52	-568.18	-2,537.77	2,865.80	2,580.73	285.07	10.053		
7,700.00	7,246.31	7,209.31	7,246.31	36.80	249.95	-78.82	-568.18	-2,537.77	2,799.98	2,513.24	286.74	9.765		
7,800.00	7,259.92	7,222.92	7,259.92	37.72	250.43	-87.08	-568.18	-2,537.77	2,733.71	2,445.70	288.02	9.491		
7,900.00	7,260.77	7,223.77	7,260.77	38.86	250.46	-90.18	-568.18	-2,537.77	2,668.83	2,379.84	288.99	9.235		
8,000.00	7,260.39	7,223.39	7,260.39	40.19	250.44	-90.17	-568.18	-2,537.77	2,606.15	2,316.07	290.07	8.984		
8,100.00	7,260.01	7,223.01	7,260.01	41.67	250.43	-90.16	-568.18	-2,537.77	2,545.85	2,254.52	291.33	8.739		
8,200.00	7,259.63	7,222.63	7,259.63	43.30	250.42	-90.15	-568.18	-2,537.77	2,488.12	2,195.36	292.76	8.499		
8,300.00	7,259.25	7,222.25	7,259.25	45.05	250.41	-90.14	-568.18	-2,537.77	2,433.12	2,138.76	294.36	8.266		
8,400.00	7,258.87	7,221.87	7,258.87	46.91	250.39	-90.13	-568.18	-2,537.77	2,381.06	2,084.94	296.12	8.041		
8,500.00	7,258.49	7,221.49	7,258.49	48.87	250.38	-90.12	-568.18	-2,537.77	2,332.12	2,034.08	298.04	7.825		
8,600.00	7,258.11	7,221.11	7,258.11	50.92	250.37	-90.11	-568.18	-2,537.77	2,286.52	1,986.41	300.11	7.619		
8,700.00	7,257.73	7,220.73	7,257.73	53.04	250.35	-90.10	-568.18	-2,537.77	2,244.44	1,942.13	302.31	7.424		
8,800.00	7,257.35	7,220.35	7,257.35	55.23	250.34	-90.09	-568.18	-2,537.77	2,206.10	1,901.47	304.63	7.242		
8,900.00	7,256.97	7,219.97	7,256.97	57.47	250.33	-90.07	-568.18	-2,537.77	2,171.69	1,864.65	307.04	7.073		
9,000.00	7,256.59	7,219.59	7,256.59	59.77	250.31	-90.06	-568.18	-2,537.77	2,141.40	1,831.88	309.53	6.918		
9,100.00	7,256.21	7,219.21	7,256.21	62.12	250.30	-90.05	-568.18	-2,537.77	2,115.41	1,803.36	312.06	6.779		
9,200.00	7,255.83	7,218.83	7,255.83	64.50	250.29	-90.04	-568.18	-2,537.77	2,093.88	1,779.28	314.60	6.656		
9,300.00	7,255.45	7,218.45	7,255.45	66.93	250.27	-90.03	-568.18	-2,537.77	2,076.94	1,759.80	317.14	6.549		
9,400.00	7,255.07	7,218.07	7,255.07	69.38	250.26	-90.02	-568.18	-2,537.77	2,064.72	1,745.07	319.64	6.459		
9,500.00	7,254.69	7,217.69	7,254.69	71.87	250.25	-90.01	-568.18	-2,537.77	2,057.28	1,735.21	322.07	6.388		
9,600.00	7,254.31	7,217.31	7,254.31	74.38	250.23	-90.00	-568.18	-2,537.77	2,054.69	1,730.28	324.42	6.334		
9,603.21	7,254.30	7,217.30	7,254.30	74.46	250.23	-90.00	-568.18	-2,537.77	2,054.69	1,730.20	324.49	6.332 CC, ES		
9,700.00	7,253.93	7,216.93	7,253.93	76.92	250.22	-89.99	-568.18	-2,537.77	2,056.97	1,730.33	326.64	6.297		
9,800.00	7,253.55	7,216.55	7,253.55	79.48	250.21	-89.98	-568.18	-2,537.77	2,064.09	1,735.36	328.73	6.279		
9,900.00	7,253.18	7,216.18	7,253.18	82.06	250.19	-89.97	-568.18	-2,537.77	2,076.02	1,745.34	330.67	6.278 SF		
10,000.00	7,252.80	7,215.80	7,252.80	84.65	250.18	-89.96	-568.18	-2,537.77	2,092.65	1,760.20	332.45	6.295		
10,100.00	7,252.42	7,215.42	7,252.42	87.27	250.17	-89.95	-568.18	-2,537.77	2,113.90	1,779.84	334.06	6.328		
10,200.00	7,252.04	7,215.04	7,252.04	89.89	250.15	-89.94	-568.18	-2,537.77	2,139.61	1,804.11	335.49	6.378		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
10,300.00	7,251.66	7,214.66	7,251.66	92.54	250.14	-89.93	-568.18	-2,537.77	2,169.62	1,832.87	336.75	6.443	
10,400.00	7,251.28	7,214.28	7,251.28	95.19	250.13	-89.92	-568.18	-2,537.77	2,203.78	1,865.93	337.84	6.523	
10,500.00	7,250.90	7,213.90	7,250.90	97.86	250.11	-89.91	-568.18	-2,537.77	2,241.87	1,903.10	338.77	6.618	
10,600.00	7,250.52	7,213.52	7,250.52	100.53	250.10	-89.89	-568.18	-2,537.77	2,283.71	1,944.16	339.55	6.726	
10,700.00	7,250.14	7,213.14	7,250.14	103.22	250.09	-89.88	-568.18	-2,537.77	2,329.10	1,988.91	340.19	6.847	
10,800.00	7,249.76	7,212.76	7,249.76	105.91	250.07	-89.87	-568.18	-2,537.77	2,377.82	2,037.14	340.69	6.979	
10,900.00	7,249.38	7,212.38	7,249.38	108.62	250.06	-89.86	-568.18	-2,537.77	2,429.69	2,088.62	341.07	7.124	
11,000.00	7,249.00	7,212.00	7,249.00	111.33	250.05	-89.85	-568.18	-2,537.77	2,484.50	2,143.15	341.35	7.278	
11,100.00	7,248.62	7,211.62	7,248.62	114.04	250.03	-89.84	-568.18	-2,537.77	2,542.07	2,200.54	341.53	7.443	
11,200.00	7,248.24	7,211.24	7,248.24	116.77	250.02	-89.83	-568.18	-2,537.77	2,602.20	2,260.58	341.63	7.617	
11,300.00	7,247.86	7,210.86	7,247.86	119.50	250.01	-89.82	-568.18	-2,537.77	2,664.74	2,323.08	341.65	7.800	
11,400.00	7,247.48	7,210.48	7,247.48	122.24	249.99	-89.81	-568.18	-2,537.77	2,729.50	2,387.89	341.61	7.990	
11,500.00	7,247.10	7,210.10	7,247.10	124.98	249.98	-89.80	-568.18	-2,537.77	2,796.34	2,454.83	341.52	8.188	
11,600.00	7,246.72	7,209.72	7,246.72	127.73	249.97	-89.79	-568.18	-2,537.77	2,865.11	2,523.74	341.37	8.393	
11,700.00	7,246.34	7,209.34	7,246.34	130.48	249.95	-89.78	-568.18	-2,537.77	2,935.68	2,594.49	341.19	8.604	
11,800.00	7,245.96	7,208.96	7,245.96	133.24	249.94	-89.77	-568.18	-2,537.77	3,007.92	2,666.95	340.97	8.822	
11,900.00	7,245.58	7,208.58	7,245.58	136.00	249.93	-89.76	-568.18	-2,537.77	3,081.71	2,740.98	340.73	9.044	
12,000.00	7,245.21	7,208.21	7,245.21	138.76	249.91	-89.75	-568.18	-2,537.77	3,156.94	2,816.48	340.46	9.272	
12,100.00	7,244.83	7,207.83	7,244.83	141.53	249.90	-89.74	-568.18	-2,537.77	3,233.52	2,893.34	340.18	9.505	
12,200.00	7,244.45	7,207.45	7,244.45	144.30	249.89	-89.73	-568.18	-2,537.77	3,311.34	2,971.46	339.88	9.743	
12,300.00	7,244.07	7,207.07	7,244.07	147.08	249.88	-89.71	-568.18	-2,537.77	3,390.33	3,050.76	339.57	9.984	
12,400.00	7,243.69	7,206.69	7,243.69	149.86	249.86	-89.70	-568.18	-2,537.77	3,470.40	3,131.15	339.25	10.229	
12,500.00	7,243.31	7,206.31	7,243.31	152.64	249.85	-89.69	-568.18	-2,537.77	3,551.48	3,212.55	338.93	10.478	
12,600.00	7,242.93	7,205.93	7,242.93	155.42	249.84	-89.68	-568.18	-2,537.77	3,633.51	3,294.90	338.60	10.731	
12,700.00	7,242.55	7,205.55	7,242.55	158.21	249.82	-89.67	-568.18	-2,537.77	3,716.42	3,378.14	338.28	10.986	
12,800.00	7,242.17	7,205.17	7,242.17	161.00	249.81	-89.66	-568.18	-2,537.77	3,800.14	3,462.20	337.95	11.245	
12,900.00	7,241.79	7,204.79	7,241.79	163.79	249.80	-89.65	-568.18	-2,537.77	3,884.64	3,547.02	337.62	11.506	
13,000.00	7,241.41	7,204.41	7,241.41	166.58	249.78	-89.64	-568.18	-2,537.77	3,969.86	3,632.57	337.29	11.770	
13,100.00	7,241.03	7,204.03	7,241.03	169.38	249.77	-89.63	-568.18	-2,537.77	4,055.75	3,718.78	336.97	12.036	
13,200.00	7,240.65	7,203.65	7,240.65	172.18	249.76	-89.62	-568.18	-2,537.77	4,142.28	3,805.63	336.65	12.304	
13,300.00	7,240.27	7,203.27	7,240.27	174.98	249.74	-89.61	-568.18	-2,537.77	4,229.40	3,893.06	336.34	12.575	
13,400.00	7,239.89	7,202.89	7,239.89	177.78	249.73	-89.60	-568.18	-2,537.77	4,317.08	3,981.05	336.03	12.847	
13,500.00	7,239.51	7,202.51	7,239.51	180.58	249.72	-89.59	-568.18	-2,537.77	4,405.28	4,069.56	335.73	13.122	
13,600.00	7,239.13	7,202.13	7,239.13	183.39	249.70	-89.58	-568.18	-2,537.77	4,493.98	4,158.55	335.43	13.398	
13,700.00	7,238.75	7,201.75	7,238.75	186.20	249.69	-89.57	-568.18	-2,537.77	4,583.15	4,248.01	335.14	13.675	
13,800.00	7,238.37	7,201.37	7,238.37	189.00	249.68	-89.56	-568.18	-2,537.77	4,672.75	4,337.90	334.85	13.955	
13,900.00	7,237.99	7,200.99	7,237.99	191.81	249.66	-89.55	-568.18	-2,537.77	4,762.76	4,428.19	334.57	14.235	
14,000.00	7,237.62	7,200.62	7,237.62	194.63	249.65	-89.53	-568.18	-2,537.77	4,853.17	4,518.87	334.30	14.518	
14,100.00	7,237.24	7,200.24	7,237.24	197.44	249.64	-89.52	-568.18	-2,537.77	4,943.95	4,609.92	334.03	14.801	
14,200.00	7,236.86	7,200.14	7,236.86	200.25	249.63	-89.51	-568.18	-2,537.77	5,035.07	4,701.29	333.78	15.085	
14,300.00	7,236.48	7,200.52	7,236.48	203.07	249.65	-89.50	-568.18	-2,537.77	5,126.53	4,792.98	333.55	15.370	
14,400.00	7,236.10	7,200.90	7,236.10	205.88	249.66	-89.49	-568.18	-2,537.77	5,218.30	4,884.97	333.33	15.655	
14,500.00	7,235.72	7,201.28	7,235.72	208.70	249.67	-89.48	-568.18	-2,537.77	5,310.37	4,977.25	333.11	15.942	
14,600.00	7,235.34	7,201.66	7,235.34	211.52	249.69	-89.47	-568.18	-2,537.77	5,402.72	5,069.81	332.90	16.229	
14,700.00	7,234.96	7,202.04	7,234.96	214.34	249.70	-89.46	-568.18	-2,537.77	5,495.33	5,162.63	332.70	16.517	
14,800.00	7,234.58	7,202.42	7,234.58	217.16	249.71	-89.45	-568.18	-2,537.77	5,588.20	5,255.70	332.51	16.806	
14,900.00	7,234.20	7,202.80	7,234.20	219.98	249.73	-89.44	-568.18	-2,537.77	5,681.32	5,349.00	332.31	17.096	
15,000.00	7,233.82	7,203.18	7,233.82	222.81	249.74	-89.43	-568.18	-2,537.77	5,774.66	5,442.53	332.13	17.387	
15,100.00	7,233.44	7,203.56	7,233.44	225.63	249.75	-89.42	-568.18	-2,537.77	5,868.22	5,536.27	331.95	17.678	
15,200.00	7,233.06	7,203.94	7,233.06	228.45	249.77	-89.41	-568.18	-2,537.77	5,962.00	5,630.22	331.78	17.970	
15,216.01	7,233.00	7,204.00	7,233.00	228.91	249.77	-89.41	-568.18	-2,537.77	5,977.03	5,645.28	331.75	18.017	

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	48.00	3.28	3.28	-109.90	-1,737.26	-4,799.30	5,104.28					
100.00	100.00	52.00	100.00	3.28	3.40	-109.90	-1,737.26	-4,799.30	5,104.05	5,097.36	6.69	763.166		
200.00	200.00	152.00	200.00	3.34	4.84	-109.90	-1,737.26	-4,799.30	5,104.05	5,095.87	8.18	624.097		
300.00	299.98	251.98	299.98	3.45	7.78	-104.18	-1,737.26	-4,799.30	5,104.48	5,093.26	11.22	454.887		
400.00	399.84	351.84	399.84	3.61	11.04	-104.21	-1,737.26	-4,799.30	5,105.76	5,091.12	14.64	348.778		
500.00	499.45	451.45	499.45	3.82	14.39	-104.26	-1,737.26	-4,799.30	5,107.92	5,089.71	18.20	280.646		
600.00	598.70	550.70	598.70	4.07	17.78	-104.33	-1,737.26	-4,799.30	5,110.95	5,089.11	21.84	234.055		
700.00	697.47	649.47	697.47	4.35	21.18	-104.43	-1,737.26	-4,799.30	5,114.88	5,089.36	25.52	200.453		
800.00	795.62	747.62	795.62	4.67	24.57	-104.54	-1,737.26	-4,799.30	5,119.73	5,090.51	29.22	175.193		
900.00	893.06	845.06	893.06	5.01	27.95	-104.66	-1,737.26	-4,799.30	5,125.54	5,092.60	32.95	155.577		
1,000.00	989.64	941.64	989.64	5.38	31.30	-104.80	-1,737.26	-4,799.30	5,132.34	5,095.67	36.67	139.945		
1,100.00	1,085.42	1,037.42	1,085.42	5.78	34.63	-105.03	-1,737.26	-4,799.30	5,140.03	5,099.63	40.40	127.214		
1,200.00	1,181.09	1,133.09	1,181.09	6.20	37.95	-105.33	-1,737.26	-4,799.30	5,147.98	5,103.82	44.16	116.587		
1,300.00	1,276.76	1,228.76	1,276.76	6.65	41.28	-105.63	-1,737.26	-4,799.30	5,156.07	5,108.15	47.92	107.587		
1,400.00	1,372.43	1,324.43	1,372.43	7.11	44.61	-105.93	-1,737.26	-4,799.30	5,164.32	5,112.61	51.71	99.874		
1,500.00	1,468.10	1,420.10	1,468.10	7.57	47.94	-106.23	-1,737.26	-4,799.30	5,172.71	5,117.21	55.50	93.196		
1,600.00	1,563.77	1,515.77	1,563.77	8.05	51.28	-106.52	-1,737.26	-4,799.30	5,181.26	5,121.95	59.31	87.361		
1,700.00	1,659.44	1,611.44	1,659.44	8.53	54.61	-106.82	-1,737.26	-4,799.30	5,189.95	5,126.83	63.12	82.222		
1,800.00	1,755.11	1,707.11	1,755.11	9.02	57.94	-107.11	-1,737.26	-4,799.30	5,198.80	5,131.85	66.94	77.663		
1,900.00	1,850.78	1,802.78	1,850.78	9.52	61.28	-107.41	-1,737.26	-4,799.30	5,207.79	5,137.02	70.77	73.592		
2,000.00	1,946.45	1,901.55	1,946.45	10.02	64.72	-107.70	-1,737.26	-4,799.30	5,216.92	5,142.22	74.70	69.835		
2,100.00	2,042.12	2,005.89	2,042.12	10.52	68.36	-107.99	-1,737.26	-4,799.30	5,226.21	5,147.37	78.84	66.289		
2,200.00	2,137.78	2,089.78	2,137.78	11.03	71.28	-108.28	-1,737.26	-4,799.30	5,235.64	5,153.37	82.27	63.643		
2,300.00	2,233.45	2,185.45	2,233.45	11.54	74.62	-108.57	-1,737.26	-4,799.30	5,245.21	5,159.11	86.11	60.916		
2,400.00	2,329.12	2,281.12	2,329.12	12.05	77.96	-108.86	-1,737.26	-4,799.30	5,254.93	5,164.98	89.95	58.422		
2,500.00	2,424.79	2,376.79	2,424.79	12.56	81.29	-109.15	-1,737.26	-4,799.30	5,264.79	5,171.00	93.79	56.133		
2,600.00	2,520.46	2,472.46	2,520.46	13.08	84.63	-109.44	-1,737.26	-4,799.30	5,274.79	5,177.16	97.64	54.024		
2,700.00	2,616.13	2,568.13	2,616.13	13.60	87.97	-109.72	-1,737.26	-4,799.30	5,284.94	5,183.45	101.49	52.076		
2,800.00	2,711.80	2,663.80	2,711.80	14.12	91.31	-110.01	-1,737.26	-4,799.30	5,295.22	5,189.89	105.34	50.270		
2,900.00	2,807.47	2,759.47	2,807.47	14.64	94.64	-110.29	-1,737.26	-4,799.30	5,305.65	5,196.46	109.19	48.593		
3,000.00	2,903.14	2,855.14	2,903.14	15.16	97.98	-110.58	-1,737.26	-4,799.30	5,316.21	5,203.18	113.04	47.031		
3,100.00	2,998.81	2,950.81	2,998.81	15.68	101.32	-110.86	-1,737.26	-4,799.30	5,326.92	5,210.03	116.89	45.572		
3,200.00	3,094.48	3,046.48	3,094.48	16.21	104.66	-111.14	-1,737.26	-4,799.30	5,337.76	5,217.01	120.74	44.208		
3,300.00	3,190.15	3,142.15	3,190.15	16.73	108.00	-111.42	-1,737.26	-4,799.30	5,348.73	5,224.14	124.60	42.929		
3,400.00	3,285.82	3,237.82	3,285.82	17.26	111.34	-111.70	-1,737.26	-4,799.30	5,359.84	5,231.39	128.45	41.727		
3,500.00	3,381.49	3,333.49	3,381.49	17.78	114.67	-111.98	-1,737.26	-4,799.30	5,371.09	5,238.78	132.30	40.597		
3,600.00	3,477.16	3,429.16	3,477.16	18.31	118.01	-112.25	-1,737.26	-4,799.30	5,382.47	5,246.31	136.16	39.531		
3,700.00	3,572.83	3,524.83	3,572.83	18.84	121.35	-112.53	-1,737.26	-4,799.30	5,393.98	5,253.97	140.01	38.525		
3,800.00	3,668.50	3,620.50	3,668.50	19.37	124.69	-112.80	-1,737.26	-4,799.30	5,405.63	5,261.76	143.87	37.573		
3,900.00	3,764.17	3,716.17	3,764.17	19.89	128.03	-113.08	-1,737.26	-4,799.30	5,417.40	5,269.68	147.73	36.672		
4,000.00	3,859.84	3,811.84	3,859.84	20.42	131.37	-113.35	-1,737.26	-4,799.30	5,429.31	5,277.73	151.58	35.818		
4,100.00	3,955.51	3,907.51	3,955.51	20.95	134.71	-113.62	-1,737.26	-4,799.30	5,441.35	5,285.91	155.44	35.007		
4,200.00	4,051.18	4,003.18	4,051.18	21.48	138.04	-113.89	-1,737.26	-4,799.30	5,453.51	5,294.22	159.29	34.236		
4,300.00	4,146.85	4,101.15	4,146.85	22.01	141.46	-114.16	-1,737.26	-4,799.30	5,465.81	5,302.58	163.23	33.485		
4,400.00	4,242.52	4,205.48	4,242.52	22.55	145.11	-114.43	-1,737.26	-4,799.30	5,478.23	5,310.84	167.39	32.728		
4,500.00	4,338.19	4,309.81	4,338.19	23.08	148.75	-114.69	-1,737.26	-4,799.30	5,490.78	5,319.23	171.55	32.007		
4,600.00	4,433.86	4,385.86	4,433.86	23.61	151.40	-114.96	-1,737.26	-4,799.30	5,503.45	5,328.73	174.72	31.499		
4,700.00	4,529.53	4,481.53	4,529.53	24.14	154.74	-115.22	-1,737.26	-4,799.30	5,516.24	5,337.67	178.57	30.890		
4,800.00	4,625.19	4,577.19	4,625.19	24.67	158.08	-115.49	-1,737.26	-4,799.30	5,529.16	5,346.73	182.43	30.308		
4,900.00	4,720.86	4,672.86	4,720.86	25.21	161.42	-115.75	-1,737.26	-4,799.30	5,542.21	5,355.92	186.29	29.751		
5,000.00	4,816.53	4,768.53	4,816.53	25.74	164.76	-116.01	-1,737.26	-4,799.30	5,555.37	5,365.23	190.14	29.217		
5,100.00	4,912.20	4,864.20	4,912.20	26.27	168.10	-116.27	-1,737.26	-4,799.30	5,568.66	5,374.66	194.00	28.705		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	4,959.87	5,007.87	26.80	171.44	-116.53	-1,737.26	-4,799.30	5,582.07	5,384.21	197.85	28.213		
5,300.00	5,103.54	5,055.54	5,103.54	27.34	174.77	-116.79	-1,737.26	-4,799.30	5,595.59	5,393.88	201.71	27.741		
5,400.00	5,199.22	5,151.22	5,199.22	27.87	178.11	-117.07	-1,737.26	-4,799.30	5,609.23	5,403.66	205.56	27.287		
5,500.00	5,295.46	5,247.46	5,295.46	28.39	181.47	-117.53	-1,737.26	-4,799.30	5,622.05	5,412.62	209.43	26.845		
5,600.00	5,392.60	5,344.60	5,392.60	28.89	184.86	-117.94	-1,737.26	-4,799.30	5,633.36	5,420.05	213.31	26.410		
5,700.00	5,490.50	5,442.50	5,490.50	29.37	188.28	-118.30	-1,737.26	-4,799.30	5,643.11	5,425.91	217.19	25.982		
5,800.00	5,589.05	5,541.05	5,589.05	29.83	191.72	-118.59	-1,737.26	-4,799.30	5,651.26	5,430.17	221.08	25.562		
5,900.00	5,688.14	5,640.14	5,688.14	30.26	195.18	-118.82	-1,737.26	-4,799.30	5,657.77	5,432.80	224.97	25.149		
6,000.00	5,787.63	5,739.63	5,787.63	30.68	198.65	-119.00	-1,737.26	-4,799.30	5,662.63	5,433.77	228.86	24.743		
6,100.00	5,887.41	5,839.41	5,887.41	31.07	202.14	-119.11	-1,737.26	-4,799.30	5,665.80	5,433.06	232.74	24.344		
6,200.00	5,987.36	5,939.36	5,987.36	31.44	205.62	-119.16	-1,737.26	-4,799.30	5,667.28	5,430.68	236.60	23.953		
6,300.00	6,087.36	6,039.36	6,087.36	31.80	209.11	-124.90	-1,737.26	-4,799.30	5,667.40	5,426.95	240.45	23.570		
6,400.00	6,187.36	6,139.36	6,187.36	32.15	212.61	-124.90	-1,737.26	-4,799.30	5,667.40	5,423.09	244.30	23.198		
6,500.00	6,287.36	6,239.36	6,287.36	32.51	216.10	-124.90	-1,737.26	-4,799.30	5,667.40	5,419.24	248.16	22.838		
6,600.00	6,387.36	6,339.36	6,387.36	32.87	219.59	-124.90	-1,737.26	-4,799.30	5,667.40	5,415.38	252.01	22.488		
6,700.00	6,487.36	6,439.36	6,487.36	33.23	223.08	-124.90	-1,737.26	-4,799.30	5,667.40	5,411.52	255.87	22.149		
6,800.00	6,587.36	6,539.36	6,587.36	33.59	226.57	-124.90	-1,737.26	-4,799.30	5,667.40	5,407.67	259.73	21.820		
6,900.00	6,687.26	6,639.26	6,687.26	33.95	230.05	-34.60	-1,737.26	-4,799.30	5,664.83	5,401.25	263.58	21.492		
7,000.00	6,785.58	6,737.58	6,785.58	34.31	233.49	-35.46	-1,737.26	-4,799.30	5,660.30	5,382.94	267.36	21.133		
7,100.00	6,879.94	6,831.94	6,879.94	34.65	236.78	-37.15	-1,737.26	-4,799.30	5,623.32	5,352.31	271.01	20.750		
7,200.00	6,968.01	6,920.01	6,968.01	34.97	239.85	-39.79	-1,737.26	-4,799.30	5,584.64	5,310.21	274.43	20.350		
7,300.00	7,047.61	7,000.39	7,047.61	35.27	242.66	-43.57	-1,737.26	-4,799.30	5,535.33	5,257.75	277.59	19.941		
7,400.00	7,116.80	7,068.80	7,116.80	35.54	245.05	-48.72	-1,737.26	-4,799.30	5,476.75	5,196.40	280.35	19.536		
7,500.00	7,173.86	7,125.86	7,173.86	35.81	247.04	-55.53	-1,737.26	-4,799.30	5,410.48	5,127.73	282.75	19.135		
7,600.00	7,217.38	7,169.38	7,217.38	36.17	248.56	-64.16	-1,737.26	-4,799.30	5,338.32	5,053.59	284.73	18.749		
7,700.00	7,246.31	7,201.69	7,246.31	36.80	249.69	-74.47	-1,737.26	-4,799.30	5,262.18	4,975.78	286.40	18.374		
7,800.00	7,259.92	7,211.92	7,259.92	37.72	250.04	-85.78	-1,737.26	-4,799.30	5,184.05	4,896.68	287.37	18.040		
7,900.00	7,260.77	7,212.77	7,260.77	38.86	250.07	-90.27	-1,737.26	-4,799.30	5,105.86	4,817.76	288.11	17.722		
8,000.00	7,260.39	7,212.39	7,260.39	40.19	250.06	-90.26	-1,737.26	-4,799.30	5,028.43	4,739.53	288.90	17.406		
8,100.00	7,260.01	7,212.01	7,260.01	41.67	250.05	-90.26	-1,737.26	-4,799.30	4,951.80	4,662.00	289.80	17.087		
8,200.00	7,259.63	7,211.63	7,259.63	43.30	250.03	-90.25	-1,737.26	-4,799.30	4,876.02	4,585.21	290.81	16.767		
8,300.00	7,259.25	7,211.25	7,259.25	45.05	250.02	-90.24	-1,737.26	-4,799.30	4,801.13	4,509.20	291.92	16.446		
8,400.00	7,258.87	7,210.87	7,258.87	46.91	250.01	-90.24	-1,737.26	-4,799.30	4,727.16	4,434.01	293.15	16.125		
8,500.00	7,258.49	7,210.49	7,258.49	48.87	249.99	-90.23	-1,737.26	-4,799.30	4,654.17	4,359.67	294.50	15.804		
8,600.00	7,258.11	7,210.11	7,258.11	50.92	249.98	-90.22	-1,737.26	-4,799.30	4,582.20	4,286.25	295.95	15.483		
8,700.00	7,257.73	7,209.73	7,257.73	53.04	249.97	-90.22	-1,737.26	-4,799.30	4,511.30	4,213.78	297.52	15.163		
8,800.00	7,257.35	7,209.35	7,257.35	55.23	249.95	-90.21	-1,737.26	-4,799.30	4,441.51	4,142.32	299.19	14.845		
8,900.00	7,256.97	7,208.97	7,256.97	57.47	249.94	-90.20	-1,737.26	-4,799.30	4,372.90	4,071.92	300.98	14.529		
9,000.00	7,256.59	7,208.59	7,256.59	59.77	249.93	-90.19	-1,737.26	-4,799.30	4,305.52	4,002.64	302.88	14.215		
9,100.00	7,256.21	7,208.21	7,256.21	62.12	249.92	-90.19	-1,737.26	-4,799.30	4,239.43	3,934.55	304.88	13.905		
9,200.00	7,255.83	7,207.83	7,255.83	64.50	249.90	-90.18	-1,737.26	-4,799.30	4,174.69	3,867.69	307.00	13.598		
9,300.00	7,255.45	7,207.45	7,255.45	66.93	249.89	-90.17	-1,737.26	-4,799.30	4,111.36	3,802.14	309.21	13.296		
9,400.00	7,255.07	7,207.07	7,255.07	69.38	249.88	-90.17	-1,737.26	-4,799.30	4,049.51	3,737.97	311.53	12.999		
9,500.00	7,254.69	7,206.69	7,254.69	71.87	249.86	-90.16	-1,737.26	-4,799.30	3,989.20	3,675.25	313.95	12.707		
9,600.00	7,254.31	7,206.31	7,254.31	74.38	249.85	-90.15	-1,737.26	-4,799.30	3,930.52	3,614.06	316.46	12.420		
9,700.00	7,253.93	7,205.93	7,253.93	76.92	249.84	-90.15	-1,737.26	-4,799.30	3,873.53	3,554.46	319.07	12.140		
9,800.00	7,253.55	7,205.55	7,253.55	79.48	249.82	-90.14	-1,737.26	-4,799.30	3,818.31	3,496.54	321.76	11.867		
9,900.00	7,253.18	7,205.18	7,253.18	82.06	249.81	-90.13	-1,737.26	-4,799.30	3,764.93	3,440.39	324.54	11.601		
10,000.00	7,252.80	7,204.80	7,252.80	84.65	249.80	-90.13	-1,737.26	-4,799.30	3,713.48	3,386.08	327.40	11.342		
10,100.00	7,252.42	7,204.42	7,252.42	87.27	249.78	-90.12	-1,737.26	-4,799.30	3,664.04	3,333.71	330.33	11.092		
10,200.00	7,252.04	7,204.04	7,252.04	89.89	249.77	-90.11	-1,737.26	-4,799.30	3,616.69	3,283.36	333.33	10.850		
10,300.00	7,251.66	7,203.66	7,251.66	92.54	249.76	-90.11	-1,737.26	-4,799.30	3,571.51	3,235.12	336.39	10.617		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
10,400.00	7,251.28	7,203.28	7,251.28	95.19	249.74	-90.10	-1,737.26	-4,799.30	3,528.58	3,189.09	339.50	10.394	
10,500.00	7,250.90	7,202.90	7,250.90	97.86	249.73	-90.09	-1,737.26	-4,799.30	3,488.00	3,145.35	342.65	10.179	
10,600.00	7,250.52	7,202.52	7,250.52	100.53	249.72	-90.09	-1,737.26	-4,799.30	3,449.84	3,104.00	345.84	9.975	
10,700.00	7,250.14	7,202.14	7,250.14	103.22	249.70	-90.08	-1,737.26	-4,799.30	3,414.18	3,065.12	349.05	9.781	
10,800.00	7,249.76	7,201.76	7,249.76	105.91	249.69	-90.07	-1,737.26	-4,799.30	3,381.10	3,028.82	352.28	9.598	
10,900.00	7,249.38	7,201.38	7,249.38	108.62	249.68	-90.07	-1,737.26	-4,799.30	3,350.69	2,995.17	355.51	9.425	
11,000.00	7,249.00	7,201.00	7,249.00	111.33	249.66	-90.06	-1,737.26	-4,799.30	3,323.00	2,964.27	358.74	9.263	
11,100.00	7,248.62	7,200.62	7,248.62	114.04	249.65	-90.05	-1,737.26	-4,799.30	3,298.12	2,936.18	361.94	9.112	
11,200.00	7,248.24	7,200.24	7,248.24	116.77	249.64	-90.05	-1,737.26	-4,799.30	3,276.10	2,910.99	365.11	8.973	
11,300.00	7,247.86	7,200.14	7,247.86	119.50	249.63	-90.04	-1,737.26	-4,799.30	3,257.00	2,888.76	368.24	8.845	
11,400.00	7,247.48	7,200.52	7,247.48	122.24	249.65	-90.03	-1,737.26	-4,799.30	3,240.88	2,869.54	371.34	8.728	
11,500.00	7,247.10	7,200.90	7,247.10	124.98	249.66	-90.03	-1,737.26	-4,799.30	3,227.77	2,853.41	374.36	8.622	
11,600.00	7,246.72	7,201.28	7,246.72	127.73	249.67	-90.02	-1,737.26	-4,799.30	3,217.73	2,840.42	377.31	8.528	
11,700.00	7,246.34	7,201.66	7,246.34	130.48	249.69	-90.01	-1,737.26	-4,799.30	3,210.76	2,830.60	380.16	8.446	
11,800.00	7,245.96	7,202.04	7,245.96	133.24	249.70	-90.01	-1,737.26	-4,799.30	3,206.90	2,823.99	382.91	8.375	
11,873.82	7,245.68	7,202.32	7,245.68	135.27	249.71	-90.00	-1,737.26	-4,799.30	3,206.05	2,821.18	384.87	8.330 CC	
11,900.00	7,245.58	7,202.42	7,245.58	136.00	249.71	-90.00	-1,737.26	-4,799.30	3,206.16	2,820.61	385.55	8.316	
12,000.00	7,245.21	7,202.79	7,245.21	138.76	249.73	-89.99	-1,737.26	-4,799.30	3,208.54	2,820.47	388.07	8.268 ES	
12,100.00	7,244.83	7,203.17	7,244.83	141.53	249.74	-89.98	-1,737.26	-4,799.30	3,214.02	2,823.57	390.46	8.231	
12,200.00	7,244.45	7,203.55	7,244.45	144.30	249.75	-89.98	-1,737.26	-4,799.30	3,222.60	2,829.89	392.71	8.206	
12,300.00	7,244.07	7,203.93	7,244.07	147.08	249.77	-89.97	-1,737.26	-4,799.30	3,234.26	2,839.43	394.83	8.192	
12,400.00	7,243.69	7,204.31	7,243.69	149.86	249.78	-89.96	-1,737.26	-4,799.30	3,248.94	2,852.14	396.80	8.188 SF	
12,500.00	7,243.31	7,204.69	7,243.31	152.64	249.79	-89.96	-1,737.26	-4,799.30	3,266.63	2,868.00	398.63	8.195	
12,600.00	7,242.93	7,205.07	7,242.93	155.42	249.81	-89.95	-1,737.26	-4,799.30	3,287.26	2,886.95	400.32	8.212	
12,700.00	7,242.55	7,205.45	7,242.55	158.21	249.82	-89.94	-1,737.26	-4,799.30	3,310.79	2,908.94	401.86	8.239	
12,800.00	7,242.17	7,205.83	7,242.17	161.00	249.83	-89.94	-1,737.26	-4,799.30	3,337.15	2,933.90	403.25	8.276	
12,900.00	7,241.79	7,206.21	7,241.79	163.79	249.85	-89.93	-1,737.26	-4,799.30	3,366.28	2,961.77	404.51	8.322	
13,000.00	7,241.41	7,206.59	7,241.41	166.58	249.86	-89.92	-1,737.26	-4,799.30	3,398.09	2,992.47	405.63	8.377	
13,100.00	7,241.03	7,206.97	7,241.03	169.38	249.87	-89.92	-1,737.26	-4,799.30	3,432.53	3,025.92	406.61	8.442	
13,200.00	7,240.65	7,207.35	7,240.65	172.18	249.89	-89.91	-1,737.26	-4,799.30	3,469.51	3,062.04	407.47	8.515	
13,300.00	7,240.27	7,207.73	7,240.27	174.98	249.90	-89.90	-1,737.26	-4,799.30	3,508.95	3,100.74	408.21	8.596	
13,400.00	7,239.89	7,208.11	7,239.89	177.78	249.91	-89.90	-1,737.26	-4,799.30	3,550.77	3,141.94	408.83	8.685	
13,500.00	7,239.51	7,208.49	7,239.51	180.58	249.92	-89.89	-1,737.26	-4,799.30	3,594.88	3,185.55	409.34	8.782	
13,600.00	7,239.13	7,208.87	7,239.13	183.39	249.94	-89.88	-1,737.26	-4,799.30	3,641.21	3,231.47	409.74	8.887	
13,700.00	7,238.75	7,209.25	7,238.75	186.20	249.95	-89.88	-1,737.26	-4,799.30	3,689.67	3,279.62	410.05	8.998	
13,800.00	7,238.37	7,209.63	7,238.37	189.00	249.96	-89.87	-1,737.26	-4,799.30	3,740.17	3,329.90	410.27	9.116	
13,900.00	7,237.99	7,189.99	7,237.99	191.81	249.28	-89.86	-1,737.26	-4,799.30	3,792.64	3,382.93	409.71	9.257	
14,000.00	7,237.62	7,189.62	7,237.62	194.63	249.27	-89.86	-1,737.26	-4,799.30	3,846.99	3,437.25	409.74	9.389	
14,100.00	7,237.24	7,189.24	7,237.24	197.44	249.25	-89.85	-1,737.26	-4,799.30	3,903.15	3,493.45	409.70	9.527	
14,200.00	7,236.86	7,188.86	7,236.86	200.25	249.24	-89.84	-1,737.26	-4,799.30	3,961.04	3,551.44	409.60	9.671	
14,300.00	7,236.48	7,188.48	7,236.48	203.07	249.23	-89.84	-1,737.26	-4,799.30	4,020.58	3,611.14	409.43	9.820	
14,400.00	7,236.10	7,188.10	7,236.10	205.88	249.21	-89.83	-1,737.26	-4,799.30	4,081.70	3,672.48	409.22	9.974	
14,500.00	7,235.72	7,187.72	7,235.72	208.70	249.20	-89.82	-1,737.26	-4,799.30	4,144.33	3,735.38	408.95	10.134	
14,600.00	7,235.34	7,187.34	7,235.34	211.52	249.19	-89.82	-1,737.26	-4,799.30	4,208.41	3,799.76	408.65	10.298	
14,700.00	7,234.96	7,186.96	7,234.96	214.34	249.17	-89.81	-1,737.26	-4,799.30	4,273.87	3,865.57	408.30	10.467	
14,800.00	7,234.58	7,186.58	7,234.58	217.16	249.16	-89.80	-1,737.26	-4,799.30	4,340.64	3,932.72	407.92	10.641	
14,900.00	7,234.20	7,186.20	7,234.20	219.98	249.15	-89.79	-1,737.26	-4,799.30	4,408.67	4,001.17	407.51	10.819	
15,000.00	7,233.82	7,185.82	7,233.82	222.81	249.13	-89.79	-1,737.26	-4,799.30	4,477.90	4,070.83	407.07	11.000	
15,100.00	7,233.44	7,185.44	7,233.44	225.63	249.12	-89.78	-1,737.26	-4,799.30	4,548.28	4,141.67	406.61	11.186	
15,200.00	7,233.06	7,185.06	7,233.06	228.45	249.11	-89.77	-1,737.26	-4,799.30	4,619.75	4,213.62	406.13	11.375	
15,216.01	7,233.00	7,185.00	7,233.00	228.91	249.10	-89.77	-1,737.26	-4,799.30	4,631.29	4,225.24	406.05	11.406	

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	51.00	3.28	3.28	-123.98	-3,238.19	-4,805.15	5,794.65					
100.00	100.00	49.00	100.00	3.28	3.39	-123.98	-3,238.19	-4,805.15	5,794.43	5,787.76	6.67	868.157		
200.00	200.00	149.00	200.00	3.34	4.76	-123.98	-3,238.19	-4,805.15	5,794.43	5,786.33	8.10	715.203		
300.00	299.98	248.98	299.98	3.45	7.68	-118.24	-3,238.19	-4,805.15	5,795.26	5,784.13	11.13	520.840		
400.00	399.84	348.84	399.84	3.61	10.94	-118.25	-3,238.19	-4,805.15	5,797.74	5,783.20	14.54	398.744		
500.00	499.45	448.45	499.45	3.82	14.29	-118.25	-3,238.19	-4,805.15	5,801.87	5,783.77	18.10	320.535		
600.00	598.70	547.70	598.70	4.07	17.68	-118.25	-3,238.19	-4,805.15	5,807.67	5,785.94	21.74	267.182		
700.00	697.47	646.47	697.47	4.35	21.08	-118.25	-3,238.19	-4,805.15	5,815.15	5,789.73	25.42	228.789		
800.00	795.62	744.62	795.62	4.67	24.47	-118.25	-3,238.19	-4,805.15	5,824.31	5,795.19	29.12	199.986		
900.00	893.06	842.06	893.06	5.01	27.84	-118.25	-3,238.19	-4,805.15	5,835.18	5,802.34	32.84	177.661		
1,000.00	989.64	938.64	989.64	5.38	31.20	-118.25	-3,238.19	-4,805.15	5,847.76	5,811.19	36.57	159.903		
1,100.00	1,085.42	1,034.42	1,085.42	5.78	34.52	-118.37	-3,238.19	-4,805.15	5,861.84	5,821.55	40.30	145.465		
1,200.00	1,181.09	1,130.09	1,181.09	6.20	37.85	-118.61	-3,238.19	-4,805.15	5,876.21	5,832.17	44.04	133.425		
1,300.00	1,276.76	1,225.76	1,276.76	6.65	41.18	-118.85	-3,238.19	-4,805.15	5,890.68	5,842.88	47.80	123.228		
1,400.00	1,372.43	1,321.43	1,372.43	7.11	44.51	-119.09	-3,238.19	-4,805.15	5,905.26	5,853.69	51.58	114.491		
1,500.00	1,468.10	1,417.10	1,468.10	7.57	47.84	-119.33	-3,238.19	-4,805.15	5,919.95	5,864.59	55.37	106.924		
1,600.00	1,563.77	1,512.77	1,563.77	8.05	51.17	-119.57	-3,238.19	-4,805.15	5,934.75	5,875.59	59.16	100.313		
1,700.00	1,659.44	1,608.44	1,659.44	8.53	54.50	-119.81	-3,238.19	-4,805.15	5,949.65	5,886.68	62.97	94.489		
1,800.00	1,755.11	1,704.11	1,755.11	9.02	57.84	-120.04	-3,238.19	-4,805.15	5,964.65	5,897.88	66.78	89.321		
1,900.00	1,850.78	1,800.22	1,850.78	9.52	61.19	-120.27	-3,238.19	-4,805.15	5,979.76	5,909.15	70.61	84.688		
2,000.00	1,946.45	1,904.55	1,946.45	10.02	64.83	-120.51	-3,238.19	-4,805.15	5,994.98	5,920.24	74.73	80.219		
2,100.00	2,042.12	2,008.89	2,042.12	10.52	68.46	-120.74	-3,238.19	-4,805.15	6,010.29	5,931.43	78.86	76.216		
2,200.00	2,137.78	2,086.78	2,137.78	11.03	71.18	-120.97	-3,238.19	-4,805.15	6,025.71	5,943.64	82.07	73.424		
2,300.00	2,233.45	2,182.45	2,233.45	11.54	74.52	-121.20	-3,238.19	-4,805.15	6,041.23	5,955.33	85.90	70.330		
2,400.00	2,329.12	2,278.12	2,329.12	12.05	77.85	-121.43	-3,238.19	-4,805.15	6,056.85	5,967.11	89.73	67.500		
2,500.00	2,424.79	2,373.79	2,424.79	12.56	81.19	-121.65	-3,238.19	-4,805.15	6,072.56	5,979.00	93.57	64.901		
2,600.00	2,520.46	2,469.46	2,520.46	13.08	84.53	-121.88	-3,238.19	-4,805.15	6,088.38	5,990.98	97.40	62.507		
2,700.00	2,616.13	2,565.13	2,616.13	13.60	87.86	-122.10	-3,238.19	-4,805.15	6,104.29	6,003.05	101.24	60.294		
2,800.00	2,711.80	2,660.80	2,711.80	14.12	91.20	-122.33	-3,238.19	-4,805.15	6,120.30	6,015.22	105.08	58.243		
2,900.00	2,807.47	2,756.47	2,807.47	14.64	94.54	-122.55	-3,238.19	-4,805.15	6,136.41	6,027.49	108.92	56.337		
3,000.00	2,903.14	2,852.14	2,903.14	15.16	97.88	-122.77	-3,238.19	-4,805.15	6,152.62	6,039.85	112.77	54.561		
3,100.00	2,998.81	2,947.81	2,998.81	15.68	101.22	-122.99	-3,238.19	-4,805.15	6,168.91	6,052.30	116.61	52.903		
3,200.00	3,094.48	3,043.48	3,094.48	16.21	104.55	-123.21	-3,238.19	-4,805.15	6,185.30	6,064.85	120.45	51.351		
3,300.00	3,190.15	3,139.15	3,190.15	16.73	107.89	-123.43	-3,238.19	-4,805.15	6,201.79	6,077.49	124.30	49.895		
3,400.00	3,285.82	3,234.82	3,285.82	17.26	111.23	-123.65	-3,238.19	-4,805.15	6,218.37	6,090.23	128.14	48.527		
3,500.00	3,381.49	3,330.49	3,381.49	17.78	114.57	-123.86	-3,238.19	-4,805.15	6,235.04	6,103.05	131.99	47.240		
3,600.00	3,477.16	3,426.16	3,477.16	18.31	117.91	-124.08	-3,238.19	-4,805.15	6,251.80	6,115.96	135.83	46.026		
3,700.00	3,572.83	3,521.83	3,572.83	18.84	121.25	-124.29	-3,238.19	-4,805.15	6,268.65	6,128.97	139.68	44.879		
3,800.00	3,668.50	3,617.50	3,668.50	19.37	124.58	-124.50	-3,238.19	-4,805.15	6,285.59	6,142.06	143.53	43.794		
3,900.00	3,764.17	3,713.17	3,764.17	19.89	127.92	-124.72	-3,238.19	-4,805.15	6,302.62	6,155.25	147.37	42.767		
4,000.00	3,859.84	3,808.84	3,859.84	20.42	131.26	-124.93	-3,238.19	-4,805.15	6,319.74	6,168.52	151.22	41.792		
4,100.00	3,955.51	3,904.51	3,955.51	20.95	134.60	-125.14	-3,238.19	-4,805.15	6,336.94	6,181.87	155.07	40.866		
4,200.00	4,051.18	4,000.18	4,051.18	21.48	137.94	-125.34	-3,238.19	-4,805.15	6,354.23	6,195.32	158.91	39.985		
4,300.00	4,146.85	4,104.15	4,146.85	22.01	141.57	-125.55	-3,238.19	-4,805.15	6,371.61	6,208.56	163.05	39.077		
4,400.00	4,242.52	4,208.48	4,242.52	22.55	145.21	-125.76	-3,238.19	-4,805.15	6,389.07	6,221.87	167.20	38.212		
4,500.00	4,338.19	4,287.19	4,338.19	23.08	147.96	-125.96	-3,238.19	-4,805.15	6,406.62	6,236.17	170.46	37.585		
4,600.00	4,433.86	4,382.86	4,433.86	23.61	151.30	-126.17	-3,238.19	-4,805.15	6,424.25	6,249.95	174.30	36.857		
4,700.00	4,529.53	4,478.53	4,529.53	24.14	154.63	-126.37	-3,238.19	-4,805.15	6,441.97	6,263.82	178.15	36.160		
4,800.00	4,625.19	4,574.19	4,625.19	24.67	157.97	-126.57	-3,238.19	-4,805.15	6,459.77	6,277.77	182.00	35.493		
4,900.00	4,720.86	4,669.86	4,720.86	25.21	161.31	-126.77	-3,238.19	-4,805.15	6,477.65	6,291.80	185.85	34.855		
5,000.00	4,816.53	4,765.53	4,816.53	25.74	164.65	-126.97	-3,238.19	-4,805.15	6,495.61	6,305.91	189.69	34.242		
5,100.00	4,912.20	4,861.20	4,912.20	26.27	167.99	-127.17	-3,238.19	-4,805.15	6,513.65	6,320.11	193.54	33.655		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	4,956.87	5,007.87	26.80	171.33	-127.37	-3,238.19	-4,805.15	6,531.77	6,334.38	197.39	33.091		
5,300.00	5,103.54	5,052.54	5,103.54	27.34	174.67	-127.57	-3,238.19	-4,805.15	6,549.97	6,348.73	201.24	32.549		
5,400.00	5,199.22	5,148.22	5,199.22	27.87	178.01	-127.79	-3,238.19	-4,805.15	6,568.24	6,363.16	205.08	32.027		
5,500.00	5,295.46	5,244.46	5,295.46	28.39	181.37	-128.25	-3,238.19	-4,805.15	6,585.35	6,376.40	208.94	31.518		
5,600.00	5,392.60	5,341.60	5,392.60	28.89	184.76	-128.64	-3,238.19	-4,805.15	6,600.38	6,387.56	212.81	31.015		
5,700.00	5,490.50	5,439.50	5,490.50	29.37	188.18	-128.98	-3,238.19	-4,805.15	6,613.29	6,396.60	216.70	30.519		
5,800.00	5,589.05	5,538.05	5,589.05	29.83	191.62	-129.26	-3,238.19	-4,805.15	6,624.06	6,403.48	220.58	30.030		
5,900.00	5,688.14	5,637.14	5,688.14	30.26	195.07	-129.49	-3,238.19	-4,805.15	6,632.65	6,408.18	224.47	29.547		
6,000.00	5,787.63	5,736.63	5,787.63	30.68	198.55	-129.65	-3,238.19	-4,805.15	6,639.04	6,410.68	228.36	29.073		
6,100.00	5,887.41	5,836.41	5,887.41	31.07	202.03	-129.76	-3,238.19	-4,805.15	6,643.22	6,410.98	232.24	28.605		
6,200.00	5,987.36	5,936.36	5,987.36	31.44	205.52	-129.81	-3,238.19	-4,805.15	6,645.16	6,409.05	236.11	28.145		
6,300.00	6,087.36	6,036.36	6,087.36	31.80	209.01	-135.55	-3,238.19	-4,805.15	6,645.31	6,405.35	239.96	27.693		
6,400.00	6,187.36	6,136.36	6,187.36	32.15	212.50	-135.55	-3,238.19	-4,805.15	6,645.31	6,401.49	243.82	27.255		
6,500.00	6,287.36	6,236.36	6,287.36	32.51	215.99	-135.55	-3,238.19	-4,805.15	6,645.31	6,397.64	247.68	26.830		
6,600.00	6,387.36	6,336.36	6,387.36	32.87	219.48	-135.55	-3,238.19	-4,805.15	6,645.31	6,393.78	251.54	26.419		
6,700.00	6,487.36	6,436.36	6,487.36	33.23	222.97	-135.55	-3,238.19	-4,805.15	6,645.31	6,389.91	255.40	26.019		
6,800.00	6,587.36	6,536.36	6,587.36	33.59	226.46	-135.55	-3,238.19	-4,805.15	6,645.31	6,386.05	259.26	25.631		
6,900.00	6,687.26	6,636.26	6,687.26	33.95	229.95	-45.26	-3,238.19	-4,805.15	6,643.12	6,380.00	263.11	25.248		
7,000.00	6,785.58	6,734.58	6,785.58	34.31	233.38	-46.17	-3,238.19	-4,805.15	6,630.68	6,363.78	266.90	24.843		
7,100.00	6,879.94	6,828.94	6,879.94	34.65	236.68	-47.94	-3,238.19	-4,805.15	6,607.62	6,337.07	270.55	24.423		
7,200.00	6,968.01	6,917.01	6,968.01	34.97	239.75	-50.62	-3,238.19	-4,805.15	6,574.61	6,300.62	273.99	23.996		
7,300.00	7,047.61	7,003.39	7,047.61	35.27	242.77	-54.29	-3,238.19	-4,805.15	6,532.62	6,255.23	277.39	23.551		
7,400.00	7,116.80	7,065.80	7,116.80	35.54	244.94	-59.02	-3,238.19	-4,805.15	6,482.86	6,202.87	279.99	23.154		
7,500.00	7,173.86	7,122.86	7,173.86	35.81	246.94	-64.85	-3,238.19	-4,805.15	6,426.75	6,144.28	282.46	22.752		
7,600.00	7,217.38	7,166.38	7,217.38	36.17	248.46	-71.67	-3,238.19	-4,805.15	6,365.86	6,081.30	284.56	22.371		
7,700.00	7,246.31	7,204.69	7,246.31	36.80	249.79	-79.23	-3,238.19	-4,805.15	6,301.88	6,015.30	286.59	21.989		
7,800.00	7,259.92	7,208.92	7,259.92	37.72	249.94	-87.11	-3,238.19	-4,805.15	6,236.52	5,948.98	287.54	21.690		
7,900.00	7,260.77	7,209.77	7,260.77	38.86	249.97	-90.18	-3,238.19	-4,805.15	6,171.39	5,882.91	288.47	21.393		
8,000.00	7,260.39	7,209.39	7,260.39	40.19	249.96	-90.18	-3,238.19	-4,805.15	6,107.19	5,817.69	289.50	21.096		
8,100.00	7,260.01	7,209.01	7,260.01	41.67	249.94	-90.18	-3,238.19	-4,805.15	6,043.96	5,753.31	290.65	20.795		
8,200.00	7,259.63	7,208.63	7,259.63	43.30	249.93	-90.17	-3,238.19	-4,805.15	5,981.74	5,689.82	291.92	20.491		
8,300.00	7,259.25	7,208.25	7,259.25	45.05	249.92	-90.17	-3,238.19	-4,805.15	5,920.55	5,627.24	293.31	20.185		
8,400.00	7,258.87	7,207.87	7,258.87	46.91	249.90	-90.16	-3,238.19	-4,805.15	5,860.43	5,565.61	294.82	19.878		
8,500.00	7,258.49	7,207.49	7,258.49	48.87	249.89	-90.16	-3,238.19	-4,805.15	5,801.41	5,504.97	296.44	19.570		
8,600.00	7,258.11	7,207.11	7,258.11	50.92	249.88	-90.15	-3,238.19	-4,805.15	5,743.53	5,445.36	298.17	19.263		
8,700.00	7,257.73	7,206.73	7,257.73	53.04	249.86	-90.15	-3,238.19	-4,805.15	5,686.81	5,386.82	300.00	18.956		
8,800.00	7,257.35	7,206.35	7,257.35	55.23	249.85	-90.14	-3,238.19	-4,805.15	5,631.30	5,329.38	301.93	18.651		
8,900.00	7,256.97	7,205.97	7,256.97	57.47	249.84	-90.14	-3,238.19	-4,805.15	5,577.03	5,273.09	303.95	18.349		
9,000.00	7,256.59	7,205.59	7,256.59	59.77	249.82	-90.13	-3,238.19	-4,805.15	5,524.04	5,217.99	306.05	18.049		
9,100.00	7,256.21	7,205.21	7,256.21	62.12	249.81	-90.13	-3,238.19	-4,805.15	5,472.36	5,164.12	308.25	17.753		
9,200.00	7,255.83	7,204.83	7,255.83	64.50	249.80	-90.12	-3,238.19	-4,805.15	5,422.04	5,111.52	310.52	17.461		
9,300.00	7,255.45	7,204.45	7,255.45	66.93	249.78	-90.12	-3,238.19	-4,805.15	5,373.10	5,060.23	312.87	17.174		
9,400.00	7,255.07	7,204.07	7,255.07	69.38	249.77	-90.12	-3,238.19	-4,805.15	5,325.59	5,010.30	315.29	16.891		
9,500.00	7,254.69	7,203.69	7,254.69	71.87	249.76	-90.11	-3,238.19	-4,805.15	5,279.55	4,961.78	317.77	16.614		
9,600.00	7,254.31	7,203.31	7,254.31	74.38	249.74	-90.11	-3,238.19	-4,805.15	5,235.02	4,914.69	320.32	16.343		
9,700.00	7,253.93	7,202.93	7,253.93	76.92	249.73	-90.10	-3,238.19	-4,805.15	5,192.02	4,869.10	322.93	16.078		
9,800.00	7,253.55	7,202.55	7,253.55	79.48	249.72	-90.10	-3,238.19	-4,805.15	5,150.61	4,825.03	325.59	15.819		
9,900.00	7,253.18	7,202.18	7,253.18	82.06	249.70	-90.09	-3,238.19	-4,805.15	5,110.83	4,782.53	328.30	15.568		
10,000.00	7,252.80	7,201.80	7,252.80	84.65	249.69	-90.09	-3,238.19	-4,805.15	5,072.70	4,741.65	331.05	15.323		
10,100.00	7,252.42	7,201.42	7,252.42	87.27	249.68	-90.08	-3,238.19	-4,805.15	5,036.27	4,702.42	333.84	15.086		
10,200.00	7,252.04	7,201.04	7,252.04	89.89	249.66	-90.08	-3,238.19	-4,805.15	5,001.57	4,664.90	336.67	14.856		
10,300.00	7,251.66	7,200.66	7,251.66	92.54	249.65	-90.07	-3,238.19	-4,805.15	4,968.65	4,629.11	339.53	14.634		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,251.28	7,200.28	7,251.28	95.19	249.64	-90.07	-3,238.19	-4,805.15	4,937.53	4,595.11	342.42	14.420		
10,500.00	7,250.90	7,200.10	7,250.90	97.86	249.63	-90.06	-3,238.19	-4,805.15	4,908.25	4,562.92	345.33	14.213		
10,600.00	7,250.52	7,200.48	7,250.52	100.53	249.65	-90.06	-3,238.19	-4,805.15	4,880.84	4,532.56	348.28	14.014		
10,700.00	7,250.14	7,200.86	7,250.14	103.22	249.66	-90.06	-3,238.19	-4,805.15	4,855.34	4,504.10	351.24	13.823		
10,800.00	7,249.76	7,201.24	7,249.76	105.91	249.67	-90.05	-3,238.19	-4,805.15	4,831.77	4,477.57	354.20	13.641		
10,900.00	7,249.38	7,201.62	7,249.38	108.62	249.69	-90.05	-3,238.19	-4,805.15	4,810.17	4,453.01	357.17	13.468		
11,000.00	7,249.00	7,202.00	7,249.00	111.33	249.70	-90.04	-3,238.19	-4,805.15	4,790.56	4,430.43	360.13	13.302		
11,100.00	7,248.62	7,202.38	7,248.62	114.04	249.71	-90.04	-3,238.19	-4,805.15	4,772.97	4,409.89	363.08	13.146		
11,200.00	7,248.24	7,202.76	7,248.24	116.77	249.72	-90.03	-3,238.19	-4,805.15	4,757.41	4,391.40	366.01	12.998		
11,300.00	7,247.86	7,203.14	7,247.86	119.50	249.74	-90.03	-3,238.19	-4,805.15	4,743.91	4,374.98	368.92	12.859		
11,400.00	7,247.48	7,203.52	7,247.48	122.24	249.75	-90.02	-3,238.19	-4,805.15	4,732.48	4,360.67	371.81	12.728		
11,500.00	7,247.10	7,203.90	7,247.10	124.98	249.76	-90.02	-3,238.19	-4,805.15	4,723.14	4,348.47	374.67	12.606		
11,600.00	7,246.72	7,204.28	7,246.72	127.73	249.78	-90.01	-3,238.19	-4,805.15	4,715.91	4,338.42	377.49	12.493		
11,700.00	7,246.34	7,204.66	7,246.34	130.48	249.79	-90.01	-3,238.19	-4,805.15	4,710.79	4,330.52	380.27	12.388		
11,800.00	7,245.96	7,205.04	7,245.96	133.24	249.80	-90.00	-3,238.19	-4,805.15	4,707.78	4,324.78	383.01	12.292		
11,891.42	7,245.62	7,205.38	7,245.62	135.76	249.82	-90.00	-3,238.19	-4,805.15	4,706.90	4,321.43	385.46	12.211 CC		
11,900.00	7,245.58	7,205.42	7,245.58	136.00	249.82	-90.00	-3,238.19	-4,805.15	4,706.90	4,321.21	385.69	12.204		
12,000.00	7,245.21	7,205.79	7,245.21	138.76	249.83	-89.99	-3,238.19	-4,805.15	4,708.15	4,319.83	388.32	12.124 ES		
12,100.00	7,244.83	7,206.17	7,244.83	141.53	249.84	-89.99	-3,238.19	-4,805.15	4,711.52	4,320.62	390.90	12.053		
12,200.00	7,244.45	7,206.55	7,244.45	144.30	249.86	-89.99	-3,238.19	-4,805.15	4,717.00	4,323.59	393.41	11.990		
12,300.00	7,244.07	7,206.93	7,244.07	147.08	249.87	-89.98	-3,238.19	-4,805.15	4,724.60	4,328.74	395.86	11.935		
12,400.00	7,243.69	7,207.31	7,243.69	149.86	249.88	-89.98	-3,238.19	-4,805.15	4,734.29	4,336.05	398.24	11.888		
12,500.00	7,243.31	7,207.69	7,243.31	152.64	249.90	-89.97	-3,238.19	-4,805.15	4,746.08	4,345.52	400.56	11.849		
12,600.00	7,242.93	7,208.07	7,242.93	155.42	249.91	-89.97	-3,238.19	-4,805.15	4,759.93	4,357.14	402.80	11.817		
12,700.00	7,242.55	7,208.45	7,242.55	158.21	249.92	-89.96	-3,238.19	-4,805.15	4,775.84	4,370.88	404.96	11.793		
12,800.00	7,242.17	7,208.83	7,242.17	161.00	249.94	-89.96	-3,238.19	-4,805.15	4,793.79	4,386.74	407.05	11.777		
12,900.00	7,241.79	7,209.21	7,241.79	163.79	249.95	-89.95	-3,238.19	-4,805.15	4,813.74	4,404.68	409.06	11.768		
13,000.00	7,241.41	7,209.59	7,241.41	166.58	249.96	-89.95	-3,238.19	-4,805.15	4,835.68	4,424.68	411.00	11.766 SF		
13,100.00	7,241.03	7,209.97	7,241.03	169.38	249.98	-89.94	-3,238.19	-4,805.15	4,859.58	4,446.73	412.86	11.771		
13,200.00	7,240.65	7,189.65	7,240.65	172.18	249.27	-89.94	-3,238.19	-4,805.15	4,885.41	4,471.50	413.91	11.803		
13,300.00	7,240.27	7,189.27	7,240.27	174.98	249.25	-89.93	-3,238.19	-4,805.15	4,913.14	4,497.56	415.58	11.822		
13,400.00	7,239.89	7,188.89	7,239.89	177.78	249.24	-89.93	-3,238.19	-4,805.15	4,942.74	4,525.56	417.18	11.848		
13,500.00	7,239.51	7,188.51	7,239.51	180.58	249.23	-89.93	-3,238.19	-4,805.15	4,974.17	4,555.48	418.70	11.880		
13,600.00	7,239.13	7,188.13	7,239.13	183.39	249.21	-89.92	-3,238.19	-4,805.15	5,007.40	4,587.27	420.14	11.919		
13,700.00	7,238.75	7,187.75	7,238.75	186.20	249.20	-89.92	-3,238.19	-4,805.15	5,042.40	4,620.90	421.50	11.963		
13,800.00	7,238.37	7,187.37	7,238.37	189.00	249.19	-89.91	-3,238.19	-4,805.15	5,079.13	4,656.34	422.79	12.013		
13,900.00	7,237.99	7,186.99	7,237.99	191.81	249.17	-89.91	-3,238.19	-4,805.15	5,117.54	4,693.54	424.00	12.070		
14,000.00	7,237.62	7,186.62	7,237.62	194.63	249.16	-89.90	-3,238.19	-4,805.15	5,157.61	4,732.46	425.15	12.131		
14,100.00	7,237.24	7,186.24	7,237.24	197.44	249.15	-89.90	-3,238.19	-4,805.15	5,199.29	4,773.07	426.22	12.199		
14,200.00	7,236.86	7,185.86	7,236.86	200.25	249.13	-89.89	-3,238.19	-4,805.15	5,242.55	4,815.33	427.23	12.271		
14,300.00	7,236.48	7,185.48	7,236.48	203.07	249.12	-89.89	-3,238.19	-4,805.15	5,287.35	4,859.18	428.17	12.349		
14,400.00	7,236.10	7,185.10	7,236.10	205.88	249.11	-89.88	-3,238.19	-4,805.15	5,333.65	4,904.60	429.05	12.431		
14,500.00	7,235.72	7,184.72	7,235.72	208.70	249.10	-89.88	-3,238.19	-4,805.15	5,381.40	4,951.54	429.86	12.519		
14,600.00	7,235.34	7,184.34	7,235.34	211.52	249.08	-89.87	-3,238.19	-4,805.15	5,430.58	4,999.97	430.61	12.611		
14,700.00	7,234.96	7,183.96	7,234.96	214.34	249.07	-89.87	-3,238.19	-4,805.15	5,481.14	5,049.83	431.31	12.708		
14,800.00	7,234.58	7,183.58	7,234.58	217.16	249.06	-89.87	-3,238.19	-4,805.15	5,533.05	5,101.09	431.96	12.809		
14,900.00	7,234.20	7,183.20	7,234.20	219.98	249.04	-89.86	-3,238.19	-4,805.15	5,586.26	5,153.72	432.55	12.915		
15,000.00	7,233.82	7,182.82	7,233.82	222.81	249.03	-89.86	-3,238.19	-4,805.15	5,640.75	5,207.66	433.08	13.025		
15,100.00	7,233.44	7,182.44	7,233.44	225.63	249.02	-89.85	-3,238.19	-4,805.15	5,696.47	5,262.89	433.58	13.138		
15,200.00	7,233.06	7,182.06	7,233.06	228.45	249.00	-89.85	-3,238.19	-4,805.15	5,753.39	5,319.37	434.02	13.256		
15,216.01	7,233.00	7,182.00	7,233.00	228.91	249.00	-89.85	-3,238.19	-4,805.15	5,762.61	5,328.52	434.09	13.275		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	69.00	3.28	3.28	-143.44	-4,409.31	-3,269.80	5,489.84					
100.00	100.00	929.66	968.07	3.28	5.27	-143.65	-4,358.05	-3,207.24	5,480.19	5,471.63	8.56	640.019		
200.00	200.00	1,028.32	1,065.40	3.34	5.69	-143.69	-4,347.83	-3,194.77	5,464.35	5,455.39	8.96	610.029		
300.00	299.98	1,127.12	1,162.87	3.45	6.13	-138.21	-4,337.60	-3,182.29	5,449.80	5,440.38	9.42	578.684		
400.00	399.84	1,226.10	1,260.53	3.61	6.59	-138.45	-4,327.35	-3,169.79	5,437.84	5,427.90	9.94	547.102		
500.00	499.45	1,325.17	1,358.26	3.82	7.06	-138.68	-4,317.10	-3,157.27	5,428.48	5,417.96	10.52	515.999		
600.00	598.70	1,425.82	1,455.95	4.07	7.55	-138.90	-4,306.84	-3,144.76	5,421.76	5,410.60	11.16	485.798		
700.00	697.47	1,526.97	1,553.48	4.35	8.05	-139.10	-4,296.61	-3,132.27	5,417.71	5,405.86	11.85	457.187		
800.00	795.62	1,628.40	1,650.72	4.67	8.56	-139.29	-4,286.41	-3,119.82	5,416.33	5,403.75	12.58	430.440		
800.99	796.59	1,627.43	1,651.68	4.67	8.55	-139.30	-4,286.30	-3,119.70	5,416.33	5,403.75	12.58	430.468		
900.00	893.06	1,730.25	1,747.56	5.01	9.07	-139.47	-4,276.24	-3,107.42	5,417.66	5,404.30	13.36	405.622		
1,000.00	989.64	1,817.39	1,843.87	5.38	9.52	-139.64	-4,266.13	-3,095.09	5,421.72	5,407.62	14.10	384.487		
1,100.00	1,085.42	1,914.48	1,939.66	5.78	10.02	-139.84	-4,256.08	-3,082.82	5,428.14	5,413.22	14.92	363.854		
1,200.00	1,181.09	2,011.49	2,035.37	6.20	10.52	-140.08	-4,246.04	-3,070.56	5,434.94	5,419.18	15.76	344.927		
1,300.00	1,276.76	2,108.51	2,131.09	6.65	11.02	-140.32	-4,235.99	-3,058.31	5,441.84	5,425.22	16.61	327.557		
1,400.00	1,372.43	2,205.53	2,226.80	7.11	11.53	-140.56	-4,225.95	-3,046.05	5,448.84	5,431.35	17.49	311.625		
1,500.00	1,468.10	2,302.54	2,322.51	7.57	12.04	-140.80	-4,215.90	-3,033.79	5,455.94	5,437.57	18.37	297.006		
1,600.00	1,563.77	2,399.56	2,418.22	8.05	12.55	-141.03	-4,205.86	-3,021.54	5,463.13	5,443.87	19.26	283.578		
1,700.00	1,659.44	2,496.58	2,513.94	8.53	13.07	-141.27	-4,195.81	-3,009.28	5,470.43	5,450.26	20.17	271.225		
1,800.00	1,755.11	2,593.59	2,609.65	9.02	13.58	-141.51	-4,185.77	-2,997.02	5,477.82	5,456.74	21.08	259.842		
1,900.00	1,850.78	2,690.61	2,705.36	9.52	14.10	-141.74	-4,175.72	-2,984.77	5,485.31	5,463.31	22.00	249.330		
2,000.00	1,946.45	2,787.62	2,801.08	10.02	14.62	-141.98	-4,165.68	-2,972.51	5,492.90	5,469.97	22.92	239.605		
2,100.00	2,042.12	2,884.64	2,896.79	10.52	15.14	-142.21	-4,155.63	-2,960.25	5,500.58	5,476.73	23.85	230.589		
2,200.00	2,137.78	2,981.66	2,992.50	11.03	15.66	-142.44	-4,145.59	-2,948.00	5,508.36	5,483.57	24.79	222.213		
2,300.00	2,233.45	3,078.67	3,088.22	11.54	16.18	-142.68	-4,135.55	-2,935.74	5,516.24	5,490.51	25.73	214.416		
2,400.00	2,329.12	3,175.69	3,183.93	12.05	16.70	-142.91	-4,125.50	-2,923.48	5,524.21	5,497.54	26.67	207.144		
2,500.00	2,424.79	3,272.70	3,279.64	12.56	17.22	-143.14	-4,115.46	-2,911.22	5,532.27	5,504.66	27.61	200.348		
2,600.00	2,520.46	3,369.72	3,375.36	13.08	17.74	-143.37	-4,105.41	-2,898.97	5,540.43	5,511.87	28.56	193.986		
2,700.00	2,616.13	3,466.74	3,471.07	13.60	18.27	-143.60	-4,095.37	-2,886.71	5,548.68	5,519.17	29.51	188.019		
2,800.00	2,711.80	3,563.75	3,566.78	14.12	18.79	-143.83	-4,085.32	-2,874.45	5,557.03	5,526.57	30.46	182.413		
2,900.00	2,807.47	3,660.77	3,662.49	14.64	19.31	-144.06	-4,075.28	-2,862.22	5,565.47	5,534.05	31.42	177.139		
3,000.00	2,903.14	3,757.78	3,758.21	15.16	19.84	-144.29	-4,065.23	-2,849.94	5,574.00	5,541.63	32.38	172.167		
3,100.00	2,998.81	3,854.80	3,853.92	15.68	20.37	-144.51	-4,055.19	-2,837.68	5,582.63	5,549.29	33.33	167.475		
3,200.00	3,094.48	3,951.82	3,949.63	16.21	20.89	-144.74	-4,045.14	-2,825.43	5,591.34	5,557.05	34.29	163.040		
3,300.00	3,190.15	4,048.83	4,045.35	16.73	21.42	-144.97	-4,035.10	-2,813.17	5,600.15	5,564.90	35.26	158.842		
3,400.00	3,285.82	4,145.85	4,141.06	17.26	21.94	-145.19	-4,025.05	-2,800.91	5,609.05	5,572.83	36.22	154.864		
3,500.00	3,381.49	4,242.87	4,236.77	17.78	22.47	-145.42	-4,015.01	-2,788.66	5,618.04	5,580.86	37.18	151.088		
3,600.00	3,477.16	4,339.88	4,332.49	18.31	23.00	-145.64	-4,004.96	-2,776.40	5,627.12	5,588.97	38.15	147.501		
3,700.00	3,572.83	4,436.90	4,428.20	18.84	23.52	-145.86	-3,994.92	-2,764.14	5,636.29	5,597.17	39.12	144.089		
3,800.00	3,668.50	4,533.91	4,523.91	19.37	24.05	-146.09	-3,984.87	-2,751.89	5,645.55	5,605.46	40.08	140.840		
3,900.00	3,764.17	4,630.93	4,619.63	19.89	24.58	-146.31	-3,974.83	-2,739.63	5,654.90	5,613.84	41.05	137.743		
4,000.00	3,859.84	4,727.95	4,715.34	20.42	25.11	-146.53	-3,964.79	-2,727.37	5,664.33	5,622.31	42.02	134.787		
4,100.00	3,955.51	4,825.06	4,811.05	20.95	25.64	-146.75	-3,954.74	-2,715.12	5,673.86	5,630.86	43.00	131.963		
4,200.00	4,051.18	4,928.04	4,908.77	21.48	26.20	-146.97	-3,944.70	-2,702.86	5,683.47	5,639.47	44.00	129.181		
4,300.00	4,146.85	5,031.03	5,002.48	22.01	26.76	-147.19	-3,934.65	-2,690.60	5,693.16	5,648.17	45.00	126.522		
4,400.00	4,242.52	5,116.01	5,098.19	22.55	27.22	-147.41	-3,924.61	-2,678.35	5,702.95	5,657.04	45.91	124.209		
4,500.00	4,338.19	5,213.03	5,193.90	23.08	27.75	-147.63	-3,914.56	-2,666.09	5,712.82	5,665.93	46.89	121.838		
4,600.00	4,433.86	5,310.04	5,289.62	23.61	28.28	-147.84	-3,904.52	-2,653.83	5,722.78	5,674.91	47.86	119.563		
4,700.00	4,529.53	5,407.06	5,385.33	24.14	28.81	-148.06	-3,894.47	-2,641.58	5,732.82	5,683.98	48.84	117.379		
4,800.00	4,625.19	5,504.07	5,481.04	24.67	29.34	-148.28	-3,884.43	-2,629.32	5,742.95	5,693.13	49.82	115.281		
4,900.00	4,720.86	5,601.09	5,576.76	25.21	29.87	-148.49	-3,874.38	-2,617.06	5,753.16	5,702.36	50.79	113.263		
5,000.00	4,816.53	5,701.89	5,672.47	25.74	30.42	-148.70	-3,864.34	-2,604.81	5,763.45	5,711.66	51.79	111.283		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	4,912.20	5,795.12	5,768.18	26.27	30.93	-148.92	-3,854.29	-2,592.55	5,773.83	5,721.08	52.75	109.453		
5,200.00	5,007.87	5,892.14	5,863.90	26.80	31.46	-149.13	-3,844.25	-2,580.29	5,784.29	5,730.56	53.73	107.652		
5,300.00	5,103.54	5,989.16	5,959.61	27.34	31.99	-149.34	-3,834.20	-2,568.03	5,794.84	5,740.12	54.71	105.917		
5,400.00	5,199.22	6,086.17	6,055.33	27.87	32.52	-149.56	-3,824.16	-2,555.78	5,805.45	5,749.76	55.69	104.242		
5,500.00	5,295.46	6,183.58	6,151.42	28.39	33.05	-149.86	-3,814.07	-2,543.47	5,814.38	5,757.72	56.67	102.608		
5,600.00	5,392.60	6,280.38	6,227.19	28.89	33.47	-150.06	-3,806.12	-2,533.77	5,820.41	5,762.89	57.52	101.189		
5,700.00	5,490.50	6,284.54	6,251.08	29.37	33.60	-150.14	-3,803.63	-2,531.17	5,824.38	5,766.30	58.08	100.281		
5,800.00	5,589.05	6,300.00	6,266.41	29.83	33.68	-150.18	-3,802.03	-2,529.99	5,826.71	5,768.14	58.57	99.484		
5,900.00	5,688.14	6,325.01	6,291.27	30.26	33.79	-150.20	-3,799.47	-2,528.87	5,827.37	5,768.30	59.07	98.651		
6,000.00	5,787.63	6,350.00	6,316.12	30.68	33.90	-150.20	-3,796.93	-2,528.73	5,826.38	5,766.85	59.54	97.862		
6,100.00	5,887.41	6,350.00	6,316.12	31.07	33.90	-150.17	-3,796.93	-2,528.73	5,823.82	5,763.97	59.85	97.301		
6,200.00	5,987.36	6,400.00	6,365.79	31.44	34.08	-150.09	-3,791.93	-2,531.39	5,819.49	5,759.13	60.37	96.401		
6,300.00	6,087.36	6,400.00	6,365.79	31.80	34.08	-155.80	-3,791.93	-2,531.39	5,814.05	5,753.43	60.63	95.898		
6,400.00	6,187.36	6,425.01	6,390.52	32.15	34.16	-155.77	-3,789.47	-2,534.20	5,809.84	5,748.86	60.98	95.267		
6,500.00	6,287.36	6,450.00	6,415.10	32.51	34.23	-155.72	-3,787.05	-2,537.97	5,807.04	5,745.71	61.33	94.687		
6,600.00	6,387.36	6,450.00	6,415.10	32.87	34.23	-155.72	-3,787.05	-2,537.97	5,805.70	5,744.15	61.55	94.326		
6,652.34	6,439.70	6,475.17	6,439.69	33.06	34.29	-155.67	-3,784.65	-2,542.74	5,805.41	5,743.64	61.77	93.985		
6,700.00	6,487.36	6,500.00	6,463.76	33.23	34.34	-155.61	-3,782.32	-2,548.40	5,805.67	5,743.70	61.98	93.675		
6,800.00	6,587.36	6,500.00	6,463.76	33.59	34.34	-155.61	-3,782.32	-2,548.40	5,806.94	5,744.77	62.17	93.399		
6,900.00	6,687.26	6,525.01	6,487.76	33.95	34.39	-65.05	-3,780.03	-2,555.06	5,808.40	5,745.95	62.46	93.000		
7,000.00	6,785.58	6,550.00	6,511.46	34.31	34.44	-65.29	-3,777.78	-2,562.64	5,805.13	5,742.40	62.73	92.543		
7,100.00	6,879.94	6,550.00	6,511.46	34.65	34.44	-65.99	-3,777.78	-2,562.64	5,796.70	5,733.80	62.90	92.155		
7,200.00	6,968.01	6,580.21	6,539.69	34.97	34.48	-67.12	-3,775.14	-2,573.05	5,783.22	5,719.99	63.23	91.463		
7,300.00	7,047.61	6,600.00	6,557.91	35.27	34.51	-68.70	-3,773.45	-2,580.60	5,765.14	5,701.58	63.56	90.698		
7,400.00	7,116.80	6,625.01	6,580.58	35.54	34.53	-70.72	-3,771.38	-2,590.94	5,742.87	5,678.86	64.01	89.723		
7,500.00	7,173.86	6,634.76	6,589.31	35.81	34.54	-73.07	-3,770.58	-2,595.21	5,716.87	5,652.35	64.51	88.617		
7,600.00	7,217.38	6,650.00	6,602.82	36.17	34.55	-75.78	-3,769.36	-2,602.16	5,687.87	5,622.66	65.21	87.221		
7,700.00	7,246.31	6,650.00	6,602.82	36.80	34.55	-78.66	-3,769.36	-2,602.16	5,656.70	5,590.66	66.04	85.652		
7,800.00	7,259.92	6,678.87	6,627.94	37.72	34.57	-81.96	-3,767.12	-2,616.19	5,623.86	5,556.66	67.20	83.693		
7,900.00	7,260.77	6,700.00	6,645.92	38.86	34.58	-83.40	-3,765.54	-2,627.19	5,590.83	5,522.34	68.49	81.629		
8,000.00	7,260.39	6,700.00	6,645.92	40.19	34.58	-83.40	-3,765.54	-2,627.19	5,559.09	5,489.22	69.87	79.569		
8,100.00	7,260.01	6,714.90	6,658.37	41.67	34.59	-83.53	-3,764.45	-2,635.30	5,528.88	5,457.43	71.45	77.378		
8,200.00	7,259.63	6,725.01	6,666.72	43.30	34.59	-83.62	-3,763.73	-2,640.96	5,500.20	5,427.04	73.16	75.178		
8,300.00	7,259.25	6,750.00	6,686.94	45.05	34.59	-83.84	-3,762.00	-2,655.53	5,473.07	5,398.01	75.06	72.920		
8,400.00	7,258.87	6,750.00	6,686.94	46.91	34.59	-83.84	-3,762.00	-2,655.53	5,447.46	5,370.49	76.97	70.774		
8,500.00	7,258.49	6,774.43	6,706.15	48.87	34.59	-84.04	-3,760.38	-2,670.54	5,423.38	5,344.30	79.08	68.581		
8,600.00	7,258.11	6,800.00	6,725.63	50.92	34.59	-84.25	-3,758.77	-2,687.02	5,400.88	5,319.60	81.28	66.446		
8,700.00	7,257.73	6,810.58	6,733.49	53.04	34.59	-84.34	-3,758.13	-2,694.07	5,379.90	5,296.38	83.51	64.418		
8,800.00	7,257.35	6,825.01	6,744.03	55.23	34.59	-84.45	-3,757.28	-2,703.89	5,360.48	5,274.65	85.83	62.453		
8,900.00	7,256.97	6,850.00	6,761.75	57.47	34.59	-84.64	-3,755.87	-2,721.46	5,342.58	5,254.33	88.25	60.538		
9,000.00	7,256.59	6,874.83	6,778.66	59.77	34.58	-84.82	-3,754.56	-2,739.59	5,326.21	5,235.48	90.73	58.703		
9,100.00	7,256.21	6,900.00	6,795.07	62.12	34.58	-85.00	-3,753.32	-2,758.63	5,311.34	5,218.09	93.26	56.954		
9,200.00	7,255.83	6,925.01	6,810.63	64.50	34.57	-85.17	-3,752.18	-2,778.18	5,297.95	5,202.13	95.83	55.286		
9,300.00	7,255.45	6,950.00	6,825.40	66.93	34.57	-85.33	-3,751.14	-2,798.30	5,286.02	5,187.58	98.44	53.698		
9,400.00	7,255.07	6,983.21	6,843.79	69.38	34.58	-85.53	-3,749.89	-2,825.93	5,275.51	5,174.37	101.13	52.165		
9,500.00	7,254.69	7,014.88	6,859.98	71.87	34.59	-85.70	-3,748.86	-2,853.13	5,266.38	5,162.54	103.84	50.715		
9,600.00	7,254.31	7,050.00	6,876.32	74.38	34.62	-85.88	-3,747.90	-2,884.18	5,258.60	5,151.99	106.61	49.326		
9,700.00	7,253.93	7,083.87	6,890.46	76.92	34.66	-86.04	-3,747.16	-2,914.95	5,252.12	5,142.71	109.41	48.004		
9,800.00	7,253.55	7,125.01	6,905.41	79.48	34.74	-86.20	-3,746.51	-2,953.27	5,246.91	5,134.62	112.28	46.729		
9,900.00	7,253.18	7,150.00	6,913.27	82.06	34.81	-86.29	-3,746.25	-2,976.98	5,242.94	5,127.86	115.07	45.562		
10,000.00	7,252.80	7,200.00	6,926.21	84.65	35.00	-86.43	-3,746.03	-3,025.27	5,240.10	5,122.00	118.10	44.371		
10,100.00	7,252.42	7,241.85	6,934.11	87.27	35.22	-86.52	-3,746.16	-3,066.35	5,238.43	5,117.34	121.09	43.261		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,199.84	7,252.04	7,284.21	6,939.36	89.89	35.52	-86.58	-3,746.59	-3,108.38	5,237.88	5,113.77	124.12	42.201	CC	
10,200.00	7,252.04	7,284.28	6,939.37	89.89	35.52	-86.58	-3,746.59	-3,108.45	5,237.88	5,113.76	124.12	42.199		
10,300.00	7,251.66	7,325.01	6,941.77	92.54	35.85	-86.61	-3,747.27	-3,149.10	5,238.43	5,111.28	127.15	41.198		
10,400.00	7,251.28	7,403.62	6,941.76	95.19	36.67	-86.61	-3,749.07	-3,227.68	5,239.88	5,109.17	130.71	40.089		
10,500.00	7,250.90	7,503.61	6,941.35	97.86	38.02	-86.61	-3,751.39	-3,327.64	5,241.42	5,106.65	134.77	38.890		
10,600.00	7,250.52	7,603.60	6,940.93	100.53	39.64	-86.61	-3,753.72	-3,427.60	5,242.97	5,103.89	139.08	37.697		
10,700.00	7,250.14	7,703.58	6,940.51	103.22	41.49	-86.61	-3,756.04	-3,527.56	5,244.51	5,100.91	143.60	36.523		
10,800.00	7,249.76	7,803.57	6,940.10	105.91	43.52	-86.61	-3,758.37	-3,627.52	5,246.05	5,097.75	148.30	35.374		
10,900.00	7,249.38	7,903.56	6,939.68	108.62	45.70	-86.61	-3,760.69	-3,727.48	5,247.60	5,094.42	153.17	34.259		
11,000.00	7,249.00	8,003.55	6,939.26	111.33	48.02	-86.61	-3,763.02	-3,827.44	5,249.14	5,090.96	158.18	33.184		
11,100.00	7,248.62	8,103.54	6,938.84	114.04	50.45	-86.61	-3,765.34	-3,927.40	5,250.68	5,087.37	163.31	32.151		
11,200.00	7,248.24	8,203.53	6,938.43	116.77	52.97	-86.61	-3,767.67	-4,027.36	5,252.22	5,083.67	168.55	31.161		
11,300.00	7,247.86	8,303.51	6,938.01	119.50	55.58	-86.62	-3,769.99	-4,127.32	5,253.77	5,079.89	173.88	30.215		
11,400.00	7,247.48	8,403.50	6,937.59	122.24	58.26	-86.62	-3,772.32	-4,227.28	5,255.31	5,076.02	179.29	29.312		
11,500.00	7,247.10	8,503.49	6,937.18	124.98	61.01	-86.62	-3,774.64	-4,327.24	5,256.85	5,072.09	184.77	28.451		
11,600.00	7,246.72	8,603.48	6,936.76	127.73	63.81	-86.62	-3,776.97	-4,427.20	5,258.40	5,068.09	190.31	27.631		
11,700.00	7,246.34	8,703.47	6,936.34	130.48	66.65	-86.62	-3,779.29	-4,527.16	5,259.94	5,064.04	195.90	26.850		
11,800.00	7,245.96	8,803.45	6,935.93	133.24	69.54	-86.62	-3,781.62	-4,627.12	5,261.48	5,059.95	201.54	26.107		
11,900.00	7,245.58	8,903.44	6,935.51	136.00	72.47	-86.62	-3,783.94	-4,727.08	5,263.03	5,055.81	207.22	25.399		
12,000.00	7,245.21	9,003.43	6,935.09	138.76	75.42	-86.62	-3,786.27	-4,827.05	5,264.57	5,051.63	212.94	24.724		
12,100.00	7,244.83	9,103.42	6,934.67	141.53	78.41	-86.62	-3,788.59	-4,927.01	5,266.11	5,047.42	218.69	24.081		
12,200.00	7,244.45	9,203.41	6,934.26	144.30	81.42	-86.62	-3,790.92	-5,026.97	5,267.65	5,043.19	224.47	23.467		
12,300.00	7,244.07	9,303.39	6,933.84	147.08	84.46	-86.62	-3,793.24	-5,126.93	5,269.20	5,038.92	230.28	22.882		
12,400.00	7,243.69	9,403.38	6,933.42	149.86	87.52	-86.62	-3,795.57	-5,226.89	5,270.74	5,034.63	236.11	22.323		
12,500.00	7,243.31	9,503.37	6,933.01	152.64	90.59	-86.62	-3,797.89	-5,326.85	5,272.28	5,030.32	241.96	21.790		
12,600.00	7,242.93	9,603.36	6,932.59	155.42	93.69	-86.62	-3,800.22	-5,426.81	5,273.83	5,025.99	247.83	21.280		
12,700.00	7,242.55	9,703.35	6,932.17	158.21	96.80	-86.62	-3,802.54	-5,526.77	5,275.37	5,021.64	253.72	20.792		
12,800.00	7,242.17	9,803.33	6,931.75	161.00	99.92	-86.62	-3,804.87	-5,626.73	5,276.91	5,017.28	259.63	20.325		
12,900.00	7,241.79	9,903.32	6,931.34	163.79	103.05	-86.62	-3,807.19	-5,726.69	5,278.46	5,012.90	265.55	19.877		
13,000.00	7,241.41	10,003.31	6,930.92	166.58	106.20	-86.62	-3,809.52	-5,826.65	5,280.00	5,008.51	271.49	19.448		
13,100.00	7,241.03	10,103.30	6,930.50	169.38	109.36	-86.63	-3,811.84	-5,926.61	5,281.54	5,004.10	277.44	19.037		
13,200.00	7,240.65	10,203.29	6,930.09	172.18	112.52	-86.63	-3,814.17	-6,026.57	5,283.08	4,999.69	283.40	18.642		
13,300.00	7,240.27	10,303.28	6,929.67	174.98	115.70	-86.63	-3,816.49	-6,126.53	5,284.63	4,995.26	289.37	18.263		
13,400.00	7,239.89	10,403.26	6,929.25	177.78	118.88	-86.63	-3,818.82	-6,226.49	5,286.17	4,990.82	295.35	17.898		
13,500.00	7,239.51	10,470.20	6,928.97	180.58	121.02	-86.63	-3,820.37	-6,293.41	5,287.82	4,987.62	300.20	17.614		
13,600.00	7,239.13	10,500.00	6,928.85	183.39	121.97	-86.63	-3,821.30	-6,323.19	5,290.50	4,986.77	303.73	17.419		
13,700.00	7,238.75	10,550.14	6,928.64	186.20	123.56	-86.63	-3,823.74	-6,373.27	5,294.53	4,986.59	307.93	17.194		
13,800.00	7,238.37	10,650.04	6,928.22	189.00	126.75	-86.63	-3,828.96	-6,473.03	5,298.96	4,985.04	313.92	16.880		
13,900.00	7,237.99	10,725.53	6,927.91	191.81	129.16	-86.63	-3,832.90	-6,548.42	5,303.45	4,984.41	319.03	16.623		
14,000.00	7,237.62	10,758.46	6,927.77	194.63	130.21	-86.63	-3,834.90	-6,581.29	5,308.90	4,986.33	322.57	16.458		
14,100.00	7,237.24	10,800.00	6,927.60	197.44	131.53	-86.64	-3,838.24	-6,622.69	5,315.82	4,989.44	326.38	16.287		
14,200.00	7,236.86	10,811.23	6,927.55	200.25	131.88	-86.64	-3,839.29	-6,633.87	5,323.96	4,994.98	328.98	16.183		
14,300.00	7,236.48	10,825.02	6,927.49	203.07	132.32	-86.64	-3,840.68	-6,647.59	5,333.60	5,002.02	331.58	16.085		
14,400.00	7,236.10	10,863.75	6,927.33	205.88	133.54	-86.64	-3,845.10	-6,686.07	5,344.50	5,009.39	335.11	15.948		
14,500.00	7,235.72	10,900.00	6,927.18	208.70	134.68	-86.64	-3,849.95	-6,721.99	5,356.85	5,018.36	338.49	15.826		
14,600.00	7,235.34	10,915.93	6,927.11	211.52	135.18	-86.64	-3,852.29	-6,737.75	5,370.48	5,029.51	340.96	15.751		
14,700.00	7,234.96	11,833.25	6,923.28	214.34	164.50	-86.68	-3,919.40	-7,649.85	5,375.04	4,997.33	377.71	14.231		
14,800.00	7,234.58	11,933.24	6,922.86	217.16	167.77	-86.68	-3,919.38	-7,749.85	5,374.24	4,990.46	383.78	14.003		
14,900.00	7,234.20	12,033.24	6,922.45	219.98	171.03	-86.68	-3,919.37	-7,849.84	5,373.45	4,983.59	389.87	13.783		
15,000.00	7,233.82	12,133.24	6,922.03	222.81	174.30	-86.67	-3,919.36	-7,949.84	5,372.66	4,976.71	395.95	13.569		
15,100.00	7,233.44	12,233.23	6,921.61	225.63	177.58	-86.67	-3,919.34	-8,049.83	5,371.87	4,969.83	402.04	13.362		
15,200.00	7,233.06	12,333.23	6,921.20	228.45	180.85	-86.67	-3,919.33	-8,149.83	5,371.08	4,962.95	408.13	13.160		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)		
15,216.01	7,233.00	12,349.24	6,921.13	228.91	181.37	-86.67	-3,919.33	-8,165.84	5,370.95	4,961.85	409.10	13.129 ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
0.00	0.00	25.00	69.00	3.28	0.00	-143.56	-4,429.35	-3,269.80	5,505.95					
100.00	100.00	56.00	100.00	3.28	0.07	-143.56	-4,429.35	-3,269.80	5,505.52	5,502.17	3.35	1,642.044		
200.00	200.00	905.80	946.28	3.34	3.86	-143.80	-4,399.38	-3,220.14	5,502.80	5,495.55	7.26	758.350		
300.00	299.98	1,004.80	1,044.22	3.45	4.37	-138.30	-4,391.88	-3,207.70	5,490.53	5,482.73	7.80	703.881		
400.00	399.84	1,103.91	1,142.25	3.61	4.88	-138.53	-4,384.36	-3,195.25	5,480.87	5,472.47	8.40	652.681		
500.00	499.45	1,202.99	1,240.26	3.82	5.39	-138.74	-4,376.85	-3,182.80	5,473.83	5,464.78	9.05	605.152		
600.00	598.70	1,301.93	1,338.13	4.07	5.90	-138.94	-4,369.35	-3,170.37	5,469.43	5,459.70	9.74	561.645		
700.00	697.47	1,400.61	1,435.74	4.35	6.42	-139.13	-4,361.86	-3,157.97	5,467.71	5,457.24	10.47	522.195		
714.01	711.25	1,414.40	1,449.38	4.39	6.49	-139.15	-4,360.82	-3,156.24	5,467.69	5,457.11	10.58	516.956		
800.00	795.62	1,498.91	1,532.97	4.67	6.93	-139.30	-4,354.41	-3,145.62	5,468.69	5,457.45	11.24	486.631		
900.00	893.06	1,596.70	1,629.70	5.01	7.44	-139.47	-4,346.99	-3,133.33	5,472.37	5,460.34	12.04	454.672		
1,000.00	989.64	1,693.87	1,725.82	5.38	7.95	-139.62	-4,339.63	-3,121.12	5,478.80	5,465.93	12.86	425.988		
1,100.00	1,085.42	1,790.42	1,821.32	5.78	8.46	-139.81	-4,332.30	-3,108.99	5,487.59	5,473.88	13.71	400.253		
1,200.00	1,181.09	1,886.88	1,916.74	6.20	8.97	-140.06	-4,324.99	-3,096.87	5,496.77	5,482.20	14.58	377.101		
1,300.00	1,276.76	1,983.35	2,012.16	6.65	9.48	-140.31	-4,317.68	-3,084.75	5,506.07	5,490.61	15.46	356.190		
1,400.00	1,372.43	2,079.81	2,107.58	7.11	9.98	-140.56	-4,310.36	-3,072.63	5,515.48	5,499.12	16.35	337.275		
1,500.00	1,468.10	2,176.27	2,203.00	7.57	10.49	-140.81	-4,303.05	-3,060.51	5,524.99	5,507.73	17.26	320.130		
1,600.00	1,563.77	2,272.74	2,298.42	8.05	11.00	-141.06	-4,295.73	-3,048.39	5,534.62	5,516.45	18.17	304.551		
1,700.00	1,659.44	2,369.20	2,393.84	8.53	11.51	-141.31	-4,288.42	-3,036.27	5,544.35	5,525.26	19.10	290.356		
1,800.00	1,755.11	2,465.67	2,489.26	9.02	12.02	-141.55	-4,281.10	-3,024.15	5,554.19	5,534.17	20.02	277.385		
1,900.00	1,850.78	2,562.13	2,584.69	9.52	12.53	-141.80	-4,273.79	-3,012.03	5,564.14	5,543.19	20.96	265.500		
2,000.00	1,946.45	2,658.60	2,680.11	10.02	13.04	-142.04	-4,266.47	-2,999.90	5,574.20	5,552.30	21.90	254.580		
2,100.00	2,042.12	2,755.06	2,775.53	10.52	13.55	-142.28	-4,259.16	-2,987.78	5,584.36	5,561.52	22.84	244.518		
2,200.00	2,137.78	2,851.53	2,870.95	11.03	14.06	-142.53	-4,251.84	-2,975.66	5,594.63	5,570.85	23.78	235.223		
2,300.00	2,233.45	2,947.99	2,966.37	11.54	14.57	-142.77	-4,244.53	-2,963.54	5,605.00	5,580.27	24.73	226.615		
2,400.00	2,329.12	3,044.46	3,061.79	12.05	15.08	-143.01	-4,237.21	-2,951.42	5,615.48	5,589.80	25.69	218.624		
2,500.00	2,424.79	3,140.92	3,157.21	12.56	15.59	-143.25	-4,229.90	-2,939.30	5,626.06	5,599.42	26.64	211.189		
2,600.00	2,520.46	3,237.39	3,252.63	13.08	16.10	-143.49	-4,222.58	-2,927.18	5,636.75	5,609.15	27.60	204.256		
2,700.00	2,616.13	3,333.85	3,348.05	13.60	16.61	-143.73	-4,215.27	-2,915.06	5,647.54	5,618.98	28.56	197.777		
2,800.00	2,711.80	3,430.31	3,443.47	14.12	17.12	-143.96	-4,207.96	-2,902.94	5,658.43	5,628.91	29.52	191.711		
2,900.00	2,807.47	3,526.78	3,538.89	14.64	17.63	-144.20	-4,200.64	-2,890.82	5,669.42	5,638.94	30.48	186.020		
3,000.00	2,903.14	3,626.77	3,634.31	15.16	18.16	-144.44	-4,193.33	-2,878.70	5,680.51	5,649.05	31.46	180.577		
3,100.00	2,998.81	3,719.71	3,729.73	15.68	18.65	-144.67	-4,186.01	-2,866.58	5,691.70	5,659.30	32.41	175.640		
3,200.00	3,094.48	3,816.17	3,825.15	16.21	19.16	-144.91	-4,178.70	-2,854.46	5,703.00	5,669.63	33.37	170.894		
3,300.00	3,190.15	3,912.64	3,920.57	16.73	19.68	-145.14	-4,171.38	-2,842.34	5,714.39	5,680.05	34.34	166.412		
3,400.00	3,285.82	4,009.10	4,015.99	17.26	20.19	-145.37	-4,164.07	-2,830.22	5,725.88	5,690.57	35.31	162.174		
3,500.00	3,381.49	4,105.57	4,111.41	17.78	20.70	-145.60	-4,156.75	-2,818.09	5,737.47	5,701.19	36.28	158.161		
3,600.00	3,477.16	4,202.03	4,206.83	18.31	21.21	-145.83	-4,149.44	-2,805.97	5,749.15	5,711.91	37.25	154.356		
3,700.00	3,572.83	4,301.50	4,302.25	18.84	21.73	-146.06	-4,142.12	-2,793.85	5,760.94	5,722.71	38.23	150.686		
3,800.00	3,668.50	4,394.96	4,397.67	19.37	22.23	-146.29	-4,134.81	-2,781.73	5,772.82	5,733.63	39.19	147.308		
3,900.00	3,764.17	4,491.43	4,493.09	19.89	22.74	-146.52	-4,127.49	-2,769.61	5,784.79	5,744.63	40.16	144.039		
4,000.00	3,859.84	4,587.89	4,588.51	20.42	23.25	-146.75	-4,120.18	-2,757.49	5,796.86	5,755.73	41.13	140.924		
4,100.00	3,955.51	4,684.35	4,683.93	20.95	23.76	-146.97	-4,112.87	-2,745.37	5,809.03	5,766.92	42.11	137.954		
4,200.00	4,051.18	4,780.82	4,779.35	21.48	24.27	-147.20	-4,105.55	-2,733.25	5,821.29	5,778.20	43.08	135.118		
4,300.00	4,146.85	4,877.28	4,874.77	22.01	24.79	-147.42	-4,098.24	-2,721.13	5,833.64	5,789.58	44.06	132.408		
4,400.00	4,242.52	4,973.75	4,970.19	22.55	25.30	-147.64	-4,090.92	-2,709.01	5,846.08	5,801.05	45.03	129.815		
4,500.00	4,338.19	5,070.21	5,065.61	23.08	25.81	-147.87	-4,083.61	-2,696.89	5,858.62	5,812.61	46.01	127.333		
4,600.00	4,433.86	5,166.68	5,161.03	23.61	26.32	-148.09	-4,076.29	-2,684.77	5,871.25	5,824.26	46.99	124.955		
4,700.00	4,529.53	5,263.14	5,256.45	24.14	26.83	-148.31	-4,068.98	-2,672.65	5,883.97	5,836.00	47.96	122.674		
4,800.00	4,625.19	5,359.61	5,351.87	24.67	27.34	-148.53	-4,061.66	-2,660.53	5,896.78	5,847.83	48.94	120.485		
4,900.00	4,720.86	5,456.07	5,447.29	25.21	27.85	-148.75	-4,054.35	-2,648.41	5,909.68	5,859.76	49.92	118.382		
5,000.00	4,816.53	5,552.54	5,542.71	25.74	28.36	-148.97	-4,047.03	-2,636.28	5,922.66	5,871.76	50.90	116.361		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	4,912.20	5,649.00	5,638.13	26.27	28.88	-149.18	-4,039.72	-2,624.16	5,935.74	5,883.86	51.88	114.417		
5,200.00	5,007.87	5,745.47	5,733.55	26.80	29.39	-149.40	-4,032.40	-2,612.04	5,948.91	5,896.05	52.86	112.545		
5,300.00	5,103.54	5,841.93	5,828.97	27.34	29.90	-149.61	-4,025.09	-2,599.92	5,962.16	5,908.32	53.84	110.743		
5,400.00	5,199.22	5,938.40	5,924.39	27.87	30.41	-149.84	-4,017.77	-2,587.80	5,975.49	5,920.67	54.82	109.005		
5,500.00	5,295.46	6,035.31	6,020.25	28.39	30.92	-150.16	-4,010.43	-2,575.63	5,987.14	5,931.34	55.79	107.311		
5,600.00	5,392.60	6,132.88	6,116.77	28.89	31.44	-150.44	-4,003.03	-2,563.36	5,995.85	5,939.09	56.76	105.644		
5,700.00	5,490.50	6,231.01	6,213.83	29.37	31.96	-150.67	-3,995.59	-2,551.04	6,001.59	5,943.89	57.71	104.004		
5,800.00	5,589.05	6,329.56	6,311.32	29.83	32.48	-150.85	-3,988.11	-2,538.65	6,004.35	5,945.71	58.64	102.390		
5,900.00	5,688.14	6,385.75	6,366.91	30.26	32.78	-150.93	-3,983.85	-2,531.68	6,004.29	5,944.95	59.34	101.191		
6,000.00	5,787.63	6,400.00	6,381.05	30.68	32.85	-150.93	-3,982.78	-2,530.29	6,002.39	5,942.61	59.78	100.404		
6,100.00	5,887.41	6,425.01	6,405.94	31.07	32.97	-150.91	-3,980.91	-2,528.61	5,998.75	5,938.50	60.25	99.564		
6,200.00	5,987.36	6,450.00	6,430.85	31.44	33.08	-150.86	-3,979.05	-2,527.92	5,993.40	5,932.72	60.68	98.766		
6,300.00	6,087.36	6,450.00	6,430.85	31.80	33.08	-156.57	-3,979.05	-2,527.92	5,987.04	5,926.07	60.97	98.201		
6,400.00	6,187.36	6,500.00	6,480.68	32.15	33.26	-156.54	-3,975.42	-2,529.47	5,981.66	5,920.18	61.47	97.307		
6,500.00	6,287.36	6,500.00	6,480.68	32.51	33.26	-156.54	-3,975.42	-2,529.47	5,977.59	5,915.85	61.73	96.828		
6,600.00	6,387.36	6,525.01	6,505.52	32.87	33.34	-156.51	-3,973.64	-2,531.72	5,974.89	5,912.79	62.10	96.221		
6,700.00	6,487.36	6,550.00	6,530.24	33.23	33.41	-156.48	-3,971.89	-2,534.94	5,973.56	5,911.11	62.44	95.663		
6,742.88	6,530.24	6,550.00	6,530.24	33.39	33.41	-156.48	-3,971.89	-2,534.94	5,973.40	5,910.86	62.54	95.510		
6,800.00	6,587.36	6,550.00	6,530.24	33.59	33.41	-156.48	-3,971.89	-2,534.94	5,973.68	5,911.01	62.67	95.321		
6,900.00	6,687.26	6,600.00	6,579.23	33.95	33.53	-65.97	-3,968.49	-2,544.29	5,973.74	5,910.65	63.09	94.686		
7,000.00	6,785.58	6,600.00	6,579.23	34.31	33.53	-66.35	-3,968.49	-2,544.29	5,969.17	5,905.88	63.29	94.320		
7,100.00	6,879.94	6,625.01	6,603.42	34.65	33.58	-67.14	-3,966.85	-2,550.40	5,959.71	5,896.11	63.60	93.709		
7,200.00	6,968.01	6,650.00	6,627.34	34.97	33.63	-68.38	-3,965.25	-2,557.46	5,945.56	5,881.63	63.93	92.998		
7,300.00	7,047.61	6,650.00	6,627.34	35.27	33.63	-69.96	-3,965.25	-2,557.46	5,927.09	5,862.89	64.21	92.312		
7,400.00	7,116.80	6,700.00	6,674.28	35.54	33.70	-72.12	-3,962.18	-2,574.37	5,904.69	5,839.91	64.78	91.154		
7,500.00	7,173.86	6,700.00	6,674.28	35.81	33.70	-74.44	-3,962.18	-2,574.37	5,878.74	5,813.48	65.27	90.073		
7,600.00	7,217.38	6,715.15	6,688.22	36.17	33.72	-77.13	-3,961.29	-2,580.22	5,850.23	5,784.25	65.98	88.660		
7,700.00	7,246.31	6,725.01	6,697.23	36.80	33.73	-80.02	-3,960.72	-2,584.21	5,819.77	5,752.90	66.87	87.026		
7,800.00	7,259.92	6,750.00	6,719.75	37.72	33.75	-83.20	-3,959.31	-2,594.92	5,788.17	5,720.15	68.02	85.101		
7,900.00	7,260.77	6,750.00	6,719.75	38.86	33.75	-84.40	-3,959.31	-2,594.92	5,756.43	5,687.21	69.23	83.152		
8,000.00	7,260.39	6,750.00	6,719.75	40.19	33.75	-84.40	-3,959.31	-2,594.92	5,726.15	5,655.54	70.61	81.100		
8,100.00	7,260.01	6,773.90	6,740.89	41.67	33.77	-84.62	-3,958.00	-2,606.00	5,697.25	5,625.02	72.23	78.879		
8,200.00	7,259.63	6,800.00	6,763.49	43.30	33.79	-84.85	-3,956.64	-2,618.98	5,670.00	5,596.00	73.99	76.629		
8,300.00	7,259.25	6,800.00	6,763.49	45.05	33.79	-84.85	-3,956.64	-2,618.98	5,644.14	5,568.35	75.79	74.471		
8,400.00	7,258.87	6,813.60	6,775.05	46.91	33.80	-84.97	-3,955.95	-2,626.12	5,619.88	5,542.13	77.75	72.283		
8,500.00	7,258.49	6,825.01	6,784.63	48.87	33.81	-85.07	-3,955.39	-2,632.29	5,597.17	5,517.37	79.80	70.140		
8,600.00	7,258.11	6,850.00	6,805.21	50.92	33.82	-85.29	-3,954.20	-2,646.41	5,576.01	5,494.02	81.99	68.011		
8,700.00	7,257.73	6,850.00	6,805.21	53.04	33.82	-85.29	-3,954.20	-2,646.41	5,556.42	5,472.25	84.17	66.013		
8,800.00	7,257.35	6,882.45	6,831.08	55.23	33.83	-85.56	-3,952.74	-2,665.92	5,538.28	5,451.75	86.53	64.004		
8,900.00	7,256.97	6,900.00	6,844.66	57.47	33.84	-85.70	-3,952.00	-2,677.02	5,521.72	5,432.82	88.90	62.111		
9,000.00	7,256.59	6,925.01	6,863.47	59.77	33.84	-85.90	-3,950.99	-2,693.48	5,506.67	5,415.32	91.35	60.282		
9,100.00	7,256.21	6,950.00	6,881.60	62.12	33.85	-86.09	-3,950.05	-2,710.64	5,493.11	5,399.27	93.84	58.535		
9,200.00	7,255.83	6,977.19	6,900.55	64.50	33.87	-86.28	-3,949.11	-2,730.12	5,481.02	5,384.63	96.39	56.864		
9,300.00	7,255.45	7,000.00	6,915.80	66.93	33.88	-86.44	-3,948.37	-2,747.06	5,470.36	5,371.42	98.95	55.285		
9,400.00	7,255.07	7,037.55	6,939.56	69.38	33.91	-86.69	-3,947.29	-2,776.12	5,461.08	5,359.48	101.60	53.750		
9,500.00	7,254.69	7,071.56	6,959.56	71.87	33.94	-86.91	-3,946.46	-2,803.60	5,453.16	5,348.88	104.28	52.294		
9,600.00	7,254.31	7,108.29	6,979.50	74.38	34.00	-87.12	-3,945.70	-2,834.43	5,446.52	5,339.53	106.99	50.905		
9,700.00	7,253.93	7,150.00	6,999.94	76.92	34.08	-87.33	-3,945.03	-2,870.78	5,441.12	5,331.35	109.77	49.567		
9,800.00	7,253.55	7,200.00	7,021.26	79.48	34.23	-87.56	-3,944.51	-2,915.99	5,436.90	5,324.25	112.65	48.263		
9,900.00	7,253.18	7,235.09	7,034.08	82.06	34.38	-87.69	-3,944.32	-2,948.65	5,433.75	5,318.28	115.47	47.056		
10,000.00	7,252.80	7,282.50	7,048.51	84.65	34.62	-87.85	-3,944.30	-2,993.80	5,431.66	5,313.23	118.43	45.863		
10,100.00	7,252.42	7,331.99	7,059.95	87.27	34.94	-87.97	-3,944.57	-3,041.93	5,430.55	5,309.10	121.45	44.714		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,169.15	7,252.15	7,367.17	7,065.81	89.08	35.22	-88.03	-3,944.94	-3,076.62	5,430.33	5,306.75	123.59	43.939	CC	
10,200.00	7,252.04	7,383.07	7,067.82	89.89	35.35	-88.06	-3,945.15	-3,092.38	5,430.38	5,305.83	124.55	43.601		
10,300.00	7,251.66	7,435.14	7,071.67	92.54	35.84	-88.10	-3,946.07	-3,144.28	5,431.10	5,303.41	127.69	42.533		
10,400.00	7,251.28	7,512.44	7,071.69	95.19	36.70	-88.10	-3,947.86	-3,221.56	5,432.58	5,301.36	131.22	41.399		
10,500.00	7,250.90	7,612.43	7,071.09	97.86	38.06	-88.10	-3,950.21	-3,321.52	5,434.16	5,298.89	135.28	40.171		
10,600.00	7,250.52	7,712.41	7,070.49	100.53	39.68	-88.10	-3,952.57	-3,421.48	5,435.74	5,296.17	139.57	38.946		
10,700.00	7,250.14	7,812.40	7,069.89	103.22	41.50	-88.10	-3,954.93	-3,521.44	5,437.32	5,293.25	144.08	37.739		
10,800.00	7,249.76	7,912.39	7,069.29	105.91	43.51	-88.09	-3,957.28	-3,621.39	5,438.91	5,290.13	148.77	36.558		
10,900.00	7,249.38	8,012.38	7,068.68	108.62	45.68	-88.09	-3,959.64	-3,721.35	5,440.49	5,286.85	153.63	35.412		
11,000.00	7,249.00	8,112.36	7,068.08	111.33	47.98	-88.09	-3,962.00	-3,821.31	5,442.07	5,283.43	158.64	34.306		
11,100.00	7,248.62	8,212.35	7,067.48	114.04	50.39	-88.09	-3,964.35	-3,921.27	5,443.65	5,279.89	163.76	33.242		
11,200.00	7,248.24	8,312.34	7,066.88	116.77	52.90	-88.09	-3,966.71	-4,021.22	5,445.23	5,276.24	168.99	32.222		
11,300.00	7,247.86	8,412.33	7,066.27	119.50	55.50	-88.09	-3,969.06	-4,121.18	5,446.81	5,272.50	174.31	31.247		
11,400.00	7,247.48	8,512.31	7,065.67	122.24	58.17	-88.08	-3,971.42	-4,221.14	5,448.39	5,268.68	179.72	30.316		
11,500.00	7,247.10	8,612.30	7,065.07	124.98	60.90	-88.08	-3,973.78	-4,321.10	5,449.98	5,264.78	185.19	29.429		
11,600.00	7,246.72	8,712.29	7,064.47	127.73	63.69	-88.08	-3,976.13	-4,421.06	5,451.56	5,260.83	190.73	28.583		
11,700.00	7,246.34	8,812.28	7,063.87	130.48	66.53	-88.08	-3,978.49	-4,521.01	5,453.14	5,256.82	196.32	27.777		
11,800.00	7,245.96	8,912.26	7,063.26	133.24	69.41	-88.08	-3,980.85	-4,620.97	5,454.72	5,252.76	201.96	27.009		
11,900.00	7,245.58	9,012.25	7,062.66	136.00	72.33	-88.08	-3,983.20	-4,720.93	5,456.30	5,248.66	207.64	26.278		
12,000.00	7,245.21	9,112.24	7,062.06	138.76	75.29	-88.07	-3,985.56	-4,820.89	5,457.88	5,244.53	213.36	25.581		
12,100.00	7,244.83	9,212.22	7,061.46	141.53	78.27	-88.07	-3,987.92	-4,920.84	5,459.46	5,240.36	219.11	24.917		
12,200.00	7,244.45	9,312.21	7,060.86	144.30	81.28	-88.07	-3,990.27	-5,020.80	5,461.05	5,236.16	224.89	24.283		
12,300.00	7,244.07	9,412.20	7,060.25	147.08	84.31	-88.07	-3,992.63	-5,120.76	5,462.63	5,231.93	230.70	23.679		
12,400.00	7,243.69	9,512.19	7,059.65	149.86	87.37	-88.07	-3,994.98	-5,220.72	5,464.21	5,227.68	236.53	23.102		
12,500.00	7,243.31	9,612.17	7,059.05	152.64	90.44	-88.06	-3,997.34	-5,320.68	5,465.79	5,223.41	242.38	22.550		
12,600.00	7,242.93	9,712.16	7,058.45	155.42	93.53	-88.06	-3,999.70	-5,420.63	5,467.37	5,219.11	248.26	22.023		
12,700.00	7,242.55	9,812.15	7,057.85	158.21	96.64	-88.06	-4,002.05	-5,520.59	5,468.95	5,214.80	254.15	21.518		
12,800.00	7,242.17	9,912.14	7,057.24	161.00	99.76	-88.06	-4,004.41	-5,620.55	5,470.53	5,210.47	260.06	21.036		
12,900.00	7,241.79	10,012.12	7,056.64	163.79	102.89	-88.06	-4,006.77	-5,720.51	5,472.12	5,206.13	265.99	20.573		
13,000.00	7,241.41	10,112.11	7,056.04	166.58	106.04	-88.06	-4,009.12	-5,820.46	5,473.70	5,201.77	271.92	20.130		
13,100.00	7,241.03	10,212.10	7,055.44	169.38	109.20	-88.05	-4,011.48	-5,920.42	5,475.28	5,197.40	277.88	19.704		
13,200.00	7,240.65	10,312.09	7,054.84	172.18	112.36	-88.05	-4,013.84	-6,020.38	5,476.86	5,193.02	283.84	19.296		
13,300.00	7,240.27	10,412.07	7,054.23	174.98	115.54	-88.05	-4,016.19	-6,120.34	5,478.44	5,188.63	289.81	18.903		
13,400.00	7,239.89	10,512.06	7,053.63	177.78	118.72	-88.05	-4,018.55	-6,220.30	5,480.02	5,184.23	295.80	18.526		
13,500.00	7,239.51	10,612.05	7,053.03	180.58	121.91	-88.05	-4,020.90	-6,320.25	5,481.61	5,179.82	301.79	18.164		
13,600.00	7,239.13	10,712.03	7,052.43	183.39	125.11	-88.04	-4,023.26	-6,420.21	5,483.19	5,175.40	307.79	17.815		
13,700.00	7,238.75	10,812.02	7,051.83	186.20	128.31	-88.04	-4,025.62	-6,520.17	5,484.77	5,170.97	313.80	17.479		
13,800.00	7,238.37	10,912.01	7,051.22	189.00	131.52	-88.04	-4,027.97	-6,620.13	5,486.35	5,166.53	319.82	17.155		
13,900.00	7,237.99	11,012.00	7,050.62	191.81	134.74	-88.04	-4,030.33	-6,720.08	5,487.93	5,162.09	325.84	16.842		
14,000.00	7,237.62	11,111.98	7,050.02	194.63	137.96	-88.04	-4,032.69	-6,820.04	5,489.51	5,157.64	331.87	16.541		
14,100.00	7,237.24	11,211.97	7,049.42	197.44	141.19	-88.04	-4,035.04	-6,920.00	5,491.09	5,153.18	337.91	16.250		
14,200.00	7,236.86	11,311.96	7,048.82	200.25	144.42	-88.03	-4,037.40	-7,019.96	5,492.68	5,148.72	343.95	15.969		
14,300.00	7,236.48	11,411.95	7,048.21	203.07	147.65	-88.03	-4,039.76	-7,119.92	5,494.26	5,144.26	350.00	15.698		
14,400.00	7,236.10	11,511.93	7,047.61	205.88	150.89	-88.03	-4,042.11	-7,219.87	5,495.84	5,139.79	356.05	15.435		
14,500.00	7,235.72	11,611.92	7,047.01	208.70	154.13	-88.03	-4,044.47	-7,319.83	5,497.42	5,135.31	362.11	15.182		
14,600.00	7,235.34	11,711.91	7,046.41	211.52	157.38	-88.03	-4,046.82	-7,419.79	5,499.00	5,130.83	368.17	14.936		
14,700.00	7,234.96	11,811.90	7,045.80	214.34	160.63	-88.03	-4,049.18	-7,519.75	5,500.58	5,126.34	374.24	14.698		
14,800.00	7,234.58	11,911.88	7,045.20	217.16	163.88	-88.02	-4,051.54	-7,619.70	5,502.17	5,121.85	380.31	14.468		
14,900.00	7,234.20	12,011.87	7,044.60	219.98	167.14	-88.02	-4,053.89	-7,719.66	5,503.75	5,117.36	386.39	14.244		
15,000.00	7,233.82	12,111.86	7,044.00	222.81	170.39	-88.02	-4,056.25	-7,819.62	5,505.33	5,112.86	392.46	14.028		
15,100.00	7,233.44	12,211.85	7,043.40	225.63	173.66	-88.02	-4,058.61	-7,919.58	5,506.91	5,108.36	398.55	13.817		
15,200.00	7,233.06	12,311.83	7,042.79	228.45	176.92	-88.02	-4,060.96	-8,019.54	5,508.49	5,103.86	404.63	13.614		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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	Warning				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)						
15,216.01	7,233.00	12,327.84	7,042.70	228.91	177.44	-88.02	-4,061.34	-8,035.54	5,508.74	5,103.14	405.61	13.582	ES, SF				



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	15,788.58	7,244.40	3.28	247.76	0.62	1,943.78	21.19	7,500.67					
100.00	100.00	15,788.83	7,244.40	3.28	247.76	0.62	1,943.78	20.95	7,404.13	7,289.07	115.06	64.350		
200.00	200.00	15,789.07	7,244.40	3.34	247.77	0.61	1,943.78	20.70	7,307.69	7,192.26	115.43	63.310		
300.00	299.98	15,789.49	7,244.40	3.45	247.78	7.24	1,943.78	20.28	7,210.89	7,095.10	115.79	62.276		
400.00	399.84	15,809.80	7,244.40	3.61	248.36	8.42	1,943.78	19.50	7,113.36	6,997.01	116.35	61.140		
500.00	499.45	15,808.67	7,244.41	3.82	248.32	10.03	1,943.79	18.37	7,015.17	6,898.58	116.60	60.167		
600.00	598.70	15,807.18	7,244.41	4.07	248.28	12.38	1,943.79	16.89	6,916.43	6,799.65	116.79	59.223		
700.00	697.47	15,805.35	7,244.41	4.35	248.23	16.12	1,943.79	15.06	6,817.24	6,700.33	116.91	58.311		
800.00	795.62	15,803.17	7,244.42	4.67	248.17	22.96	1,943.80	12.88	6,717.69	6,600.72	116.97	57.431		
900.00	893.06	15,800.65	7,244.42	5.01	248.10	38.56	1,943.80	10.36	6,617.90	6,500.95	116.96	56.585		
1,000.00	989.64	15,802.28	7,244.43	5.38	248.14	82.17	1,943.81	7.49	6,517.98	6,401.06	116.92	55.748		
1,100.00	1,085.42	15,805.44	7,244.44	5.78	248.23	111.10	1,943.81	4.33	6,418.03	6,301.19	116.84	54.932		
1,200.00	1,181.09	15,808.63	7,244.45	6.20	248.32	111.33	1,943.82	1.14	6,318.08	6,201.34	116.75	54.118		
1,300.00	1,276.76	15,811.83	7,244.46	6.65	248.41	111.57	1,943.82	-2.06	6,218.14	6,101.48	116.66	53.303		
1,400.00	1,372.43	15,815.02	7,244.46	7.11	248.50	111.82	1,943.83	-5.25	6,118.20	6,001.63	116.57	52.486		
1,500.00	1,468.10	15,818.22	7,244.47	7.57	248.59	112.08	1,943.84	-8.44	6,018.25	5,901.77	116.48	51.668		
1,600.00	1,563.77	15,821.41	7,244.48	8.05	248.68	112.34	1,943.84	-11.64	5,918.31	5,801.92	116.39	50.849		
1,700.00	1,659.44	15,824.60	7,244.49	8.53	248.78	112.61	1,943.85	-14.83	5,818.36	5,702.06	116.30	50.028		
1,800.00	1,755.11	15,827.80	7,244.49	9.02	248.87	112.89	1,943.85	-18.02	5,718.42	5,602.20	116.21	49.206		
1,900.00	1,850.78	15,830.99	7,244.50	9.52	248.96	113.18	1,943.86	-21.22	5,618.47	5,502.35	116.13	48.383		
2,000.00	1,946.45	15,834.18	7,244.51	10.02	249.05	113.48	1,943.86	-24.41	5,518.53	5,402.49	116.04	47.558		
2,100.00	2,042.12	15,837.38	7,244.52	10.52	249.14	113.79	1,943.87	-27.60	5,418.59	5,302.64	115.95	46.732		
2,200.00	2,137.78	15,840.57	7,244.53	11.03	249.23	114.11	1,943.88	-30.80	5,318.64	5,202.78	115.86	45.904		
2,300.00	2,233.45	15,843.76	7,244.53	11.54	249.32	114.44	1,943.88	-33.99	5,218.70	5,102.92	115.78	45.076		
2,400.00	2,329.12	15,846.96	7,244.54	12.05	249.41	114.78	1,943.89	-37.18	5,118.76	5,003.07	115.69	44.246		
2,500.00	2,424.79	15,850.15	7,244.55	12.56	249.50	115.14	1,943.89	-40.38	5,018.81	4,903.21	115.60	43.414		
2,600.00	2,520.46	15,853.34	7,244.56	13.08	249.59	115.50	1,943.90	-43.57	4,918.87	4,803.36	115.52	42.582		
2,700.00	2,616.13	15,856.54	7,244.56	13.60	249.68	115.88	1,943.90	-46.77	4,818.93	4,703.50	115.43	41.748		
2,800.00	2,711.80	15,859.73	7,244.57	14.12	249.77	116.28	1,943.91	-49.96	4,718.99	4,603.64	115.34	40.912		
2,900.00	2,807.47	15,862.92	7,244.58	14.64	249.86	116.69	1,943.92	-53.15	4,619.05	4,503.79	115.26	40.076		
3,000.00	2,903.14	15,866.12	7,244.59	15.16	249.95	117.11	1,943.92	-56.35	4,519.11	4,403.93	115.17	39.237		
3,100.00	2,998.81	15,869.31	7,244.60	15.68	250.04	117.55	1,943.93	-59.54	4,419.16	4,304.08	115.09	38.398		
3,200.00	3,094.48	15,872.51	7,244.60	16.21	250.13	118.01	1,943.93	-62.73	4,319.22	4,204.22	115.00	37.557		
3,300.00	3,190.15	15,875.70	7,244.61	16.73	250.22	118.49	1,943.94	-65.93	4,219.28	4,104.36	114.92	36.714		
3,400.00	3,285.82	15,878.89	7,244.62	17.26	250.31	118.99	1,943.94	-69.12	4,119.34	4,004.51	114.84	35.871		
3,500.00	3,381.49	15,882.09	7,244.63	17.78	250.40	119.51	1,943.95	-72.31	4,019.41	3,904.65	114.76	35.025		
3,600.00	3,477.16	15,885.28	7,244.63	18.31	250.49	120.05	1,943.96	-75.51	3,919.47	3,804.79	114.68	34.178		
3,700.00	3,572.83	15,888.47	7,244.64	18.84	250.58	120.61	1,943.96	-78.70	3,819.53	3,704.93	114.60	33.330		
3,800.00	3,668.50	15,908.40	7,244.65	19.37	251.15	121.20	1,943.97	-81.89	3,719.59	3,604.87	114.72	32.423		
3,900.00	3,764.17	15,905.20	7,244.66	19.89	251.05	121.81	1,943.97	-85.09	3,619.65	3,505.09	114.57	31.594		
4,000.00	3,859.84	15,902.01	7,244.67	20.42	250.96	122.45	1,943.98	-88.28	3,519.72	3,405.30	114.42	30.762		
4,100.00	3,955.51	15,901.25	7,244.67	20.95	250.94	123.13	1,943.98	-91.47	3,419.78	3,305.49	114.30	29.920		
4,200.00	4,051.18	15,904.44	7,244.68	21.48	251.03	123.83	1,943.99	-94.67	3,319.85	3,205.62	114.23	29.064		
4,300.00	4,146.85	15,907.63	7,244.69	22.01	251.12	124.57	1,944.00	-97.86	3,219.91	3,105.76	114.16	28.206		
4,400.00	4,242.52	15,910.83	7,244.70	22.55	251.21	125.34	1,944.00	-101.06	3,119.98	3,005.89	114.09	27.346		
4,500.00	4,338.19	15,914.02	7,244.70	23.08	251.30	126.15	1,944.01	-104.25	3,020.05	2,906.02	114.03	26.486		
4,600.00	4,433.86	15,917.21	7,244.71	23.61	251.39	127.00	1,944.01	-107.44	2,920.12	2,806.16	113.96	25.623		
4,700.00	4,529.53	15,920.41	7,244.72	24.14	251.48	127.90	1,944.02	-110.64	2,820.19	2,706.29	113.90	24.760		
4,800.00	4,625.19	15,923.60	7,244.73	24.67	251.58	128.84	1,944.02	-113.83	2,720.26	2,606.42	113.84	23.895		
4,900.00	4,720.86	15,926.80	7,244.74	25.21	251.67	129.83	1,944.03	-117.02	2,620.34	2,506.55	113.78	23.029		
5,000.00	4,816.53	15,929.99	7,244.74	25.74	251.76	130.88	1,944.04	-120.22	2,520.41	2,406.69	113.72	22.162		
5,100.00	4,912.20	15,933.18	7,244.75	26.27	251.85	131.98	1,944.04	-123.41	2,420.49	2,306.82	113.66	21.295		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
5,200.00	5,007.87	15,936.38	7,244.76	26.80	251.94	133.14	1,944.05	-126.60	2,320.57	2,206.97	113.60	20.427	
5,300.00	5,103.54	15,939.57	7,244.77	27.34	252.03	134.36	1,944.05	-129.80	2,220.65	2,107.11	113.54	19.559	
5,400.00	5,199.22	15,942.76	7,244.78	27.87	252.12	132.42	1,944.06	-132.99	2,120.74	2,007.27	113.47	18.690	
5,500.00	5,295.46	15,945.75	7,244.78	28.39	252.20	74.81	1,944.06	-135.98	2,020.79	1,907.26	113.53	17.800	
5,600.00	5,392.60	15,948.41	7,244.79	28.89	252.28	33.50	1,944.07	-138.63	1,920.87	1,807.03	113.84	16.873	
5,700.00	5,490.50	15,950.72	7,244.79	29.37	252.34	19.74	1,944.07	-140.94	1,821.12	1,706.68	114.44	15.913	
5,800.00	5,589.05	15,952.68	7,244.80	29.83	252.40	13.78	1,944.08	-142.90	1,721.70	1,606.29	115.41	14.919	
5,900.00	5,688.14	15,954.29	7,244.80	30.26	252.44	10.58	1,944.08	-144.52	1,622.81	1,505.99	116.81	13.892	
6,000.00	5,787.63	15,955.55	7,244.81	30.68	252.48	8.63	1,944.08	-145.78	1,524.67	1,405.88	118.79	12.835	
6,100.00	5,887.41	15,956.45	7,244.81	31.07	252.50	7.35	1,944.08	-146.68	1,427.59	1,306.10	121.48	11.751	
6,200.00	5,987.36	15,957.01	7,244.81	31.44	252.52	6.48	1,944.08	-147.24	1,331.91	1,206.80	125.11	10.646	
6,300.00	6,087.36	15,957.28	7,244.81	31.80	252.53	0.47	1,944.08	-147.50	1,237.86	1,108.04	129.82	9.535	
6,400.00	6,187.36	15,957.52	7,244.81	32.15	252.53	0.44	1,944.09	-147.75	1,144.90	1,009.35	135.55	8.446	
6,500.00	6,287.36	15,957.77	7,244.81	32.51	252.54	0.41	1,944.09	-147.99	1,053.24	910.77	142.47	7.393	
6,600.00	6,387.36	15,958.01	7,244.81	32.87	252.55	0.38	1,944.09	-148.24	963.23	812.39	150.85	6.386	
6,700.00	6,487.36	15,958.25	7,244.81	33.23	252.56	0.34	1,944.09	-148.48	875.40	714.37	161.03	5.436	
6,800.00	6,587.36	15,958.50	7,244.81	33.59	252.56	0.31	1,944.09	-148.73	790.47	617.04	173.43	4.558	
6,900.00	6,687.26	15,961.85	7,244.82	33.95	252.66	97.87	1,944.09	-152.08	709.58	521.08	188.49	3.764	
7,000.00	6,785.58	15,979.73	7,244.87	34.31	253.16	105.47	1,944.13	-169.96	635.38	428.87	206.51	3.077	
7,100.00	6,879.94	16,012.76	7,244.95	34.65	254.10	108.99	1,944.18	-202.99	571.20	344.42	226.78	2.519	
7,200.00	6,968.01	16,060.13	7,245.06	34.97	255.44	109.26	1,944.27	-250.36	519.81	272.15	247.66	2.099	
7,300.00	7,047.61	16,120.67	7,245.21	35.27	257.15	107.03	1,944.38	-310.90	482.70	215.98	266.72	1.810	
7,400.00	7,116.80	16,207.16	7,245.39	35.54	259.60	103.06	1,944.51	-383.13	459.45	177.29	282.16	1.628	
7,500.00	7,173.86	16,275.04	7,245.59	35.81	261.52	98.26	1,944.66	-465.26	447.66	155.59	292.08	1.533	
7,600.00	7,217.38	16,365.05	7,245.81	36.17	264.07	93.63	1,944.82	-555.28	443.66	145.10	298.56	1.486 Level 3	
7,644.59	7,232.14	16,407.16	7,245.91	36.42	265.26	91.86	1,944.89	-597.38	443.36	142.67	300.69	1.474 Level 3, CC	
7,700.00	7,246.31	16,460.74	7,246.04	36.80	266.78	90.08	1,944.99	-650.96	443.66	140.70	302.97	1.464 Level 3	
7,800.00	7,259.92	16,559.73	7,246.28	37.72	269.58	88.28	1,945.17	-749.96	444.82	138.00	306.82	1.450 Level 3	
7,900.00	7,260.77	16,659.71	7,246.53	38.86	272.42	88.17	1,945.35	-849.93	445.80	134.96	310.84	1.434 Level 3	
8,000.00	7,260.39	16,759.70	7,246.77	40.19	275.25	88.25	1,945.53	-949.92	446.75	131.70	315.04	1.418 Level 3	
8,100.00	7,260.01	16,859.69	7,247.02	41.67	278.09	88.34	1,945.70	-1,049.92	447.69	128.29	319.40	1.402 Level 3	
8,200.00	7,259.63	16,959.69	7,247.26	43.30	280.92	88.42	1,945.88	-1,149.91	448.63	124.75	323.88	1.385 Level 3	
8,300.00	7,259.25	17,059.68	7,247.50	45.05	283.76	88.50	1,946.06	-1,249.90	449.58	121.08	328.50	1.369 Level 3	
8,400.00	7,258.87	17,159.67	7,247.75	46.91	286.59	88.58	1,946.24	-1,349.90	450.52	117.31	333.21	1.352 Level 3	
8,500.00	7,258.49	17,259.67	7,247.99	48.87	289.43	88.67	1,946.42	-1,449.89	451.47	113.44	338.03	1.336 Level 3	
8,600.00	7,258.11	17,359.66	7,248.24	50.92	292.26	88.75	1,946.60	-1,549.88	452.41	109.49	342.92	1.319 Level 3	
8,700.00	7,257.73	17,459.65	7,248.48	53.04	295.10	88.83	1,946.78	-1,649.88	453.36	105.47	347.90	1.303 Level 3	
8,800.00	7,257.35	17,559.65	7,248.73	55.23	297.94	88.91	1,946.96	-1,749.87	454.31	101.38	352.94	1.287 Level 3	
8,900.00	7,256.97	17,659.64	7,248.97	57.47	300.78	88.99	1,947.14	-1,849.86	455.26	97.23	358.03	1.272 Level 3	
9,000.00	7,256.59	17,759.63	7,249.21	59.77	303.62	89.07	1,947.32	-1,949.85	456.21	93.03	363.18	1.256 Level 3	
9,100.00	7,256.21	17,859.63	7,249.46	62.12	306.45	89.15	1,947.50	-2,049.85	457.16	88.79	368.38	1.241 Level 2	
9,200.00	7,255.83	17,959.62	7,249.70	64.50	309.29	89.23	1,947.68	-2,149.84	458.12	84.51	373.61	1.226 Level 2	
9,300.00	7,255.45	18,059.62	7,249.95	66.93	312.13	89.31	1,947.86	-2,249.83	459.07	80.19	378.88	1.212 Level 2	
9,400.00	7,255.07	18,159.61	7,250.19	69.38	314.97	89.39	1,948.04	-2,349.83	460.02	75.84	384.19	1.197 Level 2	
9,500.00	7,254.69	18,259.60	7,250.44	71.87	317.81	89.47	1,948.22	-2,449.82	460.98	71.46	389.52	1.183 Level 2	
9,600.00	7,254.31	18,359.60	7,250.68	74.38	320.66	89.55	1,948.40	-2,549.81	461.94	67.05	394.88	1.170 Level 2	
9,700.00	7,253.93	18,459.59	7,250.92	76.92	323.50	89.63	1,948.58	-2,649.80	462.89	62.63	400.26	1.156 Level 2	
9,800.00	7,253.55	18,559.58	7,251.17	79.48	326.34	89.70	1,948.76	-2,749.80	463.85	58.18	405.67	1.143 Level 2	
9,900.00	7,253.18	18,659.58	7,251.41	82.06	329.18	89.78	1,948.94	-2,849.79	464.81	53.72	411.09	1.131 Level 2	
10,000.00	7,252.80	18,759.57	7,251.66	84.65	332.02	89.86	1,949.11	-2,949.78	465.77	49.23	416.53	1.118 Level 2	
10,100.00	7,252.42	18,859.56	7,251.90	87.27	334.86	89.93	1,949.29	-3,049.78	466.73	44.74	421.99	1.106 Level 2	
10,200.00	7,252.04	18,959.56	7,252.15	89.89	337.71	90.01	1,949.47	-3,149.77	467.69	40.23	427.46	1.094 Level 2	

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,251.66	19,059.55	7,252.39	92.54	340.55	90.09	1,949.65	-3,249.76	468.65	35.70	432.95	1.082	Level 2	
10,400.00	7,251.28	19,118.26	7,252.53	95.19	342.22	90.13	1,949.76	-3,308.47	471.43	35.14	436.29	1.081	Level 2, ES, SF	
10,500.00	7,250.90	19,118.26	7,252.53	97.86	342.22	90.13	1,949.76	-3,308.47	491.33	67.13	424.19	1.158	Level 2	
10,600.00	7,250.52	19,118.26	7,252.53	100.53	342.22	90.13	1,949.76	-3,308.47	529.68	130.34	399.34	1.326	Level 3	
10,700.00	7,250.14	19,118.26	7,252.53	103.22	342.22	90.13	1,949.76	-3,308.47	582.86	214.06	368.80	1.580		
10,800.00	7,249.76	19,118.26	7,252.53	105.91	342.22	90.13	1,949.76	-3,308.47	647.21	309.31	337.90	1.915		
10,900.00	7,249.38	19,118.26	7,252.53	108.62	342.22	90.13	1,949.76	-3,308.47	719.76	410.34	309.41	2.326		
11,000.00	7,249.00	19,118.26	7,252.53	111.33	342.22	90.13	1,949.76	-3,308.47	798.25	513.94	284.31	2.808		
11,100.00	7,248.62	19,118.26	7,252.53	114.04	342.22	90.13	1,949.76	-3,308.47	881.12	618.46	262.66	3.355		
11,200.00	7,248.24	19,118.26	7,252.53	116.77	342.22	90.13	1,949.76	-3,308.47	967.23	723.11	244.12	3.962		
11,300.00	7,247.86	19,118.26	7,252.53	119.50	342.22	90.13	1,949.76	-3,308.47	1,055.79	827.53	228.26	4.625		
11,400.00	7,247.48	19,118.26	7,252.53	122.24	342.22	90.13	1,949.76	-3,308.47	1,146.23	931.58	214.65	5.340		
11,500.00	7,247.10	19,118.26	7,252.53	124.98	342.22	90.13	1,949.76	-3,308.47	1,238.15	1,035.22	202.93	6.101		
11,600.00	7,246.72	19,118.26	7,252.53	127.73	342.22	90.13	1,949.76	-3,308.47	1,331.23	1,138.46	192.77	6.906		
11,700.00	7,246.34	19,118.26	7,252.53	130.48	342.22	90.13	1,949.76	-3,308.47	1,425.25	1,241.32	183.92	7.749		
11,800.00	7,245.96	19,118.26	7,252.53	133.24	342.22	90.13	1,949.76	-3,308.47	1,520.03	1,343.86	176.17	8.628		
11,900.00	7,245.58	19,118.26	7,252.53	136.00	342.22	90.13	1,949.76	-3,308.47	1,615.44	1,446.10	169.34	9.540		
12,000.00	7,245.21	19,118.26	7,252.53	138.76	342.22	90.13	1,949.76	-3,308.47	1,711.38	1,548.09	163.29	10.481		
12,100.00	7,244.83	19,118.26	7,252.53	141.53	342.22	90.13	1,949.76	-3,308.47	1,807.76	1,649.85	157.91	11.448		
12,200.00	7,244.45	19,118.26	7,252.53	144.30	342.22	90.13	1,949.76	-3,308.47	1,904.51	1,751.41	153.10	12.440		
12,300.00	7,244.07	19,118.26	7,252.53	147.08	342.22	90.13	1,949.76	-3,308.47	2,001.57	1,852.79	148.78	13.453		
12,400.00	7,243.69	19,118.26	7,252.53	149.86	342.22	90.13	1,949.76	-3,308.47	2,098.92	1,954.03	144.89	14.486		
12,500.00	7,243.31	19,118.26	7,252.53	152.64	342.22	90.13	1,949.76	-3,308.47	2,196.50	2,055.13	141.38	15.537		
12,600.00	7,242.93	19,118.26	7,252.53	155.42	342.22	90.13	1,949.76	-3,308.47	2,294.29	2,156.11	138.18	16.603		
12,700.00	7,242.55	19,118.26	7,252.53	158.21	342.22	90.13	1,949.76	-3,308.47	2,392.27	2,256.99	135.28	17.684		
12,800.00	7,242.17	19,118.26	7,252.53	161.00	342.22	90.13	1,949.76	-3,308.47	2,490.40	2,357.77	132.63	18.777		
12,900.00	7,241.79	19,118.26	7,252.53	163.79	342.22	90.13	1,949.76	-3,308.47	2,588.68	2,458.48	130.20	19.882		
13,000.00	7,241.41	19,118.26	7,252.53	166.58	342.22	90.13	1,949.76	-3,308.47	2,687.09	2,559.11	127.98	20.997		
13,100.00	7,241.03	19,118.26	7,252.53	169.38	342.22	90.13	1,949.76	-3,308.47	2,785.60	2,659.68	125.93	22.121		
13,200.00	7,240.65	19,118.26	7,252.53	172.18	342.22	90.13	1,949.76	-3,308.47	2,884.22	2,760.18	124.04	23.252		
13,300.00	7,240.27	19,118.26	7,252.53	174.98	342.22	90.13	1,949.76	-3,308.47	2,982.94	2,860.64	122.30	24.391		
13,400.00	7,239.89	19,118.26	7,252.53	177.78	342.22	90.13	1,949.76	-3,308.47	3,081.73	2,961.05	120.68	25.536		
13,500.00	7,239.51	19,118.26	7,252.53	180.58	342.22	90.13	1,949.76	-3,308.47	3,180.60	3,061.41	119.19	26.686		
13,600.00	7,239.13	19,118.26	7,252.53	183.39	342.22	90.13	1,949.76	-3,308.47	3,279.54	3,161.74	117.80	27.840		
13,700.00	7,238.75	19,118.26	7,252.53	186.20	342.22	90.13	1,949.76	-3,308.47	3,378.54	3,262.04	116.51	28.999		
13,800.00	7,238.37	19,118.26	7,252.53	189.00	342.22	90.13	1,949.76	-3,308.47	3,477.60	3,362.30	115.30	30.161		
13,900.00	7,237.99	19,118.26	7,252.53	191.81	342.22	90.13	1,949.76	-3,308.47	3,576.71	3,462.53	114.18	31.325		
14,000.00	7,237.62	19,118.26	7,252.53	194.63	342.22	90.13	1,949.76	-3,308.47	3,675.87	3,562.74	113.13	32.492		
14,100.00	7,237.24	19,118.26	7,252.53	197.44	342.22	90.13	1,949.76	-3,308.47	3,775.08	3,662.93	112.15	33.661		
14,200.00	7,236.86	19,118.26	7,252.53	200.25	342.22	90.13	1,949.76	-3,308.47	3,874.32	3,763.09	111.23	34.831		
14,300.00	7,236.48	19,118.26	7,252.53	203.07	342.22	90.13	1,949.76	-3,308.47	3,973.60	3,863.23	110.37	36.002		
14,400.00	7,236.10	19,118.26	7,252.53	205.88	342.22	90.13	1,949.76	-3,308.47	4,072.92	3,963.36	109.56	37.174		
14,500.00	7,235.72	19,118.26	7,252.53	208.70	342.22	90.13	1,949.76	-3,308.47	4,172.27	4,063.47	108.81	38.346		
14,600.00	7,235.34	19,118.26	7,252.53	211.52	342.22	90.13	1,949.76	-3,308.47	4,271.65	4,163.56	108.09	39.519		
14,700.00	7,234.96	19,118.26	7,252.53	214.34	342.22	90.13	1,949.76	-3,308.47	4,371.06	4,263.64	107.42	40.691		
14,800.00	7,234.58	19,118.26	7,252.53	217.16	342.22	90.13	1,949.76	-3,308.47	4,470.50	4,363.71	106.79	41.862		
14,900.00	7,234.20	19,118.26	7,252.53	219.98	342.22	90.13	1,949.76	-3,308.47	4,569.96	4,463.76	106.20	43.033		
15,000.00	7,233.82	19,118.26	7,252.53	222.81	342.22	90.13	1,949.76	-3,308.47	4,669.44	4,563.80	105.63	44.204		
15,100.00	7,233.44	19,118.26	7,252.53	225.63	342.22	90.13	1,949.76	-3,308.47	4,768.94	4,663.84	105.11	45.373		
15,200.00	7,233.06	19,118.26	7,252.53	228.45	342.22	90.13	1,949.76	-3,308.47	4,868.47	4,763.86	104.61	46.541		
15,216.01	7,233.00	19,118.26	7,252.53	228.91	342.22	90.13	1,949.76	-3,308.47	4,884.41	4,779.88	104.53	46.728		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	15,711.88	7,136.44	3.28	247.90	-0.03	1,783.56	-0.84	7,355.94					
100.00	100.00	15,712.12	7,136.44	3.28	247.91	-0.03	1,783.56	-1.08	7,258.96	7,145.77	113.20	64.128		
200.00	200.00	15,712.37	7,136.44	3.34	247.92	-0.04	1,783.55	-1.33	7,162.07	7,048.55	113.52	63.089		
300.00	299.98	15,712.77	7,136.44	3.45	247.93	6.56	1,783.55	-1.73	7,064.85	6,951.00	113.85	62.056		
400.00	399.84	15,713.48	7,136.44	3.61	247.95	7.74	1,783.54	-2.44	6,966.93	6,852.80	114.13	61.044		
500.00	499.45	15,714.50	7,136.45	3.82	247.98	9.40	1,783.53	-3.47	6,868.42	6,754.06	114.36	60.058		
600.00	598.70	15,715.84	7,136.45	4.07	248.02	11.93	1,783.52	-4.80	6,769.41	6,654.86	114.55	59.098		
700.00	697.47	15,717.48	7,136.45	4.35	248.06	16.30	1,783.50	-6.45	6,670.00	6,555.33	114.67	58.167		
800.00	795.62	15,719.44	7,136.46	4.67	248.12	25.44	1,783.48	-8.40	6,570.29	6,455.55	114.73	57.265		
900.00	893.06	15,721.69	7,136.46	5.01	248.18	52.22	1,783.46	-10.65	6,470.40	6,355.66	114.73	56.395		
1,000.00	989.64	15,724.25	7,136.47	5.38	248.25	119.65	1,783.43	-13.21	6,370.44	6,255.77	114.66	55.558		
1,100.00	1,085.42	15,727.06	7,136.48	5.78	248.33	140.37	1,783.40	-16.02	6,270.51	6,155.98	114.53	54.749		
1,200.00	1,181.09	15,729.91	7,136.48	6.20	248.41	140.84	1,783.37	-18.87	6,170.59	6,056.20	114.39	53.943		
1,300.00	1,276.76	15,732.75	7,136.49	6.65	248.49	141.30	1,783.34	-21.71	6,070.68	5,956.43	114.25	53.135		
1,400.00	1,372.43	15,735.60	7,136.50	7.11	248.57	141.78	1,783.32	-24.56	5,970.76	5,856.65	114.11	52.326		
1,500.00	1,468.10	15,738.44	7,136.50	7.57	248.66	142.26	1,783.29	-27.40	5,870.85	5,756.88	113.96	51.515		
1,600.00	1,563.77	15,741.28	7,136.51	8.05	248.74	142.75	1,783.26	-30.25	5,770.94	5,657.12	113.82	50.703		
1,700.00	1,659.44	15,744.13	7,136.52	8.53	248.82	143.25	1,783.23	-33.09	5,671.03	5,557.36	113.67	49.889		
1,800.00	1,755.11	15,746.97	7,136.53	9.02	248.90	143.75	1,783.20	-35.93	5,571.12	5,457.60	113.52	49.074		
1,900.00	1,850.78	15,749.82	7,136.53	9.52	248.98	144.27	1,783.17	-38.78	5,471.21	5,357.84	113.37	48.258		
2,000.00	1,946.45	15,752.66	7,136.54	10.02	249.06	144.79	1,783.14	-41.62	5,371.31	5,258.09	113.22	47.441		
2,100.00	2,042.12	15,755.51	7,136.55	10.52	249.14	145.32	1,783.11	-44.47	5,271.41	5,158.34	113.07	46.622		
2,200.00	2,137.78	15,758.35	7,136.55	11.03	249.22	145.86	1,783.08	-47.31	5,171.51	5,058.60	112.91	45.801		
2,300.00	2,233.45	15,761.20	7,136.56	11.54	249.30	146.40	1,783.05	-50.16	5,071.61	4,958.86	112.75	44.979		
2,400.00	2,329.12	15,764.04	7,136.57	12.05	249.38	146.96	1,783.02	-53.00	4,971.72	4,859.13	112.59	44.156		
2,500.00	2,424.79	15,766.89	7,136.57	12.56	249.46	147.52	1,782.99	-55.85	4,871.83	4,759.40	112.43	43.332		
2,600.00	2,520.46	15,769.73	7,136.58	13.08	249.54	148.09	1,782.97	-58.69	4,771.94	4,659.67	112.26	42.506		
2,700.00	2,616.13	15,772.57	7,136.59	13.60	249.62	148.67	1,782.94	-61.53	4,672.05	4,559.96	112.10	41.679		
2,800.00	2,711.80	15,775.42	7,136.60	14.12	249.70	149.26	1,782.91	-64.38	4,572.17	4,460.25	111.93	40.850		
2,900.00	2,807.47	15,778.26	7,136.60	14.64	249.78	149.86	1,782.88	-67.22	4,472.29	4,360.54	111.75	40.020		
3,000.00	2,903.14	15,781.11	7,136.61	15.16	249.86	150.47	1,782.85	-70.07	4,372.42	4,260.84	111.57	39.189		
3,100.00	2,998.81	15,783.95	7,136.62	15.68	249.94	151.08	1,782.82	-72.91	4,272.54	4,161.15	111.39	38.355		
3,200.00	3,094.48	15,786.80	7,136.62	16.21	250.02	151.71	1,782.79	-75.76	4,172.68	4,061.47	111.21	37.521		
3,300.00	3,190.15	15,789.64	7,136.63	16.73	250.10	152.34	1,782.76	-78.60	4,072.81	3,961.79	111.02	36.685		
3,400.00	3,285.82	15,807.58	7,136.64	17.26	250.18	152.98	1,782.73	-81.45	3,972.96	3,861.95	110.83	35.850		
3,500.00	3,381.49	15,804.73	7,136.64	17.78	250.26	153.64	1,782.70	-84.29	3,873.10	3,762.36	110.64	35.015		
3,600.00	3,477.16	15,801.89	7,136.65	18.31	250.34	154.30	1,782.67	-87.13	3,773.26	3,662.78	110.45	34.180		
3,700.00	3,572.83	15,801.02	7,136.66	18.84	250.42	154.97	1,782.64	-89.98	3,673.42	3,563.18	110.26	33.345		
3,800.00	3,668.50	15,803.87	7,136.66	19.37	250.50	155.65	1,782.62	-92.82	3,573.58	3,463.55	110.07	32.510		
3,900.00	3,764.17	15,806.71	7,136.67	19.89	250.58	156.34	1,782.59	-95.67	3,473.76	3,363.93	109.88	31.675		
4,000.00	3,859.84	15,809.55	7,136.68	20.42	250.66	157.03	1,782.56	-98.51	3,373.94	3,264.33	109.69	30.840		
4,100.00	3,955.51	15,812.40	7,136.69	20.95	250.74	157.74	1,782.53	-101.36	3,274.13	3,164.74	109.50	29.999		
4,200.00	4,051.18	15,815.24	7,136.69	21.48	250.83	158.46	1,782.50	-104.20	3,174.32	3,065.16	109.31	29.158		
4,300.00	4,146.85	15,818.09	7,136.70	22.01	250.91	159.18	1,782.47	-107.05	3,074.53	2,965.60	109.12	28.317		
4,400.00	4,242.52	15,820.93	7,136.71	22.55	250.99	159.91	1,782.44	-109.89	2,974.75	2,866.06	108.93	27.476		
4,500.00	4,338.19	15,823.78	7,136.71	23.08	251.07	160.66	1,782.41	-112.73	2,874.99	2,766.53	108.74	26.635		
4,600.00	4,433.86	15,826.62	7,136.72	23.61	251.15	161.41	1,782.38	-115.58	2,775.23	2,667.03	108.55	25.794		
4,700.00	4,529.53	15,829.47	7,136.73	24.14	251.23	162.17	1,782.35	-118.42	2,675.50	2,567.55	108.36	24.953		
4,800.00	4,625.19	15,832.31	7,136.73	24.67	251.31	162.94	1,782.32	-121.27	2,575.78	2,468.10	108.17	24.112		
4,900.00	4,720.86	15,835.16	7,136.74	25.21	251.39	163.71	1,782.30	-124.11	2,476.07	2,368.68	107.98	23.271		
5,000.00	4,816.53	15,838.00	7,136.75	25.74	251.47	164.50	1,782.27	-126.96	2,376.39	2,269.29	107.79	22.430		
5,100.00	4,912.20	15,840.85	7,136.75	26.27	251.55	165.29	1,782.24	-129.80	2,276.74	2,169.94	107.60	21.589		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
5,200.00	5,007.87	15,843.69	7,136.76	26.80	251.63	166.09	1,782.21	-132.65	2,177.11	2,070.64	106.47	20.448	
5,300.00	5,103.54	15,846.53	7,136.77	27.34	251.71	166.90	1,782.18	-135.49	2,077.52	1,971.39	106.12	19.577	
5,400.00	5,199.22	15,849.38	7,136.78	27.87	251.79	167.30	1,782.15	-138.33	1,977.96	1,872.21	105.75	18.704	
5,500.00	5,295.46	15,852.05	7,136.78	28.39	251.86	161.36	1,782.12	-141.00	1,878.26	1,772.81	105.46	17.810	
5,600.00	5,392.60	15,854.41	7,136.79	28.89	251.93	143.57	1,782.10	-143.37	1,778.38	1,673.06	105.33	16.884	
5,700.00	5,490.50	15,856.48	7,136.79	29.37	251.99	69.32	1,782.08	-145.43	1,678.41	1,573.04	105.38	15.928	
5,800.00	5,589.05	15,858.24	7,136.80	29.83	252.04	24.41	1,782.06	-147.19	1,578.47	1,472.83	105.64	14.942	
5,900.00	5,688.14	15,859.69	7,136.80	30.26	252.08	13.77	1,782.04	-148.64	1,478.70	1,372.52	106.17	13.927	
6,000.00	5,787.63	15,860.83	7,136.80	30.68	252.11	9.53	1,782.03	-149.78	1,379.27	1,272.21	107.06	12.883	
6,100.00	5,887.41	15,861.66	7,136.81	31.07	252.14	7.34	1,782.02	-150.61	1,280.40	1,171.97	108.42	11.809	
6,200.00	5,987.36	15,862.17	7,136.81	31.44	252.15	6.05	1,782.02	-151.13	1,182.36	1,071.90	110.46	10.704	
6,300.00	6,087.36	15,862.44	7,136.81	31.80	252.16	-0.06	1,782.02	-151.39	1,085.33	971.94	113.39	9.572	
6,400.00	6,187.36	15,862.68	7,136.81	32.15	252.17	-0.11	1,782.01	-151.64	988.97	871.71	117.25	8.434	
6,500.00	6,287.36	15,862.93	7,136.81	32.51	252.17	-0.16	1,782.01	-151.88	893.40	771.08	122.33	7.303	
6,600.00	6,387.36	15,863.17	7,136.81	32.87	252.18	-0.21	1,782.01	-152.13	798.92	669.87	129.05	6.191	
6,700.00	6,487.36	15,863.41	7,136.81	33.23	252.19	-0.26	1,782.01	-152.37	705.97	567.93	138.04	5.114	
6,800.00	6,587.36	15,863.66	7,136.81	33.59	252.19	-0.31	1,782.00	-152.61	615.22	465.04	150.18	4.097	
6,900.00	6,687.26	15,867.02	7,136.82	33.95	252.29	99.20	1,781.97	-155.97	527.92	361.18	166.75	3.166	
7,000.00	6,785.58	15,884.89	7,136.86	34.31	252.79	107.85	1,781.79	-173.84	447.18	258.04	189.14	2.364	
7,100.00	6,879.94	15,917.92	7,136.94	34.65	253.73	110.45	1,781.45	-206.87	377.59	160.01	217.58	1.735	
7,200.00	6,968.01	15,965.29	7,137.06	34.97	255.07	108.22	1,780.96	-254.24	324.10	74.83	249.27	1.300 Level 3	
7,300.00	7,047.61	16,025.84	7,137.21	35.27	256.78	102.10	1,780.34	-314.79	290.53	13.82	276.72	1.050 Level 2	
7,400.00	7,116.80	16,101.99	7,137.38	35.54	258.93	93.22	1,779.60	-387.02	276.96	-14.91	291.88	0.949 Level 1	
7,435.25	7,138.37	16,126.00	7,137.45	35.63	259.61	89.76	1,779.31	-414.94	276.13	-17.60	293.73	0.940 Level 1, CC	
7,500.00	7,173.86	16,180.21	7,137.58	35.81	261.14	83.45	1,778.76	-469.15	278.37	-15.48	293.85	0.947 Level 1	
7,600.00	7,217.38	16,270.23	7,137.80	36.17	263.69	74.89	1,777.84	-559.16	287.03	-2.52	289.55	0.991 Level 1	
7,700.00	7,246.31	16,365.92	7,138.04	36.80	266.39	68.96	1,776.86	-654.85	296.06	10.65	285.40	1.037 Level 2	
7,800.00	7,259.92	16,464.92	7,138.28	37.72	269.20	66.19	1,775.84	-753.84	300.98	16.06	284.93	1.056 Level 2	
7,900.00	7,260.77	16,564.90	7,138.52	38.86	272.02	66.04	1,774.82	-853.81	301.00	12.53	288.48	1.043 Level 2	
8,000.00	7,260.39	16,664.90	7,138.77	40.19	274.85	66.13	1,773.79	-953.81	300.53	7.97	292.56	1.027 Level 2	
8,100.00	7,260.01	16,764.89	7,139.01	41.67	277.69	66.22	1,772.77	-1,053.80	300.06	3.28	296.78	1.011 Level 2	
8,200.00	7,259.63	16,864.89	7,139.26	43.30	280.52	66.31	1,771.74	-1,153.79	299.58	-1.54	301.12	0.995 Level 1	
8,300.00	7,259.25	16,964.89	7,139.50	45.05	283.35	66.40	1,770.72	-1,253.78	299.11	-6.46	305.57	0.979 Level 1	
8,400.00	7,258.87	17,064.89	7,139.75	46.91	286.18	66.49	1,769.69	-1,353.77	298.64	-11.48	310.11	0.963 Level 1	
8,500.00	7,258.49	17,164.88	7,139.99	48.87	289.01	66.58	1,768.67	-1,453.77	298.17	-16.58	314.75	0.947 Level 1	
8,600.00	7,258.11	17,264.88	7,140.23	50.92	291.85	66.68	1,767.64	-1,553.76	297.70	-21.77	319.46	0.932 Level 1	
8,700.00	7,257.73	17,364.88	7,140.48	53.04	294.68	66.77	1,766.62	-1,653.75	297.23	-27.02	324.25	0.917 Level 1	
8,800.00	7,257.35	17,464.88	7,140.72	55.23	297.52	66.86	1,765.59	-1,753.74	296.76	-32.34	329.10	0.902 Level 1	
8,900.00	7,256.97	17,564.88	7,140.97	57.47	300.35	66.95	1,764.57	-1,853.74	296.29	-37.72	334.01	0.887 Level 1	
9,000.00	7,256.59	17,664.87	7,141.21	59.77	303.19	67.04	1,763.54	-1,953.73	295.82	-43.15	338.98	0.873 Level 1	
9,100.00	7,256.21	17,764.87	7,141.46	62.12	306.02	67.14	1,762.52	-2,053.72	295.36	-48.63	343.99	0.859 Level 1	
9,200.00	7,255.83	17,864.87	7,141.70	64.50	308.86	67.23	1,761.50	-2,153.71	294.89	-54.15	349.04	0.845 Level 1	
9,300.00	7,255.45	17,964.87	7,141.94	66.93	311.69	67.32	1,760.47	-2,253.70	294.43	-59.71	354.14	0.831 Level 1	
9,400.00	7,255.07	18,064.86	7,142.19	69.38	314.53	67.42	1,759.45	-2,353.70	293.96	-65.31	359.27	0.818 Level 1	
9,500.00	7,254.69	18,164.86	7,142.43	71.87	317.37	67.51	1,758.42	-2,453.69	293.50	-70.93	364.43	0.805 Level 1	
9,600.00	7,254.31	18,264.86	7,142.68	74.38	320.21	67.61	1,757.40	-2,553.68	293.04	-76.59	369.63	0.793 Level 1	
9,700.00	7,253.93	18,364.86	7,142.92	76.92	323.04	67.70	1,756.37	-2,653.67	292.57	-82.28	374.85	0.781 Level 1	
9,800.00	7,253.55	18,464.86	7,143.17	79.48	325.88	67.80	1,755.35	-2,753.67	292.11	-87.99	380.10	0.769 Level 1	
9,900.00	7,253.18	18,564.85	7,143.41	82.06	328.72	67.89	1,754.32	-2,853.66	291.65	-93.73	385.38	0.757 Level 1	
10,000.00	7,252.80	18,664.85	7,143.66	84.65	331.56	67.99	1,753.30	-2,953.65	291.19	-99.49	390.68	0.745 Level 1	
10,100.00	7,252.42	18,764.85	7,143.90	87.27	334.40	68.08	1,752.27	-3,053.64	290.73	-105.27	396.00	0.734 Level 1	
10,200.00	7,252.04	18,864.85	7,144.14	89.89	337.24	68.18	1,751.25	-3,153.63	290.28	-111.07	401.34	0.723 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,251.66	18,964.84	7,144.39	92.54	340.08	68.28	1,750.22	-3,253.63	289.82	-116.88	406.70	0.713	Level 1	
10,355.25	7,251.45	19,020.09	7,144.52	94.00	341.65	68.33	1,749.66	-3,308.87	289.57	-120.11	409.67	0.707	Level 1, ES, SF	
10,400.00	7,251.28	19,018.34	7,144.52	95.19	341.60	68.33	1,749.67	-3,307.12	293.08	-114.18	407.26	0.720	Level 1	
10,500.00	7,250.90	19,018.34	7,144.52	97.86	341.60	68.33	1,749.67	-3,307.12	323.93	-51.01	374.94	0.864	Level 1	
10,600.00	7,250.52	19,018.34	7,144.52	100.53	341.60	68.33	1,749.67	-3,307.12	379.43	52.24	327.19	1.160	Level 2	
10,700.00	7,250.14	19,018.34	7,144.52	103.22	341.60	68.33	1,749.67	-3,307.12	450.56	167.91	282.66	1.594		
10,800.00	7,249.76	19,018.34	7,144.52	105.91	341.60	68.33	1,749.67	-3,307.12	531.08	284.39	246.68	2.153		
10,900.00	7,249.38	19,018.34	7,144.52	108.62	341.60	68.33	1,749.67	-3,307.12	617.32	398.54	218.77	2.822		
11,000.00	7,249.00	19,018.34	7,144.52	111.33	341.60	68.33	1,749.67	-3,307.12	707.19	510.02	197.17	3.587		
11,100.00	7,248.62	19,018.34	7,144.52	114.04	341.60	68.33	1,749.67	-3,307.12	799.47	619.20	180.27	4.435		
11,200.00	7,248.24	19,018.34	7,144.52	116.77	341.60	68.33	1,749.67	-3,307.12	893.41	726.55	166.86	5.354		
11,300.00	7,247.86	19,018.34	7,144.52	119.50	341.60	68.33	1,749.67	-3,307.12	988.55	832.49	156.05	6.335		
11,400.00	7,247.48	19,018.34	7,144.52	122.24	341.60	68.33	1,749.67	-3,307.12	1,084.56	937.33	147.23	7.367		
11,500.00	7,247.10	19,018.34	7,144.52	124.98	341.60	68.33	1,749.67	-3,307.12	1,181.23	1,041.30	139.92	8.442		
11,600.00	7,246.72	19,018.34	7,144.52	127.73	341.60	68.33	1,749.67	-3,307.12	1,278.41	1,144.60	133.81	9.554		
11,700.00	7,246.34	19,018.34	7,144.52	130.48	341.60	68.33	1,749.67	-3,307.12	1,376.00	1,247.35	128.65	10.696		
11,800.00	7,245.96	19,018.34	7,144.52	133.24	341.60	68.33	1,749.67	-3,307.12	1,473.91	1,349.67	124.24	11.863		
11,900.00	7,245.58	19,018.34	7,144.52	136.00	341.60	68.33	1,749.67	-3,307.12	1,572.08	1,451.63	120.45	13.052		
12,000.00	7,245.21	19,018.34	7,144.52	138.76	341.60	68.33	1,749.67	-3,307.12	1,670.47	1,553.30	117.17	14.257		
12,100.00	7,244.83	19,018.34	7,144.52	141.53	341.60	68.33	1,749.67	-3,307.12	1,769.05	1,654.73	114.31	15.476		
12,200.00	7,244.45	19,018.34	7,144.52	144.30	341.60	68.33	1,749.67	-3,307.12	1,867.77	1,755.96	111.81	16.705		
12,300.00	7,244.07	19,018.34	7,144.52	147.08	341.60	68.33	1,749.67	-3,307.12	1,966.62	1,857.02	109.60	17.944		
12,400.00	7,243.69	19,018.34	7,144.52	149.86	341.60	68.33	1,749.67	-3,307.12	2,065.58	1,957.94	107.64	19.190		
12,500.00	7,243.31	19,018.34	7,144.52	152.64	341.60	68.33	1,749.67	-3,307.12	2,164.64	2,058.74	105.90	20.440		
12,600.00	7,242.93	19,018.34	7,144.52	155.42	341.60	68.33	1,749.67	-3,307.12	2,263.78	2,159.43	104.35	21.695		
12,700.00	7,242.55	19,018.34	7,144.52	158.21	341.60	68.33	1,749.67	-3,307.12	2,362.99	2,260.04	102.96	22.951		
12,800.00	7,242.17	19,018.34	7,144.52	161.00	341.60	68.33	1,749.67	-3,307.12	2,462.27	2,360.57	101.70	24.210		
12,900.00	7,241.79	19,018.34	7,144.52	163.79	341.60	68.33	1,749.67	-3,307.12	2,561.60	2,461.03	100.58	25.469		
13,000.00	7,241.41	19,018.34	7,144.52	166.58	341.60	68.33	1,749.67	-3,307.12	2,660.99	2,561.43	99.55	26.729		
13,100.00	7,241.03	19,018.34	7,144.52	169.38	341.60	68.33	1,749.67	-3,307.12	2,760.41	2,661.79	98.63	27.988		
13,200.00	7,240.65	19,018.34	7,144.52	172.18	341.60	68.33	1,749.67	-3,307.12	2,859.88	2,762.09	97.79	29.246		
13,300.00	7,240.27	19,018.34	7,144.52	174.98	341.60	68.33	1,749.67	-3,307.12	2,959.39	2,862.36	97.02	30.503		
13,400.00	7,239.89	19,018.34	7,144.52	177.78	341.60	68.33	1,749.67	-3,307.12	3,058.92	2,962.60	96.32	31.757		
13,500.00	7,239.51	19,018.34	7,144.52	180.58	341.60	68.33	1,749.67	-3,307.12	3,158.49	3,062.80	95.68	33.010		
13,600.00	7,239.13	19,018.34	7,144.52	183.39	341.60	68.33	1,749.67	-3,307.12	3,258.08	3,162.98	95.10	34.261		
13,700.00	7,238.75	19,018.34	7,144.52	186.20	341.60	68.33	1,749.67	-3,307.12	3,357.69	3,263.13	94.56	35.509		
13,800.00	7,238.37	19,018.34	7,144.52	189.00	341.60	68.33	1,749.67	-3,307.12	3,457.33	3,363.27	94.07	36.754		
13,900.00	7,237.99	19,018.34	7,144.52	191.81	341.60	68.33	1,749.67	-3,307.12	3,556.99	3,463.38	93.61	37.997		
14,000.00	7,237.62	19,018.34	7,144.52	194.63	341.60	68.33	1,749.67	-3,307.12	3,656.67	3,563.47	93.20	39.237		
14,100.00	7,237.24	19,018.34	7,144.52	197.44	341.60	68.33	1,749.67	-3,307.12	3,756.36	3,663.55	92.81	40.473		
14,200.00	7,236.86	19,018.34	7,144.52	200.25	341.60	68.33	1,749.67	-3,307.12	3,856.07	3,763.62	92.46	41.707		
14,300.00	7,236.48	19,018.34	7,144.52	203.07	341.60	68.33	1,749.67	-3,307.12	3,955.80	3,863.67	92.13	42.937		
14,400.00	7,236.10	19,018.34	7,144.52	205.88	341.60	68.33	1,749.67	-3,307.12	4,055.54	3,963.71	91.83	44.164		
14,500.00	7,235.72	19,018.34	7,144.52	208.70	341.60	68.33	1,749.67	-3,307.12	4,155.29	4,063.74	91.55	45.388		
14,600.00	7,235.34	19,018.34	7,144.52	211.52	341.60	68.33	1,749.67	-3,307.12	4,255.05	4,163.76	91.29	46.609		
14,700.00	7,234.96	19,018.34	7,144.52	214.34	341.60	68.33	1,749.67	-3,307.12	4,354.82	4,263.77	91.06	47.826		
14,800.00	7,234.58	19,018.34	7,144.52	217.16	341.60	68.33	1,749.67	-3,307.12	4,454.61	4,363.77	90.84	49.040		
14,900.00	7,234.20	19,018.34	7,144.52	219.98	341.60	68.33	1,749.67	-3,307.12	4,554.40	4,463.76	90.63	50.250		
15,000.00	7,233.82	19,018.34	7,144.52	222.81	341.60	68.33	1,749.67	-3,307.12	4,654.20	4,563.75	90.45	51.457		
15,100.00	7,233.44	19,018.34	7,144.52	225.63	341.60	68.33	1,749.67	-3,307.12	4,754.01	4,663.74	90.28	52.661		
15,200.00	7,233.06	19,018.34	7,144.52	228.45	341.60	68.33	1,749.67	-3,307.12	4,853.83	4,763.71	90.12	53.861		
15,216.01	7,233.00	19,018.34	7,144.52	228.91	341.60	68.33	1,749.67	-3,307.12	4,869.81	4,779.72	90.09	54.053		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1,509.50	1,558.72	3.28	8.11	-119.50	-4,254.20	-7,519.97	8,779.39					
100.00	100.00	1,584.00	1,632.02	3.28	8.51	-119.47	-4,244.14	-7,511.27	8,762.36	8,751.29	11.08	791.171		
200.00	200.00	1,584.00	1,632.02	3.34	8.51	-119.47	-4,244.14	-7,511.27	8,745.43	8,734.34	11.09	788.289		
300.00	299.98	300.00	1,716.78	3.45	3.41	-113.99	-4,232.25	-7,501.97	8,729.89	8,722.85	7.04	1,239.811		
400.00	399.84	1,738.49	1,784.11	3.61	9.31	-114.24	-4,222.67	-7,494.67	8,715.82	8,703.84	11.98	727.447		
500.00	499.45	1,809.43	1,854.04	3.82	9.68	-114.47	-4,213.39	-7,487.22	8,703.70	8,691.23	12.47	697.923		
600.00	598.70	1,896.03	1,939.45	4.07	10.13	-114.70	-4,202.58	-7,477.85	8,693.09	8,680.01	13.07	664.886		
700.00	697.47	1,963.00	2,005.52	4.35	10.47	-114.90	-4,193.91	-7,471.13	8,684.35	8,670.72	13.63	637.053		
800.00	795.62	2,273.62	2,311.51	4.67	12.13	-115.30	-4,154.64	-7,434.99	8,675.63	8,660.30	15.33	566.105		
900.00	893.06	2,496.28	2,530.13	5.01	13.37	-115.69	-4,125.06	-7,404.95	8,666.56	8,649.90	16.67	520.034		
1,000.00	989.64	2,551.97	2,584.78	5.38	13.69	-115.90	-4,117.73	-7,397.19	8,658.88	8,641.60	17.28	501.106		
1,100.00	1,085.42	2,886.72	2,912.43	5.78	15.64	-116.43	-4,069.71	-7,348.47	8,651.39	8,632.18	19.21	450.462		
1,200.00	1,181.09	2,932.19	2,956.82	6.20	15.92	-116.50	-4,062.77	-7,341.56	8,643.13	8,623.29	19.83	435.810		
1,300.00	1,276.76	1,300.00	3,050.44	6.65	6.62	-116.64	-4,049.01	-7,327.28	8,635.62	8,622.65	12.97	665.835		
1,400.00	1,372.43	3,139.50	3,159.55	7.11	17.16	-116.81	-4,033.52	-7,309.56	8,627.58	8,605.92	21.66	398.232		
1,500.00	1,468.10	3,170.78	3,190.15	7.57	17.34	-116.85	-4,029.34	-7,304.64	8,620.01	8,597.74	22.27	387.095		
1,600.00	1,563.77	3,232.68	3,250.83	8.05	17.71	-116.95	-4,021.31	-7,295.35	8,613.23	8,590.21	23.02	374.159		
1,700.00	1,659.44	3,346.34	3,362.14	8.53	18.37	-117.12	-4,006.32	-7,277.94	8,606.18	8,582.17	24.01	358.385		
1,800.00	1,755.11	3,391.00	3,405.90	9.02	18.64	-117.19	-4,000.48	-7,271.23	8,599.60	8,574.90	24.70	348.121		
1,900.00	1,850.78	3,391.00	3,405.90	9.52	18.64	-117.19	-4,000.48	-7,271.23	8,594.00	8,568.80	25.20	341.097		
2,000.00	1,946.45	3,447.75	3,461.62	10.02	18.96	-117.28	-3,993.10	-7,263.39	8,588.83	8,562.88	25.95	331.001		
2,100.00	2,042.12	3,486.00	3,499.27	10.52	19.18	-117.33	-3,988.13	-7,258.81	8,584.79	8,558.17	26.62	322.483		
2,200.00	2,137.78	3,581.00	3,592.77	11.03	19.70	-117.47	-3,975.44	-7,247.76	8,581.09	8,553.54	27.56	311.407		
2,300.00	2,233.45	3,618.65	3,629.81	11.54	19.91	-117.52	-3,970.23	-7,243.53	8,577.67	8,549.44	28.23	303.818		
2,400.00	2,329.12	4,059.38	4,062.08	12.05	22.44	-118.06	-3,899.60	-7,195.50	8,574.95	8,544.17	30.78	278.558		
2,500.00	2,424.79	4,100.73	4,102.55	12.56	22.69	-118.12	-3,893.47	-7,189.64	8,568.46	8,536.97	31.49	272.114		
2,600.00	2,520.46	2,600.00	4,228.82	13.08	13.88	-118.32	-3,876.26	-7,170.56	8,562.32	8,537.27	25.05	341.780		
2,700.00	2,616.13	4,291.23	4,289.15	13.60	23.81	-118.41	-3,868.00	-7,161.04	8,555.81	8,522.42	33.39	256.273		
2,800.00	2,711.80	4,343.00	4,339.99	14.12	24.11	-118.49	-3,861.35	-7,153.85	8,550.46	8,516.32	34.14	250.446		
2,900.00	2,807.47	4,343.00	4,339.99	14.64	24.11	-118.49	-3,861.35	-7,153.85	8,545.64	8,510.97	34.66	246.527		
3,000.00	2,903.14	3,000.00	4,437.82	15.16	16.49	-118.64	-3,848.36	-7,140.95	8,541.40	8,512.42	28.98	294.784		
3,100.00	2,998.81	4,495.16	4,489.55	15.68	24.98	-118.72	-3,841.27	-7,134.36	8,537.41	8,501.01	36.40	234.564		
3,200.00	3,094.48	4,534.00	4,527.77	16.21	25.20	-118.77	-3,836.16	-7,129.72	8,534.10	8,497.00	37.10	230.055		
3,300.00	3,190.15	4,601.47	4,594.25	16.73	25.57	-118.87	-3,827.76	-7,121.76	8,531.33	8,493.41	37.92	224.971		
3,400.00	3,285.82	4,629.00	4,621.39	17.26	25.72	-118.91	-3,824.57	-7,118.46	8,529.16	8,490.59	38.57	221.153		
3,500.00	3,381.49	4,671.74	4,663.59	17.78	25.95	-118.98	-3,819.84	-7,113.58	8,527.71	8,488.44	39.28	217.117		
3,600.00	3,477.16	4,724.00	4,715.28	18.31	26.23	-119.06	-3,814.33	-7,108.28	8,527.29	8,487.26	40.03	213.024		
3,634.18	3,509.86	4,724.00	4,715.28	18.49	26.23	-119.06	-3,814.33	-7,108.28	8,527.22	8,487.02	40.21	212.091		
3,700.00	3,572.83	4,743.22	4,734.31	18.84	26.32	-119.09	-3,812.38	-7,106.45	8,527.47	8,486.84	40.63	209.881		
3,800.00	3,668.50	4,819.00	4,809.35	19.37	26.71	-119.21	-3,804.98	-7,098.84	8,527.95	8,486.47	41.49	205.564		
3,900.00	3,764.17	4,871.38	4,861.24	19.89	26.98	-119.29	-3,800.14	-7,093.63	8,528.95	8,486.72	42.23	201.952		
4,000.00	3,859.84	4,915.00	4,904.51	20.42	27.19	-119.36	-3,796.27	-7,089.72	8,530.79	8,487.85	42.94	198.672		
4,100.00	3,955.51	4,915.00	4,904.51	20.95	27.19	-119.36	-3,796.27	-7,089.72	8,533.49	8,490.05	43.44	196.431		
4,200.00	4,051.18	4,997.04	4,985.98	21.48	27.58	-119.49	-3,789.25	-7,083.15	8,536.55	8,492.23	44.32	192.613		
4,300.00	4,146.85	5,044.11	5,032.77	22.01	27.81	-119.56	-3,785.33	-7,079.76	8,540.39	8,495.35	45.04	189.637		
4,400.00	4,242.52	5,104.00	5,092.34	22.55	28.09	-119.65	-3,780.46	-7,075.86	8,544.88	8,499.07	45.81	186.531		
4,500.00	4,338.19	5,104.00	5,092.34	23.08	28.09	-119.65	-3,780.46	-7,075.86	8,550.10	8,503.80	46.30	184.662		
4,600.00	4,433.86	5,164.33	5,152.39	23.61	28.36	-119.74	-3,775.94	-7,072.39	8,555.89	8,508.83	47.07	181.777		
4,700.00	4,529.53	5,199.13	5,187.08	24.14	28.51	-119.79	-3,773.63	-7,070.60	8,562.56	8,514.85	47.71	179.453		
4,800.00	4,625.19	5,233.86	5,221.70	24.67	28.66	-119.85	-3,771.54	-7,068.97	8,570.00	8,521.64	48.36	177.220		
4,900.00	4,720.86	5,294.00	5,281.71	25.21	28.92	-119.94	-3,768.42	-7,066.52	8,578.31	8,529.19	49.12	174.643		
5,000.00	4,816.53	5,294.00	5,281.71	25.74	28.92	-119.94	-3,768.42	-7,066.52	8,587.19	8,537.60	49.59	173.162		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	4,912.20	5,363.61	5,351.21	26.27	29.20	-120.05	-3,765.36	-7,064.09	8,596.73	8,546.34	50.39	170.617		
5,200.00	5,007.87	5,418.62	5,406.15	26.80	29.42	-120.14	-3,763.20	-7,062.35	8,606.82	8,555.71	51.11	168.393		
5,300.00	5,103.54	5,473.54	5,461.01	27.34	29.63	-120.23	-3,761.26	-7,060.79	8,617.45	8,565.62	51.83	166.248		
5,400.00	5,199.22	5,528.36	5,515.79	27.87	29.85	-120.34	-3,759.55	-7,059.39	8,628.60	8,576.05	52.56	164.181		
5,500.00	5,295.46	5,579.00	5,566.40	28.39	30.05	-120.60	-3,758.17	-7,058.24	8,639.25	8,586.01	53.24	162.259		
5,600.00	5,392.60	5,640.57	5,627.94	28.89	30.28	-120.84	-3,756.71	-7,057.05	8,648.65	8,594.69	53.96	160.275		
5,700.00	5,490.50	5,697.99	5,685.34	29.37	30.49	-121.05	-3,755.53	-7,056.15	8,656.76	8,602.12	54.64	158.435		
5,800.00	5,589.05	5,755.71	5,743.05	29.83	30.70	-121.22	-3,754.53	-7,055.45	8,663.57	8,608.27	55.30	156.671		
5,900.00	5,688.14	5,813.67	5,801.00	30.26	30.92	-121.35	-3,753.71	-7,054.95	8,669.06	8,613.13	55.94	154.978		
6,000.00	5,787.63	5,864.00	5,851.32	30.68	31.11	-121.45	-3,753.15	-7,054.69	8,673.23	8,616.72	56.52	153.458		
6,100.00	5,887.41	5,947.94	5,935.26	31.07	31.40	-121.52	-3,752.35	-7,054.54	8,675.94	8,618.70	57.24	151.578		
6,200.00	5,987.36	6,022.07	6,009.39	31.44	31.66	-121.55	-3,751.68	-7,054.67	8,677.13	8,619.24	57.89	149.892		
6,300.00	6,087.36	6,096.21	6,083.52	31.80	31.92	-127.28	-3,751.05	-7,055.05	8,677.15	8,618.62	58.53	148.260		
6,400.00	6,187.36	6,181.71	6,169.01	32.15	32.22	-127.28	-3,750.36	-7,055.78	8,677.32	8,618.10	59.22	146.529		
6,500.00	6,287.36	6,299.36	6,286.66	32.51	32.63	-127.27	-3,749.27	-7,056.77	8,677.43	8,617.36	60.07	144.457		
6,600.00	6,387.36	6,417.02	6,404.30	32.87	33.04	-127.26	-3,747.96	-7,057.63	8,677.34	8,616.42	60.92	142.437		
6,700.00	6,487.36	6,511.33	6,498.61	33.23	33.38	-127.25	-3,746.78	-7,058.30	8,677.15	8,615.49	61.66	140.715		
6,800.00	6,587.36	6,600.87	6,588.13	33.59	33.70	-127.24	-3,745.60	-7,059.12	8,677.08	8,614.70	62.39	139.082		
6,900.00	6,687.26	6,690.34	6,677.59	33.95	34.02	-36.92	-3,744.37	-7,060.11	8,674.64	8,611.54	63.10	137.471		
7,000.00	6,785.58	6,762.65	6,749.89	34.31	34.28	-37.73	-3,743.36	-7,061.07	8,660.75	8,597.03	63.72	135.915		
7,100.00	6,879.94	6,823.31	6,810.53	34.65	34.49	-39.30	-3,742.63	-7,062.10	8,635.10	8,570.82	64.28	134.329		
7,200.00	6,968.01	6,880.28	6,867.49	34.97	34.69	-41.73	-3,742.06	-7,063.25	8,598.34	8,533.51	64.83	132.628		
7,300.00	7,047.61	6,932.22	6,919.41	35.27	34.87	-45.18	-3,741.63	-7,064.46	8,551.38	8,486.01	65.37	130.819		
7,400.00	7,116.80	7,010.00	6,997.17	35.54	35.14	-50.02	-3,741.14	-7,066.56	8,495.48	8,429.41	66.06	128.596		
7,500.00	7,173.86	7,023.52	7,010.68	35.81	35.19	-56.05	-3,741.07	-7,066.96	8,431.73	8,365.24	66.49	126.808		
7,600.00	7,217.38	7,089.13	7,076.25	36.17	35.42	-64.15	-3,740.46	-7,068.96	8,361.87	8,294.62	67.25	124.335		
7,700.00	7,246.31	7,134.65	7,121.75	36.80	35.58	-73.87	-3,739.81	-7,070.43	8,287.60	8,219.60	68.00	121.879		
7,800.00	7,259.92	7,158.76	7,145.84	37.72	35.67	-84.68	-3,739.38	-7,071.23	8,210.89	8,142.16	68.73	119.466		
7,900.00	7,260.77	7,164.77	7,151.85	38.86	35.69	-89.06	-3,739.27	-7,071.43	8,133.69	8,064.23	69.46	117.098		
8,000.00	7,260.39	7,169.07	7,156.14	40.19	35.70	-89.11	-3,739.19	-7,071.57	8,056.95	7,986.68	70.28	114.645		
8,100.00	7,260.01	7,173.39	7,160.46	41.67	35.72	-89.16	-3,739.10	-7,071.72	7,980.73	7,909.54	71.19	112.106		
8,200.00	7,259.63	7,177.76	7,164.83	43.30	35.73	-89.20	-3,739.01	-7,071.87	7,905.04	7,832.85	72.19	109.497		
8,300.00	7,259.25	7,182.16	7,169.22	45.05	35.75	-89.25	-3,738.92	-7,072.02	7,829.89	7,756.60	73.29	106.831		
8,400.00	7,258.87	7,186.60	7,173.66	46.91	35.76	-89.30	-3,738.83	-7,072.17	7,755.30	7,680.82	74.48	104.124		
8,500.00	7,258.49	7,191.07	7,178.13	48.87	35.78	-89.35	-3,738.73	-7,072.33	7,681.29	7,605.53	75.76	101.390		
8,600.00	7,258.11	7,195.58	7,182.63	50.92	35.80	-89.40	-3,738.63	-7,072.48	7,607.87	7,530.74	77.13	98.641		
8,700.00	7,257.73	7,200.13	7,187.18	53.04	35.81	-89.45	-3,738.53	-7,072.64	7,535.06	7,456.48	78.58	95.891		
8,800.00	7,257.35	7,204.72	7,191.76	55.23	35.83	-89.50	-3,738.43	-7,072.80	7,462.87	7,382.76	80.12	93.151		
8,900.00	7,256.97	7,209.34	7,196.38	57.47	35.84	-89.55	-3,738.32	-7,072.96	7,391.33	7,309.60	81.74	90.430		
9,000.00	7,256.59	7,214.01	7,201.04	59.77	35.86	-89.60	-3,738.21	-7,073.12	7,320.46	7,237.03	83.43	87.739		
9,100.00	7,256.21	7,218.71	7,205.74	62.12	35.88	-89.65	-3,738.10	-7,073.29	7,250.27	7,165.06	85.21	85.084		
9,200.00	7,255.83	7,223.45	7,210.48	64.50	35.89	-89.71	-3,737.98	-7,073.46	7,180.79	7,093.72	87.07	82.474		
9,300.00	7,255.45	7,228.24	7,215.26	66.93	35.91	-89.76	-3,737.86	-7,073.63	7,112.03	7,023.03	89.00	79.913		
9,400.00	7,255.07	7,233.06	7,220.08	69.38	35.93	-89.81	-3,737.74	-7,073.80	7,044.02	6,953.02	91.00	77.407		
9,500.00	7,254.69	7,237.93	7,224.94	71.87	35.94	-89.87	-3,737.61	-7,073.97	6,976.78	6,883.70	93.07	74.959		
9,600.00	7,254.31	7,242.83	7,229.84	74.38	35.96	-89.92	-3,737.49	-7,074.15	6,910.32	6,815.10	95.22	72.573		
9,700.00	7,253.93	7,247.79	7,234.79	76.92	35.98	-89.98	-3,737.35	-7,074.33	6,844.68	6,747.25	97.43	70.250		
9,800.00	7,253.55	7,252.78	7,239.78	79.48	36.00	-90.03	-3,737.22	-7,074.51	6,779.88	6,680.17	99.71	67.994		
9,900.00	7,253.18	7,257.82	7,244.81	82.06	36.01	-90.09	-3,737.08	-7,074.69	6,715.94	6,613.88	102.06	65.804		
10,000.00	7,252.80	7,262.90	7,249.89	84.65	36.03	-90.14	-3,736.94	-7,074.87	6,652.89	6,548.42	104.47	63.682		
10,100.00	7,252.42	7,268.03	7,255.01	87.27	36.05	-90.20	-3,736.79	-7,075.06	6,590.74	6,483.80	106.94	61.628		
10,200.00	7,252.04	7,273.20	7,260.17	89.89	36.07	-90.26	-3,736.64	-7,075.25	6,529.54	6,420.06	109.48	59.642		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,251.66	7,278.42	7,265.39	92.54	36.09	-90.31	-3,736.49	-7,075.44	6,469.29	6,357.22	112.07	57.723		
10,400.00	7,251.28	7,283.68	7,270.65	95.19	36.11	-90.37	-3,736.33	-7,075.64	6,410.04	6,295.32	114.73	55.871		
10,500.00	7,250.90	7,288.99	7,275.95	97.86	36.12	-90.43	-3,736.17	-7,075.84	6,351.81	6,234.37	117.44	54.085		
10,600.00	7,250.52	7,294.35	7,281.31	100.53	36.14	-90.49	-3,736.00	-7,076.04	6,294.63	6,174.42	120.21	52.364		
10,700.00	7,250.14	7,299.76	7,286.71	103.22	36.16	-90.55	-3,735.83	-7,076.24	6,238.52	6,115.49	123.03	50.707		
10,800.00	7,249.76	7,305.22	7,292.16	105.91	36.18	-90.61	-3,735.66	-7,076.45	6,183.52	6,057.61	125.91	49.112		
10,900.00	7,249.38	7,310.73	7,297.66	108.62	36.20	-90.67	-3,735.48	-7,076.65	6,129.65	6,000.82	128.83	47.578		
11,000.00	7,249.00	7,316.29	7,303.21	111.33	36.22	-90.73	-3,735.29	-7,076.87	6,076.95	5,945.14	131.81	46.104		
11,100.00	7,248.62	7,321.90	7,308.81	114.04	36.24	-90.79	-3,735.11	-7,077.08	6,025.44	5,890.61	134.83	44.688		
11,200.00	7,248.24	7,327.56	7,314.47	116.77	36.26	-90.86	-3,734.91	-7,077.30	5,975.16	5,837.26	137.90	43.329		
11,300.00	7,247.86	7,333.27	7,320.18	119.50	36.28	-90.92	-3,734.72	-7,077.52	5,926.14	5,785.12	141.01	42.025		
11,400.00	7,247.48	7,339.04	7,325.94	122.24	36.30	-90.98	-3,734.51	-7,077.74	5,878.40	5,734.23	144.17	40.775		
11,500.00	7,247.10	7,344.86	7,331.75	124.98	36.32	-91.05	-3,734.31	-7,077.96	5,831.99	5,684.63	147.36	39.577		
11,600.00	7,246.72	7,350.74	7,337.62	127.73	36.34	-91.11	-3,734.10	-7,078.19	5,786.93	5,636.34	150.59	38.429		
11,700.00	7,246.34	7,317.05	7,303.98	130.48	36.23	-90.74	-3,735.33	-7,076.88	5,743.37	5,589.71	153.66	37.377		
11,800.00	7,245.96	7,318.94	7,305.87	133.24	36.23	-90.76	-3,735.27	-7,076.94	5,701.14	5,544.20	156.94	36.328		
11,900.00	7,245.58	7,320.83	7,307.75	136.00	36.24	-90.78	-3,735.22	-7,077.01	5,660.36	5,500.12	160.24	35.325		
12,000.00	7,245.21	7,322.70	7,309.62	138.76	36.25	-90.80	-3,735.17	-7,077.08	5,621.06	5,457.49	163.56	34.366		
12,100.00	7,244.83	7,324.55	7,311.47	141.53	36.25	-90.82	-3,735.12	-7,077.15	5,583.27	5,416.36	166.91	33.451		
12,200.00	7,244.45	7,326.40	7,313.31	144.30	36.26	-90.84	-3,735.07	-7,077.21	5,547.02	5,376.75	170.27	32.578		
12,300.00	7,244.07	7,328.23	7,315.15	147.08	36.27	-90.86	-3,735.02	-7,077.28	5,512.36	5,338.71	173.65	31.744		
12,400.00	7,243.69	7,330.05	7,316.97	149.86	36.27	-90.88	-3,734.98	-7,077.34	5,479.29	5,302.26	177.03	30.951		
12,500.00	7,243.31	7,331.86	7,318.77	152.64	36.28	-90.90	-3,734.93	-7,077.41	5,447.86	5,267.44	180.43	30.194		
12,600.00	7,242.93	7,333.66	7,320.57	155.42	36.29	-90.92	-3,734.88	-7,077.47	5,418.10	5,234.28	183.82	29.475		
12,700.00	7,242.55	7,335.45	7,322.36	158.21	36.29	-90.94	-3,734.84	-7,077.53	5,390.02	5,202.81	187.21	28.791		
12,800.00	7,242.17	7,337.22	7,324.13	161.00	36.30	-90.96	-3,734.79	-7,077.60	5,363.66	5,173.07	190.59	28.142		
12,900.00	7,241.79	7,338.99	7,325.89	163.79	36.30	-90.98	-3,734.75	-7,077.66	5,339.04	5,145.08	193.96	27.526		
13,000.00	7,241.41	7,340.74	7,327.65	166.58	36.31	-91.00	-3,734.71	-7,077.72	5,316.19	5,118.87	197.32	26.942		
13,100.00	7,241.03	7,342.48	7,329.39	169.38	36.32	-91.02	-3,734.67	-7,077.78	5,295.13	5,094.48	200.65	26.390		
13,200.00	7,240.65	7,344.22	7,331.12	172.18	36.32	-91.04	-3,734.62	-7,077.84	5,275.88	5,071.92	203.96	25.867		
13,300.00	7,240.27	7,345.94	7,332.84	174.98	36.33	-91.06	-3,734.58	-7,077.90	5,258.46	5,051.22	207.24	25.374		
13,400.00	7,239.89	7,347.65	7,334.55	177.78	36.34	-91.08	-3,734.54	-7,077.96	5,242.88	5,032.40	210.48	24.909		
13,500.00	7,239.51	7,350.00	7,344.89	180.58	36.37	-91.19	-3,734.31	-7,078.31	5,229.19	5,015.46	213.73	24.466		
13,600.00	7,239.13	7,350.00	7,344.89	183.39	36.37	-91.19	-3,734.31	-7,078.31	5,217.36	5,000.48	216.88	24.056		
13,700.00	7,238.75	7,350.00	7,344.89	186.20	36.37	-91.19	-3,734.31	-7,078.31	5,207.42	4,987.44	219.99	23.672		
13,800.00	7,238.37	7,350.00	7,344.89	189.00	36.37	-91.19	-3,734.31	-7,078.31	5,199.39	4,976.35	223.04	23.312		
13,900.00	7,237.99	7,361.56	7,341.33	191.81	36.39	-91.15	-3,734.39	-7,078.19	5,193.27	4,967.22	226.04	22.975		
14,000.00	7,237.62	7,358.56	7,344.33	194.63	36.38	-91.19	-3,734.33	-7,078.29	5,189.07	4,960.10	228.97	22.663		
14,100.00	7,237.24	7,360.44	7,347.33	197.44	36.38	-91.22	-3,734.26	-7,078.40	5,186.79	4,954.95	231.85	22.372		
14,168.13	7,236.98	7,362.48	7,349.37	199.36	36.39	-91.24	-3,734.22	-7,078.47	5,186.35	4,952.57	233.77	22.185 CC		
14,200.00	7,236.86	7,363.44	7,350.32	200.25	36.39	-91.25	-3,734.20	-7,078.50	5,186.44	4,951.78	234.66	22.102		
14,300.00	7,236.48	7,366.44	7,353.32	203.07	36.40	-91.29	-3,734.13	-7,078.60	5,188.02	4,950.62	237.41	21.853 ES		
14,400.00	7,236.10	7,369.44	7,356.32	205.88	36.41	-91.32	-3,734.07	-7,078.70	5,191.52	4,951.45	240.08	21.625		
14,500.00	7,235.72	7,372.44	7,359.31	208.70	36.42	-91.35	-3,734.01	-7,078.80	5,196.94	4,954.28	242.67	21.416		
14,600.00	7,235.34	7,375.43	7,362.31	211.52	36.44	-91.38	-3,733.94	-7,078.91	5,204.28	4,959.10	245.18	21.227		
14,700.00	7,234.96	7,378.43	7,365.31	214.34	36.45	-91.42	-3,733.88	-7,079.01	5,213.52	4,965.92	247.61	21.056		
14,800.00	7,234.58	7,381.43	7,368.30	217.16	36.46	-91.45	-3,733.81	-7,079.11	5,224.66	4,974.71	249.95	20.903		
14,900.00	7,234.20	7,384.43	7,371.30	219.98	36.47	-91.48	-3,733.75	-7,079.21	5,237.69	4,985.48	252.21	20.767		
15,000.00	7,233.82	7,387.43	7,374.30	222.81	36.48	-91.52	-3,733.68	-7,079.31	5,252.58	4,998.20	254.38	20.648		
15,100.00	7,233.44	7,390.43	7,377.29	225.63	36.49	-91.55	-3,733.62	-7,079.41	5,269.33	5,012.86	256.46	20.546		
15,200.00	7,233.06	7,393.43	7,380.29	228.45	36.50	-91.58	-3,733.56	-7,079.52	5,287.91	5,029.45	258.46	20.460		
15,216.01	7,233.00	7,393.91	7,380.77	228.91	36.50	-91.59	-3,733.55	-7,079.53	5,291.06	5,032.29	258.77	20.447 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	69.00	3.28	3.28	-119.92	-4,410.54	-7,664.30	8,843.02					
100.00	100.00	31.00	100.00	3.28	3.32	-119.92	-4,410.54	-7,664.30	8,842.75	8,836.15	6.61	1,337.976		
200.00	200.00	131.00	200.00	3.34	4.33	-119.92	-4,410.54	-7,664.30	8,842.75	8,835.09	7.67	1,153.254		
300.00	299.98	230.98	299.98	3.45	7.12	-114.18	-4,410.54	-7,664.30	8,843.47	8,832.91	10.56	837.170		
400.00	399.84	330.84	399.84	3.61	10.34	-114.17	-4,410.54	-7,664.30	8,845.62	8,831.67	13.94	634.461		
500.00	499.45	430.45	499.45	3.82	13.68	-114.16	-4,410.54	-7,664.30	8,849.20	8,831.71	17.49	505.984		
600.00	598.70	529.70	598.70	4.07	17.06	-114.14	-4,410.54	-7,664.30	8,854.21	8,833.09	21.12	419.260		
700.00	697.47	628.47	697.47	4.35	20.46	-114.11	-4,410.54	-7,664.30	8,860.67	8,835.88	24.80	357.353		
800.00	795.62	726.62	795.62	4.67	23.85	-114.08	-4,410.54	-7,664.30	8,868.59	8,840.09	28.50	311.181		
900.00	893.06	824.06	893.06	5.01	27.22	-114.04	-4,410.54	-7,664.30	8,877.96	8,845.74	32.22	275.545		
1,000.00	989.64	920.64	989.64	5.38	30.57	-113.99	-4,410.54	-7,664.30	8,888.80	8,852.85	35.95	247.284		
1,100.00	1,085.42	1,016.42	1,085.42	5.78	33.90	-114.05	-4,410.54	-7,664.30	8,900.91	8,861.24	39.67	224.355		
1,200.00	1,181.09	1,112.09	1,181.09	6.20	37.22	-114.21	-4,410.54	-7,664.30	8,913.26	8,869.84	43.42	205.282		
1,300.00	1,276.76	1,207.76	1,276.76	6.65	40.55	-114.38	-4,410.54	-7,664.30	8,925.68	8,878.50	47.18	189.168		
1,400.00	1,372.43	1,303.43	1,372.43	7.11	43.88	-114.54	-4,410.54	-7,664.30	8,938.18	8,887.22	50.96	175.388		
1,500.00	1,468.10	1,400.90	1,468.10	7.57	47.27	-114.70	-4,410.54	-7,664.30	8,950.76	8,895.94	54.82	163.288		
1,600.00	1,563.77	1,505.23	1,563.77	8.05	50.91	-114.87	-4,410.54	-7,664.30	8,963.41	8,904.49	58.92	152.135		
1,700.00	1,659.44	1,609.56	1,659.44	8.53	54.54	-115.03	-4,410.54	-7,664.30	8,976.14	8,913.11	63.03	142.417		
1,800.00	1,755.11	1,686.11	1,755.11	9.02	57.21	-115.19	-4,410.54	-7,664.30	8,988.95	8,922.77	66.18	135.835		
1,900.00	1,850.78	1,781.78	1,850.78	9.52	60.55	-115.35	-4,410.54	-7,664.30	9,001.83	8,931.83	70.00	128.605		
2,000.00	1,946.45	1,877.45	1,946.45	10.02	63.88	-115.52	-4,410.54	-7,664.30	9,014.79	8,940.96	73.82	122.117		
2,100.00	2,042.12	1,973.12	2,042.12	10.52	67.22	-115.68	-4,410.54	-7,664.30	9,027.82	8,950.17	77.65	116.263		
2,200.00	2,137.78	2,068.78	2,137.78	11.03	70.55	-115.84	-4,410.54	-7,664.30	9,040.93	8,959.44	81.48	110.955		
2,300.00	2,233.45	2,164.45	2,233.45	11.54	73.89	-116.00	-4,410.54	-7,664.30	9,054.11	8,968.79	85.32	106.122		
2,400.00	2,329.12	2,260.12	2,329.12	12.05	77.23	-116.16	-4,410.54	-7,664.30	9,067.37	8,978.21	89.16	101.702		
2,500.00	2,424.79	2,355.79	2,424.79	12.56	80.56	-116.32	-4,410.54	-7,664.30	9,080.70	8,987.70	93.00	97.646		
2,600.00	2,520.46	2,451.46	2,520.46	13.08	83.90	-116.47	-4,410.54	-7,664.30	9,094.10	8,997.26	96.84	93.910		
2,700.00	2,616.13	2,547.13	2,616.13	13.60	87.24	-116.63	-4,410.54	-7,664.30	9,107.58	9,006.90	100.68	90.458		
2,800.00	2,711.80	2,642.80	2,711.80	14.12	90.57	-116.79	-4,410.54	-7,664.30	9,121.13	9,016.60	104.53	87.260		
2,900.00	2,807.47	2,738.47	2,807.47	14.64	93.91	-116.95	-4,410.54	-7,664.30	9,134.75	9,026.38	108.37	84.289		
3,000.00	2,903.14	2,834.14	2,903.14	15.16	97.25	-117.11	-4,410.54	-7,664.30	9,148.45	9,036.23	112.22	81.521		
3,100.00	2,998.81	2,929.81	2,998.81	15.68	100.59	-117.26	-4,410.54	-7,664.30	9,162.22	9,046.14	116.07	78.936		
3,200.00	3,094.48	3,025.48	3,094.48	16.21	103.93	-117.42	-4,410.54	-7,664.30	9,176.05	9,056.13	119.92	76.518		
3,300.00	3,190.15	3,121.15	3,190.15	16.73	107.26	-117.57	-4,410.54	-7,664.30	9,189.97	9,066.19	123.77	74.250		
3,400.00	3,285.82	3,216.82	3,285.82	17.26	110.60	-117.73	-4,410.54	-7,664.30	9,203.95	9,076.32	127.62	72.119		
3,500.00	3,381.49	3,312.49	3,381.49	17.78	113.94	-117.88	-4,410.54	-7,664.30	9,218.00	9,086.53	131.47	70.113		
3,600.00	3,477.16	3,408.16	3,477.16	18.31	117.28	-118.04	-4,410.54	-7,664.30	9,232.12	9,096.80	135.33	68.221		
3,700.00	3,572.83	3,503.83	3,572.83	18.84	120.62	-118.19	-4,410.54	-7,664.30	9,246.32	9,107.14	139.18	66.435		
3,800.00	3,668.50	3,600.50	3,668.50	19.37	123.99	-118.34	-4,410.54	-7,664.30	9,260.58	9,117.51	143.07	64.729		
3,900.00	3,764.17	3,704.83	3,764.17	19.89	127.63	-118.50	-4,410.54	-7,664.30	9,274.91	9,127.69	147.22	62.999		
4,000.00	3,859.84	3,809.16	3,859.84	20.42	131.27	-118.65	-4,410.54	-7,664.30	9,289.31	9,137.93	151.38	61.364		
4,100.00	3,955.51	3,886.51	3,955.51	20.95	133.97	-118.80	-4,410.54	-7,664.30	9,303.78	9,149.19	154.59	60.182		
4,200.00	4,051.18	3,982.18	4,051.18	21.48	137.31	-118.95	-4,410.54	-7,664.30	9,318.32	9,159.87	158.45	58.810		
4,300.00	4,146.85	4,077.85	4,146.85	22.01	140.65	-119.11	-4,410.54	-7,664.30	9,332.93	9,170.62	162.30	57.503		
4,400.00	4,242.52	4,173.52	4,242.52	22.55	143.99	-119.26	-4,410.54	-7,664.30	9,347.60	9,181.44	166.16	56.257		
4,500.00	4,338.19	4,269.19	4,338.19	23.08	147.33	-119.41	-4,410.54	-7,664.30	9,362.34	9,192.33	170.01	55.068		
4,600.00	4,433.86	4,364.86	4,433.86	23.61	150.67	-119.56	-4,410.54	-7,664.30	9,377.15	9,203.28	173.87	53.933		
4,700.00	4,529.53	4,460.53	4,529.53	24.14	154.01	-119.71	-4,410.54	-7,664.30	9,392.03	9,214.30	177.72	52.846		
4,800.00	4,625.19	4,556.19	4,625.19	24.67	157.35	-119.85	-4,410.54	-7,664.30	9,406.97	9,225.39	181.58	51.807		
4,900.00	4,720.86	4,651.86	4,720.86	25.21	160.68	-120.00	-4,410.54	-7,664.30	9,421.98	9,236.54	185.43	50.810		
5,000.00	4,816.53	4,747.53	4,816.53	25.74	164.02	-120.15	-4,410.54	-7,664.30	9,437.05	9,247.76	189.29	49.855		
5,100.00	4,912.20	4,843.20	4,912.20	26.27	167.36	-120.30	-4,410.54	-7,664.30	9,452.19	9,259.05	193.14	48.938		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	4,938.87	5,007.87	26.80	170.70	-120.45	-4,410.54	-7,664.30	9,467.40	9,270.40	197.00	48.058		
5,300.00	5,103.54	5,034.54	5,103.54	27.34	174.04	-120.59	-4,410.54	-7,664.30	9,482.67	9,281.81	200.86	47.211		
5,400.00	5,199.22	5,130.22	5,199.22	27.87	177.38	-120.76	-4,410.54	-7,664.30	9,498.00	9,293.29	204.71	46.397		
5,500.00	5,295.46	5,226.46	5,295.46	28.39	180.74	-121.15	-4,410.54	-7,664.30	9,512.35	9,303.77	208.58	45.606		
5,600.00	5,392.60	5,323.60	5,392.60	28.89	184.13	-121.49	-4,410.54	-7,664.30	9,524.96	9,312.50	212.45	44.833		
5,700.00	5,490.50	5,421.50	5,490.50	29.37	187.55	-121.77	-4,410.54	-7,664.30	9,535.79	9,319.45	216.34	44.078		
5,800.00	5,589.05	5,520.05	5,589.05	29.83	190.99	-122.01	-4,410.54	-7,664.30	9,544.82	9,324.59	220.23	43.340		
5,900.00	5,688.14	5,619.14	5,688.14	30.26	194.45	-122.20	-4,410.54	-7,664.30	9,552.03	9,327.91	224.12	42.619		
6,000.00	5,787.63	5,718.63	5,787.63	30.68	197.92	-122.35	-4,410.54	-7,664.30	9,557.39	9,329.38	228.01	41.916		
6,100.00	5,887.41	5,818.41	5,887.41	31.07	201.40	-122.44	-4,410.54	-7,664.30	9,560.89	9,329.00	231.89	41.230		
6,200.00	5,987.36	5,918.36	5,987.36	31.44	204.89	-122.48	-4,410.54	-7,664.30	9,562.52	9,326.77	235.75	40.561		
6,300.00	6,087.36	6,018.36	6,087.36	31.80	208.38	-128.22	-4,410.54	-7,664.30	9,562.65	9,323.04	239.61	39.910		
6,400.00	6,187.36	6,118.36	6,187.36	32.15	211.87	-128.22	-4,410.54	-7,664.30	9,562.65	9,319.19	243.46	39.278		
6,500.00	6,287.36	6,218.36	6,287.36	32.51	215.36	-128.22	-4,410.54	-7,664.30	9,562.65	9,315.33	247.32	38.666		
6,600.00	6,387.36	6,318.36	6,387.36	32.87	218.85	-128.22	-4,410.54	-7,664.30	9,562.65	9,311.48	251.17	38.072		
6,700.00	6,487.36	6,418.36	6,487.36	33.23	222.34	-128.22	-4,410.54	-7,664.30	9,562.65	9,307.62	255.03	37.496		
6,800.00	6,587.36	6,518.36	6,587.36	33.59	225.83	-128.22	-4,410.54	-7,664.30	9,562.65	9,303.76	258.89	36.937		
6,900.00	6,687.26	6,618.26	6,687.26	33.95	229.32	-37.92	-4,410.54	-7,664.30	9,560.19	9,297.45	262.74	36.386		
7,000.00	6,785.58	6,716.58	6,785.58	34.31	232.75	-38.77	-4,410.54	-7,664.30	9,546.26	9,279.73	266.53	35.817		
7,100.00	6,879.94	6,810.94	6,879.94	34.65	236.05	-40.43	-4,410.54	-7,664.30	9,520.38	9,250.20	270.18	35.238		
7,200.00	6,968.01	6,900.99	6,968.01	34.97	239.19	-43.01	-4,410.54	-7,664.30	9,483.24	9,209.57	273.67	34.651		
7,300.00	7,047.61	6,978.61	7,047.61	35.27	241.90	-46.66	-4,410.54	-7,664.30	9,435.85	9,159.10	276.75	34.095		
7,400.00	7,116.80	7,047.80	7,116.80	35.54	244.32	-51.59	-4,410.54	-7,664.30	9,379.45	9,099.90	279.55	33.552		
7,500.00	7,173.86	7,104.86	7,173.86	35.81	246.31	-58.01	-4,410.54	-7,664.30	9,315.55	9,033.57	281.98	33.036		
7,600.00	7,217.38	7,148.38	7,217.38	36.17	247.83	-66.04	-4,410.54	-7,664.30	9,245.80	8,961.81	283.99	32.557		
7,700.00	7,246.31	7,177.31	7,246.31	36.80	248.84	-75.57	-4,410.54	-7,664.30	9,172.01	8,886.44	285.57	32.118		
7,800.00	7,259.92	7,209.08	7,259.92	37.72	249.95	-86.05	-4,410.54	-7,664.30	9,096.07	8,808.74	287.33	31.657		
7,900.00	7,260.77	7,208.23	7,260.77	38.86	249.92	-90.25	-4,410.54	-7,664.30	9,019.81	8,731.78	288.03	31.316		
8,000.00	7,260.39	7,208.61	7,260.39	40.19	249.93	-90.25	-4,410.54	-7,664.30	8,943.99	8,655.13	288.86	30.963		
8,100.00	7,260.01	7,208.99	7,260.01	41.67	249.94	-90.25	-4,410.54	-7,664.30	8,868.66	8,578.87	289.79	30.604		
8,200.00	7,259.63	7,209.37	7,259.63	43.30	249.96	-90.24	-4,410.54	-7,664.30	8,793.81	8,503.00	290.81	30.239		
8,300.00	7,259.25	7,209.75	7,259.25	45.05	249.97	-90.24	-4,410.54	-7,664.30	8,719.48	8,427.56	291.92	29.869		
8,400.00	7,258.87	7,189.87	7,258.87	46.91	249.27	-90.24	-4,410.54	-7,664.30	8,645.65	8,353.24	292.41	29.567		
8,500.00	7,258.49	7,189.49	7,258.49	48.87	249.26	-90.23	-4,410.54	-7,664.30	8,572.36	8,278.69	293.67	29.191		
8,600.00	7,258.11	7,189.11	7,258.11	50.92	249.25	-90.23	-4,410.54	-7,664.30	8,499.62	8,204.61	295.01	28.811		
8,700.00	7,257.73	7,188.73	7,257.73	53.04	249.24	-90.22	-4,410.54	-7,664.30	8,427.43	8,131.00	296.43	28.429		
8,800.00	7,257.35	7,188.35	7,257.35	55.23	249.22	-90.22	-4,410.54	-7,664.30	8,355.82	8,057.88	297.94	28.045		
8,900.00	7,256.97	7,187.97	7,256.97	57.47	249.21	-90.22	-4,410.54	-7,664.30	8,284.79	7,985.27	299.52	27.660		
9,000.00	7,256.59	7,187.59	7,256.59	59.77	249.20	-90.21	-4,410.54	-7,664.30	8,214.37	7,913.19	301.17	27.274		
9,100.00	7,256.21	7,187.21	7,256.21	62.12	249.18	-90.21	-4,410.54	-7,664.30	8,144.56	7,841.66	302.90	26.888		
9,200.00	7,255.83	7,186.83	7,255.83	64.50	249.17	-90.21	-4,410.54	-7,664.30	8,075.40	7,770.69	304.70	26.503		
9,300.00	7,255.45	7,186.45	7,255.45	66.93	249.16	-90.20	-4,410.54	-7,664.30	8,006.88	7,700.31	306.57	26.118		
9,400.00	7,255.07	7,186.07	7,255.07	69.38	249.14	-90.20	-4,410.54	-7,664.30	7,939.03	7,630.53	308.50	25.734		
9,500.00	7,254.69	7,185.69	7,254.69	71.87	249.13	-90.20	-4,410.54	-7,664.30	7,871.87	7,561.36	310.50	25.352		
9,600.00	7,254.31	7,185.31	7,254.31	74.38	249.12	-90.19	-4,410.54	-7,664.30	7,805.40	7,492.84	312.56	24.972		
9,700.00	7,253.93	7,184.93	7,253.93	76.92	249.10	-90.19	-4,410.54	-7,664.30	7,739.67	7,424.98	314.69	24.595		
9,800.00	7,253.55	7,184.55	7,253.55	79.48	249.09	-90.18	-4,410.54	-7,664.30	7,674.67	7,357.79	316.87	24.220		
9,900.00	7,253.18	7,184.18	7,253.18	82.06	249.08	-90.18	-4,410.54	-7,664.30	7,610.43	7,291.31	319.12	23.848		
10,000.00	7,252.80	7,183.80	7,252.80	84.65	249.06	-90.18	-4,410.54	-7,664.30	7,546.96	7,225.55	321.42	23.480		
10,100.00	7,252.42	7,183.42	7,252.42	87.27	249.05	-90.17	-4,410.54	-7,664.30	7,484.30	7,160.53	323.77	23.116		
10,200.00	7,252.04	7,183.04	7,252.04	89.89	249.04	-90.17	-4,410.54	-7,664.30	7,422.46	7,096.27	326.19	22.755		
10,300.00	7,251.66	7,182.66	7,251.66	92.54	249.02	-90.17	-4,410.54	-7,664.30	7,361.45	7,032.80	328.65	22.399		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,251.28	7,182.28	7,251.28	95.19	249.01	-90.16	-4,410.54	-7,664.30	7,301.30	6,970.13	331.17	22.047		
10,500.00	7,250.90	7,181.90	7,250.90	97.86	249.00	-90.16	-4,410.54	-7,664.30	7,242.04	6,908.30	333.74	21.700		
10,600.00	7,250.52	7,181.52	7,250.52	100.53	248.98	-90.15	-4,410.54	-7,664.30	7,183.67	6,847.32	336.36	21.357		
10,700.00	7,250.14	7,181.14	7,250.14	103.22	248.97	-90.15	-4,410.54	-7,664.30	7,126.24	6,787.21	339.02	21.020		
10,800.00	7,249.76	7,180.76	7,249.76	105.91	248.96	-90.15	-4,410.54	-7,664.30	7,069.75	6,728.01	341.74	20.688		
10,900.00	7,249.38	7,180.38	7,249.38	108.62	248.94	-90.14	-4,410.54	-7,664.30	7,014.23	6,669.73	344.50	20.361		
11,000.00	7,249.00	7,180.00	7,249.00	111.33	248.93	-90.14	-4,410.54	-7,664.30	6,959.70	6,612.40	347.30	20.039		
11,100.00	7,248.62	7,179.62	7,248.62	114.04	248.92	-90.14	-4,410.54	-7,664.30	6,906.20	6,556.05	350.15	19.723		
11,200.00	7,248.24	7,179.24	7,248.24	116.77	248.90	-90.13	-4,410.54	-7,664.30	6,853.73	6,500.69	353.04	19.413		
11,300.00	7,247.86	7,178.86	7,247.86	119.50	248.89	-90.13	-4,410.54	-7,664.30	6,802.33	6,446.36	355.97	19.109		
11,400.00	7,247.48	7,178.48	7,247.48	122.24	248.88	-90.12	-4,410.54	-7,664.30	6,752.02	6,393.08	358.94	18.811		
11,500.00	7,247.10	7,178.10	7,247.10	124.98	248.86	-90.12	-4,410.54	-7,664.30	6,702.83	6,340.88	361.95	18.519		
11,600.00	7,246.72	7,177.72	7,246.72	127.73	248.85	-90.12	-4,410.54	-7,664.30	6,654.77	6,289.78	364.99	18.233		
11,700.00	7,246.34	7,177.34	7,246.34	130.48	248.84	-90.11	-4,410.54	-7,664.30	6,607.88	6,239.81	368.06	17.953		
11,800.00	7,245.96	7,176.96	7,245.96	133.24	248.82	-90.11	-4,410.54	-7,664.30	6,562.17	6,191.01	371.17	17.680		
11,900.00	7,245.58	7,176.58	7,245.58	136.00	248.81	-90.11	-4,410.54	-7,664.30	6,517.68	6,143.38	374.30	17.413		
12,000.00	7,245.21	7,176.21	7,245.21	138.76	248.80	-90.10	-4,410.54	-7,664.30	6,474.43	6,096.97	377.46	17.152		
12,100.00	7,244.83	7,175.83	7,244.83	141.53	248.78	-90.10	-4,410.54	-7,664.30	6,432.44	6,051.79	380.65	16.899		
12,200.00	7,244.45	7,175.45	7,244.45	144.30	248.77	-90.10	-4,410.54	-7,664.30	6,391.74	6,007.88	383.86	16.651		
12,300.00	7,244.07	7,175.07	7,244.07	147.08	248.76	-90.09	-4,410.54	-7,664.30	6,352.36	5,965.27	387.09	16.411		
12,400.00	7,243.69	7,174.69	7,243.69	149.86	248.74	-90.09	-4,410.54	-7,664.30	6,314.31	5,923.98	390.34	16.177		
12,500.00	7,243.31	7,174.31	7,243.31	152.64	248.73	-90.08	-4,410.54	-7,664.30	6,277.63	5,884.03	393.60	15.949		
12,600.00	7,242.93	7,173.93	7,242.93	155.42	248.72	-90.08	-4,410.54	-7,664.30	6,242.33	5,845.46	396.87	15.729		
12,700.00	7,242.55	7,173.55	7,242.55	158.21	248.71	-90.08	-4,410.54	-7,664.30	6,208.44	5,808.29	400.16	15.515		
12,800.00	7,242.17	7,173.17	7,242.17	161.00	248.69	-90.07	-4,410.54	-7,664.30	6,175.99	5,772.54	403.45	15.308		
12,900.00	7,241.79	7,172.79	7,241.79	163.79	248.68	-90.07	-4,410.54	-7,664.30	6,144.99	5,738.25	406.74	15.108		
13,000.00	7,241.41	7,172.41	7,241.41	166.58	248.67	-90.07	-4,410.54	-7,664.30	6,115.47	5,705.44	410.03	14.915		
13,100.00	7,241.03	7,172.03	7,241.03	169.38	248.65	-90.06	-4,410.54	-7,664.30	6,087.45	5,674.13	413.32	14.728		
13,200.00	7,240.65	7,171.65	7,240.65	172.18	248.64	-90.06	-4,410.54	-7,664.30	6,060.95	5,644.35	416.61	14.548		
13,300.00	7,240.27	7,171.27	7,240.27	174.98	248.63	-90.05	-4,410.54	-7,664.30	6,035.99	5,616.11	419.88	14.376		
13,400.00	7,239.89	7,170.89	7,239.89	177.78	248.61	-90.05	-4,410.54	-7,664.30	6,012.59	5,589.45	423.14	14.209		
13,500.00	7,239.51	7,170.51	7,239.51	180.58	248.60	-90.05	-4,410.54	-7,664.30	5,990.77	5,564.39	426.38	14.050		
13,600.00	7,239.13	7,170.13	7,239.13	183.39	248.59	-90.04	-4,410.54	-7,664.30	5,970.55	5,540.94	429.61	13.898		
13,700.00	7,238.75	7,169.75	7,238.75	186.20	248.57	-90.04	-4,410.54	-7,664.30	5,951.93	5,519.13	432.81	13.752		
13,800.00	7,238.37	7,169.37	7,238.37	189.00	248.56	-90.04	-4,410.54	-7,664.30	5,934.94	5,498.97	435.98	13.613		
13,900.00	7,237.99	7,168.99	7,237.99	191.81	248.55	-90.03	-4,410.54	-7,664.30	5,919.60	5,480.48	439.12	13.481		
14,000.00	7,237.62	7,168.62	7,237.62	194.63	248.53	-90.03	-4,410.54	-7,664.30	5,905.90	5,463.68	442.23	13.355		
14,100.00	7,237.24	7,168.24	7,237.24	197.44	248.52	-90.02	-4,410.54	-7,664.30	5,893.88	5,448.58	445.30	13.236		
14,200.00	7,236.86	7,167.86	7,236.86	200.25	248.51	-90.02	-4,410.54	-7,664.30	5,883.52	5,435.20	448.33	13.123		
14,300.00	7,236.48	7,167.48	7,236.48	203.07	248.49	-90.02	-4,410.54	-7,664.30	5,874.85	5,423.54	451.31	13.017		
14,400.00	7,236.10	7,167.10	7,236.10	205.88	248.48	-90.01	-4,410.54	-7,664.30	5,867.88	5,413.63	454.25	12.918		
14,500.00	7,235.72	7,166.72	7,235.72	208.70	248.47	-90.01	-4,410.54	-7,664.30	5,862.60	5,405.46	457.14	12.825		
14,600.00	7,235.34	7,166.34	7,235.34	211.52	248.45	-90.01	-4,410.54	-7,664.30	5,859.02	5,399.05	459.97	12.738		
14,700.00	7,234.96	7,165.96	7,234.96	214.34	248.44	-90.00	-4,410.54	-7,664.30	5,857.15	5,394.40	462.75	12.657		
14,759.66	7,234.73	7,165.73	7,234.73	216.02	248.43	-90.00	-4,410.54	-7,664.30	5,856.85	5,392.46	464.38	12.612 CC		
14,800.00	7,234.58	7,165.58	7,234.58	217.16	248.43	-90.00	-4,410.54	-7,664.30	5,856.98	5,391.51	465.47	12.583		
14,900.00	7,234.20	7,165.20	7,234.20	219.98	248.41	-89.99	-4,410.54	-7,664.30	5,858.53	5,390.39	468.13	12.515 ES		
15,000.00	7,233.82	7,164.82	7,233.82	222.81	248.40	-89.99	-4,410.54	-7,664.30	5,861.77	5,391.05	470.73	12.453		
15,100.00	7,233.44	7,164.44	7,233.44	225.63	248.39	-89.99	-4,410.54	-7,664.30	5,866.73	5,393.47	473.26	12.396		
15,200.00	7,233.06	7,164.06	7,233.06	228.45	248.37	-89.98	-4,410.54	-7,664.30	5,873.37	5,397.65	475.72	12.346		
15,216.01	7,233.00	7,164.00	7,233.00	228.91	248.37	-89.98	-4,410.54	-7,664.30	5,874.60	5,398.49	476.11	12.339 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	54.00	3.28	3.28	-109.04	-3,093.13	-8,964.62	9,483.39					
100.00	100.00	46.00	100.00	3.28	3.38	-109.04	-3,093.13	-8,964.62	9,483.24	9,476.58	6.66	1,423.574		
200.00	200.00	146.00	200.00	3.34	4.69	-109.04	-3,093.13	-8,964.62	9,483.24	9,475.21	8.03	1,181.509		
300.00	299.98	245.98	299.98	3.45	7.59	-103.31	-3,093.13	-8,964.62	9,483.64	9,472.61	11.03	859.648		
400.00	399.84	345.84	399.84	3.61	10.84	-103.31	-3,093.13	-8,964.62	9,484.85	9,470.41	14.44	656.884		
500.00	499.45	445.45	499.45	3.82	14.19	-103.32	-3,093.13	-8,964.62	9,486.86	9,468.87	18.00	527.149		
600.00	598.70	544.70	598.70	4.07	17.58	-103.34	-3,093.13	-8,964.62	9,489.69	9,468.06	21.63	438.717		
700.00	697.47	643.47	697.47	4.35	20.98	-103.36	-3,093.13	-8,964.62	9,493.35	9,468.04	25.31	375.091		
800.00	795.62	741.62	795.62	4.67	24.37	-103.38	-3,093.13	-8,964.62	9,497.84	9,468.83	29.02	327.337		
900.00	893.06	839.06	893.06	5.01	27.74	-103.41	-3,093.13	-8,964.62	9,503.18	9,470.44	32.74	290.288		
1,000.00	989.64	935.64	989.64	5.38	31.09	-103.43	-3,093.13	-8,964.62	9,509.39	9,472.92	36.47	260.778		
1,100.00	1,085.42	1,031.42	1,085.42	5.78	34.42	-103.53	-3,093.13	-8,964.62	9,516.36	9,476.17	40.20	236.748		
1,200.00	1,181.09	1,127.09	1,181.09	6.20	37.74	-103.70	-3,093.13	-8,964.62	9,523.51	9,479.56	43.95	216.701		
1,300.00	1,276.76	1,222.76	1,276.76	6.65	41.07	-103.86	-3,093.13	-8,964.62	9,530.74	9,483.02	47.72	199.733		
1,400.00	1,372.43	1,318.43	1,372.43	7.11	44.40	-104.02	-3,093.13	-8,964.62	9,538.05	9,486.54	51.50	185.198		
1,500.00	1,468.10	1,414.10	1,468.10	7.57	47.73	-104.19	-3,093.13	-8,964.62	9,545.44	9,490.14	55.30	172.618		
1,600.00	1,563.77	1,509.77	1,563.77	8.05	51.07	-104.35	-3,093.13	-8,964.62	9,552.92	9,493.81	59.10	161.629		
1,700.00	1,659.44	1,605.44	1,659.44	8.53	54.40	-104.51	-3,093.13	-8,964.62	9,560.48	9,497.56	62.92	151.951		
1,800.00	1,755.11	1,701.11	1,755.11	9.02	57.73	-104.67	-3,093.13	-8,964.62	9,568.12	9,501.38	66.74	143.366		
1,900.00	1,850.78	1,803.22	1,850.78	9.52	61.29	-104.83	-3,093.13	-8,964.62	9,575.85	9,505.05	70.79	135.270		
2,000.00	1,946.45	1,907.55	1,946.45	10.02	64.93	-104.99	-3,093.13	-8,964.62	9,583.65	9,508.73	74.92	127.912		
2,100.00	2,042.12	1,988.12	2,042.12	10.52	67.74	-105.16	-3,093.13	-8,964.62	9,591.54	9,513.31	78.23	122.603		
2,200.00	2,137.78	2,083.78	2,137.78	11.03	71.08	-105.32	-3,093.13	-8,964.62	9,599.51	9,517.44	82.07	116.965		
2,300.00	2,233.45	2,179.45	2,233.45	11.54	74.41	-105.48	-3,093.13	-8,964.62	9,607.56	9,521.65	85.91	111.828		
2,400.00	2,329.12	2,275.12	2,329.12	12.05	77.75	-105.64	-3,093.13	-8,964.62	9,615.70	9,525.94	89.76	107.128		
2,500.00	2,424.79	2,370.79	2,424.79	12.56	81.09	-105.80	-3,093.13	-8,964.62	9,623.91	9,530.31	93.61	102.813		
2,600.00	2,520.46	2,466.46	2,520.46	13.08	84.42	-105.96	-3,093.13	-8,964.62	9,632.21	9,534.75	97.45	98.838		
2,700.00	2,616.13	2,562.13	2,616.13	13.60	87.76	-106.12	-3,093.13	-8,964.62	9,640.59	9,539.28	101.31	95.163		
2,800.00	2,711.80	2,657.80	2,711.80	14.12	91.10	-106.28	-3,093.13	-8,964.62	9,649.04	9,543.88	105.16	91.757		
2,900.00	2,807.47	2,753.47	2,807.47	14.64	94.44	-106.44	-3,093.13	-8,964.62	9,657.58	9,548.57	109.01	88.592		
3,000.00	2,903.14	2,849.14	2,903.14	15.16	97.77	-106.60	-3,093.13	-8,964.62	9,666.20	9,553.33	112.87	85.642		
3,100.00	2,998.81	2,944.81	2,998.81	15.68	101.11	-106.75	-3,093.13	-8,964.62	9,674.90	9,558.17	116.72	82.888		
3,200.00	3,094.48	3,040.48	3,094.48	16.21	104.45	-106.91	-3,093.13	-8,964.62	9,683.67	9,563.09	120.58	80.309		
3,300.00	3,190.15	3,136.15	3,190.15	16.73	107.79	-107.07	-3,093.13	-8,964.62	9,692.53	9,568.09	124.44	77.891		
3,400.00	3,285.82	3,231.82	3,285.82	17.26	111.13	-107.23	-3,093.13	-8,964.62	9,701.47	9,573.17	128.30	75.618		
3,500.00	3,381.49	3,327.49	3,381.49	17.78	114.46	-107.39	-3,093.13	-8,964.62	9,710.48	9,578.33	132.16	73.478		
3,600.00	3,477.16	3,423.16	3,477.16	18.31	117.80	-107.54	-3,093.13	-8,964.62	9,719.57	9,583.56	136.02	71.459		
3,700.00	3,572.83	3,518.83	3,572.83	18.84	121.14	-107.70	-3,093.13	-8,964.62	9,728.75	9,588.87	139.88	69.553		
3,800.00	3,668.50	3,614.50	3,668.50	19.37	124.48	-107.86	-3,093.13	-8,964.62	9,738.00	9,594.26	143.74	67.749		
3,900.00	3,764.17	3,710.17	3,764.17	19.89	127.82	-108.01	-3,093.13	-8,964.62	9,747.33	9,599.73	147.60	66.040		
4,000.00	3,859.84	3,805.84	3,859.84	20.42	131.16	-108.17	-3,093.13	-8,964.62	9,756.73	9,605.27	151.46	64.418		
4,100.00	3,955.51	3,901.51	3,955.51	20.95	134.50	-108.33	-3,093.13	-8,964.62	9,766.22	9,610.90	155.32	62.877		
4,200.00	4,051.18	4,007.82	4,051.18	21.48	138.03	-108.48	-3,093.13	-8,964.62	9,775.78	9,616.40	159.38	61.336		
4,300.00	4,146.85	4,103.15	4,146.85	22.01	141.67	-108.64	-3,093.13	-8,964.62	9,785.42	9,621.87	163.55	59.833		
4,400.00	4,242.52	4,198.52	4,242.52	22.55	144.51	-108.79	-3,093.13	-8,964.62	9,795.14	9,628.23	166.91	58.685		
4,500.00	4,338.19	4,294.19	4,338.19	23.08	147.85	-108.95	-3,093.13	-8,964.62	9,804.93	9,634.16	170.77	57.415		
4,600.00	4,433.86	4,379.86	4,433.86	23.61	151.19	-109.10	-3,093.13	-8,964.62	9,814.80	9,640.16	174.64	56.202		
4,700.00	4,529.53	4,475.53	4,529.53	24.14	154.53	-109.26	-3,093.13	-8,964.62	9,824.74	9,646.25	178.50	55.041		
4,800.00	4,625.19	4,571.19	4,625.19	24.67	157.87	-109.41	-3,093.13	-8,964.62	9,834.77	9,652.40	182.36	53.930		
4,900.00	4,720.86	4,666.86	4,720.86	25.21	161.21	-109.56	-3,093.13	-8,964.62	9,844.86	9,658.64	186.23	52.865		
5,000.00	4,816.53	4,762.53	4,816.53	25.74	164.55	-109.72	-3,093.13	-8,964.62	9,855.04	9,664.95	190.09	51.844		
5,100.00	4,912.20	4,858.20	4,912.20	26.27	167.89	-109.87	-3,093.13	-8,964.62	9,865.29	9,671.33	193.95	50.864		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	4,953.87	5,007.87	26.80	171.23	-110.02	-3,093.13	-8,964.62	9,875.61	9,677.79	197.82	49.923		
5,300.00	5,103.54	5,049.54	5,103.54	27.34	174.57	-110.18	-3,093.13	-8,964.62	9,886.01	9,684.33	201.68	49.018		
5,400.00	5,199.22	5,145.22	5,199.22	27.87	177.90	-110.35	-3,093.13	-8,964.62	9,896.48	9,690.94	205.54	48.148		
5,500.00	5,295.46	5,241.46	5,295.46	28.39	181.26	-110.67	-3,093.13	-8,964.62	9,906.31	9,696.89	209.42	47.304		
5,600.00	5,392.60	5,338.60	5,392.60	28.89	184.65	-110.96	-3,093.13	-8,964.62	9,914.96	9,701.66	213.30	46.484		
5,700.00	5,490.50	5,436.50	5,490.50	29.37	188.07	-111.21	-3,093.13	-8,964.62	9,922.42	9,705.23	217.19	45.685		
5,800.00	5,589.05	5,535.05	5,589.05	29.83	191.51	-111.41	-3,093.13	-8,964.62	9,928.65	9,707.56	221.09	44.909		
5,900.00	5,688.14	5,634.14	5,688.14	30.26	194.97	-111.58	-3,093.13	-8,964.62	9,933.62	9,708.64	224.98	44.154		
6,000.00	5,787.63	5,733.63	5,787.63	30.68	198.44	-111.70	-3,093.13	-8,964.62	9,937.33	9,708.46	228.86	43.420		
6,100.00	5,887.41	5,833.41	5,887.41	31.07	201.93	-111.78	-3,093.13	-8,964.62	9,939.75	9,707.01	232.74	42.707		
6,200.00	5,987.36	5,933.36	5,987.36	31.44	205.41	-111.82	-3,093.13	-8,964.62	9,940.88	9,704.27	236.60	42.015		
6,300.00	6,087.36	6,033.36	6,087.36	31.80	208.91	-117.55	-3,093.13	-8,964.62	9,940.96	9,700.51	240.45	41.343		
6,400.00	6,187.36	6,133.36	6,187.36	32.15	212.40	-117.55	-3,093.13	-8,964.62	9,940.96	9,696.66	244.30	40.691		
6,500.00	6,287.36	6,233.36	6,287.36	32.51	215.89	-117.55	-3,093.13	-8,964.62	9,940.96	9,692.81	248.15	40.060		
6,600.00	6,387.36	6,333.36	6,387.36	32.87	219.38	-117.55	-3,093.13	-8,964.62	9,940.96	9,688.96	252.01	39.447		
6,700.00	6,487.36	6,433.36	6,487.36	33.23	222.87	-117.55	-3,093.13	-8,964.62	9,940.96	9,685.10	255.86	38.853		
6,800.00	6,587.36	6,533.36	6,587.36	33.59	226.36	-117.55	-3,093.13	-8,964.62	9,940.96	9,681.25	259.72	38.276		
6,900.00	6,687.26	6,633.26	6,687.26	33.95	229.85	-27.23	-3,093.13	-8,964.62	9,938.19	9,674.63	263.57	37.707		
7,000.00	6,785.58	6,731.58	6,785.58	34.31	233.28	-27.94	-3,093.13	-8,964.62	9,922.50	9,655.15	267.35	37.114		
7,100.00	6,879.94	6,825.94	6,879.94	34.65	236.57	-29.35	-3,093.13	-8,964.62	9,893.33	9,622.33	270.99	36.508		
7,200.00	6,968.01	6,914.01	6,968.01	34.97	239.65	-31.59	-3,093.13	-8,964.62	9,851.43	9,577.02	274.41	35.900		
7,300.00	7,047.61	7,006.39	7,047.61	35.27	242.87	-34.91	-3,093.13	-8,964.62	9,797.87	9,519.90	277.97	35.248		
7,400.00	7,116.80	7,062.80	7,116.80	35.54	244.84	-39.67	-3,093.13	-8,964.62	9,734.02	9,453.75	280.28	34.730		
7,500.00	7,173.86	7,119.86	7,173.86	35.81	246.83	-46.42	-3,093.13	-8,964.62	9,661.52	9,378.90	282.62	34.186		
7,600.00	7,217.38	7,163.38	7,217.38	36.17	248.35	-55.86	-3,093.13	-8,964.62	9,582.19	9,297.68	284.51	33.680		
7,700.00	7,246.31	7,207.69	7,246.31	36.80	249.90	-68.51	-3,093.13	-8,964.62	9,498.04	9,211.58	286.46	33.157		
7,800.00	7,259.92	7,205.92	7,259.92	37.72	249.84	-83.96	-3,093.13	-8,964.62	9,411.17	9,124.33	286.84	32.810		
7,900.00	7,260.77	7,206.77	7,260.77	38.86	249.86	-90.39	-3,093.13	-8,964.62	9,323.65	9,036.30	287.35	32.447		
8,000.00	7,260.39	7,206.39	7,260.39	40.19	249.85	-90.39	-3,093.13	-8,964.62	9,236.37	8,948.49	287.88	32.084		
8,100.00	7,260.01	7,206.01	7,260.01	41.67	249.84	-90.38	-3,093.13	-8,964.62	9,149.35	8,860.88	288.47	31.717		
8,200.00	7,259.63	7,205.63	7,259.63	43.30	249.82	-90.38	-3,093.13	-8,964.62	9,062.60	8,773.48	289.12	31.345		
8,300.00	7,259.25	7,205.25	7,259.25	45.05	249.81	-90.37	-3,093.13	-8,964.62	8,976.13	8,686.29	289.83	30.970		
8,400.00	7,258.87	7,204.87	7,258.87	46.91	249.80	-90.37	-3,093.13	-8,964.62	8,889.93	8,599.33	290.61	30.591		
8,500.00	7,258.49	7,204.49	7,258.49	48.87	249.79	-90.36	-3,093.13	-8,964.62	8,804.04	8,512.59	291.44	30.208		
8,600.00	7,258.11	7,204.11	7,258.11	50.92	249.77	-90.36	-3,093.13	-8,964.62	8,718.44	8,426.10	292.34	29.823		
8,700.00	7,257.73	7,203.73	7,257.73	53.04	249.76	-90.35	-3,093.13	-8,964.62	8,633.15	8,339.85	293.30	29.435		
8,800.00	7,257.35	7,203.35	7,257.35	55.23	249.75	-90.35	-3,093.13	-8,964.62	8,548.18	8,253.86	294.32	29.044		
8,900.00	7,256.97	7,202.97	7,256.97	57.47	249.73	-90.34	-3,093.13	-8,964.62	8,463.53	8,168.13	295.40	28.651		
9,000.00	7,256.59	7,202.59	7,256.59	59.77	249.72	-90.34	-3,093.13	-8,964.62	8,379.23	8,082.68	296.55	28.256		
9,100.00	7,256.21	7,202.21	7,256.21	62.12	249.71	-90.33	-3,093.13	-8,964.62	8,295.27	7,997.52	297.75	27.860		
9,200.00	7,255.83	7,201.83	7,255.83	64.50	249.69	-90.33	-3,093.13	-8,964.62	8,211.68	7,912.66	299.02	27.462		
9,300.00	7,255.45	7,201.45	7,255.45	66.93	249.68	-90.32	-3,093.13	-8,964.62	8,128.45	7,828.11	300.35	27.064		
9,400.00	7,255.07	7,201.07	7,255.07	69.38	249.67	-90.32	-3,093.13	-8,964.62	8,045.61	7,743.88	301.74	26.664		
9,500.00	7,254.69	7,200.69	7,254.69	71.87	249.65	-90.31	-3,093.13	-8,964.62	7,963.16	7,659.98	303.18	26.265		
9,600.00	7,254.31	7,200.31	7,254.31	74.38	249.64	-90.31	-3,093.13	-8,964.62	7,881.12	7,576.43	304.69	25.866		
9,700.00	7,253.93	7,200.07	7,253.93	76.92	249.63	-90.30	-3,093.13	-8,964.62	7,799.49	7,493.23	306.27	25.466		
9,800.00	7,253.55	7,200.45	7,253.55	79.48	249.64	-90.30	-3,093.13	-8,964.62	7,718.30	7,410.38	307.92	25.066		
9,900.00	7,253.18	7,200.83	7,253.18	82.06	249.66	-90.30	-3,093.13	-8,964.62	7,637.56	7,327.92	309.64	24.666		
10,000.00	7,252.80	7,201.20	7,252.80	84.65	249.67	-90.29	-3,093.13	-8,964.62	7,557.27	7,245.86	311.42	24.268		
10,100.00	7,252.42	7,201.58	7,252.42	87.27	249.68	-90.29	-3,093.13	-8,964.62	7,477.46	7,164.21	313.25	23.871		
10,200.00	7,252.04	7,201.96	7,252.04	89.89	249.70	-90.28	-3,093.13	-8,964.62	7,398.15	7,083.00	315.15	23.475		
10,300.00	7,251.66	7,202.34	7,251.66	92.54	249.71	-90.28	-3,093.13	-8,964.62	7,319.33	7,002.23	317.10	23.082		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
10,400.00	7,251.28	7,202.72	7,251.28	95.19	249.72	-90.27	-3,093.13	-8,964.62	7,241.05	6,921.93	319.12	22.691	
10,500.00	7,250.90	7,203.10	7,250.90	97.86	249.74	-90.27	-3,093.13	-8,964.62	7,163.30	6,842.10	321.19	22.302	
10,600.00	7,250.52	7,203.48	7,250.52	100.53	249.75	-90.26	-3,093.13	-8,964.62	7,086.11	6,762.78	323.33	21.916	
10,700.00	7,250.14	7,203.86	7,250.14	103.22	249.76	-90.26	-3,093.13	-8,964.62	7,009.49	6,683.97	325.53	21.533	
10,800.00	7,249.76	7,204.24	7,249.76	105.91	249.78	-90.25	-3,093.13	-8,964.62	6,933.48	6,605.69	327.78	21.153	
10,900.00	7,249.38	7,204.62	7,249.38	108.62	249.79	-90.25	-3,093.13	-8,964.62	6,858.07	6,527.97	330.10	20.776	
11,000.00	7,249.00	7,205.00	7,249.00	111.33	249.80	-90.24	-3,093.13	-8,964.62	6,783.31	6,450.83	332.48	20.402	
11,100.00	7,248.62	7,205.38	7,248.62	114.04	249.82	-90.24	-3,093.13	-8,964.62	6,709.20	6,374.28	334.92	20.032	
11,200.00	7,248.24	7,205.76	7,248.24	116.77	249.83	-90.23	-3,093.13	-8,964.62	6,635.77	6,298.35	337.42	19.666	
11,300.00	7,247.86	7,206.14	7,247.86	119.50	249.84	-90.23	-3,093.13	-8,964.62	6,563.04	6,223.06	339.98	19.304	
11,400.00	7,247.48	7,206.52	7,247.48	122.24	249.86	-90.22	-3,093.13	-8,964.62	6,491.04	6,148.44	342.60	18.946	
11,500.00	7,247.10	7,206.90	7,247.10	124.98	249.87	-90.22	-3,093.13	-8,964.62	6,419.79	6,074.50	345.29	18.593	
11,600.00	7,246.72	7,207.28	7,246.72	127.73	249.88	-90.21	-3,093.13	-8,964.62	6,349.31	6,001.28	348.03	18.243	
11,700.00	7,246.34	7,207.66	7,246.34	130.48	249.90	-90.21	-3,093.13	-8,964.62	6,279.64	5,928.79	350.84	17.899	
11,800.00	7,245.96	7,208.04	7,245.96	133.24	249.91	-90.20	-3,093.13	-8,964.62	6,210.79	5,857.08	353.71	17.559	
11,900.00	7,245.58	7,208.42	7,245.58	136.00	249.92	-90.20	-3,093.13	-8,964.62	6,142.80	5,786.16	356.64	17.224	
12,000.00	7,245.21	7,208.79	7,245.21	138.76	249.94	-90.19	-3,093.13	-8,964.62	6,075.70	5,716.07	359.63	16.894	
12,100.00	7,244.83	7,209.17	7,244.83	141.53	249.95	-90.19	-3,093.13	-8,964.62	6,009.51	5,646.82	362.68	16.570	
12,200.00	7,244.45	7,209.55	7,244.45	144.30	249.96	-90.18	-3,093.13	-8,964.62	5,944.26	5,578.47	365.79	16.250	
12,300.00	7,244.07	7,209.93	7,244.07	147.08	249.98	-90.18	-3,093.13	-8,964.62	5,879.99	5,511.03	368.96	15.936	
12,400.00	7,243.69	7,209.69	7,243.69	149.86	249.27	-90.18	-3,093.13	-8,964.62	5,816.74	5,445.26	371.47	15.659	
12,500.00	7,243.31	7,189.31	7,243.31	152.64	249.26	-90.17	-3,093.13	-8,964.62	5,754.52	5,379.79	374.73	15.356	
12,600.00	7,242.93	7,188.93	7,242.93	155.42	249.24	-90.17	-3,093.13	-8,964.62	5,693.38	5,315.33	378.05	15.060	
12,700.00	7,242.55	7,188.55	7,242.55	158.21	249.23	-90.16	-3,093.13	-8,964.62	5,633.35	5,251.93	381.42	14.769	
12,800.00	7,242.17	7,188.17	7,242.17	161.00	249.22	-90.16	-3,093.13	-8,964.62	5,574.47	5,189.63	384.85	14.485	
12,900.00	7,241.79	7,187.79	7,241.79	163.79	249.20	-90.15	-3,093.13	-8,964.62	5,516.78	5,128.45	388.32	14.207	
13,000.00	7,241.41	7,187.41	7,241.41	166.58	249.19	-90.15	-3,093.13	-8,964.62	5,460.30	5,068.45	391.85	13.935	
13,100.00	7,241.03	7,187.03	7,241.03	169.38	249.18	-90.14	-3,093.13	-8,964.62	5,405.09	5,009.67	395.42	13.669	
13,200.00	7,240.65	7,186.65	7,240.65	172.18	249.16	-90.14	-3,093.13	-8,964.62	5,351.17	4,952.13	399.04	13.410	
13,300.00	7,240.27	7,186.27	7,240.27	174.98	249.15	-90.13	-3,093.13	-8,964.62	5,298.60	4,895.89	402.70	13.158	
13,400.00	7,239.89	7,185.89	7,239.89	177.78	249.14	-90.13	-3,093.13	-8,964.62	5,247.40	4,841.00	406.41	12.912	
13,500.00	7,239.51	7,185.51	7,239.51	180.58	249.12	-90.12	-3,093.13	-8,964.62	5,197.62	4,787.48	410.14	12.673	
13,600.00	7,239.13	7,185.13	7,239.13	183.39	249.11	-90.12	-3,093.13	-8,964.62	5,149.31	4,735.40	413.91	12.441	
13,700.00	7,238.75	7,184.75	7,238.75	186.20	249.10	-90.11	-3,093.13	-8,964.62	5,102.49	4,684.78	417.71	12.215	
13,800.00	7,238.37	7,184.37	7,238.37	189.00	249.08	-90.11	-3,093.13	-8,964.62	5,057.23	4,635.69	421.53	11.997	
13,900.00	7,237.99	7,183.99	7,237.99	191.81	249.07	-90.10	-3,093.13	-8,964.62	5,013.54	4,588.17	425.38	11.786	
14,000.00	7,237.62	7,183.62	7,237.62	194.63	249.06	-90.10	-3,093.13	-8,964.62	4,971.49	4,542.25	429.23	11.582	
14,100.00	7,237.24	7,183.24	7,237.24	197.44	249.04	-90.09	-3,093.13	-8,964.62	4,931.10	4,498.00	433.10	11.386	
14,200.00	7,236.86	7,182.86	7,236.86	200.25	249.03	-90.09	-3,093.13	-8,964.62	4,892.43	4,455.46	436.97	11.196	
14,300.00	7,236.48	7,182.48	7,236.48	203.07	249.02	-90.08	-3,093.13	-8,964.62	4,855.50	4,414.67	440.84	11.014	
14,400.00	7,236.10	7,182.10	7,236.10	205.88	249.00	-90.08	-3,093.13	-8,964.62	4,820.37	4,375.67	444.70	10.840	
14,500.00	7,235.72	7,181.72	7,235.72	208.70	248.99	-90.07	-3,093.13	-8,964.62	4,787.07	4,338.53	448.54	10.672	
14,600.00	7,235.34	7,181.34	7,235.34	211.52	248.98	-90.07	-3,093.13	-8,964.62	4,755.64	4,303.27	452.37	10.513	
14,700.00	7,234.96	7,180.96	7,234.96	214.34	248.96	-90.06	-3,093.13	-8,964.62	4,726.12	4,269.95	456.17	10.361	
14,800.00	7,234.58	7,180.58	7,234.58	217.16	248.95	-90.06	-3,093.13	-8,964.62	4,698.54	4,238.61	459.93	10.216	
14,900.00	7,234.20	7,180.20	7,234.20	219.98	248.94	-90.06	-3,093.13	-8,964.62	4,672.94	4,209.29	463.65	10.079	
15,000.00	7,233.82	7,179.82	7,233.82	222.81	248.92	-90.05	-3,093.13	-8,964.62	4,649.35	4,182.02	467.32	9.949	
15,100.00	7,233.44	7,179.44	7,233.44	225.63	248.91	-90.05	-3,093.13	-8,964.62	4,627.80	4,156.86	470.94	9.827	
15,200.00	7,233.06	7,179.06	7,233.06	228.45	248.90	-90.04	-3,093.13	-8,964.62	4,608.32	4,133.82	474.50	9.712	
15,216.01	7,233.00	7,179.00	7,233.00	228.91	248.90	-90.04	-3,093.13	-8,964.62	4,605.39	4,130.33	475.06	9.694 CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
0.00	0.00	0.00	37.00	3.28	3.28	-108.78	-3,059.98	-8,996.87	9,503.08					
100.00	100.00	0.00	37.00	3.28	3.28	-108.78	-3,059.98	-8,996.87	9,503.22	9,496.65	6.56	1,447.584		
200.00	200.00	72.17	109.17	3.34	3.28	-108.79	-3,060.36	-8,997.11	9,503.79	9,497.17	6.62	1,435.508		
300.00	299.98	121.00	157.99	3.45	3.29	-103.03	-3,061.06	-8,997.53	9,505.43	9,498.70	6.73	1,411.545		
400.00	399.84	161.66	198.64	3.61	3.31	-102.99	-3,061.77	-8,998.09	9,508.44	9,501.53	6.91	1,375.804		
500.00	499.45	208.00	244.97	3.82	3.34	-102.93	-3,062.51	-8,999.01	9,512.81	9,505.67	7.15	1,330.901		
600.00	598.70	208.00	244.97	4.07	3.34	-102.81	-3,062.51	-8,999.01	9,518.76	9,511.37	7.40	1,287.125		
700.00	697.47	255.23	292.17	4.35	3.38	-102.71	-3,063.11	-9,000.54	9,526.05	9,518.33	7.72	1,233.639		
800.00	795.62	300.00	336.88	4.67	3.44	-102.58	-3,063.41	-9,002.80	9,535.11	9,527.02	8.09	1,178.505		
900.00	893.06	300.00	336.88	5.01	3.44	-102.38	-3,063.41	-9,002.80	9,545.53	9,537.09	8.44	1,131.028		
1,000.00	989.64	300.00	336.88	5.38	3.44	-102.14	-3,063.41	-9,002.80	9,557.73	9,548.92	8.82	1,083.904		
1,100.00	1,085.42	352.03	388.78	5.78	3.52	-102.10	-3,063.35	-9,006.41	9,571.04	9,561.74	9.29	1,029.972		
1,200.00	1,181.09	391.00	427.60	6.20	3.59	-102.16	-3,062.94	-9,009.81	9,585.39	9,575.61	9.78	980.390		
1,300.00	1,276.76	391.00	427.60	6.65	3.59	-102.16	-3,062.94	-9,009.81	9,600.45	9,590.24	10.21	939.954		
1,400.00	1,372.43	427.31	463.72	7.11	3.66	-102.21	-3,062.27	-9,013.50	9,616.28	9,605.55	10.73	896.388		
1,500.00	1,468.10	481.00	517.00	7.57	3.78	-102.28	-3,060.72	-9,019.89	9,633.03	9,621.74	11.29	852.984		
1,600.00	1,563.77	481.00	517.00	8.05	3.78	-102.28	-3,060.72	-9,019.89	9,650.24	9,638.48	11.76	820.838		
1,700.00	1,659.44	481.00	517.00	8.53	3.78	-102.28	-3,060.72	-9,019.89	9,668.44	9,656.22	12.23	790.875		
1,800.00	1,755.11	533.39	568.85	9.02	3.91	-102.34	-3,058.72	-9,027.11	9,687.15	9,674.33	12.82	755.595		
1,900.00	1,850.78	572.00	606.97	9.52	4.02	-102.39	-3,057.02	-9,032.99	9,706.72	9,693.32	13.39	724.715		
2,000.00	1,946.45	572.00	606.97	10.02	4.02	-102.39	-3,057.02	-9,032.99	9,727.00	9,713.13	13.87	701.252		
2,100.00	2,042.12	572.00	606.97	10.52	4.02	-102.39	-3,057.02	-9,032.99	9,748.27	9,733.92	14.35	679.365		
2,200.00	2,137.78	629.09	663.17	11.03	4.21	-102.45	-3,054.29	-9,042.66	9,769.79	9,754.80	14.99	651.615		
2,300.00	2,233.45	693.00	725.80	11.54	4.44	-102.52	-3,051.03	-9,054.96	9,792.74	9,777.06	15.67	624.861		
2,400.00	2,329.12	693.00	725.80	12.05	4.44	-102.52	-3,051.03	-9,054.96	9,815.74	9,799.59	16.15	607.767		
2,500.00	2,424.79	693.00	725.80	12.56	4.44	-102.52	-3,051.03	-9,054.96	9,839.70	9,823.07	16.63	591.751		
2,600.00	2,520.46	718.83	751.03	13.08	4.54	-102.54	-3,049.72	-9,060.33	9,864.49	9,847.29	17.19	573.742		
2,700.00	2,616.13	761.00	792.15	13.60	4.72	-102.59	-3,047.79	-9,069.49	9,890.06	9,872.24	17.82	555.036		
2,800.00	2,711.80	761.00	792.15	14.12	4.72	-102.59	-3,047.79	-9,069.49	9,916.21	9,897.92	18.29	542.115		
2,900.00	2,807.47	811.56	841.30	14.64	4.95	-102.63	-3,045.27	-9,081.06	9,943.01	9,924.05	18.96	524.292		
3,000.00	2,903.14	855.00	883.38	15.16	5.16	-102.67	-3,042.52	-9,091.50	9,970.35	9,950.75	19.60	508.598		
3,100.00	2,998.81	855.00	883.38	15.68	5.16	-102.67	-3,042.52	-9,091.50	9,998.41	9,978.34	20.07	498.167		
8,900.00	7,256.97	7,295.65	6,917.42	57.47	57.61	-85.54	-2,488.12	-11,007.50	9,990.19	9,903.20	86.99	114.839		
9,000.00	7,256.59	7,296.56	6,918.33	59.77	57.61	-85.56	-2,488.15	-11,007.52	9,998.29	9,810.48	87.81	112.721		
9,100.00	7,256.21	7,297.47	6,919.25	62.12	57.61	-85.57	-2,488.17	-11,007.54	9,806.55	9,717.87	88.67	110.591		
9,200.00	7,255.83	7,298.40	6,920.18	64.50	57.61	-85.58	-2,488.20	-11,007.57	9,714.97	9,625.39	89.58	108.453		
9,300.00	7,255.45	7,299.34	6,921.11	66.93	57.62	-85.60	-2,488.22	-11,007.59	9,623.55	9,533.03	90.52	106.309		
9,400.00	7,255.07	7,300.28	6,922.05	69.38	57.62	-85.61	-2,488.24	-11,007.62	9,532.31	9,440.80	91.51	104.163		
9,500.00	7,254.69	7,301.23	6,923.01	71.87	57.62	-85.62	-2,488.27	-11,007.64	9,441.25	9,348.70	92.55	102.016		
9,600.00	7,254.31	7,302.19	6,923.97	74.38	57.62	-85.64	-2,488.30	-11,007.67	9,350.37	9,256.74	93.62	99.872		
9,700.00	7,253.93	7,303.17	6,924.94	76.92	57.62	-85.65	-2,488.32	-11,007.69	9,259.67	9,164.93	94.75	97.732		
9,800.00	7,253.55	7,304.15	6,925.92	79.48	57.63	-85.67	-2,488.35	-11,007.72	9,169.17	9,073.26	95.91	95.601		
9,900.00	7,253.18	7,305.14	6,926.91	82.06	57.63	-85.68	-2,488.37	-11,007.75	9,078.87	8,981.75	97.12	93.479		
10,000.00	7,252.80	7,306.14	6,927.90	84.65	57.63	-85.70	-2,488.40	-11,007.77	8,988.78	8,890.40	98.38	91.370		
10,100.00	7,252.42	7,307.15	6,928.91	87.27	57.63	-85.71	-2,488.43	-11,007.80	8,898.89	8,799.21	99.68	89.275		
10,200.00	7,252.04	7,308.16	6,929.93	89.89	57.64	-85.73	-2,488.45	-11,007.83	8,809.22	8,708.20	101.03	87.196		
10,300.00	7,251.66	7,309.19	6,930.96	92.54	57.64	-85.74	-2,488.48	-11,007.86	8,719.78	8,617.36	102.42	85.135		
10,400.00	7,251.28	7,310.23	6,932.00	95.19	57.64	-85.76	-2,488.51	-11,007.88	8,630.57	8,526.71	103.87	83.094		
10,500.00	7,250.90	7,311.28	6,933.05	97.86	57.64	-85.77	-2,488.54	-11,007.91	8,541.60	8,436.24	105.35	81.075		
10,600.00	7,250.52	7,312.34	6,934.11	100.53	57.65	-85.79	-2,488.57	-11,007.94	8,452.87	8,345.98	106.89	79.078		
10,700.00	7,250.14	7,313.41	6,935.18	103.22	57.65	-85.80	-2,488.60	-11,007.97	8,364.40	8,255.92	108.48	77.106		
10,800.00	7,249.76	7,314.49	6,936.26	105.91	57.65	-85.82	-2,488.63	-11,008.00	8,276.19	8,166.08	110.11	75.160		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,900.00	7,249.38	7,315.58	6,937.35	108.62	57.65	-85.83	-2,488.66	-11,008.03	8,188.25	8,076.45	111.80	73.240		
11,000.00	7,249.00	7,316.69	6,938.45	111.33	57.66	-85.85	-2,488.69	-11,008.06	8,100.59	7,987.05	113.54	71.348		
11,100.00	7,248.62	7,317.80	6,939.56	114.04	57.66	-85.87	-2,488.72	-11,008.10	8,013.22	7,897.90	115.32	69.484		
11,200.00	7,248.24	7,318.93	6,940.69	116.77	57.66	-85.88	-2,488.75	-11,008.13	7,926.15	7,808.98	117.16	67.650		
11,300.00	7,247.86	7,320.07	6,941.82	119.50	57.67	-85.90	-2,488.79	-11,008.16	7,839.38	7,720.33	119.06	65.846		
11,400.00	7,247.48	7,321.21	6,942.97	122.24	57.67	-85.92	-2,488.82	-11,008.19	7,752.94	7,631.93	121.00	64.073		
11,500.00	7,247.10	7,322.38	6,944.13	124.98	57.67	-85.93	-2,488.85	-11,008.23	7,666.82	7,543.82	123.00	62.331		
11,600.00	7,246.72	7,323.55	6,945.30	127.73	57.67	-85.95	-2,488.88	-11,008.26	7,581.04	7,455.98	125.06	60.620		
11,700.00	7,246.34	7,324.74	6,946.49	130.48	57.68	-85.97	-2,488.92	-11,008.30	7,495.62	7,368.45	127.17	58.942		
11,800.00	7,245.96	7,325.93	6,947.69	133.24	57.68	-85.98	-2,488.95	-11,008.33	7,410.56	7,281.22	129.34	57.296		
11,900.00	7,245.58	7,327.14	6,948.90	136.00	57.68	-86.00	-2,488.99	-11,008.37	7,325.87	7,194.31	131.56	55.683		
12,000.00	7,245.21	7,328.37	6,950.12	138.76	57.69	-86.02	-2,489.02	-11,008.40	7,241.58	7,107.73	133.85	54.103		
12,100.00	7,244.83	7,329.61	6,951.36	141.53	57.69	-86.04	-2,489.06	-11,008.44	7,157.69	7,021.50	136.19	52.555		
12,200.00	7,244.45	7,330.86	6,952.60	144.30	57.69	-86.06	-2,489.10	-11,008.48	7,074.22	6,935.62	138.60	51.041		
12,300.00	7,244.07	7,332.12	6,953.87	147.08	57.69	-86.07	-2,489.14	-11,008.51	6,991.18	6,850.12	141.07	49.559		
12,400.00	7,243.69	7,333.40	6,955.14	149.86	57.70	-86.09	-2,489.17	-11,008.55	6,908.60	6,765.00	143.60	48.111		
12,500.00	7,243.31	7,334.69	6,956.43	152.64	57.70	-86.11	-2,489.21	-11,008.59	6,826.47	6,680.28	146.19	46.695		
12,600.00	7,242.93	7,336.00	6,957.74	155.42	57.70	-86.13	-2,489.25	-11,008.63	6,744.83	6,595.98	148.85	45.312		
12,700.00	7,242.55	7,337.32	6,959.06	158.21	57.71	-86.15	-2,489.29	-11,008.67	6,663.69	6,512.11	151.58	43.962		
12,800.00	7,242.17	7,338.65	6,960.39	161.00	57.71	-86.17	-2,489.33	-11,008.71	6,583.07	6,428.69	154.37	42.644		
12,900.00	7,241.79	7,340.00	6,961.74	163.79	57.71	-86.19	-2,489.37	-11,008.75	6,502.98	6,345.75	157.23	41.359		
13,000.00	7,241.41	7,341.37	6,963.11	166.58	57.72	-86.21	-2,489.42	-11,008.80	6,423.45	6,263.29	160.16	40.105		
13,100.00	7,241.03	7,342.75	6,964.49	169.38	57.72	-86.23	-2,489.46	-11,008.84	6,344.51	6,181.34	163.17	38.884		
13,200.00	7,240.65	7,344.15	6,965.88	172.18	57.72	-86.25	-2,489.50	-11,008.88	6,266.16	6,099.92	166.24	37.694		
13,300.00	7,240.27	7,345.56	6,967.29	174.98	57.73	-86.27	-2,489.54	-11,008.93	6,188.43	6,019.05	169.38	36.535		
13,400.00	7,239.89	7,346.99	6,968.72	177.78	57.73	-86.29	-2,489.59	-11,008.97	6,111.36	5,938.76	172.60	35.408		
13,500.00	7,239.51	7,348.43	6,970.17	180.58	57.73	-86.31	-2,489.63	-11,009.02	6,034.95	5,859.06	175.89	34.311		
13,600.00	7,239.13	7,349.90	6,971.63	183.39	57.74	-86.33	-2,489.68	-11,009.06	5,959.24	5,779.99	179.26	33.244		
13,700.00	7,238.75	7,386.00	7,007.69	186.20	57.82	-86.86	-2,490.89	-11,010.29	5,884.46	5,701.63	182.83	32.186		
13,800.00	7,238.37	7,386.00	7,007.69	189.00	57.82	-86.86	-2,490.89	-11,010.29	5,810.21	5,623.87	186.34	31.181		
13,900.00	7,237.99	7,386.00	7,007.69	191.81	57.82	-86.86	-2,490.89	-11,010.29	5,736.75	5,546.82	189.93	30.204		
14,000.00	7,237.62	7,386.00	7,007.69	194.63	57.82	-86.86	-2,490.89	-11,010.29	5,664.10	5,470.50	193.60	29.257		
14,100.00	7,237.24	7,386.00	7,007.69	197.44	57.82	-86.86	-2,490.89	-11,010.29	5,592.29	5,394.95	197.34	28.338		
14,200.00	7,236.86	7,386.00	7,007.69	200.25	57.82	-86.86	-2,490.89	-11,010.29	5,521.36	5,320.20	201.16	27.448		
14,300.00	7,236.48	7,386.00	7,007.69	203.07	57.82	-86.86	-2,490.89	-11,010.29	5,451.35	5,246.29	205.05	26.585		
14,400.00	7,236.10	7,386.00	7,007.69	205.88	57.82	-86.86	-2,490.89	-11,010.29	5,382.28	5,173.25	209.03	25.749		
14,500.00	7,235.72	7,386.00	7,007.69	208.70	57.82	-86.86	-2,490.89	-11,010.29	5,314.19	5,101.12	213.07	24.941		
14,600.00	7,235.34	7,386.00	7,007.69	211.52	57.82	-86.86	-2,490.89	-11,010.29	5,247.13	5,029.93	217.19	24.159		
14,700.00	7,234.96	7,386.00	7,007.69	214.34	57.82	-86.86	-2,490.89	-11,010.29	5,181.13	4,959.74	221.39	23.403		
14,800.00	7,234.58	7,386.00	7,007.69	217.16	57.82	-86.86	-2,490.89	-11,010.29	5,116.23	4,890.58	225.65	22.673		
14,900.00	7,234.20	7,386.00	7,007.69	219.98	57.82	-86.86	-2,490.89	-11,010.29	5,052.48	4,822.49	229.98	21.969		
15,000.00	7,233.82	7,386.00	7,007.69	222.81	57.82	-86.86	-2,490.89	-11,010.29	4,989.91	4,755.53	234.38	21.290		
15,100.00	7,233.44	7,386.00	7,007.69	225.63	57.82	-86.86	-2,490.89	-11,010.29	4,928.59	4,689.74	238.84	20.635		
15,200.00	7,233.06	7,386.00	7,007.69	228.45	57.82	-86.86	-2,490.89	-11,010.29	4,868.54	4,625.17	243.37	20.005		
15,216.01	7,233.00	7,386.00	7,007.69	228.91	57.82	-86.86	-2,490.89	-11,010.29	4,859.05	4,614.95	244.10	19.906 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	37.00	3.28	3.28	-108.80	-3,050.88	-8,964.32	9,469.34					
100.00	100.00	0.00	37.00	3.28	3.28	-108.80	-3,050.88	-8,964.32	9,469.47	9,462.91	6.56	1,442.444		
200.00	200.00	55.84	92.84	3.34	3.28	-108.80	-3,051.23	-8,964.54	9,470.19	9,463.57	6.62	1,430.626		
300.00	299.98	577.00	613.23	3.45	3.96	-103.05	-3,036.68	-8,963.41	9,469.41	9,462.00	7.42	1,277.038		
400.00	399.84	610.00	645.98	3.61	4.04	-103.07	-3,032.64	-8,963.77	9,467.65	9,459.99	7.66	1,236.680		
469.31	468.91	634.12	669.89	3.75	4.11	-103.07	-3,029.52	-8,964.23	9,467.29	9,459.44	7.86	1,204.974		
500.00	499.45	667.00	702.45	3.82	4.21	-103.06	-3,025.02	-8,965.14	9,467.44	9,459.42	8.02	1,180.826		
600.00	598.70	718.87	753.74	4.07	4.37	-103.03	-3,017.44	-8,966.88	9,468.48	9,460.06	8.42	1,124.115		
700.00	697.47	931.53	963.11	4.35	5.16	-102.98	-2,981.02	-8,974.19	9,469.70	9,460.20	9.50	996.860		
800.00	795.62	1,036.52	1,065.70	4.67	5.63	-102.94	-2,959.14	-8,978.48	9,471.15	9,460.87	10.28	921.108		
900.00	893.06	1,151.99	1,177.59	5.01	6.22	-102.88	-2,931.23	-8,984.35	9,473.25	9,462.04	11.21	844.784		
1,000.00	989.64	1,228.00	1,250.64	5.38	6.64	-102.81	-2,910.78	-8,989.02	9,476.24	9,464.23	12.01	788.970		
1,100.00	1,085.42	1,337.36	1,354.73	5.78	7.31	-102.76	-2,878.20	-8,996.91	9,479.96	9,466.88	13.08	724.778		
1,200.00	1,181.09	1,417.00	1,429.69	6.20	7.85	-102.73	-2,852.12	-9,003.45	9,483.76	9,469.71	14.04	675.371		
1,300.00	1,276.76	1,460.73	1,470.58	6.65	8.16	-102.71	-2,837.15	-9,007.45	9,487.98	9,473.18	14.80	641.269		
1,400.00	1,372.43	1,512.00	1,518.35	7.11	8.53	-102.69	-2,819.28	-9,012.69	9,492.88	9,477.26	15.62	607.771		
1,500.00	1,468.10	1,561.35	1,564.16	7.57	8.90	-102.66	-2,801.75	-9,018.12	9,498.31	9,481.85	16.46	577.129		
1,600.00	1,563.77	1,630.44	1,628.04	8.05	9.44	-102.62	-2,776.64	-9,026.06	9,504.05	9,486.58	17.47	544.069		
1,700.00	1,659.44	1,701.00	1,692.87	8.53	10.01	-102.57	-2,750.20	-9,034.80	9,510.22	9,491.70	18.52	513.559		
1,800.00	1,755.11	1,744.63	1,732.73	9.02	10.38	-102.53	-2,733.41	-9,040.55	9,516.81	9,497.43	19.37	491.227		
1,900.00	1,850.78	1,883.81	1,885.79	9.52	11.60	-102.41	-2,677.72	-9,059.98	9,523.83	9,502.73	21.09	451.523		
2,000.00	1,946.45	1,988.90	1,953.26	10.02	12.57	-102.30	-2,634.06	-9,074.57	9,530.21	9,507.65	22.56	422.434		
2,100.00	2,042.12	2,040.03	1,999.09	10.52	13.05	-102.25	-2,612.60	-9,081.88	9,536.86	9,513.32	23.54	405.108		
2,200.00	2,137.78	2,115.83	2,066.98	11.03	13.77	-102.17	-2,580.82	-9,093.10	9,544.02	9,519.25	24.77	385.353		
2,300.00	2,233.45	2,232.66	2,171.46	11.54	14.90	-102.05	-2,531.41	-9,110.20	9,550.93	9,524.52	26.41	361.661		
2,400.00	2,329.12	2,297.60	2,229.44	12.05	15.54	-101.98	-2,503.82	-9,119.89	9,558.12	9,530.56	27.55	346.914		
2,500.00	2,424.79	2,369.00	2,293.24	12.56	16.24	-101.90	-2,473.69	-9,130.82	9,565.74	9,536.98	28.76	332.549		
2,600.00	2,520.46	2,401.21	2,322.04	13.08	16.56	-101.87	-2,460.19	-9,135.89	9,573.83	9,544.24	29.59	323.570		
2,700.00	2,616.13	2,464.00	2,378.22	13.60	17.18	-101.81	-2,434.08	-9,146.13	9,582.59	9,551.87	30.72	311.939		
2,800.00	2,711.80	2,519.15	2,427.59	14.12	17.73	-101.75	-2,411.28	-9,155.32	9,591.76	9,559.98	31.78	301.857		
2,900.00	2,807.47	2,598.39	2,498.60	14.64	18.51	-101.67	-2,378.66	-9,168.48	9,601.08	9,568.01	33.08	290.278		
3,000.00	2,903.14	2,867.48	2,739.15	15.16	21.23	-101.39	-2,266.32	-9,212.16	9,610.23	9,573.89	36.34	264.475		
3,100.00	2,998.81	2,937.00	2,800.61	15.68	21.95	-101.31	-2,235.80	-9,223.29	9,618.21	9,580.63	37.58	255.932		
3,200.00	3,094.48	2,992.65	2,850.04	16.21	22.52	-101.25	-2,211.86	-9,232.25	9,626.58	9,587.91	38.67	248.971		
3,300.00	3,190.15	3,225.19	3,058.12	16.73	24.89	-101.01	-2,114.16	-9,267.34	9,634.16	9,592.58	41.57	231.732		
3,400.00	3,285.82	3,267.80	3,096.08	17.26	25.33	-100.96	-2,095.92	-9,273.76	9,641.69	9,599.17	42.53	226.724		
3,500.00	3,381.49	3,316.00	3,139.23	17.78	25.82	-100.91	-2,075.74	-9,281.17	9,649.81	9,606.27	43.54	221.656		
3,600.00	3,477.16	3,447.90	3,257.79	18.31	27.15	-100.79	-2,021.44	-9,300.94	9,657.74	9,612.35	45.39	212.773		
3,700.00	3,572.83	3,503.00	3,307.45	18.84	27.70	-100.73	-1,999.06	-9,309.28	9,666.04	9,619.58	46.46	208.066		
3,800.00	3,668.50	3,579.71	3,376.53	19.37	28.47	-100.66	-1,967.90	-9,321.15	9,674.70	9,626.95	47.75	202.629		
3,900.00	3,764.17	3,714.52	3,497.77	19.89	29.83	-100.53	-1,912.75	-9,341.96	9,683.27	9,633.63	49.63	195.093		
4,000.00	3,859.84	3,809.65	3,583.64	20.42	30.78	-100.45	-1,874.42	-9,356.39	9,691.79	9,640.68	51.11	189.628		
4,100.00	3,955.51	3,920.95	3,683.63	20.95	31.91	-100.34	-1,828.56	-9,373.22	9,700.01	9,647.24	52.77	183.821		
4,200.00	4,051.18	3,976.00	3,732.52	21.48	32.49	-100.28	-1,804.83	-9,382.04	9,708.61	9,654.75	53.86	180.262		
4,300.00	4,146.85	4,032.70	3,782.40	22.01	33.11	-100.21	-1,779.63	-9,391.59	9,717.67	9,662.68	54.99	176.706		
4,400.00	4,242.52	4,096.70	3,838.17	22.55	33.82	-100.13	-1,750.34	-9,402.90	9,727.18	9,670.96	56.22	173.017		
4,500.00	4,338.19	4,165.00	3,897.12	23.08	34.60	-100.03	-1,718.18	-9,415.36	9,736.97	9,679.45	57.51	169.295		
4,600.00	4,433.86	4,216.31	3,941.15	23.61	35.20	-99.96	-1,693.66	-9,425.02	9,747.19	9,688.57	58.62	166.271		
4,700.00	4,529.53	4,261.76	3,980.06	24.14	35.73	-99.89	-1,671.90	-9,433.87	9,758.00	9,698.34	59.66	163.568		
4,800.00	4,625.19	4,800.00	4,199.37	24.67	41.48	-99.59	-1,561.47	-9,479.04	9,768.77	9,702.81	65.96	148.103		
4,900.00	4,720.86	4,622.13	4,298.86	25.21	39.60	-99.49	-1,516.43	-9,496.55	9,778.05	9,713.43	64.62	151.326		
5,000.00	4,816.53	4,735.68	4,402.48	25.74	40.69	-99.41	-1,473.35	-9,513.89	9,787.57	9,721.33	66.24	147.757		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	4,912.20	4,801.73	4,463.07	26.27	41.31	-99.36	-1,448.99	-9,523.79	9,797.12	9,729.74	67.38	145.407		
5,200.00	5,007.87	4,961.09	4,610.64	26.80	42.74	-99.27	-1,393.38	-9,546.60	9,806.53	9,737.18	69.35	141.407		
5,300.00	5,103.54	5,440.35	5,067.32	27.34	46.35	-99.23	-1,256.75	-9,594.26	9,812.35	9,738.80	73.55	133.409		
5,400.00	5,199.22	5,532.60	5,156.98	27.87	46.93	-99.27	-1,235.94	-9,600.38	9,817.64	9,742.97	74.66	131.494		
5,500.00	5,295.46	5,627.82	5,250.10	28.39	47.48	-99.40	-1,216.90	-9,606.12	9,822.69	9,746.96	75.73	129.702		
5,600.00	5,392.60	5,600.00	5,472.42	28.89	47.47	-99.58	-1,181.86	-9,615.56	9,826.69	9,750.45	76.23	128.901		
5,700.00	5,490.50	5,941.88	5,560.57	29.37	48.94	-99.68	-1,171.92	-9,617.39	9,829.16	9,750.98	78.18	125.719		
5,800.00	5,589.05	5,999.28	5,617.75	29.83	49.15	-99.75	-1,167.01	-9,618.48	9,831.57	9,752.73	78.85	124.688		
5,900.00	5,688.14	6,076.48	5,694.75	30.26	49.41	-99.82	-1,161.66	-9,619.86	9,833.73	9,754.18	79.54	123.625		
6,000.00	5,787.63	6,179.12	5,797.21	30.68	49.73	-99.88	-1,155.79	-9,621.38	9,835.33	9,755.05	80.28	122.511		
6,100.00	5,887.41	6,264.55	5,882.53	31.07	49.98	-99.91	-1,151.77	-9,622.52	9,836.46	9,755.54	80.93	121.545		
6,200.00	5,987.36	6,393.85	6,011.72	31.44	50.35	-99.91	-1,146.59	-9,623.67	9,836.73	9,755.06	81.67	120.442		
6,295.49	6,082.84	6,464.22	6,082.05	31.78	50.55	-99.89	-1,144.25	-9,624.23	9,836.72	9,754.51	82.20	119.663		
6,300.00	6,087.36	6,467.26	6,085.09	31.80	50.55	-105.62	-1,144.16	-9,624.25	9,836.65	9,754.42	82.23	119.627		
6,400.00	6,187.36	6,534.82	6,152.62	32.15	50.74	-105.61	-1,142.28	-9,624.91	9,836.83	9,754.07	82.76	118.859		
6,500.00	6,287.36	6,602.40	6,220.18	32.51	50.92	-105.60	-1,140.74	-9,625.71	9,837.35	9,754.06	83.29	118.104		
6,600.00	6,387.36	6,683.64	6,301.40	32.87	51.12	-105.59	-1,139.29	-9,626.80	9,838.16	9,754.30	83.86	117.316		
6,700.00	6,487.36	6,775.53	6,393.27	33.23	51.36	-105.58	-1,138.06	-9,628.01	9,839.08	9,754.62	84.45	116.504		
6,800.00	6,587.36	6,868.12	6,485.85	33.59	51.59	-105.58	-1,137.20	-9,629.21	9,840.07	9,755.03	85.04	115.705		
6,900.00	6,687.26	6,961.34	6,579.06	33.95	51.81	-15.18	-1,136.56	-9,630.42	9,838.13	9,752.50	85.63	114.892		
7,000.00	6,785.58	7,056.39	6,674.10	34.31	52.05	-15.59	-1,136.08	-9,631.67	9,822.22	9,736.00	86.22	113.924		
7,100.00	6,879.94	7,151.17	6,768.87	34.65	52.28	-16.44	-1,135.62	-9,632.91	9,791.63	9,704.84	86.80	112.810		
7,200.00	6,968.01	7,239.84	6,857.54	34.97	52.50	-17.84	-1,135.20	-9,634.07	9,747.13	9,659.78	87.35	111.588		
7,300.00	7,047.61	7,320.23	6,937.91	35.27	52.70	-19.99	-1,134.82	-9,635.13	9,689.83	9,601.97	87.86	110.285		
7,400.00	7,116.80	7,390.84	7,008.52	35.54	52.88	-23.29	-1,134.48	-9,636.05	9,621.14	9,532.82	88.33	108.927		
7,500.00	7,173.86	7,469.83	7,087.50	35.81	53.08	-28.54	-1,134.11	-9,636.99	9,542.72	9,453.92	88.80	107.468		
7,600.00	7,217.38	7,530.07	7,147.74	36.17	53.23	-37.23	-1,133.83	-9,637.59	9,456.51	9,367.31	89.20	106.017		
7,700.00	7,246.31	7,570.24	7,187.91	36.80	53.33	-52.32	-1,133.66	-9,637.92	9,364.71	9,275.17	89.54	104.592		
7,800.00	7,259.92	7,589.56	7,207.23	37.72	53.38	-77.46	-1,133.57	-9,638.07	9,269.65	9,179.83	89.81	103.209		
7,900.00	7,260.77	7,591.65	7,209.32	38.86	53.39	-89.60	-1,133.56	-9,638.08	9,173.62	9,083.57	90.05	101.868		
8,000.00	7,260.39	7,592.09	7,209.76	40.19	53.39	-89.61	-1,133.56	-9,638.09	9,077.65	8,987.34	90.31	100.515		
8,100.00	7,260.01	7,592.53	7,210.20	41.67	53.39	-89.62	-1,133.56	-9,638.09	8,981.77	8,891.18	90.59	99.145		
8,200.00	7,259.63	7,592.97	7,210.64	43.30	53.39	-89.63	-1,133.56	-9,638.09	8,885.98	8,795.08	90.90	97.757		
8,300.00	7,259.25	7,593.40	7,211.07	45.05	53.39	-89.64	-1,133.56	-9,638.10	8,790.28	8,699.05	91.23	96.352		
8,400.00	7,258.87	7,593.83	7,211.50	46.91	53.39	-89.65	-1,133.55	-9,638.10	8,694.68	8,603.09	91.59	94.930		
8,500.00	7,258.49	7,594.26	7,211.93	48.87	53.39	-89.66	-1,133.55	-9,638.10	8,599.18	8,507.20	91.98	93.492		
8,600.00	7,258.11	7,594.68	7,212.35	50.92	53.39	-89.67	-1,133.55	-9,638.11	8,503.78	8,411.39	92.39	92.038		
8,700.00	7,257.73	7,595.10	7,212.77	53.04	53.39	-89.67	-1,133.55	-9,638.11	8,408.49	8,315.65	92.84	90.570		
8,800.00	7,257.35	7,595.52	7,213.18	55.23	53.40	-89.68	-1,133.55	-9,638.11	8,313.31	8,220.00	93.32	89.087		
8,900.00	7,256.97	7,595.93	7,213.60	57.47	53.40	-89.69	-1,133.54	-9,638.12	8,218.25	8,124.42	93.82	87.592		
9,000.00	7,256.59	7,596.34	7,214.01	59.77	53.40	-89.70	-1,133.54	-9,638.12	8,123.30	8,028.94	94.36	86.084		
9,100.00	7,256.21	7,596.75	7,214.42	62.12	53.40	-89.71	-1,133.54	-9,638.12	8,028.48	7,933.54	94.94	84.565		
9,200.00	7,255.83	7,597.16	7,214.82	64.50	53.40	-89.72	-1,133.54	-9,638.12	7,933.78	7,838.23	95.55	83.036		
9,300.00	7,255.45	7,597.56	7,215.22	66.93	53.40	-89.73	-1,133.54	-9,638.13	7,839.22	7,743.03	96.19	81.497		
9,400.00	7,255.07	7,597.95	7,215.62	69.38	53.40	-89.74	-1,133.54	-9,638.13	7,744.79	7,647.92	96.87	79.950		
9,500.00	7,254.69	7,598.35	7,216.02	71.87	53.40	-89.75	-1,133.53	-9,638.13	7,650.50	7,552.91	97.59	78.397		
9,600.00	7,254.31	7,598.74	7,216.41	74.38	53.40	-89.76	-1,133.53	-9,638.13	7,556.36	7,458.02	98.34	76.838		
9,700.00	7,253.93	7,599.13	7,216.80	76.92	53.40	-89.76	-1,133.53	-9,638.14	7,462.37	7,363.24	99.14	75.274		
9,800.00	7,253.55	7,599.52	7,217.18	79.48	53.41	-89.77	-1,133.53	-9,638.14	7,368.54	7,268.57	99.97	73.707		
9,900.00	7,253.18	7,599.90	7,217.57	82.06	53.41	-89.78	-1,133.53	-9,638.14	7,274.88	7,174.03	100.85	72.138		
10,000.00	7,252.80	7,600.28	7,217.95	84.65	53.41	-89.79	-1,133.53	-9,638.15	7,181.38	7,079.62	101.77	70.568		
10,100.00	7,252.42	7,600.66	7,218.33	87.27	53.41	-89.80	-1,133.52	-9,638.15	7,088.07	6,985.34	102.73	68.999		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,200.00	7,252.04	7,601.04	7,218.70	89.89	53.41	-89.81	-1,133.52	-9,638.15	6,994.94	6,891.20	103.73	67.432		
10,300.00	7,251.66	7,601.41	7,219.07	92.54	53.41	-89.82	-1,133.52	-9,638.15	6,902.00	6,797.21	104.79	65.867		
10,400.00	7,251.28	7,601.78	7,219.45	95.19	53.41	-89.82	-1,133.52	-9,638.16	6,809.26	6,703.37	105.89	64.308		
10,500.00	7,250.90	7,602.15	7,219.81	97.86	53.41	-89.83	-1,133.52	-9,638.16	6,716.73	6,609.69	107.03	62.754		
10,600.00	7,250.52	7,602.51	7,220.18	100.53	53.41	-89.84	-1,133.52	-9,638.16	6,624.41	6,516.18	108.23	61.207		
10,700.00	7,250.14	7,602.87	7,220.54	103.22	53.41	-89.85	-1,133.51	-9,638.16	6,532.32	6,422.85	109.48	59.668		
10,800.00	7,249.76	7,603.23	7,220.90	105.91	53.42	-89.86	-1,133.51	-9,638.17	6,440.47	6,329.70	110.78	58.139		
10,900.00	7,249.38	7,603.59	7,221.26	108.62	53.42	-89.86	-1,133.51	-9,638.17	6,348.87	6,236.74	112.13	56.621		
11,000.00	7,249.00	7,603.95	7,221.61	111.33	53.42	-89.87	-1,133.51	-9,638.17	6,257.52	6,143.98	113.54	55.114		
11,100.00	7,248.62	7,604.30	7,221.96	114.04	53.42	-89.88	-1,133.51	-9,638.17	6,166.44	6,051.43	115.00	53.620		
11,200.00	7,248.24	7,604.65	7,222.31	116.77	53.42	-89.89	-1,133.51	-9,638.18	6,075.64	5,959.11	116.53	52.139		
11,300.00	7,247.86	7,605.00	7,222.66	119.50	53.42	-89.90	-1,133.51	-9,638.18	5,985.13	5,867.02	118.11	50.674		
11,400.00	7,247.48	7,605.34	7,223.01	122.24	53.42	-89.90	-1,133.50	-9,638.18	5,894.93	5,775.18	119.75	49.225		
11,500.00	7,247.10	7,605.68	7,223.35	124.98	53.42	-89.91	-1,133.50	-9,638.18	5,805.05	5,683.59	121.46	47.793		
11,600.00	7,246.72	7,606.02	7,223.69	127.73	53.42	-89.92	-1,133.50	-9,638.18	5,715.51	5,592.28	123.24	46.379		
11,700.00	7,246.34	7,606.36	7,224.03	130.48	53.42	-89.93	-1,133.50	-9,638.19	5,626.32	5,501.24	125.08	44.983		
11,800.00	7,245.96	7,606.70	7,224.36	133.24	53.42	-89.93	-1,133.50	-9,638.19	5,537.50	5,410.51	126.99	43.607		
11,900.00	7,245.58	7,607.03	7,224.70	136.00	53.42	-89.94	-1,133.50	-9,638.19	5,449.07	5,320.10	128.97	42.251		
12,000.00	7,245.21	7,607.36	7,225.03	138.76	53.43	-89.95	-1,133.50	-9,638.19	5,361.04	5,230.02	131.02	40.917		
12,100.00	7,244.83	7,607.69	7,225.36	141.53	53.43	-89.96	-1,133.49	-9,638.20	5,273.44	5,140.29	133.15	39.604		
12,200.00	7,244.45	7,608.02	7,225.68	144.30	53.43	-89.96	-1,133.49	-9,638.20	5,186.29	5,050.93	135.36	38.314		
12,300.00	7,244.07	7,608.34	7,226.01	147.08	53.43	-89.97	-1,133.49	-9,638.20	5,099.61	4,961.96	137.65	37.047		
12,400.00	7,243.69	7,608.66	7,226.33	149.86	53.43	-89.98	-1,133.49	-9,638.20	5,013.43	4,873.40	140.02	35.804		
12,500.00	7,243.31	7,608.98	7,226.65	152.64	53.43	-89.98	-1,133.49	-9,638.20	4,927.76	4,785.28	142.48	34.585		
12,600.00	7,242.93	7,609.30	7,226.97	155.42	53.43	-89.99	-1,133.49	-9,638.21	4,842.65	4,697.62	145.03	33.391		
12,700.00	7,242.55	7,609.62	7,227.28	158.21	53.43	-90.00	-1,133.49	-9,638.21	4,758.12	4,610.45	147.66	32.222		
12,800.00	7,242.17	7,609.93	7,227.60	161.00	53.43	-90.01	-1,133.48	-9,638.21	4,674.20	4,523.80	150.39	31.080		
12,900.00	7,241.79	7,610.24	7,227.91	163.79	53.43	-90.01	-1,133.48	-9,638.21	4,590.92	4,437.70	153.22	29.963		
13,000.00	7,241.41	7,605.82	7,223.48	166.58	53.42	-89.91	-1,133.51	-9,638.20	4,508.34	4,352.21	156.13	28.876		
13,100.00	7,241.03	7,606.18	7,223.85	169.38	53.42	-89.92	-1,133.50	-9,638.20	4,426.46	4,267.31	159.15	27.813		
13,200.00	7,240.65	7,606.55	7,224.22	172.18	53.42	-89.93	-1,133.50	-9,638.20	4,345.34	4,183.05	162.28	26.777		
13,300.00	7,240.27	7,606.93	7,224.59	174.98	53.42	-89.94	-1,133.50	-9,638.21	4,265.02	4,099.50	165.52	25.768		
13,400.00	7,239.89	7,607.30	7,224.96	177.78	53.43	-89.95	-1,133.50	-9,638.21	4,185.54	4,016.69	168.86	24.787		
13,500.00	7,239.51	7,607.67	7,225.33	180.58	53.43	-89.96	-1,133.50	-9,638.21	4,106.97	3,934.66	172.31	23.835		
13,600.00	7,239.13	7,608.04	7,225.70	183.39	53.43	-89.96	-1,133.50	-9,638.21	4,029.34	3,853.47	175.88	22.910		
13,700.00	7,238.75	7,608.41	7,226.07	186.20	53.43	-89.97	-1,133.50	-9,638.22	3,952.72	3,773.17	179.56	22.014		
13,800.00	7,238.37	7,608.78	7,226.45	189.00	53.43	-89.98	-1,133.49	-9,638.22	3,877.17	3,693.82	183.35	21.146		
13,900.00	7,237.99	7,609.16	7,226.82	191.81	53.43	-89.99	-1,133.49	-9,638.22	3,802.74	3,615.49	187.26	20.307		
14,000.00	7,237.62	7,609.53	7,227.19	194.63	53.43	-90.00	-1,133.49	-9,638.23	3,729.51	3,538.23	191.28	19.497		
14,100.00	7,237.24	7,609.90	7,227.57	197.44	53.43	-90.01	-1,133.49	-9,638.23	3,657.55	3,462.13	195.42	18.716		
14,200.00	7,236.86	7,610.28	7,227.94	200.25	53.43	-90.01	-1,133.49	-9,638.23	3,586.94	3,387.26	199.68	17.964		
14,300.00	7,236.48	7,610.65	7,228.31	203.07	53.43	-90.02	-1,133.49	-9,638.23	3,517.75	3,313.70	204.04	17.240		
14,400.00	7,236.10	7,611.02	7,228.69	205.88	53.44	-90.03	-1,133.48	-9,638.24	3,450.06	3,241.55	208.51	16.546		
14,500.00	7,235.72	7,611.40	7,229.06	208.70	53.44	-90.04	-1,133.48	-9,638.24	3,383.99	3,170.90	213.09	15.881		
14,600.00	7,235.34	7,611.77	7,229.44	211.52	53.44	-90.05	-1,133.48	-9,638.24	3,319.61	3,101.84	217.76	15.244		
14,700.00	7,234.96	7,612.15	7,229.81	214.34	53.44	-90.06	-1,133.48	-9,638.25	3,257.02	3,034.50	222.52	14.637		
14,800.00	7,234.58	7,612.53	7,230.19	217.16	53.44	-90.06	-1,133.48	-9,638.25	3,196.34	2,968.98	227.37	14.058		
14,900.00	7,234.20	7,612.90	7,230.57	219.98	53.44	-90.07	-1,133.48	-9,638.25	3,137.68	2,905.40	232.28	13.508		
15,000.00	7,233.82	7,613.28	7,230.94	222.81	53.44	-90.08	-1,133.48	-9,638.25	3,081.14	2,843.90	237.25	12.987		
15,100.00	7,233.44	7,613.66	7,231.32	225.63	53.44	-90.09	-1,133.47	-9,638.26	3,026.85	2,784.60	242.25	12.495		
15,200.00	7,233.06	7,614.03	7,231.70	228.45	53.44	-90.10	-1,133.47	-9,638.26	2,974.94	2,727.65	247.29	12.030		
15,216.01	7,233.00	7,614.09	7,231.76	228.91	53.44	-90.10	-1,133.47	-9,638.26	2,966.85	2,718.76	248.09	11.959	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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
0.00	0.00	2,254.40	2,185.24	3.28	15.82	-105.82	-2,478.76	-8,746.19	9,349.62					
100.00	100.00	2,302.00	2,228.88	3.28	16.24	-105.72	-2,460.57	-8,740.65	9,326.60	9,308.24	18.36	507.953		
200.00	200.00	2,350.00	2,256.32	3.34	3.58	-105.43	-2,407.78	-8,724.56	9,304.03	9,298.20	5.84	1,593.279		
300.00	299.98	2,547.31	2,453.57	3.45	18.44	-99.94	-2,366.55	-8,711.60	9,280.93	9,260.48	20.45	453.860		
400.00	399.84	2,595.68	2,497.58	3.61	18.88	-100.29	-2,347.24	-8,706.12	9,258.89	9,237.91	20.98	441.424		
500.00	499.45	2,687.87	2,581.44	3.82	19.73	-100.56	-2,310.32	-8,695.93	9,237.78	9,215.87	21.92	421.457		
600.00	598.70	2,902.18	2,775.57	4.07	21.74	-100.64	-2,223.07	-8,670.81	9,216.26	9,192.32	23.95	384.877		
700.00	697.47	2,964.00	2,831.67	4.35	22.32	-100.98	-2,198.22	-8,663.34	9,195.51	9,170.79	24.72	371.968		
800.00	795.62	3,029.44	2,891.45	4.67	22.92	-101.31	-2,172.81	-8,655.35	9,175.79	9,150.24	25.54	359.217		
900.00	893.06	3,120.84	2,975.39	5.01	23.75	-101.62	-2,138.50	-8,643.94	9,156.94	9,130.33	26.60	344.190		
1,000.00	989.64	3,228.16	3,073.68	5.38	24.72	-101.93	-2,097.48	-8,630.75	9,138.75	9,110.92	27.83	328.402		
1,100.00	1,085.42	3,285.29	3,126.08	5.78	25.23	-102.07	-2,075.84	-8,623.71	9,121.28	9,092.61	28.67	318.156		
1,200.00	1,181.09	3,346.00	3,182.19	6.20	25.77	-102.06	-2,053.86	-8,616.32	9,104.48	9,074.92	29.56	307.992		
1,300.00	1,276.76	3,371.60	3,205.96	6.65	25.99	-102.06	-2,044.87	-8,613.27	9,088.22	9,058.03	30.19	301.045		
1,400.00	1,372.43	3,409.96	3,241.66	7.11	26.32	-102.05	-2,031.54	-8,608.86	9,072.63	9,041.71	30.93	293.344		
1,500.00	1,468.10	3,482.07	3,308.99	7.57	26.92	-102.05	-2,006.95	-8,600.94	9,057.67	9,025.74	31.93	283.696		
1,600.00	1,563.77	3,571.47	3,392.70	8.05	27.67	-102.05	-1,977.29	-8,590.67	9,042.60	9,009.55	33.05	273.572		
1,700.00	1,659.44	1,700.00	3,694.21	8.53	11.82	-102.06	-1,870.96	-8,549.37	9,025.79	9,006.23	19.56	461.490		
1,800.00	1,755.11	3,974.02	3,768.47	9.02	31.06	-102.05	-1,842.76	-8,538.80	9,008.45	8,971.50	36.95	243.792		
1,900.00	1,850.78	4,030.68	3,820.78	9.52	31.56	-102.04	-1,822.08	-8,531.90	8,991.60	8,953.72	37.89	237.314		
2,000.00	1,946.45	4,118.29	3,901.49	10.02	32.34	-102.01	-1,789.60	-8,521.61	8,975.01	8,935.93	39.08	229.650		
2,100.00	2,042.12	4,186.79	3,964.61	10.52	32.95	-102.00	-1,764.17	-8,513.75	8,958.65	8,918.52	40.13	223.236		
2,200.00	2,137.78	4,679.00	4,411.34	11.03	37.61	-101.79	-1,568.54	-8,449.55	8,938.40	8,893.74	44.66	200.153		
2,300.00	2,233.45	4,737.41	4,463.41	11.54	38.20	-101.75	-1,543.31	-8,441.49	8,917.93	8,872.24	45.70	195.159		
2,400.00	2,329.12	4,774.00	4,496.17	12.05	38.57	-101.73	-1,527.76	-8,436.67	8,898.20	8,851.65	46.55	191.154		
2,500.00	2,424.79	4,808.47	4,527.20	12.56	38.90	-101.71	-1,513.41	-8,432.28	8,879.16	8,831.78	47.38	187.416		
2,600.00	2,520.46	4,869.00	4,582.16	13.08	39.48	-101.68	-1,489.16	-8,424.85	8,860.95	8,812.53	48.42	183.000		
2,700.00	2,616.13	4,885.06	4,596.84	13.60	39.62	-101.68	-1,482.92	-8,422.93	8,843.21	8,794.12	49.09	180.136		
2,800.00	2,711.80	4,963.00	4,668.33	14.12	40.34	-101.65	-1,453.37	-8,413.49	8,826.01	8,775.76	50.25	175.636		
2,900.00	2,807.47	5,057.00	4,754.54	14.64	41.20	-101.62	-1,417.69	-8,401.99	8,808.70	8,757.16	51.54	170.915		
3,000.00	2,903.14	5,117.29	4,809.79	15.16	41.75	-101.60	-1,394.67	-8,394.79	8,791.69	8,739.12	52.56	167.263		
3,100.00	2,998.81	5,152.00	4,841.75	15.68	42.06	-101.59	-1,381.74	-8,390.81	8,775.38	8,722.00	53.38	164.379		
3,200.00	3,094.48	5,196.90	4,883.29	16.21	42.46	-101.58	-1,365.41	-8,385.84	8,759.73	8,705.46	54.27	161.398		
3,300.00	3,190.15	5,247.00	4,929.86	16.73	42.89	-101.57	-1,347.75	-8,380.53	8,744.77	8,689.57	55.20	158.413		
3,400.00	3,285.82	5,274.46	4,955.51	17.26	43.12	-101.57	-1,338.34	-8,377.73	8,730.46	8,674.51	55.95	156.047		
3,500.00	3,381.49	5,312.39	4,991.07	17.78	43.43	-101.57	-1,325.68	-8,373.98	8,716.86	8,660.09	56.77	153.553		
3,600.00	3,477.16	5,342.00	5,018.93	18.31	43.68	-101.57	-1,316.07	-8,371.16	8,703.96	8,646.44	57.53	151.306		
3,700.00	3,572.83	5,342.00	5,018.93	18.84	43.68	-101.57	-1,316.07	-8,371.16	8,692.07	8,634.00	58.06	149.700		
3,800.00	3,668.50	5,399.43	5,073.35	19.37	44.11	-101.57	-1,298.45	-8,366.08	8,680.58	8,621.59	58.99	147.153		
3,900.00	3,764.17	5,437.00	5,109.25	19.89	44.40	-101.58	-1,287.77	-8,363.10	8,670.18	8,610.40	59.78	145.037		
4,000.00	3,859.84	5,437.00	5,109.25	20.42	44.40	-101.58	-1,287.77	-8,363.10	8,660.61	8,600.31	60.31	143.610		
4,100.00	3,955.51	5,485.21	5,155.59	20.95	44.72	-101.60	-1,274.96	-8,359.59	8,651.76	8,590.63	61.13	141.525		
4,200.00	4,051.18	5,531.00	5,199.87	21.48	45.04	-101.62	-1,263.68	-8,356.56	8,643.79	8,581.85	61.94	139.549		
4,300.00	4,146.85	5,570.41	5,238.12	22.01	45.28	-101.64	-1,254.55	-8,354.03	8,636.47	8,573.78	62.69	137.773		
4,400.00	4,242.52	5,626.00	5,292.24	22.55	45.63	-101.68	-1,242.39	-8,350.35	8,629.56	8,566.03	63.52	135.848		
4,500.00	4,338.19	5,675.28	5,340.41	23.08	45.91	-101.72	-1,232.51	-8,347.09	8,623.21	8,558.91	64.30	134.118		
4,600.00	4,433.86	5,720.00	5,384.30	23.61	46.17	-101.75	-1,224.42	-8,344.25	8,617.59	8,552.55	65.04	132.497		
4,700.00	4,529.53	5,831.93	5,494.48	24.14	46.76	-101.87	-1,206.19	-8,336.80	8,612.28	8,546.18	66.09	130.308		
4,800.00	4,625.19	5,814.00	5,476.81	24.67	46.66	-101.85	-1,208.98	-8,338.05	8,607.61	8,541.11	66.50	129.429		
4,900.00	4,720.86	5,869.86	5,531.95	25.21	46.93	-101.91	-1,200.79	-8,334.51	8,603.41	8,536.15	67.26	127.922		
5,000.00	4,816.53	5,909.00	5,570.71	25.74	47.12	-101.96	-1,195.76	-8,332.44	8,600.30	8,532.37	67.93	126.614		
5,100.00	4,912.20	5,940.86	5,602.31	26.27	47.26	-102.00	-1,191.97	-8,330.90	8,597.93	8,529.38	68.55	125.431		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	6,003.00	5,663.98	26.80	47.53	-102.08	-1,184.95	-8,327.96	8,596.08	8,526.78	69.30	124.048		
5,300.00	5,103.54	6,052.61	5,713.27	27.34	47.73	-102.15	-1,179.76	-8,325.75	8,594.75	8,524.77	69.98	122.819		
5,400.00	5,199.22	6,097.00	5,757.41	27.87	47.92	-102.21	-1,175.46	-8,323.91	8,594.05	8,523.41	70.64	121.666		
5,500.00	5,295.46	6,142.98	5,803.17	28.39	48.09	-102.26	-1,171.28	-8,322.23	8,593.55	8,522.27	71.28	120.558		
5,600.00	5,392.60	6,192.00	5,851.98	28.89	48.28	-102.30	-1,167.03	-8,320.73	8,593.00	8,521.08	71.92	119.478		
5,700.00	5,490.50	6,252.79	5,912.53	29.37	48.51	-102.33	-1,161.78	-8,319.19	8,592.24	8,519.65	72.59	118.361		
5,800.00	5,589.05	6,319.37	5,978.83	29.83	48.77	-102.35	-1,155.91	-8,317.77	8,591.10	8,517.83	73.27	117.249		
5,900.00	5,688.14	6,381.00	6,040.25	30.26	49.00	-102.35	-1,150.93	-8,316.58	8,589.64	8,515.73	73.91	116.215		
6,000.00	5,787.63	6,450.04	6,109.09	30.68	49.24	-102.33	-1,145.93	-8,315.35	8,587.84	8,513.29	74.55	115.191		
6,100.00	5,887.41	6,519.07	6,177.97	31.07	49.48	-102.29	-1,141.45	-8,314.22	8,585.67	8,510.50	75.17	114.214		
6,200.00	5,987.36	6,570.00	6,228.81	31.44	49.65	-102.23	-1,138.47	-8,313.44	8,583.13	8,507.43	75.70	113.386		
6,300.00	6,087.36	6,628.94	6,287.67	31.80	49.84	-107.93	-1,135.39	-8,312.75	8,580.52	8,504.28	76.24	112.552		
6,400.00	6,187.36	6,680.44	6,339.11	32.15	50.00	-107.91	-1,133.01	-8,312.44	8,578.49	8,501.75	76.74	111.785		
6,500.00	6,287.36	6,749.57	6,408.18	32.51	50.20	-107.90	-1,130.27	-8,312.17	8,576.90	8,499.59	77.31	110.944		
6,600.00	6,387.36	6,840.50	6,499.07	32.87	50.47	-107.88	-1,127.42	-8,311.81	8,575.56	8,497.61	77.95	110.016		
6,700.00	6,487.36	6,936.16	6,594.70	33.23	50.73	-107.87	-1,125.02	-8,311.30	8,574.28	8,495.69	78.60	109.088		
6,800.00	6,587.36	7,032.04	6,690.55	33.59	51.00	-107.85	-1,122.81	-8,310.78	8,573.06	8,493.80	79.25	108.174		
6,900.00	6,687.26	7,123.67	6,782.15	33.95	51.26	-17.50	-1,120.91	-8,310.27	8,568.93	8,489.05	79.88	107.274		
7,000.00	6,785.58	7,213.26	6,871.73	34.31	51.50	-18.02	-1,119.38	-8,309.77	8,561.06	8,479.58	80.48	106.244		
7,100.00	6,879.94	7,299.15	6,957.61	34.65	51.73	-19.06	-1,118.18	-8,309.29	8,518.87	8,437.81	81.06	105.094		
7,200.00	6,968.01	7,379.24	7,037.69	34.97	51.95	-20.73	-1,117.26	-8,308.86	8,473.14	8,391.55	81.59	103.846		
7,300.00	7,047.61	7,465.35	7,123.80	35.27	52.18	-23.31	-1,116.44	-8,308.39	8,414.98	8,332.85	82.13	102.464		
7,400.00	7,116.80	7,556.98	7,215.42	35.54	52.43	-27.28	-1,115.57	-8,307.67	8,345.63	8,262.98	82.66	100.967		
7,500.00	7,173.86	7,616.09	7,274.53	35.81	52.59	-33.36	-1,114.96	-8,307.10	8,266.92	8,183.86	83.06	99.527		
7,600.00	7,217.38	7,655.72	7,314.16	36.17	52.70	-43.04	-1,114.47	-8,306.77	8,180.94	8,097.55	83.39	98.103		
7,700.00	7,246.31	7,683.33	7,341.76	36.80	52.78	-58.83	-1,114.10	-8,306.55	8,089.83	8,006.15	83.68	96.677		
7,800.00	7,259.92	7,696.15	7,354.58	37.72	52.81	-82.29	-1,113.92	-8,306.45	7,995.84	7,911.92	83.92	95.276		
7,900.00	7,260.77	7,696.20	7,354.63	38.86	52.81	-92.74	-1,113.92	-8,306.45	7,901.17	7,817.03	84.14	93.904		
8,000.00	7,260.39	7,695.03	7,353.46	40.19	52.81	-92.71	-1,113.94	-8,306.46	7,806.62	7,722.24	84.38	92.513		
8,100.00	7,260.01	7,693.86	7,352.29	41.67	52.81	-92.69	-1,113.95	-8,306.47	7,712.21	7,627.56	84.66	91.098		
8,200.00	7,259.63	7,692.69	7,351.12	43.30	52.81	-92.66	-1,113.97	-8,306.48	7,617.95	7,532.98	84.96	89.660		
8,300.00	7,259.25	7,691.52	7,349.95	45.05	52.80	-92.63	-1,113.98	-8,306.49	7,523.83	7,438.52	85.30	88.199		
8,400.00	7,258.87	7,690.35	7,348.78	46.91	52.80	-92.61	-1,114.00	-8,306.50	7,429.86	7,344.18	85.68	86.717		
8,500.00	7,258.49	7,689.18	7,347.61	48.87	52.80	-92.58	-1,114.02	-8,306.51	7,336.06	7,249.97	86.09	85.213		
8,600.00	7,258.11	7,688.01	7,346.43	50.92	52.79	-92.56	-1,114.03	-8,306.52	7,242.42	7,155.88	86.54	83.689		
8,700.00	7,257.73	7,686.83	7,345.26	53.04	52.79	-92.53	-1,114.05	-8,306.52	7,148.95	7,061.92	87.03	82.146		
8,800.00	7,257.35	7,685.66	7,344.09	55.23	52.79	-92.50	-1,114.06	-8,306.53	7,055.66	6,968.11	87.56	80.585		
8,900.00	7,256.97	7,684.49	7,342.92	57.47	52.78	-92.48	-1,114.08	-8,306.54	6,962.56	6,874.43	88.13	79.007		
9,000.00	7,256.59	7,683.32	7,341.75	59.77	52.78	-92.45	-1,114.10	-8,306.55	6,869.65	6,780.91	88.74	77.415		
9,100.00	7,256.21	7,682.15	7,340.58	62.12	52.78	-92.42	-1,114.11	-8,306.56	6,776.94	6,687.55	89.39	75.810		
9,200.00	7,255.83	7,680.98	7,339.41	64.50	52.77	-92.40	-1,114.13	-8,306.57	6,684.44	6,594.35	90.10	74.193		
9,300.00	7,255.45	7,679.81	7,338.24	66.93	52.77	-92.37	-1,114.14	-8,306.58	6,592.17	6,501.32	90.84	72.565		
9,400.00	7,255.07	7,678.64	7,337.07	69.38	52.77	-92.35	-1,114.16	-8,306.59	6,500.11	6,408.47	91.64	70.930		
9,500.00	7,254.69	7,677.47	7,335.90	71.87	52.76	-92.32	-1,114.18	-8,306.60	6,408.30	6,315.81	92.49	69.288		
9,600.00	7,254.31	7,676.29	7,334.72	74.38	52.76	-92.29	-1,114.19	-8,306.61	6,316.74	6,223.35	93.38	67.642		
9,700.00	7,253.93	7,675.12	7,333.55	76.92	52.76	-92.27	-1,114.21	-8,306.62	6,225.43	6,131.10	94.33	65.994		
9,800.00	7,253.55	7,673.95	7,332.38	79.48	52.75	-92.24	-1,114.22	-8,306.62	6,134.40	6,039.06	95.34	64.345		
9,900.00	7,253.18	7,672.78	7,331.21	82.06	52.75	-92.21	-1,114.24	-8,306.63	6,043.65	5,947.25	96.39	62.697		
10,000.00	7,252.80	7,671.61	7,330.04	84.65	52.75	-92.19	-1,114.26	-8,306.64	5,953.19	5,855.68	97.51	61.052		
10,100.00	7,252.42	7,670.44	7,328.87	87.27	52.74	-92.16	-1,114.27	-8,306.65	5,863.05	5,764.37	98.68	59.413		
10,200.00	7,252.04	7,669.27	7,327.70	89.89	52.74	-92.14	-1,114.29	-8,306.66	5,773.23	5,673.31	99.92	57.781		
10,300.00	7,251.66	7,668.10	7,326.53	92.54	52.74	-92.11	-1,114.30	-8,306.67	5,683.75	5,582.54	101.21	56.157		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,251.28	7,666.92	7,325.36	95.19	52.73	-92.08	-1,114.32	-8,306.68	5,594.63	5,492.06	102.57	54.545		
10,500.00	7,250.90	7,665.75	7,324.18	97.86	52.73	-92.06	-1,114.34	-8,306.69	5,505.87	5,401.88	103.99	52.945		
10,600.00	7,250.52	7,664.58	7,323.01	100.53	52.73	-92.03	-1,114.35	-8,306.70	5,417.51	5,312.03	105.48	51.359		
10,700.00	7,250.14	7,663.41	7,321.84	103.22	52.72	-92.00	-1,114.37	-8,306.71	5,329.57	5,222.53	107.04	49.790		
10,800.00	7,249.76	7,662.24	7,320.67	105.91	52.72	-91.98	-1,114.38	-8,306.72	5,242.05	5,133.38	108.67	48.238		
10,900.00	7,249.38	7,661.06	7,319.49	108.62	52.72	-91.95	-1,114.40	-8,306.73	5,154.99	5,044.61	110.37	46.704		
11,000.00	7,249.00	7,659.87	7,318.31	111.33	52.71	-91.93	-1,114.42	-8,306.73	5,068.40	4,956.25	112.15	45.192		
11,100.00	7,248.62	7,658.68	7,317.11	114.04	52.71	-91.90	-1,114.43	-8,306.74	4,982.32	4,868.31	114.01	43.701		
11,200.00	7,248.24	7,657.48	7,315.92	116.77	52.71	-91.87	-1,114.45	-8,306.75	4,896.76	4,780.82	115.94	42.234		
11,300.00	7,247.86	7,656.28	7,314.71	119.50	52.70	-91.84	-1,114.46	-8,306.76	4,811.77	4,693.81	117.96	40.791		
11,400.00	7,247.48	7,655.07	7,313.50	122.24	52.70	-91.82	-1,114.48	-8,306.77	4,727.36	4,607.29	120.06	39.374		
11,500.00	7,247.10	7,653.85	7,312.29	124.98	52.70	-91.79	-1,114.50	-8,306.78	4,643.56	4,521.31	122.25	37.983		
11,600.00	7,246.72	7,652.63	7,311.07	127.73	52.69	-91.76	-1,114.51	-8,306.79	4,560.43	4,435.89	124.53	36.620		
11,700.00	7,246.34	7,651.40	7,309.84	130.48	52.69	-91.74	-1,114.53	-8,306.80	4,477.98	4,351.07	126.90	35.286		
11,800.00	7,245.96	7,650.17	7,308.60	133.24	52.69	-91.71	-1,114.54	-8,306.81	4,396.25	4,266.88	129.37	33.982		
11,900.00	7,245.58	7,648.93	7,307.36	136.00	52.68	-91.68	-1,114.56	-8,306.82	4,315.30	4,183.37	131.94	32.708		
12,000.00	7,245.21	7,647.68	7,306.11	138.76	52.68	-91.65	-1,114.58	-8,306.83	4,235.16	4,100.56	134.60	31.465		
12,100.00	7,244.83	7,646.43	7,304.86	141.53	52.68	-91.62	-1,114.59	-8,306.84	4,155.88	4,018.52	137.37	30.254		
12,200.00	7,244.45	7,645.17	7,303.60	144.30	52.67	-91.60	-1,114.61	-8,306.85	4,077.52	3,937.27	140.24	29.075		
12,300.00	7,244.07	7,643.90	7,302.33	147.08	52.67	-91.57	-1,114.62	-8,306.86	4,000.11	3,856.89	143.22	27.929		
12,400.00	7,243.69	7,642.62	7,301.06	149.86	52.67	-91.54	-1,114.64	-8,306.87	3,923.73	3,777.42	146.32	26.817		
12,500.00	7,243.31	7,641.34	7,299.78	152.64	52.66	-91.51	-1,114.66	-8,306.89	3,848.43	3,698.91	149.52	25.738		
12,600.00	7,242.93	7,640.06	7,298.49	155.42	52.66	-91.48	-1,114.67	-8,306.90	3,774.28	3,621.44	152.84	24.694		
12,700.00	7,242.55	7,638.76	7,297.20	158.21	52.65	-91.45	-1,114.69	-8,306.91	3,701.34	3,545.06	156.28	23.684		
12,800.00	7,242.17	7,637.46	7,295.90	161.00	52.65	-91.42	-1,114.71	-8,306.92	3,629.70	3,469.86	159.83	22.709		
12,900.00	7,241.79	7,636.15	7,294.59	163.79	52.65	-91.39	-1,114.72	-8,306.93	3,559.42	3,395.91	163.51	21.769		
13,000.00	7,241.41	7,634.84	7,293.27	166.58	52.64	-91.36	-1,114.74	-8,306.94	3,490.59	3,323.29	167.30	20.864		
13,100.00	7,241.03	7,633.51	7,291.95	169.38	52.64	-91.33	-1,114.75	-8,306.95	3,423.29	3,252.09	171.21	19.995		
13,200.00	7,240.65	7,632.19	7,290.62	172.18	52.64	-91.30	-1,114.77	-8,306.96	3,357.63	3,182.40	175.23	19.161		
13,300.00	7,240.27	7,630.85	7,289.28	174.98	52.63	-91.28	-1,114.79	-8,306.97	3,293.69	3,114.32	179.37	18.362		
13,400.00	7,239.89	7,629.51	7,287.94	177.78	52.63	-91.24	-1,114.80	-8,306.99	3,231.58	3,047.96	183.62	17.599		
13,500.00	7,239.51	7,628.15	7,286.59	180.58	52.63	-91.21	-1,114.82	-8,307.00	3,171.41	2,983.43	187.98	16.871		
13,600.00	7,239.13	7,626.80	7,285.23	183.39	52.62	-91.18	-1,114.84	-8,307.01	3,113.29	2,920.85	192.44	16.178		
13,700.00	7,238.75	7,625.43	7,283.87	186.20	52.62	-91.15	-1,114.85	-8,307.02	3,057.34	2,860.35	196.99	15.520		
13,800.00	7,238.37	7,624.06	7,282.49	189.00	52.61	-91.12	-1,114.87	-8,307.03	3,003.67	2,802.05	201.62	14.897		
13,900.00	7,237.99	7,622.68	7,281.11	191.81	52.61	-91.09	-1,114.89	-8,307.05	2,952.41	2,746.09	206.33	14.309		
14,000.00	7,237.62	7,621.29	7,279.73	194.63	52.61	-91.06	-1,114.90	-8,307.06	2,903.70	2,692.61	211.09	13.756		
14,100.00	7,237.24	7,619.89	7,278.33	197.44	52.60	-91.03	-1,114.92	-8,307.07	2,857.65	2,641.75	215.90	13.236		
14,200.00	7,236.86	7,618.49	7,276.93	200.25	52.60	-91.00	-1,114.93	-8,307.08	2,814.40	2,593.67	220.73	12.750		
14,300.00	7,236.48	7,617.08	7,275.52	203.07	52.59	-90.97	-1,114.95	-8,307.10	2,774.09	2,548.52	225.57	12.298		
14,400.00	7,236.10	7,615.66	7,274.10	205.88	52.59	-90.93	-1,114.97	-8,307.11	2,736.83	2,506.44	230.39	11.879		
14,500.00	7,235.72	7,614.23	7,272.67	208.70	52.59	-90.90	-1,114.98	-8,307.12	2,702.77	2,467.59	235.18	11.493		
14,600.00	7,235.34	7,612.80	7,271.23	211.52	52.58	-90.87	-1,115.00	-8,307.13	2,672.01	2,432.12	239.89	11.138		
14,700.00	7,234.96	7,611.35	7,269.79	214.34	52.58	-90.84	-1,115.02	-8,307.15	2,644.68	2,400.17	244.51	10.816		
14,800.00	7,234.58	7,609.90	7,268.34	217.16	52.57	-90.81	-1,115.03	-8,307.16	2,620.88	2,371.87	249.01	10.525		
14,900.00	7,234.20	7,608.44	7,266.88	219.98	52.57	-90.77	-1,115.05	-8,307.17	2,600.71	2,347.35	253.36	10.265		
15,000.00	7,233.82	7,606.98	7,265.41	222.81	52.57	-90.74	-1,115.06	-8,307.19	2,584.25	2,326.74	257.52	10.035		
15,100.00	7,233.44	7,605.50	7,263.94	225.63	52.56	-90.71	-1,115.08	-8,307.20	2,571.58	2,310.12	261.47	9.835		
15,200.00	7,233.06	7,604.02	7,262.46	228.45	52.56	-90.67	-1,115.10	-8,307.22	2,562.75	2,297.58	265.18	9.664		
15,216.01	7,233.00	7,603.78	7,262.22	228.91	52.56	-90.67	-1,115.10	-8,307.22	2,561.70	2,295.95	265.75	9.640	CC, ES, 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	37.00	3.28	3.28	-109.09	-3,116.80	-9,005.52	9,529.70					
100.00	100.00	36.86	73.86	3.28	3.28	-109.09	-3,116.72	-9,005.60	9,529.71	9,523.15	6.57	1,451.460		
200.00	200.00	95.37	132.37	3.34	3.29	-109.09	-3,116.27	-9,006.06	9,530.21	9,523.58	6.62	1,438.966		
300.00	299.98	168.00	204.98	3.45	3.30	-103.33	-3,115.16	-9,007.20	9,531.55	9,524.81	6.74	1,413.605		
400.00	399.84	168.00	204.98	3.61	3.30	-103.27	-3,115.16	-9,007.20	9,534.28	9,527.38	6.90	1,381.247		
500.00	499.45	213.24	250.20	3.82	3.33	-103.21	-3,114.29	-9,008.42	9,538.44	9,531.31	7.13	1,336.872		
600.00	598.70	259.00	295.90	4.07	3.37	-103.12	-3,113.42	-9,010.33	9,544.34	9,536.92	7.42	1,286.426		
700.00	697.47	259.00	295.90	4.35	3.37	-102.98	-3,113.42	-9,010.33	9,551.64	9,543.93	7.70	1,239.814		
800.00	795.62	292.08	328.94	4.67	3.40	-102.83	-3,112.89	-9,012.07	9,560.55	9,552.50	8.06	1,186.714		
900.00	893.06	319.13	355.94	5.01	3.44	-102.66	-3,112.59	-9,013.68	9,571.01	9,562.57	8.44	1,134.354		
1,000.00	989.64	350.00	386.74	5.38	3.48	-102.46	-3,112.40	-9,015.72	9,582.98	9,574.12	8.86	1,082.030		
1,100.00	1,085.42	400.87	437.48	5.78	3.56	-102.42	-3,112.26	-9,019.34	9,596.22	9,586.89	9.34	1,027.653		
1,200.00	1,181.09	470.39	506.80	6.20	3.70	-102.53	-3,112.12	-9,024.51	9,609.96	9,600.08	9.89	971.893		
1,300.00	1,276.76	532.00	568.24	6.65	3.84	-102.63	-3,111.92	-9,029.20	9,623.95	9,613.49	10.46	920.435		
1,400.00	1,372.43	577.11	613.20	7.11	3.95	-102.70	-3,111.87	-9,032.81	9,638.44	9,627.43	11.01	875.391		
1,500.00	1,468.10	611.59	647.55	7.57	4.05	-102.75	-3,111.98	-9,035.78	9,653.63	9,642.07	11.55	835.521		
1,600.00	1,563.77	644.00	679.83	8.05	4.14	-102.80	-3,112.21	-9,038.73	9,669.48	9,657.38	12.10	798.922		
1,700.00	1,659.44	709.98	745.51	8.53	4.34	-102.91	-3,112.90	-9,045.00	9,685.85	9,673.09	12.76	759.272		
1,800.00	1,755.11	827.76	862.74	9.02	4.72	-103.09	-3,114.42	-9,056.18	9,702.35	9,688.76	13.59	713.919		
1,900.00	1,850.78	921.75	956.29	9.52	5.06	-103.24	-3,115.17	-9,065.19	9,718.84	9,704.46	14.38	675.886		
2,000.00	1,946.45	1,096.00	1,129.81	10.02	5.72	-103.50	-3,115.34	-9,081.13	9,734.59	9,719.10	15.48	628.780		
2,100.00	2,042.12	1,141.41	1,175.04	10.52	5.90	-103.57	-3,115.24	-9,085.19	9,750.47	9,734.33	16.14	604.255		
2,200.00	2,137.78	1,190.00	1,223.36	11.03	6.09	-103.64	-3,114.97	-9,090.29	9,767.29	9,750.48	16.81	581.122		
2,300.00	2,233.45	1,190.00	1,223.36	11.54	6.09	-103.64	-3,114.97	-9,090.29	9,784.64	9,767.35	17.29	565.795		
2,400.00	2,329.12	1,223.87	1,257.00	12.05	6.24	-103.69	-3,114.74	-9,094.25	9,802.81	9,784.89	17.91	547.242		
2,500.00	2,424.79	1,255.12	1,288.00	12.56	6.37	-103.73	-3,114.53	-9,098.12	9,821.65	9,803.13	18.52	530.230		
2,600.00	2,520.46	1,285.00	1,317.63	13.08	6.50	-103.77	-3,114.34	-9,102.02	9,841.18	9,822.05	19.13	514.469		
2,700.00	2,616.13	1,316.85	1,349.18	13.60	6.64	-103.82	-3,114.26	-9,106.35	9,861.38	9,841.64	19.74	499.485		
2,800.00	2,711.80	1,347.25	1,379.28	14.12	6.78	-103.86	-3,114.39	-9,110.62	9,882.26	9,861.91	20.35	485.578		
2,900.00	2,807.47	1,379.00	1,410.70	14.64	6.92	-103.90	-3,114.74	-9,115.22	9,903.81	9,882.85	20.97	472.386		
3,000.00	2,903.14	1,415.67	1,446.94	15.16	7.10	-103.96	-3,115.17	-9,120.77	9,926.00	9,904.40	21.60	459.507		
3,100.00	2,998.81	1,475.00	1,505.49	15.68	7.38	-104.04	-3,115.40	-9,130.37	9,948.83	9,926.49	22.34	445.402		
3,200.00	3,094.48	1,475.00	1,505.49	16.21	7.38	-104.04	-3,115.40	-9,130.37	9,972.18	9,949.37	22.81	437.163		
3,300.00	3,190.15	1,526.08	1,555.80	16.73	7.63	-104.10	-3,115.48	-9,139.16	9,996.12	9,972.61	23.51	425.137		
8,500.00	7,258.49	7,087.40	6,973.10	48.87	40.92	-86.85	-3,157.09	-10,251.56	9,958.90	9,884.50	74.40	133.850		
8,600.00	7,258.11	7,088.23	6,973.92	50.92	40.93	-86.87	-3,157.11	-10,251.57	9,870.26	9,795.06	75.20	131.247		
8,700.00	7,257.73	7,089.06	6,974.75	53.04	40.93	-86.88	-3,157.14	-10,251.59	9,781.84	9,705.79	76.06	128.613		
8,800.00	7,257.35	7,089.88	6,975.57	55.23	40.93	-86.89	-3,157.17	-10,251.60	9,693.65	9,616.69	76.96	125.955		
8,900.00	7,256.97	7,090.70	6,976.40	57.47	40.93	-86.90	-3,157.19	-10,251.61	9,605.69	9,527.77	77.92	123.279		
9,000.00	7,256.59	7,091.53	6,977.22	59.77	40.94	-86.91	-3,157.22	-10,251.62	9,517.96	9,439.04	78.93	120.591		
9,100.00	7,256.21	7,092.35	6,978.04	62.12	40.94	-86.92	-3,157.24	-10,251.64	9,430.48	9,350.49	79.99	117.897		
9,200.00	7,255.83	7,093.17	6,978.86	64.50	40.94	-86.93	-3,157.27	-10,251.65	9,343.25	9,262.15	81.10	115.202		
9,300.00	7,255.45	7,093.99	6,979.68	66.93	40.95	-86.94	-3,157.30	-10,251.66	9,256.28	9,174.01	82.27	112.512		
9,400.00	7,255.07	7,094.80	6,980.49	69.38	40.95	-86.95	-3,157.32	-10,251.68	9,169.58	9,086.09	83.49	109.832		
9,500.00	7,254.69	7,095.62	6,981.31	71.87	40.95	-86.96	-3,157.35	-10,251.69	9,083.15	8,998.39	84.76	107.165		
9,600.00	7,254.31	7,096.44	6,982.12	74.38	40.95	-86.97	-3,157.38	-10,251.70	8,996.99	8,910.91	86.08	104.518		
9,700.00	7,253.93	7,097.25	6,982.94	76.92	40.96	-86.98	-3,157.40	-10,251.71	8,911.13	8,823.68	87.46	101.893		
9,800.00	7,253.55	7,098.06	6,983.75	79.48	40.96	-86.99	-3,157.43	-10,251.73	8,825.57	8,736.69	88.88	99.294		
9,900.00	7,253.18	7,098.88	6,984.56	82.06	40.96	-87.00	-3,157.46	-10,251.74	8,740.31	8,649.95	90.36	96.725		
10,000.00	7,252.80	7,099.69	6,985.37	84.65	40.96	-87.01	-3,157.48	-10,251.75	8,655.37	8,563.47	91.89	94.188		
10,100.00	7,252.42	7,100.50	6,986.18	87.27	40.97	-87.02	-3,157.51	-10,251.76	8,570.75	8,477.27	93.48	91.687		
10,200.00	7,252.04	7,101.30	6,986.99	89.89	40.97	-87.03	-3,157.54	-10,251.78	8,486.47	8,391.35	95.11	89.224		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,251.66	7,102.11	6,987.80	92.54	40.97	-87.04	-3,157.56	-10,251.79	8,402.53	8,305.73	96.80	86.799		
10,400.00	7,251.28	7,102.92	6,988.60	95.19	40.97	-87.05	-3,157.59	-10,251.80	8,318.95	8,220.40	98.55	84.417		
10,500.00	7,250.90	7,103.72	6,989.41	97.86	40.98	-87.06	-3,157.62	-10,251.81	8,235.73	8,135.39	100.34	82.077		
10,600.00	7,250.52	7,104.53	6,990.21	100.53	40.98	-87.07	-3,157.64	-10,251.83	8,152.89	8,050.70	102.19	79.782		
10,700.00	7,250.14	7,105.33	6,991.01	103.22	40.98	-87.08	-3,157.67	-10,251.84	8,070.44	7,966.34	104.09	77.532		
10,800.00	7,249.76	7,106.13	6,991.81	105.91	40.99	-87.09	-3,157.70	-10,251.85	7,988.38	7,882.34	106.05	75.328		
10,900.00	7,249.38	7,106.93	6,992.61	108.62	40.99	-87.10	-3,157.73	-10,251.86	7,906.75	7,798.69	108.06	73.171		
11,000.00	7,249.00	7,107.73	6,993.41	111.33	40.99	-87.11	-3,157.75	-10,251.88	7,825.53	7,715.41	110.12	71.061		
11,100.00	7,248.62	7,108.53	6,994.21	114.04	40.99	-87.12	-3,157.78	-10,251.89	7,744.76	7,632.52	112.25	68.999		
11,200.00	7,248.24	7,109.33	6,995.00	116.77	41.00	-87.13	-3,157.81	-10,251.90	7,664.44	7,550.02	114.42	66.984		
11,300.00	7,247.86	7,110.12	6,995.80	119.50	41.00	-87.14	-3,157.83	-10,251.91	7,584.59	7,467.94	116.65	65.018		
11,400.00	7,247.48	7,110.92	6,996.59	122.24	41.00	-87.15	-3,157.86	-10,251.93	7,505.22	7,386.28	118.94	63.099		
11,500.00	7,247.10	7,111.71	6,997.39	124.98	41.00	-87.16	-3,157.89	-10,251.94	7,426.35	7,305.06	121.29	61.229		
11,600.00	7,246.72	7,112.50	6,998.18	127.73	41.01	-87.17	-3,157.92	-10,251.95	7,348.00	7,224.30	123.69	59.405		
11,700.00	7,246.34	7,113.29	6,998.97	130.48	41.01	-87.18	-3,157.94	-10,251.96	7,270.17	7,144.02	126.15	57.629		
11,800.00	7,245.96	7,114.08	6,999.76	133.24	41.01	-87.19	-3,157.97	-10,251.98	7,192.89	7,064.22	128.67	55.900		
11,900.00	7,245.58	7,114.87	7,000.55	136.00	41.01	-87.20	-3,158.00	-10,251.99	7,116.18	6,984.93	131.25	54.217		
12,000.00	7,245.21	7,115.66	7,001.34	138.76	41.02	-87.21	-3,158.03	-10,252.00	7,040.05	6,906.16	133.89	52.580		
12,100.00	7,244.83	7,116.45	7,002.12	141.53	41.02	-87.22	-3,158.05	-10,252.01	6,964.53	6,827.94	136.59	50.988		
12,200.00	7,244.45	7,117.23	7,002.91	144.30	41.02	-87.23	-3,158.08	-10,252.02	6,889.63	6,750.28	139.35	49.441		
12,300.00	7,244.07	7,118.02	7,003.69	147.08	41.02	-87.24	-3,158.11	-10,252.04	6,815.38	6,673.21	142.17	47.938		
12,400.00	7,243.69	7,118.80	7,004.47	149.86	41.03	-87.25	-3,158.14	-10,252.05	6,741.78	6,596.73	145.05	46.478		
12,500.00	7,243.31	7,119.58	7,005.26	152.64	41.03	-87.26	-3,158.17	-10,252.06	6,668.88	6,520.89	147.99	45.062		
12,600.00	7,242.93	7,120.37	7,006.04	155.42	41.03	-87.27	-3,158.19	-10,252.07	6,596.69	6,445.69	151.00	43.687		
12,700.00	7,242.55	7,121.15	7,006.82	158.21	41.04	-87.28	-3,158.22	-10,252.08	6,525.23	6,371.16	154.07	42.353		
12,800.00	7,242.17	7,121.93	7,007.59	161.00	41.04	-87.29	-3,158.25	-10,252.10	6,454.53	6,297.33	157.20	41.060		
12,900.00	7,241.79	7,122.70	7,008.37	163.79	41.04	-87.30	-3,158.28	-10,252.11	6,384.61	6,224.22	160.39	39.808		
13,000.00	7,241.41	7,123.48	7,009.15	166.58	41.04	-87.30	-3,158.30	-10,252.12	6,315.50	6,151.86	163.64	38.594		
13,100.00	7,241.03	7,124.26	7,009.92	169.38	41.05	-87.31	-3,158.33	-10,252.13	6,247.23	6,080.27	166.96	37.418		
13,200.00	7,240.65	7,125.03	7,010.70	172.18	41.05	-87.32	-3,158.36	-10,252.14	6,179.82	6,009.49	170.33	36.280		
13,300.00	7,240.27	7,125.80	7,011.47	174.98	41.05	-87.33	-3,158.39	-10,252.16	6,113.30	5,939.53	173.77	35.180		
13,400.00	7,239.89	7,126.58	7,012.24	177.78	41.05	-87.34	-3,158.42	-10,252.17	6,047.71	5,870.44	177.27	34.115		
13,500.00	7,239.51	7,127.35	7,013.01	180.58	41.06	-87.35	-3,158.44	-10,252.18	5,983.07	5,802.23	180.83	33.086		
13,600.00	7,239.13	7,128.12	7,013.78	183.39	41.06	-87.36	-3,158.47	-10,252.19	5,919.41	5,734.95	184.45	32.091		
13,700.00	7,238.75	7,128.89	7,014.55	186.20	41.06	-87.37	-3,158.50	-10,252.20	5,856.76	5,668.63	188.13	31.131		
13,800.00	7,238.37	7,129.66	7,015.32	189.00	41.06	-87.38	-3,158.53	-10,252.21	5,795.17	5,603.30	191.87	30.204		
13,900.00	7,237.99	7,130.42	7,016.09	191.81	41.07	-87.39	-3,158.56	-10,252.23	5,734.66	5,539.00	195.66	29.309		
14,000.00	7,237.62	7,131.19	7,016.85	194.63	41.07	-87.40	-3,158.59	-10,252.24	5,675.26	5,475.75	199.50	28.447		
14,100.00	7,237.24	7,131.96	7,017.62	197.44	41.07	-87.41	-3,158.61	-10,252.25	5,617.02	5,413.61	203.40	27.615		
14,200.00	7,236.86	7,132.72	7,018.38	200.25	41.07	-87.42	-3,158.64	-10,252.26	5,559.96	5,352.61	207.35	26.814		
14,300.00	7,236.48	7,133.48	7,019.14	203.07	41.08	-87.43	-3,158.67	-10,252.27	5,504.13	5,292.79	211.34	26.043		
14,400.00	7,236.10	7,134.24	7,019.90	205.88	41.08	-87.44	-3,158.70	-10,252.28	5,449.56	5,234.18	215.38	25.302		
14,500.00	7,235.72	7,135.01	7,020.66	208.70	41.08	-87.45	-3,158.73	-10,252.30	5,396.30	5,176.83	219.46	24.588		
14,600.00	7,235.34	7,135.77	7,021.42	211.52	41.08	-87.46	-3,158.76	-10,252.31	5,344.37	5,120.79	223.58	23.903		
14,700.00	7,234.96	7,136.52	7,022.18	214.34	41.09	-87.47	-3,158.78	-10,252.32	5,293.82	5,066.09	227.74	23.245		
14,800.00	7,234.58	7,137.28	7,022.94	217.16	41.09	-87.48	-3,158.81	-10,252.33	5,244.70	5,012.78	231.92	22.614		
14,900.00	7,234.20	7,138.04	7,023.70	219.98	41.09	-87.49	-3,158.84	-10,252.34	5,197.03	4,960.90	236.13	22.009		
15,000.00	7,233.82	7,138.79	7,024.45	222.81	41.09	-87.50	-3,158.87	-10,252.35	5,150.86	4,910.50	240.36	21.430		
15,100.00	7,233.44	7,139.55	7,025.20	225.63	41.10	-87.51	-3,158.90	-10,252.36	5,106.24	4,861.63	244.61	20.875		
15,200.00	7,233.06	7,140.30	7,025.96	228.45	41.10	-87.51	-3,158.93	-10,252.38	5,063.20	4,814.33	248.87	20.345		
15,216.01	7,233.00	7,140.42	7,026.08	228.91	41.10	-87.52	-3,158.93	-10,252.38	5,056.45	4,806.90	249.55	20.262 CC, ES, 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	37.00	3.28	3.28	-108.81	-3,049.06	-8,949.58	9,454.79					
100.00	100.00	36.85	73.85	3.28	3.28	-108.81	-3,048.99	-8,949.66	9,454.81	9,448.24	6.57	1,440.068		
200.00	200.00	95.34	132.34	3.34	3.29	-108.81	-3,048.55	-8,950.11	9,455.30	9,448.68	6.62	1,427.768		
300.00	299.98	469.27	506.11	3.45	3.73	-103.07	-3,038.89	-8,949.03	9,453.57	9,446.39	7.18	1,317.357		
400.00	399.84	742.12	778.75	3.61	4.43	-103.15	-3,030.14	-8,943.35	9,451.90	9,443.86	8.04	1,176.168		
500.00	499.45	797.34	833.90	3.82	4.59	-103.20	-3,027.79	-8,941.90	9,450.06	9,441.66	8.40	1,124.521		
592.32	591.10	850.00	886.47	4.05	4.76	-103.24	-3,024.86	-8,941.11	9,449.59	9,440.80	8.79	1,074.802		
600.00	598.70	850.00	886.47	4.07	4.76	-103.24	-3,024.86	-8,941.11	9,449.59	9,440.78	8.81	1,072.402		
700.00	697.47	892.97	929.34	4.35	4.90	-103.24	-3,021.98	-8,940.89	9,450.47	9,441.24	9.23	1,023.570		
800.00	795.62	945.00	981.22	4.67	5.08	-103.24	-3,017.95	-8,941.07	9,452.68	9,442.96	9.72	972.164		
900.00	893.06	1,033.29	1,069.06	5.01	5.40	-103.24	-3,009.15	-8,942.35	9,456.02	9,445.63	10.39	910.416		
1,000.00	989.64	1,525.07	1,553.45	5.38	7.54	-103.46	-2,926.23	-8,952.43	9,459.74	9,446.84	12.90	733.176		
1,100.00	1,085.42	1,100.00	1,960.65	5.78	5.56	-103.55	-2,818.16	-8,955.95	9,458.87	9,447.94	10.93	865.633		
1,200.00	1,181.09	2,041.78	2,052.04	6.20	10.52	-103.56	-2,791.15	-8,955.72	9,456.12	9,439.47	16.65	568.045		
1,300.00	1,276.76	2,081.00	2,089.61	6.65	10.77	-103.56	-2,779.89	-8,955.91	9,453.93	9,436.60	17.33	545.452		
1,400.00	1,372.43	2,132.66	2,139.04	7.11	11.11	-103.56	-2,764.88	-8,956.54	9,452.32	9,434.20	18.12	521.726		
1,500.00	1,468.10	2,299.93	2,298.40	7.57	12.23	-103.55	-2,714.18	-8,959.71	9,451.10	9,431.42	19.68	480.327		
1,600.00	1,563.77	2,433.05	2,425.03	8.05	13.15	-103.54	-2,673.13	-8,961.18	9,448.72	9,427.68	21.05	448.955		
1,700.00	1,659.44	2,561.05	2,546.87	8.53	14.04	-103.53	-2,633.91	-8,962.27	9,446.22	9,423.82	22.40	421.795		
1,800.00	1,755.11	2,727.28	2,704.86	9.02	15.22	-103.52	-2,582.25	-8,963.38	9,443.53	9,419.50	24.03	392.982		
1,900.00	1,850.78	2,814.50	2,787.21	9.52	15.86	-103.50	-2,553.55	-8,964.00	9,440.12	9,414.97	25.15	375.338		
2,000.00	1,946.45	2,869.66	2,839.42	10.02	16.26	-103.49	-2,535.74	-8,964.47	9,437.06	9,411.01	26.04	362.378		
2,100.00	2,042.12	2,933.00	2,899.91	10.52	16.71	-103.50	-2,516.98	-8,964.84	9,434.57	9,407.59	26.99	349.598		
2,200.00	2,137.78	2,981.05	2,945.98	11.03	17.05	-103.50	-2,503.34	-8,965.15	9,432.53	9,404.71	27.82	339.039		
2,300.00	2,233.45	3,154.12	3,111.74	11.54	18.25	-103.51	-2,453.59	-8,966.04	9,430.39	9,400.90	29.50	319.694		
2,400.00	2,329.12	3,311.30	3,262.72	12.05	19.33	-103.53	-2,409.89	-8,965.45	9,427.82	9,396.76	31.05	303.596		
2,500.00	2,424.79	3,357.96	3,307.48	12.56	19.66	-103.54	-2,396.73	-8,965.23	9,424.87	9,392.98	31.89	295.562		
2,600.00	2,520.46	3,409.00	3,356.40	13.08	20.02	-103.54	-2,382.15	-8,965.36	9,422.48	9,389.73	32.75	287.684		
2,700.00	2,616.13	3,505.74	3,449.19	13.60	20.69	-103.55	-2,354.77	-8,965.80	9,420.39	9,386.46	33.93	277.654		
2,800.00	2,711.80	3,592.51	3,532.38	14.12	21.30	-103.56	-2,330.15	-8,966.26	9,418.34	9,383.30	35.04	268.783		
2,900.00	2,807.47	3,673.91	3,610.28	14.64	21.88	-103.56	-2,306.53	-8,967.02	9,416.46	9,380.34	36.13	260.651		
3,000.00	2,903.14	3,808.19	3,738.20	15.16	22.86	-103.55	-2,265.73	-8,968.86	9,414.54	9,376.93	37.61	250.346		
3,100.00	2,998.81	3,921.29	3,845.37	15.68	23.71	-103.53	-2,229.66	-8,970.71	9,412.34	9,373.38	38.96	241.579		
3,200.00	3,094.48	4,012.19	3,931.49	16.21	24.40	-103.52	-2,200.61	-8,972.11	9,410.03	9,369.88	40.16	234.326		
3,300.00	3,190.15	4,071.00	3,987.31	16.73	24.84	-103.51	-2,182.11	-8,973.09	9,408.03	9,366.91	41.12	228.803		
3,400.00	3,285.82	4,122.05	4,035.86	17.26	25.22	-103.51	-2,166.38	-8,974.08	9,406.51	9,364.50	42.02	223.877		
3,500.00	3,381.49	4,570.49	4,460.97	17.78	28.62	-103.45	-2,023.91	-8,978.32	9,404.64	9,358.82	45.82	205.265		
3,600.00	3,477.16	4,614.01	4,501.98	18.31	28.97	-103.44	-2,009.31	-8,978.17	9,400.01	9,353.32	46.69	201.345		
3,700.00	3,572.83	4,639.00	4,525.56	18.84	29.16	-103.44	-2,001.05	-8,978.17	9,396.02	9,348.61	47.42	198.160		
3,800.00	3,668.50	4,699.23	4,582.64	19.37	29.62	-103.43	-1,981.83	-8,978.30	9,392.56	9,344.17	48.39	194.093		
3,900.00	3,764.17	4,736.00	4,617.68	19.89	29.89	-103.43	-1,970.68	-8,978.44	9,389.76	9,340.57	49.20	190.857		
4,000.00	3,859.84	4,791.28	4,670.51	20.42	30.29	-103.43	-1,954.43	-8,978.80	9,387.53	9,337.40	50.12	187.297		
4,100.00	3,955.51	4,830.00	4,707.59	20.95	30.57	-103.43	-1,943.29	-8,979.19	9,385.85	9,334.92	50.93	184.297		
4,200.00	4,051.18	4,894.66	4,769.81	21.48	31.02	-103.44	-1,925.71	-8,979.81	9,384.65	9,332.76	51.89	180.850		
4,300.00	4,146.85	4,950.07	4,823.49	22.01	31.39	-103.46	-1,911.97	-8,980.20	9,383.97	9,331.18	52.78	177.781		
4,400.00	4,242.52	5,020.00	4,891.43	22.55	31.84	-103.48	-1,895.43	-8,980.77	9,383.75	9,329.99	53.75	174.566		
4,412.70	4,254.67	5,020.00	4,891.43	22.61	31.84	-103.48	-1,895.43	-8,980.77	9,383.74	9,329.92	53.82	174.348		
4,500.00	4,338.19	5,066.06	4,936.28	23.08	32.13	-103.50	-1,884.95	-8,981.21	9,383.95	9,329.38	54.56	171.980		
4,600.00	4,433.86	5,114.00	4,983.06	23.61	32.42	-103.52	-1,874.46	-8,981.71	9,384.62	9,329.24	55.38	169.447		
4,700.00	4,529.53	5,178.45	5,046.14	24.14	32.80	-103.56	-1,861.31	-8,982.36	9,385.75	9,329.47	56.28	166.764		
4,800.00	4,625.19	5,232.29	5,099.06	24.67	33.11	-103.59	-1,851.36	-8,982.82	9,387.37	9,330.27	57.11	164.386		
4,900.00	4,720.86	5,284.77	5,150.80	25.21	33.39	-103.63	-1,842.61	-8,983.22	9,389.50	9,331.60	57.91	162.149		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,000.00	4,816.53	5,341.63	5,207.01	25.74	33.68	-103.68	-1,834.07	-8,983.61	9,392.13	9,333.41	58.72	159.956		
5,100.00	4,912.20	5,398.00	5,262.82	26.27	33.97	-103.73	-1,826.17	-8,984.03	9,395.20	9,335.68	59.52	157.859		
5,200.00	5,007.87	5,446.34	5,310.78	26.80	34.19	-103.78	-1,820.11	-8,984.39	9,398.78	9,338.53	60.25	155.986		
5,300.00	5,103.54	5,493.00	5,357.18	27.34	34.41	-103.84	-1,815.19	-8,984.70	9,402.95	9,341.97	60.98	154.194		
5,400.00	5,199.22	5,548.87	5,412.81	27.87	34.64	-103.91	-1,810.08	-8,985.07	9,407.64	9,345.91	61.73	152.401		
5,500.00	5,295.46	5,654.19	5,517.79	28.39	35.07	-104.12	-1,801.61	-8,985.73	9,412.22	9,349.55	62.67	150.176		
5,600.00	5,392.60	5,600.00	5,646.72	28.89	34.87	-104.32	-1,793.37	-8,985.11	9,415.48	9,352.51	62.97	149.522		
5,700.00	5,490.50	5,829.43	5,692.71	29.37	35.74	-104.42	-1,791.25	-8,984.67	9,418.13	9,353.84	64.29	146.487		
5,800.00	5,589.05	5,872.00	5,735.24	29.83	35.89	-104.50	-1,789.44	-8,984.50	9,420.54	9,355.66	64.88	145.192		
5,900.00	5,688.14	5,916.61	5,779.82	30.26	36.04	-104.56	-1,787.82	-8,984.49	9,422.67	9,357.22	65.45	143.961		
6,000.00	5,787.63	5,966.00	5,829.19	30.68	36.21	-104.62	-1,786.44	-8,984.67	9,424.52	9,358.50	66.02	142.756		
6,100.00	5,887.41	6,036.09	5,899.26	31.07	36.45	-104.66	-1,784.83	-8,985.10	9,425.93	9,359.30	66.64	141.456		
6,200.00	5,987.36	6,135.77	5,998.91	31.44	36.77	-104.68	-1,782.73	-8,985.78	9,426.61	9,359.27	67.34	139.981		
6,300.00	6,087.36	6,244.80	6,107.92	31.80	37.13	-110.40	-1,780.64	-8,986.36	9,426.50	9,358.43	68.07	138.484		
6,375.05	6,162.40	6,299.30	6,162.41	32.06	37.32	-110.39	-1,779.56	-8,986.73	9,426.45	9,357.93	68.52	137.578		
6,400.00	6,187.36	6,319.40	6,182.51	32.15	37.38	-110.39	-1,779.14	-8,986.89	9,426.46	9,357.78	68.67	137.266		
6,500.00	6,287.36	6,399.71	6,262.79	32.51	37.65	-110.38	-1,777.41	-8,987.67	9,426.61	9,357.31	69.30	136.026		
6,600.00	6,387.36	6,479.35	6,342.41	32.87	37.92	-110.37	-1,775.72	-8,988.61	9,426.98	9,357.05	69.93	134.808		
6,700.00	6,487.36	6,567.21	6,430.25	33.23	38.22	-110.36	-1,773.95	-8,989.81	9,427.55	9,356.96	70.59	133.551		
6,800.00	6,587.36	6,676.68	6,539.68	33.59	38.58	-110.34	-1,771.82	-8,991.25	9,428.11	9,356.77	71.34	132.159		
6,900.00	6,687.26	6,760.55	6,623.53	33.95	38.87	-119.96	-1,770.23	-8,992.34	9,425.75	9,353.77	71.98	130.944		
7,000.00	6,785.58	6,838.24	6,701.21	34.31	39.13	-20.48	-1,768.81	-8,993.52	9,409.94	9,337.35	72.60	129.620		
7,100.00	6,879.94	6,936.93	6,799.86	34.65	39.47	-21.56	-1,766.86	-8,995.19	9,379.96	9,306.67	73.29	127.984		
7,200.00	6,968.01	7,035.64	6,898.53	34.97	39.82	-23.33	-1,764.46	-8,996.93	9,336.36	9,262.38	73.97	126.211		
7,300.00	7,047.61	7,128.45	6,991.30	35.27	40.15	-26.04	-1,762.15	-8,998.47	9,280.22	9,205.59	74.63	124.358		
7,400.00	7,116.80	7,196.51	7,059.33	35.54	40.38	-30.07	-1,760.55	-8,999.49	9,213.00	9,137.84	75.16	122.574		
7,500.00	7,173.86	7,242.86	7,105.66	35.81	40.55	-36.10	-1,759.56	-9,000.21	9,136.53	9,060.93	75.61	120.846		
7,600.00	7,217.38	7,278.63	7,141.42	36.17	40.67	-45.39	-1,758.87	-9,000.78	9,052.70	8,976.69	76.01	119.106		
7,700.00	7,246.31	7,302.90	7,165.68	36.80	40.76	-59.69	-1,758.43	-9,001.17	8,963.55	8,887.18	76.37	117.372		
7,800.00	7,259.92	7,315.05	7,177.83	37.72	40.80	-80.00	-1,758.23	-9,001.37	8,871.28	8,794.58	76.70	115.663		
7,900.00	7,260.77	7,317.03	7,179.81	38.86	40.80	-89.10	-1,758.19	-9,001.41	8,778.09	8,701.08	77.01	113.981		
8,000.00	7,260.39	7,318.05	7,180.83	40.19	40.81	-89.12	-1,758.18	-9,001.42	8,685.03	8,607.67	77.36	112.269		
8,100.00	7,260.01	7,319.07	7,181.84	41.67	40.81	-89.14	-1,758.16	-9,001.44	8,592.12	8,514.37	77.74	110.521		
8,200.00	7,259.63	7,320.09	7,182.86	43.30	40.82	-89.16	-1,758.14	-9,001.46	8,499.37	8,421.20	78.16	108.737		
8,300.00	7,259.25	7,321.11	7,183.89	45.05	40.82	-89.18	-1,758.13	-9,001.47	8,406.78	8,328.15	78.63	106.920		
8,400.00	7,258.87	7,322.13	7,184.91	46.91	40.82	-89.20	-1,758.11	-9,001.49	8,314.37	8,235.24	79.13	105.072		
8,500.00	7,258.49	7,323.16	7,185.93	48.87	40.83	-89.21	-1,758.09	-9,001.51	8,222.13	8,142.46	79.68	103.194		
8,600.00	7,258.11	7,324.18	7,186.96	50.92	40.83	-89.23	-1,758.07	-9,001.53	8,130.08	8,049.82	80.26	101.290		
8,700.00	7,257.73	7,325.21	7,187.99	53.04	40.83	-89.25	-1,758.06	-9,001.54	8,038.22	7,957.32	80.90	99.362		
8,800.00	7,257.35	7,326.25	7,189.02	55.23	40.84	-89.27	-1,758.04	-9,001.56	7,946.55	7,864.98	81.58	97.413		
8,900.00	7,256.97	7,327.28	7,190.06	57.47	40.84	-89.29	-1,758.02	-9,001.58	7,855.09	7,772.79	82.30	95.444		
9,000.00	7,256.59	7,328.32	7,191.09	59.77	40.84	-89.31	-1,758.01	-9,001.59	7,763.84	7,680.77	83.07	93.460		
9,100.00	7,256.21	7,329.36	7,192.13	62.12	40.85	-89.33	-1,757.99	-9,001.61	7,672.80	7,588.91	83.89	91.462		
9,200.00	7,255.83	7,330.40	7,193.17	64.50	40.85	-89.34	-1,757.97	-9,001.63	7,581.99	7,497.24	84.76	89.455		
9,300.00	7,255.45	7,331.44	7,194.21	66.93	40.86	-89.36	-1,757.96	-9,001.65	7,491.42	7,405.75	85.67	87.440		
9,400.00	7,255.07	7,332.48	7,195.26	69.38	40.86	-89.38	-1,757.94	-9,001.66	7,401.09	7,314.45	86.64	85.421		
9,500.00	7,254.69	7,333.53	7,196.30	71.87	40.86	-89.40	-1,757.92	-9,001.68	7,311.01	7,223.35	87.66	83.401		
9,600.00	7,254.31	7,334.58	7,197.35	74.38	40.87	-89.42	-1,757.91	-9,001.70	7,221.19	7,132.46	88.73	81.383		
9,700.00	7,253.93	7,335.63	7,198.40	76.92	40.87	-89.44	-1,757.89	-9,001.72	7,131.64	7,041.78	89.85	79.369		
9,800.00	7,253.55	7,336.68	7,199.46	79.48	40.87	-89.46	-1,757.87	-9,001.74	7,042.37	6,951.34	91.03	77.362		
9,900.00	7,253.18	7,337.74	7,200.51	82.06	40.88	-89.48	-1,757.86	-9,001.75	6,953.39	6,861.13	92.26	75.365		
10,000.00	7,252.80	7,338.80	7,201.57	84.65	40.88	-89.49	-1,757.84	-9,001.77	6,864.72	6,771.17	93.55	73.381		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,100.00	7,252.42	7,339.86	7,202.63	87.27	40.88	-89.51	-1,757.82	-9,001.79	6,776.36	6,681.47	94.89	71.411		
10,200.00	7,252.04	7,340.92	7,203.69	89.89	40.89	-89.53	-1,757.81	-9,001.81	6,688.33	6,592.04	96.29	69.458		
10,300.00	7,251.66	7,341.98	7,204.76	92.54	40.89	-89.55	-1,757.79	-9,001.83	6,600.64	6,502.89	97.75	67.524		
10,400.00	7,251.28	7,343.05	7,205.82	95.19	40.90	-89.57	-1,757.77	-9,001.84	6,513.31	6,414.04	99.27	65.612		
10,500.00	7,250.90	7,344.12	7,206.89	97.86	40.90	-89.59	-1,757.76	-9,001.86	6,426.34	6,325.49	100.85	63.723		
10,600.00	7,250.52	7,345.19	7,207.96	100.53	40.90	-89.61	-1,757.74	-9,001.88	6,339.76	6,237.27	102.49	61.858		
10,700.00	7,250.14	7,346.26	7,209.03	103.22	40.91	-89.63	-1,757.72	-9,001.90	6,253.58	6,149.39	104.19	60.020		
10,800.00	7,249.76	7,347.34	7,210.11	105.91	40.91	-89.65	-1,757.71	-9,001.92	6,167.82	6,061.86	105.96	58.210		
10,900.00	7,249.38	7,348.42	7,211.19	108.62	40.91	-89.67	-1,757.69	-9,001.93	6,082.49	5,974.70	107.79	56.429		
11,000.00	7,249.00	7,349.50	7,212.27	111.33	40.92	-89.69	-1,757.67	-9,001.95	5,997.61	5,887.92	109.69	54.679		
11,100.00	7,248.62	7,350.58	7,213.35	114.04	40.92	-89.71	-1,757.66	-9,001.97	5,913.21	5,801.55	111.65	52.960		
11,200.00	7,248.24	7,351.66	7,214.43	116.77	40.93	-89.73	-1,757.64	-9,001.99	5,829.29	5,715.61	113.69	51.274		
11,300.00	7,247.86	7,352.75	7,215.52	119.50	40.93	-89.74	-1,757.62	-9,002.01	5,745.90	5,630.10	115.79	49.622		
11,400.00	7,247.48	7,353.84	7,216.61	122.24	40.93	-89.76	-1,757.61	-9,002.03	5,663.04	5,545.07	117.97	48.004		
11,500.00	7,247.10	7,354.93	7,217.70	124.98	40.94	-89.78	-1,757.59	-9,002.05	5,580.74	5,460.52	120.22	46.421		
11,600.00	7,246.72	7,356.02	7,218.79	127.73	40.94	-89.80	-1,757.58	-9,002.06	5,499.03	5,376.49	122.55	44.873		
11,700.00	7,246.34	7,357.15	7,219.92	130.48	40.94	-89.82	-1,757.56	-9,002.08	5,417.93	5,292.99	124.95	43.362		
11,800.00	7,245.96	7,358.53	7,221.30	133.24	40.95	-89.85	-1,757.54	-9,002.11	5,337.48	5,210.05	127.43	41.887		
11,900.00	7,245.58	7,359.91	7,222.68	136.00	40.95	-89.87	-1,757.52	-9,002.13	5,257.69	5,127.71	129.98	40.449		
12,000.00	7,245.21	7,361.28	7,224.04	138.76	40.96	-89.90	-1,757.50	-9,002.15	5,178.61	5,045.98	132.62	39.047		
12,100.00	7,244.83	7,362.64	7,225.41	141.53	40.96	-89.92	-1,757.48	-9,002.18	5,100.26	4,964.91	135.35	37.683		
12,200.00	7,244.45	7,364.00	7,226.76	144.30	40.97	-89.95	-1,757.46	-9,002.20	5,022.67	4,884.52	138.15	36.357		
12,300.00	7,244.07	7,365.34	7,228.11	147.08	40.97	-89.97	-1,757.44	-9,002.22	4,945.90	4,804.86	141.04	35.068		
12,400.00	7,243.69	7,366.69	7,229.45	149.86	40.98	-89.99	-1,757.42	-9,002.25	4,869.96	4,725.95	144.01	33.816		
12,500.00	7,243.31	7,368.02	7,230.79	152.64	40.98	-90.02	-1,757.40	-9,002.27	4,794.91	4,647.84	147.07	32.602		
12,600.00	7,242.93	7,369.36	7,232.12	155.42	40.99	-90.04	-1,757.38	-9,002.29	4,720.78	4,570.56	150.22	31.426		
12,700.00	7,242.55	7,370.68	7,233.44	158.21	40.99	-90.07	-1,757.36	-9,002.31	4,647.62	4,494.17	153.46	30.286		
12,800.00	7,242.17	7,372.00	7,234.76	161.00	41.00	-90.09	-1,757.34	-9,002.33	4,575.48	4,418.70	156.78	29.183		
12,900.00	7,241.79	7,373.31	7,236.07	163.79	41.00	-90.11	-1,757.32	-9,002.36	4,504.40	4,344.21	160.20	28.118		
13,000.00	7,241.41	7,374.62	7,237.38	166.58	41.00	-90.14	-1,757.30	-9,002.38	4,434.44	4,270.74	163.70	27.089		
13,100.00	7,241.03	7,375.92	7,238.68	169.38	41.01	-90.16	-1,757.28	-9,002.40	4,365.65	4,198.36	167.29	26.096		
13,200.00	7,240.65	7,377.21	7,239.97	172.18	41.01	-90.18	-1,757.26	-9,002.42	4,298.08	4,127.11	170.97	25.139		
13,300.00	7,240.27	7,378.50	7,241.26	174.98	41.02	-90.21	-1,757.24	-9,002.44	4,231.80	4,057.06	174.74	24.218		
13,400.00	7,239.89	7,379.78	7,242.54	177.78	41.02	-90.23	-1,757.23	-9,002.46	4,166.86	3,988.27	178.59	23.332		
13,500.00	7,239.51	7,381.06	7,243.82	180.58	41.03	-90.25	-1,757.21	-9,002.49	4,103.33	3,920.81	182.52	22.481		
13,600.00	7,239.13	7,382.33	7,245.09	183.39	41.03	-90.28	-1,757.19	-9,002.51	4,041.27	3,854.74	186.53	21.665		
13,700.00	7,238.75	7,383.59	7,246.35	186.20	41.04	-90.30	-1,757.17	-9,002.53	3,980.76	3,790.14	190.62	20.883		
13,800.00	7,238.37	7,384.85	7,247.61	189.00	41.04	-90.32	-1,757.15	-9,002.55	3,921.87	3,727.09	194.78	20.135		
13,900.00	7,237.99	7,386.10	7,248.86	191.81	41.04	-90.34	-1,757.13	-9,002.57	3,864.67	3,665.66	199.01	19.419		
14,000.00	7,237.62	7,387.35	7,250.11	194.63	41.05	-90.37	-1,757.12	-9,002.59	3,809.23	3,605.93	203.30	18.737		
14,100.00	7,237.24	7,388.59	7,251.35	197.44	41.05	-90.39	-1,757.10	-9,002.61	3,755.64	3,548.00	207.64	18.087		
14,200.00	7,236.86	7,389.83	7,252.59	200.25	41.06	-90.41	-1,757.08	-9,002.63	3,703.97	3,491.94	212.03	17.469		
14,300.00	7,236.48	7,391.06	7,253.82	203.07	41.06	-90.43	-1,757.06	-9,002.65	3,654.31	3,437.86	216.45	16.883		
14,400.00	7,236.10	7,392.29	7,255.04	205.88	41.07	-90.45	-1,757.05	-9,002.67	3,606.74	3,385.83	220.90	16.327		
14,500.00	7,235.72	7,393.51	7,256.26	208.70	41.07	-90.48	-1,757.03	-9,002.69	3,561.34	3,335.97	225.37	15.802		
14,600.00	7,235.34	7,394.72	7,257.48	211.52	41.07	-90.50	-1,757.01	-9,002.71	3,518.19	3,288.35	229.84	15.307		
14,700.00	7,234.96	7,395.93	7,258.69	214.34	41.08	-90.52	-1,756.99	-9,002.73	3,477.39	3,243.09	234.30	14.842		
14,800.00	7,234.58	7,397.13	7,259.89	217.16	41.08	-90.54	-1,756.98	-9,002.75	3,439.01	3,200.27	238.74	14.405		
14,900.00	7,234.20	7,398.33	7,261.09	219.98	41.09	-90.56	-1,756.96	-9,002.77	3,403.14	3,160.00	243.14	13.997		
15,000.00	7,233.82	7,399.52	7,262.28	222.81	41.09	-90.58	-1,756.94	-9,002.79	3,369.85	3,122.36	247.49	13.616		
15,100.00	7,233.44	7,400.71	7,263.47	225.63	41.09	-90.61	-1,756.93	-9,002.81	3,339.23	3,087.46	251.77	13.263		
15,200.00	7,233.06	7,401.89	7,264.65	228.45	41.10	-90.63	-1,756.91	-9,002.83	3,311.34	3,055.38	255.96	12.937		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)		
15,216.01	7,233.00	7,402.08	7,264.84	228.91	41.10	-90.63	-1,756.91	-9,002.83	3,307.14	3,050.51	256.62	12.887	CC, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	37.00	3.28	3.28	-108.79	-3,054.88	-8,980.46	9,485.90					
100.00	100.00	191.23	228.20	3.28	3.34	-108.77	-3,051.80	-8,980.08	9,485.34	9,478.72	6.62	1,432.234		
200.00	200.00	312.45	349.38	3.34	3.48	-108.76	-3,048.94	-8,979.12	9,483.82	9,477.01	6.81	1,391.933		
300.00	299.98	422.00	458.88	3.45	3.66	-103.04	-3,045.55	-8,978.44	9,482.64	9,475.53	7.11	1,333.871		
391.11	390.97	496.91	533.74	3.59	3.82	-103.05	-3,042.76	-8,978.07	9,482.18	9,474.77	7.41	1,279.655		
400.00	399.84	502.88	539.70	3.61	3.84	-103.06	-3,042.52	-8,978.06	9,482.19	9,474.75	7.44	1,274.576		
500.00	499.45	542.00	578.78	3.82	3.93	-103.05	-3,040.82	-8,978.07	9,482.92	9,475.18	7.74	1,225.932		
600.00	598.70	595.07	631.80	4.07	4.06	-103.03	-3,038.44	-8,978.43	9,484.97	9,476.86	8.11	1,168.933		
700.00	697.47	648.00	684.67	4.35	4.21	-103.00	-3,036.09	-8,979.30	9,488.55	9,480.01	8.54	1,111.227		
800.00	795.62	669.90	706.55	4.67	4.27	-102.92	-3,035.15	-8,979.79	9,493.50	9,484.58	8.92	1,064.736		
900.00	893.06	723.65	760.23	5.01	4.42	-102.85	-3,033.07	-8,981.24	9,499.89	9,490.47	9.42	1,008.623		
1,000.00	989.64	790.00	826.51	5.38	4.62	-102.79	-3,030.65	-8,983.09	9,507.36	9,497.36	10.00	950.989		
1,100.00	1,085.42	841.41	877.85	5.78	4.79	-102.79	-3,028.58	-8,984.82	9,515.94	9,505.38	10.56	900.780		
1,200.00	1,181.09	884.00	920.35	6.20	4.93	-102.84	-3,026.49	-8,986.67	9,525.24	9,514.11	11.13	855.991		
1,300.00	1,276.76	884.00	920.35	6.65	4.93	-102.84	-3,026.49	-8,986.67	9,535.35	9,523.79	11.57	824.396		
1,400.00	1,372.43	937.17	973.36	7.11	5.11	-102.91	-3,023.68	-8,989.64	9,545.97	9,533.77	12.20	782.590		
1,500.00	1,468.10	979.00	1,015.03	7.57	5.25	-102.97	-3,021.46	-8,992.55	9,557.52	9,544.71	12.80	746.466		
1,600.00	1,563.77	1,002.07	1,037.99	8.05	5.34	-103.00	-3,020.18	-8,994.34	9,569.72	9,556.36	13.35	716.644		
1,700.00	1,659.44	1,055.23	1,090.86	8.53	5.53	-103.06	-3,016.78	-8,998.83	9,582.49	9,568.47	14.02	683.413		
1,800.00	1,755.11	1,140.55	1,175.51	9.02	5.86	-103.15	-3,009.91	-9,006.87	9,595.65	9,580.82	14.83	647.066		
1,900.00	1,850.78	1,196.21	1,230.61	9.52	6.09	-103.21	-3,004.44	-9,012.54	9,608.99	9,593.45	15.54	618.456		
2,000.00	1,946.45	1,234.71	1,268.64	10.02	6.25	-103.24	-3,000.25	-9,016.86	9,622.93	9,606.75	16.18	594.650		
2,100.00	2,042.12	1,263.00	1,296.53	10.52	6.37	-103.26	-2,996.97	-9,020.28	9,637.52	9,620.73	16.79	574.066		
2,200.00	2,137.78	1,307.47	1,340.27	11.03	6.57	-103.30	-2,991.42	-9,026.10	9,652.73	9,635.25	17.47	552.384		
2,300.00	2,233.45	1,358.00	1,389.78	11.54	6.80	-103.33	-2,984.48	-9,033.42	9,668.64	9,650.44	18.19	531.439		
2,400.00	2,329.12	1,413.92	1,444.47	12.05	7.07	-103.36	-2,976.45	-9,041.92	9,685.02	9,666.07	18.95	511.099		
2,500.00	2,424.79	1,512.96	1,541.40	12.56	7.56	-103.42	-2,962.62	-9,056.82	9,701.51	9,681.58	19.92	486.910		
2,600.00	2,520.46	1,577.10	1,604.28	13.08	7.88	-103.46	-2,954.31	-9,066.29	9,718.11	9,697.37	20.73	468.686		
2,700.00	2,616.13	1,642.00	1,667.84	13.60	8.21	-103.51	-2,945.86	-9,076.32	9,735.25	9,713.70	21.55	451.673		
2,800.00	2,711.80	1,698.30	1,722.97	14.12	8.51	-103.54	-2,938.67	-9,085.21	9,752.77	9,730.43	22.33	436.707		
2,900.00	2,807.47	1,863.14	1,884.53	14.64	9.38	-103.66	-2,917.72	-9,110.30	9,769.78	9,746.09	23.69	412.345		
3,000.00	2,903.14	1,926.00	1,946.04	15.16	9.72	-103.69	-2,909.35	-9,120.20	9,787.09	9,762.56	24.52	399.098		
3,100.00	2,998.81	2,042.23	2,059.95	15.68	10.36	-103.77	-2,894.72	-9,138.08	9,804.44	9,778.80	25.65	382.307		
3,200.00	3,094.48	2,091.15	2,107.92	16.21	10.63	-103.81	-2,888.71	-9,145.58	9,821.84	9,795.44	26.40	372.019		
3,300.00	3,190.15	2,362.04	2,372.86	16.73	12.16	-103.96	-2,850.06	-9,186.54	9,837.92	9,809.49	28.43	346.011		
3,400.00	3,285.82	2,401.00	2,411.05	17.26	12.38	-103.99	-2,844.88	-9,192.22	9,854.21	9,825.07	29.15	338.070		
3,500.00	3,381.49	2,457.66	2,466.62	17.78	12.70	-104.03	-2,837.73	-9,200.65	9,871.05	9,841.09	29.96	329.477		
3,600.00	3,477.16	2,523.86	2,531.47	18.31	13.08	-104.07	-2,829.04	-9,210.73	9,888.13	9,857.30	30.83	320.739		
3,700.00	3,572.83	2,590.00	2,596.13	18.84	13.47	-104.11	-2,820.03	-9,221.30	9,905.67	9,873.97	31.70	312.452		
3,800.00	3,668.50	2,695.34	2,699.06	19.37	14.09	-104.17	-2,805.47	-9,238.35	9,923.40	9,890.58	32.81	302.405		
3,900.00	3,764.17	2,759.95	2,762.20	19.89	14.47	-104.20	-2,796.60	-9,248.80	9,941.14	9,907.45	33.69	295.116		
4,000.00	3,859.84	4,000.00	2,879.14	20.42	21.77	-104.28	-2,781.14	-9,267.70	9,958.84	9,917.70	41.13	242.107		
4,100.00	3,955.51	2,914.37	2,913.45	20.95	15.37	-104.30	-2,777.14	-9,273.09	9,976.79	9,941.23	35.56	280.558		
4,200.00	4,051.18	2,969.00	2,967.02	21.48	15.68	-104.34	-2,771.20	-9,281.99	9,995.54	9,959.18	36.36	274.915		
7,600.00	7,217.38	6,976.86	6,930.40	36.17	35.66	-47.27	-2,457.03	-9,662.48	9,933.90	9,863.10	70.79	140.323		
7,700.00	7,246.31	6,996.09	6,949.63	36.80	35.74	-60.26	-2,456.85	-9,663.18	9,946.87	9,775.66	71.21	138.278		
7,800.00	7,259.92	7,006.44	6,959.97	37.72	35.78	-78.10	-2,456.75	-9,663.57	9,756.49	9,684.88	71.61	136.241		
7,900.00	7,260.77	7,009.24	6,962.76	38.86	35.79	-86.11	-2,456.72	-9,663.68	9,664.95	9,592.94	72.01	134.219		
8,000.00	7,260.39	7,011.33	6,964.85	40.19	35.80	-86.14	-2,456.70	-9,663.76	9,573.52	9,501.08	72.44	132.151		
8,100.00	7,260.01	7,013.45	6,966.97	41.67	35.81	-86.17	-2,456.68	-9,663.84	9,482.27	9,409.34	72.92	130.031		
8,200.00	7,259.63	7,015.59	6,969.11	43.30	35.81	-86.20	-2,456.66	-9,663.92	9,391.19	9,317.74	73.45	127.862		
8,300.00	7,259.25	7,017.75	6,971.27	45.05	35.82	-86.23	-2,456.63	-9,664.01	9,300.29	9,226.27	74.02	125.649		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
8,400.00	7,258.87	7,019.94	6,973.46	46.91	35.83	-86.27	-2,456.61	-9,664.09	9,209.58	9,134.94	74.64	123.395		
8,500.00	7,258.49	7,022.16	6,975.67	48.87	35.84	-86.30	-2,456.59	-9,664.18	9,119.06	9,043.76	75.30	121.104		
8,600.00	7,258.11	7,024.40	6,977.91	50.92	35.85	-86.33	-2,456.56	-9,664.27	9,028.75	8,952.74	76.01	118.780		
8,700.00	7,257.73	7,026.67	6,980.17	53.04	35.86	-86.36	-2,456.54	-9,664.36	8,938.64	8,861.86	76.77	116.429		
8,800.00	7,257.35	7,028.96	6,982.47	55.23	35.87	-86.40	-2,456.51	-9,664.45	8,848.74	8,771.15	77.58	114.054		
8,900.00	7,256.97	7,031.28	6,984.79	57.47	35.88	-86.43	-2,456.48	-9,664.55	8,759.06	8,680.61	78.44	111.660		
9,000.00	7,256.59	7,033.63	6,987.13	59.77	35.89	-86.47	-2,456.46	-9,664.64	8,669.60	8,590.25	79.35	109.252		
9,100.00	7,256.21	7,036.01	6,989.51	62.12	35.90	-86.50	-2,456.43	-9,664.74	8,580.37	8,500.06	80.31	106.834		
9,200.00	7,255.83	7,038.41	6,991.91	64.50	35.91	-86.54	-2,456.40	-9,664.84	8,491.39	8,410.06	81.33	104.411		
9,300.00	7,255.45	7,040.85	6,994.35	66.93	35.92	-86.57	-2,456.38	-9,664.94	8,402.65	8,320.26	82.39	101.987		
9,400.00	7,255.07	7,043.32	6,996.81	69.38	35.93	-86.61	-2,456.35	-9,665.04	8,314.17	8,230.66	83.50	99.566		
9,500.00	7,254.69	7,045.81	6,999.30	71.87	35.94	-86.64	-2,456.32	-9,665.14	8,225.94	8,141.27	84.67	97.153		
9,600.00	7,254.31	7,048.34	7,001.83	74.38	35.95	-86.68	-2,456.29	-9,665.25	8,137.99	8,052.10	85.89	94.750		
9,700.00	7,253.93	7,050.90	7,004.39	76.92	35.96	-86.72	-2,456.26	-9,665.36	8,050.32	7,963.16	87.16	92.362		
9,800.00	7,253.55	7,053.49	7,006.97	79.48	35.97	-86.76	-2,456.23	-9,665.47	7,962.94	7,874.46	88.49	89.992		
9,900.00	7,253.18	7,056.11	7,009.60	82.06	35.98	-86.80	-2,456.19	-9,665.58	7,875.86	7,786.00	89.86	87.643		
10,000.00	7,252.80	7,058.77	7,012.25	84.65	35.99	-86.83	-2,456.16	-9,665.69	7,789.09	7,697.79	91.30	85.318		
10,100.00	7,252.42	7,061.46	7,014.94	87.27	36.00	-86.87	-2,456.13	-9,665.81	7,702.63	7,609.85	92.78	83.019		
10,200.00	7,252.04	7,064.19	7,017.66	89.89	36.01	-86.91	-2,456.09	-9,665.93	7,616.51	7,522.19	94.32	80.750		
10,300.00	7,251.66	7,066.95	7,020.42	92.54	36.02	-86.95	-2,456.06	-9,666.05	7,530.73	7,434.81	95.92	78.511		
10,400.00	7,251.28	7,069.75	7,023.22	95.19	36.03	-87.00	-2,456.02	-9,666.17	7,445.30	7,347.73	97.57	76.306		
10,500.00	7,250.90	7,072.59	7,026.05	97.86	36.04	-87.04	-2,455.99	-9,666.30	7,360.23	7,260.95	99.28	74.136		
10,600.00	7,250.52	7,075.46	7,028.92	100.53	36.06	-87.08	-2,455.95	-9,666.43	7,275.55	7,174.50	101.05	72.003		
10,700.00	7,250.14	7,078.37	7,031.83	103.22	36.07	-87.12	-2,455.91	-9,666.56	7,191.26	7,088.39	102.87	69.907		
10,800.00	7,249.76	7,081.32	7,034.77	105.91	36.08	-87.17	-2,455.87	-9,666.69	7,107.37	7,002.62	104.75	67.851		
10,900.00	7,249.38	7,084.31	7,037.76	108.62	36.09	-87.21	-2,455.83	-9,666.82	7,023.90	6,917.21	106.69	65.834		
11,000.00	7,249.00	7,087.34	7,040.79	111.33	36.10	-87.25	-2,455.79	-9,666.96	6,940.87	6,832.18	108.69	63.859		
11,100.00	7,248.62	7,090.41	7,043.86	114.04	36.12	-87.30	-2,455.75	-9,667.10	6,858.29	6,747.54	110.75	61.925		
11,200.00	7,248.24	7,093.53	7,046.97	116.77	36.13	-87.34	-2,455.71	-9,667.25	6,776.17	6,663.30	112.87	60.033		
11,300.00	7,247.86	7,096.68	7,050.12	119.50	36.14	-87.39	-2,455.66	-9,667.39	6,694.54	6,579.49	115.06	58.185		
11,400.00	7,247.48	7,099.88	7,053.32	122.24	36.16	-87.44	-2,455.62	-9,667.54	6,613.42	6,496.11	117.30	56.379		
11,500.00	7,247.10	7,103.13	7,056.56	124.98	36.17	-87.49	-2,455.57	-9,667.70	6,532.81	6,413.20	119.61	54.616		
11,600.00	7,246.72	7,106.43	7,059.85	127.73	36.18	-87.53	-2,455.52	-9,667.85	6,452.75	6,330.76	121.99	52.896		
11,700.00	7,246.34	7,109.77	7,063.19	130.48	36.20	-87.58	-2,455.48	-9,668.01	6,373.24	6,248.81	124.43	51.220		
11,800.00	7,245.96	7,113.15	7,066.57	133.24	36.21	-87.63	-2,455.43	-9,668.17	6,294.32	6,167.39	126.94	49.587		
11,900.00	7,245.58	7,116.59	7,070.00	136.00	36.22	-87.68	-2,455.38	-9,668.34	6,216.00	6,086.49	129.51	47.997		
12,000.00	7,245.21	7,120.08	7,073.49	138.76	36.24	-87.74	-2,455.32	-9,668.51	6,138.31	6,006.16	132.15	46.450		
12,100.00	7,244.83	7,123.62	7,077.02	141.53	36.25	-87.79	-2,455.27	-9,668.68	6,061.27	5,926.42	134.86	44.945		
12,200.00	7,244.45	7,127.21	7,080.61	144.30	36.27	-87.84	-2,455.22	-9,668.86	5,984.91	5,847.27	137.64	43.483		
12,300.00	7,244.07	7,133.00	7,086.39	147.08	36.29	-87.92	-2,455.13	-9,669.15	5,909.25	5,768.76	140.50	42.060		
12,400.00	7,243.69	7,135.33	7,088.72	149.86	36.30	-87.96	-2,455.09	-9,669.26	5,834.32	5,690.91	143.41	40.682		
12,500.00	7,243.31	7,140.86	7,094.24	152.64	36.32	-88.04	-2,455.01	-9,669.54	5,760.15	5,613.74	146.41	39.342		
12,600.00	7,242.93	7,146.32	7,099.69	155.42	36.34	-88.12	-2,454.92	-9,669.81	5,686.77	5,537.28	149.48	38.043		
12,700.00	7,242.55	7,151.71	7,105.07	158.21	36.37	-88.20	-2,454.84	-9,670.07	5,614.20	5,461.57	152.62	36.784		
12,800.00	7,242.17	7,157.03	7,110.39	161.00	36.39	-88.28	-2,454.76	-9,670.33	5,542.48	5,386.64	155.84	35.565		
12,900.00	7,241.79	7,162.29	7,115.64	163.79	36.41	-88.36	-2,454.68	-9,670.59	5,471.65	5,312.52	159.13	34.386		
13,000.00	7,241.41	7,167.48	7,120.82	166.58	36.43	-88.43	-2,454.60	-9,670.84	5,401.73	5,239.24	162.48	33.245		
13,100.00	7,241.03	7,172.61	7,125.95	169.38	36.45	-88.51	-2,454.52	-9,671.09	5,332.77	5,166.85	165.91	32.142		
13,200.00	7,240.65	7,177.68	7,131.01	172.18	36.47	-88.58	-2,454.45	-9,671.33	5,264.80	5,095.38	169.42	31.076		
13,300.00	7,240.27	7,182.68	7,136.01	174.98	36.49	-88.66	-2,454.37	-9,671.57	5,197.86	5,024.87	172.99	30.047		
13,400.00	7,239.89	7,187.63	7,140.95	177.78	36.51	-88.73	-2,454.30	-9,671.80	5,131.99	4,955.36	176.63	29.055		
13,500.00	7,239.51	7,192.52	7,145.83	180.58	36.53	-88.80	-2,454.23	-9,672.03	5,067.23	4,886.89	180.35	28.097		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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							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		
13,600.00	7,239.13	7,197.35	7,150.66	183.39	36.55	-88.87	-2,454.16	-9,672.26	5,003.64	4,819.51	184.12	27.175		
13,700.00	7,238.75	7,202.12	7,155.43	186.20	36.57	-88.94	-2,454.09	-9,672.48	4,941.24	4,753.27	187.97	26.287		
13,800.00	7,238.37	7,206.84	7,160.14	189.00	36.59	-89.01	-2,454.02	-9,672.70	4,880.09	4,688.21	191.88	25.433		
13,900.00	7,237.99	7,211.51	7,164.80	191.81	36.61	-89.08	-2,453.95	-9,672.91	4,820.23	4,624.38	195.85	24.612		
14,000.00	7,237.62	7,216.12	7,169.40	194.63	36.63	-89.15	-2,453.89	-9,673.12	4,761.72	4,561.85	199.88	23.823		
14,100.00	7,237.24	7,220.67	7,173.96	197.44	36.65	-89.22	-2,453.82	-9,673.33	4,704.60	4,500.65	203.96	23.066		
14,200.00	7,236.86	7,225.18	7,178.46	200.25	36.67	-89.28	-2,453.76	-9,673.53	4,648.93	4,440.84	208.09	22.341		
14,300.00	7,236.48	7,229.63	7,182.90	203.07	36.69	-89.35	-2,453.69	-9,673.73	4,594.76	4,382.49	212.27	21.646		
14,400.00	7,236.10	7,234.04	7,187.30	205.88	36.70	-89.41	-2,453.63	-9,673.93	4,542.14	4,325.64	216.49	20.980		
14,500.00	7,235.72	7,238.39	7,191.65	208.70	36.72	-89.48	-2,453.57	-9,674.12	4,491.12	4,270.37	220.75	20.345		
14,600.00	7,235.34	7,242.70	7,195.96	211.52	36.74	-89.54	-2,453.51	-9,674.31	4,441.77	4,216.73	225.04	19.738		
14,700.00	7,234.96	7,246.96	7,200.21	214.34	36.76	-89.60	-2,453.45	-9,674.50	4,394.13	4,164.78	229.35	19.159		
14,800.00	7,234.58	7,251.17	7,204.42	217.16	36.77	-89.66	-2,453.39	-9,674.69	4,348.27	4,114.59	233.68	18.608		
14,900.00	7,234.20	7,255.33	7,208.58	219.98	36.79	-89.73	-2,453.33	-9,674.87	4,304.24	4,066.22	238.02	18.084		
15,000.00	7,233.82	7,259.45	7,212.69	222.81	36.81	-89.79	-2,453.28	-9,675.05	4,262.10	4,019.74	242.36	17.586		
15,100.00	7,233.44	7,263.53	7,216.76	225.63	36.83	-89.85	-2,453.22	-9,675.22	4,221.90	3,975.21	246.69	17.114		
15,200.00	7,233.06	7,267.56	7,220.79	228.45	36.84	-89.91	-2,453.17	-9,675.40	4,183.70	3,932.70	251.00	16.668		
15,216.01	7,233.00	7,268.20	7,221.43	228.91	36.84	-89.92	-2,453.16	-9,675.43	4,177.78	3,926.09	251.69	16.599 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	37.00	3.28	3.28	-109.10	-3,113.17	-8,988.83	9,512.74					
100.00	100.00	42.99	79.99	3.28	3.28	-109.10	-3,113.06	-8,988.91	9,512.73	9,506.17	6.57	1,448.863		
200.00	200.00	114.42	151.41	3.34	3.29	-109.10	-3,112.40	-8,989.42	9,513.10	9,506.47	6.63	1,434.798		
300.00	299.98	171.00	207.98	3.45	3.33	-103.34	-3,111.46	-8,990.11	9,514.17	9,507.40	6.77	1,405.435		
400.00	399.84	210.23	247.20	3.61	3.36	-103.30	-3,110.77	-8,990.83	9,516.61	9,509.65	6.96	1,367.008		
500.00	499.45	263.00	299.94	3.82	3.41	-103.24	-3,110.08	-8,992.30	9,520.66	9,513.44	7.22	1,318.021		
600.00	598.70	263.00	299.94	4.07	3.41	-103.14	-3,110.08	-8,992.30	9,526.10	9,518.63	7.47	1,274.937		
700.00	697.47	263.00	299.94	4.35	3.41	-103.00	-3,110.08	-8,992.30	9,533.37	9,525.61	7.76	1,228.887		
800.00	795.62	304.01	340.92	4.67	3.47	-102.86	-3,109.97	-8,993.99	9,541.98	9,533.85	8.13	1,173.963		
900.00	893.06	354.00	390.82	5.01	3.55	-102.73	-3,110.64	-8,996.91	9,552.68	9,544.13	8.55	1,117.088		
1,000.00	989.64	354.00	390.82	5.38	3.55	-102.50	-3,110.64	-8,996.91	9,564.46	9,555.53	8.93	1,071.008		
1,100.00	1,085.42	354.00	390.82	5.78	3.55	-102.38	-3,110.64	-8,996.91	9,577.90	9,568.57	9.33	1,026.098		
1,200.00	1,181.09	354.00	390.82	6.20	3.55	-102.38	-3,110.64	-8,996.91	9,592.45	9,582.69	9.76	983.039		
1,300.00	1,276.76	401.21	437.87	6.65	3.63	-102.46	-3,112.21	-9,000.32	9,607.53	9,597.25	10.27	935.059		
1,400.00	1,372.43	445.00	481.46	7.11	3.73	-102.54	-3,114.55	-9,003.88	9,623.64	9,612.83	10.81	890.552		
1,500.00	1,468.10	447.53	483.98	7.57	3.73	-102.55	-3,114.71	-9,004.09	9,640.34	9,629.07	11.27	855.497		
1,600.00	1,563.77	562.21	597.96	8.05	4.01	-102.77	-3,123.49	-9,013.04	9,657.36	9,645.37	11.99	805.372		
1,700.00	1,659.44	623.52	658.85	8.53	4.19	-102.90	-3,129.13	-9,017.55	9,674.65	9,662.03	12.62	766.624		
1,800.00	1,755.11	730.46	764.94	9.02	4.53	-103.13	-3,140.23	-9,025.10	9,692.21	9,678.81	13.40	723.111		
1,900.00	1,850.78	1,383.00	1,414.90	9.52	7.01	-104.36	-3,179.82	-9,062.48	9,708.34	9,692.10	16.24	597.826		
2,000.00	1,946.45	1,383.00	1,414.90	10.02	7.01	-104.36	-3,179.82	-9,062.48	9,721.03	9,704.30	16.73	581.178		
2,100.00	2,042.12	1,383.00	1,414.90	10.52	7.01	-104.36	-3,179.82	-9,062.48	9,734.73	9,717.51	17.21	565.493		
2,200.00	2,137.78	1,383.00	1,414.90	11.03	7.01	-104.36	-3,179.82	-9,062.48	9,749.44	9,731.73	17.70	550.714		
2,300.00	2,233.45	1,383.00	1,414.90	11.54	7.01	-104.36	-3,179.82	-9,062.48	9,765.15	9,746.96	18.19	536.786		
2,400.00	2,329.12	1,411.74	1,443.56	12.05	7.13	-104.41	-3,180.45	-9,064.57	9,781.38	9,762.59	18.79	520.446		
2,500.00	2,424.79	1,445.00	1,476.62	12.56	7.27	-104.46	-3,181.53	-9,068.00	9,799.12	9,779.70	19.42	504.716		
2,600.00	2,520.46	1,445.00	1,476.62	13.08	7.27	-104.46	-3,181.53	-9,068.00	9,817.20	9,797.30	19.90	493.292		
2,700.00	2,616.13	1,445.00	1,476.62	13.60	7.27	-104.46	-3,181.53	-9,068.00	9,836.28	9,815.89	20.39	482.503		
2,800.00	2,711.80	1,445.00	1,476.62	14.12	7.27	-104.46	-3,181.53	-9,068.00	9,856.33	9,835.46	20.87	472.307		
2,900.00	2,807.47	1,502.64	1,533.80	14.64	7.53	-104.56	-3,184.03	-9,074.89	9,877.06	9,855.47	21.59	457.460		
3,000.00	2,903.14	1,569.00	1,599.58	15.16	7.83	-104.67	-3,187.63	-9,082.82	9,898.26	9,875.90	22.35	442.824		
3,100.00	2,998.81	1,569.00	1,599.58	15.68	7.83	-104.67	-3,187.63	-9,082.82	9,920.03	9,897.20	22.83	434.518		
3,200.00	3,094.48	1,611.59	1,641.75	16.21	8.03	-104.75	-3,190.60	-9,088.03	9,942.41	9,918.92	23.49	423.212		
3,300.00	3,190.15	1,665.00	1,694.49	16.73	8.29	-104.85	-3,195.47	-9,094.87	9,965.77	9,941.56	24.20	411.750		
3,400.00	3,285.82	1,665.00	1,694.49	17.26	8.29	-104.85	-3,195.47	-9,094.87	9,989.51	9,964.84	24.67	404.868		
8,200.00	7,259.63	7,307.44	7,267.16	43.30	36.71	-90.44	-3,701.61	-9,621.04	9,938.66	9,866.79	71.87	138.287		
8,300.00	7,259.25	7,308.15	7,267.87	45.05	36.71	-90.45	-3,701.59	-9,621.05	9,853.16	9,780.55	72.62	135.686		
8,400.00	7,258.87	7,308.86	7,268.58	46.91	36.71	-90.46	-3,701.58	-9,621.06	9,767.94	9,694.52	73.43	133.029		
8,500.00	7,258.49	7,309.59	7,269.31	48.87	36.71	-90.47	-3,701.56	-9,621.07	9,683.00	9,608.70	74.30	130.325		
8,600.00	7,258.11	7,310.32	7,270.04	50.92	36.72	-90.48	-3,701.55	-9,621.08	9,598.36	9,523.12	75.23	127.582		
8,700.00	7,257.73	7,311.07	7,270.79	53.04	36.72	-90.49	-3,701.53	-9,621.09	9,514.00	9,437.78	76.23	124.809		
8,800.00	7,257.35	7,311.82	7,271.54	55.23	36.72	-90.49	-3,701.52	-9,621.10	9,429.96	9,352.68	77.28	122.016		
8,900.00	7,256.97	7,312.59	7,272.31	57.47	36.72	-90.50	-3,701.50	-9,621.11	9,346.23	9,267.83	78.40	119.210		
9,000.00	7,256.59	7,313.37	7,273.09	59.77	36.73	-90.51	-3,701.48	-9,621.12	9,262.82	9,183.24	79.58	116.399		
9,100.00	7,256.21	7,314.15	7,273.87	62.12	36.73	-90.52	-3,701.47	-9,621.13	9,179.75	9,098.93	80.81	113.591		
9,200.00	7,255.83	7,314.95	7,274.67	64.50	36.73	-90.53	-3,701.45	-9,621.13	9,097.01	9,014.90	82.11	110.792		
9,300.00	7,255.45	7,315.76	7,275.48	66.93	36.74	-90.54	-3,701.43	-9,621.14	9,014.62	8,931.16	83.46	108.008		
9,400.00	7,255.07	7,316.58	7,276.30	69.38	36.74	-90.55	-3,701.41	-9,621.15	8,932.60	8,847.72	84.87	105.246		
9,500.00	7,254.69	7,317.42	7,277.14	71.87	36.74	-90.56	-3,701.40	-9,621.17	8,850.94	8,764.60	86.34	102.511		
9,600.00	7,254.31	7,318.26	7,277.98	74.38	36.74	-90.57	-3,701.38	-9,621.18	8,769.66	8,681.80	87.87	99.806		
9,700.00	7,253.93	7,319.12	7,278.84	76.92	36.75	-90.58	-3,701.36	-9,621.19	8,688.78	8,599.33	89.45	97.138		
9,800.00	7,253.55	7,319.99	7,279.71	79.48	36.75	-90.58	-3,701.34	-9,621.20	8,608.29	8,517.21	91.09	94.508		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
9,900.00	7,253.18	7,320.88	7,280.60	82.06	36.75	-90.59	-3,701.32	-9,621.21	8,528.22	8,435.44	92.78	91.920		
10,000.00	7,252.80	7,321.78	7,281.49	84.65	36.76	-90.60	-3,701.30	-9,621.22	8,448.57	8,354.04	94.53	89.377		
10,100.00	7,252.42	7,322.69	7,282.41	87.27	36.76	-90.61	-3,701.28	-9,621.23	8,369.36	8,273.03	96.33	86.881		
10,200.00	7,252.04	7,323.61	7,283.33	89.89	36.76	-90.63	-3,701.26	-9,621.24	8,290.60	8,192.41	98.19	84.435		
10,300.00	7,251.66	7,324.55	7,284.27	92.54	36.77	-90.64	-3,701.24	-9,621.26	8,212.30	8,112.20	100.10	82.039		
10,400.00	7,251.28	7,325.51	7,285.22	95.19	36.77	-90.65	-3,701.22	-9,621.27	8,134.48	8,032.41	102.07	79.695		
10,500.00	7,250.90	7,326.48	7,286.19	97.86	36.77	-90.66	-3,701.20	-9,621.28	8,057.14	7,953.05	104.09	77.403		
10,600.00	7,250.52	7,327.46	7,287.18	100.53	36.78	-90.67	-3,701.18	-9,621.29	7,980.31	7,874.14	106.17	75.166		
10,700.00	7,250.14	7,328.46	7,288.18	103.22	36.78	-90.68	-3,701.15	-9,621.31	7,904.00	7,795.70	108.30	72.982		
10,800.00	7,249.76	7,329.48	7,289.19	105.91	36.78	-90.69	-3,701.13	-9,621.32	7,828.22	7,717.73	110.49	70.852		
10,900.00	7,249.38	7,330.51	7,290.22	108.62	36.79	-90.70	-3,701.11	-9,621.33	7,752.99	7,640.26	112.73	68.776		
11,000.00	7,249.00	7,331.56	7,291.27	111.33	36.79	-90.71	-3,701.08	-9,621.35	7,678.33	7,563.31	115.02	66.755		
11,100.00	7,248.62	7,332.63	7,292.34	114.04	36.79	-90.73	-3,701.06	-9,621.36	7,604.24	7,486.87	117.37	64.788		
11,200.00	7,248.24	7,333.71	7,293.42	116.77	36.80	-90.74	-3,701.03	-9,621.38	7,530.76	7,410.98	119.78	62.874		
11,300.00	7,247.86	7,334.81	7,294.53	119.50	36.80	-90.75	-3,701.01	-9,621.39	7,457.89	7,335.66	122.23	61.013		
11,400.00	7,247.48	7,335.93	7,295.65	122.24	36.81	-90.76	-3,700.98	-9,621.41	7,385.66	7,260.91	124.75	59.205		
11,500.00	7,247.10	7,337.07	7,296.79	124.98	36.81	-90.78	-3,700.95	-9,621.42	7,314.08	7,186.77	127.32	57.448		
11,600.00	7,246.72	7,338.23	7,297.94	127.73	36.81	-90.79	-3,700.93	-9,621.44	7,243.18	7,113.24	129.94	55.743		
11,700.00	7,246.34	7,339.41	7,299.12	130.48	36.82	-90.80	-3,700.90	-9,621.46	7,172.97	7,040.35	132.62	54.088		
11,800.00	7,245.96	7,340.61	7,300.32	133.24	36.82	-90.81	-3,700.87	-9,621.47	7,103.47	6,968.12	135.35	52.482		
11,900.00	7,245.58	7,341.83	7,301.54	136.00	36.83	-90.83	-3,700.84	-9,621.49	7,034.70	6,896.57	138.14	50.925		
12,000.00	7,245.21	7,343.08	7,302.79	138.76	36.83	-90.84	-3,700.81	-9,621.51	6,966.70	6,825.72	140.98	49.416		
12,100.00	7,244.83	7,344.34	7,304.05	141.53	36.84	-90.86	-3,700.78	-9,621.53	6,899.47	6,755.59	143.88	47.954		
12,200.00	7,244.45	7,345.63	7,305.34	144.30	36.84	-90.87	-3,700.75	-9,621.55	6,833.04	6,686.21	146.83	46.538		
12,300.00	7,244.07	7,346.94	7,306.65	147.08	36.85	-90.89	-3,700.72	-9,621.57	6,767.44	6,617.61	149.83	45.167		
12,400.00	7,243.69	7,348.28	7,307.98	149.86	36.85	-90.90	-3,700.68	-9,621.58	6,702.69	6,549.80	152.89	43.840		
12,500.00	7,243.31	7,349.64	7,309.34	152.64	36.86	-90.92	-3,700.65	-9,621.61	6,638.81	6,482.81	156.00	42.556		
12,600.00	7,242.93	7,351.02	7,310.73	155.42	36.86	-90.93	-3,700.62	-9,621.63	6,575.84	6,416.67	159.17	41.314		
12,700.00	7,242.55	7,352.43	7,312.14	158.21	36.86	-90.95	-3,700.58	-9,621.65	6,513.79	6,351.40	162.38	40.114		
12,800.00	7,242.17	7,353.87	7,313.58	161.00	36.87	-90.96	-3,700.54	-9,621.67	6,452.69	6,287.04	165.65	38.954		
12,900.00	7,241.79	7,355.34	7,315.05	163.79	36.88	-90.98	-3,700.51	-9,621.69	6,392.57	6,223.60	168.97	37.834		
13,000.00	7,241.41	7,356.84	7,316.54	166.58	36.88	-91.00	-3,700.47	-9,621.71	6,333.46	6,161.13	172.33	36.751		
13,100.00	7,241.03	7,358.36	7,318.06	169.38	36.89	-91.01	-3,700.43	-9,621.74	6,275.39	6,099.64	175.75	35.707		
13,200.00	7,240.65	7,359.92	7,319.62	172.18	36.89	-91.03	-3,700.39	-9,621.76	6,218.38	6,039.17	179.21	34.699		
13,300.00	7,240.27	7,361.50	7,321.20	174.98	36.90	-91.05	-3,700.35	-9,621.79	6,162.47	5,979.75	182.72	33.727		
13,400.00	7,239.89	7,363.12	7,322.82	177.78	36.90	-91.07	-3,700.31	-9,621.81	6,107.68	5,921.42	186.27	32.790		
13,500.00	7,239.51	7,364.77	7,324.47	180.58	36.91	-91.08	-3,700.26	-9,621.84	6,054.05	5,864.19	189.86	31.887		
13,600.00	7,239.13	7,366.46	7,326.16	183.39	36.91	-91.10	-3,700.22	-9,621.87	6,001.61	5,808.12	193.49	31.018		
13,700.00	7,238.75	7,368.18	7,327.88	186.20	36.92	-91.12	-3,700.17	-9,621.89	5,950.38	5,753.22	197.16	30.180		
13,800.00	7,238.37	7,369.93	7,329.63	189.00	36.93	-91.14	-3,700.13	-9,621.92	5,900.41	5,699.54	200.87	29.375		
13,900.00	7,237.99	7,371.73	7,331.43	191.81	36.93	-91.16	-3,700.08	-9,621.95	5,851.71	5,647.11	204.60	28.600		
14,000.00	7,237.62	7,373.56	7,333.26	194.63	36.94	-91.18	-3,700.03	-9,621.98	5,804.33	5,595.96	208.37	27.856		
14,100.00	7,237.24	7,375.44	7,335.13	197.44	36.95	-91.20	-3,699.98	-9,622.01	5,758.30	5,546.13	212.17	27.141		
14,200.00	7,236.86	7,377.35	7,337.04	200.25	36.95	-91.23	-3,699.93	-9,622.04	5,713.64	5,497.66	215.98	26.454		
14,300.00	7,236.48	7,379.31	7,339.00	203.07	36.96	-91.25	-3,699.87	-9,622.08	5,670.40	5,450.58	219.82	25.795		
14,400.00	7,236.10	7,381.31	7,341.00	205.88	36.97	-91.27	-3,699.82	-9,622.11	5,628.60	5,404.92	223.68	25.164		
14,500.00	7,235.72	7,373.61	7,333.31	208.70	36.94	-91.18	-3,700.04	-9,621.97	5,588.29	5,360.78	227.51	24.563		
14,600.00	7,235.34	7,374.74	7,334.44	211.52	36.94	-91.20	-3,700.01	-9,621.99	5,549.48	5,318.10	231.39	23.984		
14,700.00	7,234.96	7,375.88	7,335.57	214.34	36.95	-91.21	-3,699.99	-9,622.01	5,512.21	5,276.95	235.26	23.430		
14,800.00	7,234.58	7,377.01	7,336.70	217.16	36.95	-91.22	-3,699.96	-9,622.02	5,476.52	5,237.38	239.14	22.901		
14,900.00	7,234.20	7,378.14	7,337.84	219.98	36.96	-91.23	-3,699.93	-9,622.04	5,442.42	5,199.41	243.01	22.396		
15,000.00	7,233.82	7,379.27	7,338.97	222.81	36.96	-91.25	-3,699.90	-9,622.06	5,409.96	5,163.09	246.87	21.914		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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						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	
15,100.00	7,233.44	7,380.41	7,340.10	225.63	36.96	-91.26	-3,699.87	-9,622.07	5,379.16	5,128.45	250.72	21.455	
15,200.00	7,233.06	7,381.54	7,341.23	228.45	36.97	-91.27	-3,699.84	-9,622.09	5,350.06	5,095.52	254.54	21.018	
15,216.01	7,233.00	7,381.72	7,341.41	228.91	36.97	-91.27	-3,699.84	-9,622.09	5,345.56	5,090.40	255.15	20.951	CC, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	858.45	887.88	3.28	5.19	-109.75	-3,180.39	-8,856.96	9,452.46					
100.00	100.00	973.19	999.87	3.28	5.76	-109.89	-3,197.92	-8,839.16	9,442.84	9,433.82	9.02	1,046.959		
200.00	200.00	1,031.92	1,057.02	3.34	6.07	-109.97	-3,207.77	-8,829.87	9,433.49	9,424.13	9.36	1,007.806		
300.00	299.98	1,098.00	1,121.48	3.45	6.43	-104.49	-3,218.45	-8,820.00	9,425.16	9,415.36	9.80	961.380		
400.00	399.84	1,098.00	1,121.48	3.61	6.43	-104.62	-3,218.45	-8,820.00	9,418.28	9,408.33	9.95	946.704		
500.00	499.45	1,153.51	1,175.82	3.82	6.72	-104.81	-3,226.90	-8,812.41	9,412.88	9,402.45	10.43	902.624		
600.00	598.70	1,193.00	1,214.58	4.07	6.93	-104.96	-3,232.57	-8,807.50	9,409.14	9,398.27	10.87	865.510		
700.00	697.47	1,249.15	1,269.71	4.35	7.23	-105.11	-3,240.87	-8,800.73	9,406.90	9,395.45	11.44	822.085		
800.00	795.62	1,316.61	1,335.76	4.67	7.60	-105.28	-3,251.78	-8,792.47	9,405.98	9,393.86	12.12	776.317		
820.96	816.10	1,331.68	1,350.53	4.73	7.68	-105.32	-3,254.21	-8,790.65	9,405.95	9,393.68	12.27	766.676		
900.00	893.06	1,388.48	1,406.21	5.01	7.99	-105.45	-3,263.13	-8,783.94	9,406.35	9,393.50	12.85	731.902		
1,000.00	989.64	1,708.85	1,721.57	5.38	9.71	-106.23	-3,304.49	-8,745.80	9,407.05	9,392.14	14.91	630.869		
1,006.34	995.74	1,710.64	1,723.33	5.40	9.72	-106.23	-3,304.72	-8,745.57	9,407.05	9,392.10	14.95	629.399		
1,100.00	1,085.42	1,757.00	1,768.95	5.78	9.97	-106.35	-3,310.58	-8,739.75	9,407.78	9,392.21	15.58	604.024		
1,200.00	1,181.09	1,772.46	1,784.17	6.20	10.06	-106.39	-3,312.57	-8,737.89	9,409.27	9,393.18	16.09	584.868		
1,300.00	1,276.76	1,826.19	1,837.03	6.65	10.35	-106.54	-3,319.75	-8,731.48	9,411.43	9,394.60	16.82	559.406		
1,400.00	1,372.43	2,238.70	2,241.75	7.11	12.72	-107.65	-3,375.27	-8,674.85	9,411.92	9,392.34	19.58	480.615		
1,500.00	1,468.10	2,305.53	2,307.41	7.57	13.10	-107.83	-3,383.01	-8,665.13	9,411.71	9,391.29	20.42	460.896		
1,501.38	1,469.41	2,306.46	2,308.32	7.58	13.11	-107.83	-3,383.11	-8,665.00	9,411.71	9,391.28	20.43	460.633		
1,600.00	1,563.77	2,321.00	2,322.65	8.05	13.19	-107.87	-3,384.62	-8,662.97	9,412.10	9,391.12	20.99	448.467		
1,700.00	1,659.44	2,375.60	2,376.44	8.53	13.49	-108.01	-3,390.45	-8,655.66	9,413.08	9,391.31	21.77	432.450		
1,800.00	1,755.11	2,416.00	2,416.25	9.02	13.72	-108.11	-3,395.06	-8,650.55	9,414.92	9,392.44	22.48	418.866		
1,900.00	1,850.78	2,534.99	2,533.16	9.52	14.40	-108.43	-3,410.56	-8,634.73	9,417.06	9,393.42	23.64	398.326		
2,000.00	1,946.45	2,607.48	2,604.41	10.02	14.82	-108.62	-3,419.74	-8,625.12	9,419.29	9,394.74	24.55	383.621		
2,100.00	2,042.12	2,745.29	2,739.48	10.52	15.64	-109.00	-3,438.94	-8,605.67	9,421.43	9,395.57	25.86	364.279		
2,200.00	2,137.78	2,831.82	2,823.91	11.03	16.17	-109.24	-3,452.67	-8,592.62	9,423.74	9,396.84	26.90	350.361		
2,300.00	2,233.45	2,890.00	2,880.83	11.54	16.53	-109.41	-3,461.19	-8,584.14	9,426.30	9,398.54	27.76	339.544		
2,400.00	2,329.12	2,941.10	2,930.97	12.05	16.83	-109.54	-3,468.10	-8,577.15	9,429.42	9,400.85	28.57	330.059		
2,500.00	2,424.79	2,984.00	2,973.18	12.56	17.08	-109.66	-3,473.60	-8,571.75	9,433.28	9,403.95	29.33	321.615		
2,600.00	2,520.46	3,033.92	3,022.28	13.08	17.37	-109.79	-3,480.18	-8,565.65	9,437.76	9,407.62	30.14	313.181		
2,700.00	2,616.13	3,091.88	3,079.17	13.60	17.70	-109.95	-3,488.63	-8,558.37	9,442.74	9,411.75	30.98	304.755		
2,800.00	2,711.80	3,147.38	3,133.81	14.12	18.01	-110.09	-3,495.90	-8,552.00	9,448.24	9,416.43	31.81	296.989		
2,900.00	2,807.47	3,196.88	3,182.77	14.64	18.28	-110.21	-3,501.27	-8,547.07	9,454.29	9,421.69	32.60	290.042		
3,000.00	2,903.14	3,242.16	3,227.62	15.16	18.51	-110.32	-3,505.93	-8,542.92	9,460.94	9,427.59	33.35	283.707		
3,100.00	2,998.81	3,291.29	3,276.31	15.68	18.77	-110.44	-3,510.91	-8,538.72	9,468.19	9,434.07	34.12	277.504		
3,200.00	3,094.48	3,357.00	3,341.37	16.21	19.10	-110.60	-3,518.25	-8,533.12	9,476.02	9,441.04	34.98	270.910		
3,300.00	3,190.15	3,414.76	3,398.56	16.73	19.40	-110.74	-3,524.82	-8,528.33	9,484.29	9,448.49	35.80	264.956		
3,400.00	3,285.82	3,581.24	3,563.47	17.26	20.26	-111.15	-3,542.57	-8,514.02	9,492.03	9,454.84	37.19	255.240		
3,500.00	3,381.49	3,640.00	3,621.64	17.78	20.57	-111.29	-3,549.18	-8,509.07	9,500.38	9,462.37	38.02	249.904		
3,600.00	3,477.16	4,061.64	4,036.20	18.31	22.99	-112.40	-3,606.26	-8,459.47	9,507.46	9,466.49	40.97	232.038		
3,700.00	3,572.83	4,112.00	4,085.51	18.84	23.30	-112.53	-3,613.66	-8,452.35	9,513.19	9,471.37	41.81	227.530		
3,800.00	3,668.50	4,167.54	4,140.06	19.37	23.62	-112.68	-3,621.12	-8,445.11	9,519.46	9,476.80	42.66	223.164		
3,900.00	3,764.17	4,207.00	4,178.91	19.89	23.85	-112.78	-3,626.06	-8,440.28	9,526.27	9,482.86	43.41	219.456		
4,000.00	3,859.84	4,258.40	4,229.48	20.42	24.15	-112.92	-3,632.85	-8,434.07	9,533.67	9,489.44	44.23	215.534		
4,100.00	3,955.51	4,301.00	4,271.26	20.95	24.40	-113.03	-3,639.29	-8,428.80	9,541.77	9,496.77	45.00	212.023		
4,200.00	4,051.18	4,344.16	4,313.58	21.48	24.66	-113.15	-3,646.00	-8,423.59	9,550.51	9,504.73	45.78	208.623		
4,300.00	4,146.85	4,396.00	4,364.53	22.01	24.96	-113.29	-3,653.62	-8,417.84	9,559.85	9,513.24	46.61	205.125		
4,400.00	4,242.52	4,459.34	4,426.91	22.55	25.32	-113.45	-3,662.46	-8,411.30	9,569.68	9,522.19	47.48	201.531		
4,500.00	4,338.19	4,515.82	4,482.60	23.08	25.64	-113.59	-3,670.07	-8,405.79	9,579.93	9,531.62	48.32	198.269		
4,600.00	4,433.86	4,562.77	4,528.98	23.61	25.89	-113.71	-3,676.07	-8,401.64	9,590.76	9,541.67	49.09	195.378		
4,700.00	4,529.53	4,606.93	4,572.68	24.14	26.12	-113.82	-3,681.38	-8,398.16	9,602.18	9,552.35	49.83	192.688		
4,800.00	4,625.19	4,648.66	4,614.05	24.67	26.33	-113.91	-3,686.03	-8,395.34	9,614.23	9,563.68	50.55	190.179		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
4,900.00	4,720.86	4,680.00	4,645.17	25.21	26.49	-113.98	-3,689.26	-8,393.53	9,626.91	9,575.70	51.22	187.968		
5,000.00	4,816.53	4,730.93	4,695.80	25.74	26.72	-114.10	-3,694.24	-8,391.09	9,640.20	9,588.24	51.96	185.517		
5,100.00	4,912.20	4,964.00	4,928.00	26.27	27.76	-114.58	-3,711.73	-8,381.67	9,652.92	9,599.33	53.59	180.141		
5,200.00	5,007.87	5,008.35	4,972.25	26.80	27.95	-114.67	-3,714.36	-8,380.17	9,665.64	9,611.36	54.28	178.070		
5,300.00	5,103.54	5,185.61	5,149.36	27.34	28.62	-114.98	-3,719.58	-8,377.16	9,678.52	9,623.01	55.51	174.357		
5,400.00	5,199.22	5,249.00	5,212.75	27.87	28.83	-115.10	-3,719.52	-8,376.96	9,690.96	9,634.72	56.24	172.327		
5,500.00	5,295.46	5,308.43	5,272.18	28.39	29.03	-115.41	-3,719.56	-8,376.96	9,702.94	9,646.01	56.93	170.434		
5,600.00	5,392.60	5,378.22	5,341.97	28.89	29.26	-115.70	-3,719.83	-8,377.15	9,713.85	9,656.21	57.64	168.513		
5,700.00	5,490.50	5,466.14	5,429.89	29.37	29.55	-115.97	-3,720.28	-8,377.46	9,723.45	9,665.04	58.41	166.477		
5,800.00	5,589.05	5,554.63	5,518.37	29.83	29.84	-116.19	-3,720.81	-8,377.83	9,731.66	9,672.50	59.15	164.519		
5,900.00	5,688.14	5,651.52	5,615.26	30.26	30.16	-116.39	-3,721.47	-8,378.29	9,738.44	9,678.53	59.91	162.559		
6,000.00	5,787.63	5,773.72	5,737.45	30.68	30.56	-116.54	-3,722.05	-8,378.84	9,743.55	9,682.82	60.73	160.436		
6,100.00	5,887.41	5,896.35	5,860.09	31.07	30.96	-116.64	-3,722.22	-8,379.31	9,746.87	9,685.33	61.54	158.387		
6,200.00	5,987.36	5,992.51	5,956.25	31.44	31.29	-116.69	-3,722.34	-8,379.56	9,748.53	9,686.28	62.24	156.619		
6,300.00	6,087.36	6,086.94	6,050.67	31.80	31.61	-122.43	-3,722.86	-8,379.62	9,748.98	9,686.05	62.93	154.920		
6,400.00	6,187.36	6,181.36	6,145.09	32.15	31.94	-122.44	-3,723.77	-8,379.50	9,749.39	9,685.77	63.62	153.255		
6,500.00	6,287.36	6,328.01	6,291.73	32.51	32.50	-122.45	-3,725.55	-8,378.72	9,749.60	9,685.04	64.55	151.030		
6,600.00	6,387.36	6,477.97	6,441.67	32.87	33.07	-122.46	-3,727.43	-8,376.99	9,749.30	9,683.79	65.51	148.822		
6,700.00	6,487.36	6,541.82	6,505.51	33.23	33.32	-122.47	-3,728.40	-8,376.12	9,748.95	9,682.83	66.12	147.450		
6,757.02	6,544.38	6,580.71	6,544.38	33.44	33.47	-122.47	-3,729.11	-8,375.63	9,748.90	9,682.42	66.47	146.656		
6,800.00	6,587.36	6,610.01	6,573.68	33.59	33.59	-122.48	-3,729.71	-8,375.27	9,748.93	9,682.18	66.74	146.065		
6,900.00	6,687.26	6,678.10	6,641.74	33.95	33.86	-32.16	-3,731.30	-8,374.50	9,746.59	9,679.23	67.36	144.691		
7,000.00	6,785.58	6,754.00	6,717.61	34.31	34.16	-32.92	-3,733.40	-8,373.75	9,732.27	9,664.26	68.01	143.104		
7,100.00	6,879.94	6,854.57	6,818.14	34.65	34.56	-34.46	-3,736.17	-8,372.86	9,705.21	9,636.45	68.76	141.137		
7,200.00	6,968.01	6,963.66	6,927.20	34.97	34.99	-36.93	-3,738.59	-8,371.98	9,665.83	9,596.27	69.56	138.961		
7,300.00	7,047.61	7,068.11	7,031.63	35.27	35.40	-40.52	-3,740.38	-8,371.21	9,615.18	9,544.84	70.34	136.702		
7,400.00	7,116.80	7,170.25	7,133.75	35.54	35.81	-45.61	-3,742.00	-8,370.14	9,554.55	9,483.43	71.12	134.341		
7,500.00	7,173.86	7,253.29	7,216.77	35.81	36.14	-52.52	-3,743.32	-8,368.96	9,485.59	9,413.74	71.85	132.013		
7,600.00	7,217.38	7,315.35	7,278.81	36.17	36.39	-61.64	-3,744.29	-8,367.90	9,410.19	9,337.65	72.54	129.724		
7,700.00	7,246.31	7,355.17	7,318.63	36.80	36.55	-73.00	-3,744.92	-8,367.13	9,330.34	9,257.15	73.19	127.484		
7,800.00	7,259.92	7,372.14	7,335.58	37.72	36.62	-85.92	-3,745.18	-8,366.79	9,248.13	9,174.33	73.80	125.309		
7,900.00	7,260.77	7,370.38	7,333.82	38.86	36.61	-91.12	-3,745.15	-8,366.82	9,165.52	9,091.12	74.40	123.192		
8,000.00	7,260.39	7,366.88	7,330.33	40.19	36.60	-91.09	-3,745.10	-8,366.90	9,083.25	9,008.18	75.07	121.004		
8,100.00	7,260.01	7,363.42	7,326.87	41.67	36.58	-91.05	-3,745.04	-8,366.97	9,001.34	8,925.53	75.81	118.739		
8,200.00	7,259.63	7,360.00	7,323.45	43.30	36.57	-91.01	-3,744.99	-8,367.04	8,919.79	8,843.17	76.63	116.408		
8,300.00	7,259.25	7,356.62	7,320.07	45.05	36.55	-90.97	-3,744.94	-8,367.10	8,838.63	8,761.11	77.52	114.019		
8,400.00	7,258.87	7,353.28	7,316.73	46.91	36.54	-90.94	-3,744.89	-8,367.17	8,757.85	8,679.36	78.49	111.583		
8,500.00	7,258.49	7,349.98	7,313.43	48.87	36.53	-90.90	-3,744.83	-8,367.24	8,677.47	8,597.94	79.53	109.110		
8,600.00	7,258.11	7,346.71	7,310.17	50.92	36.51	-90.86	-3,744.78	-8,367.30	8,597.51	8,516.86	80.65	106.608		
8,700.00	7,257.73	7,343.49	7,306.94	53.04	36.50	-90.83	-3,744.73	-8,367.36	8,517.96	8,436.13	81.83	104.088		
8,800.00	7,257.35	7,340.29	7,303.75	55.23	36.49	-90.79	-3,744.68	-8,367.43	8,438.85	8,355.76	83.09	101.558		
8,900.00	7,256.97	7,337.13	7,300.59	57.47	36.48	-90.76	-3,744.63	-8,367.49	8,360.19	8,275.76	84.42	99.025		
9,000.00	7,256.59	7,334.01	7,297.47	59.77	36.46	-90.72	-3,744.58	-8,367.55	8,281.99	8,196.16	85.82	96.499		
9,100.00	7,256.21	7,330.92	7,294.38	62.12	36.45	-90.69	-3,744.54	-8,367.61	8,204.25	8,116.96	87.29	93.986		
9,200.00	7,255.83	7,327.87	7,291.33	64.50	36.44	-90.65	-3,744.49	-8,367.66	8,127.01	8,038.18	88.83	91.492		
9,300.00	7,255.45	7,324.85	7,288.31	66.93	36.43	-90.62	-3,744.44	-8,367.72	8,050.26	7,959.84	90.43	89.024		
9,400.00	7,255.07	7,321.86	7,285.32	69.38	36.42	-90.59	-3,744.39	-8,367.78	7,974.03	7,881.94	92.09	86.585		
9,500.00	7,254.69	7,318.90	7,282.36	71.87	36.40	-90.56	-3,744.35	-8,367.83	7,898.33	7,804.51	93.82	84.182		
9,600.00	7,254.31	7,315.97	7,279.44	74.38	36.39	-90.52	-3,744.30	-8,367.89	7,823.18	7,727.56	95.62	81.817		
9,700.00	7,253.93	7,313.08	7,276.54	76.92	36.38	-90.49	-3,744.26	-8,367.94	7,748.58	7,651.11	97.47	79.494		
9,800.00	7,253.55	7,310.21	7,273.68	79.48	36.37	-90.46	-3,744.21	-8,367.99	7,674.56	7,575.17	99.39	77.216		
9,900.00	7,253.18	7,307.38	7,270.85	82.06	36.36	-90.43	-3,744.17	-8,368.04	7,601.14	7,499.77	101.37	74.984		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,000.00	7,252.80	7,304.57	7,268.04	84.65	36.35	-90.40	-3,744.12	-8,368.09	7,528.33	7,424.92	103.41	72.802		
10,100.00	7,252.42	7,301.80	7,265.27	87.27	36.34	-90.37	-3,744.08	-8,368.14	7,456.15	7,350.64	105.51	70.670		
10,200.00	7,252.04	7,299.05	7,262.52	89.89	36.32	-90.34	-3,744.04	-8,368.19	7,384.61	7,276.95	107.66	68.590		
10,300.00	7,251.66	7,296.33	7,259.80	92.54	36.31	-90.31	-3,743.99	-8,368.24	7,313.74	7,203.86	109.88	66.563		
10,400.00	7,251.28	7,293.64	7,257.11	95.19	36.30	-90.28	-3,743.95	-8,368.29	7,243.56	7,131.41	112.15	64.588		
10,500.00	7,250.90	7,290.98	7,254.45	97.86	36.29	-90.25	-3,743.91	-8,368.33	7,174.09	7,059.61	114.48	62.667		
10,600.00	7,250.52	7,288.34	7,251.81	100.53	36.28	-90.22	-3,743.87	-8,368.38	7,105.34	6,988.47	116.87	60.799		
10,700.00	7,250.14	7,285.73	7,249.20	103.22	36.27	-90.19	-3,743.83	-8,368.42	7,037.34	6,918.03	119.31	58.985		
10,800.00	7,249.76	7,283.15	7,246.62	105.91	36.26	-90.16	-3,743.79	-8,368.47	6,970.11	6,848.30	121.80	57.224		
10,900.00	7,249.38	7,280.59	7,244.06	108.62	36.25	-90.13	-3,743.75	-8,368.51	6,903.67	6,779.32	124.36	55.515		
11,000.00	7,249.00	7,278.05	7,241.53	111.33	36.24	-90.10	-3,743.71	-8,368.56	6,838.05	6,711.09	126.96	53.859		
11,100.00	7,248.62	7,275.55	7,239.02	114.04	36.23	-90.08	-3,743.67	-8,368.60	6,773.27	6,643.65	129.62	52.254		
11,200.00	7,248.24	7,273.06	7,236.54	116.77	36.22	-90.05	-3,743.63	-8,368.64	6,709.36	6,577.03	132.33	50.700		
11,300.00	7,247.86	7,270.60	7,234.08	119.50	36.21	-90.02	-3,743.59	-8,368.68	6,646.33	6,511.24	135.10	49.196		
11,400.00	7,247.48	7,268.17	7,231.65	122.24	36.20	-90.00	-3,743.55	-8,368.72	6,584.22	6,446.31	137.91	47.742		
11,500.00	7,247.10	7,265.76	7,229.23	124.98	36.19	-89.97	-3,743.51	-8,368.76	6,523.05	6,382.27	140.78	46.336		
11,600.00	7,246.72	7,263.37	7,226.85	127.73	36.18	-89.94	-3,743.47	-8,368.80	6,462.85	6,319.16	143.69	44.977		
11,700.00	7,246.34	7,261.00	7,224.48	130.48	36.17	-89.92	-3,743.44	-8,368.84	6,403.64	6,256.99	146.66	43.664		
11,800.00	7,245.96	7,258.66	7,222.14	133.24	36.16	-89.89	-3,743.40	-8,368.88	6,345.46	6,195.79	149.67	42.398		
11,900.00	7,245.58	7,256.34	7,219.82	136.00	36.15	-89.86	-3,743.36	-8,368.91	6,288.32	6,135.60	152.72	41.175		
12,000.00	7,245.21	7,254.04	7,217.52	138.76	36.14	-89.84	-3,743.33	-8,368.95	6,232.27	6,076.45	155.82	39.996		
12,100.00	7,244.83	7,251.76	7,215.24	141.53	36.14	-89.81	-3,743.29	-8,368.99	6,177.33	6,018.36	158.96	38.860		
12,200.00	7,244.45	7,249.51	7,212.99	144.30	36.13	-89.79	-3,743.26	-8,369.02	6,123.52	5,961.37	162.15	37.765		
12,300.00	7,244.07	7,247.27	7,210.75	147.08	36.12	-89.76	-3,743.22	-8,369.06	6,070.89	5,905.52	165.37	36.711		
12,400.00	7,243.69	7,245.06	7,208.54	149.86	36.11	-89.74	-3,743.19	-8,369.09	6,019.45	5,850.82	168.63	35.696		
12,500.00	7,243.31	7,242.86	7,206.35	152.64	36.10	-89.72	-3,743.15	-8,369.13	5,969.25	5,797.33	171.92	34.720		
12,600.00	7,242.93	7,240.69	7,204.17	155.42	36.09	-89.69	-3,743.12	-8,369.16	5,920.31	5,745.06	175.25	33.782		
12,700.00	7,242.55	7,238.54	7,202.02	158.21	36.08	-89.67	-3,743.08	-8,369.19	5,872.66	5,694.06	178.61	32.880		
12,800.00	7,242.17	7,236.40	7,199.89	161.00	36.07	-89.64	-3,743.05	-8,369.22	5,826.34	5,644.35	181.99	32.014		
12,900.00	7,241.79	7,234.29	7,197.77	163.79	36.07	-89.62	-3,743.02	-8,369.26	5,781.38	5,595.98	185.40	31.183		
13,000.00	7,241.41	7,232.19	7,195.68	166.58	36.06	-89.60	-3,742.98	-8,369.29	5,737.81	5,548.98	188.84	30.385		
13,100.00	7,241.03	7,230.11	7,193.60	169.38	36.05	-89.57	-3,742.95	-8,369.32	5,695.66	5,503.38	192.29	29.621		
13,200.00	7,240.65	7,228.06	7,191.54	172.18	36.04	-89.55	-3,742.92	-8,369.35	5,654.97	5,459.21	195.75	28.888		
13,300.00	7,240.27	7,226.02	7,189.50	174.98	36.03	-89.53	-3,742.89	-8,369.38	5,615.76	5,416.53	199.23	28.187		
13,400.00	7,239.89	7,223.99	7,187.48	177.78	36.02	-89.51	-3,742.85	-8,369.41	5,578.06	5,375.35	202.72	27.517		
13,500.00	7,239.51	7,221.99	7,185.48	180.58	36.02	-89.48	-3,742.82	-8,369.44	5,541.92	5,335.71	206.20	26.876		
13,600.00	7,239.13	7,220.00	7,183.49	183.39	36.01	-89.46	-3,742.79	-8,369.47	5,507.35	5,297.66	209.69	26.264		
13,700.00	7,238.75	7,218.03	7,181.52	186.20	36.00	-89.44	-3,742.76	-8,369.50	5,474.39	5,261.21	213.18	25.680		
13,800.00	7,238.37	7,216.08	7,179.57	189.00	35.99	-89.42	-3,742.73	-8,369.52	5,443.07	5,226.41	216.66	25.123		
13,900.00	7,237.99	7,214.15	7,177.64	191.81	35.99	-89.40	-3,742.70	-8,369.55	5,413.41	5,193.29	220.12	24.593		
14,000.00	7,237.62	7,212.23	7,175.72	194.63	35.98	-89.38	-3,742.67	-8,369.58	5,385.44	5,161.88	223.57	24.089		
14,100.00	7,237.24	7,210.33	7,173.82	197.44	35.97	-89.36	-3,742.64	-8,369.61	5,359.20	5,132.21	226.99	23.610		
14,200.00	7,236.86	7,208.44	7,171.93	200.25	35.96	-89.34	-3,742.61	-8,369.63	5,334.70	5,104.31	230.39	23.155		
14,300.00	7,236.48	7,206.57	7,170.06	203.07	35.96	-89.31	-3,742.58	-8,369.66	5,311.97	5,078.22	233.75	22.725		
14,400.00	7,236.10	7,204.72	7,168.21	205.88	35.95	-89.29	-3,742.55	-8,369.69	5,291.03	5,053.95	237.08	22.317		
14,500.00	7,235.72	7,202.88	7,166.37	208.70	35.94	-89.27	-3,742.52	-8,369.71	5,271.91	5,031.54	240.37	21.932		
14,600.00	7,235.34	7,201.06	7,164.55	211.52	35.93	-89.25	-3,742.49	-8,369.74	5,254.62	5,011.00	243.61	21.569		
14,700.00	7,234.96	7,199.25	7,162.74	214.34	35.93	-89.23	-3,742.46	-8,369.76	5,239.18	4,992.37	246.81	21.228		
14,800.00	7,234.58	7,197.46	7,160.95	217.16	35.92	-89.21	-3,742.43	-8,369.79	5,225.60	4,975.66	249.94	20.907		
14,900.00	7,234.20	7,195.68	7,159.17	219.98	35.91	-89.19	-3,742.41	-8,369.81	5,213.91	4,960.89	253.02	20.607		
15,000.00	7,233.82	7,193.92	7,157.41	222.81	35.90	-89.17	-3,742.38	-8,369.83	5,204.12	4,948.08	256.03	20.326		
15,100.00	7,233.44	7,192.17	7,155.66	225.63	35.90	-89.16	-3,742.35	-8,369.86	5,196.23	4,937.25	258.98	20.064		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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						
15,200.00	7,233.06	7,190.43	7,153.93	228.45	35.89	-89.14	-3,742.32	-8,369.88	5,190.26	4,928.40	261.86	19.821						
15,216.01	7,233.00	7,190.16	7,153.65	228.91	35.89	-89.13	-3,742.32	-8,369.88	5,189.48	4,927.17	262.31	19.784	CC, ES, SF					



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	66.00	3.28	3.28	-135.62	-3,446.09	-3,372.59	4,822.27				
100.00	100.00	34.00	100.00	3.28	3.33	-135.62	-3,446.09	-3,372.59	4,821.82	4,815.20	6.62	728.594	
200.00	200.00	134.00	200.00	3.34	4.40	-135.62	-3,446.09	-3,372.59	4,821.82	4,814.08	7.74	623.235 CC	
300.00	299.98	233.98	299.98	3.45	7.21	-129.88	-3,446.09	-3,372.59	4,822.94	4,812.28	10.66	452.566	
400.00	399.84	333.84	399.84	3.61	10.44	-129.88	-3,446.09	-3,372.59	4,826.30	4,812.26	14.04	343.689	
500.00	499.45	433.45	499.45	3.82	13.78	-129.87	-3,446.09	-3,372.59	4,831.90	4,814.31	17.59	274.639	
600.00	598.70	532.70	598.70	4.07	17.17	-129.86	-3,446.09	-3,372.59	4,839.75	4,818.52	21.23	228.013	
700.00	697.47	631.47	697.47	4.35	20.56	-129.85	-3,446.09	-3,372.59	4,849.84	4,824.94	24.90	194.742	
800.00	795.62	729.62	795.62	4.67	23.95	-129.83	-3,446.09	-3,372.59	4,862.20	4,833.59	28.61	169.955	
900.00	893.06	827.06	893.06	5.01	27.32	-129.80	-3,446.09	-3,372.59	4,876.83	4,844.50	32.33	150.859	
1,000.00	989.64	923.64	989.64	5.38	30.67	-129.76	-3,446.09	-3,372.59	4,893.72	4,857.68	36.05	135.751	
1,100.00	1,085.42	1,019.42	1,085.42	5.78	34.00	-129.88	-3,446.09	-3,372.59	4,912.59	4,872.82	39.77	123.522	
1,200.00	1,181.09	1,115.09	1,181.09	6.20	37.33	-130.14	-3,446.09	-3,372.59	4,931.79	4,888.28	43.51	113.359	
1,300.00	1,276.76	1,210.76	1,276.76	6.65	40.65	-130.39	-3,446.09	-3,372.59	4,951.08	4,903.82	47.26	104.766	
1,400.00	1,372.43	1,306.43	1,372.43	7.11	43.98	-130.64	-3,446.09	-3,372.59	4,970.47	4,919.45	51.02	97.413	
1,500.00	1,468.10	1,402.10	1,468.10	7.57	47.32	-130.88	-3,446.09	-3,372.59	4,989.96	4,935.16	54.80	91.054	
1,600.00	1,563.77	1,502.23	1,563.77	8.05	50.80	-131.13	-3,446.09	-3,372.59	5,009.54	4,950.79	58.74	85.277	
1,700.00	1,659.44	1,606.56	1,659.44	8.53	54.44	-131.37	-3,446.09	-3,372.59	5,029.20	4,966.36	62.84	80.032	
1,800.00	1,755.11	1,689.11	1,755.11	9.02	57.32	-131.61	-3,446.09	-3,372.59	5,048.97	4,982.78	66.18	76.287	
1,900.00	1,850.78	1,784.78	1,850.78	9.52	60.65	-131.85	-3,446.09	-3,372.59	5,068.82	4,998.83	69.99	72.423	
2,000.00	1,946.45	1,880.45	1,946.45	10.02	63.99	-132.09	-3,446.09	-3,372.59	5,088.76	5,014.96	73.80	68.953	
2,100.00	2,042.12	1,976.12	2,042.12	10.52	67.32	-132.33	-3,446.09	-3,372.59	5,108.79	5,031.17	77.61	65.823	
2,200.00	2,137.78	2,071.78	2,137.78	11.03	70.66	-132.56	-3,446.09	-3,372.59	5,128.90	5,047.47	81.43	62.984	
2,300.00	2,233.45	2,167.45	2,233.45	11.54	73.99	-132.80	-3,446.09	-3,372.59	5,149.10	5,063.85	85.25	60.399	
2,400.00	2,329.12	2,263.12	2,329.12	12.05	77.33	-133.03	-3,446.09	-3,372.59	5,169.39	5,080.31	89.07	58.034	
2,500.00	2,424.79	2,358.79	2,424.79	12.56	80.67	-133.26	-3,446.09	-3,372.59	5,189.76	5,096.86	92.90	55.864	
2,600.00	2,520.46	2,454.46	2,520.46	13.08	84.00	-133.49	-3,446.09	-3,372.59	5,210.21	5,113.49	96.73	53.866	
2,700.00	2,616.13	2,550.13	2,616.13	13.60	87.34	-133.71	-3,446.09	-3,372.59	5,230.75	5,130.19	100.55	52.020	
2,800.00	2,711.80	2,645.80	2,711.80	14.12	90.68	-133.94	-3,446.09	-3,372.59	5,251.36	5,146.98	104.38	50.309	
2,900.00	2,807.47	2,741.47	2,807.47	14.64	94.02	-134.16	-3,446.09	-3,372.59	5,272.06	5,163.85	108.21	48.719	
3,000.00	2,903.14	2,837.14	2,903.14	15.16	97.35	-134.38	-3,446.09	-3,372.59	5,292.84	5,180.79	112.04	47.239	
3,100.00	2,998.81	2,932.81	2,998.81	15.68	100.69	-134.60	-3,446.09	-3,372.59	5,313.69	5,197.81	115.88	45.856	
3,200.00	3,094.48	3,028.48	3,094.48	16.21	104.03	-134.82	-3,446.09	-3,372.59	5,334.62	5,214.91	119.71	44.563	
3,300.00	3,190.15	3,124.15	3,190.15	16.73	107.37	-135.03	-3,446.09	-3,372.59	5,355.63	5,232.09	123.54	43.350	
3,400.00	3,285.82	3,219.82	3,285.82	17.26	110.71	-135.25	-3,446.09	-3,372.59	5,376.71	5,249.33	127.38	42.211	
3,500.00	3,381.49	3,315.49	3,381.49	17.78	114.05	-135.46	-3,446.09	-3,372.59	5,397.87	5,266.66	131.21	41.138	
3,600.00	3,477.16	3,411.16	3,477.16	18.31	117.38	-135.67	-3,446.09	-3,372.59	5,419.10	5,284.05	135.05	40.127	
3,700.00	3,572.83	3,506.83	3,572.83	18.84	120.72	-135.88	-3,446.09	-3,372.59	5,440.41	5,301.52	138.88	39.173	
3,800.00	3,668.50	3,602.50	3,668.50	19.37	124.06	-136.09	-3,446.09	-3,372.59	5,461.78	5,319.06	142.72	38.269	
3,900.00	3,764.17	3,701.83	3,764.17	19.89	127.53	-136.30	-3,446.09	-3,372.59	5,483.23	5,336.55	146.68	37.381	
4,000.00	3,859.84	3,806.16	3,859.84	20.42	131.17	-136.50	-3,446.09	-3,372.59	5,504.75	5,353.93	150.82	36.498	
4,100.00	3,955.51	3,889.51	3,955.51	20.95	134.08	-136.71	-3,446.09	-3,372.59	5,526.34	5,372.11	154.23	35.832	
4,200.00	4,051.18	3,985.18	4,051.18	21.48	137.42	-136.91	-3,446.09	-3,372.59	5,547.99	5,389.93	158.06	35.100	
4,300.00	4,146.85	4,080.85	4,146.85	22.01	140.76	-137.11	-3,446.09	-3,372.59	5,569.72	5,407.81	161.90	34.402	
4,400.00	4,242.52	4,176.52	4,242.52	22.55	144.09	-137.31	-3,446.09	-3,372.59	5,591.51	5,425.77	165.74	33.737	
4,500.00	4,338.19	4,272.19	4,338.19	23.08	147.43	-137.51	-3,446.09	-3,372.59	5,613.36	5,443.79	169.58	33.102	
4,600.00	4,433.86	4,367.86	4,433.86	23.61	150.77	-137.70	-3,446.09	-3,372.59	5,635.29	5,461.88	173.41	32.496	
4,700.00	4,529.53	4,463.53	4,529.53	24.14	154.11	-137.90	-3,446.09	-3,372.59	5,657.28	5,480.03	177.25	31.917	
4,800.00	4,625.19	4,559.19	4,625.19	24.67	157.45	-138.09	-3,446.09	-3,372.59	5,679.33	5,498.24	181.09	31.362	
4,900.00	4,720.86	4,654.86	4,720.86	25.21	160.79	-138.28	-3,446.09	-3,372.59	5,701.44	5,516.52	184.92	30.831	
5,000.00	4,816.53	4,750.53	4,816.53	25.74	164.13	-138.47	-3,446.09	-3,372.59	5,723.62	5,534.86	188.76	30.322	
5,100.00	4,912.20	4,846.20	4,912.20	26.27	167.47	-138.66	-3,446.09	-3,372.59	5,745.86	5,553.26	192.60	29.833	

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	4,941.87	5,007.87	26.80	170.81	-138.85	-3,446.09	-3,372.59	5,768.16	5,571.73	196.44	29.364		
5,300.00	5,103.54	5,037.54	5,103.54	27.34	174.15	-139.03	-3,446.09	-3,372.59	5,790.52	5,590.25	200.27	28.913		
5,400.00	5,199.22	5,133.22	5,199.22	27.87	177.49	-139.25	-3,446.09	-3,372.59	5,812.93	5,608.82	204.11	28.480		
5,500.00	5,295.46	5,229.46	5,295.46	28.39	180.85	-139.69	-3,446.09	-3,372.59	5,833.88	5,625.92	207.96	28.053		
5,600.00	5,392.60	5,326.60	5,392.60	28.89	184.24	-140.08	-3,446.09	-3,372.59	5,852.26	5,640.44	211.82	27.628		
5,700.00	5,490.50	5,424.50	5,490.50	29.37	187.65	-140.41	-3,446.09	-3,372.59	5,868.04	5,652.34	215.70	27.204		
5,800.00	5,589.05	5,523.05	5,589.05	29.83	191.09	-140.69	-3,446.09	-3,372.59	5,881.18	5,661.60	219.59	26.783		
5,900.00	5,688.14	5,622.14	5,688.14	30.26	194.55	-140.90	-3,446.09	-3,372.59	5,891.66	5,668.18	223.48	26.364		
6,000.00	5,787.63	5,721.63	5,787.63	30.68	198.02	-141.06	-3,446.09	-3,372.59	5,899.44	5,672.08	227.37	25.947		
6,100.00	5,887.41	5,821.41	5,887.41	31.07	201.51	-141.17	-3,446.09	-3,372.59	5,904.53	5,673.28	231.25	25.533		
6,200.00	5,987.36	5,921.36	5,987.36	31.44	205.00	-141.21	-3,446.09	-3,372.59	5,906.89	5,671.78	235.12	25.123		
6,300.00	6,087.36	6,021.36	6,087.36	31.80	208.49	-146.95	-3,446.09	-3,372.59	5,907.08	5,668.10	238.98	24.718		
6,400.00	6,187.36	6,121.36	6,187.36	32.15	211.98	-146.95	-3,446.09	-3,372.59	5,907.08	5,664.24	242.84	24.325		
6,500.00	6,287.36	6,221.36	6,287.36	32.51	215.47	-146.95	-3,446.09	-3,372.59	5,907.08	5,660.38	246.71	23.944		
6,600.00	6,387.36	6,321.36	6,387.36	32.87	218.96	-146.95	-3,446.09	-3,372.59	5,907.08	5,656.51	250.57	23.575		
6,700.00	6,487.36	6,421.36	6,487.36	33.23	222.45	-146.95	-3,446.09	-3,372.59	5,907.08	5,652.64	254.44	23.216		
6,800.00	6,587.36	6,521.36	6,587.36	33.59	225.94	-146.95	-3,446.09	-3,372.59	5,907.08	5,648.78	258.31	22.869		
6,900.00	6,687.26	6,621.26	6,687.26	33.95	229.43	-56.66	-3,446.09	-3,372.59	5,905.36	5,643.20	262.16	22.526		
7,000.00	6,785.58	6,719.58	6,785.58	34.31	232.86	-57.54	-3,446.09	-3,372.59	5,895.66	5,629.70	265.95	22.168		
7,100.00	6,879.94	6,813.94	6,879.94	34.65	236.15	-59.20	-3,446.09	-3,372.59	5,877.70	5,608.09	269.61	21.801		
7,200.00	6,968.01	6,902.01	6,968.01	34.97	239.23	-61.63	-3,446.09	-3,372.59	5,852.10	5,579.05	273.06	21.432		
7,300.00	7,047.61	6,981.61	7,047.61	35.27	242.01	-64.83	-3,446.09	-3,372.59	5,819.74	5,543.50	276.24	21.068		
7,400.00	7,116.80	7,050.80	7,116.80	35.54	244.42	-68.72	-3,446.09	-3,372.59	5,781.69	5,502.57	279.12	20.714		
7,500.00	7,173.86	7,107.86	7,173.86	35.81	246.41	-73.20	-3,446.09	-3,372.59	5,739.19	5,457.52	281.67	20.376		
7,600.00	7,217.38	7,151.38	7,217.38	36.17	247.93	-78.09	-3,446.09	-3,372.59	5,693.57	5,409.71	283.87	20.057		
7,700.00	7,246.31	7,180.31	7,246.31	36.80	248.94	-83.18	-3,446.09	-3,372.59	5,646.23	5,360.53	285.70	19.763		
7,800.00	7,259.92	7,206.08	7,259.92	37.72	249.84	-88.20	-3,446.09	-3,372.59	5,598.53	5,310.96	287.56	19.469		
7,900.00	7,260.77	7,205.23	7,260.77	38.86	249.81	-90.11	-3,446.09	-3,372.59	5,551.71	5,263.08	288.63	19.235		
8,000.00	7,260.39	7,205.61	7,260.39	40.19	249.82	-90.11	-3,446.09	-3,372.59	5,506.31	5,216.41	289.90	18.994		
8,100.00	7,260.01	7,205.99	7,260.01	41.67	249.84	-90.10	-3,446.09	-3,372.59	5,462.36	5,171.05	291.31	18.751		
8,200.00	7,259.63	7,206.37	7,259.63	43.30	249.85	-90.10	-3,446.09	-3,372.59	5,419.89	5,127.04	292.86	18.507		
8,300.00	7,259.25	7,206.75	7,259.25	45.05	249.86	-90.10	-3,446.09	-3,372.59	5,378.95	5,084.42	294.53	18.263		
8,400.00	7,258.87	7,207.13	7,258.87	46.91	249.88	-90.09	-3,446.09	-3,372.59	5,339.57	5,043.24	296.33	18.019		
8,500.00	7,258.49	7,207.51	7,258.49	48.87	249.89	-90.09	-3,446.09	-3,372.59	5,301.79	5,003.54	298.24	17.777		
8,600.00	7,258.11	7,207.89	7,258.11	50.92	249.90	-90.08	-3,446.09	-3,372.59	5,265.63	4,965.37	300.26	17.537		
8,700.00	7,257.73	7,208.27	7,257.73	53.04	249.92	-90.08	-3,446.09	-3,372.59	5,231.13	4,928.77	302.36	17.301		
8,800.00	7,257.35	7,208.65	7,257.35	55.23	249.93	-90.07	-3,446.09	-3,372.59	5,198.33	4,893.78	304.55	17.069		
8,900.00	7,256.97	7,209.03	7,256.97	57.47	249.94	-90.07	-3,446.09	-3,372.59	5,167.26	4,860.44	306.82	16.841		
9,000.00	7,256.59	7,209.41	7,256.59	59.77	249.96	-90.06	-3,446.09	-3,372.59	5,137.94	4,828.79	309.15	16.619		
9,100.00	7,256.21	7,209.79	7,256.21	62.12	249.97	-90.06	-3,446.09	-3,372.59	5,110.42	4,798.87	311.55	16.403		
9,200.00	7,255.83	7,189.83	7,255.83	64.50	249.27	-90.06	-3,446.09	-3,372.59	5,084.71	4,771.42	313.29	16.230		
9,300.00	7,255.45	7,189.45	7,255.45	66.93	249.26	-90.05	-3,446.09	-3,372.59	5,060.85	4,745.09	315.76	16.028		
9,400.00	7,255.07	7,189.07	7,255.07	69.38	249.25	-90.05	-3,446.09	-3,372.59	5,038.86	4,720.59	318.27	15.832		
9,500.00	7,254.69	7,188.69	7,254.69	71.87	249.23	-90.04	-3,446.09	-3,372.59	5,018.76	4,697.95	320.81	15.644		
9,600.00	7,254.31	7,188.31	7,254.31	74.38	249.22	-90.04	-3,446.09	-3,372.59	5,000.59	4,677.21	323.38	15.463		
9,700.00	7,253.93	7,187.93	7,253.93	76.92	249.21	-90.03	-3,446.09	-3,372.59	4,984.35	4,658.38	325.97	15.291		
9,800.00	7,253.55	7,187.55	7,253.55	79.48	249.19	-90.03	-3,446.09	-3,372.59	4,970.08	4,641.50	328.58	15.126		
9,900.00	7,253.18	7,187.18	7,253.18	82.06	249.18	-90.02	-3,446.09	-3,372.59	4,957.78	4,626.59	331.19	14.970		
10,000.00	7,252.80	7,186.80	7,252.80	84.65	249.17	-90.02	-3,446.09	-3,372.59	4,947.47	4,613.67	333.81	14.821		
10,100.00	7,252.42	7,186.42	7,252.42	87.27	249.15	-90.02	-3,446.09	-3,372.59	4,939.17	4,602.75	336.42	14.682		
10,200.00	7,252.04	7,186.04	7,252.04	89.89	249.14	-90.01	-3,446.09	-3,372.59	4,932.88	4,593.85	339.03	14.550		
10,300.00	7,251.66	7,185.66	7,251.66	92.54	249.13	-90.01	-3,446.09	-3,372.59	4,928.61	4,586.98	341.62	14.427		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,251.28	7,185.28	7,251.28	95.19	249.11	-90.00	-3,446.09	-3,372.59	4,926.36	4,582.16	344.20	14.313		
10,460.51	7,251.05	7,185.05	7,251.05	96.80	249.11	-90.00	-3,446.09	-3,372.59	4,925.99	4,580.24	345.75	14.247		
10,500.00	7,250.90	7,184.90	7,250.90	97.86	249.10	-90.00	-3,446.09	-3,372.59	4,926.15	4,579.39	346.76	14.206		
10,600.00	7,250.52	7,184.52	7,250.52	100.53	249.09	-89.99	-3,446.09	-3,372.59	4,927.97	4,578.68	349.28	14.109 ES		
10,700.00	7,250.14	7,184.14	7,250.14	103.22	249.07	-89.99	-3,446.09	-3,372.59	4,931.81	4,580.03	351.78	14.019		
10,800.00	7,249.76	7,183.76	7,249.76	105.91	249.06	-89.99	-3,446.09	-3,372.59	4,937.68	4,583.43	354.25	13.938		
10,900.00	7,249.38	7,183.38	7,249.38	108.62	249.05	-89.98	-3,446.09	-3,372.59	4,945.56	4,588.88	356.68	13.866		
11,000.00	7,249.00	7,183.00	7,249.00	111.33	249.04	-89.98	-3,446.09	-3,372.59	4,955.45	4,596.38	359.06	13.801		
11,100.00	7,248.62	7,182.62	7,248.62	114.04	249.02	-89.97	-3,446.09	-3,372.59	4,967.33	4,605.92	361.40	13.745		
11,200.00	7,248.24	7,182.24	7,248.24	116.77	249.01	-89.97	-3,446.09	-3,372.59	4,981.19	4,617.49	363.70	13.696		
11,300.00	7,247.86	7,181.86	7,247.86	119.50	249.00	-89.96	-3,446.09	-3,372.59	4,997.01	4,631.07	365.94	13.655		
11,400.00	7,247.48	7,181.48	7,247.48	122.24	248.98	-89.96	-3,446.09	-3,372.59	5,014.78	4,646.65	368.13	13.622		
11,500.00	7,247.10	7,181.10	7,247.10	124.98	248.97	-89.95	-3,446.09	-3,372.59	5,034.47	4,664.20	370.27	13.597		
11,600.00	7,246.72	7,180.72	7,246.72	127.73	248.96	-89.95	-3,446.09	-3,372.59	5,056.07	4,683.71	372.35	13.579		
11,700.00	7,246.34	7,180.34	7,246.34	130.48	248.94	-89.95	-3,446.09	-3,372.59	5,079.54	4,705.16	374.38	13.568		
11,800.00	7,245.96	7,179.96	7,245.96	133.24	248.93	-89.94	-3,446.09	-3,372.59	5,104.86	4,728.52	376.34	13.564 SF		
11,900.00	7,245.58	7,179.58	7,245.58	136.00	248.92	-89.94	-3,446.09	-3,372.59	5,132.01	4,753.76	378.25	13.568		
12,000.00	7,245.21	7,179.21	7,245.21	138.76	248.90	-89.93	-3,446.09	-3,372.59	5,160.95	4,780.85	380.10	13.578		
12,100.00	7,244.83	7,178.83	7,244.83	141.53	248.89	-89.93	-3,446.09	-3,372.59	5,191.65	4,809.77	381.88	13.595		
12,200.00	7,244.45	7,178.45	7,244.45	144.30	248.88	-89.92	-3,446.09	-3,372.59	5,224.09	4,840.49	383.61	13.618		
12,300.00	7,244.07	7,178.07	7,244.07	147.08	248.86	-89.92	-3,446.09	-3,372.59	5,258.24	4,872.97	385.27	13.648		
12,400.00	7,243.69	7,177.69	7,243.69	149.86	248.85	-89.91	-3,446.09	-3,372.59	5,294.05	4,907.17	386.88	13.684		
12,500.00	7,243.31	7,177.31	7,243.31	152.64	248.84	-89.91	-3,446.09	-3,372.59	5,331.50	4,943.08	388.42	13.726		
12,600.00	7,242.93	7,176.93	7,242.93	155.42	248.82	-89.91	-3,446.09	-3,372.59	5,370.54	4,980.64	389.90	13.774		
12,700.00	7,242.55	7,176.55	7,242.55	158.21	248.81	-89.90	-3,446.09	-3,372.59	5,411.16	5,019.83	391.33	13.828		
12,800.00	7,242.17	7,176.17	7,242.17	161.00	248.80	-89.90	-3,446.09	-3,372.59	5,453.30	5,060.61	392.69	13.887		
12,900.00	7,241.79	7,175.79	7,241.79	163.79	248.78	-89.89	-3,446.09	-3,372.59	5,496.95	5,102.94	394.00	13.951		
13,000.00	7,241.41	7,175.41	7,241.41	166.58	248.77	-89.89	-3,446.09	-3,372.59	5,542.05	5,146.79	395.26	14.021		
13,100.00	7,241.03	7,175.03	7,241.03	169.38	248.76	-89.88	-3,446.09	-3,372.59	5,588.58	5,192.12	396.46	14.096		
13,200.00	7,240.65	7,174.65	7,240.65	172.18	248.74	-89.88	-3,446.09	-3,372.59	5,636.49	5,238.89	397.60	14.176		
13,300.00	7,240.27	7,174.27	7,240.27	174.98	248.73	-89.87	-3,446.09	-3,372.59	5,685.77	5,287.07	398.69	14.261		
13,400.00	7,239.89	7,173.89	7,239.89	177.78	248.72	-89.87	-3,446.09	-3,372.59	5,736.36	5,336.63	399.74	14.350		
13,500.00	7,239.51	7,173.51	7,239.51	180.58	248.70	-89.87	-3,446.09	-3,372.59	5,788.24	5,387.51	400.73	14.444		
13,600.00	7,239.13	7,173.13	7,239.13	183.39	248.69	-89.86	-3,446.09	-3,372.59	5,841.37	5,439.70	401.67	14.543		
13,700.00	7,238.75	7,172.75	7,238.75	186.20	248.68	-89.86	-3,446.09	-3,372.59	5,895.72	5,493.15	402.57	14.645		
13,800.00	7,238.37	7,172.37	7,238.37	189.00	248.66	-89.85	-3,446.09	-3,372.59	5,951.25	5,547.83	403.42	14.752		
13,900.00	7,237.99	7,171.99	7,237.99	191.81	248.65	-89.85	-3,446.09	-3,372.59	6,007.94	5,603.71	404.23	14.863		
14,000.00	7,237.62	7,171.62	7,237.62	194.63	248.64	-89.84	-3,446.09	-3,372.59	6,065.74	5,660.74	405.00	14.977		
14,100.00	7,237.24	7,171.24	7,237.24	197.44	248.62	-89.84	-3,446.09	-3,372.59	6,124.63	5,718.90	405.72	15.096		
14,200.00	7,236.86	7,170.86	7,236.86	200.25	248.61	-89.83	-3,446.09	-3,372.59	6,184.57	5,778.16	406.41	15.218		
14,300.00	7,236.48	7,170.48	7,236.48	203.07	248.60	-89.83	-3,446.09	-3,372.59	6,245.55	5,838.48	407.06	15.343		
14,400.00	7,236.10	7,170.10	7,236.10	205.88	248.58	-89.83	-3,446.09	-3,372.59	6,307.51	5,899.84	407.68	15.472		
14,500.00	7,235.72	7,169.72	7,235.72	208.70	248.57	-89.82	-3,446.09	-3,372.59	6,370.45	5,962.19	408.26	15.604		
14,600.00	7,235.34	7,169.34	7,235.34	211.52	248.56	-89.82	-3,446.09	-3,372.59	6,434.32	6,025.52	408.80	15.739		
14,700.00	7,234.96	7,168.96	7,234.96	214.34	248.54	-89.81	-3,446.09	-3,372.59	6,499.11	6,089.79	409.32	15.878		
14,800.00	7,234.58	7,168.58	7,234.58	217.16	248.53	-89.81	-3,446.09	-3,372.59	6,564.77	6,154.97	409.80	16.019		
14,900.00	7,234.20	7,168.20	7,234.20	219.98	248.52	-89.80	-3,446.09	-3,372.59	6,631.30	6,221.05	410.26	16.164		
15,000.00	7,233.82	7,167.82	7,233.82	222.81	248.51	-89.80	-3,446.09	-3,372.59	6,698.66	6,287.98	410.68	16.311		
15,100.00	7,233.44	7,167.44	7,233.44	225.63	248.49	-89.80	-3,446.09	-3,372.59	6,766.83	6,355.74	411.08	16.461		
15,200.00	7,233.06	7,167.06	7,233.06	228.45	248.48	-89.79	-3,446.09	-3,372.59	6,835.77	6,424.31	411.46	16.613		
15,216.01	7,233.00	7,167.00	7,233.00	228.91	248.48	-89.79	-3,446.09	-3,372.59	6,846.89	6,435.37	411.52	16.638		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	12.00	3.28	3.28	31.47	797.83	488.39	935.53					
100.00	100.00	85.91	97.90	3.28	3.29	31.47	797.91	488.45	935.55	928.98	6.57	142.399		
200.00	200.00	185.85	197.85	3.34	3.33	31.48	798.08	488.65	935.79	929.12	6.67	140.332		
300.00	299.98	288.25	300.25	3.45	3.44	37.30	798.09	488.85	934.52	927.64	6.88	135.828		
400.00	399.84	382.01	394.00	3.61	3.58	37.56	798.09	489.28	930.61	923.43	7.18	129.602		
500.00	499.45	483.94	495.93	3.82	3.77	38.02	798.19	490.29	924.31	916.73	7.58	121.895		
600.00	598.70	579.19	591.17	4.07	3.99	38.63	798.19	491.21	915.25	907.20	8.05	113.724		
700.00	697.47	680.34	692.32	4.35	4.25	39.49	798.17	492.71	903.83	895.24	8.59	105.171		
800.00	795.62	780.45	792.42	4.67	4.54	40.55	797.83	494.01	889.55	880.35	9.19	96.750		
900.00	893.06	875.03	886.99	5.01	4.82	41.76	797.61	495.12	872.90	863.07	9.83	88.826		
1,000.00	989.64	973.53	985.48	5.38	5.14	43.27	797.37	496.60	854.20	843.69	10.51	81.239		
1,100.00	1,085.42	1,066.51	1,078.46	5.78	5.46	44.76	797.21	497.65	833.67	822.44	11.22	74.291		
1,200.00	1,181.09	1,161.35	1,173.28	6.20	5.79	46.22	797.35	498.99	813.79	801.83	11.96	68.039		
1,300.00	1,276.76	1,261.37	1,273.29	6.65	6.14	47.86	797.11	500.47	794.26	781.51	12.74	62.331		
1,400.00	1,372.43	1,359.61	1,371.53	7.11	6.50	49.55	796.49	501.45	774.77	761.23	13.54	57.217		
1,500.00	1,468.10	1,454.97	1,466.88	7.57	6.86	51.24	796.01	502.12	755.84	741.49	14.35	52.672		
1,600.00	1,563.77	1,549.66	1,561.57	8.05	7.22	53.03	795.27	503.16	737.71	722.54	15.18	48.613		
1,700.00	1,659.44	1,644.89	1,656.79	8.53	7.59	54.91	794.61	504.23	720.44	704.43	16.02	44.978		
1,800.00	1,755.11	1,740.99	1,752.89	9.02	7.96	56.86	794.24	505.00	703.98	687.11	16.88	41.716		
1,900.00	1,850.78	1,839.64	1,851.53	9.52	8.35	58.96	793.69	505.70	688.22	670.47	17.75	38.769		
2,000.00	1,946.45	1,938.54	1,950.42	10.02	8.74	61.14	792.86	505.73	672.72	654.08	18.64	36.094		
2,100.00	2,042.12	2,033.60	2,045.49	10.52	9.11	63.28	792.48	505.39	658.13	638.61	19.52	33.711		
2,200.00	2,137.78	2,128.80	2,140.68	11.03	9.49	65.53	791.92	505.15	644.57	624.15	20.42	31.570		
2,300.00	2,233.45	2,222.37	2,234.25	11.54	9.87	67.79	791.85	504.87	632.29	610.98	21.31	29.664		
2,400.00	2,329.12	2,315.78	2,327.66	12.05	10.24	70.12	791.91	504.93	621.51	599.29	22.22	27.972		
2,500.00	2,424.79	2,411.94	2,423.82	12.56	10.63	72.59	792.02	505.13	612.07	588.93	23.14	26.454		
2,600.00	2,520.46	2,512.05	2,523.93	13.08	11.04	75.23	792.06	504.89	603.45	579.39	24.07	25.073		
2,700.00	2,616.13	2,605.71	2,617.59	13.60	11.42	77.74	792.29	504.48	596.01	571.02	24.98	23.857		
2,800.00	2,711.80	2,701.60	2,713.47	14.12	11.81	80.34	792.73	504.08	589.96	564.05	25.91	22.774		
2,900.00	2,807.47	2,800.12	2,811.99	14.64	12.21	83.06	793.12	503.44	585.02	558.18	26.84	21.800		
3,000.00	2,903.14	2,897.51	2,909.37	15.16	12.61	85.82	793.09	502.52	581.10	553.34	27.76	20.931		
3,100.00	2,998.81	2,994.15	3,006.01	15.68	13.01	88.59	792.97	501.41	578.41	549.73	28.68	20.165		
3,200.00	3,094.48	3,094.43	3,106.27	16.21	13.42	91.47	793.07	499.76	576.72	547.11	29.62	19.473		
3,272.44	3,163.79	3,161.92	3,173.76	16.59	13.70	93.41	793.09	498.46	576.21	545.94	30.27	19.034 CC		
3,300.00	3,190.15	3,187.45	3,199.28	16.73	13.81	94.14	793.13	498.03	576.28	545.76	30.52	18.882 ES		
3,400.00	3,285.82	3,281.64	3,293.46	17.26	14.20	96.85	793.11	496.67	577.69	546.27	31.42	18.385		
3,500.00	3,381.49	3,378.29	3,390.10	17.78	14.60	99.66	792.66	495.34	580.63	548.30	32.33	17.960		
3,600.00	3,477.16	3,473.45	3,485.25	18.31	15.00	102.38	792.27	493.89	584.91	551.68	33.22	17.606		
3,700.00	3,572.83	3,565.65	3,577.45	18.84	15.38	104.97	791.98	492.79	590.90	556.81	34.09	17.331		
3,800.00	3,668.50	3,658.38	3,670.16	19.37	15.77	107.49	791.93	492.32	598.88	563.92	34.96	17.130		
3,900.00	3,764.17	3,753.94	3,765.73	19.89	16.17	109.96	792.41	492.24	608.39	572.55	35.84	16.976		
4,000.00	3,859.84	3,851.38	3,863.16	20.42	16.58	112.41	792.86	491.99	618.92	582.20	36.72	16.854		
4,100.00	3,955.51	3,948.60	3,960.38	20.95	16.99	114.79	793.23	491.42	630.32	592.72	37.60	16.762		
4,200.00	4,051.18	4,043.70	4,055.48	21.48	17.38	117.03	793.66	490.78	642.70	604.23	38.47	16.709		
4,300.00	4,146.85	4,138.65	4,150.43	22.01	17.78	119.20	793.88	490.33	656.35	617.03	39.32	16.692		
4,400.00	4,242.52	4,235.07	4,246.85	22.55	18.19	121.33	794.05	489.72	670.85	630.66	40.19	16.693		
4,500.00	4,338.19	4,330.11	4,341.88	23.08	18.59	123.33	794.29	489.23	686.33	645.29	41.04	16.724		
4,600.00	4,433.86	4,425.78	4,437.56	23.61	18.99	125.25	794.56	488.78	702.66	660.77	41.90	16.772		
4,700.00	4,529.53	4,520.28	4,532.05	24.14	19.39	127.06	794.90	488.49	719.89	677.15	42.74	16.843		
4,800.00	4,625.19	4,615.08	4,626.86	24.67	19.79	128.76	795.39	488.52	738.00	694.41	43.59	16.931		
4,900.00	4,720.86	4,711.39	4,723.17	25.21	20.19	130.42	795.91	488.54	756.74	712.29	44.45	17.025		
5,000.00	4,816.53	4,805.01	4,816.78	25.74	20.59	131.93	796.55	488.84	776.23	730.94	45.29	17.140		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	4,912.20	4,901.19	4,912.95	26.27	20.99	133.36	797.67	489.65	796.36	750.21	46.15	17.256		
5,200.00	5,007.87	5,001.92	5,013.67	26.80	21.42	134.78	799.12	490.32	816.66	769.61	47.06	17.355		
5,300.00	5,103.54	5,094.33	5,106.07	27.34	21.81	136.06	800.05	490.52	837.34	789.46	47.88	17.487		
5,400.00	5,199.22	5,190.76	5,202.50	27.87	22.22	137.40	800.39	490.40	858.63	809.88	48.75	17.613		
5,500.00	5,295.46	5,291.62	5,303.36	28.39	22.64	138.92	800.59	489.72	878.56	828.92	49.65	17.696		
5,600.00	5,392.60	5,385.21	5,396.94	28.89	23.04	140.14	800.66	488.82	896.12	845.66	50.46	17.758		
5,700.00	5,490.50	5,487.78	5,499.51	29.37	23.47	141.26	800.27	487.46	911.35	859.99	51.35	17.747		
5,800.00	5,589.05	5,583.61	5,595.32	29.83	23.88	142.13	799.98	485.91	923.81	871.65	52.16	17.711		
5,900.00	5,688.14	5,682.78	5,694.48	30.26	24.30	142.83	799.70	484.68	933.89	880.89	52.99	17.623		
6,000.00	5,787.63	5,788.14	5,799.83	30.68	24.74	143.38	799.49	482.97	940.96	887.09	53.87	17.467		
6,100.00	5,887.41	5,887.56	5,899.22	31.07	25.16	143.76	799.47	481.00	944.90	890.22	54.68	17.281		
6,200.00	5,987.36	5,988.64	6,000.29	31.44	25.59	143.96	799.59	479.18	946.06	890.57	55.49	17.049		
6,300.00	6,087.36	6,091.77	6,103.40	31.80	26.03	138.31	799.81	477.07	944.73	888.42	56.31	16.777		
6,400.00	6,187.36	6,186.59	6,198.20	32.15	26.43	138.41	799.80	474.97	943.27	886.21	57.05	16.533		
6,500.00	6,287.36	6,292.19	6,303.77	32.51	26.88	138.52	799.64	472.62	941.91	884.01	57.90	16.268		
6,600.00	6,387.36	6,394.40	6,405.94	32.87	27.32	138.65	799.71	469.80	940.03	881.31	58.72	16.010		
6,700.00	6,487.36	6,498.44	6,509.93	33.23	27.76	138.79	799.92	466.59	937.84	878.30	59.55	15.749		
6,800.00	6,587.36	6,606.54	6,617.96	33.59	28.22	138.93	800.69	462.81	935.01	874.59	60.42	15.476		
6,871.72	6,659.02	6,677.47	6,688.83	33.85	28.52	-130.65	801.20	459.95	934.37	873.38	60.99	15.321		
6,900.00	6,687.26	6,705.60	6,716.93	33.95	28.64	-130.60	801.37	458.78	933.84	872.63	61.21	15.256		
7,000.00	6,785.58	6,799.30	6,810.56	34.31	29.04	-130.62	801.75	455.10	942.54	880.55	61.99	15.204 SF		
7,100.00	6,879.94	6,904.07	6,915.24	34.65	29.49	-130.73	802.22	450.72	961.47	898.57	62.90	15.287		
7,200.00	6,968.01	6,999.35	7,010.40	34.97	29.89	-130.59	802.98	446.06	990.40	926.67	63.74	15.539		
7,300.00	7,047.61	7,080.50	7,091.44	35.27	30.24	-129.79	803.60	441.85	1,030.05	965.57	64.48	15.974		
7,400.00	7,116.80	7,167.40	7,178.19	35.54	30.62	-128.65	804.20	436.79	1,080.17	1,014.91	65.26	16.551		
7,500.00	7,173.86	7,233.31	7,243.93	35.81	30.90	-125.96	804.86	432.10	1,139.73	1,073.85	65.89	17.299		
7,600.00	7,217.38	7,279.79	7,290.30	36.17	31.10	-121.05	805.19	428.86	1,208.79	1,142.43	66.36	18.216		
7,700.00	7,246.31	7,315.27	7,325.69	36.80	31.25	-113.53	805.42	426.40	1,285.69	1,218.95	66.74	19.265		
7,800.00	7,259.92	7,335.70	7,346.07	37.72	31.34	-102.34	805.55	424.98	1,368.48	1,301.49	66.99	20.428		
7,900.00	7,260.77	7,343.46	7,353.81	38.86	31.38	-97.14	805.60	424.45	1,454.82	1,387.69	67.14	21.670		
8,000.00	7,260.39	7,350.01	7,360.34	40.19	31.40	-97.67	805.65	423.99	1,542.88	1,475.60	67.28	22.934		
8,100.00	7,260.01	7,356.55	7,366.87	41.67	31.43	-98.19	805.69	423.54	1,632.28	1,564.87	67.42	24.212		
8,200.00	7,259.63	7,363.10	7,373.40	43.30	31.46	-98.71	805.73	423.09	1,722.83	1,655.27	67.56	25.501		
8,300.00	7,259.25	7,369.64	7,379.93	45.05	31.49	-99.23	805.77	422.63	1,814.34	1,746.65	67.70	26.801		
8,400.00	7,258.87	7,376.19	7,386.46	46.91	31.52	-99.74	805.82	422.18	1,906.69	1,838.86	67.83	28.109		
8,500.00	7,258.49	7,382.73	7,392.99	48.87	31.55	-100.26	805.86	421.73	1,999.75	1,931.78	67.97	29.423		
8,600.00	7,258.11	7,389.27	7,399.51	50.92	31.58	-100.78	805.90	421.27	2,093.43	2,025.33	68.09	30.743		
8,700.00	7,257.73	7,395.82	7,406.04	53.04	31.60	-101.29	805.94	420.82	2,187.65	2,119.43	68.22	32.067		
8,800.00	7,257.35	7,402.36	7,412.57	55.23	31.63	-101.80	805.98	420.37	2,282.34	2,214.00	68.34	33.395		
8,900.00	7,256.97	7,408.91	7,419.10	57.47	31.66	-102.31	806.03	419.91	2,377.45	2,308.99	68.46	34.726		
9,000.00	7,256.59	7,415.45	7,425.63	59.77	31.69	-102.82	806.07	419.46	2,472.93	2,404.35	68.58	36.059		
9,100.00	7,256.21	7,422.00	7,432.16	62.12	31.72	-103.32	806.11	419.01	2,568.73	2,500.04	68.70	37.393		
9,200.00	7,255.83	7,428.54	7,438.68	64.50	31.75	-103.82	806.15	418.55	2,664.83	2,596.02	68.81	38.729		
9,300.00	7,255.45	7,435.08	7,445.21	66.93	31.78	-104.33	806.19	418.10	2,761.19	2,692.27	68.92	40.065		
9,400.00	7,255.07	7,441.63	7,451.74	69.38	31.80	-104.82	806.24	417.65	2,857.78	2,788.76	69.03	41.402		
9,500.00	7,254.69	7,448.17	7,458.27	71.87	31.83	-105.32	806.28	417.19	2,954.59	2,885.46	69.13	42.738		
9,600.00	7,254.31	7,454.72	7,464.80	74.38	31.86	-105.82	806.32	416.74	3,051.59	2,982.35	69.24	44.074		
9,700.00	7,253.93	7,461.26	7,471.33	76.92	31.89	-106.31	806.36	416.28	3,148.76	3,079.42	69.34	45.410		
9,800.00	7,253.55	7,467.79	7,477.40	79.48	31.81	-106.80	806.40	415.82	3,246.19	3,176.89	69.44	46.746		
9,900.00	7,253.18	7,474.30	7,483.47	82.06	31.81	-107.29	806.44	415.36	3,343.72	3,274.35	69.54	48.082		
10,000.00	7,252.80	7,480.81	7,490.64	84.65	31.81	-107.78	806.48	414.90	3,441.39	3,371.96	69.64	49.418		
10,100.00	7,252.42	7,487.32	7,497.15	87.27	31.81	-108.27	806.52	414.44	3,539.19	3,469.70	69.74	50.754		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,200.00	7,252.04	7,443.00	7,453.11	89.89	31.81	-104.93	806.25	417.55	3,637.11	3,567.56	69.55	52.294		
10,300.00	7,251.66	7,443.00	7,453.11	92.54	31.81	-104.93	806.25	417.55	3,735.14	3,665.53	69.61	53.657		
10,400.00	7,251.28	7,443.00	7,453.11	95.19	31.81	-104.93	806.25	417.55	3,833.27	3,763.60	69.67	55.020		
10,500.00	7,250.90	7,443.00	7,453.11	97.86	31.81	-104.93	806.25	417.55	3,931.49	3,861.76	69.73	56.381		
10,600.00	7,250.52	7,443.00	7,453.11	100.53	31.81	-104.93	806.25	417.55	4,029.81	3,960.02	69.79	57.742		
10,700.00	7,250.14	7,443.00	7,453.11	103.22	31.81	-104.93	806.25	417.55	4,128.20	4,058.35	69.85	59.102		
10,800.00	7,249.76	7,443.00	7,453.11	105.91	31.81	-104.93	806.25	417.55	4,226.67	4,156.76	69.91	60.461		
10,900.00	7,249.38	7,443.00	7,453.11	108.62	31.81	-104.93	806.25	417.55	4,325.21	4,255.25	69.97	61.819		
11,000.00	7,249.00	7,443.00	7,453.11	111.33	31.81	-104.93	806.25	417.55	4,423.82	4,353.79	70.02	63.176		
11,100.00	7,248.62	7,443.00	7,453.11	114.04	31.81	-104.93	806.25	417.55	4,522.48	4,452.40	70.08	64.531		
11,200.00	7,248.24	7,443.00	7,453.11	116.77	31.81	-104.93	806.25	417.55	4,621.21	4,551.07	70.14	65.885		
11,300.00	7,247.86	7,443.00	7,453.11	119.50	31.81	-104.93	806.25	417.55	4,719.98	4,649.79	70.20	67.237		
11,400.00	7,247.48	7,443.00	7,453.11	122.24	31.81	-104.93	806.25	417.55	4,818.81	4,748.55	70.26	68.587		
11,500.00	7,247.10	7,443.00	7,453.11	124.98	31.81	-104.93	806.25	417.55	4,917.69	4,847.37	70.32	69.936		
11,600.00	7,246.72	7,443.00	7,453.11	127.73	31.81	-104.93	806.25	417.55	5,016.61	4,946.23	70.38	71.283		
11,700.00	7,246.34	7,443.00	7,453.11	130.48	31.81	-104.93	806.25	417.55	5,115.57	5,045.13	70.44	72.627		
11,800.00	7,245.96	7,443.00	7,453.11	133.24	31.81	-104.93	806.25	417.55	5,214.57	5,144.08	70.50	73.970		
11,900.00	7,245.58	7,443.00	7,453.11	136.00	31.81	-104.93	806.25	417.55	5,313.61	5,243.06	70.56	75.311		
12,000.00	7,245.21	7,443.00	7,453.11	138.76	31.81	-104.93	806.25	417.55	5,412.69	5,342.07	70.62	76.650		
12,100.00	7,244.83	7,443.00	7,453.11	141.53	31.81	-104.93	806.25	417.55	5,511.79	5,441.12	70.68	77.986		
12,200.00	7,244.45	7,443.00	7,453.11	144.30	31.81	-104.93	806.25	417.55	5,610.93	5,540.20	70.74	79.320		
12,300.00	7,244.07	7,443.00	7,453.11	147.08	31.81	-104.93	806.25	417.55	5,710.10	5,639.30	70.80	80.652		
12,400.00	7,243.69	7,443.00	7,453.11	149.86	31.81	-104.93	806.25	417.55	5,809.30	5,738.44	70.86	81.982		
12,500.00	7,243.31	7,443.00	7,453.11	152.64	31.81	-104.93	806.25	417.55	5,908.53	5,837.60	70.92	83.309		
12,600.00	7,242.93	7,443.00	7,453.11	155.42	31.81	-104.93	806.25	417.55	6,007.78	5,936.79	70.99	84.633		
12,700.00	7,242.55	7,443.00	7,453.11	158.21	31.81	-104.93	806.25	417.55	6,107.05	6,036.00	71.05	85.955		
12,800.00	7,242.17	7,443.00	7,453.11	161.00	31.81	-104.93	806.25	417.55	6,206.35	6,135.24	71.11	87.274		
12,900.00	7,241.79	7,443.00	7,453.11	163.79	31.81	-104.93	806.25	417.55	6,305.67	6,234.49	71.18	88.591		
13,000.00	7,241.41	7,443.00	7,453.11	166.58	31.81	-104.93	806.25	417.55	6,405.01	6,333.77	71.24	89.905		
13,100.00	7,241.03	7,443.00	7,453.11	169.38	31.81	-104.93	806.25	417.55	6,504.37	6,433.07	71.31	91.216		
13,200.00	7,240.65	7,443.00	7,453.11	172.18	31.81	-104.93	806.25	417.55	6,603.75	6,532.38	71.37	92.524		
13,300.00	7,240.27	7,443.00	7,453.11	174.98	31.81	-104.93	806.25	417.55	6,703.15	6,631.71	71.44	93.830		
13,400.00	7,239.89	7,443.00	7,453.11	177.78	31.81	-104.93	806.25	417.55	6,802.57	6,731.07	71.51	95.132		
13,500.00	7,239.51	7,443.00	7,453.11	180.58	31.81	-104.93	806.25	417.55	6,902.01	6,830.43	71.57	96.432		
13,600.00	7,239.13	7,443.00	7,453.11	183.39	31.81	-104.93	806.25	417.55	7,001.46	6,929.81	71.64	97.728		
13,700.00	7,238.75	7,443.00	7,453.11	186.20	31.81	-104.93	806.25	417.55	7,100.92	7,029.21	71.71	99.022		
13,800.00	7,238.37	7,443.00	7,453.11	189.00	31.81	-104.93	806.25	417.55	7,200.40	7,128.62	71.78	100.312		
13,900.00	7,237.99	7,443.00	7,453.11	191.81	31.81	-104.93	806.25	417.55	7,299.90	7,228.05	71.85	101.599		
14,000.00	7,237.62	7,443.00	7,453.11	194.63	31.81	-104.93	806.25	417.55	7,399.40	7,327.48	71.92	102.884		
14,100.00	7,237.24	7,443.00	7,453.11	197.44	31.81	-104.93	806.25	417.55	7,498.93	7,426.93	71.99	104.165		
14,200.00	7,236.86	7,443.00	7,453.11	200.25	31.81	-104.93	806.25	417.55	7,598.46	7,526.40	72.06	105.442		
14,300.00	7,236.48	7,443.00	7,453.11	203.07	31.81	-104.93	806.25	417.55	7,698.01	7,625.87	72.13	106.717		
14,400.00	7,236.10	7,443.00	7,453.11	205.88	31.81	-104.93	806.25	417.55	7,797.56	7,725.36	72.21	107.988		
14,500.00	7,235.72	7,443.00	7,453.11	208.70	31.81	-104.93	806.25	417.55	7,897.13	7,824.85	72.28	109.256		
14,600.00	7,235.34	7,443.00	7,453.11	211.52	31.81	-104.93	806.25	417.55	7,996.71	7,924.36	72.36	110.520		
14,700.00	7,234.96	7,443.00	7,453.11	214.34	31.81	-104.93	806.25	417.55	8,096.30	8,023.87	72.43	111.781		
14,800.00	7,234.58	7,443.00	7,453.11	217.16	31.81	-104.93	806.25	417.55	8,195.90	8,123.40	72.51	113.039		
14,900.00	7,234.20	7,443.00	7,453.11	219.98	31.81	-104.93	806.25	417.55	8,295.51	8,222.93	72.58	114.293		
15,000.00	7,233.82	7,443.00	7,453.11	222.81	31.81	-104.93	806.25	417.55	8,395.13	8,322.47	72.66	115.544		
15,100.00	7,233.44	7,443.00	7,453.11	225.63	31.81	-104.93	806.25	417.55	8,494.76	8,422.02	72.73	116.791		
15,200.00	7,233.06	7,443.00	7,453.11	228.45	31.81	-104.93	806.25	417.55	8,594.39	8,521.58	72.81	118.035		
15,216.01	7,233.00	7,443.00	7,453.11	228.91	31.81	-104.93	806.25	417.55	8,610.35	8,537.52	72.82	118.234		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	22.00	3.28	3.28	116.17	-255.00	519.01	578.69					
100.00	100.00	80.99	102.99	3.28	3.29	116.11	-254.44	519.05	578.07	571.50	6.57	87.987		
200.00	200.00	183.47	205.45	3.34	3.33	115.97	-252.83	518.98	577.32	570.65	6.67	86.560		
254.06	254.06	237.80	259.78	3.39	3.38	121.70	-252.11	518.73	577.05	570.28	6.77	85.240 CC, ES		
300.00	299.98	283.64	305.61	3.45	3.43	121.76	-251.54	518.51	577.25	570.37	6.88	83.925		
400.00	399.84	381.23	403.20	3.61	3.58	122.07	-250.40	518.19	579.21	572.03	7.18	80.650		
500.00	499.45	478.74	500.70	3.82	3.76	122.60	-249.24	518.35	583.49	575.92	7.57	77.054		
600.00	598.70	578.70	600.65	4.07	3.99	123.35	-247.90	518.80	589.94	581.90	8.05	73.325		
700.00	697.47	676.33	698.27	4.35	4.24	124.28	-246.36	519.32	598.44	589.86	8.58	69.751		
800.00	795.62	775.02	796.95	4.67	4.52	125.44	-244.98	519.96	609.36	600.18	9.17	66.422		
900.00	893.06	871.60	893.51	5.01	4.82	126.70	-243.35	520.72	622.64	612.82	9.81	63.457		
1,000.00	989.64	968.12	990.01	5.38	5.13	128.12	-241.91	521.62	638.68	628.18	10.49	60.871		
1,100.00	1,085.42	1,065.07	1,086.95	5.78	5.46	129.79	-240.50	522.42	657.08	645.87	11.21	58.616		
1,200.00	1,181.09	1,161.40	1,183.27	6.20	5.79	131.52	-239.02	523.14	676.22	664.27	11.95	56.593		
1,300.00	1,276.76	1,259.34	1,281.19	6.65	6.14	133.20	-237.66	523.68	695.88	683.17	12.72	54.722		
1,400.00	1,372.43	1,355.55	1,377.40	7.11	6.49	134.75	-236.09	524.03	715.80	702.30	13.50	53.038		
1,500.00	1,468.10	1,451.12	1,472.95	7.57	6.85	136.21	-234.67	524.47	736.38	722.09	14.29	51.543		
1,600.00	1,563.77	1,548.91	1,570.73	8.05	7.22	137.67	-233.52	524.51	757.32	742.22	15.10	50.154		
1,700.00	1,659.44	1,646.35	1,668.16	8.53	7.60	139.05	-232.20	524.33	778.43	762.51	15.92	48.891		
1,800.00	1,755.11	1,740.78	1,762.59	9.02	7.96	140.35	-231.28	523.81	799.97	783.23	16.74	47.796		
1,900.00	1,850.78	1,835.11	1,856.92	9.52	8.33	141.58	-230.53	523.55	822.21	804.65	17.56	46.827		
2,000.00	1,946.45	1,932.32	1,954.12	10.02	8.72	142.77	-229.59	523.35	844.73	826.33	18.40	45.906		
2,100.00	2,042.12	2,027.36	2,049.16	10.52	9.10	143.90	-228.94	522.80	867.56	848.32	19.24	45.098		
2,200.00	2,137.78	2,120.59	2,142.38	11.03	9.47	145.00	-228.82	522.02	890.96	870.89	20.07	44.401		
2,300.00	2,233.45	2,215.60	2,237.39	11.54	9.85	146.05	-228.79	521.31	914.80	893.89	20.91	43.752		
2,400.00	2,329.12	2,308.41	2,330.19	12.05	10.22	147.04	-228.98	520.68	939.16	917.42	21.74	43.199		
2,500.00	2,424.79	2,405.23	2,427.02	12.56	10.61	148.04	-229.40	519.85	963.86	941.26	22.60	42.651		
2,600.00	2,520.46	2,495.43	2,517.21	13.08	10.98	148.93	-230.01	519.12	989.03	965.61	23.42	42.236		
2,700.00	2,616.13	2,589.21	2,610.98	13.60	11.36	149.81	-230.92	518.52	1,014.77	990.52	24.26	41.831		
2,800.00	2,711.80	2,682.45	2,704.22	14.12	11.74	150.64	-231.88	518.14	1,040.91	1,015.81	25.10	41.473		
2,900.00	2,807.47	2,777.14	2,798.90	14.64	12.13	151.43	-232.87	517.98	1,067.39	1,041.44	25.95	41.133		
3,000.00	2,903.14	2,877.24	2,898.99	15.16	12.54	152.24	-233.94	517.51	1,093.93	1,067.09	26.84	40.755		
3,100.00	2,998.81	2,974.54	2,996.29	15.68	12.94	152.98	-234.58	516.95	1,120.26	1,092.55	27.72	40.420		
3,200.00	3,094.48	3,074.82	3,096.56	16.21	13.35	153.70	-235.04	516.34	1,146.57	1,117.96	28.61	40.071		
3,300.00	3,190.15	3,171.78	3,193.53	16.73	13.76	154.37	-235.18	515.56	1,172.68	1,143.19	29.49	39.766		
3,400.00	3,285.82	3,267.30	3,289.04	17.26	14.15	155.01	-235.36	514.72	1,198.93	1,168.57	30.36	39.494		
3,500.00	3,381.49	3,359.58	3,381.32	17.78	14.54	155.59	-235.54	514.07	1,225.41	1,194.20	31.20	39.273		
3,600.00	3,477.16	3,452.79	3,474.53	18.31	14.93	156.14	-235.80	513.92	1,252.32	1,220.26	32.06	39.067		
3,700.00	3,572.83	3,548.15	3,569.88	18.84	15.32	156.68	-236.15	513.71	1,279.39	1,246.46	32.93	38.857		
3,800.00	3,668.50	3,643.45	3,665.19	19.37	15.72	157.20	-236.60	513.36	1,306.58	1,272.79	33.80	38.660		
3,900.00	3,764.17	3,738.71	3,760.44	19.89	16.12	157.71	-237.13	512.88	1,333.89	1,299.23	34.67	38.477		
4,000.00	3,859.84	3,833.92	3,855.65	20.42	16.52	158.21	-237.76	512.26	1,361.32	1,325.78	35.54	38.305		
4,100.00	3,955.51	3,929.08	3,950.80	20.95	16.92	158.69	-238.47	511.51	1,388.86	1,352.45	36.41	38.145		
4,200.00	4,051.18	4,024.18	4,045.90	21.48	17.32	159.16	-239.28	510.62	1,416.52	1,379.24	37.28	37.994		
4,300.00	4,146.85	4,119.24	4,140.94	22.01	17.72	159.62	-240.18	509.60	1,444.29	1,406.13	38.15	37.854		
4,400.00	4,242.52	4,214.24	4,235.93	22.55	18.12	160.07	-241.17	508.45	1,472.17	1,433.14	39.03	37.722		
4,500.00	4,338.19	4,308.59	4,330.27	23.08	18.52	160.50	-242.15	507.42	1,500.18	1,460.28	39.89	37.605		
4,600.00	4,433.86	4,404.17	4,425.84	23.61	18.92	160.90	-243.03	506.72	1,528.30	1,487.53	40.77	37.486		
4,700.00	4,529.53	4,511.38	4,533.05	24.14	19.37	161.32	-243.52	506.00	1,556.11	1,514.37	41.74	37.282		
4,800.00	4,625.19	4,605.72	4,627.39	24.67	19.77	161.68	-243.72	505.24	1,583.70	1,541.09	42.61	37.168		
4,900.00	4,720.86	4,700.76	4,722.43	25.21	20.17	162.03	-243.87	504.59	1,611.36	1,567.88	43.48	37.056		
5,000.00	4,816.53	4,791.31	4,812.97	25.74	20.55	162.34	-244.09	504.22	1,639.25	1,594.92	44.33	36.982		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	4,912.20	4,893.43	4,915.09	26.27	20.98	162.67	-244.24	504.01	1,667.17	1,621.91	45.26	36.837		
5,200.00	5,007.87	4,993.86	5,015.52	26.80	21.41	162.98	-244.00	503.73	1,694.78	1,648.60	46.18	36.701		
5,300.00	5,103.54	5,087.19	5,108.85	27.34	21.80	163.27	-243.78	503.31	1,722.35	1,675.31	47.04	36.613		
5,400.00	5,199.22	5,184.32	5,205.98	27.87	22.21	163.57	-243.61	502.86	1,750.02	1,702.08	47.94	36.506		
5,500.00	5,295.46	5,282.24	5,303.90	28.39	22.63	163.99	-243.40	502.24	1,775.72	1,726.89	48.83	36.365		
5,600.00	5,392.60	5,376.59	5,398.25	28.89	23.03	164.34	-243.35	501.28	1,798.21	1,748.53	49.68	36.194		
5,700.00	5,490.50	5,474.03	5,495.67	29.37	23.44	164.65	-243.44	500.28	1,817.58	1,767.03	50.55	35.959		
5,800.00	5,589.05	5,570.21	5,591.85	29.83	23.85	164.90	-243.47	499.56	1,833.68	1,782.29	51.39	35.685		
5,900.00	5,688.14	5,663.44	5,685.09	30.26	24.24	165.08	-243.65	499.04	1,846.68	1,794.49	52.19	35.385		
6,000.00	5,787.63	5,759.95	5,781.59	30.68	24.65	165.23	-244.15	498.50	1,856.64	1,803.64	53.00	35.030		
6,100.00	5,887.41	5,864.43	5,886.07	31.07	25.09	165.34	-244.63	497.95	1,863.20	1,809.34	53.87	34.590		
6,200.00	5,987.36	5,969.43	5,991.07	31.44	25.54	165.39	-244.68	497.55	1,866.05	1,811.33	54.72	34.102		
6,300.00	6,087.36	6,067.63	6,089.26	31.80	25.96	159.68	-244.72	496.89	1,866.09	1,810.58	55.51	33.619		
6,400.00	6,187.36	6,166.47	6,188.10	32.15	26.38	159.70	-244.95	496.14	1,866.04	1,809.74	56.30	33.145		
6,500.00	6,287.36	6,267.09	6,288.72	32.51	26.80	159.72	-245.11	495.57	1,865.99	1,808.88	57.11	32.674		
6,600.00	6,387.36	6,367.26	6,388.89	32.87	27.23	159.73	-245.13	495.28	1,865.91	1,807.99	57.92	32.217		
6,700.00	6,487.36	6,467.14	6,488.77	33.23	27.66	159.74	-245.14	495.02	1,865.83	1,807.11	58.72	31.773		
6,800.00	6,587.36	6,567.01	6,588.64	33.59	28.08	159.75	-245.15	494.79	1,865.76	1,806.23	59.53	31.340		
6,803.91	6,591.27	6,570.92	6,592.54	33.61	28.10	-109.81	-245.15	494.78	1,865.76	1,806.19	59.56	31.324		
6,900.00	6,687.26	6,666.79	6,688.42	33.95	28.51	-109.80	-245.15	494.58	1,866.75	1,806.41	60.34	30.938		
7,000.00	6,785.58	6,765.03	6,786.66	34.31	28.92	-109.79	-245.16	494.39	1,872.76	1,811.61	61.15	30.627		
7,100.00	6,879.94	6,859.32	6,880.95	34.65	29.32	-109.68	-245.17	494.23	1,884.39	1,822.44	61.95	30.418		
7,200.00	6,968.01	6,947.33	6,968.96	34.97	29.70	-109.36	-245.17	494.10	1,902.00	1,839.26	62.73	30.320 SF		
7,300.00	7,047.61	7,026.90	7,048.53	35.27	30.04	-108.65	-245.18	494.00	1,926.00	1,862.51	63.49	30.338		
7,400.00	7,116.80	7,096.05	7,117.68	35.54	30.33	-107.35	-245.18	493.92	1,956.72	1,892.50	64.21	30.473		
7,500.00	7,173.86	7,153.09	7,174.72	35.81	30.58	-105.25	-245.18	493.86	1,994.27	1,929.36	64.91	30.722		
7,600.00	7,217.38	7,196.61	7,218.24	36.17	30.76	-102.14	-245.18	493.82	2,038.46	1,972.87	65.59	31.079		
7,700.00	7,246.31	7,225.55	7,247.18	36.80	30.89	-97.87	-245.18	493.79	2,088.68	2,022.45	66.23	31.539		
7,800.00	7,259.92	7,239.21	7,260.84	37.72	30.94	-92.36	-245.18	493.78	2,143.92	2,077.12	66.80	32.094		
7,900.00	7,260.77	7,240.13	7,261.76	38.86	30.95	-89.87	-245.18	493.78	2,202.84	2,135.52	67.32	32.723		
8,000.00	7,260.39	7,239.83	7,261.46	40.19	30.95	-89.86	-245.18	493.78	2,264.65	2,196.78	67.87	33.368		
8,100.00	7,260.01	7,239.53	7,261.16	41.67	30.94	-89.85	-245.18	493.78	2,329.12	2,260.67	68.45	34.027		
8,200.00	7,259.63	7,239.23	7,260.86	43.30	30.94	-89.84	-245.18	493.78	2,396.03	2,326.99	69.04	34.703		
8,300.00	7,259.25	7,238.93	7,260.56	45.05	30.94	-89.83	-245.18	493.78	2,465.18	2,395.53	69.65	35.396		
8,400.00	7,258.87	7,238.63	7,260.25	46.91	30.94	-89.82	-245.18	493.78	2,536.39	2,466.14	70.25	36.108		
8,500.00	7,258.49	7,238.33	7,259.95	48.87	30.94	-89.81	-245.18	493.78	2,609.49	2,538.65	70.84	36.838		
8,600.00	7,258.11	7,238.03	7,259.65	50.92	30.94	-89.80	-245.18	493.78	2,684.32	2,612.90	71.42	37.587		
8,700.00	7,257.73	7,237.73	7,259.35	53.04	30.94	-89.79	-245.18	493.78	2,760.75	2,688.77	71.98	38.354		
8,800.00	7,257.35	7,237.43	7,259.05	55.23	30.94	-89.78	-245.18	493.78	2,838.64	2,766.12	72.53	39.139		
8,900.00	7,256.97	7,237.13	7,258.75	57.47	30.93	-89.77	-245.18	493.78	2,917.88	2,844.83	73.05	39.941		
9,000.00	7,256.59	7,236.83	7,258.46	59.77	30.93	-89.76	-245.18	493.78	2,998.37	2,924.80	73.56	40.759		
9,100.00	7,256.21	7,236.53	7,258.16	62.12	30.93	-89.75	-245.18	493.79	3,079.99	3,005.94	74.05	41.593		
9,200.00	7,255.83	7,236.23	7,257.86	64.50	30.93	-89.74	-245.18	493.79	3,162.68	3,088.16	74.52	42.442		
9,300.00	7,255.45	7,235.93	7,257.56	66.93	30.93	-89.73	-245.18	493.79	3,246.33	3,171.37	74.97	43.304		
9,400.00	7,255.07	7,235.63	7,257.26	69.38	30.93	-89.72	-245.18	493.79	3,330.89	3,255.49	75.40	44.179		
9,500.00	7,254.69	7,235.33	7,256.96	71.87	30.93	-89.71	-245.18	493.79	3,416.28	3,340.47	75.81	45.066		
9,600.00	7,254.31	7,235.03	7,256.66	74.38	30.93	-89.70	-245.18	493.79	3,502.45	3,426.25	76.20	45.964		
9,700.00	7,253.93	7,234.73	7,256.36	76.92	30.92	-89.69	-245.18	493.79	3,589.33	3,512.75	76.58	46.873		
9,800.00	7,253.55	7,234.43	7,256.06	79.48	30.92	-89.68	-245.18	493.79	3,676.88	3,599.94	76.94	47.791		
9,900.00	7,253.18	7,234.14	7,255.76	82.06	30.92	-89.67	-245.18	493.79	3,765.05	3,687.77	77.28	48.719		
10,000.00	7,252.80	7,233.84	7,255.47	84.65	30.92	-89.66	-245.18	493.79	3,853.80	3,776.19	77.61	49.655		
10,100.00	7,252.42	7,233.54	7,255.17	87.27	30.92	-89.65	-245.18	493.79	3,943.08	3,865.16	77.93	50.600		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,200.00	7,252.04	7,233.24	7,254.87	89.89	30.92	-89.64	-245.18	493.79	4,032.87	3,954.64	78.23	51.551		
10,300.00	7,251.66	7,232.94	7,254.57	92.54	30.92	-89.63	-245.18	493.79	4,123.13	4,044.61	78.52	52.510		
10,400.00	7,251.28	7,232.65	7,254.27	95.19	30.92	-89.62	-245.18	493.79	4,213.83	4,135.03	78.80	53.474		
10,500.00	7,250.90	7,232.35	7,253.98	97.86	30.91	-89.61	-245.18	493.79	4,304.94	4,225.87	79.07	54.445		
10,600.00	7,250.52	7,232.05	7,253.68	100.53	30.91	-89.60	-245.18	493.79	4,396.44	4,317.11	79.33	55.421		
10,700.00	7,250.14	7,231.75	7,253.38	103.22	30.91	-89.59	-245.18	493.79	4,488.30	4,408.72	79.58	56.402		
10,800.00	7,249.76	7,231.46	7,253.08	105.91	30.91	-89.58	-245.18	493.79	4,580.50	4,500.68	79.82	57.388		
10,900.00	7,249.38	7,231.16	7,252.79	108.62	30.91	-89.57	-245.18	493.79	4,673.02	4,592.97	80.05	58.378		
11,000.00	7,249.00	7,230.86	7,252.49	111.33	30.91	-89.57	-245.18	493.79	4,765.84	4,685.57	80.27	59.373		
11,100.00	7,248.62	7,230.56	7,252.19	114.04	30.91	-89.56	-245.18	493.79	4,858.95	4,778.47	80.49	60.371		
11,200.00	7,248.24	7,230.27	7,251.90	116.77	30.91	-89.55	-245.18	493.79	4,952.33	4,871.64	80.69	61.372		
11,300.00	7,247.86	7,229.97	7,251.60	119.50	30.90	-89.54	-245.18	493.79	5,045.96	4,965.07	80.90	62.377		
11,400.00	7,247.48	7,229.67	7,251.30	122.24	30.90	-89.53	-245.18	493.79	5,139.83	5,058.74	81.09	63.384		
11,500.00	7,247.10	7,229.38	7,251.01	124.98	30.90	-89.52	-245.18	493.79	5,233.93	5,152.65	81.28	64.394		
11,600.00	7,246.72	7,229.08	7,250.71	127.73	30.90	-89.51	-245.18	493.79	5,328.24	5,246.78	81.46	65.407		
11,700.00	7,246.34	7,228.79	7,250.41	130.48	30.90	-89.50	-245.18	493.79	5,422.76	5,341.12	81.64	66.422		
11,800.00	7,245.96	7,228.49	7,250.12	133.24	30.90	-89.49	-245.18	493.79	5,517.47	5,435.66	81.81	67.439		
11,900.00	7,245.58	7,228.19	7,249.82	136.00	30.90	-89.48	-245.18	493.79	5,612.36	5,530.38	81.98	68.458		
12,000.00	7,245.21	7,227.90	7,249.53	138.76	30.89	-89.47	-245.18	493.79	5,707.43	5,625.29	82.15	69.479		
12,100.00	7,244.83	7,227.60	7,249.23	141.53	30.89	-89.46	-245.18	493.79	5,802.67	5,720.36	82.31	70.501		
12,200.00	7,244.45	7,227.31	7,248.93	144.30	30.89	-89.45	-245.18	493.79	5,898.06	5,815.60	82.46	71.524		
12,300.00	7,244.07	7,227.01	7,248.64	147.08	30.89	-89.44	-245.18	493.79	5,993.60	5,910.99	82.61	72.549		
12,400.00	7,243.69	7,226.72	7,248.34	149.86	30.89	-89.43	-245.18	493.79	6,089.28	6,006.52	82.76	73.575		
12,500.00	7,243.31	7,226.42	7,248.05	152.64	30.89	-89.42	-245.18	493.79	6,185.11	6,102.20	82.91	74.602		
12,600.00	7,242.93	7,226.12	7,247.75	155.42	30.89	-89.41	-245.18	493.79	6,281.06	6,198.01	83.05	75.630		
12,700.00	7,242.55	7,225.83	7,247.46	158.21	30.89	-89.40	-245.18	493.79	6,377.13	6,293.94	83.19	76.658		
12,800.00	7,242.17	7,225.54	7,247.16	161.00	30.88	-89.39	-245.18	493.79	6,473.33	6,390.00	83.33	77.687		
12,900.00	7,241.79	7,225.24	7,246.87	163.79	30.88	-89.38	-245.18	493.79	6,569.64	6,486.18	83.46	78.717		
13,000.00	7,241.41	7,224.95	7,246.57	166.58	30.88	-89.37	-245.18	493.79	6,666.05	6,582.46	83.59	79.747		
13,100.00	7,241.03	7,224.65	7,246.28	169.38	30.88	-89.36	-245.18	493.79	6,762.58	6,678.86	83.72	80.777		
13,200.00	7,240.65	7,224.36	7,245.98	172.18	30.88	-89.35	-245.18	493.79	6,859.20	6,775.35	83.85	81.808		
13,300.00	7,240.27	7,224.06	7,245.69	174.98	30.88	-89.34	-245.18	493.79	6,955.91	6,871.94	83.97	82.838		
13,400.00	7,239.89	7,223.77	7,245.40	177.78	30.88	-89.33	-245.18	493.80	7,052.72	6,968.63	84.09	83.869		
13,500.00	7,239.51	7,223.47	7,245.10	180.58	30.88	-89.32	-245.18	493.80	7,149.62	7,065.40	84.21	84.899		
13,600.00	7,239.13	7,223.18	7,244.81	183.39	30.87	-89.31	-245.18	493.80	7,246.60	7,162.27	84.33	85.930		
13,700.00	7,238.75	7,222.89	7,244.51	186.20	30.87	-89.30	-245.18	493.80	7,343.66	7,259.21	84.45	86.960		
13,800.00	7,238.37	7,222.59	7,244.22	189.00	30.87	-89.30	-245.18	493.80	7,440.80	7,356.23	84.56	87.990		
13,900.00	7,237.99	7,222.30	7,243.93	191.81	30.87	-89.29	-245.18	493.80	7,538.01	7,453.33	84.68	89.020		
14,000.00	7,237.62	7,222.01	7,243.63	194.63	30.87	-89.28	-245.18	493.80	7,635.30	7,550.51	84.79	90.049		
14,100.00	7,237.24	7,221.71	7,243.34	197.44	30.87	-89.27	-245.18	493.80	7,732.65	7,647.75	84.90	91.078		
14,200.00	7,236.86	7,221.42	7,243.05	200.25	30.87	-89.26	-245.18	493.80	7,830.07	7,745.06	85.01	92.106		
14,300.00	7,236.48	7,221.13	7,242.76	203.07	30.87	-89.25	-245.18	493.80	7,927.56	7,842.44	85.12	93.134		
14,400.00	7,236.10	7,220.83	7,242.46	205.88	30.86	-89.24	-245.18	493.80	8,025.11	7,939.88	85.23	94.161		
14,500.00	7,235.72	7,220.54	7,242.17	208.70	30.86	-89.23	-245.18	493.80	8,122.71	8,037.38	85.33	95.187		
14,600.00	7,235.34	7,220.25	7,241.88	211.52	30.86	-89.22	-245.18	493.80	8,220.38	8,134.94	85.44	96.212		
14,700.00	7,234.96	7,219.96	7,241.58	214.34	30.86	-89.21	-245.18	493.80	8,318.10	8,232.55	85.54	97.237		
14,800.00	7,234.58	7,219.66	7,241.29	217.16	30.86	-89.20	-245.18	493.80	8,415.87	8,330.22	85.65	98.261		
14,900.00	7,234.20	7,219.37	7,241.00	219.98	30.86	-89.19	-245.18	493.80	8,513.70	8,427.95	85.75	99.284		
15,000.00	7,233.82	7,219.08	7,240.71	222.81	30.86	-89.18	-245.18	493.80	8,611.57	8,525.72	85.85	100.306		
15,100.00	7,233.44	7,218.79	7,240.42	225.63	30.86	-89.17	-245.18	493.80	8,709.50	8,623.54	85.95	101.327		
15,200.00	7,233.06	7,218.50	7,240.12	228.45	30.85	-89.16	-245.18	493.80	8,807.47	8,721.41	86.05	102.347		
15,216.01	7,233.00	7,218.45	7,240.08	228.91	30.85	-89.16	-245.18	493.80	8,823.16	8,737.09	86.07	102.510		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.00	2.00	3.28	3.28	10.84	1,270.70	243.36	1,293.80					
100.00	100.00	105.62	107.62	3.28	3.29	10.85	1,270.37	243.42	1,293.51	1,286.93	6.57	196.790		
200.00	200.00	210.63	212.62	3.34	3.34	10.86	1,269.48	243.50	1,292.68	1,286.01	6.67	193.726		
300.00	299.98	313.15	315.14	3.45	3.45	16.64	1,268.37	243.41	1,289.93	1,283.04	6.89	187.170		
400.00	399.84	407.02	409.00	3.61	3.59	16.73	1,267.44	243.25	1,283.92	1,276.72	7.20	178.318		
500.00	499.45	502.78	504.77	3.82	3.78	16.88	1,266.99	242.85	1,275.03	1,267.44	7.60	167.824		
600.00	598.70	607.84	609.82	4.07	4.03	17.11	1,266.41	242.48	1,262.76	1,254.67	8.10	155.991		
700.00	697.47	704.08	706.06	4.35	4.29	17.39	1,265.77	241.88	1,247.04	1,238.41	8.64	144.401		
800.00	795.62	801.48	803.45	4.67	4.57	17.73	1,265.36	240.84	1,228.21	1,218.97	9.23	133.029		
900.00	893.06	902.79	904.75	5.01	4.89	18.16	1,264.68	239.69	1,205.89	1,196.00	9.89	121.939		
1,000.00	989.64	991.62	993.57	5.38	5.18	18.63	1,264.24	238.52	1,180.52	1,169.97	10.54	111.955		
1,100.00	1,085.42	1,072.29	1,074.21	5.78	5.45	18.98	1,265.00	236.36	1,153.51	1,142.31	11.20	102.973		
1,200.00	1,181.09	1,156.41	1,158.21	6.20	5.74	19.18	1,267.14	232.57	1,127.32	1,115.44	11.89	94.848		
1,300.00	1,276.76	1,236.62	1,238.18	6.65	6.03	19.28	1,270.58	227.43	1,102.39	1,089.81	12.58	87.600		
1,400.00	1,372.43	1,327.02	1,328.08	7.11	6.36	19.27	1,275.96	219.60	1,078.54	1,065.20	13.34	80.839		
1,500.00	1,468.10	1,413.54	1,413.84	7.57	6.69	19.14	1,282.19	210.06	1,055.38	1,041.27	14.11	74.782		
1,600.00	1,563.77	1,504.40	1,503.69	8.05	7.06	18.92	1,289.85	198.92	1,033.14	1,018.21	14.92	69.233		
1,700.00	1,659.44	1,600.69	1,598.82	8.53	7.47	18.65	1,298.39	186.75	1,011.25	995.48	15.77	64.112		
1,800.00	1,755.11	1,708.04	1,704.91	9.02	7.94	18.33	1,307.52	173.09	989.04	972.36	16.68	59.295		
1,900.00	1,850.78	1,806.66	1,802.46	9.52	8.38	18.05	1,315.09	160.73	966.09	948.51	17.57	54.982		
2,000.00	1,946.45	1,915.64	1,910.35	10.02	8.87	17.75	1,322.78	147.43	942.63	924.13	18.50	50.940		
2,100.00	2,042.12	2,016.11	2,009.91	10.52	9.33	17.48	1,328.93	135.40	918.34	898.93	19.42	47.292		
2,200.00	2,137.78	2,104.82	2,097.82	11.03	9.75	17.24	1,334.61	124.93	894.37	874.06	20.31	44.045		
2,300.00	2,233.45	2,194.63	2,186.71	11.54	10.17	16.96	1,341.16	114.04	871.21	850.01	21.21	41.082		
2,400.00	2,329.12	2,294.77	2,285.84	12.05	10.65	16.62	1,348.75	101.93	848.36	826.21	22.14	38.311		
2,500.00	2,424.79	2,384.63	2,374.80	12.56	11.08	16.32	1,355.74	91.38	825.78	802.72	23.06	35.815		
2,600.00	2,520.46	2,484.54	2,473.74	13.08	11.57	16.00	1,363.74	80.01	803.51	779.51	24.00	33.480		
2,700.00	2,616.13	2,576.14	2,564.46	13.60	12.01	15.70	1,371.24	69.80	781.47	756.55	24.92	31.354		
2,800.00	2,711.80	2,680.38	2,667.69	14.12	12.52	15.34	1,379.70	58.15	759.38	733.49	25.88	29.338		
2,900.00	2,807.47	2,778.42	2,764.80	14.64	13.00	14.96	1,387.20	46.91	736.83	710.00	26.83	27.461		
3,000.00	2,903.14	2,873.89	2,859.28	15.16	13.48	14.52	1,394.66	35.42	714.39	686.61	27.78	25.716		
3,100.00	2,998.81	2,970.26	2,954.59	15.68	13.96	14.01	1,402.49	23.48	692.25	663.52	28.73	24.091		
3,200.00	3,094.48	3,071.96	3,055.25	16.21	14.47	13.48	1,410.26	11.22	669.74	640.04	29.70	22.552		
3,300.00	3,190.15	3,167.09	3,149.44	16.73	14.95	12.97	1,417.49	-0.03	647.26	616.61	30.65	21.118		
3,400.00	3,285.82	3,267.20	3,248.46	17.26	15.46	12.33	1,425.23	-12.47	624.92	593.31	31.61	19.770		
3,500.00	3,381.49	3,372.33	3,352.63	17.78	15.99	11.68	1,431.99	-24.93	601.42	568.85	32.56	18.468		
3,600.00	3,477.16	3,469.55	3,449.06	18.31	16.47	11.08	1,437.66	-35.99	577.46	543.95	33.51	17.232		
3,700.00	3,572.83	3,562.92	3,541.78	18.84	16.92	10.59	1,443.19	-45.38	553.76	519.30	34.46	16.071		
3,800.00	3,668.50	3,654.11	3,632.30	19.37	17.37	10.08	1,449.60	-54.43	531.16	495.76	35.40	15.003		
3,900.00	3,764.17	3,749.80	3,727.22	19.89	17.84	9.49	1,457.07	-63.91	509.39	473.04	36.35	14.014		
4,000.00	3,859.84	3,846.03	3,822.70	20.42	18.32	8.86	1,464.51	-73.31	487.61	450.31	37.29	13.075		
4,100.00	3,955.51	3,939.21	3,915.12	20.95	18.78	8.24	1,472.64	-82.03	466.86	428.62	38.24	12.209		
4,200.00	4,051.18	4,036.42	4,011.44	21.48	19.27	7.44	1,481.39	-91.80	446.44	407.26	39.18	11.394		
4,300.00	4,146.85	4,132.00	4,106.02	22.01	19.76	6.48	1,490.39	-102.19	426.52	386.39	40.13	10.629		
4,400.00	4,242.52	4,231.81	4,204.80	22.55	20.26	5.41	1,500.02	-112.81	406.96	365.90	41.06	9.910		
4,500.00	4,338.19	4,334.93	4,307.00	23.08	20.79	4.22	1,508.60	-123.54	386.23	344.25	41.98	9.200		
4,600.00	4,433.86	4,435.45	4,406.72	23.61	21.29	2.96	1,515.97	-133.75	364.69	321.79	42.89	8.502		
4,700.00	4,529.53	4,538.34	4,508.92	24.14	21.79	1.55	1,522.43	-143.78	342.27	298.50	43.77	7.820		
4,800.00	4,625.19	4,640.41	4,610.51	24.67	22.28	0.15	1,527.01	-152.51	318.19	273.57	44.62	7.131		
4,900.00	4,720.86	4,739.99	4,709.67	25.21	22.74	-1.51	1,530.22	-161.16	293.11	247.63	45.48	6.445		
5,000.00	4,816.53	4,839.14	4,808.47	25.74	23.20	-3.37	1,532.53	-169.11	267.33	221.02	46.31	5.772		
5,100.00	4,912.20	4,936.38	4,905.50	26.27	23.63	-5.21	1,534.27	-175.24	241.04	193.87	47.17	5.111		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	5,034.65	5,003.66	26.80	24.05	-6.95	1,535.88	-179.30	214.42	166.45	47.97	4.470		
5,300.00	5,103.54	5,132.02	5,101.00	27.34	24.45	-8.72	1,536.95	-181.72	187.13	138.35	48.78	3.836		
5,400.00	5,199.22	5,227.91	5,196.86	27.87	24.85	-11.03	1,537.72	-183.96	159.76	110.13	49.63	3.219		
5,500.00	5,295.46	5,325.04	5,293.97	28.39	25.25	-13.88	1,538.42	-185.96	134.49	84.06	50.43	2.667		
5,600.00	5,392.60	5,422.20	5,391.11	28.89	25.64	-17.52	1,538.91	-187.93	112.74	61.47	51.28	2.199		
5,700.00	5,490.50	5,521.14	5,490.03	29.37	26.04	-22.08	1,539.10	-189.70	94.46	42.40	52.06	1.815		
5,800.00	5,589.05	5,619.67	5,588.55	29.83	26.44	-27.65	1,538.80	-191.31	79.61	26.67	52.94	1.504		
5,900.00	5,688.14	5,718.28	5,687.14	30.26	26.84	-33.91	1,538.83	-193.09	69.08	15.16	53.92	1.281 Level 3		
6,000.00	5,787.63	5,817.98	5,786.83	30.68	27.25	-40.14	1,538.98	-194.89	62.41	7.53	54.87	1.137 Level 2		
6,100.00	5,887.41	5,917.68	5,886.51	31.07	27.66	-45.19	1,539.19	-196.61	59.04	3.18	55.85	1.057 Level 2		
6,173.56	5,960.92	5,991.24	5,960.05	31.34	27.96	-47.75	1,539.26	-197.96	58.37	1.85	56.52	1.033 Level 2		
6,200.00	5,987.36	6,017.72	5,986.53	31.44	28.07	-48.40	1,539.23	-198.46	58.44	1.69	56.75	1.030 Level 2		
6,300.00	6,087.36	6,118.00	6,086.79	31.80	28.48	-55.53	1,538.94	-200.20	59.53	1.97	57.56	1.034 Level 2		
6,400.00	6,187.36	6,218.32	6,187.11	32.15	28.88	-56.43	1,538.46	-201.18	60.08	1.73	58.35	1.030 Level 2		
6,500.00	6,287.36	6,318.27	6,287.05	32.51	29.28	-57.38	1,537.92	-202.17	60.61	1.44	59.17	1.024 Level 2		
6,600.00	6,387.36	6,419.08	6,387.85	32.87	29.67	-58.56	1,536.94	-202.97	60.78	0.86	59.92	1.014 Level 2		
6,700.00	6,487.36	6,522.36	6,490.79	33.23	30.05	-65.07	1,529.41	-203.12	57.45	-3.10	60.54	0.949 Level 1		
6,800.00	6,587.36	6,621.52	6,587.88	33.59	30.37	-85.25	1,509.58	-203.36	52.43	-10.03	62.46	0.839 Level 1		
6,816.96	6,604.31	6,637.70	6,603.44	33.65	30.42	0.35	1,505.15	-203.59	52.34	-10.47	62.81	0.833 Level 1, CC, ES, SF		
6,900.00	6,687.26	6,714.14	6,675.40	33.95	30.63	-26.02	1,479.51	-204.95	58.08	-4.18	62.26	0.933 Level 1		
7,000.00	6,785.58	6,796.15	6,748.63	34.31	30.83	-55.31	1,442.76	-206.11	80.14	25.92	54.22	1.478 Level 3		
7,100.00	6,879.94	6,866.95	6,807.89	34.65	30.97	-72.86	1,404.05	-206.22	123.89	76.55	47.34	2.617		
7,200.00	6,968.01	6,928.37	6,856.72	34.97	31.07	-80.76	1,366.81	-206.06	182.83	137.07	45.76	3.995		
7,300.00	7,047.61	6,981.00	6,897.00	35.27	31.16	-82.75	1,332.94	-206.04	251.41	204.61	46.79	5.373		
7,400.00	7,116.80	7,020.93	6,926.45	35.54	31.22	-79.95	1,305.99	-205.98	327.08	278.77	48.32	6.769		
7,500.00	7,173.86	7,050.14	6,947.18	35.81	31.27	-73.50	1,285.41	-205.80	407.99	357.79	50.20	8.128		
7,600.00	7,217.38	7,070.03	6,960.87	36.17	31.30	-64.39	1,270.98	-205.59	492.03	439.78	52.25	9.418		
7,700.00	7,246.31	7,083.67	6,970.07	36.80	31.31	-54.35	1,260.91	-205.38	577.37	522.95	54.42	10.609		
7,800.00	7,259.92	7,090.20	6,974.44	37.72	31.32	-44.47	1,256.06	-205.28	662.41	605.91	56.50	11.725		
7,900.00	7,260.77	7,089.87	6,974.21	38.86	31.32	-40.69	1,256.31	-205.28	746.95	688.65	58.30	12.813		
8,000.00	7,260.39	7,088.88	6,973.56	40.19	31.32	-40.54	1,257.04	-205.30	834.52	774.86	59.66	13.988		
8,100.00	7,260.01	7,087.90	6,972.90	41.67	31.32	-40.40	1,257.77	-205.32	924.60	863.92	60.68	15.237		
8,200.00	7,259.63	7,086.92	6,972.24	43.30	31.32	-40.25	1,258.50	-205.33	1,016.55	955.08	61.47	16.537		
8,300.00	7,259.25	7,085.94	6,971.59	45.05	31.32	-40.10	1,259.23	-205.35	1,109.88	1,047.79	62.09	17.876		
8,400.00	7,258.87	7,084.96	6,970.93	46.91	31.32	-39.95	1,259.96	-205.36	1,204.29	1,141.71	62.58	19.244		
8,500.00	7,258.49	7,083.98	6,970.27	48.87	31.31	-39.81	1,260.69	-205.38	1,299.53	1,236.55	62.98	20.634		
8,600.00	7,258.11	7,083.00	6,969.62	50.92	31.31	-39.66	1,261.41	-205.39	1,395.43	1,332.12	63.31	22.041		
8,700.00	7,257.73	7,082.02	6,968.96	53.04	31.31	-39.51	1,262.14	-205.41	1,491.88	1,428.29	63.59	23.462		
8,800.00	7,257.35	7,081.04	6,968.30	55.23	31.31	-39.37	1,262.86	-205.42	1,588.76	1,524.94	63.82	24.893		
8,900.00	7,256.97	7,080.06	6,967.65	57.47	31.31	-39.22	1,263.59	-205.44	1,686.00	1,621.98	64.03	26.333		
9,000.00	7,256.59	7,079.08	6,966.99	59.77	31.31	-39.07	1,264.31	-205.45	1,783.55	1,719.35	64.20	27.780		
9,100.00	7,256.21	7,078.11	6,966.33	62.12	31.31	-38.93	1,265.03	-205.47	1,881.36	1,817.00	64.36	29.232		
9,200.00	7,255.83	7,077.13	6,965.67	64.50	31.31	-38.78	1,265.75	-205.48	1,979.39	1,914.89	64.50	30.689		
9,300.00	7,255.45	7,076.00	6,964.91	66.93	31.30	-38.61	1,266.59	-205.50	2,077.60	2,012.98	64.62	32.150		
9,400.00	7,255.07	7,076.00	6,964.91	69.38	31.30	-38.61	1,266.59	-205.50	2,175.97	2,111.23	64.74	33.609		
9,500.00	7,254.69	7,076.00	6,964.91	71.87	31.30	-38.61	1,266.59	-205.50	2,274.49	2,209.63	64.85	35.071		
9,600.00	7,254.31	7,076.00	6,964.91	74.38	31.30	-38.61	1,266.59	-205.50	2,373.13	2,308.17	64.96	36.534		
9,700.00	7,253.93	7,076.00	6,964.91	76.92	31.30	-38.61	1,266.59	-205.50	2,471.88	2,406.83	65.05	37.998		
9,800.00	7,253.55	7,076.00	6,964.91	79.48	31.30	-38.61	1,266.59	-205.50	2,570.73	2,505.58	65.14	39.463		
9,900.00	7,253.18	7,076.00	6,964.91	82.06	31.30	-38.61	1,266.59	-205.50	2,669.66	2,604.43	65.23	40.928		
10,000.00	7,252.80	7,076.00	6,964.91	84.65	31.30	-38.61	1,266.59	-205.50	2,768.67	2,703.36	65.31	42.393		
10,100.00	7,252.42	7,076.00	6,964.91	87.27	31.30	-38.61	1,266.59	-205.50	2,867.75	2,802.36	65.39	43.858		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,200.00	7,252.04	7,076.00	6,964.91	89.89	31.30	-38.61	1,266.59	-205.50	2,966.89	2,901.43	65.46	45.323		
10,300.00	7,251.66	7,076.00	6,964.91	92.54	31.30	-38.61	1,266.59	-205.50	3,066.08	3,000.55	65.53	46.787		
10,400.00	7,251.28	7,076.00	6,964.91	95.19	31.30	-38.61	1,266.59	-205.50	3,165.33	3,099.73	65.60	48.251		
10,500.00	7,250.90	7,076.00	6,964.91	97.86	31.30	-38.61	1,266.59	-205.50	3,264.62	3,198.95	65.67	49.713		
10,600.00	7,250.52	7,076.00	6,964.91	100.53	31.30	-38.61	1,266.59	-205.50	3,363.96	3,298.22	65.74	51.174		
10,700.00	7,250.14	7,076.00	6,964.91	103.22	31.30	-38.61	1,266.59	-205.50	3,463.33	3,397.53	65.80	52.633		
10,800.00	7,249.76	7,076.00	6,964.91	105.91	31.30	-38.61	1,266.59	-205.50	3,562.74	3,496.87	65.86	54.092		
10,900.00	7,249.38	7,076.00	6,964.91	108.62	31.30	-38.61	1,266.59	-205.50	3,662.18	3,596.25	65.93	55.548		
11,000.00	7,249.00	7,076.00	6,964.91	111.33	31.30	-38.61	1,266.59	-205.50	3,761.65	3,695.66	65.99	57.003		
11,100.00	7,248.62	7,067.36	6,959.05	114.04	31.29	-37.32	1,272.94	-205.62	3,861.12	3,795.12	66.00	58.500		
11,200.00	7,248.24	7,066.97	6,958.79	116.77	31.29	-37.26	1,273.22	-205.63	3,960.64	3,894.58	66.06	59.953		
11,300.00	7,247.86	7,066.59	6,958.53	119.50	31.29	-37.21	1,273.50	-205.63	4,060.18	3,994.06	66.12	61.405		
11,400.00	7,247.48	7,066.23	6,958.28	122.24	31.29	-37.15	1,273.77	-205.64	4,159.75	4,093.57	66.18	62.854		
11,500.00	7,247.10	7,065.87	6,958.03	124.98	31.29	-37.10	1,274.03	-205.64	4,259.33	4,193.09	66.24	64.301		
11,600.00	7,246.72	7,065.51	6,957.79	127.73	31.29	-37.04	1,274.29	-205.65	4,358.94	4,292.64	66.30	65.745		
11,700.00	7,246.34	7,065.17	6,957.55	130.48	31.29	-36.99	1,274.54	-205.65	4,458.56	4,392.20	66.36	67.187		
11,800.00	7,245.96	7,064.83	6,957.32	133.24	31.29	-36.94	1,274.79	-205.65	4,558.20	4,491.78	66.42	68.627		
11,900.00	7,245.58	7,064.50	6,957.10	136.00	31.29	-36.89	1,275.03	-205.66	4,657.86	4,591.38	66.48	70.064		
12,000.00	7,245.21	7,064.17	6,956.87	138.76	31.29	-36.84	1,275.27	-205.66	4,757.52	4,690.98	66.54	71.498		
12,100.00	7,244.83	7,063.85	6,956.65	141.53	31.29	-36.80	1,275.50	-205.67	4,857.21	4,790.61	66.60	72.929		
12,200.00	7,244.45	7,063.54	6,956.44	144.30	31.29	-36.75	1,275.73	-205.67	4,956.90	4,890.24	66.66	74.358		
12,300.00	7,244.07	7,063.23	6,956.23	147.08	31.29	-36.71	1,275.95	-205.67	5,056.61	4,989.89	66.72	75.784		
12,400.00	7,243.69	7,062.93	6,956.02	149.86	31.28	-36.66	1,276.17	-205.68	5,156.33	5,089.54	66.79	77.206		
12,500.00	7,243.31	7,062.64	6,955.82	152.64	31.28	-36.62	1,276.38	-205.68	5,256.06	5,189.21	66.85	78.626		
12,600.00	7,242.93	7,062.35	6,955.62	155.42	31.28	-36.57	1,276.59	-205.68	5,355.80	5,288.88	66.91	80.042		
12,700.00	7,242.55	7,062.06	6,955.43	158.21	31.28	-36.53	1,276.80	-205.69	5,455.54	5,388.57	66.98	81.456		
12,800.00	7,242.17	7,061.79	6,955.24	161.00	31.28	-36.49	1,277.00	-205.69	5,555.30	5,488.26	67.04	82.866		
12,900.00	7,241.79	7,061.51	6,955.05	163.79	31.28	-36.45	1,277.20	-205.69	5,655.07	5,587.96	67.10	84.273		
13,000.00	7,241.41	7,061.24	6,954.87	166.58	31.28	-36.41	1,277.40	-205.70	5,754.84	5,687.67	67.17	85.676		
13,100.00	7,241.03	7,060.98	6,954.68	169.38	31.28	-36.37	1,277.59	-205.70	5,854.62	5,787.39	67.24	87.077		
13,200.00	7,240.65	7,060.72	6,954.51	172.18	31.28	-36.33	1,277.78	-205.70	5,954.41	5,887.11	67.30	88.473		
13,300.00	7,240.27	7,060.47	6,954.33	174.98	31.28	-36.29	1,277.96	-205.71	6,054.21	5,986.84	67.37	89.867		
13,400.00	7,239.89	7,060.22	6,954.16	177.78	31.28	-36.26	1,278.14	-205.71	6,154.01	6,086.58	67.44	91.256		
13,500.00	7,239.51	7,059.97	6,953.99	180.58	31.28	-36.22	1,278.32	-205.71	6,253.82	6,186.32	67.50	92.643		
13,600.00	7,239.13	7,059.73	6,953.83	183.39	31.28	-36.19	1,278.49	-205.71	6,353.64	6,286.06	67.57	94.025		
13,700.00	7,238.75	7,059.50	6,953.66	186.20	31.28	-36.15	1,278.67	-205.72	6,453.46	6,385.81	67.64	95.404		
13,800.00	7,238.37	7,059.26	6,953.50	189.00	31.28	-36.12	1,278.83	-205.72	6,553.28	6,485.57	67.71	96.779		
13,900.00	7,237.99	7,059.03	6,953.34	191.81	31.28	-36.08	1,279.00	-205.72	6,653.11	6,585.33	67.78	98.151		
14,000.00	7,237.62	7,058.81	6,953.19	194.63	31.28	-36.05	1,279.16	-205.72	6,752.95	6,685.09	67.86	99.518		
14,100.00	7,237.24	7,058.59	6,953.04	197.44	31.28	-36.02	1,279.32	-205.73	6,852.79	6,784.86	67.93	100.882		
14,200.00	7,236.86	7,058.37	6,952.89	200.25	31.28	-35.98	1,279.48	-205.73	6,952.64	6,884.64	68.00	102.242		
14,300.00	7,236.48	7,058.15	6,952.74	203.07	31.28	-35.95	1,279.64	-205.73	7,052.49	6,984.41	68.08	103.598		
14,400.00	7,236.10	7,057.94	6,952.59	205.88	31.28	-35.92	1,279.79	-205.73	7,152.34	7,084.19	68.15	104.950		
14,500.00	7,235.72	7,057.74	6,952.45	208.70	31.28	-35.89	1,279.94	-205.73	7,252.20	7,183.97	68.23	106.298		
14,600.00	7,235.34	7,057.53	6,952.31	211.52	31.28	-35.86	1,280.09	-205.74	7,352.06	7,283.76	68.30	107.642		
14,700.00	7,234.96	7,057.33	6,952.17	214.34	31.28	-35.83	1,280.23	-205.74	7,451.93	7,383.55	68.38	108.982		
14,800.00	7,234.58	7,057.13	6,952.03	217.16	31.28	-35.80	1,280.37	-205.74	7,551.80	7,483.34	68.45	110.318		
14,900.00	7,234.20	7,056.94	6,951.90	219.98	31.28	-35.77	1,280.52	-205.74	7,651.67	7,583.14	68.53	111.650		
15,000.00	7,233.82	7,056.75	6,951.77	222.81	31.28	-35.74	1,280.65	-205.74	7,751.54	7,682.93	68.61	112.978		
15,100.00	7,233.44	7,056.56	6,951.64	225.63	31.28	-35.72	1,280.79	-205.75	7,851.42	7,782.73	68.69	114.301		
15,200.00	7,233.06	7,056.37	6,951.51	228.45	31.28	-35.69	1,280.92	-205.75	7,951.31	7,882.54	68.77	115.621		
15,216.01	7,233.00	7,056.34	6,951.49	228.91	31.28	-35.68	1,280.95	-205.75	7,967.30	7,898.52	68.78	115.832		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.00	2.00	3.28	3.28	12.18	1,272.16	274.51	1,301.44					
100.00	100.00	100.77	102.77	3.28	3.29	12.19	1,272.01	274.70	1,301.34	1,294.76	6.57	198.007		
200.00	200.00	207.00	209.00	3.34	3.33	12.21	1,271.47	275.20	1,300.94	1,294.27	6.67	195.055		
300.00	299.98	310.99	312.98	3.45	3.44	17.99	1,270.54	275.08	1,298.38	1,291.49	6.89	188.553		
400.00	399.84	413.38	415.36	3.61	3.60	18.07	1,269.60	274.10	1,292.31	1,285.10	7.21	179.342		
500.00	499.45	516.14	518.11	3.82	3.80	18.26	1,268.22	274.05	1,282.70	1,275.08	7.62	168.294		
600.00	598.70	608.87	610.83	4.07	4.03	18.53	1,267.05	274.28	1,269.96	1,261.87	8.09	156.963		
700.00	697.47	709.47	711.43	4.35	4.30	18.90	1,265.89	274.75	1,254.12	1,245.47	8.65	145.063		
800.00	795.62	810.83	812.78	4.67	4.60	19.37	1,264.37	275.38	1,234.75	1,225.49	9.26	133.363		
900.00	893.06	904.55	906.48	5.01	4.89	19.91	1,263.01	276.07	1,212.29	1,202.40	9.89	122.527		
1,000.00	989.64	996.59	998.50	5.38	5.20	20.56	1,261.81	277.17	1,186.96	1,176.40	10.56	112.380		
1,100.00	1,085.42	1,085.73	1,087.63	5.78	5.51	21.17	1,261.20	278.10	1,159.55	1,148.30	11.25	103.057		
1,200.00	1,181.09	1,180.40	1,182.30	6.20	5.84	21.74	1,260.88	278.79	1,132.17	1,120.20	11.98	94.538		
1,300.00	1,276.76	1,276.72	1,278.62	6.65	6.19	22.34	1,260.56	279.51	1,104.91	1,092.18	12.73	86.792		
1,400.00	1,372.43	1,372.49	1,374.39	7.11	6.55	22.96	1,260.15	280.07	1,077.64	1,064.13	13.50	79.798		
1,500.00	1,468.10	1,463.77	1,465.67	7.57	6.89	23.58	1,260.05	280.66	1,050.79	1,036.50	14.28	73.583		
1,600.00	1,563.77	1,559.33	1,561.23	8.05	7.26	24.26	1,260.07	281.33	1,024.21	1,009.13	15.08	67.910		
1,700.00	1,659.44	1,654.78	1,656.68	8.53	7.63	24.98	1,260.11	282.10	997.83	981.94	15.90	62.768		
1,800.00	1,755.11	1,753.17	1,755.06	9.02	8.01	25.76	1,260.07	282.73	971.48	954.75	16.73	58.057		
1,900.00	1,850.78	1,849.88	1,851.77	9.52	8.40	26.58	1,259.67	283.41	944.99	927.41	17.57	53.775		
2,000.00	1,946.45	1,940.01	1,941.90	10.02	8.74	27.31	1,259.94	283.14	918.99	900.59	18.39	49.964		
2,100.00	2,042.12	2,028.70	2,030.57	10.52	9.08	27.98	1,261.26	281.81	893.80	874.59	19.21	46.531		
2,200.00	2,137.78	2,114.15	2,115.95	11.03	9.40	28.58	1,263.80	279.78	869.76	849.74	20.03	43.429		
2,300.00	2,233.45	2,197.39	2,199.07	11.54	9.72	29.14	1,267.73	277.42	847.24	826.39	20.85	40.636		
2,400.00	2,329.12	2,286.84	2,288.31	12.05	10.07	29.72	1,273.19	274.87	826.06	804.36	21.69	38.076		
2,500.00	2,424.79	2,377.34	2,378.56	12.56	10.43	30.33	1,279.51	272.48	805.84	783.29	22.55	35.734		
2,600.00	2,520.46	2,472.22	2,473.10	13.08	10.81	30.96	1,286.94	269.66	786.36	762.93	23.43	33.568		
2,700.00	2,616.13	2,563.90	2,564.39	13.60	11.19	31.53	1,294.86	266.39	767.44	743.14	24.30	31.582		
2,800.00	2,711.80	2,656.52	2,656.52	14.12	11.57	32.10	1,303.70	263.08	749.41	724.23	25.18	29.758		
2,900.00	2,807.47	2,748.68	2,748.10	14.64	11.96	32.64	1,313.39	259.45	732.18	706.10	26.07	28.082		
3,000.00	2,903.14	2,847.16	2,845.82	15.16	12.38	33.17	1,324.65	254.95	715.53	688.54	26.99	26.514		
3,100.00	2,998.81	2,950.92	2,948.83	15.68	12.83	33.75	1,336.10	249.92	698.49	670.57	27.92	25.016		
3,200.00	3,094.48	3,052.07	3,049.28	16.21	13.27	34.34	1,346.71	244.65	680.86	652.01	28.85	23.597		
3,300.00	3,190.15	3,151.95	3,148.45	16.73	13.71	34.91	1,357.12	238.86	662.98	633.19	29.79	22.256		
3,400.00	3,285.82	3,252.73	3,248.59	17.26	14.15	35.57	1,367.08	233.34	644.84	614.11	30.73	20.985		
3,500.00	3,381.49	3,346.52	3,341.82	17.78	14.57	36.27	1,376.16	228.85	626.95	595.29	31.66	19.800		
3,600.00	3,477.16	3,442.65	3,437.37	18.31	15.00	37.04	1,385.87	224.46	609.63	577.02	32.61	18.695		
3,700.00	3,572.83	3,539.01	3,533.11	18.84	15.43	37.84	1,395.90	220.18	592.75	559.19	33.56	17.662		
3,800.00	3,668.50	3,638.89	3,632.34	19.37	15.88	38.72	1,406.30	215.74	576.00	541.48	34.52	16.685		
3,900.00	3,764.17	3,739.96	3,732.75	19.89	16.35	39.62	1,416.67	210.67	558.95	523.46	35.49	15.749		
4,000.00	3,859.84	3,838.52	3,830.68	20.42	16.80	40.55	1,426.53	205.50	541.71	505.25	36.46	14.857		
4,100.00	3,955.51	3,934.76	3,926.18	20.95	17.24	41.41	1,436.93	199.73	524.85	487.41	37.44	14.019		
4,200.00	4,051.18	4,032.06	4,022.63	21.48	17.70	42.24	1,448.04	193.39	508.29	469.87	38.42	13.229		
4,300.00	4,146.85	4,127.72	4,117.40	22.01	18.15	43.06	1,459.53	187.09	492.28	452.87	39.41	12.491		
4,400.00	4,242.52	4,225.45	4,214.26	22.55	18.62	44.04	1,471.19	181.46	476.82	436.41	40.41	11.800		
4,500.00	4,338.19	4,326.21	4,314.22	23.08	19.09	45.19	1,482.62	175.90	461.20	419.78	41.41	11.137		
4,600.00	4,433.86	4,423.60	4,410.91	23.61	19.55	46.46	1,493.10	170.83	445.51	403.09	42.42	10.502		
4,700.00	4,529.53	4,519.31	4,505.99	24.14	20.00	47.91	1,503.30	166.94	430.73	387.29	43.44	9.916		
4,800.00	4,625.19	4,617.60	4,603.66	24.67	20.46	49.53	1,513.72	163.21	416.40	371.94	44.46	9.366		
4,900.00	4,720.86	4,718.05	4,703.55	25.21	20.93	51.42	1,523.79	159.90	402.37	356.88	45.49	8.846		
5,000.00	4,816.53	4,819.68	4,804.78	25.74	21.40	53.67	1,532.26	156.73	387.77	341.25	46.52	8.336		
5,100.00	4,912.20	4,920.56	4,905.37	26.27	21.85	56.28	1,539.19	153.94	373.11	325.56	47.55	7.847		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	5,019.78	5,004.42	26.80	22.29	59.26	1,544.45	151.32	358.39	309.80	48.59	7.376		
5,300.00	5,103.54	5,116.04	5,100.60	27.34	22.70	62.73	1,547.79	149.90	344.64	295.00	49.64	6.943		
5,400.00	5,199.22	5,213.41	5,197.96	27.87	23.12	66.80	1,549.61	149.59	332.52	281.83	50.69	6.560		
5,500.00	5,295.46	5,312.11	5,296.66	28.39	23.53	70.78	1,550.78	148.98	322.36	270.65	51.70	6.235		
5,600.00	5,392.60	5,412.18	5,396.71	28.89	23.94	74.53	1,551.41	147.81	314.25	261.58	52.67	5.966		
5,700.00	5,490.50	5,513.21	5,497.72	29.37	24.36	77.94	1,551.59	145.78	307.45	253.85	53.59	5.737		
5,800.00	5,589.05	5,609.01	5,593.49	29.83	24.75	80.87	1,550.84	143.93	302.19	247.70	54.49	5.546		
5,900.00	5,688.14	5,705.89	5,690.35	30.26	25.13	83.63	1,548.75	143.38	299.28	243.96	55.33	5.409		
6,000.00	5,787.63	5,804.58	5,789.03	30.68	25.52	85.86	1,546.72	143.20	297.78	241.65	56.13	5.305		
6,100.00	5,887.41	5,904.37	5,888.80	31.07	25.92	87.37	1,545.23	142.97	296.94	240.02	56.92	5.217		
6,200.00	5,987.36	6,005.00	5,989.43	31.44	26.32	88.14	1,544.19	142.53	296.24	238.55	57.69	5.135		
6,300.00	6,087.36	6,105.22	6,089.64	31.80	26.73	82.59	1,543.35	141.90	295.50	237.05	58.45	5.056		
6,400.00	6,187.36	6,205.56	6,189.97	32.15	27.14	82.75	1,542.45	141.18	294.67	235.46	59.21	4.976		
6,500.00	6,287.36	6,306.16	6,290.56	32.51	27.55	82.89	1,541.60	140.31	293.70	233.72	59.98	4.897		
6,600.00	6,387.36	6,406.64	6,391.04	32.87	27.96	82.92	1,541.27	139.07	292.44	231.69	60.75	4.813		
6,700.00	6,487.36	6,511.56	6,495.90	33.23	28.39	83.27	1,539.28	137.48	290.73	229.20	61.53	4.725		
6,800.00	6,587.36	6,618.81	6,602.14	33.59	28.79	85.92	1,525.57	133.97	286.20	223.96	62.23	4.599		
6,844.40	6,631.74	6,661.96	6,644.28	33.75	28.94	178.20	1,516.40	132.44	285.03	222.48	62.55	4.557 CC		
6,900.00	6,687.26	6,715.18	6,695.55	33.95	29.12	-178.96	1,502.30	130.74	285.10	222.20	62.91	4.532 ES, SF		
7,000.00	6,785.58	6,803.99	6,778.92	34.31	29.40	-172.98	1,471.92	128.18	301.94	238.59	63.36	4.766		
7,100.00	6,879.94	6,880.12	6,847.50	34.65	29.63	-166.72	1,438.93	126.93	339.63	276.31	63.32	5.364		
7,200.00	6,968.01	6,942.38	6,901.02	34.97	29.80	-160.44	1,407.15	127.03	396.84	334.02	62.82	6.317		
7,300.00	7,047.61	7,000.56	6,948.59	35.27	29.97	-152.93	1,373.70	127.27	468.92	406.47	62.46	7.508		
7,400.00	7,116.80	7,040.86	6,979.92	35.54	30.09	-143.83	1,348.35	127.31	551.78	489.75	62.03	8.896		
7,500.00	7,173.86	7,071.65	7,002.99	35.81	30.19	-130.22	1,327.97	127.64	642.21	580.35	61.86	10.382		
7,600.00	7,217.38	7,094.35	7,019.57	36.17	30.26	-108.19	1,312.47	128.00	736.97	675.01	61.96	11.894		
7,700.00	7,246.31	7,109.00	7,030.07	36.80	30.31	-77.63	1,302.25	128.26	833.56	771.30	62.26	13.389		
7,800.00	7,259.92	7,114.22	7,033.77	37.72	30.33	-50.08	1,298.57	128.35	929.90	867.25	62.65	14.843		
7,900.00	7,260.77	7,113.72	7,033.41	38.86	30.33	-42.06	1,298.92	128.34	1,024.96	961.87	63.09	16.246		
8,000.00	7,260.39	7,112.65	7,032.66	40.19	30.33	-41.87	1,299.68	128.32	1,120.65	1,057.20	63.45	17.662		
8,100.00	7,260.01	7,109.00	7,030.07	41.67	30.31	-41.19	1,302.25	128.26	1,217.04	1,153.33	63.71	19.104		
8,200.00	7,259.63	7,109.00	7,030.07	43.30	30.31	-41.19	1,302.25	128.26	1,313.96	1,250.00	63.95	20.546		
8,300.00	7,259.25	7,109.00	7,030.07	45.05	30.31	-41.19	1,302.25	128.26	1,411.30	1,347.15	64.16	21.998		
8,400.00	7,258.87	7,109.00	7,030.07	46.91	30.31	-41.19	1,302.25	128.26	1,509.00	1,444.67	64.33	23.459		
8,500.00	7,258.49	7,109.00	7,030.07	48.87	30.31	-41.19	1,302.25	128.26	1,606.98	1,542.51	64.47	24.925		
8,600.00	7,258.11	7,109.00	7,030.07	50.92	30.31	-41.19	1,302.25	128.26	1,705.19	1,640.59	64.60	26.397		
8,700.00	7,257.73	7,105.35	7,027.47	53.04	30.30	-40.53	1,304.81	128.19	1,803.60	1,738.91	64.68	27.884		
8,800.00	7,257.35	7,104.33	7,026.74	55.23	30.30	-40.34	1,305.53	128.17	1,902.17	1,837.39	64.78	29.366		
8,900.00	7,256.97	7,103.32	7,026.02	57.47	30.29	-40.15	1,306.23	128.15	2,000.88	1,936.02	64.86	30.850		
9,000.00	7,256.59	7,102.33	7,025.31	59.77	30.29	-39.97	1,306.93	128.14	2,099.72	2,034.78	64.94	32.336		
9,100.00	7,256.21	7,101.34	7,024.60	62.12	30.29	-39.79	1,307.62	128.12	2,198.66	2,133.65	65.01	33.823		
9,200.00	7,255.83	7,100.36	7,023.90	64.50	30.28	-39.61	1,308.30	128.10	2,297.69	2,232.62	65.07	35.311		
9,300.00	7,255.45	7,099.40	7,023.21	66.93	30.28	-39.44	1,308.97	128.08	2,396.80	2,331.66	65.13	36.799		
9,400.00	7,255.07	7,098.44	7,022.52	69.38	30.28	-39.26	1,309.63	128.07	2,495.98	2,430.79	65.19	38.288		
9,500.00	7,254.69	7,097.50	7,021.84	71.87	30.27	-39.09	1,310.29	128.05	2,595.22	2,529.98	65.24	39.777		
9,600.00	7,254.31	7,096.56	7,021.17	74.38	30.27	-38.92	1,310.94	128.04	2,694.52	2,629.22	65.30	41.265		
9,700.00	7,253.93	7,095.64	7,020.50	76.92	30.27	-38.75	1,311.58	128.02	2,793.87	2,728.52	65.35	42.753		
9,800.00	7,253.55	7,094.73	7,019.84	79.48	30.27	-38.59	1,312.21	128.00	2,893.26	2,827.86	65.40	44.241		
9,900.00	7,253.18	7,093.82	7,019.19	82.06	30.26	-38.42	1,312.84	127.99	2,992.69	2,927.24	65.45	45.727		
10,000.00	7,252.80	7,092.93	7,018.55	84.65	30.26	-38.26	1,313.45	127.97	3,092.16	3,026.67	65.49	47.212		
10,100.00	7,252.42	7,092.04	7,017.91	87.27	30.26	-38.10	1,314.06	127.96	3,191.66	3,126.12	65.54	48.697		
10,200.00	7,252.04	7,091.17	7,017.27	89.89	30.25	-37.94	1,314.67	127.94	3,291.19	3,225.60	65.59	50.180		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
10,300.00	7,251.66	7,090.30	7,016.64	92.54	30.25	-37.79	1,315.26	127.93	3,390.75	3,325.12	65.63	51.661	
10,400.00	7,251.28	7,089.44	7,016.02	95.19	30.25	-37.63	1,315.85	127.91	3,490.34	3,424.65	65.68	53.141	
10,500.00	7,250.90	7,088.60	7,015.41	97.86	30.24	-37.48	1,316.44	127.90	3,589.94	3,524.21	65.73	54.619	
10,600.00	7,250.52	7,087.76	7,014.80	100.53	30.24	-37.33	1,317.01	127.89	3,689.57	3,623.80	65.77	56.096	
10,700.00	7,250.14	7,086.93	7,014.19	103.22	30.24	-37.18	1,317.58	127.87	3,789.22	3,723.40	65.82	57.570	
10,800.00	7,249.76	7,086.10	7,013.59	105.91	30.24	-37.03	1,318.15	127.86	3,888.88	3,823.01	65.87	59.043	
10,900.00	7,249.38	7,085.29	7,013.00	108.62	30.23	-36.89	1,318.71	127.85	3,988.56	3,922.65	65.91	60.513	
11,000.00	7,249.00	7,084.48	7,012.41	111.33	30.23	-36.74	1,319.26	127.83	4,088.26	4,022.30	65.96	61.981	
11,100.00	7,248.62	7,083.69	7,011.83	114.04	30.23	-36.60	1,319.80	127.82	4,187.97	4,121.96	66.01	63.448	
11,200.00	7,248.24	7,082.90	7,011.25	116.77	30.23	-36.46	1,320.34	127.81	4,287.69	4,221.64	66.05	64.911	
11,300.00	7,247.86	7,082.12	7,010.68	119.50	30.22	-36.32	1,320.87	127.80	4,387.43	4,321.32	66.10	66.373	
11,400.00	7,247.48	7,077.00	7,006.93	122.24	30.21	-35.41	1,324.35	127.72	4,487.18	4,421.05	66.13	67.851	
11,500.00	7,247.10	7,077.00	7,006.93	124.98	30.21	-35.41	1,324.35	127.72	4,586.94	4,520.75	66.19	69.304	
11,600.00	7,246.72	7,077.00	7,006.93	127.73	30.21	-35.41	1,324.35	127.72	4,686.70	4,620.46	66.24	70.754	
11,700.00	7,246.34	7,077.00	7,006.93	130.48	30.21	-35.41	1,324.35	127.72	4,786.48	4,720.19	66.29	72.202	
11,800.00	7,245.96	7,077.00	7,006.93	133.24	30.21	-35.41	1,324.35	127.72	4,886.27	4,819.92	66.35	73.646	
11,900.00	7,245.58	7,077.00	7,006.93	136.00	30.21	-35.41	1,324.35	127.72	4,986.06	4,919.66	66.40	75.088	
12,000.00	7,245.21	7,077.00	7,006.93	138.76	30.21	-35.41	1,324.35	127.72	5,085.86	5,019.41	66.46	76.527	
12,100.00	7,244.83	7,077.00	7,006.93	141.53	30.21	-35.41	1,324.35	127.72	5,185.68	5,119.16	66.51	77.963	
12,200.00	7,244.45	7,077.00	7,006.93	144.30	30.21	-35.41	1,324.35	127.72	5,285.49	5,218.92	66.57	79.395	
12,300.00	7,244.07	7,077.00	7,006.93	147.08	30.21	-35.41	1,324.35	127.72	5,385.32	5,318.69	66.63	80.825	
12,400.00	7,243.69	7,077.00	7,006.93	149.86	30.21	-35.41	1,324.35	127.72	5,485.15	5,418.46	66.69	82.251	
12,500.00	7,243.31	7,077.00	7,006.93	152.64	30.21	-35.41	1,324.35	127.72	5,584.99	5,518.24	66.75	83.674	
12,600.00	7,242.93	7,077.00	7,006.93	155.42	30.21	-35.41	1,324.35	127.72	5,684.83	5,618.02	66.81	85.094	
12,700.00	7,242.55	7,077.00	7,006.93	158.21	30.21	-35.41	1,324.35	127.72	5,784.68	5,717.81	66.87	86.511	
12,800.00	7,242.17	7,077.00	7,006.93	161.00	30.21	-35.41	1,324.35	127.72	5,884.53	5,817.60	66.93	87.924	
12,900.00	7,241.79	7,077.00	7,006.93	163.79	30.21	-35.41	1,324.35	127.72	5,984.39	5,917.40	66.99	89.333	
13,000.00	7,241.41	7,077.00	7,006.93	166.58	30.21	-35.41	1,324.35	127.72	6,084.25	6,017.20	67.05	90.739	
13,100.00	7,241.03	7,077.00	7,006.93	169.38	30.21	-35.41	1,324.35	127.72	6,184.12	6,117.00	67.12	92.142	
13,200.00	7,240.65	7,077.00	7,006.93	172.18	30.21	-35.41	1,324.35	127.72	6,283.99	6,216.81	67.18	93.540	
13,300.00	7,240.27	7,077.00	7,006.93	174.98	30.21	-35.41	1,324.35	127.72	6,383.86	6,316.62	67.24	94.936	
13,400.00	7,239.89	7,077.00	7,006.93	177.78	30.21	-35.41	1,324.35	127.72	6,483.74	6,416.43	67.31	96.327	
13,500.00	7,239.51	7,077.00	7,006.93	180.58	30.21	-35.41	1,324.35	127.72	6,583.63	6,516.25	67.38	97.715	
13,600.00	7,239.13	7,077.00	7,006.93	183.39	30.21	-35.41	1,324.35	127.72	6,683.51	6,616.07	67.44	99.099	
13,700.00	7,238.75	7,077.00	7,006.93	186.20	30.21	-35.41	1,324.35	127.72	6,783.40	6,715.89	67.51	100.479	
13,800.00	7,238.37	7,077.00	7,006.93	189.00	30.21	-35.41	1,324.35	127.72	6,883.30	6,815.72	67.58	101.855	
13,900.00	7,237.99	7,077.00	7,006.93	191.81	30.21	-35.41	1,324.35	127.72	6,983.19	6,915.54	67.65	103.228	
14,000.00	7,237.62	7,077.00	7,006.93	194.63	30.21	-35.41	1,324.35	127.72	7,083.09	7,015.37	67.72	104.596	
14,100.00	7,237.24	7,077.00	7,006.93	197.44	30.21	-35.41	1,324.35	127.72	7,182.99	7,115.20	67.79	105.961	
14,200.00	7,236.86	7,067.27	6,999.75	200.25	30.18	-33.69	1,330.91	127.58	7,282.88	7,215.05	67.82	107.379	
14,300.00	7,236.48	7,066.91	6,999.48	203.07	30.17	-33.63	1,331.15	127.57	7,382.78	7,314.89	67.90	108.738	
14,400.00	7,236.10	7,066.56	6,999.22	205.88	30.17	-33.57	1,331.39	127.57	7,482.69	7,414.73	67.97	110.093	
14,500.00	7,235.72	7,066.20	6,998.96	208.70	30.17	-33.51	1,331.63	127.56	7,582.60	7,514.56	68.04	111.444	
14,600.00	7,235.34	7,065.86	6,998.70	211.52	30.17	-33.45	1,331.86	127.56	7,682.52	7,614.40	68.11	112.791	
14,700.00	7,234.96	7,065.52	6,998.45	214.34	30.17	-33.39	1,332.09	127.55	7,782.43	7,714.24	68.19	114.134	
14,800.00	7,234.58	7,065.18	6,998.20	217.16	30.17	-33.33	1,332.31	127.55	7,882.35	7,814.09	68.26	115.472	
14,900.00	7,234.20	7,064.85	6,997.95	219.98	30.17	-33.27	1,332.53	127.55	7,982.27	7,913.93	68.34	116.806	
15,000.00	7,233.82	7,064.52	6,997.71	222.81	30.17	-33.21	1,332.75	127.54	8,082.19	8,013.77	68.41	118.137	
15,100.00	7,233.44	7,064.20	6,997.47	225.63	30.17	-33.16	1,332.97	127.54	8,182.11	8,113.62	68.49	119.462	
15,200.00	7,233.06	7,063.88	6,997.24	228.45	30.16	-33.10	1,333.18	127.53	8,282.04	8,213.47	68.57	120.784	
15,216.01	7,233.00	7,063.83	6,997.20	228.91	30.16	-33.10	1,333.21	127.53	8,298.04	8,229.46	68.58	120.995	

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2.00	3.28	3.28	13.40	1,267.79	302.04	1,303.27					
100.00	100.00	79.85	81.85	3.28	3.29	13.42	1,268.21	302.68	1,303.95	1,297.38	6.57	198.462		
200.00	200.00	166.28	168.24	3.34	3.31	13.50	1,269.57	304.76	1,306.02	1,299.38	6.65	196.505		
300.00	299.98	281.05	282.95	3.45	3.41	19.39	1,271.11	308.23	1,306.41	1,299.56	6.85	190.648		
400.00	399.84	375.59	377.44	3.61	3.54	19.60	1,271.40	311.03	1,302.50	1,295.35	7.15	182.212		
500.00	499.45	474.20	476.02	3.82	3.72	19.79	1,273.59	311.89	1,296.65	1,289.11	7.54	172.022		
600.00	598.70	591.27	593.08	4.07	3.99	20.06	1,274.71	311.83	1,286.06	1,278.01	8.05	159.742		
700.00	697.47	681.49	683.30	4.35	4.22	20.39	1,275.26	312.17	1,272.04	1,263.47	8.57	148.417		
800.00	795.62	773.06	774.86	4.67	4.49	20.81	1,276.41	312.89	1,255.53	1,246.38	9.15	137.231		
900.00	893.06	879.35	881.14	5.01	4.82	21.38	1,277.73	313.70	1,235.86	1,226.04	9.82	125.851		
1,000.00	989.64	975.17	976.96	5.38	5.13	22.01	1,278.62	314.25	1,212.72	1,202.22	10.50	115.496		
1,100.00	1,085.42	1,061.11	1,062.88	5.78	5.43	22.57	1,279.82	314.72	1,187.41	1,176.22	11.18	106.189		
1,200.00	1,181.09	1,157.51	1,159.27	6.20	5.77	23.12	1,281.59	315.21	1,162.26	1,150.34	11.92	97.533		
1,300.00	1,276.76	1,262.46	1,264.20	6.65	6.15	23.70	1,283.30	314.96	1,136.81	1,124.12	12.70	89.516		
1,400.00	1,372.43	1,355.52	1,357.24	7.11	6.49	24.23	1,284.80	314.26	1,111.30	1,097.84	13.46	82.546		
1,500.00	1,468.10	1,451.50	1,453.21	7.57	6.85	24.78	1,286.34	313.45	1,085.85	1,071.60	14.25	76.182		
1,600.00	1,563.77	1,529.79	1,531.48	8.05	7.15	25.32	1,287.95	314.07	1,061.43	1,046.42	15.01	70.717		
1,700.00	1,659.44	1,607.42	1,609.03	8.53	7.46	25.95	1,290.33	316.53	1,038.82	1,023.04	15.78	65.832		
1,800.00	1,755.11	1,690.31	1,691.73	9.02	7.79	26.73	1,293.70	320.88	1,018.01	1,001.43	16.58	61.401		
1,900.00	1,850.78	1,772.17	1,773.29	9.52	8.12	27.60	1,297.45	326.87	998.68	981.30	17.39	57.436		
2,000.00	1,946.45	1,852.31	1,852.99	10.02	8.46	28.53	1,302.09	333.89	981.29	963.09	18.20	53.920		
2,100.00	2,042.12	1,936.00	1,936.10	10.52	8.81	29.50	1,308.26	341.49	965.81	946.78	19.03	50.750		
2,200.00	2,137.78	2,028.86	2,028.23	11.03	9.22	30.62	1,315.78	350.28	951.54	931.63	19.91	47.804		
2,300.00	2,233.45	2,126.09	2,124.75	11.54	9.64	31.74	1,324.38	358.30	937.81	917.00	20.80	45.081		
2,400.00	2,329.12	2,220.84	2,218.78	12.05	10.07	32.87	1,332.84	366.32	924.62	902.93	21.70	42.614		
2,500.00	2,424.79	2,320.71	2,317.82	12.56	10.52	34.17	1,341.25	376.01	911.98	889.36	22.62	40.315		
2,600.00	2,520.46	2,427.96	2,424.30	13.08	11.01	35.65	1,349.05	386.26	898.74	875.16	23.58	38.115		
2,700.00	2,616.13	2,522.13	2,517.83	13.60	11.44	36.95	1,355.87	394.75	885.75	861.26	24.49	36.164		
2,800.00	2,711.80	2,612.10	2,607.14	14.12	11.85	38.22	1,362.87	403.07	873.83	848.44	25.39	34.413		
2,900.00	2,807.47	2,703.10	2,697.37	14.64	12.28	39.54	1,370.65	411.94	863.33	837.03	26.30	32.826		
3,000.00	2,903.14	2,804.86	2,798.24	15.16	12.76	41.09	1,378.92	422.52	853.42	826.16	27.26	31.307		
3,100.00	2,998.81	2,909.76	2,902.26	15.68	13.25	42.86	1,385.54	434.39	843.26	815.03	28.24	29.863		
3,200.00	3,094.48	3,015.74	3,007.48	16.21	13.75	44.65	1,391.90	445.26	832.96	803.74	29.22	28.506		
3,300.00	3,190.15	3,111.23	3,102.45	16.73	14.20	46.20	1,397.83	453.39	822.42	792.26	30.16	27.265		
3,400.00	3,285.82	3,199.19	3,189.81	17.26	14.61	47.70	1,403.64	461.80	813.52	782.44	31.08	26.175		
3,500.00	3,381.49	3,303.65	3,293.51	17.78	15.11	49.49	1,410.99	471.99	805.81	773.74	32.07	25.127		
3,600.00	3,477.16	3,405.13	3,394.44	18.31	15.59	51.23	1,417.41	480.36	797.24	764.19	33.05	24.125		
3,700.00	3,572.83	3,498.10	3,486.87	18.84	16.03	52.87	1,423.36	488.33	789.69	755.70	33.99	23.232		
3,800.00	3,668.50	3,593.16	3,581.34	19.37	16.48	54.58	1,429.60	496.85	783.28	748.33	34.95	22.412		
3,900.00	3,764.17	3,688.72	3,674.31	19.89	16.92	56.26	1,436.12	505.14	777.83	741.92	35.90	21.665		
4,000.00	3,859.84	3,780.80	3,767.73	20.42	17.38	58.03	1,442.30	514.39	773.65	736.79	36.86	20.989		
4,100.00	3,955.51	3,866.42	3,852.69	20.95	17.79	59.69	1,447.87	523.42	770.88	733.11	37.77	20.410		
4,147.01	4,000.48	3,903.85	3,889.75	21.20	17.98	60.42	1,450.58	527.85	770.55	732.37	38.18	20.184		
4,200.00	4,051.18	3,951.56	3,936.95	21.48	18.22	61.35	1,454.25	533.81	770.82	732.15	38.67	19.934		
4,300.00	4,146.85	4,046.60	4,030.91	22.01	18.70	63.18	1,461.90	545.86	772.35	732.72	39.63	19.489		
4,400.00	4,242.52	4,151.80	4,134.95	22.55	19.23	65.11	1,471.37	558.18	774.41	733.74	40.67	19.042		
4,500.00	4,338.19	4,269.74	4,251.89	23.08	19.81	67.18	1,481.75	569.46	775.31	733.52	41.78	18.555		
4,600.00	4,433.86	4,374.73	4,356.23	23.61	20.31	68.99	1,490.41	577.31	774.82	732.01	42.81	18.098		
4,700.00	4,529.53	4,474.00	4,454.91	24.14	20.79	70.67	1,498.85	584.10	774.59	730.77	43.81	17.679		
4,700.94	4,530.42	4,474.93	4,455.83	24.15	20.79	70.68	1,498.92	584.16	774.59	730.76	43.82	17.675		
4,800.00	4,625.19	4,564.41	4,544.75	24.67	21.22	72.19	1,506.58	590.54	775.31	730.55	44.77	17.319		
4,900.00	4,720.86	4,669.12	4,648.79	25.21	21.72	73.96	1,515.63	598.14	776.86	731.06	45.80	16.961		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,000.00	4,816.53	4,762.18	4,741.31	25.74	22.17	75.55	1,523.22	604.71	778.73	731.96	46.77	16.648		
5,100.00	4,912.20	4,872.87	4,851.44	26.27	22.69	77.47	1,531.44	612.21	780.81	732.96	47.85	16.318		
5,200.00	5,007.87	4,968.26	4,946.44	26.80	23.14	79.18	1,537.55	618.32	782.98	734.15	48.83	16.033		
5,300.00	5,103.54	5,080.93	5,058.79	27.34	23.65	81.37	1,542.02	625.38	785.25	735.35	49.91	15.735		
5,400.00	5,199.22	5,201.48	5,179.23	27.87	24.17	83.71	1,545.73	629.00	785.00	734.02	50.98	15.397		
5,500.00	5,295.46	5,325.92	5,303.62	28.39	24.68	85.98	1,548.13	630.03	783.79	731.79	51.99	15.075		
5,600.00	5,392.60	5,423.89	5,401.58	28.89	25.04	87.69	1,547.08	628.90	781.11	728.20	52.91	14.764		
5,700.00	5,490.50	5,519.40	5,497.08	29.37	25.39	89.14	1,546.24	628.06	779.51	725.73	53.79	14.492		
5,800.00	5,589.05	5,619.02	5,596.70	29.83	25.76	90.41	1,545.47	627.24	778.54	723.89	54.65	14.246		
5,900.00	5,688.14	5,721.52	5,699.19	30.26	26.13	91.47	1,544.48	626.09	777.55	722.06	55.49	14.013		
6,000.00	5,787.63	5,824.49	5,802.14	30.68	26.52	92.26	1,543.63	624.43	776.20	719.90	56.31	13.786		
6,100.00	5,887.41	5,924.62	5,902.25	31.07	26.89	92.76	1,542.80	622.59	774.60	717.50	57.09	13.567		
6,200.00	5,987.36	6,025.92	6,003.53	31.44	27.28	93.00	1,541.99	620.62	772.77	714.91	57.86	13.356		
6,300.00	6,087.36	6,125.44	6,103.01	31.80	27.65	93.32	1,541.29	618.43	770.56	711.95	58.61	13.148		
6,400.00	6,187.36	6,219.93	6,197.49	32.15	28.01	93.78	1,540.38	617.06	769.05	709.70	59.35	12.958		
6,500.00	6,287.36	6,324.60	6,302.14	32.51	28.41	94.22	1,539.79	615.38	767.43	707.31	60.11	12.767		
6,600.00	6,387.36	6,448.72	6,425.88	32.87	28.86	94.77	1,532.22	611.67	764.23	703.38	60.85	12.559		
6,700.00	6,487.36	6,528.42	6,504.57	33.23	29.13	95.22	1,519.95	608.99	760.45	698.86	61.59	12.347		
6,797.68	6,585.04	6,611.10	6,585.05	33.58	29.39	95.67	1,501.10	608.46	759.59	697.33	62.26	12.200 CC		
6,800.00	6,587.36	6,613.09	6,586.97	33.59	29.40	95.65	1,500.57	608.46	759.59	697.32	62.28	12.197 ES		
6,900.00	6,687.26	6,697.80	6,667.57	33.95	29.65	-177.23	1,474.58	608.85	763.95	701.05	62.90	12.145 SF		
7,000.00	6,785.58	6,776.65	6,739.68	34.31	29.86	-174.75	1,442.85	609.97	785.65	722.25	63.40	12.391		
7,100.00	6,879.94	6,866.26	6,816.02	34.65	30.06	-170.91	1,396.07	610.21	824.59	760.72	63.87	12.911		
7,200.00	6,968.01	6,916.10	6,855.38	34.97	30.16	-167.62	1,365.52	609.67	879.86	815.95	63.91	13.768		
7,300.00	7,047.61	6,954.00	6,883.66	35.27	30.22	-163.55	1,340.29	609.81	950.65	886.89	63.76	14.911		
7,400.00	7,116.80	6,992.41	6,911.28	35.54	30.28	-157.22	1,313.61	610.32	1,033.15	969.50	63.65	16.231		
7,500.00	7,173.86	7,031.40	6,938.40	35.81	30.34	-146.41	1,285.60	610.51	1,123.38	1,059.70	63.68	17.641		
7,600.00	7,217.38	7,049.00	6,950.26	36.17	30.36	-126.24	1,272.59	610.53	1,218.66	1,155.03	63.63	19.153		
7,700.00	7,246.31	7,059.53	6,957.23	36.80	30.38	-86.93	1,264.69	610.57	1,316.45	1,252.79	63.66	20.678		
7,800.00	7,259.92	7,062.81	6,959.37	37.72	30.38	-48.40	1,262.21	610.60	1,414.34	1,350.56	63.77	22.177		
7,900.00	7,260.77	7,062.81	6,959.37	38.86	30.38	-39.05	1,262.21	610.60	1,510.85	1,446.90	63.96	23.623		
8,000.00	7,260.39	7,062.52	6,959.18	40.19	30.38	-39.01	1,262.43	610.60	1,607.58	1,543.46	64.12	25.071		
8,100.00	7,260.01	7,062.26	6,959.01	41.67	30.38	-38.97	1,262.63	610.60	1,704.69	1,640.43	64.26	26.528		
8,200.00	7,259.63	7,062.00	6,958.84	43.30	30.38	-38.93	1,262.83	610.60	1,802.11	1,737.73	64.38	27.991		
8,300.00	7,259.25	7,061.76	6,958.69	45.05	30.38	-38.90	1,263.01	610.59	1,899.81	1,835.32	64.49	29.459		
8,400.00	7,258.87	7,061.53	6,958.54	46.91	30.38	-38.86	1,263.18	610.59	1,997.73	1,933.14	64.59	30.932		
8,500.00	7,258.49	7,061.32	6,958.40	48.87	30.38	-38.83	1,263.34	610.59	2,095.84	2,031.17	64.67	32.408		
8,600.00	7,258.11	7,061.11	6,958.26	50.92	30.38	-38.80	1,263.50	610.59	2,194.13	2,129.38	64.75	33.887		
8,700.00	7,257.73	7,060.92	6,958.13	53.04	30.38	-38.77	1,263.65	610.58	2,292.56	2,227.74	64.82	35.368		
8,800.00	7,257.35	7,060.73	6,958.01	55.23	30.38	-38.75	1,263.79	610.58	2,391.13	2,326.24	64.89	36.851		
8,900.00	7,256.97	7,060.55	6,957.90	57.47	30.38	-38.72	1,263.92	610.58	2,489.81	2,424.86	64.95	38.336		
9,000.00	7,256.59	7,060.38	6,957.78	59.77	30.38	-38.70	1,264.05	610.58	2,588.59	2,523.58	65.01	39.821		
9,100.00	7,256.21	7,060.22	6,957.68	62.12	30.38	-38.67	1,264.17	610.58	2,687.46	2,622.40	65.06	41.307		
9,200.00	7,255.83	7,060.07	6,957.58	64.50	30.38	-38.65	1,264.29	610.58	2,786.41	2,721.30	65.11	42.793		
9,300.00	7,255.45	7,059.92	6,957.48	66.93	30.38	-38.63	1,264.40	610.57	2,885.43	2,820.27	65.16	44.279		
9,400.00	7,255.07	7,049.00	6,950.26	69.38	30.36	-37.05	1,272.59	610.53	2,984.60	2,919.44	65.16	45.803		
9,500.00	7,254.69	7,049.00	6,950.26	71.87	30.36	-37.05	1,272.59	610.53	3,083.74	3,018.53	65.21	47.289		
9,600.00	7,254.31	7,049.00	6,950.26	74.38	30.36	-37.05	1,272.59	610.53	3,182.94	3,117.68	65.26	48.775		
9,700.00	7,253.93	7,049.00	6,950.26	76.92	30.36	-37.05	1,272.59	610.53	3,282.19	3,216.88	65.31	50.259		
9,800.00	7,253.55	7,049.00	6,950.26	79.48	30.36	-37.05	1,272.59	610.53	3,381.48	3,316.13	65.35	51.743		
9,900.00	7,253.18	7,049.00	6,950.26	82.06	30.36	-37.05	1,272.59	610.53	3,480.81	3,415.41	65.40	53.225		
10,000.00	7,252.80	7,049.00	6,950.26	84.65	30.36	-37.05	1,272.59	610.53	3,580.18	3,514.74	65.44	54.706		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,100.00	7,252.42	7,049.00	6,950.26	87.27	30.36	-37.05	1,272.59	610.53	3,679.58	3,614.09	65.49	56.186		
10,200.00	7,252.04	7,049.00	6,950.26	89.89	30.36	-37.05	1,272.59	610.53	3,779.02	3,713.48	65.53	57.664		
10,300.00	7,251.66	7,049.00	6,950.26	92.54	30.36	-37.05	1,272.59	610.53	3,878.48	3,812.90	65.58	59.141		
10,400.00	7,251.28	7,049.00	6,950.26	95.19	30.36	-37.05	1,272.59	610.53	3,977.97	3,912.34	65.63	60.616		
10,500.00	7,250.90	7,049.00	6,950.26	97.86	30.36	-37.05	1,272.59	610.53	4,077.49	4,011.81	65.67	62.089		
10,600.00	7,250.52	7,049.00	6,950.26	100.53	30.36	-37.05	1,272.59	610.53	4,177.02	4,111.31	65.72	63.560		
10,700.00	7,250.14	7,049.00	6,950.26	103.22	30.36	-37.05	1,272.59	610.53	4,276.58	4,210.82	65.76	65.029		
10,800.00	7,249.76	7,049.00	6,950.26	105.91	30.36	-37.05	1,272.59	610.53	4,376.16	4,310.35	65.81	66.496		
10,900.00	7,249.38	7,049.00	6,950.26	108.62	30.36	-37.05	1,272.59	610.53	4,475.76	4,409.91	65.86	67.961		
11,000.00	7,249.00	7,049.00	6,950.26	111.33	30.36	-37.05	1,272.59	610.53	4,575.38	4,509.47	65.91	69.423		
11,100.00	7,248.62	7,049.00	6,950.26	114.04	30.36	-37.05	1,272.59	610.53	4,675.01	4,609.06	65.95	70.883		
11,200.00	7,248.24	7,049.00	6,950.26	116.77	30.36	-37.05	1,272.59	610.53	4,774.66	4,708.66	66.00	72.341		
11,300.00	7,247.86	7,049.00	6,950.26	119.50	30.36	-37.05	1,272.59	610.53	4,874.32	4,808.27	66.05	73.795		
11,400.00	7,247.48	7,049.00	6,950.26	122.24	30.36	-37.05	1,272.59	610.53	4,974.00	4,907.90	66.10	75.248		
11,500.00	7,247.10	7,049.00	6,950.26	124.98	30.36	-37.05	1,272.59	610.53	5,073.69	5,007.54	66.15	76.697		
11,600.00	7,246.72	7,049.00	6,950.26	127.73	30.36	-37.05	1,272.59	610.53	5,173.39	5,107.19	66.20	78.144		
11,700.00	7,246.34	7,049.00	6,950.26	130.48	30.36	-37.05	1,272.59	610.53	5,273.10	5,206.85	66.26	79.588		
11,800.00	7,245.96	7,049.00	6,950.26	133.24	30.36	-37.05	1,272.59	610.53	5,372.82	5,306.52	66.31	81.029		
11,900.00	7,245.58	7,049.00	6,950.26	136.00	30.36	-37.05	1,272.59	610.53	5,472.56	5,406.20	66.36	82.467		
12,000.00	7,245.21	7,049.00	6,950.26	138.76	30.36	-37.05	1,272.59	610.53	5,572.30	5,505.89	66.41	83.902		
12,100.00	7,244.83	7,049.00	6,950.26	141.53	30.36	-37.05	1,272.59	610.53	5,672.05	5,605.58	66.47	85.333		
12,200.00	7,244.45	7,049.00	6,950.26	144.30	30.36	-37.05	1,272.59	610.53	5,771.81	5,705.29	66.52	86.762		
12,300.00	7,244.07	7,049.00	6,950.26	147.08	30.36	-37.05	1,272.59	610.53	5,871.58	5,805.00	66.58	88.187		
12,400.00	7,243.69	7,049.00	6,950.26	149.86	30.36	-37.05	1,272.59	610.53	5,971.36	5,904.72	66.64	89.609		
12,500.00	7,243.31	7,049.00	6,950.26	152.64	30.36	-37.05	1,272.59	610.53	6,071.14	6,004.44	66.70	91.028		
12,600.00	7,242.93	7,049.00	6,950.26	155.42	30.36	-37.05	1,272.59	610.53	6,170.93	6,104.18	66.75	92.444		
12,700.00	7,242.55	7,049.00	6,950.26	158.21	30.36	-37.05	1,272.59	610.53	6,270.73	6,203.91	66.81	93.855		
12,800.00	7,242.17	7,049.00	6,950.26	161.00	30.36	-37.05	1,272.59	610.53	6,370.53	6,303.66	66.87	95.264		
12,900.00	7,241.79	7,049.00	6,950.26	163.79	30.36	-37.05	1,272.59	610.53	6,470.34	6,403.41	66.93	96.669		
13,000.00	7,241.41	7,049.00	6,950.26	166.58	30.36	-37.05	1,272.59	610.53	6,570.16	6,503.16	66.99	98.070		
13,100.00	7,241.03	7,049.00	6,950.26	169.38	30.36	-37.05	1,272.59	610.53	6,669.98	6,602.92	67.06	99.468		
13,200.00	7,240.65	7,049.00	6,950.26	172.18	30.36	-37.05	1,272.59	610.53	6,769.80	6,702.68	67.12	100.862		
13,300.00	7,240.27	7,049.00	6,950.26	174.98	30.36	-37.05	1,272.59	610.53	6,869.63	6,802.45	67.18	102.252		
13,400.00	7,239.89	7,049.00	6,950.26	177.78	30.36	-37.05	1,272.59	610.53	6,969.47	6,902.22	67.25	103.638		
13,500.00	7,239.51	7,049.00	6,950.26	180.58	30.36	-37.05	1,272.59	610.53	7,069.31	7,002.00	67.31	105.021		
13,600.00	7,239.13	7,049.00	6,950.26	183.39	30.36	-37.05	1,272.59	610.53	7,169.16	7,101.78	67.38	106.400		
13,700.00	7,238.75	7,049.00	6,950.26	186.20	30.36	-37.05	1,272.59	610.53	7,269.01	7,201.56	67.45	107.775		
13,800.00	7,238.37	7,049.00	6,950.26	189.00	30.36	-37.05	1,272.59	610.53	7,368.86	7,301.35	67.51	109.146		
13,900.00	7,237.99	7,049.00	6,950.26	191.81	30.36	-37.05	1,272.59	610.53	7,468.72	7,401.13	67.58	110.513		
14,000.00	7,237.62	7,049.00	6,950.26	194.63	30.36	-37.05	1,272.59	610.53	7,568.58	7,500.93	67.65	111.876		
14,100.00	7,237.24	7,049.00	6,950.26	197.44	30.36	-37.05	1,272.59	610.53	7,668.44	7,600.72	67.72	113.235		
14,200.00	7,236.86	7,049.00	6,950.26	200.25	30.36	-37.05	1,272.59	610.53	7,768.31	7,700.52	67.79	114.589		
14,300.00	7,236.48	7,049.00	6,950.26	203.07	30.36	-37.05	1,272.59	610.53	7,868.18	7,800.32	67.86	115.940		
14,400.00	7,236.10	7,049.00	6,950.26	205.88	30.36	-37.05	1,272.59	610.53	7,968.06	7,900.12	67.94	117.287		
14,500.00	7,235.72	7,049.00	6,950.26	208.70	30.36	-37.05	1,272.59	610.53	8,067.94	7,999.93	68.01	118.629		
14,600.00	7,235.34	7,049.00	6,950.26	211.52	30.36	-37.05	1,272.59	610.53	8,167.82	8,099.73	68.08	119.968		
14,700.00	7,234.96	7,049.00	6,950.26	214.34	30.36	-37.05	1,272.59	610.53	8,267.70	8,199.54	68.16	121.302		
14,800.00	7,234.58	7,049.00	6,950.26	217.16	30.36	-37.05	1,272.59	610.53	8,367.59	8,299.35	68.23	122.631		
14,900.00	7,234.20	7,049.00	6,950.26	219.98	30.36	-37.05	1,272.59	610.53	8,467.48	8,399.17	68.31	123.957		
15,000.00	7,233.82	7,049.00	6,950.26	222.81	30.36	-37.05	1,272.59	610.53	8,567.37	8,498.98	68.39	125.278		
15,100.00	7,233.44	7,049.00	6,950.26	225.63	30.36	-37.05	1,272.59	610.53	8,667.26	8,598.80	68.46	126.595		
15,200.00	7,233.06	7,049.00	6,950.26	228.45	30.36	-37.05	1,272.59	610.53	8,767.16	8,698.62	68.54	127.907		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		Between Centres	Between Ellipses	Minimum Separation	Separation Factor				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)					
15,216.01	7,233.00	7,049.00	6,950.26	228.91	30.36	-37.05	1,272.59	610.53	8,783.16	8,714.60	68.56	128.117				



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	10.45	2.45	3.28	3.28	53.24	1,264.19	1,692.64	2,112.64					
100.00	100.00	141.10	133.09	3.28	3.29	53.23	1,264.09	1,691.34	2,111.79	2,105.22	6.58	321.063		
200.00	200.00	256.95	248.90	3.34	3.37	53.17	1,264.34	1,688.33	2,109.84	2,103.13	6.71	314.433		
300.00	299.98	361.30	353.16	3.45	3.51	58.92	1,265.34	1,684.22	2,106.36	2,099.40	6.95	302.923		
400.00	399.84	452.61	444.37	3.61	3.67	59.01	1,267.20	1,680.28	2,101.41	2,094.13	7.27	288.862		
500.00	499.45	552.32	543.94	3.82	3.89	59.20	1,269.75	1,675.71	2,094.78	2,087.08	7.70	272.084		
600.00	598.70	650.46	641.90	4.07	4.15	59.47	1,272.99	1,670.73	2,086.43	2,078.23	8.20	254.512		
700.00	697.47	745.38	736.61	4.35	4.43	59.83	1,276.70	1,665.61	2,076.43	2,067.67	8.75	237.192		
800.00	795.62	847.31	838.27	4.67	4.75	60.31	1,281.34	1,659.84	2,064.89	2,055.50	9.39	219.863		
900.00	893.06	939.79	930.51	5.01	5.07	60.87	1,285.39	1,654.50	2,051.51	2,041.46	10.05	204.154		
1,000.00	989.64	1,034.65	1,025.06	5.38	5.41	61.53	1,290.51	1,648.89	2,037.00	2,026.24	10.76	189.270		
1,100.00	1,085.42	1,308.54	1,295.34	5.78	6.58	62.57	1,311.91	1,611.37	2,015.29	2,003.01	12.28	164.123		
1,200.00	1,181.09	1,416.68	1,401.42	6.20	7.10	62.89	1,319.44	1,591.76	1,990.49	1,977.32	13.17	151.095		
1,300.00	1,276.76	1,504.40	1,487.40	6.65	7.54	63.15	1,325.78	1,575.57	1,965.64	1,951.63	14.01	140.310		
1,400.00	1,372.43	1,672.02	1,651.57	7.11	8.42	63.69	1,335.46	1,543.29	1,939.40	1,924.19	15.21	127.521		
1,500.00	1,468.10	1,774.33	1,751.78	7.57	8.97	64.09	1,338.81	1,522.90	1,911.33	1,895.20	16.13	118.495		
1,600.00	1,563.77	1,857.93	1,833.69	8.05	9.42	64.44	1,340.96	1,506.38	1,883.13	1,866.15	16.98	110.871		
1,700.00	1,659.44	1,924.20	1,898.81	8.53	9.77	64.73	1,342.93	1,494.22	1,856.34	1,838.55	17.78	104.394		
1,800.00	1,755.11	1,996.30	1,969.82	9.02	10.15	65.07	1,345.40	1,481.97	1,830.98	1,812.37	18.61	98.390		
1,900.00	1,850.78	2,062.78	2,035.42	9.52	10.50	65.39	1,348.10	1,471.51	1,807.10	1,787.67	19.42	93.039		
2,000.00	1,946.45	2,138.72	2,110.44	10.02	10.89	65.75	1,352.13	1,460.46	1,784.88	1,764.59	20.28	88.003		
2,100.00	2,042.12	2,232.18	2,202.72	10.52	11.38	66.18	1,357.85	1,446.78	1,763.16	1,741.94	21.22	83.086		
2,200.00	2,137.78	2,320.59	2,289.93	11.03	11.84	66.57	1,364.13	1,433.72	1,741.93	1,719.77	22.15	78.636		
2,300.00	2,233.45	2,410.83	2,378.88	11.54	12.32	66.95	1,371.37	1,420.37	1,721.22	1,698.13	23.10	74.514		
2,400.00	2,329.12	2,502.98	2,469.85	12.05	12.81	67.38	1,378.21	1,407.36	1,700.88	1,676.83	24.05	70.711		
2,500.00	2,424.79	2,589.28	2,555.15	12.56	13.26	67.81	1,384.37	1,395.83	1,681.16	1,656.18	24.98	67.292		
2,600.00	2,520.46	2,684.01	2,648.88	13.08	13.74	68.31	1,390.93	1,383.72	1,661.94	1,635.99	25.94	64.060		
2,700.00	2,616.13	2,798.71	2,762.35	13.60	14.34	68.93	1,398.56	1,368.85	1,642.61	1,615.63	26.98	60.885		
2,800.00	2,711.80	2,943.55	2,905.10	14.12	15.13	69.67	1,408.08	1,346.28	1,621.04	1,592.91	28.12	57.639		
2,900.00	2,807.47	3,033.95	2,993.99	14.64	15.63	70.13	1,413.92	1,330.88	1,598.36	1,569.27	29.09	54.946		
3,000.00	2,903.14	3,128.57	3,087.20	15.16	16.15	70.66	1,419.46	1,315.60	1,576.28	1,546.22	30.06	52.431		
3,100.00	2,998.81	3,225.58	3,182.77	15.68	16.69	71.23	1,425.01	1,299.94	1,554.29	1,523.25	31.04	50.067		
3,200.00	3,094.48	3,304.42	3,260.52	16.21	17.12	71.71	1,429.39	1,287.64	1,532.88	1,500.91	31.96	47.955		
3,300.00	3,190.15	3,400.33	3,355.46	16.73	17.62	72.39	1,433.17	1,274.56	1,512.66	1,479.75	32.92	45.952		
3,400.00	3,285.82	3,489.12	3,443.40	17.26	18.07	73.08	1,435.63	1,262.55	1,492.31	1,458.47	33.84	44.096		
3,500.00	3,381.49	3,572.16	3,525.76	17.78	18.49	73.74	1,438.16	1,252.24	1,473.26	1,438.51	34.75	42.396		
3,600.00	3,477.16	3,664.54	3,617.31	18.31	18.96	74.45	1,442.31	1,240.65	1,454.94	1,419.24	35.69	40.765		
3,700.00	3,572.83	3,770.53	3,722.17	18.84	19.52	75.20	1,448.78	1,226.64	1,436.87	1,400.19	36.69	39.167		
3,800.00	3,668.50	3,888.34	3,838.27	19.37	20.17	75.97	1,457.60	1,208.72	1,417.68	1,379.96	37.73	37.578		
3,900.00	3,764.17	3,999.66	3,947.71	19.89	20.80	76.68	1,466.22	1,190.24	1,397.49	1,358.74	38.75	36.063		
4,000.00	3,859.84	4,111.00	4,057.08	20.42	21.44	77.44	1,473.95	1,170.88	1,376.48	1,336.71	39.76	34.615		
4,100.00	3,955.51	4,221.66	4,165.69	20.95	22.09	78.24	1,480.59	1,150.77	1,354.62	1,313.85	40.77	33.230		
4,200.00	4,051.18	4,293.85	4,236.70	21.48	22.49	78.81	1,484.58	1,138.39	1,333.65	1,291.95	41.70	31.984		
4,300.00	4,146.85	4,373.67	4,315.39	22.01	22.94	79.48	1,488.73	1,125.68	1,314.05	1,271.42	42.64	30.820		
4,400.00	4,242.52	4,462.45	4,403.07	22.55	23.42	80.26	1,493.23	1,112.47	1,295.66	1,252.08	43.58	29.732		
4,500.00	4,338.19	4,553.02	4,492.56	23.08	23.91	81.07	1,497.98	1,099.39	1,278.01	1,233.49	44.52	28.706		
4,600.00	4,433.86	4,638.98	4,577.56	23.61	24.36	81.86	1,502.64	1,087.46	1,261.25	1,215.80	45.45	27.751		
4,700.00	4,529.53	4,723.52	4,661.27	24.14	24.80	82.66	1,507.32	1,076.53	1,245.71	1,199.34	46.37	26.865		
4,800.00	4,625.19	4,805.61	4,742.64	24.67	25.23	83.46	1,511.99	1,066.74	1,231.51	1,184.23	47.28	26.049		
4,900.00	4,720.86	4,886.27	4,822.69	25.21	25.63	84.25	1,516.85	1,058.18	1,218.95	1,170.78	48.17	25.306		
5,000.00	4,816.53	4,970.90	4,906.79	25.74	26.04	85.11	1,521.98	1,050.24	1,207.93	1,158.87	49.06	24.621		
5,100.00	4,912.20	5,067.05	5,002.39	26.27	26.50	86.11	1,527.72	1,041.82	1,197.87	1,147.89	49.99	23.965		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	5,172.11	5,106.74	26.80	27.01	87.18	1,534.85	1,031.78	1,187.56	1,136.62	50.94	23.311		
5,300.00	5,103.54	5,258.55	5,192.62	27.34	27.43	88.08	1,540.56	1,023.93	1,178.06	1,126.22	51.84	22.725		
5,400.00	5,199.22	5,350.52	5,284.12	27.87	27.86	89.08	1,545.74	1,016.21	1,169.50	1,116.76	52.74	22.175		
5,500.00	5,295.46	5,433.84	5,367.13	28.39	28.24	89.83	1,549.53	1,010.08	1,162.25	1,108.66	53.59	21.689		
5,600.00	5,392.60	5,516.44	5,449.52	28.89	28.60	90.52	1,552.60	1,005.14	1,156.61	1,102.21	54.40	21.262		
5,700.00	5,490.50	5,603.17	5,536.12	29.37	28.97	91.16	1,555.24	1,001.04	1,152.39	1,097.19	55.20	20.877		
5,800.00	5,589.05	5,699.09	5,631.93	29.83	29.37	91.76	1,557.78	997.21	1,149.00	1,092.98	56.02	20.509		
5,900.00	5,688.14	5,796.70	5,729.43	30.26	29.78	92.21	1,560.48	993.42	1,145.76	1,088.92	56.85	20.155		
6,000.00	5,787.63	5,893.45	5,826.08	30.68	30.18	92.51	1,562.76	989.90	1,142.67	1,085.02	57.65	19.821		
6,100.00	5,887.41	5,984.17	5,916.75	31.07	30.54	92.66	1,564.33	987.08	1,139.95	1,081.56	58.40	19.520		
6,200.00	5,987.36	6,083.48	6,016.01	31.44	30.94	92.71	1,565.44	984.56	1,137.62	1,078.44	59.18	19.223		
6,300.00	6,087.36	6,182.98	6,115.49	31.80	31.33	86.92	1,566.27	982.01	1,135.13	1,075.17	59.95	18.934		
6,400.00	6,187.36	6,273.45	6,205.93	32.15	31.68	86.92	1,566.20	980.13	1,133.04	1,072.39	60.66	18.679		
6,500.00	6,287.36	6,372.41	6,304.87	32.51	32.05	86.96	1,565.26	978.65	1,131.50	1,070.09	61.41	18.426		
6,600.00	6,387.36	6,461.07	6,413.52	32.87	32.46	86.99	1,564.56	976.72	1,129.70	1,067.48	62.22	18.156		
6,700.00	6,487.36	6,543.42	6,574.54	33.23	33.03	87.85	1,547.35	970.42	1,125.72	1,062.57	63.15	17.827		
6,800.00	6,587.36	6,797.33	6,721.33	33.59	33.53	90.08	1,503.76	956.99	1,116.18	1,052.37	63.81	17.492		
6,898.34	6,685.55	6,874.40	6,791.27	33.95	33.76	-177.87	1,472.53	948.77	1,110.19	1,045.78	64.41	17.236		
6,900.00	6,687.26	6,875.49	6,792.23	33.95	33.76	-177.84	1,472.03	948.66	1,108.37	1,043.95	64.42	17.206 CC, ES, SF		
7,000.00	6,785.58	6,943.47	6,850.63	34.31	33.93	-176.03	1,437.85	942.46	1,118.24	1,053.30	64.95	17.218		
7,100.00	6,879.94	6,995.30	6,892.95	34.65	34.04	-174.27	1,408.15	938.88	1,147.70	1,082.41	65.29	17.578		
7,200.00	6,968.01	7,060.68	6,943.75	34.97	34.16	-171.54	1,367.20	935.02	1,195.00	1,129.40	65.60	18.217		
7,300.00	7,047.61	7,110.70	6,980.77	35.27	34.25	-168.49	1,333.68	932.13	1,257.68	1,191.93	65.75	19.129		
7,400.00	7,116.80	7,152.57	7,010.71	35.54	34.33	-164.41	1,304.50	929.92	1,333.36	1,267.54	65.82	20.258		
7,500.00	7,173.86	7,186.25	7,033.99	35.81	34.39	-158.16	1,280.23	928.26	1,419.04	1,353.20	65.85	21.551		
7,600.00	7,217.38	7,211.06	7,050.62	36.17	34.43	-146.71	1,261.86	927.06	1,511.76	1,445.90	65.86	22.956		
7,700.00	7,246.31	7,226.49	7,060.69	36.80	34.46	-120.51	1,250.18	926.35	1,608.71	1,542.84	65.87	24.424		
7,800.00	7,259.92	7,236.00	7,066.78	37.72	34.48	-70.57	1,242.90	925.92	1,707.28	1,641.36	65.92	25.899		
7,900.00	7,260.77	7,236.00	7,066.78	38.86	34.48	-53.45	1,242.90	925.92	1,805.54	1,739.57	65.97	27.368		
8,000.00	7,260.39	7,236.00	7,066.78	40.19	34.48	-53.45	1,242.90	925.92	1,903.87	1,837.84	66.03	28.833		
8,100.00	7,260.01	7,243.74	7,071.67	41.67	34.49	-54.72	1,236.91	925.58	2,002.35	1,936.20	66.15	30.269		
8,200.00	7,259.63	7,246.31	7,073.28	43.30	34.49	-55.13	1,234.90	925.47	2,100.97	2,034.75	66.22	31.727		
8,300.00	7,259.25	7,248.85	7,074.86	45.05	34.50	-55.54	1,232.92	925.36	2,199.71	2,133.42	66.28	33.186		
8,400.00	7,258.87	7,251.35	7,076.40	46.91	34.50	-55.94	1,230.96	925.26	2,298.55	2,232.21	66.35	34.645		
8,500.00	7,258.49	7,253.80	7,077.92	48.87	34.51	-56.33	1,229.03	925.16	2,397.49	2,331.09	66.40	36.105		
8,600.00	7,258.11	7,256.21	7,079.40	50.92	34.51	-56.72	1,227.13	925.06	2,496.50	2,430.05	66.46	37.564		
8,700.00	7,257.73	7,258.59	7,080.85	53.04	34.52	-57.09	1,225.25	924.96	2,595.59	2,529.08	66.52	39.023		
8,800.00	7,257.35	7,260.92	7,082.27	55.23	34.52	-57.46	1,223.39	924.86	2,694.74	2,628.17	66.57	40.480		
8,900.00	7,256.97	7,268.00	7,086.52	57.47	34.53	-58.55	1,217.75	924.58	2,793.96	2,727.30	66.66	41.916		
9,000.00	7,256.59	7,268.00	7,086.52	59.77	34.53	-58.55	1,217.75	924.58	2,893.21	2,826.52	66.69	43.381		
9,100.00	7,256.21	7,268.00	7,086.52	62.12	34.53	-58.55	1,217.75	924.58	2,992.51	2,925.78	66.73	44.844		
9,200.00	7,255.83	7,268.00	7,086.52	64.50	34.53	-58.55	1,217.75	924.58	3,091.86	3,025.09	66.77	46.307		
9,300.00	7,255.45	7,268.00	7,086.52	66.93	34.53	-58.55	1,217.75	924.58	3,191.25	3,124.44	66.81	47.769		
9,400.00	7,255.07	7,268.00	7,086.52	69.38	34.53	-58.55	1,217.75	924.58	3,290.68	3,223.83	66.84	49.229		
9,500.00	7,254.69	7,268.00	7,086.52	71.87	34.53	-58.55	1,217.75	924.58	3,390.14	3,323.25	66.88	50.688		
9,600.00	7,254.31	7,276.25	7,091.40	74.38	34.55	-59.80	1,211.10	924.27	3,489.60	3,422.63	66.97	52.105		
9,700.00	7,253.93	7,277.85	7,092.33	76.92	34.55	-60.04	1,209.80	924.21	3,589.11	3,522.09	67.02	53.552		
9,800.00	7,253.55	7,279.41	7,093.24	79.48	34.55	-60.27	1,208.53	924.15	3,688.64	3,621.57	67.07	54.997		
9,900.00	7,253.18	7,280.95	7,094.13	82.06	34.56	-60.49	1,207.28	924.10	3,788.20	3,721.08	67.12	56.440		
10,000.00	7,252.80	7,282.45	7,094.99	84.65	34.56	-60.72	1,206.05	924.05	3,887.78	3,820.61	67.17	57.881		
10,100.00	7,252.42	7,283.92	7,095.83	87.27	34.56	-60.93	1,204.85	924.00	3,987.37	3,920.16	67.22	59.320		
10,200.00	7,252.04	7,285.37	7,096.66	89.89	34.56	-61.14	1,203.66	923.95	4,086.99	4,019.72	67.27	60.757		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,251.66	7,286.79	7,097.46	92.54	34.57	-61.35	1,202.49	923.90	4,186.62	4,119.30	67.32	62.191		
10,400.00	7,251.28	7,288.18	7,098.25	95.19	34.57	-61.55	1,201.34	923.85	4,286.27	4,218.90	67.37	63.624		
10,500.00	7,250.90	7,289.55	7,099.02	97.86	34.57	-61.74	1,200.22	923.80	4,385.93	4,318.51	67.42	65.053		
10,600.00	7,250.52	7,290.00	7,104.26	100.53	34.59	-63.07	1,192.35	923.50	4,485.63	4,418.11	67.52	66.431		
10,700.00	7,250.14	7,290.00	7,104.26	103.22	34.59	-63.07	1,192.35	923.50	4,585.32	4,517.75	67.57	67.863		
10,800.00	7,249.76	7,290.00	7,104.26	105.91	34.59	-63.07	1,192.35	923.50	4,685.01	4,617.40	67.61	69.292		
10,900.00	7,249.38	7,290.00	7,104.26	108.62	34.59	-63.07	1,192.35	923.50	4,784.72	4,717.07	67.66	70.719		
11,000.00	7,249.00	7,290.00	7,104.26	111.33	34.59	-63.07	1,192.35	923.50	4,884.45	4,816.74	67.70	72.144		
11,100.00	7,248.62	7,290.00	7,104.26	114.04	34.59	-63.07	1,192.35	923.50	4,984.18	4,916.43	67.75	73.566		
11,200.00	7,248.24	7,290.00	7,104.26	116.77	34.59	-63.07	1,192.35	923.50	5,083.92	5,016.12	67.80	74.986		
11,300.00	7,247.86	7,290.00	7,104.26	119.50	34.59	-63.07	1,192.35	923.50	5,183.68	5,115.83	67.85	76.402		
11,400.00	7,247.48	7,290.00	7,104.26	122.24	34.59	-63.07	1,192.35	923.50	5,283.44	5,215.54	67.90	77.817		
11,500.00	7,247.10	7,290.00	7,104.26	124.98	34.59	-63.07	1,192.35	923.50	5,383.21	5,315.26	67.95	79.228		
11,600.00	7,246.72	7,290.00	7,104.26	127.73	34.59	-63.07	1,192.35	923.50	5,482.99	5,414.99	68.00	80.636		
11,700.00	7,246.34	7,290.00	7,104.26	130.48	34.59	-63.07	1,192.35	923.50	5,582.78	5,514.73	68.05	82.041		
11,800.00	7,245.96	7,290.00	7,104.26	133.24	34.59	-63.07	1,192.35	923.50	5,682.57	5,614.47	68.10	83.444		
11,900.00	7,245.58	7,290.00	7,104.26	136.00	34.59	-63.07	1,192.35	923.50	5,782.37	5,714.22	68.15	84.843		
12,000.00	7,245.21	7,290.00	7,104.26	138.76	34.59	-63.07	1,192.35	923.50	5,882.18	5,813.98	68.21	86.240		
12,100.00	7,244.83	7,290.00	7,104.26	141.53	34.59	-63.07	1,192.35	923.50	5,982.00	5,913.74	68.26	87.633		
12,200.00	7,244.45	7,290.00	7,104.26	144.30	34.59	-63.07	1,192.35	923.50	6,081.82	6,013.50	68.32	89.023		
12,300.00	7,244.07	7,290.00	7,104.26	147.08	34.59	-63.07	1,192.35	923.50	6,181.65	6,113.27	68.37	90.410		
12,400.00	7,243.69	7,290.00	7,104.26	149.86	34.59	-63.07	1,192.35	923.50	6,281.48	6,213.05	68.43	91.793		
12,500.00	7,243.31	7,290.00	7,104.26	152.64	34.59	-63.07	1,192.35	923.50	6,381.32	6,312.83	68.49	93.173		
12,600.00	7,242.93	7,290.00	7,104.26	155.42	34.59	-63.07	1,192.35	923.50	6,481.16	6,412.61	68.55	94.550		
12,700.00	7,242.55	7,290.00	7,104.26	158.21	34.59	-63.07	1,192.35	923.50	6,581.01	6,512.40	68.61	95.924		
12,800.00	7,242.17	7,290.00	7,104.26	161.00	34.59	-63.07	1,192.35	923.50	6,680.86	6,612.19	68.67	97.294		
12,900.00	7,241.79	7,290.00	7,104.26	163.79	34.59	-63.07	1,192.35	923.50	6,780.72	6,711.99	68.73	98.660		
13,000.00	7,241.41	7,290.00	7,104.26	166.58	34.59	-63.07	1,192.35	923.50	6,880.58	6,811.79	68.79	100.023		
13,100.00	7,241.03	7,290.00	7,104.26	169.38	34.59	-63.07	1,192.35	923.50	6,980.44	6,911.59	68.85	101.383		
13,200.00	7,240.65	7,290.00	7,104.26	172.18	34.59	-63.07	1,192.35	923.50	7,080.31	7,011.39	68.92	102.739		
13,300.00	7,240.27	7,290.00	7,104.26	174.98	34.59	-63.07	1,192.35	923.50	7,180.18	7,111.20	68.98	104.091		
13,400.00	7,239.89	7,290.00	7,104.26	177.78	34.59	-63.07	1,192.35	923.50	7,280.06	7,211.01	69.05	105.439		
13,500.00	7,239.51	7,290.00	7,104.26	180.58	34.59	-63.07	1,192.35	923.50	7,379.94	7,310.83	69.11	106.784		
13,600.00	7,239.13	7,290.00	7,104.26	183.39	34.59	-63.07	1,192.35	923.50	7,479.82	7,410.64	69.18	108.125		
13,700.00	7,238.75	7,290.00	7,104.26	186.20	34.59	-63.07	1,192.35	923.50	7,579.71	7,510.46	69.24	109.462		
13,800.00	7,238.37	7,290.00	7,104.26	189.00	34.59	-63.07	1,192.35	923.50	7,679.59	7,610.28	69.31	110.796		
13,900.00	7,237.99	7,290.00	7,104.26	191.81	34.59	-63.07	1,192.35	923.50	7,779.48	7,710.10	69.38	112.125		
14,000.00	7,237.62	7,290.00	7,104.26	194.63	34.59	-63.07	1,192.35	923.50	7,879.38	7,809.93	69.45	113.451		
14,100.00	7,237.24	7,290.00	7,104.26	197.44	34.59	-63.07	1,192.35	923.50	7,979.28	7,909.75	69.52	114.773		
14,200.00	7,236.86	7,290.00	7,104.26	200.25	34.59	-63.07	1,192.35	923.50	8,079.17	8,009.58	69.59	116.091		
14,300.00	7,236.48	7,290.00	7,104.26	203.07	34.59	-63.07	1,192.35	923.50	8,179.08	8,109.41	69.67	117.405		
14,400.00	7,236.10	7,290.00	7,104.26	205.88	34.59	-63.07	1,192.35	923.50	8,278.98	8,209.24	69.74	118.715		
14,500.00	7,235.72	7,312.82	7,111.67	208.70	34.61	-64.92	1,180.70	923.16	8,378.79	8,308.89	69.90	119.867		
14,600.00	7,235.34	7,313.10	7,111.82	211.52	34.61	-64.96	1,180.45	923.15	8,478.70	8,408.72	69.98	121.164		
14,700.00	7,234.96	7,313.39	7,111.97	214.34	34.61	-64.99	1,180.21	923.15	8,578.60	8,508.55	70.05	122.457		
14,800.00	7,234.58	7,313.66	7,112.11	217.16	34.61	-65.03	1,179.98	923.14	8,678.51	8,608.38	70.13	123.746		
14,900.00	7,234.20	7,313.93	7,112.26	219.98	34.61	-65.07	1,179.75	923.14	8,778.42	8,708.21	70.21	125.031		
15,000.00	7,233.82	7,314.20	7,112.40	222.81	34.61	-65.10	1,179.52	923.13	8,878.34	8,808.05	70.29	126.311		
15,100.00	7,233.44	7,314.46	7,112.53	225.63	34.61	-65.13	1,179.30	923.13	8,978.25	8,907.88	70.37	127.588		
15,200.00	7,233.06	7,314.72	7,112.67	228.45	34.61	-65.17	1,179.08	923.12	9,078.17	9,007.72	70.45	128.860		
15,216.01	7,233.00	7,314.76	7,112.69	228.91	34.61	-65.17	1,179.05	923.12	9,094.17	9,023.71	70.46	129.063		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.00	0.00	3.28	3.28	-180.00	-19.67	0.00	19.67					
100.00	100.00	100.00	100.00	3.28	3.28	-180.00	-19.67	0.00	19.67	13.10	6.57	2.994		
200.00	200.00	200.00	200.00	3.34	3.34	-180.00	-19.67	0.00	19.67	12.99	6.67	2.947 CC		
300.00	299.98	299.98	299.98	3.45	3.44	-174.73	-19.67	0.00	21.41	14.52	6.89	3.107		
400.00	399.84	400.73	400.71	3.61	3.61	-175.36	-17.91	-0.23	24.88	17.66	7.22	3.445		
500.00	499.45	501.60	501.43	3.82	3.81	-175.63	-12.64	-0.90	28.33	20.67	7.65	3.701		
600.00	598.70	602.59	602.03	4.07	4.06	-175.66	-3.83	-2.03	31.76	23.58	8.18	3.884		
700.00	697.47	703.71	702.38	4.35	4.35	-175.52	8.50	-3.61	35.16	26.39	8.77	4.009		
800.00	795.62	804.95	802.34	4.67	4.66	-175.26	24.36	-5.64	38.53	29.11	9.42	4.089		
900.00	893.06	905.82	901.35	5.01	5.00	-174.94	43.44	-8.09	42.05	31.95	10.11	4.161		
1,000.00	989.64	1,005.62	999.16	5.38	5.34	-174.93	63.10	-10.61	48.27	37.46	10.81	4.464		
1,100.00	1,085.42	1,105.19	1,096.76	5.78	5.71	-175.19	82.71	-13.12	57.45	45.89	11.56	4.970		
1,200.00	1,181.09	1,204.74	1,194.32	6.20	6.10	-175.41	102.32	-15.63	67.01	54.67	12.34	5.432		
1,300.00	1,276.76	1,304.28	1,291.88	6.65	6.51	-175.58	121.92	-18.14	76.56	63.42	13.14	5.828		
1,400.00	1,372.43	1,403.82	1,389.44	7.11	6.92	-175.71	141.53	-20.66	86.12	72.15	13.96	6.168		
1,500.00	1,468.10	1,503.36	1,487.00	7.57	7.34	-175.81	161.13	-23.17	95.67	80.87	14.80	6.463		
1,600.00	1,563.77	1,602.91	1,584.56	8.05	7.77	-175.90	180.74	-25.68	105.22	89.56	15.66	6.719		
1,700.00	1,659.44	1,702.45	1,682.12	8.53	8.20	-175.97	200.34	-28.19	114.78	98.25	16.53	6.943		
1,800.00	1,755.11	1,801.99	1,779.68	9.02	8.64	-176.02	219.94	-30.70	124.33	106.92	17.41	7.141		
1,900.00	1,850.78	1,901.53	1,877.24	9.52	9.09	-176.08	239.55	-33.22	133.89	115.59	18.30	7.315		
2,000.00	1,946.45	2,001.08	1,974.80	10.02	9.53	-176.12	259.15	-35.73	143.44	124.24	19.20	7.470		
2,100.00	2,042.12	2,100.62	2,072.36	10.52	9.99	-176.16	278.76	-38.24	153.00	132.89	20.11	7.609		
2,200.00	2,137.78	2,200.16	2,169.92	11.03	10.44	-176.19	298.36	-40.75	162.56	141.54	21.02	7.734		
2,300.00	2,233.45	2,300.30	2,267.48	11.54	10.90	-176.22	317.97	-43.27	172.11	150.17	21.94	7.845		
2,400.00	2,329.12	2,400.76	2,365.04	12.05	11.36	-176.25	337.57	-45.78	181.67	158.80	22.87	7.945		
2,500.00	2,424.79	2,501.21	2,462.60	12.56	11.82	-176.27	357.18	-48.29	191.22	167.43	23.80	8.036		
2,600.00	2,520.46	2,601.67	2,560.16	13.08	12.29	-176.30	376.78	-50.80	200.78	176.05	24.73	8.119		
2,700.00	2,616.13	2,702.13	2,657.72	13.60	12.76	-176.32	396.39	-53.31	210.33	184.67	25.67	8.194		
2,800.00	2,711.80	2,802.59	2,755.28	14.12	13.23	-176.33	415.99	-55.83	219.89	193.28	26.61	8.264		
2,900.00	2,807.47	2,903.04	2,852.84	14.64	13.70	-176.35	435.60	-58.34	229.44	201.89	27.55	8.328		
3,000.00	2,903.14	3,003.50	2,950.41	15.16	14.17	-176.37	455.20	-60.85	239.00	210.50	28.50	8.387		
3,100.00	2,998.81	3,103.96	3,047.97	15.68	14.64	-176.38	474.81	-63.36	248.56	219.11	29.44	8.442		
3,200.00	3,094.48	3,204.42	3,145.53	16.21	15.11	-176.39	494.41	-65.88	258.11	227.72	30.39	8.492		
3,300.00	3,190.15	3,304.87	3,243.09	16.73	15.59	-176.41	514.02	-68.39	267.67	236.32	31.34	8.539		
3,400.00	3,285.82	3,394.67	3,340.65	17.26	16.01	-176.42	533.62	-70.90	277.22	244.97	32.25	8.596		
3,500.00	3,381.49	3,505.79	3,438.21	17.78	16.54	-176.43	553.23	-73.41	286.78	253.53	33.25	8.624		
3,600.00	3,477.16	3,606.25	3,535.77	18.31	17.01	-176.44	572.83	-75.92	296.33	262.13	34.21	8.663		
3,700.00	3,572.83	3,693.30	3,633.33	18.84	17.43	-176.45	592.43	-78.44	305.89	270.79	35.10	8.714		
3,800.00	3,668.50	3,807.16	3,730.89	19.37	17.97	-176.46	612.04	-80.95	315.44	279.32	36.12	8.732		
3,900.00	3,764.17	3,907.62	3,828.45	19.89	18.44	-176.47	631.64	-83.46	325.00	287.92	37.08	8.764		
4,000.00	3,859.84	3,991.92	3,926.01	20.42	18.85	-176.47	651.25	-85.97	334.56	296.59	37.97	8.811		
4,100.00	3,955.51	4,108.53	4,023.57	20.95	19.40	-176.48	670.85	-88.49	344.11	305.11	39.00	8.822		
4,200.00	4,051.18	4,191.01	4,121.13	21.48	19.79	-176.49	690.46	-91.00	353.67	313.78	39.88	8.868		
4,300.00	4,146.85	4,309.45	4,218.69	22.01	20.36	-176.49	710.06	-93.51	363.22	322.29	40.93	8.874		
4,400.00	4,242.52	4,409.91	4,316.25	22.55	20.84	-176.50	729.67	-96.02	372.78	330.89	41.89	8.898		
4,500.00	4,338.19	4,489.63	4,413.81	23.08	21.22	-176.51	749.27	-98.53	382.33	339.57	42.76	8.941		
4,600.00	4,433.86	4,589.18	4,511.37	23.61	21.70	-176.51	768.88	-101.05	391.89	348.17	43.72	8.963		
4,700.00	4,529.53	4,688.72	4,608.93	24.14	22.17	-176.52	788.48	-103.56	401.45	356.76	44.68	8.985		
4,800.00	4,625.19	4,788.26	4,706.49	24.67	22.65	-176.52	808.09	-106.07	411.00	365.36	45.64	9.005		
4,900.00	4,720.86	4,887.80	4,804.05	25.21	23.12	-176.53	827.69	-108.58	420.56	373.95	46.61	9.024		
5,000.00	4,816.53	4,987.35	4,901.61	25.74	23.60	-176.53	847.30	-111.10	430.11	382.54	47.57	9.042		
5,100.00	4,912.20	5,086.89	4,999.17	26.27	24.08	-176.54	866.90	-113.61	439.67	391.14	48.53	9.059		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	5,186.43	5,096.73	26.80	24.55	-176.54	886.51	-116.12	449.22	399.73	49.50	9.076	
5,300.00	5,103.54	5,285.97	5,194.29	27.34	25.03	-176.54	906.11	-118.63	458.78	408.32	50.46	9.092	
5,400.00	5,199.22	5,385.52	5,291.86	27.87	25.51	-176.55	925.72	-121.15	468.32	416.90	51.42	9.107	
5,500.00	5,295.46	5,485.23	5,389.58	28.39	25.99	-176.55	945.35	-123.66	475.82	423.44	52.38	9.084	
5,600.00	5,392.60	5,585.14	5,487.51	28.89	26.47	-176.52	965.03	-126.18	479.85	426.52	53.33	8.998	
5,700.00	5,490.50	5,685.14	5,585.51	29.37	26.95	-176.46	984.72	-128.71	480.39	426.13	54.26	8.853	
5,800.00	5,589.05	5,785.09	5,683.47	29.83	27.43	-176.36	1,004.41	-131.23	477.45	422.27	55.18	8.652	
5,900.00	5,688.14	5,884.87	5,781.27	30.26	27.91	-176.24	1,024.06	-133.75	471.03	414.94	56.09	8.398	
6,000.00	5,787.63	5,984.37	5,878.78	30.68	28.39	-176.08	1,043.66	-136.26	461.14	404.17	56.98	8.094	
6,100.00	5,887.41	6,083.46	5,975.90	31.07	28.86	-175.87	1,063.17	-138.76	447.80	389.96	57.85	7.741	
6,200.00	5,987.36	6,182.02	6,072.50	31.44	29.34	-175.61	1,082.58	-141.25	431.02	372.33	58.70	7.343	
6,300.00	6,087.36	6,280.07	6,168.60	31.80	29.81	178.95	1,101.90	-143.72	411.51	351.98	59.53	6.912	
6,400.00	6,187.36	6,378.08	6,264.66	32.15	30.28	179.27	1,121.20	-146.20	391.77	331.41	60.37	6.490	
6,500.00	6,287.36	6,476.09	6,360.72	32.51	30.75	179.61	1,140.50	-148.67	372.05	310.84	61.21	6.079	
6,600.00	6,387.36	6,574.10	6,456.77	32.87	31.22	-180.00	1,159.80	-151.14	352.34	290.30	62.04	5.679	
6,700.00	6,487.36	6,670.81	6,551.11	33.23	31.69	-178.44	1,178.72	-160.01	332.81	269.91	62.90	5.291	
6,800.00	6,587.36	6,762.84	6,638.70	33.59	32.12	-174.32	1,196.18	-181.85	314.80	251.04	63.75	4.938	
6,900.00	6,687.26	6,848.23	6,716.45	33.95	32.51	-78.75	1,211.60	-213.42	300.94	236.52	64.42	4.671	
7,000.00	6,785.58	6,930.27	6,786.63	34.31	32.87	-73.85	1,225.44	-253.49	291.31	226.74	64.58	4.511	
7,100.00	6,879.94	7,009.97	6,849.43	34.65	33.21	-68.99	1,237.74	-300.91	285.53	221.60	63.93	4.466	
7,200.00	6,968.01	7,087.86	6,904.74	34.97	33.55	-64.38	1,248.49	-354.62	283.00	220.66	62.33	4.540	
7,252.83	7,011.25	7,128.43	6,930.89	35.13	33.73	-62.11	1,253.54	-385.21	282.70	221.57	61.13	4.624	
7,300.00	7,047.61	7,164.37	6,952.42	35.27	33.91	-60.21	1,257.67	-413.68	282.90	223.03	59.87	4.725	
7,400.00	7,116.80	7,239.82	6,992.33	35.54	34.32	-56.63	1,265.25	-477.22	284.36	227.56	56.80	5.007	
7,500.00	7,173.86	7,314.51	7,024.30	35.81	34.83	-53.73	1,271.22	-544.41	286.53	232.98	53.54	5.351	
7,600.00	7,217.38	7,388.66	7,048.21	36.17	35.45	-51.56	1,275.54	-614.41	288.68	238.08	50.60	5.705	
7,700.00	7,246.31	7,462.45	7,063.92	36.80	36.16	-50.16	1,278.20	-686.42	290.26	241.75	48.52	5.983	
7,800.00	7,259.92	7,536.05	7,071.36	37.72	36.96	-49.52	1,279.19	-759.59	290.93	243.15	47.78	6.090	
7,900.00	7,260.77	7,624.96	7,071.84	38.86	38.04	-49.49	1,278.66	-848.49	290.84	241.73	49.11	5.922	
8,000.00	7,260.39	7,724.96	7,071.55	40.19	39.40	-49.50	1,277.91	-948.49	290.75	239.40	51.35	5.662	
8,100.00	7,260.01	7,824.96	7,071.27	41.67	40.92	-49.51	1,277.16	-1,048.49	290.67	236.79	53.88	5.395	
8,200.00	7,259.63	7,924.96	7,070.98	43.30	42.58	-49.52	1,276.41	-1,148.48	290.59	233.93	56.66	5.129	
8,300.00	7,259.25	8,024.96	7,070.70	45.05	44.36	-49.53	1,275.65	-1,248.48	290.50	230.85	59.65	4.870	
8,400.00	7,258.87	8,124.96	7,070.41	46.91	46.25	-49.54	1,274.90	-1,348.48	290.42	227.60	62.82	4.623	
8,500.00	7,258.49	8,224.96	7,070.13	48.87	48.23	-49.55	1,274.15	-1,448.47	290.33	224.18	66.15	4.389	
8,600.00	7,258.11	8,324.96	7,069.84	50.92	50.31	-49.56	1,273.40	-1,548.47	290.25	220.63	69.62	4.169	
8,700.00	7,257.73	8,424.96	7,069.56	53.04	52.45	-49.57	1,272.64	-1,648.47	290.17	216.96	73.21	3.964	
8,800.00	7,257.35	8,524.96	7,069.27	55.23	54.66	-49.58	1,271.89	-1,748.46	290.08	213.19	76.89	3.773	
8,900.00	7,256.97	8,624.96	7,068.99	57.47	56.93	-49.59	1,271.14	-1,848.46	290.00	209.34	80.66	3.595	
9,000.00	7,256.59	8,724.96	7,068.71	59.77	59.25	-49.60	1,270.39	-1,948.46	289.91	205.41	84.51	3.431	
9,100.00	7,256.21	8,824.96	7,068.42	62.12	61.62	-49.61	1,269.63	-2,048.46	289.83	201.41	88.42	3.278	
9,200.00	7,255.83	8,924.96	7,068.14	64.50	64.02	-49.62	1,268.88	-2,148.45	289.75	197.36	92.39	3.136	
9,300.00	7,255.45	9,024.96	7,067.85	66.93	66.47	-49.63	1,268.13	-2,248.45	289.66	193.25	96.41	3.005	
9,400.00	7,255.07	9,124.96	7,067.57	69.38	68.94	-49.65	1,267.38	-2,348.45	289.58	189.11	100.47	2.882	
9,500.00	7,254.69	9,224.96	7,067.28	71.87	71.44	-49.66	1,266.62	-2,448.44	289.49	184.92	104.58	2.768	
9,600.00	7,254.31	9,324.96	7,067.00	74.38	73.97	-49.67	1,265.87	-2,548.44	289.41	180.69	108.72	2.662	
9,700.00	7,253.93	9,424.96	7,066.71	76.92	76.52	-49.68	1,265.12	-2,648.44	289.33	176.44	112.89	2.563	
9,800.00	7,253.55	9,524.96	7,066.43	79.48	79.10	-49.69	1,264.37	-2,748.43	289.24	172.16	117.09	2.470	
9,900.00	7,253.18	9,624.96	7,066.14	82.06	81.69	-49.70	1,263.62	-2,848.43	289.16	167.85	121.31	2.384	
10,000.00	7,252.80	9,724.96	7,065.86	84.65	84.30	-49.71	1,262.86	-2,948.43	289.08	163.52	125.56	2.302	
10,100.00	7,252.42	9,824.96	7,065.57	87.27	86.92	-49.72	1,262.11	-3,048.42	288.99	159.17	129.83	2.226	
10,200.00	7,252.04	9,924.96	7,065.29	89.89	89.56	-49.73	1,261.36	-3,148.42	288.91	154.80	134.11	2.154	

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,251.66	10,024.96	7,065.00	92.54	92.21	-49.74	1,260.61	-3,248.42	288.82	150.41	138.42	2.087		
10,400.00	7,251.28	10,124.96	7,064.72	95.19	94.88	-49.75	1,259.85	-3,348.41	288.74	146.00	142.74	2.023		
10,500.00	7,250.90	10,224.96	7,064.43	97.86	97.55	-49.76	1,259.10	-3,448.41	288.66	141.58	147.07	1.963		
10,600.00	7,250.52	10,324.96	7,064.15	100.53	100.24	-49.77	1,258.35	-3,548.41	288.57	137.15	151.42	1.906		
10,700.00	7,250.14	10,424.96	7,063.86	103.22	102.93	-49.78	1,257.60	-3,648.40	288.49	132.71	155.78	1.852		
10,800.00	7,249.76	10,524.96	7,063.58	105.91	105.64	-49.79	1,256.84	-3,748.40	288.41	128.25	160.16	1.801		
10,900.00	7,249.38	10,624.96	7,063.29	108.62	108.35	-49.80	1,256.09	-3,848.40	288.32	123.78	164.54	1.752		
11,000.00	7,249.00	10,724.96	7,063.01	111.33	111.07	-49.81	1,255.34	-3,948.39	288.24	119.31	168.93	1.706		
11,100.00	7,248.62	10,824.96	7,062.73	114.04	113.79	-49.82	1,254.59	-4,048.39	288.15	114.82	173.33	1.662		
11,200.00	7,248.24	10,924.96	7,062.44	116.77	116.52	-49.84	1,253.83	-4,148.39	288.07	110.33	177.75	1.621		
11,300.00	7,247.86	11,024.96	7,062.16	119.50	119.26	-49.85	1,253.08	-4,248.38	287.99	105.82	182.16	1.581		
11,400.00	7,247.48	11,124.96	7,061.87	122.24	122.00	-49.86	1,252.33	-4,348.38	287.90	101.31	186.59	1.543		
11,500.00	7,247.10	11,224.96	7,061.59	124.98	124.75	-49.87	1,251.58	-4,448.38	287.82	96.79	191.03	1.507		
11,600.00	7,246.72	11,324.96	7,061.30	127.73	127.51	-49.88	1,250.82	-4,548.37	287.74	92.27	195.47	1.472	Level 3	
11,700.00	7,246.34	11,424.96	7,061.02	130.48	130.26	-49.89	1,250.07	-4,648.37	287.65	87.74	199.91	1.439	Level 3	
11,800.00	7,245.96	11,524.96	7,060.73	133.24	133.03	-49.90	1,249.32	-4,748.37	287.57	83.20	204.37	1.407	Level 3	
11,900.00	7,245.58	11,624.96	7,060.45	136.00	135.79	-49.91	1,248.57	-4,848.36	287.49	78.66	208.83	1.377	Level 3	
12,000.00	7,245.21	11,724.96	7,060.16	138.76	138.56	-49.92	1,247.81	-4,948.36	287.40	74.11	213.29	1.347	Level 3	
12,100.00	7,244.83	11,824.96	7,059.88	141.53	141.34	-49.93	1,247.06	-5,048.36	287.32	69.56	217.76	1.319	Level 3	
12,200.00	7,244.45	11,924.96	7,059.59	144.30	144.11	-49.94	1,246.31	-5,148.35	287.23	65.00	222.24	1.292	Level 3	
12,300.00	7,244.07	12,024.96	7,059.31	147.08	146.89	-49.95	1,245.56	-5,248.35	287.15	60.43	226.72	1.267	Level 3	
12,400.00	7,243.69	12,124.96	7,059.02	149.86	149.68	-49.96	1,244.80	-5,348.35	287.07	55.87	231.20	1.242	Level 2	
12,500.00	7,243.31	12,224.96	7,058.74	152.64	152.46	-49.97	1,244.05	-5,448.34	286.98	51.29	235.69	1.218	Level 2	
12,600.00	7,242.93	12,324.96	7,058.45	155.42	155.25	-49.98	1,243.30	-5,548.34	286.90	46.72	240.18	1.195	Level 2	
12,700.00	7,242.55	12,424.96	7,058.17	158.21	158.04	-50.00	1,242.55	-5,648.34	286.82	42.14	244.68	1.172	Level 2	
12,800.00	7,242.17	12,524.96	7,057.88	161.00	160.83	-50.01	1,241.79	-5,748.33	286.73	37.55	249.18	1.151	Level 2	
12,900.00	7,241.79	12,624.96	7,057.60	163.79	163.63	-50.02	1,241.04	-5,848.33	286.65	32.96	253.69	1.130	Level 2	
13,000.00	7,241.41	12,724.96	7,057.31	166.58	166.43	-50.03	1,240.29	-5,948.33	286.57	28.37	258.19	1.110	Level 2	
13,100.00	7,241.03	12,824.96	7,057.03	169.38	169.23	-50.04	1,239.54	-6,048.32	286.48	23.78	262.70	1.091	Level 2	
13,200.00	7,240.65	12,924.96	7,056.75	172.18	172.03	-50.05	1,238.78	-6,148.32	286.40	19.18	267.22	1.072	Level 2	
13,300.00	7,240.27	13,024.96	7,056.46	174.98	174.83	-50.06	1,238.03	-6,248.32	286.32	14.58	271.74	1.054	Level 2	
13,400.00	7,239.89	13,124.96	7,056.18	177.78	177.64	-50.07	1,237.28	-6,348.31	286.23	9.97	276.26	1.036	Level 2	
13,500.00	7,239.51	13,224.96	7,055.89	180.58	180.44	-50.08	1,236.53	-6,448.31	286.15	5.36	280.78	1.019	Level 2	
13,600.00	7,239.13	13,324.96	7,055.61	183.39	183.25	-50.09	1,235.77	-6,548.31	286.07	0.75	285.31	1.003	Level 2	
13,700.00	7,238.75	13,424.96	7,055.32	186.20	186.06	-50.10	1,235.02	-6,648.30	285.98	-3.86	289.84	0.987	Level 1	
13,800.00	7,238.37	13,524.96	7,055.04	189.00	188.87	-50.11	1,234.27	-6,748.30	285.90	-8.48	294.38	0.971	Level 1	
13,900.00	7,237.99	13,624.96	7,054.75	191.81	191.68	-50.12	1,233.52	-6,848.30	285.81	-13.10	298.91	0.956	Level 1	
14,000.00	7,237.62	13,724.96	7,054.47	194.63	194.50	-50.13	1,232.77	-6,948.29	285.73	-17.72	303.45	0.942	Level 1	
14,100.00	7,237.24	13,824.96	7,054.18	197.44	197.31	-50.15	1,232.01	-7,048.29	285.65	-22.34	307.99	0.927	Level 1	
14,200.00	7,236.86	13,924.96	7,053.90	200.25	200.13	-50.16	1,231.26	-7,148.29	285.56	-26.97	312.53	0.914	Level 1	
14,300.00	7,236.48	14,024.96	7,053.61	203.07	202.95	-50.17	1,230.51	-7,248.28	285.48	-31.60	317.08	0.900	Level 1	
14,400.00	7,236.10	14,124.96	7,053.33	205.88	205.77	-50.18	1,229.76	-7,348.28	285.40	-36.23	321.63	0.887	Level 1	
14,500.00	7,235.72	14,224.96	7,053.04	208.70	208.59	-50.19	1,229.00	-7,448.28	285.31	-40.87	326.18	0.875	Level 1	
14,600.00	7,235.34	14,324.96	7,052.76	211.52	211.41	-50.20	1,228.25	-7,548.27	285.23	-45.50	330.73	0.862	Level 1	
14,700.00	7,234.96	14,424.96	7,052.47	214.34	214.23	-50.21	1,227.50	-7,648.27	285.15	-50.14	335.29	0.850	Level 1	
14,800.00	7,234.58	14,524.96	7,052.19	217.16	217.05	-50.22	1,226.75	-7,748.27	285.06	-54.78	339.85	0.839	Level 1	
14,900.00	7,234.20	14,624.96	7,051.90	219.98	219.88	-50.23	1,225.99	-7,848.26	284.98	-59.43	344.41	0.827	Level 1	
15,000.00	7,233.82	14,724.96	7,051.62	222.81	222.70	-50.24	1,225.24	-7,948.26	284.90	-64.07	348.97	0.816	Level 1	
15,100.00	7,233.44	14,824.96	7,051.33	225.63	225.53	-50.25	1,224.49	-8,048.26	284.81	-68.72	353.54	0.806	Level 1	
15,200.00	7,233.06	14,924.96	7,051.05	228.45	228.35	-50.26	1,223.74	-8,148.25	284.73	-73.37	358.10	0.795	Level 1	
15,216.01	7,233.00	14,940.97	7,051.00	228.91	228.81	-50.27	1,223.62	-8,164.27	284.72	-74.12	358.83	0.793	Level 1, ES, 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1.00	0.00	3.28	3.28	-179.52	-99.82	-0.83	99.82					
100.00	100.00	101.00	100.00	3.28	3.28	-179.52	-99.82	-0.83	99.82	93.25	6.57	15.195		
200.00	200.00	201.00	200.00	3.34	3.34	-179.52	-99.82	-0.83	99.82	93.15	6.67	14.955 CC, ES		
300.00	299.98	301.02	299.98	3.45	3.45	-173.89	-99.82	-0.83	101.56	94.67	6.89	14.736		
400.00	399.84	401.16	399.84	3.61	3.61	-174.18	-99.82	-0.83	106.76	99.55	7.21	14.801		
500.00	499.45	501.55	499.45	3.82	3.81	-174.60	-99.82	-0.83	115.44	107.81	7.63	15.136		
600.00	598.70	597.70	598.70	4.07	4.04	-175.10	-99.82	-0.83	127.58	119.47	8.11	15.736		
700.00	697.47	701.13	702.11	4.35	4.32	-175.36	-98.18	-1.53	141.58	132.91	8.67	16.322		
800.00	795.62	804.27	805.10	4.67	4.63	-175.18	-93.16	-3.65	155.76	146.45	9.30	16.740		
900.00	893.06	902.90	903.52	5.01	4.95	-174.97	-87.20	-6.17	172.20	162.24	9.96	17.288		
1,000.00	989.64	1,000.90	1,001.31	5.38	5.27	-174.88	-81.28	-8.67	192.07	181.41	10.66	18.025		
1,100.00	1,085.42	1,098.27	1,098.47	5.78	5.62	-174.89	-75.40	-11.15	214.84	203.46	11.38	18.874		
1,200.00	1,181.09	1,195.56	1,195.55	6.20	5.97	-174.92	-69.52	-13.63	237.97	225.85	12.13	19.622		
1,300.00	1,276.76	1,307.15	1,292.63	6.65	6.39	-174.94	-63.64	-16.12	261.11	248.16	12.95	20.163		
1,400.00	1,372.43	1,409.86	1,389.71	7.11	6.78	-174.96	-57.76	-18.60	284.24	270.48	13.76	20.657		
1,500.00	1,468.10	1,487.42	1,486.78	7.57	7.08	-174.98	-51.89	-21.08	307.37	292.88	14.49	21.216		
1,600.00	1,563.77	1,584.71	1,583.86	8.05	7.46	-175.00	-46.01	-23.56	330.51	315.20	15.31	21.594		
1,700.00	1,659.44	1,682.00	1,680.94	8.53	7.85	-175.01	-40.13	-26.05	353.64	337.50	16.14	21.917		
1,800.00	1,755.11	1,779.29	1,778.02	9.02	8.24	-175.02	-34.26	-28.53	376.77	359.80	16.97	22.196		
1,900.00	1,850.78	1,876.57	1,875.10	9.52	8.64	-175.03	-28.38	-31.01	399.90	382.08	17.82	22.438		
2,000.00	1,946.45	1,973.86	1,972.18	10.02	9.04	-175.04	-22.50	-33.49	423.04	404.36	18.68	22.649		
2,100.00	2,042.12	2,071.15	2,069.25	10.52	9.44	-175.05	-16.62	-35.98	446.17	426.63	19.54	22.835		
2,200.00	2,137.78	2,168.44	2,166.33	11.03	9.84	-175.06	-10.75	-38.46	469.30	448.90	20.41	22.998		
2,300.00	2,233.45	2,265.73	2,263.41	11.54	10.25	-175.06	-4.87	-40.94	492.44	471.16	21.28	23.142		
2,400.00	2,329.12	2,363.01	2,360.49	12.05	10.66	-175.07	1.01	-43.42	515.57	493.41	22.15	23.271		
2,500.00	2,424.79	2,460.30	2,457.57	12.56	11.07	-175.08	6.88	-45.91	538.70	515.67	23.04	23.386		
2,600.00	2,520.46	2,557.59	2,554.64	13.08	11.48	-175.08	12.76	-48.39	561.83	537.92	23.92	23.489		
2,700.00	2,616.13	2,654.88	2,651.72	13.60	11.89	-175.09	18.64	-50.87	584.97	560.16	24.81	23.582		
2,800.00	2,711.80	2,752.16	2,748.80	14.12	12.31	-175.09	24.51	-53.35	608.10	582.41	25.69	23.666		
2,900.00	2,807.47	2,849.45	2,845.88	14.64	12.72	-175.09	30.39	-55.84	631.23	604.65	26.59	23.742		
3,000.00	2,903.14	2,946.74	2,942.96	15.16	13.14	-175.10	36.27	-58.32	654.37	626.89	27.48	23.812		
3,100.00	2,998.81	3,044.03	3,040.03	15.68	13.56	-175.10	42.15	-60.80	677.50	649.12	28.38	23.875		
3,200.00	3,094.48	3,141.31	3,137.11	16.21	13.98	-175.10	48.02	-63.28	700.63	671.36	29.27	23.933		
3,300.00	3,190.15	3,238.60	3,234.19	16.73	14.39	-175.11	53.90	-65.76	723.77	693.59	30.17	23.986		
3,400.00	3,285.82	3,335.89	3,331.27	17.26	14.81	-175.11	59.78	-68.25	746.90	715.82	31.08	24.035		
3,500.00	3,381.49	3,433.18	3,428.35	17.78	15.23	-175.11	65.65	-70.73	770.03	738.05	31.98	24.080		
3,600.00	3,477.16	3,530.46	3,525.42	18.31	15.66	-175.12	71.53	-73.21	793.16	760.28	32.88	24.122		
3,700.00	3,572.83	3,627.75	3,622.50	18.84	16.08	-175.12	77.41	-75.69	816.30	782.51	33.79	24.161		
3,800.00	3,668.50	3,725.04	3,719.58	19.37	16.50	-175.12	83.29	-78.18	839.43	804.74	34.69	24.197		
3,900.00	3,764.17	3,822.33	3,816.66	19.89	16.92	-175.12	89.16	-80.66	862.56	826.96	35.60	24.230		
4,000.00	3,859.84	3,919.61	3,913.74	20.42	17.34	-175.12	95.04	-83.14	885.70	849.19	36.51	24.261		
4,100.00	3,955.51	4,016.90	4,010.82	20.95	17.77	-175.13	100.92	-85.62	908.83	871.41	37.42	24.290		
4,200.00	4,051.18	4,114.19	4,107.89	21.48	18.19	-175.13	106.79	-88.11	931.96	893.64	38.32	24.318		
4,300.00	4,146.85	4,211.48	4,204.97	22.01	18.61	-175.13	112.67	-90.59	955.10	915.86	39.23	24.343		
4,400.00	4,242.52	4,308.76	4,302.05	22.55	19.04	-175.13	118.55	-93.07	978.23	938.08	40.15	24.367		
4,500.00	4,338.19	4,406.05	4,399.13	23.08	19.46	-175.13	124.42	-95.55	1,001.36	960.30	41.06	24.389		
4,600.00	4,433.86	4,503.34	4,496.21	23.61	19.89	-175.13	130.30	-98.04	1,024.49	982.52	41.97	24.410		
4,700.00	4,529.53	4,600.63	4,593.28	24.14	20.31	-175.14	136.18	-100.52	1,047.63	1,004.74	42.88	24.430		
4,800.00	4,625.19	4,702.09	4,690.36	24.67	20.75	-175.14	142.06	-103.00	1,070.76	1,026.95	43.81	24.439		
4,900.00	4,720.86	4,804.80	4,787.44	25.21	21.20	-175.14	147.93	-105.48	1,093.89	1,049.14	44.75	24.444		
5,000.00	4,816.53	4,907.51	4,884.52	25.74	21.65	-175.14	153.81	-107.97	1,117.03	1,071.34	45.69	24.448		
5,100.00	4,912.20	4,989.78	4,981.60	26.27	22.01	-175.14	159.69	-110.45	1,140.16	1,093.62	46.54	24.499		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	5,087.06	5,078.67	26.80	22.44	-175.14	165.56	-112.93	1,163.29	1,115.84	47.45	24.514		
5,300.00	5,103.54	5,184.35	5,175.75	27.34	22.86	-175.14	171.44	-115.41	1,186.43	1,138.06	48.37	24.528		
5,400.00	5,199.22	5,281.64	5,272.83	27.87	23.29	-175.15	177.32	-117.90	1,209.54	1,160.26	49.29	24.542		
5,500.00	5,295.46	5,379.38	5,370.36	28.39	23.72	-175.18	183.22	-120.39	1,230.67	1,180.47	50.20	24.517		
5,600.00	5,392.60	5,477.79	5,468.56	28.89	24.15	-175.19	189.17	-122.90	1,248.38	1,197.28	51.10	24.430		
5,700.00	5,490.50	5,576.76	5,567.32	29.37	24.58	-175.18	195.15	-125.43	1,262.67	1,210.67	52.00	24.283		
5,800.00	5,589.05	5,676.16	5,666.50	29.83	25.02	-175.15	201.15	-127.96	1,273.50	1,220.62	52.88	24.082		
5,900.00	5,688.14	5,775.87	5,766.00	30.26	25.46	-175.10	207.17	-130.51	1,280.87	1,227.11	53.76	23.827		
6,000.00	5,787.63	5,875.78	5,865.69	30.68	25.90	-175.04	213.21	-133.06	1,284.77	1,230.15	54.62	23.523		
6,100.00	5,887.41	5,975.76	5,965.45	31.07	26.34	-174.95	219.25	-135.61	1,285.19	1,229.73	55.47	23.171		
6,200.00	5,987.36	6,075.68	6,065.16	31.44	26.78	-174.85	225.29	-138.16	1,282.14	1,225.85	56.30	22.774		
6,300.00	6,087.36	6,175.48	6,164.75	31.80	27.21	179.53	231.31	-140.70	1,276.32	1,219.20	57.12	22.345		
6,400.00	6,187.36	6,275.26	6,264.32	32.15	27.65	179.64	237.34	-143.25	1,270.26	1,212.32	57.94	21.925		
6,500.00	6,287.36	6,375.05	6,363.89	32.51	28.09	179.76	243.37	-145.80	1,264.20	1,205.44	58.76	21.515		
6,600.00	6,387.36	6,474.83	6,463.46	32.87	28.53	179.87	249.40	-148.34	1,258.15	1,198.57	59.58	21.117		
6,700.00	6,487.36	6,574.62	6,563.03	33.23	28.97	179.99	255.43	-150.89	1,252.10	1,191.70	60.41	20.728		
6,800.00	6,587.36	6,674.60	6,662.77	33.59	29.41	-179.87	261.47	-154.05	1,246.06	1,184.83	61.23	20.349		
6,900.00	6,687.26	6,773.58	6,760.40	33.95	29.85	-89.23	267.45	-168.54	1,240.01	1,177.96	62.05	19.985		
7,000.00	6,785.58	6,870.58	6,852.78	34.31	30.28	-89.22	273.20	-197.27	1,233.97	1,171.13	62.84	19.636		
7,100.00	6,879.94	6,965.90	6,938.27	34.65	30.70	-89.22	278.61	-238.86	1,228.08	1,164.45	63.63	19.300		
7,200.00	6,968.01	7,059.73	7,015.45	34.97	31.15	-89.24	283.58	-291.83	1,222.45	1,158.01	64.44	18.971		
7,300.00	7,047.61	7,152.27	7,083.15	35.27	31.63	-89.28	288.04	-354.65	1,217.21	1,151.90	65.30	18.640		
7,400.00	7,116.80	7,243.72	7,140.42	35.54	32.18	-89.34	291.91	-425.73	1,212.44	1,146.15	66.29	18.290		
7,500.00	7,173.86	7,334.28	7,186.55	35.81	32.83	-89.40	295.16	-503.51	1,208.26	1,140.78	67.48	17.905		
7,600.00	7,217.38	7,424.15	7,220.99	36.17	33.60	-89.47	297.73	-586.39	1,204.73	1,135.80	68.93	17.477		
7,700.00	7,246.31	7,513.51	7,243.35	36.80	34.49	-89.55	299.58	-672.82	1,201.93	1,131.26	70.67	17.008		
7,800.00	7,259.92	7,602.56	7,253.40	37.72	35.50	-89.63	300.71	-761.22	1,199.90	1,127.22	72.69	16.508		
7,900.00	7,260.77	7,698.82	7,253.75	38.86	36.71	-89.67	301.30	-857.46	1,198.51	1,123.43	75.08	15.964		
8,000.00	7,260.39	7,801.19	7,253.39	40.19	38.18	-89.67	301.87	-957.45	1,197.16	1,119.26	77.90	15.368		
8,100.00	7,260.01	7,901.20	7,253.02	41.67	39.77	-89.67	302.43	-1,057.44	1,195.81	1,114.81	81.00	14.763		
8,200.00	7,259.63	8,001.21	7,252.66	43.30	41.49	-89.67	303.00	-1,157.43	1,194.46	1,110.08	84.38	14.156		
8,300.00	7,259.25	8,101.22	7,252.29	45.05	43.33	-89.67	303.57	-1,257.42	1,193.11	1,105.12	88.00	13.559		
8,400.00	7,258.87	8,201.23	7,251.92	46.91	45.28	-89.67	304.13	-1,357.41	1,191.76	1,099.94	91.83	12.978		
8,500.00	7,258.49	8,301.24	7,251.56	48.87	47.33	-89.67	304.70	-1,457.40	1,190.42	1,094.57	95.85	12.420		
8,600.00	7,258.11	8,401.25	7,251.19	50.92	49.45	-89.67	305.27	-1,557.38	1,189.07	1,089.03	100.03	11.887		
8,700.00	7,257.73	8,501.26	7,250.83	53.04	51.65	-89.67	305.84	-1,657.37	1,187.72	1,083.35	104.37	11.380		
8,800.00	7,257.35	8,601.27	7,250.46	55.23	53.91	-89.67	306.40	-1,757.36	1,186.37	1,077.54	108.83	10.902		
8,900.00	7,256.97	8,701.28	7,250.09	57.47	56.22	-89.67	306.97	-1,857.35	1,185.02	1,071.62	113.40	10.450		
9,000.00	7,256.59	8,801.29	7,249.73	59.77	58.58	-89.67	307.54	-1,957.34	1,183.67	1,065.60	118.07	10.025		
9,100.00	7,256.21	8,901.29	7,249.36	62.12	60.99	-89.67	308.10	-2,057.33	1,182.32	1,059.49	122.83	9.625		
9,200.00	7,255.83	9,001.30	7,248.99	64.50	63.43	-89.67	308.67	-2,157.32	1,180.97	1,053.30	127.67	9.250		
9,300.00	7,255.45	9,101.31	7,248.63	66.93	65.91	-89.67	309.24	-2,257.31	1,179.62	1,047.04	132.58	8.897		
9,400.00	7,255.07	9,201.32	7,248.26	69.38	68.41	-89.67	309.80	-2,357.29	1,178.28	1,040.72	137.56	8.566		
9,500.00	7,254.69	9,301.33	7,247.90	71.87	70.95	-89.67	310.37	-2,457.28	1,176.93	1,034.34	142.59	8.254		
9,600.00	7,254.31	9,401.34	7,247.53	74.38	73.51	-89.67	310.94	-2,557.27	1,175.58	1,027.91	147.67	7.961		
9,700.00	7,253.93	9,501.35	7,247.16	76.92	76.09	-89.67	311.50	-2,657.26	1,174.23	1,021.44	152.79	7.685		
9,800.00	7,253.55	9,601.36	7,246.80	79.48	78.69	-89.67	312.07	-2,757.25	1,172.88	1,014.92	157.96	7.425		
9,900.00	7,253.18	9,701.37	7,246.43	82.06	81.30	-89.67	312.64	-2,857.24	1,171.53	1,008.37	163.16	7.180		
10,000.00	7,252.80	9,801.38	7,246.07	84.65	83.94	-89.67	313.20	-2,957.23	1,170.18	1,001.79	168.40	6.949		
10,100.00	7,252.42	9,901.39	7,245.70	87.27	86.58	-89.67	313.77	-3,057.21	1,168.83	995.17	173.66	6.730		
10,200.00	7,252.04	10,001.39	7,245.33	89.89	89.24	-89.67	314.34	-3,157.20	1,167.48	988.53	178.96	6.524		
10,300.00	7,251.66	10,101.40	7,244.97	92.54	91.92	-89.67	314.90	-3,257.19	1,166.14	981.86	184.28	6.328		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,251.28	10,201.41	7,244.60	95.19	94.60	-89.67	315.47	-3,357.18	1,164.79	975.17	189.62	6.143		
10,500.00	7,250.90	10,301.42	7,244.23	97.86	97.30	-89.67	316.04	-3,457.17	1,163.44	968.45	194.99	5.967		
10,600.00	7,250.52	10,401.43	7,243.87	100.53	100.00	-89.68	316.60	-3,557.16	1,162.09	961.72	200.37	5.800		
10,700.00	7,250.14	10,501.44	7,243.50	103.22	102.71	-89.68	317.17	-3,657.15	1,160.74	954.97	205.77	5.641		
10,800.00	7,249.76	10,601.45	7,243.14	105.91	105.43	-89.68	317.74	-3,757.13	1,159.39	948.20	211.19	5.490		
10,900.00	7,249.38	10,701.46	7,242.77	108.62	108.16	-89.68	318.31	-3,857.12	1,158.04	941.41	216.63	5.346		
11,000.00	7,249.00	10,801.47	7,242.40	111.33	110.89	-89.68	318.87	-3,957.11	1,156.69	934.62	222.08	5.209		
11,100.00	7,248.62	10,901.48	7,242.04	114.04	113.63	-89.68	319.44	-4,057.10	1,155.35	927.81	227.54	5.078		
11,200.00	7,248.24	11,001.49	7,241.67	116.77	116.38	-89.68	320.01	-4,157.09	1,154.00	920.98	233.01	4.952		
11,300.00	7,247.86	11,101.49	7,241.31	119.50	119.13	-89.68	320.57	-4,257.08	1,152.65	914.15	238.50	4.833		
11,400.00	7,247.48	11,201.50	7,240.94	122.24	121.89	-89.68	321.14	-4,357.07	1,151.30	907.30	244.00	4.718		
11,500.00	7,247.10	11,301.51	7,240.57	124.98	124.65	-89.68	321.71	-4,457.06	1,149.95	900.44	249.51	4.609		
11,600.00	7,246.72	11,401.52	7,240.21	127.73	127.42	-89.68	322.27	-4,557.04	1,148.60	893.58	255.02	4.504		
11,700.00	7,246.34	11,501.53	7,239.84	130.48	130.19	-89.68	322.84	-4,657.03	1,147.25	886.70	260.55	4.403		
11,800.00	7,245.96	11,601.54	7,239.47	133.24	132.96	-89.68	323.41	-4,757.02	1,145.90	879.82	266.08	4.307		
11,900.00	7,245.58	11,701.55	7,239.11	136.00	135.74	-89.68	323.97	-4,857.01	1,144.55	872.93	271.62	4.214		
12,000.00	7,245.21	11,801.56	7,238.74	138.76	138.52	-89.68	324.54	-4,957.00	1,143.21	866.03	277.17	4.125		
12,100.00	7,244.83	11,901.57	7,238.38	141.53	141.31	-89.68	325.11	-5,056.99	1,141.86	859.13	282.73	4.039		
12,200.00	7,244.45	12,001.58	7,238.01	144.30	144.10	-89.68	325.67	-5,156.98	1,140.51	852.22	288.29	3.956		
12,300.00	7,244.07	12,101.59	7,237.64	147.08	146.89	-89.68	326.24	-5,256.96	1,139.16	845.30	293.86	3.877		
12,400.00	7,243.69	12,201.59	7,237.28	149.86	149.68	-89.68	326.81	-5,356.95	1,137.81	838.38	299.43	3.800		
12,500.00	7,243.31	12,301.60	7,236.91	152.64	152.48	-89.68	327.37	-5,456.94	1,136.46	831.45	305.01	3.726		
12,600.00	7,242.93	12,401.61	7,236.55	155.42	155.27	-89.68	327.94	-5,556.93	1,135.11	824.52	310.60	3.655		
12,700.00	7,242.55	12,501.62	7,236.18	158.21	158.08	-89.68	328.51	-5,656.92	1,133.76	817.58	316.18	3.586		
12,800.00	7,242.17	12,601.63	7,235.81	161.00	160.88	-89.68	329.07	-5,756.91	1,132.41	810.64	321.78	3.519		
12,900.00	7,241.79	12,701.64	7,235.45	163.79	163.68	-89.68	329.64	-5,856.90	1,131.07	803.69	327.38	3.455		
13,000.00	7,241.41	12,801.65	7,235.08	166.58	166.49	-89.68	330.21	-5,956.88	1,129.72	796.74	332.98	3.393		
13,100.00	7,241.03	12,901.66	7,234.71	169.38	169.30	-89.68	330.78	-6,056.87	1,128.37	789.78	338.59	3.333		
13,200.00	7,240.65	13,001.67	7,234.35	172.18	172.11	-89.68	331.34	-6,156.86	1,127.02	782.82	344.20	3.274		
13,300.00	7,240.27	13,101.68	7,233.98	174.98	174.92	-89.68	331.91	-6,256.85	1,125.67	775.86	349.81	3.218		
13,400.00	7,239.89	13,201.69	7,233.62	177.78	177.74	-89.68	332.48	-6,356.84	1,124.32	768.89	355.43	3.163		
13,500.00	7,239.51	13,301.69	7,233.25	180.58	180.55	-89.68	333.04	-6,456.83	1,122.97	761.93	361.05	3.110		
13,600.00	7,239.13	13,401.70	7,232.88	183.39	183.37	-89.68	333.61	-6,556.82	1,121.62	754.95	366.67	3.059		
13,700.00	7,238.75	13,501.71	7,232.52	186.20	186.19	-89.68	334.18	-6,656.80	1,120.27	747.98	372.30	3.009		
13,800.00	7,238.37	13,601.72	7,232.15	189.00	189.01	-89.68	334.74	-6,756.79	1,118.93	741.00	377.93	2.961		
13,900.00	7,237.99	13,701.73	7,231.79	191.81	191.83	-89.68	335.31	-6,856.78	1,117.58	734.02	383.56	2.914		
14,000.00	7,237.62	13,801.74	7,231.42	194.63	194.65	-89.68	335.88	-6,956.77	1,116.23	727.04	389.19	2.868		
14,100.00	7,237.24	13,901.75	7,231.05	197.44	197.47	-89.69	336.44	-7,056.76	1,114.88	720.05	394.83	2.824		
14,200.00	7,236.86	14,001.76	7,230.69	200.25	200.30	-89.69	337.01	-7,156.75	1,113.53	713.06	400.47	2.781		
14,300.00	7,236.48	14,101.77	7,230.32	203.07	203.12	-89.69	337.58	-7,256.74	1,112.18	706.07	406.11	2.739		
14,400.00	7,236.10	14,201.78	7,229.95	205.88	205.95	-89.69	338.14	-7,356.73	1,110.83	699.08	411.76	2.698		
14,500.00	7,235.72	14,301.79	7,229.59	208.70	208.78	-89.69	338.71	-7,456.71	1,109.48	692.08	417.40	2.658		
14,600.00	7,235.34	14,401.79	7,229.22	211.52	211.61	-89.69	339.28	-7,556.70	1,108.13	685.09	423.05	2.619		
14,700.00	7,234.96	14,501.80	7,228.86	214.34	214.44	-89.69	339.84	-7,656.69	1,106.79	678.09	428.70	2.582		
14,800.00	7,234.58	14,601.81	7,228.49	217.16	217.27	-89.69	340.41	-7,756.68	1,105.44	671.09	434.35	2.545		
14,900.00	7,234.20	14,701.82	7,228.12	219.98	220.10	-89.69	340.98	-7,856.67	1,104.09	664.08	440.00	2.509		
15,000.00	7,233.82	14,801.83	7,227.76	222.81	222.93	-89.69	341.55	-7,956.66	1,102.74	657.08	445.66	2.474		
15,100.00	7,233.44	14,901.84	7,227.39	225.63	225.76	-89.69	342.11	-8,056.65	1,101.39	650.07	451.32	2.440		
15,200.00	7,233.06	14,998.15	7,227.03	228.45	228.49	-89.69	342.68	-8,156.63	1,100.04	643.17	456.87	2.408		
15,216.01	7,233.00	15,014.16	7,226.97	228.91	228.94	-89.69	342.77	-8,172.65	1,099.83	642.05	457.78	2.403 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2.00	0.00	3.28	3.28	-179.52	-399.65	-3.34	399.66					
100.00	100.00	102.00	100.00	3.28	3.29	-179.52	-399.65	-3.34	399.66	393.09	6.57	60.832		
200.00	200.00	198.00	200.00	3.34	3.34	-179.52	-399.65	-3.34	399.66	392.99	6.67	59.897	CC, ES	
300.00	299.98	285.94	287.93	3.45	3.42	-173.79	-400.93	-3.44	402.86	395.98	6.88	58.577		
400.00	399.84	373.10	375.00	3.61	3.55	-173.80	-404.86	-3.77	412.56	405.37	7.19	57.394		
500.00	499.45	459.19	460.83	3.82	3.71	-173.81	-411.32	-4.31	428.69	421.10	7.59	56.506		
600.00	598.70	543.69	544.87	4.07	3.89	-173.81	-420.17	-5.04	451.14	443.08	8.05	56.020		
700.00	697.47	626.15	626.58	4.35	4.10	-173.82	-431.18	-5.96	479.75	471.18	8.57	55.991		
800.00	795.62	706.14	705.51	4.67	4.33	-173.82	-444.09	-7.03	514.33	505.22	9.11	56.428		
900.00	893.06	783.29	781.27	5.01	4.58	-173.80	-458.62	-8.24	554.67	544.99	9.68	57.297		
1,000.00	989.64	857.29	853.54	5.38	4.84	-173.78	-474.46	-9.56	600.51	590.26	10.25	58.592		
1,100.00	1,085.42	928.10	922.29	5.78	5.11	-173.81	-491.36	-10.96	651.16	640.34	10.82	60.173		
1,200.00	1,181.09	997.92	989.65	6.20	5.39	-173.87	-509.67	-12.49	704.20	692.82	11.38	61.903		
1,300.00	1,276.76	1,082.15	1,070.68	6.65	5.74	-173.93	-532.57	-14.39	758.09	746.09	12.00	63.165		
1,400.00	1,372.43	1,166.38	1,151.71	7.11	6.11	-173.98	-555.47	-16.30	811.99	799.34	12.66	64.161		
1,500.00	1,468.10	1,250.61	1,232.75	7.57	6.50	-174.03	-578.38	-18.20	865.89	852.56	13.33	64.950		
1,600.00	1,563.77	1,334.84	1,313.78	8.05	6.89	-174.07	-601.28	-20.11	919.79	905.77	14.03	65.572		
1,700.00	1,659.44	1,419.07	1,394.81	8.53	7.29	-174.10	-624.19	-22.01	973.69	958.95	14.74	66.062		
1,800.00	1,755.11	1,503.30	1,475.84	9.02	7.70	-174.14	-647.09	-23.92	1,027.59	1,012.13	15.47	66.444		
1,900.00	1,850.78	1,587.53	1,556.88	9.52	8.12	-174.16	-670.00	-25.82	1,081.49	1,065.29	16.20	66.742		
2,000.00	1,946.45	1,671.75	1,637.91	10.02	8.54	-174.19	-692.90	-27.73	1,135.40	1,118.44	16.95	66.971		
2,100.00	2,042.12	1,755.98	1,718.94	10.52	8.96	-174.21	-715.80	-29.63	1,189.30	1,171.58	17.71	67.145		
2,200.00	2,137.78	1,840.21	1,799.97	11.03	9.39	-174.24	-738.71	-31.53	1,243.20	1,224.72	18.48	67.274		
2,300.00	2,233.45	1,924.44	1,881.01	11.54	9.82	-174.26	-761.61	-33.44	1,297.10	1,277.85	19.25	67.368		
2,400.00	2,329.12	2,008.67	1,962.04	12.05	10.26	-174.27	-784.52	-35.34	1,351.00	1,330.97	20.03	67.434		
2,500.00	2,424.79	2,107.10	2,043.07	12.56	10.77	-174.29	-807.42	-37.25	1,404.90	1,384.02	20.89	67.263		
2,600.00	2,520.46	2,177.13	2,124.10	13.08	11.14	-174.31	-830.33	-39.15	1,458.80	1,437.19	21.61	67.499		
2,700.00	2,616.13	2,261.36	2,205.14	13.60	11.58	-174.32	-853.23	-41.06	1,512.71	1,490.30	22.41	67.507		
2,800.00	2,711.80	2,345.59	2,286.17	14.12	12.02	-174.33	-876.13	-42.96	1,566.61	1,543.40	23.21	67.503		
2,900.00	2,807.47	2,429.81	2,367.20	14.64	12.47	-174.35	-899.04	-44.87	1,620.51	1,596.50	24.01	67.488		
3,000.00	2,903.14	2,514.04	2,448.23	15.16	12.92	-174.36	-921.94	-46.77	1,674.41	1,649.59	24.82	67.466		
3,100.00	2,998.81	2,601.73	2,529.27	15.68	13.38	-174.37	-944.85	-48.68	1,728.31	1,702.67	25.65	67.394		
3,200.00	3,094.48	2,682.50	2,610.30	16.21	13.81	-174.38	-967.75	-50.58	1,782.21	1,755.77	26.44	67.403		
3,300.00	3,190.15	2,766.73	2,691.33	16.73	14.26	-174.39	-990.66	-52.49	1,836.12	1,808.86	27.26	67.364		
3,400.00	3,285.82	2,850.96	2,772.36	17.26	14.72	-174.40	-1,013.56	-54.39	1,890.02	1,861.94	28.07	67.323		
3,500.00	3,381.49	2,935.19	2,853.40	17.78	15.17	-174.41	-1,036.46	-56.30	1,943.92	1,915.03	28.89	67.279		
3,600.00	3,477.16	3,019.42	2,934.43	18.31	15.62	-174.42	-1,059.37	-58.20	1,997.82	1,968.11	29.71	67.233		
3,700.00	3,572.83	3,103.65	3,015.46	18.84	16.08	-174.42	-1,082.27	-60.11	2,051.72	2,021.19	30.54	67.186		
3,800.00	3,668.50	3,187.88	3,096.50	19.37	16.53	-174.43	-1,105.18	-62.01	2,105.63	2,074.26	31.36	67.137		
3,900.00	3,764.17	3,272.10	3,177.53	19.89	16.98	-174.44	-1,128.08	-63.92	2,159.53	2,127.34	32.19	67.088		
4,000.00	3,859.84	3,356.33	3,258.56	20.42	17.44	-174.45	-1,150.98	-65.82	2,213.43	2,180.41	33.02	67.039		
4,100.00	3,955.51	3,440.56	3,339.59	20.95	17.90	-174.45	-1,173.89	-67.73	2,267.33	2,233.49	33.85	66.989		
4,200.00	4,051.18	3,524.79	3,420.63	21.48	18.35	-174.46	-1,196.79	-69.63	2,321.23	2,286.56	34.68	66.939		
4,300.00	4,146.85	3,609.02	3,501.66	22.01	18.81	-174.46	-1,219.70	-71.53	2,375.14	2,339.63	35.51	66.889		
4,400.00	4,242.52	3,706.75	3,582.69	22.55	19.34	-174.47	-1,242.60	-73.44	2,429.04	2,392.63	36.41	66.719		
4,500.00	4,338.19	3,777.48	3,663.72	23.08	19.73	-174.47	-1,265.51	-75.34	2,482.94	2,445.77	37.17	66.791		
4,600.00	4,433.86	3,861.71	3,744.76	23.61	20.18	-174.48	-1,288.41	-77.25	2,536.84	2,498.83	38.01	66.742		
4,700.00	4,529.53	3,945.94	3,825.79	24.14	20.64	-174.48	-1,311.31	-79.15	2,590.75	2,551.90	38.85	66.694		
4,800.00	4,625.19	4,030.16	3,906.82	24.67	21.10	-174.49	-1,334.22	-81.06	2,644.65	2,604.97	39.68	66.647		
4,900.00	4,720.86	4,114.39	3,987.85	25.21	21.56	-174.49	-1,357.12	-82.96	2,698.55	2,658.03	40.52	66.600		
5,000.00	4,816.53	4,201.38	4,068.89	25.74	22.04	-174.50	-1,380.03	-84.87	2,752.45	2,711.08	41.37	66.532		
5,100.00	4,912.20	4,282.85	4,149.92	26.27	22.48	-174.50	-1,402.93	-86.77	2,806.35	2,764.16	42.20	66.507		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	4,367.08	4,230.95	26.80	22.94	-174.51	-1,425.84	-88.68	2,860.26	2,817.22	43.04	66.462		
5,300.00	5,103.54	4,451.31	4,311.98	27.34	23.40	-174.51	-1,448.74	-90.58	2,914.16	2,870.28	43.88	66.418		
5,400.00	5,199.22	4,535.55	4,393.02	27.87	23.86	-174.52	-1,471.65	-92.49	2,968.05	2,923.33	44.72	66.374		
5,500.00	5,295.46	4,620.86	4,475.10	28.39	24.33	-174.64	-1,494.85	-94.42	3,020.21	2,974.65	45.56	66.291		
5,600.00	5,392.60	4,707.94	4,558.87	28.89	24.81	-174.74	-1,518.52	-96.39	3,069.37	3,022.96	46.41	66.141		
5,700.00	5,490.50	4,803.34	4,644.23	29.37	25.33	-174.82	-1,542.65	-98.39	3,115.47	3,068.18	47.29	65.880		
5,800.00	5,589.05	4,886.94	4,731.08	29.83	25.79	-174.88	-1,567.20	-100.43	3,158.47	3,110.36	48.11	65.651		
5,900.00	5,688.14	4,978.65	4,819.31	30.26	26.29	-174.93	-1,592.14	-102.51	3,198.30	3,149.34	48.96	65.319		
6,000.00	5,787.63	5,071.68	4,908.82	30.68	26.80	-174.97	-1,617.44	-104.61	3,234.92	3,185.10	49.82	64.936		
6,100.00	5,887.41	5,165.93	4,999.48	31.07	27.31	-175.00	-1,643.07	-106.74	3,268.28	3,217.61	50.67	64.505		
6,200.00	5,987.36	5,261.27	5,091.21	31.44	27.84	-175.01	-1,668.99	-108.90	3,298.35	3,246.84	51.51	64.030		
6,300.00	6,087.36	5,357.41	5,183.70	31.80	28.36	179.28	-1,695.13	-111.07	3,325.75	3,273.39	52.36	63.523		
6,400.00	6,187.36	5,453.61	5,276.25	32.15	28.89	179.33	-1,721.30	-113.25	3,352.92	3,299.72	53.20	63.023		
6,500.00	6,287.36	5,549.82	5,368.81	32.51	29.42	179.37	-1,747.46	-115.42	3,380.09	3,326.04	54.05	62.536		
6,600.00	6,387.36	5,646.02	5,461.36	32.87	29.95	179.41	-1,773.62	-117.60	3,407.27	3,352.37	54.90	62.063		
6,700.00	6,487.36	5,742.23	5,553.92	33.23	30.48	179.46	-1,799.78	-119.78	3,434.45	3,378.70	55.75	61.603		
6,800.00	6,587.36	5,838.43	5,646.47	33.59	31.01	179.50	-1,825.94	-121.95	3,461.63	3,405.02	56.60	61.155		
6,900.00	6,687.26	5,934.62	5,739.00	33.95	31.53	-88.47	-1,852.09	-124.13	3,488.78	3,431.33	57.45	60.727		
7,000.00	6,785.58	6,029.65	5,830.43	34.31	32.06	-86.22	-1,877.94	-126.28	3,515.56	3,457.27	58.29	60.313		
7,100.00	6,879.94	6,121.24	5,918.54	34.65	32.56	-84.30	-1,902.84	-128.35	3,541.51	3,482.40	59.11	59.912		
7,200.00	6,968.01	6,207.13	6,001.18	34.97	33.03	-82.66	-1,926.20	-130.29	3,566.36	3,506.45	59.91	59.527		
7,300.00	7,047.61	6,285.21	6,076.29	35.27	33.46	-81.25	-1,947.43	-132.05	3,590.01	3,529.31	60.69	59.150		
7,400.00	7,116.80	6,353.55	6,142.04	35.54	33.84	-80.00	-1,966.01	-133.60	3,612.47	3,550.99	61.48	58.760		
7,500.00	7,173.86	6,410.47	6,196.80	35.81	34.15	-78.81	-1,981.49	-134.89	3,633.81	3,571.51	62.29	58.333		
7,600.00	7,217.38	6,454.57	6,239.23	36.17	34.39	-77.62	-1,993.48	-135.88	3,654.08	3,590.92	63.17	57.847		
7,700.00	7,246.31	6,484.77	6,268.28	36.80	34.56	-76.36	-2,001.70	-136.57	3,673.30	3,609.19	64.11	57.297		
7,800.00	7,259.92	6,500.31	6,283.23	37.72	34.64	-75.00	-2,005.92	-136.92	3,691.35	3,626.24	65.11	56.698		
7,900.00	7,260.77	6,503.60	6,286.39	38.86	34.66	-74.45	-2,006.81	-136.99	3,708.76	3,642.61	66.15	56.067		
8,000.00	7,260.39	6,505.70	6,288.42	40.19	34.67	-74.49	-2,007.39	-137.04	3,728.46	3,661.13	67.33	55.377		
8,100.00	7,260.01	6,507.81	6,290.45	41.67	34.69	-74.52	-2,007.96	-137.09	3,750.72	3,682.09	68.63	54.652		
8,200.00	7,259.63	6,509.92	6,292.48	43.30	34.70	-74.55	-2,008.54	-137.14	3,775.50	3,705.47	70.03	53.913		
8,300.00	7,259.25	8,317.24	7,248.35	45.05	45.74	-89.84	-2,286.76	-1,228.53	3,783.48	3,693.98	89.50	42.275		
8,400.00	7,258.87	8,417.24	7,247.76	46.91	47.43	-89.83	-2,287.34	-1,328.53	3,783.28	3,690.10	93.18	40.600		
8,500.00	7,258.49	8,517.24	7,247.16	48.87	49.25	-89.83	-2,287.93	-1,428.52	3,783.09	3,686.02	97.07	38.974		
8,600.00	7,258.11	8,617.24	7,246.57	50.92	51.18	-89.83	-2,288.51	-1,528.52	3,782.89	3,681.76	101.12	37.408		
8,700.00	7,257.73	8,717.24	7,245.97	53.04	53.21	-89.82	-2,289.09	-1,628.51	3,782.69	3,677.35	105.34	35.911		
8,800.00	7,257.35	8,817.24	7,245.37	55.23	55.31	-89.82	-2,289.68	-1,728.51	3,782.49	3,672.81	109.68	34.486		
8,900.00	7,256.97	8,917.24	7,244.78	57.47	57.48	-89.82	-2,290.26	-1,828.51	3,782.30	3,668.14	114.15	33.134		
9,000.00	7,256.59	9,017.24	7,244.18	59.77	59.71	-89.81	-2,290.84	-1,928.50	3,782.10	3,663.37	118.73	31.855		
9,100.00	7,256.21	9,117.24	7,243.59	62.12	62.00	-89.81	-2,291.43	-2,028.50	3,781.90	3,658.50	123.40	30.648		
9,200.00	7,255.83	9,217.24	7,242.99	64.50	64.33	-89.81	-2,292.01	-2,128.49	3,781.70	3,653.55	128.15	29.509		
9,300.00	7,255.45	9,317.24	7,242.40	66.93	66.71	-89.80	-2,292.60	-2,228.49	3,781.51	3,648.52	132.99	28.435		
9,400.00	7,255.07	9,417.23	7,241.80	69.38	69.12	-89.80	-2,293.18	-2,328.49	3,781.31	3,643.42	137.89	27.424		
9,500.00	7,254.69	9,517.23	7,241.20	71.87	71.57	-89.80	-2,293.76	-2,428.48	3,781.11	3,638.26	142.85	26.470		
9,600.00	7,254.31	9,617.23	7,240.61	74.38	74.05	-89.79	-2,294.35	-2,528.48	3,780.91	3,633.05	147.86	25.571		
9,700.00	7,253.93	9,717.23	7,240.01	76.92	76.55	-89.79	-2,294.93	-2,628.47	3,780.72	3,627.79	152.92	24.723		
9,800.00	7,253.55	9,817.23	7,239.42	79.48	79.08	-89.79	-2,295.51	-2,728.47	3,780.52	3,622.49	158.03	23.922		
9,900.00	7,253.18	9,917.23	7,238.82	82.06	81.63	-89.78	-2,296.10	-2,828.47	3,780.32	3,617.14	163.18	23.166		
10,000.00	7,252.80	10,017.23	7,238.22	84.65	84.20	-89.78	-2,296.68	-2,928.46	3,780.12	3,611.76	168.37	22.452		
10,100.00	7,252.42	10,117.23	7,237.63	87.27	86.79	-89.78	-2,297.27	-3,028.46	3,779.93	3,606.34	173.59	21.775		
10,200.00	7,252.04	10,217.23	7,237.03	89.89	89.39	-89.77	-2,297.85	-3,128.45	3,779.73	3,600.89	178.84	21.135		
10,300.00	7,251.66	10,317.23	7,236.44	92.54	92.02	-89.77	-2,298.43	-3,228.45	3,779.53	3,595.42	184.11	20.528		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,251.28	10,417.23	7,235.84	95.19	94.65	-89.77	-2,299.02	-3,328.45	3,779.33	3,589.92	189.42	19.952		
10,500.00	7,250.90	10,517.23	7,235.25	97.86	97.30	-89.76	-2,299.60	-3,428.44	3,779.14	3,584.39	194.74	19.406		
10,600.00	7,250.52	10,617.23	7,234.65	100.53	99.96	-89.76	-2,300.18	-3,528.44	3,778.94	3,578.85	200.09	18.886		
10,700.00	7,250.14	10,717.23	7,234.05	103.22	102.63	-89.76	-2,300.77	-3,628.44	3,778.74	3,573.28	205.46	18.392		
10,800.00	7,249.76	10,817.23	7,233.46	105.91	105.31	-89.75	-2,301.35	-3,728.43	3,778.55	3,567.70	210.84	17.921		
10,900.00	7,249.38	10,917.23	7,232.86	108.62	108.00	-89.75	-2,301.94	-3,828.43	3,778.35	3,562.10	216.25	17.472		
11,000.00	7,249.00	11,017.23	7,232.27	111.33	110.70	-89.75	-2,302.52	-3,928.42	3,778.15	3,556.48	221.67	17.044		
11,100.00	7,248.62	11,117.23	7,231.67	114.04	113.40	-89.74	-2,303.10	-4,028.42	3,777.95	3,550.85	227.10	16.636		
11,200.00	7,248.24	11,217.23	7,231.07	116.77	116.11	-89.74	-2,303.69	-4,128.42	3,777.76	3,545.21	232.55	16.245		
11,300.00	7,247.86	11,317.23	7,230.48	119.50	118.83	-89.74	-2,304.27	-4,228.41	3,777.56	3,539.55	238.01	15.872		
11,400.00	7,247.48	11,417.23	7,229.88	122.24	121.56	-89.73	-2,304.86	-4,328.41	3,777.36	3,533.88	243.48	15.514		
11,500.00	7,247.10	11,517.23	7,229.29	124.98	124.29	-89.73	-2,305.44	-4,428.40	3,777.16	3,528.20	248.96	15.172		
11,600.00	7,246.72	11,617.23	7,228.69	127.73	127.03	-89.73	-2,306.02	-4,528.40	3,776.97	3,522.51	254.45	14.843		
11,700.00	7,246.34	11,717.22	7,228.09	130.48	129.78	-89.72	-2,306.61	-4,628.40	3,776.77	3,516.81	259.96	14.528		
11,800.00	7,245.96	11,817.22	7,227.50	133.24	132.52	-89.72	-2,307.19	-4,728.39	3,776.57	3,511.11	265.47	14.226		
11,900.00	7,245.58	11,917.22	7,226.90	136.00	135.28	-89.72	-2,307.77	-4,828.39	3,776.38	3,505.39	270.99	13.936		
12,000.00	7,245.21	12,017.22	7,226.31	138.76	138.03	-89.71	-2,308.36	-4,928.38	3,776.18	3,499.66	276.52	13.656		
12,100.00	7,244.83	12,117.22	7,225.71	141.53	140.80	-89.71	-2,308.94	-5,028.38	3,775.98	3,493.93	282.05	13.388		
12,200.00	7,244.45	12,217.22	7,225.12	144.30	143.56	-89.71	-2,309.53	-5,128.38	3,775.78	3,488.19	287.59	13.129		
12,300.00	7,244.07	12,317.22	7,224.52	147.08	146.33	-89.70	-2,310.11	-5,228.37	3,775.59	3,482.44	293.14	12.880		
12,400.00	7,243.69	12,417.22	7,223.92	149.86	149.10	-89.70	-2,310.69	-5,328.37	3,775.39	3,476.69	298.70	12.639		
12,500.00	7,243.31	12,517.22	7,223.33	152.64	151.88	-89.70	-2,311.28	-5,428.36	3,775.19	3,470.93	304.26	12.408		
12,600.00	7,242.93	12,617.22	7,222.73	155.42	154.66	-89.69	-2,311.86	-5,528.36	3,775.00	3,465.17	309.83	12.184		
12,700.00	7,242.55	12,717.22	7,222.14	158.21	157.44	-89.69	-2,312.44	-5,628.36	3,774.80	3,459.40	315.40	11.968		
12,800.00	7,242.17	12,817.22	7,221.54	161.00	160.22	-89.69	-2,313.03	-5,728.35	3,774.60	3,453.62	320.98	11.760		
12,900.00	7,241.79	12,917.22	7,220.94	163.79	163.01	-89.68	-2,313.61	-5,828.35	3,774.41	3,447.84	326.56	11.558		
13,000.00	7,241.41	13,017.22	7,220.35	166.58	165.80	-89.68	-2,314.20	-5,928.35	3,774.21	3,442.06	332.15	11.363		
13,100.00	7,241.03	13,117.22	7,219.75	169.38	168.59	-89.68	-2,314.78	-6,028.34	3,774.01	3,436.27	337.74	11.174		
13,200.00	7,240.65	13,217.22	7,219.16	172.18	171.38	-89.67	-2,315.36	-6,128.34	3,773.81	3,430.48	343.33	10.992		
13,300.00	7,240.27	13,317.22	7,218.56	174.98	174.18	-89.67	-2,315.95	-6,228.33	3,773.62	3,424.68	348.93	10.815		
13,400.00	7,239.89	13,417.22	7,217.97	177.78	176.97	-89.67	-2,316.53	-6,328.33	3,773.42	3,418.88	354.54	10.643		
13,500.00	7,239.51	13,517.22	7,217.37	180.58	179.77	-89.66	-2,317.11	-6,428.33	3,773.22	3,413.08	360.14	10.477		
13,600.00	7,239.13	13,617.22	7,216.77	183.39	182.58	-89.66	-2,317.70	-6,528.32	3,773.03	3,407.27	365.75	10.316		
13,700.00	7,238.75	13,717.22	7,216.18	186.20	185.38	-89.66	-2,318.28	-6,628.32	3,772.83	3,401.46	371.37	10.159		
13,800.00	7,238.37	13,817.22	7,215.58	189.00	188.18	-89.65	-2,318.87	-6,728.31	3,772.63	3,395.65	376.98	10.007		
13,900.00	7,237.99	13,917.22	7,214.99	191.81	190.99	-89.65	-2,319.45	-6,828.31	3,772.44	3,389.83	382.60	9.860		
14,000.00	7,237.62	14,017.22	7,214.39	194.63	193.80	-89.65	-2,320.03	-6,928.31	3,772.24	3,384.01	388.23	9.717		
14,100.00	7,237.24	14,117.21	7,213.79	197.44	196.61	-89.64	-2,320.62	-7,028.30	3,772.04	3,378.19	393.85	9.577		
14,200.00	7,236.86	14,217.21	7,213.20	200.25	199.42	-89.64	-2,321.20	-7,128.30	3,771.85	3,372.37	399.48	9.442		
14,300.00	7,236.48	14,317.21	7,212.60	203.07	202.23	-89.64	-2,321.78	-7,228.29	3,771.65	3,366.54	405.11	9.310		
14,400.00	7,236.10	14,417.21	7,212.01	205.88	205.05	-89.63	-2,322.37	-7,328.29	3,771.45	3,360.71	410.74	9.182		
14,500.00	7,235.72	14,517.21	7,211.41	208.70	207.86	-89.63	-2,322.95	-7,428.29	3,771.26	3,354.88	416.38	9.057		
14,600.00	7,235.34	14,617.21	7,210.82	211.52	210.68	-89.63	-2,323.54	-7,528.28	3,771.06	3,349.05	422.01	8.936		
14,700.00	7,234.96	14,717.21	7,210.22	214.34	213.49	-89.62	-2,324.12	-7,628.28	3,770.86	3,343.21	427.65	8.818		
14,800.00	7,234.58	14,817.21	7,209.62	217.16	216.31	-89.62	-2,324.70	-7,728.28	3,770.66	3,337.37	433.29	8.702		
14,900.00	7,234.20	14,917.21	7,209.03	219.98	219.13	-89.62	-2,325.29	-7,828.27	3,770.47	3,331.53	438.94	8.590		
15,000.00	7,233.82	15,017.21	7,208.43	222.81	221.95	-89.61	-2,325.87	-7,928.27	3,770.27	3,325.69	444.58	8.480		
15,100.00	7,233.44	15,117.21	7,207.84	225.63	224.77	-89.61	-2,326.45	-8,028.26	3,770.07	3,319.85	450.23	8.374		
15,200.00	7,233.06	15,217.21	7,207.24	228.45	227.60	-89.61	-2,327.04	-8,128.26	3,769.88	3,314.00	455.88	8.270		
15,216.01	7,233.00	15,233.22	7,207.14	228.91	228.05	-89.61	-2,327.13	-8,144.27	3,769.85	3,313.07	456.78	8.253 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 34C-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	-179.54	-519.86	-4.17	519.88					
100.00	100.00	103.00	100.00	3.28	3.29	-179.54	-519.86	-4.17	519.88	513.31	6.57	79.127		
200.00	200.00	197.00	200.00	3.34	3.33	-179.54	-519.86	-4.17	519.88	513.20	6.67	77.923 CC, ES		
300.00	299.98	282.03	285.02	3.45	3.42	-173.81	-521.03	-4.23	523.00	516.13	6.87	76.105		
400.00	399.84	366.10	369.00	3.61	3.54	-173.83	-524.67	-4.39	532.52	525.34	7.17	74.221		
500.00	499.45	449.17	451.86	3.82	3.69	-173.85	-530.68	-4.67	548.37	540.81	7.56	72.511		
600.00	598.70	530.77	533.04	4.07	3.86	-173.88	-538.91	-5.05	570.45	562.43	8.02	71.154		
700.00	697.47	610.47	612.07	4.35	4.06	-173.91	-549.18	-5.53	598.61	590.09	8.52	70.261		
800.00	795.62	687.87	688.51	4.67	4.28	-173.93	-561.26	-6.09	632.68	623.62	9.06	69.870		
900.00	893.06	762.61	762.00	5.01	4.51	-173.95	-574.87	-6.72	672.44	662.83	9.61	69.968		
1,000.00	989.64	834.39	832.22	5.38	4.76	-173.96	-589.74	-7.40	717.65	707.48	10.17	70.553		
1,100.00	1,085.42	903.18	899.14	5.78	5.01	-174.02	-605.64	-8.14	767.63	756.90	10.73	71.519		
1,200.00	1,181.09	969.92	963.68	6.20	5.27	-174.12	-622.59	-8.92	819.97	808.69	11.28	72.719		
1,300.00	1,276.76	1,034.76	1,026.00	6.65	5.54	-174.20	-640.49	-9.75	874.24	862.43	11.82	73.978		
1,400.00	1,372.43	1,100.00	1,088.27	7.11	5.83	-174.26	-659.92	-10.65	930.38	918.02	12.37	75.242		
1,500.00	1,468.10	1,158.81	1,144.01	7.57	6.10	-174.31	-678.65	-11.52	988.29	975.40	12.88	76.708		
1,600.00	1,563.77	1,218.08	1,199.79	8.05	6.38	-174.35	-698.67	-12.44	1,047.90	1,034.49	13.40	78.178		
1,700.00	1,659.44	1,275.55	1,253.46	8.53	6.67	-174.38	-719.19	-13.39	1,109.13	1,095.21	13.91	79.712		
1,800.00	1,755.11	1,331.25	1,305.08	9.02	6.96	-174.41	-740.09	-14.36	1,171.90	1,157.49	14.41	81.308		
1,900.00	1,850.78	1,385.23	1,354.71	9.52	7.25	-174.42	-761.30	-15.34	1,236.15	1,221.25	14.90	82.967		
2,000.00	1,946.45	1,437.53	1,402.40	10.02	7.54	-174.44	-782.74	-16.33	1,301.81	1,286.44	15.37	84.675		
2,100.00	2,042.12	1,488.20	1,448.22	10.52	7.83	-174.44	-804.34	-17.33	1,368.82	1,352.98	15.84	86.442		
2,200.00	2,137.78	1,537.27	1,492.23	11.03	8.12	-174.45	-826.02	-18.33	1,437.10	1,420.81	16.28	88.249		
2,300.00	2,233.45	1,584.80	1,534.50	11.54	8.40	-174.45	-847.74	-19.34	1,506.60	1,489.88	16.72	90.108		
2,400.00	2,329.12	1,630.83	1,575.08	12.05	8.69	-174.45	-869.44	-20.34	1,577.26	1,560.12	17.14	92.003		
2,500.00	2,424.79	1,675.41	1,614.05	12.56	8.97	-174.45	-891.07	-21.34	1,649.04	1,631.48	17.55	93.941		
2,600.00	2,520.46	1,718.59	1,651.46	13.08	9.25	-174.44	-912.59	-22.34	1,721.87	1,703.91	17.95	95.916		
2,700.00	2,616.13	1,760.40	1,687.38	13.60	9.53	-174.43	-933.98	-23.33	1,795.70	1,777.36	18.34	97.920		
2,800.00	2,711.80	1,800.00	1,721.11	14.12	9.80	-174.43	-954.70	-24.28	1,870.50	1,851.79	18.70	100.018		
2,900.00	2,807.47	1,846.99	1,760.78	14.64	10.12	-174.42	-979.86	-25.45	1,946.17	1,927.03	19.15	101.639		
3,000.00	2,903.14	1,912.07	1,815.60	15.16	10.58	-174.40	-1,014.89	-27.07	2,022.10	2,002.30	19.80	102.146		
3,100.00	2,998.81	1,977.15	1,870.43	15.68	11.04	-174.39	-1,049.92	-28.69	2,098.02	2,077.57	20.45	102.580		
3,200.00	3,094.48	2,042.23	1,925.25	16.21	11.51	-174.38	-1,084.94	-30.31	2,173.95	2,152.83	21.12	102.952		
3,300.00	3,190.15	2,107.31	1,980.08	16.73	11.98	-174.37	-1,119.97	-31.93	2,249.87	2,228.09	21.79	103.272		
3,400.00	3,285.82	2,172.39	2,034.91	17.26	12.45	-174.36	-1,155.00	-33.55	2,325.80	2,303.34	22.46	103.543		
3,500.00	3,381.49	2,237.47	2,089.73	17.78	12.93	-174.35	-1,190.02	-35.17	2,401.72	2,378.58	23.14	103.774		
3,600.00	3,477.16	2,302.55	2,144.56	18.31	13.41	-174.34	-1,225.05	-36.79	2,477.65	2,453.82	23.83	103.973		
3,700.00	3,572.83	2,367.63	2,199.38	18.84	13.90	-174.33	-1,260.08	-38.41	2,553.57	2,529.05	24.52	104.137		
3,800.00	3,668.50	2,432.71	2,254.21	19.37	14.39	-174.33	-1,295.10	-40.03	2,629.50	2,604.28	25.22	104.277		
3,900.00	3,764.17	2,502.21	2,309.04	19.89	14.91	-174.32	-1,330.13	-41.65	2,705.42	2,679.48	25.94	104.290		
4,000.00	3,859.84	2,562.87	2,363.86	20.42	15.37	-174.31	-1,365.16	-43.27	2,781.35	2,754.73	26.62	104.490		
4,100.00	3,955.51	2,627.95	2,418.69	20.95	15.86	-174.30	-1,400.19	-44.89	2,857.27	2,829.95	27.32	104.568		
4,200.00	4,051.18	2,706.97	2,473.51	21.48	16.46	-174.30	-1,435.21	-46.51	2,933.19	2,905.08	28.12	104.322		
4,300.00	4,146.85	2,758.11	2,528.34	22.01	16.85	-174.29	-1,470.24	-48.13	3,009.12	2,980.37	28.75	104.680		
4,400.00	4,242.52	2,823.19	2,583.17	22.55	17.35	-174.29	-1,505.27	-49.75	3,085.04	3,055.58	29.46	104.717		
4,500.00	4,338.19	2,888.27	2,637.99	23.08	17.84	-174.28	-1,540.29	-51.37	3,160.97	3,130.79	30.18	104.744		
4,600.00	4,433.86	2,953.35	2,692.82	23.61	18.34	-174.28	-1,575.32	-52.99	3,236.89	3,206.00	30.90	104.761		
4,700.00	4,529.53	3,018.43	2,747.64	24.14	18.84	-174.27	-1,610.35	-54.61	3,312.82	3,281.20	31.62	104.770		
4,800.00	4,625.19	3,083.51	2,802.47	24.67	19.35	-174.27	-1,645.37	-56.23	3,388.74	3,356.40	32.34	104.772		
4,900.00	4,720.86	3,148.59	2,857.30	25.21	19.85	-174.26	-1,680.40	-57.85	3,464.67	3,431.60	33.07	104.766		
5,000.00	4,816.53	3,213.67	2,912.12	25.74	20.35	-174.26	-1,715.43	-59.47	3,540.59	3,506.79	33.80	104.756		
5,100.00	4,912.20	3,278.75	2,966.95	26.27	20.86	-174.25	-1,750.45	-61.09	3,616.52	3,581.99	34.53	104.740		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 34C-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	5,007.87	3,343.83	3,021.77	26.80	21.36	-174.25	-1,785.48	-62.71	3,692.44	3,657.18	35.26	104.719		
5,300.00	5,103.54	3,408.91	3,076.60	27.34	21.87	-174.25	-1,820.51	-64.33	3,768.37	3,732.37	35.99	104.695		
5,400.00	5,199.22	3,474.00	3,131.44	27.87	22.37	-174.26	-1,855.54	-65.95	3,844.28	3,807.55	36.73	104.667		
5,500.00	5,295.46	3,540.62	3,187.56	28.39	22.89	-174.48	-1,891.40	-67.61	3,918.85	3,881.38	37.47	104.577		
5,600.00	5,392.60	3,609.79	3,245.83	28.89	23.43	-174.66	-1,928.63	-69.33	3,991.06	3,952.83	38.23	104.384		
5,700.00	5,490.50	3,681.42	3,306.18	29.37	23.99	-174.82	-1,967.18	-71.11	4,060.82	4,021.81	39.01	104.085		
5,800.00	5,589.05	3,755.43	3,368.52	29.83	24.57	-174.95	-2,007.01	-72.95	4,128.05	4,088.24	39.81	103.692		
5,900.00	5,688.14	3,831.72	3,432.80	30.26	25.16	-175.07	-2,048.07	-74.85	4,192.67	4,152.05	40.62	103.212		
6,000.00	5,787.63	3,910.21	3,498.92	30.68	25.78	-175.17	-2,090.32	-76.81	4,254.59	4,213.15	41.45	102.656		
6,100.00	5,887.41	4,009.21	3,566.80	31.07	26.55	-175.25	-2,133.69	-78.81	4,313.75	4,271.36	42.39	101.752		
6,200.00	5,987.36	4,073.37	3,636.37	31.44	27.06	-175.32	-2,178.13	-80.87	4,370.07	4,326.95	43.12	101.337		
6,300.00	6,087.36	4,157.49	3,707.24	31.80	27.72	178.95	-2,223.41	-82.96	4,424.07	4,380.10	43.98	100.602		
6,400.00	6,187.36	4,241.73	3,778.21	32.15	28.38	179.00	-2,268.75	-85.06	4,477.87	4,433.04	44.84	99.872		
6,500.00	6,287.36	4,325.98	3,849.18	32.51	29.04	179.04	-2,314.09	-87.16	4,531.68	4,485.98	45.70	99.164		
6,600.00	6,387.36	4,410.22	3,920.15	32.87	29.70	179.08	-2,359.43	-89.25	4,585.48	4,538.92	46.56	98.479		
6,700.00	6,487.36	4,505.54	3,991.12	33.23	30.45	179.12	-2,404.77	-91.35	4,639.29	4,591.79	47.50	97.670		
6,800.00	6,587.36	4,578.71	4,062.09	33.59	31.03	179.16	-2,450.11	-93.45	4,693.09	4,644.79	48.30	97.167		
6,900.00	6,687.26	4,662.96	4,133.06	33.95	31.69	-86.78	-2,495.46	-95.54	4,746.86	4,697.70	49.16	96.555		
7,000.00	6,785.58	4,746.31	4,203.28	34.31	32.35	-81.39	-2,540.31	-97.62	4,799.90	4,749.88	50.01	95.970		
7,100.00	6,879.94	4,826.75	4,271.05	34.65	32.98	-76.52	-2,583.61	-99.62	4,851.05	4,800.21	50.84	95.417		
7,200.00	6,968.01	4,902.32	4,334.71	34.97	33.58	-72.25	-2,624.28	-101.50	4,899.32	4,847.69	51.63	94.896		
7,300.00	7,047.61	4,971.13	4,392.68	35.27	34.12	-68.60	-2,661.32	-103.22	4,943.89	4,891.51	52.38	94.383		
7,400.00	7,116.80	5,031.51	4,443.55	35.54	34.60	-65.53	-2,693.82	-104.72	4,984.09	4,930.97	53.12	93.829		
7,500.00	7,173.86	5,081.97	4,486.05	35.81	35.00	-62.99	-2,720.97	-105.97	5,019.37	4,965.50	53.87	93.170		
7,600.00	7,217.38	5,144.81	7,193.81	36.17	50.51	-89.67	-3,542.78	-535.09	5,044.95	4,970.46	74.49	67.730		
7,700.00	7,246.31	8,241.11	7,224.08	36.80	50.58	-89.72	-3,543.34	-626.41	5,044.77	4,968.70	76.07	66.316		
7,800.00	7,259.92	8,337.81	7,240.29	37.72	50.62	-89.77	-3,543.92	-721.65	5,044.59	4,966.63	77.96	64.709		
7,900.00	7,260.77	8,435.98	7,242.86	38.86	50.66	-89.80	-3,544.52	-819.73	5,044.42	4,964.26	80.15	62.936		
8,000.00	7,260.39	8,535.98	7,242.45	40.19	50.71	-89.80	-3,545.13	-919.73	5,044.25	4,961.57	82.68	61.012		
8,100.00	7,260.01	8,635.98	7,242.04	41.67	50.78	-89.80	-3,545.74	-1,019.72	5,044.08	4,958.57	85.51	58.988		
8,200.00	7,259.63	8,735.98	7,241.64	43.30	50.90	-89.80	-3,546.36	-1,119.72	5,043.91	4,955.29	88.62	56.915		
8,300.00	7,259.25	8,835.98	7,241.23	45.05	51.10	-89.80	-3,546.97	-1,219.72	5,043.74	4,951.76	91.98	54.834		
8,400.00	7,258.87	8,935.98	7,240.83	46.91	51.50	-89.80	-3,547.58	-1,319.71	5,043.57	4,948.00	95.57	52.775		
8,500.00	7,258.49	9,035.98	7,240.42	48.87	52.31	-89.80	-3,548.19	-1,419.71	5,043.40	4,944.05	99.35	50.763		
8,600.00	7,258.11	9,135.98	7,240.02	50.92	53.64	-89.79	-3,548.81	-1,519.71	5,043.23	4,939.92	103.31	48.815		
8,700.00	7,257.73	9,235.98	7,239.61	53.04	55.33	-89.79	-3,549.42	-1,619.71	5,043.06	4,935.63	107.43	46.941		
8,800.00	7,257.35	9,335.98	7,239.20	55.23	57.24	-89.79	-3,550.03	-1,719.70	5,042.89	4,931.20	111.69	45.149		
8,900.00	7,256.97	9,435.98	7,238.80	57.47	59.28	-89.79	-3,550.64	-1,819.70	5,042.72	4,926.64	116.08	43.442		
9,000.00	7,256.59	9,535.98	7,238.39	59.77	61.40	-89.79	-3,551.26	-1,919.70	5,042.55	4,921.98	120.58	41.821		
9,100.00	7,256.21	9,635.98	7,237.99	62.12	63.60	-89.79	-3,551.87	-2,019.69	5,042.38	4,917.21	125.17	40.284		
9,200.00	7,255.83	9,735.98	7,237.58	64.50	65.85	-89.79	-3,552.48	-2,119.69	5,042.21	4,912.36	129.86	38.829		
9,300.00	7,255.45	9,835.98	7,237.18	66.93	68.16	-89.79	-3,553.09	-2,219.69	5,042.04	4,907.42	134.62	37.454		
9,400.00	7,255.07	9,935.98	7,236.77	69.38	70.51	-89.79	-3,553.71	-2,319.68	5,041.87	4,902.42	139.46	36.154		
9,500.00	7,254.69	10,035.98	7,236.36	71.87	72.90	-89.79	-3,554.32	-2,419.68	5,041.70	4,897.35	144.36	34.925		
9,600.00	7,254.31	10,135.98	7,235.96	74.38	75.32	-89.79	-3,554.93	-2,519.68	5,041.54	4,892.22	149.32	33.764		
9,700.00	7,253.93	10,235.98	7,235.55	76.92	77.78	-89.79	-3,555.54	-2,619.68	5,041.37	4,887.04	154.33	32.667		
9,800.00	7,253.55	10,335.98	7,235.15	79.48	80.26	-89.79	-3,556.16	-2,719.67	5,041.20	4,881.81	159.39	31.629		
9,900.00	7,253.18	10,435.98	7,234.74	82.06	82.77	-89.79	-3,556.77	-2,819.67	5,041.03	4,876.54	164.49	30.647		
10,000.00	7,252.80	10,535.98	7,234.34	84.65	85.30	-89.79	-3,557.38	-2,919.67	5,040.86	4,871.23	169.63	29.717		
10,100.00	7,252.42	10,635.98	7,233.93	87.27	87.85	-89.79	-3,557.99	-3,019.67	5,040.69	4,865.88	174.80	28.836		
10,200.00	7,252.04	10,735.98	7,233.52	89.89	90.42	-89.79	-3,558.61	-3,119.66	5,040.52	4,860.51	180.01	28.001		
10,300.00	7,251.66	10,835.98	7,233.12	92.54	93.00	-89.79	-3,559.22	-3,219.66	5,040.35	4,855.10	185.25	27.208		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 34C-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	7,251.28	10,935.98	7,232.71	95.19	95.61	-89.79	-3,559.83	-3,319.66	5,040.18	4,849.66	190.52	26.455		
10,500.00	7,250.90	11,035.98	7,232.31	97.86	98.22	-89.79	-3,560.44	-3,419.65	5,040.01	4,844.20	195.81	25.739		
10,600.00	7,250.52	11,135.97	7,231.90	100.53	100.85	-89.79	-3,561.06	-3,519.65	5,039.84	4,838.72	201.12	25.058		
10,700.00	7,250.14	11,235.97	7,231.50	103.22	103.50	-89.79	-3,561.67	-3,619.65	5,039.67	4,833.21	206.46	24.410		
10,800.00	7,249.76	11,335.97	7,231.09	105.91	106.15	-89.79	-3,562.28	-3,719.65	5,039.50	4,827.68	211.82	23.792		
10,900.00	7,249.38	11,435.97	7,230.68	108.62	108.81	-89.79	-3,562.89	-3,819.64	5,039.33	4,822.14	217.19	23.202		
11,000.00	7,249.00	11,535.97	7,230.28	111.33	111.49	-89.79	-3,563.51	-3,919.64	5,039.16	4,816.58	222.58	22.639		
11,100.00	7,248.62	11,635.97	7,229.87	114.04	114.17	-89.79	-3,564.12	-4,019.64	5,038.99	4,811.00	227.99	22.102		
11,200.00	7,248.24	11,735.97	7,229.47	116.77	116.86	-89.79	-3,564.73	-4,119.63	5,038.82	4,805.41	233.41	21.587		
11,300.00	7,247.86	11,835.97	7,229.06	119.50	119.56	-89.79	-3,565.34	-4,219.63	5,038.66	4,799.81	238.85	21.095		
11,400.00	7,247.48	11,935.97	7,228.65	122.24	122.27	-89.79	-3,565.96	-4,319.63	5,038.49	4,794.19	244.30	20.624		
11,500.00	7,247.10	12,035.97	7,228.25	124.98	124.98	-89.79	-3,566.57	-4,419.63	5,038.32	4,788.56	249.76	20.173		
11,600.00	7,246.72	12,135.97	7,227.84	127.73	127.70	-89.79	-3,567.18	-4,519.62	5,038.15	4,782.92	255.23	19.739		
11,700.00	7,246.34	12,235.97	7,227.44	130.48	130.43	-89.79	-3,567.79	-4,619.62	5,037.98	4,777.26	260.71	19.324		
11,800.00	7,245.96	12,335.97	7,227.03	133.24	133.16	-89.79	-3,568.41	-4,719.62	5,037.81	4,771.60	266.21	18.924		
11,900.00	7,245.58	12,435.97	7,226.63	136.00	135.89	-89.78	-3,569.02	-4,819.61	5,037.64	4,765.93	271.71	18.541		
12,000.00	7,245.21	12,535.97	7,226.22	138.76	138.63	-89.78	-3,569.63	-4,919.61	5,037.47	4,760.25	277.22	18.171		
12,100.00	7,244.83	12,635.97	7,225.81	141.53	141.38	-89.78	-3,570.24	-5,019.61	5,037.30	4,754.56	282.74	17.816		
12,200.00	7,244.45	12,735.97	7,225.41	144.30	144.13	-89.78	-3,570.85	-5,119.61	5,037.13	4,748.87	288.26	17.474		
12,300.00	7,244.07	12,835.97	7,225.00	147.08	146.89	-89.78	-3,571.47	-5,219.60	5,036.96	4,743.16	293.80	17.144		
12,400.00	7,243.69	12,935.97	7,224.60	149.86	149.64	-89.78	-3,572.08	-5,319.60	5,036.79	4,737.45	299.34	16.826		
12,500.00	7,243.31	13,035.97	7,224.19	152.64	152.41	-89.78	-3,572.69	-5,419.60	5,036.62	4,731.74	304.88	16.520		
12,600.00	7,242.93	13,135.97	7,223.79	155.42	155.17	-89.78	-3,573.30	-5,519.59	5,036.45	4,726.02	310.44	16.224		
12,700.00	7,242.55	13,235.97	7,223.38	158.21	157.94	-89.78	-3,573.92	-5,619.59	5,036.28	4,720.29	316.00	15.938		
12,800.00	7,242.17	13,335.97	7,222.97	161.00	160.71	-89.78	-3,574.53	-5,719.59	5,036.11	4,714.55	321.56	15.661		
12,900.00	7,241.79	13,435.97	7,222.57	163.79	163.49	-89.78	-3,575.14	-5,819.59	5,035.95	4,708.81	327.13	15.394		
13,000.00	7,241.41	13,535.97	7,222.16	166.58	166.27	-89.78	-3,575.75	-5,919.58	5,035.78	4,703.07	332.71	15.136		
13,100.00	7,241.03	13,635.97	7,221.76	169.38	169.05	-89.78	-3,576.37	-6,019.58	5,035.61	4,697.32	338.29	14.886		
13,200.00	7,240.65	13,735.97	7,221.35	172.18	171.83	-89.78	-3,576.98	-6,119.58	5,035.44	4,691.57	343.87	14.643		
13,300.00	7,240.27	13,835.97	7,220.95	174.98	174.62	-89.78	-3,577.59	-6,219.57	5,035.27	4,685.81	349.46	14.409		
13,400.00	7,239.89	13,935.97	7,220.54	177.78	177.40	-89.78	-3,578.20	-6,319.57	5,035.10	4,680.05	355.05	14.181		
13,500.00	7,239.51	14,035.97	7,220.13	180.58	180.19	-89.78	-3,578.82	-6,419.57	5,034.93	4,674.28	360.65	13.961		
13,600.00	7,239.13	14,135.97	7,219.73	183.39	182.99	-89.78	-3,579.43	-6,519.57	5,034.76	4,668.51	366.25	13.747		
13,700.00	7,238.75	14,235.97	7,219.32	186.20	185.78	-89.78	-3,580.04	-6,619.56	5,034.59	4,662.74	371.85	13.539		
13,800.00	7,238.37	14,335.97	7,218.92	189.00	188.58	-89.78	-3,580.65	-6,719.56	5,034.42	4,656.96	377.46	13.338		
13,900.00	7,237.99	14,435.97	7,218.51	191.81	191.38	-89.78	-3,581.27	-6,819.56	5,034.25	4,651.18	383.07	13.142		
14,000.00	7,237.62	14,535.97	7,218.11	194.63	194.18	-89.78	-3,581.88	-6,919.56	5,034.08	4,645.40	388.68	12.952		
14,100.00	7,237.24	14,635.97	7,217.70	197.44	196.98	-89.78	-3,582.49	-7,019.55	5,033.91	4,639.61	394.30	12.767		
14,200.00	7,236.86	14,735.97	7,217.29	200.25	199.78	-89.78	-3,583.10	-7,119.55	5,033.74	4,633.83	399.92	12.587		
14,300.00	7,236.48	14,835.97	7,216.89	203.07	202.59	-89.78	-3,583.72	-7,219.55	5,033.57	4,628.03	405.54	12.412		
14,400.00	7,236.10	14,935.97	7,216.48	205.88	205.39	-89.78	-3,584.33	-7,319.54	5,033.40	4,622.24	411.16	12.242		
14,500.00	7,235.72	15,035.97	7,216.08	208.70	208.20	-89.78	-3,584.94	-7,419.54	5,033.23	4,616.44	416.79	12.076		
14,600.00	7,235.34	15,135.97	7,215.67	211.52	211.01	-89.78	-3,585.55	-7,519.54	5,033.07	4,610.65	422.42	11.915		
14,700.00	7,234.96	15,235.97	7,215.27	214.34	213.82	-89.78	-3,586.17	-7,619.54	5,032.90	4,604.84	428.05	11.758		
14,800.00	7,234.58	15,335.97	7,214.86	217.16	216.63	-89.78	-3,586.78	-7,719.53	5,032.73	4,599.04	433.69	11.605		
14,900.00	7,234.20	15,435.97	7,214.45	219.98	219.44	-89.78	-3,587.39	-7,819.53	5,032.56	4,593.24	439.32	11.455		
15,000.00	7,233.82	15,535.97	7,214.05	222.81	222.26	-89.78	-3,588.00	-7,919.53	5,032.39	4,587.43	444.96	11.310		
15,100.00	7,233.44	15,635.97	7,213.64	225.63	225.07	-89.77	-3,588.62	-8,019.52	5,032.22	4,581.62	450.60	11.168		
15,200.00	7,233.06	15,735.97	7,213.24	228.45	227.89	-89.77	-3,589.23	-8,119.52	5,032.05	4,575.81	456.24	11.029		
15,216.01	7,233.00	15,751.98	7,213.17	228.91	228.34	-89.77	-3,589.33	-8,135.53	5,032.02	4,574.88	457.15	11.007 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1.00	0.00	3.28	3.28	-179.54	-139.89	-1.11	139.90					
100.00	100.00	101.00	100.00	3.28	3.28	-179.54	-139.89	-1.11	139.90	133.33	6.57	21.295		
200.00	200.00	201.00	200.00	3.34	3.34	-179.54	-139.89	-1.11	139.90	133.22	6.67	20.959 CC, ES		
300.00	299.98	301.02	299.98	3.45	3.45	-173.88	-139.89	-1.11	141.63	134.74	6.89	20.551		
400.00	399.84	401.16	399.84	3.61	3.61	-174.09	-139.89	-1.11	146.84	139.62	7.21	20.356		
500.00	499.45	501.55	499.45	3.82	3.81	-174.40	-139.89	-1.11	155.51	147.88	7.63	20.390		
600.00	598.70	597.70	598.70	4.07	4.04	-174.79	-139.89	-1.11	167.64	159.53	8.11	20.678		
700.00	697.47	700.60	700.38	4.35	4.32	-174.77	-139.00	-2.54	182.34	173.67	8.67	21.037		
800.00	795.62	802.14	798.80	4.67	4.61	-174.52	-137.45	-5.02	199.77	190.49	9.28	21.528		
900.00	893.06	904.34	896.55	5.01	4.94	-174.39	-135.91	-7.48	220.61	210.67	9.94	22.190		
1,000.00	989.64	992.67	993.52	5.38	5.23	-174.35	-134.39	-9.92	244.84	234.24	10.60	23.102		
1,100.00	1,085.42	1,088.93	1,089.74	5.78	5.56	-174.39	-132.87	-12.35	271.94	260.63	11.31	24.038		
1,200.00	1,181.09	1,185.08	1,185.85	6.20	5.91	-174.46	-131.36	-14.76	299.40	287.36	12.04	24.861		
1,300.00	1,276.76	1,281.24	1,281.96	6.65	6.26	-174.51	-129.85	-17.18	326.86	314.06	12.80	25.542		
1,400.00	1,372.43	1,377.39	1,378.08	7.11	6.62	-174.56	-128.34	-19.60	354.32	340.75	13.57	26.110		
1,500.00	1,468.10	1,473.55	1,474.19	7.57	6.99	-174.59	-126.83	-22.02	381.78	367.42	14.36	26.587		
1,600.00	1,563.77	1,569.71	1,570.30	8.05	7.37	-174.63	-125.32	-24.44	409.23	394.07	15.16	26.989		
1,700.00	1,659.44	1,665.86	1,666.42	8.53	7.75	-174.66	-123.80	-26.86	436.69	420.72	15.98	27.331		
1,800.00	1,755.11	1,762.02	1,762.53	9.02	8.13	-174.68	-122.29	-29.28	464.15	447.35	16.80	27.623		
1,900.00	1,850.78	1,858.17	1,858.65	9.52	8.52	-174.71	-120.78	-31.70	491.61	473.97	17.64	27.874		
2,000.00	1,946.45	1,954.33	1,954.76	10.02	8.91	-174.73	-119.27	-34.12	519.07	500.59	18.48	28.092		
2,100.00	2,042.12	2,050.49	2,050.87	10.52	9.30	-174.75	-117.76	-36.54	546.53	527.20	19.33	28.281		
2,200.00	2,137.78	2,146.64	2,146.99	11.03	9.70	-174.76	-116.24	-38.96	573.99	553.81	20.18	28.446		
2,300.00	2,233.45	2,242.80	2,243.10	11.54	10.10	-174.78	-114.73	-41.38	601.45	580.41	21.04	28.591		
2,400.00	2,329.12	2,338.96	2,339.21	12.05	10.50	-174.79	-113.22	-43.80	628.90	607.01	21.90	28.719		
2,500.00	2,424.79	2,435.11	2,435.33	12.56	10.90	-174.81	-111.71	-46.22	656.36	633.60	22.77	28.832		
2,600.00	2,520.46	2,531.27	2,531.44	13.08	11.31	-174.82	-110.20	-48.64	683.82	660.19	23.63	28.933		
2,700.00	2,616.13	2,627.42	2,627.56	13.60	11.71	-174.83	-108.69	-51.06	711.28	686.77	24.51	29.023		
2,800.00	2,711.80	2,723.58	2,723.67	14.12	12.12	-174.84	-107.17	-53.48	738.74	713.36	25.38	29.103		
2,900.00	2,807.47	2,819.74	2,819.78	14.64	12.52	-174.85	-105.66	-55.89	766.20	739.94	26.26	29.176		
3,000.00	2,903.14	2,915.89	2,915.90	15.16	12.93	-174.86	-104.15	-58.31	793.66	766.52	27.14	29.241		
3,100.00	2,998.81	3,012.05	3,012.01	15.68	13.34	-174.86	-102.64	-60.73	821.12	793.09	28.02	29.300		
3,200.00	3,094.48	3,108.20	3,108.12	16.21	13.75	-174.87	-101.13	-63.15	848.58	819.67	28.91	29.354		
3,300.00	3,190.15	3,204.36	3,204.24	16.73	14.16	-174.88	-99.61	-65.57	876.04	846.24	29.79	29.403		
3,400.00	3,285.82	3,300.52	3,300.35	17.26	14.58	-174.89	-98.10	-67.99	903.50	872.81	30.68	29.448		
3,500.00	3,381.49	3,403.33	3,396.47	17.78	15.02	-174.89	-96.59	-70.41	930.96	899.36	31.60	29.462		
3,600.00	3,477.16	3,507.17	3,492.58	18.31	15.46	-174.90	-95.08	-72.83	958.41	925.89	32.52	29.470		
3,700.00	3,572.83	3,588.98	3,588.69	18.84	15.81	-174.90	-93.57	-75.25	985.87	952.52	33.35	29.560		
3,800.00	3,668.50	3,685.14	3,684.81	19.37	16.23	-174.91	-92.06	-77.67	1,013.33	979.09	34.24	29.591		
3,900.00	3,764.17	3,781.30	3,780.92	19.89	16.64	-174.91	-90.54	-80.09	1,040.79	1,005.65	35.14	29.621		
4,000.00	3,859.84	3,877.45	3,877.03	20.42	17.06	-174.92	-89.03	-82.51	1,068.25	1,032.22	36.03	29.647		
4,100.00	3,955.51	3,973.61	3,973.15	20.95	17.47	-174.92	-87.52	-84.93	1,095.71	1,058.78	36.93	29.672		
4,200.00	4,051.18	4,069.76	4,069.26	21.48	17.89	-174.93	-86.01	-87.35	1,123.17	1,085.35	37.82	29.695		
4,300.00	4,146.85	4,165.92	4,165.38	22.01	18.30	-174.93	-84.50	-89.77	1,150.63	1,111.91	38.72	29.717		
4,400.00	4,242.52	4,262.08	4,261.49	22.55	18.72	-174.93	-82.98	-92.19	1,178.09	1,138.47	39.62	29.737		
4,500.00	4,338.19	4,358.23	4,357.60	23.08	19.14	-174.94	-81.47	-94.61	1,205.55	1,165.03	40.52	29.755		
4,600.00	4,433.86	4,454.39	4,453.72	23.61	19.55	-174.94	-79.96	-97.02	1,233.01	1,191.59	41.41	29.772		
4,700.00	4,529.53	4,550.54	4,549.83	24.14	19.97	-174.95	-78.45	-99.44	1,260.47	1,218.15	42.31	29.788		
4,800.00	4,625.19	4,646.70	4,645.94	24.67	20.39	-174.95	-76.94	-101.86	1,287.93	1,244.71	43.21	29.803		
4,900.00	4,720.86	4,742.86	4,742.06	25.21	20.81	-174.95	-75.43	-104.28	1,315.38	1,271.27	44.11	29.817		
5,000.00	4,816.53	4,839.01	4,838.17	25.74	21.22	-174.95	-73.91	-106.70	1,342.84	1,297.83	45.02	29.831		
5,100.00	4,912.20	4,935.17	4,934.28	26.27	21.64	-174.96	-72.40	-109.12	1,370.30	1,324.39	45.92	29.843		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	5,031.32	5,030.40	26.80	22.06	-174.96	-70.89	-111.54	1,397.76	1,350.94	46.82	29.855		
5,300.00	5,103.54	5,127.48	5,126.51	27.34	22.48	-174.96	-69.38	-113.96	1,425.22	1,377.50	47.72	29.865		
5,400.00	5,199.22	5,223.64	5,222.63	27.87	22.90	-174.97	-67.87	-116.38	1,452.67	1,404.04	48.62	29.876		
5,500.00	5,295.46	5,320.34	5,319.28	28.39	23.32	-175.01	-66.35	-118.81	1,478.14	1,428.62	49.52	29.848		
5,600.00	5,392.60	5,417.86	5,416.76	28.89	23.74	-175.03	-64.81	-121.27	1,500.24	1,449.82	50.42	29.757		
5,700.00	5,490.50	5,516.09	5,514.95	29.37	24.17	-175.04	-63.27	-123.74	1,518.93	1,467.63	51.30	29.608		
5,800.00	5,589.05	5,614.90	5,613.72	29.83	24.60	-175.03	-61.71	-126.22	1,534.20	1,482.02	52.18	29.402		
5,900.00	5,688.14	5,714.19	5,712.96	30.26	25.04	-175.00	-60.15	-128.72	1,546.03	1,492.98	53.05	29.145		
6,000.00	5,787.63	5,813.82	5,812.55	30.68	25.47	-174.95	-58.59	-131.23	1,554.39	1,500.49	53.90	28.837		
6,100.00	5,887.41	5,913.68	5,912.36	31.07	25.91	-174.89	-57.02	-133.74	1,559.29	1,504.54	54.75	28.482		
6,200.00	5,987.36	6,013.64	6,012.28	31.44	26.34	-174.81	-55.45	-136.26	1,560.72	1,505.14	55.57	28.083		
6,300.00	6,087.36	6,113.60	6,112.19	31.80	26.78	179.55	-53.87	-138.77	1,559.36	1,502.97	56.39	27.652		
6,400.00	6,187.36	6,213.55	6,212.11	32.15	27.21	179.64	-52.30	-141.29	1,557.77	1,500.56	57.21	27.229		
6,500.00	6,287.36	6,313.51	6,312.02	32.51	27.65	179.73	-50.73	-143.80	1,556.18	1,498.15	58.03	26.817		
6,600.00	6,387.36	6,413.46	6,411.93	32.87	28.09	179.82	-49.16	-146.32	1,554.60	1,495.75	58.85	26.416		
6,700.00	6,487.36	6,513.42	6,511.84	33.23	28.53	179.92	-47.59	-148.83	1,553.02	1,493.35	59.67	26.025		
6,800.00	6,587.36	6,613.38	6,611.75	33.59	28.96	-179.99	-46.02	-151.35	1,551.45	1,490.95	60.50	25.644		
6,900.00	6,687.26	6,711.32	6,709.28	33.95	29.39	-89.45	-44.52	-159.25	1,549.90	1,488.60	61.30	25.284		
7,000.00	6,785.58	6,808.15	6,803.41	34.31	29.82	-89.39	-43.19	-181.49	1,548.40	1,486.31	62.10	24.936		
7,100.00	6,879.94	6,904.25	6,892.44	34.65	30.26	-89.34	-42.05	-217.42	1,546.98	1,484.08	62.90	24.595		
7,200.00	6,968.01	6,999.71	6,974.53	34.97	30.70	-89.31	-41.11	-265.97	1,545.64	1,481.93	63.72	24.257		
7,300.00	7,047.61	7,094.66	7,048.08	35.27	31.17	-89.30	-40.40	-325.87	1,544.44	1,479.84	64.60	23.907		
7,400.00	7,116.80	7,189.20	7,111.65	35.54	31.71	-89.30	-39.92	-395.73	1,543.39	1,477.78	65.61	23.523		
7,500.00	7,173.86	7,283.46	7,164.06	35.81	32.34	-89.31	-39.68	-473.96	1,542.51	1,475.68	66.83	23.083		
7,600.00	7,217.38	7,377.54	7,204.28	36.17	33.09	-89.35	-39.69	-558.92	1,541.82	1,473.51	68.31	22.571		
7,700.00	7,246.31	7,471.57	7,231.56	36.80	33.99	-89.39	-39.94	-648.82	1,541.34	1,471.24	70.10	21.988		
7,800.00	7,259.92	7,565.68	7,245.31	37.72	35.03	-89.45	-40.43	-741.83	1,541.08	1,468.89	72.18	21.349		
7,900.00	7,260.77	7,662.72	7,246.85	38.86	36.24	-89.48	-41.15	-838.82	1,541.03	1,466.45	74.58	20.663		
8,000.00	7,260.39	7,762.72	7,246.53	40.19	37.64	-89.48	-41.91	-938.82	1,541.01	1,463.67	77.34	19.926		
8,100.00	7,260.01	7,862.72	7,246.22	41.67	39.19	-89.49	-42.68	-1,038.82	1,541.00	1,460.59	80.40	19.166		
8,200.00	7,259.63	7,962.72	7,245.91	43.30	40.89	-89.49	-43.45	-1,138.81	1,540.98	1,457.23	83.75	18.400		
8,300.00	7,259.25	8,062.72	7,245.60	45.05	42.71	-89.49	-44.22	-1,238.81	1,540.97	1,453.63	87.34	17.644		
8,400.00	7,258.87	8,162.72	7,245.29	46.91	44.64	-89.49	-44.99	-1,338.81	1,540.95	1,449.80	91.15	16.906		
8,500.00	7,258.49	8,262.72	7,244.97	48.87	46.67	-89.50	-45.75	-1,438.80	1,540.94	1,445.79	95.15	16.195		
8,600.00	7,258.11	8,362.72	7,244.66	50.92	48.78	-89.50	-46.52	-1,538.80	1,540.92	1,441.61	99.31	15.516		
8,700.00	7,257.73	8,462.72	7,244.35	53.04	50.96	-89.50	-47.29	-1,638.80	1,540.91	1,437.27	103.63	14.869		
8,800.00	7,257.35	8,562.72	7,244.04	55.23	53.21	-89.51	-48.06	-1,738.79	1,540.89	1,432.81	108.08	14.257		
8,900.00	7,256.97	8,662.72	7,243.73	57.47	55.51	-89.51	-48.82	-1,838.79	1,540.88	1,428.24	112.64	13.680		
9,000.00	7,256.59	8,762.72	7,243.41	59.77	57.86	-89.51	-49.59	-1,938.79	1,540.86	1,423.56	117.30	13.136		
9,100.00	7,256.21	8,862.72	7,243.10	62.12	60.26	-89.51	-50.36	-2,038.78	1,540.85	1,418.79	122.05	12.625		
9,200.00	7,255.83	8,962.72	7,242.79	64.50	62.69	-89.52	-51.13	-2,138.78	1,540.83	1,413.95	126.88	12.144		
9,300.00	7,255.45	9,062.72	7,242.48	66.93	65.16	-89.52	-51.89	-2,238.78	1,540.82	1,409.03	131.78	11.692		
9,400.00	7,255.07	9,162.72	7,242.17	69.38	67.66	-89.52	-52.66	-2,338.77	1,540.80	1,404.05	136.75	11.267		
9,500.00	7,254.69	9,262.72	7,241.85	71.87	70.19	-89.52	-53.43	-2,438.77	1,540.79	1,399.01	141.77	10.868		
9,600.00	7,254.31	9,362.72	7,241.54	74.38	72.74	-89.53	-54.20	-2,538.77	1,540.77	1,393.93	146.84	10.493		
9,700.00	7,253.93	9,462.72	7,241.23	76.92	75.31	-89.53	-54.96	-2,638.76	1,540.76	1,388.79	151.96	10.139		
9,800.00	7,253.55	9,562.72	7,240.92	79.48	77.91	-89.53	-55.73	-2,738.76	1,540.74	1,383.62	157.12	9.806		
9,900.00	7,253.18	9,662.72	7,240.61	82.06	80.52	-89.53	-56.50	-2,838.76	1,540.73	1,378.41	162.32	9.492		
10,000.00	7,252.80	9,762.72	7,240.29	84.65	83.15	-89.54	-57.27	-2,938.75	1,540.71	1,373.16	167.55	9.196		
10,100.00	7,252.42	9,862.72	7,239.98	87.27	85.79	-89.54	-58.03	-3,038.75	1,540.70	1,367.88	172.81	8.915		
10,200.00	7,252.04	9,962.72	7,239.67	89.89	88.45	-89.54	-58.80	-3,138.75	1,540.68	1,362.58	178.10	8.651		
10,300.00	7,251.66	10,062.72	7,239.36	92.54	91.12	-89.54	-59.57	-3,238.74	1,540.67	1,357.25	183.42	8.400		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,251.28	10,162.72	7,239.05	95.19	93.79	-89.55	-60.34	-3,338.74	1,540.65	1,351.90	188.76	8.162		
10,500.00	7,250.90	10,262.72	7,238.74	97.86	96.48	-89.55	-61.10	-3,438.73	1,540.64	1,346.52	194.12	7.937		
10,600.00	7,250.52	10,362.72	7,238.42	100.53	99.18	-89.55	-61.87	-3,538.73	1,540.62	1,341.13	199.50	7.723		
10,700.00	7,250.14	10,462.72	7,238.11	103.22	101.89	-89.55	-62.64	-3,638.73	1,540.61	1,335.71	204.89	7.519		
10,800.00	7,249.76	10,562.72	7,237.80	105.91	104.61	-89.56	-63.41	-3,738.72	1,540.59	1,330.28	210.31	7.325		
10,900.00	7,249.38	10,662.72	7,237.49	108.62	107.33	-89.56	-64.17	-3,838.72	1,540.58	1,324.84	215.74	7.141		
11,000.00	7,249.00	10,762.72	7,237.18	111.33	110.06	-89.56	-64.94	-3,938.72	1,540.56	1,319.38	221.18	6.965		
11,100.00	7,248.62	10,862.72	7,236.86	114.04	112.80	-89.56	-65.71	-4,038.71	1,540.55	1,313.90	226.64	6.797		
11,200.00	7,248.24	10,962.72	7,236.55	116.77	115.54	-89.57	-66.48	-4,138.71	1,540.53	1,308.42	232.11	6.637		
11,300.00	7,247.86	11,062.72	7,236.24	119.50	118.29	-89.57	-67.24	-4,238.71	1,540.52	1,302.92	237.60	6.484		
11,400.00	7,247.48	11,162.72	7,235.93	122.24	121.04	-89.57	-68.01	-4,338.70	1,540.50	1,297.41	243.09	6.337		
11,500.00	7,247.10	11,262.72	7,235.62	124.98	123.80	-89.57	-68.78	-4,438.70	1,540.49	1,291.89	248.59	6.197		
11,600.00	7,246.72	11,362.72	7,235.30	127.73	126.56	-89.58	-69.55	-4,538.70	1,540.47	1,286.37	254.11	6.062		
11,700.00	7,246.34	11,462.72	7,234.99	130.48	129.33	-89.58	-70.32	-4,638.69	1,540.46	1,280.83	259.63	5.933		
11,800.00	7,245.96	11,562.72	7,234.68	133.24	132.10	-89.58	-71.08	-4,738.69	1,540.44	1,275.29	265.16	5.810		
11,900.00	7,245.58	11,662.72	7,234.37	136.00	134.87	-89.58	-71.85	-4,838.69	1,540.43	1,269.73	270.69	5.691		
12,000.00	7,245.21	11,762.72	7,234.06	138.76	137.65	-89.59	-72.62	-4,938.68	1,540.41	1,264.17	276.24	5.576		
12,100.00	7,244.83	11,862.72	7,233.74	141.53	140.43	-89.59	-73.39	-5,038.68	1,540.40	1,258.61	281.79	5.466		
12,200.00	7,244.45	11,962.72	7,233.43	144.30	143.21	-89.59	-74.15	-5,138.68	1,540.38	1,253.03	287.35	5.361		
12,300.00	7,244.07	12,062.72	7,233.12	147.08	146.00	-89.59	-74.92	-5,238.67	1,540.37	1,247.45	292.91	5.259		
12,400.00	7,243.69	12,162.72	7,232.81	149.86	148.79	-89.60	-75.69	-5,338.67	1,540.35	1,241.87	298.48	5.161		
12,500.00	7,243.31	12,262.72	7,232.50	152.64	151.58	-89.60	-76.46	-5,438.67	1,540.34	1,236.28	304.06	5.066		
12,600.00	7,242.93	12,362.72	7,232.18	155.42	154.38	-89.60	-77.22	-5,538.66	1,540.32	1,230.68	309.64	4.975		
12,700.00	7,242.55	12,462.72	7,231.87	158.21	157.17	-89.60	-77.99	-5,638.66	1,540.31	1,225.08	315.22	4.886		
12,800.00	7,242.17	12,562.72	7,231.56	161.00	159.97	-89.61	-78.76	-5,738.66	1,540.29	1,219.48	320.82	4.801		
12,900.00	7,241.79	12,662.72	7,231.25	163.79	162.77	-89.61	-79.53	-5,838.65	1,540.28	1,213.87	326.41	4.719		
13,000.00	7,241.41	12,762.72	7,230.94	166.58	165.57	-89.61	-80.29	-5,938.65	1,540.26	1,208.26	332.01	4.639		
13,100.00	7,241.03	12,862.72	7,230.63	169.38	168.38	-89.61	-81.06	-6,038.65	1,540.25	1,202.64	337.61	4.562		
13,200.00	7,240.65	12,962.72	7,230.31	172.18	171.19	-89.62	-81.83	-6,138.64	1,540.23	1,197.02	343.22	4.488		
13,300.00	7,240.27	13,062.72	7,230.00	174.98	173.99	-89.62	-82.60	-6,238.64	1,540.22	1,191.39	348.83	4.415		
13,400.00	7,239.89	13,162.72	7,229.69	177.78	176.80	-89.62	-83.36	-6,338.63	1,540.20	1,185.76	354.44	4.345		
13,500.00	7,239.51	13,262.72	7,229.38	180.58	179.62	-89.62	-84.13	-6,438.63	1,540.19	1,180.13	360.06	4.278		
13,600.00	7,239.13	13,362.72	7,229.07	183.39	182.43	-89.63	-84.90	-6,538.63	1,540.18	1,174.50	365.68	4.212		
13,700.00	7,238.75	13,462.72	7,228.75	186.20	185.24	-89.63	-85.67	-6,638.62	1,540.16	1,168.86	371.30	4.148		
13,800.00	7,238.37	13,562.72	7,228.44	189.00	188.06	-89.63	-86.43	-6,738.62	1,540.15	1,163.22	376.93	4.086		
13,900.00	7,237.99	13,662.72	7,228.13	191.81	190.87	-89.63	-87.20	-6,838.62	1,540.13	1,157.58	382.55	4.026		
14,000.00	7,237.62	13,762.72	7,227.82	194.63	193.69	-89.64	-87.97	-6,938.61	1,540.12	1,151.93	388.18	3.967		
14,100.00	7,237.24	13,862.72	7,227.51	197.44	196.51	-89.64	-88.74	-7,038.61	1,540.10	1,146.28	393.82	3.911		
14,200.00	7,236.86	13,962.72	7,227.19	200.25	199.33	-89.64	-89.50	-7,138.61	1,540.09	1,140.63	399.45	3.855		
14,300.00	7,236.48	14,062.72	7,226.88	203.07	202.15	-89.64	-90.27	-7,238.60	1,540.07	1,134.98	405.09	3.802		
14,400.00	7,236.10	14,162.72	7,226.57	205.88	204.98	-89.65	-91.04	-7,338.60	1,540.06	1,129.33	410.73	3.750		
14,500.00	7,235.72	14,262.72	7,226.26	208.70	207.80	-89.65	-91.81	-7,438.60	1,540.04	1,123.67	416.37	3.699		
14,600.00	7,235.34	14,362.72	7,225.95	211.52	210.62	-89.65	-92.57	-7,538.59	1,540.03	1,118.01	422.02	3.649		
14,700.00	7,234.96	14,462.72	7,225.63	214.34	213.45	-89.65	-93.34	-7,638.59	1,540.01	1,112.35	427.66	3.601		
14,800.00	7,234.58	14,562.72	7,225.32	217.16	216.27	-89.66	-94.11	-7,738.59	1,540.00	1,106.69	433.31	3.554		
14,900.00	7,234.20	14,662.72	7,225.01	219.98	219.10	-89.66	-94.88	-7,838.58	1,539.98	1,101.02	438.96	3.508		
15,000.00	7,233.82	14,762.72	7,224.70	222.81	221.93	-89.66	-95.65	-7,938.58	1,539.97	1,095.35	444.61	3.464		
15,100.00	7,233.44	14,862.72	7,224.39	225.63	224.76	-89.66	-96.41	-8,038.58	1,539.95	1,089.69	450.27	3.420		
15,200.00	7,233.06	14,962.72	7,224.07	228.45	227.59	-89.67	-97.18	-8,138.57	1,539.94	1,084.02	455.92	3.378		
15,216.01	7,233.00	14,978.73	7,224.02	228.91	228.04	-89.67	-97.30	-8,154.59	1,539.94	1,083.11	456.83	3.371 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2.00	0.00	3.28	3.28	-179.54	-379.97	-3.06	379.98					
100.00	100.00	102.00	100.00	3.28	3.29	-179.54	-379.97	-3.06	379.98	373.41	6.57	57.837		
200.00	200.00	198.00	200.00	3.34	3.34	-179.54	-379.97	-3.06	379.98	373.31	6.67	56.947	CC, ES	
300.00	299.98	286.47	288.46	3.45	3.42	-173.81	-381.27	-3.18	383.19	376.31	6.88	55.711		
400.00	399.84	374.16	376.05	3.61	3.55	-173.81	-385.24	-3.56	392.91	385.72	7.19	54.645		
500.00	499.45	460.77	462.41	3.82	3.71	-173.81	-391.77	-4.17	409.08	401.49	7.59	53.894		
600.00	598.70	545.78	546.94	4.07	3.90	-173.81	-400.72	-5.01	431.58	423.52	8.06	53.552		
700.00	697.47	628.72	629.12	4.35	4.11	-173.80	-411.84	-6.06	460.26	451.68	8.58	53.667		
800.00	795.62	709.16	708.48	4.67	4.34	-173.78	-424.89	-7.29	494.92	485.79	9.12	54.238		
900.00	893.06	786.73	784.64	5.01	4.59	-173.75	-439.58	-8.67	535.34	525.65	9.69	55.234		
1,000.00	989.64	861.12	857.26	5.38	4.86	-173.71	-455.58	-10.18	581.27	571.01	10.26	56.642		
1,100.00	1,085.42	932.28	926.33	5.78	5.12	-173.73	-472.64	-11.79	632.02	621.19	10.84	58.323		
1,200.00	1,181.09	1,014.59	1,005.88	6.20	5.45	-173.79	-493.68	-13.77	684.49	673.05	11.44	59.851		
1,300.00	1,276.76	1,100.30	1,088.13	6.65	5.81	-173.85	-515.47	-15.82	736.99	724.91	12.08	61.020		
1,400.00	1,372.43	1,184.80	1,170.37	7.11	6.18	-173.90	-537.26	-17.88	789.49	776.75	12.74	61.971		
1,500.00	1,468.10	1,269.91	1,252.62	7.57	6.57	-173.94	-559.05	-19.93	841.99	828.56	13.43	62.715		
1,600.00	1,563.77	1,355.02	1,334.86	8.05	6.96	-173.98	-580.83	-21.98	894.49	880.36	14.13	63.302		
1,700.00	1,659.44	1,440.13	1,417.11	8.53	7.36	-174.01	-602.62	-24.03	946.99	932.14	14.85	63.765		
1,800.00	1,755.11	1,525.24	1,499.36	9.02	7.77	-174.04	-624.41	-26.09	999.49	983.91	15.59	64.129		
1,900.00	1,850.78	1,610.34	1,581.60	9.52	8.18	-174.07	-646.20	-28.14	1,051.99	1,035.66	16.33	64.413		
2,000.00	1,946.45	1,704.55	1,663.85	10.02	8.65	-174.09	-667.99	-30.19	1,104.50	1,087.37	17.13	64.482		
2,100.00	2,042.12	1,780.56	1,746.10	10.52	9.02	-174.11	-689.77	-32.24	1,157.00	1,139.14	17.85	64.803		
2,200.00	2,137.78	1,865.67	1,828.34	11.03	9.45	-174.13	-711.56	-34.30	1,209.50	1,190.87	18.63	64.930		
2,300.00	2,233.45	1,950.78	1,910.59	11.54	9.88	-174.15	-733.35	-36.35	1,262.00	1,242.60	19.41	65.024		
2,400.00	2,329.12	2,035.89	1,992.84	12.05	10.31	-174.17	-755.14	-38.40	1,314.51	1,294.31	20.19	65.091		
2,500.00	2,424.79	2,120.99	2,075.08	12.56	10.74	-174.19	-776.93	-40.45	1,367.01	1,346.02	20.99	65.136		
2,600.00	2,520.46	2,206.10	2,157.33	13.08	11.18	-174.20	-798.72	-42.51	1,419.51	1,397.73	21.78	65.164		
2,700.00	2,616.13	2,291.21	2,239.57	13.60	11.62	-174.21	-820.50	-44.56	1,472.01	1,449.43	22.58	65.177		
2,800.00	2,711.80	2,376.32	2,321.82	14.12	12.06	-174.23	-842.29	-46.61	1,524.52	1,501.13	23.39	65.178		
2,900.00	2,807.47	2,461.43	2,404.07	14.64	12.50	-174.24	-864.08	-48.66	1,577.02	1,552.82	24.20	65.169		
3,000.00	2,903.14	2,546.53	2,486.31	15.16	12.94	-174.25	-885.87	-50.71	1,629.52	1,604.51	25.01	65.153		
3,100.00	2,998.81	2,631.64	2,568.56	15.68	13.39	-174.26	-907.66	-52.77	1,682.02	1,656.20	25.83	65.131		
3,200.00	3,094.48	2,716.75	2,650.81	16.21	13.83	-174.27	-929.44	-54.82	1,734.53	1,707.88	26.64	65.104		
3,300.00	3,190.15	2,801.86	2,733.05	16.73	14.28	-174.28	-951.23	-56.87	1,787.03	1,759.57	27.46	65.072		
3,400.00	3,285.82	2,886.97	2,815.30	17.26	14.73	-174.29	-973.02	-58.92	1,839.53	1,811.25	28.28	65.038		
3,500.00	3,381.49	2,972.07	2,897.54	17.78	15.18	-174.30	-994.81	-60.98	1,892.04	1,862.93	29.11	65.000		
3,600.00	3,477.16	3,057.18	2,979.79	18.31	15.62	-174.30	-1,016.60	-63.03	1,944.54	1,914.61	29.93	64.961		
3,700.00	3,572.83	3,142.29	3,062.04	18.84	16.07	-174.31	-1,038.38	-65.08	1,997.04	1,966.28	30.76	64.921		
3,800.00	3,668.50	3,227.40	3,144.28	19.37	16.52	-174.32	-1,060.17	-67.13	2,049.55	2,017.95	31.59	64.879		
3,900.00	3,764.17	3,312.51	3,226.53	19.89	16.97	-174.32	-1,081.96	-69.19	2,102.05	2,069.63	32.42	64.836		
4,000.00	3,859.84	3,397.62	3,308.78	20.42	17.43	-174.33	-1,103.75	-71.24	2,154.55	2,121.30	33.25	64.793		
4,100.00	3,955.51	3,482.72	3,391.02	20.95	17.88	-174.34	-1,125.54	-73.29	2,207.05	2,172.97	34.09	64.750		
4,200.00	4,051.18	3,567.83	3,473.27	21.48	18.33	-174.34	-1,147.32	-75.34	2,259.56	2,224.64	34.92	64.706		
4,300.00	4,146.85	3,652.94	3,555.52	22.01	18.78	-174.35	-1,169.11	-77.40	2,312.06	2,276.30	35.76	64.662		
4,400.00	4,242.52	3,738.05	3,637.76	22.55	19.24	-174.35	-1,190.90	-79.45	2,364.56	2,327.97	36.59	64.619		
4,500.00	4,338.19	3,823.16	3,720.01	23.08	19.69	-174.36	-1,212.69	-81.50	2,417.07	2,379.64	37.43	64.576		
4,600.00	4,433.86	3,908.26	3,802.25	23.61	20.14	-174.36	-1,234.48	-83.55	2,469.57	2,431.30	38.27	64.533		
4,700.00	4,529.53	4,006.63	3,884.50	24.14	20.67	-174.37	-1,256.26	-85.61	2,522.07	2,482.90	39.17	64.385		
4,800.00	4,625.19	4,078.48	3,966.75	24.67	21.05	-174.37	-1,278.05	-87.66	2,574.58	2,534.63	39.95	64.448		
4,900.00	4,720.86	4,163.59	4,048.99	25.21	21.51	-174.38	-1,299.84	-89.71	2,627.08	2,586.29	40.79	64.406		
5,000.00	4,816.53	4,248.70	4,131.24	25.74	21.96	-174.38	-1,321.63	-91.76	2,679.58	2,637.95	41.63	64.365		
5,100.00	4,912.20	4,333.80	4,213.49	26.27	22.42	-174.38	-1,343.42	-93.82	2,732.09	2,689.61	42.47	64.324		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	4,418.91	4,295.73	26.80	22.87	-174.39	-1,365.20	-95.87	2,784.59	2,741.27	43.32	64.284		
5,300.00	5,103.54	4,504.02	4,377.98	27.34	23.33	-174.39	-1,386.99	-97.92	2,837.09	2,792.93	44.16	64.245		
5,400.00	5,199.22	4,589.14	4,460.23	27.87	23.78	-174.41	-1,408.78	-99.97	2,889.58	2,844.58	45.01	64.206		
5,500.00	5,295.46	4,675.30	4,543.50	28.39	24.25	-174.52	-1,430.84	-102.05	2,940.32	2,894.47	45.85	64.128		
5,600.00	5,392.60	4,763.17	4,628.42	28.89	24.72	-174.61	-1,453.34	-104.17	2,988.04	2,941.34	46.70	63.984		
5,700.00	5,490.50	4,852.65	4,714.89	29.37	25.20	-174.69	-1,476.24	-106.33	3,032.68	2,985.12	47.55	63.775		
5,800.00	5,589.05	4,943.62	4,802.80	29.83	25.69	-174.75	-1,499.53	-108.52	3,074.18	3,025.77	48.41	63.507		
5,900.00	5,688.14	5,035.98	4,892.05	30.26	26.18	-174.80	-1,523.18	-110.75	3,112.49	3,063.23	49.26	63.184		
6,000.00	5,787.63	5,129.60	4,982.52	30.68	26.68	-174.84	-1,547.14	-113.01	3,147.57	3,097.46	50.11	62.809		
6,100.00	5,887.41	5,224.38	5,074.12	31.07	27.19	-174.86	-1,571.41	-115.29	3,179.37	3,128.41	50.96	62.387		
6,200.00	5,987.36	5,320.20	5,166.72	31.44	27.71	-174.87	-1,595.94	-117.60	3,207.87	3,156.06	51.81	61.920		
6,300.00	6,087.36	5,416.78	5,260.05	31.80	28.23	179.43	-1,620.66	-119.93	3,233.68	3,181.03	52.65	61.422		
6,400.00	6,187.36	5,513.42	5,353.43	32.15	28.75	179.48	-1,645.40	-122.26	3,259.27	3,205.77	53.49	60.931		
6,500.00	6,287.36	5,610.06	5,446.82	32.51	29.27	179.52	-1,670.14	-124.59	3,284.85	3,230.52	54.34	60.453		
6,600.00	6,387.36	5,706.69	5,540.21	32.87	29.79	179.57	-1,694.88	-126.92	3,310.44	3,255.26	55.18	59.989		
6,700.00	6,487.36	5,803.33	5,633.60	33.23	30.31	179.61	-1,719.62	-129.25	3,336.03	3,280.00	56.03	59.536		
6,800.00	6,587.36	5,900.03	5,726.99	33.59	30.83	179.66	-1,744.36	-131.58	3,361.63	3,304.74	56.88	59.096		
6,900.00	6,687.26	6,003.41	5,820.36	33.95	31.38	-88.41	-1,769.10	-133.91	3,387.19	3,329.43	57.76	58.642		
7,000.00	6,785.58	6,107.93	5,912.63	34.31	31.95	-86.33	-1,793.54	-136.22	3,412.36	3,353.72	58.64	58.190		
7,100.00	6,879.94	6,184.11	6,001.58	34.65	32.36	-84.57	-1,817.10	-138.44	3,436.73	3,377.34	59.59	57.872		
7,200.00	6,968.01	6,270.45	6,085.01	34.97	32.82	-83.10	-1,839.21	-140.52	3,460.08	3,399.89	60.18	57.491		
7,300.00	7,047.61	6,348.95	6,160.87	35.27	33.24	-81.84	-1,859.30	-142.41	3,482.36	3,421.39	60.97	57.118		
7,400.00	7,116.80	6,417.69	6,227.30	35.54	33.62	-80.72	-1,876.90	-144.07	3,503.63	3,441.88	61.76	56.734		
7,500.00	7,173.86	6,474.97	6,282.66	35.81	33.92	-79.65	-1,891.57	-145.45	3,524.02	3,461.44	62.58	56.316		
7,600.00	7,217.38	6,519.39	6,325.58	36.17	34.16	-78.53	-1,902.94	-146.52	3,543.61	3,480.16	63.45	55.846		
7,700.00	7,246.31	6,557.74	6,362.64	36.80	34.37	-77.44	-1,912.75	-147.53	3,562.45	3,497.97	64.48	55.252		
7,800.00	7,259.92	6,744.31	6,539.15	37.72	35.33	-78.77	-1,959.73	-182.11	3,579.99	3,512.91	67.08	53.368		
7,900.00	7,260.77	7,576.44	6,951.84	38.86	38.82	-85.06	-2,073.50	-828.13	3,586.67	3,511.27	75.39	47.572		
8,000.00	7,260.39	7,676.44	6,951.46	40.19	39.79	-85.06	-2,074.09	-928.13	3,586.48	3,508.41	78.07	45.940		
8,100.00	7,260.01	7,776.44	6,951.08	41.67	41.03	-85.06	-2,074.69	-1,028.13	3,586.30	3,505.25	81.05	44.249		
8,200.00	7,259.63	7,876.44	6,950.70	43.30	42.50	-85.06	-2,075.29	-1,128.13	3,586.12	3,501.81	84.31	42.535		
8,300.00	7,259.25	7,976.44	6,950.32	45.05	44.13	-85.06	-2,075.89	-1,228.12	3,585.93	3,498.12	87.82	40.833		
8,400.00	7,258.87	8,076.44	6,949.94	46.91	45.91	-85.06	-2,076.49	-1,328.12	3,585.75	3,494.20	91.55	39.168		
8,500.00	7,258.49	8,176.44	6,949.56	48.87	47.81	-85.06	-2,077.09	-1,428.12	3,585.57	3,490.10	95.47	37.556		
8,600.00	7,258.11	8,276.44	6,949.18	50.92	49.81	-85.06	-2,077.69	-1,528.11	3,585.39	3,485.82	99.57	36.009		
8,700.00	7,257.73	8,376.44	6,948.80	53.04	51.89	-85.06	-2,078.28	-1,628.11	3,585.20	3,481.39	103.81	34.535		
8,800.00	7,257.35	8,476.44	6,948.43	55.23	54.05	-85.06	-2,078.88	-1,728.11	3,585.02	3,476.83	108.19	33.135		
8,900.00	7,256.97	8,576.44	6,948.05	57.47	56.27	-85.06	-2,079.48	-1,828.11	3,584.84	3,472.15	112.69	31.811		
9,000.00	7,256.59	8,676.44	6,947.67	59.77	58.56	-85.06	-2,080.08	-1,928.10	3,584.66	3,467.36	117.30	30.561		
9,100.00	7,256.21	8,776.44	6,947.29	62.12	60.89	-85.06	-2,080.68	-2,028.10	3,584.47	3,462.48	121.99	29.383		
9,200.00	7,255.83	8,876.44	6,946.91	64.50	63.26	-85.06	-2,081.28	-2,128.10	3,584.29	3,457.52	126.77	28.275		
9,300.00	7,255.45	8,976.44	6,946.53	66.93	65.68	-85.06	-2,081.88	-2,228.10	3,584.11	3,452.49	131.62	27.231		
9,400.00	7,255.07	9,076.44	6,946.15	69.38	68.13	-85.06	-2,082.48	-2,328.09	3,583.93	3,447.39	136.53	26.250		
9,500.00	7,254.69	9,176.44	6,945.77	71.87	70.61	-85.06	-2,083.07	-2,428.09	3,583.74	3,442.24	141.51	25.326		
9,600.00	7,254.31	9,276.44	6,945.39	74.38	73.12	-85.06	-2,083.67	-2,528.09	3,583.56	3,437.03	146.53	24.456		
9,700.00	7,253.93	9,376.44	6,945.01	76.92	75.66	-85.05	-2,084.27	-2,628.08	3,583.38	3,431.77	151.61	23.636		
9,800.00	7,253.55	9,476.44	6,944.63	79.48	78.22	-85.05	-2,084.87	-2,728.08	3,583.19	3,426.47	156.72	22.863		
9,900.00	7,253.18	9,576.44	6,944.25	82.06	80.79	-85.05	-2,085.47	-2,828.08	3,583.01	3,421.13	161.88	22.134		
10,000.00	7,252.80	9,676.44	6,943.87	84.65	83.39	-85.05	-2,086.07	-2,928.08	3,582.83	3,415.76	167.07	21.445		
10,100.00	7,252.42	9,776.44	6,943.49	87.27	86.00	-85.05	-2,086.67	-3,028.07	3,582.65	3,410.35	172.29	20.794		
10,200.00	7,252.04	9,876.44	6,943.11	89.89	88.63	-85.05	-2,087.26	-3,128.07	3,582.46	3,404.92	177.55	20.178		
10,300.00	7,251.66	9,976.44	6,942.74	92.54	91.28	-85.05	-2,087.86	-3,228.07	3,582.28	3,399.46	182.82	19.594		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,251.28	10,076.44	6,942.36	95.19	93.93	-85.05	-2,088.46	-3,328.07	3,582.10	3,393.97	188.13	19.041		
10,500.00	7,250.90	10,176.44	6,941.98	97.86	96.60	-85.05	-2,089.06	-3,428.06	3,581.92	3,388.46	193.45	18.516		
10,600.00	7,250.52	10,276.44	6,941.60	100.53	99.28	-85.05	-2,089.66	-3,528.06	3,581.73	3,382.93	198.80	18.017		
10,700.00	7,250.14	10,376.44	6,941.22	103.22	101.96	-85.05	-2,090.26	-3,628.06	3,581.55	3,377.39	204.16	17.542		
10,800.00	7,249.76	10,476.44	6,940.84	105.91	104.66	-85.05	-2,090.86	-3,728.06	3,581.37	3,371.82	209.55	17.091		
10,900.00	7,249.38	10,576.44	6,940.46	108.62	107.37	-85.05	-2,091.45	-3,828.05	3,581.19	3,366.24	214.95	16.661		
11,000.00	7,249.00	10,676.44	6,940.08	111.33	110.08	-85.05	-2,092.05	-3,928.05	3,581.00	3,360.64	220.36	16.251		
11,100.00	7,248.62	10,776.44	6,939.70	114.04	112.80	-85.05	-2,092.65	-4,028.05	3,580.82	3,355.03	225.79	15.859		
11,200.00	7,248.24	10,876.44	6,939.32	116.77	115.53	-85.05	-2,093.25	-4,128.04	3,580.64	3,349.41	231.23	15.485		
11,300.00	7,247.86	10,976.44	6,938.94	119.50	118.26	-85.05	-2,093.85	-4,228.04	3,580.45	3,343.77	236.68	15.128		
11,400.00	7,247.48	11,076.44	6,938.56	122.24	121.00	-85.05	-2,094.45	-4,328.04	3,580.27	3,338.13	242.14	14.786		
11,500.00	7,247.10	11,176.44	6,938.18	124.98	123.74	-85.05	-2,095.05	-4,428.04	3,580.09	3,332.47	247.62	14.458		
11,600.00	7,246.72	11,276.44	6,937.80	127.73	126.49	-85.05	-2,095.65	-4,528.03	3,579.91	3,326.80	253.10	14.144		
11,700.00	7,246.34	11,376.44	6,937.43	130.48	129.25	-85.05	-2,096.24	-4,628.03	3,579.72	3,321.13	258.60	13.843		
11,800.00	7,245.96	11,476.44	6,937.05	133.24	132.01	-85.05	-2,096.84	-4,728.03	3,579.54	3,315.44	264.10	13.554		
11,900.00	7,245.58	11,576.44	6,936.67	136.00	134.77	-85.05	-2,097.44	-4,828.03	3,579.36	3,309.75	269.61	13.276		
12,000.00	7,245.21	11,676.44	6,936.29	138.76	137.54	-85.05	-2,098.04	-4,928.02	3,579.18	3,304.05	275.13	13.009		
12,100.00	7,244.83	11,776.44	6,935.91	141.53	140.31	-85.05	-2,098.64	-5,028.02	3,578.99	3,298.34	280.65	12.753		
12,200.00	7,244.45	11,876.44	6,935.53	144.30	143.08	-85.05	-2,099.24	-5,128.02	3,578.81	3,292.63	286.18	12.505		
12,300.00	7,244.07	11,976.44	6,935.15	147.08	145.86	-85.05	-2,099.84	-5,228.02	3,578.63	3,286.91	291.72	12.267		
12,400.00	7,243.69	12,076.44	6,934.77	149.86	148.64	-85.05	-2,100.43	-5,328.01	3,578.45	3,281.18	297.26	12.038		
12,500.00	7,243.31	12,176.44	6,934.39	152.64	151.42	-85.05	-2,101.03	-5,428.01	3,578.26	3,275.45	302.81	11.817		
12,600.00	7,242.93	12,276.44	6,934.01	155.42	154.21	-85.05	-2,101.63	-5,528.01	3,578.08	3,269.71	308.37	11.603		
12,700.00	7,242.55	12,376.44	6,933.63	158.21	157.00	-85.05	-2,102.23	-5,628.00	3,577.90	3,263.97	313.93	11.397		
12,800.00	7,242.17	12,476.44	6,933.25	161.00	159.79	-85.05	-2,102.83	-5,728.00	3,577.71	3,258.22	319.49	11.198		
12,900.00	7,241.79	12,576.43	6,932.87	163.79	162.58	-85.05	-2,103.43	-5,828.00	3,577.53	3,252.47	325.06	11.006		
13,000.00	7,241.41	12,676.43	6,932.49	166.58	165.38	-85.05	-2,104.03	-5,928.00	3,577.35	3,246.71	330.64	10.820		
13,100.00	7,241.03	12,776.43	6,932.11	169.38	168.18	-85.05	-2,104.62	-6,027.99	3,577.17	3,240.95	336.21	10.640		
13,200.00	7,240.65	12,876.43	6,931.74	172.18	170.98	-85.05	-2,105.22	-6,127.99	3,576.98	3,235.19	341.79	10.465		
13,300.00	7,240.27	12,976.43	6,931.36	174.98	173.78	-85.05	-2,105.82	-6,227.99	3,576.80	3,229.42	347.38	10.297		
13,400.00	7,239.89	13,076.43	6,930.98	177.78	176.58	-85.05	-2,106.42	-6,327.99	3,576.62	3,223.65	352.97	10.133		
13,500.00	7,239.51	13,176.43	6,930.60	180.58	179.39	-85.05	-2,107.02	-6,427.98	3,576.44	3,217.87	358.56	9.974		
13,600.00	7,239.13	13,276.43	6,930.22	183.39	182.20	-85.04	-2,107.62	-6,527.98	3,576.25	3,212.10	364.16	9.821		
13,700.00	7,238.75	13,376.43	6,929.84	186.20	185.00	-85.04	-2,108.22	-6,627.98	3,576.07	3,206.32	369.76	9.671		
13,800.00	7,238.37	13,476.43	6,929.46	189.00	187.82	-85.04	-2,108.82	-6,727.98	3,575.89	3,200.53	375.36	9.527		
13,900.00	7,237.99	13,576.43	6,929.08	191.81	190.63	-85.04	-2,109.41	-6,827.97	3,575.71	3,194.74	380.96	9.386		
14,000.00	7,237.62	13,676.43	6,928.70	194.63	193.44	-85.04	-2,110.01	-6,927.97	3,575.52	3,188.95	386.57	9.249		
14,100.00	7,237.24	13,776.43	6,928.32	197.44	196.25	-85.04	-2,110.61	-7,027.97	3,575.34	3,183.16	392.18	9.117		
14,200.00	7,236.86	13,876.43	6,927.94	200.25	199.07	-85.04	-2,111.21	-7,127.96	3,575.16	3,177.37	397.79	8.988		
14,300.00	7,236.48	13,976.43	6,927.56	203.07	201.89	-85.04	-2,111.81	-7,227.96	3,574.97	3,171.57	403.41	8.862		
14,400.00	7,236.10	14,076.43	6,927.18	205.88	204.71	-85.04	-2,112.41	-7,327.96	3,574.79	3,165.77	409.02	8.740		
14,500.00	7,235.72	14,176.43	6,926.80	208.70	207.52	-85.04	-2,113.01	-7,427.96	3,574.61	3,159.97	414.64	8.621		
14,600.00	7,235.34	14,276.43	6,926.42	211.52	210.34	-85.04	-2,113.60	-7,527.95	3,574.43	3,154.16	420.26	8.505		
14,700.00	7,234.96	14,376.43	6,926.05	214.34	213.17	-85.04	-2,114.20	-7,627.95	3,574.24	3,148.36	425.88	8.393		
14,800.00	7,234.58	14,476.43	6,925.67	217.16	215.99	-85.04	-2,114.80	-7,727.95	3,574.06	3,142.55	431.51	8.283		
14,900.00	7,234.20	14,576.43	6,925.29	219.98	218.81	-85.04	-2,115.40	-7,827.95	3,573.88	3,136.74	437.14	8.176		
15,000.00	7,233.82	14,676.43	6,924.91	222.81	221.64	-85.04	-2,116.00	-7,927.94	3,573.70	3,130.93	442.77	8.071		
15,100.00	7,233.44	14,776.43	6,924.53	225.63	224.46	-85.04	-2,116.60	-8,027.94	3,573.51	3,125.12	448.40	7.970		
15,200.00	7,233.06	14,876.43	6,924.15	228.45	227.29	-85.04	-2,117.20	-8,127.94	3,573.33	3,119.30	454.03	7.870		
15,216.01	7,233.00	14,892.44	6,924.09	228.91	227.74	-85.04	-2,117.29	-8,143.95	3,573.30	3,118.37	454.93	7.855 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2.00	0.00	3.28	3.28	-179.51	-359.94	-3.06	359.95					
100.00	100.00	102.00	100.00	3.28	3.29	-179.51	-359.94	-3.06	359.95	353.38	6.57	54.788		
200.00	200.00	198.00	200.00	3.34	3.34	-179.51	-359.94	-3.06	359.95	353.28	6.67	53.946	CC, ES	
300.00	299.98	287.02	289.00	3.45	3.42	-173.78	-361.25	-3.20	363.17	356.29	6.88	52.794		
400.00	399.84	375.26	377.15	3.61	3.55	-173.77	-365.27	-3.63	372.91	365.72	7.19	51.849		
500.00	499.45	462.40	464.03	3.82	3.71	-173.76	-371.88	-4.33	389.12	381.52	7.59	51.238		
600.00	598.70	547.93	549.07	4.07	3.90	-173.75	-380.92	-5.30	411.67	403.61	8.06	51.045		
700.00	697.47	631.36	631.73	4.35	4.12	-173.73	-392.17	-6.50	440.41	431.83	8.58	51.304		
800.00	795.62	712.27	711.54	4.67	4.35	-173.69	-405.36	-7.90	475.15	466.01	9.14	52.012		
900.00	893.06	790.27	788.11	5.01	4.61	-173.65	-420.19	-9.49	515.66	505.95	9.70	53.138		
1,000.00	989.64	868.08	864.05	5.38	4.88	-173.60	-436.99	-11.28	561.63	551.35	10.28	54.627		
1,100.00	1,085.42	955.07	948.82	5.78	5.21	-173.63	-456.44	-13.35	610.93	600.03	10.90	56.039		
1,200.00	1,181.09	1,041.89	1,033.41	6.20	5.55	-173.71	-475.84	-15.42	660.56	649.02	11.53	57.273		
1,300.00	1,276.76	1,128.70	1,118.01	6.65	5.91	-173.77	-495.25	-17.49	710.18	697.99	12.19	58.245		
1,400.00	1,372.43	1,215.52	1,202.60	7.11	6.28	-173.83	-514.66	-19.56	759.81	746.93	12.88	59.008		
1,500.00	1,468.10	1,302.33	1,287.19	7.57	6.67	-173.88	-534.07	-21.63	809.43	795.85	13.58	59.605		
1,600.00	1,563.77	1,389.15	1,371.79	8.05	7.06	-173.93	-553.47	-23.70	859.06	844.76	14.30	60.070		
1,700.00	1,659.44	1,475.97	1,456.38	8.53	7.45	-173.97	-572.88	-25.77	908.69	893.65	15.04	60.430		
1,800.00	1,755.11	1,562.78	1,540.97	9.02	7.86	-174.01	-592.29	-27.84	958.31	942.53	15.79	60.708		
1,900.00	1,850.78	1,649.60	1,625.56	9.52	8.26	-174.04	-611.70	-29.91	1,007.94	991.40	16.55	60.919		
2,000.00	1,946.45	1,736.41	1,710.16	10.02	8.68	-174.07	-631.10	-31.98	1,057.57	1,040.25	17.31	61.078		
2,100.00	2,042.12	1,823.23	1,794.75	10.52	9.09	-174.10	-650.51	-34.05	1,107.20	1,089.10	18.09	61.196		
2,200.00	2,137.78	1,910.04	1,879.34	11.03	9.51	-174.12	-669.92	-36.12	1,156.82	1,137.95	18.88	61.279		
2,300.00	2,233.45	2,003.14	1,963.94	11.54	9.96	-174.14	-689.33	-38.19	1,206.45	1,186.76	19.70	61.249		
2,400.00	2,329.12	2,083.67	2,048.53	12.05	10.36	-174.17	-708.73	-40.25	1,256.08	1,235.61	20.47	61.372		
2,500.00	2,424.79	2,170.49	2,133.12	12.56	10.78	-174.18	-728.14	-42.32	1,305.71	1,284.44	21.27	61.390		
2,600.00	2,520.46	2,257.30	2,217.72	13.08	11.21	-174.20	-747.55	-44.39	1,355.34	1,333.26	22.08	61.394		
2,700.00	2,616.13	2,344.12	2,302.31	13.60	11.64	-174.22	-766.95	-46.46	1,404.97	1,382.08	22.89	61.387		
2,800.00	2,711.80	2,430.93	2,386.90	14.12	12.07	-174.24	-786.36	-48.53	1,454.59	1,430.89	23.70	61.372		
2,900.00	2,807.47	2,517.75	2,471.49	14.64	12.51	-174.25	-805.77	-50.60	1,504.22	1,479.70	24.52	61.349		
3,000.00	2,903.14	2,604.56	2,556.09	15.16	12.94	-174.26	-825.18	-52.67	1,553.85	1,528.51	25.34	61.320		
3,100.00	2,998.81	2,708.62	2,640.68	15.68	13.47	-174.28	-844.58	-54.74	1,603.48	1,577.24	26.24	61.102		
3,200.00	3,094.48	2,778.19	2,725.27	16.21	13.82	-174.29	-863.99	-56.81	1,653.11	1,626.12	26.99	61.251		
3,300.00	3,190.15	2,865.01	2,809.87	16.73	14.25	-174.30	-883.40	-58.88	1,702.74	1,674.92	27.82	61.212		
3,400.00	3,285.82	2,951.83	2,894.46	17.26	14.69	-174.31	-902.81	-60.95	1,752.37	1,723.72	28.65	61.170		
3,500.00	3,381.49	3,038.64	2,979.05	17.78	15.13	-174.32	-922.21	-63.02	1,802.00	1,772.52	29.48	61.128		
3,600.00	3,477.16	3,125.46	3,063.64	18.31	15.57	-174.33	-941.62	-65.09	1,851.63	1,821.31	30.31	61.084		
3,700.00	3,572.83	3,212.27	3,148.24	18.84	16.01	-174.34	-961.03	-67.16	1,901.25	1,870.11	31.15	61.039		
3,800.00	3,668.50	3,300.91	3,232.83	19.37	16.46	-174.35	-980.44	-69.23	1,950.88	1,918.89	31.99	60.977		
3,900.00	3,764.17	3,385.90	3,317.42	19.89	16.89	-174.36	-999.84	-71.30	2,000.51	1,967.69	32.82	60.948		
4,000.00	3,859.84	3,472.72	3,402.02	20.42	17.34	-174.36	-1,019.25	-73.37	2,050.14	2,016.48	33.66	60.903		
4,100.00	3,955.51	3,559.53	3,486.61	20.95	17.78	-174.37	-1,038.66	-75.44	2,099.77	2,065.27	34.50	60.857		
4,200.00	4,051.18	3,646.35	3,571.20	21.48	18.22	-174.38	-1,058.06	-77.51	2,149.40	2,114.06	35.34	60.812		
4,300.00	4,146.85	3,733.16	3,655.80	22.01	18.67	-174.38	-1,077.47	-79.58	2,199.03	2,162.84	36.19	60.768		
4,400.00	4,242.52	3,819.98	3,740.39	22.55	19.11	-174.39	-1,096.88	-81.65	2,248.66	2,211.63	37.03	60.723		
4,500.00	4,338.19	3,906.79	3,824.98	23.08	19.56	-174.40	-1,116.29	-83.72	2,298.29	2,260.41	37.88	60.679		
4,600.00	4,433.86	4,006.39	3,909.57	23.61	20.07	-174.40	-1,135.69	-85.79	2,347.92	2,309.14	38.78	60.542		
4,700.00	4,529.53	4,080.42	3,994.17	24.14	20.45	-174.41	-1,155.10	-87.86	2,397.55	2,357.98	39.57	60.593		
4,800.00	4,625.19	4,167.24	4,078.76	24.67	20.89	-174.41	-1,174.51	-89.93	2,447.18	2,406.76	40.41	60.551		
4,900.00	4,720.86	4,254.05	4,163.35	25.21	21.34	-174.42	-1,193.92	-91.99	2,496.81	2,455.54	41.26	60.510		
5,000.00	4,816.53	4,340.87	4,247.95	25.74	21.78	-174.42	-1,213.32	-94.06	2,546.43	2,504.32	42.11	60.469		
5,100.00	4,912.20	4,427.68	4,332.54	26.27	22.23	-174.43	-1,232.73	-96.13	2,596.06	2,553.10	42.96	60.429		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	4,514.50	4,417.13	26.80	22.67	-174.43	-1,252.14	-98.20	2,645.69	2,601.88	43.81	60.389		
5,300.00	5,103.54	4,601.32	4,501.72	27.34	23.12	-174.44	-1,271.55	-100.27	2,695.32	2,650.66	44.66	60.350		
5,400.00	5,199.22	4,688.14	4,586.32	27.87	23.57	-174.45	-1,290.95	-102.34	2,744.94	2,699.43	45.51	60.312		
5,500.00	5,295.46	4,775.95	4,671.89	28.39	24.02	-174.56	-1,310.58	-104.44	2,792.77	2,746.41	46.36	60.236		
5,600.00	5,392.60	4,865.37	4,759.02	28.89	24.48	-174.64	-1,330.57	-106.57	2,837.53	2,790.31	47.22	60.095		
5,700.00	5,490.50	4,956.29	4,847.61	29.37	24.95	-174.71	-1,350.90	-108.74	2,879.14	2,831.07	48.07	59.891		
5,800.00	5,589.05	5,048.60	4,937.56	29.83	25.42	-174.77	-1,371.53	-110.94	2,917.58	2,868.65	48.93	59.628		
5,900.00	5,688.14	5,142.18	5,028.75	30.26	25.91	-174.81	-1,392.45	-113.17	2,952.78	2,903.00	49.78	59.312		
6,000.00	5,787.63	5,236.93	5,121.07	30.68	26.40	-174.84	-1,413.63	-115.43	2,984.71	2,934.08	50.64	58.945		
6,100.00	5,887.41	5,332.72	5,214.41	31.07	26.89	-174.85	-1,435.05	-117.71	3,013.33	2,961.85	51.48	58.532		
6,200.00	5,987.36	5,429.44	5,308.65	31.44	27.39	-174.85	-1,456.67	-120.01	3,038.60	2,986.28	52.32	58.074		
6,300.00	6,087.36	5,526.83	5,403.55	31.80	27.89	179.45	-1,478.44	-122.34	3,061.17	3,008.01	53.16	57.586		
6,400.00	6,187.36	5,624.27	5,498.49	32.15	28.39	179.50	-1,500.22	-124.66	3,083.51	3,029.52	54.00	57.105		
6,500.00	6,287.36	5,721.71	5,593.44	32.51	28.90	179.54	-1,522.01	-126.98	3,105.85	3,051.02	54.84	56.637		
6,600.00	6,387.36	5,819.15	5,688.38	32.87	29.40	179.59	-1,543.79	-129.31	3,128.20	3,072.52	55.68	56.181		
6,700.00	6,487.36	5,916.59	5,783.33	33.23	29.90	179.64	-1,565.57	-131.63	3,150.54	3,094.02	56.52	55.737		
6,800.00	6,587.36	6,014.03	5,878.27	33.59	30.41	179.68	-1,587.35	-133.95	3,172.89	3,115.52	57.37	55.305		
6,900.00	6,687.26	6,111.45	5,973.20	33.95	30.91	-88.59	-1,609.13	-136.27	3,195.21	3,137.00	58.21	54.893		
7,000.00	6,785.58	6,207.71	6,067.00	34.31	31.41	-86.83	-1,630.65	-138.57	3,217.18	3,158.14	59.04	54.492		
7,100.00	6,879.94	6,300.49	6,157.41	34.65	31.89	-85.40	-1,651.39	-140.78	3,238.49	3,178.63	59.86	54.103		
7,200.00	6,968.01	6,387.51	6,242.20	34.97	32.34	-84.23	-1,670.85	-142.85	3,259.02	3,198.36	60.65	53.730		
7,300.00	7,047.61	6,466.62	6,319.28	35.27	32.75	-83.25	-1,688.53	-144.74	3,278.81	3,217.38	61.44	53.368		
7,400.00	7,116.80	6,535.88	6,386.77	35.54	33.11	-82.37	-1,704.01	-146.39	3,298.05	3,235.82	62.23	53.000		
7,500.00	7,173.86	6,593.58	6,442.99	35.81	33.41	-81.48	-1,716.91	-147.77	3,316.92	3,253.87	63.05	52.608		
7,600.00	7,217.38	6,676.71	6,523.81	36.17	33.83	-81.08	-1,735.47	-152.90	3,335.47	3,271.17	64.30	51.877		
7,700.00	7,246.31	6,832.24	6,670.44	36.80	34.59	-81.84	-1,769.34	-190.63	3,352.83	3,286.47	66.36	50.525		
7,800.00	7,259.92	7,185.85	6,941.93	37.72	35.94	-84.89	-1,832.95	-400.64	3,366.88	3,296.99	69.89	48.173		
7,900.00	7,260.77	7,643.54	7,066.90	38.86	38.24	-86.70	-1,864.40	-830.10	3,369.81	3,294.41	75.40	44.695		
8,000.00	7,260.39	7,743.54	7,066.67	40.19	39.34	-86.70	-1,864.99	-930.10	3,369.62	3,291.54	78.07	43.159		
8,100.00	7,260.01	7,843.54	7,066.44	41.67	40.69	-86.71	-1,865.59	-1,030.10	3,369.43	3,288.36	81.07	41.563		
8,200.00	7,259.63	7,943.54	7,066.21	43.30	42.22	-86.71	-1,866.19	-1,130.10	3,369.24	3,284.89	84.34	39.948		
8,300.00	7,259.25	8,043.54	7,065.98	45.05	43.90	-86.71	-1,866.79	-1,230.09	3,369.04	3,281.18	87.86	38.344		
8,400.00	7,258.87	8,143.54	7,065.75	46.91	45.71	-86.71	-1,867.39	-1,330.09	3,368.85	3,277.24	91.61	36.775		
8,500.00	7,258.49	8,243.54	7,065.52	48.87	47.64	-86.72	-1,867.99	-1,430.09	3,368.66	3,273.12	95.55	35.257		
8,600.00	7,258.11	8,343.54	7,065.29	50.92	49.66	-86.72	-1,868.59	-1,530.09	3,368.47	3,268.81	99.66	33.801		
8,700.00	7,257.73	8,443.54	7,065.06	53.04	51.76	-86.72	-1,869.19	-1,630.08	3,368.28	3,264.36	103.92	32.413		
8,800.00	7,257.35	8,543.54	7,064.83	55.23	53.93	-86.72	-1,869.79	-1,730.08	3,368.09	3,259.78	108.31	31.097		
8,900.00	7,256.97	8,643.54	7,064.60	57.47	56.17	-86.73	-1,870.38	-1,830.08	3,367.90	3,255.07	112.82	29.851		
9,000.00	7,256.59	8,743.54	7,064.37	59.77	58.47	-86.73	-1,870.98	-1,930.08	3,367.70	3,250.27	117.44	28.676		
9,100.00	7,256.21	8,843.53	7,064.14	62.12	60.81	-86.73	-1,871.58	-2,030.08	3,367.51	3,245.37	122.15	27.569		
9,200.00	7,255.83	8,943.53	7,063.91	64.50	63.19	-86.73	-1,872.18	-2,130.07	3,367.32	3,240.38	126.94	26.527		
9,300.00	7,255.45	9,043.53	7,063.68	66.93	65.62	-86.74	-1,872.78	-2,230.07	3,367.13	3,235.33	131.80	25.547		
9,400.00	7,255.07	9,143.53	7,063.44	69.38	68.07	-86.74	-1,873.38	-2,330.07	3,366.94	3,230.21	136.73	24.625		
9,500.00	7,254.69	9,243.53	7,063.21	71.87	70.56	-86.74	-1,873.98	-2,430.07	3,366.75	3,225.03	141.72	23.757		
9,600.00	7,254.31	9,343.53	7,062.98	74.38	73.08	-86.74	-1,874.58	-2,530.06	3,366.56	3,219.80	146.76	22.940		
9,700.00	7,253.93	9,443.53	7,062.75	76.92	75.62	-86.74	-1,875.17	-2,630.06	3,366.36	3,214.52	151.85	22.170		
9,800.00	7,253.55	9,543.53	7,062.52	79.48	78.18	-86.75	-1,875.77	-2,730.06	3,366.17	3,209.20	156.98	21.444		
9,900.00	7,253.18	9,643.53	7,062.29	82.06	80.76	-86.75	-1,876.37	-2,830.06	3,365.98	3,203.84	162.14	20.759		
10,000.00	7,252.80	9,743.53	7,062.06	84.65	83.37	-86.75	-1,876.97	-2,930.05	3,365.79	3,198.44	167.35	20.112		
10,100.00	7,252.42	9,843.53	7,061.83	87.27	85.98	-86.75	-1,877.57	-3,030.05	3,365.60	3,193.01	172.58	19.501		
10,200.00	7,252.04	9,943.53	7,061.60	89.89	88.62	-86.76	-1,878.17	-3,130.05	3,365.41	3,187.56	177.85	18.923		
10,300.00	7,251.66	10,043.53	7,061.37	92.54	91.26	-86.76	-1,878.77	-3,230.05	3,365.22	3,182.08	183.14	18.375		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,251.28	10,143.53	7,061.14	95.19	93.92	-86.76	-1,879.37	-3,330.05	3,365.03	3,176.57	188.46	17.856		
10,500.00	7,250.90	10,243.53	7,060.91	97.86	96.59	-86.76	-1,879.97	-3,430.04	3,364.83	3,171.04	193.80	17.363		
10,600.00	7,250.52	10,343.53	7,060.68	100.53	99.27	-86.77	-1,880.56	-3,530.04	3,364.64	3,165.49	199.15	16.895		
10,700.00	7,250.14	10,443.53	7,060.45	103.22	101.96	-86.77	-1,881.16	-3,630.04	3,364.45	3,159.92	204.53	16.449		
10,800.00	7,249.76	10,543.53	7,060.22	105.91	104.66	-86.77	-1,881.76	-3,730.04	3,364.26	3,154.33	209.93	16.026		
10,900.00	7,249.38	10,643.53	7,059.99	108.62	107.37	-86.77	-1,882.36	-3,830.03	3,364.07	3,148.73	215.34	15.622		
11,000.00	7,249.00	10,743.53	7,059.76	111.33	110.08	-86.78	-1,882.96	-3,930.03	3,363.88	3,143.11	220.77	15.237		
11,100.00	7,248.62	10,843.53	7,059.53	114.04	112.81	-86.78	-1,883.56	-4,030.03	3,363.69	3,137.48	226.21	14.870		
11,200.00	7,248.24	10,943.53	7,059.30	116.77	115.53	-86.78	-1,884.16	-4,130.03	3,363.50	3,131.84	231.66	14.519		
11,300.00	7,247.86	11,043.53	7,059.07	119.50	118.27	-86.78	-1,884.76	-4,230.02	3,363.30	3,126.18	237.12	14.184		
11,400.00	7,247.48	11,143.53	7,058.84	122.24	121.01	-86.78	-1,885.35	-4,330.02	3,363.11	3,120.51	242.60	13.863		
11,500.00	7,247.10	11,243.53	7,058.61	124.98	123.76	-86.79	-1,885.95	-4,430.02	3,362.92	3,114.83	248.09	13.555		
11,600.00	7,246.72	11,343.53	7,058.38	127.73	126.51	-86.79	-1,886.55	-4,530.02	3,362.73	3,109.15	253.59	13.261		
11,700.00	7,246.34	11,443.53	7,058.15	130.48	129.26	-86.79	-1,887.15	-4,630.01	3,362.54	3,103.45	259.09	12.978		
11,800.00	7,245.96	11,543.53	7,057.92	133.24	132.03	-86.79	-1,887.75	-4,730.01	3,362.35	3,097.74	264.61	12.707		
11,900.00	7,245.58	11,643.53	7,057.69	136.00	134.79	-86.80	-1,888.35	-4,830.01	3,362.16	3,092.03	270.13	12.446		
12,000.00	7,245.21	11,743.53	7,057.45	138.76	137.56	-86.80	-1,888.95	-4,930.01	3,361.97	3,086.31	275.66	12.196		
12,100.00	7,244.83	11,843.53	7,057.22	141.53	140.33	-86.80	-1,889.55	-5,030.01	3,361.77	3,080.58	281.20	11.955		
12,200.00	7,244.45	11,943.53	7,056.99	144.30	143.11	-86.80	-1,890.15	-5,130.00	3,361.58	3,074.84	286.74	11.723		
12,300.00	7,244.07	12,043.53	7,056.76	147.08	145.88	-86.81	-1,890.74	-5,230.00	3,361.39	3,069.10	292.29	11.500		
12,400.00	7,243.69	12,143.53	7,056.53	149.86	148.67	-86.81	-1,891.34	-5,330.00	3,361.20	3,063.35	297.85	11.285		
12,500.00	7,243.31	12,243.53	7,056.30	152.64	151.45	-86.81	-1,891.94	-5,430.00	3,361.01	3,057.60	303.41	11.077		
12,600.00	7,242.93	12,343.53	7,056.07	155.42	154.24	-86.81	-1,892.54	-5,529.99	3,360.82	3,051.84	308.98	10.877		
12,700.00	7,242.55	12,443.52	7,055.84	158.21	157.03	-86.82	-1,893.14	-5,629.99	3,360.63	3,046.08	314.55	10.684		
12,800.00	7,242.17	12,543.52	7,055.61	161.00	159.82	-86.82	-1,893.74	-5,729.99	3,360.44	3,040.31	320.13	10.497		
12,900.00	7,241.79	12,643.52	7,055.38	163.79	162.61	-86.82	-1,894.34	-5,829.99	3,360.25	3,034.53	325.71	10.317		
13,000.00	7,241.41	12,743.52	7,055.15	166.58	165.41	-86.82	-1,894.94	-5,929.98	3,360.05	3,028.76	331.30	10.142		
13,100.00	7,241.03	12,843.52	7,054.92	169.38	168.21	-86.83	-1,895.53	-6,029.98	3,359.86	3,022.98	336.89	9.973		
13,200.00	7,240.65	12,943.52	7,054.69	172.18	171.01	-86.83	-1,896.13	-6,129.98	3,359.67	3,017.19	342.48	9.810		
13,300.00	7,240.27	13,043.52	7,054.46	174.98	173.81	-86.83	-1,896.73	-6,229.98	3,359.48	3,011.40	348.08	9.651		
13,400.00	7,239.89	13,143.52	7,054.23	177.78	176.62	-86.83	-1,897.33	-6,329.98	3,359.29	3,005.61	353.68	9.498		
13,500.00	7,239.51	13,243.52	7,054.00	180.58	179.42	-86.83	-1,897.93	-6,429.97	3,359.10	2,999.81	359.29	9.349		
13,600.00	7,239.13	13,343.52	7,053.77	183.39	182.23	-86.84	-1,898.53	-6,529.97	3,358.91	2,994.01	364.90	9.205		
13,700.00	7,238.75	13,443.52	7,053.54	186.20	185.04	-86.84	-1,899.13	-6,629.97	3,358.72	2,988.21	370.51	9.065		
13,800.00	7,238.37	13,543.52	7,053.31	189.00	187.85	-86.84	-1,899.73	-6,729.97	3,358.53	2,982.40	376.12	8.929		
13,900.00	7,237.99	13,643.52	7,053.08	191.81	190.67	-86.84	-1,900.33	-6,829.96	3,358.33	2,976.59	381.74	8.797		
14,000.00	7,237.62	13,743.52	7,052.85	194.63	193.48	-86.85	-1,900.92	-6,929.96	3,358.14	2,970.78	387.36	8.669		
14,100.00	7,237.24	13,843.52	7,052.62	197.44	196.29	-86.85	-1,901.52	-7,029.96	3,357.95	2,964.97	392.98	8.545		
14,200.00	7,236.86	13,943.52	7,052.39	200.25	199.11	-86.85	-1,902.12	-7,129.96	3,357.76	2,959.15	398.61	8.424		
14,300.00	7,236.48	14,043.52	7,052.16	203.07	201.93	-86.85	-1,902.72	-7,229.95	3,357.57	2,953.33	404.24	8.306		
14,400.00	7,236.10	14,143.52	7,051.93	205.88	204.75	-86.86	-1,903.32	-7,329.95	3,357.38	2,947.51	409.87	8.191		
14,500.00	7,235.72	14,243.52	7,051.70	208.70	207.57	-86.86	-1,903.92	-7,429.95	3,357.19	2,941.69	415.50	8.080		
14,600.00	7,235.34	14,343.52	7,051.46	211.52	210.39	-86.86	-1,904.52	-7,529.95	3,357.00	2,935.87	421.13	7.971		
14,700.00	7,234.96	14,443.52	7,051.23	214.34	213.21	-86.86	-1,905.12	-7,629.94	3,356.81	2,930.04	426.77	7.866		
14,800.00	7,234.58	14,543.52	7,051.00	217.16	216.03	-86.87	-1,905.71	-7,729.94	3,356.62	2,924.21	432.41	7.763		
14,900.00	7,234.20	14,643.52	7,050.77	219.98	218.86	-86.87	-1,906.31	-7,829.94	3,356.42	2,918.38	438.05	7.662		
15,000.00	7,233.82	14,743.52	7,050.54	222.81	221.68	-86.87	-1,906.91	-7,929.94	3,356.23	2,912.55	443.69	7.564		
15,100.00	7,233.44	14,843.52	7,050.31	225.63	224.51	-86.87	-1,907.51	-8,029.94	3,356.04	2,906.71	449.33	7.469		
15,200.00	7,233.06	14,943.52	7,050.08	228.45	227.33	-86.87	-1,908.11	-8,129.93	3,355.85	2,900.87	454.98	7.376		
15,216.01	7,233.00	14,959.53	7,050.05	228.91	227.78	-86.88	-1,908.21	-8,145.95	3,355.82	2,899.94	455.88	7.361 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2.00	0.00	3.28	3.28	-179.53	-339.89	-2.78	339.90					
100.00	100.00	102.00	100.00	3.28	3.29	-179.53	-339.89	-2.78	339.90	333.33	6.57	51.736		
200.00	200.00	198.00	200.00	3.34	3.34	-179.53	-339.89	-2.78	339.90	333.23	6.67	50.941	CC, ES	
300.00	299.98	287.58	289.57	3.45	3.42	-173.79	-341.22	-2.95	343.12	336.24	6.88	49.875		
400.00	399.84	376.39	378.28	3.61	3.55	-173.77	-345.27	-3.48	352.89	345.69	7.19	49.050		
500.00	499.45	464.09	465.72	3.82	3.72	-173.74	-351.95	-4.34	369.12	361.52	7.60	48.580		
600.00	598.70	550.16	551.29	4.07	3.91	-173.70	-361.09	-5.52	391.72	383.65	8.07	48.534		
700.00	697.47	634.11	634.45	4.35	4.13	-173.64	-372.45	-6.98	420.51	411.92	8.59	48.939		
800.00	795.62	715.51	714.73	4.67	4.36	-173.57	-385.77	-8.70	455.31	446.16	9.15	49.787		
900.00	893.06	805.39	803.10	5.01	4.65	-173.52	-402.06	-10.80	494.98	485.26	9.73	50.894		
1,000.00	989.64	895.73	891.91	5.38	4.97	-173.49	-418.47	-12.92	537.85	527.51	10.34	52.016		
1,100.00	1,085.42	984.76	979.43	5.78	5.30	-173.54	-434.63	-15.00	583.37	572.39	10.98	53.109		
1,200.00	1,181.09	1,073.62	1,066.79	6.20	5.65	-173.63	-450.77	-17.08	629.23	617.59	11.64	54.062		
1,300.00	1,276.76	1,162.48	1,154.15	6.65	6.01	-173.71	-466.91	-19.17	675.09	662.77	12.32	54.795		
1,400.00	1,372.43	1,251.34	1,241.51	7.11	6.37	-173.78	-483.04	-21.25	720.95	707.93	13.02	55.355		
1,500.00	1,468.10	1,340.20	1,328.87	7.57	6.75	-173.84	-499.18	-23.33	766.81	753.06	13.75	55.780		
1,600.00	1,563.77	1,429.06	1,416.23	8.05	7.14	-173.90	-515.31	-25.41	812.67	798.19	14.49	56.100		
1,700.00	1,659.44	1,517.92	1,503.59	8.53	7.53	-173.95	-531.45	-27.49	858.53	843.30	15.24	56.338		
1,800.00	1,755.11	1,606.78	1,590.94	9.02	7.92	-173.99	-547.59	-29.57	904.40	888.39	16.00	56.512		
1,900.00	1,850.78	1,704.36	1,678.30	9.52	8.36	-174.03	-563.72	-31.65	950.26	933.44	16.82	56.512		
2,000.00	1,946.45	1,784.51	1,765.66	10.02	8.73	-174.07	-579.86	-33.74	996.12	978.56	17.56	56.719		
2,100.00	2,042.12	1,873.37	1,853.02	10.52	9.13	-174.10	-596.00	-35.82	1,041.99	1,023.63	18.35	56.772		
2,200.00	2,137.78	1,962.23	1,940.38	11.03	9.54	-174.13	-612.13	-37.90	1,087.85	1,068.70	19.15	56.800		
2,300.00	2,233.45	2,051.09	2,027.74	11.54	9.96	-174.16	-628.27	-39.98	1,133.71	1,113.76	19.96	56.809		
2,400.00	2,329.12	2,139.95	2,115.10	12.05	10.37	-174.18	-644.40	-42.06	1,179.58	1,158.81	20.77	56.803		
2,500.00	2,424.79	2,228.81	2,202.46	12.56	10.79	-174.21	-660.54	-44.14	1,225.44	1,203.86	21.58	56.785		
2,600.00	2,520.46	2,317.67	2,289.82	13.08	11.21	-174.23	-676.68	-46.22	1,271.31	1,248.91	22.40	56.758		
2,700.00	2,616.13	2,406.53	2,377.17	13.60	11.63	-174.25	-692.81	-48.31	1,317.17	1,293.95	23.22	56.723		
2,800.00	2,711.80	2,495.39	2,464.53	14.12	12.05	-174.27	-708.95	-50.39	1,363.03	1,338.99	24.05	56.683		
2,900.00	2,807.47	2,584.26	2,551.89	14.64	12.47	-174.29	-725.09	-52.47	1,408.90	1,384.02	24.87	56.639		
3,000.00	2,903.14	2,673.12	2,639.25	15.16	12.90	-174.30	-741.22	-54.55	1,454.76	1,429.06	25.71	56.592		
3,100.00	2,998.81	2,761.98	2,726.61	15.68	13.32	-174.32	-757.36	-56.63	1,500.63	1,474.09	26.54	56.543		
3,200.00	3,094.48	2,850.84	2,813.97	16.21	13.75	-174.33	-773.49	-58.71	1,546.49	1,519.12	27.38	56.491		
3,300.00	3,190.15	2,939.70	2,901.33	16.73	14.18	-174.35	-789.63	-60.79	1,592.36	1,564.14	28.21	56.439		
3,400.00	3,285.82	3,028.56	2,988.69	17.26	14.60	-174.36	-805.77	-62.87	1,638.22	1,609.17	29.05	56.386		
3,500.00	3,381.49	3,117.42	3,076.05	17.78	15.03	-174.37	-821.90	-64.96	1,684.09	1,654.19	29.90	56.333		
3,600.00	3,477.16	3,206.28	3,163.40	18.31	15.46	-174.38	-838.04	-67.04	1,729.95	1,699.22	30.74	56.280		
3,700.00	3,572.83	3,304.86	3,250.76	18.84	15.94	-174.40	-854.17	-69.12	1,775.82	1,744.19	31.63	56.149		
3,800.00	3,668.50	3,384.01	3,338.12	19.37	16.32	-174.41	-870.31	-71.20	1,821.68	1,789.25	32.43	56.175		
3,900.00	3,764.17	3,472.87	3,425.48	19.89	16.75	-174.42	-886.45	-73.28	1,867.55	1,834.27	33.28	56.123		
4,000.00	3,859.84	3,561.73	3,512.84	20.42	17.19	-174.43	-902.58	-75.36	1,913.41	1,879.29	34.12	56.071		
4,100.00	3,955.51	3,650.59	3,600.20	20.95	17.62	-174.44	-918.72	-77.44	1,959.28	1,924.31	34.97	56.021		
4,200.00	4,051.18	3,739.45	3,687.56	21.48	18.05	-174.44	-934.86	-79.53	2,005.15	1,969.32	35.82	55.971		
4,300.00	4,146.85	3,828.31	3,774.92	22.01	18.48	-174.45	-950.99	-81.61	2,051.01	2,014.33	36.68	55.922		
4,400.00	4,242.52	3,917.17	3,862.28	22.55	18.92	-174.46	-967.13	-83.69	2,096.88	2,059.35	37.53	55.874		
4,500.00	4,338.19	4,006.03	3,949.63	23.08	19.35	-174.47	-983.26	-85.77	2,142.74	2,104.36	38.38	55.827		
4,600.00	4,433.86	4,105.11	4,036.99	23.61	19.83	-174.48	-999.40	-87.85	2,188.61	2,149.32	39.28	55.714		
4,700.00	4,529.53	4,183.75	4,124.35	24.14	20.22	-174.48	-1,015.54	-89.93	2,234.47	2,194.38	40.09	55.735		
4,800.00	4,625.19	4,272.62	4,211.71	24.67	20.65	-174.49	-1,031.67	-92.01	2,280.34	2,239.39	40.95	55.691		
4,900.00	4,720.86	4,361.48	4,299.07	25.21	21.09	-174.50	-1,047.81	-94.10	2,326.20	2,284.40	41.80	55.647		
5,000.00	4,816.53	4,450.34	4,386.43	25.74	21.52	-174.50	-1,063.95	-96.18	2,372.07	2,329.41	42.66	55.605		
5,100.00	4,912.20	4,539.20	4,473.79	26.27	21.95	-174.51	-1,080.08	-98.26	2,417.94	2,374.42	43.52	55.563		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	4,628.06	4,561.15	26.80	22.39	-174.51	-1,096.22	-100.34	2,463.80	2,419.43	44.37	55.522		
5,300.00	5,103.54	4,716.92	4,648.51	27.34	22.83	-174.52	-1,112.35	-102.42	2,509.67	2,464.43	45.23	55.482		
5,400.00	5,199.22	4,805.79	4,735.87	27.87	23.26	-174.53	-1,128.49	-104.50	2,555.52	2,509.43	46.09	55.443		
5,500.00	5,295.46	4,904.43	4,824.13	28.39	23.74	-174.63	-1,144.79	-106.61	2,599.55	2,552.56	46.99	55.318		
5,600.00	5,392.60	4,986.82	4,913.85	28.89	24.15	-174.70	-1,161.37	-108.74	2,640.43	2,592.62	47.81	55.227		
5,700.00	5,490.50	5,079.44	5,004.90	29.37	24.60	-174.76	-1,178.18	-110.91	2,678.12	2,629.45	48.67	55.026		
5,800.00	5,589.05	5,173.31	5,097.18	29.83	25.06	-174.81	-1,195.23	-113.11	2,712.56	2,663.03	49.53	54.768		
5,900.00	5,688.14	5,268.32	5,190.59	30.26	25.53	-174.84	-1,212.48	-115.34	2,743.72	2,693.34	50.38	54.457		
6,000.00	5,787.63	5,364.35	5,284.99	30.68	26.00	-174.86	-1,229.92	-117.59	2,771.56	2,720.33	51.23	54.097		
6,100.00	5,887.41	5,461.28	5,380.28	31.07	26.48	-174.86	-1,247.52	-119.86	2,796.05	2,743.97	52.08	53.690		
6,200.00	5,987.36	5,559.00	5,476.35	31.44	26.96	-174.85	-1,265.27	-122.15	2,817.15	2,764.24	52.91	53.240		
6,300.00	6,087.36	5,657.26	5,572.95	31.80	27.44	179.45	-1,283.11	-124.45	2,835.53	2,781.78	53.74	52.760		
6,400.00	6,187.36	5,755.57	5,669.60	32.15	27.93	179.50	-1,300.96	-126.75	2,853.67	2,799.09	54.58	52.287		
6,500.00	6,287.36	5,853.88	5,766.25	32.51	28.41	179.55	-1,318.81	-129.05	2,871.82	2,816.40	55.41	51.827		
6,600.00	6,387.36	5,952.19	5,862.90	32.87	28.89	179.60	-1,336.67	-131.36	2,889.96	2,833.71	56.25	51.380		
6,700.00	6,487.36	6,050.50	5,959.54	33.23	29.38	179.65	-1,354.52	-133.66	2,908.11	2,851.03	57.09	50.943		
6,800.00	6,587.36	6,148.81	6,056.19	33.59	29.86	179.70	-1,372.37	-135.96	2,926.26	2,868.34	57.92	50.519		
6,900.00	6,687.26	6,247.10	6,152.82	33.95	30.35	-88.82	-1,390.22	-138.26	2,944.39	2,885.63	58.76	50.112		
7,000.00	6,785.58	6,344.20	6,248.28	34.31	30.82	-87.49	-1,407.85	-140.54	2,962.23	2,902.65	59.58	49.718		
7,100.00	6,879.94	6,437.78	6,340.28	34.65	31.29	-86.47	-1,424.84	-142.73	2,979.60	2,919.20	60.39	49.336		
7,200.00	6,968.01	6,525.53	6,426.54	34.97	31.72	-85.70	-1,440.78	-144.79	2,996.50	2,935.31	61.19	48.971		
7,300.00	7,047.61	6,605.29	6,504.95	35.27	32.11	-85.09	-1,455.26	-146.65	3,013.14	2,951.16	61.97	48.621		
7,400.00	7,116.80	6,692.22	6,590.26	35.54	32.54	-84.73	-1,471.06	-151.41	3,029.68	2,966.76	62.92	48.152		
7,500.00	7,173.86	6,801.32	6,695.18	35.81	33.06	-84.72	-1,490.77	-173.23	3,045.70	2,981.50	64.19	47.446		
7,600.00	7,217.38	6,936.46	6,817.55	36.17	33.64	-85.07	-1,514.18	-224.94	3,060.62	2,994.82	65.80	46.515		
7,700.00	7,246.31	7,114.96	6,957.59	36.80	34.31	-85.89	-1,541.77	-331.16	3,073.53	3,005.69	67.84	45.307		
7,800.00	7,259.92	7,360.27	7,091.99	37.72	35.17	-87.09	-1,569.91	-532.60	3,082.77	3,012.11	70.66	43.628		
7,900.00	7,260.77	7,636.35	7,141.91	38.86	37.14	-87.79	-1,583.60	-801.64	3,086.05	3,011.35	74.70	41.311		
8,000.00	7,260.39	7,736.35	7,141.37	40.19	38.32	-87.79	-1,585.17	-901.62	3,086.84	3,009.48	77.36	39.901		
8,100.00	7,260.01	7,836.35	7,140.82	41.67	39.71	-87.79	-1,586.74	-1,001.60	3,087.64	3,007.31	80.33	38.436		
8,200.00	7,259.63	7,936.34	7,140.28	43.30	41.26	-87.78	-1,588.31	-1,101.58	3,088.43	3,004.85	83.58	36.950		
8,300.00	7,259.25	8,036.34	7,139.74	45.05	42.96	-87.78	-1,589.88	-1,201.57	3,089.22	3,002.13	87.09	35.471		
8,400.00	7,258.87	8,136.34	7,139.20	46.91	44.78	-87.78	-1,591.45	-1,301.55	3,090.02	2,999.20	90.82	34.023		
8,500.00	7,258.49	8,236.34	7,138.66	48.87	46.71	-87.78	-1,593.02	-1,401.53	3,090.81	2,996.06	94.75	32.621		
8,600.00	7,258.11	8,336.33	7,138.11	50.92	48.73	-87.77	-1,594.59	-1,501.52	3,091.61	2,992.75	98.85	31.275		
8,700.00	7,257.73	8,436.33	7,137.57	53.04	50.84	-87.77	-1,596.16	-1,601.50	3,092.40	2,989.29	103.11	29.992		
8,800.00	7,257.35	8,536.33	7,137.03	55.23	53.02	-87.77	-1,597.73	-1,701.48	3,093.19	2,985.70	107.50	28.775		
8,900.00	7,256.97	8,636.32	7,136.49	57.47	55.26	-87.77	-1,599.30	-1,801.47	3,093.99	2,981.98	112.01	27.624		
9,000.00	7,256.59	8,736.32	7,135.95	59.77	57.55	-87.76	-1,600.87	-1,901.45	3,094.78	2,978.16	116.62	26.537		
9,100.00	7,256.21	8,836.32	7,135.40	62.12	59.89	-87.76	-1,602.44	-2,001.43	3,095.58	2,974.25	121.33	25.514		
9,200.00	7,255.83	8,936.31	7,134.86	64.50	62.28	-87.76	-1,604.01	-2,101.41	3,096.37	2,970.25	126.12	24.551		
9,300.00	7,255.45	9,036.31	7,134.32	66.93	64.71	-87.76	-1,605.58	-2,201.40	3,097.16	2,966.18	130.98	23.646		
9,400.00	7,255.07	9,136.31	7,133.78	69.38	67.17	-87.75	-1,607.15	-2,301.38	3,097.96	2,962.05	135.91	22.794		
9,500.00	7,254.69	9,236.30	7,133.24	71.87	69.66	-87.75	-1,608.72	-2,401.36	3,098.75	2,957.85	140.90	21.993		
9,600.00	7,254.31	9,336.30	7,132.69	74.38	72.17	-87.75	-1,610.29	-2,501.35	3,099.54	2,953.60	145.94	21.238		
9,700.00	7,253.93	9,436.30	7,132.15	76.92	74.71	-87.75	-1,611.86	-2,601.33	3,100.34	2,949.31	151.03	20.528		
9,800.00	7,253.55	9,536.29	7,131.61	79.48	77.28	-87.74	-1,613.43	-2,701.31	3,101.13	2,944.97	156.16	19.858		
9,900.00	7,253.18	9,636.29	7,131.07	82.06	79.86	-87.74	-1,615.00	-2,801.29	3,101.93	2,940.59	161.33	19.227		
10,000.00	7,252.80	9,736.29	7,130.53	84.65	82.46	-87.74	-1,616.57	-2,901.28	3,102.72	2,936.18	166.54	18.631		
10,100.00	7,252.42	9,836.28	7,129.98	87.27	85.08	-87.74	-1,618.14	-3,001.26	3,103.51	2,931.74	171.78	18.067		
10,200.00	7,252.04	9,936.28	7,129.44	89.89	87.71	-87.73	-1,619.71	-3,101.24	3,104.31	2,927.27	177.04	17.534		
10,300.00	7,251.66	10,036.28	7,128.90	92.54	90.36	-87.73	-1,621.28	-3,201.23	3,105.10	2,922.77	182.34	17.030		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,251.28	10,136.27	7,128.36	95.19	93.02	-87.73	-1,622.85	-3,301.21	3,105.90	2,918.24	187.65	16.551		
10,500.00	7,250.90	10,236.27	7,127.82	97.86	95.69	-87.73	-1,624.42	-3,401.19	3,106.69	2,913.70	192.99	16.097		
10,600.00	7,250.52	10,336.27	7,127.28	100.53	98.37	-87.73	-1,625.99	-3,501.18	3,107.48	2,909.13	198.35	15.666		
10,700.00	7,250.14	10,436.26	7,126.73	103.22	101.06	-87.72	-1,627.56	-3,601.16	3,108.28	2,904.54	203.73	15.257		
10,800.00	7,249.76	10,536.26	7,126.19	105.91	103.76	-87.72	-1,629.13	-3,701.14	3,109.07	2,899.94	209.13	14.867		
10,900.00	7,249.38	10,636.26	7,125.65	108.62	106.47	-87.72	-1,630.70	-3,801.12	3,109.87	2,895.32	214.54	14.495		
11,000.00	7,249.00	10,736.25	7,125.11	111.33	109.18	-87.72	-1,632.27	-3,901.11	3,110.66	2,890.69	219.97	14.141		
11,100.00	7,248.62	10,836.25	7,124.57	114.04	111.90	-87.71	-1,633.84	-4,001.09	3,111.45	2,886.04	225.41	13.803		
11,200.00	7,248.24	10,936.25	7,124.02	116.77	114.63	-87.71	-1,635.41	-4,101.07	3,112.25	2,881.38	230.87	13.481		
11,300.00	7,247.86	11,036.24	7,123.48	119.50	117.37	-87.71	-1,636.98	-4,201.06	3,113.04	2,876.71	236.33	13.172		
11,400.00	7,247.48	11,136.24	7,122.94	122.24	120.11	-87.71	-1,638.55	-4,301.04	3,113.84	2,872.02	241.81	12.877		
11,500.00	7,247.10	11,236.24	7,122.40	124.98	122.85	-87.70	-1,640.12	-4,401.02	3,114.63	2,867.33	247.30	12.595		
11,600.00	7,246.72	11,336.23	7,121.86	127.73	125.60	-87.70	-1,641.69	-4,501.01	3,115.42	2,862.63	252.80	12.324		
11,700.00	7,246.34	11,436.23	7,121.31	130.48	128.36	-87.70	-1,643.26	-4,600.99	3,116.22	2,857.91	258.31	12.064		
11,800.00	7,245.96	11,536.23	7,120.77	133.24	131.12	-87.70	-1,644.83	-4,700.97	3,117.01	2,853.19	263.82	11.815		
11,900.00	7,245.58	11,636.23	7,120.23	136.00	133.88	-87.69	-1,646.40	-4,800.95	3,117.81	2,848.46	269.34	11.576		
12,000.00	7,245.21	11,736.22	7,119.69	138.76	136.65	-87.69	-1,647.97	-4,900.94	3,118.60	2,843.72	274.88	11.345		
12,100.00	7,244.83	11,836.22	7,119.15	141.53	139.42	-87.69	-1,649.54	-5,000.92	3,119.39	2,838.98	280.41	11.124		
12,200.00	7,244.45	11,936.22	7,118.60	144.30	142.19	-87.69	-1,651.11	-5,100.90	3,120.19	2,834.23	285.96	10.911		
12,300.00	7,244.07	12,036.21	7,118.06	147.08	144.97	-87.68	-1,652.68	-5,200.89	3,120.98	2,829.47	291.51	10.706		
12,400.00	7,243.69	12,136.21	7,117.52	149.86	147.75	-87.68	-1,654.25	-5,300.87	3,121.78	2,824.71	297.07	10.509		
12,500.00	7,243.31	12,236.21	7,116.98	152.64	150.53	-87.68	-1,655.82	-5,400.85	3,122.57	2,819.94	302.63	10.318		
12,600.00	7,242.93	12,336.20	7,116.44	155.42	153.32	-87.68	-1,657.39	-5,500.84	3,123.36	2,815.17	308.20	10.134		
12,700.00	7,242.55	12,436.20	7,115.89	158.21	156.10	-87.67	-1,658.96	-5,600.82	3,124.16	2,810.39	313.77	9.957		
12,800.00	7,242.17	12,536.20	7,115.35	161.00	158.89	-87.67	-1,660.53	-5,700.80	3,124.95	2,805.60	319.35	9.785		
12,900.00	7,241.79	12,636.19	7,114.81	163.79	161.69	-87.67	-1,662.10	-5,800.78	3,125.75	2,800.81	324.93	9.620		
13,000.00	7,241.41	12,736.19	7,114.27	166.58	164.48	-87.67	-1,663.67	-5,900.77	3,126.54	2,796.02	330.52	9.460		
13,100.00	7,241.03	12,836.19	7,113.73	169.38	167.28	-87.67	-1,665.24	-6,000.75	3,127.33	2,791.23	336.11	9.305		
13,200.00	7,240.65	12,936.18	7,113.18	172.18	170.08	-87.66	-1,666.81	-6,100.73	3,128.13	2,786.43	341.70	9.155		
13,300.00	7,240.27	13,036.18	7,112.64	174.98	172.88	-87.66	-1,668.38	-6,200.72	3,128.92	2,781.62	347.30	9.009		
13,400.00	7,239.89	13,136.18	7,112.10	177.78	175.68	-87.66	-1,669.95	-6,300.70	3,129.72	2,776.81	352.90	8.868		
13,500.00	7,239.51	13,236.17	7,111.56	180.58	178.49	-87.66	-1,671.52	-6,400.68	3,130.51	2,772.00	358.51	8.732		
13,600.00	7,239.13	13,336.17	7,111.02	183.39	181.29	-87.65	-1,673.09	-6,500.66	3,131.30	2,767.19	364.12	8.600		
13,700.00	7,238.75	13,436.17	7,110.47	186.20	184.10	-87.65	-1,674.66	-6,600.65	3,132.10	2,762.37	369.73	8.471		
13,800.00	7,238.37	13,536.16	7,109.93	189.00	186.91	-87.65	-1,676.23	-6,700.63	3,132.89	2,757.55	375.34	8.347		
13,900.00	7,237.99	13,636.16	7,109.39	191.81	189.72	-87.65	-1,677.80	-6,800.61	3,133.69	2,752.73	380.96	8.226		
14,000.00	7,237.62	13,736.16	7,108.85	194.63	192.53	-87.64	-1,679.37	-6,900.60	3,134.48	2,747.90	386.58	8.108		
14,100.00	7,237.24	13,836.15	7,108.31	197.44	195.34	-87.64	-1,680.94	-7,000.58	3,135.28	2,743.07	392.20	7.994		
14,200.00	7,236.86	13,936.15	7,107.77	200.25	198.16	-87.64	-1,682.51	-7,100.56	3,136.07	2,738.24	397.83	7.883		
14,300.00	7,236.48	14,036.15	7,107.22	203.07	200.97	-87.64	-1,684.08	-7,200.55	3,136.86	2,733.41	403.45	7.775		
14,400.00	7,236.10	14,136.14	7,106.68	205.88	203.79	-87.63	-1,685.65	-7,300.53	3,137.66	2,728.58	409.08	7.670		
14,500.00	7,235.72	14,236.14	7,106.14	208.70	206.61	-87.63	-1,687.22	-7,400.51	3,138.45	2,723.74	414.71	7.568		
14,600.00	7,235.34	14,336.14	7,105.60	211.52	209.42	-87.63	-1,688.79	-7,500.49	3,139.25	2,718.90	420.35	7.468		
14,700.00	7,234.96	14,436.13	7,105.06	214.34	212.24	-87.63	-1,690.36	-7,600.48	3,140.04	2,714.06	425.98	7.371		
14,800.00	7,234.58	14,536.13	7,104.51	217.16	215.06	-87.62	-1,691.93	-7,700.46	3,140.83	2,709.22	431.62	7.277		
14,900.00	7,234.20	14,636.13	7,103.97	219.98	217.88	-87.62	-1,693.50	-7,800.44	3,141.63	2,704.37	437.26	7.185		
15,000.00	7,233.82	14,736.12	7,103.43	222.81	220.71	-87.62	-1,695.07	-7,900.43	3,142.42	2,699.52	442.90	7.095		
15,100.00	7,233.44	14,836.12	7,102.89	225.63	223.53	-87.62	-1,696.64	-8,000.41	3,143.22	2,694.68	448.54	7.008		
15,200.00	7,233.06	14,936.12	7,102.35	228.45	226.35	-87.62	-1,698.21	-8,100.39	3,144.01	2,689.83	454.18	6.922		
15,216.01	7,233.00	14,952.13	7,102.26	228.91	226.81	-87.61	-1,698.46	-8,116.40	3,144.14	2,689.05	455.09	6.909 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	3.00	0.00	3.28	3.28	-179.51	-459.76	-3.89	459.77					
100.00	100.00	103.00	100.00	3.28	3.29	-179.51	-459.76	-3.89	459.77	453.20	6.57	69.980		
200.00	200.00	197.00	200.00	3.34	3.33	-179.51	-459.76	-3.89	459.77	453.10	6.67	68.915 CC, ES		
300.00	299.98	283.52	286.51	3.45	3.42	-173.79	-460.97	-3.97	462.92	456.05	6.87	67.343		
400.00	399.84	369.10	372.01	3.61	3.54	-173.80	-464.74	-4.21	472.51	465.33	7.18	65.805		
500.00	499.45	453.66	456.33	3.82	3.69	-173.82	-470.96	-4.61	488.49	480.92	7.57	64.501		
600.00	598.70	536.69	538.92	4.07	3.88	-173.84	-479.48	-5.15	510.74	502.70	8.03	63.575		
700.00	697.47	617.75	619.27	4.35	4.08	-173.86	-490.10	-5.82	539.11	530.57	8.54	63.111		
800.00	795.62	696.42	696.94	4.67	4.30	-173.88	-502.57	-6.62	573.42	564.34	9.08	63.133		
900.00	893.06	772.36	771.56	5.01	4.55	-173.88	-516.63	-7.51	613.45	603.81	9.64	63.613		
1,000.00	989.64	845.24	842.79	5.38	4.80	-173.88	-531.97	-8.48	658.97	648.76	10.21	64.554		
1,100.00	1,085.42	915.03	910.63	5.78	5.06	-173.93	-548.35	-9.52	709.27	698.49	10.77	65.826		
1,200.00	1,181.09	982.69	975.99	6.20	5.33	-174.01	-565.80	-10.63	761.94	750.62	11.32	67.303		
1,300.00	1,276.76	1,048.39	1,039.04	6.65	5.60	-174.07	-584.21	-11.80	816.58	804.71	11.87	68.819		
1,400.00	1,372.43	1,112.14	1,099.81	7.11	5.88	-174.12	-603.46	-13.03	873.09	860.68	12.40	70.386		
1,500.00	1,468.10	1,173.97	1,158.31	7.57	6.17	-174.15	-623.40	-14.29	931.39	918.45	12.94	72.001		
1,600.00	1,563.77	1,234.80	1,215.45	8.05	6.46	-174.18	-644.25	-15.62	991.39	977.93	13.46	73.641		
1,700.00	1,659.44	1,314.22	1,289.77	8.53	6.86	-174.20	-672.17	-17.39	1,052.16	1,038.04	14.12	74.514		
1,800.00	1,755.11	1,393.64	1,364.10	9.02	7.27	-174.22	-700.09	-19.17	1,112.92	1,098.13	14.80	75.217		
1,900.00	1,850.78	1,473.06	1,438.43	9.52	7.69	-174.24	-728.01	-20.94	1,173.69	1,158.20	15.49	75.782		
2,000.00	1,946.45	1,552.48	1,512.76	10.02	8.12	-174.26	-755.93	-22.72	1,234.45	1,218.26	16.19	76.234		
2,100.00	2,042.12	1,631.90	1,587.09	10.52	8.55	-174.27	-783.86	-24.49	1,295.22	1,278.31	16.91	76.595		
2,200.00	2,137.78	1,711.32	1,661.42	11.03	8.99	-174.29	-811.78	-26.27	1,355.98	1,338.35	17.64	76.881		
2,300.00	2,233.45	1,809.26	1,735.75	11.54	9.54	-174.30	-839.70	-28.04	1,416.75	1,398.29	18.46	76.737		
2,400.00	2,329.12	1,870.16	1,810.08	12.05	9.88	-174.31	-867.62	-29.82	1,477.52	1,458.40	19.12	77.280		
2,500.00	2,424.79	1,949.58	1,884.41	12.56	10.34	-174.32	-895.54	-31.59	1,538.28	1,518.41	19.87	77.413		
2,600.00	2,520.46	2,029.00	1,958.74	13.08	10.79	-174.33	-923.46	-33.37	1,599.05	1,578.42	20.63	77.513		
2,700.00	2,616.13	2,108.42	2,033.06	13.60	11.25	-174.34	-951.38	-35.14	1,659.81	1,638.42	21.39	77.585		
2,800.00	2,711.80	2,187.84	2,107.39	14.12	11.71	-174.35	-979.30	-36.92	1,720.58	1,698.41	22.16	77.633		
2,900.00	2,807.47	2,267.26	2,181.72	14.64	12.17	-174.36	-1,007.22	-38.69	1,781.34	1,758.41	22.94	77.663		
3,000.00	2,903.14	2,346.68	2,256.05	15.16	12.64	-174.36	-1,035.14	-40.46	1,842.11	1,818.39	23.71	77.677		
3,100.00	2,998.81	2,426.10	2,330.38	15.68	13.11	-174.37	-1,063.06	-42.24	1,902.87	1,878.38	24.50	77.679		
3,200.00	3,094.48	2,505.52	2,404.71	16.21	13.57	-174.38	-1,090.98	-44.01	1,963.64	1,938.36	25.28	77.670		
3,300.00	3,190.15	2,584.94	2,479.04	16.73	14.04	-174.38	-1,118.90	-45.79	2,024.41	1,998.34	26.07	77.652		
3,400.00	3,285.82	2,664.36	2,553.37	17.26	14.52	-174.39	-1,146.83	-47.56	2,085.17	2,058.31	26.86	77.626		
3,500.00	3,381.49	2,743.78	2,627.70	17.78	14.99	-174.40	-1,174.75	-49.34	2,145.94	2,118.28	27.66	77.595		
3,600.00	3,477.16	2,823.20	2,702.02	18.31	15.46	-174.40	-1,202.67	-51.11	2,206.70	2,178.25	28.45	77.559		
3,700.00	3,572.83	2,902.62	2,776.35	18.84	15.94	-174.41	-1,230.59	-52.89	2,267.47	2,238.22	29.25	77.519		
3,800.00	3,668.50	2,982.04	2,850.68	19.37	16.41	-174.41	-1,258.51	-54.66	2,328.23	2,298.18	30.05	77.476		
3,900.00	3,764.17	3,061.46	2,925.01	19.89	16.89	-174.41	-1,286.43	-56.44	2,389.00	2,358.15	30.85	77.430		
4,000.00	3,859.84	3,140.88	2,999.34	20.42	17.36	-174.42	-1,314.35	-58.21	2,449.77	2,418.11	31.66	77.383		
4,100.00	3,955.51	3,220.30	3,073.67	20.95	17.84	-174.42	-1,342.27	-59.98	2,510.53	2,478.07	32.46	77.333		
4,200.00	4,051.18	3,299.72	3,148.00	21.48	18.32	-174.43	-1,370.19	-61.76	2,571.30	2,538.03	33.27	77.283		
4,300.00	4,146.85	3,379.14	3,222.33	22.01	18.80	-174.43	-1,398.11	-63.53	2,632.06	2,597.98	34.08	77.231		
4,400.00	4,242.52	3,458.56	3,296.66	22.55	19.28	-174.43	-1,426.03	-65.31	2,692.83	2,657.94	34.89	77.179		
4,500.00	4,338.19	3,537.98	3,370.98	23.08	19.76	-174.44	-1,453.95	-67.08	2,753.59	2,717.89	35.70	77.126		
4,600.00	4,433.86	3,617.40	3,445.31	23.61	20.24	-174.44	-1,481.87	-68.86	2,814.36	2,777.84	36.52	77.074		
4,700.00	4,529.53	3,703.18	3,519.64	24.14	20.76	-174.44	-1,509.79	-70.63	2,875.13	2,837.76	37.36	76.952		
4,800.00	4,625.19	3,776.24	3,593.97	24.67	21.20	-174.45	-1,537.72	-72.41	2,935.89	2,897.75	38.14	76.968		
4,900.00	4,720.86	3,855.66	3,668.30	25.21	21.68	-174.45	-1,565.64	-74.18	2,996.66	2,957.70	38.96	76.915		
5,000.00	4,816.53	3,935.07	3,742.63	25.74	22.16	-174.45	-1,593.56	-75.96	3,057.42	3,017.65	39.78	76.863		
5,100.00	4,912.20	4,014.49	3,816.96	26.27	22.65	-174.45	-1,621.48	-77.73	3,118.19	3,077.59	40.60	76.810		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	4,106.09	3,891.29	26.80	23.20	-174.46	-1,649.40	-79.51	3,178.95	3,137.48	41.48	76.640		
5,300.00	5,103.54	4,173.33	3,965.62	27.34	23.61	-174.46	-1,677.32	-81.28	3,239.72	3,197.49	42.24	76.707		
5,400.00	5,199.22	4,252.76	4,039.95	27.87	24.09	-174.48	-1,705.24	-83.05	3,300.47	3,257.42	43.06	76.656		
5,500.00	5,295.46	4,333.41	4,115.43	28.39	24.58	-174.61	-1,733.59	-84.86	3,359.59	3,315.71	43.88	76.563		
5,600.00	5,392.60	4,416.06	4,192.79	28.89	25.09	-174.73	-1,762.65	-86.70	3,415.87	3,371.16	44.71	76.397		
5,700.00	5,490.50	4,500.62	4,271.92	29.37	25.60	-174.83	-1,792.38	-88.59	3,469.25	3,423.70	45.55	76.160		
5,800.00	5,589.05	4,586.97	4,352.74	29.83	26.13	-174.91	-1,822.74	-90.52	3,519.65	3,473.25	46.40	75.858		
5,900.00	5,688.14	4,675.03	4,435.15	30.26	26.67	-174.98	-1,853.69	-92.49	3,567.02	3,519.77	47.25	75.495		
6,000.00	5,787.63	4,764.66	4,519.04	30.68	27.21	-175.04	-1,885.21	-94.49	3,611.30	3,563.20	48.10	75.078		
6,100.00	5,887.41	4,855.78	4,604.32	31.07	27.77	-175.08	-1,917.24	-96.53	3,652.44	3,603.49	48.95	74.608		
6,200.00	5,987.36	4,948.27	4,690.88	31.44	28.33	-175.11	-1,949.75	-98.60	3,690.39	3,640.58	49.81	74.092		
6,300.00	6,087.36	5,041.78	4,778.39	31.80	28.90	179.17	-1,982.63	-100.68	3,725.74	3,675.08	50.66	73.543		
6,400.00	6,187.36	5,135.37	4,865.98	32.15	29.48	179.21	-2,015.53	-102.78	3,760.88	3,709.36	51.52	73.001		
6,500.00	6,287.36	5,228.96	4,953.57	32.51	30.05	179.25	-2,048.43	-104.87	3,796.01	3,743.63	52.38	72.474		
6,600.00	6,387.36	5,322.55	5,041.16	32.87	30.62	179.29	-2,081.33	-106.96	3,831.15	3,777.91	53.24	71.961		
6,700.00	6,487.36	5,416.14	5,128.75	33.23	31.19	179.33	-2,114.24	-109.05	3,866.29	3,812.19	54.10	71.463		
6,800.00	6,587.36	5,509.73	5,216.34	33.59	31.76	179.37	-2,147.14	-111.14	3,901.43	3,846.46	54.97	70.978		
6,900.00	6,687.26	5,603.30	5,303.92	33.95	32.34	-88.07	-2,180.03	-113.23	3,936.54	3,880.72	55.82	70.516		
7,000.00	6,785.58	5,704.24	5,390.46	34.31	32.95	-84.98	-2,212.54	-115.30	3,971.18	3,914.46	56.72	70.015		
7,100.00	6,879.94	5,784.90	5,473.88	34.65	33.45	-82.23	-2,243.88	-117.29	4,004.67	3,947.17	57.50	69.641		
7,200.00	6,968.01	5,868.50	5,552.12	34.97	33.96	-79.84	-2,273.27	-119.16	4,036.52	3,978.22	58.31	69.229		
7,300.00	7,047.61	5,944.52	5,623.27	35.27	34.43	-77.75	-2,299.99	-120.86	4,066.40	4,007.31	59.09	68.821		
7,400.00	7,116.80	6,011.08	5,685.56	35.54	34.83	-75.92	-2,323.39	-122.34	4,094.08	4,034.22	59.86	68.391		
7,500.00	7,173.86	6,066.53	5,737.46	35.81	35.17	-74.30	-2,342.89	-123.58	4,119.44	4,058.77	60.67	67.902		
7,600.00	7,217.38	6,109.53	5,777.70	36.17	35.44	-72.81	-2,358.00	-124.54	4,142.36	4,080.84	61.53	67.326		
7,700.00	7,246.31	6,139.00	5,805.28	36.80	35.62	-71.42	-2,368.37	-125.20	4,162.73	4,100.28	62.46	66.651		
7,800.00	7,259.92	6,154.22	5,819.53	37.72	35.71	-70.11	-2,373.72	-125.54	4,180.38	4,116.93	63.44	65.892		
7,900.00	7,260.77	6,157.52	5,822.61	38.86	35.73	-69.63	-2,374.88	-125.61	4,196.06	4,131.57	64.49	65.070		
8,000.00	7,260.39	6,159.68	5,824.63	40.19	35.74	-69.66	-2,375.63	-125.66	4,213.64	4,147.97	65.67	64.162		
8,100.00	7,260.01	6,161.83	5,826.65	41.67	35.76	-69.69	-2,376.39	-125.71	4,233.51	4,166.52	66.99	63.197		
8,200.00	7,259.63	6,163.98	5,828.66	43.30	35.77	-69.72	-2,377.15	-125.76	4,255.64	4,187.22	68.41	62.204		
8,300.00	7,259.25	6,166.14	5,830.68	45.05	35.78	-69.75	-2,377.91	-125.81	4,279.98	4,210.06	69.93	61.206		
8,400.00	7,258.87	6,168.29	5,832.69	46.91	35.80	-69.78	-2,378.66	-125.86	4,306.52	4,235.01	71.51	60.221		
8,500.00	7,258.49	6,170.45	5,834.71	48.87	35.81	-69.81	-2,379.42	-125.90	4,335.19	4,262.04	73.15	59.265		
8,600.00	7,258.11	6,172.60	5,836.73	50.92	35.82	-69.84	-2,380.18	-125.95	4,365.97	4,291.14	74.83	58.348		
8,700.00	7,257.73	6,174.75	5,838.74	53.04	35.84	-69.87	-2,380.94	-126.00	4,398.80	4,322.27	76.53	57.477		
8,800.00	7,257.35	8,987.90	7,243.29	55.23	56.87	-89.82	-2,920.68	-1,724.63	4,413.51	4,302.69	110.82	39.826		
8,900.00	7,256.97	9,087.90	7,242.79	57.47	58.94	-89.82	-2,921.27	-1,824.63	4,413.32	4,298.09	115.23	38.299		
9,000.00	7,256.59	9,187.90	7,242.29	59.77	61.07	-89.81	-2,921.86	-1,924.63	4,413.13	4,293.37	119.76	36.851		
9,100.00	7,256.21	9,287.90	7,241.79	62.12	63.28	-89.81	-2,922.45	-2,024.62	4,412.93	4,288.56	124.38	35.480		
9,200.00	7,255.83	9,387.90	7,241.28	64.50	65.54	-89.81	-2,923.03	-2,124.62	4,412.74	4,283.65	129.09	34.185		
9,300.00	7,255.45	9,487.90	7,240.78	66.93	67.85	-89.81	-2,923.62	-2,224.62	4,412.55	4,278.67	133.87	32.961		
9,400.00	7,255.07	9,587.90	7,240.28	69.38	70.20	-89.81	-2,924.21	-2,324.61	4,412.35	4,273.62	138.73	31.805		
9,500.00	7,254.69	9,687.90	7,239.78	71.87	72.59	-89.81	-2,924.80	-2,424.61	4,412.16	4,268.51	143.65	30.714		
9,600.00	7,254.31	9,787.90	7,239.28	74.38	75.02	-89.81	-2,925.39	-2,524.61	4,411.97	4,263.34	148.63	29.684		
9,700.00	7,253.93	9,887.90	7,238.78	76.92	77.47	-89.80	-2,925.98	-2,624.60	4,411.77	4,258.11	153.66	28.712		
9,800.00	7,253.55	9,987.90	7,238.28	79.48	79.96	-89.80	-2,926.56	-2,724.60	4,411.58	4,252.85	158.73	27.792		
9,900.00	7,253.18	10,087.90	7,237.78	82.06	82.47	-89.80	-2,927.15	-2,824.60	4,411.39	4,247.53	163.85	26.923		
10,000.00	7,252.80	10,187.90	7,237.28	84.65	85.00	-89.80	-2,927.74	-2,924.59	4,411.19	4,242.18	169.01	26.100		
10,100.00	7,252.42	10,287.90	7,236.78	87.27	87.55	-89.80	-2,928.33	-3,024.59	4,411.00	4,236.80	174.20	25.321		
10,200.00	7,252.04	10,387.90	7,236.28	89.89	90.13	-89.80	-2,928.92	-3,124.59	4,410.81	4,231.38	179.42	24.583		
10,300.00	7,251.66	10,487.90	7,235.78	92.54	92.72	-89.79	-2,929.50	-3,224.58	4,410.61	4,225.94	184.68	23.883		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,251.28	10,587.90	7,235.28	95.19	95.32	-89.79	-2,930.09	-3,324.58	4,410.42	4,220.46	189.96	23.218		
10,500.00	7,250.90	10,687.90	7,234.78	97.86	97.94	-89.79	-2,930.68	-3,424.58	4,410.23	4,214.97	195.26	22.587		
10,600.00	7,250.52	10,787.90	7,234.28	100.53	100.57	-89.79	-2,931.27	-3,524.57	4,410.03	4,209.45	200.59	21.986		
10,700.00	7,250.14	10,887.90	7,233.77	103.22	103.22	-89.79	-2,931.86	-3,624.57	4,409.84	4,203.91	205.93	21.414		
10,800.00	7,249.76	10,987.90	7,233.27	105.91	105.88	-89.79	-2,932.45	-3,724.57	4,409.65	4,198.35	211.30	20.869		
10,900.00	7,249.38	11,087.90	7,232.77	108.62	108.54	-89.78	-2,933.03	-3,824.56	4,409.45	4,192.77	216.69	20.350		
11,000.00	7,249.00	11,187.90	7,232.27	111.33	111.22	-89.78	-2,933.62	-3,924.56	4,409.26	4,187.17	222.09	19.854		
11,100.00	7,248.62	11,287.90	7,231.77	114.04	113.90	-89.78	-2,934.21	-4,024.56	4,409.07	4,181.56	227.50	19.380		
11,200.00	7,248.24	11,387.90	7,231.27	116.77	116.60	-89.78	-2,934.80	-4,124.55	4,408.87	4,175.94	232.93	18.927		
11,300.00	7,247.86	11,487.90	7,230.77	119.50	119.30	-89.78	-2,935.39	-4,224.55	4,408.68	4,170.30	238.38	18.494		
11,400.00	7,247.48	11,587.90	7,230.27	122.24	122.01	-89.78	-2,935.97	-4,324.55	4,408.49	4,164.65	243.84	18.080		
11,500.00	7,247.10	11,687.90	7,229.77	124.98	124.73	-89.78	-2,936.56	-4,424.55	4,408.29	4,158.99	249.31	17.682		
11,600.00	7,246.72	11,787.90	7,229.27	127.73	127.45	-89.77	-2,937.15	-4,524.54	4,408.10	4,153.31	254.78	17.301		
11,700.00	7,246.34	11,887.90	7,228.77	130.48	130.18	-89.77	-2,937.74	-4,624.54	4,407.91	4,147.63	260.27	16.936		
11,800.00	7,245.96	11,987.90	7,228.27	133.24	132.91	-89.77	-2,938.33	-4,724.54	4,407.71	4,141.94	265.77	16.584		
11,900.00	7,245.58	12,087.89	7,227.77	136.00	135.65	-89.77	-2,938.92	-4,824.53	4,407.52	4,136.24	271.28	16.247		
12,000.00	7,245.21	12,187.89	7,227.27	138.76	138.39	-89.77	-2,939.50	-4,924.53	4,407.33	4,130.53	276.80	15.922		
12,100.00	7,244.83	12,287.89	7,226.77	141.53	141.14	-89.77	-2,940.09	-5,024.53	4,407.13	4,124.81	282.32	15.610		
12,200.00	7,244.45	12,387.89	7,226.26	144.30	143.89	-89.76	-2,940.68	-5,124.52	4,406.94	4,119.08	287.86	15.310		
12,300.00	7,244.07	12,487.89	7,225.76	147.08	146.65	-89.76	-2,941.27	-5,224.52	4,406.75	4,113.35	293.40	15.020		
12,400.00	7,243.69	12,587.89	7,225.26	149.86	149.41	-89.76	-2,941.86	-5,324.52	4,406.55	4,107.61	298.94	14.741		
12,500.00	7,243.31	12,687.89	7,224.76	152.64	152.17	-89.76	-2,942.44	-5,424.51	4,406.36	4,101.87	304.49	14.471		
12,600.00	7,242.93	12,787.89	7,224.26	155.42	154.94	-89.76	-2,943.03	-5,524.51	4,406.17	4,096.11	310.05	14.211		
12,700.00	7,242.55	12,887.89	7,223.76	158.21	157.71	-89.76	-2,943.62	-5,624.51	4,405.97	4,090.36	315.62	13.960		
12,800.00	7,242.17	12,987.89	7,223.26	161.00	160.49	-89.75	-2,944.21	-5,724.50	4,405.78	4,084.59	321.19	13.717		
12,900.00	7,241.79	13,087.89	7,222.76	163.79	163.26	-89.75	-2,944.80	-5,824.50	4,405.59	4,078.83	326.76	13.483		
13,000.00	7,241.41	13,187.89	7,222.26	166.58	166.04	-89.75	-2,945.39	-5,924.50	4,405.39	4,073.05	332.34	13.256		
13,100.00	7,241.03	13,287.89	7,221.76	169.38	168.83	-89.75	-2,945.97	-6,024.49	4,405.20	4,067.28	337.92	13.036		
13,200.00	7,240.65	13,387.89	7,221.26	172.18	171.61	-89.75	-2,946.56	-6,124.49	4,405.01	4,061.49	343.51	12.823		
13,300.00	7,240.27	13,487.89	7,220.76	174.98	174.40	-89.75	-2,947.15	-6,224.49	4,404.81	4,055.71	349.10	12.617		
13,400.00	7,239.89	13,587.89	7,220.26	177.78	177.19	-89.74	-2,947.74	-6,324.48	4,404.62	4,049.92	354.70	12.418		
13,500.00	7,239.51	13,687.89	7,219.76	180.58	179.98	-89.74	-2,948.33	-6,424.48	4,404.43	4,044.13	360.30	12.224		
13,600.00	7,239.13	13,787.89	7,219.26	183.39	182.78	-89.74	-2,948.91	-6,524.48	4,404.23	4,038.33	365.91	12.037		
13,700.00	7,238.75	13,887.89	7,218.75	186.20	185.57	-89.74	-2,949.50	-6,624.47	4,404.04	4,032.53	371.51	11.854		
13,800.00	7,238.37	13,987.89	7,218.25	189.00	188.37	-89.74	-2,950.09	-6,724.47	4,403.85	4,026.72	377.12	11.677		
13,900.00	7,237.99	14,087.89	7,217.75	191.81	191.17	-89.74	-2,950.68	-6,824.47	4,403.65	4,020.92	382.74	11.506		
14,000.00	7,237.62	14,187.89	7,217.25	194.63	193.97	-89.74	-2,951.27	-6,924.46	4,403.46	4,015.11	388.35	11.339		
14,100.00	7,237.24	14,287.89	7,216.75	197.44	196.77	-89.73	-2,951.86	-7,024.46	4,403.27	4,009.29	393.97	11.177		
14,200.00	7,236.86	14,387.89	7,216.25	200.25	199.58	-89.73	-2,952.44	-7,124.46	4,403.07	4,003.48	399.60	11.019		
14,300.00	7,236.48	14,487.89	7,215.75	203.07	202.38	-89.73	-2,953.03	-7,224.45	4,402.88	3,997.66	405.22	10.865		
14,400.00	7,236.10	14,587.89	7,215.25	205.88	205.19	-89.73	-2,953.62	-7,324.45	4,402.69	3,991.84	410.85	10.716		
14,500.00	7,235.72	14,687.89	7,214.75	208.70	208.00	-89.73	-2,954.21	-7,424.45	4,402.49	3,986.02	416.48	10.571		
14,600.00	7,235.34	14,787.89	7,214.25	211.52	210.81	-89.73	-2,954.80	-7,524.44	4,402.30	3,980.19	422.11	10.429		
14,700.00	7,234.96	14,887.89	7,213.75	214.34	213.62	-89.72	-2,955.38	-7,624.44	4,402.11	3,974.36	427.74	10.291		
14,800.00	7,234.58	14,987.89	7,213.25	217.16	216.44	-89.72	-2,955.97	-7,724.44	4,401.91	3,968.53	433.38	10.157		
14,900.00	7,234.20	15,087.89	7,212.75	219.98	219.25	-89.72	-2,956.56	-7,824.43	4,401.72	3,962.70	439.02	10.026		
15,000.00	7,233.82	15,187.89	7,212.25	222.81	222.07	-89.72	-2,957.15	-7,924.43	4,401.53	3,956.87	444.66	9.899		
15,100.00	7,233.44	15,287.89	7,211.74	225.63	224.88	-89.72	-2,957.74	-8,024.43	4,401.34	3,951.03	450.30	9.774		
15,200.00	7,233.06	15,387.89	7,211.24	228.45	227.70	-89.72	-2,958.33	-8,124.43	4,401.14	3,945.19	455.95	9.653		
15,216.01	7,233.00	15,403.90	7,211.16	228.91	228.15	-89.72	-2,958.42	-8,140.44	4,401.11	3,944.26	456.85	9.634 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	3.00	0.00	3.28	3.28	-179.53	-479.78	-3.89	479.80					
100.00	100.00	103.00	100.00	3.28	3.29	-179.53	-479.78	-3.89	479.80	473.23	6.57	73.027		
200.00	200.00	197.00	200.00	3.34	3.33	-179.53	-479.78	-3.89	479.80	473.13	6.67	71.916 CC, ES		
300.00	299.98	283.02	286.01	3.45	3.42	-173.81	-480.98	-3.97	482.94	476.06	6.87	70.262		
400.00	399.84	368.09	371.00	3.61	3.54	-173.82	-484.70	-4.19	492.50	485.33	7.18	68.607		
500.00	499.45	452.15	454.82	3.82	3.69	-173.84	-490.85	-4.55	508.44	500.87	7.57	67.168		
600.00	598.70	534.70	536.94	4.07	3.87	-173.86	-499.28	-5.06	530.63	522.60	8.03	66.097		
700.00	697.47	615.30	616.85	4.35	4.08	-173.88	-509.78	-5.68	558.93	550.40	8.53	65.489		
800.00	795.62	693.55	694.11	4.67	4.29	-173.90	-522.12	-6.42	593.16	584.08	9.07	65.373		
900.00	893.06	769.08	768.35	5.01	4.53	-173.91	-536.02	-7.24	633.10	623.46	9.63	65.725		
1,000.00	989.64	841.60	839.24	5.38	4.79	-173.91	-551.20	-8.15	678.51	668.31	10.20	66.548		
1,100.00	1,085.42	911.05	906.77	5.78	5.04	-173.96	-567.42	-9.12	728.70	717.94	10.76	67.718		
1,200.00	1,181.09	978.41	971.87	6.20	5.31	-174.04	-584.70	-10.15	781.26	769.95	11.31	69.102		
1,300.00	1,276.76	1,043.82	1,034.67	6.65	5.58	-174.11	-602.94	-11.23	835.77	823.92	11.85	70.532		
1,400.00	1,372.43	1,107.31	1,095.22	7.11	5.86	-174.16	-622.01	-12.37	892.15	879.77	12.39	72.021		
1,500.00	1,468.10	1,168.90	1,153.53	7.57	6.15	-174.19	-641.78	-13.55	950.32	937.40	12.92	73.563		
1,600.00	1,563.77	1,228.61	1,209.65	8.05	6.44	-174.22	-662.15	-14.76	1,010.19	996.75	13.44	75.164		
1,700.00	1,659.44	1,286.49	1,263.63	8.53	6.73	-174.24	-682.99	-16.00	1,071.69	1,057.74	13.95	76.823		
1,800.00	1,755.11	1,343.58	1,316.45	9.02	7.02	-174.25	-704.61	-17.29	1,134.74	1,120.29	14.46	78.495		
1,900.00	1,850.78	1,402.63	1,387.48	9.52	7.43	-174.26	-734.42	-19.07	1,198.48	1,183.36	15.12	79.264		
2,000.00	1,946.45	1,502.31	1,458.52	10.02	7.88	-174.27	-764.23	-20.84	1,262.21	1,246.39	15.82	79.784		
2,100.00	2,042.12	1,574.75	1,529.56	10.52	8.29	-174.28	-794.04	-22.62	1,325.95	1,309.45	16.49	80.399		
2,200.00	2,137.78	1,651.81	1,600.59	11.03	8.73	-174.29	-823.85	-24.39	1,389.68	1,372.49	17.20	80.812		
2,300.00	2,233.45	1,728.86	1,671.63	11.54	9.18	-174.30	-853.66	-26.17	1,453.42	1,435.51	17.91	81.144		
2,400.00	2,329.12	1,805.92	1,742.67	12.05	9.63	-174.30	-883.46	-27.95	1,517.15	1,498.52	18.64	81.412		
2,500.00	2,424.79	1,882.98	1,813.70	12.56	10.08	-174.31	-913.27	-29.72	1,580.89	1,561.52	19.37	81.625		
2,600.00	2,520.46	1,960.04	1,884.74	13.08	10.54	-174.31	-943.08	-31.50	1,644.62	1,624.51	20.11	81.792		
2,700.00	2,616.13	2,037.09	1,955.77	13.60	11.01	-174.32	-972.89	-33.27	1,708.36	1,687.50	20.85	81.923		
2,800.00	2,711.80	2,114.15	2,026.81	14.12	11.47	-174.32	-1,002.70	-35.05	1,772.09	1,750.49	21.61	82.022		
2,900.00	2,807.47	2,191.21	2,097.85	14.64	11.94	-174.33	-1,032.50	-36.83	1,835.83	1,813.46	22.36	82.096		
3,000.00	2,903.14	2,268.26	2,168.88	15.16	12.41	-174.33	-1,062.31	-38.60	1,899.56	1,876.44	23.12	82.148		
3,100.00	2,998.81	2,345.32	2,239.92	15.68	12.88	-174.34	-1,092.12	-40.38	1,963.30	1,939.41	23.89	82.182		
3,200.00	3,094.48	2,422.38	2,310.96	16.21	13.36	-174.34	-1,121.93	-42.15	2,027.03	2,002.37	24.66	82.201		
3,300.00	3,190.15	2,500.56	2,381.99	16.73	13.84	-174.34	-1,151.74	-43.93	2,090.77	2,065.33	25.44	82.189		
3,400.00	3,285.82	2,576.49	2,453.03	17.26	14.31	-174.35	-1,181.55	-45.71	2,154.50	2,128.29	26.21	82.204		
3,500.00	3,381.49	2,653.55	2,524.06	17.78	14.79	-174.35	-1,211.35	-47.48	2,218.24	2,191.25	26.99	82.191		
3,600.00	3,477.16	2,730.61	2,595.10	18.31	15.27	-174.35	-1,241.16	-49.26	2,281.97	2,254.20	27.77	82.171		
3,700.00	3,572.83	2,807.67	2,666.14	18.84	15.76	-174.36	-1,270.97	-51.04	2,345.71	2,317.15	28.56	82.145		
3,800.00	3,668.50	2,884.72	2,737.17	19.37	16.24	-174.36	-1,300.78	-52.81	2,409.44	2,380.10	29.34	82.114		
3,900.00	3,764.17	2,961.78	2,808.21	19.89	16.72	-174.36	-1,330.59	-54.59	2,473.18	2,443.04	30.13	82.078		
4,000.00	3,859.84	3,038.84	2,879.25	20.42	17.21	-174.36	-1,360.39	-56.36	2,536.91	2,505.99	30.92	82.039		
4,100.00	3,955.51	3,115.90	2,950.28	20.95	17.69	-174.37	-1,390.20	-58.14	2,600.65	2,568.93	31.72	81.998		
4,200.00	4,051.18	3,207.05	3,021.32	21.48	18.27	-174.37	-1,420.01	-59.92	2,664.38	2,631.80	32.59	81.764		
4,300.00	4,146.85	3,270.01	3,092.35	22.01	18.67	-174.37	-1,449.82	-61.69	2,728.12	2,694.81	33.31	81.907		
4,400.00	4,242.52	3,347.07	3,163.39	22.55	19.15	-174.37	-1,479.63	-63.47	2,791.85	2,757.75	34.11	81.860		
4,500.00	4,338.19	3,424.13	3,234.43	23.08	19.64	-174.37	-1,509.44	-65.24	2,855.59	2,820.68	34.90	81.811		
4,600.00	4,433.86	3,501.18	3,305.46	23.61	20.13	-174.38	-1,539.24	-67.02	2,919.32	2,883.62	35.71	81.761		
4,700.00	4,529.53	3,578.24	3,376.50	24.14	20.62	-174.38	-1,569.05	-68.80	2,983.06	2,946.55	36.51	81.711		
4,800.00	4,625.19	3,655.30	3,447.54	24.67	21.11	-174.38	-1,598.86	-70.57	3,046.79	3,009.48	37.31	81.660		
4,900.00	4,720.86	3,732.35	3,518.57	25.21	21.60	-174.38	-1,628.67	-72.35	3,110.53	3,072.41	38.12	81.609		
5,000.00	4,816.53	3,809.41	3,589.61	25.74	22.09	-174.38	-1,658.48	-74.12	3,174.26	3,135.34	38.92	81.557		
5,100.00	4,912.20	3,886.47	3,660.65	26.27	22.58	-174.38	-1,688.29	-75.90	3,238.00	3,198.27	39.73	81.505		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	3,963.53	3,731.68	26.80	23.07	-174.39	-1,718.09	-77.68	3,301.73	3,261.20	40.54	81.454		
5,300.00	5,103.54	4,040.58	3,802.72	27.34	23.56	-174.39	-1,747.90	-79.45	3,365.47	3,324.12	41.34	81.402		
5,400.00	5,199.22	4,117.65	3,873.76	27.87	24.05	-174.40	-1,777.71	-81.23	3,429.19	3,387.04	42.15	81.351		
5,500.00	5,295.46	4,204.00	3,945.99	28.39	24.60	-174.55	-1,808.02	-83.03	3,491.33	3,448.32	43.01	81.173		
5,600.00	5,392.60	4,276.45	4,020.16	28.89	25.07	-174.68	-1,839.14	-84.89	3,550.70	3,506.91	43.79	81.084		
5,700.00	5,490.50	4,358.92	4,096.18	29.37	25.59	-174.79	-1,871.04	-86.79	3,607.25	3,562.62	44.62	80.837		
5,800.00	5,589.05	4,443.30	4,173.97	29.83	26.13	-174.88	-1,903.69	-88.73	3,660.89	3,615.43	45.46	80.521		
5,900.00	5,688.14	4,529.49	4,253.42	30.26	26.69	-174.96	-1,937.03	-90.72	3,711.57	3,665.26	46.31	80.143		
6,000.00	5,787.63	4,617.38	4,334.45	30.68	27.25	-175.03	-1,971.03	-92.75	3,759.22	3,712.06	47.16	79.707		
6,100.00	5,887.41	4,706.87	4,416.94	31.07	27.82	-175.08	-2,005.64	-94.81	3,803.79	3,755.77	48.02	79.217		
6,200.00	5,987.36	4,802.15	4,500.81	31.44	28.43	-175.12	-2,040.84	-96.91	3,845.22	3,796.32	48.90	78.641		
6,300.00	6,087.36	4,889.94	4,585.71	31.80	28.99	179.17	-2,076.46	-99.03	3,884.10	3,834.37	49.73	78.106		
6,400.00	6,187.36	4,982.13	4,670.69	32.15	29.59	179.21	-2,112.12	-101.15	3,922.76	3,872.17	50.59	77.540		
6,500.00	6,287.36	5,074.32	4,755.68	32.51	30.18	179.25	-2,147.78	-103.28	3,961.43	3,909.97	51.45	76.991		
6,600.00	6,387.36	5,166.50	4,840.66	32.87	30.77	179.29	-2,183.44	-105.40	4,000.09	3,947.77	52.32	76.456		
6,700.00	6,487.36	5,258.69	4,925.64	33.23	31.36	179.33	-2,219.10	-107.53	4,038.76	3,985.57	53.19	75.937		
6,800.00	6,587.36	5,350.88	5,010.63	33.59	31.95	179.37	-2,254.76	-109.65	4,077.43	4,023.37	54.05	75.432		
6,900.00	6,687.26	5,443.05	5,095.60	33.95	32.54	-87.82	-2,290.42	-111.78	4,116.07	4,061.15	54.92	74.952		
7,000.00	6,785.58	5,534.15	5,179.58	34.31	33.13	-84.34	-2,325.66	-113.88	4,154.17	4,098.40	55.77	74.489		
7,100.00	6,879.94	5,621.99	5,260.56	34.65	33.69	-81.23	-2,359.64	-115.90	4,190.98	4,134.38	56.60	74.043		
7,200.00	6,968.01	5,704.41	5,336.53	34.97	34.22	-78.49	-2,391.52	-117.80	4,225.91	4,168.50	57.40	73.616		
7,300.00	7,047.61	5,779.37	5,405.64	35.27	34.71	-76.11	-2,420.52	-119.53	4,258.51	4,200.32	58.18	73.192		
7,400.00	7,116.80	5,845.02	5,466.16	35.54	35.13	-74.05	-2,445.91	-121.04	4,288.48	4,229.53	58.96	72.741		
7,500.00	7,173.86	5,900.24	5,516.62	35.81	35.48	-72.24	-2,467.09	-122.30	4,315.62	4,255.86	59.76	72.221		
7,600.00	7,217.38	5,942.23	5,555.78	36.17	35.75	-70.64	-2,483.52	-123.28	4,339.73	4,279.12	60.61	71.606		
7,700.00	7,246.31	5,971.39	5,582.66	36.80	35.94	-69.20	-2,494.80	-123.95	4,360.66	4,299.13	61.53	70.873		
7,800.00	7,259.92	5,986.52	5,596.60	37.72	36.04	-67.91	-2,500.65	-124.30	4,378.20	4,315.69	62.51	70.042		
7,900.00	7,260.77	5,989.90	5,599.72	38.86	36.06	-67.45	-2,501.96	-124.38	4,393.23	4,329.68	63.55	69.134		
8,000.00	7,260.39	6,007.84	5,601.80	40.19	36.18	-67.48	-2,502.83	-124.43	4,410.01	4,345.19	64.82	68.035		
8,100.00	7,260.01	6,005.58	5,603.88	41.67	36.16	-67.51	-2,503.71	-124.48	4,428.98	4,362.87	66.11	66.991		
8,200.00	7,259.63	6,003.32	5,605.97	43.30	36.15	-67.54	-2,504.58	-124.54	4,450.12	4,382.61	67.52	65.911		
8,300.00	7,259.25	6,001.07	5,608.05	45.05	36.13	-67.57	-2,505.45	-124.59	4,473.40	4,404.39	69.01	64.820		
8,400.00	7,258.87	6,001.19	5,610.13	46.91	36.13	-67.60	-2,506.33	-124.64	4,498.78	4,428.18	70.60	63.726		
8,500.00	7,258.49	6,003.45	5,612.21	48.87	36.15	-67.63	-2,507.20	-124.69	4,526.22	4,453.97	72.25	62.649		
8,600.00	7,258.11	6,005.71	5,614.29	50.92	36.16	-67.66	-2,508.07	-124.75	4,555.69	4,481.75	73.94	61.612		
8,700.00	7,257.73	6,007.96	5,616.37	53.04	36.18	-67.69	-2,508.95	-124.80	4,587.16	4,511.49	75.67	60.624		
8,800.00	7,257.35	6,010.22	5,618.45	55.23	36.19	-67.72	-2,509.82	-124.85	4,620.57	4,543.16	77.41	59.689		
8,900.00	7,256.97	9,008.92	7,068.91	57.47	59.40	-87.67	-3,130.46	-1,822.46	4,626.32	4,510.65	115.68	39.994		
9,000.00	7,256.59	9,108.92	7,068.61	59.77	61.52	-87.67	-3,131.06	-1,922.46	4,626.14	4,505.94	120.20	38.488		
9,100.00	7,256.21	9,208.92	7,068.31	62.12	63.71	-87.67	-3,131.66	-2,022.46	4,625.95	4,501.13	124.82	37.062		
9,200.00	7,255.83	9,308.92	7,068.01	64.50	65.96	-87.67	-3,132.26	-2,122.45	4,625.76	4,496.24	129.52	35.714		
9,300.00	7,255.45	9,408.92	7,067.71	66.93	68.26	-87.67	-3,132.86	-2,222.45	4,625.57	4,491.27	134.31	34.440		
9,400.00	7,255.07	9,508.92	7,067.42	69.38	70.61	-87.68	-3,133.45	-2,322.45	4,625.39	4,486.23	139.16	33.237		
9,500.00	7,254.69	9,608.92	7,067.12	71.87	73.00	-87.68	-3,134.05	-2,422.45	4,625.20	4,481.12	144.08	32.102		
9,600.00	7,254.31	9,708.92	7,066.82	74.38	75.42	-87.68	-3,134.65	-2,522.44	4,625.01	4,475.96	149.05	31.029		
9,700.00	7,253.93	9,808.92	7,066.52	76.92	77.87	-87.68	-3,135.25	-2,622.44	4,624.83	4,470.75	154.08	30.016		
9,800.00	7,253.55	9,891.08	7,066.23	79.48	79.91	-87.68	-3,135.84	-2,722.44	4,624.64	4,465.94	158.70	29.141		
9,900.00	7,253.18	10,008.92	7,065.93	82.06	82.86	-87.68	-3,136.44	-2,822.44	4,624.45	4,460.19	164.26	28.153		
10,000.00	7,252.80	10,108.92	7,065.63	84.65	85.39	-87.68	-3,137.04	-2,922.43	4,624.26	4,454.85	169.41	27.296		
10,100.00	7,252.42	10,208.92	7,065.33	87.27	87.94	-87.68	-3,137.64	-3,022.43	4,624.08	4,449.48	174.60	26.484		
10,200.00	7,252.04	10,308.92	7,065.04	89.89	90.52	-87.68	-3,138.24	-3,122.43	4,623.89	4,444.07	179.82	25.714		
10,300.00	7,251.66	10,408.93	7,064.74	92.54	93.10	-87.68	-3,138.83	-3,222.43	4,623.70	4,438.64	185.07	24.984		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,251.28	10,508.93	7,064.44	95.19	95.71	-87.68	-3,139.43	-3,322.42	4,623.52	4,433.17	190.34	24.291		
10,500.00	7,250.90	10,608.93	7,064.14	97.86	98.33	-87.69	-3,140.03	-3,422.42	4,623.33	4,427.69	195.64	23.632		
10,600.00	7,250.52	10,708.93	7,063.85	100.53	100.96	-87.69	-3,140.63	-3,522.42	4,623.14	4,422.18	200.96	23.005		
10,700.00	7,250.14	10,808.93	7,063.55	103.22	103.60	-87.69	-3,141.23	-3,622.42	4,622.95	4,416.65	206.30	22.409		
10,800.00	7,249.76	10,908.93	7,063.25	105.91	106.26	-87.69	-3,141.82	-3,722.41	4,622.77	4,411.10	211.67	21.840		
10,900.00	7,249.38	11,008.93	7,062.95	108.62	108.92	-87.69	-3,142.42	-3,822.41	4,622.58	4,405.53	217.04	21.298		
11,000.00	7,249.00	11,108.93	7,062.66	111.33	111.60	-87.69	-3,143.02	-3,922.41	4,622.39	4,399.95	222.44	20.780		
11,100.00	7,248.62	11,208.93	7,062.36	114.04	114.29	-87.69	-3,143.62	-4,022.41	4,622.20	4,394.35	227.85	20.286		
11,200.00	7,248.24	11,308.93	7,062.06	116.77	116.98	-87.69	-3,144.22	-4,122.40	4,622.02	4,388.74	233.28	19.813		
11,300.00	7,247.86	11,408.93	7,061.76	119.50	119.68	-87.69	-3,144.81	-4,222.40	4,621.83	4,383.11	238.72	19.361		
11,400.00	7,247.48	11,508.93	7,061.47	122.24	122.39	-87.69	-3,145.41	-4,322.40	4,621.64	4,377.47	244.17	18.928		
11,500.00	7,247.10	11,608.93	7,061.17	124.98	125.10	-87.69	-3,146.01	-4,422.40	4,621.46	4,371.82	249.63	18.513		
11,600.00	7,246.72	11,708.93	7,060.87	127.73	127.83	-87.70	-3,146.61	-4,522.39	4,621.27	4,366.16	255.11	18.115		
11,700.00	7,246.34	11,808.93	7,060.57	130.48	130.55	-87.70	-3,147.21	-4,622.39	4,621.08	4,360.49	260.59	17.733		
11,800.00	7,245.96	11,908.93	7,060.28	133.24	133.29	-87.70	-3,147.80	-4,722.39	4,620.89	4,354.81	266.09	17.366		
11,900.00	7,245.58	12,008.93	7,059.98	136.00	136.02	-87.70	-3,148.40	-4,822.39	4,620.71	4,349.12	271.59	17.014		
12,000.00	7,245.21	12,108.93	7,059.68	138.76	138.77	-87.70	-3,149.00	-4,922.38	4,620.52	4,343.42	277.10	16.675		
12,100.00	7,244.83	12,208.93	7,059.38	141.53	141.52	-87.70	-3,149.60	-5,022.38	4,620.33	4,337.71	282.62	16.348		
12,200.00	7,244.45	12,308.93	7,059.08	144.30	144.27	-87.70	-3,150.19	-5,122.38	4,620.15	4,332.00	288.15	16.034		
12,300.00	7,244.07	12,408.93	7,058.79	147.08	147.02	-87.70	-3,150.79	-5,222.38	4,619.96	4,326.28	293.68	15.731		
12,400.00	7,243.69	12,508.93	7,058.49	149.86	149.78	-87.70	-3,151.39	-5,322.38	4,619.77	4,320.55	299.22	15.439		
12,500.00	7,243.31	12,608.93	7,058.19	152.64	152.55	-87.70	-3,151.99	-5,422.37	4,619.58	4,314.81	304.77	15.158		
12,600.00	7,242.93	12,708.93	7,057.89	155.42	155.32	-87.70	-3,152.59	-5,522.37	4,619.40	4,309.07	310.32	14.886		
12,700.00	7,242.55	12,808.93	7,057.60	158.21	158.09	-87.71	-3,153.18	-5,622.37	4,619.21	4,303.33	315.88	14.623		
12,800.00	7,242.17	12,908.93	7,057.30	161.00	160.86	-87.71	-3,153.78	-5,722.37	4,619.02	4,297.58	321.45	14.370		
12,900.00	7,241.79	13,008.93	7,057.00	163.79	163.64	-87.71	-3,154.38	-5,822.36	4,618.84	4,291.82	327.02	14.124		
13,000.00	7,241.41	13,108.93	7,056.70	166.58	166.42	-87.71	-3,154.98	-5,922.36	4,618.65	4,286.06	332.59	13.887		
13,100.00	7,241.03	13,208.93	7,056.41	169.38	169.20	-87.71	-3,155.58	-6,022.36	4,618.46	4,280.29	338.17	13.657		
13,200.00	7,240.65	13,308.93	7,056.11	172.18	171.98	-87.71	-3,156.17	-6,122.36	4,618.27	4,274.52	343.75	13.435		
13,300.00	7,240.27	13,408.93	7,055.81	174.98	174.77	-87.71	-3,156.77	-6,222.35	4,618.09	4,268.75	349.34	13.219		
13,400.00	7,239.89	13,508.93	7,055.51	177.78	177.56	-87.71	-3,157.37	-6,322.35	4,617.90	4,262.97	354.93	13.011		
13,500.00	7,239.51	13,608.93	7,055.22	180.58	180.35	-87.71	-3,157.97	-6,422.35	4,617.71	4,257.19	360.53	12.808		
13,600.00	7,239.13	13,708.93	7,054.92	183.39	183.15	-87.71	-3,158.57	-6,522.35	4,617.53	4,251.40	366.12	12.612		
13,700.00	7,238.75	13,808.93	7,054.62	186.20	185.94	-87.71	-3,159.16	-6,622.34	4,617.34	4,245.61	371.73	12.421		
13,800.00	7,238.37	13,908.93	7,054.32	189.00	188.74	-87.72	-3,159.76	-6,722.34	4,617.15	4,239.82	377.33	12.236		
13,900.00	7,237.99	14,008.93	7,054.03	191.81	191.54	-87.72	-3,160.36	-6,822.34	4,616.96	4,234.02	382.94	12.057		
14,000.00	7,237.62	14,108.93	7,053.73	194.63	194.34	-87.72	-3,160.96	-6,922.34	4,616.78	4,228.22	388.55	11.882		
14,100.00	7,237.24	14,208.93	7,053.43	197.44	197.14	-87.72	-3,161.56	-7,022.33	4,616.59	4,222.42	394.17	11.712		
14,200.00	7,236.86	14,308.93	7,053.13	200.25	199.95	-87.72	-3,162.15	-7,122.33	4,616.40	4,216.62	399.79	11.547		
14,300.00	7,236.48	14,408.93	7,052.84	203.07	202.75	-87.72	-3,162.75	-7,222.33	4,616.21	4,210.81	405.41	11.387		
14,400.00	7,236.10	14,508.93	7,052.54	205.88	205.56	-87.72	-3,163.35	-7,322.33	4,616.03	4,205.00	411.03	11.230		
14,500.00	7,235.72	14,608.93	7,052.24	208.70	208.37	-87.72	-3,163.95	-7,422.32	4,615.84	4,199.19	416.65	11.078		
14,600.00	7,235.34	14,708.93	7,051.94	211.52	211.18	-87.72	-3,164.54	-7,522.32	4,615.65	4,193.37	422.28	10.930		
14,700.00	7,234.96	14,808.93	7,051.64	214.34	213.99	-87.72	-3,165.14	-7,622.32	4,615.47	4,187.55	427.91	10.786		
14,800.00	7,234.58	14,908.93	7,051.35	217.16	216.80	-87.73	-3,165.74	-7,722.32	4,615.28	4,181.74	433.54	10.645		
14,900.00	7,234.20	15,008.93	7,051.05	219.98	219.62	-87.73	-3,166.34	-7,822.31	4,615.09	4,175.91	439.18	10.508		
15,000.00	7,233.82	15,108.93	7,050.75	222.81	222.43	-87.73	-3,166.94	-7,922.31	4,614.90	4,170.09	444.81	10.375		
15,100.00	7,233.44	15,208.93	7,050.45	225.63	225.25	-87.73	-3,167.53	-8,022.31	4,614.72	4,164.27	450.45	10.245		
15,200.00	7,233.06	15,291.07	7,050.16	228.45	227.56	-87.73	-3,168.13	-8,122.31	4,614.53	4,158.44	455.59	10.129		
15,216.01	7,233.00	15,307.08	7,050.11	228.91	228.01	-87.73	-3,168.23	-8,138.32	4,614.50	4,158.01	456.49	10.109 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1.00	0.00	3.28	3.28	-179.60	-119.84	-0.83	119.85					
100.00	100.00	101.00	100.00	3.28	3.28	-179.60	-119.84	-0.83	119.85	113.28	6.57	18.243		
200.00	200.00	201.00	200.00	3.34	3.34	-179.60	-119.84	-0.83	119.85	113.17	6.67	17.955 CC, ES		
300.00	299.98	301.02	299.98	3.45	3.45	-173.95	-119.84	-0.83	121.58	114.69	6.89	17.642		
400.00	399.84	401.16	399.84	3.61	3.61	-174.19	-119.84	-0.83	126.79	119.57	7.21	17.577		
500.00	499.45	498.45	499.45	3.82	3.80	-174.55	-119.84	-0.83	135.46	127.84	7.62	17.778		
600.00	598.70	602.38	603.35	4.07	4.05	-174.67	-118.22	-1.68	146.04	137.92	8.12	17.982		
700.00	697.47	703.99	704.84	4.35	4.33	-174.37	-113.83	-3.95	157.31	148.62	8.69	18.111		
800.00	795.62	802.94	803.66	4.67	4.63	-174.17	-109.20	-6.35	171.67	162.38	9.30	18.468		
900.00	893.06	901.34	901.92	5.01	4.94	-174.09	-104.59	-8.73	189.47	179.52	9.95	19.039		
1,000.00	989.64	1,000.94	999.51	5.38	5.27	-174.11	-100.01	-11.10	210.67	200.02	10.65	19.778		
1,100.00	1,085.42	1,103.88	1,096.43	5.78	5.64	-174.22	-95.47	-13.46	234.76	223.36	11.40	20.597		
1,200.00	1,181.09	1,206.92	1,193.25	6.20	6.01	-174.33	-90.93	-15.81	259.21	247.05	12.16	21.312		
1,300.00	1,276.76	1,309.96	1,290.08	6.65	6.39	-174.43	-86.39	-18.16	283.67	270.71	12.95	21.902		
1,400.00	1,372.43	1,387.00	1,386.91	7.11	6.69	-174.51	-81.85	-20.51	308.12	294.46	13.66	22.555		
1,500.00	1,468.10	1,483.97	1,483.74	7.57	7.06	-174.58	-77.31	-22.86	332.57	318.11	14.46	22.998		
1,600.00	1,563.77	1,580.93	1,580.57	8.05	7.44	-174.64	-72.77	-25.21	357.03	341.75	15.28	23.373		
1,700.00	1,659.44	1,677.89	1,677.40	8.53	7.83	-174.69	-68.23	-27.56	381.48	365.38	16.10	23.693		
1,800.00	1,755.11	1,774.86	1,774.22	9.02	8.22	-174.73	-63.69	-29.92	405.94	389.00	16.94	23.968		
1,900.00	1,850.78	1,871.82	1,871.05	9.52	8.61	-174.77	-59.15	-32.27	430.39	412.61	17.78	24.206		
2,000.00	1,946.45	1,968.78	1,967.88	10.02	9.01	-174.81	-54.61	-34.62	454.85	436.22	18.63	24.413		
2,100.00	2,042.12	2,065.75	2,064.71	10.52	9.41	-174.84	-50.07	-36.97	479.30	459.82	19.49	24.593		
2,200.00	2,137.78	2,162.71	2,161.54	11.03	9.81	-174.87	-45.53	-39.32	503.76	483.41	20.35	24.752		
2,300.00	2,233.45	2,259.67	2,258.37	11.54	10.22	-174.90	-40.99	-41.67	528.22	507.00	21.22	24.892		
2,400.00	2,329.12	2,356.64	2,355.19	12.05	10.62	-174.92	-36.45	-44.02	552.67	530.58	22.09	25.016		
2,500.00	2,424.79	2,453.60	2,452.02	12.56	11.03	-174.94	-31.91	-46.37	577.13	554.16	22.97	25.127		
2,600.00	2,520.46	2,550.56	2,548.85	13.08	11.44	-174.96	-27.37	-48.73	601.59	577.74	23.85	25.226		
2,700.00	2,616.13	2,647.53	2,645.68	13.60	11.85	-174.98	-22.83	-51.08	626.04	601.31	24.73	25.315		
2,800.00	2,711.80	2,744.49	2,742.51	14.12	12.26	-175.00	-18.29	-53.43	650.50	624.88	25.62	25.395		
2,900.00	2,807.47	2,841.45	2,839.33	14.64	12.67	-175.01	-13.75	-55.78	674.95	648.45	26.50	25.467		
3,000.00	2,903.14	2,938.42	2,936.16	15.16	13.09	-175.03	-9.21	-58.13	699.41	672.02	27.39	25.532		
3,100.00	2,998.81	3,035.38	3,032.99	15.68	13.50	-175.04	-4.67	-60.48	723.87	695.58	28.28	25.592		
3,200.00	3,094.48	3,132.34	3,129.82	16.21	13.92	-175.06	-0.13	-62.83	748.32	719.15	29.18	25.647		
3,300.00	3,190.15	3,229.30	3,226.65	16.73	14.33	-175.07	4.41	-65.18	772.78	742.71	30.07	25.696		
3,400.00	3,285.82	3,326.27	3,323.48	17.26	14.75	-175.08	8.95	-67.53	797.24	766.27	30.97	25.742		
3,500.00	3,381.49	3,423.23	3,420.30	17.78	15.17	-175.09	13.49	-69.89	821.69	789.82	31.87	25.784		
3,600.00	3,477.16	3,520.19	3,517.13	18.31	15.59	-175.10	18.03	-72.24	846.15	813.38	32.77	25.823		
3,700.00	3,572.83	3,617.16	3,613.96	18.84	16.01	-175.11	22.57	-74.59	870.61	836.94	33.67	25.858		
3,800.00	3,668.50	3,714.12	3,710.79	19.37	16.42	-175.12	27.11	-76.94	895.06	860.49	34.57	25.891		
3,900.00	3,764.17	3,811.08	3,807.62	19.89	16.84	-175.13	31.65	-79.29	919.52	884.05	35.47	25.922		
4,000.00	3,859.84	3,908.05	3,904.45	20.42	17.26	-175.14	36.19	-81.64	943.98	907.60	36.38	25.950		
4,100.00	3,955.51	4,005.01	4,001.27	20.95	17.68	-175.14	40.73	-83.99	968.43	931.15	37.28	25.977		
4,200.00	4,051.18	4,101.97	4,098.10	21.48	18.10	-175.15	45.27	-86.34	992.89	954.70	38.19	26.002		
4,300.00	4,146.85	4,201.06	4,194.93	22.01	18.53	-175.16	49.81	-88.70	1,017.35	978.25	39.10	26.018		
4,400.00	4,242.52	4,304.10	4,291.76	22.55	18.98	-175.16	54.35	-91.05	1,041.80	1,001.77	40.03	26.023		
4,500.00	4,338.19	4,407.14	4,388.59	23.08	19.43	-175.17	58.89	-93.40	1,066.26	1,025.29	40.97	26.027		
4,600.00	4,433.86	4,489.83	4,485.42	23.61	19.79	-175.18	63.43	-95.75	1,090.72	1,048.90	41.81	26.085		
4,700.00	4,529.53	4,586.79	4,582.24	24.14	20.21	-175.18	67.97	-98.10	1,115.17	1,072.45	42.72	26.103		
4,800.00	4,625.19	4,683.75	4,679.07	24.67	20.63	-175.19	72.51	-100.45	1,139.63	1,096.00	43.63	26.120		
4,900.00	4,720.86	4,780.71	4,775.90	25.21	21.06	-175.19	77.05	-102.80	1,164.09	1,119.55	44.54	26.135		
5,000.00	4,816.53	4,877.68	4,872.73	25.74	21.48	-175.20	81.59	-105.15	1,188.54	1,143.09	45.45	26.150		
5,100.00	4,912.20	4,974.64	4,969.56	26.27	21.90	-175.20	86.13	-107.51	1,213.00	1,166.64	46.36	26.164		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	5,071.60	5,066.38	26.80	22.33	-175.21	90.67	-109.86	1,237.46	1,190.19	47.27	26.177		
5,300.00	5,103.54	5,168.57	5,163.21	27.34	22.75	-175.21	95.21	-112.21	1,261.92	1,213.73	48.18	26.190		
5,400.00	5,199.22	5,265.53	5,260.04	27.87	23.17	-175.22	99.75	-114.56	1,286.36	1,237.26	49.10	26.201		
5,500.00	5,295.46	5,362.97	5,357.35	28.39	23.60	-175.25	104.31	-116.92	1,308.81	1,258.81	50.00	26.175		
5,600.00	5,392.60	5,461.14	5,455.38	28.89	24.03	-175.27	108.91	-119.30	1,327.87	1,276.96	50.90	26.086		
5,700.00	5,490.50	5,559.90	5,554.00	29.37	24.46	-175.27	113.53	-121.70	1,343.50	1,291.70	51.80	25.938		
5,800.00	5,589.05	5,659.15	5,653.11	29.83	24.89	-175.25	118.18	-124.10	1,355.68	1,303.00	52.68	25.735		
5,900.00	5,688.14	5,758.75	5,752.58	30.26	25.33	-175.21	122.84	-126.52	1,364.41	1,310.86	53.55	25.479		
6,000.00	5,787.63	5,858.60	5,852.28	30.68	25.77	-175.16	127.52	-128.94	1,369.66	1,315.25	54.41	25.173		
6,100.00	5,887.41	5,958.56	5,952.11	31.07	26.21	-175.09	132.20	-131.36	1,371.45	1,316.19	55.26	24.820		
6,200.00	5,987.36	6,058.52	6,051.93	31.44	26.64	-174.99	136.88	-133.79	1,369.76	1,313.67	56.09	24.422		
6,300.00	6,087.36	6,158.39	6,151.66	31.80	27.08	-179.37	141.55	-136.21	1,365.28	1,308.38	56.91	23.992		
6,400.00	6,187.36	6,258.25	6,251.38	32.15	27.52	-179.47	146.23	-138.63	1,360.57	1,302.85	57.72	23.570		
6,500.00	6,287.36	6,358.11	6,351.10	32.51	27.96	-179.57	150.91	-141.05	1,355.87	1,297.33	58.54	23.159		
6,600.00	6,387.36	6,457.95	6,450.80	32.87	28.39	-179.68	155.58	-143.54	1,351.17	1,291.81	59.37	22.760		
6,700.00	6,487.36	6,556.15	6,548.14	33.23	28.82	-179.84	160.08	-154.91	1,346.53	1,286.36	60.18	22.376		
6,800.00	6,587.36	6,648.80	6,637.36	33.59	29.23	-178.80	164.12	-179.25	1,342.35	1,281.41	60.94	22.027		
6,900.00	6,687.26	6,734.07	6,715.57	33.95	29.61	-87.18	167.57	-212.89	1,339.23	1,277.62	61.61	21.736		
7,000.00	6,785.58	6,815.60	6,785.52	34.31	29.99	-86.14	170.58	-254.55	1,337.05	1,274.83	62.22	21.489		
7,100.00	6,879.94	6,894.41	6,847.55	34.65	30.37	-85.16	173.18	-303.01	1,335.66	1,272.88	62.79	21.273		
7,200.00	6,968.01	6,971.06	6,901.71	34.97	30.79	-84.27	175.36	-357.14	1,334.90	1,271.57	63.34	21.076		
7,300.00	7,047.61	7,046.00	6,948.00	35.27	31.25	-83.48	177.15	-415.99	1,334.61	1,270.69	63.92	20.880		
7,341.28	7,077.54	7,076.52	6,964.82	35.38	31.46	-83.19	177.77	-441.45	1,334.59	1,270.39	64.20	20.789		
7,400.00	7,116.80	7,119.60	6,986.44	35.54	31.77	-82.80	178.53	-478.69	1,334.63	1,270.02	64.60	20.659		
7,500.00	7,173.86	7,192.17	7,017.02	35.81	32.37	-82.25	179.53	-544.45	1,334.80	1,269.34	65.46	20.391		
7,600.00	7,217.38	7,263.99	7,039.74	36.17	33.05	-81.83	180.14	-612.54	1,335.00	1,268.44	66.56	20.057		
7,700.00	7,246.31	7,335.30	7,054.58	36.80	33.80	-81.56	180.38	-682.25	1,335.14	1,267.19	67.96	19.647		
7,800.00	7,259.92	7,406.33	7,061.53	37.72	34.63	-81.44	180.23	-752.90	1,335.15	1,265.50	69.65	19.171		
7,805.69	7,260.24	7,410.36	7,061.68	37.79	34.68	-81.43	180.21	-756.93	1,335.15	1,265.39	69.75	19.141		
7,900.00	7,260.77	7,490.71	7,061.19	38.86	35.71	-81.40	179.65	-837.27	1,335.19	1,263.37	71.82	18.591		
8,000.00	7,260.39	7,609.30	7,059.44	40.19	37.43	-81.34	178.89	-937.24	1,335.37	1,260.53	74.83	17.844		
8,100.00	7,260.01	7,690.69	7,057.69	41.67	38.74	-81.29	178.14	-1,037.21	1,335.55	1,257.95	77.60	17.211		
8,200.00	7,259.63	7,809.32	7,055.94	43.30	40.80	-81.23	177.39	-1,137.18	1,335.72	1,254.47	81.26	16.438		
8,300.00	7,259.25	7,890.67	7,054.19	45.05	42.32	-81.17	176.64	-1,237.16	1,335.91	1,251.41	84.49	15.811		
8,400.00	7,258.87	8,009.34	7,052.44	46.91	44.66	-81.11	175.88	-1,337.13	1,336.09	1,247.44	88.65	15.071		
8,500.00	7,258.49	8,109.35	7,050.69	48.87	46.73	-81.05	175.13	-1,437.10	1,336.27	1,243.63	92.64	14.424		
8,600.00	7,258.11	8,209.36	7,048.94	50.92	48.88	-81.00	174.38	-1,537.07	1,336.46	1,239.66	96.79	13.807		
8,700.00	7,257.73	8,309.37	7,047.19	53.04	51.10	-80.94	173.63	-1,637.05	1,336.64	1,235.55	101.09	13.223		
8,800.00	7,257.35	8,409.38	7,045.45	55.23	53.38	-80.88	172.87	-1,737.02	1,336.83	1,231.32	105.51	12.671		
8,900.00	7,256.97	8,509.38	7,043.70	57.47	55.71	-80.82	172.12	-1,836.99	1,337.02	1,226.98	110.04	12.151		
9,000.00	7,256.59	8,609.39	7,041.95	59.77	58.09	-80.76	171.37	-1,936.96	1,337.21	1,222.55	114.66	11.662		
9,100.00	7,256.21	8,709.40	7,040.20	62.12	60.51	-80.70	170.62	-2,036.94	1,337.40	1,218.03	119.37	11.204		
9,200.00	7,255.83	8,809.41	7,038.45	64.50	62.97	-80.65	169.86	-2,136.91	1,337.59	1,213.44	124.15	10.774		
9,300.00	7,255.45	8,909.42	7,036.70	66.93	65.46	-80.59	169.11	-2,236.88	1,337.79	1,208.78	129.01	10.370		
9,400.00	7,255.07	9,009.43	7,034.95	69.38	67.98	-80.53	168.36	-2,336.85	1,337.98	1,204.07	133.92	9.991		
9,500.00	7,254.69	9,109.44	7,033.20	71.87	70.53	-80.47	167.61	-2,436.83	1,338.18	1,199.30	138.88	9.636		
9,600.00	7,254.31	9,209.45	7,031.45	74.38	73.10	-80.41	166.85	-2,536.80	1,338.38	1,194.49	143.89	9.302		
9,700.00	7,253.93	9,309.46	7,029.70	76.92	75.69	-80.36	166.10	-2,636.77	1,338.58	1,189.64	148.94	8.988		
9,800.00	7,253.55	9,409.47	7,027.95	79.48	78.30	-80.30	165.35	-2,736.74	1,338.78	1,184.76	154.02	8.692		
9,900.00	7,253.18	9,509.48	7,026.20	82.06	80.92	-80.24	164.60	-2,836.72	1,338.98	1,179.84	159.15	8.414		
10,000.00	7,252.80	9,609.49	7,024.45	84.65	83.56	-80.18	163.84	-2,936.69	1,339.19	1,174.89	164.30	8.151		
10,100.00	7,252.42	9,709.50	7,022.70	87.27	86.21	-80.12	163.09	-3,036.66	1,339.39	1,169.92	169.48	7.903		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,200.00	7,252.04	9,809.51	7,020.95	89.89	88.88	-80.07	162.34	-3,136.63	1,339.60	1,164.92	174.68	7.669		
10,300.00	7,251.66	9,909.52	7,019.20	92.54	91.56	-80.01	161.59	-3,236.61	1,339.81	1,159.90	179.91	7.447		
10,400.00	7,251.28	10,009.53	7,017.46	95.19	94.25	-79.95	160.83	-3,336.58	1,340.02	1,154.86	185.16	7.237		
10,500.00	7,250.90	10,109.54	7,015.71	97.86	96.95	-79.89	160.08	-3,436.55	1,340.23	1,149.81	190.42	7.038		
10,600.00	7,250.52	10,190.46	7,013.96	100.53	99.14	-79.83	159.33	-3,536.52	1,340.44	1,145.25	195.19	6.867		
10,700.00	7,250.14	10,309.55	7,012.21	103.22	102.37	-79.78	158.58	-3,636.50	1,340.66	1,139.66	201.00	6.670		
10,800.00	7,249.76	10,409.56	7,010.46	105.91	105.10	-79.72	157.82	-3,736.47	1,340.87	1,134.56	206.31	6.499		
10,900.00	7,249.38	10,509.57	7,008.71	108.62	107.83	-79.66	157.07	-3,836.44	1,341.09	1,129.45	211.64	6.337		
11,000.00	7,249.00	10,609.58	7,006.96	111.33	110.56	-79.60	156.32	-3,936.41	1,341.31	1,124.33	216.97	6.182		
11,100.00	7,248.62	10,709.59	7,005.21	114.04	113.31	-79.55	155.57	-4,036.39	1,341.52	1,119.21	222.32	6.034		
11,200.00	7,248.24	10,809.60	7,003.46	116.77	116.05	-79.49	154.81	-4,136.36	1,341.75	1,114.07	227.67	5.893		
11,300.00	7,247.86	10,909.61	7,001.71	119.50	118.81	-79.43	154.06	-4,236.33	1,341.97	1,108.93	233.04	5.759		
11,400.00	7,247.48	11,009.62	6,999.96	122.24	121.57	-79.37	153.31	-4,336.30	1,342.19	1,103.78	238.41	5.630		
11,500.00	7,247.10	11,109.63	6,998.21	124.98	124.33	-79.31	152.56	-4,436.28	1,342.42	1,098.62	243.79	5.506		
11,600.00	7,246.72	11,209.64	6,996.46	127.73	127.10	-79.26	151.80	-4,536.25	1,342.64	1,093.46	249.18	5.388		
11,700.00	7,246.34	11,309.65	6,994.71	130.48	129.87	-79.20	151.05	-4,636.22	1,342.87	1,088.30	254.57	5.275		
11,800.00	7,245.96	11,409.66	6,992.96	133.24	132.64	-79.14	150.30	-4,736.19	1,343.10	1,083.13	259.97	5.166		
11,900.00	7,245.58	11,509.67	6,991.21	136.00	135.42	-79.08	149.55	-4,836.17	1,343.33	1,077.95	265.38	5.062		
12,000.00	7,245.21	11,609.68	6,989.47	138.76	138.20	-79.03	148.79	-4,936.14	1,343.56	1,072.77	270.78	4.962		
12,100.00	7,244.83	11,709.69	6,987.72	141.53	140.99	-78.97	148.04	-5,036.11	1,343.79	1,067.59	276.20	4.865		
12,200.00	7,244.45	11,809.69	6,985.97	144.30	143.77	-78.91	147.29	-5,136.08	1,344.03	1,062.41	281.61	4.773		
12,300.00	7,244.07	11,909.70	6,984.22	147.08	146.56	-78.85	146.53	-5,236.06	1,344.26	1,057.23	287.03	4.683		
12,400.00	7,243.69	12,009.71	6,982.47	149.86	149.36	-78.80	145.78	-5,336.03	1,344.50	1,052.04	292.46	4.597		
12,500.00	7,243.31	12,109.72	6,980.72	152.64	152.15	-78.74	145.03	-5,436.00	1,344.74	1,046.85	297.89	4.514		
12,600.00	7,242.93	12,209.73	6,978.97	155.42	154.95	-78.68	144.28	-5,535.97	1,344.98	1,041.66	303.31	4.434		
12,700.00	7,242.55	12,309.74	6,977.22	158.21	157.75	-78.62	143.52	-5,635.95	1,345.22	1,036.47	308.75	4.357		
12,800.00	7,242.17	12,409.75	6,975.47	161.00	160.55	-78.57	142.77	-5,735.92	1,345.46	1,031.28	314.18	4.282		
12,900.00	7,241.79	12,509.76	6,973.72	163.79	163.35	-78.51	142.02	-5,835.89	1,345.70	1,026.09	319.62	4.210		
13,000.00	7,241.41	12,609.77	6,971.97	166.58	166.16	-78.45	141.27	-5,935.86	1,345.95	1,020.90	325.05	4.141		
13,100.00	7,241.03	12,709.78	6,970.22	169.38	168.97	-78.39	140.51	-6,035.84	1,346.19	1,015.70	330.49	4.073		
13,200.00	7,240.65	12,809.79	6,968.47	172.18	171.78	-78.34	139.76	-6,135.81	1,346.44	1,010.51	335.93	4.008		
13,300.00	7,240.27	12,909.80	6,966.72	174.98	174.04	-78.28	139.01	-6,235.78	1,346.69	1,005.86	340.83	3.951		
13,400.00	7,239.89	13,009.81	6,964.97	177.78	177.40	-78.22	138.26	-6,335.75	1,346.94	1,000.13	346.81	3.884		
13,500.00	7,239.51	13,109.82	6,963.22	180.58	180.21	-78.16	137.50	-6,435.73	1,347.19	994.94	352.25	3.824		
13,600.00	7,239.13	13,209.83	6,961.48	183.39	183.03	-78.11	136.75	-6,535.70	1,347.45	989.75	357.70	3.767		
13,700.00	7,238.75	13,309.84	6,959.73	186.20	185.84	-78.05	136.00	-6,635.67	1,347.70	984.56	363.14	3.711		
13,800.00	7,238.37	13,409.85	6,957.98	189.00	188.66	-77.99	135.25	-6,735.64	1,347.96	979.37	368.58	3.657		
13,900.00	7,237.99	13,509.85	6,956.23	191.81	191.48	-77.94	134.49	-6,835.62	1,348.21	974.19	374.03	3.605		
14,000.00	7,237.62	13,609.86	6,954.48	194.63	194.30	-77.88	133.74	-6,935.59	1,348.47	969.00	379.47	3.554		
14,100.00	7,237.24	13,709.87	6,952.73	197.44	197.12	-77.82	132.99	-7,035.56	1,348.73	963.82	384.91	3.504		
14,200.00	7,236.86	13,809.88	6,950.98	200.25	199.94	-77.76	132.24	-7,135.53	1,348.99	958.64	390.36	3.456		
14,300.00	7,236.48	13,909.89	6,949.23	203.07	202.77	-77.71	131.48	-7,235.51	1,349.26	953.46	395.80	3.409		
14,400.00	7,236.10	14,009.90	6,947.48	205.88	205.59	-77.65	130.73	-7,335.48	1,349.52	948.28	401.24	3.363		
14,500.00	7,235.72	14,109.91	6,945.73	208.70	208.42	-77.59	129.98	-7,435.45	1,349.78	943.10	406.68	3.319		
14,600.00	7,235.34	14,190.08	6,943.98	211.52	210.68	-77.54	129.23	-7,535.42	1,350.05	938.47	411.58	3.280		
14,700.00	7,234.96	14,309.93	6,942.23	214.34	214.07	-77.48	128.47	-7,635.39	1,350.32	932.75	417.57	3.234		
14,800.00	7,234.58	14,409.94	6,940.48	217.16	216.90	-77.42	127.72	-7,735.37	1,350.59	927.58	423.01	3.193		
14,900.00	7,234.20	14,509.95	6,938.73	219.98	219.72	-77.37	126.97	-7,835.34	1,350.86	922.41	428.45	3.153		
15,000.00	7,233.82	14,609.96	6,936.98	222.81	222.55	-77.31	126.22	-7,935.31	1,351.13	917.25	433.88	3.114		
15,100.00	7,233.44	14,709.97	6,935.23	225.63	225.38	-77.25	125.46	-8,035.28	1,351.40	912.08	439.32	3.076		
15,200.00	7,233.06	14,790.02	6,933.49	228.45	227.65	-77.19	124.71	-8,135.26	1,351.68	907.47	444.20	3.043		
15,216.01	7,233.00	14,806.04	6,933.21	228.91	228.10	-77.19	124.59	-8,151.27	1,351.72	906.65	445.07	3.037 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2.00	0.00	3.28	3.28	-179.55	-319.85	-2.50	319.86					
100.00	100.00	102.00	100.00	3.28	3.29	-179.55	-319.85	-2.50	319.86	313.29	6.57	48.686		
200.00	200.00	198.00	200.00	3.34	3.34	-179.55	-319.85	-2.50	319.86	313.19	6.67	47.938 CC, ES		
300.00	299.98	288.14	290.13	3.45	3.43	-173.81	-321.19	-2.69	323.09	316.21	6.88	46.958		
400.00	399.84	377.52	379.40	3.61	3.55	-173.78	-325.30	-3.27	332.88	325.68	7.20	46.255		
500.00	499.45	465.77	467.39	3.82	3.72	-173.73	-332.05	-4.23	349.15	341.55	7.60	45.927		
600.00	598.70	552.37	553.48	4.07	3.93	-173.67	-341.28	-5.53	371.79	363.72	8.08	46.029		
700.00	697.47	636.83	637.14	4.35	4.17	-173.60	-352.76	-7.15	400.65	392.05	8.60	46.581		
800.00	795.62	725.74	724.88	4.67	4.47	-173.52	-366.99	-9.16	435.08	425.92	9.16	47.502		
900.00	893.06	818.27	816.15	5.01	4.82	-173.47	-382.02	-11.29	472.99	463.25	9.75	48.535		
1,000.00	989.64	909.42	906.08	5.38	5.19	-173.46	-396.83	-13.38	514.09	503.72	10.37	49.558		
1,100.00	1,085.42	1,000.68	994.76	5.78	5.58	-173.52	-411.43	-15.44	557.88	546.84	11.03	50.564		
1,200.00	1,181.09	1,089.06	1,083.28	6.20	5.98	-173.63	-426.00	-17.50	601.99	590.30	11.69	51.480		
1,300.00	1,276.76	1,178.79	1,171.80	6.65	6.40	-173.72	-440.58	-19.56	646.11	633.73	12.39	52.167		
1,400.00	1,372.43	1,268.53	1,260.32	7.11	6.83	-173.79	-455.15	-21.62	690.24	677.14	13.10	52.693		
1,500.00	1,468.10	1,358.27	1,348.84	7.57	7.27	-173.86	-469.72	-23.68	734.36	720.53	13.83	53.093		
1,600.00	1,563.77	1,448.00	1,437.36	8.05	7.71	-173.92	-484.30	-25.73	778.48	763.90	14.58	53.395		
1,700.00	1,659.44	1,537.74	1,525.88	8.53	8.17	-173.97	-498.87	-27.79	822.60	807.26	15.34	53.621		
1,800.00	1,755.11	1,627.48	1,614.40	9.02	8.63	-174.02	-513.45	-29.85	866.73	850.61	16.11	53.787		
1,900.00	1,850.78	1,717.21	1,702.93	9.52	9.09	-174.07	-528.02	-31.91	910.85	893.96	16.90	53.906		
2,000.00	1,946.45	1,806.95	1,791.45	10.02	9.56	-174.11	-542.60	-33.97	954.98	937.29	17.69	53.988		
2,100.00	2,042.12	1,896.69	1,879.97	10.52	10.03	-174.14	-557.17	-36.03	999.10	980.62	18.49	54.041		
2,200.00	2,137.78	1,986.42	1,968.49	11.03	10.50	-174.18	-571.74	-38.09	1,043.23	1,023.94	19.29	54.071		
2,300.00	2,233.45	2,076.16	2,057.01	11.54	10.98	-174.21	-586.32	-40.15	1,087.35	1,067.25	20.11	54.084		
2,400.00	2,329.12	2,165.90	2,145.53	12.05	11.46	-174.23	-600.89	-42.21	1,131.48	1,110.56	20.92	54.082		
2,500.00	2,424.79	2,255.63	2,234.05	12.56	11.94	-174.26	-615.47	-44.27	1,175.61	1,153.86	21.74	54.069		
2,600.00	2,520.46	2,345.37	2,322.57	13.08	12.42	-174.28	-630.04	-46.32	1,219.73	1,197.17	22.57	54.047		
2,700.00	2,616.13	2,435.11	2,411.10	13.60	12.91	-174.31	-644.62	-48.38	1,263.86	1,240.46	23.40	54.019		
2,800.00	2,711.80	2,524.84	2,499.62	14.12	13.39	-174.33	-659.19	-50.44	1,307.99	1,283.76	24.23	53.985		
2,900.00	2,807.47	2,614.58	2,588.14	14.64	13.88	-174.35	-673.76	-52.50	1,352.11	1,327.05	25.06	53.947		
3,000.00	2,903.14	2,704.32	2,676.66	15.16	14.37	-174.36	-688.34	-54.56	1,396.24	1,370.34	25.90	53.906		
3,100.00	2,998.81	2,805.95	2,765.18	15.68	14.92	-174.38	-702.91	-56.62	1,440.37	1,413.57	26.79	53.756		
3,200.00	3,094.48	2,883.79	2,853.70	16.21	15.35	-174.40	-717.49	-58.68	1,484.49	1,456.91	27.58	53.819		
3,300.00	3,190.15	2,973.53	2,942.22	16.73	15.84	-174.41	-732.06	-60.74	1,528.62	1,500.19	28.43	53.773		
3,400.00	3,285.82	3,063.26	3,030.74	17.26	16.33	-174.43	-746.64	-62.80	1,572.75	1,543.48	29.27	53.726		
3,500.00	3,381.49	3,153.00	3,119.27	17.78	16.83	-174.44	-761.21	-64.85	1,616.88	1,586.76	30.12	53.679		
3,600.00	3,477.16	3,242.74	3,207.79	18.31	17.32	-174.45	-775.79	-66.91	1,661.00	1,630.03	30.97	53.632		
3,700.00	3,572.83	3,332.47	3,296.31	18.84	17.81	-174.47	-790.36	-68.97	1,705.13	1,673.31	31.82	53.585		
3,800.00	3,668.50	3,422.21	3,384.83	19.37	18.31	-174.48	-804.93	-71.03	1,749.26	1,716.59	32.67	53.539		
3,900.00	3,764.17	3,511.95	3,473.35	19.89	18.80	-174.49	-819.51	-73.09	1,793.39	1,759.86	33.53	53.493		
4,000.00	3,859.84	3,601.68	3,561.87	20.42	19.30	-174.50	-834.08	-75.15	1,837.51	1,803.13	34.38	53.447		
4,100.00	3,955.51	3,691.42	3,650.39	20.95	19.79	-174.51	-848.66	-77.21	1,881.64	1,846.41	35.24	53.402		
4,200.00	4,051.18	3,781.16	3,738.91	21.48	20.29	-174.52	-863.23	-79.27	1,925.77	1,889.68	36.09	53.357		
4,300.00	4,146.85	3,870.89	3,827.44	22.01	20.79	-174.53	-877.81	-81.33	1,969.90	1,932.95	36.95	53.314		
4,400.00	4,242.52	3,960.63	3,915.96	22.55	21.28	-174.54	-892.38	-83.38	2,014.03	1,976.22	37.81	53.271		
4,500.00	4,338.19	4,050.37	4,004.48	23.08	21.78	-174.54	-906.95	-85.44	2,058.15	2,019.49	38.67	53.229		
4,600.00	4,433.86	4,140.10	4,093.00	23.61	22.28	-174.55	-921.53	-87.50	2,102.28	2,062.76	39.53	53.187		
4,700.00	4,529.53	4,229.84	4,181.52	24.14	22.77	-174.56	-936.10	-89.56	2,146.41	2,106.02	40.39	53.147		
4,800.00	4,625.19	4,319.58	4,270.04	24.67	23.27	-174.57	-950.68	-91.62	2,190.54	2,149.29	41.25	53.107		
4,900.00	4,720.86	4,409.31	4,358.56	25.21	23.77	-174.57	-965.25	-93.68	2,234.67	2,192.56	42.11	53.068		
5,000.00	4,816.53	4,500.95	4,447.08	25.74	24.28	-174.58	-979.83	-95.74	2,278.79	2,235.81	42.98	53.019		
5,100.00	4,912.20	4,588.79	4,535.61	26.27	24.77	-174.59	-994.40	-97.80	2,322.92	2,279.09	43.83	52.992		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	4,678.52	4,624.13	26.80	25.27	-174.59	-1,008.97	-99.86	2,367.05	2,322.35	44.70	52.956		
5,300.00	5,103.54	4,768.26	4,712.65	27.34	25.76	-174.60	-1,023.55	-101.92	2,411.18	2,365.61	45.56	52.920		
5,400.00	5,199.22	4,858.00	4,801.18	27.87	26.26	-174.61	-1,038.12	-103.97	2,455.29	2,408.87	46.43	52.885		
5,500.00	5,295.46	4,948.62	4,890.57	28.39	26.77	-174.70	-1,052.84	-106.05	2,497.57	2,450.27	47.29	52.813		
5,600.00	5,392.60	5,040.66	4,981.36	28.89	27.28	-174.77	-1,067.79	-108.16	2,536.66	2,488.51	48.15	52.677		
5,700.00	5,490.50	5,133.99	5,073.43	29.37	27.80	-174.83	-1,082.95	-110.31	2,572.54	2,523.52	49.02	52.482		
5,800.00	5,589.05	5,228.52	5,166.67	29.83	28.33	-174.87	-1,098.30	-112.48	2,605.15	2,555.27	49.88	52.230		
5,900.00	5,688.14	5,324.11	5,260.97	30.26	28.86	-174.89	-1,113.83	-114.67	2,634.45	2,583.72	50.73	51.926		
6,000.00	5,787.63	5,420.66	5,356.22	30.68	29.40	-174.91	-1,129.51	-116.88	2,660.42	2,608.83	51.59	51.573		
6,100.00	5,887.41	5,518.06	5,452.29	31.07	29.94	-174.91	-1,145.33	-119.12	2,683.01	2,630.58	52.43	51.174		
6,200.00	5,987.36	5,616.17	5,549.07	31.44	30.49	-174.89	-1,161.26	-121.37	2,702.21	2,648.94	53.26	50.732		
6,300.00	6,087.36	5,714.77	5,646.34	31.80	31.04	179.41	-1,177.27	-123.63	2,718.66	2,664.57	54.09	50.259		
6,400.00	6,187.36	5,813.42	5,743.65	32.15	31.59	179.46	-1,193.30	-125.90	2,734.89	2,679.96	54.92	49.794		
6,500.00	6,287.36	5,912.06	5,840.96	32.51	32.14	179.52	-1,209.32	-128.16	2,751.11	2,695.36	55.76	49.341		
6,600.00	6,387.36	6,010.71	5,938.27	32.87	32.69	179.57	-1,225.34	-130.42	2,767.34	2,710.75	56.59	48.901		
6,700.00	6,487.36	6,109.36	6,035.58	33.23	33.24	179.62	-1,241.36	-132.69	2,783.57	2,726.14	57.43	48.472		
6,800.00	6,587.36	6,208.00	6,132.89	33.59	33.79	179.66	-1,257.38	-134.95	2,799.80	2,741.54	58.26	48.054		
6,900.00	6,687.26	6,306.62	6,230.17	33.95	34.34	-88.97	-1,273.40	-137.21	2,816.01	2,756.91	59.09	47.652		
7,000.00	6,785.58	6,404.04	6,326.28	34.31	34.88	-87.83	-1,289.22	-139.45	2,831.98	2,772.05	59.93	47.258		
7,100.00	6,879.94	6,497.92	6,418.88	34.65	35.41	-87.00	-1,304.47	-141.60	2,847.57	2,786.81	60.76	46.869		
7,200.00	6,968.01	6,585.94	6,505.71	34.97	35.90	-86.41	-1,318.76	-143.62	2,862.86	2,801.28	61.58	46.493		
7,300.00	7,047.61	6,665.92	6,584.61	35.27	36.35	-85.97	-1,331.75	-145.46	2,878.12	2,815.72	62.40	46.126		
7,400.00	7,116.80	6,745.79	6,663.37	35.54	36.79	-85.68	-1,344.72	-147.94	2,893.67	2,830.34	63.33	45.691		
7,500.00	7,173.86	6,860.03	6,774.52	35.81	37.44	-85.93	-1,363.13	-165.89	2,909.14	2,844.39	64.74	44.933		
7,600.00	7,217.38	7,007.70	6,910.35	36.17	38.26	-86.61	-1,385.82	-218.31	2,923.75	2,857.13	66.62	43.887		
7,700.00	7,246.31	7,700.00	7,054.66	36.80	42.88	-87.60	-1,410.27	-323.62	2,936.28	2,863.57	72.71	40.382		
7,800.00	7,259.92	7,800.00	7,212.01	37.72	44.40	-89.25	-1,437.81	-571.17	2,944.23	2,867.24	76.99	38.243		
7,900.00	7,260.77	7,752.68	7,247.75	38.86	44.00	-89.75	-1,445.45	-833.42	2,945.30	2,867.22	78.08	37.722		
8,000.00	7,260.39	7,852.68	7,247.22	40.19	45.45	-89.74	-1,446.03	-933.41	2,945.10	2,863.77	81.33	36.212		
8,100.00	7,260.01	7,952.68	7,246.69	41.67	47.13	-89.74	-1,446.62	-1,033.41	2,944.90	2,860.00	84.90	34.685		
8,200.00	7,259.63	8,052.68	7,246.16	43.30	49.01	-89.74	-1,447.20	-1,133.41	2,944.71	2,855.94	88.77	33.174		
8,300.00	7,259.25	8,152.68	7,245.64	45.05	51.08	-89.74	-1,447.79	-1,233.40	2,944.51	2,851.63	92.88	31.703		
8,400.00	7,258.87	8,252.68	7,245.11	46.91	53.29	-89.73	-1,448.37	-1,333.40	2,944.31	2,847.10	97.21	30.288		
8,500.00	7,258.49	8,352.68	7,244.58	48.87	55.64	-89.73	-1,448.95	-1,433.40	2,944.12	2,842.38	101.74	28.939		
8,600.00	7,258.11	8,452.68	7,244.05	50.92	58.09	-89.73	-1,449.54	-1,533.39	2,943.92	2,837.49	106.43	27.661		
8,700.00	7,257.73	8,552.68	7,243.52	53.04	60.64	-89.72	-1,450.12	-1,633.39	2,943.72	2,832.46	111.27	26.457		
8,800.00	7,257.35	8,652.68	7,242.99	55.23	63.28	-89.72	-1,450.71	-1,733.39	2,943.53	2,827.29	116.23	25.325		
8,900.00	7,256.97	8,752.68	7,242.46	57.47	65.98	-89.72	-1,451.29	-1,833.38	2,943.33	2,822.02	121.31	24.263		
9,000.00	7,256.59	8,852.68	7,241.93	59.77	68.74	-89.72	-1,451.88	-1,933.38	2,943.13	2,816.65	126.49	23.269		
9,100.00	7,256.21	8,952.68	7,241.41	62.12	71.55	-89.71	-1,452.46	-2,033.38	2,942.93	2,811.19	131.75	22.337		
9,200.00	7,255.83	9,052.68	7,240.88	64.50	74.41	-89.71	-1,453.05	-2,133.37	2,942.74	2,805.65	137.09	21.466		
9,300.00	7,255.45	9,152.68	7,240.35	66.93	77.31	-89.71	-1,453.63	-2,233.37	2,942.54	2,800.04	142.50	20.649		
9,400.00	7,255.07	9,252.68	7,239.82	69.38	80.25	-89.70	-1,454.21	-2,333.37	2,942.34	2,794.37	147.97	19.885		
9,500.00	7,254.69	9,352.68	7,239.29	71.87	83.21	-89.70	-1,454.80	-2,433.36	2,942.15	2,788.65	153.50	19.167		
9,600.00	7,254.31	9,452.67	7,238.76	74.38	86.21	-89.70	-1,455.38	-2,533.36	2,941.95	2,782.88	159.07	18.494		
9,700.00	7,253.93	9,552.67	7,238.23	76.92	89.23	-89.69	-1,455.97	-2,633.36	2,941.75	2,777.06	164.69	17.862		
9,800.00	7,253.55	9,652.67	7,237.71	79.48	92.27	-89.69	-1,456.55	-2,733.35	2,941.56	2,771.21	170.35	17.268		
9,900.00	7,253.18	9,752.67	7,237.18	82.06	95.33	-89.69	-1,457.14	-2,833.35	2,941.36	2,765.32	176.04	16.708		
10,000.00	7,252.80	9,852.67	7,236.65	84.65	98.41	-89.69	-1,457.72	-2,933.34	2,941.16	2,759.40	181.77	16.181		
10,100.00	7,252.42	9,952.67	7,236.12	87.27	101.51	-89.68	-1,458.30	-3,033.34	2,940.97	2,753.44	187.52	15.683		
10,200.00	7,252.04	10,052.67	7,235.59	89.89	104.62	-89.68	-1,458.89	-3,133.34	2,940.77	2,747.46	193.31	15.213		
10,300.00	7,251.66	10,152.67	7,235.06	92.54	107.75	-89.68	-1,459.47	-3,233.33	2,940.57	2,741.46	199.11	14.768		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,251.28	10,252.67	7,234.53	95.19	110.89	-89.67	-1,460.06	-3,333.33	2,940.38	2,735.43	204.94	14.347		
10,500.00	7,250.90	10,352.67	7,234.00	97.86	114.04	-89.67	-1,460.64	-3,433.33	2,940.18	2,729.39	210.79	13.948		
10,600.00	7,250.52	10,452.67	7,233.48	100.53	117.20	-89.67	-1,461.23	-3,533.32	2,939.98	2,723.32	216.66	13.569		
10,700.00	7,250.14	10,552.67	7,232.95	103.22	120.37	-89.67	-1,461.81	-3,633.32	2,939.79	2,717.24	222.55	13.210		
10,800.00	7,249.76	10,652.67	7,232.42	105.91	123.55	-89.66	-1,462.39	-3,733.32	2,939.59	2,711.14	228.45	12.867		
10,900.00	7,249.38	10,752.67	7,231.89	108.62	126.74	-89.66	-1,462.98	-3,833.31	2,939.39	2,705.02	234.37	12.542		
11,000.00	7,249.00	10,852.67	7,231.36	111.33	129.93	-89.66	-1,463.56	-3,933.31	2,939.20	2,698.89	240.30	12.231		
11,100.00	7,248.62	10,952.67	7,230.83	114.04	133.13	-89.65	-1,464.15	-4,033.31	2,939.00	2,692.75	246.25	11.935		
11,200.00	7,248.24	11,052.67	7,230.30	116.77	136.34	-89.65	-1,464.73	-4,133.30	2,938.80	2,686.60	252.20	11.653		
11,300.00	7,247.86	11,152.67	7,229.77	119.50	139.55	-89.65	-1,465.32	-4,233.30	2,938.61	2,680.44	258.17	11.382		
11,400.00	7,247.48	11,252.67	7,229.25	122.24	142.77	-89.64	-1,465.90	-4,333.30	2,938.41	2,674.26	264.15	11.124		
11,500.00	7,247.10	11,352.67	7,228.72	124.98	146.00	-89.64	-1,466.49	-4,433.29	2,938.21	2,668.08	270.13	10.877		
11,600.00	7,246.72	11,452.67	7,228.19	127.73	149.23	-89.64	-1,467.07	-4,533.29	2,938.02	2,661.89	276.13	10.640		
11,700.00	7,246.34	11,552.67	7,227.66	130.48	152.46	-89.64	-1,467.65	-4,633.29	2,937.82	2,655.69	282.13	10.413		
11,800.00	7,245.96	11,652.67	7,227.13	133.24	155.70	-89.63	-1,468.24	-4,733.28	2,937.62	2,649.48	288.15	10.195		
11,900.00	7,245.58	11,752.67	7,226.60	136.00	158.94	-89.63	-1,468.82	-4,833.28	2,937.43	2,643.26	294.17	9.986		
12,000.00	7,245.21	11,852.67	7,226.07	138.76	162.19	-89.63	-1,469.41	-4,933.28	2,937.23	2,637.04	300.19	9.784		
12,100.00	7,244.83	11,952.67	7,225.54	141.53	165.44	-89.62	-1,469.99	-5,033.27	2,937.03	2,630.81	306.23	9.591		
12,200.00	7,244.45	12,052.67	7,225.02	144.30	168.69	-89.62	-1,470.58	-5,133.27	2,936.84	2,624.57	312.27	9.405		
12,300.00	7,244.07	12,152.67	7,224.49	147.08	171.95	-89.62	-1,471.16	-5,233.27	2,936.64	2,618.33	318.31	9.226		
12,400.00	7,243.69	12,252.67	7,223.96	149.86	175.20	-89.62	-1,471.74	-5,333.26	2,936.44	2,612.08	324.36	9.053		
12,500.00	7,243.31	12,352.67	7,223.43	152.64	178.47	-89.61	-1,472.33	-5,433.26	2,936.25	2,605.83	330.42	8.886		
12,600.00	7,242.93	12,452.67	7,222.90	155.42	181.73	-89.61	-1,472.91	-5,533.26	2,936.05	2,599.57	336.48	8.726		
12,700.00	7,242.55	12,552.67	7,222.37	158.21	185.00	-89.61	-1,473.50	-5,633.25	2,935.85	2,593.31	342.54	8.571		
12,800.00	7,242.17	12,652.67	7,221.84	161.00	188.27	-89.60	-1,474.08	-5,733.25	2,935.66	2,587.04	348.61	8.421		
12,900.00	7,241.79	12,752.66	7,221.32	163.79	191.54	-89.60	-1,474.67	-5,833.25	2,935.46	2,580.77	354.69	8.276		
13,000.00	7,241.41	12,852.66	7,220.79	166.58	194.81	-89.60	-1,475.25	-5,933.24	2,935.26	2,574.50	360.77	8.136		
13,100.00	7,241.03	12,952.66	7,220.26	169.38	198.09	-89.59	-1,475.83	-6,033.24	2,935.07	2,568.22	366.85	8.001		
13,200.00	7,240.65	13,052.66	7,219.73	172.18	201.37	-89.59	-1,476.42	-6,133.24	2,934.87	2,561.94	372.93	7.870		
13,300.00	7,240.27	13,152.66	7,219.20	174.98	204.64	-89.59	-1,477.00	-6,233.23	2,934.67	2,555.65	379.02	7.743		
13,400.00	7,239.89	13,252.66	7,218.67	177.78	207.93	-89.59	-1,477.59	-6,333.23	2,934.48	2,549.36	385.11	7.620		
13,500.00	7,239.51	13,352.66	7,218.14	180.58	211.21	-89.58	-1,478.17	-6,433.23	2,934.28	2,543.07	391.21	7.501		
13,600.00	7,239.13	13,452.66	7,217.61	183.39	214.49	-89.58	-1,478.76	-6,533.22	2,934.08	2,536.78	397.31	7.385		
13,700.00	7,238.75	13,552.66	7,217.09	186.20	217.78	-89.58	-1,479.34	-6,633.22	2,933.89	2,530.48	403.41	7.273		
13,800.00	7,238.37	13,652.66	7,216.56	189.00	221.07	-89.57	-1,479.93	-6,733.22	2,933.69	2,524.18	409.51	7.164		
13,900.00	7,237.99	13,752.66	7,216.03	191.81	224.35	-89.57	-1,480.51	-6,833.21	2,933.49	2,517.87	415.62	7.058		
14,000.00	7,237.62	13,852.66	7,215.50	194.63	227.64	-89.57	-1,481.09	-6,933.21	2,933.30	2,511.57	421.73	6.955		
14,100.00	7,237.24	13,952.66	7,214.97	197.44	230.94	-89.57	-1,481.68	-7,033.21	2,933.10	2,505.26	427.84	6.856		
14,200.00	7,236.86	14,052.66	7,214.44	200.25	234.23	-89.56	-1,482.26	-7,133.20	2,932.91	2,498.95	433.95	6.759		
14,300.00	7,236.48	14,152.66	7,213.91	203.07	237.52	-89.56	-1,482.85	-7,233.20	2,932.71	2,492.64	440.07	6.664		
14,400.00	7,236.10	14,252.66	7,213.38	205.88	240.82	-89.56	-1,483.43	-7,333.19	2,932.51	2,486.33	446.19	6.572		
14,500.00	7,235.72	14,352.66	7,212.86	208.70	244.11	-89.55	-1,484.02	-7,433.19	2,932.32	2,480.01	452.31	6.483		
14,600.00	7,235.34	14,452.66	7,212.33	211.52	247.41	-89.55	-1,484.60	-7,533.19	2,932.12	2,473.69	458.43	6.396		
14,700.00	7,234.96	14,552.66	7,211.80	214.34	250.71	-89.55	-1,485.18	-7,633.18	2,931.92	2,467.37	464.55	6.311		
14,800.00	7,234.58	14,652.66	7,211.27	217.16	254.01	-89.54	-1,485.77	-7,733.18	2,931.73	2,461.05	470.68	6.229		
14,900.00	7,234.20	14,752.66	7,210.74	219.98	257.31	-89.54	-1,486.35	-7,833.18	2,931.53	2,454.73	476.80	6.148		
15,000.00	7,233.82	14,852.66	7,210.21	222.81	260.61	-89.54	-1,486.94	-7,933.17	2,931.33	2,448.40	482.93	6.070		
15,100.00	7,233.44	14,952.66	7,209.68	225.63	263.91	-89.54	-1,487.52	-8,033.17	2,931.14	2,442.08	489.06	5.993		
15,200.00	7,233.06	15,052.66	7,209.15	228.45	267.21	-89.53	-1,488.11	-8,133.17	2,930.94	2,435.75	495.19	5.919		
15,216.01	7,233.00	15,068.67	7,209.07	228.91	267.74	-89.53	-1,488.20	-8,149.18	2,930.91	2,434.73	496.17	5.907 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1.00	0.00	3.28	3.28	-179.52	-200.00	-1.67	200.00					
100.00	100.00	101.00	100.00	3.28	3.28	-179.52	-200.00	-1.67	200.00	193.43	6.57	30.444		
200.00	200.00	201.00	200.00	3.34	3.34	-179.52	-200.00	-1.67	200.00	193.33	6.67	29.964	CC, ES	
300.00	299.98	301.02	299.98	3.45	3.45	-173.84	-200.00	-1.67	201.74	194.85	6.89	29.272		
400.00	399.84	401.16	399.84	3.61	3.61	-173.98	-200.00	-1.67	206.94	199.73	7.21	28.689		
500.00	499.45	498.45	499.45	3.82	3.80	-174.21	-200.00	-1.67	215.61	207.99	7.62	28.296		
600.00	598.70	590.82	591.80	4.07	4.01	-174.36	-201.36	-2.12	229.21	221.12	8.09	28.340		
700.00	697.47	681.60	682.48	4.35	4.24	-174.33	-205.46	-3.46	249.22	240.61	8.61	28.943		
800.00	795.62	774.50	775.12	4.67	4.50	-174.18	-212.08	-5.63	275.13	265.95	9.18	29.973		
900.00	893.06	870.02	870.34	5.01	4.78	-174.09	-219.20	-7.97	304.72	294.92	9.79	31.117		
1,000.00	989.64	964.46	964.49	5.38	5.08	-174.05	-226.24	-10.28	337.60	327.16	10.44	32.332		
1,100.00	1,085.42	1,057.87	1,057.62	5.78	5.40	-174.10	-233.20	-12.56	373.27	362.15	11.12	33.565		
1,200.00	1,181.09	1,151.16	1,150.62	6.20	5.73	-174.17	-240.16	-14.85	409.29	397.48	11.81	34.648		
1,300.00	1,276.76	1,244.45	1,243.61	6.65	6.07	-174.24	-247.11	-17.13	445.31	432.78	12.53	35.539		
1,400.00	1,372.43	1,337.73	1,336.61	7.11	6.42	-174.29	-254.07	-19.41	481.33	468.06	13.27	36.277		
1,500.00	1,468.10	1,431.02	1,429.61	7.57	6.78	-174.33	-261.02	-21.69	517.35	503.33	14.02	36.890		
1,600.00	1,563.77	1,524.31	1,522.61	8.05	7.14	-174.37	-267.98	-23.97	553.38	538.58	14.80	37.402		
1,700.00	1,659.44	1,617.59	1,615.61	8.53	7.51	-174.41	-274.93	-26.25	589.40	573.82	15.58	37.833		
1,800.00	1,755.11	1,710.88	1,708.61	9.02	7.89	-174.44	-281.89	-28.54	625.42	609.04	16.37	38.197		
1,900.00	1,850.78	1,804.17	1,801.61	9.52	8.27	-174.46	-288.84	-30.82	661.44	644.26	17.18	38.506		
2,000.00	1,946.45	1,902.55	1,894.61	10.02	8.68	-174.49	-295.80	-33.10	697.46	679.45	18.01	38.726		
2,100.00	2,042.12	2,009.26	1,987.61	10.52	9.12	-174.51	-302.75	-35.38	733.48	714.60	18.88	38.840		
2,200.00	2,137.78	2,084.03	2,080.60	11.03	9.43	-174.53	-309.71	-37.66	769.50	749.87	19.63	39.193		
2,300.00	2,233.45	2,177.31	2,173.60	11.54	9.83	-174.55	-316.66	-39.95	805.53	785.06	20.46	39.362		
2,400.00	2,329.12	2,270.60	2,266.60	12.05	10.22	-174.57	-323.62	-42.23	841.55	820.25	21.30	39.509		
2,500.00	2,424.79	2,363.88	2,359.60	12.56	10.62	-174.58	-330.57	-44.51	877.57	855.43	22.14	39.638		
2,600.00	2,520.46	2,457.17	2,452.60	13.08	11.02	-174.60	-337.52	-46.79	913.59	890.61	22.98	39.750		
2,700.00	2,616.13	2,550.46	2,545.60	13.60	11.42	-174.61	-344.48	-49.07	949.61	925.78	23.83	39.849		
2,800.00	2,711.80	2,643.74	2,638.60	14.12	11.82	-174.62	-351.43	-51.35	985.64	960.96	24.68	39.936		
2,900.00	2,807.47	2,737.03	2,731.60	14.64	12.23	-174.63	-358.39	-53.64	1,021.66	996.13	25.53	40.014		
3,000.00	2,903.14	2,830.32	2,824.60	15.16	12.63	-174.64	-365.34	-55.92	1,057.68	1,031.29	26.39	40.082		
3,100.00	2,998.81	2,923.60	2,917.59	15.68	13.04	-174.65	-372.30	-58.20	1,093.70	1,066.46	27.25	40.143		
3,200.00	3,094.48	3,016.89	3,010.59	16.21	13.44	-174.66	-379.25	-60.48	1,129.72	1,101.62	28.10	40.197		
3,300.00	3,190.15	3,110.18	3,103.59	16.73	13.85	-174.67	-386.21	-62.76	1,165.75	1,136.78	28.97	40.245		
3,400.00	3,285.82	3,203.46	3,196.59	17.26	14.26	-174.68	-393.16	-65.04	1,201.77	1,171.94	29.83	40.289		
3,500.00	3,381.49	3,296.75	3,289.59	17.78	14.67	-174.69	-400.12	-67.33	1,237.79	1,207.10	30.69	40.327		
3,600.00	3,477.16	3,390.04	3,382.59	18.31	15.08	-174.69	-407.07	-69.61	1,273.81	1,242.25	31.56	40.362		
3,700.00	3,572.83	3,483.32	3,475.59	18.84	15.49	-174.70	-414.03	-71.89	1,309.84	1,277.41	32.43	40.394		
3,800.00	3,668.50	3,576.61	3,568.59	19.37	15.90	-174.71	-420.98	-74.17	1,345.86	1,312.56	33.30	40.422		
3,900.00	3,764.17	3,669.90	3,661.59	19.89	16.31	-174.71	-427.94	-76.45	1,381.88	1,347.72	34.16	40.447		
4,000.00	3,859.84	3,763.18	3,754.58	20.42	16.73	-174.72	-434.89	-78.74	1,417.90	1,382.87	35.04	40.470		
4,100.00	3,955.51	3,856.47	3,847.58	20.95	17.14	-174.72	-441.85	-81.02	1,453.93	1,418.02	35.91	40.491		
4,200.00	4,051.18	3,949.76	3,940.58	21.48	17.55	-174.73	-448.80	-83.30	1,489.95	1,453.17	36.78	40.510		
4,300.00	4,146.85	4,043.04	4,033.58	22.01	17.96	-174.73	-455.76	-85.58	1,525.97	1,488.32	37.65	40.527		
4,400.00	4,242.52	4,136.33	4,126.58	22.55	18.38	-174.74	-462.71	-87.86	1,561.99	1,523.46	38.53	40.542		
4,500.00	4,338.19	4,229.62	4,219.58	23.08	18.79	-174.74	-469.66	-90.14	1,598.01	1,558.61	39.40	40.556		
4,600.00	4,433.86	4,322.90	4,312.58	23.61	19.21	-174.75	-476.62	-92.43	1,634.04	1,593.76	40.28	40.569		
4,700.00	4,529.53	4,416.19	4,405.58	24.14	19.62	-174.75	-483.57	-94.71	1,670.06	1,628.90	41.15	40.580		
4,800.00	4,625.19	4,509.47	4,498.58	24.67	20.04	-174.75	-490.53	-96.99	1,706.08	1,664.05	42.03	40.590		
4,900.00	4,720.86	4,602.76	4,591.58	25.21	20.45	-174.76	-497.48	-99.27	1,742.10	1,699.20	42.91	40.600		
5,000.00	4,816.53	4,703.95	4,684.57	25.74	20.90	-174.76	-504.44	-101.55	1,778.13	1,734.30	43.82	40.576		
5,100.00	4,912.20	4,789.33	4,777.57	26.27	21.28	-174.77	-511.39	-103.83	1,814.15	1,769.48	44.67	40.616		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	4,882.62	4,870.57	26.80	21.70	-174.77	-518.35	-106.12	1,850.17	1,804.63	45.55	40.623		
5,300.00	5,103.54	4,975.91	4,963.57	27.34	22.12	-174.77	-525.30	-108.40	1,886.19	1,839.77	46.43	40.629		
5,400.00	5,199.22	5,069.20	5,056.57	27.87	22.53	-174.78	-532.26	-110.68	1,922.20	1,874.90	47.31	40.634		
5,500.00	5,295.46	5,163.20	5,150.29	28.39	22.95	-174.84	-539.27	-112.98	1,956.30	1,908.12	48.18	40.602		
5,600.00	5,392.60	5,258.33	5,245.12	28.89	23.38	-174.89	-546.36	-115.31	1,987.11	1,938.05	49.06	40.506		
5,700.00	5,490.50	5,354.47	5,340.97	29.37	23.81	-174.92	-553.53	-117.66	2,014.59	1,964.66	49.93	40.350		
5,800.00	5,589.05	5,451.51	5,437.71	29.83	24.24	-174.93	-560.76	-120.03	2,038.71	1,987.92	50.79	40.137		
5,900.00	5,688.14	5,549.32	5,535.22	30.26	24.68	-174.93	-568.05	-122.42	2,059.45	2,007.80	51.65	39.872		
6,000.00	5,787.63	5,647.79	5,633.38	30.68	25.12	-174.92	-575.39	-124.83	2,076.77	2,024.27	52.50	39.557		
6,100.00	5,887.41	5,746.80	5,732.08	31.07	25.56	-174.89	-582.77	-127.25	2,090.67	2,037.32	53.34	39.194		
6,200.00	5,987.36	5,846.22	5,831.20	31.44	26.01	-174.85	-590.19	-129.69	2,101.11	2,046.94	54.17	38.788		
6,300.00	6,087.36	5,945.89	5,930.57	31.80	26.45	179.48	-597.62	-132.12	2,108.78	2,053.79	54.99	38.349		
6,400.00	6,187.36	6,045.58	6,029.95	32.15	26.90	179.55	-605.05	-134.56	2,116.22	2,060.41	55.81	37.919		
6,500.00	6,287.36	6,145.28	6,129.33	32.51	27.35	179.62	-612.48	-137.00	2,123.66	2,067.03	56.63	37.499		
6,600.00	6,387.36	6,244.97	6,228.72	32.87	27.79	179.69	-619.91	-139.44	2,131.10	2,073.64	57.46	37.091		
6,700.00	6,487.36	6,344.66	6,328.10	33.23	28.24	179.75	-627.35	-141.88	2,138.55	2,080.26	58.28	36.693		
6,800.00	6,587.36	6,444.35	6,427.49	33.59	28.69	179.82	-634.78	-144.32	2,145.99	2,086.89	59.11	36.306		
6,900.00	6,687.26	6,544.02	6,526.85	33.95	29.14	-89.33	-642.21	-146.75	2,153.42	2,093.49	59.93	35.934		
7,000.00	6,785.58	6,642.49	6,625.01	34.31	29.58	-89.07	-649.55	-149.16	2,160.72	2,099.98	60.74	35.573		
7,100.00	6,879.94	6,742.18	6,723.80	34.65	30.02	-89.03	-657.00	-159.37	2,167.93	2,106.34	61.58	35.203		
7,200.00	6,968.01	6,845.79	6,823.46	34.97	30.47	-89.02	-664.65	-186.21	2,174.91	2,112.43	62.48	34.812		
7,300.00	7,047.61	6,953.71	6,921.21	35.27	30.92	-89.05	-672.31	-231.00	2,181.47	2,118.03	63.44	34.388		
7,400.00	7,116.80	7,066.20	7,013.53	35.54	31.35	-89.11	-679.71	-294.58	2,187.40	2,122.89	64.51	33.908		
7,500.00	7,173.86	7,183.34	7,096.25	35.81	31.81	-89.20	-686.55	-377.00	2,192.51	2,126.74	65.78	33.332		
7,600.00	7,217.38	7,304.92	7,164.68	36.17	32.44	-89.31	-692.46	-477.10	2,196.59	2,129.25	67.34	32.617		
7,700.00	7,246.31	7,430.35	7,214.09	36.80	33.39	-89.42	-697.08	-592.08	2,199.45	2,130.13	69.32	31.729		
7,800.00	7,259.92	7,558.68	7,240.40	37.72	34.67	-89.52	-700.06	-717.42	2,200.95	2,129.23	71.72	30.686		
7,900.00	7,260.77	7,674.80	7,243.82	38.86	36.06	-89.56	-701.26	-833.41	2,201.16	2,126.82	74.34	29.610		
8,000.00	7,260.39	7,774.80	7,243.43	40.19	37.45	-89.56	-702.04	-933.41	2,201.16	2,124.07	77.09	28.552		
8,100.00	7,260.01	7,874.80	7,243.03	41.67	39.00	-89.56	-702.82	-1,033.40	2,201.16	2,121.00	80.16	27.461		
8,200.00	7,259.63	7,974.80	7,242.64	43.30	40.69	-89.56	-703.60	-1,133.40	2,201.16	2,117.66	83.50	26.361		
8,300.00	7,259.25	8,074.80	7,242.25	45.05	42.51	-89.56	-704.39	-1,233.40	2,201.16	2,114.07	87.09	25.274		
8,400.00	7,258.87	8,174.80	7,241.85	46.91	44.43	-89.56	-705.17	-1,333.39	2,201.16	2,110.26	90.90	24.215		
8,500.00	7,258.49	8,274.80	7,241.46	48.87	46.45	-89.56	-705.95	-1,433.39	2,201.16	2,106.26	94.90	23.195		
8,600.00	7,258.11	8,374.80	7,241.07	50.92	48.56	-89.56	-706.73	-1,533.39	2,201.16	2,102.09	99.07	22.219		
8,700.00	7,257.73	8,474.80	7,240.67	53.04	50.74	-89.56	-707.51	-1,633.38	2,201.16	2,097.78	103.39	21.291		
8,800.00	7,257.35	8,574.80	7,240.28	55.23	52.99	-89.56	-708.30	-1,733.38	2,201.16	2,093.33	107.83	20.413		
8,900.00	7,256.97	8,674.80	7,239.89	57.47	55.29	-89.56	-709.08	-1,833.37	2,201.16	2,088.77	112.39	19.584		
9,000.00	7,256.59	8,774.80	7,239.49	59.77	57.64	-89.55	-709.86	-1,933.37	2,201.16	2,084.11	117.06	18.804		
9,100.00	7,256.21	8,874.80	7,239.10	62.12	60.04	-89.55	-710.64	-2,033.37	2,201.16	2,079.35	121.81	18.070		
9,200.00	7,255.83	8,974.80	7,238.71	64.50	62.47	-89.55	-711.43	-2,133.36	2,201.16	2,074.52	126.64	17.381		
9,300.00	7,255.45	9,074.80	7,238.31	66.93	64.94	-89.55	-712.21	-2,233.36	2,201.16	2,069.62	131.55	16.733		
9,400.00	7,255.07	9,174.80	7,237.92	69.38	67.44	-89.55	-712.99	-2,333.35	2,201.17	2,064.65	136.51	16.124		
9,500.00	7,254.69	9,274.80	7,237.53	71.87	69.97	-89.55	-713.77	-2,433.35	2,201.17	2,059.63	141.54	15.552		
9,600.00	7,254.31	9,374.80	7,237.13	74.38	72.52	-89.55	-714.55	-2,533.35	2,201.17	2,054.56	146.61	15.014		
9,700.00	7,253.93	9,474.80	7,236.74	76.92	75.09	-89.55	-715.34	-2,633.34	2,201.17	2,049.44	151.73	14.507		
9,800.00	7,253.55	9,574.80	7,236.35	79.48	77.69	-89.55	-716.12	-2,733.34	2,201.17	2,044.28	156.89	14.030		
9,900.00	7,253.18	9,674.80	7,235.95	82.06	80.30	-89.55	-716.90	-2,833.34	2,201.17	2,039.08	162.09	13.580		
10,000.00	7,252.80	9,774.80	7,235.56	84.65	82.93	-89.55	-717.68	-2,933.33	2,201.17	2,033.85	167.32	13.155		
10,100.00	7,252.42	9,874.80	7,235.17	87.27	85.57	-89.55	-718.47	-3,033.33	2,201.17	2,028.58	172.58	12.754		
10,200.00	7,252.04	9,974.80	7,234.77	89.89	88.23	-89.55	-719.25	-3,133.32	2,201.17	2,023.29	177.87	12.375		
10,300.00	7,251.66	10,074.80	7,234.38	92.54	90.90	-89.55	-720.03	-3,233.32	2,201.17	2,017.98	183.19	12.016		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,251.28	10,174.80	7,233.99	95.19	93.58	-89.55	-720.81	-3,333.32	2,201.17	2,012.64	188.53	11.675		
10,500.00	7,250.90	10,274.80	7,233.59	97.86	96.27	-89.55	-721.59	-3,433.31	2,201.17	2,007.28	193.89	11.353		
10,600.00	7,250.52	10,374.80	7,233.20	100.53	98.97	-89.55	-722.38	-3,533.31	2,201.17	2,001.90	199.27	11.046		
10,700.00	7,250.14	10,474.80	7,232.81	103.22	101.68	-89.55	-723.16	-3,633.31	2,201.17	1,996.50	204.67	10.755		
10,800.00	7,249.76	10,574.80	7,232.41	105.91	104.39	-89.55	-723.94	-3,733.30	2,201.17	1,991.08	210.09	10.477		
10,900.00	7,249.38	10,674.80	7,232.02	108.62	107.12	-89.55	-724.72	-3,833.30	2,201.17	1,985.65	215.52	10.213		
11,000.00	7,249.00	10,774.80	7,231.63	111.33	109.85	-89.55	-725.51	-3,933.29	2,201.17	1,980.21	220.96	9.962		
11,100.00	7,248.62	10,874.80	7,231.23	114.04	112.58	-89.55	-726.29	-4,033.29	2,201.17	1,974.75	226.42	9.722		
11,200.00	7,248.24	10,974.80	7,230.84	116.77	115.33	-89.55	-727.07	-4,133.29	2,201.17	1,969.28	231.89	9.492		
11,300.00	7,247.86	11,074.80	7,230.45	119.50	118.07	-89.55	-727.85	-4,233.28	2,201.17	1,963.80	237.38	9.273		
11,400.00	7,247.48	11,174.80	7,230.05	122.24	120.83	-89.55	-728.63	-4,333.28	2,201.17	1,958.30	242.87	9.063		
11,500.00	7,247.10	11,274.80	7,229.66	124.98	123.59	-89.55	-729.42	-4,433.27	2,201.17	1,952.80	248.37	8.862		
11,600.00	7,246.72	11,374.80	7,229.27	127.73	126.35	-89.55	-730.20	-4,533.27	2,201.17	1,947.29	253.89	8.670		
11,700.00	7,246.34	11,474.80	7,228.87	130.48	129.11	-89.55	-730.98	-4,633.27	2,201.17	1,941.77	259.41	8.485		
11,800.00	7,245.96	11,574.80	7,228.48	133.24	131.89	-89.54	-731.76	-4,733.26	2,201.17	1,936.24	264.94	8.308		
11,900.00	7,245.58	11,674.80	7,228.09	136.00	134.66	-89.54	-732.55	-4,833.26	2,201.17	1,930.70	270.48	8.138		
12,000.00	7,245.21	11,774.80	7,227.69	138.76	137.44	-89.54	-733.33	-4,933.26	2,201.17	1,925.15	276.02	7.975		
12,100.00	7,244.83	11,874.80	7,227.30	141.53	140.22	-89.54	-734.11	-5,033.25	2,201.17	1,919.60	281.57	7.817		
12,200.00	7,244.45	11,974.80	7,226.91	144.30	143.00	-89.54	-734.89	-5,133.25	2,201.17	1,914.04	287.13	7.666		
12,300.00	7,244.07	12,074.80	7,226.51	147.08	145.79	-89.54	-735.67	-5,233.24	2,201.18	1,908.48	292.70	7.520		
12,400.00	7,243.69	12,174.80	7,226.12	149.86	148.58	-89.54	-736.46	-5,333.24	2,201.18	1,902.91	298.27	7.380		
12,500.00	7,243.31	12,274.80	7,225.73	152.64	151.37	-89.54	-737.24	-5,433.24	2,201.18	1,897.33	303.84	7.244		
12,600.00	7,242.93	12,374.80	7,225.33	155.42	154.17	-89.54	-738.02	-5,533.23	2,201.18	1,891.75	309.42	7.114		
12,700.00	7,242.55	12,474.80	7,224.94	158.21	156.96	-89.54	-738.80	-5,633.23	2,201.18	1,886.17	315.01	6.988		
12,800.00	7,242.17	12,574.80	7,224.55	161.00	159.76	-89.54	-739.59	-5,733.22	2,201.18	1,880.58	320.60	6.866		
12,900.00	7,241.79	12,674.80	7,224.15	163.79	162.56	-89.54	-740.37	-5,833.22	2,201.18	1,874.99	326.19	6.748		
13,000.00	7,241.41	12,774.80	7,223.76	166.58	165.37	-89.54	-741.15	-5,933.22	2,201.18	1,869.39	331.79	6.634		
13,100.00	7,241.03	12,874.80	7,223.37	169.38	168.17	-89.54	-741.93	-6,033.21	2,201.18	1,863.78	337.39	6.524		
13,200.00	7,240.65	12,974.80	7,222.97	172.18	170.98	-89.54	-742.71	-6,133.21	2,201.18	1,858.18	343.00	6.417		
13,300.00	7,240.27	13,074.80	7,222.58	174.98	173.79	-89.54	-743.50	-6,233.21	2,201.18	1,852.57	348.61	6.314		
13,400.00	7,239.89	13,174.80	7,222.19	177.78	176.60	-89.54	-744.28	-6,333.20	2,201.18	1,846.96	354.22	6.214		
13,500.00	7,239.51	13,274.80	7,221.79	180.58	179.41	-89.54	-745.06	-6,433.20	2,201.18	1,841.34	359.84	6.117		
13,600.00	7,239.13	13,374.80	7,221.40	183.39	182.22	-89.54	-745.84	-6,533.19	2,201.18	1,835.72	365.46	6.023		
13,700.00	7,238.75	13,474.80	7,221.01	186.20	185.04	-89.54	-746.63	-6,633.19	2,201.18	1,830.10	371.08	5.932		
13,800.00	7,238.37	13,574.80	7,220.62	189.00	187.85	-89.54	-747.41	-6,733.19	2,201.18	1,824.47	376.71	5.843		
13,900.00	7,237.99	13,674.80	7,220.22	191.81	190.67	-89.54	-748.19	-6,833.18	2,201.18	1,818.85	382.34	5.757		
14,000.00	7,237.62	13,774.80	7,219.83	194.63	193.49	-89.54	-748.97	-6,933.18	2,201.18	1,813.22	387.97	5.674		
14,100.00	7,237.24	13,874.80	7,219.44	197.44	196.31	-89.54	-749.75	-7,033.17	2,201.18	1,807.58	393.60	5.592		
14,200.00	7,236.86	13,974.80	7,219.04	200.25	199.13	-89.54	-750.54	-7,133.17	2,201.18	1,801.95	399.23	5.514		
14,300.00	7,236.48	14,074.80	7,218.65	203.07	201.95	-89.54	-751.32	-7,233.17	2,201.18	1,796.31	404.87	5.437		
14,400.00	7,236.10	14,174.80	7,218.26	205.88	204.77	-89.54	-752.10	-7,333.16	2,201.18	1,790.67	410.51	5.362		
14,500.00	7,235.72	14,274.80	7,217.86	208.70	207.59	-89.54	-752.88	-7,433.16	2,201.18	1,785.03	416.15	5.289		
14,600.00	7,235.34	14,374.80	7,217.47	211.52	210.42	-89.53	-753.67	-7,533.15	2,201.18	1,779.39	421.80	5.219		
14,700.00	7,234.96	14,474.80	7,217.08	214.34	213.24	-89.53	-754.45	-7,633.15	2,201.18	1,773.74	427.44	5.150		
14,800.00	7,234.58	14,574.80	7,216.68	217.16	216.07	-89.53	-755.23	-7,733.15	2,201.18	1,768.09	433.09	5.082		
14,900.00	7,234.20	14,674.80	7,216.29	219.98	218.90	-89.53	-756.01	-7,833.14	2,201.18	1,762.44	438.74	5.017		
15,000.00	7,233.82	14,774.80	7,215.90	222.81	221.72	-89.53	-756.79	-7,933.14	2,201.18	1,756.79	444.39	4.953		
15,100.00	7,233.44	14,874.80	7,215.50	225.63	224.55	-89.53	-757.58	-8,033.14	2,201.19	1,751.14	450.05	4.891		
15,200.00	7,233.06	14,974.80	7,215.11	228.45	227.38	-89.53	-758.36	-8,133.13	2,201.19	1,745.49	455.70	4.830		
15,216.01	7,233.00	14,990.82	7,215.05	228.91	227.84	-89.53	-758.48	-8,149.15	2,201.19	1,744.58	456.61	4.821 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2.00	0.00	3.28	3.28	-179.52	-299.82	-2.50	299.83					
100.00	100.00	102.00	100.00	3.28	3.29	-179.52	-299.82	-2.50	299.83	293.26	6.57	45.636		
200.00	200.00	202.00	200.00	3.34	3.34	-179.52	-299.82	-2.50	299.83	293.15	6.68	44.913 CC, ES		
300.00	299.98	297.98	299.98	3.45	3.44	-173.82	-299.82	-2.50	301.56	294.67	6.89	43.782		
400.00	399.84	388.46	390.45	3.61	3.58	-173.86	-301.16	-2.74	308.25	301.06	7.19	42.847		
500.00	499.45	477.89	479.78	3.82	3.74	-173.86	-305.26	-3.45	321.48	313.89	7.59	42.352		
600.00	598.70	565.90	567.52	4.07	3.94	-173.82	-311.96	-4.61	341.14	333.08	8.06	42.327		
700.00	697.47	651.98	653.09	4.35	4.16	-173.75	-321.09	-6.20	367.09	358.51	8.58	42.773		
800.00	795.62	739.64	739.94	4.67	4.40	-173.66	-332.80	-8.23	399.00	389.86	9.14	43.651		
900.00	893.06	833.02	832.39	5.01	4.69	-173.60	-345.82	-10.49	434.75	425.01	9.74	44.643		
1,000.00	989.64	925.11	923.55	5.38	5.01	-173.57	-358.66	-12.72	473.71	463.35	10.37	45.693		
1,100.00	1,085.42	1,016.01	1,013.53	5.78	5.33	-173.62	-371.33	-14.92	515.40	504.37	11.03	46.738		
1,200.00	1,181.09	1,106.75	1,103.36	6.20	5.67	-173.71	-383.98	-17.11	557.42	545.72	11.70	47.648		
1,300.00	1,276.76	1,202.51	1,193.19	6.65	6.04	-173.79	-396.62	-19.31	599.44	587.02	12.41	48.285		
1,400.00	1,372.43	1,288.23	1,283.01	7.11	6.38	-173.86	-409.27	-21.51	641.46	628.34	13.11	48.912		
1,500.00	1,468.10	1,378.97	1,372.84	7.57	6.75	-173.92	-421.92	-23.70	683.48	669.63	13.85	49.342		
1,600.00	1,563.77	1,469.71	1,462.67	8.05	7.12	-173.97	-434.57	-25.90	725.50	710.90	14.60	49.677		
1,700.00	1,659.44	1,560.45	1,552.50	8.53	7.50	-174.01	-447.22	-28.09	767.52	752.15	15.37	49.935		
1,800.00	1,755.11	1,651.19	1,642.32	9.02	7.89	-174.06	-459.87	-30.29	809.55	793.40	16.15	50.134		
1,900.00	1,850.78	1,741.93	1,732.15	9.52	8.28	-174.09	-472.52	-32.49	851.57	834.64	16.93	50.285		
2,000.00	1,946.45	1,832.67	1,821.98	10.02	8.67	-174.13	-485.17	-34.68	893.59	875.86	17.73	50.399		
2,100.00	2,042.12	1,923.41	1,911.81	10.52	9.07	-174.16	-497.82	-36.88	935.62	917.08	18.53	50.483		
2,200.00	2,137.78	2,014.15	2,001.63	11.03	9.47	-174.19	-510.46	-39.07	977.64	958.30	19.34	50.543		
2,300.00	2,233.45	2,104.89	2,091.46	11.54	9.88	-174.21	-523.11	-41.27	1,019.67	999.51	20.16	50.584		
2,400.00	2,329.12	2,204.37	2,181.29	12.05	10.32	-174.24	-535.76	-43.47	1,061.69	1,040.68	21.02	50.520		
2,500.00	2,424.79	2,286.37	2,271.12	12.56	10.69	-174.26	-548.41	-45.66	1,103.72	1,081.91	21.80	50.624		
2,600.00	2,520.46	2,377.11	2,360.94	13.08	11.10	-174.28	-561.06	-47.86	1,145.74	1,123.11	22.63	50.627		
2,700.00	2,616.13	2,467.85	2,450.77	13.60	11.51	-174.30	-573.71	-50.05	1,187.77	1,164.30	23.46	50.623		
2,800.00	2,711.80	2,558.59	2,540.60	14.12	11.92	-174.31	-586.36	-52.25	1,229.79	1,205.49	24.30	50.612		
2,900.00	2,807.47	2,649.33	2,630.43	14.64	12.34	-174.33	-599.01	-54.45	1,271.81	1,246.68	25.14	50.597		
3,000.00	2,903.14	2,740.07	2,720.25	15.16	12.75	-174.35	-611.66	-56.64	1,313.84	1,287.86	25.98	50.577		
3,100.00	2,998.81	2,830.81	2,810.08	15.68	13.17	-174.36	-624.30	-58.84	1,355.87	1,329.05	26.82	50.554		
3,200.00	3,094.48	2,921.55	2,899.91	16.21	13.58	-174.37	-636.95	-61.03	1,397.89	1,370.23	27.67	50.529		
3,300.00	3,190.15	3,012.29	2,989.74	16.73	14.00	-174.39	-649.60	-63.23	1,439.92	1,411.40	28.51	50.501		
3,400.00	3,285.82	3,103.03	3,079.56	17.26	14.42	-174.40	-662.25	-65.43	1,481.94	1,452.58	29.36	50.473		
3,500.00	3,381.49	3,206.23	3,169.39	17.78	14.90	-174.41	-674.90	-67.62	1,523.97	1,493.70	30.27	50.351		
3,600.00	3,477.16	3,284.51	3,259.22	18.31	15.26	-174.42	-687.55	-69.82	1,565.99	1,534.93	31.06	50.412		
3,700.00	3,572.83	3,375.25	3,349.05	18.84	15.68	-174.43	-700.20	-72.01	1,608.02	1,576.10	31.92	50.381		
3,800.00	3,668.50	3,465.99	3,438.87	19.37	16.10	-174.44	-712.85	-74.21	1,650.04	1,617.27	32.77	50.349		
3,900.00	3,764.17	3,556.73	3,528.70	19.89	16.52	-174.45	-725.50	-76.41	1,692.07	1,658.44	33.63	50.317		
4,000.00	3,859.84	3,647.47	3,618.53	20.42	16.94	-174.46	-738.14	-78.60	1,734.09	1,699.61	34.49	50.285		
4,100.00	3,955.51	3,738.21	3,708.36	20.95	17.36	-174.47	-750.79	-80.80	1,776.12	1,740.78	35.34	50.254		
4,200.00	4,051.18	3,828.95	3,798.18	21.48	17.79	-174.48	-763.44	-82.99	1,818.15	1,781.94	36.20	50.222		
4,300.00	4,146.85	3,919.69	3,888.01	22.01	18.21	-174.48	-776.09	-85.19	1,860.17	1,823.11	37.06	50.191		
4,400.00	4,242.52	4,010.43	3,977.84	22.55	18.63	-174.49	-788.74	-87.39	1,902.20	1,864.27	37.92	50.159		
4,500.00	4,338.19	4,101.18	4,067.66	23.08	19.06	-174.50	-801.39	-89.58	1,944.22	1,905.44	38.78	50.129		
4,600.00	4,433.86	4,208.08	4,157.49	23.61	19.56	-174.50	-814.04	-91.78	1,986.25	1,946.53	39.72	50.007		
4,700.00	4,529.53	4,282.66	4,247.32	24.14	19.91	-174.51	-826.69	-93.97	2,028.27	1,987.76	40.51	50.068		
4,800.00	4,625.19	4,373.40	4,337.15	24.67	20.33	-174.52	-839.34	-96.17	2,070.30	2,028.93	41.37	50.039		
4,900.00	4,720.86	4,464.14	4,426.97	25.21	20.76	-174.52	-851.98	-98.37	2,112.33	2,070.09	42.24	50.010		
5,000.00	4,816.53	4,554.88	4,516.80	25.74	21.18	-174.53	-864.63	-100.56	2,154.35	2,111.25	43.10	49.981		
5,100.00	4,912.20	4,645.62	4,606.63	26.27	21.61	-174.53	-877.28	-102.76	2,196.38	2,152.41	43.97	49.953		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	4,736.36	4,696.46	26.80	22.03	-174.54	-889.93	-104.95	2,238.40	2,193.57	44.83	49.925		
5,300.00	5,103.54	4,827.10	4,786.28	27.34	22.46	-174.54	-902.58	-107.15	2,280.43	2,234.73	45.70	49.898		
5,400.00	5,199.22	4,917.84	4,876.12	27.87	22.88	-174.56	-915.23	-109.35	2,322.44	2,275.87	46.57	49.871		
5,500.00	5,295.46	5,009.42	4,966.78	28.39	23.31	-174.64	-928.00	-111.56	2,362.59	2,315.16	47.43	49.807		
5,600.00	5,392.60	5,102.34	5,058.76	28.89	23.75	-174.70	-940.95	-113.81	2,399.54	2,351.24	48.30	49.680		
5,700.00	5,490.50	5,203.51	5,151.96	29.37	24.23	-174.75	-954.07	-116.09	2,433.23	2,384.03	49.19	49.461		
5,800.00	5,589.05	5,308.26	5,246.26	29.83	24.72	-174.79	-967.35	-118.39	2,463.63	2,413.53	50.10	49.176		
5,900.00	5,688.14	5,388.00	5,341.54	30.26	25.09	-174.81	-980.77	-120.72	2,490.70	2,439.82	50.88	48.953		
6,000.00	5,787.63	5,485.13	5,437.69	30.68	25.55	-174.81	-994.31	-123.07	2,514.41	2,462.68	51.73	48.608		
6,100.00	5,887.41	5,583.02	5,534.60	31.07	26.01	-174.80	-1,007.95	-125.44	2,534.73	2,482.16	52.57	48.216		
6,200.00	5,987.36	5,681.54	5,632.14	31.44	26.48	-174.78	-1,021.69	-127.83	2,551.64	2,498.24	53.40	47.781		
6,300.00	6,087.36	5,780.51	5,730.10	31.80	26.94	179.53	-1,035.48	-130.22	2,565.80	2,511.57	54.23	47.316		
6,400.00	6,187.36	5,879.50	5,828.10	32.15	27.41	179.59	-1,049.28	-132.62	2,579.73	2,524.67	55.05	46.858		
6,500.00	6,287.36	5,978.49	5,926.10	32.51	27.88	179.64	-1,063.08	-135.01	2,593.65	2,537.77	55.88	46.412		
6,600.00	6,387.36	6,077.49	6,024.10	32.87	28.34	179.70	-1,076.88	-137.41	2,607.58	2,550.87	56.71	45.978		
6,700.00	6,487.36	6,176.48	6,122.10	33.23	28.81	179.75	-1,090.68	-139.81	2,621.52	2,563.97	57.55	45.555		
6,800.00	6,587.36	6,275.48	6,220.09	33.59	29.28	179.80	-1,104.48	-142.20	2,635.45	2,577.07	58.38	45.143		
6,900.00	6,687.26	6,374.45	6,318.07	33.95	29.74	-88.97	-1,118.28	-144.60	2,649.36	2,590.15	59.21	44.748		
7,000.00	6,785.58	6,472.23	6,414.87	34.31	30.20	-88.05	-1,131.91	-146.96	2,663.03	2,603.01	60.03	44.365		
7,100.00	6,879.94	6,569.32	6,510.83	34.65	30.66	-87.43	-1,145.44	-152.04	2,676.36	2,615.50	60.86	43.976		
7,200.00	6,968.01	6,671.32	6,609.75	34.97	31.13	-86.91	-1,159.52	-171.98	2,689.14	2,627.38	61.76	43.542		
7,300.00	7,047.61	6,778.93	6,709.26	35.27	31.59	-86.49	-1,173.84	-210.00	2,701.05	2,638.32	62.73	43.056		
7,400.00	7,116.80	6,892.87	6,806.09	35.54	32.04	-86.17	-1,187.96	-268.06	2,711.74	2,647.92	63.82	42.490		
7,500.00	7,173.86	7,013.63	6,895.77	35.81	32.47	-85.97	-1,201.26	-347.56	2,720.89	2,655.79	65.09	41.799		
7,600.00	7,217.38	7,141.30	6,972.61	36.17	32.93	-85.86	-1,212.94	-448.58	2,728.15	2,661.49	66.66	40.926		
7,700.00	7,246.31	7,275.32	7,030.12	36.80	33.60	-85.84	-1,222.07	-569.02	2,733.22	2,664.57	68.65	39.815		
7,800.00	7,259.92	7,414.28	7,062.04	37.72	34.75	-85.89	-1,227.73	-703.86	2,735.85	2,664.73	71.11	38.471		
7,900.00	7,260.77	7,538.42	7,066.83	38.86	36.16	-85.94	-1,229.48	-827.78	2,736.22	2,662.42	73.81	37.073		
8,000.00	7,260.39	7,638.42	7,066.44	40.19	37.50	-85.94	-1,230.29	-927.78	2,736.25	2,659.72	76.53	35.752		
8,100.00	7,260.01	7,738.42	7,066.05	41.67	39.01	-85.94	-1,231.10	-1,027.77	2,736.28	2,656.70	79.58	34.384		
8,200.00	7,259.63	7,838.42	7,065.65	43.30	40.67	-85.93	-1,231.91	-1,127.77	2,736.31	2,653.41	82.90	33.005		
8,300.00	7,259.25	7,938.42	7,065.26	45.05	42.47	-85.93	-1,232.72	-1,227.76	2,736.35	2,649.87	86.48	31.642		
8,400.00	7,258.87	8,038.42	7,064.87	46.91	44.37	-85.93	-1,233.53	-1,327.76	2,736.38	2,646.10	90.27	30.312		
8,500.00	7,258.49	8,138.42	7,064.47	48.87	46.38	-85.93	-1,234.35	-1,427.75	2,736.41	2,642.15	94.26	29.031		
8,600.00	7,258.11	8,238.42	7,064.08	50.92	48.47	-85.93	-1,235.16	-1,527.75	2,736.44	2,638.02	98.41	27.805		
8,700.00	7,257.73	8,338.42	7,063.69	53.04	50.64	-85.93	-1,235.97	-1,627.75	2,736.47	2,633.75	102.72	26.641		
8,800.00	7,257.35	8,438.42	7,063.29	55.23	52.87	-85.93	-1,236.78	-1,727.74	2,736.50	2,629.35	107.15	25.539		
8,900.00	7,256.97	8,538.42	7,062.90	57.47	55.16	-85.93	-1,237.59	-1,827.74	2,736.53	2,624.83	111.70	24.499		
9,000.00	7,256.59	8,638.42	7,062.51	59.77	57.51	-85.93	-1,238.40	-1,927.73	2,736.56	2,620.21	116.35	23.520		
9,100.00	7,256.21	8,738.42	7,062.11	62.12	59.90	-85.93	-1,239.22	-2,027.73	2,736.59	2,615.50	121.09	22.599		
9,200.00	7,255.83	8,838.42	7,061.72	64.50	62.32	-85.93	-1,240.03	-2,127.73	2,736.62	2,610.71	125.91	21.734		
9,300.00	7,255.45	8,938.42	7,061.33	66.93	64.79	-85.93	-1,240.84	-2,227.72	2,736.65	2,605.85	130.81	20.921		
9,400.00	7,255.07	9,038.42	7,060.94	69.38	67.28	-85.93	-1,241.65	-2,327.72	2,736.68	2,600.92	135.76	20.158		
9,500.00	7,254.69	9,138.42	7,060.54	71.87	69.80	-85.93	-1,242.46	-2,427.71	2,736.71	2,595.94	140.77	19.441		
9,600.00	7,254.31	9,238.42	7,060.15	74.38	72.35	-85.93	-1,243.27	-2,527.71	2,736.74	2,590.91	145.84	18.766		
9,700.00	7,253.93	9,338.42	7,059.76	76.92	74.92	-85.93	-1,244.09	-2,627.71	2,736.77	2,585.83	150.94	18.131		
9,800.00	7,253.55	9,438.42	7,059.36	79.48	77.51	-85.93	-1,244.90	-2,727.70	2,736.80	2,580.71	156.09	17.533		
9,900.00	7,253.18	9,538.42	7,058.97	82.06	80.12	-85.93	-1,245.71	-2,827.70	2,736.84	2,575.56	161.28	16.969		
10,000.00	7,252.80	9,638.42	7,058.58	84.65	82.74	-85.93	-1,246.52	-2,927.69	2,736.87	2,570.37	166.50	16.438		
10,100.00	7,252.42	9,738.42	7,058.18	87.27	85.38	-85.93	-1,247.33	-3,027.69	2,736.90	2,565.15	171.75	15.935		
10,200.00	7,252.04	9,838.42	7,057.79	89.89	88.04	-85.93	-1,248.15	-3,127.69	2,736.93	2,559.90	177.03	15.460		
10,300.00	7,251.66	9,938.42	7,057.40	92.54	90.70	-85.93	-1,248.96	-3,227.68	2,736.96	2,554.62	182.33	15.011		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,251.28	10,038.42	7,057.00	95.19	93.38	-85.93	-1,249.77	-3,327.68	2,736.99	2,549.33	187.66	14.585		
10,500.00	7,250.90	10,138.42	7,056.61	97.86	96.07	-85.93	-1,250.58	-3,427.67	2,737.02	2,544.01	193.01	14.181		
10,600.00	7,250.52	10,238.42	7,056.22	100.53	98.77	-85.93	-1,251.39	-3,527.67	2,737.05	2,538.67	198.38	13.797		
10,700.00	7,250.14	10,338.42	7,055.82	103.22	101.47	-85.93	-1,252.20	-3,627.67	2,737.08	2,533.31	203.77	13.432		
10,800.00	7,249.76	10,438.42	7,055.43	105.91	104.19	-85.93	-1,253.02	-3,727.66	2,737.11	2,527.94	209.17	13.086		
10,900.00	7,249.38	10,538.42	7,055.04	108.62	106.91	-85.93	-1,253.83	-3,827.66	2,737.14	2,522.55	214.59	12.755		
11,000.00	7,249.00	10,638.42	7,054.64	111.33	109.64	-85.93	-1,254.64	-3,927.65	2,737.17	2,517.15	220.02	12.440		
11,100.00	7,248.62	10,738.42	7,054.25	114.04	112.37	-85.93	-1,255.45	-4,027.65	2,737.20	2,511.73	225.47	12.140		
11,200.00	7,248.24	10,838.42	7,053.86	116.77	115.11	-85.93	-1,256.26	-4,127.64	2,737.23	2,506.31	230.93	11.853		
11,300.00	7,247.86	10,938.42	7,053.47	119.50	117.86	-85.93	-1,257.07	-4,227.64	2,737.26	2,500.87	236.40	11.579		
11,400.00	7,247.48	11,038.42	7,053.07	122.24	120.61	-85.93	-1,257.89	-4,327.64	2,737.30	2,495.42	241.88	11.317		
11,500.00	7,247.10	11,138.42	7,052.68	124.98	123.37	-85.93	-1,258.70	-4,427.63	2,737.33	2,489.95	247.37	11.066		
11,600.00	7,246.72	11,238.42	7,052.29	127.73	126.13	-85.93	-1,259.51	-4,527.63	2,737.36	2,484.48	252.87	10.825		
11,700.00	7,246.34	11,338.42	7,051.89	130.48	128.90	-85.93	-1,260.32	-4,627.62	2,737.39	2,479.01	258.38	10.594		
11,800.00	7,245.96	11,438.42	7,051.50	133.24	131.67	-85.93	-1,261.13	-4,727.62	2,737.42	2,473.52	263.90	10.373		
11,900.00	7,245.58	11,538.42	7,051.11	136.00	134.44	-85.93	-1,261.94	-4,827.62	2,737.45	2,468.02	269.42	10.160		
12,000.00	7,245.21	11,638.42	7,050.71	138.76	137.22	-85.93	-1,262.76	-4,927.61	2,737.48	2,462.52	274.96	9.956		
12,100.00	7,244.83	11,738.42	7,050.32	141.53	140.00	-85.93	-1,263.57	-5,027.61	2,737.51	2,457.01	280.50	9.760		
12,200.00	7,244.45	11,838.42	7,049.93	144.30	142.78	-85.93	-1,264.38	-5,127.60	2,737.54	2,451.50	286.04	9.570		
12,300.00	7,244.07	11,938.42	7,049.53	147.08	145.57	-85.92	-1,265.19	-5,227.60	2,737.57	2,445.98	291.59	9.388		
12,400.00	7,243.69	12,038.42	7,049.14	149.86	148.35	-85.92	-1,266.00	-5,327.60	2,737.60	2,440.45	297.15	9.213		
12,500.00	7,243.31	12,138.42	7,048.75	152.64	151.15	-85.92	-1,266.81	-5,427.59	2,737.63	2,434.92	302.71	9.044		
12,600.00	7,242.93	12,238.42	7,048.35	155.42	153.94	-85.92	-1,267.63	-5,527.59	2,737.66	2,429.38	308.28	8.880		
12,700.00	7,242.55	12,338.42	7,047.96	158.21	156.74	-85.92	-1,268.44	-5,627.58	2,737.69	2,423.84	313.85	8.723		
12,800.00	7,242.17	12,438.42	7,047.57	161.00	159.53	-85.92	-1,269.25	-5,727.58	2,737.72	2,418.29	319.43	8.571		
12,900.00	7,241.79	12,538.42	7,047.17	163.79	162.33	-85.92	-1,270.06	-5,827.58	2,737.76	2,412.74	325.01	8.424		
13,000.00	7,241.41	12,638.42	7,046.78	166.58	165.14	-85.92	-1,270.87	-5,927.57	2,737.79	2,407.19	330.60	8.281		
13,100.00	7,241.03	12,738.42	7,046.39	169.38	167.94	-85.92	-1,271.69	-6,027.57	2,737.82	2,401.63	336.19	8.144		
13,200.00	7,240.65	12,838.42	7,045.99	172.18	170.75	-85.92	-1,272.50	-6,127.56	2,737.85	2,396.07	341.78	8.011		
13,300.00	7,240.27	12,938.42	7,045.60	174.98	173.55	-85.92	-1,273.31	-6,227.56	2,737.88	2,390.50	347.38	7.882		
13,400.00	7,239.89	13,038.42	7,045.21	177.78	176.36	-85.92	-1,274.12	-6,327.55	2,737.91	2,384.93	352.98	7.757		
13,500.00	7,239.51	13,138.42	7,044.82	180.58	179.17	-85.92	-1,274.93	-6,427.55	2,737.94	2,379.36	358.58	7.635		
13,600.00	7,239.13	13,238.42	7,044.42	183.39	181.99	-85.92	-1,275.74	-6,527.55	2,737.97	2,373.78	364.19	7.518		
13,700.00	7,238.75	13,338.42	7,044.03	186.20	184.80	-85.92	-1,276.56	-6,627.54	2,738.00	2,368.20	369.80	7.404		
13,800.00	7,238.37	13,438.42	7,043.64	189.00	187.62	-85.92	-1,277.37	-6,727.54	2,738.03	2,362.62	375.41	7.293		
13,900.00	7,237.99	13,538.42	7,043.24	191.81	190.43	-85.92	-1,278.18	-6,827.53	2,738.06	2,357.04	381.02	7.186		
14,000.00	7,237.62	13,638.42	7,042.85	194.63	193.25	-85.92	-1,278.99	-6,927.53	2,738.09	2,351.45	386.64	7.082		
14,100.00	7,237.24	13,738.42	7,042.46	197.44	196.07	-85.92	-1,279.80	-7,027.53	2,738.12	2,345.86	392.26	6.980		
14,200.00	7,236.86	13,838.42	7,042.06	200.25	198.89	-85.92	-1,280.61	-7,127.52	2,738.15	2,340.27	397.88	6.882		
14,300.00	7,236.48	13,938.42	7,041.67	203.07	201.71	-85.92	-1,281.43	-7,227.52	2,738.18	2,334.68	403.51	6.786		
14,400.00	7,236.10	14,038.42	7,041.28	205.88	204.53	-85.92	-1,282.24	-7,327.51	2,738.21	2,329.08	409.14	6.693		
14,500.00	7,235.72	14,138.42	7,040.88	208.70	207.36	-85.92	-1,283.05	-7,427.51	2,738.25	2,323.48	414.76	6.602		
14,600.00	7,235.34	14,238.42	7,040.49	211.52	210.18	-85.92	-1,283.86	-7,527.51	2,738.28	2,317.88	420.39	6.514		
14,700.00	7,234.96	14,338.42	7,040.10	214.34	213.00	-85.92	-1,284.67	-7,627.50	2,738.31	2,312.28	426.03	6.428		
14,800.00	7,234.58	14,438.42	7,039.70	217.16	215.83	-85.92	-1,285.48	-7,727.50	2,738.34	2,306.68	431.66	6.344		
14,900.00	7,234.20	14,538.42	7,039.31	219.98	218.66	-85.92	-1,286.30	-7,827.49	2,738.37	2,301.07	437.30	6.262		
15,000.00	7,233.82	14,638.42	7,038.92	222.81	221.48	-85.92	-1,287.11	-7,927.49	2,738.40	2,295.46	442.94	6.182		
15,100.00	7,233.44	14,738.42	7,038.52	225.63	224.31	-85.92	-1,287.92	-8,027.49	2,738.43	2,289.85	448.57	6.105		
15,200.00	7,233.06	14,838.42	7,038.13	228.45	227.14	-85.92	-1,288.73	-8,127.48	2,738.46	2,284.24	454.22	6.029		
15,216.01	7,233.00	14,854.43	7,038.07	228.91	227.59	-85.92	-1,288.86	-8,143.49	2,738.47	2,283.35	455.12	6.017 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1.00	0.00	3.28	3.28	-179.56	-219.66	-1.67	219.67					
100.00	100.00	101.00	100.00	3.28	3.28	-179.56	-219.66	-1.67	219.67	213.10	6.57	33.437		
200.00	200.00	201.00	200.00	3.34	3.34	-179.56	-219.66	-1.67	219.67	213.00	6.67	32.910	CC, ES	
300.00	299.98	301.02	299.98	3.45	3.45	-173.88	-219.66	-1.67	221.41	214.51	6.89	32.126		
400.00	399.84	401.16	399.84	3.61	3.61	-174.01	-219.66	-1.67	226.61	219.40	7.21	31.415		
500.00	499.45	501.55	499.45	3.82	3.81	-174.21	-219.66	-1.67	235.28	227.65	7.63	30.850		
600.00	598.70	596.33	597.33	4.07	4.03	-174.47	-219.71	-1.68	247.46	239.35	8.10	30.541		
700.00	697.47	696.88	697.86	4.35	4.26	-174.63	-221.61	-2.12	265.09	256.48	8.62	30.761		
800.00	795.62	775.61	776.46	4.67	4.50	-174.69	-226.16	-3.19	289.11	279.92	9.18	31.489		
900.00	893.06	862.03	862.57	5.01	4.76	-174.65	-233.17	-4.83	319.32	309.55	9.78	32.665		
1,000.00	989.64	951.38	951.40	5.38	5.04	-174.55	-242.60	-7.03	355.11	344.70	10.40	34.137		
1,100.00	1,085.42	1,043.55	1,043.00	5.78	5.35	-174.53	-252.55	-9.35	393.89	382.83	11.07	35.597		
1,200.00	1,181.09	1,135.58	1,134.46	6.20	5.67	-174.55	-262.48	-11.67	433.02	421.28	11.74	36.884		
1,300.00	1,276.76	1,227.60	1,225.92	6.65	6.01	-174.57	-272.42	-14.00	472.15	459.71	12.44	37.948		
1,400.00	1,372.43	1,319.63	1,317.38	7.11	6.35	-174.58	-282.35	-16.32	511.28	498.12	13.17	38.834		
1,500.00	1,468.10	1,411.66	1,408.84	7.57	6.71	-174.59	-292.29	-18.64	550.41	536.50	13.91	39.575		
1,600.00	1,563.77	1,503.68	1,500.30	8.05	7.07	-174.60	-302.22	-20.96	589.54	574.88	14.67	40.197		
1,700.00	1,659.44	1,604.29	1,591.75	8.53	7.48	-174.61	-312.16	-23.28	628.67	613.20	15.47	40.634		
1,800.00	1,755.11	1,687.73	1,683.21	9.02	7.82	-174.62	-322.09	-25.60	667.80	651.58	16.22	41.171		
1,900.00	1,850.78	1,779.76	1,774.67	9.52	8.20	-174.62	-332.03	-27.92	706.93	689.92	17.01	41.553		
2,000.00	1,946.45	1,871.79	1,866.13	10.02	8.59	-174.63	-341.96	-30.25	746.06	728.25	17.81	41.880		
2,100.00	2,042.12	1,963.81	1,957.59	10.52	8.98	-174.64	-351.89	-32.57	785.19	766.57	18.62	42.163		
2,200.00	2,137.78	2,055.84	2,049.05	11.03	9.37	-174.64	-361.83	-34.89	824.32	804.88	19.44	42.408		
2,300.00	2,233.45	2,147.87	2,140.51	11.54	9.76	-174.64	-371.76	-37.21	863.45	843.19	20.26	42.621		
2,400.00	2,329.12	2,239.89	2,231.97	12.05	10.16	-174.65	-381.70	-39.53	902.58	881.50	21.08	42.808		
2,500.00	2,424.79	2,331.92	2,323.43	12.56	10.56	-174.65	-391.63	-41.85	941.71	919.79	21.91	42.971		
2,600.00	2,520.46	2,423.95	2,414.89	13.08	10.96	-174.66	-401.57	-44.18	980.84	958.09	22.75	43.115		
2,700.00	2,616.13	2,515.97	2,506.35	13.60	11.36	-174.66	-411.50	-46.50	1,019.97	996.38	23.59	43.243		
2,800.00	2,711.80	2,608.00	2,597.81	14.12	11.77	-174.66	-421.44	-48.82	1,059.10	1,034.67	24.43	43.356		
2,900.00	2,807.47	2,700.03	2,689.26	14.64	12.18	-174.66	-431.37	-51.14	1,098.23	1,072.96	25.27	43.456		
3,000.00	2,903.14	2,807.95	2,780.72	15.16	12.65	-174.67	-441.31	-53.46	1,137.36	1,111.17	26.19	43.432		
3,100.00	2,998.81	2,884.08	2,872.18	15.68	12.99	-174.67	-451.24	-55.78	1,176.49	1,149.52	26.97	43.626		
3,200.00	3,094.48	2,976.10	2,963.64	16.21	13.40	-174.67	-461.18	-58.10	1,215.62	1,187.80	27.82	43.698		
3,300.00	3,190.15	3,068.13	3,055.10	16.73	13.81	-174.67	-471.11	-60.43	1,254.75	1,226.08	28.67	43.763		
3,400.00	3,285.82	3,160.16	3,146.56	17.26	14.22	-174.68	-481.05	-62.75	1,293.88	1,264.35	29.53	43.821		
3,500.00	3,381.49	3,252.18	3,238.02	17.78	14.64	-174.68	-490.98	-65.07	1,333.01	1,302.62	30.38	43.873		
3,600.00	3,477.16	3,344.21	3,329.48	18.31	15.05	-174.68	-500.92	-67.39	1,372.14	1,340.90	31.24	43.921		
3,700.00	3,572.83	3,436.24	3,420.94	18.84	15.46	-174.68	-510.85	-69.71	1,411.27	1,379.17	32.10	43.964		
3,800.00	3,668.50	3,528.26	3,512.40	19.37	15.88	-174.68	-520.79	-72.03	1,450.40	1,417.44	32.96	44.003		
3,900.00	3,764.17	3,620.29	3,603.86	19.89	16.29	-174.68	-530.72	-74.36	1,489.53	1,455.70	33.82	44.039		
4,000.00	3,859.84	3,712.32	3,695.31	20.42	16.71	-174.69	-540.66	-76.68	1,528.66	1,493.97	34.69	44.071		
4,100.00	3,955.51	3,804.34	3,786.77	20.95	17.12	-174.69	-550.59	-79.00	1,567.79	1,532.24	35.55	44.101		
4,200.00	4,051.18	3,903.63	3,878.23	21.48	17.57	-174.69	-560.53	-81.32	1,606.91	1,570.47	36.45	44.089		
4,300.00	4,146.85	3,988.40	3,969.69	22.01	17.96	-174.69	-570.46	-83.64	1,646.04	1,608.76	37.28	44.153		
4,400.00	4,242.52	4,080.42	4,061.15	22.55	18.37	-174.69	-580.40	-85.96	1,685.17	1,647.03	38.15	44.175		
4,500.00	4,338.19	4,172.45	4,152.61	23.08	18.79	-174.69	-590.33	-88.28	1,724.30	1,685.29	39.02	44.196		
4,600.00	4,433.86	4,264.47	4,244.07	23.61	19.21	-174.69	-600.27	-90.61	1,763.43	1,723.55	39.88	44.215		
4,700.00	4,529.53	4,356.50	4,335.53	24.14	19.63	-174.69	-610.20	-92.93	1,802.56	1,761.81	40.75	44.232		
4,800.00	4,625.19	4,448.53	4,426.99	24.67	20.05	-174.69	-620.14	-95.25	1,841.69	1,800.07	41.62	44.248		
4,900.00	4,720.86	4,540.55	4,518.45	25.21	20.47	-174.70	-630.07	-97.57	1,880.82	1,838.33	42.49	44.263		
5,000.00	4,816.53	4,632.58	4,609.91	25.74	20.88	-174.70	-640.01	-99.89	1,919.95	1,876.59	43.36	44.276		
5,100.00	4,912.20	4,724.61	4,701.37	26.27	21.30	-174.70	-649.94	-102.21	1,959.08	1,914.85	44.23	44.288		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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)			
5,200.00	5,007.87	4,816.63	4,792.82	26.80	21.72	-174.70	-659.88	-104.54	1,998.21	1,953.11	45.11	44.300		
5,300.00	5,103.54	4,908.66	4,884.28	27.34	22.14	-174.70	-669.81	-106.86	2,037.34	1,991.36	45.98	44.310		
5,400.00	5,199.22	5,000.69	4,975.75	27.87	22.56	-174.71	-679.75	-109.18	2,076.46	2,029.61	46.85	44.319		
5,500.00	5,295.46	5,106.50	5,067.98	28.39	23.05	-174.78	-689.77	-111.52	2,113.69	2,065.91	47.78	44.237		
5,600.00	5,392.60	5,187.54	5,161.45	28.89	23.42	-174.83	-699.92	-113.89	2,147.67	2,099.07	48.59	44.197		
5,700.00	5,490.50	5,282.71	5,256.02	29.37	23.85	-174.86	-710.19	-116.29	2,178.36	2,128.90	49.46	44.044		
5,800.00	5,589.05	5,378.88	5,351.60	29.83	24.29	-174.88	-720.58	-118.72	2,205.72	2,155.40	50.32	43.833		
5,900.00	5,688.14	5,475.94	5,448.06	30.26	24.74	-174.89	-731.05	-121.17	2,229.73	2,178.55	51.18	43.568		
6,000.00	5,787.63	5,573.77	5,545.29	30.68	25.18	-174.88	-741.61	-123.64	2,250.35	2,198.32	52.03	43.254		
6,100.00	5,887.41	5,672.25	5,643.17	31.07	25.63	-174.86	-752.25	-126.12	2,267.55	2,214.69	52.87	42.892		
6,200.00	5,987.36	5,771.27	5,741.57	31.44	26.09	-174.83	-762.94	-128.62	2,281.33	2,227.63	53.70	42.485		
6,300.00	6,087.36	5,870.62	5,840.32	31.80	26.54	179.50	-773.66	-131.12	2,292.34	2,237.82	54.52	42.047		
6,400.00	6,187.36	5,970.01	5,939.09	32.15	27.00	179.56	-784.39	-133.63	2,303.12	2,247.78	55.34	41.616		
6,500.00	6,287.36	6,069.39	6,037.86	32.51	27.45	179.63	-795.12	-136.14	2,313.90	2,257.73	56.17	41.197		
6,600.00	6,387.36	6,168.77	6,136.63	32.87	27.91	179.69	-805.85	-138.65	2,324.68	2,267.69	56.99	40.788		
6,700.00	6,487.36	6,268.16	6,235.40	33.23	28.37	179.75	-816.58	-141.15	2,335.47	2,277.65	57.82	40.390		
6,800.00	6,587.36	6,367.54	6,334.17	33.59	28.82	179.82	-827.31	-143.66	2,346.26	2,287.61	58.65	40.003		
6,900.00	6,687.26	6,466.90	6,432.92	33.95	29.28	-89.14	-838.04	-146.17	2,357.03	2,297.55	59.47	39.631		
7,000.00	6,785.58	6,565.17	6,530.58	34.31	29.73	-88.54	-848.64	-148.82	2,367.61	2,307.32	60.29	39.270		
7,100.00	6,879.94	6,664.68	6,628.60	34.65	30.18	-88.11	-859.38	-161.42	2,377.91	2,316.78	61.14	38.895		
7,200.00	6,968.01	6,767.69	6,726.71	34.97	30.63	-87.73	-870.25	-190.46	2,387.72	2,325.70	62.02	38.496		
7,300.00	7,047.61	6,874.53	6,822.16	35.27	31.07	-87.42	-880.98	-236.96	2,396.78	2,333.80	62.98	38.059		
7,400.00	7,116.80	6,985.42	6,911.59	35.54	31.49	-87.18	-891.21	-301.48	2,404.83	2,340.79	64.04	37.554		
7,500.00	7,173.86	7,100.39	6,991.10	35.81	31.92	-87.01	-900.51	-383.78	2,411.63	2,346.34	65.29	36.937		
7,600.00	7,217.38	7,219.24	7,056.45	36.17	32.46	-86.91	-908.41	-482.54	2,416.97	2,350.12	66.85	36.155		
7,700.00	7,246.31	7,341.48	7,103.43	36.80	33.31	-86.88	-914.43	-595.02	2,420.64	2,351.84	68.80	35.185		
7,800.00	7,259.92	7,466.26	7,128.48	37.72	34.53	-86.92	-918.15	-717.00	2,422.51	2,351.34	71.17	34.038		
7,900.00	7,260.77	7,580.72	7,131.80	38.86	35.89	-86.95	-919.45	-831.33	2,422.74	2,348.98	73.76	32.848		
8,000.00	7,260.39	7,680.72	7,131.37	40.19	37.27	-86.95	-920.23	-931.33	2,422.73	2,346.22	76.51	31.665		
8,100.00	7,260.01	7,780.72	7,130.94	41.67	38.81	-86.95	-921.01	-1,031.32	2,422.73	2,343.16	79.57	30.446		
8,200.00	7,259.63	7,880.72	7,130.50	43.30	40.50	-86.94	-921.79	-1,131.32	2,422.73	2,339.81	82.92	29.218		
8,300.00	7,259.25	7,980.72	7,130.07	45.05	42.32	-86.94	-922.56	-1,231.31	2,422.73	2,336.22	86.51	28.005		
8,400.00	7,258.87	8,080.72	7,129.63	46.91	44.24	-86.94	-923.34	-1,331.31	2,422.73	2,332.41	90.32	26.824		
8,500.00	7,258.49	8,180.72	7,129.20	48.87	46.27	-86.94	-924.12	-1,431.31	2,422.73	2,328.40	94.32	25.686		
8,600.00	7,258.11	8,280.72	7,128.77	50.92	48.38	-86.94	-924.90	-1,531.30	2,422.72	2,324.23	98.49	24.598		
8,700.00	7,257.73	8,380.72	7,128.33	53.04	50.56	-86.94	-925.67	-1,631.30	2,422.72	2,319.91	102.81	23.565		
8,800.00	7,257.35	8,480.72	7,127.90	55.23	52.81	-86.94	-926.45	-1,731.29	2,422.72	2,315.46	107.26	22.588		
8,900.00	7,256.97	8,580.72	7,127.46	57.47	55.11	-86.94	-927.23	-1,831.29	2,422.72	2,310.90	111.82	21.666		
9,000.00	7,256.59	8,680.72	7,127.03	59.77	57.46	-86.93	-928.01	-1,931.29	2,422.72	2,306.23	116.48	20.799		
9,100.00	7,256.21	8,780.72	7,126.60	62.12	59.86	-86.93	-928.78	-2,031.28	2,422.72	2,301.48	121.24	19.983		
9,200.00	7,255.83	8,880.72	7,126.16	64.50	62.30	-86.93	-929.56	-2,131.28	2,422.71	2,296.65	126.07	19.217		
9,300.00	7,255.45	8,980.72	7,125.73	66.93	64.77	-86.93	-930.34	-2,231.27	2,422.71	2,291.74	130.97	18.498		
9,400.00	7,255.07	9,080.72	7,125.29	69.38	67.27	-86.93	-931.12	-2,331.27	2,422.71	2,286.77	135.94	17.822		
9,500.00	7,254.69	9,180.72	7,124.86	71.87	69.80	-86.93	-931.89	-2,431.27	2,422.71	2,281.75	140.96	17.187		
9,600.00	7,254.31	9,280.72	7,124.43	74.38	72.36	-86.93	-932.67	-2,531.26	2,422.71	2,276.68	146.03	16.590		
9,700.00	7,253.93	9,380.72	7,123.99	76.92	74.93	-86.93	-933.45	-2,631.26	2,422.71	2,271.56	151.15	16.029		
9,800.00	7,253.55	9,480.72	7,123.56	79.48	77.53	-86.92	-934.22	-2,731.25	2,422.70	2,266.40	156.31	15.500		
9,900.00	7,253.18	9,580.72	7,123.12	82.06	80.14	-86.92	-935.00	-2,831.25	2,422.70	2,261.20	161.50	15.001		
10,000.00	7,252.80	9,680.72	7,122.69	84.65	82.77	-86.92	-935.78	-2,931.25	2,422.70	2,255.97	166.73	14.531		
10,100.00	7,252.42	9,780.72	7,122.26	87.27	85.42	-86.92	-936.56	-3,031.24	2,422.70	2,250.71	171.99	14.086		
10,200.00	7,252.04	9,880.72	7,121.82	89.89	88.08	-86.92	-937.33	-3,131.24	2,422.70	2,245.42	177.28	13.666		
10,300.00	7,251.66	9,980.72	7,121.39	92.54	90.75	-86.92	-938.11	-3,231.23	2,422.70	2,240.11	182.59	13.269		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,251.28	10,080.72	7,120.96	95.19	93.43	-86.92	-938.89	-3,331.23	2,422.69	2,234.77	187.92	12.892		
10,500.00	7,250.90	10,180.72	7,120.52	97.86	96.12	-86.92	-939.67	-3,431.23	2,422.69	2,229.41	193.28	12.535		
10,600.00	7,250.52	10,280.72	7,120.09	100.53	98.82	-86.91	-940.44	-3,531.22	2,422.69	2,224.03	198.66	12.195		
10,700.00	7,250.14	10,380.72	7,119.65	103.22	101.53	-86.91	-941.22	-3,631.22	2,422.69	2,218.64	204.05	11.873		
10,800.00	7,249.76	10,480.72	7,119.22	105.91	104.25	-86.91	-942.00	-3,731.21	2,422.69	2,213.22	209.46	11.566		
10,900.00	7,249.38	10,580.72	7,118.79	108.62	106.97	-86.91	-942.78	-3,831.21	2,422.69	2,207.80	214.89	11.274		
11,000.00	7,249.00	10,680.72	7,118.35	111.33	109.70	-86.91	-943.55	-3,931.21	2,422.68	2,202.35	220.33	10.996		
11,100.00	7,248.62	10,780.72	7,117.92	114.04	112.44	-86.91	-944.33	-4,031.20	2,422.68	2,196.90	225.78	10.730		
11,200.00	7,248.24	10,880.72	7,117.48	116.77	115.19	-86.91	-945.11	-4,131.20	2,422.68	2,191.43	231.25	10.476		
11,300.00	7,247.86	10,980.72	7,117.05	119.50	117.94	-86.90	-945.88	-4,231.19	2,422.68	2,185.95	236.73	10.234		
11,400.00	7,247.48	11,080.72	7,116.62	122.24	120.69	-86.90	-946.66	-4,331.19	2,422.68	2,180.46	242.22	10.002		
11,500.00	7,247.10	11,180.72	7,116.18	124.98	123.45	-86.90	-947.44	-4,431.19	2,422.68	2,174.96	247.71	9.780		
11,600.00	7,246.72	11,280.72	7,115.75	127.73	126.21	-86.90	-948.22	-4,531.18	2,422.67	2,169.45	253.22	9.567		
11,700.00	7,246.34	11,380.72	7,115.31	130.48	128.98	-86.90	-948.99	-4,631.18	2,422.67	2,163.94	258.74	9.363		
11,800.00	7,245.96	11,480.72	7,114.88	133.24	131.75	-86.90	-949.77	-4,731.17	2,422.67	2,158.41	264.26	9.168		
11,900.00	7,245.58	11,580.72	7,114.45	136.00	134.53	-86.90	-950.55	-4,831.17	2,422.67	2,152.88	269.79	8.980		
12,000.00	7,245.21	11,680.72	7,114.01	138.76	137.30	-86.90	-951.33	-4,931.17	2,422.67	2,147.34	275.33	8.799		
12,100.00	7,244.83	11,780.72	7,113.58	141.53	140.09	-86.89	-952.10	-5,031.16	2,422.67	2,141.79	280.88	8.625		
12,200.00	7,244.45	11,880.72	7,113.14	144.30	142.87	-86.89	-952.88	-5,131.16	2,422.66	2,136.24	286.43	8.458		
12,300.00	7,244.07	11,980.72	7,112.71	147.08	145.66	-86.89	-953.66	-5,231.15	2,422.66	2,130.68	291.99	8.297		
12,400.00	7,243.69	12,080.72	7,112.28	149.86	148.45	-86.89	-954.44	-5,331.15	2,422.66	2,125.11	297.55	8.142		
12,500.00	7,243.31	12,180.72	7,111.84	152.64	151.24	-86.89	-955.21	-5,431.15	2,422.66	2,119.54	303.12	7.992		
12,600.00	7,242.93	12,280.72	7,111.41	155.42	154.04	-86.89	-955.99	-5,531.14	2,422.66	2,113.96	308.69	7.848		
12,700.00	7,242.55	12,380.72	7,110.98	158.21	156.83	-86.89	-956.77	-5,631.14	2,422.66	2,108.38	314.27	7.709		
12,800.00	7,242.17	12,480.72	7,110.54	161.00	159.63	-86.89	-957.55	-5,731.14	2,422.65	2,102.80	319.86	7.574		
12,900.00	7,241.79	12,580.72	7,110.11	163.79	162.44	-86.88	-958.32	-5,831.13	2,422.65	2,097.21	325.44	7.444		
13,000.00	7,241.41	12,680.72	7,109.67	166.58	165.24	-86.88	-959.10	-5,931.13	2,422.65	2,091.62	331.04	7.318		
13,100.00	7,241.03	12,780.72	7,109.24	169.38	168.05	-86.88	-959.88	-6,031.12	2,422.65	2,086.02	336.63	7.197		
13,200.00	7,240.65	12,880.72	7,108.81	172.18	170.85	-86.88	-960.65	-6,131.12	2,422.65	2,080.42	342.23	7.079		
13,300.00	7,240.27	12,980.72	7,108.37	174.98	173.66	-86.88	-961.43	-6,231.12	2,422.65	2,074.81	347.83	6.965		
13,400.00	7,239.89	13,080.72	7,107.94	177.78	176.47	-86.88	-962.21	-6,331.11	2,422.64	2,069.21	353.44	6.854		
13,500.00	7,239.51	13,180.72	7,107.50	180.58	179.28	-86.88	-962.99	-6,431.11	2,422.64	2,063.59	359.05	6.747		
13,600.00	7,239.13	13,280.72	7,107.07	183.39	182.10	-86.88	-963.76	-6,531.10	2,422.64	2,057.98	364.66	6.644		
13,700.00	7,238.75	13,380.72	7,106.64	186.20	184.91	-86.87	-964.54	-6,631.10	2,422.64	2,052.36	370.28	6.543		
13,800.00	7,238.37	13,480.72	7,106.20	189.00	187.73	-86.87	-965.32	-6,731.10	2,422.64	2,046.74	375.89	6.445		
13,900.00	7,237.99	13,580.72	7,105.77	191.81	190.55	-86.87	-966.10	-6,831.09	2,422.64	2,041.12	381.51	6.350		
14,000.00	7,237.62	13,680.72	7,105.33	194.63	193.36	-86.87	-966.87	-6,931.09	2,422.64	2,035.50	387.14	6.258		
14,100.00	7,237.24	13,780.72	7,104.90	197.44	196.18	-86.87	-967.65	-7,031.08	2,422.63	2,029.87	392.76	6.168		
14,200.00	7,236.86	13,880.72	7,104.47	200.25	199.00	-86.87	-968.43	-7,131.08	2,422.63	2,024.24	398.39	6.081		
14,300.00	7,236.48	13,980.72	7,104.03	203.07	201.83	-86.87	-969.21	-7,231.08	2,422.63	2,018.61	404.02	5.996		
14,400.00	7,236.10	14,080.72	7,103.60	205.88	204.65	-86.86	-969.98	-7,331.07	2,422.63	2,012.97	409.65	5.914		
14,500.00	7,235.72	14,180.72	7,103.16	208.70	207.47	-86.86	-970.76	-7,431.07	2,422.63	2,007.34	415.29	5.834		
14,600.00	7,235.34	14,280.72	7,102.73	211.52	210.30	-86.86	-971.54	-7,531.06	2,422.63	2,001.70	420.92	5.755		
14,700.00	7,234.96	14,380.72	7,102.30	214.34	213.12	-86.86	-972.32	-7,631.06	2,422.62	1,996.06	426.56	5.679		
14,800.00	7,234.58	14,480.72	7,101.86	217.16	215.95	-86.86	-973.09	-7,731.06	2,422.62	1,990.42	432.20	5.605		
14,900.00	7,234.20	14,580.72	7,101.43	219.98	218.78	-86.86	-973.87	-7,831.05	2,422.62	1,984.78	437.84	5.533		
15,000.00	7,233.82	14,680.72	7,100.99	222.81	221.61	-86.86	-974.65	-7,931.05	2,422.62	1,979.13	443.49	5.463		
15,100.00	7,233.44	14,780.72	7,100.56	225.63	224.43	-86.86	-975.42	-8,031.04	2,422.62	1,973.48	449.13	5.394		
15,200.00	7,233.06	14,880.72	7,100.13	228.45	227.26	-86.85	-976.20	-8,131.04	2,422.62	1,967.84	454.78	5.327		
15,216.01	7,233.00	14,896.74	7,100.06	228.91	227.72	-86.85	-976.33	-8,147.05	2,422.62	1,966.93	455.68	5.316 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2.00	0.00	3.28	3.28	-179.54	-419.67	-3.34	419.68					
100.00	100.00	102.00	100.00	3.28	3.29	-179.54	-419.67	-3.34	419.68	413.11	6.57	63.880		
200.00	200.00	198.00	200.00	3.34	3.34	-179.54	-419.67	-3.34	419.68	413.01	6.67	62.898 CC, ES		
300.00	299.98	285.42	287.40	3.45	3.42	-173.81	-420.94	-3.44	422.87	416.00	6.88	61.494		
400.00	399.84	372.04	373.94	3.61	3.55	-173.82	-424.82	-3.73	432.55	425.36	7.19	60.192		
500.00	499.45	457.61	459.26	3.82	3.70	-173.84	-431.21	-4.22	448.64	441.05	7.58	59.164		
600.00	598.70	541.62	542.81	4.07	3.89	-173.85	-439.95	-4.89	471.03	462.98	8.05	58.531		
700.00	697.47	623.60	624.06	4.35	4.10	-173.86	-450.84	-5.73	499.57	491.01	8.56	58.358		
800.00	795.62	703.15	702.56	4.67	4.32	-173.86	-463.61	-6.71	534.07	524.96	9.10	58.657		
900.00	893.06	779.88	777.93	5.01	4.57	-173.85	-477.99	-7.81	574.31	564.64	9.67	59.397		
1,000.00	989.64	853.50	849.85	5.38	4.83	-173.83	-493.66	-9.02	620.05	609.82	10.24	60.576		
1,100.00	1,085.42	923.96	918.28	5.78	5.09	-173.87	-510.39	-10.30	670.59	659.79	10.81	62.054		
1,200.00	1,181.09	992.25	984.19	6.20	5.36	-173.94	-528.20	-11.67	723.52	712.16	11.36	63.717		
1,300.00	1,276.76	1,058.52	1,047.73	6.65	5.65	-173.98	-546.97	-13.11	778.42	766.52	11.90	65.404		
1,400.00	1,372.43	1,131.14	1,116.91	7.11	5.97	-174.02	-569.00	-14.80	835.01	822.53	12.48	66.883		
1,500.00	1,468.10	1,213.39	1,195.18	7.57	6.35	-174.05	-594.18	-16.73	891.89	878.75	13.14	67.889		
1,600.00	1,563.77	1,295.64	1,273.46	8.05	6.74	-174.08	-619.36	-18.66	948.76	934.95	13.81	68.696		
1,700.00	1,659.44	1,377.89	1,351.74	8.53	7.15	-174.11	-644.54	-20.59	1,005.64	991.14	14.50	69.341		
1,800.00	1,755.11	1,460.14	1,430.01	9.02	7.56	-174.13	-669.72	-22.52	1,062.52	1,047.31	15.21	69.856		
1,900.00	1,850.78	1,542.39	1,508.29	9.52	7.98	-174.16	-694.90	-24.46	1,119.39	1,103.46	15.93	70.264		
2,000.00	1,946.45	1,624.64	1,586.57	10.02	8.40	-174.18	-720.08	-26.39	1,176.27	1,159.61	16.66	70.588		
2,100.00	2,042.12	1,706.89	1,664.84	10.52	8.83	-174.19	-745.26	-28.32	1,233.15	1,215.74	17.41	70.842		
2,200.00	2,137.78	1,789.14	1,743.12	11.03	9.27	-174.21	-770.44	-30.25	1,290.02	1,271.86	18.16	71.041		
2,300.00	2,233.45	1,871.39	1,821.39	11.54	9.71	-174.22	-795.62	-32.18	1,346.90	1,327.98	18.92	71.193		
2,400.00	2,329.12	1,953.64	1,899.67	12.05	10.15	-174.24	-820.80	-34.12	1,403.78	1,384.09	19.69	71.308		
2,500.00	2,424.79	2,035.89	1,977.95	12.56	10.59	-174.25	-845.98	-36.05	1,460.65	1,440.19	20.46	71.393		
2,600.00	2,520.46	2,118.14	2,056.22	13.08	11.04	-174.26	-871.16	-37.98	1,517.53	1,496.29	21.24	71.454		
2,700.00	2,616.13	2,200.38	2,134.50	13.60	11.49	-174.27	-896.34	-39.91	1,574.41	1,552.38	22.02	71.494		
2,800.00	2,711.80	2,282.63	2,212.78	14.12	11.94	-174.28	-921.52	-41.85	1,631.28	1,608.47	22.81	71.517		
2,900.00	2,807.47	2,364.88	2,291.05	14.64	12.40	-174.29	-946.70	-43.78	1,688.16	1,664.56	23.60	71.526		
3,000.00	2,903.14	2,447.13	2,369.33	15.16	12.85	-174.30	-971.89	-45.71	1,745.04	1,720.64	24.40	71.524		
3,100.00	2,998.81	2,529.38	2,447.61	15.68	13.31	-174.31	-997.07	-47.64	1,801.91	1,776.72	25.20	71.513		
3,200.00	3,094.48	2,611.63	2,525.88	16.21	13.77	-174.32	-1,022.25	-49.57	1,858.79	1,832.79	26.00	71.495		
3,300.00	3,190.15	2,693.88	2,604.16	16.73	14.23	-174.32	-1,047.43	-51.51	1,915.67	1,888.86	26.80	71.470		
3,400.00	3,285.82	2,776.13	2,682.43	17.26	14.69	-174.33	-1,072.61	-53.44	1,972.54	1,944.93	27.61	71.440		
3,500.00	3,381.49	2,858.38	2,760.71	17.78	15.15	-174.34	-1,097.79	-55.37	2,029.42	2,001.00	28.42	71.406		
3,600.00	3,477.16	2,940.63	2,838.99	18.31	15.61	-174.34	-1,122.97	-57.30	2,086.30	2,057.07	29.23	71.369		
3,700.00	3,572.83	3,022.88	2,917.26	18.84	16.07	-174.35	-1,148.15	-59.23	2,143.17	2,113.13	30.05	71.330		
3,800.00	3,668.50	3,105.13	2,995.54	19.37	16.54	-174.35	-1,173.33	-61.17	2,200.05	2,169.19	30.86	71.288		
3,900.00	3,764.17	3,187.38	3,073.82	19.89	17.00	-174.36	-1,198.51	-63.10	2,256.93	2,225.25	31.68	71.244		
4,000.00	3,859.84	3,269.63	3,152.09	20.42	17.47	-174.36	-1,223.69	-65.03	2,313.81	2,281.31	32.50	71.200		
4,100.00	3,955.51	3,351.88	3,230.37	20.95	17.93	-174.37	-1,248.87	-66.96	2,370.68	2,337.37	33.32	71.154		
4,200.00	4,051.18	3,434.13	3,308.65	21.48	18.40	-174.37	-1,274.05	-68.89	2,427.56	2,393.42	34.14	71.108		
4,300.00	4,146.85	3,516.38	3,386.92	22.01	18.87	-174.38	-1,299.23	-70.83	2,484.44	2,449.48	34.96	71.061		
4,400.00	4,242.52	3,598.63	3,465.20	22.55	19.33	-174.38	-1,324.41	-72.76	2,541.31	2,505.53	35.79	71.015		
4,500.00	4,338.19	3,680.88	3,543.47	23.08	19.80	-174.38	-1,349.59	-74.69	2,598.19	2,561.58	36.61	70.968		
4,600.00	4,433.86	3,763.13	3,621.75	23.61	20.27	-174.39	-1,374.77	-76.62	2,655.07	2,617.63	37.44	70.921		
4,700.00	4,529.53	3,845.37	3,700.03	24.14	20.74	-174.39	-1,399.95	-78.56	2,711.95	2,673.68	38.26	70.874		
4,800.00	4,625.19	3,927.62	3,778.30	24.67	21.21	-174.39	-1,425.13	-80.49	2,768.82	2,729.73	39.09	70.827		
4,900.00	4,720.86	4,009.87	3,856.58	25.21	21.68	-174.40	-1,450.31	-82.42	2,825.70	2,785.78	39.92	70.781		
5,000.00	4,816.53	4,107.88	3,934.86	25.74	22.24	-174.40	-1,475.50	-84.35	2,882.58	2,841.75	40.83	70.598		
5,100.00	4,912.20	4,174.37	4,013.13	26.27	22.62	-174.40	-1,500.68	-86.28	2,939.45	2,897.87	41.58	70.690		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	4,256.62	4,091.41	26.80	23.09	-174.41	-1,525.86	-88.22	2,996.33	2,953.92	42.41	70.645		
5,300.00	5,103.54	4,338.87	4,169.69	27.34	23.56	-174.41	-1,551.04	-90.15	3,053.21	3,009.96	43.25	70.600		
5,400.00	5,199.22	4,421.13	4,247.97	27.87	24.03	-174.42	-1,576.22	-92.08	3,110.07	3,065.99	44.08	70.556		
5,500.00	5,295.46	4,504.53	4,327.34	28.39	24.50	-174.55	-1,601.75	-94.04	3,165.25	3,120.33	44.91	70.472		
5,600.00	5,392.60	4,589.79	4,408.48	28.89	24.99	-174.66	-1,627.85	-96.04	3,217.49	3,171.73	45.76	70.319		
5,700.00	5,490.50	4,676.81	4,491.30	29.37	25.49	-174.75	-1,654.50	-98.09	3,266.74	3,220.13	46.60	70.098		
5,800.00	5,589.05	4,765.49	4,575.70	29.83	26.00	-174.82	-1,681.65	-100.17	3,312.93	3,265.48	47.45	69.814		
5,900.00	5,688.14	4,855.72	4,661.56	30.26	26.52	-174.88	-1,709.27	-102.29	3,356.01	3,307.71	48.31	69.474		
6,000.00	5,787.63	4,947.38	4,748.80	30.68	27.04	-174.92	-1,737.33	-104.44	3,395.94	3,346.78	49.16	69.080		
6,100.00	5,887.41	5,040.37	4,837.30	31.07	27.58	-174.96	-1,765.80	-106.63	3,432.65	3,382.64	50.01	68.637		
6,200.00	5,987.36	5,134.57	4,926.95	31.44	28.12	-174.98	-1,794.64	-108.84	3,466.11	3,415.24	50.86	68.148		
6,300.00	6,087.36	5,229.67	5,017.45	31.80	28.66	179.31	-1,823.75	-111.07	3,496.93	3,445.22	51.71	67.628		
6,400.00	6,187.36	5,324.84	5,108.02	32.15	29.21	179.35	-1,852.89	-113.31	3,527.52	3,474.96	52.56	67.114		
6,500.00	6,287.36	5,420.01	5,198.60	32.51	29.76	179.40	-1,882.02	-115.54	3,558.12	3,504.71	53.41	66.615		
6,600.00	6,387.36	5,515.18	5,289.17	32.87	30.30	179.44	-1,911.16	-117.78	3,588.72	3,534.45	54.27	66.129		
6,700.00	6,487.36	5,610.35	5,379.74	33.23	30.85	179.48	-1,940.30	-120.02	3,619.32	3,564.20	55.13	65.656		
6,800.00	6,587.36	5,705.52	5,470.31	33.59	31.40	179.52	-1,969.43	-122.25	3,649.93	3,593.94	55.98	65.196		
6,900.00	6,687.26	5,800.67	5,560.87	33.95	31.94	-88.22	-1,998.56	-124.49	3,680.50	3,623.67	56.83	64.758		
7,000.00	6,785.58	5,905.30	5,650.36	34.31	32.55	-85.62	-2,027.35	-126.70	3,710.64	3,652.90	57.73	64.273		
7,100.00	6,879.94	5,985.35	5,736.63	34.65	33.01	-83.35	-2,055.10	-128.82	3,739.78	3,681.28	58.51	63.922		
7,200.00	6,968.01	6,070.39	5,817.56	34.97	33.50	-81.39	-2,081.14	-130.82	3,767.58	3,708.27	59.31	63.527		
7,300.00	7,047.61	6,147.71	5,891.14	35.27	33.94	-79.70	-2,104.81	-132.64	3,793.81	3,733.72	60.09	63.137		
7,400.00	7,116.80	6,215.41	5,955.58	35.54	34.33	-78.21	-2,125.54	-134.23	3,818.41	3,757.54	60.87	62.729		
7,500.00	7,173.86	6,271.84	6,009.28	35.81	34.65	-76.85	-2,142.81	-135.55	3,841.34	3,779.65	61.68	62.274		
7,600.00	7,217.38	6,315.59	6,050.92	36.17	34.91	-75.54	-2,156.21	-136.58	3,862.60	3,800.04	62.55	61.748		
7,700.00	7,246.31	6,345.60	6,079.47	36.80	35.08	-74.24	-2,165.39	-137.29	3,882.14	3,818.64	63.49	61.142		
7,800.00	7,259.92	6,361.11	6,094.24	37.72	35.17	-72.91	-2,170.14	-137.65	3,899.83	3,835.34	64.49	60.473		
7,900.00	7,260.77	6,364.50	6,097.47	38.86	35.19	-72.40	-2,171.18	-137.73	3,916.31	3,850.77	65.54	59.758		
8,000.00	7,260.39	6,366.73	6,099.59	40.19	35.20	-72.44	-2,171.86	-137.78	3,934.90	3,868.17	66.72	58.973		
8,100.00	7,260.01	6,368.96	6,101.71	41.67	35.21	-72.47	-2,172.54	-137.84	3,955.93	3,887.89	68.04	58.144		
8,200.00	7,259.63	6,371.18	6,103.83	43.30	35.23	-72.50	-2,173.22	-137.89	3,979.36	3,909.91	69.45	57.296		
8,300.00	7,259.25	8,201.87	7,075.57	45.05	45.94	-87.37	-2,494.02	-1,223.45	3,994.98	3,905.56	89.42	44.678		
8,400.00	7,258.87	8,301.87	7,075.25	46.91	47.57	-87.37	-2,494.69	-1,323.44	3,994.86	3,901.77	93.09	42.912		
8,500.00	7,258.49	8,401.87	7,074.92	48.87	49.34	-87.37	-2,495.35	-1,423.44	3,994.74	3,897.77	96.97	41.196		
8,600.00	7,258.11	8,501.87	7,074.60	50.92	51.23	-87.37	-2,496.02	-1,523.44	3,994.63	3,893.61	101.02	39.544		
8,700.00	7,257.73	8,601.87	7,074.27	53.04	53.23	-87.37	-2,496.69	-1,623.44	3,994.51	3,889.29	105.22	37.963		
8,800.00	7,257.35	8,701.87	7,073.95	55.23	55.31	-87.37	-2,497.36	-1,723.43	3,994.39	3,884.83	109.56	36.458		
8,900.00	7,256.97	8,801.87	7,073.62	57.47	57.47	-87.37	-2,498.02	-1,823.43	3,994.28	3,880.25	114.02	35.031		
9,000.00	7,256.59	8,901.87	7,073.30	59.77	59.69	-87.37	-2,498.69	-1,923.43	3,994.16	3,875.57	118.59	33.681		
9,100.00	7,256.21	8,998.13	7,072.97	62.12	61.87	-87.37	-2,499.36	-2,023.42	3,994.04	3,870.88	123.17	32.428		
9,200.00	7,255.83	9,098.13	7,072.65	64.50	64.20	-87.37	-2,500.03	-2,123.42	3,993.93	3,866.01	127.91	31.224		
9,300.00	7,255.45	9,201.87	7,072.32	66.93	66.65	-87.37	-2,500.69	-2,223.42	3,993.81	3,860.98	132.82	30.068		
9,400.00	7,255.07	9,301.87	7,072.00	69.38	69.06	-87.37	-2,501.36	-2,323.42	3,993.69	3,855.97	137.72	28.999		
9,500.00	7,254.69	9,398.13	7,071.67	71.87	71.41	-87.37	-2,502.03	-2,423.41	3,993.57	3,851.00	142.58	28.010		
9,600.00	7,254.31	9,501.87	7,071.35	74.38	73.97	-87.37	-2,502.69	-2,523.41	3,993.46	3,845.78	147.68	27.042		
9,700.00	7,253.93	9,601.87	7,071.02	76.92	76.47	-87.37	-2,503.36	-2,623.41	3,993.34	3,840.61	152.73	26.146		
9,800.00	7,253.55	9,701.87	7,070.70	79.48	78.99	-87.38	-2,504.03	-2,723.40	3,993.22	3,835.39	157.83	25.300		
9,900.00	7,253.18	9,801.87	7,070.37	82.06	81.54	-87.38	-2,504.70	-2,823.40	3,993.11	3,830.13	162.98	24.501		
10,000.00	7,252.80	9,901.87	7,070.05	84.65	84.11	-87.38	-2,505.36	-2,923.40	3,992.99	3,824.84	168.15	23.746		
10,100.00	7,252.42	10,001.87	7,069.72	87.27	86.69	-87.38	-2,506.03	-3,023.40	3,992.87	3,819.51	173.37	23.031		
10,200.00	7,252.04	10,101.87	7,069.40	89.89	89.30	-87.38	-2,506.70	-3,123.39	3,992.76	3,814.15	178.61	22.355		
10,300.00	7,251.66	10,201.87	7,069.07	92.54	91.91	-87.38	-2,507.37	-3,223.39	3,992.64	3,808.76	183.88	21.713		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,251.28	10,301.87	7,068.75	95.19	94.55	-87.38	-2,508.03	-3,323.39	3,992.52	3,803.35	189.18	21.105		
10,500.00	7,250.90	10,398.13	7,068.42	97.86	97.09	-87.38	-2,508.70	-3,423.38	3,992.41	3,798.01	194.40	20.538		
10,600.00	7,250.52	10,501.87	7,068.10	100.53	99.85	-87.38	-2,509.37	-3,523.38	3,992.29	3,792.45	199.84	19.978		
10,700.00	7,250.14	10,601.87	7,067.77	103.22	102.52	-87.38	-2,510.04	-3,623.38	3,992.17	3,786.98	205.20	19.455		
10,800.00	7,249.76	10,701.87	7,067.45	105.91	105.20	-87.38	-2,510.70	-3,723.38	3,992.06	3,781.48	210.58	18.958		
10,900.00	7,249.38	10,798.13	7,067.12	108.62	107.78	-87.38	-2,511.37	-3,823.37	3,991.94	3,776.07	215.87	18.492		
11,000.00	7,249.00	10,898.13	7,066.80	111.33	110.48	-87.38	-2,512.04	-3,923.37	3,991.82	3,770.54	221.28	18.039		
11,100.00	7,248.62	11,001.88	7,066.47	114.04	113.28	-87.38	-2,512.71	-4,023.37	3,991.70	3,764.89	226.81	17.599		
11,200.00	7,248.24	11,098.13	7,066.15	116.77	115.89	-87.39	-2,513.37	-4,123.37	3,991.59	3,759.44	232.15	17.194		
11,300.00	7,247.86	11,201.88	7,065.82	119.50	118.71	-87.39	-2,514.04	-4,223.36	3,991.47	3,753.77	237.71	16.792		
11,400.00	7,247.48	11,301.88	7,065.50	122.24	121.44	-87.39	-2,514.71	-4,323.36	3,991.35	3,748.18	243.17	16.414		
11,500.00	7,247.10	11,401.88	7,065.17	124.98	124.17	-87.39	-2,515.38	-4,423.36	3,991.24	3,742.59	248.65	16.052		
11,600.00	7,246.72	11,501.88	7,064.85	127.73	126.91	-87.39	-2,516.04	-4,523.35	3,991.12	3,736.99	254.13	15.705		
11,700.00	7,246.34	11,601.88	7,064.52	130.48	129.65	-87.39	-2,516.71	-4,623.35	3,991.00	3,731.37	259.63	15.372		
11,800.00	7,245.96	11,701.88	7,064.20	133.24	132.40	-87.39	-2,517.38	-4,723.35	3,990.89	3,725.75	265.13	15.052		
11,900.00	7,245.58	11,801.88	7,063.87	136.00	135.15	-87.39	-2,518.05	-4,823.35	3,990.77	3,720.12	270.65	14.745		
12,000.00	7,245.21	11,901.88	7,063.55	138.76	137.91	-87.39	-2,518.71	-4,923.34	3,990.65	3,714.48	276.17	14.450		
12,100.00	7,244.83	12,001.88	7,063.22	141.53	140.67	-87.39	-2,519.38	-5,023.34	3,990.54	3,708.84	281.70	14.166		
12,200.00	7,244.45	12,101.88	7,062.90	144.30	143.43	-87.39	-2,520.05	-5,123.34	3,990.42	3,703.18	287.23	13.893		
12,300.00	7,244.07	12,201.88	7,062.58	147.08	146.20	-87.39	-2,520.72	-5,223.33	3,990.30	3,697.52	292.78	13.629		
12,400.00	7,243.69	12,298.12	7,062.25	149.86	148.86	-87.39	-2,521.38	-5,323.33	3,990.19	3,691.96	298.22	13.380		
12,500.00	7,243.31	12,401.88	7,061.93	152.64	151.74	-87.39	-2,522.05	-5,423.33	3,990.07	3,686.19	303.88	13.130		
12,600.00	7,242.93	12,501.88	7,061.60	155.42	154.52	-87.40	-2,522.72	-5,523.33	3,989.95	3,680.51	309.44	12.894		
12,700.00	7,242.55	12,601.88	7,061.28	158.21	157.30	-87.40	-2,523.39	-5,623.32	3,989.83	3,674.82	315.01	12.666		
12,800.00	7,242.17	12,698.12	7,060.95	161.00	159.98	-87.40	-2,524.05	-5,723.32	3,989.72	3,669.24	320.48	12.449		
12,900.00	7,241.79	12,801.88	7,060.63	163.79	162.87	-87.40	-2,524.72	-5,823.32	3,989.60	3,663.44	326.16	12.232		
13,000.00	7,241.41	12,901.88	7,060.30	166.58	165.66	-87.40	-2,525.39	-5,923.31	3,989.48	3,657.74	331.74	12.026		
13,100.00	7,241.03	13,001.88	7,059.98	169.38	168.45	-87.40	-2,526.06	-6,023.31	3,989.37	3,652.04	337.32	11.826		
13,200.00	7,240.65	13,101.88	7,059.65	172.18	171.24	-87.40	-2,526.72	-6,123.31	3,989.25	3,646.34	342.91	11.633		
13,300.00	7,240.27	13,201.88	7,059.33	174.98	174.04	-87.40	-2,527.39	-6,223.31	3,989.13	3,640.63	348.51	11.446		
13,400.00	7,239.89	13,301.88	7,059.00	177.78	176.84	-87.40	-2,528.06	-6,323.30	3,989.02	3,634.91	354.10	11.265		
13,500.00	7,239.51	13,401.88	7,058.68	180.58	179.63	-87.40	-2,528.73	-6,423.30	3,988.90	3,629.19	359.71	11.089		
13,600.00	7,239.13	13,501.88	7,058.35	183.39	182.44	-87.40	-2,529.39	-6,523.30	3,988.78	3,623.47	365.31	10.919		
13,700.00	7,238.75	13,598.12	7,058.03	186.20	185.13	-87.40	-2,530.06	-6,623.29	3,988.67	3,617.85	370.81	10.757		
13,800.00	7,238.37	13,701.88	7,057.70	189.00	188.04	-87.40	-2,530.73	-6,723.29	3,988.55	3,612.02	376.53	10.593		
13,900.00	7,237.99	13,801.88	7,057.38	191.81	190.85	-87.40	-2,531.40	-6,823.29	3,988.43	3,606.29	382.14	10.437		
14,000.00	7,237.62	13,898.12	7,057.05	194.63	193.55	-87.41	-2,532.06	-6,923.29	3,988.32	3,600.66	387.65	10.288		
14,100.00	7,237.24	14,001.88	7,056.73	197.44	196.46	-87.41	-2,532.73	-7,023.28	3,988.20	3,594.82	393.38	10.138		
14,200.00	7,236.86	14,101.88	7,056.40	200.25	199.28	-87.41	-2,533.40	-7,123.28	3,988.08	3,589.08	399.00	9.995		
14,300.00	7,236.48	14,201.88	7,056.08	203.07	202.09	-87.41	-2,534.07	-7,223.28	3,987.96	3,583.34	404.62	9.856		
14,400.00	7,236.10	14,301.88	7,055.75	205.88	204.90	-87.41	-2,534.73	-7,323.27	3,987.85	3,577.60	410.25	9.721		
14,500.00	7,235.72	14,401.88	7,055.43	208.70	207.71	-87.41	-2,535.40	-7,423.27	3,987.73	3,571.85	415.88	9.589		
14,600.00	7,235.34	14,498.12	7,055.10	211.52	210.42	-87.41	-2,536.07	-7,523.27	3,987.61	3,566.21	421.40	9.463		
14,700.00	7,234.96	14,601.88	7,054.78	214.34	213.35	-87.41	-2,536.74	-7,623.27	3,987.50	3,560.35	427.14	9.335		
14,800.00	7,234.58	14,701.88	7,054.45	217.16	216.16	-87.41	-2,537.40	-7,723.26	3,987.38	3,554.60	432.78	9.213		
14,900.00	7,234.20	14,801.88	7,054.13	219.98	218.98	-87.41	-2,538.07	-7,823.26	3,987.26	3,548.85	438.42	9.095		
15,000.00	7,233.82	14,898.12	7,053.80	222.81	221.70	-87.41	-2,538.74	-7,923.26	3,987.15	3,543.20	443.95	8.981		
15,100.00	7,233.44	14,998.12	7,053.48	225.63	224.52	-87.41	-2,539.41	-8,023.25	3,987.03	3,537.44	449.59	8.868		
15,200.00	7,233.06	15,101.88	7,053.15	228.45	227.45	-87.41	-2,540.07	-8,123.25	3,986.91	3,531.57	455.34	8.756		
15,216.01	7,233.00	15,114.14	7,053.10	228.91	227.79	-87.41	-2,540.18	-8,139.26	3,986.89	3,530.76	456.14	8.741 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	3.00	0.00	3.28	3.28	-179.53	-439.72	-3.62	439.74					
100.00	100.00	103.00	100.00	3.28	3.29	-179.53	-439.72	-3.62	439.74	433.17	6.57	66.930		
200.00	200.00	197.00	200.00	3.34	3.33	-179.53	-439.72	-3.62	439.74	433.06	6.67	65.911	CC, ES	
300.00	299.98	284.03	287.02	3.45	3.42	-173.80	-440.95	-3.70	442.89	436.02	6.87	64.422		
400.00	399.84	370.13	373.03	3.61	3.54	-173.81	-444.76	-3.96	452.51	445.33	7.18	63.002		
500.00	499.45	455.19	457.85	3.82	3.70	-173.83	-451.05	-4.40	468.53	460.95	7.58	61.835		
600.00	598.70	538.71	540.92	4.07	3.88	-173.85	-459.67	-5.00	490.83	482.79	8.04	61.055		
700.00	697.47	620.24	621.73	4.35	4.09	-173.86	-470.41	-5.74	519.27	510.72	8.55	60.734		
800.00	795.62	699.35	699.82	4.67	4.31	-173.87	-483.03	-6.61	553.67	544.57	9.09	60.895		
900.00	893.06	775.68	774.82	5.01	4.56	-173.87	-497.23	-7.59	593.79	584.14	9.65	61.503		
1,000.00	989.64	848.94	846.40	5.38	4.81	-173.87	-512.73	-8.67	639.41	629.19	10.22	62.562		
1,100.00	1,085.42	919.07	914.54	5.78	5.07	-173.91	-529.28	-9.81	689.82	679.03	10.79	63.936		
1,200.00	1,181.09	987.05	980.18	6.20	5.34	-173.98	-546.90	-11.03	742.61	731.27	11.34	65.506		
1,300.00	1,276.76	1,053.04	1,043.49	6.65	5.62	-174.04	-565.49	-12.32	797.37	785.48	11.88	67.107		
1,400.00	1,372.43	1,117.06	1,104.47	7.11	5.91	-174.08	-584.91	-13.66	854.00	841.58	12.42	68.752		
1,500.00	1,468.10	1,183.42	1,167.24	7.57	6.21	-174.11	-606.41	-15.15	912.39	899.41	12.98	70.303		
1,600.00	1,563.77	1,264.22	1,243.49	8.05	6.60	-174.14	-633.07	-16.99	971.31	957.68	13.63	71.246		
1,700.00	1,659.44	1,345.01	1,319.74	8.53	7.00	-174.16	-659.73	-18.83	1,030.23	1,015.93	14.31	72.002		
1,800.00	1,755.11	1,425.81	1,395.99	9.02	7.42	-174.19	-686.38	-20.68	1,089.16	1,074.16	15.00	72.609		
1,900.00	1,850.78	1,506.61	1,472.24	9.52	7.84	-174.21	-713.04	-22.52	1,148.08	1,132.37	15.71	73.095		
2,000.00	1,946.45	1,587.40	1,548.49	10.02	8.26	-174.22	-739.70	-24.37	1,207.00	1,190.57	16.43	73.482		
2,100.00	2,042.12	1,668.20	1,624.74	10.52	8.70	-174.24	-766.36	-26.21	1,265.92	1,248.77	17.16	73.789		
2,200.00	2,137.78	1,749.00	1,700.99	11.03	9.13	-174.26	-793.01	-28.05	1,324.84	1,306.95	17.90	74.030		
2,300.00	2,233.45	1,829.79	1,777.24	11.54	9.58	-174.27	-819.67	-29.90	1,383.77	1,365.12	18.64	74.219		
2,400.00	2,329.12	1,910.59	1,853.49	12.05	10.02	-174.28	-846.33	-31.74	1,442.69	1,423.29	19.40	74.364		
2,500.00	2,424.79	2,008.61	1,929.74	12.56	10.57	-174.29	-872.99	-33.59	1,501.61	1,481.37	20.25	74.170		
2,600.00	2,520.46	2,072.18	2,005.99	13.08	10.92	-174.30	-899.64	-35.43	1,560.53	1,539.60	20.93	74.554		
2,700.00	2,616.13	2,152.98	2,082.24	13.60	11.38	-174.31	-926.30	-37.27	1,619.46	1,597.75	21.71	74.610		
2,800.00	2,711.80	2,233.78	2,158.49	14.12	11.84	-174.32	-952.96	-39.12	1,678.38	1,655.89	22.48	74.646		
2,900.00	2,807.47	2,314.57	2,234.74	14.64	12.29	-174.33	-979.62	-40.96	1,737.30	1,714.03	23.27	74.666		
3,000.00	2,903.14	2,404.63	2,310.99	15.16	12.81	-174.34	-1,006.27	-42.81	1,796.22	1,772.12	24.10	74.532		
3,100.00	2,998.81	2,476.17	2,387.24	15.68	13.22	-174.35	-1,032.93	-44.65	1,855.15	1,830.30	24.84	74.669		
3,200.00	3,094.48	2,556.96	2,463.49	16.21	13.68	-174.36	-1,059.59	-46.49	1,914.07	1,888.43	25.64	74.656		
3,300.00	3,190.15	2,637.76	2,539.74	16.73	14.15	-174.36	-1,086.25	-48.34	1,972.99	1,946.56	26.44	74.635		
3,400.00	3,285.82	2,718.56	2,615.99	17.26	14.61	-174.37	-1,112.90	-50.18	2,031.91	2,004.68	27.23	74.608		
3,500.00	3,381.49	2,800.65	2,692.24	17.78	15.09	-174.37	-1,139.56	-52.03	2,090.84	2,062.79	28.04	74.559		
3,600.00	3,477.16	2,880.15	2,768.49	18.31	15.55	-174.38	-1,166.22	-53.87	2,149.76	2,120.92	28.84	74.540		
3,700.00	3,572.83	2,960.95	2,844.74	18.84	16.02	-174.39	-1,192.87	-55.71	2,208.68	2,179.04	29.65	74.501		
3,800.00	3,668.50	3,041.74	2,920.99	19.37	16.49	-174.39	-1,219.53	-57.56	2,267.60	2,237.15	30.45	74.459		
3,900.00	3,764.17	3,122.54	2,997.24	19.89	16.96	-174.40	-1,246.19	-59.40	2,326.53	2,295.26	31.26	74.415		
4,000.00	3,859.84	3,203.34	3,073.49	20.42	17.43	-174.40	-1,272.85	-61.25	2,385.45	2,353.37	32.08	74.369		
4,100.00	3,955.51	3,284.13	3,149.74	20.95	17.90	-174.40	-1,299.50	-63.09	2,444.37	2,411.48	32.89	74.322		
4,200.00	4,051.18	3,364.93	3,225.99	21.48	18.38	-174.41	-1,326.16	-64.93	2,503.30	2,469.59	33.70	74.275		
4,300.00	4,146.85	3,445.73	3,302.24	22.01	18.85	-174.41	-1,352.82	-66.78	2,562.22	2,527.70	34.52	74.226		
4,400.00	4,242.52	3,526.52	3,378.49	22.55	19.32	-174.42	-1,379.48	-68.62	2,621.14	2,585.80	35.34	74.177		
4,500.00	4,338.19	3,607.32	3,454.74	23.08	19.80	-174.42	-1,406.13	-70.47	2,680.06	2,643.91	36.15	74.128		
4,600.00	4,433.86	3,688.12	3,530.99	23.61	20.27	-174.42	-1,432.79	-72.31	2,738.99	2,702.01	36.97	74.078		
4,700.00	4,529.53	3,768.91	3,607.24	24.14	20.75	-174.43	-1,459.45	-74.15	2,797.91	2,760.11	37.79	74.029		
4,800.00	4,625.19	3,849.71	3,683.49	24.67	21.22	-174.43	-1,486.11	-76.00	2,856.83	2,818.21	38.62	73.980		
4,900.00	4,720.86	3,930.51	3,759.74	25.21	21.70	-174.43	-1,512.76	-77.84	2,915.75	2,876.31	39.44	73.931		
5,000.00	4,816.53	4,011.30	3,835.99	25.74	22.17	-174.44	-1,539.42	-79.69	2,974.68	2,934.41	40.26	73.882		
5,100.00	4,912.20	4,107.90	3,912.24	26.27	22.74	-174.44	-1,566.08	-81.53	3,033.60	2,992.43	41.17	73.688		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	4,172.90	3,988.49	26.80	23.13	-174.44	-1,592.74	-83.37	3,092.52	3,050.61	41.91	73.785		
5,300.00	5,103.54	4,253.69	4,064.74	27.34	23.60	-174.44	-1,619.39	-85.22	3,151.44	3,108.71	42.74	73.738		
5,400.00	5,199.22	4,334.50	4,141.00	27.87	24.08	-174.46	-1,646.05	-87.06	3,210.36	3,166.79	43.57	73.691		
5,500.00	5,295.46	4,416.48	4,218.37	28.39	24.57	-174.59	-1,673.10	-88.93	3,267.60	3,223.21	44.40	73.602		
5,600.00	5,392.60	4,500.41	4,297.57	28.89	25.06	-174.70	-1,700.79	-90.85	3,321.97	3,276.74	45.23	73.443		
5,700.00	5,490.50	4,586.17	4,378.51	29.37	25.57	-174.80	-1,729.09	-92.81	3,373.38	3,327.31	46.08	73.215		
5,800.00	5,589.05	4,673.66	4,461.08	29.83	26.09	-174.88	-1,757.95	-94.80	3,421.79	3,374.86	46.92	72.922		
5,900.00	5,688.14	4,762.78	4,545.18	30.26	26.61	-174.94	-1,787.36	-96.84	3,467.12	3,419.34	47.78	72.571		
6,000.00	5,787.63	4,853.41	4,630.72	30.68	27.15	-174.99	-1,817.26	-98.90	3,509.33	3,460.70	48.63	72.166		
6,100.00	5,887.41	4,945.45	4,717.58	31.07	27.70	-175.03	-1,847.63	-101.00	3,548.36	3,498.88	49.48	71.710		
6,200.00	5,987.36	5,038.79	4,805.66	31.44	28.25	-175.06	-1,878.42	-103.13	3,584.17	3,533.84	50.33	71.209		
6,300.00	6,087.36	5,133.08	4,894.65	31.80	28.81	179.23	-1,909.53	-105.29	3,617.36	3,566.18	51.18	70.674		
6,400.00	6,187.36	5,227.45	4,983.71	32.15	29.37	179.27	-1,940.67	-107.44	3,650.34	3,598.30	52.04	70.147		
6,500.00	6,287.36	5,321.83	5,072.77	32.51	29.93	179.32	-1,971.81	-109.59	3,683.31	3,630.42	52.90	69.634		
6,600.00	6,387.36	5,416.20	5,161.83	32.87	30.49	179.36	-2,002.94	-111.75	3,716.29	3,662.53	53.75	69.135		
6,700.00	6,487.36	5,510.57	5,250.90	33.23	31.05	179.40	-2,034.08	-113.90	3,749.27	3,694.65	54.61	68.650		
6,800.00	6,587.36	5,604.95	5,339.96	33.59	31.61	179.44	-2,065.21	-116.06	3,782.25	3,726.77	55.48	68.178		
6,900.00	6,687.26	5,700.70	5,429.00	33.95	32.18	-88.15	-2,096.35	-118.21	3,815.20	3,758.86	56.34	67.720		
7,000.00	6,785.58	5,807.46	5,517.00	34.31	32.81	-85.30	-2,127.11	-120.34	3,847.69	3,790.44	57.25	67.203		
7,100.00	6,879.94	5,892.43	5,601.83	34.65	33.26	-82.78	-2,156.76	-122.39	3,879.12	3,821.11	58.01	66.874		
7,200.00	6,968.01	5,966.74	5,681.39	34.97	33.76	-80.59	-2,184.58	-124.31	3,909.04	3,850.23	58.81	66.471		
7,300.00	7,047.61	6,043.39	5,753.73	35.27	34.21	-78.69	-2,209.87	-126.06	3,937.19	3,877.60	59.59	66.073		
7,400.00	7,116.80	6,110.51	5,817.08	35.54	34.61	-77.02	-2,232.02	-127.59	3,963.41	3,903.04	60.37	65.653		
7,500.00	7,173.86	6,166.44	5,869.86	35.81	34.95	-75.52	-2,250.47	-128.87	3,987.62	3,926.44	61.18	65.181		
7,600.00	7,217.38	6,209.81	5,910.78	36.17	35.20	-74.12	-2,264.78	-129.86	4,009.75	3,947.71	62.04	64.629		
7,700.00	7,246.31	6,239.54	5,938.84	36.80	35.38	-72.77	-2,274.59	-130.54	4,029.72	3,966.75	62.98	63.988		
7,800.00	7,259.92	6,254.90	5,953.34	37.72	35.47	-71.45	-2,279.65	-130.89	4,047.38	3,983.42	63.97	63.273		
7,900.00	7,260.77	6,258.23	5,956.48	38.86	35.49	-70.96	-2,280.75	-130.97	4,063.44	3,998.43	65.01	62.503		
8,000.00	7,260.39	6,260.41	5,958.54	40.19	35.50	-70.99	-2,281.47	-131.02	4,081.49	4,015.29	66.20	61.654		
8,100.00	7,260.01	6,262.59	5,960.60	41.67	35.52	-71.02	-2,282.19	-131.06	4,101.90	4,034.38	67.52	60.755		
8,200.00	7,259.63	6,264.78	5,962.66	43.30	35.53	-71.05	-2,282.91	-131.11	4,124.63	4,055.70	68.94	59.832		
8,300.00	7,259.25	6,266.96	5,964.72	45.05	35.54	-71.08	-2,283.63	-131.16	4,149.65	4,079.21	70.45	58.906		
8,400.00	7,258.87	6,269.14	5,966.78	46.91	35.56	-71.11	-2,284.35	-131.21	4,176.91	4,104.89	72.02	57.995		
8,500.00	7,258.49	6,271.32	5,968.84	48.87	35.57	-71.14	-2,285.07	-131.26	4,202.69	4,130.61	73.64	57.106		
8,600.00	7,258.11	6,273.50	5,970.90	50.92	35.58	-71.17	-2,285.79	-131.31	4,228.47	4,156.33	75.31	56.237		
8,700.00	7,257.73	6,275.68	5,972.96	53.04	35.59	-71.20	-2,286.51	-131.36	4,254.25	4,182.05	77.03	55.387		
8,800.00	7,257.35	6,277.86	5,975.02	55.23	35.60	-71.23	-2,287.23	-131.41	4,280.03	4,207.77	78.80	54.556		
8,900.00	7,256.97	6,279.99	5,977.08	57.47	35.61	-71.26	-2,287.95	-131.46	4,305.81	4,233.49	80.62	53.734		
9,000.00	7,256.59	6,282.12	5,979.14	59.77	35.62	-71.29	-2,288.67	-131.51	4,331.59	4,259.21	82.49	52.921		
9,100.00	7,256.21	6,284.25	5,981.20	62.12	35.63	-71.32	-2,289.39	-131.56	4,357.37	4,284.93	84.31	52.117		
9,200.00	7,255.83	6,286.37	5,983.26	64.50	35.64	-71.35	-2,290.11	-131.61	4,383.15	4,310.65	86.09	51.322		
9,300.00	7,255.45	6,288.50	5,985.32	66.93	35.65	-71.38	-2,290.83	-131.66	4,408.93	4,336.37	87.82	50.536		
9,400.00	7,255.07	6,290.62	5,987.38	69.38	35.66	-71.41	-2,291.55	-131.71	4,434.71	4,362.09	89.51	49.758		
9,500.00	7,254.69	6,292.75	5,989.44	71.87	35.67	-71.44	-2,292.27	-131.76	4,460.49	4,387.81	91.16	48.987		
9,600.00	7,254.31	6,294.87	5,991.50	74.38	35.68	-71.47	-2,292.99	-131.81	4,486.27	4,413.53	92.77	48.223		
9,700.00	7,253.93	6,296.99	5,993.56	76.92	35.69	-71.50	-2,293.71	-131.86	4,512.05	4,439.25	94.34	47.465		
9,800.00	7,253.55	6,299.12	5,995.62	79.48	35.70	-71.53	-2,294.43	-131.91	4,537.83	4,464.97	95.87	46.714		
9,900.00	7,253.18	6,301.25	5,997.68	82.06	35.71	-71.56	-2,295.15	-131.96	4,563.61	4,490.69	97.37	45.969		
10,000.00	7,252.80	6,303.37	5,999.74	84.65	35.72	-71.59	-2,295.87	-132.01	4,589.39	4,516.41	98.83	45.229		
10,100.00	7,252.42	6,305.50	6,001.80	87.27	35.73	-71.62	-2,296.59	-132.06	4,615.17	4,542.13	100.25	44.493		
10,200.00	7,252.04	6,307.62	6,003.86	89.89	35.74	-71.65	-2,297.31	-132.11	4,640.95	4,567.85	101.64	43.761		
10,300.00	7,251.66	6,309.75	6,005.92	92.54	35.75	-71.68	-2,298.03	-132.16	4,666.73	4,593.57	103.00	43.032		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)			
10,400.00	7,251.28	10,426.88	7,132.56	95.19	94.88	-88.38	-2,717.60	-3,324.19	4,199.58	4,010.01	189.57	22.153		
10,500.00	7,250.90	10,526.88	7,131.99	97.86	97.52	-88.38	-2,718.21	-3,424.19	4,199.42	4,004.54	194.88	21.549		
10,600.00	7,250.52	10,626.88	7,131.42	100.53	100.16	-88.38	-2,718.83	-3,524.19	4,199.26	3,999.04	200.22	20.974		
10,700.00	7,250.14	10,726.88	7,130.85	103.22	102.82	-88.37	-2,719.44	-3,624.18	4,199.09	3,993.52	205.57	20.426		
10,800.00	7,249.76	10,826.88	7,130.28	105.91	105.49	-88.37	-2,720.05	-3,724.18	4,198.93	3,987.98	210.95	19.905		
10,900.00	7,249.38	10,926.88	7,129.71	108.62	108.17	-88.37	-2,720.67	-3,824.18	4,198.77	3,982.43	216.34	19.408		
11,000.00	7,249.00	11,026.88	7,129.15	111.33	110.86	-88.36	-2,721.28	-3,924.17	4,198.60	3,976.86	221.74	18.934		
11,100.00	7,248.62	11,126.88	7,128.58	114.04	113.55	-88.36	-2,721.89	-4,024.17	4,198.44	3,971.27	227.17	18.482		
11,200.00	7,248.24	11,226.88	7,128.01	116.77	116.25	-88.36	-2,722.50	-4,124.16	4,198.27	3,965.67	232.60	18.049		
11,300.00	7,247.86	11,326.88	7,127.44	119.50	118.97	-88.36	-2,723.12	-4,224.16	4,198.11	3,960.06	238.05	17.635		
11,400.00	7,247.48	11,426.88	7,126.87	122.24	121.68	-88.35	-2,723.73	-4,324.16	4,197.95	3,954.43	243.51	17.239		
11,500.00	7,247.10	11,526.88	7,126.30	124.98	124.41	-88.35	-2,724.34	-4,424.15	4,197.78	3,948.80	248.99	16.859		
11,600.00	7,246.72	11,626.87	7,125.74	127.73	127.14	-88.35	-2,724.96	-4,524.15	4,197.62	3,943.15	254.47	16.495		
11,700.00	7,246.34	11,726.87	7,125.17	130.48	129.87	-88.35	-2,725.57	-4,624.15	4,197.46	3,937.49	259.96	16.146		
11,800.00	7,245.96	11,826.87	7,124.60	133.24	132.61	-88.34	-2,726.18	-4,724.14	4,197.29	3,931.83	265.47	15.811		
11,900.00	7,245.58	11,926.87	7,124.03	136.00	135.36	-88.34	-2,726.80	-4,824.14	4,197.13	3,926.15	270.98	15.489		
12,000.00	7,245.21	12,026.87	7,123.46	138.76	138.11	-88.34	-2,727.41	-4,924.13	4,196.97	3,920.47	276.50	15.179		
12,100.00	7,244.83	12,126.87	7,122.89	141.53	140.87	-88.34	-2,728.02	-5,024.13	4,196.80	3,914.78	282.03	14.881		
12,200.00	7,244.45	12,226.87	7,122.32	144.30	143.62	-88.33	-2,728.63	-5,124.13	4,196.64	3,909.08	287.56	14.594		
12,300.00	7,244.07	12,326.87	7,121.76	147.08	146.39	-88.33	-2,729.25	-5,224.12	4,196.48	3,903.37	293.10	14.317		
12,400.00	7,243.69	12,426.87	7,121.19	149.86	149.15	-88.33	-2,729.86	-5,324.12	4,196.31	3,897.66	298.65	14.051		
12,500.00	7,243.31	12,526.87	7,120.62	152.64	151.92	-88.32	-2,730.47	-5,424.11	4,196.15	3,891.94	304.20	13.794		
12,600.00	7,242.93	12,626.87	7,120.05	155.42	154.70	-88.32	-2,731.09	-5,524.11	4,195.99	3,886.22	309.76	13.546		
12,700.00	7,242.55	12,726.87	7,119.48	158.21	157.47	-88.32	-2,731.70	-5,624.11	4,195.82	3,880.49	315.33	13.306		
12,800.00	7,242.17	12,826.87	7,118.91	161.00	160.25	-88.32	-2,732.31	-5,724.10	4,195.66	3,874.76	320.90	13.075		
12,900.00	7,241.79	12,926.87	7,118.35	163.79	163.03	-88.31	-2,732.93	-5,824.10	4,195.50	3,869.02	326.48	12.851		
13,000.00	7,241.41	13,026.87	7,117.78	166.58	165.82	-88.31	-2,733.54	-5,924.10	4,195.33	3,863.28	332.06	12.634		
13,100.00	7,241.03	13,126.87	7,117.21	169.38	168.61	-88.31	-2,734.15	-6,024.09	4,195.17	3,857.53	337.64	12.425		
13,200.00	7,240.65	13,226.87	7,116.64	172.18	171.39	-88.31	-2,734.76	-6,124.09	4,195.01	3,851.77	343.23	12.222		
13,300.00	7,240.27	13,326.87	7,116.07	174.98	174.19	-88.30	-2,735.38	-6,224.08	4,194.84	3,846.02	348.82	12.026		
13,400.00	7,239.89	13,426.87	7,115.50	177.78	176.98	-88.30	-2,735.99	-6,324.08	4,194.68	3,840.26	354.42	11.835		
13,500.00	7,239.51	13,526.87	7,114.93	180.58	179.78	-88.30	-2,736.60	-6,424.08	4,194.52	3,834.49	360.02	11.651		
13,600.00	7,239.13	13,626.87	7,114.37	183.39	182.57	-88.30	-2,737.22	-6,524.07	4,194.35	3,828.73	365.63	11.472		
13,700.00	7,238.75	13,726.87	7,113.80	186.20	185.37	-88.29	-2,737.83	-6,624.07	4,194.19	3,822.96	371.23	11.298		
13,800.00	7,238.37	13,826.87	7,113.23	189.00	188.18	-88.29	-2,738.44	-6,724.07	4,194.03	3,817.18	376.84	11.129		
13,900.00	7,237.99	13,926.87	7,112.66	191.81	190.98	-88.29	-2,739.05	-6,824.06	4,193.86	3,811.41	382.46	10.966		
14,000.00	7,237.62	14,026.87	7,112.09	194.63	193.78	-88.29	-2,739.67	-6,924.06	4,193.70	3,805.63	388.07	10.806		
14,100.00	7,237.24	14,126.87	7,111.52	197.44	196.59	-88.28	-2,740.28	-7,024.05	4,193.54	3,799.84	393.69	10.652		
14,200.00	7,236.86	14,226.87	7,110.96	200.25	199.40	-88.28	-2,740.89	-7,124.05	4,193.37	3,794.06	399.32	10.501		
14,300.00	7,236.48	14,326.87	7,110.39	203.07	202.21	-88.28	-2,741.51	-7,224.05	4,193.21	3,788.27	404.94	10.355		
14,400.00	7,236.10	14,426.87	7,109.82	205.88	205.02	-88.27	-2,742.12	-7,324.04	4,193.05	3,782.48	410.57	10.213		
14,500.00	7,235.72	14,526.87	7,109.25	208.70	207.83	-88.27	-2,742.73	-7,424.04	4,192.88	3,776.69	416.20	10.074		
14,600.00	7,235.34	14,626.87	7,108.68	211.52	210.64	-88.27	-2,743.35	-7,524.03	4,192.72	3,770.89	421.83	9.939		
14,700.00	7,234.96	14,726.87	7,108.11	214.34	213.46	-88.27	-2,743.96	-7,624.03	4,192.56	3,765.10	427.46	9.808		
14,800.00	7,234.58	14,826.86	7,107.55	217.16	216.27	-88.26	-2,744.57	-7,724.03	4,192.39	3,759.30	433.10	9.680		
14,900.00	7,234.20	14,926.86	7,106.98	219.98	219.09	-88.26	-2,745.18	-7,824.02	4,192.23	3,753.50	438.74	9.555		
15,000.00	7,233.82	15,026.86	7,106.41	222.81	221.91	-88.26	-2,745.80	-7,924.02	4,192.07	3,747.69	444.38	9.434		
15,100.00	7,233.44	15,126.86	7,105.84	225.63	224.73	-88.26	-2,746.41	-8,024.02	4,191.90	3,741.89	450.02	9.315		
15,200.00	7,233.06	15,226.86	7,105.27	228.45	227.55	-88.25	-2,747.02	-8,124.01	4,191.74	3,736.08	455.66	9.199		
15,216.01	7,233.00	15,242.88	7,105.18	228.91	228.00	-88.25	-2,747.12	-8,140.02	4,191.71	3,735.15	456.56	9.181 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	3.00	0.00	3.28	3.28	-179.52	-499.82	-4.17	499.84					
100.00	100.00	103.00	100.00	3.28	3.29	-179.52	-499.82	-4.17	499.84	493.27	6.57	76.077		
200.00	200.00	197.00	200.00	3.34	3.33	-179.52	-499.82	-4.17	499.84	493.16	6.67	74.919 CC, ES		
300.00	299.98	282.52	285.51	3.45	3.42	-173.79	-501.01	-4.24	502.97	496.09	6.87	73.183		
400.00	399.84	367.09	370.00	3.61	3.54	-173.81	-504.68	-4.44	512.51	505.33	7.18	71.413		
500.00	499.45	450.65	453.33	3.82	3.69	-173.83	-510.76	-4.77	528.40	520.84	7.57	69.838		
600.00	598.70	532.73	534.98	4.07	3.87	-173.85	-519.09	-5.23	550.54	542.51	8.02	68.624		
700.00	697.47	612.88	614.45	4.35	4.07	-173.88	-529.48	-5.80	578.77	570.24	8.53	67.873		
800.00	795.62	690.70	691.30	4.67	4.29	-173.90	-541.68	-6.46	612.91	603.85	9.06	67.619		
900.00	893.06	765.83	765.16	5.01	4.52	-173.91	-555.43	-7.22	652.76	643.14	9.62	67.844		
1,000.00	989.64	837.98	835.72	5.38	4.77	-173.91	-570.46	-8.04	698.07	687.88	10.18	68.547		
1,100.00	1,085.42	907.11	902.95	5.78	5.03	-173.96	-586.51	-8.92	748.15	737.41	10.75	69.615		
1,200.00	1,181.09	974.16	967.77	6.20	5.29	-174.05	-603.63	-9.86	800.60	789.31	11.29	70.907		
1,300.00	1,276.76	1,039.28	1,030.33	6.65	5.56	-174.12	-621.70	-10.85	854.99	843.16	11.83	72.251		
1,400.00	1,372.43	1,100.00	1,088.27	7.11	5.83	-174.18	-639.82	-11.84	911.25	898.89	12.36	73.738		
1,500.00	1,468.10	1,163.85	1,148.77	7.57	6.12	-174.22	-660.20	-12.95	969.28	956.38	12.90	75.131		
1,600.00	1,563.77	1,223.35	1,204.72	8.05	6.41	-174.26	-680.39	-14.06	1,029.02	1,015.59	13.42	76.666		
1,700.00	1,659.44	1,281.02	1,258.55	8.53	6.70	-174.28	-701.07	-15.19	1,090.38	1,076.45	13.93	78.262		
1,800.00	1,755.11	1,336.91	1,310.31	9.02	6.99	-174.30	-722.14	-16.34	1,153.29	1,138.86	14.43	79.913		
1,900.00	1,850.78	1,391.07	1,360.05	9.52	7.28	-174.31	-743.51	-17.51	1,217.68	1,202.76	14.92	81.624		
2,000.00	1,946.45	1,460.42	1,423.36	10.02	7.66	-174.31	-771.77	-19.06	1,283.12	1,267.59	15.53	82.624		
2,100.00	2,042.12	1,535.99	1,492.34	10.52	8.09	-174.32	-802.59	-20.75	1,348.61	1,332.40	16.20	83.222		
2,200.00	2,137.78	1,611.56	1,561.31	11.03	8.53	-174.33	-833.42	-22.44	1,414.10	1,397.21	16.89	83.709		
2,300.00	2,233.45	1,687.13	1,630.29	11.54	8.98	-174.34	-864.25	-24.13	1,479.59	1,462.00	17.59	84.104		
2,400.00	2,329.12	1,762.70	1,699.26	12.05	9.43	-174.34	-895.08	-25.81	1,545.08	1,526.78	18.30	84.421		
2,500.00	2,424.79	1,838.27	1,768.24	12.56	9.88	-174.35	-925.91	-27.50	1,610.58	1,591.56	19.02	84.676		
2,600.00	2,520.46	1,913.84	1,837.21	13.08	10.34	-174.35	-956.74	-29.19	1,676.07	1,656.32	19.75	84.879		
2,700.00	2,616.13	1,989.41	1,906.19	13.60	10.80	-174.36	-987.57	-30.88	1,741.56	1,721.08	20.48	85.038		
2,800.00	2,711.80	2,064.98	1,975.16	14.12	11.27	-174.36	-1,018.40	-32.57	1,807.05	1,785.83	21.22	85.160		
2,900.00	2,807.47	2,140.55	2,044.14	14.64	11.74	-174.37	-1,049.23	-34.25	1,872.54	1,850.58	21.96	85.253		
3,000.00	2,903.14	2,216.12	2,113.11	15.16	12.22	-174.37	-1,080.05	-35.94	1,938.04	1,915.32	22.71	85.321		
3,100.00	2,998.81	2,308.31	2,182.09	15.68	12.80	-174.37	-1,110.88	-37.63	2,003.53	1,979.97	23.56	85.052		
3,200.00	3,094.48	2,367.26	2,251.06	16.21	13.17	-174.38	-1,141.71	-39.32	2,069.02	2,044.79	24.23	85.395		
3,300.00	3,190.15	2,442.83	2,320.03	16.73	13.65	-174.38	-1,172.54	-41.00	2,134.51	2,109.52	24.99	85.409		
3,400.00	3,285.82	2,518.40	2,389.01	17.26	14.13	-174.38	-1,203.37	-42.69	2,200.00	2,174.25	25.76	85.411		
3,500.00	3,381.49	2,606.04	2,457.98	17.78	14.69	-174.39	-1,234.20	-44.38	2,265.50	2,238.91	26.59	85.196		
3,600.00	3,477.16	2,669.53	2,526.96	18.31	15.10	-174.39	-1,265.03	-46.07	2,330.99	2,303.69	27.30	85.384		
3,700.00	3,572.83	2,745.10	2,595.93	18.84	15.58	-174.39	-1,295.86	-47.76	2,396.48	2,368.41	28.08	85.359		
3,800.00	3,668.50	2,820.67	2,664.91	19.37	16.07	-174.39	-1,326.69	-49.44	2,461.97	2,433.12	28.85	85.329		
3,900.00	3,764.17	2,903.76	2,733.88	19.89	16.60	-174.40	-1,357.52	-51.13	2,527.46	2,497.79	29.67	85.176		
4,000.00	3,859.84	2,971.81	2,802.86	20.42	17.04	-174.40	-1,388.34	-52.82	2,592.96	2,562.54	30.41	85.253		
4,100.00	3,955.51	3,047.38	2,871.83	20.95	17.53	-174.40	-1,419.17	-54.51	2,658.45	2,627.25	31.20	85.209		
4,200.00	4,051.18	3,122.95	2,940.81	21.48	18.02	-174.40	-1,450.00	-56.20	2,723.94	2,691.96	31.99	85.163		
4,300.00	4,146.85	3,198.52	3,009.78	22.01	18.51	-174.40	-1,480.83	-57.88	2,789.43	2,756.66	32.77	85.114		
4,400.00	4,242.52	3,274.09	3,078.76	22.55	19.01	-174.41	-1,511.66	-59.57	2,854.92	2,821.36	33.56	85.063		
4,500.00	4,338.19	3,349.66	3,147.73	23.08	19.50	-174.41	-1,542.49	-61.26	2,920.42	2,886.06	34.35	85.011		
4,600.00	4,433.86	3,425.23	3,216.71	23.61	19.99	-174.41	-1,573.32	-62.95	2,985.91	2,950.76	35.15	84.958		
4,700.00	4,529.53	3,500.80	3,285.68	24.14	20.48	-174.41	-1,604.15	-64.64	3,051.40	3,015.46	35.94	84.904		
4,800.00	4,625.19	3,576.37	3,354.66	24.67	20.98	-174.41	-1,634.98	-66.32	3,116.89	3,080.16	36.73	84.849		
4,900.00	4,720.86	3,651.94	3,423.63	25.21	21.47	-174.41	-1,665.80	-68.01	3,182.39	3,144.85	37.53	84.793		
5,000.00	4,816.53	3,727.51	3,492.61	25.74	21.97	-174.42	-1,696.63	-69.70	3,247.88	3,209.55	38.33	84.737		
5,100.00	4,912.20	3,803.08	3,561.58	26.27	22.46	-174.42	-1,727.46	-71.39	3,313.37	3,274.24	39.13	84.681		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	3,878.65	3,630.55	26.80	22.96	-174.42	-1,758.29	-73.08	3,378.86	3,338.93	39.93	84.625		
5,300.00	5,103.54	3,954.22	3,699.53	27.34	23.45	-174.42	-1,789.12	-74.76	3,444.35	3,403.63	40.73	84.569		
5,400.00	5,199.22	4,029.80	3,768.51	27.87	23.95	-174.44	-1,819.95	-76.45	3,509.83	3,468.30	41.53	84.513		
5,500.00	5,295.46	4,106.70	3,838.70	28.39	24.45	-174.59	-1,851.32	-78.17	3,573.76	3,531.42	42.34	84.412		
5,600.00	5,392.60	4,185.76	3,910.87	28.89	24.97	-174.73	-1,883.58	-79.94	3,634.97	3,591.81	43.15	84.232		
5,700.00	5,490.50	4,266.91	3,984.93	29.37	25.51	-174.84	-1,916.68	-81.75	3,693.40	3,649.41	43.98	83.974		
5,800.00	5,589.05	4,350.03	4,060.80	29.83	26.06	-174.94	-1,950.59	-83.60	3,748.97	3,704.15	44.82	83.645		
5,900.00	5,688.14	4,435.03	4,138.38	30.26	26.61	-175.02	-1,985.27	-85.50	3,801.62	3,755.95	45.66	83.252		
6,000.00	5,787.63	4,521.81	4,217.58	30.68	27.19	-175.09	-2,020.67	-87.44	3,851.28	3,804.77	46.51	82.798		
6,100.00	5,887.41	4,610.25	4,298.30	31.07	27.77	-175.15	-2,056.75	-89.42	3,897.89	3,850.53	47.37	82.291		
6,200.00	5,987.36	4,700.25	4,380.45	31.44	28.36	-175.19	-2,093.46	-91.43	3,941.41	3,893.18	48.22	81.733		
6,300.00	6,087.36	4,808.58	4,463.67	31.80	29.08	179.09	-2,130.66	-93.46	3,982.39	3,933.22	49.18	80.983		
6,400.00	6,187.36	4,882.69	4,546.97	32.15	29.57	179.13	-2,167.90	-95.50	4,023.17	3,973.22	49.94	80.554		
6,500.00	6,287.36	4,973.97	4,630.28	32.51	30.17	179.17	-2,205.13	-97.54	4,063.94	4,013.13	50.81	79.985		
6,600.00	6,387.36	5,065.24	4,713.59	32.87	30.77	179.21	-2,242.37	-99.58	4,104.72	4,053.04	51.68	79.432		
6,700.00	6,487.36	5,156.51	4,796.90	33.23	31.38	179.25	-2,279.60	-101.62	4,145.49	4,092.95	52.54	78.894		
6,800.00	6,587.36	5,247.79	4,880.20	33.59	31.98	179.29	-2,316.84	-103.66	4,186.27	4,132.86	53.42	78.372		
6,900.00	6,687.26	5,339.04	4,963.50	33.95	32.58	-87.75	-2,354.06	-105.70	4,227.02	4,172.75	54.28	77.875		
7,000.00	6,785.58	5,429.24	5,045.82	34.31	33.18	-84.02	-2,390.86	-107.71	4,267.23	4,212.09	55.13	77.398		
7,100.00	6,879.94	5,516.20	5,125.20	34.65	33.76	-80.68	-2,426.34	-109.65	4,306.06	4,250.09	55.97	76.939		
7,200.00	6,968.01	5,602.21	5,199.66	34.97	34.32	-77.73	-2,459.62	-111.47	4,342.88	4,286.09	56.79	76.467		
7,300.00	7,047.61	5,671.99	5,267.38	35.27	34.79	-75.17	-2,489.89	-113.13	4,377.19	4,319.65	57.54	76.067		
7,400.00	7,116.80	5,736.97	5,326.70	35.54	35.22	-72.95	-2,516.40	-114.58	4,408.64	4,350.33	58.31	75.603		
7,500.00	7,173.86	5,808.86	5,376.14	35.81	35.69	-71.02	-2,538.50	-115.79	4,436.95	4,377.74	59.20	74.942		
7,600.00	7,217.38	5,833.17	5,414.50	36.17	35.85	-69.34	-2,555.64	-116.73	4,461.90	4,401.95	59.95	74.425		
7,700.00	7,246.31	5,862.01	5,440.83	36.80	36.04	-67.87	-2,567.41	-117.38	4,483.30	4,422.43	60.87	73.659		
7,800.00	7,259.92	5,876.96	5,454.47	37.72	36.14	-66.57	-2,573.51	-117.71	4,500.93	4,439.09	61.84	72.783		
7,900.00	7,260.77	5,880.28	5,457.50	38.86	36.17	-66.13	-2,574.86	-117.78	4,515.70	4,452.83	62.87	71.823		
8,000.00	7,260.39	5,882.49	5,459.52	40.19	36.18	-66.15	-2,575.76	-117.83	4,532.15	4,468.10	64.05	70.754		
8,100.00	7,260.01	5,884.69	5,461.53	41.67	36.19	-66.18	-2,576.66	-117.88	4,550.74	4,485.37	65.37	69.615		
8,200.00	7,259.63	5,886.90	5,463.54	43.30	36.21	-66.21	-2,577.56	-117.93	4,571.44	4,504.64	66.80	68.438		
8,300.00	7,259.25	5,889.11	5,465.56	45.05	36.22	-66.24	-2,578.46	-117.98	4,594.22	4,525.90	68.32	67.248		
8,400.00	7,258.87	5,908.69	5,467.57	46.91	36.35	-66.27	-2,579.36	-118.03	4,619.05	4,549.04	70.01	65.975		
8,500.00	7,258.49	5,906.48	5,469.58	48.87	36.34	-66.30	-2,580.26	-118.08	4,645.90	4,574.26	71.64	64.850		
8,600.00	7,258.11	5,895.73	5,471.60	50.92	36.27	-66.32	-2,581.16	-118.13	4,674.74	4,601.47	73.27	63.805		
8,700.00	7,257.73	5,902.07	5,473.61	53.04	36.31	-66.35	-2,582.06	-118.18	4,705.52	4,630.50	75.02	62.723		
8,800.00	7,257.35	5,900.14	5,475.62	55.23	36.30	-66.38	-2,582.96	-118.23	4,738.22	4,661.47	76.75	61.737		
8,900.00	7,256.97	5,902.34	5,477.64	57.47	36.31	-66.41	-2,583.86	-118.28	4,772.78	4,694.27	78.51	60.790		
9,000.00	7,256.59	5,904.55	5,479.65	59.77	36.33	-66.44	-2,584.76	-118.33	4,809.18	4,728.89	80.28	59.905		
9,100.00	7,256.21	9,336.60	7,140.30	62.12	64.06	-88.63	-3,342.46	-2,021.61	4,834.33	4,709.33	124.99	38.676		
9,200.00	7,255.83	9,436.60	7,139.76	64.50	66.26	-88.62	-3,343.05	-2,121.61	4,834.14	4,704.46	129.67	37.279		
9,300.00	7,255.45	9,536.60	7,139.22	66.93	68.52	-88.62	-3,343.64	-2,221.60	4,833.95	4,699.51	134.43	35.958		
9,400.00	7,255.07	9,636.60	7,138.68	69.38	70.83	-88.62	-3,344.23	-2,321.60	4,833.76	4,694.49	139.27	34.709		
9,500.00	7,254.69	9,736.60	7,138.14	71.87	73.18	-88.62	-3,344.82	-2,421.60	4,833.57	4,689.40	144.16	33.529		
9,600.00	7,254.31	9,836.60	7,137.60	74.38	75.57	-88.62	-3,345.40	-2,521.59	4,833.38	4,684.26	149.12	32.413		
9,700.00	7,253.93	9,936.60	7,137.06	76.92	77.99	-88.61	-3,345.99	-2,621.59	4,833.19	4,679.06	154.12	31.359		
9,800.00	7,253.55	10,036.60	7,136.52	79.48	80.45	-88.61	-3,346.58	-2,721.58	4,833.00	4,673.82	159.18	30.362		
9,900.00	7,253.18	10,136.60	7,135.97	82.06	82.93	-88.61	-3,347.17	-2,821.58	4,832.81	4,668.53	164.28	29.419		
10,000.00	7,252.80	10,236.60	7,135.43	84.65	85.44	-88.61	-3,347.75	-2,921.58	4,832.62	4,663.20	169.41	28.526		
10,100.00	7,252.42	10,336.60	7,134.89	87.27	87.97	-88.61	-3,348.34	-3,021.57	4,832.43	4,657.84	174.59	27.679		
10,200.00	7,252.04	10,436.60	7,134.35	89.89	90.52	-88.60	-3,348.93	-3,121.57	4,832.24	4,652.44	179.79	26.877		
10,300.00	7,251.66	10,536.60	7,133.81	92.54	93.09	-88.60	-3,349.52	-3,221.57	4,832.05	4,647.02	185.03	26.115		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,251.28	10,636.60	7,133.27	95.19	95.68	-88.60	-3,350.11	-3,321.56	4,831.86	4,641.56	190.29	25.392		
10,500.00	7,250.90	10,736.60	7,132.73	97.86	98.28	-88.60	-3,350.69	-3,421.56	4,831.67	4,636.08	195.58	24.704		
10,600.00	7,250.52	10,836.59	7,132.19	100.53	100.90	-88.60	-3,351.28	-3,521.56	4,831.48	4,630.58	200.89	24.050		
10,700.00	7,250.14	10,936.59	7,131.65	103.22	103.53	-88.60	-3,351.87	-3,621.55	4,831.29	4,625.06	206.23	23.427		
10,800.00	7,249.76	11,036.59	7,131.11	105.91	106.17	-88.59	-3,352.46	-3,721.55	4,831.10	4,619.52	211.58	22.833		
10,900.00	7,249.38	11,136.59	7,130.56	108.62	108.83	-88.59	-3,353.05	-3,821.55	4,830.91	4,613.95	216.95	22.267		
11,000.00	7,249.00	11,236.59	7,130.02	111.33	111.49	-88.59	-3,353.63	-3,921.54	4,830.72	4,608.37	222.34	21.727		
11,100.00	7,248.62	11,336.59	7,129.48	114.04	114.16	-88.59	-3,354.22	-4,021.54	4,830.53	4,602.78	227.75	21.210		
11,200.00	7,248.24	11,436.59	7,128.94	116.77	116.85	-88.59	-3,354.81	-4,121.54	4,830.34	4,597.17	233.17	20.716		
11,300.00	7,247.86	11,536.59	7,128.40	119.50	119.54	-88.58	-3,355.40	-4,221.53	4,830.15	4,591.55	238.60	20.244		
11,400.00	7,247.48	11,636.59	7,127.86	122.24	122.24	-88.58	-3,355.99	-4,321.53	4,829.96	4,585.91	244.05	19.791		
11,500.00	7,247.10	11,736.59	7,127.32	124.98	124.94	-88.58	-3,356.57	-4,421.53	4,829.77	4,580.26	249.50	19.357		
11,600.00	7,246.72	11,836.59	7,126.78	127.73	127.65	-88.58	-3,357.16	-4,521.52	4,829.58	4,574.60	254.97	18.941		
11,700.00	7,246.34	11,936.59	7,126.24	130.48	130.37	-88.58	-3,357.75	-4,621.52	4,829.39	4,568.93	260.45	18.542		
11,800.00	7,245.96	12,036.59	7,125.69	133.24	133.10	-88.57	-3,358.34	-4,721.51	4,829.20	4,563.25	265.94	18.159		
11,900.00	7,245.58	12,136.59	7,125.15	136.00	135.83	-88.57	-3,358.93	-4,821.51	4,829.01	4,557.56	271.44	17.790		
12,000.00	7,245.21	12,236.59	7,124.61	138.76	138.57	-88.57	-3,359.51	-4,921.51	4,828.82	4,551.86	276.95	17.436		
12,100.00	7,244.83	12,336.59	7,124.07	141.53	141.31	-88.57	-3,360.10	-5,021.50	4,828.63	4,546.16	282.47	17.094		
12,200.00	7,244.45	12,436.59	7,123.53	144.30	144.05	-88.57	-3,360.69	-5,121.50	4,828.44	4,540.44	287.99	16.766		
12,300.00	7,244.07	12,536.59	7,122.99	147.08	146.80	-88.56	-3,361.28	-5,221.50	4,828.25	4,534.72	293.52	16.449		
12,400.00	7,243.69	12,636.59	7,122.45	149.86	149.56	-88.56	-3,361.86	-5,321.49	4,828.06	4,528.99	299.06	16.144		
12,500.00	7,243.31	12,736.59	7,121.91	152.64	152.31	-88.56	-3,362.45	-5,421.49	4,827.87	4,523.26	304.61	15.850		
12,600.00	7,242.93	12,836.59	7,121.37	155.42	155.08	-88.56	-3,363.04	-5,521.49	4,827.68	4,517.52	310.16	15.565		
12,700.00	7,242.55	12,936.59	7,120.82	158.21	157.84	-88.56	-3,363.63	-5,621.48	4,827.49	4,511.77	315.71	15.291		
12,800.00	7,242.17	13,036.59	7,120.28	161.00	160.61	-88.55	-3,364.22	-5,721.48	4,827.30	4,506.02	321.28	15.025		
12,900.00	7,241.79	13,136.59	7,119.74	163.79	163.38	-88.55	-3,364.80	-5,821.48	4,827.11	4,500.26	326.84	14.769		
13,000.00	7,241.41	13,236.59	7,119.20	166.58	166.16	-88.55	-3,365.39	-5,921.47	4,826.92	4,494.50	332.42	14.521		
13,100.00	7,241.03	13,336.59	7,118.66	169.38	168.93	-88.55	-3,365.98	-6,021.47	4,826.73	4,488.73	337.99	14.281		
13,200.00	7,240.65	13,436.59	7,118.12	172.18	171.71	-88.55	-3,366.57	-6,121.47	4,826.54	4,482.96	343.57	14.048		
13,300.00	7,240.27	13,536.59	7,117.58	174.98	174.50	-88.54	-3,367.16	-6,221.46	4,826.35	4,477.19	349.16	13.823		
13,400.00	7,239.89	13,636.59	7,117.04	177.78	177.28	-88.54	-3,367.74	-6,321.46	4,826.16	4,471.41	354.75	13.604		
13,500.00	7,239.51	13,736.59	7,116.50	180.58	180.07	-88.54	-3,368.33	-6,421.46	4,825.97	4,465.62	360.34	13.393		
13,600.00	7,239.13	13,836.59	7,115.95	183.39	182.86	-88.54	-3,368.92	-6,521.45	4,825.78	4,459.84	365.94	13.187		
13,700.00	7,238.75	13,936.59	7,115.41	186.20	185.65	-88.54	-3,369.51	-6,621.45	4,825.59	4,454.04	371.54	12.988		
13,800.00	7,238.37	14,036.58	7,114.87	189.00	188.45	-88.53	-3,370.10	-6,721.44	4,825.40	4,448.25	377.15	12.794		
13,900.00	7,237.99	14,136.58	7,114.33	191.81	191.24	-88.53	-3,370.68	-6,821.44	4,825.21	4,442.45	382.76	12.606		
14,000.00	7,237.62	14,236.58	7,113.79	194.63	194.04	-88.53	-3,371.27	-6,921.44	4,825.02	4,436.65	388.37	12.424		
14,100.00	7,237.24	14,336.58	7,113.25	197.44	196.84	-88.53	-3,371.86	-7,021.43	4,824.83	4,430.85	393.98	12.246		
14,200.00	7,236.86	14,436.58	7,112.71	200.25	199.64	-88.53	-3,372.45	-7,121.43	4,824.64	4,425.04	399.60	12.074		
14,300.00	7,236.48	14,536.58	7,112.17	203.07	202.44	-88.52	-3,373.04	-7,221.43	4,824.45	4,419.23	405.22	11.906		
14,400.00	7,236.10	14,636.58	7,111.63	205.88	205.25	-88.52	-3,373.62	-7,321.42	4,824.26	4,413.42	410.84	11.742		
14,500.00	7,235.72	14,736.58	7,111.09	208.70	208.05	-88.52	-3,374.21	-7,421.42	4,824.07	4,407.60	416.46	11.583		
14,600.00	7,235.34	14,836.58	7,110.54	211.52	210.86	-88.52	-3,374.80	-7,521.42	4,823.88	4,401.79	422.09	11.429		
14,700.00	7,234.96	14,936.58	7,110.00	214.34	213.67	-88.52	-3,375.39	-7,621.41	4,823.69	4,395.97	427.72	11.278		
14,800.00	7,234.58	15,036.58	7,109.46	217.16	216.48	-88.51	-3,375.98	-7,721.41	4,823.50	4,390.15	433.35	11.131		
14,900.00	7,234.20	15,136.58	7,108.92	219.98	219.29	-88.51	-3,376.56	-7,821.41	4,823.31	4,384.32	438.99	10.987		
15,000.00	7,233.82	15,236.58	7,108.38	222.81	222.10	-88.51	-3,377.15	-7,921.40	4,823.12	4,378.50	444.62	10.848		
15,100.00	7,233.44	15,336.58	7,107.84	225.63	224.92	-88.51	-3,377.74	-8,021.40	4,822.93	4,372.67	450.26	10.711		
15,200.00	7,233.06	15,436.58	7,107.30	228.45	227.73	-88.51	-3,378.33	-8,121.40	4,822.74	4,366.84	455.90	10.579		
15,216.01	7,233.00	15,452.59	7,107.21	228.91	228.18	-88.51	-3,378.42	-8,137.41	4,822.71	4,365.91	456.80	10.558 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.00	0.00	3.28	0.00	-179.60	-39.71	-0.28	39.71					
100.00	100.00	100.00	100.00	3.28	0.18	-179.60	-39.71	-0.28	39.71	36.25	3.46	11.476		
200.00	200.00	200.00	200.00	3.34	0.61	-179.60	-39.71	-0.28	39.71	35.76	3.95	10.050 CC		
300.00	299.98	300.02	299.98	3.45	1.05	-174.12	-39.71	-0.28	41.45	36.95	4.50	9.213		
400.00	399.84	400.16	399.84	3.61	1.49	-174.77	-39.71	-0.28	46.65	41.55	5.10	9.147		
500.00	499.45	499.45	499.45	3.82	1.93	-175.58	-39.71	-0.28	55.34	49.59	5.75	9.632		
600.00	598.70	601.03	601.01	4.07	2.37	-176.23	-37.94	-0.52	65.76	59.32	6.45	10.197		
700.00	697.47	703.00	702.83	4.35	2.83	-176.60	-32.59	-1.25	76.14	68.94	7.21	10.568		
800.00	795.62	805.36	804.78	4.67	3.28	-176.79	-23.60	-2.47	86.46	78.46	8.00	10.806		
900.00	893.06	908.11	906.73	5.01	3.74	-176.86	-10.95	-4.19	96.69	87.87	8.83	10.954		
1,000.00	989.64	1,011.24	1,008.53	5.38	4.20	-176.85	5.37	-6.41	106.84	97.16	9.68	11.038		
1,100.00	1,085.42	1,111.47	1,107.05	5.78	4.65	-176.81	23.65	-8.90	117.50	106.99	10.51	11.178		
1,200.00	1,181.09	1,210.87	1,204.73	6.20	5.10	-176.80	41.85	-11.37	128.46	117.11	11.35	11.317		
1,300.00	1,276.76	1,310.26	1,302.42	6.65	5.55	-176.78	60.05	-13.85	139.41	127.21	12.21	11.420		
1,400.00	1,372.43	1,409.66	1,400.10	7.11	6.01	-176.77	78.25	-16.33	150.37	137.29	13.08	11.496		
1,500.00	1,468.10	1,509.06	1,497.79	7.57	6.47	-176.76	96.46	-18.80	161.33	147.36	13.96	11.553		
1,600.00	1,563.77	1,608.46	1,595.48	8.05	6.93	-176.75	114.66	-21.28	172.29	157.43	14.86	11.594		
1,700.00	1,659.44	1,707.86	1,693.16	8.53	7.40	-176.74	132.86	-23.75	183.24	167.48	15.76	11.625		
1,800.00	1,755.11	1,807.25	1,790.85	9.02	7.87	-176.73	151.06	-26.23	194.20	177.53	16.67	11.648		
1,900.00	1,850.78	1,906.65	1,888.53	9.52	8.33	-176.72	169.26	-28.71	205.16	187.57	17.59	11.664		
2,000.00	1,946.45	2,006.05	1,988.22	10.02	8.80	-176.72	187.47	-31.18	216.11	197.60	18.51	11.675		
2,100.00	2,042.12	2,105.45	2,083.90	10.52	9.27	-176.71	205.67	-33.66	227.07	207.63	19.44	11.682		
2,200.00	2,137.78	2,204.84	2,181.59	11.03	9.74	-176.71	223.87	-36.14	238.03	217.66	20.37	11.687		
2,300.00	2,233.45	2,304.24	2,279.28	11.54	10.21	-176.70	242.07	-38.61	248.98	227.68	21.30	11.689		
2,400.00	2,329.12	2,403.64	2,376.96	12.05	10.68	-176.70	260.27	-41.09	259.94	237.70	22.24	11.689		
2,500.00	2,424.79	2,503.04	2,474.65	12.56	11.15	-176.69	278.48	-43.56	270.90	247.72	23.18	11.689		
2,600.00	2,520.46	2,602.44	2,572.33	13.08	11.62	-176.69	296.68	-46.04	281.86	257.74	24.12	11.687		
2,700.00	2,616.13	2,701.83	2,670.02	13.60	12.09	-176.69	314.88	-48.52	292.81	267.75	25.06	11.684		
2,800.00	2,711.80	2,801.23	2,767.70	14.12	12.57	-176.68	333.08	-50.99	303.77	277.76	26.01	11.681		
2,900.00	2,807.47	2,900.63	2,865.39	14.64	13.04	-176.68	351.28	-53.47	314.73	287.77	26.95	11.677		
3,000.00	2,903.14	3,000.03	2,963.08	15.16	13.51	-176.68	369.49	-55.95	325.68	297.78	27.90	11.672		
3,100.00	2,998.81	3,100.57	3,060.76	15.68	13.99	-176.68	387.69	-58.42	336.64	307.78	28.86	11.666		
3,200.00	3,094.48	3,201.18	3,158.45	16.21	14.47	-176.67	405.89	-60.90	347.60	317.78	29.81	11.659		
3,300.00	3,190.15	3,301.78	3,256.13	16.73	14.95	-176.67	424.09	-63.37	358.55	327.78	30.77	11.652		
3,400.00	3,285.82	3,402.38	3,353.82	17.26	15.42	-176.67	442.29	-65.85	369.51	337.78	31.73	11.646		
3,500.00	3,381.49	3,497.02	3,451.50	17.78	15.87	-176.67	460.50	-68.33	380.47	347.81	32.66	11.649		
3,600.00	3,477.16	3,596.42	3,549.19	18.31	16.35	-176.67	478.70	-70.80	391.42	357.81	33.62	11.644		
3,700.00	3,572.83	3,695.81	3,646.88	18.84	16.82	-176.66	496.90	-73.28	402.38	367.81	34.57	11.639		
3,800.00	3,668.50	3,795.21	3,744.56	19.37	17.29	-176.66	515.10	-75.76	413.34	377.81	35.53	11.634		
3,900.00	3,764.17	3,894.61	3,842.25	19.89	17.77	-176.66	533.30	-78.23	424.30	387.81	36.49	11.629		
4,000.00	3,859.84	3,994.01	3,939.93	20.42	18.24	-176.66	551.51	-80.71	435.25	397.81	37.44	11.624		
4,100.00	3,955.51	4,093.41	4,037.62	20.95	18.71	-176.66	569.71	-83.18	446.21	407.81	38.40	11.620		
4,200.00	4,051.18	4,207.20	4,135.30	21.48	19.26	-176.66	587.91	-85.66	457.17	417.74	39.43	11.595		
4,300.00	4,146.85	4,307.80	4,232.99	22.01	19.74	-176.66	606.11	-88.14	468.12	427.73	40.39	11.590		
4,400.00	4,242.52	4,391.60	4,330.68	22.55	20.14	-176.65	624.31	-90.61	479.08	437.80	41.28	11.606		
4,500.00	4,338.19	4,491.00	4,428.36	23.08	20.61	-176.65	642.52	-93.09	490.04	447.80	42.24	11.602		
4,600.00	4,433.86	4,609.61	4,526.05	23.61	21.18	-176.65	660.72	-95.56	500.99	457.71	43.29	11.573		
4,700.00	4,529.53	4,689.79	4,623.73	24.14	21.56	-176.65	678.92	-98.04	511.95	467.79	44.16	11.593		
4,800.00	4,625.19	4,789.19	4,721.42	24.67	22.03	-176.65	697.12	-100.52	522.91	477.79	45.12	11.589		
4,900.00	4,720.86	4,888.59	4,819.10	25.21	22.51	-176.65	715.32	-102.99	533.87	487.78	46.08	11.585		
5,000.00	4,816.53	4,987.99	4,916.79	25.74	22.98	-176.65	733.53	-105.47	544.82	497.78	47.04	11.581		
5,100.00	4,912.20	5,087.38	5,014.48	26.27	23.45	-176.65	751.73	-107.95	555.78	507.77	48.01	11.577		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	5,186.78	5,112.16	26.80	23.93	-176.65	769.93	-110.42	566.74	517.77	48.97	11.573		
5,300.00	5,103.54	5,286.18	5,209.85	27.34	24.40	-176.65	788.13	-112.90	577.69	527.76	49.93	11.570		
5,400.00	5,199.22	5,385.58	5,307.53	27.87	24.88	-176.65	806.33	-115.37	588.64	537.74	50.89	11.566		
5,500.00	5,295.46	5,485.18	5,405.42	28.39	25.35	-176.64	824.57	-117.86	597.54	545.69	51.85	11.524		
5,600.00	5,392.60	5,585.02	5,503.54	28.89	25.83	-176.62	842.86	-120.34	602.97	550.18	52.80	11.421		
5,700.00	5,490.50	5,685.00	5,601.80	29.37	26.30	-176.57	861.16	-122.83	604.92	551.19	53.73	11.259		
5,800.00	5,589.05	5,784.98	5,700.05	29.83	26.78	-176.50	879.47	-125.32	603.39	548.74	54.65	11.041		
5,900.00	5,688.14	5,884.84	5,798.20	30.26	27.26	-176.40	897.76	-127.81	598.37	542.82	55.55	10.771		
6,000.00	5,787.63	5,984.47	5,896.11	30.68	27.73	-176.27	916.00	-130.29	589.89	533.45	56.44	10.452		
6,100.00	5,887.41	6,083.74	5,993.67	31.07	28.21	-176.12	934.18	-132.77	577.94	520.63	57.31	10.085		
6,200.00	5,987.36	6,182.53	6,090.75	31.44	28.68	-175.92	952.27	-135.23	562.54	504.38	58.16	9.672		
6,300.00	6,087.36	6,280.85	6,187.38	31.80	29.15	178.56	970.28	-137.68	544.40	485.40	59.00	9.228		
6,400.00	6,187.36	6,379.12	6,283.96	32.15	29.62	178.78	988.27	-140.13	526.03	466.20	59.83	8.792		
6,500.00	6,287.36	6,477.40	6,380.55	32.51	30.09	179.02	1,006.27	-142.57	507.67	447.00	60.67	8.368		
6,600.00	6,387.36	6,575.68	6,477.13	32.87	30.56	179.27	1,024.27	-145.02	489.32	427.81	61.50	7.956		
6,700.00	6,487.36	6,673.96	6,573.72	33.23	31.02	179.55	1,042.26	-147.47	470.98	408.63	62.34	7.554		
6,800.00	6,587.36	6,772.04	6,670.10	33.59	31.49	179.89	1,060.22	-150.24	452.65	389.46	63.19	7.164		
6,900.00	6,687.26	6,868.25	6,763.80	33.95	31.95	-89.40	1,077.51	-162.96	434.58	370.56	64.02	6.788		
7,000.00	6,785.58	6,963.06	6,853.28	34.31	32.39	-89.60	1,093.81	-189.37	417.17	352.33	64.85	6.433		
7,100.00	6,879.94	7,056.78	6,937.04	34.65	32.80	-89.75	1,108.83	-228.47	400.80	335.14	65.66	6.104		
7,200.00	6,968.01	7,149.68	7,031.63	34.97	33.20	-89.87	1,122.33	-279.12	385.80	319.36	66.45	5.806		
7,300.00	7,047.61	7,241.95	7,081.77	35.27	33.59	-89.95	1,134.09	-340.09	372.51	305.26	67.25	5.539		
7,400.00	7,116.80	7,333.76	7,140.30	35.54	34.02	-90.01	1,143.91	-410.04	361.19	293.07	68.13	5.302		
7,500.00	7,173.86	7,425.27	7,188.22	35.81	34.55	-90.04	1,151.64	-487.52	352.08	282.92	69.15	5.091		
7,600.00	7,217.38	7,516.59	7,224.70	36.17	35.23	-90.07	1,157.13	-570.98	345.34	274.92	70.42	4.904		
7,700.00	7,246.31	7,607.81	7,249.06	36.80	36.06	-90.10	1,160.29	-658.74	341.11	269.13	71.98	4.739		
7,800.00	7,259.92	7,699.00	7,260.86	37.72	37.03	-90.15	1,161.07	-749.08	339.49	265.61	73.87	4.595		
7,812.00	7,260.58	7,709.94	7,261.42	37.86	37.15	-90.14	1,161.00	-760.01	339.47	265.34	74.13	4.580		
7,900.00	7,260.77	7,795.01	7,261.77	38.86	38.17	-90.17	1,159.72	-845.06	340.10	263.92	76.17	4.465		
8,000.00	7,260.39	7,904.99	7,261.35	40.19	39.66	-90.16	1,158.06	-945.04	340.97	261.93	79.05	4.314		
8,100.00	7,260.01	8,005.00	7,260.93	41.67	41.18	-90.15	1,156.40	-1,045.02	341.85	259.76	82.09	4.164		
8,200.00	7,259.63	8,105.00	7,260.51	43.30	42.84	-90.15	1,154.75	-1,145.00	342.73	257.31	85.41	4.013		
8,300.00	7,259.25	8,195.00	7,260.09	45.05	44.44	-90.14	1,153.09	-1,244.99	343.60	254.81	88.79	3.870		
8,400.00	7,258.87	8,294.99	7,259.67	46.91	46.32	-90.13	1,151.43	-1,344.97	344.48	251.92	92.56	3.722		
8,500.00	7,258.49	8,394.99	7,259.25	48.87	48.29	-90.12	1,149.77	-1,444.95	345.36	248.84	96.52	3.578		
8,600.00	7,258.11	8,505.02	7,258.83	50.92	50.56	-90.12	1,148.11	-1,544.93	346.23	245.37	100.86	3.433		
8,700.00	7,257.73	8,594.98	7,258.41	53.04	52.48	-90.11	1,146.45	-1,644.91	347.11	242.19	104.92	3.308		
8,800.00	7,257.35	8,705.02	7,257.99	55.23	54.91	-90.10	1,144.79	-1,744.89	347.99	238.43	109.56	3.176		
8,900.00	7,256.97	8,805.03	7,257.57	57.47	57.17	-90.10	1,143.14	-1,844.87	348.86	234.78	114.09	3.058		
9,000.00	7,256.59	8,905.03	7,257.15	59.77	59.48	-90.09	1,141.48	-1,944.86	349.74	231.02	118.72	2.946		
9,100.00	7,256.21	9,005.04	7,256.73	62.12	61.84	-90.08	1,139.82	-2,044.84	350.62	227.17	123.44	2.840		
9,200.00	7,255.83	9,105.04	7,256.31	64.50	64.24	-90.08	1,138.16	-2,144.82	351.49	223.25	128.24	2.741		
9,300.00	7,255.45	9,205.04	7,255.89	66.93	66.68	-90.07	1,136.50	-2,244.80	352.37	219.25	133.12	2.647		
9,400.00	7,255.07	9,305.05	7,255.47	69.38	69.15	-90.06	1,134.84	-2,344.78	353.25	215.19	138.06	2.559		
9,500.00	7,254.69	9,405.05	7,255.05	71.87	71.64	-90.06	1,133.19	-2,444.76	354.12	211.07	143.05	2.475		
9,600.00	7,254.31	9,505.05	7,254.63	74.38	74.17	-90.05	1,131.53	-2,544.75	355.00	206.90	148.10	2.397		
9,700.00	7,253.93	9,605.06	7,254.21	76.92	76.71	-90.04	1,129.87	-2,644.73	355.88	202.68	153.20	2.323		
9,800.00	7,253.55	9,705.06	7,253.79	79.48	79.28	-90.04	1,128.21	-2,744.71	356.75	198.42	158.33	2.253		
9,900.00	7,253.18	9,794.93	7,253.37	82.06	81.61	-90.03	1,126.55	-2,844.69	357.63	194.38	163.25	2.191		
10,000.00	7,252.80	9,905.07	7,252.95	84.65	84.47	-90.02	1,124.89	-2,944.67	358.51	189.79	168.72	2.125		
10,100.00	7,252.42	10,005.07	7,252.53	87.27	87.09	-90.02	1,123.23	-3,044.65	359.38	185.42	173.96	2.066		
10,200.00	7,252.04	10,094.92	7,252.11	89.89	89.46	-90.01	1,121.58	-3,144.63	360.26	181.30	178.96	2.013		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,251.66	10,205.08	7,251.69	92.54	92.37	-90.00	1,119.92	-3,244.62	361.14	176.61	184.53	1.957		
10,400.00	7,251.28	10,305.09	7,251.26	95.19	95.03	-90.00	1,118.26	-3,344.60	362.01	172.16	189.85	1.907		
10,500.00	7,250.90	10,405.09	7,250.84	97.86	97.70	-89.99	1,116.60	-3,444.58	362.89	167.70	195.19	1.859		
10,600.00	7,250.52	10,505.09	7,250.42	100.53	100.38	-89.98	1,114.94	-3,544.56	363.77	163.21	200.56	1.814		
10,700.00	7,250.14	10,594.90	7,250.00	103.22	102.80	-89.98	1,113.28	-3,644.54	364.64	158.98	205.66	1.773		
10,800.00	7,249.76	10,705.10	7,249.58	105.91	105.77	-89.97	1,111.62	-3,744.52	365.52	154.18	211.34	1.730		
10,900.00	7,249.38	10,805.10	7,249.16	108.62	108.48	-89.96	1,109.97	-3,844.50	366.40	149.64	216.75	1.690		
11,000.00	7,249.00	10,905.11	7,248.74	111.33	111.19	-89.96	1,108.31	-3,944.49	367.27	145.09	222.18	1.653		
11,100.00	7,248.62	11,005.11	7,248.32	114.04	113.91	-89.95	1,106.65	-4,044.47	368.15	140.52	227.63	1.617		
11,200.00	7,248.24	11,105.12	7,247.90	116.77	116.64	-89.95	1,104.99	-4,144.45	369.03	135.94	233.08	1.583		
11,300.00	7,247.86	11,205.12	7,247.48	119.50	119.37	-89.94	1,103.33	-4,244.43	369.90	131.35	238.55	1.551		
11,400.00	7,247.48	11,305.12	7,247.06	122.24	122.11	-89.93	1,101.67	-4,344.41	370.78	126.75	244.03	1.519		
11,500.00	7,247.10	11,405.13	7,246.64	124.98	124.86	-89.93	1,100.01	-4,444.39	371.66	122.13	249.52	1.489 Level 3		
11,600.00	7,246.72	11,505.13	7,246.22	127.73	127.61	-89.92	1,098.36	-4,544.38	372.53	117.51	255.02	1.461 Level 3		
11,700.00	7,246.34	11,605.14	7,245.80	130.48	130.36	-89.91	1,096.70	-4,644.36	373.41	112.88	260.53	1.433 Level 3		
11,800.00	7,245.96	11,705.14	7,245.38	133.24	133.12	-89.91	1,095.04	-4,744.34	374.29	108.23	266.05	1.407 Level 3		
11,900.00	7,245.58	11,794.86	7,244.96	136.00	135.60	-89.90	1,093.38	-4,844.32	375.16	103.87	271.29	1.383 Level 3		
12,000.00	7,245.21	11,905.15	7,244.54	138.76	138.65	-89.90	1,091.72	-4,944.30	376.04	98.93	277.11	1.357 Level 3		
12,100.00	7,244.83	12,005.15	7,244.12	141.53	141.41	-89.89	1,090.06	-5,044.28	376.92	94.26	282.65	1.333 Level 3		
12,200.00	7,244.45	12,105.15	7,243.70	144.30	144.19	-89.88	1,088.40	-5,144.26	377.79	89.59	288.20	1.311 Level 3		
12,300.00	7,244.07	12,205.16	7,243.28	147.08	146.96	-89.88	1,086.75	-5,244.25	378.67	84.92	293.75	1.289 Level 3		
12,400.00	7,243.69	12,305.16	7,242.86	149.86	149.74	-89.87	1,085.09	-5,344.23	379.55	80.23	299.31	1.268 Level 3		
12,500.00	7,243.31	12,405.17	7,242.44	152.64	152.52	-89.87	1,083.43	-5,444.21	380.42	75.55	304.88	1.248 Level 2		
12,600.00	7,242.93	12,505.17	7,242.02	155.42	155.31	-89.86	1,081.77	-5,544.19	381.30	70.85	310.45	1.228 Level 2		
12,700.00	7,242.55	12,605.17	7,241.60	158.21	158.09	-89.86	1,080.11	-5,644.17	382.18	66.15	316.03	1.209 Level 2		
12,800.00	7,242.17	12,694.82	7,241.18	161.00	160.60	-89.85	1,078.45	-5,744.15	383.05	61.74	321.32	1.192 Level 2		
12,900.00	7,241.79	12,805.18	7,240.76	163.79	163.68	-89.84	1,076.79	-5,844.14	383.93	56.74	327.19	1.173 Level 2		
13,000.00	7,241.41	12,905.19	7,240.34	166.58	166.47	-89.84	1,075.14	-5,944.12	384.81	52.03	332.78	1.156 Level 2		
13,100.00	7,241.03	12,994.81	7,239.92	169.38	169.27	-89.83	1,073.48	-6,044.10	385.69	47.60	338.08	1.141 Level 2		
13,200.00	7,240.65	13,105.19	7,239.50	172.18	172.06	-89.83	1,071.82	-6,144.08	386.56	42.59	343.97	1.124 Level 2		
13,300.00	7,240.27	13,205.20	7,239.08	174.98	174.86	-89.82	1,070.16	-6,244.06	387.44	37.87	349.57	1.108 Level 2		
13,400.00	7,239.89	13,305.20	7,238.66	177.78	177.66	-89.82	1,068.50	-6,344.04	388.32	33.14	355.18	1.093 Level 2		
13,500.00	7,239.51	13,394.80	7,238.24	180.58	180.17	-89.81	1,066.84	-6,444.02	389.19	28.70	360.49	1.080 Level 2		
13,600.00	7,239.13	13,505.21	7,237.82	183.39	183.27	-89.80	1,065.18	-6,544.01	390.07	23.67	366.40	1.065 Level 2		
13,700.00	7,238.75	13,605.21	7,237.39	186.20	186.08	-89.80	1,063.53	-6,643.99	390.95	18.94	372.01	1.051 Level 2		
13,800.00	7,238.37	13,705.22	7,236.97	189.00	188.89	-89.79	1,061.87	-6,743.97	391.82	14.19	377.63	1.038 Level 2		
13,900.00	7,237.99	13,805.22	7,236.55	191.81	191.69	-89.79	1,060.21	-6,843.95	392.70	9.45	383.25	1.025 Level 2		
14,000.00	7,237.62	13,905.22	7,236.13	194.63	194.51	-89.78	1,058.55	-6,943.93	393.58	4.71	388.87	1.012 Level 2		
14,100.00	7,237.24	14,005.23	7,235.71	197.44	197.32	-89.78	1,056.89	-7,043.91	394.45	-0.04	394.50	1.000 Level 1		
14,200.00	7,236.86	14,094.77	7,235.29	200.25	199.84	-89.77	1,055.23	-7,143.89	395.33	-4.50	399.83	0.989 Level 1		
14,300.00	7,236.48	14,205.24	7,234.87	203.07	202.94	-89.77	1,053.57	-7,243.88	396.21	-9.55	405.75	0.976 Level 1		
14,400.00	7,236.10	14,305.24	7,234.45	205.88	205.76	-89.76	1,051.92	-7,343.86	397.08	-14.30	411.39	0.965 Level 1		
14,500.00	7,235.72	14,405.24	7,234.03	208.70	208.58	-89.76	1,050.26	-7,443.84	397.96	-19.06	417.02	0.954 Level 1		
14,600.00	7,235.34	14,505.25	7,233.61	211.52	211.39	-89.75	1,048.60	-7,543.82	398.84	-23.82	422.66	0.944 Level 1		
14,700.00	7,234.96	14,605.25	7,233.19	214.34	214.21	-89.74	1,046.94	-7,643.80	399.72	-28.58	428.30	0.933 Level 1		
14,800.00	7,234.58	14,705.26	7,232.77	217.16	217.03	-89.74	1,045.28	-7,743.78	400.59	-33.35	433.94	0.923 Level 1		
14,900.00	7,234.20	14,805.26	7,232.35	219.98	219.85	-89.73	1,043.62	-7,843.77	401.47	-38.11	439.58	0.913 Level 1		
15,000.00	7,233.82	14,905.26	7,231.93	222.81	222.67	-89.73	1,041.96	-7,943.75	402.35	-42.88	445.22	0.904 Level 1		
15,100.00	7,233.44	15,005.27	7,231.51	225.63	225.49	-89.72	1,040.31	-8,043.73	403.22	-47.65	450.87	0.894 Level 1		
15,200.00	7,233.06	15,094.73	7,231.09	228.45	228.02	-89.72	1,038.65	-8,143.71	404.10	-52.12	456.22	0.886 Level 1		
15,216.01	7,233.00	15,110.74	7,231.02	228.91	228.47	-89.72	1,038.38	-8,159.72	404.24	-52.88	457.12	0.884 Level 1, ES, 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1.00	0.00	3.28	3.28	-179.60	-79.78	-0.56	79.78					
100.00	100.00	101.00	100.00	3.28	3.28	-179.60	-79.78	-0.56	79.78	73.21	6.57	12.144		
200.00	200.00	201.00	200.00	3.34	3.34	-179.60	-79.78	-0.56	79.78	73.11	6.67	11.952 CC, ES		
300.00	299.98	301.02	299.98	3.45	3.45	-173.99	-79.78	-0.56	81.52	74.62	6.89	11.828		
400.00	399.84	401.16	399.84	3.61	3.61	-174.35	-79.78	-0.56	86.72	79.51	7.21	12.022		
500.00	499.45	501.55	499.45	3.82	3.81	-174.85	-79.78	-0.56	95.40	87.77	7.63	12.509		
600.00	598.70	597.70	598.70	4.07	4.04	-175.41	-79.78	-0.56	107.54	99.44	8.11	13.265		
700.00	697.47	700.66	701.64	4.35	4.32	-175.82	-78.06	-0.97	121.48	112.81	8.67	14.006		
800.00	795.62	804.24	805.06	4.67	4.63	-175.94	-72.70	-2.25	135.38	126.07	9.31	14.544		
900.00	893.06	908.34	908.74	5.01	4.97	-175.83	-63.66	-4.42	149.21	139.21	10.00	14.923		
1,000.00	989.64	1,008.53	1,008.27	5.38	5.31	-175.64	-52.45	-7.10	163.98	153.27	10.71	15.314		
1,100.00	1,085.42	1,106.97	1,106.04	5.78	5.66	-175.55	-41.33	-9.77	181.59	170.14	11.44	15.870		
1,200.00	1,181.09	1,205.34	1,203.75	6.20	6.01	-175.51	-30.22	-12.43	199.56	187.36	12.20	16.360		
1,300.00	1,276.76	1,303.71	1,301.45	6.65	6.39	-175.46	-19.11	-15.09	217.53	204.55	12.98	16.760		
1,400.00	1,372.43	1,402.08	1,399.16	7.11	6.76	-175.43	-8.00	-17.75	235.50	221.72	13.78	17.090		
1,500.00	1,468.10	1,500.45	1,496.87	7.57	7.15	-175.40	3.10	-20.41	253.47	238.87	14.60	17.363		
1,600.00	1,563.77	1,601.17	1,594.57	8.05	7.56	-175.37	14.21	-23.07	271.44	256.00	15.44	17.580		
1,700.00	1,659.44	1,702.80	1,692.28	8.53	7.97	-175.35	25.32	-25.73	289.41	273.11	16.30	17.758		
1,800.00	1,755.11	1,804.43	1,789.98	9.02	8.39	-175.33	36.43	-28.39	307.38	290.22	17.17	17.906		
1,900.00	1,850.78	1,906.06	1,887.69	9.52	8.81	-175.31	47.54	-31.05	325.35	307.31	18.04	18.032		
2,000.00	1,946.45	2,007.69	1,985.40	10.02	9.23	-175.30	58.65	-33.72	343.33	324.40	18.93	18.138		
2,100.00	2,042.12	2,090.69	2,083.10	10.52	9.58	-175.28	69.76	-36.38	361.30	341.55	19.74	18.301		
2,200.00	2,137.78	2,189.06	2,180.81	11.03	10.00	-175.27	80.87	-39.04	379.27	358.64	20.63	18.388		
2,300.00	2,233.45	2,287.43	2,278.52	11.54	10.42	-175.26	91.98	-41.70	397.24	375.73	21.51	18.464		
2,400.00	2,329.12	2,385.80	2,376.22	12.05	10.84	-175.25	103.09	-44.36	415.21	392.80	22.41	18.530		
2,500.00	2,424.79	2,484.17	2,473.93	12.56	11.27	-175.24	114.20	-47.02	433.18	409.88	23.30	18.588		
2,600.00	2,520.46	2,582.55	2,571.64	13.08	11.69	-175.23	125.31	-49.68	451.15	426.95	24.20	18.639		
2,700.00	2,616.13	2,680.92	2,669.34	13.60	12.12	-175.22	136.42	-52.34	469.12	444.02	25.11	18.684		
2,800.00	2,711.80	2,779.29	2,767.05	14.12	12.55	-175.21	147.53	-55.00	487.10	461.08	26.01	18.724		
2,900.00	2,807.47	2,877.66	2,864.75	14.64	12.98	-175.21	158.64	-57.66	505.07	478.14	26.92	18.760		
3,000.00	2,903.14	2,976.03	2,962.46	15.16	13.41	-175.20	169.74	-60.33	523.04	495.20	27.83	18.791		
3,100.00	2,998.81	3,074.40	3,060.17	15.68	13.84	-175.19	180.85	-62.99	541.01	512.26	28.75	18.820		
3,200.00	3,094.48	3,172.78	3,157.87	16.21	14.27	-175.19	191.96	-65.65	558.98	529.32	29.66	18.845		
3,300.00	3,190.15	3,271.15	3,255.58	16.73	14.70	-175.18	203.07	-68.31	576.95	546.37	30.58	18.868		
3,400.00	3,285.82	3,369.52	3,353.29	17.26	15.14	-175.18	214.18	-70.97	594.92	563.43	31.50	18.888		
3,500.00	3,381.49	3,467.89	3,450.99	17.78	15.57	-175.17	225.29	-73.63	612.89	580.48	32.42	18.907		
3,600.00	3,477.16	3,566.26	3,548.70	18.31	16.01	-175.17	236.40	-76.29	630.87	597.53	33.34	18.924		
3,700.00	3,572.83	3,664.64	3,646.41	18.84	16.44	-175.16	247.51	-78.95	648.84	614.58	34.26	18.939		
3,800.00	3,668.50	3,763.01	3,744.11	19.37	16.88	-175.16	258.62	-81.61	666.81	631.63	35.18	18.953		
3,900.00	3,764.17	3,861.38	3,841.82	19.89	17.31	-175.15	269.73	-84.28	684.78	648.67	36.11	18.965		
4,000.00	3,859.84	3,959.75	3,939.52	20.42	17.75	-175.15	280.84	-86.94	702.75	665.72	37.03	18.977		
4,100.00	3,955.51	4,058.12	4,037.23	20.95	18.19	-175.15	291.95	-89.60	720.72	682.76	37.96	18.987		
4,200.00	4,051.18	4,156.50	4,134.94	21.48	18.63	-175.14	303.06	-92.26	738.69	699.81	38.88	18.997		
4,300.00	4,146.85	4,254.87	4,232.64	22.01	19.06	-175.14	314.17	-94.92	756.67	716.85	39.81	19.006		
4,400.00	4,242.52	4,353.24	4,330.35	22.55	19.50	-175.14	325.28	-97.58	774.64	733.90	40.74	19.014		
4,500.00	4,338.19	4,451.61	4,428.06	23.08	19.94	-175.13	336.38	-100.24	792.61	750.94	41.67	19.021		
4,600.00	4,433.86	4,549.98	4,525.76	23.61	20.38	-175.13	347.49	-102.90	810.58	767.98	42.60	19.028		
4,700.00	4,529.53	4,648.35	4,623.47	24.14	20.82	-175.13	358.60	-105.56	828.55	785.02	43.53	19.034		
4,800.00	4,625.19	4,746.73	4,721.18	24.67	21.26	-175.13	369.71	-108.22	846.52	802.06	44.46	19.040		
4,900.00	4,720.86	4,845.10	4,818.88	25.21	21.70	-175.12	380.82	-110.89	864.49	819.10	45.39	19.045		
5,000.00	4,816.53	4,943.47	4,916.59	25.74	22.14	-175.12	391.93	-113.55	882.47	836.14	46.32	19.050		
5,100.00	4,912.20	5,041.84	5,014.29	26.27	22.58	-175.12	403.04	-116.21	900.44	853.18	47.26	19.055		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	5,140.21	5,112.00	26.80	23.02	-175.12	414.15	-118.87	918.41	870.22	48.19	19.059		
5,300.00	5,103.54	5,238.59	5,209.71	27.34	23.46	-175.11	425.26	-121.53	936.38	887.26	49.12	19.063		
5,400.00	5,199.22	5,336.96	5,307.42	27.87	23.90	-175.12	436.37	-124.19	954.34	904.28	50.05	19.066		
5,500.00	5,295.46	5,435.68	5,405.46	28.39	24.34	-175.13	447.52	-126.86	970.28	919.30	50.98	19.032		
5,600.00	5,392.60	5,534.89	5,504.00	28.89	24.79	-175.12	458.72	-129.55	982.78	930.88	51.90	18.935		
5,700.00	5,490.50	5,634.47	5,602.91	29.37	25.24	-175.09	469.97	-132.24	991.83	939.01	52.81	18.781		
5,800.00	5,589.05	5,734.30	5,702.07	29.83	25.68	-175.04	481.24	-134.94	997.40	943.69	53.71	18.570		
5,900.00	5,688.14	5,834.26	5,801.35	30.26	26.13	-174.96	492.53	-137.64	999.51	944.91	54.59	18.308		
6,000.00	5,787.63	5,934.23	5,900.65	30.68	26.58	-174.86	503.82	-140.35	998.14	942.67	55.46	17.996		
6,100.00	5,887.41	6,034.09	5,999.83	31.07	27.03	-174.74	515.10	-143.05	993.30	936.98	56.32	17.637		
6,200.00	5,987.36	6,133.71	6,098.78	31.44	27.48	-174.59	526.35	-145.74	984.99	927.84	57.16	17.233		
6,300.00	6,087.36	6,233.06	6,197.46	31.80	27.92	-174.84	537.57	-148.43	973.92	915.94	57.98	16.797		
6,400.00	6,187.36	6,332.39	6,296.11	32.15	28.37	-180.00	548.78	-151.12	962.62	903.81	58.80	16.370		
6,500.00	6,287.36	6,430.70	6,393.60	32.51	28.81	-179.68	559.85	-156.42	951.36	891.73	59.62	15.956		
6,600.00	6,387.36	6,525.13	6,485.63	32.87	29.24	-178.57	570.20	-174.46	940.48	880.05	60.42	15.565		
6,700.00	6,487.36	6,612.55	6,567.61	33.23	29.62	-176.78	579.34	-203.20	930.83	869.68	61.15	15.222		
6,800.00	6,587.36	6,699.85	6,637.12	33.59	29.96	-174.57	587.01	-238.32	923.70	861.95	61.75	14.958		
6,900.00	6,687.26	6,760.81	6,695.19	33.95	30.27	-81.99	593.35	-276.75	920.09	857.93	62.16	14.802		
7,000.00	6,785.58	6,828.01	6,746.71	34.31	30.59	-80.00	598.92	-319.48	918.93	856.55	62.37	14.732		
7,009.52	6,794.78	6,834.31	6,751.30	34.34	30.62	-79.82	599.41	-323.76	918.92	856.53	62.39	14.730		
7,100.00	6,879.94	6,893.47	6,792.33	34.65	30.94	-78.11	603.79	-366.14	919.57	857.16	62.41	14.734		
7,200.00	6,968.01	6,957.63	6,832.20	34.97	31.32	-76.34	607.98	-416.19	921.48	859.18	62.30	14.790		
7,300.00	7,047.61	7,020.79	6,866.37	35.27	31.76	-74.75	611.49	-469.16	924.14	862.01	62.13	14.874		
7,400.00	7,116.80	7,083.19	6,894.84	35.54	32.25	-73.38	614.35	-524.59	927.04	865.05	61.99	14.954		
7,500.00	7,173.86	7,150.00	6,919.20	35.81	32.84	-72.20	616.68	-586.72	929.80	867.67	62.13	14.966		
7,600.00	7,217.38	7,206.48	6,934.66	36.17	33.41	-71.43	618.06	-641.01	931.99	869.66	62.34	14.951		
7,700.00	7,246.31	7,267.66	6,945.94	36.80	34.08	-70.90	618.92	-701.11	933.43	870.38	63.06	14.803		
7,800.00	7,259.92	7,328.71	6,951.43	37.72	34.80	-70.68	619.12	-761.89	933.92	869.69	64.23	14.540		
7,900.00	7,260.77	7,410.10	6,951.84	38.86	35.85	-70.68	618.60	-843.27	933.78	867.58	66.20	14.105		
8,000.00	7,260.39	7,510.10	6,951.55	40.19	37.28	-70.68	617.86	-943.27	933.72	864.87	68.85	13.562		
8,100.00	7,260.01	7,610.10	6,951.25	41.67	38.87	-70.69	617.12	-1,043.27	933.65	861.84	71.80	13.003		
8,200.00	7,259.63	7,710.10	6,950.95	43.30	40.60	-70.69	616.38	-1,143.26	933.58	858.54	75.04	12.441		
8,300.00	7,259.25	7,810.10	6,950.65	45.05	42.45	-70.70	615.65	-1,243.26	933.51	854.99	78.52	11.889		
8,400.00	7,258.87	7,910.10	6,950.35	46.91	44.40	-70.70	614.91	-1,343.26	933.44	851.24	82.20	11.355		
8,500.00	7,258.49	8,010.10	6,950.05	48.87	46.45	-70.70	614.17	-1,443.25	933.37	847.30	86.08	10.843		
8,600.00	7,258.11	8,110.10	6,949.76	50.92	48.59	-70.71	613.43	-1,543.25	933.30	843.19	90.11	10.357		
8,700.00	7,257.73	8,210.10	6,949.46	53.04	50.79	-70.71	612.69	-1,643.25	933.24	838.95	94.29	9.898		
8,800.00	7,257.35	8,310.10	6,949.16	55.23	53.06	-70.72	611.96	-1,743.24	933.17	834.58	98.58	9.466		
8,900.00	7,256.97	8,410.10	6,948.86	57.47	55.38	-70.72	611.22	-1,843.24	933.10	830.11	102.99	9.060		
9,000.00	7,256.59	8,510.10	6,948.56	59.77	57.75	-70.72	610.48	-1,943.24	933.03	825.54	107.49	8.680		
9,100.00	7,256.21	8,610.10	6,948.26	62.12	60.16	-70.73	609.74	-2,043.23	932.96	820.90	112.07	8.325		
9,200.00	7,255.83	8,710.10	6,947.97	64.50	62.61	-70.73	609.01	-2,143.23	932.89	816.17	116.72	7.992		
9,300.00	7,255.45	8,810.10	6,947.67	66.93	65.09	-70.73	608.27	-2,243.23	932.83	811.39	121.44	7.681		
9,400.00	7,255.07	8,910.10	6,947.37	69.38	67.60	-70.74	607.53	-2,343.23	932.76	806.54	126.22	7.390		
9,500.00	7,254.69	9,010.10	6,947.07	71.87	70.14	-70.74	606.79	-2,443.22	932.69	801.64	131.04	7.117		
9,600.00	7,254.31	9,110.10	6,946.77	74.38	72.70	-70.75	606.05	-2,543.22	932.62	796.70	135.92	6.862		
9,700.00	7,253.93	9,210.10	6,946.47	76.92	75.29	-70.75	605.32	-2,643.22	932.55	791.72	140.83	6.622		
9,800.00	7,253.55	9,310.10	6,946.18	79.48	77.89	-70.75	604.58	-2,743.21	932.48	786.70	145.78	6.396		
9,900.00	7,253.18	9,410.10	6,945.88	82.06	80.51	-70.76	603.84	-2,843.21	932.41	781.65	150.77	6.184		
10,000.00	7,252.80	9,510.10	6,945.58	84.65	83.15	-70.76	603.10	-2,943.21	932.35	776.56	155.78	5.985		
10,100.00	7,252.42	9,610.10	6,945.28	87.27	85.80	-70.76	602.37	-3,043.20	932.28	771.45	160.82	5.797		
10,200.00	7,252.04	9,710.10	6,944.98	89.89	88.46	-70.77	601.63	-3,143.20	932.21	766.32	165.89	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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,251.66	9,810.10	6,944.68	92.54	91.14	-70.77	600.89	-3,243.20	932.14	761.16	170.98	5.452		
10,400.00	7,251.28	9,910.10	6,944.39	95.19	93.82	-70.78	600.15	-3,343.19	932.07	755.98	176.09	5.293		
10,500.00	7,250.90	10,010.10	6,944.09	97.86	96.52	-70.78	599.41	-3,443.19	932.00	750.78	181.22	5.143		
10,600.00	7,250.52	10,110.10	6,943.79	100.53	99.22	-70.78	598.68	-3,543.19	931.93	745.57	186.37	5.001		
10,700.00	7,250.14	10,210.10	6,943.49	103.22	101.94	-70.79	597.94	-3,643.18	931.87	740.34	191.53	4.865		
10,800.00	7,249.76	10,310.10	6,943.19	105.91	104.66	-70.79	597.20	-3,743.18	931.80	735.09	196.71	4.737		
10,900.00	7,249.38	10,410.10	6,942.89	108.62	107.38	-70.80	596.46	-3,843.18	931.73	729.83	201.90	4.615		
11,000.00	7,249.00	10,510.10	6,942.60	111.33	110.12	-70.80	595.73	-3,943.17	931.66	724.56	207.10	4.499		
11,100.00	7,248.62	10,610.10	6,942.30	114.04	112.86	-70.80	594.99	-4,043.17	931.59	719.28	212.32	4.388		
11,200.00	7,248.24	10,710.10	6,942.00	116.77	115.61	-70.81	594.25	-4,143.17	931.52	713.98	217.54	4.282		
11,300.00	7,247.86	10,810.10	6,941.70	119.50	118.36	-70.81	593.51	-4,243.16	931.46	708.68	222.78	4.181		
11,400.00	7,247.48	10,910.10	6,941.40	122.24	121.12	-70.81	592.77	-4,343.16	931.39	703.36	228.03	4.085		
11,500.00	7,247.10	11,010.10	6,941.10	124.98	123.88	-70.82	592.04	-4,443.16	931.32	698.04	233.28	3.992		
11,600.00	7,246.72	11,110.10	6,940.80	127.73	126.64	-70.82	591.30	-4,543.15	931.25	692.70	238.55	3.904		
11,700.00	7,246.34	11,210.10	6,940.51	130.48	129.41	-70.83	590.56	-4,643.15	931.18	687.37	243.82	3.819		
11,800.00	7,245.96	11,310.10	6,940.21	133.24	132.19	-70.83	589.82	-4,743.15	931.11	682.02	249.10	3.738		
11,900.00	7,245.58	11,410.10	6,939.91	136.00	134.96	-70.83	589.09	-4,843.15	931.05	676.66	254.38	3.660		
12,000.00	7,245.21	11,510.10	6,939.61	138.76	137.74	-70.84	588.35	-4,943.14	930.98	671.30	259.67	3.585		
12,100.00	7,244.83	11,610.10	6,939.31	141.53	140.53	-70.84	587.61	-5,043.14	930.91	665.94	264.97	3.513		
12,200.00	7,244.45	11,710.10	6,939.01	144.30	143.31	-70.85	586.87	-5,143.14	930.84	660.57	270.27	3.444		
12,300.00	7,244.07	11,810.10	6,938.72	147.08	146.10	-70.85	586.13	-5,243.13	930.77	655.19	275.58	3.377		
12,400.00	7,243.69	11,910.10	6,938.42	149.86	148.89	-70.85	585.40	-5,343.13	930.70	649.81	280.90	3.313		
12,500.00	7,243.31	12,010.10	6,938.12	152.64	151.69	-70.86	584.66	-5,443.13	930.63	644.42	286.22	3.251		
12,600.00	7,242.93	12,110.10	6,937.82	155.42	154.49	-70.86	583.92	-5,543.12	930.57	639.03	291.54	3.192		
12,700.00	7,242.55	12,210.10	6,937.52	158.21	157.28	-70.86	583.18	-5,643.12	930.50	633.63	296.87	3.134		
12,800.00	7,242.17	12,310.10	6,937.22	161.00	160.09	-70.87	582.45	-5,743.12	930.43	628.23	302.20	3.079		
12,900.00	7,241.79	12,410.10	6,936.93	163.79	162.89	-70.87	581.71	-5,843.11	930.36	622.82	307.54	3.025		
13,000.00	7,241.41	12,510.10	6,936.63	166.58	165.69	-70.88	580.97	-5,943.11	930.29	617.42	312.88	2.973		
13,100.00	7,241.03	12,610.10	6,936.33	169.38	168.50	-70.88	580.23	-6,043.11	930.22	612.00	318.22	2.923		
13,200.00	7,240.65	12,710.10	6,936.03	172.18	171.31	-70.88	579.50	-6,143.10	930.16	606.59	323.57	2.875		
13,300.00	7,240.27	12,810.10	6,935.73	174.98	174.12	-70.89	578.76	-6,243.10	930.09	601.17	328.92	2.828		
13,400.00	7,239.89	12,910.10	6,935.43	177.78	176.93	-70.89	578.02	-6,343.10	930.02	595.75	334.27	2.782		
13,500.00	7,239.51	13,010.10	6,935.14	180.58	179.74	-70.89	577.28	-6,443.09	929.95	590.32	339.63	2.738		
13,600.00	7,239.13	13,110.10	6,934.84	183.39	182.56	-70.90	576.54	-6,543.09	929.88	584.90	344.99	2.695		
13,700.00	7,238.75	13,210.10	6,934.54	186.20	185.37	-70.90	575.81	-6,643.09	929.81	579.47	350.35	2.654		
13,800.00	7,238.37	13,310.10	6,934.24	189.00	188.19	-70.91	575.07	-6,743.08	929.75	574.03	355.71	2.614		
13,900.00	7,237.99	13,410.10	6,933.94	191.81	191.01	-70.91	574.33	-6,843.08	929.68	568.60	361.08	2.575		
14,000.00	7,237.62	13,510.10	6,933.64	194.63	193.83	-70.91	573.59	-6,943.08	929.61	563.16	366.45	2.537		
14,100.00	7,237.24	13,610.10	6,933.35	197.44	196.65	-70.92	572.86	-7,043.07	929.54	557.72	371.82	2.500		
14,200.00	7,236.86	13,710.10	6,933.05	200.25	199.47	-70.92	572.12	-7,143.07	929.47	552.28	377.19	2.464		
14,300.00	7,236.48	13,810.10	6,932.75	203.07	202.29	-70.93	571.38	-7,243.07	929.40	546.83	382.57	2.429		
14,400.00	7,236.10	13,910.10	6,932.45	205.88	205.12	-70.93	570.64	-7,343.06	929.34	541.39	387.95	2.396		
14,500.00	7,235.72	14,010.10	6,932.15	208.70	207.94	-70.93	569.90	-7,443.06	929.27	535.94	393.33	2.363		
14,600.00	7,235.34	14,110.10	6,931.85	211.52	210.77	-70.94	569.17	-7,543.06	929.20	530.49	398.71	2.331		
14,700.00	7,234.96	14,210.10	6,931.56	214.34	213.59	-70.94	568.43	-7,643.06	929.13	525.04	404.09	2.299		
14,800.00	7,234.58	14,310.10	6,931.26	217.16	216.42	-70.94	567.69	-7,743.05	929.06	519.58	409.48	2.269		
14,900.00	7,234.20	14,410.10	6,930.96	219.98	219.25	-70.95	566.95	-7,843.05	929.00	514.13	414.87	2.239		
15,000.00	7,233.82	14,510.10	6,930.66	222.81	222.08	-70.95	566.22	-7,943.05	928.93	508.67	420.26	2.210		
15,100.00	7,233.44	14,610.10	6,930.36	225.63	224.91	-70.96	565.48	-8,043.04	928.86	503.21	425.65	2.182		
15,200.00	7,233.06	14,710.10	6,930.06	228.45	227.74	-70.96	564.74	-8,143.04	928.79	497.75	431.04	2.155		
15,216.01	7,233.00	14,726.12	6,930.02	228.91	228.19	-70.96	564.62	-8,159.05	928.78	496.88	431.90	2.150 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1.00	0.00	3.28	3.28	-179.47	-59.73	-0.56	59.74					
100.00	100.00	101.00	100.00	3.28	3.28	-179.47	-59.73	-0.56	59.74	53.17	6.57	9.093		
200.00	200.00	201.00	200.00	3.34	3.34	-179.47	-59.73	-0.56	59.74	53.06	6.67	8.949	CC, ES	
300.00	299.98	301.02	299.98	3.45	3.45	-173.91	-59.73	-0.56	61.47	54.58	6.89	8.920		
400.00	399.84	401.16	399.84	3.61	3.61	-174.37	-59.73	-0.56	66.68	59.46	7.21	9.244		
500.00	499.45	501.55	499.45	3.82	3.81	-175.01	-59.73	-0.56	75.36	67.73	7.63	9.881		
600.00	598.70	597.70	598.70	4.07	4.04	-175.68	-59.73	-0.56	87.50	79.40	8.11	10.793		
700.00	697.47	700.00	700.98	4.35	4.32	-176.22	-58.01	-0.83	101.44	92.77	8.67	11.697		
800.00	795.62	802.89	803.72	4.67	4.63	-176.51	-52.64	-1.70	115.31	106.00	9.30	12.392		
900.00	893.06	906.32	906.74	5.01	4.96	-176.64	-43.58	-3.16	129.09	119.10	9.99	12.918		
1,000.00	989.64	1,010.28	1,009.88	5.38	5.32	-176.65	-30.78	-5.22	142.76	132.04	10.73	13.309		
1,100.00	1,085.42	1,112.17	1,110.51	5.78	5.68	-176.59	-15.02	-7.76	156.21	144.73	11.48	13.604		
1,200.00	1,181.09	1,211.28	1,208.32	6.20	6.05	-176.53	0.81	-10.31	169.52	157.27	12.24	13.845		
1,300.00	1,276.76	1,310.39	1,306.12	6.65	6.42	-176.48	16.64	-12.86	182.83	169.79	13.03	14.029		
1,400.00	1,372.43	1,409.50	1,403.93	7.11	6.81	-176.44	32.47	-15.41	196.14	182.29	13.84	14.169		
1,500.00	1,468.10	1,508.62	1,501.73	7.57	7.21	-176.40	48.30	-17.96	209.45	194.78	14.67	14.277		
1,600.00	1,563.77	1,607.73	1,599.54	8.05	7.61	-176.36	64.13	-20.51	222.76	207.24	15.51	14.359		
1,700.00	1,659.44	1,706.84	1,697.34	8.53	8.03	-176.34	79.95	-23.06	236.07	219.70	16.37	14.421		
1,800.00	1,755.11	1,805.95	1,795.15	9.02	8.44	-176.31	95.78	-25.61	249.38	232.14	17.24	14.468		
1,900.00	1,850.78	1,905.06	1,892.95	9.52	8.87	-176.29	111.61	-28.16	262.69	244.58	18.11	14.503		
2,000.00	1,946.45	2,004.17	1,990.76	10.02	9.29	-176.26	127.44	-30.70	276.00	257.00	19.00	14.528		
2,100.00	2,042.12	2,103.28	2,088.56	10.52	9.72	-176.25	143.27	-33.25	289.31	269.42	19.89	14.546		
2,200.00	2,137.78	2,202.39	2,186.36	11.03	10.16	-176.23	159.10	-35.80	302.62	281.83	20.79	14.558		
2,300.00	2,233.45	2,301.50	2,284.17	11.54	10.59	-176.21	174.93	-38.35	315.93	294.24	21.69	14.566		
2,400.00	2,329.12	2,400.61	2,381.97	12.05	11.03	-176.20	190.76	-40.90	329.24	306.64	22.60	14.570		
2,500.00	2,424.79	2,499.72	2,479.78	12.56	11.47	-176.18	206.59	-43.45	342.55	319.04	23.51	14.571		
2,600.00	2,520.46	2,601.17	2,577.58	13.08	11.92	-176.17	222.42	-46.00	355.86	331.43	24.43	14.564		
2,700.00	2,616.13	2,702.06	2,675.39	13.60	12.37	-176.16	238.25	-48.55	369.17	343.81	25.36	14.557		
2,800.00	2,711.80	2,802.95	2,773.19	14.12	12.83	-176.15	254.08	-51.10	382.48	356.19	26.29	14.548		
2,900.00	2,807.47	2,903.84	2,871.00	14.64	13.28	-176.14	269.91	-53.65	395.79	368.57	27.22	14.539		
3,000.00	2,903.14	3,004.73	2,968.80	15.16	13.74	-176.13	285.74	-56.20	409.11	380.95	28.16	14.529		
3,100.00	2,998.81	3,105.62	3,066.61	15.68	14.19	-176.12	301.57	-58.75	422.42	393.32	29.09	14.519		
3,200.00	3,094.48	3,206.51	3,164.41	16.21	14.65	-176.11	317.40	-61.30	435.73	405.69	30.03	14.508		
3,300.00	3,190.15	3,307.40	3,262.22	16.73	15.11	-176.10	333.23	-63.85	449.04	418.06	30.97	14.497		
3,400.00	3,285.82	3,408.29	3,360.02	17.26	15.57	-176.10	349.06	-66.40	462.35	430.43	31.92	14.487		
3,500.00	3,381.49	3,509.18	3,457.82	17.78	16.03	-176.09	364.89	-68.95	475.66	442.80	32.86	14.476		
3,600.00	3,477.16	3,589.93	3,555.63	18.31	16.40	-176.08	380.72	-71.50	488.97	455.26	33.71	14.504		
3,700.00	3,572.83	3,689.04	3,653.43	18.84	16.85	-176.08	396.55	-74.05	502.28	467.63	34.65	14.495		
3,800.00	3,668.50	3,788.15	3,751.24	19.37	17.31	-176.07	412.38	-76.60	515.59	480.00	35.59	14.486		
3,900.00	3,764.17	3,887.26	3,849.04	19.89	17.76	-176.06	428.21	-79.15	528.90	492.37	36.53	14.478		
4,000.00	3,859.84	3,986.37	3,946.85	20.42	18.21	-176.06	444.04	-81.70	542.21	504.74	37.47	14.469		
4,100.00	3,955.51	4,085.48	4,044.65	20.95	18.67	-176.05	459.87	-84.25	555.52	517.11	38.42	14.461		
4,200.00	4,051.18	4,184.59	4,142.46	21.48	19.12	-176.05	475.70	-86.80	568.83	529.47	39.36	14.453		
4,300.00	4,146.85	4,283.70	4,240.26	22.01	19.58	-176.04	491.53	-89.35	582.14	541.84	40.30	14.444		
4,400.00	4,242.52	4,382.81	4,338.07	22.55	20.04	-176.04	507.35	-91.90	595.46	554.21	41.25	14.436		
4,500.00	4,338.19	4,481.92	4,435.87	23.08	20.49	-176.04	523.18	-94.45	608.77	566.57	42.19	14.428		
4,600.00	4,433.86	4,581.03	4,533.68	23.61	20.95	-176.03	539.01	-97.00	622.08	578.94	43.14	14.420		
4,700.00	4,529.53	4,680.14	4,631.48	24.14	21.41	-176.03	554.84	-99.55	635.39	591.30	44.09	14.413		
4,800.00	4,625.19	4,779.25	4,729.29	24.67	21.87	-176.02	570.67	-102.10	648.70	603.67	45.03	14.405		
4,900.00	4,720.86	4,878.36	4,827.09	25.21	22.32	-176.02	586.50	-104.65	662.01	616.03	45.98	14.398		
5,000.00	4,816.53	4,977.47	4,924.89	25.74	22.78	-176.02	602.33	-107.19	675.32	628.39	46.93	14.390		
5,100.00	4,912.20	5,076.58	5,022.70	26.27	23.24	-176.01	618.16	-109.74	688.63	640.75	47.88	14.383		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	5,175.69	5,120.50	26.80	23.70	-176.01	633.99	-112.29	701.94	653.11	48.83	14.376		
5,300.00	5,103.54	5,274.80	5,218.31	27.34	24.16	-176.01	649.82	-114.84	715.25	665.48	49.78	14.369		
5,400.00	5,199.22	5,373.91	5,316.11	27.87	24.62	-176.01	665.65	-117.39	728.55	677.82	50.73	14.362		
5,500.00	5,295.46	5,473.27	5,414.16	28.39	25.08	-176.01	681.52	-119.95	739.82	688.15	51.67	14.318		
5,600.00	5,392.60	5,572.96	5,512.54	28.89	25.54	-175.99	697.44	-122.51	747.62	695.01	52.60	14.212		
5,700.00	5,490.50	5,672.86	5,611.12	29.37	26.00	-175.94	713.40	-125.08	751.94	698.42	53.53	14.048		
5,800.00	5,589.05	5,772.85	5,709.79	29.83	26.47	-175.87	729.37	-127.66	752.79	698.35	54.44	13.829		
5,900.00	5,688.14	5,872.80	5,808.43	30.26	26.93	-175.78	745.33	-130.23	750.16	694.82	55.33	13.558		
6,000.00	5,787.63	5,972.60	5,906.91	30.68	27.39	-175.66	761.27	-132.80	744.05	687.84	56.21	13.237		
6,100.00	5,887.41	6,072.12	6,005.12	31.07	27.86	-175.52	777.17	-135.36	734.47	677.40	57.07	12.869		
6,200.00	5,987.36	6,171.24	6,102.94	31.44	28.32	-175.34	793.00	-137.91	721.44	663.53	57.92	12.457		
6,300.00	6,087.36	6,269.96	6,200.36	31.80	28.77	179.12	808.77	-140.44	705.66	646.92	58.75	12.012		
6,400.00	6,187.36	6,368.64	6,297.74	32.15	29.23	179.32	824.53	-142.98	689.65	630.08	59.57	11.576		
6,500.00	6,287.36	6,467.33	6,395.13	32.51	29.69	179.52	840.29	-145.52	673.65	613.25	60.40	11.152		
6,600.00	6,387.36	6,566.01	6,492.51	32.87	30.15	179.73	856.05	-148.06	657.66	596.42	61.24	10.740		
6,700.00	6,487.36	6,662.45	6,587.52	33.23	30.60	-179.78	871.32	-153.56	641.78	579.72	62.06	10.341		
6,800.00	6,587.36	6,754.61	6,676.77	33.59	31.02	-178.12	885.24	-171.45	626.74	563.88	62.86	9.970		
6,900.00	6,687.26	6,841.17	6,757.51	33.95	31.40	-85.92	897.41	-199.96	613.55	549.97	63.59	9.649		
7,000.00	6,785.58	6,924.71	6,831.20	34.31	31.76	-84.57	908.13	-237.72	602.30	538.11	64.19	9.382		
7,100.00	6,879.94	7,006.08	6,897.72	34.65	32.10	-83.26	917.40	-283.55	592.96	528.31	64.65	9.171		
7,200.00	6,968.01	7,085.74	6,956.78	34.97	32.44	-82.03	925.22	-336.34	585.48	520.51	64.96	9.012		
7,300.00	7,047.61	7,164.04	7,008.09	35.27	32.82	-80.90	931.57	-395.08	579.73	514.56	65.17	8.896		
7,400.00	7,116.80	7,241.30	7,051.40	35.54	33.27	-79.92	936.46	-458.82	575.57	510.22	65.35	8.807		
7,500.00	7,173.86	7,317.77	7,086.48	35.81	33.82	-79.12	939.87	-526.64	572.84	507.18	65.66	8.724		
7,600.00	7,217.38	7,393.70	7,113.14	36.17	34.46	-78.51	941.80	-597.65	571.40	505.16	66.24	8.626		
7,674.51	7,240.37	7,450.00	7,127.42	36.62	35.01	-78.21	942.28	-652.09	571.09	504.15	66.94	8.532		
7,700.00	7,246.31	7,469.26	7,131.22	36.80	35.21	-78.13	942.25	-670.97	571.12	503.90	67.22	8.496		
7,800.00	7,259.92	7,544.65	7,140.59	37.72	36.03	-77.98	941.24	-745.73	571.92	503.26	68.66	8.330		
7,900.00	7,260.77	7,629.74	7,141.83	38.86	37.07	-78.03	938.56	-830.75	574.02	503.29	70.72	8.116		
8,000.00	7,260.39	7,729.71	7,141.40	40.19	38.42	-78.08	935.10	-930.65	576.65	503.26	73.39	7.858		
8,100.00	7,260.01	7,829.67	7,140.97	41.67	39.93	-78.13	931.64	-1,030.56	579.28	502.91	76.37	7.585		
8,200.00	7,259.63	7,929.64	7,140.53	43.30	41.57	-78.18	928.18	-1,130.46	581.92	502.28	79.64	7.307		
8,300.00	7,259.25	8,029.60	7,140.10	45.05	43.35	-78.23	924.73	-1,230.36	584.55	501.39	83.16	7.030		
8,400.00	7,258.87	8,129.57	7,139.66	46.91	45.23	-78.28	921.27	-1,330.26	587.18	500.29	86.89	6.757		
8,500.00	7,258.49	8,229.53	7,139.23	48.87	47.21	-78.32	917.81	-1,430.17	589.82	498.99	90.83	6.494		
8,600.00	7,258.11	8,329.49	7,138.80	50.92	49.27	-78.37	914.35	-1,530.07	592.45	497.52	94.93	6.241		
8,700.00	7,257.73	8,429.46	7,138.36	53.04	51.41	-78.42	910.89	-1,629.97	595.09	495.90	99.18	6.000		
8,800.00	7,257.35	8,529.42	7,137.93	55.23	53.62	-78.47	907.43	-1,729.88	597.72	494.16	103.57	5.771		
8,900.00	7,256.97	8,629.39	7,137.50	57.47	55.88	-78.51	903.97	-1,829.78	600.36	492.29	108.07	5.556		
9,000.00	7,256.59	8,729.35	7,137.06	59.77	58.19	-78.56	900.51	-1,929.68	602.99	490.33	112.67	5.352		
9,100.00	7,256.21	8,829.31	7,136.63	62.12	60.55	-78.60	897.05	-2,029.59	605.63	488.27	117.36	5.161		
9,200.00	7,255.83	8,929.28	7,136.20	64.50	62.96	-78.65	893.59	-2,129.49	608.27	486.14	122.13	4.981		
9,300.00	7,255.45	9,029.24	7,135.76	66.93	65.39	-78.69	890.13	-2,229.39	610.90	483.94	126.97	4.812		
9,400.00	7,255.07	9,129.21	7,135.33	69.38	67.86	-78.74	886.67	-2,329.30	613.54	481.67	131.87	4.653		
9,500.00	7,254.69	9,229.17	7,134.89	71.87	70.36	-78.78	883.22	-2,429.20	616.18	479.35	136.83	4.503		
9,600.00	7,254.31	9,329.13	7,134.46	74.38	72.88	-78.82	879.76	-2,529.10	618.82	476.98	141.84	4.363		
9,700.00	7,253.93	9,429.10	7,134.03	76.92	75.43	-78.87	876.30	-2,629.01	621.46	474.56	146.90	4.230		
9,800.00	7,253.55	9,529.06	7,133.59	79.48	77.99	-78.91	872.84	-2,728.91	624.10	472.10	152.00	4.106		
9,900.00	7,253.18	9,629.03	7,133.16	82.06	80.58	-78.95	869.38	-2,828.81	626.74	469.60	157.13	3.989		
10,000.00	7,252.80	9,728.99	7,132.73	84.65	83.18	-78.99	865.92	-2,928.72	629.38	467.07	162.30	3.878		
10,100.00	7,252.42	9,828.95	7,132.29	87.27	85.80	-79.03	862.46	-3,028.62	632.02	464.51	167.50	3.773		
10,200.00	7,252.04	9,928.92	7,131.86	89.89	88.43	-79.07	859.00	-3,128.52	634.66	461.92	172.73	3.674		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,251.66	10,028.88	7,131.43	92.54	91.08	-79.12	855.54	-3,228.43	637.30	459.31	177.99	3.581		
10,400.00	7,251.28	10,128.85	7,130.99	95.19	93.74	-79.16	852.08	-3,328.33	639.94	456.67	183.27	3.492		
10,500.00	7,250.90	10,228.81	7,130.56	97.86	96.41	-79.20	848.62	-3,428.23	642.58	454.01	188.57	3.408		
10,600.00	7,250.52	10,328.78	7,130.12	100.53	99.08	-79.24	845.17	-3,528.14	645.22	451.34	193.89	3.328		
10,700.00	7,250.14	10,428.74	7,129.69	103.22	101.77	-79.28	841.71	-3,628.04	647.86	448.64	199.22	3.252		
10,800.00	7,249.76	10,528.70	7,129.26	105.91	104.47	-79.31	838.25	-3,727.94	650.50	445.93	204.58	3.180		
10,900.00	7,249.38	10,628.67	7,128.82	108.62	107.17	-79.35	834.79	-3,827.85	653.15	443.20	209.95	3.111		
11,000.00	7,249.00	10,728.63	7,128.39	111.33	109.88	-79.39	831.33	-3,927.75	655.79	440.45	215.34	3.045		
11,100.00	7,248.62	10,828.60	7,127.96	114.04	112.60	-79.43	827.87	-4,027.65	658.43	437.70	220.74	2.983		
11,200.00	7,248.24	10,928.56	7,127.52	116.77	115.32	-79.47	824.41	-4,127.56	661.08	434.93	226.15	2.923		
11,300.00	7,247.86	11,028.52	7,127.09	119.50	118.05	-79.51	820.95	-4,227.46	663.72	432.15	231.57	2.866		
11,400.00	7,247.48	11,128.49	7,126.66	122.24	120.79	-79.54	817.49	-4,327.36	666.36	429.36	237.01	2.812		
11,500.00	7,247.10	11,228.45	7,126.22	124.98	123.53	-79.58	814.03	-4,427.27	669.01	426.55	242.46	2.759		
11,600.00	7,246.72	11,328.42	7,125.79	127.73	126.28	-79.62	810.57	-4,527.17	671.65	423.74	247.91	2.709		
11,700.00	7,246.34	11,428.38	7,125.35	130.48	129.02	-79.65	807.12	-4,627.07	674.30	420.92	253.38	2.661		
11,800.00	7,245.96	11,528.34	7,124.92	133.24	131.78	-79.69	803.66	-4,726.98	676.94	418.09	258.85	2.615		
11,900.00	7,245.58	11,628.31	7,124.49	136.00	134.54	-79.73	800.20	-4,826.88	679.59	415.26	264.33	2.571		
12,000.00	7,245.21	11,728.27	7,124.05	138.76	137.30	-79.76	796.74	-4,926.78	682.23	412.41	269.82	2.528		
12,100.00	7,244.83	11,828.24	7,123.62	141.53	140.06	-79.80	793.28	-5,026.69	684.88	409.56	275.32	2.488		
12,200.00	7,244.45	11,928.20	7,123.19	144.30	142.83	-79.83	789.82	-5,126.59	687.53	406.70	280.82	2.448		
12,300.00	7,244.07	12,028.17	7,122.75	147.08	145.60	-79.87	786.36	-5,226.49	690.17	403.84	286.34	2.410		
12,400.00	7,243.69	12,128.13	7,122.32	149.86	148.38	-79.90	782.90	-5,326.40	692.82	400.97	291.85	2.374		
12,500.00	7,243.31	12,228.09	7,121.89	152.64	151.15	-79.94	779.44	-5,426.30	695.47	398.09	297.38	2.339		
12,600.00	7,242.93	12,328.06	7,121.45	155.42	153.93	-79.97	775.98	-5,526.20	698.11	395.21	302.90	2.305		
12,700.00	7,242.55	12,428.02	7,121.02	158.21	156.71	-80.00	772.52	-5,626.11	700.76	392.32	308.44	2.272		
12,800.00	7,242.17	12,527.99	7,120.59	161.00	159.50	-80.04	769.07	-5,726.01	703.41	389.43	313.98	2.240		
12,900.00	7,241.79	12,627.95	7,120.15	163.79	162.28	-80.07	765.61	-5,825.91	706.06	386.54	319.52	2.210		
13,000.00	7,241.41	12,727.91	7,119.72	166.58	165.07	-80.10	762.15	-5,925.82	708.71	383.64	325.07	2.180		
13,100.00	7,241.03	12,827.88	7,119.28	169.38	167.86	-80.14	758.69	-6,025.72	711.35	380.73	330.62	2.152		
13,200.00	7,240.65	12,927.84	7,118.85	172.18	170.66	-80.17	755.23	-6,125.62	714.00	377.82	336.18	2.124		
13,300.00	7,240.27	13,027.81	7,118.42	174.98	173.45	-80.20	751.77	-6,225.53	716.65	374.91	341.74	2.097		
13,400.00	7,239.89	13,127.77	7,117.98	177.78	176.25	-80.23	748.31	-6,325.43	719.30	372.00	347.30	2.071		
13,500.00	7,239.51	13,227.73	7,117.55	180.58	179.04	-80.26	744.85	-6,425.33	721.95	369.08	352.87	2.046		
13,600.00	7,239.13	13,327.70	7,117.12	183.39	181.84	-80.30	741.39	-6,525.24	724.60	366.15	358.44	2.022		
13,700.00	7,238.75	13,427.66	7,116.68	186.20	184.64	-80.33	737.93	-6,625.14	727.25	363.23	364.02	1.998		
13,800.00	7,238.37	13,527.63	7,116.25	189.00	187.44	-80.36	734.47	-6,725.04	729.90	360.30	369.60	1.975		
13,900.00	7,237.99	13,627.59	7,115.82	191.81	190.25	-80.39	731.01	-6,824.95	732.55	357.37	375.18	1.953		
14,000.00	7,237.62	13,727.55	7,115.38	194.63	193.05	-80.42	727.56	-6,924.85	735.20	354.43	380.77	1.931		
14,100.00	7,237.24	13,827.52	7,114.95	197.44	195.86	-80.45	724.10	-7,024.75	737.85	351.50	386.35	1.910		
14,200.00	7,236.86	13,927.48	7,114.51	200.25	198.66	-80.48	720.64	-7,124.66	740.50	348.56	391.94	1.889		
14,300.00	7,236.48	14,027.45	7,114.08	203.07	201.47	-80.51	717.18	-7,224.56	743.15	345.61	397.54	1.869		
14,400.00	7,236.10	14,127.41	7,113.65	205.88	204.28	-80.54	713.72	-7,324.46	745.80	342.67	403.13	1.850		
14,500.00	7,235.72	14,227.38	7,113.21	208.70	207.09	-80.57	710.26	-7,424.37	748.45	339.72	408.73	1.831		
14,600.00	7,235.34	14,327.34	7,112.78	211.52	209.90	-80.60	706.80	-7,524.27	751.11	336.77	414.33	1.813		
14,700.00	7,234.96	14,427.30	7,112.35	214.34	212.72	-80.63	703.34	-7,624.17	753.76	333.82	419.94	1.795		
14,800.00	7,234.58	14,527.27	7,111.91	217.16	215.53	-80.66	699.88	-7,724.08	756.41	330.87	425.54	1.778		
14,900.00	7,234.20	14,627.23	7,111.48	219.98	218.34	-80.69	696.42	-7,823.98	759.06	327.91	431.15	1.761		
15,000.00	7,233.82	14,727.20	7,111.05	222.81	221.16	-80.72	692.96	-7,923.88	761.71	324.96	436.76	1.744		
15,100.00	7,233.44	14,827.16	7,110.61	225.63	223.97	-80.74	689.51	-8,023.79	764.37	322.00	442.37	1.728		
15,200.00	7,233.06	14,927.12	7,110.18	228.45	226.79	-80.77	686.05	-8,123.69	767.02	319.04	447.98	1.712		
15,216.01	7,233.00	14,943.13	7,110.11	228.91	227.24	-80.78	685.49	-8,139.69	767.44	318.56	448.88	1.710 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1.00	0.00	3.28	3.28	-179.56	-179.95	-1.39	179.96					
100.00	100.00	101.00	100.00	3.28	3.28	-179.56	-179.95	-1.39	179.96	173.39	6.57	27.393		
200.00	200.00	201.00	200.00	3.34	3.34	-179.56	-179.95	-1.39	179.96	173.29	6.67	26.961	CC, ES	
300.00	299.98	301.02	299.98	3.45	3.45	-173.88	-179.95	-1.39	181.70	174.80	6.89	26.364		
400.00	399.84	398.84	399.84	3.61	3.60	-174.04	-179.95	-1.39	186.90	179.69	7.21	25.925		
500.00	499.45	493.41	494.39	3.82	3.78	-174.00	-181.15	-2.33	196.83	189.22	7.61	25.872		
600.00	598.70	608.94	591.97	4.07	4.04	-173.66	-184.17	-4.71	212.02	203.90	8.12	26.112		
700.00	697.47	689.29	690.12	4.35	4.25	-173.44	-187.27	-7.14	230.70	222.09	8.61	26.797		
800.00	795.62	786.82	787.57	4.67	4.53	-173.33	-190.34	-9.56	252.78	243.58	9.20	27.487		
900.00	893.06	883.52	884.19	5.01	4.82	-173.30	-193.39	-11.96	278.22	268.40	9.83	28.309		
1,000.00	989.64	979.28	979.88	5.38	5.14	-173.35	-196.41	-14.34	307.01	296.51	10.50	29.249		
1,100.00	1,085.42	1,074.15	1,074.67	5.78	5.46	-173.46	-199.40	-16.69	338.62	327.42	11.19	30.250		
1,200.00	1,181.09	1,168.90	1,169.34	6.20	5.80	-173.60	-202.39	-19.05	370.58	358.67	11.91	31.127		
1,300.00	1,276.76	1,263.65	1,264.02	6.65	6.14	-173.71	-205.38	-21.40	402.54	389.90	12.64	31.844		
1,400.00	1,372.43	1,358.40	1,358.69	7.11	6.50	-173.80	-208.37	-23.75	434.51	421.11	13.40	32.434		
1,500.00	1,468.10	1,453.16	1,453.37	7.57	6.86	-173.89	-211.36	-26.10	466.47	452.30	14.17	32.921		
1,600.00	1,563.77	1,547.91	1,548.04	8.05	7.23	-173.96	-214.34	-28.45	498.44	483.48	14.96	33.326		
1,700.00	1,659.44	1,642.66	1,642.72	8.53	7.60	-174.02	-217.33	-30.80	530.41	514.65	15.76	33.665		
1,800.00	1,755.11	1,737.41	1,737.39	9.02	7.98	-174.08	-220.32	-33.16	562.37	545.81	16.57	33.949		
1,900.00	1,850.78	1,832.16	1,832.07	9.52	8.36	-174.13	-223.31	-35.51	594.34	576.96	17.38	34.190		
2,000.00	1,946.45	1,926.91	1,926.74	10.02	8.75	-174.17	-226.30	-37.86	626.31	608.10	18.21	34.395		
2,100.00	2,042.12	2,021.66	2,021.42	10.52	9.14	-174.21	-229.29	-40.21	658.28	639.24	19.04	34.569		
2,200.00	2,137.78	2,116.41	2,116.09	11.03	9.53	-174.25	-232.27	-42.56	690.25	670.37	19.88	34.719		
2,300.00	2,233.45	2,211.17	2,210.77	11.54	9.92	-174.28	-235.26	-44.91	722.22	701.49	20.72	34.848		
2,400.00	2,329.12	2,305.92	2,305.44	12.05	10.32	-174.31	-238.25	-47.26	754.19	732.62	21.57	34.960		
2,500.00	2,424.79	2,400.67	2,400.12	12.56	10.72	-174.34	-241.24	-49.62	786.16	763.73	22.43	35.057		
2,600.00	2,520.46	2,504.58	2,494.79	13.08	11.16	-174.37	-244.23	-51.97	818.13	794.81	23.32	35.084		
2,700.00	2,616.13	2,609.83	2,589.47	13.60	11.60	-174.39	-247.21	-54.32	850.10	825.88	24.22	35.095		
2,800.00	2,711.80	2,684.92	2,684.14	14.12	11.92	-174.41	-250.20	-56.67	882.07	857.07	25.00	35.280		
2,900.00	2,807.47	2,779.67	2,778.82	14.64	12.32	-174.43	-253.19	-59.02	914.04	888.17	25.87	35.337		
3,000.00	2,903.14	2,874.42	2,873.49	15.16	12.73	-174.45	-256.18	-61.37	946.01	919.28	26.73	35.387		
3,100.00	2,998.81	2,969.18	2,968.17	15.68	13.13	-174.47	-259.17	-63.73	977.98	950.38	27.60	35.431		
3,200.00	3,094.48	3,063.93	3,062.84	16.21	13.54	-174.49	-262.16	-66.08	1,009.95	981.48	28.47	35.470		
3,300.00	3,190.15	3,158.68	3,157.52	16.73	13.95	-174.50	-265.14	-68.43	1,041.92	1,012.58	29.35	35.505		
3,400.00	3,285.82	3,253.43	3,252.19	17.26	14.35	-174.52	-268.13	-70.78	1,073.89	1,043.67	30.22	35.536		
3,500.00	3,381.49	3,348.18	3,346.87	17.78	14.76	-174.53	-271.12	-73.13	1,105.86	1,074.77	31.10	35.563		
3,600.00	3,477.16	3,442.93	3,441.54	18.31	15.17	-174.55	-274.11	-75.48	1,137.83	1,105.86	31.97	35.588		
3,700.00	3,572.83	3,537.68	3,536.22	18.84	15.58	-174.56	-277.10	-77.83	1,169.80	1,136.95	32.85	35.610		
3,800.00	3,668.50	3,632.43	3,630.89	19.37	15.99	-174.57	-280.09	-80.19	1,201.77	1,168.04	33.73	35.629		
3,900.00	3,764.17	3,727.19	3,725.57	19.89	16.40	-174.58	-283.07	-82.54	1,233.75	1,199.14	34.61	35.646		
4,000.00	3,859.84	3,821.94	3,820.24	20.42	16.81	-174.59	-286.06	-84.89	1,265.72	1,230.22	35.49	35.662		
4,100.00	3,955.51	3,916.69	3,914.92	20.95	17.23	-174.60	-289.05	-87.24	1,297.69	1,261.31	36.37	35.676		
4,200.00	4,051.18	4,011.44	4,009.59	21.48	17.64	-174.61	-292.04	-89.59	1,329.66	1,292.40	37.26	35.688		
4,300.00	4,146.85	4,106.19	4,104.27	22.01	18.05	-174.62	-295.03	-91.94	1,361.63	1,323.49	38.14	35.699		
4,400.00	4,242.52	4,200.94	4,198.94	22.55	18.46	-174.63	-298.02	-94.30	1,393.60	1,354.57	39.03	35.709		
4,500.00	4,338.19	4,295.69	4,293.62	23.08	18.88	-174.64	-301.00	-96.65	1,425.57	1,385.66	39.91	35.718		
4,600.00	4,433.86	4,409.56	4,388.29	23.61	19.37	-174.65	-303.99	-99.00	1,457.54	1,416.66	40.88	35.653		
4,700.00	4,529.53	4,485.20	4,482.97	24.14	19.70	-174.65	-306.98	-101.35	1,489.52	1,447.83	41.69	35.732		
4,800.00	4,625.19	4,579.95	4,577.64	24.67	20.12	-174.66	-309.97	-103.70	1,521.49	1,478.91	42.57	35.739		
4,900.00	4,720.86	4,674.70	4,672.32	25.21	20.53	-174.67	-312.96	-106.05	1,553.46	1,510.00	43.46	35.744		
5,000.00	4,816.53	4,769.45	4,766.99	25.74	20.94	-174.67	-315.94	-108.40	1,585.43	1,541.08	44.35	35.749		
5,100.00	4,912.20	4,864.20	4,861.67	26.27	21.36	-174.68	-318.93	-110.76	1,617.40	1,572.16	45.24	35.753		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	4,958.95	4,956.34	26.80	21.77	-174.69	-321.92	-113.11	1,649.37	1,603.24	46.13	35.757		
5,300.00	5,103.54	5,053.70	5,051.02	27.34	22.19	-174.69	-324.91	-115.46	1,681.34	1,634.33	47.02	35.760		
5,400.00	5,199.22	5,148.46	5,145.70	27.87	22.60	-174.70	-327.90	-117.81	1,713.30	1,665.39	47.91	35.763		
5,500.00	5,295.46	5,243.84	5,241.00	28.39	23.02	-174.76	-330.91	-120.18	1,743.32	1,694.52	48.79	35.727		
5,600.00	5,392.60	5,340.21	5,337.29	28.89	23.44	-174.80	-333.95	-122.57	1,770.00	1,720.32	49.68	35.630		
5,700.00	5,490.50	5,437.45	5,434.45	29.37	23.87	-174.82	-337.01	-124.98	1,793.32	1,742.76	50.55	35.473		
5,800.00	5,589.05	5,535.43	5,532.36	29.83	24.30	-174.83	-340.10	-127.41	1,813.24	1,761.82	51.43	35.260		
5,900.00	5,688.14	5,634.05	5,630.89	30.26	24.73	-174.82	-343.21	-129.86	1,829.75	1,777.46	52.29	34.994		
6,000.00	5,787.63	5,733.17	5,729.94	30.68	25.17	-174.79	-346.34	-132.32	1,842.82	1,789.68	53.14	34.679		
6,100.00	5,887.41	5,832.68	5,829.37	31.07	25.60	-174.75	-349.48	-134.79	1,852.44	1,798.46	53.98	34.318		
6,200.00	5,987.36	5,932.47	5,929.07	31.44	26.04	-174.69	-352.62	-137.27	1,858.59	1,803.78	54.81	33.912		
6,300.00	6,087.36	6,032.38	6,028.90	31.80	26.48	179.65	-355.77	-139.75	1,861.97	1,806.34	55.62	33.474		
6,400.00	6,187.36	6,132.30	6,128.74	32.15	26.92	179.73	-358.93	-142.23	1,865.11	1,808.67	56.44	33.044		
6,500.00	6,287.36	6,232.22	6,228.58	32.51	27.36	179.80	-362.08	-144.71	1,868.25	1,810.99	57.26	32.626		
6,600.00	6,387.36	6,332.14	6,328.42	32.87	27.80	179.88	-365.23	-147.19	1,871.40	1,813.32	58.09	32.218		
6,700.00	6,487.36	6,432.05	6,428.26	33.23	28.24	179.96	-368.38	-149.67	1,874.55	1,815.64	58.91	31.821		
6,800.00	6,587.36	6,529.81	6,525.54	33.59	28.67	-179.80	-371.48	-157.67	1,877.75	1,818.04	59.71	31.446		
6,900.00	6,687.26	6,623.64	6,616.75	33.95	29.08	-88.59	-374.48	-179.14	1,881.18	1,820.72	60.46	31.112		
7,000.00	6,785.58	6,714.73	6,701.34	34.31	29.47	-87.72	-377.34	-212.58	1,884.74	1,823.57	61.18	30.808		
7,100.00	6,879.94	6,803.62	6,778.48	34.65	29.84	-86.91	-380.03	-256.54	1,888.30	1,826.43	61.87	30.521		
7,200.00	6,968.01	6,890.68	6,847.38	34.97	30.22	-86.17	-382.52	-309.59	1,891.71	1,829.14	62.57	30.233		
7,300.00	7,047.61	6,976.21	6,907.41	35.27	30.63	-85.53	-384.78	-370.38	1,894.85	1,831.52	63.33	29.919		
7,400.00	7,116.80	7,060.53	6,958.09	35.54	31.12	-84.98	-386.79	-437.66	1,897.61	1,833.39	64.22	29.548		
7,500.00	7,173.86	7,143.89	6,999.03	35.81	31.71	-84.55	-388.52	-510.18	1,899.86	1,834.56	65.31	29.091		
7,600.00	7,217.38	7,226.56	7,029.95	36.17	32.41	-84.23	-389.96	-586.78	1,901.54	1,834.88	66.66	28.526		
7,700.00	7,246.31	7,308.79	7,050.60	36.80	33.23	-84.04	-391.09	-666.31	1,902.57	1,834.26	68.30	27.855		
7,800.00	7,259.92	7,390.81	7,060.83	37.72	34.16	-83.98	-391.91	-747.62	1,902.91	1,832.67	70.24	27.093		
7,900.00	7,260.77	7,481.71	7,061.78	38.86	35.32	-84.00	-392.50	-838.50	1,902.74	1,830.18	72.56	26.224		
8,000.00	7,260.39	7,581.71	7,061.35	40.19	36.75	-84.00	-393.10	-938.50	1,902.56	1,827.23	75.34	25.254		
8,100.00	7,260.01	7,681.71	7,060.91	41.67	38.35	-83.99	-393.70	-1,038.50	1,902.39	1,823.96	78.43	24.257		
8,200.00	7,259.63	7,781.71	7,060.48	43.30	40.08	-83.99	-394.29	-1,138.49	1,902.21	1,820.41	81.80	23.255		
8,300.00	7,259.25	7,881.71	7,060.05	45.05	41.94	-83.99	-394.89	-1,238.49	1,902.03	1,816.62	85.41	22.269		
8,400.00	7,258.87	7,981.71	7,059.61	46.91	43.91	-83.99	-395.49	-1,338.49	1,901.86	1,812.61	89.24	21.311		
8,500.00	7,258.49	8,081.71	7,059.18	48.87	45.97	-83.98	-396.09	-1,438.48	1,901.68	1,808.42	93.26	20.390		
8,600.00	7,258.11	8,181.71	7,058.74	50.92	48.11	-83.98	-396.69	-1,538.48	1,901.50	1,804.05	97.45	19.513		
8,700.00	7,257.73	8,281.71	7,058.31	53.04	50.32	-83.98	-397.29	-1,638.48	1,901.33	1,799.54	101.78	18.680		
8,800.00	7,257.35	8,381.71	7,057.88	55.23	52.60	-83.98	-397.89	-1,738.48	1,901.15	1,794.91	106.24	17.894		
8,900.00	7,256.97	8,481.71	7,057.44	57.47	54.93	-83.98	-398.49	-1,838.47	1,900.97	1,790.16	110.82	17.154		
9,000.00	7,256.59	8,581.71	7,057.01	59.77	57.31	-83.97	-399.08	-1,938.47	1,900.80	1,785.31	115.49	16.459		
9,100.00	7,256.21	8,681.71	7,056.57	62.12	59.73	-83.97	-399.68	-2,038.47	1,900.62	1,780.38	120.25	15.806		
9,200.00	7,255.83	8,781.71	7,056.14	64.50	62.18	-83.97	-400.28	-2,138.46	1,900.45	1,775.36	125.08	15.194		
9,300.00	7,255.45	8,881.71	7,055.71	66.93	64.67	-83.97	-400.88	-2,238.46	1,900.27	1,770.28	129.99	14.619		
9,400.00	7,255.07	8,981.71	7,055.27	69.38	67.19	-83.96	-401.48	-2,338.46	1,900.09	1,765.14	134.95	14.080		
9,500.00	7,254.69	9,081.71	7,054.84	71.87	69.74	-83.96	-402.08	-2,438.46	1,899.92	1,759.94	139.97	13.573		
9,600.00	7,254.31	9,181.71	7,054.40	74.38	72.31	-83.96	-402.68	-2,538.45	1,899.74	1,754.69	145.04	13.098		
9,700.00	7,253.93	9,281.71	7,053.97	76.92	74.90	-83.96	-403.28	-2,638.45	1,899.56	1,749.40	150.16	12.650		
9,800.00	7,253.55	9,381.71	7,053.54	79.48	77.51	-83.96	-403.87	-2,738.45	1,899.39	1,744.07	155.31	12.229		
9,900.00	7,253.18	9,481.71	7,053.10	82.06	80.14	-83.95	-404.47	-2,838.44	1,899.21	1,738.71	160.50	11.833		
10,000.00	7,252.80	9,581.71	7,052.67	84.65	82.78	-83.95	-405.07	-2,938.44	1,899.03	1,733.31	165.73	11.459		
10,100.00	7,252.42	9,681.71	7,052.23	87.27	85.44	-83.95	-405.67	-3,038.44	1,898.86	1,727.88	170.98	11.106		
10,200.00	7,252.04	9,781.71	7,051.80	89.89	88.10	-83.95	-406.27	-3,138.44	1,898.68	1,722.42	176.26	10.772		
10,300.00	7,251.66	9,881.71	7,051.37	92.54	90.78	-83.94	-406.87	-3,238.43	1,898.50	1,716.94	181.56	10.457		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,251.28	9,981.71	7,050.93	95.19	93.48	-83.94	-407.47	-3,338.43	1,898.33	1,711.44	186.89	10.158		
10,500.00	7,250.90	10,081.71	7,050.50	97.86	96.18	-83.94	-408.07	-3,438.43	1,898.15	1,705.92	192.23	9.874		
10,600.00	7,250.52	10,181.71	7,050.06	100.53	98.89	-83.94	-408.66	-3,538.42	1,897.97	1,700.38	197.60	9.605		
10,700.00	7,250.14	10,281.71	7,049.63	103.22	101.60	-83.94	-409.26	-3,638.42	1,897.80	1,694.82	202.98	9.350		
10,800.00	7,249.76	10,381.71	7,049.20	105.91	104.33	-83.93	-409.86	-3,738.42	1,897.62	1,689.24	208.38	9.107		
10,900.00	7,249.38	10,481.71	7,048.76	108.62	107.06	-83.93	-410.46	-3,838.41	1,897.45	1,683.65	213.79	8.875		
11,000.00	7,249.00	10,581.71	7,048.33	111.33	109.80	-83.93	-411.06	-3,938.41	1,897.27	1,678.05	219.22	8.655		
11,100.00	7,248.62	10,681.71	7,047.89	114.04	112.54	-83.93	-411.66	-4,038.41	1,897.09	1,672.43	224.66	8.444		
11,200.00	7,248.24	10,781.71	7,047.46	116.77	115.29	-83.92	-412.26	-4,138.41	1,896.92	1,666.80	230.11	8.243		
11,300.00	7,247.86	10,881.70	7,047.03	119.50	118.05	-83.92	-412.86	-4,238.40	1,896.74	1,661.16	235.58	8.051		
11,400.00	7,247.48	10,981.70	7,046.59	122.24	120.81	-83.92	-413.45	-4,338.40	1,896.56	1,655.51	241.05	7.868		
11,500.00	7,247.10	11,081.70	7,046.16	124.98	123.57	-83.92	-414.05	-4,438.40	1,896.39	1,649.85	246.53	7.692		
11,600.00	7,246.72	11,181.70	7,045.72	127.73	126.34	-83.92	-414.65	-4,538.39	1,896.21	1,644.19	252.03	7.524		
11,700.00	7,246.34	11,281.70	7,045.29	130.48	129.11	-83.91	-415.25	-4,638.39	1,896.03	1,638.51	257.53	7.363		
11,800.00	7,245.96	11,381.70	7,044.86	133.24	131.89	-83.91	-415.85	-4,738.39	1,895.86	1,632.82	263.03	7.208		
11,900.00	7,245.58	11,481.70	7,044.42	136.00	134.67	-83.91	-416.45	-4,838.39	1,895.68	1,627.13	268.55	7.059		
12,000.00	7,245.21	11,581.70	7,043.99	138.76	137.45	-83.91	-417.05	-4,938.38	1,895.51	1,621.43	274.07	6.916		
12,100.00	7,244.83	11,681.70	7,043.55	141.53	140.24	-83.90	-417.65	-5,038.38	1,895.33	1,615.73	279.60	6.779		
12,200.00	7,244.45	11,781.70	7,043.12	144.30	143.03	-83.90	-418.24	-5,138.38	1,895.15	1,610.02	285.14	6.646		
12,300.00	7,244.07	11,881.70	7,042.69	147.08	145.82	-83.90	-418.84	-5,238.37	1,894.98	1,604.30	290.68	6.519		
12,400.00	7,243.69	11,981.70	7,042.25	149.86	148.62	-83.90	-419.44	-5,338.37	1,894.80	1,598.58	296.22	6.397		
12,500.00	7,243.31	12,081.70	7,041.82	152.64	151.41	-83.90	-420.04	-5,438.37	1,894.62	1,592.85	301.77	6.278		
12,600.00	7,242.93	12,181.70	7,041.38	155.42	154.21	-83.89	-420.64	-5,538.37	1,894.45	1,587.12	307.33	6.164		
12,700.00	7,242.55	12,281.70	7,040.95	158.21	157.01	-83.89	-421.24	-5,638.36	1,894.27	1,581.38	312.89	6.054		
12,800.00	7,242.17	12,381.70	7,040.52	161.00	159.82	-83.89	-421.84	-5,738.36	1,894.09	1,575.64	318.46	5.948		
12,900.00	7,241.79	12,481.70	7,040.08	163.79	162.62	-83.89	-422.44	-5,838.36	1,893.92	1,569.89	324.03	5.845		
13,000.00	7,241.41	12,581.70	7,039.65	166.58	165.43	-83.88	-423.03	-5,938.35	1,893.74	1,564.14	329.60	5.746		
13,100.00	7,241.03	12,681.70	7,039.21	169.38	168.24	-83.88	-423.63	-6,038.35	1,893.57	1,558.39	335.18	5.649		
13,200.00	7,240.65	12,781.70	7,038.78	172.18	171.05	-83.88	-424.23	-6,138.35	1,893.39	1,552.63	340.76	5.556		
13,300.00	7,240.27	12,881.70	7,038.35	174.98	173.86	-83.88	-424.83	-6,238.34	1,893.21	1,546.87	346.34	5.466		
13,400.00	7,239.89	12,981.70	7,037.91	177.78	176.67	-83.88	-425.43	-6,338.34	1,893.04	1,541.11	351.93	5.379		
13,500.00	7,239.51	13,081.70	7,037.48	180.58	179.49	-83.87	-426.03	-6,438.34	1,892.86	1,535.34	357.52	5.294		
13,600.00	7,239.13	13,181.70	7,037.04	183.39	182.30	-83.87	-426.63	-6,538.34	1,892.68	1,529.57	363.11	5.212		
13,700.00	7,238.75	13,281.70	7,036.61	186.20	185.12	-83.87	-427.23	-6,638.33	1,892.51	1,523.80	368.71	5.133		
13,800.00	7,238.37	13,381.70	7,036.18	189.00	187.94	-83.87	-427.82	-6,738.33	1,892.33	1,518.03	374.30	5.056		
13,900.00	7,237.99	13,481.70	7,035.74	191.81	190.76	-83.86	-428.42	-6,838.33	1,892.15	1,512.25	379.90	4.981		
14,000.00	7,237.62	13,581.70	7,035.31	194.63	193.58	-83.86	-429.02	-6,938.32	1,891.98	1,506.47	385.51	4.908		
14,100.00	7,237.24	13,681.70	7,034.87	197.44	196.40	-83.86	-429.62	-7,038.32	1,891.80	1,500.69	391.11	4.837		
14,200.00	7,236.86	13,781.70	7,034.44	200.25	199.23	-83.86	-430.22	-7,138.32	1,891.63	1,494.90	396.72	4.768		
14,300.00	7,236.48	13,881.70	7,034.01	203.07	202.05	-83.86	-430.82	-7,238.32	1,891.45	1,489.12	402.33	4.701		
14,400.00	7,236.10	13,981.70	7,033.57	205.88	204.88	-83.85	-431.42	-7,338.31	1,891.27	1,483.33	407.94	4.636		
14,500.00	7,235.72	14,081.70	7,033.14	208.70	207.70	-83.85	-432.02	-7,438.31	1,891.10	1,477.54	413.56	4.573		
14,600.00	7,235.34	14,181.70	7,032.70	211.52	210.53	-83.85	-432.61	-7,538.31	1,890.92	1,471.75	419.17	4.511		
14,700.00	7,234.96	14,281.70	7,032.27	214.34	213.36	-83.85	-433.21	-7,638.30	1,890.74	1,465.95	424.79	4.451		
14,800.00	7,234.58	14,381.70	7,031.84	217.16	216.18	-83.84	-433.81	-7,738.30	1,890.57	1,460.16	430.41	4.392		
14,900.00	7,234.20	14,481.70	7,031.40	219.98	219.01	-83.84	-434.41	-7,838.30	1,890.39	1,454.36	436.03	4.335		
15,000.00	7,233.82	14,581.70	7,030.97	222.81	221.84	-83.84	-435.01	-7,938.30	1,890.21	1,448.56	441.65	4.280		
15,100.00	7,233.44	14,681.70	7,030.53	225.63	224.68	-83.84	-435.61	-8,038.29	1,890.04	1,442.76	447.28	4.226		
15,200.00	7,233.06	14,781.70	7,030.10	228.45	227.51	-83.84	-436.21	-8,138.29	1,889.86	1,436.96	452.90	4.173		
15,216.01	7,233.00	14,797.71	7,030.03	228.91	227.96	-83.83	-436.30	-8,154.30	1,889.83	1,436.03	453.80	4.164 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1.00	0.00	3.28	3.28	-179.50	-159.92	-1.39	159.93					
100.00	100.00	101.00	100.00	3.28	3.28	-179.50	-159.92	-1.39	159.93	153.36	6.57	24.344		
200.00	200.00	201.00	200.00	3.34	3.34	-179.50	-159.92	-1.39	159.93	153.25	6.67	23.960	CC, ES	
300.00	299.98	301.02	299.98	3.45	3.45	-173.83	-159.92	-1.39	161.66	154.77	6.89	23.457		
400.00	399.84	401.16	399.84	3.61	3.61	-174.01	-159.92	-1.39	166.87	159.65	7.21	23.133		
500.00	499.45	498.45	499.45	3.82	3.80	-174.29	-159.92	-1.39	175.54	167.92	7.62	23.037		
600.00	598.70	602.29	598.70	4.07	4.05	-174.16	-159.92	-2.94	187.66	179.55	8.11	23.134		
700.00	697.47	703.51	697.44	4.35	4.31	-173.88	-159.92	-5.41	203.23	194.57	8.66	23.462		
800.00	795.62	805.34	795.58	4.67	4.61	-173.72	-159.92	-7.86	222.22	212.95	9.27	23.967		
900.00	893.06	907.88	893.01	5.01	4.93	-173.66	-159.92	-10.29	244.60	234.67	9.93	24.628		
1,000.00	989.64	988.74	989.60	5.38	5.19	-173.68	-159.92	-12.71	270.35	259.79	10.56	25.602		
1,100.00	1,085.42	1,084.56	1,085.39	5.78	5.52	-173.78	-159.92	-15.10	298.95	287.69	11.27	26.530		
1,200.00	1,181.09	1,180.27	1,181.07	6.20	5.86	-173.89	-159.92	-17.49	327.92	315.92	11.99	27.344		
1,300.00	1,276.76	1,275.98	1,276.76	6.65	6.21	-173.99	-159.92	-19.89	356.88	344.14	12.74	28.014		
1,400.00	1,372.43	1,371.70	1,372.44	7.11	6.57	-174.07	-159.92	-22.28	385.84	372.34	13.51	28.567		
1,500.00	1,468.10	1,467.41	1,468.12	7.57	6.94	-174.14	-159.92	-24.67	414.81	400.52	14.29	29.028		
1,600.00	1,563.77	1,563.12	1,563.80	8.05	7.31	-174.20	-159.92	-27.06	443.77	428.68	15.09	29.413		
1,700.00	1,659.44	1,658.83	1,659.49	8.53	7.69	-174.26	-159.92	-29.45	472.74	456.84	15.90	29.737		
1,800.00	1,755.11	1,754.54	1,755.17	9.02	8.07	-174.30	-159.92	-31.84	501.70	484.98	16.72	30.012		
1,900.00	1,850.78	1,850.26	1,850.85	9.52	8.46	-174.35	-159.92	-34.24	530.67	513.12	17.54	30.246		
2,000.00	1,946.45	1,945.97	1,946.53	10.02	8.84	-174.38	-159.92	-36.63	559.63	541.25	18.38	30.447		
2,100.00	2,042.12	2,041.68	2,042.22	10.52	9.24	-174.42	-159.92	-39.02	588.60	569.38	19.22	30.619		
2,200.00	2,137.78	2,137.39	2,137.90	11.03	9.63	-174.45	-159.92	-41.41	617.56	597.49	20.07	30.769		
2,300.00	2,233.45	2,233.11	2,233.58	11.54	10.03	-174.48	-159.92	-43.80	646.53	625.61	20.92	30.899		
2,400.00	2,329.12	2,328.82	2,329.26	12.05	10.42	-174.50	-159.92	-46.19	675.50	653.72	21.78	31.012		
2,500.00	2,424.79	2,424.53	2,424.95	12.56	10.82	-174.53	-159.92	-48.58	704.46	681.82	22.64	31.112		
2,600.00	2,520.46	2,520.24	2,520.63	13.08	11.22	-174.55	-159.92	-50.98	733.43	709.92	23.51	31.199		
2,700.00	2,616.13	2,615.96	2,616.31	13.60	11.63	-174.57	-159.92	-53.37	762.40	738.02	24.38	31.276		
2,800.00	2,711.80	2,711.67	2,711.99	14.12	12.03	-174.59	-159.92	-55.76	791.36	766.12	25.25	31.345		
2,900.00	2,807.47	2,807.38	2,807.68	14.64	12.44	-174.60	-159.92	-58.15	820.33	794.21	26.12	31.406		
3,000.00	2,903.14	2,903.09	2,903.36	15.16	12.84	-174.62	-159.92	-60.54	849.30	822.30	27.00	31.460		
3,100.00	2,998.81	3,001.19	2,999.04	15.68	13.26	-174.64	-159.92	-62.93	878.27	850.38	27.88	31.498		
3,200.00	3,094.48	3,105.48	3,094.72	16.21	13.71	-174.65	-159.92	-65.33	907.23	878.43	28.80	31.501		
3,300.00	3,190.15	3,209.77	3,190.41	16.73	14.15	-174.66	-159.92	-67.72	936.20	906.48	29.72	31.503		
3,400.00	3,285.82	3,285.94	3,286.09	17.26	14.48	-174.67	-159.92	-70.11	965.17	934.65	30.52	31.627		
3,500.00	3,381.49	3,381.66	3,381.77	17.78	14.89	-174.69	-159.92	-72.50	994.13	962.73	31.40	31.659		
3,600.00	3,477.16	3,477.37	3,477.45	18.31	15.30	-174.70	-159.92	-74.89	1,023.10	990.81	32.29	31.688		
3,700.00	3,572.83	3,573.08	3,573.14	18.84	15.71	-174.71	-159.92	-77.28	1,052.07	1,018.89	33.17	31.714		
3,800.00	3,668.50	3,668.79	3,668.82	19.37	16.12	-174.72	-159.92	-79.68	1,081.04	1,046.97	34.06	31.738		
3,900.00	3,764.17	3,764.51	3,764.50	19.89	16.53	-174.73	-159.92	-82.07	1,110.00	1,075.05	34.95	31.759		
4,000.00	3,859.84	3,860.22	3,860.18	20.42	16.95	-174.74	-159.92	-84.46	1,138.97	1,103.13	35.84	31.779		
4,100.00	3,955.51	3,955.93	3,955.87	20.95	17.36	-174.74	-159.92	-86.85	1,167.94	1,131.21	36.73	31.797		
4,200.00	4,051.18	4,051.64	4,051.55	21.48	17.77	-174.75	-159.92	-89.24	1,196.91	1,159.28	37.62	31.814		
4,300.00	4,146.85	4,147.35	4,147.23	22.01	18.19	-174.76	-159.92	-91.63	1,225.87	1,187.36	38.51	31.829		
4,400.00	4,242.52	4,243.07	4,242.91	22.55	18.60	-174.77	-159.92	-94.02	1,254.84	1,215.43	39.41	31.842		
4,500.00	4,338.19	4,338.78	4,338.60	23.08	19.02	-174.77	-159.92	-96.42	1,283.81	1,243.51	40.30	31.855		
4,600.00	4,433.86	4,434.49	4,434.28	23.61	19.43	-174.78	-159.92	-98.81	1,312.78	1,271.58	41.20	31.866		
4,700.00	4,529.53	4,530.20	4,529.96	24.14	19.85	-174.79	-159.92	-101.20	1,341.74	1,299.65	42.09	31.877		
4,800.00	4,625.19	4,625.92	4,625.64	24.67	20.26	-174.79	-159.92	-103.59	1,370.71	1,327.72	42.99	31.887		
4,900.00	4,720.86	4,721.63	4,721.33	25.21	20.68	-174.80	-159.92	-105.98	1,399.68	1,355.79	43.88	31.896		
5,000.00	4,816.53	4,817.34	4,817.01	25.74	21.09	-174.81	-159.92	-108.37	1,428.65	1,383.87	44.78	31.904		
5,100.00	4,912.20	4,913.05	4,912.69	26.27	21.51	-174.81	-159.92	-110.77	1,457.61	1,411.94	45.68	31.912		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	5,008.77	5,008.37	26.80	21.93	-174.82	-159.92	-113.16	1,486.58	1,440.01	46.57	31.918		
5,300.00	5,103.54	5,104.48	5,104.06	27.34	22.34	-174.82	-159.92	-115.55	1,515.55	1,468.08	47.47	31.925		
5,400.00	5,199.22	5,200.20	5,199.74	27.87	22.76	-174.83	-159.92	-117.94	1,544.50	1,496.13	48.37	31.931		
5,500.00	5,295.46	5,303.52	5,296.00	28.39	23.21	-174.88	-159.92	-120.35	1,571.49	1,522.20	49.30	31.879		
5,600.00	5,392.60	5,406.36	5,393.13	28.89	23.66	-174.91	-159.92	-122.77	1,595.12	1,544.91	50.21	31.769		
5,700.00	5,490.50	5,508.44	5,491.02	29.37	24.10	-174.92	-159.92	-125.22	1,615.36	1,564.25	51.11	31.605		
5,800.00	5,589.05	5,609.87	5,589.55	29.83	24.55	-174.91	-159.92	-127.68	1,632.18	1,580.18	52.00	31.389		
5,900.00	5,688.14	5,689.22	5,688.61	30.26	24.89	-174.89	-159.92	-130.16	1,645.57	1,592.79	52.78	31.179		
6,000.00	5,787.63	5,788.70	5,788.07	30.68	25.33	-174.86	-159.92	-132.65	1,655.50	1,601.87	53.63	30.868		
6,100.00	5,887.41	5,888.47	5,887.80	31.07	25.76	-174.80	-159.92	-135.14	1,661.98	1,607.50	54.47	30.510		
6,200.00	5,987.36	5,988.39	5,987.70	31.44	26.20	-174.73	-159.92	-137.63	1,664.98	1,609.68	55.30	30.107		
6,300.00	6,087.36	6,088.36	6,087.63	31.80	26.63	179.62	-159.92	-140.13	1,665.20	1,609.08	56.12	29.672		
6,400.00	6,187.36	6,188.33	6,187.57	32.15	27.07	179.71	-159.92	-142.63	1,665.18	1,608.25	56.94	29.246		
6,500.00	6,287.36	6,288.30	6,287.51	32.51	27.51	179.79	-159.92	-145.13	1,665.17	1,607.42	57.76	28.830		
6,600.00	6,387.36	6,388.27	6,387.45	32.87	27.94	179.88	-159.92	-147.63	1,665.17	1,606.59	58.58	28.426		
6,700.00	6,487.36	6,488.24	6,487.38	33.23	28.38	179.97	-159.92	-150.12	1,665.16	1,605.76	59.40	28.032		
6,724.97	6,512.33	6,513.20	6,512.34	33.32	28.49	179.99	-159.92	-150.75	1,665.16	1,605.55	59.61	27.936		
6,800.00	6,587.36	6,584.04	6,582.90	33.59	28.80	-179.81	-160.00	-156.57	1,665.26	1,605.06	60.19	27.666		
6,900.00	6,687.26	6,675.67	6,672.44	33.95	29.21	-88.77	-160.33	-175.64	1,665.75	1,604.81	60.94	27.335		
7,000.00	6,785.58	6,765.02	6,756.25	34.31	29.61	-88.16	-160.89	-206.42	1,666.59	1,604.93	61.66	27.031		
7,100.00	6,879.94	6,852.58	6,833.41	34.65	30.01	-87.59	-161.66	-247.66	1,667.69	1,605.33	62.36	26.744		
7,200.00	6,968.01	6,938.66	6,903.04	34.97	30.42	-87.08	-162.61	-298.14	1,668.97	1,605.90	63.07	26.461		
7,300.00	7,047.61	7,023.55	6,964.43	35.27	30.87	-86.63	-163.73	-356.66	1,670.37	1,606.53	63.85	26.163		
7,400.00	7,116.80	7,107.50	7,016.96	35.54	31.37	-86.25	-164.98	-422.06	1,671.81	1,607.07	64.74	25.825		
7,500.00	7,173.86	7,190.79	7,060.12	35.81	31.96	-85.94	-166.35	-493.21	1,673.22	1,607.39	65.82	25.420		
7,600.00	7,217.38	7,273.64	7,093.48	36.17	32.65	-85.72	-167.82	-568.97	1,674.53	1,607.36	67.17	24.930		
7,700.00	7,246.31	7,356.30	7,116.69	36.80	33.46	-85.60	-169.36	-648.23	1,675.71	1,606.90	68.81	24.354		
7,800.00	7,259.92	7,439.00	7,129.43	37.72	34.37	-85.56	-170.95	-729.87	1,676.71	1,605.98	70.74	23.704		
7,900.00	7,260.77	7,526.74	7,131.90	38.86	35.46	-85.59	-172.66	-817.51	1,677.71	1,604.72	72.99	22.984		
8,000.00	7,260.39	7,626.73	7,131.53	40.19	36.84	-85.60	-174.61	-917.49	1,678.88	1,603.17	75.72	22.173		
8,100.00	7,260.01	7,726.72	7,131.17	41.67	38.38	-85.60	-176.57	-1,017.46	1,680.05	1,601.30	78.76	21.332		
8,200.00	7,259.63	7,826.72	7,130.80	43.30	40.07	-85.60	-178.53	-1,117.43	1,681.22	1,599.14	82.08	20.483		
8,300.00	7,259.25	7,926.71	7,130.43	45.05	41.88	-85.61	-180.48	-1,217.41	1,682.39	1,596.74	85.66	19.641		
8,400.00	7,258.87	8,026.70	7,130.07	46.91	43.81	-85.61	-182.44	-1,317.38	1,683.56	1,594.11	89.45	18.821		
8,500.00	7,258.49	8,126.70	7,129.70	48.87	45.83	-85.61	-184.39	-1,417.35	1,684.73	1,591.29	93.44	18.030		
8,600.00	7,258.11	8,226.69	7,129.34	50.92	47.93	-85.62	-186.35	-1,517.33	1,685.90	1,588.30	97.60	17.274		
8,700.00	7,257.73	8,326.68	7,128.97	53.04	50.12	-85.62	-188.30	-1,617.30	1,687.07	1,585.17	101.90	16.556		
8,800.00	7,257.35	8,426.68	7,128.60	55.23	52.36	-85.62	-190.26	-1,717.27	1,688.24	1,581.90	106.34	15.876		
8,900.00	7,256.97	8,526.67	7,128.24	57.47	54.66	-85.63	-192.21	-1,817.25	1,689.41	1,578.51	110.89	15.235		
9,000.00	7,256.59	8,626.66	7,127.87	59.77	57.02	-85.63	-194.17	-1,917.22	1,690.58	1,575.03	115.55	14.631		
9,100.00	7,256.21	8,726.66	7,127.50	62.12	59.41	-85.63	-196.12	-2,017.19	1,691.75	1,571.45	120.29	14.064		
9,200.00	7,255.83	8,826.65	7,127.14	64.50	61.85	-85.64	-198.08	-2,117.17	1,692.91	1,567.80	125.12	13.531		
9,300.00	7,255.45	8,926.64	7,126.77	66.93	64.32	-85.64	-200.04	-2,217.14	1,694.08	1,564.07	130.01	13.030		
9,400.00	7,255.07	9,026.63	7,126.41	69.38	66.82	-85.64	-201.99	-2,317.11	1,695.25	1,560.29	134.97	12.560		
9,500.00	7,254.69	9,126.63	7,126.04	71.87	69.35	-85.65	-203.95	-2,417.09	1,696.42	1,556.44	139.98	12.119		
9,600.00	7,254.31	9,226.62	7,125.67	74.38	71.90	-85.65	-205.90	-2,517.06	1,697.59	1,552.55	145.05	11.704		
9,700.00	7,253.93	9,326.61	7,125.31	76.92	74.47	-85.65	-207.86	-2,617.03	1,698.76	1,548.61	150.16	11.313		
9,800.00	7,253.55	9,426.61	7,124.94	79.48	77.07	-85.66	-209.81	-2,717.01	1,699.93	1,544.62	155.31	10.946		
9,900.00	7,253.18	9,526.60	7,124.58	82.06	79.68	-85.66	-211.77	-2,816.98	1,701.10	1,540.61	160.49	10.599		
10,000.00	7,252.80	9,626.59	7,124.21	84.65	82.31	-85.66	-213.72	-2,916.95	1,702.27	1,536.55	165.71	10.272		
10,100.00	7,252.42	9,726.59	7,123.84	87.27	84.95	-85.67	-215.68	-3,016.93	1,703.44	1,532.47	170.97	9.964		
10,200.00	7,252.04	9,826.58	7,123.48	89.89	87.60	-85.67	-217.63	-3,116.90	1,704.61	1,528.36	176.25	9.672		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,251.66	9,926.57	7,123.11	92.54	90.27	-85.68	-219.59	-3,216.87	1,705.78	1,524.23	181.55	9.396		
10,400.00	7,251.28	10,026.57	7,122.74	95.19	92.95	-85.68	-221.54	-3,316.85	1,706.95	1,520.07	186.88	9.134		
10,500.00	7,250.90	10,126.56	7,122.38	97.86	95.64	-85.68	-223.50	-3,416.82	1,708.12	1,515.89	192.23	8.886		
10,600.00	7,250.52	10,226.55	7,122.01	100.53	98.34	-85.69	-225.46	-3,516.79	1,709.28	1,511.69	197.59	8.650		
10,700.00	7,250.14	10,326.54	7,121.65	103.22	101.04	-85.69	-227.41	-3,616.77	1,710.45	1,507.47	202.98	8.427		
10,800.00	7,249.76	10,426.54	7,121.28	105.91	103.76	-85.69	-229.37	-3,716.74	1,711.62	1,503.24	208.38	8.214		
10,900.00	7,249.38	10,526.53	7,120.91	108.62	106.48	-85.70	-231.32	-3,816.71	1,712.79	1,498.99	213.80	8.011		
11,000.00	7,249.00	10,626.52	7,120.55	111.33	109.21	-85.70	-233.28	-3,916.69	1,713.96	1,494.73	219.24	7.818		
11,100.00	7,248.62	10,726.52	7,120.18	114.04	111.94	-85.70	-235.23	-4,016.66	1,715.13	1,490.45	224.68	7.634		
11,200.00	7,248.24	10,826.51	7,119.82	116.77	114.69	-85.71	-237.19	-4,116.63	1,716.30	1,486.16	230.14	7.458		
11,300.00	7,247.86	10,926.50	7,119.45	119.50	117.43	-85.71	-239.14	-4,216.61	1,717.47	1,481.86	235.61	7.290		
11,400.00	7,247.48	11,026.50	7,119.08	122.24	120.18	-85.71	-241.10	-4,316.58	1,718.64	1,477.55	241.09	7.129		
11,500.00	7,247.10	11,126.49	7,118.72	124.98	122.94	-85.72	-243.05	-4,416.55	1,719.81	1,473.23	246.58	6.975		
11,600.00	7,246.72	11,226.48	7,118.35	127.73	125.70	-85.72	-245.01	-4,516.53	1,720.98	1,468.90	252.08	6.827		
11,700.00	7,246.34	11,326.48	7,117.98	130.48	128.46	-85.72	-246.97	-4,616.50	1,722.15	1,464.56	257.59	6.686		
11,800.00	7,245.96	11,426.47	7,117.62	133.24	131.23	-85.73	-248.92	-4,716.47	1,723.32	1,460.22	263.10	6.550		
11,900.00	7,245.58	11,526.46	7,117.25	136.00	134.00	-85.73	-250.88	-4,816.45	1,724.49	1,455.86	268.62	6.420		
12,000.00	7,245.21	11,626.46	7,116.89	138.76	136.78	-85.73	-252.83	-4,916.42	1,725.66	1,451.50	274.16	6.294		
12,100.00	7,244.83	11,726.45	7,116.52	141.53	139.56	-85.74	-254.79	-5,016.39	1,726.83	1,447.13	279.69	6.174		
12,200.00	7,244.45	11,826.44	7,116.15	144.30	142.34	-85.74	-256.74	-5,116.37	1,728.00	1,442.76	285.24	6.058		
12,300.00	7,244.07	11,926.43	7,115.79	147.08	145.12	-85.74	-258.70	-5,216.34	1,729.16	1,438.38	290.79	5.946		
12,400.00	7,243.69	12,026.43	7,115.42	149.86	147.91	-85.75	-260.65	-5,316.31	1,730.33	1,433.99	296.34	5.839		
12,500.00	7,243.31	12,126.42	7,115.06	152.64	150.70	-85.75	-262.61	-5,416.29	1,731.50	1,429.60	301.90	5.735		
12,600.00	7,242.93	12,226.41	7,114.69	155.42	153.49	-85.75	-264.56	-5,516.26	1,732.67	1,425.20	307.47	5.635		
12,700.00	7,242.55	12,326.41	7,114.32	158.21	156.28	-85.76	-266.52	-5,616.23	1,733.84	1,420.80	313.04	5.539		
12,800.00	7,242.17	12,426.40	7,113.96	161.00	159.08	-85.76	-268.47	-5,716.21	1,735.01	1,416.40	318.62	5.445		
12,900.00	7,241.79	12,526.39	7,113.59	163.79	161.88	-85.76	-270.43	-5,816.18	1,736.18	1,411.99	324.20	5.355		
13,000.00	7,241.41	12,626.39	7,113.22	166.58	164.68	-85.77	-272.39	-5,916.15	1,737.35	1,407.57	329.78	5.268		
13,100.00	7,241.03	12,726.38	7,112.86	169.38	167.48	-85.77	-274.34	-6,016.13	1,738.52	1,403.15	335.37	5.184		
13,200.00	7,240.65	12,826.37	7,112.49	172.18	170.28	-85.77	-276.30	-6,116.10	1,739.69	1,398.73	340.96	5.102		
13,300.00	7,240.27	12,926.37	7,112.13	174.98	173.09	-85.78	-278.25	-6,216.07	1,740.86	1,394.31	346.55	5.023		
13,400.00	7,239.89	13,026.36	7,111.76	177.78	175.90	-85.78	-280.21	-6,316.05	1,742.03	1,389.88	352.15	4.947		
13,500.00	7,239.51	13,126.35	7,111.39	180.58	178.70	-85.78	-282.16	-6,416.02	1,743.20	1,385.44	357.75	4.873		
13,600.00	7,239.13	13,226.35	7,111.03	183.39	181.51	-85.79	-284.12	-6,515.99	1,744.37	1,381.01	363.36	4.801		
13,700.00	7,238.75	13,326.34	7,110.66	186.20	184.33	-85.79	-286.07	-6,615.97	1,745.54	1,376.57	368.97	4.731		
13,800.00	7,238.37	13,426.33	7,110.30	189.00	187.14	-85.79	-288.03	-6,715.94	1,746.71	1,372.13	374.58	4.663		
13,900.00	7,237.99	13,526.32	7,109.93	191.81	189.95	-85.80	-289.98	-6,815.91	1,747.88	1,367.69	380.19	4.597		
14,000.00	7,237.62	13,626.32	7,109.56	194.63	192.77	-85.80	-291.94	-6,915.89	1,749.05	1,363.24	385.80	4.533		
14,100.00	7,237.24	13,726.31	7,109.20	197.44	195.58	-85.80	-293.90	-7,015.86	1,750.22	1,358.79	391.42	4.471		
14,200.00	7,236.86	13,826.30	7,108.83	200.25	198.40	-85.81	-295.85	-7,115.83	1,751.39	1,354.34	397.04	4.411		
14,300.00	7,236.48	13,926.30	7,108.46	203.07	201.22	-85.81	-297.81	-7,215.81	1,752.55	1,349.89	402.67	4.352		
14,400.00	7,236.10	14,026.29	7,108.10	205.88	204.04	-85.81	-299.76	-7,315.78	1,753.72	1,345.43	408.29	4.295		
14,500.00	7,235.72	14,126.28	7,107.73	208.70	206.86	-85.81	-301.72	-7,415.75	1,754.89	1,340.98	413.92	4.240		
14,600.00	7,235.34	14,226.28	7,107.37	211.52	209.68	-85.82	-303.67	-7,515.73	1,756.06	1,336.52	419.55	4.186		
14,700.00	7,234.96	14,326.27	7,107.00	214.34	212.50	-85.82	-305.63	-7,615.70	1,757.23	1,332.06	425.18	4.133		
14,800.00	7,234.58	14,426.26	7,106.63	217.16	215.32	-85.82	-307.58	-7,715.67	1,758.40	1,327.59	430.81	4.082		
14,900.00	7,234.20	14,526.26	7,106.27	219.98	218.15	-85.83	-309.54	-7,815.65	1,759.57	1,323.13	436.44	4.032		
15,000.00	7,233.82	14,626.25	7,105.90	222.81	220.97	-85.83	-311.49	-7,915.62	1,760.74	1,318.66	442.08	3.983		
15,100.00	7,233.44	14,726.24	7,105.54	225.63	223.80	-85.83	-313.45	-8,015.59	1,761.91	1,314.19	447.72	3.935		
15,200.00	7,233.06	14,826.24	7,105.17	228.45	226.62	-85.84	-315.40	-8,115.57	1,763.08	1,309.72	453.36	3.889		
15,216.01	7,233.00	14,842.25	7,105.11	228.91	227.07	-85.84	-315.72	-8,131.57	1,763.27	1,309.01	454.26	3.882 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
8,000.00	7,260.39	7,201.61	7,260.39	40.19	249.68	-90.30	-4,435.59	-8,996.26	9,997.52	9,709.27	288.25	34.684		
8,100.00	7,260.01	7,201.99	7,260.01	41.67	249.70	-90.30	-4,435.59	-8,996.26	9,916.76	9,627.72	289.04	34.310		
8,200.00	7,259.63	7,202.37	7,259.63	43.30	249.71	-90.29	-4,435.59	-8,996.26	9,836.35	9,546.44	289.91	33.929		
8,300.00	7,259.25	7,202.75	7,259.25	45.05	249.72	-90.29	-4,435.59	-8,996.26	9,756.30	9,465.45	290.85	33.544		
8,400.00	7,258.87	7,203.13	7,258.87	46.91	249.74	-90.28	-4,435.59	-8,996.26	9,676.62	9,384.75	291.87	33.153		
8,500.00	7,258.49	7,203.51	7,258.49	48.87	249.75	-90.28	-4,435.59	-8,996.26	9,597.33	9,304.36	292.97	32.759		
8,600.00	7,258.11	7,203.89	7,258.11	50.92	249.76	-90.28	-4,435.59	-8,996.26	9,518.42	9,224.28	294.14	32.360		
8,700.00	7,257.73	7,204.27	7,257.73	53.04	249.78	-90.27	-4,435.59	-8,996.26	9,439.92	9,144.54	295.38	31.959		
8,800.00	7,257.35	7,204.65	7,257.35	55.23	249.79	-90.27	-4,435.59	-8,996.26	9,361.82	9,065.14	296.69	31.555		
8,900.00	7,256.97	7,205.03	7,256.97	57.47	249.80	-90.27	-4,435.59	-8,996.26	9,284.15	8,986.08	298.06	31.148		
9,000.00	7,256.59	7,205.41	7,256.59	59.77	249.82	-90.26	-4,435.59	-8,996.26	9,206.90	8,907.39	299.51	30.740		
9,100.00	7,256.21	7,205.79	7,256.21	62.12	249.83	-90.26	-4,435.59	-8,996.26	9,130.10	8,829.08	301.02	30.331		
9,200.00	7,255.83	7,206.17	7,255.83	64.50	249.84	-90.26	-4,435.59	-8,996.26	9,053.75	8,751.16	302.59	29.921		
9,300.00	7,255.45	7,206.55	7,255.45	66.93	249.86	-90.25	-4,435.59	-8,996.26	8,977.86	8,673.64	304.23	29.511		
9,400.00	7,255.07	7,206.93	7,255.07	69.38	249.87	-90.25	-4,435.59	-8,996.26	8,902.45	8,596.53	305.92	29.100		
9,500.00	7,254.69	7,207.31	7,254.69	71.87	249.88	-90.24	-4,435.59	-8,996.26	8,827.53	8,519.85	307.68	28.690		
9,600.00	7,254.31	7,207.69	7,254.31	74.38	249.90	-90.24	-4,435.59	-8,996.26	8,753.11	8,443.61	309.50	28.282		
9,700.00	7,253.93	7,208.07	7,253.93	76.92	249.91	-90.24	-4,435.59	-8,996.26	8,679.21	8,367.83	311.37	27.874		
9,800.00	7,253.55	7,208.45	7,253.55	79.48	249.92	-90.23	-4,435.59	-8,996.26	8,605.83	8,292.52	313.31	27.468		
9,900.00	7,253.18	7,208.83	7,253.18	82.06	249.94	-90.23	-4,435.59	-8,996.26	8,532.99	8,217.70	315.30	27.063		
10,000.00	7,252.80	7,209.20	7,252.80	84.65	249.95	-90.23	-4,435.59	-8,996.26	8,460.71	8,143.37	317.34	26.661		
10,100.00	7,252.42	7,209.58	7,252.42	87.27	249.96	-90.22	-4,435.59	-8,996.26	8,389.00	8,069.56	319.44	26.262		
10,200.00	7,252.04	7,209.96	7,252.04	89.89	249.98	-90.22	-4,435.59	-8,996.26	8,317.87	7,996.28	321.59	25.865		
10,300.00	7,251.66	7,189.66	7,251.66	92.54	249.27	-90.21	-4,435.59	-8,996.26	8,247.34	7,924.26	323.08	25.527		
10,400.00	7,251.28	7,189.28	7,251.28	95.19	249.25	-90.21	-4,435.59	-8,996.26	8,177.42	7,852.11	325.31	25.137		
10,500.00	7,250.90	7,188.90	7,250.90	97.86	249.24	-90.21	-4,435.59	-8,996.26	8,108.14	7,780.54	327.60	24.750		
10,600.00	7,250.52	7,188.52	7,250.52	100.53	249.23	-90.20	-4,435.59	-8,996.26	8,039.50	7,709.57	329.93	24.367		
10,700.00	7,250.14	7,188.14	7,250.14	103.22	249.21	-90.20	-4,435.59	-8,996.26	7,971.53	7,639.21	332.32	23.988		
10,800.00	7,249.76	7,187.76	7,249.76	105.91	249.20	-90.20	-4,435.59	-8,996.26	7,904.23	7,569.48	334.76	23.612		
10,900.00	7,249.38	7,187.38	7,249.38	108.62	249.19	-90.19	-4,435.59	-8,996.26	7,837.64	7,500.39	337.25	23.240		
11,000.00	7,249.00	7,187.00	7,249.00	111.33	249.17	-90.19	-4,435.59	-8,996.26	7,771.76	7,431.98	339.78	22.873		
11,100.00	7,248.62	7,186.62	7,248.62	114.04	249.16	-90.18	-4,435.59	-8,996.26	7,706.61	7,364.24	342.37	22.510		
11,200.00	7,248.24	7,186.24	7,248.24	116.77	249.15	-90.18	-4,435.59	-8,996.26	7,642.22	7,297.22	345.00	22.151		
11,300.00	7,247.86	7,185.86	7,247.86	119.50	249.14	-90.18	-4,435.59	-8,996.26	7,578.60	7,230.92	347.68	21.797		
11,400.00	7,247.48	7,185.48	7,247.48	122.24	249.12	-90.17	-4,435.59	-8,996.26	7,515.77	7,165.36	350.41	21.448		
11,500.00	7,247.10	7,185.10	7,247.10	124.98	249.11	-90.17	-4,435.59	-8,996.26	7,453.76	7,100.57	353.19	21.104		
11,600.00	7,246.72	7,184.72	7,246.72	127.73	249.10	-90.17	-4,435.59	-8,996.26	7,392.57	7,036.57	356.01	20.765		
11,700.00	7,246.34	7,184.34	7,246.34	130.48	249.08	-90.16	-4,435.59	-8,996.26	7,332.24	6,973.37	358.87	20.431		
11,800.00	7,245.96	7,183.96	7,245.96	133.24	249.07	-90.16	-4,435.59	-8,996.26	7,272.79	6,911.01	361.78	20.103		
11,900.00	7,245.58	7,183.58	7,245.58	136.00	249.06	-90.16	-4,435.59	-8,996.26	7,214.23	6,849.50	364.74	19.779		
12,000.00	7,245.21	7,183.21	7,245.21	138.76	249.04	-90.15	-4,435.59	-8,996.26	7,156.59	6,788.86	367.73	19.462		
12,100.00	7,244.83	7,182.83	7,244.83	141.53	249.03	-90.15	-4,435.59	-8,996.26	7,099.89	6,729.12	370.77	19.149		
12,200.00	7,244.45	7,182.45	7,244.45	144.30	249.02	-90.14	-4,435.59	-8,996.26	7,044.15	6,670.31	373.84	18.842		
12,300.00	7,244.07	7,182.07	7,244.07	147.08	249.00	-90.14	-4,435.59	-8,996.26	6,989.40	6,612.44	376.96	18.541		
12,400.00	7,243.69	7,181.69	7,243.69	149.86	248.99	-90.14	-4,435.59	-8,996.26	6,935.66	6,555.55	380.11	18.246		
12,500.00	7,243.31	7,181.31	7,243.31	152.64	248.98	-90.13	-4,435.59	-8,996.26	6,882.95	6,499.65	383.31	17.957		
12,600.00	7,242.93	7,180.93	7,242.93	155.42	248.96	-90.13	-4,435.59	-8,996.26	6,831.30	6,444.77	386.53	17.673		
12,700.00	7,242.55	7,180.55	7,242.55	158.21	248.95	-90.13	-4,435.59	-8,996.26	6,780.73	6,390.94	389.79	17.396		
12,800.00	7,242.17	7,180.17	7,242.17	161.00	248.94	-90.12	-4,435.59	-8,996.26	6,731.27	6,338.19	393.08	17.124		
12,900.00	7,241.79	7,179.79	7,241.79	163.79	248.92	-90.12	-4,435.59	-8,996.26	6,682.94	6,286.53	396.41	16.859		
13,000.00	7,241.41	7,179.41	7,241.41	166.58	248.91	-90.11	-4,435.59	-8,996.26	6,635.76	6,236.00	399.76	16.600		
13,100.00	7,241.03	7,179.03	7,241.03	169.38	248.90	-90.11	-4,435.59	-8,996.26	6,589.76	6,186.63	403.13	16.346		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	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	
13,200.00	7,240.65	7,178.65	7,240.65	172.18	248.88	-90.11	-4,435.59	-8,996.26	6,544.97	6,138.44	406.53	16.099	
13,300.00	7,240.27	7,178.27	7,240.27	174.98	248.87	-90.10	-4,435.59	-8,996.26	6,501.40	6,091.45	409.96	15.859	
13,400.00	7,239.89	7,177.89	7,239.89	177.78	248.86	-90.10	-4,435.59	-8,996.26	6,459.09	6,045.70	413.40	15.624	
13,500.00	7,239.51	7,177.51	7,239.51	180.58	248.84	-90.10	-4,435.59	-8,996.26	6,418.06	6,001.21	416.86	15.396	
13,600.00	7,239.13	7,177.13	7,239.13	183.39	248.83	-90.09	-4,435.59	-8,996.26	6,378.34	5,958.01	420.33	15.175	
13,700.00	7,238.75	7,176.75	7,238.75	186.20	248.82	-90.09	-4,435.59	-8,996.26	6,339.94	5,916.13	423.82	14.959	
13,800.00	7,238.37	7,176.37	7,238.37	189.00	248.80	-90.08	-4,435.59	-8,996.26	6,302.90	5,875.59	427.31	14.750	
13,900.00	7,237.99	7,175.99	7,237.99	191.81	248.79	-90.08	-4,435.59	-8,996.26	6,267.23	5,836.42	430.81	14.548	
14,000.00	7,237.62	7,175.62	7,237.62	194.63	248.78	-90.08	-4,435.59	-8,996.26	6,232.96	5,798.65	434.31	14.351	
14,100.00	7,237.24	7,175.24	7,237.24	197.44	248.76	-90.07	-4,435.59	-8,996.26	6,200.12	5,762.30	437.81	14.162	
14,200.00	7,236.86	7,174.86	7,236.86	200.25	248.75	-90.07	-4,435.59	-8,996.26	6,168.72	5,727.41	441.31	13.978	
14,300.00	7,236.48	7,174.48	7,236.48	203.07	248.74	-90.07	-4,435.59	-8,996.26	6,138.79	5,693.99	444.80	13.801	
14,400.00	7,236.10	7,174.10	7,236.10	205.88	248.72	-90.06	-4,435.59	-8,996.26	6,110.35	5,662.07	448.29	13.630	
14,500.00	7,235.72	7,173.72	7,235.72	208.70	248.71	-90.06	-4,435.59	-8,996.26	6,083.42	5,631.67	451.75	13.466	
14,600.00	7,235.34	7,173.34	7,235.34	211.52	248.70	-90.06	-4,435.59	-8,996.26	6,058.03	5,602.83	455.20	13.308	
14,700.00	7,234.96	7,172.96	7,234.96	214.34	248.68	-90.05	-4,435.59	-8,996.26	6,034.18	5,575.55	458.63	13.157	
14,800.00	7,234.58	7,172.58	7,234.58	217.16	248.67	-90.05	-4,435.59	-8,996.26	6,011.90	5,549.87	462.03	13.012	
14,900.00	7,234.20	7,172.20	7,234.20	219.98	248.66	-90.04	-4,435.59	-8,996.26	5,991.21	5,525.81	465.40	12.873	
15,000.00	7,233.82	7,171.82	7,233.82	222.81	248.64	-90.04	-4,435.59	-8,996.26	5,972.12	5,503.38	468.75	12.741	
15,100.00	7,233.44	7,171.44	7,233.44	225.63	248.63	-90.04	-4,435.59	-8,996.26	5,954.65	5,482.60	472.05	12.614	
15,200.00	7,233.06	7,171.06	7,233.06	228.45	248.62	-90.03	-4,435.59	-8,996.26	5,938.82	5,463.50	475.31	12.494	
15,216.01	7,233.00	7,171.00	7,233.00	228.91	248.62	-90.03	-4,435.59	-8,996.26	5,936.43	5,460.60	475.83	12.476 CC, ES, 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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-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	665.66	700.59	3.28	4.31	-109.17	-3,108.16	-8,938.88	9,489.73					
100.00	100.00	724.00	758.32	3.28	4.49	-109.22	-3,113.79	-8,932.67	9,482.70	9,474.96	7.75	1,223.773		
200.00	200.00	724.00	758.32	3.34	4.49	-109.22	-3,113.79	-8,932.67	9,476.29	9,468.50	7.79	1,216.503		
300.00	299.98	724.00	758.32	3.45	4.49	-103.58	-3,113.79	-8,932.67	9,471.33	9,463.44	7.89	1,200.696		
400.00	399.84	724.00	758.32	3.61	4.49	-103.64	-3,113.79	-8,932.67	9,468.24	9,460.20	8.04	1,177.668		
500.00	499.45	774.08	807.80	3.82	4.66	-103.74	-3,119.89	-8,927.98	9,466.11	9,457.71	8.40	1,126.495		
535.76	534.99	779.02	812.68	3.90	4.68	-103.75	-3,120.59	-8,927.57	9,465.95	9,457.44	8.50	1,113.384		
600.00	598.70	818.00	851.05	4.07	4.81	-103.82	-3,126.79	-8,924.71	9,466.54	9,457.75	8.80	1,076.147		
700.00	697.47	818.00	851.05	4.35	4.81	-103.79	-3,126.79	-8,924.71	9,468.15	9,459.08	9.08	1,043.134		
800.00	795.62	818.00	851.05	4.67	4.81	-103.72	-3,126.79	-8,924.71	9,471.65	9,462.26	9.39	1,008.508		
900.00	893.06	818.00	851.05	5.01	4.81	-103.61	-3,126.79	-8,924.71	9,477.02	9,467.28	9.74	973.083		
1,000.00	989.64	818.00	851.05	5.38	4.81	-103.47	-3,126.79	-8,924.71	9,484.27	9,474.15	10.12	937.471		
1,100.00	1,085.42	818.00	851.05	5.78	4.81	-103.39	-3,126.79	-8,924.71	9,493.26	9,482.74	10.52	902.372		
1,200.00	1,181.09	867.58	899.75	6.20	4.99	-103.53	-3,135.71	-8,922.14	9,502.50	9,491.37	11.12	854.162		
1,300.00	1,276.76	912.00	943.33	6.65	5.15	-103.66	-3,144.23	-8,921.00	9,513.49	9,501.76	11.73	810.963		
1,400.00	1,372.43	912.00	943.33	7.11	5.15	-103.66	-3,144.23	-8,921.00	9,524.81	9,512.63	12.18	781.989		
1,500.00	1,468.10	912.00	943.33	7.57	5.15	-103.66	-3,144.23	-8,921.00	9,537.17	9,524.53	12.64	754.629		
1,600.00	1,563.77	912.00	943.33	8.05	5.15	-103.66	-3,144.23	-8,921.00	9,550.56	9,537.46	13.10	728.883		
1,700.00	1,659.44	912.00	943.33	8.53	5.15	-103.66	-3,144.23	-8,921.00	9,564.98	9,551.40	13.57	704.710		
1,800.00	1,755.11	912.00	943.33	9.02	5.15	-103.66	-3,144.23	-8,921.00	9,580.41	9,566.37	14.05	682.042		
1,900.00	1,850.78	957.88	988.32	9.52	5.32	-103.78	-3,153.21	-8,921.11	9,596.12	9,581.41	14.70	652.694		
2,000.00	1,946.45	1,006.00	1,035.51	10.02	5.50	-103.91	-3,162.48	-8,922.77	9,613.55	9,598.18	15.37	625.333		
2,100.00	2,042.12	1,006.00	1,035.51	10.52	5.50	-103.91	-3,162.48	-8,922.77	9,631.16	9,615.31	15.85	607.543		
2,200.00	2,137.78	1,006.00	1,035.51	11.03	5.50	-103.91	-3,162.48	-8,922.77	9,649.78	9,633.45	16.33	590.846		
2,300.00	2,233.45	1,006.00	1,035.51	11.54	5.50	-103.91	-3,162.48	-8,922.77	9,669.40	9,652.59	16.81	575.168		
2,400.00	2,329.12	1,006.00	1,035.51	12.05	5.50	-103.91	-3,162.48	-8,922.77	9,690.01	9,672.72	17.29	560.440		
2,500.00	2,424.79	1,046.43	1,075.15	12.56	5.65	-104.01	-3,169.98	-8,925.30	9,711.19	9,693.26	17.93	541.669		
2,600.00	2,520.46	1,064.43	1,092.80	13.08	5.71	-104.06	-3,173.19	-8,926.72	9,733.31	9,714.84	18.48	526.779		
2,700.00	2,616.13	1,101.00	1,128.68	13.60	5.85	-104.15	-3,179.44	-8,930.15	9,756.34	9,737.23	19.10	510.773		
2,800.00	2,711.80	1,101.00	1,128.68	14.12	5.85	-104.15	-3,179.44	-8,930.15	9,779.99	9,760.42	19.57	499.651		
2,900.00	2,807.47	1,101.00	1,128.68	14.64	5.85	-104.15	-3,179.44	-8,930.15	9,804.61	9,784.56	20.04	489.161		
3,000.00	2,903.14	1,101.00	1,128.68	15.16	5.85	-104.15	-3,179.44	-8,930.15	9,830.18	9,809.67	20.51	479.259		
3,100.00	2,998.81	1,145.11	1,171.82	15.68	6.02	-104.25	-3,187.12	-8,935.10	9,856.10	9,834.94	21.16	465.800		
3,200.00	3,094.48	1,197.00	1,222.30	16.21	6.23	-104.38	-3,197.06	-8,941.89	9,883.53	9,861.69	21.84	452.491		
3,300.00	3,190.15	1,197.00	1,222.30	16.73	6.23	-104.38	-3,197.06	-8,941.89	9,911.07	9,888.77	22.30	444.406		
3,400.00	3,285.82	1,197.00	1,222.30	17.26	6.23	-104.38	-3,197.06	-8,941.89	9,939.54	9,916.78	22.76	436.753		
3,500.00	3,381.49	1,197.00	1,222.30	17.78	6.23	-104.38	-3,197.06	-8,941.89	9,968.93	9,945.72	23.21	429.505		
3,600.00	3,477.16	1,197.00	1,222.30	18.31	6.23	-104.38	-3,197.06	-8,941.89	9,999.23	9,975.57	23.66	422.639		
9,100.00	7,256.21	3,857.79	3,632.70	62.12	29.95	-57.62	-4,236.90	-9,324.53	9,941.88	9,873.22	68.65	144.811		
9,200.00	7,255.83	3,863.99	3,638.31	64.50	30.02	-57.67	-4,239.43	-9,325.33	9,868.35	9,798.39	69.96	141.050		
9,300.00	7,255.45	3,870.23	3,643.94	66.93	30.08	-57.72	-4,241.99	-9,326.13	9,795.29	9,723.96	71.33	137.327		
9,400.00	7,255.07	3,876.50	3,649.60	69.38	30.14	-57.78	-4,244.56	-9,326.94	9,722.70	9,649.95	72.75	133.652		
9,500.00	7,254.69	3,882.80	3,655.29	71.87	30.20	-57.83	-4,247.15	-9,327.75	9,650.59	9,576.37	74.22	130.032		
9,600.00	7,254.31	3,889.13	3,661.01	74.38	30.27	-57.88	-4,249.76	-9,328.58	9,578.97	9,503.23	75.74	126.472		
9,700.00	7,253.93	3,895.50	3,666.75	76.92	30.33	-57.94	-4,252.38	-9,329.40	9,507.86	9,430.55	77.31	122.980		
9,800.00	7,253.55	3,901.91	3,672.52	79.48	30.39	-57.99	-4,255.02	-9,330.24	9,437.26	9,358.33	78.93	119.558		
9,900.00	7,253.18	3,925.00	3,693.33	82.06	30.62	-58.18	-4,264.58	-9,333.27	9,367.22	9,286.45	80.78	115.966		
10,000.00	7,252.80	3,925.00	3,693.33	84.65	30.62	-58.18	-4,264.58	-9,333.27	9,297.67	9,215.24	82.43	112.797		
10,100.00	7,252.42	3,925.00	3,693.33	87.27	30.62	-58.18	-4,264.58	-9,333.27	9,228.68	9,144.55	84.13	109.701		
10,200.00	7,252.04	3,925.00	3,693.33	89.89	30.62	-58.18	-4,264.58	-9,333.27	9,160.26	9,074.39	85.87	106.679		
10,300.00	7,251.66	3,925.00	3,693.33	92.54	30.62	-58.18	-4,264.58	-9,333.27	9,092.42	9,004.77	87.65	103.733		
10,400.00	7,251.28	3,925.00	3,693.33	95.19	30.62	-58.18	-4,264.58	-9,333.27	9,025.19	8,935.71	89.48	100.864		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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							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		
10,500.00	7,250.90	3,925.00	3,693.33	97.86	30.62	-58.18	-4,264.58	-9,333.27	8,958.56	8,867.21	91.35	98.071		
10,600.00	7,250.52	7,461.45	7,051.27	100.53	53.79	-88.45	-5,072.61	-9,557.66	8,890.65	8,771.19	119.45	74.428		
10,700.00	7,250.14	7,463.56	7,053.38	103.22	53.80	-88.47	-5,072.63	-9,557.71	8,822.80	8,701.13	121.67	72.514		
10,800.00	7,249.76	7,465.68	7,055.50	105.91	53.80	-88.48	-5,072.65	-9,557.75	8,755.57	8,631.64	123.93	70.647		
10,900.00	7,249.38	7,467.81	7,057.63	108.62	53.81	-88.50	-5,072.67	-9,557.80	8,688.97	8,562.73	126.24	68.828		
11,000.00	7,249.00	7,469.95	7,059.77	111.33	53.81	-88.52	-5,072.69	-9,557.85	8,623.02	8,494.43	128.59	67.056		
11,100.00	7,248.62	7,472.10	7,061.92	114.04	53.82	-88.54	-5,072.71	-9,557.90	8,557.73	8,426.73	130.99	65.331		
11,200.00	7,248.24	7,474.26	7,064.07	116.77	53.82	-88.56	-5,072.73	-9,557.95	8,493.11	8,359.67	133.43	63.651		
11,300.00	7,247.86	7,476.43	7,066.24	119.50	53.83	-88.58	-5,072.75	-9,558.00	8,429.18	8,293.26	135.92	62.018		
11,400.00	7,247.48	7,478.61	7,068.42	122.24	53.84	-88.60	-5,072.77	-9,558.05	8,365.96	8,227.51	138.44	60.429		
11,500.00	7,247.10	7,480.80	7,070.61	124.98	53.84	-88.62	-5,072.78	-9,558.10	8,303.46	8,162.44	141.01	58.885		
11,600.00	7,246.72	7,482.99	7,072.81	127.73	53.85	-88.64	-5,072.80	-9,558.16	8,241.69	8,098.07	143.62	57.384		
11,700.00	7,246.34	7,485.20	7,075.01	130.48	53.85	-88.66	-5,072.82	-9,558.21	8,180.69	8,034.41	146.28	55.927		
11,800.00	7,245.96	7,487.42	7,077.23	133.24	53.86	-88.68	-5,072.84	-9,558.26	8,120.46	7,971.49	148.97	54.511		
11,900.00	7,245.58	7,489.65	7,079.46	136.00	53.87	-88.70	-5,072.86	-9,558.31	8,061.01	7,909.31	151.70	53.136		
12,000.00	7,245.21	7,491.89	7,081.70	138.76	53.87	-88.72	-5,072.88	-9,558.36	8,002.38	7,847.90	154.48	51.802		
12,100.00	7,244.83	7,494.14	7,083.94	141.53	53.88	-88.74	-5,072.90	-9,558.42	7,944.57	7,787.27	157.30	50.507		
12,200.00	7,244.45	7,496.39	7,086.20	144.30	53.89	-88.76	-5,072.92	-9,558.47	7,887.60	7,727.45	160.15	49.251		
12,300.00	7,244.07	7,498.66	7,088.47	147.08	53.89	-88.78	-5,072.94	-9,558.52	7,831.50	7,668.46	163.04	48.033		
12,400.00	7,243.69	7,500.94	7,090.75	149.86	53.90	-88.80	-5,072.96	-9,558.58	7,776.28	7,610.30	165.97	46.852		
12,500.00	7,243.31	7,503.23	7,093.04	152.64	53.90	-88.82	-5,072.97	-9,558.63	7,721.95	7,553.01	168.94	45.707		
12,600.00	7,242.93	7,505.53	7,095.34	155.42	53.91	-88.84	-5,072.99	-9,558.69	7,668.55	7,496.60	171.95	44.598		
12,700.00	7,242.55	7,507.84	7,097.65	158.21	53.92	-88.86	-5,073.01	-9,558.74	7,616.08	7,441.09	174.99	43.523		
12,800.00	7,242.17	7,510.17	7,099.97	161.00	53.92	-88.88	-5,073.03	-9,558.80	7,564.57	7,386.50	178.07	42.482		
12,900.00	7,241.79	7,512.50	7,102.30	163.79	53.93	-88.90	-5,073.05	-9,558.85	7,514.04	7,332.86	181.18	41.474		
13,000.00	7,241.41	7,514.84	7,104.64	166.58	53.94	-88.92	-5,073.07	-9,558.91	7,464.50	7,280.18	184.32	40.498		
13,100.00	7,241.03	7,517.20	7,107.00	169.38	53.94	-88.94	-5,073.08	-9,558.97	7,415.98	7,228.49	187.50	39.553		
13,200.00	7,240.65	7,519.56	7,109.36	172.18	53.95	-88.96	-5,073.10	-9,559.02	7,368.50	7,177.80	190.70	38.639		
13,300.00	7,240.27	7,521.94	7,111.74	174.98	53.96	-88.98	-5,073.12	-9,559.08	7,322.08	7,128.14	193.94	37.755		
13,400.00	7,239.89	7,524.33	7,114.12	177.78	53.96	-89.00	-5,073.14	-9,559.14	7,276.73	7,079.53	197.20	36.900		
13,500.00	7,239.51	7,526.73	7,116.52	180.58	53.97	-89.02	-5,073.15	-9,559.19	7,232.48	7,031.99	200.50	36.073		
13,600.00	7,239.13	7,529.14	7,118.93	183.39	53.98	-89.04	-5,073.17	-9,559.25	7,189.35	6,985.54	203.81	35.274		
13,700.00	7,238.75	7,531.56	7,121.35	186.20	53.98	-89.06	-5,073.19	-9,559.31	7,147.36	6,940.20	207.15	34.502		
13,800.00	7,238.37	7,533.99	7,123.79	189.00	53.99	-89.09	-5,073.21	-9,559.37	7,106.52	6,896.00	210.52	33.757		
13,900.00	7,237.99	7,536.44	7,126.23	191.81	54.00	-89.11	-5,073.22	-9,559.43	7,066.87	6,852.96	213.90	33.037		
14,000.00	7,237.62	7,538.89	7,128.69	194.63	54.00	-89.13	-5,073.24	-9,559.49	7,028.41	6,811.10	217.31	32.343		
14,100.00	7,237.24	7,541.36	7,131.15	197.44	54.01	-89.15	-5,073.26	-9,559.55	6,991.17	6,770.44	220.73	31.673		
14,200.00	7,236.86	7,543.84	7,133.63	200.25	54.02	-89.17	-5,073.27	-9,559.61	6,955.17	6,731.00	224.17	31.027		
14,300.00	7,236.48	7,546.33	7,136.12	203.07	54.02	-89.20	-5,073.29	-9,559.67	6,920.43	6,692.81	227.62	30.404		
14,400.00	7,236.10	7,548.84	7,138.63	205.88	54.03	-89.22	-5,073.31	-9,559.74	6,886.96	6,655.88	231.08	29.803		
14,500.00	7,235.72	7,551.35	7,141.14	208.70	54.04	-89.24	-5,073.32	-9,559.80	6,854.78	6,620.23	234.55	29.225		
14,600.00	7,235.34	7,553.88	7,143.67	211.52	54.04	-89.26	-5,073.34	-9,559.86	6,823.92	6,585.90	238.03	28.669		
14,700.00	7,234.96	7,556.42	7,146.21	214.34	54.05	-89.28	-5,073.36	-9,559.92	6,794.39	6,552.89	241.51	28.134		
14,800.00	7,234.58	7,558.97	7,148.76	217.16	54.06	-89.31	-5,073.37	-9,559.99	6,766.21	6,521.23	244.99	27.619		
14,900.00	7,234.20	7,561.54	7,151.32	219.98	54.06	-89.33	-5,073.39	-9,560.05	6,739.40	6,490.93	248.47	27.124		
15,000.00	7,233.82	7,564.11	7,153.90	222.81	54.07	-89.35	-5,073.40	-9,560.11	6,713.96	6,462.02	251.94	26.649		
15,100.00	7,233.44	7,566.70	7,156.49	225.63	54.08	-89.37	-5,073.42	-9,560.18	6,689.93	6,434.51	255.41	26.193		
15,200.00	7,233.06	7,569.31	7,159.09	228.45	54.09	-89.40	-5,073.44	-9,560.24	6,667.30	6,408.43	258.87	25.755		
15,216.01	7,233.00	7,569.72	7,159.51	228.91	54.09	-89.40	-5,073.44	-9,560.25	6,663.81	6,404.39	259.43	25.687	CC, ES, 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	65.00	3.28	3.28	-131.58	-4,362.78	-4,918.04	6,574.59					
100.00	100.00	48.26	113.26	3.28	3.28	-131.57	-4,362.63	-4,918.11	6,574.23	6,567.67	6.57	1,001.180		
200.00	200.00	184.63	249.61	3.34	3.33	-131.56	-4,360.71	-4,918.93	6,573.75	6,567.08	6.67	985.395		
237.76	237.76	223.49	288.47	3.37	3.37	-125.82	-4,359.93	-4,919.22	6,573.60	6,566.86	6.74	975.313		
300.00	299.98	278.86	343.82	3.45	3.43	-125.82	-4,358.90	-4,919.60	6,574.02	6,567.15	6.88	956.155		
400.00	399.84	376.35	441.30	3.61	3.58	-125.80	-4,357.35	-4,920.15	6,576.46	6,569.28	7.18	916.042		
500.00	499.45	479.37	544.31	3.82	3.77	-125.78	-4,355.91	-4,920.53	6,580.91	6,573.33	7.58	868.116		
600.00	598.70	597.74	662.67	4.07	4.04	-125.77	-4,354.30	-4,920.68	6,587.27	6,579.17	8.10	813.265		
700.00	697.47	684.57	749.49	4.35	4.27	-125.72	-4,353.21	-4,920.63	6,595.59	6,586.98	8.61	766.069		
800.00	795.62	784.50	849.41	4.67	4.55	-125.68	-4,352.15	-4,920.52	6,606.08	6,596.87	9.21	717.260		
900.00	893.06	871.95	936.86	5.01	4.82	-125.61	-4,351.24	-4,920.45	6,618.65	6,608.83	9.82	673.833		
1,000.00	989.64	962.19	1,027.09	5.38	5.11	-125.52	-4,350.38	-4,920.51	6,633.44	6,622.96	10.48	632.661		
1,100.00	1,085.42	1,064.65	1,129.55	5.78	5.45	-125.60	-4,349.39	-4,920.60	6,650.04	6,638.81	11.23	592.397		
1,200.00	1,181.09	1,157.31	1,222.20	6.20	5.78	-125.79	-4,348.44	-4,920.62	6,666.83	6,654.87	11.96	557.413		
1,300.00	1,276.76	1,240.03	1,304.92	6.65	6.07	-125.95	-4,347.62	-4,920.78	6,683.85	6,671.16	12.68	527.015		
1,400.00	1,372.43	1,321.65	1,386.54	7.11	6.37	-126.11	-4,347.03	-4,920.98	6,701.15	6,687.73	13.42	499.414		
1,500.00	1,468.10	1,408.09	1,472.97	7.57	6.69	-126.29	-4,346.65	-4,921.19	6,718.70	6,704.52	14.19	473.605		
1,600.00	1,563.77	1,518.27	1,583.16	8.05	7.10	-126.50	-4,346.15	-4,921.39	6,736.29	6,721.23	15.06	447.301		
1,700.00	1,659.44	1,604.64	1,669.53	8.53	7.44	-126.68	-4,345.88	-4,921.43	6,753.95	6,738.09	15.85	426.013		
1,800.00	1,755.11	1,709.29	1,774.17	9.02	7.84	-126.89	-4,345.53	-4,921.44	6,771.65	6,754.92	16.73	404.754		
1,900.00	1,850.78	1,796.06	1,860.94	9.52	8.18	-127.06	-4,345.26	-4,921.46	6,789.44	6,771.90	17.54	387.004		
2,000.00	1,946.45	1,868.42	1,933.31	10.02	8.46	-127.20	-4,345.18	-4,921.56	6,807.52	6,789.22	18.30	371.930		
2,100.00	2,042.12	1,947.29	2,012.17	10.52	8.78	-127.35	-4,345.25	-4,921.87	6,825.99	6,806.90	19.09	357.504		
2,200.00	2,137.78	2,034.02	2,098.90	11.03	9.12	-127.52	-4,345.39	-4,922.36	6,844.70	6,824.78	19.92	343.603		
2,300.00	2,233.45	2,126.03	2,190.91	11.54	9.48	-127.70	-4,345.65	-4,922.88	6,863.56	6,842.79	20.77	330.393		
2,400.00	2,329.12	2,220.60	2,285.48	12.05	9.86	-127.88	-4,345.85	-4,923.50	6,882.51	6,860.87	21.64	318.007		
2,500.00	2,424.79	2,308.30	2,373.17	12.56	10.22	-128.05	-4,346.02	-4,924.20	6,901.62	6,879.13	22.49	306.931		
2,600.00	2,520.46	2,407.53	2,472.40	13.08	10.62	-128.24	-4,346.18	-4,925.05	6,920.81	6,897.43	23.38	295.989		
2,700.00	2,616.13	2,495.08	2,559.95	13.60	10.98	-128.40	-4,346.35	-4,925.82	6,940.12	6,915.89	24.23	286.420		
2,800.00	2,711.80	2,585.96	2,650.82	14.12	11.35	-128.57	-4,346.50	-4,926.77	6,959.58	6,934.48	25.10	277.318		
2,900.00	2,807.47	2,666.72	2,731.58	14.64	11.68	-128.72	-4,346.57	-4,927.82	6,979.22	6,953.30	25.92	269.270		
3,000.00	2,903.14	2,749.52	2,814.37	15.16	12.02	-128.87	-4,346.76	-4,929.03	6,999.15	6,972.40	26.75	261.626		
3,100.00	2,998.81	2,834.90	2,899.74	15.68	12.37	-129.03	-4,347.09	-4,930.34	7,019.28	6,991.68	27.60	254.335		
3,200.00	3,094.48	2,920.69	2,985.51	16.21	12.73	-129.19	-4,347.63	-4,931.62	7,039.63	7,011.18	28.45	247.459		
3,300.00	3,190.15	3,011.58	3,076.39	16.73	13.10	-129.35	-4,348.25	-4,933.07	7,060.14	7,030.82	29.32	240.788		
3,400.00	3,285.82	3,169.68	3,234.47	17.26	13.76	-129.64	-4,349.16	-4,935.20	7,080.58	7,050.08	30.50	232.144		
3,500.00	3,381.49	3,275.58	3,340.37	17.78	14.20	-129.83	-4,349.38	-4,935.76	7,100.19	7,068.74	31.45	225.788		
3,600.00	3,477.16	3,366.63	3,451.42	18.31	14.66	-130.03	-4,349.50	-4,936.47	7,119.88	7,087.47	32.42	219.638		
3,700.00	3,572.83	3,475.24	3,540.02	18.84	15.03	-130.19	-4,349.56	-4,936.91	7,139.51	7,106.22	33.29	214.493		
3,800.00	3,668.50	3,553.11	3,617.90	19.37	15.36	-130.33	-4,349.75	-4,937.36	7,159.38	7,125.27	34.11	209.916		
3,900.00	3,764.17	3,628.77	3,693.55	19.89	15.67	-130.46	-4,349.91	-4,938.12	7,179.57	7,144.66	34.92	205.625		
4,000.00	3,859.84	3,705.58	3,770.36	20.42	16.00	-130.60	-4,350.08	-4,939.22	7,200.09	7,164.36	35.73	201.508		
4,100.00	3,955.51	3,788.72	3,853.48	20.95	16.34	-130.74	-4,350.32	-4,940.59	7,220.88	7,184.30	36.58	197.422		
4,200.00	4,051.18	3,870.89	3,935.64	21.48	16.69	-130.88	-4,350.73	-4,941.98	7,241.89	7,204.47	37.42	193.550		
4,300.00	4,146.85	3,939.83	4,004.57	22.01	16.98	-131.00	-4,351.29	-4,943.15	7,263.19	7,225.00	38.19	190.169		
4,400.00	4,242.52	4,000.01	4,064.73	22.55	17.23	-131.10	-4,351.98	-4,944.35	7,284.98	7,246.06	38.93	187.142		
4,500.00	4,338.19	4,066.18	4,130.88	23.08	17.51	-131.21	-4,353.01	-4,945.81	7,307.25	7,267.56	39.69	184.112		
4,600.00	4,433.86	4,130.19	4,194.86	23.61	17.78	-131.33	-4,354.29	-4,947.30	7,329.98	7,289.54	40.44	181.260		
4,700.00	4,529.53	4,200.01	4,264.63	24.14	18.08	-131.45	-4,355.94	-4,949.13	7,353.18	7,311.97	41.22	178.405		
4,800.00	4,625.19	4,340.79	4,405.34	24.67	18.67	-131.69	-4,359.01	-4,952.72	7,376.31	7,333.96	42.34	174.209		
4,900.00	4,720.86	4,462.27	4,526.76	25.21	19.18	-131.89	-4,360.88	-4,955.72	7,398.96	7,355.59	43.37	170.587		
5,000.00	4,816.53	4,613.83	4,678.28	25.74	19.82	-132.14	-4,362.52	-4,959.15	7,421.24	7,376.68	44.55	166.570		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	4,912.20	4,754.62	4,819.05	26.27	20.42	-132.37	-4,363.48	-4,961.33	7,442.79	7,397.11	45.68	162.933		
5,200.00	5,007.87	4,858.83	4,923.24	26.80	20.86	-132.54	-4,364.15	-4,962.38	7,464.06	7,417.43	46.63	160.073		
5,300.00	5,103.54	4,963.68	5,028.09	27.34	21.30	-132.71	-4,364.72	-4,963.49	7,485.34	7,437.76	47.58	157.315		
5,400.00	5,199.22	5,082.97	5,147.38	27.87	21.81	-132.93	-4,364.78	-4,964.78	7,506.45	7,457.84	48.61	154.437		
5,500.00	5,295.46	5,193.13	5,257.53	28.39	22.27	-133.39	-4,364.77	-4,966.04	7,525.96	7,476.39	49.57	151.810		
5,600.00	5,392.60	5,303.96	5,368.34	28.89	22.74	-133.77	-4,364.18	-4,967.47	7,543.00	7,492.47	50.53	149.271		
5,700.00	5,490.50	5,371.74	5,436.12	29.37	23.03	-134.06	-4,363.91	-4,968.35	7,557.80	7,506.53	51.26	147.430		
5,800.00	5,589.05	5,519.75	5,584.12	29.83	23.66	-134.36	-4,363.42	-4,970.18	7,570.28	7,517.91	52.37	144.551		
5,900.00	5,688.14	5,568.37	5,632.73	30.26	23.87	-134.53	-4,363.35	-4,970.72	7,580.25	7,527.28	52.98	143.089		
6,000.00	5,787.63	5,641.68	5,706.04	30.68	24.18	-134.68	-4,363.54	-4,971.60	7,588.23	7,534.55	53.68	141.352		
6,100.00	5,887.41	5,728.85	5,793.19	31.07	24.55	-134.79	-4,363.79	-4,972.90	7,594.00	7,539.56	54.44	139.489		
6,200.00	5,987.36	5,819.93	5,884.26	31.44	24.93	-134.85	-4,364.20	-4,974.24	7,597.43	7,542.23	55.20	137.629		
6,300.00	6,087.36	5,906.54	5,970.86	31.80	25.30	-140.58	-4,364.47	-4,975.90	7,599.05	7,543.12	55.93	135.872		
6,400.00	6,187.36	6,010.36	6,074.65	32.15	25.74	-140.57	-4,364.56	-4,978.26	7,600.56	7,543.82	56.74	133.953		
6,500.00	6,287.36	6,115.19	6,179.46	32.51	26.19	-140.56	-4,364.75	-4,980.40	7,602.00	7,544.44	57.56	132.071		
6,600.00	6,387.36	6,200.01	6,264.26	32.87	26.55	-140.54	-4,364.72	-4,982.40	7,603.48	7,545.19	58.28	130.461		
6,700.00	6,487.36	6,272.45	6,336.67	33.23	26.86	-140.53	-4,364.75	-4,984.36	7,605.24	7,546.30	58.94	129.028		
6,800.00	6,587.36	6,382.97	6,447.15	33.59	27.33	-140.52	-4,365.20	-4,987.32	7,607.27	7,547.47	59.80	127.219		
6,900.00	6,687.26	6,482.24	6,546.38	33.95	27.75	-50.13	-4,365.22	-4,990.13	7,607.08	7,546.50	60.58	125.563		
7,000.00	6,785.58	6,562.69	6,626.80	34.31	28.10	-50.85	-4,365.42	-4,992.35	7,597.70	7,536.43	61.27	124.003		
7,100.00	6,879.94	6,642.48	6,706.56	34.65	28.44	-52.36	-4,365.97	-4,994.47	7,578.81	7,516.85	61.96	122.319		
7,200.00	6,968.01	6,721.44	6,785.47	34.97	28.77	-54.69	-4,366.21	-4,997.11	7,550.88	7,488.22	62.66	120.508		
7,300.00	7,047.61	6,791.47	6,855.45	35.27	29.07	-57.87	-4,366.12	-5,000.00	7,514.70	7,451.36	63.34	118.633		
7,400.00	7,116.80	6,838.14	6,902.06	35.54	29.27	-61.84	-4,365.99	-5,002.18	7,471.38	7,407.42	63.97	116.803		
7,500.00	7,173.86	6,875.48	6,939.35	35.81	29.43	-66.66	-4,365.98	-5,004.03	7,422.19	7,357.57	64.62	114.851		
7,600.00	7,217.38	6,900.01	6,963.86	36.17	29.53	-72.21	-4,366.02	-5,005.29	7,368.42	7,303.09	65.33	112.786		
7,700.00	7,246.31	6,921.49	6,985.31	36.80	29.63	-78.42	-4,366.08	-5,006.44	7,311.49	7,245.33	66.16	110.520		
7,800.00	7,259.92	6,931.26	6,995.06	37.72	29.67	-84.96	-4,366.12	-5,006.98	7,252.85	7,185.79	67.05	108.163		
7,900.00	7,260.77	6,934.58	6,998.37	38.86	29.68	-87.58	-4,366.14	-5,007.16	7,194.02	7,125.98	68.05	105.722		
8,000.00	7,260.39	6,937.29	7,001.08	40.19	29.69	-87.61	-4,366.15	-5,007.32	7,136.06	7,066.89	69.17	103.167		
8,100.00	7,260.01	6,940.04	7,003.83	41.67	29.71	-87.63	-4,366.17	-5,007.47	7,079.03	7,008.60	70.42	100.520		
8,200.00	7,259.63	6,942.82	7,006.60	43.30	29.72	-87.66	-4,366.18	-5,007.63	7,022.96	6,951.15	71.80	97.807		
8,300.00	7,259.25	6,945.63	7,009.41	45.05	29.73	-87.69	-4,366.20	-5,007.79	6,967.87	6,894.57	73.30	95.056		
8,400.00	7,258.87	6,948.48	7,012.25	46.91	29.74	-87.72	-4,366.22	-5,007.95	6,913.79	6,838.87	74.92	92.288		
8,500.00	7,258.49	6,951.35	7,015.12	48.87	29.75	-87.75	-4,366.23	-5,008.12	6,860.73	6,784.10	76.64	89.525		
8,600.00	7,258.11	6,954.27	7,018.03	50.92	29.77	-87.77	-4,366.25	-5,008.29	6,808.73	6,730.27	78.46	86.783		
8,700.00	7,257.73	6,957.21	7,020.97	53.04	29.78	-87.80	-4,366.27	-5,008.46	6,757.81	6,677.43	80.37	84.080		
8,800.00	7,257.35	6,960.19	7,023.94	55.23	29.79	-87.83	-4,366.29	-5,008.63	6,707.98	6,625.60	82.38	81.427		
8,900.00	7,256.97	6,963.21	7,026.95	57.47	29.80	-87.86	-4,366.32	-5,008.81	6,659.29	6,574.82	84.47	78.835		
9,000.00	7,256.59	6,966.26	7,030.00	59.77	29.82	-87.89	-4,366.34	-5,008.99	6,611.74	6,525.10	86.64	76.311		
9,100.00	7,256.21	6,969.35	7,033.08	62.12	29.83	-87.92	-4,366.36	-5,009.18	6,565.38	6,476.49	88.89	73.862		
9,200.00	7,255.83	6,972.48	7,036.20	64.50	29.84	-87.95	-4,366.39	-5,009.36	6,520.21	6,429.01	91.20	71.493		
9,300.00	7,255.45	6,975.64	7,039.36	66.93	29.86	-87.98	-4,366.41	-5,009.56	6,476.27	6,382.69	93.58	69.205		
9,400.00	7,255.07	6,978.85	7,042.56	69.38	29.87	-88.01	-4,366.44	-5,009.75	6,433.58	6,337.56	96.02	67.002		
9,500.00	7,254.69	6,982.09	7,045.80	71.87	29.88	-88.05	-4,366.47	-5,009.95	6,392.17	6,293.65	98.52	64.883		
9,600.00	7,254.31	7,000.01	7,063.69	74.38	29.96	-88.22	-4,366.64	-5,011.06	6,352.09	6,250.94	101.15	62.799		
9,700.00	7,253.93	7,000.01	7,063.69	76.92	29.96	-88.22	-4,366.64	-5,011.06	6,313.29	6,209.56	103.73	60.862		
9,800.00	7,253.55	7,000.01	7,063.69	79.48	29.96	-88.22	-4,366.64	-5,011.06	6,275.85	6,169.49	106.36	59.008		
9,900.00	7,253.18	7,000.01	7,063.69	82.06	29.96	-88.22	-4,366.64	-5,011.06	6,239.79	6,130.76	109.02	57.234		
10,000.00	7,252.80	7,000.01	7,063.69	84.65	29.96	-88.22	-4,366.64	-5,011.06	6,205.12	6,093.40	111.73	55.538		
10,100.00	7,252.42	7,000.01	7,063.69	87.27	29.96	-88.22	-4,366.64	-5,011.06	6,171.89	6,057.42	114.46	53.919		
10,200.00	7,252.04	7,007.58	7,071.24	89.89	29.99	-88.30	-4,366.72	-5,011.54	6,140.09	6,022.82	117.28	52.356		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,251.66	7,012.07	7,075.71	92.54	30.01	-88.34	-4,366.77	-5,011.82	6,109.77	5,989.67	120.10	50.873		
10,400.00	7,251.28	7,016.55	7,080.19	95.19	30.03	-88.38	-4,366.82	-5,012.10	6,080.93	5,957.99	122.94	49.461		
10,500.00	7,250.90	7,021.04	7,084.67	97.86	30.05	-88.43	-4,366.87	-5,012.39	6,053.61	5,927.80	125.81	48.118		
10,600.00	7,250.52	7,025.54	7,089.16	100.53	30.07	-88.47	-4,366.92	-5,012.67	6,027.81	5,899.12	128.69	46.840		
10,700.00	7,250.14	7,030.04	7,093.65	103.22	30.09	-88.52	-4,366.98	-5,012.96	6,003.57	5,871.98	131.59	45.625		
10,800.00	7,249.76	7,034.54	7,098.14	105.91	30.11	-88.56	-4,367.03	-5,013.24	5,980.89	5,846.40	134.49	44.471		
10,900.00	7,249.38	7,039.04	7,102.63	108.62	30.13	-88.60	-4,367.09	-5,013.53	5,959.80	5,822.40	137.40	43.375		
11,000.00	7,249.00	7,043.55	7,107.13	111.33	30.15	-88.65	-4,367.14	-5,013.81	5,940.32	5,800.00	140.32	42.335		
11,100.00	7,248.62	7,048.06	7,111.64	114.04	30.17	-88.69	-4,367.20	-5,014.10	5,922.46	5,779.23	143.23	41.349		
11,200.00	7,248.24	7,052.58	7,116.14	116.77	30.19	-88.74	-4,367.26	-5,014.38	5,906.23	5,760.09	146.14	40.414		
11,300.00	7,247.86	7,057.09	7,120.65	119.50	30.21	-88.78	-4,367.32	-5,014.67	5,891.65	5,742.60	149.05	39.529		
11,400.00	7,247.48	7,061.62	7,125.16	122.24	30.22	-88.83	-4,367.38	-5,014.95	5,878.73	5,726.79	151.94	38.692		
11,500.00	7,247.10	7,066.14	7,129.68	124.98	30.24	-88.87	-4,367.44	-5,015.24	5,867.48	5,712.66	154.82	37.900		
11,600.00	7,246.72	7,070.67	7,134.20	127.73	30.26	-88.91	-4,367.51	-5,015.53	5,857.91	5,700.23	157.68	37.151		
11,700.00	7,246.34	7,075.20	7,138.72	130.48	30.28	-88.96	-4,367.57	-5,015.82	5,850.03	5,689.52	160.52	36.444		
11,800.00	7,245.96	7,079.74	7,143.25	133.24	30.30	-89.00	-4,367.64	-5,016.10	5,843.85	5,680.52	163.34	35.778		
11,900.00	7,245.58	7,084.28	7,147.78	136.00	30.32	-89.05	-4,367.71	-5,016.39	5,839.37	5,673.24	166.13	35.150		
12,000.00	7,245.21	7,088.82	7,152.31	138.76	30.34	-89.09	-4,367.77	-5,016.68	5,836.60	5,667.71	168.89	34.559		
12,100.00	7,244.83	7,093.37	7,156.85	141.53	30.36	-89.14	-4,367.84	-5,016.97	5,835.53	5,663.91	171.62	34.003		
12,112.42	7,244.78	7,093.93	7,157.41	141.87	30.36	-89.14	-4,367.85	-5,017.01	5,835.52	5,663.56	171.96	33.936 CC		
12,200.00	7,244.45	7,100.01	7,163.48	144.30	30.39	-89.20	-4,367.95	-5,017.39	5,836.17	5,661.85	174.33	33.479		
12,300.00	7,244.07	7,103.25	7,166.70	147.08	30.40	-89.23	-4,368.00	-5,017.60	5,838.52	5,661.55	176.97	32.991 ES		
12,400.00	7,243.69	7,109.24	7,172.68	149.86	30.43	-89.29	-4,368.09	-5,017.98	5,842.58	5,662.98	179.60	32.531		
12,500.00	7,243.31	7,115.23	7,178.66	152.64	30.45	-89.35	-4,368.19	-5,018.36	5,848.33	5,666.15	182.18	32.101		
12,600.00	7,242.93	7,121.21	7,184.63	155.42	30.48	-89.41	-4,368.28	-5,018.74	5,855.79	5,671.07	184.72	31.701		
12,700.00	7,242.55	7,127.20	7,190.61	158.21	30.51	-89.47	-4,368.38	-5,019.12	5,864.93	5,677.72	187.21	31.328		
12,800.00	7,242.17	7,133.19	7,196.59	161.00	30.53	-89.53	-4,368.47	-5,019.50	5,875.75	5,686.10	189.65	30.981		
12,900.00	7,241.79	7,139.18	7,202.56	163.79	30.56	-89.59	-4,368.57	-5,019.88	5,888.25	5,696.20	192.05	30.661		
13,000.00	7,241.41	7,145.17	7,208.54	166.58	30.58	-89.64	-4,368.66	-5,020.26	5,902.41	5,708.02	194.39	30.364		
13,100.00	7,241.03	7,151.15	7,214.51	169.38	30.61	-89.70	-4,368.75	-5,020.64	5,918.22	5,721.54	196.67	30.092		
13,200.00	7,240.65	7,157.14	7,220.48	172.18	30.63	-89.76	-4,368.85	-5,021.02	5,935.66	5,736.76	198.90	29.842		
13,300.00	7,240.27	7,163.13	7,226.46	174.98	30.66	-89.82	-4,368.94	-5,021.40	5,954.73	5,753.65	201.08	29.614		
13,400.00	7,239.89	7,169.11	7,232.43	177.78	30.69	-89.88	-4,369.04	-5,021.78	5,975.40	5,772.20	203.20	29.407		
13,500.00	7,239.51	7,175.10	7,238.40	180.58	30.71	-89.94	-4,369.13	-5,022.16	5,997.67	5,792.41	205.26	29.220		
13,600.00	7,239.13	7,181.09	7,244.38	183.39	30.74	-90.00	-4,369.23	-5,022.54	6,021.51	5,814.24	207.27	29.052		
13,700.00	7,238.75	7,187.07	7,250.35	186.20	30.76	-90.05	-4,369.32	-5,022.92	6,046.90	5,837.69	209.21	28.903		
13,800.00	7,238.37	7,193.06	7,256.32	189.00	30.79	-90.11	-4,369.41	-5,023.30	6,073.82	5,862.73	211.10	28.773		
13,900.00	7,237.99	7,199.04	7,262.29	191.81	30.81	-90.17	-4,369.51	-5,023.68	6,102.26	5,889.34	212.93	28.659		
14,000.00	7,237.62	7,205.03	7,268.26	194.63	30.84	-90.23	-4,369.60	-5,024.06	6,132.20	5,917.50	214.70	28.562		
14,100.00	7,237.24	7,211.01	7,274.24	197.44	30.87	-90.29	-4,369.70	-5,024.44	6,163.60	5,947.20	216.41	28.482		
14,200.00	7,236.86	7,216.99	7,280.21	200.25	30.89	-90.35	-4,369.79	-5,024.82	6,196.46	5,978.40	218.06	28.416		
14,300.00	7,236.48	7,222.98	7,286.18	203.07	30.92	-90.41	-4,369.89	-5,025.20	6,230.74	6,011.08	219.65	28.366		
14,400.00	7,236.10	7,228.96	7,292.15	205.88	30.94	-90.47	-4,369.98	-5,025.58	6,266.42	6,045.23	221.19	28.330		
14,500.00	7,235.72	7,234.94	7,298.12	208.70	30.97	-90.52	-4,370.08	-5,025.96	6,303.48	6,080.81	222.67	28.309		
14,600.00	7,235.34	7,240.92	7,304.09	211.52	30.99	-90.58	-4,370.17	-5,026.34	6,341.90	6,117.80	224.10	28.300 SF		
14,700.00	7,234.96	7,246.91	7,310.06	214.34	31.02	-90.64	-4,370.26	-5,026.72	6,381.64	6,156.18	225.46	28.304		
14,800.00	7,234.58	7,252.89	7,316.02	217.16	31.05	-90.70	-4,370.36	-5,027.10	6,422.70	6,195.92	226.78	28.321		
14,900.00	7,234.20	7,258.87	7,321.99	219.98	31.07	-90.76	-4,370.45	-5,027.48	6,465.03	6,236.99	228.04	28.350		
15,000.00	7,233.82	7,264.85	7,327.96	222.81	31.10	-90.82	-4,370.55	-5,027.86	6,508.62	6,279.37	229.25	28.391		
15,100.00	7,233.44	7,270.83	7,333.93	225.63	31.12	-90.88	-4,370.64	-5,028.24	6,553.44	6,323.03	230.41	28.443		
15,200.00	7,233.06	7,276.81	7,339.90	228.45	31.15	-90.93	-4,370.74	-5,028.62	6,599.46	6,367.95	231.52	28.505		
15,216.01	7,233.00	7,277.77	7,340.85	228.91	31.15	-90.94	-4,370.75	-5,028.68	6,606.94	6,375.25	231.69	28.517		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	25.00	74.00	3.28	3.28	-149.04	-5,493.08	-3,294.98	6,405.95				
100.00	100.00	89.53	138.53	3.28	3.28	-149.04	-5,492.92	-3,294.85	6,405.45	6,398.88	6.57	975.260	
200.00	200.00	193.39	242.39	3.34	3.33	-149.04	-5,492.15	-3,294.66	6,404.71	6,398.05	6.67	960.710	
225.71	225.71	213.25	262.24	3.36	3.35	-143.31	-5,491.96	-3,294.74	6,404.64	6,397.94	6.70	955.216	
300.00	299.98	262.81	311.80	3.45	3.39	-143.30	-5,491.66	-3,294.87	6,405.67	6,398.83	6.84	936.791	
400.00	399.84	1,492.78	1,528.15	3.61	7.61	-142.79	-5,348.61	-3,326.25	6,404.24	6,393.14	11.10	576.878	
500.00	499.45	1,552.00	1,585.82	3.82	7.93	-142.87	-5,335.32	-3,328.44	6,393.81	6,382.25	11.56	553.171	
600.00	598.70	1,642.25	1,673.71	4.07	8.42	-142.89	-5,315.20	-3,332.24	6,386.54	6,374.32	12.22	522.629	
700.00	697.47	1,700.00	1,729.95	4.35	8.74	-142.91	-5,302.38	-3,334.96	6,382.43	6,369.66	12.77	499.827	
800.00	795.62	1,837.06	1,863.44	4.67	9.51	-142.87	-5,272.03	-3,341.63	6,381.22	6,367.46	13.76	463.787	
805.76	801.26	1,842.81	1,869.04	4.68	9.54	-142.87	-5,270.74	-3,341.91	6,381.22	6,367.41	13.81	462.173	
900.00	893.06	1,937.02	1,960.71	5.01	10.09	-142.84	-5,249.51	-3,346.52	6,382.45	6,367.85	14.60	437.028	
1,000.00	989.64	2,036.93	2,057.93	5.38	10.67	-142.79	-5,226.99	-3,351.40	6,386.47	6,370.98	15.48	412.438	
1,100.00	1,085.42	2,136.71	2,155.02	5.78	11.26	-142.77	-5,204.51	-3,356.28	6,392.85	6,376.46	16.39	389.931	
1,200.00	1,181.09	2,236.47	2,252.10	6.20	11.86	-142.78	-5,182.03	-3,361.15	6,399.53	6,382.21	17.33	369.345	
1,300.00	1,276.76	2,336.23	2,349.17	6.65	12.45	-142.80	-5,159.55	-3,366.03	6,406.22	6,387.94	18.28	350.497	
1,400.00	1,372.43	2,435.99	2,446.24	7.11	13.06	-142.82	-5,137.07	-3,370.90	6,412.90	6,393.66	19.24	333.242	
1,500.00	1,468.10	2,535.75	2,543.31	7.57	13.66	-142.83	-5,114.59	-3,375.77	6,419.59	6,399.36	20.22	317.431	
1,600.00	1,563.77	2,635.51	2,640.38	8.05	14.27	-142.85	-5,092.11	-3,380.65	6,426.27	6,405.06	21.21	302.924	
1,700.00	1,659.44	2,735.28	2,737.46	8.53	14.88	-142.86	-5,069.63	-3,385.52	6,432.95	6,410.74	22.21	289.590	
1,800.00	1,755.11	2,835.04	2,834.53	9.02	15.49	-142.88	-5,047.15	-3,390.40	6,439.64	6,416.42	23.22	277.310	
1,900.00	1,850.78	2,934.80	2,931.60	9.52	16.11	-142.89	-5,024.67	-3,395.27	6,446.33	6,422.09	24.24	265.976	
2,000.00	1,946.45	3,034.56	3,028.67	10.02	16.72	-142.91	-5,002.19	-3,400.15	6,453.01	6,427.76	25.26	255.494	
2,100.00	2,042.12	3,134.32	3,125.75	10.52	17.34	-142.93	-4,979.71	-3,405.02	6,459.70	6,433.42	26.28	245.778	
2,200.00	2,137.78	3,234.08	3,222.82	11.03	17.96	-142.94	-4,957.23	-3,409.90	6,466.39	6,439.07	27.31	236.753	
2,300.00	2,233.45	3,333.84	3,319.89	11.54	18.58	-142.96	-4,934.75	-3,414.77	6,473.08	6,444.73	28.35	228.352	
2,400.00	2,329.12	3,433.60	3,416.96	12.05	19.20	-142.97	-4,912.27	-3,419.65	6,479.76	6,450.38	29.38	220.517	
2,500.00	2,424.79	3,533.36	3,514.03	12.56	19.83	-142.99	-4,889.79	-3,424.52	6,486.45	6,456.03	30.42	213.195	
2,600.00	2,520.46	3,633.12	3,611.11	13.08	20.45	-143.01	-4,867.31	-3,429.40	6,493.14	6,461.67	31.47	206.339	
2,700.00	2,616.13	3,732.88	3,708.18	13.60	21.07	-143.02	-4,844.83	-3,434.27	6,499.83	6,467.32	32.51	199.909	
2,800.00	2,711.80	10,714.32	7,246.37	14.12	120.65	-176.33	-4,011.84	31.90	6,490.85	6,385.34	105.51	61.518	
2,900.00	2,807.47	10,709.82	7,246.45	14.64	120.51	-176.28	-4,011.86	27.41	6,445.39	6,338.54	106.84	60.325	
3,000.00	2,903.14	10,705.33	7,246.53	15.16	120.37	-176.24	-4,011.87	22.92	6,401.16	6,292.98	108.18	59.169	
3,100.00	2,998.81	10,700.83	7,246.61	15.68	120.23	-176.19	-4,011.89	18.42	6,358.19	6,248.66	109.53	58.051	
3,200.00	3,094.48	10,703.66	7,246.69	16.21	120.32	-176.15	-4,011.90	13.93	6,316.51	6,205.46	111.06	56.877	
3,300.00	3,190.15	10,691.85	7,246.77	16.73	119.94	-176.10	-4,011.92	9.44	6,276.15	6,163.92	112.22	55.925	
3,400.00	3,285.82	10,687.35	7,246.85	17.26	119.80	-176.06	-4,011.93	4.94	6,237.12	6,123.55	113.57	54.917	
3,500.00	3,381.49	10,682.86	7,246.93	17.78	119.66	-176.01	-4,011.95	0.45	6,199.46	6,084.54	114.92	53.945	
3,600.00	3,477.16	10,678.37	7,247.00	18.31	119.51	-175.97	-4,011.96	-4.04	6,163.19	6,046.93	116.26	53.010	
3,700.00	3,572.83	10,673.87	7,247.08	18.84	119.37	-175.93	-4,011.98	-8.53	6,128.33	6,010.73	117.60	52.111	
3,800.00	3,668.50	10,669.38	7,247.16	19.37	119.23	-175.88	-4,011.99	-13.03	6,094.91	5,975.98	118.93	51.247	
3,900.00	3,764.17	10,664.89	7,247.24	19.89	119.09	-175.84	-4,012.01	-17.52	6,062.95	5,942.70	120.25	50.418	
4,000.00	3,859.84	10,660.39	7,247.32	20.42	118.94	-175.79	-4,012.02	-22.01	6,032.48	5,910.92	121.56	49.624	
4,100.00	3,955.51	10,655.90	7,247.40	20.95	118.80	-175.75	-4,012.04	-26.51	6,003.51	5,880.65	122.86	48.864	
4,200.00	4,051.18	10,652.64	7,247.48	21.48	118.70	-175.70	-4,012.05	-31.00	5,976.08	5,851.90	124.18	48.125	
4,300.00	4,146.85	10,646.91	7,247.56	22.01	118.52	-175.66	-4,012.07	-35.49	5,950.19	5,824.78	125.41	47.446	
4,400.00	4,242.52	10,642.42	7,247.64	22.55	118.38	-175.61	-4,012.08	-39.99	5,925.88	5,799.22	126.66	46.787	
4,500.00	4,338.19	10,637.92	7,247.72	23.08	118.23	-175.57	-4,012.10	-44.48	5,903.16	5,775.27	127.89	46.160	
4,600.00	4,433.86	10,633.43	7,247.80	23.61	118.09	-175.52	-4,012.11	-48.97	5,882.04	5,752.95	129.09	45.565	
4,700.00	4,529.53	10,628.94	7,247.87	24.14	117.95	-175.48	-4,012.13	-53.46	5,862.56	5,732.28	130.27	45.002	
4,800.00	4,625.19	10,624.44	7,247.95	24.67	117.81	-175.43	-4,012.14	-57.96	5,844.71	5,713.28	131.43	44.470	
4,900.00	4,720.86	10,619.95	7,248.03	25.21	117.67	-175.39	-4,012.16	-62.45	5,828.53	5,695.97	132.56	43.969	

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,000.00	4,816.53	10,615.46	7,248.11	25.74	117.52	-175.35	-4,012.17	-66.94	5,814.01	5,680.35	133.66	43.498		
5,100.00	4,912.20	10,610.96	7,248.19	26.27	117.38	-175.30	-4,012.19	-71.44	5,801.18	5,666.45	134.73	43.058		
5,200.00	5,007.87	10,606.47	7,248.27	26.80	117.24	-175.26	-4,012.20	-75.93	5,790.05	5,654.28	135.77	42.646		
5,300.00	5,103.54	10,601.97	7,248.35	27.34	117.10	-175.21	-4,012.22	-80.42	5,780.62	5,643.84	136.77	42.264		
5,400.00	5,199.22	10,602.52	7,248.43	27.87	117.11	-175.17	-4,012.23	-84.91	5,772.89	5,634.99	137.90	41.864		
5,500.00	5,295.46	10,593.17	7,248.50	28.39	116.82	-175.11	-4,012.25	-89.22	5,764.84	5,626.16	138.68	41.570		
5,600.00	5,392.60	10,589.17	7,248.57	28.89	116.69	-175.05	-4,012.26	-93.23	5,755.04	5,615.48	139.57	41.235		
5,700.00	5,490.50	10,585.48	7,248.64	29.37	116.58	-174.99	-4,012.27	-96.91	5,743.51	5,603.10	140.41	40.905		
5,800.00	5,589.05	10,582.11	7,248.70	29.83	116.47	-174.94	-4,012.28	-100.28	5,730.23	5,589.02	141.21	40.579		
5,900.00	5,688.14	10,579.07	7,248.75	30.26	116.37	-174.88	-4,012.29	-103.32	5,715.22	5,573.25	141.97	40.257		
6,000.00	5,787.63	10,576.35	7,248.80	30.68	116.29	-174.82	-4,012.30	-106.04	5,698.49	5,555.80	142.68	39.938		
6,100.00	5,887.41	10,573.97	7,248.84	31.07	116.21	-174.76	-4,012.31	-108.42	5,680.03	5,536.67	143.35	39.623		
6,200.00	5,987.36	10,571.92	7,248.88	31.44	116.15	-174.70	-4,012.32	-110.47	5,659.85	5,515.87	143.98	39.311		
6,300.00	6,087.36	10,570.13	7,248.91	31.80	116.09	179.60	-4,012.32	-112.26	5,638.64	5,494.08	144.56	39.006		
6,400.00	6,187.36	10,568.38	7,248.94	32.15	116.04	179.61	-4,012.33	-114.01	5,618.89	5,473.79	145.10	38.724		
6,500.00	6,287.36	10,566.62	7,248.97	32.51	115.98	179.63	-4,012.34	-115.77	5,600.86	5,455.24	145.61	38.464		
6,600.00	6,387.36	10,564.86	7,249.00	32.87	115.93	179.65	-4,012.34	-117.53	5,584.56	5,438.47	146.09	38.228		
6,700.00	6,487.36	10,563.10	7,249.03	33.23	115.87	179.67	-4,012.35	-119.29	5,570.00	5,423.48	146.52	38.015		
6,800.00	6,587.36	10,561.34	7,249.06	33.59	115.81	179.69	-4,012.35	-121.05	5,557.21	5,410.29	146.92	37.825		
6,900.00	6,687.26	10,556.47	7,249.15	33.95	115.66	-90.42	-4,012.37	-125.92	5,546.19	5,399.03	147.17	37.687		
7,000.00	6,785.58	10,537.11	7,249.49	34.31	115.05	-91.05	-4,012.43	-145.28	5,537.04	5,390.13	146.92	37.688		
7,100.00	6,879.94	10,502.65	7,250.10	34.65	113.96	-91.37	-4,012.55	-179.73	5,529.83	5,383.67	146.16	37.833		
7,200.00	6,968.01	10,453.95	7,250.95	34.97	112.43	-91.41	-4,012.71	-228.42	5,524.46	5,379.52	144.94	38.115		
7,300.00	7,047.61	10,392.21	7,252.04	35.27	110.49	-91.25	-4,012.92	-290.15	5,520.73	5,377.40	143.32	38.519		
7,400.00	7,116.80	10,316.55	7,252.62	35.54	108.12	-90.93	-4,013.17	-365.81	5,518.29	5,376.97	141.32	39.049 ES		
7,500.00	7,173.86	10,234.55	7,252.62	35.81	105.56	-90.58	-4,013.44	-447.81	5,516.81	5,377.58	139.23	39.624		
7,600.00	7,217.38	10,144.63	7,252.62	36.17	102.76	-90.25	-4,013.74	-537.72	5,515.96	5,378.91	137.05	40.247		
7,700.00	7,246.31	10,055.02	7,252.62	36.80	99.98	-90.01	-4,014.06	-633.34	5,515.42	5,380.34	135.08	40.830		
7,800.00	7,259.92	9,953.99	7,252.62	37.72	96.87	-89.91	-4,014.39	-732.30	5,514.98	5,382.03	132.95	41.482		
7,900.00	7,260.77	9,853.96	7,252.62	38.86	93.80	-89.92	-4,014.73	-832.28	5,514.53	5,383.50	131.03	42.085		
8,000.00	7,260.39	9,753.96	7,252.62	40.19	90.75	-89.92	-4,015.06	-932.28	5,514.09	5,384.78	129.30	42.645		
8,100.00	7,260.01	9,653.96	7,252.62	41.67	87.72	-89.92	-4,015.40	-1,032.28	5,513.64	5,385.89	127.74	43.162		
8,200.00	7,259.63	9,550.08	7,252.62	43.30	84.60	-89.93	-4,015.73	-1,132.27	5,513.19	5,386.96	126.23	43.677		
8,300.00	7,259.25	9,453.96	7,252.62	45.05	81.74	-89.93	-4,016.06	-1,232.27	5,512.74	5,387.65	125.09	44.071		
8,400.00	7,258.87	9,353.95	7,252.62	46.91	78.79	-89.94	-4,016.40	-1,332.27	5,512.29	5,388.33	123.97	44.466		
8,500.00	7,258.49	9,253.95	7,252.62	48.87	75.87	-89.94	-4,016.73	-1,432.27	5,511.84	5,388.88	122.97	44.824		
8,600.00	7,258.11	9,153.95	7,252.62	50.92	72.99	-89.94	-4,017.07	-1,532.26	5,511.39	5,389.31	122.08	45.144		
8,700.00	7,257.73	9,053.95	7,252.62	53.04	70.15	-89.95	-4,017.40	-1,632.26	5,510.95	5,389.64	121.31	45.428		
8,800.00	7,257.35	8,953.95	7,252.62	55.23	67.36	-89.95	-4,017.73	-1,732.26	5,510.50	5,389.85	120.65	45.675		
8,900.00	7,256.97	8,853.94	7,252.62	57.47	64.63	-89.96	-4,018.07	-1,832.26	5,510.05	5,389.97	120.08	45.885		
9,000.00	7,256.59	8,753.94	7,252.62	59.77	61.96	-89.96	-4,018.40	-1,932.25	5,509.60	5,389.98	119.63	46.057		
9,100.00	7,256.21	8,653.94	7,252.62	62.12	59.36	-89.96	-4,018.74	-2,032.25	5,509.15	5,389.88	119.27	46.189		
9,200.00	7,255.83	8,553.94	7,252.62	64.50	56.85	-89.97	-4,019.07	-2,132.25	5,508.71	5,389.67	119.03	46.279		
9,300.00	7,255.45	8,453.93	7,252.62	66.93	54.44	-89.97	-4,019.40	-2,232.25	5,508.26	5,389.35	118.91	46.324		
9,400.00	7,255.07	8,353.93	7,252.62	69.38	52.16	-89.98	-4,019.74	-2,332.25	5,507.81	5,388.90	118.91	46.321		
9,500.00	7,254.69	8,253.93	7,252.62	71.87	50.05	-89.98	-4,020.07	-2,432.24	5,507.36	5,388.32	119.04	46.265		
9,600.00	7,254.31	8,153.93	7,252.62	74.38	48.13	-89.98	-4,020.41	-2,532.24	5,506.91	5,387.59	119.32	46.151		
9,700.00	7,253.93	8,053.93	7,252.62	76.92	46.48	-89.99	-4,020.74	-2,632.24	5,506.46	5,386.69	119.77	45.974		
9,800.00	7,253.55	7,950.11	7,252.62	79.48	45.12	-89.99	-4,021.07	-2,732.24	5,506.02	5,385.68	120.34	45.755		
9,900.00	7,253.18	7,853.92	7,252.62	82.06	44.20	-90.00	-4,021.41	-2,832.23	5,505.57	5,384.32	121.25	45.407		
10,000.00	7,252.80	7,753.92	7,252.62	84.65	43.57	-90.00	-4,021.74	-2,932.23	5,505.12	5,382.80	122.32	45.005		
10,049.31	7,252.61	7,725.46	7,252.50	85.94	43.44	-90.00	-4,021.85	-2,956.88	5,504.98	5,381.77	123.22	44.677 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,100.00	7,252.42	7,700.00	7,251.51	87.27	43.34	-89.99	-4,022.17	-2,982.32	5,505.16	5,380.96	124.19	44.328		
10,200.00	7,252.04	7,674.60	7,249.54	89.89	43.25	-89.97	-4,022.71	-3,007.63	5,506.35	5,379.89	126.46	43.542		
10,300.00	7,251.66	7,652.02	7,246.96	92.54	43.18	-89.94	-4,023.38	-3,030.06	5,508.80	5,380.04	128.76	42.785		
10,400.00	7,251.28	7,600.00	7,238.09	95.19	43.03	-89.85	-4,025.61	-3,081.25	5,512.43	5,381.71	130.72	42.171		
10,500.00	7,250.90	7,586.07	7,235.02	97.86	43.00	-89.82	-4,026.36	-3,094.82	5,517.31	5,384.19	133.12	41.447		
10,600.00	7,250.52	7,552.02	7,226.32	100.53	42.92	-89.73	-4,028.49	-3,127.67	5,523.41	5,388.12	135.30	40.825		
10,700.00	7,250.14	7,509.37	7,213.02	103.22	42.83	-89.60	-4,031.71	-3,168.06	5,530.79	5,393.39	137.40	40.252		
10,800.00	7,249.76	7,484.93	7,204.23	105.91	42.77	-89.51	-4,033.82	-3,190.75	5,539.46	5,399.78	139.68	39.657		
10,900.00	7,249.38	7,452.02	7,191.05	108.62	42.71	-89.37	-4,036.97	-3,220.75	5,549.45	5,407.57	141.88	39.113		
11,000.00	7,249.00	7,429.36	7,181.11	111.33	42.66	-89.27	-4,039.34	-3,240.97	5,560.75	5,416.59	144.17	38.572		
11,100.00	7,248.62	7,400.00	7,167.20	114.04	42.61	-89.13	-4,042.65	-3,266.61	5,573.41	5,427.05	146.36	38.080		
11,200.00	7,248.24	7,378.41	7,156.24	116.77	42.56	-89.01	-4,045.26	-3,285.03	5,587.43	5,438.82	148.62	37.596		
11,300.00	7,247.86	7,352.01	7,142.03	119.50	42.51	-88.87	-4,048.62	-3,307.01	5,602.84	5,452.04	150.80	37.153		
11,400.00	7,247.48	7,332.10	7,130.72	122.24	42.46	-88.75	-4,051.30	-3,323.18	5,619.64	5,466.63	153.02	36.726		
11,500.00	7,247.10	7,310.64	7,117.99	124.98	42.42	-88.62	-4,054.30	-3,340.20	5,637.85	5,482.67	155.19	36.329		
11,600.00	7,246.72	7,300.00	7,111.48	127.73	42.39	-88.56	-4,055.84	-3,348.46	5,657.51	5,500.13	157.38	35.947		
11,700.00	7,246.34	7,270.91	7,092.99	130.48	42.32	-88.37	-4,060.20	-3,370.49	5,678.54	5,519.07	159.46	35.610		
11,800.00	7,245.96	7,252.01	7,080.46	133.24	42.27	-88.24	-4,063.15	-3,384.32	5,701.02	5,539.47	161.55	35.290		
11,900.00	7,245.58	7,235.17	7,068.96	136.00	42.23	-88.12	-4,065.85	-3,396.33	5,724.94	5,561.32	163.61	34.990		
12,000.00	7,245.21	7,208.36	7,050.03	138.76	42.16	-87.93	-4,070.30	-3,414.77	5,750.33	5,584.73	165.59	34.725		
12,100.00	7,244.83	7,200.00	7,043.96	141.53	42.13	-87.87	-4,071.73	-3,420.36	5,777.07	5,609.45	167.61	34.467		
12,200.00	7,244.45	7,200.00	7,043.96	144.30	42.13	-87.87	-4,071.73	-3,420.36	5,805.32	5,635.70	169.62	34.225		
12,300.00	7,244.07	7,174.12	7,024.77	147.08	42.05	-87.67	-4,076.23	-3,437.12	5,834.88	5,663.39	171.49	34.024		
12,400.00	7,243.69	7,152.01	7,007.86	149.86	41.99	-87.50	-4,080.20	-3,450.79	5,865.93	5,692.61	173.33	33.843		
12,500.00	7,243.31	7,152.01	7,007.86	152.64	41.99	-87.50	-4,080.20	-3,450.79	5,898.33	5,723.13	175.20	33.666		
12,600.00	7,242.93	7,152.01	7,007.86	155.42	41.99	-87.50	-4,080.20	-3,450.79	5,932.23	5,755.21	177.02	33.511		
12,700.00	7,242.55	7,124.56	6,986.23	158.21	41.90	-87.28	-4,085.26	-3,466.92	5,967.29	5,788.57	178.72	33.389		
12,800.00	7,242.17	7,100.00	6,966.32	161.00	41.82	-87.08	-4,089.92	-3,480.52	6,003.89	5,823.52	180.37	33.287		
12,900.00	7,241.79	7,100.00	6,966.32	163.79	41.82	-87.08	-4,089.92	-3,480.52	6,041.67	5,859.62	182.06	33.186		
13,000.00	7,241.41	7,100.00	6,966.32	166.58	41.82	-87.08	-4,089.92	-3,480.52	6,080.86	5,897.17	183.70	33.103		
13,100.00	7,241.03	7,100.00	6,966.32	169.38	41.82	-87.08	-4,089.92	-3,480.52	6,121.44	5,936.15	185.29	33.038		
13,200.00	7,240.65	7,075.01	6,945.55	172.18	41.73	-86.87	-4,094.78	-3,493.54	6,163.07	5,976.31	186.77	32.999		
13,300.00	7,240.27	7,052.01	6,926.01	174.98	41.65	-86.67	-4,099.34	-3,504.77	6,206.19	6,017.99	188.20	32.977		
13,400.00	7,239.89	7,052.01	6,926.01	177.78	41.65	-86.67	-4,099.34	-3,504.77	6,250.35	6,060.70	189.66	32.956		
13,500.00	7,239.51	7,049.69	6,924.02	180.58	41.64	-86.65	-4,099.81	-3,505.87	6,295.80	6,104.74	191.06	32.952 SF		
13,600.00	7,239.13	7,049.69	6,924.02	183.39	41.64	-86.65	-4,099.81	-3,505.87	6,342.48	6,150.06	192.42	32.961		
13,700.00	7,238.75	7,049.69	6,924.02	186.20	41.64	-86.65	-4,099.81	-3,505.87	6,390.39	6,196.65	193.74	32.984		
13,800.00	7,238.37	7,028.92	6,906.00	189.00	41.56	-86.47	-4,104.02	-3,515.32	6,439.27	6,244.30	194.97	33.027		
13,900.00	7,237.99	7,010.76	6,890.02	191.81	41.48	-86.31	-4,107.75	-3,523.08	6,489.44	6,293.28	196.16	33.083		
14,000.00	7,237.62	7,010.76	6,890.02	194.63	41.48	-86.31	-4,107.75	-3,523.08	6,540.59	6,343.24	197.35	33.142		
14,100.00	7,237.24	7,010.76	6,890.02	197.44	41.48	-86.31	-4,107.75	-3,523.08	6,592.86	6,394.36	198.50	33.213		
14,200.00	7,236.86	7,000.00	6,880.45	200.25	41.44	-86.21	-4,109.98	-3,527.46	6,646.21	6,446.62	199.59	33.299		
14,300.00	7,236.48	7,000.00	6,880.45	203.07	41.44	-86.21	-4,109.98	-3,527.46	6,700.58	6,499.92	200.66	33.392		
14,400.00	7,236.10	7,000.00	6,880.45	205.88	41.44	-86.21	-4,109.98	-3,527.46	6,755.99	6,554.29	201.69	33.496		
14,500.00	7,235.72	7,000.00	6,880.45	208.70	41.44	-86.21	-4,109.98	-3,527.46	6,812.41	6,609.73	202.69	33.611		
14,600.00	7,235.34	7,000.00	6,880.45	211.52	41.44	-86.21	-4,109.98	-3,527.46	6,869.83	6,666.19	203.64	33.735		
14,700.00	7,234.96	6,978.26	6,860.90	214.34	41.34	-86.02	-4,114.54	-3,535.80	6,927.95	6,723.42	204.53	33.873		
14,800.00	7,234.58	6,973.64	6,856.71	217.16	41.32	-85.97	-4,115.51	-3,537.48	6,987.14	6,781.74	205.41	34.016		
14,900.00	7,234.20	6,952.01	6,836.94	219.98	41.23	-85.78	-4,120.12	-3,544.94	7,047.41	6,841.19	206.22	34.175		
15,000.00	7,233.82	6,952.01	6,836.94	222.81	41.23	-85.78	-4,120.12	-3,544.94	7,108.31	6,901.27	207.04	34.333		
15,100.00	7,233.44	6,952.01	6,836.94	225.63	41.23	-85.78	-4,120.12	-3,544.94	7,170.09	6,962.26	207.83	34.500		
15,200.00	7,233.06	6,952.01	6,836.94	228.45	41.23	-85.78	-4,120.12	-3,544.94	7,232.72	7,024.13	208.59	34.675		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

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	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)		
15,216.01	7,233.00	6,952.01	6,836.94	228.91	41.23	-85.78	-4,120.12	-3,544.94	7,242.82	7,034.12	208.71	34.703	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	74.00	3.28	3.28	-148.95	-5,473.04	-3,294.98	6,388.78					
100.00	100.00	1,290.27	1,319.90	3.28	7.27	-147.82	-5,293.79	-3,331.15	6,372.51	6,362.12	10.40	612.938		
200.00	200.00	1,414.72	1,439.88	3.34	8.02	-147.61	-5,261.36	-3,337.77	6,352.95	6,341.87	11.08	573.460		
300.00	299.98	1,514.32	1,536.09	3.45	8.63	-141.95	-5,236.01	-3,342.22	6,334.92	6,323.24	11.68	542.485		
400.00	399.84	1,600.00	1,618.92	3.61	9.15	-142.04	-5,214.34	-3,345.53	6,319.48	6,307.23	12.25	515.789		
500.00	499.45	1,662.52	1,679.50	3.82	9.54	-142.13	-5,199.04	-3,347.87	6,307.37	6,294.62	12.75	494.628		
600.00	598.70	1,836.68	1,844.60	4.07	10.63	-142.10	-5,155.91	-3,355.04	6,297.63	6,283.71	13.92	452.438		
700.00	697.47	1,937.33	1,940.38	4.35	11.29	-142.11	-5,129.91	-3,359.65	6,290.07	6,275.33	14.74	426.770		
800.00	795.62	2,037.64	2,036.48	4.67	11.94	-142.12	-5,103.82	-3,364.28	6,285.28	6,269.68	15.60	402.966		
900.00	893.06	2,137.75	2,132.78	5.01	12.60	-142.10	-5,077.67	-3,368.92	6,283.24	6,266.75	16.49	380.986		
923.95	916.27	2,156.20	2,155.86	5.09	12.72	-142.10	-5,071.40	-3,370.03	6,283.16	6,266.48	16.68	376.676		
1,000.00	989.64	2,237.78	2,229.15	5.38	13.27	-142.08	-5,051.50	-3,373.56	6,283.96	6,266.54	17.42	360.742		
1,100.00	1,085.42	2,337.83	2,325.51	5.78	13.93	-142.06	-5,025.34	-3,378.20	6,287.03	6,268.65	18.38	342.131		
1,200.00	1,181.09	2,437.89	2,421.86	6.20	14.60	-142.06	-4,999.18	-3,382.84	6,290.39	6,271.04	19.35	325.010		
1,300.00	1,276.76	2,537.94	2,518.20	6.65	15.27	-142.06	-4,973.03	-3,387.49	6,293.76	6,273.41	20.35	309.267		
1,400.00	1,372.43	2,632.01	2,614.55	7.11	15.90	-142.06	-4,946.87	-3,392.13	6,297.12	6,275.80	21.33	295.266		
1,500.00	1,468.10	2,738.06	2,710.90	7.57	16.62	-142.06	-4,920.71	-3,396.77	6,300.49	6,278.10	22.38	281.468		
1,600.00	1,563.77	2,838.12	2,807.25	8.05	17.30	-142.06	-4,894.55	-3,401.41	6,303.85	6,280.43	23.42	269.192		
1,700.00	1,659.44	2,938.17	2,903.59	8.53	17.97	-142.06	-4,868.39	-3,406.05	6,307.22	6,282.76	24.46	257.862		
1,800.00	1,755.11	3,038.23	2,999.94	9.02	18.65	-142.07	-4,842.23	-3,410.69	6,310.58	6,285.07	25.51	247.386		
1,900.00	1,850.78	3,138.29	3,096.29	9.52	19.33	-142.07	-4,816.07	-3,415.33	6,313.95	6,287.38	26.56	237.681		
2,000.00	1,946.45	3,231.67	3,192.64	10.02	19.97	-142.07	-4,789.91	-3,419.98	6,317.31	6,289.73	27.59	228.993		
2,100.00	2,042.12	3,338.40	3,288.98	10.52	20.70	-142.07	-4,763.75	-3,424.62	6,320.68	6,291.99	28.69	220.293		
2,200.00	2,137.78	3,431.56	3,385.33	11.03	21.33	-142.07	-4,737.60	-3,429.26	6,324.04	6,294.32	29.72	212.772		
2,300.00	2,233.45	3,538.52	3,481.68	11.54	22.06	-142.07	-4,711.44	-3,433.90	6,327.41	6,296.57	30.84	205.194		
2,400.00	2,329.12	3,631.44	3,578.03	12.05	22.70	-142.07	-4,685.28	-3,438.54	6,330.77	6,298.90	31.87	198.634		
2,500.00	2,424.79	10,479.46	7,078.95	12.56	117.72	-175.33	-3,748.96	-69.91	6,332.09	6,233.29	98.80	64.092		
2,600.00	2,520.46	10,476.57	7,078.95	13.08	117.63	-175.30	-3,748.95	-72.80	6,281.99	6,181.85	100.14	62.732		
2,700.00	2,616.13	10,473.69	7,078.95	13.60	117.53	-175.27	-3,748.94	-75.68	6,233.09	6,131.60	101.50	61.412		
2,800.00	2,711.80	10,470.80	7,078.94	14.12	117.44	-175.24	-3,748.93	-78.56	6,185.43	6,082.56	102.87	60.131		
2,900.00	2,807.47	10,467.92	7,078.94	14.64	117.35	-175.21	-3,748.93	-81.45	6,139.02	6,034.77	104.25	58.890		
3,000.00	2,903.14	10,465.04	7,078.94	15.16	117.26	-175.18	-3,748.92	-84.33	6,093.90	5,988.26	105.63	57.689		
3,100.00	2,998.81	10,462.15	7,078.93	15.68	117.17	-175.15	-3,748.91	-87.22	6,050.09	5,943.06	107.03	56.528		
3,200.00	3,094.48	10,459.27	7,078.93	16.21	117.08	-175.12	-3,748.91	-90.10	6,007.63	5,899.20	108.43	55.407		
3,300.00	3,190.15	10,456.38	7,078.93	16.73	116.99	-175.09	-3,748.90	-92.99	5,966.53	5,856.70	109.83	54.325		
3,400.00	3,285.82	10,453.50	7,078.93	17.26	116.90	-175.06	-3,748.89	-95.87	5,926.84	5,815.61	111.23	53.283		
3,500.00	3,381.49	10,450.62	7,078.92	17.78	116.81	-175.03	-3,748.88	-98.75	5,888.58	5,775.95	112.63	52.280		
3,600.00	3,477.16	10,447.73	7,078.92	18.31	116.72	-175.00	-3,748.88	-101.64	5,851.78	5,737.75	114.03	51.316		
3,700.00	3,572.83	10,444.85	7,078.92	18.84	116.63	-174.97	-3,748.87	-104.52	5,816.46	5,701.04	115.43	50.391		
3,800.00	3,668.50	10,441.96	7,078.91	19.37	116.54	-174.94	-3,748.86	-107.41	5,782.66	5,665.84	116.81	49.503		
3,900.00	3,764.17	10,439.08	7,078.91	19.89	116.44	-174.91	-3,748.86	-110.29	5,750.39	5,632.20	118.19	48.654		
4,000.00	3,859.84	10,436.19	7,078.91	20.42	116.35	-174.88	-3,748.85	-113.18	5,719.69	5,600.13	119.56	47.841		
4,100.00	3,955.51	10,436.73	7,078.91	20.95	116.37	-174.85	-3,748.84	-116.06	5,690.58	5,569.58	121.00	47.029		
4,200.00	4,051.18	10,439.62	7,078.90	21.48	116.46	-174.82	-3,748.83	-118.94	5,663.08	5,540.59	122.50	46.231		
4,300.00	4,146.85	10,427.54	7,078.90	22.01	116.08	-174.79	-3,748.83	-121.83	5,637.23	5,513.66	123.57	45.621		
4,400.00	4,242.52	10,424.66	7,078.90	22.55	115.99	-174.76	-3,748.82	-124.71	5,613.03	5,488.16	124.87	44.952		
4,500.00	4,338.19	10,421.77	7,078.89	23.08	115.90	-174.73	-3,748.81	-127.60	5,590.52	5,464.37	126.14	44.318		
4,600.00	4,433.86	10,418.89	7,078.89	23.61	115.81	-174.70	-3,748.81	-130.48	5,569.71	5,442.31	127.40	43.719		
4,700.00	4,529.53	10,416.00	7,078.89	24.14	115.72	-174.67	-3,748.80	-133.36	5,550.62	5,421.99	128.63	43.153		
4,800.00	4,625.19	10,413.12	7,078.89	24.67	115.63	-174.64	-3,748.79	-136.25	5,533.27	5,403.44	129.83	42.620		
4,900.00	4,720.86	10,410.24	7,078.88	25.21	115.54	-174.61	-3,748.78	-139.13	5,517.68	5,386.68	131.00	42.120		
5,000.00	4,816.53	10,407.35	7,078.88	25.74	115.45	-174.58	-3,748.78	-142.02	5,503.86	5,371.72	132.14	41.652		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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-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	4,912.20	10,404.47	7,078.88	26.27	115.36	-174.55	-3,748.77	-144.90	5,491.82	5,358.58	133.25	41.216		
5,200.00	5,007.87	10,401.58	7,078.87	26.80	115.27	-174.52	-3,748.76	-147.79	5,481.59	5,347.27	134.32	40.811		
5,300.00	5,103.54	10,401.30	7,078.87	27.34	115.26	-174.49	-3,748.76	-150.67	5,473.15	5,337.73	135.43	40.414		
5,400.00	5,199.22	10,395.82	7,078.87	27.87	115.08	-174.45	-3,748.75	-153.55	5,466.52	5,330.18	136.35	40.092		
5,500.00	5,295.46	10,393.14	7,078.87	28.39	115.00	-174.41	-3,748.74	-156.23	5,459.68	5,322.38	137.30	39.764		
5,600.00	5,392.60	10,390.80	7,078.86	28.89	114.93	-174.37	-3,748.74	-158.57	5,451.19	5,312.98	138.21	39.441		
5,700.00	5,490.50	10,388.82	7,078.86	29.37	114.86	-174.33	-3,748.73	-160.55	5,441.06	5,301.98	139.08	39.123		
5,800.00	5,589.05	10,387.18	7,078.86	29.83	114.81	-174.29	-3,748.73	-162.19	5,429.29	5,289.39	139.89	38.810		
5,900.00	5,688.14	10,385.90	7,078.86	30.26	114.77	-174.25	-3,748.72	-163.47	5,415.89	5,275.22	140.66	38.502		
6,000.00	5,787.63	10,384.98	7,078.86	30.68	114.74	-174.21	-3,748.72	-164.39	5,400.85	5,259.47	141.39	38.199		
6,100.00	5,887.41	10,384.41	7,078.86	31.07	114.73	-174.17	-3,748.72	-164.96	5,384.20	5,242.14	142.06	37.900		
6,200.00	5,987.36	10,384.20	7,078.86	31.44	114.72	-174.13	-3,748.72	-165.17	5,365.93	5,223.23	142.69	37.605		
6,300.00	6,087.36	10,384.27	7,078.86	31.80	114.72	-179.85	-3,748.72	-165.10	5,346.71	5,203.44	143.28	37.317		
6,400.00	6,187.36	10,384.37	7,078.86	32.15	114.73	-179.85	-3,748.72	-165.00	5,329.08	5,185.26	143.82	37.054		
6,500.00	6,287.36	10,384.47	7,078.86	32.51	114.73	-179.85	-3,748.72	-164.90	5,313.26	5,168.94	144.32	36.815		
6,600.00	6,387.36	10,384.57	7,078.86	32.87	114.73	-179.85	-3,748.72	-164.80	5,299.29	5,154.50	144.79	36.601		
6,700.00	6,487.36	10,384.67	7,078.86	33.23	114.73	-179.85	-3,748.72	-164.70	5,287.17	5,141.96	145.20	36.412		
6,800.00	6,587.36	10,384.77	7,078.86	33.59	114.74	-179.85	-3,748.72	-164.60	5,276.92	5,131.34	145.58	36.248		
6,900.00	6,687.26	10,381.76	7,078.85	33.95	114.64	-89.83	-3,748.71	-167.61	5,268.52	5,122.72	145.80	36.134		
7,000.00	6,785.58	10,364.22	7,078.84	34.31	114.09	-90.24	-3,748.67	-185.15	5,261.94	5,116.42	145.52	36.158		
7,100.00	6,879.94	10,338.53	7,078.80	34.65	113.29	-90.33	-3,748.59	-217.85	5,257.19	5,112.23	144.96	36.267		
7,200.00	6,968.01	10,284.45	7,078.76	34.97	111.59	-90.15	-3,748.47	-264.92	5,254.11	5,110.63	143.48	36.620		
7,300.00	7,047.61	10,224.18	7,078.70	35.27	109.71	-89.78	-3,748.32	-325.19	5,252.41	5,110.60	141.82	37.036		
7,400.00	7,116.80	10,152.19	7,078.63	35.54	107.47	-89.30	-3,748.15	-397.18	5,251.72	5,111.86	139.86	37.551		
7,484.31	7,165.77	10,083.68	7,078.56	35.76	105.34	-88.88	-3,747.98	-465.69	5,251.60	5,113.54	138.06	38.039		
7,500.00	7,173.86	10,070.25	7,078.54	35.81	104.92	-88.81	-3,747.94	-479.12	5,251.60	5,113.90	137.70	38.137		
7,600.00	7,217.38	9,980.38	7,078.45	36.17	102.14	-88.37	-3,747.72	-568.98	5,251.65	5,116.17	135.48	38.763		
7,700.00	7,246.31	9,884.80	7,078.36	36.80	99.20	-88.08	-3,747.49	-664.57	5,251.51	5,118.22	133.29	39.400		
7,800.00	7,259.92	9,785.85	7,078.26	37.72	96.17	-87.99	-3,747.24	-763.51	5,250.95	5,119.74	131.21	40.020		
7,900.00	7,260.77	9,685.88	7,078.16	38.86	93.13	-88.01	-3,746.99	-863.49	5,249.95	5,120.66	129.30	40.604		
8,000.00	7,260.39	9,585.89	7,078.06	40.19	90.11	-88.01	-3,746.75	-963.48	5,248.92	5,121.34	127.57	41.145		
8,100.00	7,260.01	9,485.89	7,077.96	41.67	87.11	-88.01	-3,746.50	-1,063.47	5,247.88	5,121.86	126.02	41.642		
8,200.00	7,259.63	9,385.90	7,077.86	43.30	84.14	-88.02	-3,746.25	-1,163.47	5,246.84	5,122.21	124.63	42.099		
8,300.00	7,259.25	9,285.90	7,077.76	45.05	81.20	-88.02	-3,746.00	-1,263.46	5,245.80	5,122.42	123.39	42.515		
8,400.00	7,258.87	9,187.23	7,077.44	46.91	78.34	-88.02	-3,745.76	-1,362.14	5,244.77	5,122.45	122.32	42.878		
8,500.00	7,258.49	9,087.24	7,076.61	48.87	75.47	-88.01	-3,745.51	-1,462.13	5,243.76	5,122.43	121.33	43.220		
8,600.00	7,258.11	8,987.24	7,075.78	50.92	72.64	-88.01	-3,745.27	-1,562.12	5,242.75	5,122.29	120.45	43.525		
8,700.00	7,257.73	8,887.25	7,074.96	53.04	69.87	-88.00	-3,745.02	-1,662.11	5,241.73	5,122.04	119.69	43.793		
8,800.00	7,257.35	8,787.25	7,074.13	55.23	67.15	-88.00	-3,744.77	-1,762.10	5,240.72	5,121.68	119.04	44.024		
8,900.00	7,256.97	8,687.26	7,073.30	57.47	64.51	-87.99	-3,744.52	-1,862.09	5,239.71	5,121.21	118.50	44.218		
9,000.00	7,256.59	8,587.27	7,072.48	59.77	61.94	-87.99	-3,744.28	-1,962.08	5,238.69	5,120.64	118.06	44.374		
9,100.00	7,256.21	8,487.27	7,071.65	62.12	59.48	-87.98	-3,744.03	-2,062.07	5,237.68	5,119.95	117.73	44.490		
9,200.00	7,255.83	8,387.28	7,070.82	64.50	57.14	-87.98	-3,743.78	-2,162.06	5,236.67	5,119.16	117.51	44.563		
9,300.00	7,255.45	8,287.29	7,069.99	66.93	54.94	-87.97	-3,743.54	-2,262.05	5,235.66	5,118.24	117.42	44.591		
9,400.00	7,255.07	8,187.29	7,069.17	69.38	52.94	-87.97	-3,743.29	-2,362.04	5,234.64	5,117.19	117.45	44.569		
9,500.00	7,254.69	8,087.30	7,068.34	71.87	51.18	-87.96	-3,743.04	-2,462.03	5,233.63	5,116.00	117.63	44.494		
9,600.00	7,254.31	7,987.30	7,067.51	74.38	49.70	-87.96	-3,742.79	-2,562.02	5,232.62	5,114.66	117.96	44.360		
9,700.00	7,253.93	7,887.31	7,066.69	76.92	48.54	-87.95	-3,742.55	-2,662.01	5,231.61	5,113.14	118.46	44.162		
9,800.00	7,253.55	7,787.32	7,065.86	79.48	47.70	-87.95	-3,742.30	-2,761.99	5,230.59	5,111.43	119.17	43.893		
9,900.00	7,253.18	7,687.32	7,065.03	82.06	47.12	-87.94	-3,742.05	-2,861.98	5,229.58	5,109.50	120.09	43.549		
10,000.00	7,252.80	7,600.00	7,064.29	84.65	46.79	-87.94	-3,741.84	-2,949.30	5,228.59	5,107.18	121.41	43.066		
10,056.90	7,252.58	7,583.35	7,063.81	86.14	46.73	-87.93	-3,741.89	-2,965.94	5,228.37	5,105.69	122.68	42.619 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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-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		
10,100.00	7,252.42	7,570.83	7,063.18	87.27	46.70	-87.92	-3,742.01	-2,978.45	5,228.50	5,104.87	123.63	42.291		
10,200.00	7,252.04	7,541.89	7,060.80	89.89	46.62	-87.90	-3,742.51	-3,007.29	5,229.76	5,103.91	125.85	41.556 ES		
10,300.00	7,251.66	7,513.22	7,057.21	92.54	46.55	-87.86	-3,743.35	-3,035.71	5,232.39	5,104.31	128.08	40.853		
10,400.00	7,251.28	7,484.94	7,052.45	95.19	46.48	-87.81	-3,744.51	-3,063.57	5,236.39	5,106.07	130.31	40.183		
10,500.00	7,250.90	7,450.00	7,044.94	97.86	46.40	-87.73	-3,746.39	-3,097.63	5,241.78	5,109.31	132.47	39.570		
10,600.00	7,250.52	7,435.02	7,041.17	100.53	46.37	-87.69	-3,747.35	-3,112.10	5,248.54	5,113.70	134.84	38.923		
10,700.00	7,250.14	7,400.00	7,031.08	103.22	46.29	-87.58	-3,749.92	-3,145.53	5,256.71	5,119.71	136.99	38.372		
10,800.00	7,249.76	7,377.38	7,023.63	105.91	46.25	-87.50	-3,751.85	-3,166.79	5,266.28	5,127.02	139.27	37.814		
10,900.00	7,249.38	7,350.00	7,013.63	108.62	46.19	-87.40	-3,754.44	-3,192.16	5,277.29	5,135.82	141.48	37.302		
11,000.00	7,249.00	7,335.01	7,007.72	111.33	46.16	-87.33	-3,755.97	-3,205.84	5,289.75	5,145.97	143.78	36.790		
11,100.00	7,248.62	7,300.00	6,992.71	114.04	46.08	-87.17	-3,759.90	-3,237.22	5,303.63	5,157.74	145.90	36.352		
11,200.00	7,248.24	7,281.85	6,984.29	116.77	46.04	-87.08	-3,762.11	-3,253.14	5,318.98	5,170.82	148.16	35.901		
11,300.00	7,247.86	7,250.00	6,968.45	119.50	45.97	-86.91	-3,766.28	-3,280.46	5,335.83	5,185.60	150.24	35.516		
11,400.00	7,247.48	7,235.01	6,960.54	122.24	45.94	-86.83	-3,768.36	-3,293.02	5,354.09	5,201.65	152.44	35.122		
11,500.00	7,247.10	7,221.20	6,953.01	124.98	45.91	-86.75	-3,770.35	-3,304.42	5,373.86	5,219.24	154.62	34.755		
11,600.00	7,246.72	7,200.00	6,940.98	127.73	45.85	-86.62	-3,773.53	-3,321.59	5,395.11	5,238.40	156.72	34.426		
11,700.00	7,246.34	7,183.10	6,931.01	130.48	45.81	-86.51	-3,776.17	-3,334.97	5,417.85	5,259.05	158.81	34.116		
11,800.00	7,245.96	7,164.00	6,919.33	133.24	45.76	-86.39	-3,779.27	-3,349.76	5,442.07	5,281.22	160.85	33.834		
11,900.00	7,245.58	7,150.00	6,910.49	136.00	45.72	-86.30	-3,781.62	-3,360.37	5,467.78	5,304.90	162.87	33.571		
12,000.00	7,245.21	7,135.01	6,900.79	138.76	45.68	-86.19	-3,784.20	-3,371.49	5,494.96	5,330.10	164.86	33.332		
12,100.00	7,244.83	7,121.76	6,892.01	141.53	45.64	-86.10	-3,786.54	-3,381.13	5,523.61	5,356.81	166.81	33.114		
12,200.00	7,244.45	7,100.00	6,877.16	144.30	45.57	-85.94	-3,790.49	-3,396.55	5,553.70	5,385.03	168.67	32.926		
12,300.00	7,244.07	7,100.00	6,877.16	147.08	45.57	-85.94	-3,790.49	-3,396.55	5,585.33	5,414.73	170.60	32.740		
12,400.00	7,243.69	7,073.74	6,858.59	149.86	45.49	-85.75	-3,795.44	-3,414.43	5,618.24	5,445.88	172.36	32.596		
12,500.00	7,243.31	7,050.00	6,841.20	152.64	45.42	-85.56	-3,800.09	-3,429.91	5,652.71	5,478.63	174.08	32.472		
12,600.00	7,242.93	7,050.00	6,841.20	155.42	45.42	-85.56	-3,800.09	-3,429.91	5,688.47	5,512.60	175.86	32.346		
12,700.00	7,242.55	7,035.01	6,829.94	158.21	45.36	-85.45	-3,803.10	-3,439.33	5,725.67	5,548.13	177.54	32.250		
12,800.00	7,242.17	7,035.01	6,829.94	161.00	45.36	-85.45	-3,803.10	-3,439.33	5,764.29	5,585.06	179.23	32.162		
12,900.00	7,241.79	7,015.20	6,814.73	163.79	45.29	-85.29	-3,807.17	-3,451.37	5,804.17	5,623.38	180.79	32.105		
13,000.00	7,241.41	7,000.00	6,802.83	166.58	45.24	-85.16	-3,810.36	-3,460.26	5,845.44	5,663.12	182.32	32.061		
13,100.00	7,241.03	7,000.00	6,802.83	169.38	45.24	-85.16	-3,810.36	-3,460.26	5,888.01	5,704.14	183.86	32.024		
13,200.00	7,240.65	7,000.00	6,802.83	172.18	45.24	-85.16	-3,810.36	-3,460.26	5,931.96	5,746.60	185.36	32.003 SF		
13,300.00	7,240.27	6,976.79	6,784.26	174.98	45.15	-84.97	-3,815.33	-3,473.26	5,976.97	5,790.24	186.73	32.009		
13,400.00	7,239.89	6,950.00	6,762.27	177.78	45.05	-84.74	-3,821.23	-3,487.39	6,023.51	5,835.47	188.04	32.034		
13,500.00	7,239.51	6,950.00	6,762.27	180.58	45.05	-84.74	-3,821.23	-3,487.39	6,070.97	5,881.57	189.40	32.054		
13,600.00	7,239.13	6,950.00	6,762.27	183.39	45.05	-84.74	-3,821.23	-3,487.39	6,119.69	5,928.98	190.71	32.089		
13,700.00	7,238.75	6,950.00	6,762.27	186.20	45.05	-84.74	-3,821.23	-3,487.39	6,169.65	5,977.68	191.97	32.138		
13,800.00	7,238.37	6,935.01	6,749.73	189.00	44.98	-84.61	-3,824.60	-3,494.87	6,220.73	6,027.58	193.15	32.207		
13,900.00	7,237.99	6,935.01	6,749.73	191.81	44.98	-84.61	-3,824.60	-3,494.87	6,272.95	6,078.62	194.33	32.280		
14,000.00	7,237.62	6,935.01	6,749.73	194.63	44.98	-84.61	-3,824.60	-3,494.87	6,326.33	6,130.86	195.46	32.366		
14,100.00	7,237.24	6,916.67	6,734.16	197.44	44.90	-84.44	-3,828.78	-3,503.60	6,380.63	6,184.12	196.51	32.470		
14,200.00	7,236.86	6,900.00	6,719.80	200.25	44.83	-84.29	-3,832.64	-3,511.14	6,436.12	6,238.60	197.52	32.585		
14,300.00	7,236.48	6,900.00	6,719.80	203.07	44.83	-84.29	-3,832.64	-3,511.14	6,492.52	6,293.98	198.53	32.702		
14,400.00	7,236.10	6,900.00	6,719.80	205.88	44.83	-84.29	-3,832.64	-3,511.14	6,549.96	6,350.45	199.51	32.830		
14,500.00	7,235.72	6,900.00	6,719.80	208.70	44.83	-84.29	-3,832.64	-3,511.14	6,608.42	6,407.97	200.45	32.968		
14,600.00	7,235.34	6,900.00	6,719.80	211.52	44.83	-84.29	-3,832.64	-3,511.14	6,667.86	6,466.51	201.35	33.116		
14,700.00	7,234.96	6,900.00	6,719.80	214.34	44.83	-84.29	-3,832.64	-3,511.14	6,728.26	6,526.05	202.21	33.273		
14,800.00	7,234.58	6,877.20	6,699.86	217.16	44.73	-84.09	-3,838.00	-3,520.81	6,789.28	6,586.29	203.00	33.445		
14,900.00	7,234.20	6,872.31	6,695.54	219.98	44.71	-84.04	-3,839.16	-3,522.79	6,851.38	6,647.59	203.79	33.620		
15,000.00	7,233.82	6,850.00	6,675.66	222.81	44.60	-83.84	-3,844.52	-3,531.37	6,914.53	6,710.02	204.50	33.811		
15,100.00	7,233.44	6,850.00	6,675.66	225.63	44.60	-83.84	-3,844.52	-3,531.37	6,978.24	6,773.00	205.24	34.000		
15,200.00	7,233.06	6,850.00	6,675.66	228.45	44.60	-83.84	-3,844.52	-3,531.37	7,042.79	6,836.84	205.95	34.197		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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-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)					
15,216.01	7,233.00	6,850.00	6,675.66	228.91	44.60	-83.84	-3,844.52	-3,531.37	7,053.20	6,847.15	206.06	34.230				



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	67.00	3.28	3.28	-125.88	-4,590.51	-6,346.30	7,832.80					
100.00	100.00	33.00	100.00	3.28	3.33	-125.88	-4,590.51	-6,346.30	7,832.52	7,825.90	6.61	1,184.069		
200.00	200.00	133.00	200.00	3.34	4.38	-125.88	-4,590.51	-6,346.30	7,832.52	7,824.80	7.71	1,015.421		
300.00	299.98	232.98	299.98	3.45	7.18	-120.14	-4,590.51	-6,346.30	7,833.39	7,822.77	10.63	737.215		
400.00	399.84	332.84	399.84	3.61	10.40	-120.13	-4,590.51	-6,346.30	7,836.02	7,822.01	14.01	559.370		
500.00	499.45	432.45	499.45	3.82	13.75	-120.11	-4,590.51	-6,346.30	7,840.41	7,822.85	17.56	446.546		
600.00	598.70	531.70	598.70	4.07	17.13	-120.08	-4,590.51	-6,346.30	7,846.55	7,825.37	21.19	370.317		
700.00	697.47	630.47	697.47	4.35	20.53	-120.04	-4,590.51	-6,346.30	7,854.46	7,829.60	24.87	315.870		
800.00	795.62	728.62	795.62	4.67	23.92	-119.99	-4,590.51	-6,346.30	7,864.14	7,835.57	28.57	275.251		
900.00	893.06	826.06	893.06	5.01	27.29	-119.93	-4,590.51	-6,346.30	7,875.60	7,843.31	32.29	243.900		
1,000.00	989.64	922.64	989.64	5.38	30.64	-119.86	-4,590.51	-6,346.30	7,888.83	7,852.82	36.02	219.042		
1,100.00	1,085.42	1,018.42	1,085.42	5.78	33.97	-119.91	-4,590.51	-6,346.30	7,903.61	7,863.87	39.74	198.879		
1,200.00	1,181.09	1,114.09	1,181.09	6.20	37.29	-120.09	-4,590.51	-6,346.30	7,918.65	7,875.17	43.48	182.107		
1,300.00	1,276.76	1,209.76	1,276.76	6.65	40.62	-120.27	-4,590.51	-6,346.30	7,933.77	7,886.53	47.24	167.933		
1,400.00	1,372.43	1,305.43	1,372.43	7.11	43.95	-120.44	-4,590.51	-6,346.30	7,948.97	7,897.95	51.02	155.806		
1,500.00	1,468.10	1,401.10	1,468.10	7.57	47.28	-120.62	-4,590.51	-6,346.30	7,964.25	7,909.44	54.80	145.321		
1,600.00	1,563.77	1,503.23	1,563.77	8.05	50.84	-120.79	-4,590.51	-6,346.30	7,979.60	7,920.77	58.83	135.649		
1,700.00	1,659.44	1,607.56	1,659.44	8.53	54.47	-120.96	-4,590.51	-6,346.30	7,995.03	7,932.10	62.93	127.045		
1,800.00	1,755.11	1,688.11	1,755.11	9.02	57.28	-121.14	-4,590.51	-6,346.30	8,010.53	7,944.32	66.21	120.980		
1,900.00	1,850.78	1,783.78	1,850.78	9.52	60.62	-121.31	-4,590.51	-6,346.30	8,026.11	7,956.08	70.03	114.611		
2,000.00	1,946.45	1,879.45	1,946.45	10.02	63.95	-121.48	-4,590.51	-6,346.30	8,041.77	7,967.92	73.85	108.894		
2,100.00	2,042.12	1,975.12	2,042.12	10.52	67.29	-121.65	-4,590.51	-6,346.30	8,057.50	7,979.82	77.67	103.735		
2,200.00	2,137.78	2,070.78	2,137.78	11.03	70.62	-121.82	-4,590.51	-6,346.30	8,073.30	7,991.80	81.50	99.057		
2,300.00	2,233.45	2,166.45	2,233.45	11.54	73.96	-121.99	-4,590.51	-6,346.30	8,089.18	8,003.85	85.33	94.796		
2,400.00	2,329.12	2,262.12	2,329.12	12.05	77.30	-122.16	-4,590.51	-6,346.30	8,105.13	8,015.96	89.17	90.900		
2,500.00	2,424.79	2,357.79	2,424.79	12.56	80.63	-122.33	-4,590.51	-6,346.30	8,121.15	8,028.15	93.00	87.324		
2,600.00	2,520.46	2,453.46	2,520.46	13.08	83.97	-122.50	-4,590.51	-6,346.30	8,137.25	8,040.41	96.84	84.030		
2,700.00	2,616.13	2,549.13	2,616.13	13.60	87.31	-122.67	-4,590.51	-6,346.30	8,153.42	8,052.74	100.68	80.986		
2,800.00	2,711.80	2,644.80	2,711.80	14.12	90.64	-122.83	-4,590.51	-6,346.30	8,169.66	8,065.14	104.52	78.166		
2,900.00	2,807.47	2,740.47	2,807.47	14.64	93.98	-123.00	-4,590.51	-6,346.30	8,185.97	8,077.61	108.36	75.545		
3,000.00	2,903.14	2,836.14	2,903.14	15.16	97.32	-123.16	-4,590.51	-6,346.30	8,202.36	8,090.15	112.20	73.104		
3,100.00	2,998.81	2,931.81	2,998.81	15.68	100.66	-123.33	-4,590.51	-6,346.30	8,218.81	8,102.76	116.04	70.825		
3,200.00	3,094.48	3,027.48	3,094.48	16.21	104.00	-123.49	-4,590.51	-6,346.30	8,235.33	8,115.44	119.89	68.691		
3,300.00	3,190.15	3,123.15	3,190.15	16.73	107.33	-123.66	-4,590.51	-6,346.30	8,251.93	8,128.19	123.73	66.691		
3,400.00	3,285.82	3,218.82	3,285.82	17.26	110.67	-123.82	-4,590.51	-6,346.30	8,268.59	8,141.01	127.58	64.811		
3,500.00	3,381.49	3,314.49	3,381.49	17.78	114.01	-123.98	-4,590.51	-6,346.30	8,285.32	8,153.89	131.43	63.041		
3,600.00	3,477.16	3,410.16	3,477.16	18.31	117.35	-124.14	-4,590.51	-6,346.30	8,302.12	8,166.84	135.27	61.373		
3,700.00	3,572.83	3,505.83	3,572.83	18.84	120.69	-124.30	-4,590.51	-6,346.30	8,318.99	8,179.86	139.12	59.797		
3,800.00	3,668.50	3,601.50	3,668.50	19.37	124.03	-124.46	-4,590.51	-6,346.30	8,335.92	8,192.95	142.97	58.306		
3,900.00	3,764.17	3,702.83	3,764.17	19.89	127.56	-124.62	-4,590.51	-6,346.30	8,352.92	8,205.91	147.01	56.817		
4,000.00	3,859.84	3,807.16	3,859.84	20.42	131.20	-124.78	-4,590.51	-6,346.30	8,369.99	8,218.83	151.16	55.370		
4,100.00	3,955.51	3,888.51	3,955.51	20.95	134.04	-124.94	-4,590.51	-6,346.30	8,387.13	8,232.61	155.51	54.281		
4,200.00	4,051.18	3,984.18	4,051.18	21.48	137.38	-125.10	-4,590.51	-6,346.30	8,404.33	8,245.96	159.86	53.070		
4,300.00	4,146.85	4,079.85	4,146.85	22.01	140.72	-125.26	-4,590.51	-6,346.30	8,421.59	8,259.38	164.21	51.917		
4,400.00	4,242.52	4,175.52	4,242.52	22.55	144.06	-125.41	-4,590.51	-6,346.30	8,438.92	8,272.86	168.56	50.818		
4,500.00	4,338.19	4,271.19	4,338.19	23.08	147.40	-125.57	-4,590.51	-6,346.30	8,456.32	8,286.41	172.91	49.769		
4,600.00	4,433.86	4,366.86	4,433.86	23.61	150.74	-125.73	-4,590.51	-6,346.30	8,473.78	8,300.02	177.26	48.767		
4,700.00	4,529.53	4,462.53	4,529.53	24.14	154.08	-125.88	-4,590.51	-6,346.30	8,491.30	8,313.70	181.61	47.809		
4,800.00	4,625.19	4,558.19	4,625.19	24.67	157.42	-126.04	-4,590.51	-6,346.30	8,508.89	8,327.43	185.96	46.892		
4,900.00	4,720.86	4,653.86	4,720.86	25.21	160.75	-126.19	-4,590.51	-6,346.30	8,526.54	8,341.23	190.31	46.013		
5,000.00	4,816.53	4,749.53	4,816.53	25.74	164.09	-126.34	-4,590.51	-6,346.30	8,544.26	8,355.10	194.66	45.170		
5,100.00	4,912.20	4,845.20	4,912.20	26.27	167.43	-126.49	-4,590.51	-6,346.30	8,562.03	8,369.03	199.01	44.361		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
5,200.00	5,007.87	4,940.87	5,007.87	26.80	170.77	-126.65	-4,590.51	-6,346.30	8,579.87	8,383.01	196.86	43.584	
5,300.00	5,103.54	5,036.54	5,103.54	27.34	174.11	-126.80	-4,590.51	-6,346.30	8,597.77	8,397.06	200.71	42.838	
5,400.00	5,199.22	5,132.22	5,199.22	27.87	177.45	-126.98	-4,590.51	-6,346.30	8,615.72	8,411.16	204.56	42.119	
5,500.00	5,295.46	5,228.46	5,295.46	28.39	180.81	-127.39	-4,590.51	-6,346.30	8,632.51	8,424.10	208.42	41.420	
5,600.00	5,392.60	5,325.60	5,392.60	28.89	184.20	-127.75	-4,590.51	-6,346.30	8,647.26	8,434.97	212.29	40.733	
5,700.00	5,490.50	5,423.50	5,490.50	29.37	187.62	-128.05	-4,590.51	-6,346.30	8,659.92	8,443.75	216.17	40.060	
5,800.00	5,589.05	5,522.05	5,589.05	29.83	191.06	-128.31	-4,590.51	-6,346.30	8,670.47	8,450.41	220.06	39.400	
5,900.00	5,688.14	5,621.14	5,688.14	30.26	194.52	-128.51	-4,590.51	-6,346.30	8,678.89	8,454.93	223.96	38.753	
6,000.00	5,787.63	5,720.63	5,787.63	30.68	197.99	-128.66	-4,590.51	-6,346.30	8,685.15	8,457.30	227.84	38.119	
6,100.00	5,887.41	5,820.41	5,887.41	31.07	201.47	-128.75	-4,590.51	-6,346.30	8,689.23	8,457.51	231.72	37.499	
6,200.00	5,987.36	5,920.36	5,987.36	31.44	204.96	-128.80	-4,590.51	-6,346.30	8,691.13	8,455.55	235.59	36.891	
6,300.00	6,087.36	6,020.36	6,087.36	31.80	208.45	-134.54	-4,590.51	-6,346.30	8,691.28	8,451.84	239.44	36.298	
6,400.00	6,187.36	6,120.36	6,187.36	32.15	211.94	-134.54	-4,590.51	-6,346.30	8,691.28	8,447.98	243.30	35.722	
6,500.00	6,287.36	6,220.36	6,287.36	32.51	215.43	-134.54	-4,590.51	-6,346.30	8,691.28	8,444.13	247.16	35.165	
6,600.00	6,387.36	6,320.36	6,387.36	32.87	218.92	-134.54	-4,590.51	-6,346.30	8,691.28	8,440.27	251.02	34.624	
6,700.00	6,487.36	6,420.36	6,487.36	33.23	222.41	-134.54	-4,590.51	-6,346.30	8,691.28	8,436.40	254.88	34.100	
6,800.00	6,587.36	6,520.36	6,587.36	33.59	225.90	-134.54	-4,590.51	-6,346.30	8,691.28	8,432.54	258.74	33.590	
6,900.00	6,687.26	6,620.26	6,687.26	33.95	229.39	-44.24	-4,590.51	-6,346.30	8,689.05	8,426.46	262.59	33.089	
7,000.00	6,785.58	6,718.58	6,785.58	34.31	232.82	-45.13	-4,590.51	-6,346.30	8,676.39	8,410.01	266.38	32.571	
7,100.00	6,879.94	6,812.94	6,879.94	34.65	236.12	-46.85	-4,590.51	-6,346.30	8,652.90	8,382.87	270.03	32.044	
7,200.00	6,968.01	6,901.01	6,968.01	34.97	239.19	-49.47	-4,590.51	-6,346.30	8,619.24	8,345.77	273.47	31.518	
7,300.00	7,047.61	6,980.61	7,047.61	35.27	241.97	-53.08	-4,590.51	-6,346.30	8,576.33	8,299.70	276.63	31.003	
7,400.00	7,116.80	7,049.80	7,116.80	35.54	244.39	-57.79	-4,590.51	-6,346.30	8,525.38	8,245.92	279.46	30.506	
7,500.00	7,173.86	7,106.86	7,173.86	35.81	246.38	-63.66	-4,590.51	-6,346.30	8,467.78	8,185.85	281.93	30.035	
7,600.00	7,217.38	7,150.38	7,217.38	36.17	247.90	-70.65	-4,590.51	-6,346.30	8,405.09	8,121.07	284.02	29.593	
7,700.00	7,246.31	7,179.31	7,246.31	36.80	248.91	-78.54	-4,590.51	-6,346.30	8,338.96	8,053.27	285.69	29.188	
7,800.00	7,259.92	7,207.08	7,259.92	37.72	249.88	-86.90	-4,590.51	-6,346.30	8,271.13	7,983.70	287.43	28.776	
7,900.00	7,260.77	7,206.23	7,260.77	38.86	249.85	-90.20	-4,590.51	-6,346.30	8,203.24	7,914.97	288.27	28.457	
8,000.00	7,260.39	7,206.61	7,260.39	40.19	249.86	-90.20	-4,590.51	-6,346.30	8,136.00	7,846.74	289.26	28.127	
8,100.00	7,260.01	7,206.99	7,260.01	41.67	249.87	-90.19	-4,590.51	-6,346.30	8,069.45	7,779.07	290.37	27.790	
8,200.00	7,259.63	7,207.37	7,259.63	43.30	249.89	-90.19	-4,590.51	-6,346.30	8,003.58	7,711.99	291.59	27.448	
8,300.00	7,259.25	7,207.75	7,259.25	45.05	249.90	-90.18	-4,590.51	-6,346.30	7,938.43	7,645.52	292.91	27.102	
8,400.00	7,258.87	7,208.13	7,258.87	46.91	249.91	-90.18	-4,590.51	-6,346.30	7,874.02	7,579.68	294.34	26.752	
8,500.00	7,258.49	7,208.51	7,258.49	48.87	249.93	-90.18	-4,590.51	-6,346.30	7,810.35	7,514.48	295.86	26.399	
8,600.00	7,258.11	7,208.89	7,258.11	50.92	249.94	-90.17	-4,590.51	-6,346.30	7,747.45	7,449.96	297.48	26.043	
8,700.00	7,257.73	7,209.27	7,257.73	53.04	249.95	-90.17	-4,590.51	-6,346.30	7,685.33	7,386.14	299.19	25.687	
8,800.00	7,257.35	7,209.65	7,257.35	55.23	249.97	-90.17	-4,590.51	-6,346.30	7,624.02	7,323.04	300.99	25.330	
8,900.00	7,256.97	7,189.97	7,256.97	57.47	249.28	-90.16	-4,590.51	-6,346.30	7,563.54	7,261.37	302.16	25.031	
9,000.00	7,256.59	7,189.59	7,256.59	59.77	249.27	-90.16	-4,590.51	-6,346.30	7,503.90	7,199.80	304.10	24.676	
9,100.00	7,256.21	7,189.21	7,256.21	62.12	249.25	-90.16	-4,590.51	-6,346.30	7,445.12	7,139.02	306.10	24.322	
9,200.00	7,255.83	7,188.83	7,255.83	64.50	249.24	-90.15	-4,590.51	-6,346.30	7,387.24	7,079.06	308.18	23.970	
9,300.00	7,255.45	7,188.45	7,255.45	66.93	249.23	-90.15	-4,590.51	-6,346.30	7,330.26	7,019.93	310.33	23.621	
9,400.00	7,255.07	7,188.07	7,255.07	69.38	249.21	-90.15	-4,590.51	-6,346.30	7,274.21	6,961.66	312.54	23.274	
9,500.00	7,254.69	7,187.69	7,254.69	71.87	249.20	-90.14	-4,590.51	-6,346.30	7,219.10	6,904.28	314.82	22.931	
9,600.00	7,254.31	7,187.31	7,254.31	74.38	249.19	-90.14	-4,590.51	-6,346.30	7,164.97	6,847.81	317.16	22.591	
9,700.00	7,253.93	7,186.93	7,253.93	76.92	249.17	-90.13	-4,590.51	-6,346.30	7,111.84	6,792.28	319.56	22.255	
9,800.00	7,253.55	7,186.55	7,253.55	79.48	249.16	-90.13	-4,590.51	-6,346.30	7,059.72	6,737.71	322.01	21.924	
9,900.00	7,253.18	7,186.18	7,253.18	82.06	249.15	-90.13	-4,590.51	-6,346.30	7,008.64	6,684.12	324.52	21.597	
10,000.00	7,252.80	7,185.80	7,252.80	84.65	249.13	-90.12	-4,590.51	-6,346.30	6,958.62	6,631.55	327.07	21.275	
10,100.00	7,252.42	7,185.42	7,252.42	87.27	249.12	-90.12	-4,590.51	-6,346.30	6,909.69	6,580.01	329.68	20.959	
10,200.00	7,252.04	7,185.04	7,252.04	89.89	249.11	-90.12	-4,590.51	-6,346.30	6,861.86	6,529.53	332.33	20.648	
10,300.00	7,251.66	7,184.66	7,251.66	92.54	249.09	-90.11	-4,590.51	-6,346.30	6,815.17	6,480.15	335.03	20.342	

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,251.28	7,184.28	7,251.28	95.19	249.08	-90.11	-4,590.51	-6,346.30	6,769.64	6,431.87	337.76	20.043		
10,500.00	7,250.90	7,183.90	7,250.90	97.86	249.07	-90.11	-4,590.51	-6,346.30	6,725.28	6,384.74	340.54	19.749		
10,600.00	7,250.52	7,183.52	7,250.52	100.53	249.05	-90.10	-4,590.51	-6,346.30	6,682.12	6,338.77	343.35	19.461		
10,700.00	7,250.14	7,183.14	7,250.14	103.22	249.04	-90.10	-4,590.51	-6,346.30	6,640.19	6,293.99	346.20	19.180		
10,800.00	7,249.76	7,182.76	7,249.76	105.91	249.03	-90.10	-4,590.51	-6,346.30	6,599.51	6,250.43	349.08	18.905		
10,900.00	7,249.38	7,182.38	7,249.38	108.62	249.01	-90.09	-4,590.51	-6,346.30	6,560.10	6,208.10	351.99	18.637		
11,000.00	7,249.00	7,182.00	7,249.00	111.33	249.00	-90.09	-4,590.51	-6,346.30	6,521.99	6,167.05	354.93	18.375		
11,100.00	7,248.62	7,181.62	7,248.62	114.04	248.99	-90.08	-4,590.51	-6,346.30	6,485.19	6,127.29	357.90	18.120		
11,200.00	7,248.24	7,181.24	7,248.24	116.77	248.97	-90.08	-4,590.51	-6,346.30	6,449.73	6,088.85	360.88	17.872		
11,300.00	7,247.86	7,180.86	7,247.86	119.50	248.96	-90.08	-4,590.51	-6,346.30	6,415.64	6,051.75	363.89	17.631		
11,400.00	7,247.48	7,180.48	7,247.48	122.24	248.95	-90.07	-4,590.51	-6,346.30	6,382.93	6,016.02	366.91	17.396		
11,500.00	7,247.10	7,180.10	7,247.10	124.98	248.93	-90.07	-4,590.51	-6,346.30	6,351.63	5,981.69	369.95	17.169		
11,600.00	7,246.72	7,179.72	7,246.72	127.73	248.92	-90.07	-4,590.51	-6,346.30	6,321.76	5,948.76	372.99	16.949		
11,700.00	7,246.34	7,179.34	7,246.34	130.48	248.91	-90.06	-4,590.51	-6,346.30	6,293.33	5,917.28	376.05	16.735		
11,800.00	7,245.96	7,178.96	7,245.96	133.24	248.89	-90.06	-4,590.51	-6,346.30	6,266.37	5,887.26	379.11	16.529		
11,900.00	7,245.58	7,178.58	7,245.58	136.00	248.88	-90.06	-4,590.51	-6,346.30	6,240.89	5,858.72	382.18	16.330		
12,000.00	7,245.21	7,178.21	7,245.21	138.76	248.87	-90.05	-4,590.51	-6,346.30	6,216.92	5,831.68	385.24	16.138		
12,100.00	7,244.83	7,177.83	7,244.83	141.53	248.85	-90.05	-4,590.51	-6,346.30	6,194.48	5,806.17	388.30	15.953		
12,200.00	7,244.45	7,177.45	7,244.45	144.30	248.84	-90.04	-4,590.51	-6,346.30	6,173.57	5,782.21	391.36	15.775		
12,300.00	7,244.07	7,177.07	7,244.07	147.08	248.83	-90.04	-4,590.51	-6,346.30	6,154.21	5,759.80	394.41	15.604		
12,400.00	7,243.69	7,176.69	7,243.69	149.86	248.81	-90.04	-4,590.51	-6,346.30	6,136.42	5,738.98	397.44	15.440		
12,500.00	7,243.31	7,176.31	7,243.31	152.64	248.80	-90.03	-4,590.51	-6,346.30	6,120.22	5,719.76	400.46	15.283		
12,600.00	7,242.93	7,175.93	7,242.93	155.42	248.79	-90.03	-4,590.51	-6,346.30	6,105.61	5,702.15	403.45	15.133		
12,700.00	7,242.55	7,175.55	7,242.55	158.21	248.78	-90.03	-4,590.51	-6,346.30	6,092.60	5,686.17	406.43	14.991		
12,800.00	7,242.17	7,175.17	7,242.17	161.00	248.76	-90.02	-4,590.51	-6,346.30	6,081.22	5,671.84	409.38	14.855		
12,900.00	7,241.79	7,174.79	7,241.79	163.79	248.75	-90.02	-4,590.51	-6,346.30	6,071.46	5,659.15	412.31	14.726		
13,000.00	7,241.41	7,174.41	7,241.41	166.58	248.74	-90.02	-4,590.51	-6,346.30	6,063.33	5,648.13	415.20	14.603		
13,100.00	7,241.03	7,174.03	7,241.03	169.38	248.72	-90.01	-4,590.51	-6,346.30	6,056.84	5,638.78	418.06	14.488		
13,200.00	7,240.65	7,173.65	7,240.65	172.18	248.71	-90.01	-4,590.51	-6,346.30	6,052.00	5,631.12	420.88	14.379		
13,300.00	7,240.27	7,173.27	7,240.27	174.98	248.70	-90.01	-4,590.51	-6,346.30	6,048.81	5,625.14	423.67	14.277		
13,400.00	7,239.89	7,172.89	7,239.89	177.78	248.68	-90.00	-4,590.51	-6,346.30	6,047.27	5,620.86	426.41	14.182		
13,443.10	7,239.73	7,172.73	7,239.73	178.99	248.68	-90.00	-4,590.51	-6,346.30	6,047.12	5,619.54	427.58	14.143 CC		
13,500.00	7,239.51	7,172.51	7,239.51	180.58	248.67	-90.00	-4,590.51	-6,346.30	6,047.39	5,618.28	429.11	14.093		
13,600.00	7,239.13	7,172.13	7,239.13	183.39	248.66	-89.99	-4,590.51	-6,346.30	6,049.15	5,617.39	431.76	14.010 ES		
13,700.00	7,238.75	7,171.75	7,238.75	186.20	248.64	-89.99	-4,590.51	-6,346.30	6,052.57	5,618.21	434.36	13.934		
13,800.00	7,238.37	7,171.37	7,238.37	189.00	248.63	-89.99	-4,590.51	-6,346.30	6,057.64	5,620.73	436.91	13.865		
13,900.00	7,237.99	7,170.99	7,237.99	191.81	248.62	-89.98	-4,590.51	-6,346.30	6,064.35	5,624.94	439.41	13.801		
14,000.00	7,237.62	7,170.62	7,237.62	194.63	248.60	-89.98	-4,590.51	-6,346.30	6,072.71	5,630.85	441.86	13.744		
14,100.00	7,237.24	7,170.24	7,237.24	197.44	248.59	-89.98	-4,590.51	-6,346.30	6,082.69	5,638.45	444.25	13.692		
14,200.00	7,236.86	7,169.86	7,236.86	200.25	248.58	-89.97	-4,590.51	-6,346.30	6,094.30	5,647.73	446.58	13.647		
14,300.00	7,236.48	7,169.48	7,236.48	203.07	248.56	-89.97	-4,590.51	-6,346.30	6,107.53	5,658.68	448.85	13.607		
14,400.00	7,236.10	7,169.10	7,236.10	205.88	248.55	-89.97	-4,590.51	-6,346.30	6,122.36	5,671.30	451.06	13.573		
14,500.00	7,235.72	7,168.72	7,235.72	208.70	248.54	-89.96	-4,590.51	-6,346.30	6,138.78	5,685.58	453.21	13.545		
14,600.00	7,235.34	7,168.34	7,235.34	211.52	248.52	-89.96	-4,590.51	-6,346.30	6,156.79	5,701.49	455.30	13.523		
14,700.00	7,234.96	7,167.96	7,234.96	214.34	248.51	-89.95	-4,590.51	-6,346.30	6,176.36	5,719.04	457.32	13.506		
14,800.00	7,234.58	7,167.58	7,234.58	217.16	248.50	-89.95	-4,590.51	-6,346.30	6,197.48	5,738.20	459.28	13.494		
14,900.00	7,234.20	7,167.20	7,234.20	219.98	248.48	-89.95	-4,590.51	-6,346.30	6,220.14	5,758.96	461.18	13.487		
15,000.00	7,233.82	7,166.82	7,233.82	222.81	248.47	-89.94	-4,590.51	-6,346.30	6,244.32	5,781.31	463.01	13.486 SF		
15,100.00	7,233.44	7,166.44	7,233.44	225.63	248.46	-89.94	-4,590.51	-6,346.30	6,270.00	5,805.22	464.78	13.490		
15,200.00	7,233.06	7,166.06	7,233.06	228.45	248.44	-89.94	-4,590.51	-6,346.30	6,297.17	5,830.68	466.49	13.499		
15,216.01	7,233.00	7,166.00	7,233.00	228.91	248.44	-89.94	-4,590.51	-6,346.30	6,301.65	5,834.89	466.76	13.501		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	20.00	3.28	3.28	-70.85	2,208.52	-6,358.73	6,731.38					
100.00	100.00	80.00	100.00	3.28	3.56	-70.85	2,208.52	-6,358.73	6,731.35	6,724.50	6.85	982.738		
200.00	200.00	180.00	200.00	3.34	5.60	-70.85	2,208.52	-6,358.73	6,731.35	6,722.41	8.94	753.238		
300.00	299.98	279.98	299.98	3.45	8.67	-65.14	2,208.52	-6,358.73	6,730.62	6,718.50	12.12	555.443		
400.00	399.84	379.84	399.84	3.61	11.97	-65.22	2,208.52	-6,358.73	6,728.42	6,712.84	15.58	431.969		
500.00	499.45	479.45	499.45	3.82	15.35	-65.35	2,208.52	-6,358.73	6,724.76	6,705.61	19.15	351.081		
600.00	598.70	578.70	598.70	4.07	18.75	-65.54	2,208.52	-6,358.73	6,719.67	6,696.87	22.80	294.742		
700.00	697.47	677.47	697.47	4.35	22.15	-65.78	2,208.52	-6,358.73	6,713.15	6,686.67	26.48	253.495		
800.00	795.62	775.62	795.62	4.67	25.54	-66.07	2,208.52	-6,358.73	6,705.25	6,675.06	30.19	222.099		
900.00	893.06	873.06	893.06	5.01	28.92	-66.41	2,208.52	-6,358.73	6,695.98	6,662.07	33.91	197.454		
1,000.00	989.64	969.64	989.64	5.38	32.27	-66.81	2,208.52	-6,358.73	6,685.41	6,647.77	37.64	177.624		
1,100.00	1,085.42	1,065.42	1,085.42	5.78	35.60	-67.12	2,208.52	-6,358.73	6,673.75	6,632.39	41.36	161.339		
1,200.00	1,181.09	1,161.09	1,181.09	6.20	38.93	-67.35	2,208.52	-6,358.73	6,662.06	6,616.95	45.11	147.682		
1,300.00	1,276.76	1,256.76	1,276.76	6.65	42.26	-67.57	2,208.52	-6,358.73	6,650.47	6,601.60	48.87	136.072		
1,400.00	1,372.43	1,352.43	1,372.43	7.11	45.59	-67.79	2,208.52	-6,358.73	6,639.00	6,586.34	52.65	126.088		
1,500.00	1,468.10	1,448.10	1,468.10	7.57	48.92	-68.02	2,208.52	-6,358.73	6,627.63	6,571.18	56.44	117.419		
1,600.00	1,563.77	1,543.77	1,563.77	8.05	52.25	-68.24	2,208.52	-6,358.73	6,616.36	6,556.12	60.25	109.823		
1,700.00	1,659.44	1,639.44	1,659.44	8.53	55.58	-68.47	2,208.52	-6,358.73	6,605.21	6,541.16	64.05	103.118		
1,800.00	1,755.11	1,735.11	1,755.11	9.02	58.92	-68.69	2,208.52	-6,358.73	6,594.17	6,526.30	67.87	97.157		
1,900.00	1,850.78	1,830.78	1,850.78	9.52	62.25	-68.92	2,208.52	-6,358.73	6,583.24	6,511.54	71.69	91.824		
2,000.00	1,946.45	1,926.45	1,946.45	10.02	65.59	-69.15	2,208.52	-6,358.73	6,572.41	6,496.89	75.52	87.026		
2,100.00	2,042.12	2,022.12	2,042.12	10.52	68.92	-69.38	2,208.52	-6,358.73	6,561.70	6,482.35	79.35	82.688		
2,200.00	2,137.78	2,117.78	2,137.78	11.03	72.26	-69.61	2,208.52	-6,358.73	6,551.10	6,467.91	83.19	78.748		
2,300.00	2,233.45	2,213.45	2,233.45	11.54	75.60	-69.84	2,208.52	-6,358.73	6,540.62	6,453.59	87.03	75.153		
2,400.00	2,329.12	2,309.12	2,329.12	12.05	78.93	-70.07	2,208.52	-6,358.73	6,530.24	6,439.37	90.87	71.860		
2,500.00	2,424.79	2,404.79	2,424.79	12.56	82.27	-70.30	2,208.52	-6,358.73	6,519.98	6,425.26	94.72	68.834		
2,600.00	2,520.46	2,500.46	2,520.46	13.08	85.61	-70.53	2,208.52	-6,358.73	6,509.84	6,411.27	98.57	66.044		
2,700.00	2,616.13	2,603.87	2,616.13	13.60	89.22	-70.76	2,208.52	-6,358.73	6,499.81	6,397.12	102.69	63.296		
2,800.00	2,711.80	2,708.20	2,711.80	14.12	92.86	-71.00	2,208.52	-6,358.73	6,489.89	6,383.05	106.84	60.742		
2,900.00	2,807.47	2,787.47	2,807.47	14.64	95.62	-71.23	2,208.52	-6,358.73	6,480.09	6,369.96	110.13	58.843		
3,000.00	2,903.14	2,883.14	2,903.14	15.16	98.96	-71.47	2,208.52	-6,358.73	6,470.40	6,356.42	113.98	56.767		
3,100.00	2,998.81	2,978.81	2,998.81	15.68	102.30	-71.70	2,208.52	-6,358.73	6,460.83	6,343.00	117.84	54.828		
3,200.00	3,094.48	3,074.48	3,094.48	16.21	105.64	-71.94	2,208.52	-6,358.73	6,451.38	6,329.69	121.70	53.012		
3,300.00	3,190.15	3,170.15	3,190.15	16.73	108.97	-72.17	2,208.52	-6,358.73	6,442.05	6,316.49	125.56	51.308		
3,400.00	3,285.82	3,265.82	3,285.82	17.26	112.31	-72.41	2,208.52	-6,358.73	6,432.83	6,303.42	129.42	49.706		
3,500.00	3,381.49	3,361.49	3,381.49	17.78	115.65	-72.65	2,208.52	-6,358.73	6,423.74	6,290.46	133.28	48.197		
3,600.00	3,477.16	3,457.16	3,477.16	18.31	118.99	-72.89	2,208.52	-6,358.73	6,414.76	6,277.62	137.14	46.774		
3,700.00	3,572.83	3,552.83	3,572.83	18.84	122.33	-73.13	2,208.52	-6,358.73	6,405.90	6,264.89	141.01	45.429		
3,800.00	3,668.50	3,648.50	3,668.50	19.37	125.67	-73.37	2,208.52	-6,358.73	6,397.16	6,252.29	144.87	44.157		
3,900.00	3,764.17	3,744.17	3,764.17	19.89	129.01	-73.61	2,208.52	-6,358.73	6,388.55	6,239.81	148.74	42.951		
4,000.00	3,859.84	3,839.84	3,859.84	20.42	132.34	-73.85	2,208.52	-6,358.73	6,380.05	6,227.44	152.61	41.807		
4,100.00	3,955.51	3,935.51	3,955.51	20.95	135.68	-74.09	2,208.52	-6,358.73	6,371.68	6,215.20	156.47	40.720		
4,200.00	4,051.18	4,031.18	4,051.18	21.48	139.02	-74.33	2,208.52	-6,358.73	6,363.42	6,203.08	160.34	39.687		
4,300.00	4,146.85	4,126.85	4,146.85	22.01	142.36	-74.57	2,208.52	-6,358.73	6,355.30	6,191.08	164.21	38.702		
4,400.00	4,242.52	4,222.52	4,242.52	22.55	145.70	-74.81	2,208.52	-6,358.73	6,347.29	6,179.21	168.08	37.763		
4,500.00	4,338.19	4,318.19	4,338.19	23.08	149.04	-75.06	2,208.52	-6,358.73	6,339.41	6,167.46	171.95	36.868		
4,600.00	4,433.86	4,413.86	4,433.86	23.61	152.38	-75.30	2,208.52	-6,358.73	6,331.65	6,155.83	175.82	36.012		
4,700.00	4,529.53	4,509.53	4,529.53	24.14	155.72	-75.55	2,208.52	-6,358.73	6,324.01	6,144.32	179.69	35.193		
4,800.00	4,625.19	4,605.19	4,625.19	24.67	159.06	-75.79	2,208.52	-6,358.73	6,316.50	6,132.94	183.56	34.410		
4,900.00	4,720.86	4,700.86	4,720.86	25.21	162.40	-76.04	2,208.52	-6,358.73	6,309.12	6,121.68	187.44	33.660		
5,000.00	4,816.53	4,803.47	4,816.53	25.74	165.98	-76.29	2,208.52	-6,358.73	6,301.86	6,110.31	191.55	32.899		
5,100.00	4,912.20	4,907.80	4,912.20	26.27	169.62	-76.53	2,208.52	-6,358.73	6,294.73	6,099.00	195.73	32.161		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	4,987.87	5,007.87	26.80	172.41	-76.78	2,208.52	-6,358.73	6,287.72	6,088.67	199.06	31.588		
5,300.00	5,103.54	5,083.54	5,103.54	27.34	175.75	-77.03	2,208.52	-6,358.73	6,280.85	6,077.92	202.93	30.951		
5,400.00	5,199.22	5,179.22	5,199.22	27.87	179.09	-77.26	2,208.52	-6,358.73	6,274.10	6,067.29	206.80	30.338		
5,500.00	5,295.46	5,275.46	5,295.46	28.39	182.45	-77.38	2,208.52	-6,358.73	6,267.92	6,057.24	210.69	29.750		
5,600.00	5,392.60	5,372.60	5,392.60	28.89	185.84	-77.48	2,208.52	-6,358.73	6,262.61	6,048.03	214.58	29.185		
5,700.00	5,490.50	5,470.50	5,490.50	29.37	189.26	-77.57	2,208.52	-6,358.73	6,258.12	6,039.64	218.48	28.644		
5,800.00	5,589.05	5,569.05	5,589.05	29.83	192.70	-77.65	2,208.52	-6,358.73	6,254.44	6,032.06	222.38	28.125		
5,900.00	5,688.14	5,668.14	5,688.14	30.26	196.16	-77.71	2,208.52	-6,358.73	6,251.54	6,025.27	226.27	27.628		
6,000.00	5,787.63	5,767.63	5,787.63	30.68	199.63	-77.76	2,208.52	-6,358.73	6,249.40	6,019.24	230.16	27.152		
6,100.00	5,887.41	5,867.41	5,887.41	31.07	203.11	-77.79	2,208.52	-6,358.73	6,248.02	6,013.98	234.04	26.697		
6,200.00	5,987.36	5,967.36	5,987.36	31.44	206.60	-77.80	2,208.52	-6,358.73	6,247.38	6,009.48	237.90	26.261		
6,297.97	6,085.32	6,065.32	6,085.32	31.79	210.02	-77.81	2,208.52	-6,358.73	6,247.24	6,005.57	241.67	25.851		
6,300.00	6,087.36	6,067.36	6,087.36	31.80	210.09	-83.54	2,208.52	-6,358.73	6,247.33	6,005.58	241.74	25.843		
6,400.00	6,187.36	6,167.36	6,187.36	32.15	213.58	-83.54	2,208.52	-6,358.73	6,247.33	6,001.74	245.59	25.438		
6,500.00	6,287.36	6,267.36	6,287.36	32.51	217.07	-83.54	2,208.52	-6,358.73	6,247.33	5,997.89	249.44	25.045		
6,600.00	6,387.36	6,367.36	6,387.36	32.87	220.56	-83.54	2,208.52	-6,358.73	6,247.33	5,994.04	253.29	24.665		
6,700.00	6,487.36	6,467.36	6,487.36	33.23	224.05	-83.54	2,208.52	-6,358.73	6,247.33	5,990.18	257.14	24.295		
6,800.00	6,587.36	6,567.36	6,587.36	33.59	227.55	-83.54	2,208.52	-6,358.73	6,247.33	5,986.33	261.00	23.936		
6,900.00	6,687.26	6,667.26	6,687.26	33.95	231.03	6.95	2,208.52	-6,358.73	6,244.24	5,979.39	264.85	23.577		
7,000.00	6,785.58	6,765.58	6,785.58	34.31	234.46	7.17	2,208.52	-6,358.73	6,226.73	5,958.09	268.64	23.179		
7,100.00	6,879.94	6,859.94	6,879.94	34.65	237.76	7.60	2,208.52	-6,358.73	6,194.17	5,921.89	272.28	22.749		
7,200.00	6,968.01	6,948.01	6,968.01	34.97	240.83	8.33	2,208.52	-6,358.73	6,147.36	5,871.70	275.67	22.300		
7,300.00	7,047.61	7,027.61	7,047.61	35.27	243.61	9.46	2,208.52	-6,358.73	6,087.47	5,808.75	278.72	21.841		
7,400.00	7,116.80	7,103.20	7,116.80	35.54	246.25	11.24	2,208.52	-6,358.73	6,015.96	5,734.39	281.57	21.366		
7,500.00	7,173.86	7,153.86	7,173.86	35.81	248.02	14.19	2,208.52	-6,358.73	5,934.62	5,651.11	283.50	20.933		
7,600.00	7,217.38	7,202.62	7,217.38	36.17	249.72	19.62	2,208.52	-6,358.73	5,845.44	5,560.13	285.31	20.488		
7,700.00	7,246.31	7,226.31	7,246.31	36.80	250.55	31.69	2,208.52	-6,358.73	5,750.63	5,464.45	286.18	20.095		
7,800.00	7,259.92	7,239.92	7,259.92	37.72	251.02	66.58	2,208.52	-6,358.73	5,652.53	5,365.87	286.65	19.719		
7,900.00	7,260.77	7,240.77	7,260.77	38.86	251.05	91.59	2,208.52	-6,358.73	5,553.45	5,266.80	286.65	19.374		
8,000.00	7,260.39	7,240.39	7,260.39	40.19	251.04	91.56	2,208.52	-6,358.73	5,454.39	5,167.78	286.61	19.031		
8,100.00	7,260.01	7,240.01	7,260.01	41.67	251.03	91.53	2,208.52	-6,358.73	5,355.36	5,068.79	286.57	18.688		
8,200.00	7,259.63	7,239.63	7,259.63	43.30	251.01	91.50	2,208.52	-6,358.73	5,256.37	4,969.83	286.54	18.344		
8,300.00	7,259.25	7,239.25	7,259.25	45.05	251.00	91.48	2,208.52	-6,358.73	5,157.42	4,870.90	286.52	18.000		
8,400.00	7,258.87	7,238.87	7,258.87	46.91	250.99	91.45	2,208.52	-6,358.73	5,058.51	4,772.01	286.50	17.656		
8,500.00	7,258.49	7,238.49	7,258.49	48.87	250.97	91.42	2,208.52	-6,358.73	4,959.64	4,673.15	286.49	17.312		
8,600.00	7,258.11	7,238.11	7,258.11	50.92	250.96	91.39	2,208.52	-6,358.73	4,860.82	4,574.33	286.49	16.967		
8,700.00	7,257.73	7,237.73	7,257.73	53.04	250.95	91.36	2,208.52	-6,358.73	4,762.05	4,475.55	286.50	16.621		
8,800.00	7,257.35	7,237.35	7,257.35	55.23	250.93	91.33	2,208.52	-6,358.73	4,663.33	4,376.81	286.52	16.276		
8,900.00	7,256.97	7,236.97	7,256.97	57.47	250.92	91.30	2,208.52	-6,358.73	4,564.67	4,278.12	286.56	15.929		
9,000.00	7,256.59	7,236.59	7,256.59	59.77	250.91	91.27	2,208.52	-6,358.73	4,466.07	4,179.46	286.60	15.583		
9,100.00	7,256.21	7,236.21	7,256.21	62.12	250.89	91.24	2,208.52	-6,358.73	4,367.53	4,080.86	286.67	15.236		
9,200.00	7,255.83	7,235.83	7,255.83	64.50	250.88	91.22	2,208.52	-6,358.73	4,269.06	3,982.31	286.75	14.888		
9,300.00	7,255.45	7,235.45	7,255.45	66.93	250.87	91.19	2,208.52	-6,358.73	4,170.66	3,883.81	286.84	14.540		
9,400.00	7,255.07	7,235.07	7,255.07	69.38	250.85	91.16	2,208.52	-6,358.73	4,072.34	3,785.37	286.96	14.191		
9,500.00	7,254.69	7,234.69	7,254.69	71.87	250.84	91.13	2,208.52	-6,358.73	3,974.10	3,686.99	287.11	13.842		
9,600.00	7,254.31	7,234.31	7,254.31	74.38	250.83	91.10	2,208.52	-6,358.73	3,875.95	3,588.67	287.28	13.492		
9,700.00	7,253.93	7,233.93	7,253.93	76.92	250.81	91.07	2,208.52	-6,358.73	3,777.90	3,490.42	287.48	13.141		
9,800.00	7,253.55	7,233.55	7,253.55	79.48	250.80	91.04	2,208.52	-6,358.73	3,679.96	3,392.24	287.71	12.790		
9,900.00	7,253.18	7,233.18	7,253.18	82.06	250.79	91.01	2,208.52	-6,358.73	3,582.12	3,294.14	287.99	12.439		
10,000.00	7,252.80	7,232.80	7,252.80	84.65	250.77	90.98	2,208.52	-6,358.73	3,484.41	3,196.11	288.30	12.086		
10,100.00	7,252.42	7,232.42	7,252.42	87.27	250.76	90.96	2,208.52	-6,358.73	3,386.84	3,098.18	288.66	11.733		
10,200.00	7,252.04	7,232.04	7,252.04	89.89	250.75	90.93	2,208.52	-6,358.73	3,289.41	3,000.34	289.07	11.379		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
10,300.00	7,251.66	7,231.66	7,251.66	92.54	250.73	90.90	2,208.52	-6,358.73	3,192.14	2,902.59	289.55	11.025	
10,400.00	7,251.28	7,231.28	7,251.28	95.19	250.72	90.87	2,208.52	-6,358.73	3,095.04	2,804.96	290.09	10.669	
10,500.00	7,250.90	7,230.90	7,250.90	97.86	250.71	90.84	2,208.52	-6,358.73	2,998.14	2,707.44	290.70	10.313	
10,600.00	7,250.52	7,230.52	7,250.52	100.53	250.69	90.81	2,208.52	-6,358.73	2,901.44	2,610.04	291.40	9.957	
10,700.00	7,250.14	7,230.14	7,250.14	103.22	250.68	90.78	2,208.52	-6,358.73	2,804.98	2,512.78	292.19	9.600	
10,800.00	7,249.76	7,229.76	7,249.76	105.91	250.67	90.75	2,208.52	-6,358.73	2,708.77	2,415.68	293.09	9.242	
10,900.00	7,249.38	7,229.38	7,249.38	108.62	250.65	90.72	2,208.52	-6,358.73	2,612.84	2,318.74	294.11	8.884	
11,000.00	7,249.00	7,229.00	7,249.00	111.33	250.64	90.69	2,208.52	-6,358.73	2,517.24	2,221.98	295.26	8.525	
11,100.00	7,248.62	7,228.62	7,248.62	114.04	250.63	90.67	2,208.52	-6,358.73	2,421.99	2,125.42	296.57	8.167	
11,200.00	7,248.24	7,228.24	7,248.24	116.77	250.61	90.64	2,208.52	-6,358.73	2,327.13	2,029.09	298.04	7.808	
11,300.00	7,247.86	7,227.86	7,247.86	119.50	250.60	90.61	2,208.52	-6,358.73	2,232.73	1,933.02	299.71	7.450	
11,400.00	7,247.48	7,227.48	7,247.48	122.24	250.59	90.58	2,208.52	-6,358.73	2,138.84	1,837.24	301.59	7.092	
11,500.00	7,247.10	7,227.10	7,247.10	124.98	250.57	90.55	2,208.52	-6,358.73	2,045.52	1,741.80	303.72	6.735	
11,600.00	7,246.72	7,226.72	7,246.72	127.73	250.56	90.52	2,208.52	-6,358.73	1,952.87	1,646.74	306.13	6.379	
11,700.00	7,246.34	7,226.34	7,246.34	130.48	250.55	90.49	2,208.52	-6,358.73	1,860.97	1,552.12	308.85	6.025	
11,800.00	7,245.96	7,225.96	7,245.96	133.24	250.53	90.46	2,208.52	-6,358.73	1,769.96	1,458.03	311.93	5.674	
11,900.00	7,245.58	7,225.58	7,245.58	136.00	250.52	90.43	2,208.52	-6,358.73	1,679.96	1,364.56	315.41	5.326	
12,000.00	7,245.21	7,225.21	7,245.21	138.76	250.51	90.41	2,208.52	-6,358.73	1,591.17	1,271.82	319.34	4.983	
12,100.00	7,244.83	7,224.83	7,244.83	141.53	250.50	90.38	2,208.52	-6,358.73	1,503.78	1,179.98	323.80	4.644	
12,200.00	7,244.45	7,224.45	7,244.45	144.30	250.48	90.35	2,208.52	-6,358.73	1,418.05	1,089.22	328.83	4.312	
12,300.00	7,244.07	7,224.07	7,244.07	147.08	250.47	90.32	2,208.52	-6,358.73	1,334.32	999.80	334.52	3.989	
12,400.00	7,243.69	7,223.69	7,243.69	149.86	250.46	90.29	2,208.52	-6,358.73	1,252.97	912.04	340.93	3.675	
12,500.00	7,243.31	7,223.31	7,243.31	152.64	250.44	90.26	2,208.52	-6,358.73	1,174.50	826.37	348.14	3.374	
12,600.00	7,242.93	7,222.93	7,242.93	155.42	250.43	90.23	2,208.52	-6,358.73	1,099.54	743.36	356.18	3.087	
12,700.00	7,242.55	7,222.55	7,242.55	158.21	250.42	90.20	2,208.52	-6,358.73	1,028.84	663.77	365.07	2.818	
12,800.00	7,242.17	7,222.17	7,242.17	161.00	250.40	90.17	2,208.52	-6,358.73	963.35	588.59	374.76	2.571	
12,900.00	7,241.79	7,221.79	7,241.79	163.79	250.39	90.15	2,208.52	-6,358.73	904.20	519.13	385.07	2.348	
13,000.00	7,241.41	7,221.41	7,241.41	166.58	250.38	90.12	2,208.52	-6,358.73	852.70	457.04	395.66	2.155	
13,100.00	7,241.03	7,221.03	7,241.03	169.38	250.36	90.09	2,208.52	-6,358.73	810.33	404.31	406.02	1.996	
13,200.00	7,240.65	7,220.65	7,240.65	172.18	250.35	90.06	2,208.52	-6,358.73	778.56	363.17	415.39	1.874	
13,300.00	7,240.27	7,220.27	7,240.27	174.98	250.34	90.03	2,208.52	-6,358.73	758.74	335.77	422.96	1.794	
13,400.00	7,239.89	7,219.89	7,239.89	177.78	250.32	90.00	2,208.52	-6,358.73	751.80	323.81	428.00	1.757	
13,402.37	7,239.88	7,219.88	7,239.88	177.85	250.32	90.00	2,208.52	-6,358.73	751.80	323.72	428.08	1.756 CC, ES, SF	
13,500.00	7,239.51	7,219.51	7,239.51	180.58	250.31	89.97	2,208.52	-6,358.73	758.11	328.04	430.07	1.763	
13,600.00	7,239.13	7,219.13	7,239.13	183.39	250.30	89.94	2,208.52	-6,358.73	777.34	348.12	429.22	1.811	
13,700.00	7,238.75	7,218.75	7,238.75	186.20	250.28	89.91	2,208.52	-6,358.73	808.57	382.68	425.89	1.899	
13,800.00	7,238.37	7,218.37	7,238.37	189.00	250.27	89.88	2,208.52	-6,358.73	850.48	429.74	420.74	2.021	
13,900.00	7,237.99	7,217.99	7,237.99	191.81	250.26	89.86	2,208.52	-6,358.73	901.58	487.09	414.49	2.175	
14,000.00	7,237.62	7,217.62	7,237.62	194.63	250.24	89.83	2,208.52	-6,358.73	960.40	552.69	407.71	2.356	
14,100.00	7,237.24	7,217.24	7,237.24	197.44	250.23	89.80	2,208.52	-6,358.73	1,025.62	624.77	400.85	2.559	
14,200.00	7,236.86	7,216.86	7,236.86	200.25	250.22	89.77	2,208.52	-6,358.73	1,096.09	701.91	394.18	2.781	
14,300.00	7,236.48	7,216.48	7,236.48	203.07	250.20	89.74	2,208.52	-6,358.73	1,170.87	783.00	387.87	3.019	
14,400.00	7,236.10	7,216.10	7,236.10	205.88	250.19	89.71	2,208.52	-6,358.73	1,249.18	867.19	381.99	3.270	
14,500.00	7,235.72	7,215.72	7,235.72	208.70	250.18	89.68	2,208.52	-6,358.73	1,330.41	953.82	376.58	3.533	
14,600.00	7,235.34	7,215.34	7,235.34	211.52	250.16	89.65	2,208.52	-6,358.73	1,414.04	1,042.41	371.63	3.805	
14,700.00	7,234.96	7,214.96	7,234.96	214.34	250.15	89.62	2,208.52	-6,358.73	1,499.68	1,132.56	367.11	4.085	
14,800.00	7,234.58	7,214.58	7,234.58	217.16	250.14	89.60	2,208.52	-6,358.73	1,586.99	1,223.99	363.00	4.372	
14,900.00	7,234.20	7,214.20	7,234.20	219.98	250.12	89.57	2,208.52	-6,358.73	1,675.73	1,316.48	359.25	4.664	
15,000.00	7,233.82	7,213.82	7,233.82	222.81	250.11	89.54	2,208.52	-6,358.73	1,765.67	1,409.83	355.84	4.962	
15,100.00	7,233.44	7,213.44	7,233.44	225.63	250.10	89.51	2,208.52	-6,358.73	1,856.64	1,503.92	352.73	5.264	
15,200.00	7,233.06	7,213.06	7,233.06	228.45	250.08	89.48	2,208.52	-6,358.73	1,948.50	1,598.62	349.88	5.569	
15,216.01	7,233.00	7,213.00	7,233.00	228.91	250.08	89.48	2,208.52	-6,358.73	1,963.28	1,613.83	349.45	5.618	

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	17.00	3.28	3.28	-74.74	2,143.38	-7,854.99	8,142.19					
100.00	100.00	83.00	100.00	3.28	3.59	-74.74	2,143.38	-7,854.99	8,142.17	8,135.30	6.87	1,185.105		
200.00	200.00	183.00	200.00	3.34	5.68	-74.74	2,143.38	-7,854.99	8,142.17	8,133.15	9.02	902.504		
300.00	299.98	282.98	299.98	3.45	8.77	-69.03	2,143.38	-7,854.99	8,141.55	8,129.33	12.21	666.545		
400.00	399.84	382.84	399.84	3.61	12.07	-69.10	2,143.38	-7,854.99	8,139.68	8,124.00	15.68	519.221		
500.00	499.45	482.45	499.45	3.82	15.45	-69.21	2,143.38	-7,854.99	8,136.56	8,117.31	19.26	422.541		
600.00	598.70	581.70	598.70	4.07	18.85	-69.37	2,143.38	-7,854.99	8,132.23	8,109.33	22.90	355.104		
700.00	697.47	680.47	697.47	4.35	22.25	-69.58	2,143.38	-7,854.99	8,126.68	8,100.10	26.59	305.684		
800.00	795.62	778.62	795.62	4.67	25.65	-69.83	2,143.38	-7,854.99	8,119.95	8,089.66	30.29	268.041		
900.00	893.06	876.06	893.06	5.01	29.02	-70.12	2,143.38	-7,854.99	8,112.07	8,078.06	34.02	238.480		
1,000.00	989.64	972.64	989.64	5.38	32.38	-70.46	2,143.38	-7,854.99	8,103.07	8,065.33	37.74	214.691		
1,100.00	1,085.42	1,068.42	1,085.42	5.78	35.70	-70.73	2,143.38	-7,854.99	8,093.16	8,051.69	41.47	195.150		
1,200.00	1,181.09	1,164.09	1,181.09	6.20	39.03	-70.92	2,143.38	-7,854.99	8,083.22	8,038.00	45.22	178.755		
1,300.00	1,276.76	1,259.76	1,276.76	6.65	42.36	-71.11	2,143.38	-7,854.99	8,073.37	8,024.38	48.99	164.811		
1,400.00	1,372.43	1,355.43	1,372.43	7.11	45.69	-71.29	2,143.38	-7,854.99	8,063.61	8,010.84	52.77	152.816		
1,500.00	1,468.10	1,451.10	1,468.10	7.57	49.02	-71.48	2,143.38	-7,854.99	8,053.94	7,997.38	56.56	142.397		
1,600.00	1,563.77	1,546.77	1,563.77	8.05	52.36	-71.67	2,143.38	-7,854.99	8,044.37	7,984.01	60.36	133.267		
1,700.00	1,659.44	1,642.44	1,659.44	8.53	55.69	-71.86	2,143.38	-7,854.99	8,034.89	7,970.72	64.17	125.204		
1,800.00	1,755.11	1,738.11	1,755.11	9.02	59.02	-72.05	2,143.38	-7,854.99	8,025.51	7,957.52	67.99	118.035		
1,900.00	1,850.78	1,833.78	1,850.78	9.52	62.36	-72.24	2,143.38	-7,854.99	8,016.22	7,944.41	71.82	111.619		
2,000.00	1,946.45	1,929.45	1,946.45	10.02	65.69	-72.43	2,143.38	-7,854.99	8,007.03	7,931.38	75.65	105.847		
2,100.00	2,042.12	2,025.12	2,042.12	10.52	69.03	-72.62	2,143.38	-7,854.99	7,997.93	7,918.45	79.48	100.626		
2,200.00	2,137.78	2,120.78	2,137.78	11.03	72.37	-72.81	2,143.38	-7,854.99	7,988.93	7,905.61	83.32	95.883		
2,300.00	2,233.45	2,216.45	2,233.45	11.54	75.70	-73.01	2,143.38	-7,854.99	7,980.03	7,892.86	87.16	91.555		
2,400.00	2,329.12	2,312.12	2,329.12	12.05	79.04	-73.20	2,143.38	-7,854.99	7,971.22	7,880.21	91.01	87.590		
2,500.00	2,424.79	2,407.79	2,424.79	12.56	82.38	-73.39	2,143.38	-7,854.99	7,962.50	7,867.65	94.85	83.946		
2,600.00	2,520.46	2,503.46	2,520.46	13.08	85.71	-73.58	2,143.38	-7,854.99	7,953.89	7,855.19	98.70	80.585		
2,700.00	2,616.13	2,600.87	2,616.13	13.60	89.11	-73.78	2,143.38	-7,854.99	7,945.37	7,842.75	102.61	77.429		
2,800.00	2,711.80	2,705.20	2,711.80	14.12	92.75	-73.97	2,143.38	-7,854.99	7,936.95	7,830.18	106.77	74.337		
2,900.00	2,807.47	2,809.53	2,807.47	14.64	96.39	-74.17	2,143.38	-7,854.99	7,928.62	7,817.70	110.93	71.476		
3,000.00	2,903.14	2,886.14	2,903.14	15.16	99.06	-74.36	2,143.38	-7,854.99	7,920.40	7,806.28	114.12	69.404		
3,100.00	2,998.81	2,981.81	2,998.81	15.68	102.40	-74.55	2,143.38	-7,854.99	7,912.27	7,794.30	117.98	67.066		
3,200.00	3,094.48	3,077.48	3,094.48	16.21	105.74	-74.75	2,143.38	-7,854.99	7,904.25	7,782.41	121.84	64.875		
3,300.00	3,190.15	3,173.15	3,190.15	16.73	109.08	-74.95	2,143.38	-7,854.99	7,896.32	7,770.62	125.70	62.820		
3,400.00	3,285.82	3,268.82	3,285.82	17.26	112.42	-75.14	2,143.38	-7,854.99	7,888.49	7,758.93	129.56	60.887		
3,500.00	3,381.49	3,364.49	3,381.49	17.78	115.76	-75.34	2,143.38	-7,854.99	7,880.76	7,747.34	133.42	59.066		
3,600.00	3,477.16	3,460.16	3,477.16	18.31	119.09	-75.53	2,143.38	-7,854.99	7,873.13	7,735.84	137.29	57.348		
3,700.00	3,572.83	3,555.83	3,572.83	18.84	122.43	-75.73	2,143.38	-7,854.99	7,865.60	7,724.45	141.15	55.724		
3,800.00	3,668.50	3,651.50	3,668.50	19.37	125.77	-75.93	2,143.38	-7,854.99	7,858.18	7,713.16	145.02	54.188		
3,900.00	3,764.17	3,747.17	3,764.17	19.89	129.11	-76.13	2,143.38	-7,854.99	7,850.85	7,701.96	148.88	52.731		
4,000.00	3,859.84	3,842.84	3,859.84	20.42	132.45	-76.32	2,143.38	-7,854.99	7,843.62	7,690.87	152.75	51.349		
4,100.00	3,955.51	3,938.51	3,955.51	20.95	135.79	-76.52	2,143.38	-7,854.99	7,836.50	7,679.88	156.62	50.036		
4,200.00	4,051.18	4,034.18	4,051.18	21.48	139.13	-76.72	2,143.38	-7,854.99	7,829.47	7,668.99	160.49	48.786		
4,300.00	4,146.85	4,129.85	4,146.85	22.01	142.47	-76.92	2,143.38	-7,854.99	7,822.55	7,658.20	164.36	47.595		
4,400.00	4,242.52	4,225.52	4,242.52	22.55	145.80	-77.12	2,143.38	-7,854.99	7,815.74	7,647.51	168.23	46.460		
4,500.00	4,338.19	4,321.19	4,338.19	23.08	149.14	-77.32	2,143.38	-7,854.99	7,809.02	7,636.92	172.10	45.376		
4,600.00	4,433.86	4,416.86	4,433.86	23.61	152.48	-77.52	2,143.38	-7,854.99	7,802.41	7,626.44	175.97	44.340		
4,700.00	4,529.53	4,512.53	4,529.53	24.14	155.82	-77.72	2,143.38	-7,854.99	7,795.90	7,616.06	179.84	43.350		
4,800.00	4,625.19	4,608.19	4,625.19	24.67	159.16	-77.92	2,143.38	-7,854.99	7,789.49	7,605.78	183.71	42.401		
4,900.00	4,720.86	4,703.86	4,720.86	25.21	162.50	-78.12	2,143.38	-7,854.99	7,783.19	7,595.61	187.58	41.493		
5,000.00	4,816.53	4,800.47	4,816.53	25.74	165.87	-78.32	2,143.38	-7,854.99	7,776.99	7,585.50	191.49	40.614		
5,100.00	4,912.20	4,904.80	4,912.20	26.27	169.51	-78.52	2,143.38	-7,854.99	7,770.89	7,575.23	195.66	39.716		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	5,009.13	5,007.87	26.80	173.15	-78.72	2,143.38	-7,854.99	7,764.90	7,565.07	199.84	38.856		
5,300.00	5,103.54	5,086.54	5,103.54	27.34	175.86	-78.93	2,143.38	-7,854.99	7,759.02	7,555.94	203.07	38.208		
5,400.00	5,199.22	5,182.22	5,199.22	27.87	179.20	-79.12	2,143.38	-7,854.99	7,753.24	7,546.29	206.95	37.465		
5,500.00	5,295.46	5,278.46	5,295.46	28.39	182.56	-79.20	2,143.38	-7,854.99	7,747.94	7,537.12	210.83	36.750		
5,600.00	5,392.60	5,375.60	5,392.60	28.89	185.95	-79.28	2,143.38	-7,854.99	7,743.38	7,528.67	214.72	36.063		
5,700.00	5,490.50	5,473.50	5,490.50	29.37	189.36	-79.35	2,143.38	-7,854.99	7,739.53	7,520.92	218.62	35.402		
5,800.00	5,589.05	5,572.05	5,589.05	29.83	192.80	-79.41	2,143.38	-7,854.99	7,736.37	7,513.86	222.51	34.768		
5,900.00	5,688.14	5,671.14	5,688.14	30.26	196.26	-79.46	2,143.38	-7,854.99	7,733.88	7,507.47	226.41	34.159		
6,000.00	5,787.63	5,770.63	5,787.63	30.68	199.73	-79.50	2,143.38	-7,854.99	7,732.04	7,501.75	230.30	33.574		
6,100.00	5,887.41	5,870.41	5,887.41	31.07	203.22	-79.52	2,143.38	-7,854.99	7,730.85	7,496.68	234.17	33.013		
6,200.00	5,987.36	5,970.36	5,987.36	31.44	206.71	-79.53	2,143.38	-7,854.99	7,730.30	7,492.27	238.03	32.476		
6,297.97	6,085.32	6,068.32	6,085.32	31.79	210.13	-79.53	2,143.38	-7,854.99	7,730.18	7,488.38	241.80	31.969		
6,300.00	6,087.36	6,070.36	6,087.36	31.80	210.20	-85.26	2,143.38	-7,854.99	7,730.26	7,488.38	241.88	31.959		
6,400.00	6,187.36	6,170.36	6,187.36	32.15	213.69	-85.26	2,143.38	-7,854.99	7,730.26	7,484.53	245.73	31.459		
6,500.00	6,287.36	6,270.36	6,287.36	32.51	217.18	-85.26	2,143.38	-7,854.99	7,730.26	7,480.68	249.58	30.974		
6,600.00	6,387.36	6,370.36	6,387.36	32.87	220.67	-85.26	2,143.38	-7,854.99	7,730.26	7,476.83	253.43	30.503		
6,700.00	6,487.36	6,470.36	6,487.36	33.23	224.16	-85.26	2,143.38	-7,854.99	7,730.26	7,472.98	257.28	30.046		
6,800.00	6,587.36	6,570.36	6,587.36	33.59	227.65	-85.26	2,143.38	-7,854.99	7,730.26	7,469.13	261.13	29.603		
6,900.00	6,687.26	6,670.26	6,687.26	33.95	231.14	5.21	2,143.38	-7,854.99	7,727.16	7,462.18	264.98	29.161		
7,000.00	6,785.58	6,768.58	6,785.58	34.31	234.57	5.37	2,143.38	-7,854.99	7,709.60	7,440.82	268.77	28.684		
7,100.00	6,879.94	6,862.94	6,879.94	34.65	237.86	5.70	2,143.38	-7,854.99	7,676.93	7,404.52	272.41	28.181		
7,200.00	6,968.01	6,951.01	6,968.01	34.97	240.94	6.23	2,143.38	-7,854.99	7,629.97	7,354.17	275.80	27.665		
7,300.00	7,047.61	7,030.61	7,047.61	35.27	243.72	7.07	2,143.38	-7,854.99	7,569.87	7,291.02	278.85	27.147		
7,400.00	7,116.80	7,100.20	7,116.80	35.54	246.14	8.40	2,143.38	-7,854.99	7,498.12	7,216.62	281.50	26.636		
7,500.00	7,173.86	7,156.86	7,173.86	35.81	248.12	10.61	2,143.38	-7,854.99	7,416.48	7,132.83	283.65	26.147		
7,600.00	7,217.38	7,200.38	7,217.38	36.17	249.64	14.75	2,143.38	-7,854.99	7,326.97	7,041.70	285.27	25.684		
7,700.00	7,246.31	7,229.31	7,246.31	36.80	250.65	24.43	2,143.38	-7,854.99	7,231.79	6,945.46	286.33	25.257		
7,800.00	7,259.92	7,242.92	7,259.92	37.72	251.13	59.42	2,143.38	-7,854.99	7,133.30	6,846.48	286.81	24.871		
7,900.00	7,260.77	7,243.77	7,260.77	38.86	251.16	92.18	2,143.38	-7,854.99	7,033.81	6,746.99	286.82	24.523		
8,000.00	7,260.39	7,243.39	7,260.39	40.19	251.14	92.15	2,143.38	-7,854.99	6,934.31	6,647.52	286.78	24.180		
8,100.00	7,260.01	7,243.01	7,260.01	41.67	251.13	92.12	2,143.38	-7,854.99	6,834.82	6,548.08	286.75	23.836		
8,200.00	7,259.63	7,242.63	7,259.63	43.30	251.12	92.08	2,143.38	-7,854.99	6,735.36	6,448.64	286.72	23.491		
8,300.00	7,259.25	7,242.25	7,259.25	45.05	251.10	92.05	2,143.38	-7,854.99	6,635.90	6,349.21	286.69	23.147		
8,400.00	7,258.87	7,241.87	7,258.87	46.91	251.09	92.02	2,143.38	-7,854.99	6,536.47	6,249.80	286.66	22.802		
8,500.00	7,258.49	7,241.49	7,258.49	48.87	251.08	91.99	2,143.38	-7,854.99	6,437.05	6,150.41	286.64	22.457		
8,600.00	7,258.11	7,241.11	7,258.11	50.92	251.06	91.96	2,143.38	-7,854.99	6,337.65	6,051.02	286.63	22.111		
8,700.00	7,257.73	7,240.73	7,257.73	53.04	251.05	91.93	2,143.38	-7,854.99	6,238.27	5,951.65	286.62	21.765		
8,800.00	7,257.35	7,240.35	7,257.35	55.23	251.04	91.90	2,143.38	-7,854.99	6,138.91	5,852.30	286.61	21.419		
8,900.00	7,256.97	7,239.97	7,256.97	57.47	251.02	91.87	2,143.38	-7,854.99	6,039.57	5,752.96	286.61	21.072		
9,000.00	7,256.59	7,239.59	7,256.59	59.77	251.01	91.84	2,143.38	-7,854.99	5,940.25	5,653.64	286.61	20.726		
9,100.00	7,256.21	7,239.21	7,256.21	62.12	251.00	91.81	2,143.38	-7,854.99	5,840.96	5,554.33	286.63	20.378		
9,200.00	7,255.83	7,238.83	7,255.83	64.50	250.98	91.77	2,143.38	-7,854.99	5,741.69	5,455.05	286.64	20.031		
9,300.00	7,255.45	7,238.45	7,255.45	66.93	250.97	91.74	2,143.38	-7,854.99	5,642.45	5,355.78	286.67	19.683		
9,400.00	7,255.07	7,238.07	7,255.07	69.38	250.96	91.71	2,143.38	-7,854.99	5,543.23	5,256.53	286.70	19.334		
9,500.00	7,254.69	7,237.69	7,254.69	71.87	250.94	91.68	2,143.38	-7,854.99	5,444.04	5,157.30	286.74	18.986		
9,600.00	7,254.31	7,237.31	7,254.31	74.38	250.93	91.65	2,143.38	-7,854.99	5,344.88	5,058.09	286.80	18.637		
9,700.00	7,253.93	7,236.93	7,253.93	76.92	250.92	91.62	2,143.38	-7,854.99	5,245.76	4,958.90	286.86	18.287		
9,800.00	7,253.55	7,236.55	7,253.55	79.48	250.90	91.59	2,143.38	-7,854.99	5,146.67	4,859.73	286.93	17.937		
9,900.00	7,253.18	7,236.18	7,253.18	82.06	250.89	91.56	2,143.38	-7,854.99	5,047.61	4,760.59	287.02	17.586		
10,000.00	7,252.80	7,235.80	7,252.80	84.65	250.88	91.53	2,143.38	-7,854.99	4,948.59	4,661.47	287.12	17.235		
10,100.00	7,252.42	7,235.42	7,252.42	87.27	250.86	91.49	2,143.38	-7,854.99	4,849.61	4,562.38	287.23	16.884		
10,200.00	7,252.04	7,235.04	7,252.04	89.89	250.85	91.46	2,143.38	-7,854.99	4,750.68	4,463.32	287.36	16.532		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,251.66	7,234.66	7,251.66	92.54	250.84	91.43	2,143.38	-7,854.99	4,651.79	4,364.28	287.51	16.179		
10,400.00	7,251.28	7,234.28	7,251.28	95.19	250.83	91.40	2,143.38	-7,854.99	4,552.95	4,265.27	287.68	15.826		
10,500.00	7,250.90	7,233.90	7,250.90	97.86	250.81	91.37	2,143.38	-7,854.99	4,454.16	4,166.29	287.87	15.473		
10,600.00	7,250.52	7,233.52	7,250.52	100.53	250.80	91.34	2,143.38	-7,854.99	4,355.42	4,067.34	288.08	15.119		
10,700.00	7,250.14	7,233.14	7,250.14	103.22	250.79	91.31	2,143.38	-7,854.99	4,256.75	3,968.42	288.32	14.764		
10,800.00	7,249.76	7,232.76	7,249.76	105.91	250.77	91.28	2,143.38	-7,854.99	4,158.14	3,869.54	288.59	14.408		
10,900.00	7,249.38	7,232.38	7,249.38	108.62	250.76	91.24	2,143.38	-7,854.99	4,059.59	3,770.70	288.89	14.052		
11,000.00	7,249.00	7,232.00	7,249.00	111.33	250.75	91.21	2,143.38	-7,854.99	3,961.12	3,671.90	289.22	13.696		
11,100.00	7,248.62	7,231.62	7,248.62	114.04	250.73	91.18	2,143.38	-7,854.99	3,862.73	3,573.13	289.60	13.338		
11,200.00	7,248.24	7,231.24	7,248.24	116.77	250.72	91.15	2,143.38	-7,854.99	3,764.42	3,474.41	290.01	12.980		
11,300.00	7,247.86	7,230.86	7,247.86	119.50	250.71	91.12	2,143.38	-7,854.99	3,666.20	3,375.73	290.47	12.622		
11,400.00	7,247.48	7,230.48	7,247.48	122.24	250.69	91.09	2,143.38	-7,854.99	3,568.09	3,277.10	290.98	12.262		
11,500.00	7,247.10	7,230.10	7,247.10	124.98	250.68	91.06	2,143.38	-7,854.99	3,470.08	3,178.52	291.55	11.902		
11,600.00	7,246.72	7,229.72	7,246.72	127.73	250.67	91.03	2,143.38	-7,854.99	3,372.18	3,080.00	292.18	11.541		
11,700.00	7,246.34	7,229.34	7,246.34	130.48	250.65	91.00	2,143.38	-7,854.99	3,274.42	2,981.53	292.88	11.180		
11,800.00	7,245.96	7,228.96	7,245.96	133.24	250.64	90.96	2,143.38	-7,854.99	3,176.79	2,883.13	293.66	10.818		
11,900.00	7,245.58	7,228.58	7,245.58	136.00	250.63	90.93	2,143.38	-7,854.99	3,079.32	2,784.79	294.52	10.455		
12,000.00	7,245.21	7,228.21	7,245.21	138.76	250.61	90.90	2,143.38	-7,854.99	2,982.01	2,686.53	295.48	10.092		
12,100.00	7,244.83	7,227.83	7,244.83	141.53	250.60	90.87	2,143.38	-7,854.99	2,884.88	2,588.34	296.54	9.728		
12,200.00	7,244.45	7,227.45	7,244.45	144.30	250.59	90.84	2,143.38	-7,854.99	2,787.96	2,490.24	297.72	9.364		
12,300.00	7,244.07	7,227.07	7,244.07	147.08	250.57	90.81	2,143.38	-7,854.99	2,691.27	2,392.24	299.03	9.000		
12,400.00	7,243.69	7,226.69	7,243.69	149.86	250.56	90.78	2,143.38	-7,854.99	2,594.83	2,294.34	300.49	8.635		
12,500.00	7,243.31	7,226.31	7,243.31	152.64	250.55	90.75	2,143.38	-7,854.99	2,498.66	2,196.56	302.11	8.271		
12,600.00	7,242.93	7,225.93	7,242.93	155.42	250.53	90.72	2,143.38	-7,854.99	2,402.81	2,098.90	303.90	7.906		
12,700.00	7,242.55	7,225.55	7,242.55	158.21	250.52	90.68	2,143.38	-7,854.99	2,307.31	2,001.40	305.91	7.542		
12,800.00	7,242.17	7,225.17	7,242.17	161.00	250.51	90.65	2,143.38	-7,854.99	2,212.21	1,904.07	308.14	7.179		
12,900.00	7,241.79	7,224.79	7,241.79	163.79	250.49	90.62	2,143.38	-7,854.99	2,117.56	1,806.93	310.63	6.817		
13,000.00	7,241.41	7,224.41	7,241.41	166.58	250.48	90.59	2,143.38	-7,854.99	2,023.42	1,710.01	313.41	6.456		
13,100.00	7,241.03	7,224.03	7,241.03	169.38	250.47	90.56	2,143.38	-7,854.99	1,929.88	1,613.36	316.52	6.097		
13,200.00	7,240.65	7,223.65	7,240.65	172.18	250.45	90.53	2,143.38	-7,854.99	1,837.01	1,517.01	320.00	5.741		
13,300.00	7,240.27	7,223.27	7,240.27	174.98	250.44	90.50	2,143.38	-7,854.99	1,744.93	1,421.02	323.91	5.387		
13,400.00	7,239.89	7,222.89	7,239.89	177.78	250.43	90.47	2,143.38	-7,854.99	1,653.78	1,325.48	328.30	5.037		
13,500.00	7,239.51	7,222.51	7,239.51	180.58	250.41	90.44	2,143.38	-7,854.99	1,563.70	1,230.46	333.24	4.692		
13,600.00	7,239.13	7,222.13	7,239.13	183.39	250.40	90.40	2,143.38	-7,854.99	1,474.90	1,136.10	338.81	4.353		
13,700.00	7,238.75	7,221.75	7,238.75	186.20	250.39	90.37	2,143.38	-7,854.99	1,387.63	1,042.55	345.08	4.021		
13,800.00	7,238.37	7,221.37	7,238.37	189.00	250.37	90.34	2,143.38	-7,854.99	1,302.19	950.02	352.17	3.698		
13,900.00	7,237.99	7,220.99	7,237.99	191.81	250.36	90.31	2,143.38	-7,854.99	1,218.97	858.80	360.17	3.384		
14,000.00	7,237.62	7,220.62	7,237.62	194.63	250.35	90.28	2,143.38	-7,854.99	1,138.45	769.28	369.18	3.084		
14,100.00	7,237.24	7,220.24	7,237.24	197.44	250.33	90.25	2,143.38	-7,854.99	1,061.25	681.98	379.28	2.798		
14,200.00	7,236.86	7,219.86	7,236.86	200.25	250.32	90.22	2,143.38	-7,854.99	988.15	597.64	390.51	2.530		
14,300.00	7,236.48	7,219.48	7,236.48	203.07	250.31	90.19	2,143.38	-7,854.99	920.12	517.29	402.83	2.284		
14,400.00	7,236.10	7,219.10	7,236.10	205.88	250.30	90.16	2,143.38	-7,854.99	858.37	442.34	416.03	2.063		
14,500.00	7,235.72	7,218.72	7,235.72	208.70	250.28	90.12	2,143.38	-7,854.99	804.35	374.66	429.69	1.872		
14,600.00	7,235.34	7,218.34	7,235.34	211.52	250.27	90.09	2,143.38	-7,854.99	759.71	316.65	443.06	1.715		
14,700.00	7,234.96	7,217.96	7,234.96	214.34	250.26	90.06	2,143.38	-7,854.99	726.19	271.11	455.07	1.596		
14,800.00	7,234.58	7,217.58	7,234.58	217.16	250.24	90.03	2,143.38	-7,854.99	705.35	240.88	464.47	1.519		
14,899.10	7,234.20	7,217.20	7,234.20	219.96	250.23	90.00	2,143.38	-7,854.99	698.36	228.24	470.12	1.486 Level 3, CC		
14,900.00	7,234.20	7,217.20	7,234.20	219.98	250.23	90.00	2,143.38	-7,854.99	698.36	228.21	470.15	1.485 Level 3, ES, SF		
15,000.00	7,233.82	7,216.82	7,233.82	222.81	250.22	89.97	2,143.38	-7,854.99	705.61	234.09	471.52	1.496 Level 3		
15,100.00	7,233.44	7,216.44	7,233.44	225.63	250.20	89.94	2,143.38	-7,854.99	726.68	257.93	468.75	1.550		
15,200.00	7,233.06	7,216.06	7,233.06	228.45	250.19	89.91	2,143.38	-7,854.99	760.42	297.76	462.66	1.644		
15,216.01	7,233.00	7,216.00	7,233.00	228.91	250.19	89.90	2,143.38	-7,854.99	766.90	305.45	461.45	1.662		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.00	0.00	3.28	3.28	-58.11	2,258.97	-3,630.46	4,275.88					
100.00	100.00	100.00	100.00	3.28	3.72	-58.11	2,258.97	-3,630.46	4,275.88	4,268.88	7.00	610.821		
200.00	200.00	200.00	200.00	3.34	6.18	-58.11	2,258.97	-3,630.46	4,275.88	4,266.37	9.52	449.337		
300.00	299.98	300.02	299.98	3.45	9.32	-52.41	2,258.97	-3,630.46	4,274.82	4,262.05	12.77	334.777		
400.00	399.84	400.16	399.84	3.61	12.66	-52.52	2,258.97	-3,630.46	4,271.62	4,255.36	16.26	262.691		
500.00	499.45	500.55	499.45	3.82	16.07	-52.69	2,258.97	-3,630.46	4,266.32	4,246.44	19.88	214.639		
600.00	598.70	601.30	598.70	4.07	19.52	-52.94	2,258.97	-3,630.46	4,258.92	4,235.34	23.58	180.626		
700.00	697.47	702.53	697.47	4.35	23.01	-53.26	2,258.97	-3,630.46	4,249.45	4,222.10	27.35	155.364		
800.00	795.62	804.38	795.62	4.67	26.54	-53.65	2,258.97	-3,630.46	4,237.95	4,206.76	31.19	135.880		
900.00	893.06	906.94	893.06	5.01	30.10	-54.11	2,258.97	-3,630.46	4,224.47	4,189.38	35.09	120.395		
1,000.00	989.64	989.64	989.64	5.38	32.97	-54.65	2,258.97	-3,630.46	4,209.05	4,170.72	38.33	109.811		
1,100.00	1,085.42	1,085.42	1,085.42	5.78	36.30	-55.09	2,258.97	-3,630.46	4,192.04	4,149.99	42.05	99.686		
1,200.00	1,181.09	1,181.09	1,181.09	6.20	39.62	-55.41	2,258.97	-3,630.46	4,174.95	4,129.16	45.79	91.176		
1,300.00	1,276.76	1,276.76	1,276.76	6.65	42.95	-55.73	2,258.97	-3,630.46	4,158.00	4,108.45	49.55	83.922		
1,400.00	1,372.43	1,372.43	1,372.43	7.11	46.28	-56.05	2,258.97	-3,630.46	4,141.18	4,087.86	53.32	77.672		
1,500.00	1,468.10	1,468.10	1,468.10	7.57	49.61	-56.37	2,258.97	-3,630.46	4,124.49	4,067.39	57.10	72.235		
1,600.00	1,563.77	1,563.77	1,563.77	8.05	52.95	-56.70	2,258.97	-3,630.46	4,107.95	4,047.06	60.89	67.464		
1,700.00	1,659.44	1,659.44	1,659.44	8.53	56.28	-57.03	2,258.97	-3,630.46	4,091.54	4,026.85	64.69	63.246		
1,800.00	1,755.11	1,755.11	1,755.11	9.02	59.62	-57.37	2,258.97	-3,630.46	4,075.28	4,006.78	68.50	59.492		
1,900.00	1,850.78	1,850.78	1,850.78	9.52	62.95	-57.70	2,258.97	-3,630.46	4,059.16	3,986.84	72.32	56.131		
2,000.00	1,946.45	1,946.45	1,946.45	10.02	66.29	-58.04	2,258.97	-3,630.46	4,043.18	3,967.05	76.14	53.105		
2,100.00	2,042.12	2,042.12	2,042.12	10.52	69.62	-58.38	2,258.97	-3,630.46	4,027.36	3,947.40	79.96	50.366		
2,200.00	2,137.78	2,137.78	2,137.78	11.03	72.96	-58.72	2,258.97	-3,630.46	4,011.68	3,927.89	83.79	47.877		
2,300.00	2,233.45	2,233.45	2,233.45	11.54	76.30	-59.07	2,258.97	-3,630.46	3,996.15	3,908.53	87.62	45.606		
2,400.00	2,329.12	2,329.12	2,329.12	12.05	79.63	-59.42	2,258.97	-3,630.46	3,980.78	3,889.32	91.46	43.524		
2,500.00	2,424.79	2,424.79	2,424.79	12.56	82.97	-59.77	2,258.97	-3,630.46	3,965.55	3,870.25	95.30	41.611		
2,600.00	2,520.46	2,520.46	2,520.46	13.08	86.31	-60.12	2,258.97	-3,630.46	3,950.49	3,851.35	99.14	39.846		
2,700.00	2,616.13	2,616.13	2,616.13	13.60	89.64	-60.47	2,258.97	-3,630.46	3,935.58	3,832.59	102.99	38.214		
2,800.00	2,711.80	2,711.80	2,711.80	14.12	92.98	-60.83	2,258.97	-3,630.46	3,920.83	3,814.00	106.84	36.700		
2,900.00	2,807.47	2,807.47	2,807.47	14.64	96.32	-61.19	2,258.97	-3,630.46	3,906.24	3,795.56	110.68	35.292		
3,000.00	2,903.14	2,903.14	2,903.14	15.16	99.66	-61.56	2,258.97	-3,630.46	3,891.82	3,777.28	114.54	33.979		
3,100.00	2,998.81	3,001.19	2,998.81	15.68	103.08	-61.92	2,258.97	-3,630.46	3,877.56	3,759.09	118.47	32.730		
3,200.00	3,094.48	3,105.52	3,094.48	16.21	106.72	-62.29	2,258.97	-3,630.46	3,863.47	3,740.84	122.63	31.505		
3,300.00	3,190.15	3,209.85	3,190.15	16.73	110.36	-62.66	2,258.97	-3,630.46	3,849.54	3,722.76	126.79	30.362		
3,400.00	3,285.82	3,285.82	3,285.82	17.26	113.01	-63.03	2,258.97	-3,630.46	3,835.79	3,705.83	129.96	29.515		
3,500.00	3,381.49	3,381.49	3,381.49	17.78	116.35	-63.41	2,258.97	-3,630.46	3,822.21	3,688.39	133.82	28.563		
3,600.00	3,477.16	3,477.16	3,477.16	18.31	119.69	-63.79	2,258.97	-3,630.46	3,808.80	3,671.12	137.68	27.664		
3,700.00	3,572.83	3,572.83	3,572.83	18.84	123.03	-64.17	2,258.97	-3,630.46	3,795.57	3,654.03	141.54	26.816		
3,800.00	3,668.50	3,668.50	3,668.50	19.37	126.36	-64.55	2,258.97	-3,630.46	3,782.52	3,637.11	145.40	26.014		
3,900.00	3,764.17	3,764.17	3,764.17	19.89	129.70	-64.94	2,258.97	-3,630.46	3,769.64	3,620.37	149.27	25.254		
4,000.00	3,859.84	3,859.84	3,859.84	20.42	133.04	-65.32	2,258.97	-3,630.46	3,756.95	3,603.81	153.13	24.534		
4,100.00	3,955.51	3,955.51	3,955.51	20.95	136.38	-65.71	2,258.97	-3,630.46	3,744.44	3,587.44	157.00	23.850		
4,200.00	4,051.18	4,051.18	4,051.18	21.48	139.72	-66.11	2,258.97	-3,630.46	3,732.11	3,571.24	160.87	23.200		
4,300.00	4,146.85	4,146.85	4,146.85	22.01	143.06	-66.50	2,258.97	-3,630.46	3,719.98	3,555.24	164.74	22.581		
4,400.00	4,242.52	4,242.52	4,242.52	22.55	146.40	-66.90	2,258.97	-3,630.46	3,708.03	3,539.42	168.61	21.992		
4,500.00	4,338.19	4,338.19	4,338.19	23.08	149.74	-67.30	2,258.97	-3,630.46	3,696.27	3,523.79	172.48	21.430		
4,600.00	4,433.86	4,433.86	4,433.86	23.61	153.08	-67.70	2,258.97	-3,630.46	3,684.70	3,508.35	176.35	20.894		
4,700.00	4,529.53	4,529.53	4,529.53	24.14	156.41	-68.11	2,258.97	-3,630.46	3,673.33	3,493.11	180.22	20.382		
4,800.00	4,625.19	4,625.19	4,625.19	24.67	159.75	-68.51	2,258.97	-3,630.46	3,662.16	3,478.06	184.10	19.893		
4,900.00	4,720.86	4,720.86	4,720.86	25.21	163.09	-68.92	2,258.97	-3,630.46	3,651.18	3,463.21	187.97	19.424		
5,000.00	4,816.53	4,816.53	4,816.53	25.74	166.43	-69.33	2,258.97	-3,630.46	3,640.40	3,448.56	191.84	18.976		
5,100.00	4,912.20	4,912.20	4,912.20	26.27	169.77	-69.75	2,258.97	-3,630.46	3,629.82	3,434.10	195.72	18.546		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	5,007.87	5,007.87	26.80	173.11	-70.16	2,258.97	-3,630.46	3,619.45	3,419.85	199.60	18.134		
5,300.00	5,103.54	5,103.54	5,103.54	27.34	176.45	-70.58	2,258.97	-3,630.46	3,609.28	3,405.81	203.47	17.738		
5,400.00	5,199.22	5,200.78	5,199.22	27.87	179.84	-70.98	2,258.97	-3,630.46	3,599.32	3,391.92	207.40	17.354		
5,500.00	5,295.46	5,304.54	5,295.46	28.39	183.47	-71.20	2,258.97	-3,630.46	3,590.23	3,378.68	211.55	16.971		
5,600.00	5,392.60	5,407.41	5,392.60	28.89	187.06	-71.41	2,258.97	-3,630.46	3,582.41	3,366.77	215.65	16.612		
5,700.00	5,490.50	5,509.50	5,490.50	29.37	190.62	-71.58	2,258.97	-3,630.46	3,575.83	3,356.14	219.70	16.276		
5,800.00	5,589.05	5,589.05	5,589.05	29.83	193.40	-71.74	2,258.97	-3,630.46	3,570.44	3,347.50	222.93	16.016		
5,900.00	5,688.14	5,688.14	5,688.14	30.26	196.86	-71.86	2,258.97	-3,630.46	3,566.20	3,339.36	226.83	15.722		
6,000.00	5,787.63	5,787.63	5,787.63	30.68	200.33	-71.95	2,258.97	-3,630.46	3,563.07	3,332.35	230.72	15.443		
6,100.00	5,887.41	5,887.41	5,887.41	31.07	203.81	-72.01	2,258.97	-3,630.46	3,561.05	3,326.45	234.60	15.179		
6,200.00	5,987.36	5,987.36	5,987.36	31.44	207.30	-72.04	2,258.97	-3,630.46	3,560.11	3,321.65	238.46	14.929		
6,297.97	6,085.32	6,085.32	6,085.32	31.79	210.72	-72.05	2,258.97	-3,630.46	3,559.92	3,317.68	242.23	14.696		
6,300.00	6,087.36	6,087.36	6,087.36	31.80	210.79	-77.78	2,258.97	-3,630.46	3,560.04	3,317.73	242.31	14.692		
6,400.00	6,187.36	6,187.36	6,187.36	32.15	214.28	-77.78	2,258.97	-3,630.46	3,560.04	3,313.88	246.16	14.462		
6,500.00	6,287.36	6,287.36	6,287.36	32.51	217.77	-77.78	2,258.97	-3,630.46	3,560.04	3,310.03	250.01	14.240		
6,600.00	6,387.36	6,387.36	6,387.36	32.87	221.26	-77.78	2,258.97	-3,630.46	3,560.04	3,306.18	253.86	14.024		
6,700.00	6,487.36	6,487.36	6,487.36	33.23	224.75	-77.78	2,258.97	-3,630.46	3,560.04	3,302.33	257.72	13.814		
6,800.00	6,587.36	6,587.36	6,587.36	33.59	228.24	-77.78	2,258.97	-3,630.46	3,560.04	3,298.47	261.57	13.610		
6,900.00	6,687.26	6,687.26	6,687.26	33.95	231.73	12.74	2,258.97	-3,630.46	3,557.00	3,291.58	265.42	13.401		
7,000.00	6,785.58	6,785.58	6,785.58	34.31	235.16	13.16	2,258.97	-3,630.46	3,539.80	3,270.59	269.21	13.149		
7,100.00	6,879.94	6,879.94	6,879.94	34.65	238.46	14.00	2,258.97	-3,630.46	3,507.82	3,234.96	272.85	12.856		
7,200.00	6,968.01	6,968.01	6,968.01	34.97	241.53	15.38	2,258.97	-3,630.46	3,461.86	3,185.62	276.24	12.532		
7,300.00	7,047.61	7,047.61	7,047.61	35.27	244.31	17.52	2,258.97	-3,630.46	3,403.09	3,123.80	279.28	12.185		
7,400.00	7,116.80	7,116.80	7,116.80	35.54	246.72	20.82	2,258.97	-3,630.46	3,332.99	3,051.08	281.91	11.823		
7,500.00	7,173.86	7,173.86	7,173.86	35.81	248.72	26.09	2,258.97	-3,630.46	3,253.33	2,969.28	284.05	11.453		
7,600.00	7,217.38	7,217.38	7,217.38	36.17	250.24	34.98	2,258.97	-3,630.46	3,166.12	2,880.45	285.66	11.083		
7,700.00	7,246.31	7,246.31	7,246.31	36.80	251.25	50.89	2,258.97	-3,630.46	3,073.54	2,786.83	286.71	10.720		
7,800.00	7,259.92	7,259.92	7,259.92	37.72	251.72	77.93	2,258.97	-3,630.46	2,977.93	2,690.75	287.18	10.369		
7,900.00	7,260.77	7,260.77	7,260.77	38.86	251.75	90.77	2,258.97	-3,630.46	2,881.57	2,594.38	287.19	10.034		
8,000.00	7,260.39	7,260.39	7,260.39	40.19	251.74	90.74	2,258.97	-3,630.46	2,785.45	2,498.27	287.17	9.700		
8,100.00	7,260.01	7,260.01	7,260.01	41.67	251.72	90.72	2,258.97	-3,630.46	2,689.60	2,402.42	287.19	9.365		
8,200.00	7,259.63	7,259.63	7,259.63	43.30	251.71	90.69	2,258.97	-3,630.46	2,594.07	2,306.84	287.24	9.031		
8,300.00	7,259.25	7,259.25	7,259.25	45.05	251.70	90.66	2,258.97	-3,630.46	2,498.89	2,211.56	287.33	8.697		
8,400.00	7,258.87	7,258.87	7,258.87	46.91	251.68	90.63	2,258.97	-3,630.46	2,404.11	2,116.63	287.48	8.363		
8,500.00	7,258.49	7,258.49	7,258.49	48.87	251.67	90.61	2,258.97	-3,630.46	2,309.76	2,022.07	287.69	8.029		
8,600.00	7,258.11	7,258.11	7,258.11	50.92	251.66	90.58	2,258.97	-3,630.46	2,215.91	1,927.92	287.98	7.695		
8,700.00	7,257.73	7,257.73	7,257.73	53.04	251.64	90.55	2,258.97	-3,630.46	2,122.61	1,834.25	288.37	7.361		
8,800.00	7,257.35	7,257.35	7,257.35	55.23	251.63	90.52	2,258.97	-3,630.46	2,029.96	1,741.10	288.87	7.027		
8,900.00	7,256.97	7,256.97	7,256.97	57.47	251.62	90.49	2,258.97	-3,630.46	1,938.04	1,648.54	289.50	6.694		
9,000.00	7,256.59	7,256.59	7,256.59	59.77	251.60	90.47	2,258.97	-3,630.46	1,846.96	1,556.65	290.30	6.362		
9,100.00	7,256.21	7,256.21	7,256.21	62.12	251.59	90.44	2,258.97	-3,630.46	1,756.85	1,465.55	291.30	6.031		
9,200.00	7,255.83	7,255.83	7,255.83	64.50	251.58	90.41	2,258.97	-3,630.46	1,667.86	1,375.33	292.53	5.702		
9,300.00	7,255.45	7,255.45	7,255.45	66.93	251.56	90.38	2,258.97	-3,630.46	1,580.19	1,286.16	294.03	5.374		
9,400.00	7,255.07	7,255.07	7,255.07	69.38	251.55	90.35	2,258.97	-3,630.46	1,494.08	1,198.22	295.86	5.050		
9,500.00	7,254.69	7,254.69	7,254.69	71.87	251.54	90.33	2,258.97	-3,630.46	1,409.79	1,111.73	298.06	4.730		
9,600.00	7,254.31	7,254.31	7,254.31	74.38	251.52	90.30	2,258.97	-3,630.46	1,327.69	1,027.00	300.69	4.416		
9,700.00	7,253.93	7,253.93	7,253.93	76.92	251.51	90.27	2,258.97	-3,630.46	1,248.21	944.40	303.80	4.109		
9,800.00	7,253.55	7,253.55	7,253.55	79.48	251.50	90.24	2,258.97	-3,630.46	1,171.87	864.41	307.46	3.811		
9,900.00	7,253.18	7,253.18	7,253.18	82.06	251.48	90.22	2,258.97	-3,630.46	1,099.33	787.63	311.70	3.527		
10,000.00	7,252.80	7,252.80	7,252.80	84.65	251.47	90.19	2,258.97	-3,630.46	1,031.39	714.86	316.53	3.258		
10,100.00	7,252.42	7,252.42	7,252.42	87.27	251.46	90.16	2,258.97	-3,630.46	969.03	647.09	321.95	3.010		
10,200.00	7,252.04	7,252.04	7,252.04	89.89	251.44	90.13	2,258.97	-3,630.46	913.38	585.55	327.84	2.786		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,251.66	7,251.66	7,251.66	92.54	251.43	90.10	2,258.97	-3,630.46	865.75	531.73	334.02	2.592		
10,400.00	7,251.28	7,251.28	7,251.28	95.19	251.42	90.08	2,258.97	-3,630.46	827.51	487.31	340.20	2.432		
10,500.00	7,250.90	7,250.90	7,250.90	97.86	251.41	90.05	2,258.97	-3,630.46	800.01	454.04	345.98	2.312		
10,600.00	7,250.52	7,250.52	7,250.52	100.53	251.39	90.02	2,258.97	-3,630.46	784.39	433.49	350.90	2.235		
10,673.76	7,250.24	7,250.24	7,250.24	102.51	251.38	90.00	2,258.97	-3,630.46	780.91	427.17	353.74	2.208 CC		
10,700.00	7,250.14	7,250.14	7,250.14	103.22	251.38	89.99	2,258.97	-3,630.46	781.36	426.78	354.57	2.204 ES, SF		
10,800.00	7,249.76	7,249.76	7,249.76	105.91	251.37	89.96	2,258.97	-3,630.46	791.05	434.29	356.77	2.217		
10,900.00	7,249.38	7,249.38	7,249.38	108.62	251.35	89.94	2,258.97	-3,630.46	813.03	455.55	357.48	2.274		
11,000.00	7,249.00	7,249.00	7,249.00	111.33	251.34	89.91	2,258.97	-3,630.46	846.32	489.43	356.89	2.371		
11,100.00	7,248.62	7,248.62	7,248.62	114.04	251.33	89.88	2,258.97	-3,630.46	889.67	534.37	355.30	2.504		
11,200.00	7,248.24	7,248.24	7,248.24	116.77	251.31	89.85	2,258.97	-3,630.46	941.68	588.64	353.03	2.667		
11,300.00	7,247.86	7,247.86	7,247.86	119.50	251.30	89.83	2,258.97	-3,630.46	1,001.00	650.62	350.38	2.857		
11,400.00	7,247.48	7,247.48	7,247.48	122.24	251.29	89.80	2,258.97	-3,630.46	1,066.42	718.85	347.56	3.068		
11,500.00	7,247.10	7,247.10	7,247.10	124.98	251.27	89.77	2,258.97	-3,630.46	1,136.88	792.15	344.73	3.298		
11,600.00	7,246.72	7,246.72	7,246.72	127.73	251.26	89.74	2,258.97	-3,630.46	1,211.50	869.52	341.98	3.543		
11,700.00	7,246.34	7,246.34	7,246.34	130.48	251.25	89.71	2,258.97	-3,630.46	1,289.57	950.20	339.37	3.800		
11,800.00	7,245.96	7,245.96	7,245.96	133.24	251.23	89.69	2,258.97	-3,630.46	1,370.49	1,033.56	336.93	4.068		
11,900.00	7,245.58	7,245.58	7,245.58	136.00	251.22	89.66	2,258.97	-3,630.46	1,453.78	1,119.12	334.66	4.344		
12,000.00	7,245.21	7,245.21	7,245.21	138.76	251.21	89.63	2,258.97	-3,630.46	1,539.06	1,206.50	332.57	4.628		
12,100.00	7,244.83	7,244.83	7,244.83	141.53	251.19	89.60	2,258.97	-3,630.46	1,626.03	1,295.38	330.65	4.918		
12,200.00	7,244.45	7,244.45	7,244.45	144.30	251.18	89.58	2,258.97	-3,630.46	1,714.41	1,385.53	328.88	5.213		
12,300.00	7,244.07	7,244.07	7,244.07	147.08	251.17	89.55	2,258.97	-3,630.46	1,804.01	1,476.74	327.27	5.512		
12,400.00	7,243.69	7,243.69	7,243.69	149.86	251.15	89.52	2,258.97	-3,630.46	1,894.65	1,568.87	325.78	5.816		
12,500.00	7,243.31	7,243.31	7,243.31	152.64	251.14	89.49	2,258.97	-3,630.46	1,986.19	1,661.77	324.42	6.122		
12,600.00	7,242.93	7,242.93	7,242.93	155.42	251.13	89.46	2,258.97	-3,630.46	2,078.50	1,755.34	323.17	6.432		
12,700.00	7,242.55	7,242.55	7,242.55	158.21	251.11	89.44	2,258.97	-3,630.46	2,171.50	1,849.49	322.02	6.743		
12,800.00	7,242.17	7,242.17	7,242.17	161.00	251.10	89.41	2,258.97	-3,630.46	2,265.10	1,944.14	320.95	7.057		
12,900.00	7,241.79	7,241.79	7,241.79	163.79	251.09	89.38	2,258.97	-3,630.46	2,359.22	2,039.24	319.97	7.373		
13,000.00	7,241.41	7,241.41	7,241.41	166.58	251.07	89.35	2,258.97	-3,630.46	2,453.80	2,134.74	319.07	7.691		
13,100.00	7,241.03	7,241.03	7,241.03	169.38	251.06	89.32	2,258.97	-3,630.46	2,548.80	2,230.57	318.23	8.009		
13,200.00	7,240.65	7,240.65	7,240.65	172.18	251.05	89.30	2,258.97	-3,630.46	2,644.17	2,326.72	317.45	8.329		
13,300.00	7,240.27	7,240.27	7,240.27	174.98	251.03	89.27	2,258.97	-3,630.46	2,739.87	2,423.14	316.73	8.651		
13,400.00	7,239.89	7,239.89	7,239.89	177.78	251.02	89.24	2,258.97	-3,630.46	2,835.86	2,519.81	316.06	8.973		
13,500.00	7,239.51	7,239.51	7,239.51	180.58	251.01	89.21	2,258.97	-3,630.46	2,932.12	2,616.69	315.43	9.296		
13,600.00	7,239.13	7,239.13	7,239.13	183.39	250.99	89.19	2,258.97	-3,630.46	3,028.63	2,713.78	314.85	9.619		
13,700.00	7,238.75	7,238.75	7,238.75	186.20	250.98	89.16	2,258.97	-3,630.46	3,125.35	2,811.05	314.30	9.944		
13,800.00	7,238.37	7,238.37	7,238.37	189.00	250.97	89.13	2,258.97	-3,630.46	3,222.28	2,908.49	313.79	10.269		
13,900.00	7,237.99	7,237.99	7,237.99	191.81	250.95	89.10	2,258.97	-3,630.46	3,319.38	3,006.07	313.32	10.594		
14,000.00	7,237.62	7,237.62	7,237.62	194.63	250.94	89.07	2,258.97	-3,630.46	3,416.66	3,103.79	312.87	10.920		
14,100.00	7,237.24	7,237.24	7,237.24	197.44	250.93	89.05	2,258.97	-3,630.46	3,514.08	3,201.64	312.45	11.247		
14,200.00	7,236.86	7,236.86	7,236.86	200.25	250.92	89.02	2,258.97	-3,630.46	3,611.65	3,299.60	312.06	11.574		
14,300.00	7,236.48	7,236.48	7,236.48	203.07	250.90	88.99	2,258.97	-3,630.46	3,709.35	3,397.66	311.69	11.901		
14,400.00	7,236.10	7,236.10	7,236.10	205.88	250.89	88.96	2,258.97	-3,630.46	3,807.16	3,495.83	311.34	12.228		
14,500.00	7,235.72	7,235.72	7,235.72	208.70	250.88	88.93	2,258.97	-3,630.46	3,905.09	3,594.08	311.01	12.556		
14,600.00	7,235.34	7,235.34	7,235.34	211.52	250.86	88.91	2,258.97	-3,630.46	4,003.12	3,692.42	310.70	12.884		
14,700.00	7,234.96	7,234.96	7,234.96	214.34	250.85	88.88	2,258.97	-3,630.46	4,101.25	3,790.83	310.41	13.212		
14,800.00	7,234.58	7,234.58	7,234.58	217.16	250.84	88.85	2,258.97	-3,630.46	4,199.46	3,889.32	310.14	13.541		
14,900.00	7,234.20	7,234.20	7,234.20	219.98	250.82	88.82	2,258.97	-3,630.46	4,297.75	3,987.87	309.88	13.869		
15,000.00	7,233.82	7,233.82	7,233.82	222.81	250.81	88.80	2,258.97	-3,630.46	4,396.13	4,086.49	309.64	14.198		
15,100.00	7,233.44	7,233.44	7,233.44	225.63	250.80	88.77	2,258.97	-3,630.46	4,494.57	4,185.16	309.41	14.526		
15,200.00	7,233.06	7,233.06	7,233.06	228.45	250.78	88.74	2,258.97	-3,630.46	4,593.08	4,283.89	309.19	14.855		
15,216.01	7,233.00	7,233.00	7,233.00	228.91	250.78	88.74	2,258.97	-3,630.46	4,608.86	4,299.71	309.16	14.908		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	40.00	3.28	3.28	-65.29	2,230.03	-4,845.81	5,334.46					
100.00	100.00	60.00	100.00	3.28	3.44	-65.29	2,230.03	-4,845.81	5,334.31	5,327.58	6.73	792.868		
200.00	200.00	160.00	200.00	3.34	5.05	-65.29	2,230.03	-4,845.81	5,334.31	5,325.92	8.39	636.002		
300.00	299.98	259.98	299.98	3.45	8.03	-59.59	2,230.03	-4,845.81	5,333.43	5,321.95	11.48	464.762		
400.00	399.84	359.84	399.84	3.61	11.30	-59.68	2,230.03	-4,845.81	5,330.78	5,315.87	14.91	357.610		
500.00	499.45	459.45	499.45	3.82	14.67	-59.84	2,230.03	-4,845.81	5,326.38	5,307.90	18.47	288.319		
600.00	598.70	558.70	598.70	4.07	18.06	-60.06	2,230.03	-4,845.81	5,320.24	5,298.13	22.11	240.597		
700.00	697.47	657.47	697.47	4.35	21.46	-60.34	2,230.03	-4,845.81	5,312.39	5,286.60	25.79	205.959		
800.00	795.62	755.62	795.62	4.67	24.85	-60.68	2,230.03	-4,845.81	5,302.87	5,273.37	29.50	179.763		
900.00	893.06	853.06	893.06	5.01	28.23	-61.09	2,230.03	-4,845.81	5,291.70	5,258.48	33.22	159.301		
1,000.00	989.64	949.64	989.64	5.38	31.58	-61.55	2,230.03	-4,845.81	5,278.95	5,242.00	36.94	142.898		
1,100.00	1,085.42	1,045.42	1,085.42	5.78	34.90	-61.93	2,230.03	-4,845.81	5,264.89	5,224.22	40.67	129.465		
1,200.00	1,181.09	1,141.09	1,181.09	6.20	38.23	-62.20	2,230.03	-4,845.81	5,250.78	5,206.37	44.41	118.239		
1,300.00	1,276.76	1,236.76	1,276.76	6.65	41.56	-62.48	2,230.03	-4,845.81	5,236.79	5,188.62	48.17	108.718		
1,400.00	1,372.43	1,332.43	1,372.43	7.11	44.89	-62.75	2,230.03	-4,845.81	5,222.93	5,170.99	51.94	100.550		
1,500.00	1,468.10	1,428.10	1,468.10	7.57	48.22	-63.02	2,230.03	-4,845.81	5,209.19	5,153.46	55.73	93.471		
1,600.00	1,563.77	1,523.77	1,563.77	8.05	51.55	-63.30	2,230.03	-4,845.81	5,195.59	5,136.06	59.53	87.280		
1,700.00	1,659.44	1,619.44	1,659.44	8.53	54.89	-63.58	2,230.03	-4,845.81	5,182.10	5,118.77	63.33	81.822		
1,800.00	1,755.11	1,715.11	1,755.11	9.02	58.22	-63.86	2,230.03	-4,845.81	5,168.75	5,101.60	67.15	76.976		
1,900.00	1,850.78	1,810.78	1,850.78	9.52	61.56	-64.14	2,230.03	-4,845.81	5,155.53	5,084.56	70.97	72.647		
2,000.00	1,946.45	1,906.45	1,946.45	10.02	64.89	-64.42	2,230.03	-4,845.81	5,142.44	5,067.65	74.79	68.757		
2,100.00	2,042.12	2,002.12	2,042.12	10.52	68.23	-64.70	2,230.03	-4,845.81	5,129.48	5,050.86	78.62	65.243		
2,200.00	2,137.78	2,102.22	2,137.78	11.03	71.72	-64.99	2,230.03	-4,845.81	5,116.65	5,034.04	82.61	61.938		
2,300.00	2,233.45	2,206.55	2,233.45	11.54	75.36	-65.27	2,230.03	-4,845.81	5,103.96	5,017.21	86.75	58.836		
2,400.00	2,329.12	2,289.12	2,329.12	12.05	78.24	-65.56	2,230.03	-4,845.81	5,091.40	5,001.26	90.13	56.488		
2,500.00	2,424.79	2,384.79	2,424.79	12.56	81.57	-65.85	2,230.03	-4,845.81	5,078.97	4,985.00	93.98	54.045		
2,600.00	2,520.46	2,480.46	2,520.46	13.08	84.91	-66.14	2,230.03	-4,845.81	5,066.69	4,968.87	97.82	51.795		
2,700.00	2,616.13	2,576.13	2,616.13	13.60	88.25	-66.43	2,230.03	-4,845.81	5,054.54	4,952.87	101.67	49.715		
2,800.00	2,711.80	2,671.80	2,711.80	14.12	91.59	-66.72	2,230.03	-4,845.81	5,042.53	4,937.01	105.52	47.787		
2,900.00	2,807.47	2,767.47	2,807.47	14.64	94.92	-67.01	2,230.03	-4,845.81	5,030.66	4,921.29	109.37	45.995		
3,000.00	2,903.14	2,863.14	2,903.14	15.16	98.26	-67.31	2,230.03	-4,845.81	5,018.93	4,905.70	113.23	44.326		
3,100.00	2,998.81	2,958.81	2,998.81	15.68	101.60	-67.60	2,230.03	-4,845.81	5,007.34	4,890.26	117.08	42.767		
3,200.00	3,094.48	3,054.48	3,094.48	16.21	104.94	-67.90	2,230.03	-4,845.81	4,995.90	4,874.96	120.94	41.309		
3,300.00	3,190.15	3,150.15	3,190.15	16.73	108.28	-68.20	2,230.03	-4,845.81	4,984.60	4,859.80	124.80	39.941		
3,400.00	3,285.82	3,245.82	3,285.82	17.26	111.61	-68.50	2,230.03	-4,845.81	4,973.44	4,844.78	128.66	38.656		
3,500.00	3,381.49	3,341.49	3,381.49	17.78	114.95	-68.80	2,230.03	-4,845.81	4,962.43	4,829.91	132.52	37.446		
3,600.00	3,477.16	3,437.16	3,477.16	18.31	118.29	-69.10	2,230.03	-4,845.81	4,951.57	4,815.18	136.38	36.306		
3,700.00	3,572.83	3,532.83	3,572.83	18.84	121.63	-69.40	2,230.03	-4,845.81	4,940.85	4,800.60	140.25	35.230		
3,800.00	3,668.50	3,628.50	3,668.50	19.37	124.97	-69.71	2,230.03	-4,845.81	4,930.28	4,786.17	144.11	34.211		
3,900.00	3,764.17	3,724.17	3,764.17	19.89	128.31	-70.01	2,230.03	-4,845.81	4,919.86	4,771.89	147.98	33.247		
4,000.00	3,859.84	3,819.84	3,859.84	20.42	131.65	-70.32	2,230.03	-4,845.81	4,909.60	4,757.75	151.84	32.333		
4,100.00	3,955.51	3,915.51	3,955.51	20.95	134.98	-70.63	2,230.03	-4,845.81	4,899.48	4,743.77	155.71	31.465		
4,200.00	4,051.18	4,011.18	4,051.18	21.48	138.32	-70.94	2,230.03	-4,845.81	4,889.52	4,729.94	159.58	30.640		
4,300.00	4,146.85	4,106.85	4,146.85	22.01	141.66	-71.25	2,230.03	-4,845.81	4,879.71	4,716.26	163.45	29.855		
4,400.00	4,242.52	4,202.52	4,242.52	22.55	145.00	-71.56	2,230.03	-4,845.81	4,870.05	4,702.73	167.32	29.106		
4,500.00	4,338.19	4,301.81	4,338.19	23.08	148.47	-71.87	2,230.03	-4,845.81	4,860.55	4,689.23	171.32	28.372		
4,600.00	4,433.86	4,406.14	4,433.86	23.61	152.11	-72.19	2,230.03	-4,845.81	4,851.20	4,675.71	175.49	27.644		
4,700.00	4,529.53	4,489.53	4,529.53	24.14	155.02	-72.50	2,230.03	-4,845.81	4,842.01	4,663.08	178.93	27.061		
4,800.00	4,625.19	4,585.19	4,625.19	24.67	158.36	-72.82	2,230.03	-4,845.81	4,832.98	4,650.18	182.80	26.438		
4,900.00	4,720.86	4,680.86	4,720.86	25.21	161.70	-73.14	2,230.03	-4,845.81	4,824.11	4,637.43	186.68	25.842		
5,000.00	4,816.53	4,776.53	4,816.53	25.74	165.04	-73.46	2,230.03	-4,845.81	4,815.40	4,624.85	190.55	25.271		
5,100.00	4,912.20	4,872.20	4,912.20	26.27	168.38	-73.77	2,230.03	-4,845.81	4,806.85	4,612.42	194.42	24.723		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	4,967.87	5,007.87	26.80	171.71	-74.09	2,230.03	-4,845.81	4,798.46	4,600.16	198.30	24.198		
5,300.00	5,103.54	5,063.54	5,103.54	27.34	175.05	-74.42	2,230.03	-4,845.81	4,790.23	4,588.05	202.17	23.694		
5,400.00	5,199.22	5,159.22	5,199.22	27.87	178.39	-74.72	2,230.03	-4,845.81	4,782.17	4,576.12	206.05	23.209		
5,500.00	5,295.46	5,255.46	5,295.46	28.39	181.75	-74.88	2,230.03	-4,845.81	4,774.80	4,564.87	209.93	22.744		
5,600.00	5,392.60	5,352.60	5,392.60	28.89	185.14	-75.03	2,230.03	-4,845.81	4,768.47	4,554.64	213.83	22.301		
5,700.00	5,490.50	5,450.50	5,490.50	29.37	188.56	-75.16	2,230.03	-4,845.81	4,763.13	4,545.40	217.73	21.877		
5,800.00	5,589.05	5,549.05	5,589.05	29.83	192.00	-75.27	2,230.03	-4,845.81	4,758.75	4,537.12	221.63	21.472		
5,900.00	5,688.14	5,648.14	5,688.14	30.26	195.46	-75.36	2,230.03	-4,845.81	4,755.30	4,529.78	225.52	21.086		
6,000.00	5,787.63	5,747.63	5,787.63	30.68	198.93	-75.42	2,230.03	-4,845.81	4,752.77	4,523.36	229.41	20.717		
6,100.00	5,887.41	5,847.41	5,887.41	31.07	202.41	-75.47	2,230.03	-4,845.81	4,751.13	4,517.84	233.29	20.366		
6,200.00	5,987.36	5,947.36	5,987.36	31.44	205.90	-75.49	2,230.03	-4,845.81	4,750.37	4,513.21	237.15	20.031		
6,297.97	6,085.32	6,045.32	6,085.32	31.79	209.32	-75.50	2,230.03	-4,845.81	4,750.20	4,509.28	240.92	19.717		
6,300.00	6,087.36	6,047.36	6,087.36	31.80	209.39	-81.22	2,230.03	-4,845.81	4,750.31	4,509.31	241.00	19.711		
6,400.00	6,187.36	6,147.36	6,187.36	32.15	212.88	-81.22	2,230.03	-4,845.81	4,750.31	4,505.46	244.85	19.401		
6,500.00	6,287.36	6,247.36	6,287.36	32.51	216.38	-81.22	2,230.03	-4,845.81	4,750.31	4,501.61	248.69	19.101		
6,600.00	6,387.36	6,347.36	6,387.36	32.87	219.87	-81.22	2,230.03	-4,845.81	4,750.31	4,497.76	252.55	18.810		
6,700.00	6,487.36	6,447.36	6,487.36	33.23	223.36	-81.22	2,230.03	-4,845.81	4,750.31	4,493.91	256.40	18.527		
6,800.00	6,587.36	6,547.36	6,587.36	33.59	226.85	-81.22	2,230.03	-4,845.81	4,750.31	4,490.05	260.25	18.253		
6,900.00	6,687.26	6,647.26	6,687.26	33.95	230.33	9.28	2,230.03	-4,845.81	4,747.23	4,483.13	264.10	17.975		
7,000.00	6,785.58	6,745.58	6,785.58	34.31	233.77	9.57	2,230.03	-4,845.81	4,729.83	4,461.93	267.90	17.655		
7,100.00	6,879.94	6,839.94	6,879.94	34.65	237.06	10.17	2,230.03	-4,845.81	4,697.46	4,425.92	271.53	17.300		
7,200.00	6,968.01	6,928.01	6,968.01	34.97	240.13	11.15	2,230.03	-4,845.81	4,650.93	4,376.01	274.92	16.917		
7,300.00	7,047.61	7,007.61	7,047.61	35.27	242.91	12.69	2,230.03	-4,845.81	4,591.40	4,313.43	277.97	16.518		
7,400.00	7,116.80	7,076.80	7,116.80	35.54	245.33	15.09	2,230.03	-4,845.81	4,520.35	4,239.75	280.60	16.110		
7,500.00	7,173.86	7,133.86	7,173.86	35.81	247.32	19.02	2,230.03	-4,845.81	4,439.55	4,156.80	282.75	15.701		
7,600.00	7,217.38	7,177.38	7,217.38	36.17	248.84	26.04	2,230.03	-4,845.81	4,350.99	4,066.63	284.36	15.301		
7,700.00	7,246.31	7,206.31	7,246.31	36.80	249.85	40.41	2,230.03	-4,845.81	4,256.88	3,971.47	285.41	14.915		
7,800.00	7,259.92	7,219.92	7,259.92	37.72	250.32	72.67	2,230.03	-4,845.81	4,159.55	3,873.67	285.88	14.550		
7,900.00	7,260.77	7,220.77	7,260.77	38.86	250.35	91.14	2,230.03	-4,845.81	4,061.30	3,775.43	285.88	14.206		
8,000.00	7,260.39	7,220.39	7,260.39	40.19	250.34	91.11	2,230.03	-4,845.81	3,963.12	3,677.29	285.84	13.865		
8,100.00	7,260.01	7,220.01	7,260.01	41.67	250.33	91.08	2,230.03	-4,845.81	3,865.03	3,579.23	285.81	13.523		
8,200.00	7,259.63	7,219.63	7,259.63	43.30	250.31	91.05	2,230.03	-4,845.81	3,767.05	3,481.26	285.79	13.181		
8,300.00	7,259.25	7,219.25	7,259.25	45.05	250.30	91.02	2,230.03	-4,845.81	3,669.17	3,383.38	285.79	12.839		
8,400.00	7,258.87	7,218.87	7,258.87	46.91	250.29	91.00	2,230.03	-4,845.81	3,571.41	3,285.60	285.80	12.496		
8,500.00	7,258.49	7,218.49	7,258.49	48.87	250.27	90.97	2,230.03	-4,845.81	3,473.77	3,187.93	285.84	12.153		
8,600.00	7,258.11	7,218.11	7,258.11	50.92	250.26	90.94	2,230.03	-4,845.81	3,376.27	3,090.37	285.90	11.809		
8,700.00	7,257.73	7,217.73	7,257.73	53.04	250.25	90.91	2,230.03	-4,845.81	3,278.93	2,992.94	285.99	11.465		
8,800.00	7,257.35	7,217.35	7,257.35	55.23	250.23	90.88	2,230.03	-4,845.81	3,181.75	2,895.64	286.11	11.121		
8,900.00	7,256.97	7,216.97	7,256.97	57.47	250.22	90.85	2,230.03	-4,845.81	3,084.75	2,798.49	286.26	10.776		
9,000.00	7,256.59	7,216.59	7,256.59	59.77	250.21	90.82	2,230.03	-4,845.81	2,987.95	2,701.49	286.46	10.431		
9,100.00	7,256.21	7,216.21	7,256.21	62.12	250.19	90.80	2,230.03	-4,845.81	2,891.36	2,604.66	286.71	10.085		
9,200.00	7,255.83	7,215.83	7,255.83	64.50	250.18	90.77	2,230.03	-4,845.81	2,795.02	2,508.01	287.01	9.738		
9,300.00	7,255.45	7,215.45	7,255.45	66.93	250.17	90.74	2,230.03	-4,845.81	2,698.94	2,411.56	287.38	9.392		
9,400.00	7,255.07	7,215.07	7,255.07	69.38	250.15	90.71	2,230.03	-4,845.81	2,603.15	2,315.33	287.82	9.044		
9,500.00	7,254.69	7,214.69	7,254.69	71.87	250.14	90.68	2,230.03	-4,845.81	2,507.70	2,219.34	288.36	8.697		
9,600.00	7,254.31	7,214.31	7,254.31	74.38	250.13	90.65	2,230.03	-4,845.81	2,412.61	2,123.62	288.99	8.348		
9,700.00	7,253.93	7,213.93	7,253.93	76.92	250.11	90.63	2,230.03	-4,845.81	2,317.94	2,028.19	289.75	8.000		
9,800.00	7,253.55	7,213.55	7,253.55	79.48	250.10	90.60	2,230.03	-4,845.81	2,223.73	1,933.10	290.64	7.651		
9,900.00	7,253.18	7,213.18	7,253.18	82.06	250.09	90.57	2,230.03	-4,845.81	2,130.06	1,838.37	291.69	7.303		
10,000.00	7,252.80	7,212.80	7,252.80	84.65	250.08	90.54	2,230.03	-4,845.81	2,036.98	1,744.06	292.92	6.954		
10,100.00	7,252.42	7,212.42	7,252.42	87.27	250.06	90.51	2,230.03	-4,845.81	1,944.59	1,650.23	294.36	6.606		
10,200.00	7,252.04	7,212.04	7,252.04	89.89	250.05	90.48	2,230.03	-4,845.81	1,852.99	1,556.95	296.04	6.259		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,251.66	7,211.66	7,251.66	92.54	250.04	90.45	2,230.03	-4,845.81	1,762.30	1,464.30	298.00	5.914		
10,400.00	7,251.28	7,211.28	7,251.28	95.19	250.02	90.43	2,230.03	-4,845.81	1,672.68	1,372.39	300.29	5.570		
10,500.00	7,250.90	7,210.90	7,250.90	97.86	250.01	90.40	2,230.03	-4,845.81	1,584.30	1,281.36	302.94	5.230		
10,600.00	7,250.52	7,210.52	7,250.52	100.53	250.00	90.37	2,230.03	-4,845.81	1,497.38	1,191.38	306.00	4.893		
10,700.00	7,250.14	7,210.14	7,250.14	103.22	249.98	90.34	2,230.03	-4,845.81	1,412.19	1,102.65	309.54	4.562		
10,800.00	7,249.76	7,209.76	7,249.76	105.91	249.97	90.31	2,230.03	-4,845.81	1,329.07	1,015.45	313.62	4.238		
10,900.00	7,249.38	7,209.38	7,249.38	108.62	249.96	90.28	2,230.03	-4,845.81	1,248.43	930.14	318.29	3.922		
11,000.00	7,249.00	7,209.00	7,249.00	111.33	249.94	90.25	2,230.03	-4,845.81	1,170.77	847.17	323.61	3.618		
11,100.00	7,248.62	7,208.62	7,248.62	114.04	249.93	90.23	2,230.03	-4,845.81	1,096.75	767.12	329.63	3.327		
11,200.00	7,248.24	7,208.24	7,248.24	116.77	249.92	90.20	2,230.03	-4,845.81	1,027.13	690.78	336.35	3.054		
11,300.00	7,247.86	7,207.86	7,247.86	119.50	249.90	90.17	2,230.03	-4,845.81	962.88	619.13	343.74	2.801		
11,400.00	7,247.48	7,207.48	7,247.48	122.24	249.89	90.14	2,230.03	-4,845.81	905.14	553.47	351.67	2.574		
11,500.00	7,247.10	7,207.10	7,247.10	124.98	249.88	90.11	2,230.03	-4,845.81	855.23	495.34	359.88	2.376		
11,600.00	7,246.72	7,206.72	7,246.72	127.73	249.86	90.08	2,230.03	-4,845.81	814.59	446.62	367.97	2.214		
11,700.00	7,246.34	7,206.34	7,246.34	130.48	249.85	90.05	2,230.03	-4,845.81	784.66	409.28	375.38	2.090		
11,800.00	7,245.96	7,205.96	7,245.96	133.24	249.84	90.03	2,230.03	-4,845.81	766.70	385.21	381.50	2.010		
11,889.31	7,245.63	7,205.63	7,245.63	135.70	249.82	90.00	2,230.03	-4,845.81	761.48	376.07	385.41	1.976 CC		
11,900.00	7,245.58	7,205.58	7,245.58	136.00	249.82	90.00	2,230.03	-4,845.81	761.56	375.79	385.77	1.974 ES, SF		
12,000.00	7,245.21	7,205.21	7,245.21	138.76	249.81	89.97	2,230.03	-4,845.81	769.49	381.60	387.89	1.984		
12,100.00	7,244.83	7,204.83	7,244.83	141.53	249.80	89.94	2,230.03	-4,845.81	790.09	402.22	387.88	2.037		
12,200.00	7,244.45	7,204.45	7,244.45	144.30	249.78	89.91	2,230.03	-4,845.81	822.43	436.39	386.04	2.130		
12,300.00	7,244.07	7,204.07	7,244.07	147.08	249.77	89.88	2,230.03	-4,845.81	865.17	482.33	382.84	2.260		
12,400.00	7,243.69	7,203.69	7,243.69	149.86	249.76	89.85	2,230.03	-4,845.81	916.88	538.09	378.78	2.421		
12,500.00	7,243.31	7,203.31	7,243.31	152.64	249.74	89.83	2,230.03	-4,845.81	976.11	601.83	374.28	2.608		
12,600.00	7,242.93	7,202.93	7,242.93	155.42	249.73	89.80	2,230.03	-4,845.81	1,041.60	671.95	369.66	2.818		
12,700.00	7,242.55	7,202.55	7,242.55	158.21	249.72	89.77	2,230.03	-4,845.81	1,112.24	747.12	365.12	3.046		
12,800.00	7,242.17	7,202.17	7,242.17	161.00	249.70	89.74	2,230.03	-4,845.81	1,187.10	826.32	360.78	3.290		
12,900.00	7,241.79	7,201.79	7,241.79	163.79	249.69	89.71	2,230.03	-4,845.81	1,265.44	908.72	356.72	3.547		
13,000.00	7,241.41	7,201.41	7,241.41	166.58	249.68	89.68	2,230.03	-4,845.81	1,346.66	993.69	352.96	3.815		
13,100.00	7,241.03	7,201.03	7,241.03	169.38	249.66	89.65	2,230.03	-4,845.81	1,430.25	1,080.74	349.51	4.092		
13,200.00	7,240.65	7,200.65	7,240.65	172.18	249.65	89.63	2,230.03	-4,845.81	1,515.83	1,169.49	346.35	4.377		
13,300.00	7,240.27	7,200.27	7,240.27	174.98	249.64	89.60	2,230.03	-4,845.81	1,603.09	1,259.63	343.46	4.667		
13,400.00	7,239.89	7,200.11	7,239.89	177.78	249.63	89.57	2,230.03	-4,845.81	1,691.75	1,350.92	340.83	4.964		
13,500.00	7,239.51	7,200.49	7,239.51	180.58	249.65	89.54	2,230.03	-4,845.81	1,781.62	1,443.17	338.45	5.264		
13,600.00	7,239.13	7,200.87	7,239.13	183.39	249.66	89.51	2,230.03	-4,845.81	1,872.51	1,536.23	336.28	5.568		
13,700.00	7,238.75	7,201.25	7,238.75	186.20	249.67	89.48	2,230.03	-4,845.81	1,964.29	1,630.00	334.29	5.876		
13,800.00	7,238.37	7,201.63	7,238.37	189.00	249.69	89.45	2,230.03	-4,845.81	2,056.83	1,724.36	332.47	6.186		
13,900.00	7,237.99	7,202.01	7,237.99	191.81	249.70	89.43	2,230.03	-4,845.81	2,150.04	1,819.24	330.81	6.499		
14,000.00	7,237.62	7,202.39	7,237.62	194.63	249.71	89.40	2,230.03	-4,845.81	2,243.84	1,914.56	329.28	6.814		
14,100.00	7,237.24	7,202.76	7,237.24	197.44	249.73	89.37	2,230.03	-4,845.81	2,338.15	2,010.28	327.87	7.131		
14,200.00	7,236.86	7,203.14	7,236.86	200.25	249.74	89.34	2,230.03	-4,845.81	2,432.92	2,106.34	326.58	7.450		
14,300.00	7,236.48	7,203.52	7,236.48	203.07	249.75	89.31	2,230.03	-4,845.81	2,528.09	2,202.71	325.38	7.770		
14,400.00	7,236.10	7,203.90	7,236.10	205.88	249.76	89.28	2,230.03	-4,845.81	2,623.61	2,299.34	324.27	8.091		
14,500.00	7,235.72	7,204.28	7,235.72	208.70	249.78	89.25	2,230.03	-4,845.81	2,719.46	2,396.21	323.25	8.413		
14,600.00	7,235.34	7,204.66	7,235.34	211.52	249.79	89.23	2,230.03	-4,845.81	2,815.60	2,493.30	322.30	8.736		
14,700.00	7,234.96	7,205.04	7,234.96	214.34	249.80	89.20	2,230.03	-4,845.81	2,912.00	2,590.58	321.42	9.060		
14,800.00	7,234.58	7,205.42	7,234.58	217.16	249.82	89.17	2,230.03	-4,845.81	3,008.63	2,688.03	320.60	9.384		
14,900.00	7,234.20	7,205.80	7,234.20	219.98	249.83	89.14	2,230.03	-4,845.81	3,105.48	2,785.64	319.84	9.710		
15,000.00	7,233.82	7,206.18	7,233.82	222.81	249.84	89.11	2,230.03	-4,845.81	3,202.52	2,883.40	319.13	10.035		
15,100.00	7,233.44	7,206.56	7,233.44	225.63	249.86	89.08	2,230.03	-4,845.81	3,299.74	2,981.28	318.46	10.362		
15,200.00	7,233.06	7,206.94	7,233.06	228.45	249.87	89.05	2,230.03	-4,845.81	3,397.12	3,079.28	317.84	10.688		
15,216.01	7,233.00	7,207.00	7,233.00	228.91	249.87	89.05	2,230.03	-4,845.81	3,412.72	3,094.98	317.74	10.740		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	67.00	3.28	3.28	-124.66	-4,391.60	-6,352.93	7,723.36					
100.00	100.00	33.00	100.00	3.28	3.33	-124.66	-4,391.60	-6,352.93	7,723.07	7,716.45	6.61	1,167.523		
200.00	200.00	133.00	200.00	3.34	4.38	-124.66	-4,391.60	-6,352.93	7,723.07	7,715.36	7.71	1,001.232		
300.00	299.98	232.98	299.98	3.45	7.18	-118.92	-4,391.60	-6,352.93	7,723.91	7,713.29	10.63	726.913		
400.00	399.84	332.84	399.84	3.61	10.40	-118.91	-4,391.60	-6,352.93	7,726.45	7,712.44	14.01	551.552		
500.00	499.45	432.45	499.45	3.82	13.75	-118.89	-4,391.60	-6,352.93	7,730.67	7,713.11	17.56	440.302		
600.00	598.70	531.70	598.70	4.07	17.13	-118.87	-4,391.60	-6,352.93	7,736.59	7,715.40	21.19	365.133		
700.00	697.47	630.47	697.47	4.35	20.53	-118.83	-4,391.60	-6,352.93	7,744.21	7,719.34	24.87	311.441		
800.00	795.62	728.62	795.62	4.67	23.92	-118.79	-4,391.60	-6,352.93	7,753.54	7,724.97	28.57	271.383		
900.00	893.06	826.06	893.06	5.01	27.29	-118.74	-4,391.60	-6,352.93	7,764.58	7,732.29	32.29	240.464		
1,000.00	989.64	922.64	989.64	5.38	30.64	-118.67	-4,391.60	-6,352.93	7,777.35	7,741.33	36.02	215.946		
1,100.00	1,085.42	1,018.42	1,085.42	5.78	33.97	-118.74	-4,391.60	-6,352.93	7,791.60	7,751.86	39.74	196.058		
1,200.00	1,181.09	1,114.09	1,181.09	6.20	37.29	-118.92	-4,391.60	-6,352.93	7,806.12	7,762.64	43.48	179.514		
1,300.00	1,276.76	1,209.76	1,276.76	6.65	40.62	-119.10	-4,391.60	-6,352.93	7,820.72	7,773.47	47.25	165.533		
1,400.00	1,372.43	1,305.43	1,372.43	7.11	43.95	-119.28	-4,391.60	-6,352.93	7,835.40	7,784.38	51.02	153.572		
1,500.00	1,468.10	1,401.10	1,468.10	7.57	47.28	-119.46	-4,391.60	-6,352.93	7,850.16	7,795.35	54.81	143.230		
1,600.00	1,563.77	1,503.23	1,563.77	8.05	50.84	-119.64	-4,391.60	-6,352.93	7,865.00	7,806.17	58.83	133.690		
1,700.00	1,659.44	1,607.56	1,659.44	8.53	54.47	-119.82	-4,391.60	-6,352.93	7,879.92	7,816.98	62.94	125.205		
1,800.00	1,755.11	1,688.11	1,755.11	9.02	57.28	-119.99	-4,391.60	-6,352.93	7,894.91	7,828.69	66.22	119.222		
1,900.00	1,850.78	1,783.78	1,850.78	9.52	60.62	-120.17	-4,391.60	-6,352.93	7,909.99	7,839.95	70.04	112.941		
2,000.00	1,946.45	1,879.45	1,946.45	10.02	63.95	-120.35	-4,391.60	-6,352.93	7,925.15	7,851.29	73.86	107.303		
2,100.00	2,042.12	1,975.12	2,042.12	10.52	67.29	-120.52	-4,391.60	-6,352.93	7,940.38	7,862.70	77.68	102.215		
2,200.00	2,137.78	2,070.78	2,137.78	11.03	70.62	-120.70	-4,391.60	-6,352.93	7,955.69	7,874.18	81.51	97.602		
2,300.00	2,233.45	2,166.45	2,233.45	11.54	73.96	-120.87	-4,391.60	-6,352.93	7,971.08	7,885.73	85.34	93.400		
2,400.00	2,329.12	2,262.12	2,329.12	12.05	77.30	-121.05	-4,391.60	-6,352.93	7,986.54	7,897.36	89.18	89.558		
2,500.00	2,424.79	2,357.79	2,424.79	12.56	80.63	-121.22	-4,391.60	-6,352.93	8,002.08	7,909.07	93.01	86.031		
2,600.00	2,520.46	2,453.46	2,520.46	13.08	83.97	-121.39	-4,391.60	-6,352.93	8,017.69	7,920.84	96.85	82.783		
2,700.00	2,616.13	2,549.13	2,616.13	13.60	87.31	-121.56	-4,391.60	-6,352.93	8,033.38	7,932.69	100.69	79.782		
2,800.00	2,711.80	2,644.80	2,711.80	14.12	90.64	-121.73	-4,391.60	-6,352.93	8,049.15	7,944.62	104.53	77.001		
2,900.00	2,807.47	2,740.47	2,807.47	14.64	93.98	-121.90	-4,391.60	-6,352.93	8,064.99	7,956.61	108.37	74.418		
3,000.00	2,903.14	2,836.14	2,903.14	15.16	97.32	-122.07	-4,391.60	-6,352.93	8,080.90	7,968.68	112.22	72.011		
3,100.00	2,998.81	2,931.81	2,998.81	15.68	100.66	-122.24	-4,391.60	-6,352.93	8,096.89	7,980.83	116.06	69.763		
3,200.00	3,094.48	3,027.48	3,094.48	16.21	104.00	-122.41	-4,391.60	-6,352.93	8,112.95	7,993.04	119.91	67.660		
3,300.00	3,190.15	3,123.15	3,190.15	16.73	107.33	-122.58	-4,391.60	-6,352.93	8,129.08	8,005.33	123.75	65.687		
3,400.00	3,285.82	3,218.82	3,285.82	17.26	110.67	-122.75	-4,391.60	-6,352.93	8,145.28	8,017.68	127.60	63.834		
3,500.00	3,381.49	3,314.49	3,381.49	17.78	114.01	-122.91	-4,391.60	-6,352.93	8,161.56	8,030.11	131.45	62.090		
3,600.00	3,477.16	3,410.16	3,477.16	18.31	117.35	-123.08	-4,391.60	-6,352.93	8,177.91	8,042.61	135.30	60.445		
3,700.00	3,572.83	3,505.83	3,572.83	18.84	120.69	-123.24	-4,391.60	-6,352.93	8,194.32	8,055.18	139.14	58.891		
3,800.00	3,668.50	3,601.50	3,668.50	19.37	124.03	-123.41	-4,391.60	-6,352.93	8,210.81	8,067.82	142.99	57.421		
3,900.00	3,764.17	3,702.83	3,764.17	19.89	127.56	-123.57	-4,391.60	-6,352.93	8,227.37	8,080.33	147.04	55.954		
4,000.00	3,859.84	3,807.16	3,859.84	20.42	131.20	-123.74	-4,391.60	-6,352.93	8,244.00	8,092.81	151.19	54.527		
4,100.00	3,955.51	3,888.51	3,955.51	20.95	134.04	-123.90	-4,391.60	-6,352.93	8,260.69	8,106.15	154.54	53.453		
4,200.00	4,051.18	3,984.18	4,051.18	21.48	137.38	-124.06	-4,391.60	-6,352.93	8,277.46	8,119.07	158.39	52.260		
4,300.00	4,146.85	4,079.85	4,146.85	22.01	140.72	-124.22	-4,391.60	-6,352.93	8,294.29	8,132.05	162.24	51.124		
4,400.00	4,242.52	4,175.52	4,242.52	22.55	144.06	-124.38	-4,391.60	-6,352.93	8,311.19	8,145.10	166.09	50.040		
4,500.00	4,338.19	4,271.19	4,338.19	23.08	147.40	-124.55	-4,391.60	-6,352.93	8,328.16	8,158.22	169.94	49.007		
4,600.00	4,433.86	4,366.86	4,433.86	23.61	150.74	-124.71	-4,391.60	-6,352.93	8,345.20	8,171.41	173.79	48.019		
4,700.00	4,529.53	4,462.00	4,519.00	24.14	153.71	-124.85	-4,391.60	-6,352.93	8,362.31	8,185.04	177.27	47.173		
4,800.00	4,625.19	4,452.00	4,519.00	24.67	153.71	-124.85	-4,391.60	-6,352.93	8,380.14	8,202.41	177.73	47.152		
4,900.00	4,720.86	4,452.00	4,519.00	25.21	153.71	-124.85	-4,391.60	-6,352.93	8,399.13	8,220.97	178.16	47.143		
5,000.00	4,816.53	4,452.00	4,519.00	25.74	153.71	-124.85	-4,391.60	-6,352.93	8,419.26	8,240.69	178.57	47.148		
5,100.00	4,912.20	4,452.00	4,519.00	26.27	153.71	-124.85	-4,391.60	-6,352.93	8,440.53	8,261.57	178.96	47.165		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	4,452.00	4,519.00	26.80	153.71	-124.85	-4,391.60	-6,352.93	8,462.93	8,283.61	179.32	47.195		
5,300.00	5,103.54	4,452.00	4,519.00	27.34	153.71	-124.85	-4,391.60	-6,352.93	8,486.45	8,306.79	179.65	47.238		
5,400.00	5,199.22	4,452.00	4,519.00	27.87	153.71	-124.89	-4,391.60	-6,352.93	8,511.07	8,331.10	179.97	47.293		
5,500.00	5,295.46	4,452.00	4,519.00	28.39	153.71	-125.30	-4,391.60	-6,352.93	8,535.65	8,355.40	180.24	47.356		
5,600.00	5,392.60	4,452.00	4,519.00	28.89	153.71	-125.70	-4,391.60	-6,352.93	8,559.38	8,378.90	180.48	47.425		
5,700.00	5,490.50	4,452.00	4,519.00	29.37	153.71	-126.08	-4,391.60	-6,352.93	8,582.23	8,401.55	180.68	47.501		
5,800.00	5,589.05	4,452.00	4,519.00	29.83	153.71	-126.44	-4,391.60	-6,352.93	8,604.19	8,423.36	180.83	47.582		
5,900.00	5,688.14	4,452.00	4,519.00	30.26	153.71	-126.79	-4,391.60	-6,352.93	8,625.23	8,444.29	180.94	47.670		
6,000.00	5,787.63	4,452.00	4,519.00	30.68	153.71	-127.12	-4,391.60	-6,352.93	8,645.33	8,464.32	181.01	47.763		
6,100.00	5,887.41	4,452.00	4,519.00	31.07	153.71	-127.43	-4,391.60	-6,352.93	8,664.48	8,483.45	181.03	47.862		
6,200.00	5,987.36	4,452.00	4,519.00	31.44	153.71	-127.72	-4,391.60	-6,352.93	8,682.66	8,501.65	181.02	47.966		
6,300.00	6,087.36	4,452.00	4,519.00	31.80	153.71	-133.56	-4,391.60	-6,352.93	8,700.28	8,519.31	180.97	48.077		
6,400.00	6,187.36	4,452.00	4,519.00	32.15	153.71	-133.56	-4,391.60	-6,352.93	8,718.86	8,537.97	180.89	48.199		
6,500.00	6,287.36	4,452.00	4,519.00	32.51	153.71	-133.56	-4,391.60	-6,352.93	8,738.55	8,557.74	180.80	48.332		
6,600.00	6,387.36	4,452.00	4,519.00	32.87	153.71	-133.56	-4,391.60	-6,352.93	8,759.33	8,578.64	180.69	48.477		
6,700.00	6,487.36	4,452.00	4,519.00	33.23	153.71	-133.56	-4,391.60	-6,352.93	8,781.20	8,600.65	180.56	48.634		
6,800.00	6,587.36	4,452.00	4,519.00	33.59	153.71	-133.56	-4,391.60	-6,352.93	8,804.16	8,623.75	180.41	48.802		
6,900.00	6,687.26	4,452.00	4,519.00	33.95	153.71	-42.29	-4,391.60	-6,352.93	8,825.96	8,645.74	180.22	48.973		
7,000.00	6,785.58	4,452.00	4,519.00	34.31	153.71	-41.55	-4,391.60	-6,352.93	8,838.19	8,658.19	180.01	49.099		
7,100.00	6,879.94	4,452.00	4,519.00	34.65	153.71	-41.45	-4,391.60	-6,352.93	8,839.85	8,660.06	179.79	49.169		
7,200.00	6,968.01	4,452.00	4,519.00	34.97	153.71	-41.99	-4,391.60	-6,352.93	8,830.88	8,651.31	179.57	49.178		
7,300.00	7,047.61	4,452.00	4,519.00	35.27	153.71	-43.20	-4,391.60	-6,352.93	8,811.49	8,632.11	179.38	49.121		
7,400.00	7,116.80	4,452.00	4,519.00	35.54	153.71	-45.13	-4,391.60	-6,352.93	8,782.08	8,602.83	179.25	48.992		
7,500.00	7,173.86	4,452.00	4,519.00	35.81	153.71	-47.88	-4,391.60	-6,352.93	8,743.29	8,564.06	179.22	48.784		
7,600.00	7,217.38	4,452.00	4,519.00	36.17	153.71	-51.58	-4,391.60	-6,352.93	8,695.94	8,516.61	179.32	48.493		
7,700.00	7,246.31	4,452.00	4,519.00	36.80	153.71	-56.36	-4,391.60	-6,352.93	8,641.07	8,461.48	179.59	48.117		
7,800.00	7,259.92	4,452.00	4,519.00	37.72	153.71	-62.34	-4,391.60	-6,352.93	8,579.91	8,399.88	180.02	47.660		
7,900.00	7,260.77	4,452.00	4,519.00	38.86	153.71	-65.05	-4,391.60	-6,352.93	8,514.69	8,334.07	180.62	47.140		
8,000.00	7,260.39	4,452.00	4,519.00	40.19	153.71	-65.05	-4,391.60	-6,352.93	8,449.75	8,268.42	181.34	46.597		
8,100.00	7,260.01	4,452.00	4,519.00	41.67	153.71	-65.05	-4,391.60	-6,352.93	8,385.50	8,203.34	182.16	46.035		
8,200.00	7,259.63	4,452.00	4,519.00	43.30	153.71	-65.05	-4,391.60	-6,352.93	8,321.95	8,138.88	183.08	45.456		
8,300.00	7,259.25	4,452.00	4,519.00	45.05	153.71	-65.05	-4,391.60	-6,352.93	8,259.13	8,075.03	184.10	44.862		
8,400.00	7,258.87	4,452.00	4,519.00	46.91	153.71	-65.05	-4,391.60	-6,352.93	8,197.04	8,011.82	185.22	44.256		
8,500.00	7,258.49	4,452.00	4,519.00	48.87	153.71	-65.05	-4,391.60	-6,352.93	8,135.71	7,949.28	186.43	43.639		
8,600.00	7,258.11	4,452.00	4,519.00	50.92	153.71	-65.05	-4,391.60	-6,352.93	8,075.15	7,887.42	187.73	43.015		
8,700.00	7,257.73	4,452.00	4,519.00	53.04	153.71	-65.05	-4,391.60	-6,352.93	8,015.39	7,826.27	189.11	42.384		
8,800.00	7,257.35	4,452.00	4,519.00	55.23	153.71	-65.05	-4,391.60	-6,352.93	7,956.43	7,765.85	190.58	41.749		
8,900.00	7,256.97	4,452.00	4,519.00	57.47	153.71	-65.05	-4,391.60	-6,352.93	7,898.29	7,706.17	192.12	41.112		
9,000.00	7,256.59	4,452.00	4,519.00	59.77	153.71	-65.05	-4,391.60	-6,352.93	7,841.00	7,647.27	193.73	40.474		
9,100.00	7,256.21	4,452.00	4,519.00	62.12	153.71	-65.05	-4,391.60	-6,352.93	7,784.58	7,589.16	195.41	39.836		
9,200.00	7,255.83	4,452.00	4,519.00	64.50	153.71	-65.05	-4,391.60	-6,352.93	7,729.03	7,531.87	197.16	39.202		
9,300.00	7,255.45	4,452.00	4,519.00	66.93	153.71	-65.05	-4,391.60	-6,352.93	7,674.39	7,475.42	198.97	38.570		
9,400.00	7,255.07	4,452.00	4,519.00	69.38	153.71	-65.05	-4,391.60	-6,352.93	7,620.66	7,419.82	200.84	37.944		
9,500.00	7,254.69	4,452.00	4,519.00	71.87	153.71	-65.05	-4,391.60	-6,352.93	7,567.88	7,365.11	202.77	37.323		
9,600.00	7,254.31	4,452.00	4,519.00	74.38	153.71	-65.05	-4,391.60	-6,352.93	7,516.06	7,311.31	204.75	36.708		
9,700.00	7,253.93	4,452.00	4,519.00	76.92	153.71	-65.05	-4,391.60	-6,352.93	7,465.21	7,258.43	206.79	36.101		
9,800.00	7,253.55	4,452.00	4,519.00	79.48	153.71	-65.05	-4,391.60	-6,352.93	7,415.37	7,206.50	208.87	35.502		
9,900.00	7,253.18	4,452.00	4,519.00	82.06	153.71	-65.05	-4,391.60	-6,352.93	7,366.55	7,155.55	211.00	34.912		
10,000.00	7,252.80	4,452.00	4,519.00	84.65	153.71	-65.05	-4,391.60	-6,352.93	7,318.77	7,105.59	213.18	34.332		
10,100.00	7,252.42	4,452.00	4,519.00	87.27	153.71	-65.05	-4,391.60	-6,352.93	7,272.04	7,056.65	215.40	33.761		
10,200.00	7,252.04	4,452.00	4,519.00	89.89	153.71	-65.05	-4,391.60	-6,352.93	7,226.40	7,008.75	217.66	33.201		
10,300.00	7,251.66	4,452.00	4,519.00	92.54	153.71	-65.05	-4,391.60	-6,352.93	7,181.87	6,961.91	219.96	32.651		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,251.28	4,452.00	4,519.00	95.19	153.71	-65.05	-4,391.60	-6,352.93	7,138.45	6,916.16	222.29	32.113		
10,500.00	7,250.90	4,452.00	4,519.00	97.86	153.71	-65.05	-4,391.60	-6,352.93	7,096.18	6,871.52	224.67	31.585		
10,600.00	7,250.52	4,452.00	4,519.00	100.53	153.71	-65.05	-4,391.60	-6,352.93	7,055.08	6,828.00	227.07	31.070		
10,700.00	7,250.14	4,452.00	4,519.00	103.22	153.71	-65.05	-4,391.60	-6,352.93	7,015.16	6,785.65	229.51	30.566		
10,800.00	7,249.76	4,452.00	4,519.00	105.91	153.71	-65.05	-4,391.60	-6,352.93	6,976.44	6,744.46	231.98	30.074		
10,900.00	7,249.38	4,452.00	4,519.00	108.62	153.71	-65.05	-4,391.60	-6,352.93	6,938.95	6,704.48	234.47	29.594		
11,000.00	7,249.00	4,452.00	4,519.00	111.33	153.71	-65.05	-4,391.60	-6,352.93	6,902.70	6,665.71	237.00	29.126		
11,100.00	7,248.62	4,452.00	4,519.00	114.04	153.71	-65.05	-4,391.60	-6,352.93	6,867.72	6,628.18	239.54	28.670		
11,200.00	7,248.24	4,452.00	4,519.00	116.77	153.71	-65.05	-4,391.60	-6,352.93	6,834.03	6,591.92	242.11	28.227		
11,300.00	7,247.86	4,452.00	4,519.00	119.50	153.71	-65.05	-4,391.60	-6,352.93	6,801.63	6,556.94	244.70	27.796		
11,400.00	7,247.48	4,452.00	4,519.00	122.24	153.71	-65.05	-4,391.60	-6,352.93	6,770.56	6,523.26	247.31	27.377		
11,500.00	7,247.10	4,452.00	4,519.00	124.98	153.71	-65.05	-4,391.60	-6,352.93	6,740.83	6,490.91	249.93	26.971		
11,600.00	7,246.72	4,452.00	4,519.00	127.73	153.71	-65.05	-4,391.60	-6,352.93	6,712.46	6,459.90	252.57	26.577		
11,700.00	7,246.34	4,452.00	4,519.00	130.48	153.71	-65.05	-4,391.60	-6,352.93	6,685.46	6,430.25	255.21	26.195		
11,800.00	7,245.96	4,452.00	4,519.00	133.24	153.71	-65.05	-4,391.60	-6,352.93	6,659.86	6,401.99	257.87	25.826		
11,900.00	7,245.58	4,452.00	4,519.00	136.00	153.71	-65.05	-4,391.60	-6,352.93	6,635.66	6,375.12	260.54	25.469		
12,000.00	7,245.21	4,452.00	4,519.00	138.76	153.71	-65.05	-4,391.60	-6,352.93	6,612.89	6,349.68	263.21	25.124		
12,100.00	7,244.83	4,452.00	4,519.00	141.53	153.71	-65.05	-4,391.60	-6,352.93	6,591.56	6,325.67	265.89	24.791		
12,200.00	7,244.45	4,452.00	4,519.00	144.30	153.71	-65.05	-4,391.60	-6,352.93	6,571.68	6,303.11	268.57	24.470		
12,300.00	7,244.07	4,452.00	4,519.00	147.08	153.71	-65.05	-4,391.60	-6,352.93	6,553.26	6,282.02	271.24	24.160		
12,400.00	7,243.69	4,452.00	4,519.00	149.86	153.71	-65.05	-4,391.60	-6,352.93	6,536.33	6,262.41	273.91	23.863		
12,500.00	7,243.31	4,452.00	4,519.00	152.64	153.71	-65.05	-4,391.60	-6,352.93	6,520.88	6,244.30	276.58	23.577		
12,600.00	7,242.93	4,452.00	4,519.00	155.42	153.71	-65.05	-4,391.60	-6,352.93	6,506.93	6,227.69	279.24	23.302		
12,700.00	7,242.55	4,452.00	4,519.00	158.21	153.71	-65.05	-4,391.60	-6,352.93	6,494.49	6,212.60	281.89	23.039		
12,800.00	7,242.17	4,452.00	4,519.00	161.00	153.71	-65.05	-4,391.60	-6,352.93	6,483.58	6,199.05	284.53	22.787		
12,900.00	7,241.79	4,452.00	4,519.00	163.79	153.71	-65.05	-4,391.60	-6,352.93	6,474.18	6,187.03	287.15	22.546		
13,000.00	7,241.41	4,452.00	4,519.00	166.58	153.71	-65.05	-4,391.60	-6,352.93	6,466.32	6,176.57	289.76	22.316		
13,100.00	7,241.03	4,452.00	4,519.00	169.38	153.71	-65.05	-4,391.60	-6,352.93	6,460.00	6,167.66	292.35	22.097		
13,200.00	7,240.65	4,452.00	4,519.00	172.18	153.71	-65.05	-4,391.60	-6,352.93	6,455.23	6,160.32	294.91	21.889		
13,300.00	7,240.27	4,452.00	4,519.00	174.98	153.71	-65.05	-4,391.60	-6,352.93	6,452.00	6,154.54	297.45	21.691		
13,400.00	7,239.89	4,452.00	4,519.00	177.78	153.71	-65.05	-4,391.60	-6,352.93	6,450.31	6,150.34	299.97	21.503		
13,458.50	7,239.67	4,452.00	4,519.00	179.42	153.71	-65.05	-4,391.60	-6,352.93	6,450.05	6,148.62	301.43	21.398 CC		
13,500.00	7,239.51	4,452.00	4,519.00	180.58	153.71	-65.05	-4,391.60	-6,352.93	6,450.18	6,147.72	302.46	21.326		
13,600.00	7,239.13	4,452.00	4,519.00	183.39	153.71	-65.05	-4,391.60	-6,352.93	6,451.60	6,146.68	304.92	21.158 ES		
13,700.00	7,238.75	4,452.00	4,519.00	186.20	153.71	-65.05	-4,391.60	-6,352.93	6,454.57	6,147.21	307.35	21.000		
13,800.00	7,238.37	4,452.00	4,519.00	189.00	153.71	-65.05	-4,391.60	-6,352.93	6,459.08	6,149.33	309.75	20.852		
13,900.00	7,237.99	4,452.00	4,519.00	191.81	153.71	-65.05	-4,391.60	-6,352.93	6,465.14	6,153.03	312.12	20.714		
14,000.00	7,237.62	4,452.00	4,519.00	194.63	153.71	-65.05	-4,391.60	-6,352.93	6,472.74	6,158.30	314.44	20.585		
14,100.00	7,237.24	4,452.00	4,519.00	197.44	153.71	-65.05	-4,391.60	-6,352.93	6,481.87	6,165.14	316.73	20.465		
14,200.00	7,236.86	4,452.00	4,519.00	200.25	153.71	-65.05	-4,391.60	-6,352.93	6,492.53	6,173.55	318.98	20.354		
14,300.00	7,236.48	4,452.00	4,519.00	203.07	153.71	-65.05	-4,391.60	-6,352.93	6,504.71	6,183.52	321.19	20.252		
14,400.00	7,236.10	4,452.00	4,519.00	205.88	153.71	-65.05	-4,391.60	-6,352.93	6,518.40	6,195.04	323.36	20.158		
14,500.00	7,235.72	4,452.00	4,519.00	208.70	153.71	-65.05	-4,391.60	-6,352.93	6,533.60	6,208.11	325.48	20.073		
14,600.00	7,235.34	4,452.00	4,519.00	211.52	153.71	-65.05	-4,391.60	-6,352.93	6,550.28	6,222.71	327.57	19.997		
14,700.00	7,234.96	4,452.00	4,519.00	214.34	153.71	-65.05	-4,391.60	-6,352.93	6,568.45	6,238.84	329.60	19.928		
14,800.00	7,234.58	4,452.00	4,519.00	217.16	153.71	-65.05	-4,391.60	-6,352.93	6,588.08	6,256.48	331.59	19.868		
14,900.00	7,234.20	4,452.00	4,519.00	219.98	153.71	-65.05	-4,391.60	-6,352.93	6,609.17	6,275.63	333.54	19.815		
15,000.00	7,233.82	4,452.00	4,519.00	222.81	153.71	-65.05	-4,391.60	-6,352.93	6,631.69	6,296.26	335.43	19.770		
15,100.00	7,233.44	4,452.00	4,519.00	225.63	153.71	-65.05	-4,391.60	-6,352.93	6,655.65	6,318.37	337.28	19.733		
15,200.00	7,233.06	4,452.00	4,519.00	228.45	153.71	-65.05	-4,391.60	-6,352.93	6,681.02	6,341.93	339.09	19.703		
15,216.01	7,233.00	4,452.00	4,519.00	228.91	153.71	-65.05	-4,391.60	-6,352.93	6,685.21	6,345.84	339.37	19.699 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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-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	1,377.00	1,308.28	3.28	7.39	-108.61	-2,968.95	-8,816.56	9,394.57					
100.00	100.00	1,416.81	1,347.61	3.28	7.58	-108.59	-2,964.34	-8,812.40	9,380.96	9,370.67	10.29	911.907		
200.00	200.00	1,471.00	1,401.14	3.34	7.85	-108.56	-2,957.67	-8,807.32	9,368.00	9,357.44	10.55	887.591		
300.00	299.98	300.00	1,555.36	3.45	3.39	-103.02	-2,938.92	-8,792.60	9,355.76	9,348.79	6.96	1,343.511		
400.00	399.84	1,660.00	1,587.91	3.61	8.77	-103.24	-2,935.13	-8,789.22	9,343.74	9,332.13	11.61	804.614		
500.00	499.45	1,709.00	1,636.36	3.82	9.01	-103.45	-2,929.86	-8,784.11	9,332.82	9,320.81	12.01	777.142		
600.00	598.70	1,755.00	1,681.96	4.07	9.23	-103.65	-2,925.21	-8,780.30	9,324.06	9,311.63	12.44	749.749		
700.00	697.47	1,951.82	1,876.64	4.35	10.20	-103.90	-2,902.19	-8,762.98	9,315.58	9,301.99	13.59	685.576		
800.00	795.62	2,284.43	2,204.53	4.67	11.95	-104.27	-2,857.68	-8,729.51	9,306.26	9,290.82	15.44	602.671		
900.00	893.06	900.00	2,392.30	5.01	4.85	-104.63	-2,831.23	-8,707.48	9,296.36	9,286.56	9.80	948.134		
1,000.00	989.64	2,544.22	2,460.01	5.38	13.38	-104.89	-2,821.91	-8,698.86	9,286.44	9,269.08	17.36	534.850		
1,100.00	1,085.42	2,570.60	2,485.99	5.78	13.52	-105.00	-2,818.57	-8,695.70	9,278.02	9,260.14	17.88	518.969		
1,200.00	1,181.09	2,761.18	2,673.62	6.20	14.57	-105.24	-2,794.46	-8,672.66	9,269.66	9,250.48	19.18	483.218		
1,300.00	1,276.76	2,792.00	2,703.94	6.65	14.74	-105.28	-2,790.43	-8,668.86	9,261.10	9,241.33	19.76	468.608		
1,400.00	1,372.43	2,792.00	2,703.94	7.11	14.74	-105.28	-2,790.43	-8,668.86	9,253.52	9,233.30	20.21	457.809		
1,500.00	1,468.10	2,832.69	2,744.05	7.57	14.95	-105.33	-2,785.41	-8,664.23	9,246.49	9,225.63	20.86	443.273		
1,600.00	1,563.77	2,887.00	2,797.81	8.05	15.23	-105.41	-2,779.60	-8,659.16	9,241.00	9,219.42	21.58	428.256		
1,700.00	1,659.44	1,700.00	2,790.64	8.53	9.28	-105.40	-2,780.41	-8,659.82	9,235.64	9,218.91	16.74	551.858		
1,800.00	1,755.11	3,051.11	2,960.09	9.02	16.08	-105.62	-2,760.60	-8,643.93	9,230.50	9,207.21	23.29	396.245		
1,900.00	1,850.78	3,197.68	3,104.80	9.52	16.86	-105.80	-2,742.03	-8,629.87	9,224.72	9,200.25	24.47	376.999		
2,000.00	1,946.45	3,262.00	3,168.33	10.02	17.20	-105.88	-2,734.19	-8,623.62	9,219.03	9,193.77	25.26	364.910		
2,100.00	2,042.12	3,388.56	3,293.33	10.52	17.87	-106.04	-2,718.92	-8,611.03	9,213.21	9,186.86	26.35	349.659		
2,200.00	2,137.78	3,449.00	3,353.04	11.03	18.19	-106.12	-2,711.61	-8,605.15	9,207.65	9,180.52	27.13	339.352		
2,300.00	2,233.45	4,109.00	4,001.00	11.54	21.92	-106.89	-2,615.49	-8,530.04	9,202.05	9,171.29	30.76	299.191		
2,400.00	2,329.12	4,488.00	4,369.51	12.05	24.30	-107.33	-2,551.81	-8,469.51	9,188.60	9,155.53	33.08	277.800		
2,500.00	2,424.79	4,542.62	4,422.50	12.56	24.65	-107.40	-2,542.90	-8,459.71	9,174.29	9,140.43	33.86	270.940		
2,600.00	2,520.46	4,583.00	4,461.81	13.08	24.90	-107.45	-2,536.59	-8,452.95	9,160.98	9,126.40	34.58	264.908		
2,700.00	2,616.13	4,583.00	4,461.81	13.60	24.90	-107.45	-2,536.59	-8,452.95	9,148.41	9,113.30	35.12	260.520		
2,800.00	2,711.80	4,583.00	4,461.81	14.12	24.90	-107.45	-2,536.59	-8,452.95	9,136.92	9,101.27	35.65	256.297		
2,900.00	2,807.47	4,621.73	4,499.66	14.64	25.13	-107.50	-2,530.92	-8,447.00	9,126.01	9,089.65	36.36	250.994		
3,000.00	2,903.14	4,637.54	4,515.16	15.16	25.22	-107.52	-2,528.76	-8,444.77	9,116.18	9,079.22	36.96	246.617		
3,100.00	2,998.81	4,678.00	4,554.95	15.68	25.46	-107.57	-2,523.63	-8,439.58	9,107.48	9,069.80	37.68	241.687		
3,200.00	3,094.48	4,678.00	4,554.95	16.21	25.46	-107.57	-2,523.63	-8,439.58	9,099.32	9,061.11	38.21	238.113		
3,300.00	3,190.15	4,678.00	4,554.95	16.73	25.46	-107.57	-2,523.63	-8,439.58	9,092.25	9,053.51	38.74	234.679		
3,400.00	3,285.82	4,729.54	4,605.81	17.26	25.74	-107.64	-2,517.73	-8,433.62	9,085.88	9,046.37	39.50	230.005		
3,500.00	3,381.49	4,772.00	4,647.77	17.78	25.96	-107.70	-2,513.23	-8,428.97	9,080.26	9,040.04	40.22	225.758		
3,600.00	3,477.16	4,810.93	4,686.29	18.31	26.16	-107.76	-2,509.33	-8,424.86	9,075.30	9,034.38	40.92	221.784		
3,700.00	3,572.83	4,867.00	4,741.81	18.84	26.45	-107.84	-2,503.99	-8,419.16	9,070.95	9,029.25	41.69	217.561		
3,800.00	3,668.50	4,895.06	4,769.63	19.37	26.59	-107.88	-2,501.44	-8,416.44	9,067.22	9,024.88	42.34	214.152		
3,900.00	3,764.17	4,928.73	4,803.02	19.89	26.76	-107.93	-2,498.49	-8,413.37	9,064.23	9,021.22	43.01	210.749		
4,000.00	3,859.84	4,961.00	4,835.06	20.42	26.92	-107.98	-2,495.78	-8,410.61	9,061.99	9,018.32	43.67	207.504		
4,100.00	3,955.51	5,019.42	4,893.10	20.95	27.20	-108.07	-2,491.08	-8,405.89	9,060.36	9,015.91	44.45	203.847		
4,200.00	4,051.18	5,056.00	4,929.46	21.48	27.37	-108.12	-2,488.27	-8,403.02	9,059.27	9,014.14	45.12	200.766		
4,294.92	4,141.99	5,088.46	4,961.74	21.99	27.52	-108.17	-2,485.89	-8,400.67	9,058.90	9,013.15	45.75	198.000		
4,300.00	4,146.85	5,089.73	4,963.00	22.01	27.53	-108.18	-2,485.80	-8,400.58	9,058.91	9,013.12	45.78	197.864		
4,400.00	4,242.52	5,114.75	4,987.92	22.55	27.64	-108.21	-2,484.08	-8,398.98	9,059.40	9,013.00	46.40	195.236		
4,500.00	4,338.19	5,150.00	5,023.04	23.08	27.80	-108.27	-2,481.79	-8,397.02	9,060.75	9,013.68	47.06	192.517		
4,600.00	4,433.86	5,184.55	5,057.48	23.61	27.95	-108.32	-2,479.72	-8,395.29	9,062.83	9,015.11	47.72	189.920		
4,700.00	4,529.53	5,243.00	5,115.77	24.14	28.20	-108.41	-2,476.56	-8,392.42	9,065.43	9,016.96	48.48	186.995		
4,800.00	4,625.19	5,243.00	5,115.77	24.67	28.20	-108.41	-2,476.56	-8,392.42	9,068.83	9,019.86	48.97	185.184		
4,900.00	4,720.86	5,301.31	5,173.96	25.21	28.44	-108.51	-2,473.86	-8,389.97	9,072.71	9,022.99	49.72	182.460		
5,000.00	4,816.53	5,336.00	5,208.61	25.74	28.59	-108.56	-2,472.47	-8,388.86	9,077.54	9,027.17	50.37	180.225		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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-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	4,912.20	5,371.26	5,243.84	26.27	28.72	-108.62	-2,471.26	-8,387.91	9,083.09	9,032.09	51.01	178.073		
5,200.00	5,007.87	5,430.00	5,302.54	26.80	28.95	-108.72	-2,469.80	-8,386.47	9,089.32	9,037.57	51.75	175.632		
5,300.00	5,103.54	5,474.64	5,347.17	27.34	29.12	-108.79	-2,468.90	-8,385.52	9,096.07	9,043.64	52.43	173.490		
5,400.00	5,199.22	5,543.96	5,416.45	27.87	29.38	-108.92	-2,467.28	-8,384.34	9,103.23	9,050.01	53.22	171.050		
5,500.00	5,295.46	5,613.83	5,486.29	28.39	29.65	-109.15	-2,465.37	-8,383.51	9,110.07	9,056.07	54.00	168.705		
5,600.00	5,392.60	5,684.42	5,556.85	28.89	29.91	-109.36	-2,463.16	-8,383.03	9,116.11	9,061.35	54.76	166.461		
5,700.00	5,490.50	5,753.42	5,625.81	29.37	30.17	-109.53	-2,460.79	-8,382.90	9,121.34	9,065.84	55.50	164.344		
5,800.00	5,589.05	5,821.48	5,693.83	29.83	30.42	-109.66	-2,458.52	-8,382.99	9,125.76	9,069.54	56.21	162.338		
5,900.00	5,688.14	5,889.81	5,762.12	30.26	30.68	-109.77	-2,456.33	-8,383.29	9,129.35	9,072.44	56.91	160.422		
6,000.00	5,787.63	5,958.33	5,830.61	30.68	30.93	-109.85	-2,454.22	-8,383.82	9,132.11	9,074.53	57.58	158.592		
6,100.00	5,887.41	6,044.99	5,917.23	31.07	31.25	-109.90	-2,451.67	-8,384.72	9,133.99	9,075.67	58.32	156.613		
6,200.00	5,987.36	6,152.41	6,024.60	31.44	31.65	-109.92	-2,448.67	-8,385.72	9,134.66	9,075.52	59.14	154.459		
6,300.00	6,087.36	6,259.80	6,131.95	31.80	32.04	-115.63	-2,445.84	-8,386.55	9,134.29	9,074.35	59.94	152.385		
6,400.00	6,187.36	6,375.66	6,247.76	32.15	32.48	-115.61	-2,442.50	-8,387.42	9,133.72	9,072.93	60.79	150.239		
6,500.00	6,287.36	6,493.18	6,365.19	32.51	32.93	-115.58	-2,438.00	-8,388.59	9,132.97	9,071.31	61.66	148.122		
6,600.00	6,387.36	6,667.38	6,539.15	32.87	33.61	-115.52	-2,429.14	-8,390.60	9,131.89	9,069.08	62.81	145.386		
6,700.00	6,487.36	6,700.00	6,661.36	33.23	33.75	-115.47	-2,420.54	-8,391.43	9,129.33	9,066.00	63.33	144.149		
6,800.00	6,587.36	6,944.59	6,815.63	33.59	34.75	-115.41	-2,409.33	-8,392.66	9,126.83	9,062.03	64.80	140.837		
6,900.00	6,687.26	7,020.05	6,890.84	33.95	35.07	-25.09	-2,403.25	-8,393.58	9,121.64	9,056.15	65.49	139.283		
7,000.00	6,785.58	7,094.50	6,965.02	34.31	35.38	-25.80	-2,397.09	-8,394.78	9,103.59	9,037.43	66.16	137.593		
7,100.00	6,879.94	7,162.46	7,032.74	34.65	35.66	-27.16	-2,391.41	-8,396.09	9,072.13	9,005.33	66.80	135.820		
7,200.00	6,968.01	7,222.91	7,093.00	34.97	35.90	-29.32	-2,386.78	-8,397.28	9,028.05	8,960.67	67.38	133.990		
7,300.00	7,047.61	7,277.83	7,147.77	35.27	36.13	-32.52	-2,382.97	-8,398.34	8,972.43	8,904.50	67.93	132.087		
7,400.00	7,116.80	7,325.83	7,195.67	35.54	36.32	-37.17	-2,379.95	-8,399.27	8,906.60	8,838.16	68.44	130.132		
7,500.00	7,173.86	7,382.00	7,251.74	35.81	36.55	-43.99	-2,376.80	-8,400.33	8,832.17	8,763.16	69.01	127.990		
7,600.00	7,217.38	7,403.27	7,272.98	36.17	36.64	-53.61	-2,375.68	-8,400.74	8,750.87	8,681.45	69.42	126.062		
7,700.00	7,246.31	7,433.92	7,303.58	36.80	36.76	-67.17	-2,374.07	-8,401.31	8,664.73	8,594.83	69.90	123.953		
7,800.00	7,259.92	7,434.00	7,303.66	37.72	36.76	-83.97	-2,374.07	-8,401.32	8,575.91	8,505.63	70.28	122.025		
7,900.00	7,260.77	7,434.00	7,303.66	38.86	36.76	-91.08	-2,374.07	-8,401.32	8,486.48	8,415.78	70.70	120.035		
8,000.00	7,260.39	7,434.00	7,303.66	40.19	36.76	-91.08	-2,374.07	-8,401.32	8,397.28	8,326.10	71.17	117.984		
8,100.00	7,260.01	7,434.00	7,303.66	41.67	36.76	-91.08	-2,374.07	-8,401.32	8,308.32	8,236.62	71.70	115.876		
8,200.00	7,259.63	7,434.00	7,303.66	43.30	36.76	-91.08	-2,374.07	-8,401.32	8,219.61	8,147.33	72.28	113.714		
8,300.00	7,259.25	7,434.00	7,303.66	45.05	36.76	-91.08	-2,374.07	-8,401.32	8,131.17	8,058.25	72.92	111.503		
8,400.00	7,258.87	7,434.00	7,303.66	46.91	36.76	-91.08	-2,374.07	-8,401.32	8,043.00	7,969.38	73.62	109.249		
8,500.00	7,258.49	7,434.00	7,303.66	48.87	36.76	-91.08	-2,374.07	-8,401.32	7,955.11	7,880.73	74.38	106.957		
8,600.00	7,258.11	7,434.00	7,303.66	50.92	36.76	-91.08	-2,374.07	-8,401.32	7,867.51	7,792.32	75.19	104.633		
8,700.00	7,257.73	7,434.00	7,303.66	53.04	36.76	-91.08	-2,374.07	-8,401.32	7,780.20	7,704.14	76.07	102.281		
8,800.00	7,257.35	7,434.00	7,303.66	55.23	36.76	-91.08	-2,374.07	-8,401.32	7,693.21	7,616.21	77.00	99.909		
8,900.00	7,256.97	7,434.00	7,303.66	57.47	36.76	-91.08	-2,374.07	-8,401.32	7,606.54	7,528.54	78.00	97.522		
9,000.00	7,256.59	7,434.00	7,303.66	59.77	36.76	-91.08	-2,374.07	-8,401.32	7,520.19	7,441.14	79.06	95.125		
9,100.00	7,256.21	7,434.00	7,303.66	62.12	36.76	-91.08	-2,374.07	-8,401.32	7,434.19	7,354.02	80.18	92.724		
9,200.00	7,255.83	7,434.00	7,303.66	64.50	36.76	-91.08	-2,374.07	-8,401.32	7,348.55	7,267.19	81.36	90.325		
9,300.00	7,255.45	7,434.00	7,303.66	66.93	36.76	-91.08	-2,374.07	-8,401.32	7,263.27	7,180.66	82.60	87.932		
9,400.00	7,255.07	7,434.00	7,303.66	69.38	36.76	-91.08	-2,374.07	-8,401.32	7,178.37	7,094.46	83.91	85.550		
9,500.00	7,254.69	7,434.00	7,303.66	71.87	36.76	-91.08	-2,374.07	-8,401.32	7,093.86	7,008.58	85.28	83.184		
9,600.00	7,254.31	7,434.00	7,303.66	74.38	36.76	-91.08	-2,374.07	-8,401.32	7,009.76	6,923.05	86.71	80.838		
9,700.00	7,253.93	7,434.00	7,303.66	76.92	36.76	-91.08	-2,374.07	-8,401.32	6,926.09	6,837.87	88.21	78.516		
9,800.00	7,253.55	7,434.00	7,303.66	79.48	36.76	-91.08	-2,374.07	-8,401.32	6,842.85	6,753.07	89.77	76.222		
9,900.00	7,253.18	7,434.00	7,303.66	82.06	36.76	-91.08	-2,374.07	-8,401.32	6,760.06	6,668.66	91.40	73.959		
10,000.00	7,252.80	7,434.00	7,303.66	84.65	36.76	-91.08	-2,374.07	-8,401.32	6,677.75	6,584.66	93.10	71.729		
10,100.00	7,252.42	7,434.00	7,303.66	87.27	36.76	-91.08	-2,374.07	-8,401.32	6,595.93	6,501.07	94.86	69.536		
10,200.00	7,252.04	7,434.00	7,303.66	89.89	36.76	-91.08	-2,374.07	-8,401.32	6,514.61	6,417.93	96.68	67.382		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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-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	7,251.66	7,434.00	7,303.66	92.54	36.76	-91.08	-2,374.07	-8,401.32	6,433.82	6,335.25	98.58	65.268		
10,400.00	7,251.28	7,434.00	7,303.66	95.19	36.76	-91.08	-2,374.07	-8,401.32	6,353.58	6,253.05	100.54	63.197		
10,500.00	7,250.90	7,434.00	7,303.66	97.86	36.76	-91.08	-2,374.07	-8,401.32	6,273.91	6,171.34	102.57	61.170		
10,600.00	7,250.52	7,434.00	7,303.66	100.53	36.76	-91.08	-2,374.07	-8,401.32	6,194.82	6,090.16	104.66	59.188		
10,700.00	7,250.14	7,434.00	7,303.66	103.22	36.76	-91.08	-2,374.07	-8,401.32	6,116.35	6,009.52	106.83	57.252		
10,800.00	7,249.76	7,434.00	7,303.66	105.91	36.76	-91.08	-2,374.07	-8,401.32	6,038.51	5,929.44	109.07	55.364		
10,900.00	7,249.38	7,434.00	7,303.66	108.62	36.76	-91.08	-2,374.07	-8,401.32	5,961.34	5,849.96	111.38	53.524		
11,000.00	7,249.00	7,434.00	7,303.66	111.33	36.76	-91.08	-2,374.07	-8,401.32	5,884.85	5,771.09	113.76	51.731		
11,100.00	7,248.62	7,434.00	7,303.66	114.04	36.76	-91.08	-2,374.07	-8,401.32	5,809.08	5,692.86	116.21	49.987		
11,200.00	7,248.24	7,434.00	7,303.66	116.77	36.76	-91.08	-2,374.07	-8,401.32	5,734.04	5,615.31	118.74	48.292		
11,300.00	7,247.86	7,434.00	7,303.66	119.50	36.76	-91.08	-2,374.07	-8,401.32	5,659.79	5,538.45	121.33	46.646		
11,400.00	7,247.48	7,434.00	7,303.66	122.24	36.76	-91.08	-2,374.07	-8,401.32	5,586.33	5,462.32	124.01	45.048		
11,500.00	7,247.10	7,434.00	7,303.66	124.98	36.76	-91.08	-2,374.07	-8,401.32	5,513.71	5,386.95	126.75	43.499		
11,600.00	7,246.72	7,434.00	7,303.66	127.73	36.76	-91.08	-2,374.07	-8,401.32	5,441.96	5,312.38	129.58	41.998		
11,700.00	7,246.34	7,434.00	7,303.66	130.48	36.76	-91.08	-2,374.07	-8,401.32	5,371.11	5,238.63	132.47	40.545		
11,800.00	7,245.96	7,434.00	7,303.66	133.24	36.76	-91.08	-2,374.07	-8,401.32	5,301.20	5,165.75	135.45	39.139		
11,900.00	7,245.58	7,434.00	7,303.66	136.00	36.76	-91.08	-2,374.07	-8,401.32	5,232.27	5,093.77	138.49	37.780		
12,000.00	7,245.21	7,434.00	7,303.66	138.76	36.76	-91.08	-2,374.07	-8,401.32	5,164.35	5,022.74	141.62	36.467		
12,100.00	7,244.83	7,434.00	7,303.66	141.53	36.76	-91.08	-2,374.07	-8,401.32	5,097.49	4,952.68	144.81	35.201		
12,200.00	7,244.45	7,434.00	7,303.66	144.30	36.76	-91.08	-2,374.07	-8,401.32	5,031.73	4,883.65	148.08	33.979		
12,300.00	7,244.07	7,434.00	7,303.66	147.08	36.76	-91.08	-2,374.07	-8,401.32	4,967.12	4,815.69	151.43	32.802		
12,400.00	7,243.69	7,434.00	7,303.66	149.86	36.76	-91.08	-2,374.07	-8,401.32	4,903.69	4,748.84	154.85	31.668		
12,500.00	7,243.31	7,434.00	7,303.66	152.64	36.76	-91.08	-2,374.07	-8,401.32	4,841.49	4,683.16	158.34	30.577		
12,600.00	7,242.93	7,434.00	7,303.66	155.42	36.76	-91.08	-2,374.07	-8,401.32	4,780.58	4,618.69	161.89	29.529		
12,700.00	7,242.55	7,434.00	7,303.66	158.21	36.76	-91.08	-2,374.07	-8,401.32	4,721.00	4,555.48	165.52	28.522		
12,800.00	7,242.17	7,434.00	7,303.66	161.00	36.76	-91.08	-2,374.07	-8,401.32	4,662.81	4,493.60	169.21	27.556		
12,900.00	7,241.79	7,434.00	7,303.66	163.79	36.76	-91.08	-2,374.07	-8,401.32	4,606.05	4,433.09	172.96	26.630		
13,000.00	7,241.41	7,434.00	7,303.66	166.58	36.76	-91.08	-2,374.07	-8,401.32	4,550.78	4,374.01	176.77	25.743		
13,100.00	7,241.03	7,434.00	7,303.66	169.38	36.76	-91.08	-2,374.07	-8,401.32	4,497.05	4,316.41	180.64	24.895		
13,200.00	7,240.65	7,434.00	7,303.66	172.18	36.76	-91.08	-2,374.07	-8,401.32	4,444.93	4,260.37	184.56	24.084		
13,300.00	7,240.27	7,434.00	7,303.66	174.98	36.76	-91.08	-2,374.07	-8,401.32	4,394.46	4,205.94	188.52	23.310		
13,400.00	7,239.89	7,434.00	7,303.66	177.78	36.76	-91.08	-2,374.07	-8,401.32	4,345.71	4,153.18	192.53	22.572		
13,500.00	7,239.51	7,434.00	7,303.66	180.58	36.76	-91.08	-2,374.07	-8,401.32	4,298.74	4,102.17	196.57	21.869		
13,600.00	7,239.13	7,434.00	7,303.66	183.39	36.76	-91.08	-2,374.07	-8,401.32	4,253.59	4,052.95	200.64	21.200		
13,700.00	7,238.75	7,434.00	7,303.66	186.20	36.76	-91.08	-2,374.07	-8,401.32	4,210.34	4,005.61	204.73	20.565		
13,800.00	7,238.37	7,434.00	7,303.66	189.00	36.76	-91.08	-2,374.07	-8,401.32	4,169.03	3,960.20	208.83	19.963		
13,900.00	7,237.99	7,434.00	7,303.66	191.81	36.76	-91.08	-2,374.07	-8,401.32	4,129.74	3,916.80	212.94	19.393		
14,000.00	7,237.62	7,434.00	7,303.66	194.63	36.76	-91.08	-2,374.07	-8,401.32	4,092.51	3,875.46	217.05	18.855		
14,100.00	7,237.24	7,434.00	7,303.66	197.44	36.76	-91.08	-2,374.07	-8,401.32	4,057.41	3,836.26	221.15	18.347		
14,200.00	7,236.86	7,434.00	7,303.66	200.25	36.76	-91.08	-2,374.07	-8,401.32	4,024.49	3,799.27	225.22	17.869		
14,300.00	7,236.48	7,434.00	7,303.66	203.07	36.76	-91.08	-2,374.07	-8,401.32	3,993.79	3,764.53	229.26	17.420		
14,400.00	7,236.10	7,434.00	7,303.66	205.88	36.76	-91.08	-2,374.07	-8,401.32	3,965.39	3,732.13	233.26	17.000		
14,500.00	7,235.72	7,434.00	7,303.66	208.70	36.76	-91.08	-2,374.07	-8,401.32	3,939.31	3,702.11	237.20	16.608		
14,600.00	7,235.34	7,434.00	7,303.66	211.52	36.76	-91.08	-2,374.07	-8,401.32	3,915.62	3,674.54	241.08	16.242		
14,700.00	7,234.96	7,434.00	7,303.66	214.34	36.76	-91.08	-2,374.07	-8,401.32	3,894.36	3,649.47	244.88	15.903		
14,800.00	7,234.58	7,434.00	7,303.66	217.16	36.76	-91.08	-2,374.07	-8,401.32	3,875.55	3,626.95	248.60	15.589		
14,900.00	7,234.20	7,434.00	7,303.66	219.98	36.76	-91.08	-2,374.07	-8,401.32	3,859.25	3,607.03	252.22	15.301		
15,000.00	7,233.82	7,434.00	7,303.66	222.81	36.76	-91.08	-2,374.07	-8,401.32	3,845.48	3,589.75	255.74	15.037		
15,100.00	7,233.44	7,434.00	7,303.66	225.63	36.76	-91.08	-2,374.07	-8,401.32	3,834.27	3,575.14	259.13	14.796		
15,200.00	7,233.06	7,434.00	7,303.66	228.45	36.76	-91.08	-2,374.07	-8,401.32	3,825.64	3,563.24	262.40	14.579		
15,216.01	7,233.00	7,434.00	7,303.66	228.91	36.76	-91.08	-2,374.07	-8,401.32	3,824.50	3,561.59	262.91	14.547	CC, ES, 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	31.00	3.28	3.28	-83.65	1,018.12	-9,145.85	9,202.40				
100.00	100.00	69.00	100.00	3.28	3.49	-83.65	1,018.12	-9,145.85	9,202.34	9,195.57	6.78	1,357.508	
200.00	200.00	169.00	200.00	3.34	5.29	-83.65	1,018.12	-9,145.85	9,202.34	9,193.71	8.63	1,066.309	
300.00	299.98	268.98	299.98	3.45	8.32	-77.93	1,018.12	-9,145.85	9,201.98	9,190.22	11.76	782.266	
400.00	399.84	368.84	399.84	3.61	11.60	-77.99	1,018.12	-9,145.85	9,200.89	9,185.68	15.21	605.054	
500.00	499.45	468.45	499.45	3.82	14.97	-78.07	1,018.12	-9,145.85	9,199.07	9,180.29	18.78	489.879	
600.00	598.70	567.70	598.70	4.07	18.37	-78.20	1,018.12	-9,145.85	9,196.55	9,174.13	22.42	410.216	
700.00	697.47	666.47	697.47	4.35	21.77	-78.35	1,018.12	-9,145.85	9,193.33	9,167.23	26.10	352.224	
800.00	795.62	764.62	795.62	4.67	25.16	-78.55	1,018.12	-9,145.85	9,189.44	9,159.63	29.81	308.284	
900.00	893.06	862.06	893.06	5.01	28.54	-78.77	1,018.12	-9,145.85	9,184.91	9,151.38	33.53	273.927	
1,000.00	989.64	958.64	989.64	5.38	31.89	-79.02	1,018.12	-9,145.85	9,179.75	9,142.49	37.26	246.377	
1,100.00	1,085.42	1,054.42	1,085.42	5.78	35.22	-79.24	1,018.12	-9,145.85	9,174.11	9,133.12	40.99	223.816	
1,200.00	1,181.09	1,150.09	1,181.09	6.20	38.54	-79.41	1,018.12	-9,145.85	9,168.48	9,123.74	44.74	204.922	
1,300.00	1,276.76	1,245.76	1,276.76	6.65	41.87	-79.59	1,018.12	-9,145.85	9,162.95	9,114.44	48.51	188.883	
1,400.00	1,372.43	1,341.43	1,372.43	7.11	45.20	-79.76	1,018.12	-9,145.85	9,157.50	9,105.20	52.30	175.109	
1,500.00	1,468.10	1,437.10	1,468.10	7.57	48.53	-79.93	1,018.12	-9,145.85	9,152.14	9,096.05	56.09	163.160	
1,600.00	1,563.77	1,532.77	1,563.77	8.05	51.87	-80.10	1,018.12	-9,145.85	9,146.87	9,086.97	59.90	152.702	
1,700.00	1,659.44	1,628.44	1,659.44	8.53	55.20	-80.27	1,018.12	-9,145.85	9,141.69	9,077.98	63.72	143.477	
1,800.00	1,755.11	1,724.11	1,755.11	9.02	58.54	-80.45	1,018.12	-9,145.85	9,136.61	9,069.07	67.54	135.282	
1,900.00	1,850.78	1,819.78	1,850.78	9.52	61.87	-80.62	1,018.12	-9,145.85	9,131.61	9,060.24	71.37	127.955	
2,000.00	1,946.45	1,915.45	1,946.45	10.02	65.21	-80.79	1,018.12	-9,145.85	9,126.70	9,051.50	75.20	121.367	
2,100.00	2,042.12	2,011.12	2,042.12	10.52	68.54	-80.96	1,018.12	-9,145.85	9,121.88	9,042.84	79.04	115.413	
2,200.00	2,137.78	2,106.78	2,137.78	11.03	71.88	-81.14	1,018.12	-9,145.85	9,117.15	9,034.27	82.88	110.006	
2,300.00	2,233.45	2,202.45	2,233.45	11.54	75.21	-81.31	1,018.12	-9,145.85	9,112.51	9,025.79	86.72	105.076	
2,400.00	2,329.12	2,301.88	2,329.12	12.05	78.68	-81.48	1,018.12	-9,145.85	9,107.97	9,017.27	90.70	100.416	
2,500.00	2,424.79	2,406.21	2,424.79	12.56	82.32	-81.66	1,018.12	-9,145.85	9,103.51	9,008.66	94.85	95.973	
2,600.00	2,520.46	2,489.46	2,520.46	13.08	85.22	-81.83	1,018.12	-9,145.85	9,099.15	9,000.87	98.27	92.590	
2,700.00	2,616.13	2,585.13	2,616.13	13.60	88.56	-82.00	1,018.12	-9,145.85	9,094.87	8,992.74	102.13	89.053	
2,800.00	2,711.80	2,680.80	2,711.80	14.12	91.90	-82.18	1,018.12	-9,145.85	9,090.69	8,984.70	105.98	85.773	
2,900.00	2,807.47	2,776.47	2,807.47	14.64	95.24	-82.35	1,018.12	-9,145.85	9,086.60	8,976.75	109.84	82.724	
3,000.00	2,903.14	2,872.14	2,903.14	15.16	98.58	-82.53	1,018.12	-9,145.85	9,082.60	8,968.90	113.70	79.881	
3,100.00	2,998.81	2,967.81	2,998.81	15.68	101.91	-82.70	1,018.12	-9,145.85	9,078.69	8,961.13	117.56	77.224	
3,200.00	3,094.48	3,063.48	3,094.48	16.21	105.25	-82.88	1,018.12	-9,145.85	9,074.87	8,953.45	121.42	74.736	
3,300.00	3,190.15	3,159.15	3,190.15	16.73	108.59	-83.05	1,018.12	-9,145.85	9,071.15	8,945.86	125.29	72.402	
3,400.00	3,285.82	3,254.82	3,285.82	17.26	111.93	-83.22	1,018.12	-9,145.85	9,067.51	8,938.36	129.15	70.208	
3,500.00	3,381.49	3,350.49	3,381.49	17.78	115.27	-83.40	1,018.12	-9,145.85	9,063.97	8,930.96	133.02	68.141	
3,600.00	3,477.16	3,446.16	3,477.16	18.31	118.61	-83.57	1,018.12	-9,145.85	9,060.52	8,923.64	136.88	66.192	
3,700.00	3,572.83	3,541.83	3,572.83	18.84	121.94	-83.75	1,018.12	-9,145.85	9,057.17	8,916.42	140.75	64.350	
3,800.00	3,668.50	3,637.50	3,668.50	19.37	125.28	-83.93	1,018.12	-9,145.85	9,053.90	8,909.29	144.62	62.606	
3,900.00	3,764.17	3,733.17	3,764.17	19.89	128.62	-84.10	1,018.12	-9,145.85	9,050.73	8,902.25	148.48	60.954	
4,000.00	3,859.84	3,828.84	3,859.84	20.42	131.96	-84.28	1,018.12	-9,145.85	9,047.65	8,895.30	152.35	59.386	
4,100.00	3,955.51	3,924.51	3,955.51	20.95	135.30	-84.45	1,018.12	-9,145.85	9,044.66	8,888.44	156.22	57.896	
4,200.00	4,051.18	4,020.18	4,051.18	21.48	138.64	-84.63	1,018.12	-9,145.85	9,041.77	8,881.68	160.09	56.479	
4,300.00	4,146.85	4,115.85	4,146.85	22.01	141.98	-84.80	1,018.12	-9,145.85	9,038.97	8,875.01	163.96	55.129	
4,400.00	4,242.52	4,211.52	4,242.52	22.55	145.32	-84.98	1,018.12	-9,145.85	9,036.26	8,868.43	167.83	53.841	
4,500.00	4,338.19	4,307.19	4,338.19	23.08	148.65	-85.16	1,018.12	-9,145.85	9,033.65	8,861.94	171.70	52.612	
4,600.00	4,433.86	4,402.86	4,433.86	23.61	151.99	-85.33	1,018.12	-9,145.85	9,031.12	8,855.55	175.57	51.438	
4,700.00	4,529.53	4,501.48	4,529.53	24.14	155.44	-85.51	1,018.12	-9,145.85	9,028.69	8,849.15	179.55	50.285	
4,800.00	4,625.19	4,605.81	4,625.19	24.67	159.08	-85.68	1,018.12	-9,145.85	9,026.36	8,842.64	183.72	49.130	
4,900.00	4,720.86	4,689.86	4,720.86	25.21	162.01	-85.86	1,018.12	-9,145.85	9,024.12	8,836.93	187.19	48.208	
5,000.00	4,816.53	4,785.53	4,816.53	25.74	165.35	-86.04	1,018.12	-9,145.85	9,021.97	8,830.90	191.06	47.220	
5,100.00	4,912.20	4,881.20	4,912.20	26.27	168.69	-86.21	1,018.12	-9,145.85	9,019.91	8,824.97	194.94	46.271	

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	4,976.87	5,007.87	26.80	172.03	-86.39	1,018.12	-9,145.85	9,017.95	8,819.14	198.81	45.360		
5,300.00	5,103.54	5,072.54	5,103.54	27.34	175.37	-86.57	1,018.12	-9,145.85	9,016.08	8,813.40	202.68	44.484		
5,400.00	5,199.22	5,168.22	5,199.22	27.87	178.71	-86.74	1,018.12	-9,145.85	9,014.31	8,807.75	206.56	43.641		
5,500.00	5,295.46	5,264.46	5,295.46	28.39	182.07	-86.87	1,018.12	-9,145.85	9,012.74	8,802.30	210.44	42.828		
5,600.00	5,392.60	5,361.60	5,392.60	28.89	185.46	-86.99	1,018.12	-9,145.85	9,011.43	8,797.10	214.33	42.045		
5,700.00	5,490.50	5,459.50	5,490.50	29.37	188.87	-87.10	1,018.12	-9,145.85	9,010.36	8,792.13	218.23	41.289		
5,800.00	5,589.05	5,558.05	5,589.05	29.83	192.31	-87.19	1,018.12	-9,145.85	9,009.50	8,787.38	222.12	40.561		
5,900.00	5,688.14	5,657.14	5,688.14	30.26	195.77	-87.26	1,018.12	-9,145.85	9,008.84	8,782.82	226.02	39.859		
6,000.00	5,787.63	5,756.63	5,787.63	30.68	199.25	-87.31	1,018.12	-9,145.85	9,008.37	8,778.46	229.91	39.183		
6,100.00	5,887.41	5,856.41	5,887.41	31.07	202.73	-87.35	1,018.12	-9,145.85	9,008.06	8,774.28	233.78	38.532		
6,200.00	5,987.36	5,956.36	5,987.36	31.44	206.22	-87.37	1,018.12	-9,145.85	9,007.92	8,770.28	237.64	37.906		
6,297.96	6,085.32	6,054.32	6,085.32	31.79	209.64	-87.37	1,018.12	-9,145.85	9,007.89	8,766.49	241.41	37.314		
6,300.00	6,087.36	6,056.36	6,087.36	31.80	209.71	-93.10	1,018.12	-9,145.85	9,007.91	8,766.43	241.49	37.302		
6,400.00	6,187.36	6,156.36	6,187.36	32.15	213.20	-93.10	1,018.12	-9,145.85	9,007.91	8,762.58	245.33	36.717		
6,500.00	6,287.36	6,256.36	6,287.36	32.51	216.69	-93.10	1,018.12	-9,145.85	9,007.91	8,758.73	249.18	36.150		
6,600.00	6,387.36	6,356.36	6,387.36	32.87	220.18	-93.10	1,018.12	-9,145.85	9,007.91	8,754.88	253.03	35.600		
6,700.00	6,487.36	6,456.36	6,487.36	33.23	223.67	-93.10	1,018.12	-9,145.85	9,007.91	8,751.03	256.88	35.066		
6,800.00	6,587.36	6,556.36	6,587.36	33.59	227.16	-93.10	1,018.12	-9,145.85	9,007.91	8,747.18	260.74	34.548		
6,900.00	6,687.26	6,656.26	6,687.26	33.95	230.65	-2.67	1,018.12	-9,145.85	9,004.80	8,740.22	264.58	34.034		
7,000.00	6,785.58	6,754.58	6,785.58	34.31	234.08	-2.75	1,018.12	-9,145.85	8,987.19	8,718.81	268.37	33.488		
7,100.00	6,879.94	6,848.94	6,879.94	34.65	237.37	-2.91	1,018.12	-9,145.85	8,954.42	8,682.41	272.01	32.919		
7,200.00	6,968.01	6,937.01	6,968.01	34.97	240.45	-3.18	1,018.12	-9,145.85	8,907.32	8,631.91	275.40	32.343		
7,300.00	7,047.61	7,016.61	7,047.61	35.27	243.23	-3.61	1,018.12	-9,145.85	8,847.03	8,568.56	278.46	31.771		
7,400.00	7,116.80	7,085.80	7,116.80	35.54	245.64	-4.29	1,018.12	-9,145.85	8,775.05	8,493.93	281.12	31.215		
7,500.00	7,173.86	7,142.86	7,173.86	35.81	247.63	-5.43	1,018.12	-9,145.85	8,693.14	8,409.84	283.30	30.685		
7,600.00	7,217.38	7,186.38	7,217.38	36.17	249.15	-7.59	1,018.12	-9,145.85	8,603.33	8,318.37	284.96	30.191		
7,700.00	7,246.31	7,215.31	7,246.31	36.80	250.16	-12.93	1,018.12	-9,145.85	8,507.83	8,221.76	286.07	29.740		
7,800.00	7,259.92	7,228.92	7,259.92	37.72	250.64	-40.49	1,018.12	-9,145.85	8,408.98	8,122.38	286.60	29.340		
7,900.00	7,260.77	7,229.77	7,260.77	38.86	250.67	-94.32	1,018.12	-9,145.85	8,309.13	8,022.46	286.67	28.985		
8,000.00	7,260.39	7,229.39	7,260.39	40.19	250.65	-94.27	1,018.12	-9,145.85	8,209.25	7,922.56	286.69	28.634		
8,100.00	7,260.01	7,229.01	7,260.01	41.67	250.64	-94.22	1,018.12	-9,145.85	8,109.39	7,822.67	286.72	28.283		
8,200.00	7,259.63	7,228.63	7,259.63	43.30	250.63	-94.17	1,018.12	-9,145.85	8,009.52	7,722.77	286.75	27.932		
8,300.00	7,259.25	7,228.25	7,259.25	45.05	250.61	-94.11	1,018.12	-9,145.85	7,909.66	7,622.88	286.78	27.581		
8,400.00	7,258.87	7,227.87	7,258.87	46.91	250.60	-94.06	1,018.12	-9,145.85	7,809.80	7,522.99	286.81	27.230		
8,500.00	7,258.49	7,227.49	7,258.49	48.87	250.59	-94.01	1,018.12	-9,145.85	7,709.94	7,423.10	286.85	26.878		
8,600.00	7,258.11	7,227.11	7,258.11	50.92	250.57	-93.96	1,018.12	-9,145.85	7,610.09	7,323.21	286.89	26.526		
8,700.00	7,257.73	7,226.73	7,257.73	53.04	250.56	-93.91	1,018.12	-9,145.85	7,510.25	7,223.32	286.93	26.175		
8,800.00	7,257.35	7,226.35	7,257.35	55.23	250.55	-93.85	1,018.12	-9,145.85	7,410.40	7,123.43	286.97	25.823		
8,900.00	7,256.97	7,225.97	7,256.97	57.47	250.54	-93.80	1,018.12	-9,145.85	7,310.56	7,023.54	287.02	25.471		
9,000.00	7,256.59	7,225.59	7,256.59	59.77	250.52	-93.75	1,018.12	-9,145.85	7,210.73	6,923.66	287.07	25.118		
9,100.00	7,256.21	7,225.21	7,256.21	62.12	250.51	-93.70	1,018.12	-9,145.85	7,110.90	6,823.78	287.13	24.766		
9,200.00	7,255.83	7,224.83	7,255.83	64.50	250.50	-93.65	1,018.12	-9,145.85	7,011.08	6,723.89	287.18	24.413		
9,300.00	7,255.45	7,224.45	7,255.45	66.93	250.48	-93.59	1,018.12	-9,145.85	6,911.26	6,624.01	287.24	24.061		
9,400.00	7,255.07	7,224.07	7,255.07	69.38	250.47	-93.54	1,018.12	-9,145.85	6,811.44	6,524.13	287.31	23.708		
9,500.00	7,254.69	7,223.69	7,254.69	71.87	250.46	-93.49	1,018.12	-9,145.85	6,711.63	6,424.25	287.38	23.355		
9,600.00	7,254.31	7,223.31	7,254.31	74.38	250.44	-93.44	1,018.12	-9,145.85	6,611.83	6,324.38	287.45	23.002		
9,700.00	7,253.93	7,222.93	7,253.93	76.92	250.43	-93.39	1,018.12	-9,145.85	6,512.03	6,224.50	287.53	22.648		
9,800.00	7,253.55	7,222.55	7,253.55	79.48	250.42	-93.33	1,018.12	-9,145.85	6,412.24	6,124.63	287.61	22.295		
9,900.00	7,253.18	7,222.18	7,253.18	82.06	250.40	-93.28	1,018.12	-9,145.85	6,312.46	6,024.76	287.70	21.941		
10,000.00	7,252.80	7,221.80	7,252.80	84.65	250.39	-93.23	1,018.12	-9,145.85	6,212.68	5,924.89	287.79	21.588		
10,100.00	7,252.42	7,221.42	7,252.42	87.27	250.38	-93.18	1,018.12	-9,145.85	6,112.91	5,825.02	287.88	21.234		
10,200.00	7,252.04	7,221.04	7,252.04	89.89	250.36	-93.13	1,018.12	-9,145.85	6,013.14	5,725.16	287.98	20.880		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,251.66	7,220.66	7,251.66	92.54	250.35	-93.07	1,018.12	-9,145.85	5,913.39	5,625.30	288.09	20.526		
10,400.00	7,251.28	7,220.28	7,251.28	95.19	250.34	-93.02	1,018.12	-9,145.85	5,813.64	5,525.44	288.21	20.172		
10,500.00	7,250.90	7,219.90	7,250.90	97.86	250.32	-92.97	1,018.12	-9,145.85	5,713.91	5,425.58	288.33	19.817		
10,600.00	7,250.52	7,219.52	7,250.52	100.53	250.31	-92.92	1,018.12	-9,145.85	5,614.18	5,325.72	288.45	19.463		
10,700.00	7,250.14	7,219.14	7,250.14	103.22	250.30	-92.87	1,018.12	-9,145.85	5,514.46	5,225.87	288.59	19.108		
10,800.00	7,249.76	7,218.76	7,249.76	105.91	250.28	-92.81	1,018.12	-9,145.85	5,414.75	5,126.02	288.73	18.754		
10,900.00	7,249.38	7,218.38	7,249.38	108.62	250.27	-92.76	1,018.12	-9,145.85	5,315.05	5,026.17	288.88	18.399		
11,000.00	7,249.00	7,218.00	7,249.00	111.33	250.26	-92.71	1,018.12	-9,145.85	5,215.37	4,926.33	289.04	18.044		
11,100.00	7,248.62	7,217.62	7,248.62	114.04	250.24	-92.66	1,018.12	-9,145.85	5,115.70	4,826.49	289.21	17.689		
11,200.00	7,248.24	7,217.24	7,248.24	116.77	250.23	-92.61	1,018.12	-9,145.85	5,016.04	4,726.65	289.39	17.333		
11,300.00	7,247.86	7,216.86	7,247.86	119.50	250.22	-92.55	1,018.12	-9,145.85	4,916.39	4,626.81	289.58	16.978		
11,400.00	7,247.48	7,216.48	7,247.48	122.24	250.20	-92.50	1,018.12	-9,145.85	4,816.76	4,526.98	289.78	16.622		
11,500.00	7,247.10	7,216.10	7,247.10	124.98	250.19	-92.45	1,018.12	-9,145.85	4,717.14	4,427.15	289.99	16.267		
11,600.00	7,246.72	7,215.72	7,246.72	127.73	250.18	-92.40	1,018.12	-9,145.85	4,617.54	4,327.32	290.22	15.911		
11,700.00	7,246.34	7,215.34	7,246.34	130.48	250.16	-92.35	1,018.12	-9,145.85	4,517.96	4,227.50	290.46	15.555		
11,800.00	7,245.96	7,214.96	7,245.96	133.24	250.15	-92.29	1,018.12	-9,145.85	4,418.40	4,127.68	290.71	15.198		
11,900.00	7,245.58	7,214.58	7,245.58	136.00	250.14	-92.24	1,018.12	-9,145.85	4,318.85	4,027.87	290.99	14.842		
12,000.00	7,245.21	7,214.21	7,245.21	138.76	250.12	-92.19	1,018.12	-9,145.85	4,219.33	3,928.05	291.28	14.486		
12,100.00	7,244.83	7,213.83	7,244.83	141.53	250.11	-92.14	1,018.12	-9,145.85	4,119.83	3,828.24	291.59	14.129		
12,200.00	7,244.45	7,213.45	7,244.45	144.30	250.10	-92.09	1,018.12	-9,145.85	4,020.36	3,728.44	291.92	13.772		
12,300.00	7,244.07	7,213.07	7,244.07	147.08	250.08	-92.03	1,018.12	-9,145.85	3,920.91	3,628.64	292.28	13.415		
12,400.00	7,243.69	7,212.69	7,243.69	149.86	250.07	-91.98	1,018.12	-9,145.85	3,821.49	3,528.84	292.66	13.058		
12,500.00	7,243.31	7,212.31	7,243.31	152.64	250.06	-91.93	1,018.12	-9,145.85	3,722.11	3,429.04	293.07	12.701		
12,600.00	7,242.93	7,211.93	7,242.93	155.42	250.04	-91.88	1,018.12	-9,145.85	3,622.75	3,329.25	293.51	12.343		
12,700.00	7,242.55	7,211.55	7,242.55	158.21	250.03	-91.82	1,018.12	-9,145.85	3,523.44	3,229.46	293.98	11.985		
12,800.00	7,242.17	7,211.17	7,242.17	161.00	250.02	-91.77	1,018.12	-9,145.85	3,424.16	3,129.67	294.49	11.627		
12,900.00	7,241.79	7,210.79	7,241.79	163.79	250.01	-91.72	1,018.12	-9,145.85	3,324.93	3,029.88	295.04	11.269		
13,000.00	7,241.41	7,210.41	7,241.41	166.58	249.99	-91.67	1,018.12	-9,145.85	3,225.74	2,930.10	295.64	10.911		
13,100.00	7,241.03	7,210.03	7,241.03	169.38	249.98	-91.62	1,018.12	-9,145.85	3,126.61	2,830.32	296.29	10.553		
13,200.00	7,240.65	7,209.65	7,240.65	172.18	249.97	-91.56	1,018.12	-9,145.85	3,027.53	2,730.54	296.99	10.194		
13,300.00	7,240.27	7,209.27	7,240.27	174.98	249.95	-91.51	1,018.12	-9,145.85	2,928.51	2,630.76	297.76	9.835		
13,400.00	7,239.89	7,208.89	7,239.89	177.78	249.94	-91.46	1,018.12	-9,145.85	2,829.57	2,530.98	298.59	9.476		
13,500.00	7,239.51	7,208.51	7,239.51	180.58	249.93	-91.41	1,018.12	-9,145.85	2,730.70	2,431.20	299.51	9.117		
13,600.00	7,239.13	7,208.13	7,239.13	183.39	249.91	-91.36	1,018.12	-9,145.85	2,631.92	2,331.41	300.51	8.758		
13,700.00	7,238.75	7,207.75	7,238.75	186.20	249.90	-91.30	1,018.12	-9,145.85	2,533.23	2,231.62	301.61	8.399		
13,800.00	7,238.37	7,207.37	7,238.37	189.00	249.89	-91.25	1,018.12	-9,145.85	2,434.65	2,131.83	302.82	8.040		
13,900.00	7,237.99	7,206.99	7,237.99	191.81	249.87	-91.20	1,018.12	-9,145.85	2,336.19	2,032.03	304.16	7.681		
14,000.00	7,237.62	7,206.62	7,237.62	194.63	249.86	-91.15	1,018.12	-9,145.85	2,237.86	1,932.22	305.64	7.322		
14,100.00	7,237.24	7,206.24	7,237.24	197.44	249.85	-91.09	1,018.12	-9,145.85	2,139.69	1,832.40	307.30	6.963		
14,200.00	7,236.86	7,205.86	7,236.86	200.25	249.83	-91.04	1,018.12	-9,145.85	2,041.70	1,732.56	309.14	6.604		
14,300.00	7,236.48	7,205.48	7,236.48	203.07	249.82	-90.99	1,018.12	-9,145.85	1,943.92	1,632.71	311.20	6.246		
14,400.00	7,236.10	7,205.10	7,236.10	205.88	249.81	-90.94	1,018.12	-9,145.85	1,846.37	1,532.84	313.53	5.889		
14,500.00	7,235.72	7,204.72	7,235.72	208.70	249.79	-90.89	1,018.12	-9,145.85	1,749.09	1,432.94	316.15	5.532		
14,600.00	7,235.34	7,204.34	7,235.34	211.52	249.78	-90.83	1,018.12	-9,145.85	1,652.15	1,333.02	319.13	5.177		
14,700.00	7,234.96	7,203.96	7,234.96	214.34	249.77	-90.78	1,018.12	-9,145.85	1,555.59	1,233.07	322.52	4.823		
14,800.00	7,234.58	7,203.58	7,234.58	217.16	249.75	-90.73	1,018.12	-9,145.85	1,459.49	1,133.08	326.41	4.471		
14,900.00	7,234.20	7,203.20	7,234.20	219.98	249.74	-90.68	1,018.12	-9,145.85	1,363.95	1,033.05	330.90	4.122		
15,000.00	7,233.82	7,202.82	7,233.82	222.81	249.73	-90.63	1,018.12	-9,145.85	1,269.10	933.00	336.11	3.776		
15,100.00	7,233.44	7,202.44	7,233.44	225.63	249.71	-90.57	1,018.12	-9,145.85	1,175.11	832.92	342.19	3.434		
15,200.00	7,233.06	7,202.06	7,233.06	228.45	249.70	-90.52	1,018.12	-9,145.85	1,082.19	732.84	349.35	3.098		
15,216.01	7,233.00	7,202.00	7,233.00	228.91	249.70	-90.51	1,018.12	-9,145.85	1,067.43	716.82	350.61	3.044	CC, ES, 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	13.02	1.02	3.28	3.28	3.22	2,064.52	116.25	2,067.79					
100.00	100.00	122.07	110.07	3.28	3.29	3.21	2,064.26	115.88	2,067.53	2,060.95	6.58	314.240		
200.00	200.00	230.24	218.24	3.34	3.37	3.21	2,063.47	115.73	2,066.79	2,060.08	6.71	308.132		
300.00	299.98	328.13	316.12	3.45	3.49	8.96	2,062.61	115.71	2,064.19	2,057.25	6.94	297.591		
400.00	399.84	419.63	407.61	3.61	3.64	8.98	2,062.10	115.18	2,058.44	2,051.18	7.25	283.880		
500.00	499.45	509.92	497.91	3.82	3.83	9.02	2,062.01	114.40	2,049.68	2,042.04	7.64	268.146		
600.00	598.70	602.04	590.02	4.07	4.05	9.09	2,062.29	113.51	2,037.89	2,029.78	8.11	251.274		
700.00	697.47	692.32	680.29	4.35	4.28	9.18	2,062.90	113.07	2,023.08	2,014.44	8.63	234.404		
800.00	795.62	807.58	795.56	4.67	4.61	9.35	2,063.44	113.11	2,004.71	1,995.43	9.28	216.126		
900.00	893.06	891.34	879.31	5.01	4.87	9.52	2,063.78	113.27	1,982.89	1,973.02	9.87	200.830		
1,000.00	989.64	1,003.26	991.24	5.38	5.23	9.76	2,064.16	113.59	1,957.72	1,947.12	10.60	184.733		
1,100.00	1,085.42	1,097.63	1,085.60	5.78	5.55	9.96	2,064.11	113.99	1,929.33	1,918.03	11.30	170.771		
1,200.00	1,181.09	1,188.49	1,176.46	6.20	5.87	10.12	2,064.17	114.68	1,900.74	1,888.73	12.00	158.381		
1,300.00	1,276.76	1,293.84	1,281.80	6.65	6.25	10.32	2,064.15	115.41	1,872.08	1,859.31	12.77	146.546		
1,400.00	1,372.43	1,384.71	1,372.68	7.11	6.58	10.48	2,063.98	115.60	1,843.25	1,829.73	13.52	136.337		
1,500.00	1,468.10	1,487.33	1,475.30	7.57	6.96	10.66	2,063.82	115.69	1,814.46	1,800.14	14.32	126.717		
1,600.00	1,563.77	1,589.28	1,577.24	8.05	7.35	10.86	2,063.20	115.96	1,785.26	1,770.13	15.13	118.002		
1,700.00	1,659.44	1,685.14	1,673.10	8.53	7.72	11.03	2,062.46	115.80	1,755.88	1,739.95	15.93	110.217		
1,800.00	1,755.11	1,784.23	1,772.19	9.02	8.11	11.21	2,061.65	115.14	1,726.45	1,709.69	16.75	103.054		
1,900.00	1,850.78	1,872.73	1,860.68	9.52	8.45	11.36	2,060.97	114.37	1,697.05	1,679.50	17.55	96.689		
2,000.00	1,946.45	1,972.45	1,960.40	10.02	8.85	11.54	2,060.45	113.57	1,667.91	1,649.52	18.39	90.692		
2,100.00	2,042.12	2,064.95	2,052.89	10.52	9.22	11.71	2,059.73	112.78	1,638.53	1,619.32	19.22	85.269		
2,200.00	2,137.78	2,154.69	2,142.61	11.03	9.58	11.86	2,059.44	111.61	1,609.55	1,589.51	20.04	80.318		
2,300.00	2,233.45	2,241.67	2,229.60	11.54	9.93	12.02	2,059.44	110.73	1,580.93	1,560.07	20.86	75.781		
2,400.00	2,329.12	2,326.91	2,314.83	12.05	10.27	12.20	2,060.05	110.07	1,553.01	1,531.33	21.68	71.618		
2,500.00	2,424.79	2,416.16	2,404.07	12.56	10.63	12.36	2,061.17	108.94	1,525.60	1,503.07	22.52	67.734		
2,600.00	2,520.46	2,502.96	2,490.84	13.08	10.99	12.52	2,062.77	107.65	1,498.72	1,475.36	23.36	64.156		
2,700.00	2,616.13	2,592.18	2,580.02	13.60	11.36	12.68	2,064.91	106.28	1,472.39	1,448.18	24.21	60.821		
2,800.00	2,711.80	2,700.22	2,688.02	14.12	11.80	12.88	2,067.39	104.60	1,445.97	1,420.87	25.11	57.595		
2,900.00	2,807.47	2,792.08	2,779.85	14.64	12.18	13.06	2,069.23	103.08	1,419.28	1,393.31	25.97	54.657		
3,000.00	2,903.14	2,895.56	2,883.29	15.16	12.61	13.25	2,071.29	100.89	1,392.53	1,365.67	26.86	51.851		
3,100.00	2,998.81	2,993.77	2,981.46	15.68	13.02	13.43	2,072.89	98.68	1,365.43	1,337.69	27.74	49.230		
3,200.00	3,094.48	3,082.86	3,070.51	16.21	13.39	13.61	2,074.47	96.90	1,338.52	1,309.92	28.60	46.801		
3,300.00	3,190.15	3,182.24	3,169.86	16.73	13.80	13.83	2,076.46	95.11	1,311.85	1,282.37	29.49	44.492		
3,400.00	3,285.82	3,270.14	3,257.73	17.26	14.17	14.04	2,078.21	93.72	1,285.24	1,254.89	30.35	42.342		
3,500.00	3,381.49	3,356.07	3,343.62	17.78	14.53	14.25	2,080.65	92.43	1,259.46	1,228.23	31.22	40.339		
3,600.00	3,477.16	3,455.14	3,442.63	18.31	14.94	14.52	2,083.94	91.46	1,234.24	1,202.12	32.11	38.434		
3,700.00	3,572.83	3,554.43	3,541.88	18.84	15.35	14.85	2,086.47	91.22	1,208.39	1,175.39	33.01	36.611		
3,800.00	3,668.50	3,660.66	3,648.08	19.37	15.80	15.19	2,089.18	90.57	1,182.57	1,148.67	33.91	34.878		
3,900.00	3,764.17	3,762.27	3,749.67	19.89	16.22	15.53	2,090.61	89.61	1,155.60	1,120.80	34.80	33.207		
4,000.00	3,859.84	3,861.57	3,848.95	20.42	16.64	15.87	2,092.04	88.46	1,128.68	1,092.99	35.69	31.623		
4,100.00	3,955.51	3,966.92	3,954.28	20.95	17.08	16.19	2,093.04	86.10	1,101.16	1,064.58	36.58	30.101		
4,200.00	4,051.18	4,066.88	4,054.20	21.48	17.50	16.49	2,093.33	83.48	1,072.97	1,035.50	37.47	28.635		
4,300.00	4,146.85	4,158.70	4,145.99	22.01	17.89	16.78	2,093.60	80.97	1,044.80	1,006.44	38.36	27.234		
4,400.00	4,242.52	4,250.78	4,238.04	22.55	18.28	17.12	2,094.26	79.11	1,017.17	977.91	39.26	25.909		
4,500.00	4,338.19	4,342.34	4,329.59	23.08	18.66	17.50	2,095.08	77.59	989.83	949.67	40.16	24.647		
4,600.00	4,433.86	4,433.09	4,420.32	23.61	19.04	17.92	2,096.38	76.73	963.16	922.09	41.06	23.455		
4,700.00	4,529.53	4,526.71	4,513.92	24.14	19.44	18.36	2,098.01	75.68	936.81	894.84	41.97	22.322		
4,800.00	4,625.19	4,619.67	4,606.85	24.67	19.83	18.80	2,100.19	74.21	910.99	868.12	42.87	21.248		
4,900.00	4,720.86	4,723.15	4,710.29	25.21	20.27	19.30	2,102.27	72.37	884.87	841.10	43.77	20.217		
5,000.00	4,816.53	4,824.31	4,811.41	25.74	20.70	19.80	2,103.74	70.19	858.21	813.54	44.66	19.215		
5,100.00	4,912.20	4,924.38	4,911.45	26.27	21.12	20.32	2,104.57	67.69	830.93	785.37	45.56	18.239		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	5,017.35	5,004.37	26.80	21.51	20.81	2,105.55	65.01	803.85	757.38	46.47	17.297		
5,300.00	5,103.54	5,114.85	5,101.84	27.34	21.93	21.39	2,106.44	62.58	776.79	729.41	47.38	16.396		
5,400.00	5,199.22	5,206.17	5,193.14	27.87	22.31	22.01	2,107.32	61.18	750.11	701.80	48.31	15.527		
5,500.00	5,295.46	5,301.62	5,288.58	28.39	22.72	22.48	2,108.54	59.96	725.73	676.50	49.22	14.743		
5,600.00	5,392.60	5,397.57	5,384.51	28.89	23.12	22.94	2,109.84	59.10	704.75	654.62	50.13	14.057		
5,700.00	5,490.50	5,494.95	5,481.89	29.37	23.54	23.40	2,111.16	58.80	687.17	636.14	51.03	13.465		
5,800.00	5,589.05	5,588.79	5,575.71	29.83	23.93	23.78	2,112.73	58.80	673.21	621.28	51.94	12.962		
5,900.00	5,688.14	5,689.65	5,676.56	30.26	24.36	24.18	2,114.55	59.46	662.80	610.00	52.80	12.553		
6,000.00	5,787.63	5,795.75	5,782.65	30.68	24.81	24.53	2,115.72	60.28	654.97	601.34	53.63	12.214		
6,100.00	5,887.41	5,899.26	5,886.15	31.07	25.25	24.73	2,116.19	60.40	649.50	595.06	54.44	11.931		
6,200.00	5,987.36	6,005.67	5,992.56	31.44	25.70	24.81	2,115.94	60.12	646.44	591.23	55.21	11.708		
6,300.00	6,087.36	6,107.69	6,094.58	31.80	26.13	19.06	2,115.09	59.62	645.28	589.28	56.00	11.523		
6,400.00	6,187.36	6,208.02	6,194.90	32.15	26.56	19.05	2,114.07	59.11	644.15	587.35	56.79	11.342		
6,500.00	6,287.36	6,307.19	6,294.06	32.51	26.98	19.02	2,113.16	58.41	643.05	585.45	57.60	11.164		
6,600.00	6,387.36	6,406.26	6,393.12	32.87	27.40	18.94	2,112.54	57.25	642.08	583.67	58.41	10.993		
6,700.00	6,487.36	6,500.43	6,487.29	33.23	27.80	18.82	2,112.58	55.92	641.66	582.41	59.25	10.830		
6,748.98	6,536.33	6,551.00	6,537.85	33.41	28.01	18.76	2,112.75	55.24	641.61	581.98	59.63	10.760		
6,800.00	6,587.36	6,603.68	6,590.53	33.59	28.24	18.71	2,112.75	54.64	641.42	581.39	60.03	10.685		
6,817.06	6,604.42	6,621.13	6,607.97	33.65	28.31	109.16	2,112.72	54.44	641.38	581.22	60.16	10.661 CC		
6,900.00	6,687.26	6,706.03	6,692.86	33.95	28.67	109.26	2,112.52	53.18	641.77	580.95	60.82	10.553 ES		
7,000.00	6,785.58	6,805.36	6,792.18	34.31	29.10	110.18	2,112.10	51.55	646.87	585.22	61.64	10.494 SF		
7,100.00	6,879.94	6,900.13	6,886.94	34.65	29.50	111.68	2,111.63	50.05	658.14	595.63	62.51	10.529		
7,200.00	6,968.01	6,986.44	6,973.24	34.97	29.87	113.28	2,111.24	48.99	677.28	613.86	63.42	10.680		
7,300.00	7,047.61	7,066.00	7,052.79	35.27	30.20	114.59	2,110.82	48.54	705.97	641.63	64.34	10.973		
7,400.00	7,116.80	7,137.75	7,124.55	35.54	30.51	115.15	2,110.19	48.43	745.28	680.02	65.25	11.421		
7,500.00	7,173.86	7,198.98	7,185.77	35.81	30.77	114.34	2,109.24	48.38	795.46	729.31	66.15	12.025		
7,600.00	7,217.38	7,242.64	7,229.42	36.17	30.95	111.16	2,108.40	48.35	856.27	789.26	67.00	12.780		
7,700.00	7,246.31	7,271.63	7,258.41	36.80	31.08	105.12	2,107.84	48.33	926.36	858.61	67.75	13.673		
7,800.00	7,259.92	7,285.32	7,272.09	37.72	31.13	95.60	2,107.58	48.32	1,003.55	935.19	68.36	14.680		
7,900.00	7,260.77	7,286.24	7,273.02	38.86	31.14	90.84	2,107.56	48.32	1,085.27	1,016.43	68.84	15.766		
8,000.00	7,260.39	7,285.94	7,272.72	40.19	31.14	90.81	2,107.57	48.32	1,169.85	1,100.60	69.25	16.893		
8,100.00	7,260.01	7,285.64	7,272.42	41.67	31.14	90.78	2,107.58	48.32	1,256.71	1,187.09	69.61	18.053		
8,200.00	7,259.63	7,285.34	7,272.12	43.30	31.13	90.76	2,107.58	48.32	1,345.39	1,275.46	69.93	19.239		
8,300.00	7,259.25	7,285.04	7,271.82	45.05	31.13	90.73	2,107.59	48.32	1,435.56	1,365.35	70.21	20.448		
8,400.00	7,258.87	7,284.74	7,271.52	46.91	31.13	90.70	2,107.59	48.33	1,526.95	1,456.50	70.45	21.674		
8,500.00	7,258.49	7,284.44	7,271.22	48.87	31.13	90.67	2,107.60	48.33	1,619.36	1,548.70	70.67	22.915		
8,600.00	7,258.11	7,284.14	7,270.92	50.92	31.13	90.64	2,107.60	48.33	1,712.63	1,641.77	70.86	24.169		
8,700.00	7,257.73	7,283.84	7,270.62	53.04	31.13	90.61	2,107.61	48.33	1,806.61	1,735.58	71.03	25.433		
8,800.00	7,257.35	7,283.54	7,270.32	55.23	31.13	90.58	2,107.62	48.33	1,901.21	1,830.02	71.19	26.706		
8,900.00	7,256.97	7,283.24	7,270.02	57.47	31.13	90.56	2,107.62	48.33	1,996.34	1,925.01	71.33	27.987		
9,000.00	7,256.59	7,282.94	7,269.72	59.77	31.12	90.53	2,107.63	48.33	2,091.92	2,020.46	71.46	29.273		
9,100.00	7,256.21	7,282.65	7,269.42	62.12	31.12	90.50	2,107.63	48.33	2,187.89	2,116.31	71.58	30.565		
9,200.00	7,255.83	7,282.35	7,269.12	64.50	31.12	90.47	2,107.64	48.33	2,284.21	2,212.52	71.69	31.862		
9,300.00	7,255.45	7,282.05	7,268.82	66.93	31.12	90.44	2,107.64	48.33	2,380.84	2,309.04	71.79	33.162		
9,400.00	7,255.07	7,281.75	7,268.52	69.38	31.12	90.41	2,107.65	48.33	2,477.73	2,405.84	71.89	34.465		
9,500.00	7,254.69	7,281.45	7,268.22	71.87	31.12	90.38	2,107.66	48.33	2,574.86	2,502.88	71.98	35.771		
9,600.00	7,254.31	7,281.15	7,267.92	74.38	31.12	90.36	2,107.66	48.33	2,672.20	2,600.13	72.07	37.079		
9,700.00	7,253.93	7,280.85	7,267.62	76.92	31.12	90.33	2,107.67	48.33	2,769.73	2,697.58	72.15	38.389		
9,800.00	7,253.55	7,280.55	7,267.32	79.48	31.11	90.30	2,107.67	48.33	2,867.43	2,795.20	72.23	39.701		
9,900.00	7,253.18	7,280.25	7,267.02	82.06	31.11	90.27	2,107.68	48.33	2,965.28	2,892.98	72.30	41.013		
10,000.00	7,252.80	7,279.95	7,266.72	84.65	31.11	90.24	2,107.68	48.33	3,063.28	2,990.90	72.37	42.327		
10,100.00	7,252.42	7,279.65	7,266.42	87.27	31.11	90.21	2,107.69	48.33	3,161.39	3,088.95	72.44	43.641		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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)			
10,200.00	7,252.04	7,279.35	7,266.12	89.89	31.11	90.18	2,107.70	48.33	3,259.63	3,187.12	72.51	44.955		
10,300.00	7,251.66	7,279.05	7,265.82	92.54	31.11	90.15	2,107.70	48.33	3,357.96	3,285.39	72.57	46.270		
10,400.00	7,251.28	7,278.75	7,265.52	95.19	31.11	90.13	2,107.71	48.33	3,456.40	3,383.76	72.64	47.585		
10,500.00	7,250.90	7,278.45	7,265.22	97.86	31.11	90.10	2,107.71	48.33	3,554.92	3,482.22	72.70	48.899		
10,600.00	7,250.52	7,278.15	7,264.92	100.53	31.10	90.07	2,107.72	48.33	3,653.52	3,580.76	72.76	50.213		
10,700.00	7,250.14	7,277.85	7,264.62	103.22	31.10	90.04	2,107.72	48.33	3,752.19	3,679.37	72.82	51.527		
10,800.00	7,249.76	7,277.55	7,264.32	105.91	31.10	90.01	2,107.73	48.33	3,850.93	3,778.05	72.88	52.841		
10,900.00	7,249.38	7,277.25	7,264.02	108.62	31.10	89.98	2,107.74	48.33	3,949.74	3,876.80	72.94	54.153		
11,000.00	7,249.00	7,276.95	7,263.72	111.33	31.10	89.95	2,107.74	48.33	4,048.60	3,975.61	72.99	55.465		
11,100.00	7,248.62	7,276.65	7,263.42	114.04	31.10	89.93	2,107.75	48.33	4,147.52	4,074.47	73.05	56.776		
11,200.00	7,248.24	7,276.35	7,263.12	116.77	31.10	89.90	2,107.75	48.33	4,246.49	4,173.38	73.11	58.085		
11,300.00	7,247.86	7,276.05	7,262.82	119.50	31.09	89.87	2,107.76	48.33	4,345.51	4,272.34	73.16	59.394		
11,400.00	7,247.48	7,275.75	7,262.52	122.24	31.09	89.84	2,107.77	48.33	4,444.57	4,371.35	73.22	60.701		
11,500.00	7,247.10	7,275.45	7,262.22	124.98	31.09	89.81	2,107.77	48.33	4,543.67	4,470.39	73.28	62.007		
11,600.00	7,246.72	7,275.15	7,261.92	127.73	31.09	89.78	2,107.78	48.33	4,642.81	4,569.48	73.33	63.312		
11,700.00	7,246.34	7,274.85	7,261.62	130.48	31.09	89.75	2,107.78	48.33	4,741.99	4,668.60	73.39	64.615		
11,800.00	7,245.96	7,274.55	7,261.32	133.24	31.09	89.73	2,107.79	48.33	4,841.20	4,767.75	73.44	65.917		
11,900.00	7,245.58	7,274.25	7,261.02	136.00	31.09	89.70	2,107.79	48.33	4,940.44	4,866.94	73.50	67.217		
12,000.00	7,245.21	7,273.95	7,260.72	138.76	31.09	89.67	2,107.80	48.33	5,039.71	4,966.16	73.56	68.516		
12,100.00	7,244.83	7,273.65	7,260.42	141.53	31.08	89.64	2,107.81	48.33	5,139.01	5,065.40	73.61	69.812		
12,200.00	7,244.45	7,273.35	7,260.12	144.30	31.08	89.61	2,107.81	48.33	5,238.34	5,164.67	73.67	71.107		
12,300.00	7,244.07	7,273.05	7,259.82	147.08	31.08	89.58	2,107.82	48.33	5,337.69	5,263.97	73.72	72.400		
12,400.00	7,243.69	7,272.75	7,259.52	149.86	31.08	89.55	2,107.82	48.33	5,437.07	5,363.28	73.78	73.691		
12,500.00	7,243.31	7,272.45	7,259.22	152.64	31.08	89.53	2,107.83	48.33	5,536.46	5,462.63	73.84	74.980		
12,600.00	7,242.93	7,272.15	7,258.93	155.42	31.08	89.50	2,107.83	48.33	5,635.88	5,561.99	73.90	76.268		
12,700.00	7,242.55	7,271.85	7,258.63	158.21	31.08	89.47	2,107.84	48.33	5,735.32	5,661.37	73.95	77.553		
12,800.00	7,242.17	7,271.55	7,258.33	161.00	31.08	89.44	2,107.85	48.33	5,834.78	5,760.77	74.01	78.836		
12,900.00	7,241.79	7,271.25	7,258.03	163.79	31.07	89.41	2,107.85	48.33	5,934.26	5,860.19	74.07	80.116		
13,000.00	7,241.41	7,270.95	7,257.73	166.58	31.07	89.38	2,107.86	48.33	6,033.75	5,959.62	74.13	81.395		
13,100.00	7,241.03	7,270.65	7,257.43	169.38	31.07	89.35	2,107.86	48.33	6,133.26	6,059.08	74.19	82.671		
13,200.00	7,240.65	7,270.35	7,257.13	172.18	31.07	89.33	2,107.87	48.33	6,232.79	6,158.54	74.25	83.945		
13,300.00	7,240.27	7,270.05	7,256.83	174.98	31.07	89.30	2,107.87	48.33	6,332.33	6,258.02	74.31	85.217		
13,400.00	7,239.89	7,269.75	7,256.53	177.78	31.07	89.27	2,107.88	48.33	6,431.89	6,357.52	74.37	86.486		
13,500.00	7,239.51	7,269.45	7,256.23	180.58	31.07	89.24	2,107.89	48.33	6,531.46	6,457.03	74.43	87.752		
13,600.00	7,239.13	7,269.15	7,255.93	183.39	31.07	89.21	2,107.89	48.34	6,631.04	6,556.55	74.49	89.017		
13,700.00	7,238.75	7,268.85	7,255.63	186.20	31.06	89.18	2,107.90	48.34	6,730.63	6,656.08	74.55	90.278		
13,800.00	7,238.37	7,268.55	7,255.33	189.00	31.06	89.15	2,107.90	48.34	6,830.24	6,755.62	74.62	91.538		
13,900.00	7,237.99	7,268.25	7,255.03	191.81	31.06	89.13	2,107.91	48.34	6,929.86	6,855.18	74.68	92.794		
14,000.00	7,237.62	7,267.95	7,254.73	194.63	31.06	89.10	2,107.91	48.34	7,029.48	6,954.74	74.74	94.048		
14,100.00	7,237.24	7,267.65	7,254.43	197.44	31.06	89.07	2,107.92	48.34	7,129.12	7,054.32	74.81	95.299		
14,200.00	7,236.86	7,267.35	7,254.13	200.25	31.06	89.04	2,107.93	48.34	7,228.77	7,153.90	74.87	96.548		
14,300.00	7,236.48	7,267.05	7,253.83	203.07	31.06	89.01	2,107.93	48.34	7,328.43	7,253.49	74.94	97.794		
14,400.00	7,236.10	7,266.75	7,253.53	205.88	31.06	88.98	2,107.94	48.34	7,428.10	7,353.09	75.00	99.037		
14,500.00	7,235.72	7,266.45	7,253.23	208.70	31.05	88.95	2,107.94	48.34	7,527.77	7,452.70	75.07	100.277		
14,600.00	7,235.34	7,266.15	7,252.93	211.52	31.05	88.93	2,107.95	48.34	7,627.46	7,552.32	75.14	101.514		
14,700.00	7,234.96	7,265.85	7,252.63	214.34	31.05	88.90	2,107.96	48.34	7,727.15	7,651.95	75.20	102.749		
14,800.00	7,234.58	7,265.55	7,252.33	217.16	31.05	88.87	2,107.96	48.34	7,826.85	7,751.58	75.27	103.981		
14,900.00	7,234.20	7,265.25	7,252.03	219.98	31.05	88.84	2,107.97	48.34	7,926.56	7,851.22	75.34	105.209		
15,000.00	7,233.82	7,264.95	7,251.73	222.81	31.05	88.81	2,107.97	48.34	8,026.28	7,950.87	75.41	106.435		
15,100.00	7,233.44	7,264.65	7,251.43	225.63	31.05	88.78	2,107.98	48.34	8,126.00	8,050.52	75.48	107.658		
15,200.00	7,233.06	7,264.35	7,251.13	228.45	31.05	88.76	2,107.98	48.34	8,225.73	8,150.18	75.55	108.878		
15,216.01	7,233.00	7,264.31	7,251.08	228.91	31.05	88.75	2,107.98	48.34	8,241.70	8,166.14	75.56	109.073		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	61.00	3.28	3.28	-166.49	-4,359.61	-1,047.65	4,484.13					
100.00	100.00	39.00	100.00	3.28	3.35	-166.49	-4,359.61	-1,047.65	4,483.72	4,477.08	6.63	675.806		
200.00	200.00	139.00	200.00	3.34	4.52	-166.49	-4,359.61	-1,047.65	4,483.72	4,475.86	7.85	570.813 CC		
300.00	299.98	238.98	299.98	3.45	7.37	-160.75	-4,359.61	-1,047.65	4,485.37	4,474.55	10.81	414.806 ES		
400.00	399.84	338.84	399.84	3.61	10.60	-160.74	-4,359.61	-1,047.65	4,490.31	4,476.10	14.21	315.976		
500.00	499.45	438.45	499.45	3.82	13.95	-160.72	-4,359.61	-1,047.65	4,498.54	4,480.77	17.77	253.178		
600.00	598.70	537.70	598.70	4.07	17.34	-160.70	-4,359.61	-1,047.65	4,510.05	4,488.64	21.40	210.705		
700.00	697.47	636.47	697.47	4.35	20.73	-160.66	-4,359.61	-1,047.65	4,524.83	4,499.75	25.08	180.381		
800.00	795.62	734.62	795.62	4.67	24.12	-160.62	-4,359.61	-1,047.65	4,542.87	4,514.08	28.79	157.799		
900.00	893.06	832.06	893.06	5.01	27.50	-160.57	-4,359.61	-1,047.65	4,564.14	4,531.64	32.50	140.421		
1,000.00	989.64	928.64	989.64	5.38	30.85	-160.51	-4,359.61	-1,047.65	4,588.64	4,552.42	36.22	126.698		
1,100.00	1,085.42	1,024.42	1,085.42	5.78	34.17	-160.54	-4,359.61	-1,047.65	4,615.87	4,575.94	39.93	115.610		
1,200.00	1,181.09	1,120.09	1,181.09	6.20	37.50	-160.66	-4,359.61	-1,047.65	4,643.45	4,599.81	43.64	106.404		
1,300.00	1,276.76	1,215.76	1,276.76	6.65	40.83	-160.78	-4,359.61	-1,047.65	4,671.06	4,623.69	47.37	98.608		
1,400.00	1,372.43	1,311.43	1,372.43	7.11	44.16	-160.90	-4,359.61	-1,047.65	4,698.68	4,647.57	51.11	91.927		
1,500.00	1,468.10	1,407.10	1,468.10	7.57	47.49	-161.01	-4,359.61	-1,047.65	4,726.32	4,671.45	54.87	86.140		
1,600.00	1,563.77	1,502.77	1,563.77	8.05	50.82	-161.13	-4,359.61	-1,047.65	4,753.98	4,695.35	58.63	81.083		
1,700.00	1,659.44	1,601.56	1,659.44	8.53	54.26	-161.24	-4,359.61	-1,047.65	4,781.65	4,719.14	62.51	76.493		
1,800.00	1,755.11	1,705.89	1,755.11	9.02	57.90	-161.35	-4,359.61	-1,047.65	4,809.35	4,742.76	66.59	72.223		
1,900.00	1,850.78	1,789.78	1,850.78	9.52	60.82	-161.46	-4,359.61	-1,047.65	4,837.05	4,767.09	69.96	69.138		
2,000.00	1,946.45	1,885.45	1,946.45	10.02	64.16	-161.57	-4,359.61	-1,047.65	4,864.78	4,791.03	73.75	65.963		
2,100.00	2,042.12	1,981.12	2,042.12	10.52	67.50	-161.67	-4,359.61	-1,047.65	4,892.52	4,814.98	77.54	63.095		
2,200.00	2,137.78	2,076.78	2,137.78	11.03	70.83	-161.78	-4,359.61	-1,047.65	4,920.28	4,838.94	81.34	60.492		
2,300.00	2,233.45	2,172.45	2,233.45	11.54	74.17	-161.89	-4,359.61	-1,047.65	4,948.05	4,862.91	85.14	58.120		
2,400.00	2,329.12	2,268.12	2,329.12	12.05	77.50	-161.99	-4,359.61	-1,047.65	4,975.84	4,886.90	88.94	55.948		
2,500.00	2,424.79	2,363.79	2,424.79	12.56	80.84	-162.09	-4,359.61	-1,047.65	5,003.64	4,910.90	92.74	53.954		
2,600.00	2,520.46	2,459.46	2,520.46	13.08	84.18	-162.19	-4,359.61	-1,047.65	5,031.46	4,934.91	96.54	52.115		
2,700.00	2,616.13	2,555.13	2,616.13	13.60	87.52	-162.29	-4,359.61	-1,047.65	5,059.29	4,958.94	100.35	50.416		
2,800.00	2,711.80	2,650.80	2,711.80	14.12	90.85	-162.39	-4,359.61	-1,047.65	5,087.14	4,982.98	104.16	48.840		
2,900.00	2,807.47	2,746.47	2,807.47	14.64	94.19	-162.49	-4,359.61	-1,047.65	5,115.00	5,007.03	107.97	47.374		
3,000.00	2,903.14	2,842.14	2,903.14	15.16	97.53	-162.59	-4,359.61	-1,047.65	5,142.87	5,031.09	111.78	46.008		
3,100.00	2,998.81	2,937.81	2,998.81	15.68	100.87	-162.68	-4,359.61	-1,047.65	5,170.76	5,055.16	115.59	44.732		
3,200.00	3,094.48	3,033.48	3,094.48	16.21	104.21	-162.78	-4,359.61	-1,047.65	5,198.66	5,079.25	119.41	43.537		
3,300.00	3,190.15	3,129.15	3,190.15	16.73	107.54	-162.87	-4,359.61	-1,047.65	5,226.57	5,103.35	123.22	42.416		
3,400.00	3,285.82	3,224.82	3,285.82	17.26	110.88	-162.97	-4,359.61	-1,047.65	5,254.50	5,127.46	127.04	41.362		
3,500.00	3,381.49	3,320.49	3,381.49	17.78	114.22	-163.06	-4,359.61	-1,047.65	5,282.44	5,151.59	130.85	40.369		
3,600.00	3,477.16	3,416.16	3,477.16	18.31	117.56	-163.15	-4,359.61	-1,047.65	5,310.39	5,175.72	134.67	39.433		
3,700.00	3,572.83	3,511.83	3,572.83	18.84	120.90	-163.24	-4,359.61	-1,047.65	5,338.36	5,199.87	138.49	38.548		
3,800.00	3,668.50	3,607.50	3,668.50	19.37	124.24	-163.33	-4,359.61	-1,047.65	5,366.34	5,224.03	142.31	37.710		
3,900.00	3,764.17	3,703.17	3,764.17	19.89	127.57	-163.42	-4,359.61	-1,047.65	5,394.32	5,248.20	146.12	36.916		
4,000.00	3,859.84	3,801.16	3,859.84	20.42	130.99	-163.51	-4,359.61	-1,047.65	5,422.33	5,272.30	150.02	36.143		
4,100.00	3,955.51	3,905.49	3,955.51	20.95	134.64	-163.59	-4,359.61	-1,047.65	5,450.34	5,296.19	154.15	35.358		
4,200.00	4,051.18	4,009.82	4,051.18	21.48	138.28	-163.68	-4,359.61	-1,047.65	5,478.36	5,320.09	158.27	34.614		
4,300.00	4,146.85	4,085.85	4,146.85	22.01	140.93	-163.76	-4,359.61	-1,047.65	5,506.40	5,344.99	161.40	34.116		
4,400.00	4,242.52	4,181.52	4,242.52	22.55	144.27	-163.85	-4,359.61	-1,047.65	5,534.44	5,369.22	165.22	33.497		
4,500.00	4,338.19	4,277.19	4,338.19	23.08	147.61	-163.93	-4,359.61	-1,047.65	5,562.50	5,393.46	169.05	32.905		
4,600.00	4,433.86	4,372.86	4,433.86	23.61	150.95	-164.01	-4,359.61	-1,047.65	5,590.57	5,417.70	172.87	32.340		
4,700.00	4,529.53	4,468.53	4,529.53	24.14	154.29	-164.09	-4,359.61	-1,047.65	5,618.65	5,441.96	176.69	31.800		
4,800.00	4,625.19	4,564.19	4,625.19	24.67	157.62	-164.17	-4,359.61	-1,047.65	5,646.74	5,466.23	180.51	31.282		
4,900.00	4,720.86	4,659.86	4,720.86	25.21	160.96	-164.25	-4,359.61	-1,047.65	5,674.84	5,490.50	184.33	30.786		
5,000.00	4,816.53	4,755.53	4,816.53	25.74	164.30	-164.33	-4,359.61	-1,047.65	5,702.95	5,514.79	188.15	30.310		
5,100.00	4,912.20	4,851.20	4,912.20	26.27	167.64	-164.41	-4,359.61	-1,047.65	5,731.06	5,539.09	191.98	29.853		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	4,946.87	5,007.87	26.80	170.98	-164.49	-4,359.61	-1,047.65	5,759.19	5,563.39	195.80	29.414		
5,300.00	5,103.54	5,042.54	5,103.54	27.34	174.32	-164.57	-4,359.61	-1,047.65	5,787.33	5,587.71	199.62	28.991		
5,400.00	5,199.22	5,138.22	5,199.22	27.87	177.66	-164.66	-4,359.61	-1,047.65	5,815.47	5,612.02	203.45	28.585		
5,500.00	5,295.46	5,234.46	5,295.46	28.39	181.02	-164.87	-4,359.61	-1,047.65	5,841.71	5,634.42	207.28	28.182		
5,600.00	5,392.60	5,331.60	5,392.60	28.89	184.41	-165.05	-4,359.61	-1,047.65	5,864.69	5,653.55	211.14	27.776		
5,700.00	5,490.50	5,429.50	5,490.50	29.37	187.83	-165.21	-4,359.61	-1,047.65	5,884.38	5,669.37	215.02	27.367		
5,800.00	5,589.05	5,528.05	5,589.05	29.83	191.27	-165.33	-4,359.61	-1,047.65	5,900.76	5,681.86	218.90	26.956		
5,900.00	5,688.14	5,627.14	5,688.14	30.26	194.73	-165.43	-4,359.61	-1,047.65	5,913.80	5,691.01	222.79	26.544		
6,000.00	5,787.63	5,726.63	5,787.63	30.68	198.20	-165.50	-4,359.61	-1,047.65	5,923.48	5,696.80	226.68	26.131		
6,100.00	5,887.41	5,826.41	5,887.41	31.07	201.68	-165.55	-4,359.61	-1,047.65	5,929.80	5,699.23	230.57	25.718		
6,200.00	5,987.36	5,926.36	5,987.36	31.44	205.17	-165.57	-4,359.61	-1,047.65	5,932.74	5,698.29	234.45	25.305		
6,300.00	6,087.36	6,026.36	6,087.36	31.80	208.66	-171.31	-4,359.61	-1,047.65	5,932.97	5,694.65	238.32	24.895		
6,400.00	6,187.36	6,126.36	6,187.36	32.15	212.15	-171.31	-4,359.61	-1,047.65	5,932.97	5,690.78	242.19	24.497		
6,500.00	6,287.36	6,226.36	6,287.36	32.51	215.64	-171.31	-4,359.61	-1,047.65	5,932.97	5,686.91	246.06	24.112		
6,600.00	6,387.36	6,326.36	6,387.36	32.87	219.13	-171.31	-4,359.61	-1,047.65	5,932.97	5,683.04	249.94	23.738		
6,700.00	6,487.36	6,426.36	6,487.36	33.23	222.62	-171.31	-4,359.61	-1,047.65	5,932.97	5,679.16	253.81	23.375		
6,800.00	6,587.36	6,526.36	6,587.36	33.59	226.11	-171.31	-4,359.61	-1,047.65	5,932.97	5,675.28	257.69	23.024		
6,900.00	6,687.26	6,626.26	6,687.26	33.95	229.60	-80.93	-4,359.61	-1,047.65	5,932.48	5,670.93	261.55	22.682		
7,000.00	6,785.58	6,724.58	6,785.58	34.31	233.03	-81.35	-4,359.61	-1,047.65	5,929.71	5,664.36	265.36	22.346		
7,100.00	6,879.94	6,818.94	6,879.94	34.65	236.33	-82.09	-4,359.61	-1,047.65	5,924.70	5,655.67	269.03	22.022		
7,200.00	6,968.01	6,907.01	6,968.01	34.97	239.40	-83.10	-4,359.61	-1,047.65	5,917.81	5,645.31	272.51	21.716		
7,300.00	7,047.61	6,986.61	7,047.61	35.27	242.18	-84.31	-4,359.61	-1,047.65	5,909.53	5,633.81	275.72	21.433		
7,400.00	7,116.80	7,055.80	7,116.80	35.54	244.59	-85.61	-4,359.61	-1,047.65	5,900.44	5,621.80	278.64	21.176		
7,500.00	7,173.86	7,112.86	7,173.86	35.81	246.59	-86.90	-4,359.61	-1,047.65	5,891.14	5,609.91	281.24	20.947		
7,600.00	7,217.38	7,156.38	7,217.38	36.17	248.11	-88.09	-4,359.61	-1,047.65	5,882.25	5,598.75	283.50	20.749		
7,700.00	7,246.31	7,185.31	7,246.31	36.80	249.12	-89.08	-4,359.61	-1,047.65	5,874.29	5,588.87	285.41	20.582		
7,800.00	7,259.92	7,201.08	7,259.92	37.72	249.67	-89.81	-4,359.61	-1,047.65	5,867.67	5,580.66	287.01	20.444		
7,900.00	7,260.77	7,200.23	7,260.77	38.86	249.64	-90.01	-4,359.61	-1,047.65	5,862.68	5,574.53	288.15	20.346		
8,000.00	7,260.39	7,200.61	7,260.39	40.19	249.65	-90.01	-4,359.61	-1,047.65	5,859.40	5,569.90	289.49	20.240		
8,100.00	7,260.01	7,200.99	7,260.01	41.67	249.66	-90.00	-4,359.61	-1,047.65	5,857.81	5,566.83	290.98	20.132		
8,142.76	7,259.84	7,201.16	7,259.84	42.37	249.67	-90.00	-4,359.61	-1,047.65	5,857.66	5,565.99	291.67	20.083		
8,200.00	7,259.63	7,201.37	7,259.63	43.30	249.68	-90.00	-4,359.61	-1,047.65	5,857.94	5,565.35	292.59	20.021		
8,300.00	7,259.25	7,201.75	7,259.25	45.05	249.69	-89.99	-4,359.61	-1,047.65	5,859.77	5,565.46	294.30	19.911		
8,400.00	7,258.87	7,202.13	7,258.87	46.91	249.70	-89.99	-4,359.61	-1,047.65	5,863.30	5,567.19	296.12	19.801		
8,500.00	7,258.49	7,202.51	7,258.49	48.87	249.72	-89.99	-4,359.61	-1,047.65	5,868.54	5,570.53	298.01	19.693		
8,600.00	7,258.11	7,202.89	7,258.11	50.92	249.73	-89.98	-4,359.61	-1,047.65	5,875.47	5,575.51	299.97	19.587		
8,700.00	7,257.73	7,203.27	7,257.73	53.04	249.74	-89.98	-4,359.61	-1,047.65	5,884.10	5,582.12	301.98	19.485		
8,800.00	7,257.35	7,203.65	7,257.35	55.23	249.76	-89.98	-4,359.61	-1,047.65	5,894.41	5,590.37	304.04	19.387		
8,900.00	7,256.97	7,204.03	7,256.97	57.47	249.77	-89.97	-4,359.61	-1,047.65	5,906.40	5,600.26	306.14	19.293		
9,000.00	7,256.59	7,204.41	7,256.59	59.77	249.78	-89.97	-4,359.61	-1,047.65	5,920.05	5,611.79	308.26	19.205		
9,100.00	7,256.21	7,204.79	7,256.21	62.12	249.80	-89.96	-4,359.61	-1,047.65	5,935.35	5,624.95	310.40	19.121		
9,200.00	7,255.83	7,205.17	7,255.83	64.50	249.81	-89.96	-4,359.61	-1,047.65	5,952.30	5,639.74	312.56	19.044		
9,300.00	7,255.45	7,205.55	7,255.45	66.93	249.82	-89.96	-4,359.61	-1,047.65	5,970.87	5,656.15	314.72	18.972		
9,400.00	7,255.07	7,205.93	7,255.07	69.38	249.84	-89.95	-4,359.61	-1,047.65	5,991.06	5,674.17	316.89	18.906		
9,500.00	7,254.69	7,206.31	7,254.69	71.87	249.85	-89.95	-4,359.61	-1,047.65	6,012.84	5,693.79	319.05	18.846		
9,600.00	7,254.31	7,206.69	7,254.31	74.38	249.86	-89.95	-4,359.61	-1,047.65	6,036.19	5,714.99	321.20	18.793		
9,700.00	7,253.93	7,207.07	7,253.93	76.92	249.88	-89.94	-4,359.61	-1,047.65	6,061.11	5,737.77	323.34	18.745		
9,800.00	7,253.55	7,207.45	7,253.55	79.48	249.89	-89.94	-4,359.61	-1,047.65	6,087.57	5,762.10	325.47	18.704		
9,900.00	7,253.18	7,207.83	7,253.18	82.06	249.90	-89.93	-4,359.61	-1,047.65	6,115.55	5,787.97	327.58	18.669		
10,000.00	7,252.80	7,208.20	7,252.80	84.65	249.91	-89.93	-4,359.61	-1,047.65	6,145.03	5,815.37	329.66	18.640		
10,100.00	7,252.42	7,208.58	7,252.42	87.27	249.93	-89.93	-4,359.61	-1,047.65	6,175.99	5,844.26	331.73	18.618		
10,200.00	7,252.04	7,208.96	7,252.04	89.89	249.94	-89.92	-4,359.61	-1,047.65	6,208.40	5,874.64	333.77	18.601		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,251.66	7,209.34	7,251.66	92.54	249.95	-89.92	-4,359.61	-1,047.65	6,242.25	5,906.48	335.78	18.591		
10,400.00	7,251.28	7,209.72	7,251.28	95.19	249.97	-89.92	-4,359.61	-1,047.65	6,277.51	5,939.76	337.76	18.586 SF		
10,500.00	7,250.90	7,189.90	7,250.90	97.86	249.28	-89.91	-4,359.61	-1,047.65	6,314.16	5,975.16	339.00	18.626		
10,600.00	7,250.52	7,189.52	7,250.52	100.53	249.26	-89.91	-4,359.61	-1,047.65	6,352.17	6,011.28	340.89	18.634		
10,700.00	7,250.14	7,189.14	7,250.14	103.22	249.25	-89.91	-4,359.61	-1,047.65	6,391.52	6,048.76	342.75	18.648		
10,800.00	7,249.76	7,188.76	7,249.76	105.91	249.24	-89.90	-4,359.61	-1,047.65	6,432.18	6,087.60	344.58	18.667		
10,900.00	7,249.38	7,188.38	7,249.38	108.62	249.22	-89.90	-4,359.61	-1,047.65	6,474.13	6,127.76	346.37	18.691		
11,000.00	7,249.00	7,188.00	7,249.00	111.33	249.21	-89.89	-4,359.61	-1,047.65	6,517.35	6,169.22	348.13	18.721		
11,100.00	7,248.62	7,187.62	7,248.62	114.04	249.20	-89.89	-4,359.61	-1,047.65	6,561.80	6,211.96	349.85	18.756		
11,200.00	7,248.24	7,187.24	7,248.24	116.77	249.18	-89.89	-4,359.61	-1,047.65	6,607.47	6,255.94	351.53	18.796		
11,300.00	7,247.86	7,186.86	7,247.86	119.50	249.17	-89.88	-4,359.61	-1,047.65	6,654.33	6,301.15	353.18	18.841		
11,400.00	7,247.48	7,186.48	7,247.48	122.24	249.16	-89.88	-4,359.61	-1,047.65	6,702.36	6,347.56	354.79	18.891		
11,500.00	7,247.10	7,186.10	7,247.10	124.98	249.14	-89.88	-4,359.61	-1,047.65	6,751.52	6,395.15	356.37	18.945		
11,600.00	7,246.72	7,185.72	7,246.72	127.73	249.13	-89.87	-4,359.61	-1,047.65	6,801.80	6,443.89	357.91	19.004		
11,700.00	7,246.34	7,185.34	7,246.34	130.48	249.12	-89.87	-4,359.61	-1,047.65	6,853.17	6,493.75	359.41	19.068		
11,800.00	7,245.96	7,184.96	7,245.96	133.24	249.10	-89.86	-4,359.61	-1,047.65	6,905.60	6,544.72	360.88	19.135		
11,900.00	7,245.58	7,184.58	7,245.58	136.00	249.09	-89.86	-4,359.61	-1,047.65	6,959.08	6,596.76	362.31	19.207		
12,000.00	7,245.21	7,184.21	7,245.21	138.76	249.08	-89.86	-4,359.61	-1,047.65	7,013.57	6,649.86	363.71	19.283		
12,100.00	7,244.83	7,183.83	7,244.83	141.53	249.06	-89.85	-4,359.61	-1,047.65	7,069.06	6,703.99	365.08	19.363		
12,200.00	7,244.45	7,183.45	7,244.45	144.30	249.05	-89.85	-4,359.61	-1,047.65	7,125.52	6,759.12	366.40	19.447		
12,300.00	7,244.07	7,183.07	7,244.07	147.08	249.04	-89.85	-4,359.61	-1,047.65	7,182.93	6,815.23	367.70	19.535		
12,400.00	7,243.69	7,182.69	7,243.69	149.86	249.02	-89.84	-4,359.61	-1,047.65	7,241.27	6,872.30	368.96	19.626		
12,500.00	7,243.31	7,182.31	7,243.31	152.64	249.01	-89.84	-4,359.61	-1,047.65	7,300.50	6,930.31	370.19	19.721		
12,600.00	7,242.93	7,181.93	7,242.93	155.42	249.00	-89.83	-4,359.61	-1,047.65	7,360.63	6,989.23	371.39	19.819		
12,700.00	7,242.55	7,181.55	7,242.55	158.21	248.98	-89.83	-4,359.61	-1,047.65	7,421.61	7,049.05	372.56	19.921		
12,800.00	7,242.17	7,181.17	7,242.17	161.00	248.97	-89.83	-4,359.61	-1,047.65	7,483.43	7,109.73	373.69	20.026		
12,900.00	7,241.79	7,180.79	7,241.79	163.79	248.96	-89.82	-4,359.61	-1,047.65	7,546.07	7,171.26	374.80	20.134		
13,000.00	7,241.41	7,180.41	7,241.41	166.58	248.94	-89.82	-4,359.61	-1,047.65	7,609.50	7,233.63	375.88	20.245		
13,100.00	7,241.03	7,180.03	7,241.03	169.38	248.93	-89.82	-4,359.61	-1,047.65	7,673.72	7,296.80	376.92	20.359		
13,200.00	7,240.65	7,179.65	7,240.65	172.18	248.92	-89.81	-4,359.61	-1,047.65	7,738.70	7,360.75	377.94	20.476		
13,300.00	7,240.27	7,179.27	7,240.27	174.98	248.90	-89.81	-4,359.61	-1,047.65	7,804.41	7,425.48	378.93	20.596		
13,400.00	7,239.89	7,178.89	7,239.89	177.78	248.89	-89.80	-4,359.61	-1,047.65	7,870.85	7,490.95	379.90	20.718		
13,500.00	7,239.51	7,178.51	7,239.51	180.58	248.88	-89.80	-4,359.61	-1,047.65	7,937.99	7,557.15	380.84	20.844		
13,600.00	7,239.13	7,178.13	7,239.13	183.39	248.87	-89.80	-4,359.61	-1,047.65	8,005.82	7,624.07	381.75	20.971		
13,700.00	7,238.75	7,177.75	7,238.75	186.20	248.85	-89.79	-4,359.61	-1,047.65	8,074.31	7,691.68	382.64	21.102		
13,800.00	7,238.37	7,177.37	7,238.37	189.00	248.84	-89.79	-4,359.61	-1,047.65	8,143.46	7,759.96	383.50	21.235		
13,900.00	7,237.99	7,176.99	7,237.99	191.81	248.83	-89.79	-4,359.61	-1,047.65	8,213.25	7,828.91	384.34	21.370		
14,000.00	7,237.62	7,176.62	7,237.62	194.63	248.81	-89.78	-4,359.61	-1,047.65	8,283.65	7,898.49	385.16	21.507		
14,100.00	7,237.24	7,176.24	7,237.24	197.44	248.80	-89.78	-4,359.61	-1,047.65	8,354.66	7,968.70	385.95	21.647		
14,200.00	7,236.86	7,175.86	7,236.86	200.25	248.79	-89.78	-4,359.61	-1,047.65	8,426.25	8,039.53	386.72	21.789		
14,300.00	7,236.48	7,175.48	7,236.48	203.07	248.77	-89.77	-4,359.61	-1,047.65	8,498.42	8,110.95	387.48	21.933		
14,400.00	7,236.10	7,175.10	7,236.10	205.88	248.76	-89.77	-4,359.61	-1,047.65	8,571.15	8,182.94	388.21	22.079		
14,500.00	7,235.72	7,174.72	7,235.72	208.70	248.75	-89.76	-4,359.61	-1,047.65	8,644.42	8,255.50	388.92	22.227		
14,600.00	7,235.34	7,174.34	7,235.34	211.52	248.73	-89.76	-4,359.61	-1,047.65	8,718.22	8,328.62	389.61	22.377		
14,700.00	7,234.96	7,173.96	7,234.96	214.34	248.72	-89.76	-4,359.61	-1,047.65	8,792.55	8,402.27	390.28	22.529		
14,800.00	7,234.58	7,173.58	7,234.58	217.16	248.71	-89.75	-4,359.61	-1,047.65	8,867.37	8,476.44	390.93	22.683		
14,900.00	7,234.20	7,173.20	7,234.20	219.98	248.69	-89.75	-4,359.61	-1,047.65	8,942.69	8,551.12	391.57	22.838		
15,000.00	7,233.82	7,172.82	7,233.82	222.81	248.68	-89.75	-4,359.61	-1,047.65	9,018.49	8,626.30	392.19	22.995		
15,100.00	7,233.44	7,172.44	7,233.44	225.63	248.67	-89.74	-4,359.61	-1,047.65	9,094.76	8,701.97	392.79	23.154		
15,200.00	7,233.06	7,172.06	7,233.06	228.45	248.65	-89.74	-4,359.61	-1,047.65	9,171.48	8,778.10	393.37	23.315		
15,216.01	7,233.00	7,172.00	7,233.00	228.91	248.65	-89.74	-4,359.61	-1,047.65	9,183.81	8,790.34	393.46	23.341		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
0.00	0.00	6.00	0.00	3.28	3.28	-48.46	1,031.02	-1,163.67	1,554.71					
100.00	100.00	106.00	100.00	3.28	3.82	-48.46	1,031.02	-1,163.67	1,554.71	1,547.61	7.10	218.878		
200.00	200.00	206.00	200.00	3.34	6.36	-48.46	1,031.02	-1,163.67	1,554.71	1,545.02	9.69	160.371		
300.00	299.98	306.02	299.98	3.45	9.52	-42.79	1,031.02	-1,163.67	1,553.43	1,540.47	12.97	119.812		
400.00	399.84	406.16	399.84	3.61	12.86	-42.97	1,031.02	-1,163.67	1,549.60	1,533.13	16.46	94.118		
500.00	499.45	506.55	499.45	3.82	16.27	-43.28	1,031.02	-1,163.67	1,543.22	1,523.14	20.08	76.840		
600.00	598.70	607.30	598.70	4.07	19.73	-43.71	1,031.02	-1,163.67	1,534.35	1,510.56	23.79	64.502		
700.00	697.47	708.53	697.47	4.35	23.22	-44.28	1,031.02	-1,163.67	1,523.03	1,495.47	27.56	55.258		
800.00	795.62	789.62	795.62	4.67	26.03	-44.97	1,031.02	-1,163.67	1,509.32	1,478.64	30.68	49.195		
900.00	893.06	887.06	893.06	5.01	29.41	-45.81	1,031.02	-1,163.67	1,493.32	1,458.92	34.40	43.411		
1,000.00	989.64	983.64	989.64	5.38	32.76	-46.78	1,031.02	-1,163.67	1,475.11	1,436.99	38.12	38.696		
1,100.00	1,085.42	1,079.42	1,085.42	5.78	36.09	-47.73	1,031.02	-1,163.67	1,455.16	1,413.32	41.84	34.780		
1,200.00	1,181.09	1,175.09	1,181.09	6.20	39.41	-48.57	1,031.02	-1,163.67	1,435.26	1,389.69	45.57	31.495		
1,300.00	1,276.76	1,270.76	1,276.76	6.65	42.74	-49.43	1,031.02	-1,163.67	1,415.69	1,366.36	49.32	28.702		
1,400.00	1,372.43	1,366.43	1,372.43	7.11	46.07	-50.31	1,031.02	-1,163.67	1,396.44	1,343.35	53.09	26.304		
1,500.00	1,468.10	1,462.10	1,468.10	7.57	49.41	-51.22	1,031.02	-1,163.67	1,377.54	1,320.67	56.87	24.223		
1,600.00	1,563.77	1,557.77	1,563.77	8.05	52.74	-52.15	1,031.02	-1,163.67	1,359.00	1,298.34	60.66	22.404		
1,700.00	1,659.44	1,653.44	1,659.44	8.53	56.07	-53.10	1,031.02	-1,163.67	1,340.84	1,276.38	64.46	20.801		
1,800.00	1,755.11	1,749.11	1,755.11	9.02	59.41	-54.08	1,031.02	-1,163.67	1,323.07	1,254.80	68.27	19.380		
1,900.00	1,850.78	1,844.78	1,850.78	9.52	62.74	-55.09	1,031.02	-1,163.67	1,305.71	1,233.62	72.09	18.113		
2,000.00	1,946.45	1,940.45	1,946.45	10.02	66.08	-56.12	1,031.02	-1,163.67	1,288.77	1,212.85	75.91	16.977		
2,100.00	2,042.12	2,036.12	2,042.12	10.52	69.41	-57.17	1,031.02	-1,163.67	1,272.27	1,192.52	79.74	15.955		
2,200.00	2,137.78	2,131.78	2,137.78	11.03	72.75	-58.26	1,031.02	-1,163.67	1,256.22	1,172.65	83.58	15.031		
2,300.00	2,233.45	2,227.45	2,233.45	11.54	76.09	-59.36	1,031.02	-1,163.67	1,240.66	1,153.24	87.42	14.192		
2,400.00	2,329.12	2,323.12	2,329.12	12.05	79.42	-60.49	1,031.02	-1,163.67	1,225.58	1,134.32	91.26	13.429		
2,500.00	2,424.79	2,418.79	2,424.79	12.56	82.76	-61.65	1,031.02	-1,163.67	1,211.02	1,115.91	95.11	12.732		
2,600.00	2,520.46	2,514.46	2,520.46	13.08	86.10	-62.84	1,031.02	-1,163.67	1,196.99	1,098.03	98.97	12.095		
2,700.00	2,616.13	2,610.13	2,616.13	13.60	89.43	-64.05	1,031.02	-1,163.67	1,183.51	1,080.69	102.83	11.510		
2,800.00	2,711.80	2,705.80	2,711.80	14.12	92.77	-65.28	1,031.02	-1,163.67	1,170.60	1,063.92	106.69	10.972		
2,900.00	2,807.47	2,801.47	2,807.47	14.64	96.11	-66.54	1,031.02	-1,163.67	1,158.28	1,047.73	110.55	10.477		
3,000.00	2,903.14	2,902.86	2,903.14	15.16	99.65	-67.83	1,031.02	-1,163.67	1,146.56	1,031.94	114.62	10.003		
3,100.00	2,998.81	3,007.19	2,998.81	15.68	103.29	-69.14	1,031.02	-1,163.67	1,135.47	1,016.68	118.79	9.558		
3,200.00	3,094.48	3,098.48	3,094.48	16.21	106.12	-70.47	1,031.02	-1,163.67	1,125.03	1,002.86	122.17	9.209		
3,300.00	3,190.15	3,184.15	3,190.15	16.73	109.46	-71.83	1,031.02	-1,163.67	1,115.24	989.20	126.04	8.848		
3,400.00	3,285.82	3,279.82	3,285.82	17.26	112.80	-73.20	1,031.02	-1,163.67	1,106.13	976.22	129.92	8.514		
3,500.00	3,381.49	3,375.49	3,381.49	17.78	116.14	-74.60	1,031.02	-1,163.67	1,097.73	963.93	133.80	8.204		
3,600.00	3,477.16	3,471.16	3,477.16	18.31	119.48	-76.01	1,031.02	-1,163.67	1,090.03	952.35	137.68	7.917		
3,700.00	3,572.83	3,566.83	3,572.83	18.84	122.82	-77.45	1,031.02	-1,163.67	1,083.06	941.50	141.56	7.651		
3,800.00	3,668.50	3,662.50	3,668.50	19.37	126.16	-78.89	1,031.02	-1,163.67	1,076.84	931.40	145.44	7.404		
3,900.00	3,764.17	3,758.17	3,764.17	19.89	129.49	-80.36	1,031.02	-1,163.67	1,071.36	922.04	149.32	7.175		
4,000.00	3,859.84	3,853.84	3,859.84	20.42	132.83	-81.83	1,031.02	-1,163.67	1,066.66	913.46	153.20	6.962		
4,100.00	3,955.51	3,949.51	3,955.51	20.95	136.17	-83.32	1,031.02	-1,163.67	1,062.73	905.65	157.08	6.765		
4,200.00	4,051.18	4,045.18	4,051.18	21.48	139.51	-84.82	1,031.02	-1,163.67	1,059.59	898.62	160.97	6.583		
4,300.00	4,146.85	4,140.85	4,146.85	22.01	142.85	-86.32	1,031.02	-1,163.67	1,057.24	892.39	164.85	6.414		
4,400.00	4,242.52	4,236.52	4,242.52	22.55	146.19	-87.83	1,031.02	-1,163.67	1,055.69	886.96	168.72	6.257		
4,500.00	4,338.19	4,332.19	4,338.19	23.08	149.53	-89.34	1,031.02	-1,163.67	1,054.94	882.34	172.60	6.112		
4,543.55	4,379.85	4,373.85	4,379.85	23.31	150.98	-90.00	1,031.02	-1,163.67	1,054.86	880.57	174.29	6.052		
4,600.00	4,433.86	4,427.86	4,433.86	23.61	152.87	-90.85	1,031.02	-1,163.67	1,054.99	878.51	176.47	5.978		
4,700.00	4,529.53	4,523.53	4,529.53	24.14	156.21	-92.37	1,031.02	-1,163.67	1,055.84	875.50	180.35	5.855		
4,800.00	4,625.19	4,619.19	4,625.19	24.67	159.54	-93.87	1,031.02	-1,163.67	1,057.50	873.28	184.22	5.741		
4,900.00	4,720.86	4,714.86	4,720.86	25.21	162.88	-95.38	1,031.02	-1,163.67	1,059.95	871.87	188.08	5.636		
5,000.00	4,816.53	4,810.53	4,816.53	25.74	166.22	-96.87	1,031.02	-1,163.67	1,063.19	871.25	191.95	5.539		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	4,912.20	4,906.20	4,912.20	26.27	169.56	-98.36	1,031.02	-1,163.67	1,067.22	871.42	195.81	5.450		
5,200.00	5,007.87	5,001.87	5,007.87	26.80	172.90	-99.83	1,031.02	-1,163.67	1,072.03	872.36	199.66	5.369		
5,300.00	5,103.54	5,102.46	5,103.54	27.34	176.41	-101.29	1,031.02	-1,163.67	1,077.60	873.91	203.69	5.290		
5,400.00	5,199.22	5,206.78	5,199.22	27.87	180.05	-102.75	1,031.02	-1,163.67	1,083.92	876.07	207.84	5.215		
5,500.00	5,295.46	5,289.46	5,295.46	28.39	182.94	-104.22	1,031.02	-1,163.67	1,090.47	879.25	211.23	5.163		
5,600.00	5,392.60	5,386.60	5,392.60	28.89	186.33	-105.51	1,031.02	-1,163.67	1,096.74	881.64	215.10	5.099		
5,700.00	5,490.50	5,484.50	5,490.50	29.37	189.75	-106.62	1,031.02	-1,163.67	1,102.48	883.51	218.97	5.035		
5,800.00	5,589.05	5,583.05	5,589.05	29.83	193.19	-107.55	1,031.02	-1,163.67	1,107.51	884.66	222.85	4.970		
5,900.00	5,688.14	5,682.14	5,688.14	30.26	196.65	-108.28	1,031.02	-1,163.67	1,111.69	884.96	226.73	4.903		
6,000.00	5,787.63	5,781.63	5,787.63	30.68	200.12	-108.83	1,031.02	-1,163.67	1,114.89	884.28	230.61	4.835		
6,100.00	5,887.41	5,881.41	5,887.41	31.07	203.60	-109.18	1,031.02	-1,163.67	1,117.02	882.54	234.48	4.764		
6,200.00	5,987.36	5,981.36	5,987.36	31.44	207.09	-109.35	1,031.02	-1,163.67	1,118.02	879.68	238.34	4.691		
6,300.00	6,087.36	6,081.36	6,087.36	31.80	210.58	-115.10	1,031.02	-1,163.67	1,118.10	875.92	242.18	4.617		
6,400.00	6,187.36	6,181.36	6,187.36	32.15	214.07	-115.10	1,031.02	-1,163.67	1,118.10	872.07	246.03	4.545		
6,500.00	6,287.36	6,281.36	6,287.36	32.51	217.56	-115.10	1,031.02	-1,163.67	1,118.10	868.22	249.88	4.474		
6,600.00	6,387.36	6,381.36	6,387.36	32.87	221.05	-115.10	1,031.02	-1,163.67	1,118.10	864.36	253.74	4.407		
6,700.00	6,487.36	6,481.36	6,487.36	33.23	224.54	-115.10	1,031.02	-1,163.67	1,118.10	860.51	257.59	4.341		
6,800.00	6,587.36	6,581.36	6,587.36	33.59	228.03	-115.10	1,031.02	-1,163.67	1,118.10	856.65	261.45	4.277		
6,900.00	6,687.26	6,681.26	6,687.26	33.95	231.52	-24.82	1,031.02	-1,163.67	1,115.27	849.98	265.29	4.204		
7,000.00	6,785.58	6,779.58	6,785.58	34.31	234.95	-25.84	1,031.02	-1,163.67	1,099.28	830.20	269.07	4.085		
7,100.00	6,879.94	6,873.94	6,879.94	34.65	238.25	-27.87	1,031.02	-1,163.67	1,069.66	796.96	272.70	3.922		
7,200.00	6,968.01	6,962.01	6,968.01	34.97	241.32	-31.17	1,031.02	-1,163.67	1,027.43	751.33	276.09	3.721		
7,300.00	7,047.61	7,041.61	7,047.61	35.27	244.10	-36.13	1,031.02	-1,163.67	974.03	694.85	279.18	3.489		
7,400.00	7,116.80	7,110.80	7,116.80	35.54	246.51	-43.21	1,031.02	-1,163.67	911.42	629.51	281.91	3.233		
7,500.00	7,173.86	7,167.86	7,173.86	35.81	248.51	-52.79	1,031.02	-1,163.67	842.01	557.76	284.25	2.962		
7,600.00	7,217.38	7,211.38	7,217.38	36.17	250.03	-64.51	1,031.02	-1,163.67	768.75	482.56	286.20	2.686		
7,700.00	7,246.31	7,240.31	7,246.31	36.80	251.04	-76.71	1,031.02	-1,163.67	695.16	407.36	287.79	2.415		
7,800.00	7,259.92	7,253.92	7,259.92	37.72	251.51	-87.03	1,031.02	-1,163.67	625.29	336.20	289.09	2.163		
7,900.00	7,260.77	7,254.77	7,260.77	38.86	251.54	-90.15	1,031.02	-1,163.67	563.63	273.40	290.23	1.942		
8,000.00	7,260.39	7,254.39	7,260.39	40.19	251.53	-90.10	1,031.02	-1,163.67	514.15	222.52	291.64	1.763		
8,100.00	7,260.01	7,254.01	7,260.01	41.67	251.51	-90.05	1,031.02	-1,163.67	480.65	187.47	293.18	1.639		
8,200.00	7,259.63	7,253.63	7,259.63	43.30	251.50	-90.01	1,031.02	-1,163.67	466.58	172.04	294.54	1.584		
8,216.63	7,259.56	7,253.56	7,259.56	43.59	251.50	-90.00	1,031.02	-1,163.67	466.29	171.55	294.73	1.582 CC, ES, SF		
8,300.00	7,259.25	7,253.25	7,259.25	45.05	251.49	-89.96	1,031.02	-1,163.67	473.68	178.32	295.36	1.604		
8,400.00	7,258.87	7,252.87	7,258.87	46.91	251.47	-89.91	1,031.02	-1,163.67	501.05	205.54	295.51	1.696		
8,500.00	7,258.49	7,252.49	7,258.49	48.87	251.46	-89.87	1,031.02	-1,163.67	545.64	250.49	295.15	1.849		
8,600.00	7,258.11	7,252.11	7,258.11	50.92	251.45	-89.82	1,031.02	-1,163.67	603.65	309.13	294.52	2.050		
8,700.00	7,257.73	7,251.73	7,257.73	53.04	251.43	-89.77	1,031.02	-1,163.67	671.61	377.79	293.83	2.286		
8,800.00	7,257.35	7,251.35	7,257.35	55.23	251.42	-89.73	1,031.02	-1,163.67	746.82	453.65	293.16	2.547		
8,900.00	7,256.97	7,250.97	7,256.97	57.47	251.41	-89.68	1,031.02	-1,163.67	827.29	534.72	292.57	2.828		
9,000.00	7,256.59	7,250.59	7,256.59	59.77	251.39	-89.63	1,031.02	-1,163.67	911.63	619.57	292.06	3.121		
9,100.00	7,256.21	7,250.21	7,256.21	62.12	251.38	-89.59	1,031.02	-1,163.67	998.87	707.24	291.63	3.425		
9,200.00	7,255.83	7,249.83	7,255.83	64.50	251.37	-89.54	1,031.02	-1,163.67	1,088.31	797.04	291.27	3.736		
9,300.00	7,255.45	7,249.45	7,255.45	66.93	251.35	-89.49	1,031.02	-1,163.67	1,179.44	888.49	290.96	4.054		
9,400.00	7,255.07	7,249.07	7,255.07	69.38	251.34	-89.45	1,031.02	-1,163.67	1,271.91	981.22	290.69	4.375		
9,500.00	7,254.69	7,248.69	7,254.69	71.87	251.33	-89.40	1,031.02	-1,163.67	1,365.44	1,074.97	290.47	4.701		
9,600.00	7,254.31	7,248.31	7,254.31	74.38	251.32	-89.35	1,031.02	-1,163.67	1,459.83	1,169.55	290.28	5.029		
9,700.00	7,253.93	7,247.93	7,253.93	76.92	251.30	-89.31	1,031.02	-1,163.67	1,554.92	1,264.80	290.11	5.360		
9,800.00	7,253.55	7,247.55	7,253.55	79.48	251.29	-89.26	1,031.02	-1,163.67	1,650.59	1,360.61	289.97	5.692		
9,900.00	7,253.18	7,247.18	7,253.18	82.06	251.28	-89.22	1,031.02	-1,163.67	1,746.74	1,456.89	289.85	6.026		
10,000.00	7,252.80	7,246.80	7,252.80	84.65	251.26	-89.17	1,031.02	-1,163.67	1,843.30	1,553.56	289.74	6.362		
10,100.00	7,252.42	7,246.42	7,252.42	87.27	251.25	-89.12	1,031.02	-1,163.67	1,940.22	1,650.56	289.65	6.698		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,200.00	7,252.04	7,246.04	7,252.04	89.89	251.24	-89.08	1,031.02	-1,163.67	2,037.43	1,747.85	289.57	7.036		
10,300.00	7,251.66	7,245.66	7,251.66	92.54	251.22	-89.03	1,031.02	-1,163.67	2,134.89	1,845.39	289.50	7.374		
10,400.00	7,251.28	7,245.28	7,251.28	95.19	251.21	-88.98	1,031.02	-1,163.67	2,232.59	1,943.14	289.44	7.713		
10,500.00	7,250.90	7,244.90	7,250.90	97.86	251.20	-88.94	1,031.02	-1,163.67	2,330.47	2,041.08	289.39	8.053		
10,600.00	7,250.52	7,244.52	7,250.52	100.53	251.18	-88.89	1,031.02	-1,163.67	2,428.53	2,139.19	289.35	8.393		
10,700.00	7,250.14	7,244.14	7,250.14	103.22	251.17	-88.84	1,031.02	-1,163.67	2,526.74	2,237.44	289.31	8.734		
10,800.00	7,249.76	7,243.76	7,249.76	105.91	251.16	-88.80	1,031.02	-1,163.67	2,625.09	2,335.82	289.27	9.075		
10,900.00	7,249.38	7,243.38	7,249.38	108.62	251.14	-88.75	1,031.02	-1,163.67	2,723.56	2,434.31	289.25	9.416		
11,000.00	7,249.00	7,243.00	7,249.00	111.33	251.13	-88.70	1,031.02	-1,163.67	2,822.13	2,532.91	289.23	9.758		
11,100.00	7,248.62	7,242.62	7,248.62	114.04	251.12	-88.66	1,031.02	-1,163.67	2,920.80	2,631.60	289.21	10.099		
11,200.00	7,248.24	7,242.24	7,248.24	116.77	251.10	-88.61	1,031.02	-1,163.67	3,019.56	2,730.37	289.19	10.441		
11,300.00	7,247.86	7,241.86	7,247.86	119.50	251.09	-88.56	1,031.02	-1,163.67	3,118.40	2,829.22	289.18	10.783		
11,400.00	7,247.48	7,241.48	7,247.48	122.24	251.08	-88.52	1,031.02	-1,163.67	3,217.31	2,928.13	289.18	11.126		
11,500.00	7,247.10	7,241.10	7,247.10	124.98	251.06	-88.47	1,031.02	-1,163.67	3,316.29	3,027.11	289.17	11.468		
11,600.00	7,246.72	7,240.72	7,246.72	127.73	251.05	-88.42	1,031.02	-1,163.67	3,415.32	3,126.15	289.17	11.811		
11,700.00	7,246.34	7,240.34	7,246.34	130.48	251.04	-88.38	1,031.02	-1,163.67	3,514.41	3,225.23	289.18	12.153		
11,800.00	7,245.96	7,239.96	7,245.96	133.24	251.02	-88.33	1,031.02	-1,163.67	3,613.55	3,324.37	289.18	12.496		
11,900.00	7,245.58	7,239.58	7,245.58	136.00	251.01	-88.28	1,031.02	-1,163.67	3,712.74	3,423.55	289.19	12.838		
12,000.00	7,245.21	7,239.21	7,245.21	138.76	251.00	-88.24	1,031.02	-1,163.67	3,811.96	3,522.76	289.20	13.181		
12,100.00	7,244.83	7,238.83	7,244.83	141.53	250.98	-88.19	1,031.02	-1,163.67	3,911.23	3,622.02	289.21	13.524		
12,200.00	7,244.45	7,238.45	7,244.45	144.30	250.97	-88.14	1,031.02	-1,163.67	4,010.54	3,721.31	289.23	13.866		
12,300.00	7,244.07	7,238.07	7,244.07	147.08	250.96	-88.10	1,031.02	-1,163.67	4,109.87	3,820.63	289.24	14.209		
12,400.00	7,243.69	7,237.69	7,243.69	149.86	250.94	-88.05	1,031.02	-1,163.67	4,209.24	3,919.98	289.26	14.552		
12,500.00	7,243.31	7,237.31	7,243.31	152.64	250.93	-88.00	1,031.02	-1,163.67	4,308.64	4,019.36	289.28	14.894		
12,600.00	7,242.93	7,236.93	7,242.93	155.42	250.92	-87.96	1,031.02	-1,163.67	4,408.07	4,118.76	289.30	15.237		
12,700.00	7,242.55	7,236.55	7,242.55	158.21	250.90	-87.91	1,031.02	-1,163.67	4,507.52	4,218.19	289.33	15.579		
12,800.00	7,242.17	7,236.17	7,242.17	161.00	250.89	-87.86	1,031.02	-1,163.67	4,606.99	4,317.64	289.35	15.922		
12,900.00	7,241.79	7,235.79	7,241.79	163.79	250.88	-87.82	1,031.02	-1,163.67	4,706.49	4,417.11	289.38	16.264		
13,000.00	7,241.41	7,235.41	7,241.41	166.58	250.86	-87.77	1,031.02	-1,163.67	4,806.00	4,516.59	289.41	16.606		
13,100.00	7,241.03	7,235.03	7,241.03	169.38	250.85	-87.72	1,031.02	-1,163.67	4,905.54	4,616.10	289.44	16.948		
13,200.00	7,240.65	7,234.65	7,240.65	172.18	250.84	-87.68	1,031.02	-1,163.67	5,005.10	4,715.63	289.47	17.290		
13,300.00	7,240.27	7,234.27	7,240.27	174.98	250.82	-87.63	1,031.02	-1,163.67	5,104.67	4,815.17	289.50	17.632		
13,400.00	7,239.89	7,233.89	7,239.89	177.78	250.81	-87.58	1,031.02	-1,163.67	5,204.26	4,914.72	289.54	17.974		
13,500.00	7,239.51	7,233.51	7,239.51	180.58	250.80	-87.54	1,031.02	-1,163.67	5,303.86	5,014.29	289.58	18.316		
13,600.00	7,239.13	7,233.13	7,239.13	183.39	250.79	-87.49	1,031.02	-1,163.67	5,403.48	5,113.87	289.61	18.658		
13,700.00	7,238.75	7,232.75	7,238.75	186.20	250.77	-87.44	1,031.02	-1,163.67	5,503.12	5,213.47	289.65	18.999		
13,800.00	7,238.37	7,232.37	7,238.37	189.00	250.76	-87.40	1,031.02	-1,163.67	5,602.76	5,313.07	289.69	19.340		
13,900.00	7,237.99	7,231.99	7,237.99	191.81	250.75	-87.35	1,031.02	-1,163.67	5,702.42	5,412.69	289.73	19.682		
14,000.00	7,237.62	7,231.62	7,237.62	194.63	250.73	-87.31	1,031.02	-1,163.67	5,802.09	5,512.32	289.77	20.023		
14,100.00	7,237.24	7,231.24	7,237.24	197.44	250.72	-87.26	1,031.02	-1,163.67	5,901.77	5,611.95	289.82	20.364		
14,200.00	7,236.86	7,230.86	7,236.86	200.25	250.71	-87.21	1,031.02	-1,163.67	6,001.46	5,711.60	289.86	20.705		
14,300.00	7,236.48	7,230.48	7,236.48	203.07	250.69	-87.17	1,031.02	-1,163.67	6,101.17	5,811.26	289.91	21.045		
14,400.00	7,236.10	7,230.10	7,236.10	205.88	250.68	-87.12	1,031.02	-1,163.67	6,200.88	5,910.92	289.95	21.386		
14,500.00	7,235.72	7,229.72	7,235.72	208.70	250.67	-87.07	1,031.02	-1,163.67	6,300.60	6,010.60	290.00	21.726		
14,600.00	7,235.34	7,229.34	7,235.34	211.52	250.65	-87.03	1,031.02	-1,163.67	6,400.33	6,110.28	290.05	22.066		
14,700.00	7,234.96	7,228.96	7,234.96	214.34	250.64	-86.98	1,031.02	-1,163.67	6,500.06	6,209.96	290.10	22.406		
14,800.00	7,234.58	7,228.58	7,234.58	217.16	250.63	-86.93	1,031.02	-1,163.67	6,599.81	6,309.66	290.15	22.746		
14,900.00	7,234.20	7,228.20	7,234.20	219.98	250.61	-86.89	1,031.02	-1,163.67	6,699.56	6,409.36	290.20	23.086		
15,000.00	7,233.82	7,227.82	7,233.82	222.81	250.60	-86.84	1,031.02	-1,163.67	6,799.32	6,509.07	290.26	23.425		
15,100.00	7,233.44	7,227.44	7,233.44	225.63	250.59	-86.79	1,031.02	-1,163.67	6,899.09	6,608.78	290.31	23.764		
15,200.00	7,233.06	7,227.06	7,233.06	228.45	250.57	-86.75	1,031.02	-1,163.67	6,998.87	6,708.50	290.37	24.103		
15,216.01	7,233.00	7,227.00	7,233.00	228.91	250.57	-86.74	1,031.02	-1,163.67	7,014.84	6,724.47	290.38	24.158		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	20.00	3.28	3.28	-103.88	-273.20	-1,105.33	1,138.76					
100.00	100.00	80.00	100.00	3.28	3.56	-103.88	-273.20	-1,105.33	1,138.59	1,131.74	6.85	166.227		
200.00	200.00	180.00	200.00	3.34	5.60	-103.88	-273.20	-1,105.33	1,138.59	1,129.65	8.94	127.408 CC		
300.00	299.98	279.98	299.98	3.45	8.67	-98.23	-273.20	-1,105.33	1,138.84	1,126.72	12.12	93.983		
400.00	399.84	379.84	399.84	3.61	11.97	-98.48	-273.20	-1,105.33	1,139.60	1,124.02	15.58	73.166		
500.00	499.45	479.45	499.45	3.82	15.35	-98.88	-273.20	-1,105.33	1,140.92	1,121.76	19.15	59.567		
600.00	598.70	578.70	598.70	4.07	18.75	-99.44	-273.20	-1,105.33	1,142.87	1,120.08	22.80	50.132		
700.00	697.47	677.47	697.47	4.35	22.15	-100.15	-273.20	-1,105.33	1,145.57	1,119.09	26.48	43.259		
800.00	795.62	775.62	795.62	4.67	25.54	-101.00	-273.20	-1,105.33	1,149.13	1,118.94	30.19	38.061 ES		
900.00	893.06	873.06	893.06	5.01	28.92	-101.98	-273.20	-1,105.33	1,153.73	1,119.81	33.92	34.018		
1,000.00	989.64	969.64	989.64	5.38	32.27	-103.08	-273.20	-1,105.33	1,159.54	1,121.89	37.65	30.801		
1,100.00	1,085.42	1,065.42	1,085.42	5.78	35.60	-104.34	-273.20	-1,105.33	1,166.62	1,125.25	41.38	28.194		
1,200.00	1,181.09	1,161.09	1,181.09	6.20	38.93	-105.66	-273.20	-1,105.33	1,174.48	1,129.35	45.13	26.025		
1,300.00	1,276.76	1,256.76	1,276.76	6.65	42.26	-106.96	-273.20	-1,105.33	1,182.99	1,134.09	48.90	24.193		
1,400.00	1,372.43	1,352.43	1,372.43	7.11	45.59	-108.25	-273.20	-1,105.33	1,192.16	1,139.48	52.68	22.630		
1,500.00	1,468.10	1,448.10	1,468.10	7.57	48.92	-109.52	-273.20	-1,105.33	1,201.96	1,145.48	56.47	21.284		
1,600.00	1,563.77	1,543.77	1,563.77	8.05	52.25	-110.76	-273.20	-1,105.33	1,212.38	1,152.10	60.27	20.115		
1,700.00	1,659.44	1,639.44	1,659.44	8.53	55.58	-111.99	-273.20	-1,105.33	1,223.40	1,159.32	64.08	19.092		
1,800.00	1,755.11	1,735.11	1,755.11	9.02	58.92	-113.20	-273.20	-1,105.33	1,235.01	1,167.12	67.89	18.191		
1,900.00	1,850.78	1,830.78	1,850.78	9.52	62.25	-114.38	-273.20	-1,105.33	1,247.20	1,175.49	71.71	17.392		
2,000.00	1,946.45	1,926.45	1,946.45	10.02	65.59	-115.55	-273.20	-1,105.33	1,259.93	1,184.40	75.53	16.681		
2,100.00	2,042.12	2,022.12	2,042.12	10.52	68.92	-116.69	-273.20	-1,105.33	1,273.21	1,193.86	79.35	16.045		
2,200.00	2,137.78	2,117.78	2,137.78	11.03	72.26	-117.81	-273.20	-1,105.33	1,287.01	1,203.83	83.18	15.473		
2,300.00	2,233.45	2,213.45	2,233.45	11.54	75.60	-118.90	-273.20	-1,105.33	1,301.31	1,214.31	87.00	14.957		
2,400.00	2,329.12	2,309.12	2,329.12	12.05	78.93	-119.98	-273.20	-1,105.33	1,316.10	1,225.27	90.83	14.490		
2,500.00	2,424.79	2,404.79	2,424.79	12.56	82.27	-121.03	-273.20	-1,105.33	1,331.37	1,236.71	94.66	14.065		
2,600.00	2,520.46	2,500.46	2,520.46	13.08	85.61	-122.06	-273.20	-1,105.33	1,347.09	1,248.60	98.48	13.678		
2,700.00	2,616.13	2,603.87	2,616.13	13.60	89.22	-123.06	-273.20	-1,105.33	1,363.25	1,260.66	102.58	13.289		
2,800.00	2,711.80	2,708.20	2,711.80	14.12	92.86	-124.05	-273.20	-1,105.33	1,379.83	1,273.12	106.71	12.931		
2,900.00	2,807.47	2,787.47	2,807.47	14.64	95.62	-125.01	-273.20	-1,105.33	1,396.83	1,286.86	109.97	12.702		
3,000.00	2,903.14	2,883.14	2,903.14	15.16	98.96	-125.94	-273.20	-1,105.33	1,414.21	1,300.42	113.80	12.428		
3,100.00	2,998.81	2,978.81	2,998.81	15.68	102.30	-126.86	-273.20	-1,105.33	1,431.98	1,314.36	117.62	12.174		
3,200.00	3,094.48	3,074.48	3,094.48	16.21	105.64	-127.76	-273.20	-1,105.33	1,450.12	1,328.67	121.45	11.940		
3,300.00	3,190.15	3,170.15	3,190.15	16.73	108.97	-128.63	-273.20	-1,105.33	1,468.61	1,343.33	125.28	11.723		
3,400.00	3,285.82	3,265.82	3,285.82	17.26	112.31	-129.49	-273.20	-1,105.33	1,487.44	1,358.34	129.11	11.521		
3,500.00	3,381.49	3,361.49	3,381.49	17.78	115.65	-130.32	-273.20	-1,105.33	1,506.60	1,373.67	132.93	11.334		
3,600.00	3,477.16	3,457.16	3,477.16	18.31	118.99	-131.13	-273.20	-1,105.33	1,526.07	1,389.31	136.76	11.159		
3,700.00	3,572.83	3,552.83	3,572.83	18.84	122.33	-131.92	-273.20	-1,105.33	1,545.84	1,405.26	140.58	10.996		
3,800.00	3,668.50	3,648.50	3,668.50	19.37	125.67	-132.70	-273.20	-1,105.33	1,565.91	1,421.50	144.41	10.844		
3,900.00	3,764.17	3,744.17	3,764.17	19.89	129.01	-133.45	-273.20	-1,105.33	1,586.26	1,438.02	148.23	10.701		
4,000.00	3,859.84	3,839.84	3,859.84	20.42	132.34	-134.19	-273.20	-1,105.33	1,606.87	1,454.81	152.06	10.567		
4,100.00	3,955.51	3,935.51	3,955.51	20.95	135.68	-134.91	-273.20	-1,105.33	1,627.75	1,471.86	155.88	10.442		
4,200.00	4,051.18	4,031.18	4,051.18	21.48	139.02	-135.61	-273.20	-1,105.33	1,648.87	1,489.17	159.71	10.324		
4,300.00	4,146.85	4,126.85	4,146.85	22.01	142.36	-136.30	-273.20	-1,105.33	1,670.24	1,506.71	163.53	10.214		
4,400.00	4,242.52	4,222.52	4,242.52	22.55	145.70	-136.96	-273.20	-1,105.33	1,691.83	1,524.48	167.35	10.109		
4,500.00	4,338.19	4,318.19	4,338.19	23.08	149.04	-137.61	-273.20	-1,105.33	1,713.65	1,542.48	171.18	10.011		
4,600.00	4,433.86	4,413.86	4,433.86	23.61	152.38	-138.25	-273.20	-1,105.33	1,735.68	1,560.68	175.00	9.918		
4,700.00	4,529.53	4,509.53	4,529.53	24.14	155.72	-138.87	-273.20	-1,105.33	1,757.92	1,579.10	178.82	9.831		
4,800.00	4,625.19	4,605.19	4,625.19	24.67	159.06	-139.48	-273.20	-1,105.33	1,780.36	1,597.71	182.64	9.748		
4,900.00	4,720.86	4,700.86	4,720.86	25.21	162.40	-140.07	-273.20	-1,105.33	1,802.99	1,616.52	186.47	9.669		
5,000.00	4,816.53	4,803.47	4,816.53	25.74	165.98	-140.64	-273.20	-1,105.33	1,825.80	1,635.27	190.53	9.583		
5,100.00	4,912.20	4,907.80	4,912.20	26.27	169.62	-141.20	-273.20	-1,105.33	1,848.79	1,654.13	194.65	9.498		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	4,987.87	5,007.87	26.80	172.41	-141.75	-273.20	-1,105.33	1,871.94	1,674.01	197.93	9.458	
5,300.00	5,103.54	5,083.54	5,103.54	27.34	175.75	-142.29	-273.20	-1,105.33	1,895.27	1,693.51	201.75	9.394	
5,400.00	5,199.22	5,179.22	5,199.22	27.87	179.09	-142.84	-273.20	-1,105.33	1,918.74	1,713.16	205.57	9.334	
5,500.00	5,295.46	5,275.46	5,295.46	28.39	182.45	-143.59	-273.20	-1,105.33	1,940.75	1,731.35	209.41	9.268	
5,600.00	5,392.60	5,372.60	5,392.60	28.89	185.84	-144.23	-273.20	-1,105.33	1,960.14	1,746.88	213.26	9.191	
5,700.00	5,490.50	5,470.50	5,490.50	29.37	189.26	-144.76	-273.20	-1,105.33	1,976.82	1,759.69	217.13	9.104	
5,800.00	5,589.05	5,569.05	5,589.05	29.83	192.70	-145.20	-273.20	-1,105.33	1,990.74	1,769.73	221.01	9.008	
5,900.00	5,688.14	5,668.14	5,688.14	30.26	196.16	-145.55	-273.20	-1,105.33	2,001.86	1,776.97	224.89	8.901	
6,000.00	5,787.63	5,767.63	5,787.63	30.68	199.63	-145.80	-273.20	-1,105.33	2,010.13	1,781.35	228.78	8.786	
6,100.00	5,887.41	5,867.41	5,887.41	31.07	203.11	-145.97	-273.20	-1,105.33	2,015.54	1,782.88	232.66	8.663	
6,200.00	5,987.36	5,967.36	5,987.36	31.44	206.60	-146.05	-273.20	-1,105.33	2,018.05	1,781.53	236.53	8.532	
6,300.00	6,087.36	6,067.36	6,087.36	31.80	210.09	-151.78	-273.20	-1,105.33	2,018.25	1,777.86	240.39	8.396	
6,400.00	6,187.36	6,167.36	6,187.36	32.15	213.58	-151.78	-273.20	-1,105.33	2,018.25	1,774.00	244.26	8.263	
6,500.00	6,287.36	6,267.36	6,287.36	32.51	217.07	-151.78	-273.20	-1,105.33	2,018.25	1,770.13	248.12	8.134	
6,600.00	6,387.36	6,367.36	6,387.36	32.87	220.56	-151.78	-273.20	-1,105.33	2,018.25	1,766.26	251.99	8.009	
6,700.00	6,487.36	6,467.36	6,487.36	33.23	224.05	-151.78	-273.20	-1,105.33	2,018.25	1,762.40	255.86	7.888	
6,800.00	6,587.36	6,567.36	6,587.36	33.59	227.55	-151.78	-273.20	-1,105.33	2,018.25	1,758.53	259.73	7.771	
6,900.00	6,687.26	6,667.26	6,687.26	33.95	231.03	-61.53	-273.20	-1,105.33	2,016.76	1,753.18	263.58	7.651	
7,000.00	6,785.58	6,765.58	6,785.58	34.31	234.46	-62.64	-273.20	-1,105.33	2,008.38	1,741.02	267.36	7.512	
7,100.00	6,879.94	6,859.94	6,879.94	34.65	237.76	-64.69	-273.20	-1,105.33	1,993.12	1,722.12	271.01	7.355	
7,200.00	6,968.01	6,948.01	6,968.01	34.97	240.83	-67.59	-273.20	-1,105.33	1,971.93	1,697.49	274.43	7.185	
7,300.00	7,047.61	7,027.61	7,047.61	35.27	243.61	-71.20	-273.20	-1,105.33	1,946.14	1,668.54	277.60	7.011	
7,400.00	7,116.80	7,103.20	7,116.80	35.54	246.25	-75.26	-273.20	-1,105.33	1,917.37	1,636.69	280.68	6.831	
7,500.00	7,173.86	7,153.86	7,173.86	35.81	248.02	-79.45	-273.20	-1,105.33	1,887.46	1,604.46	283.00	6.669	
7,600.00	7,217.38	7,202.62	7,217.38	36.17	249.72	-83.40	-273.20	-1,105.33	1,858.27	1,572.87	285.40	6.511	
7,700.00	7,246.31	7,226.31	7,246.31	36.80	250.55	-86.77	-273.20	-1,105.33	1,831.57	1,544.48	287.09	6.380	
7,800.00	7,259.92	7,239.92	7,259.92	37.72	251.02	-89.31	-273.20	-1,105.33	1,808.85	1,520.26	288.58	6.268	
7,900.00	7,260.77	7,240.77	7,260.77	38.86	251.05	-90.03	-273.20	-1,105.33	1,791.16	1,501.40	289.76	6.182	
8,000.00	7,260.39	7,240.39	7,260.39	40.19	251.04	-90.02	-273.20	-1,105.33	1,778.92	1,487.89	291.03	6.112	
8,100.00	7,260.01	7,240.01	7,260.01	41.67	251.03	-90.01	-273.20	-1,105.33	1,772.24	1,479.82	292.42	6.061	
8,168.49	7,259.75	7,239.75	7,259.75	42.78	251.02	-90.00	-273.20	-1,105.33	1,770.92	1,477.48	293.44	6.035	
8,200.00	7,259.63	7,239.63	7,259.63	43.30	251.01	-90.00	-273.20	-1,105.33	1,771.20	1,477.31	293.89	6.027	
8,300.00	7,259.25	7,239.25	7,259.25	45.05	251.00	-89.98	-273.20	-1,105.33	1,775.80	1,480.38	295.42	6.011 SF	
8,400.00	7,258.87	7,238.87	7,258.87	46.91	250.99	-89.97	-273.20	-1,105.33	1,785.99	1,489.04	296.95	6.014	
8,500.00	7,258.49	7,238.49	7,258.49	48.87	250.97	-89.96	-273.20	-1,105.33	1,801.68	1,503.21	298.47	6.036	
8,600.00	7,258.11	7,238.11	7,258.11	50.92	250.96	-89.95	-273.20	-1,105.33	1,822.73	1,522.79	299.95	6.077	
8,700.00	7,257.73	7,237.73	7,257.73	53.04	250.95	-89.93	-273.20	-1,105.33	1,848.96	1,547.60	301.36	6.135	
8,800.00	7,257.35	7,237.35	7,257.35	55.23	250.93	-89.92	-273.20	-1,105.33	1,880.15	1,577.46	302.69	6.211	
8,900.00	7,256.97	7,236.97	7,256.97	57.47	250.92	-89.91	-273.20	-1,105.33	1,916.05	1,612.12	303.93	6.304	
9,000.00	7,256.59	7,236.59	7,256.59	59.77	250.91	-89.90	-273.20	-1,105.33	1,956.42	1,651.34	305.08	6.413	
9,100.00	7,256.21	7,236.21	7,256.21	62.12	250.89	-89.89	-273.20	-1,105.33	2,000.97	1,694.84	306.12	6.537	
9,200.00	7,255.83	7,235.83	7,255.83	64.50	250.88	-89.87	-273.20	-1,105.33	2,049.43	1,742.36	307.06	6.674	
9,300.00	7,255.45	7,235.45	7,255.45	66.93	250.87	-89.86	-273.20	-1,105.33	2,101.54	1,793.63	307.91	6.825	
9,400.00	7,255.07	7,235.07	7,255.07	69.38	250.85	-89.85	-273.20	-1,105.33	2,157.03	1,848.36	308.67	6.988	
9,500.00	7,254.69	7,234.69	7,254.69	71.87	250.84	-89.84	-273.20	-1,105.33	2,215.64	1,906.30	309.34	7.162	
9,600.00	7,254.31	7,234.31	7,254.31	74.38	250.83	-89.82	-273.20	-1,105.33	2,277.14	1,967.21	309.93	7.347	
9,700.00	7,253.93	7,233.93	7,253.93	76.92	250.81	-89.81	-273.20	-1,105.33	2,341.29	2,030.84	310.45	7.542	
9,800.00	7,253.55	7,233.55	7,253.55	79.48	250.80	-89.80	-273.20	-1,105.33	2,407.89	2,096.99	310.90	7.745	
9,900.00	7,253.18	7,233.18	7,253.18	82.06	250.79	-89.79	-273.20	-1,105.33	2,476.74	2,165.45	311.30	7.956	
10,000.00	7,252.80	7,232.80	7,252.80	84.65	250.77	-89.78	-273.20	-1,105.33	2,547.66	2,236.02	311.64	8.175	
10,100.00	7,252.42	7,232.42	7,252.42	87.27	250.76	-89.76	-273.20	-1,105.33	2,620.47	2,308.53	311.93	8.401	
10,200.00	7,252.04	7,232.04	7,252.04	89.89	250.75	-89.75	-273.20	-1,105.33	2,695.02	2,382.84	312.19	8.633	

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,251.66	7,231.66	7,251.66	92.54	250.73	-89.74	-273.20	-1,105.33	2,771.18	2,458.78	312.40	8.871		
10,400.00	7,251.28	7,231.28	7,251.28	95.19	250.72	-89.73	-273.20	-1,105.33	2,848.81	2,536.23	312.59	9.114		
10,500.00	7,250.90	7,230.90	7,250.90	97.86	250.71	-89.71	-273.20	-1,105.33	2,927.80	2,615.06	312.74	9.362		
10,600.00	7,250.52	7,230.52	7,250.52	100.53	250.69	-89.70	-273.20	-1,105.33	3,008.04	2,695.17	312.88	9.614		
10,700.00	7,250.14	7,230.14	7,250.14	103.22	250.68	-89.69	-273.20	-1,105.33	3,089.44	2,776.45	312.99	9.871		
10,800.00	7,249.76	7,229.76	7,249.76	105.91	250.67	-89.68	-273.20	-1,105.33	3,171.90	2,858.82	313.08	10.131		
10,900.00	7,249.38	7,229.38	7,249.38	108.62	250.65	-89.66	-273.20	-1,105.33	3,255.34	2,942.19	313.15	10.395		
11,000.00	7,249.00	7,229.00	7,249.00	111.33	250.64	-89.65	-273.20	-1,105.33	3,339.69	3,026.48	313.21	10.663		
11,100.00	7,248.62	7,228.62	7,248.62	114.04	250.63	-89.64	-273.20	-1,105.33	3,424.88	3,111.62	313.26	10.933		
11,200.00	7,248.24	7,228.24	7,248.24	116.77	250.61	-89.63	-273.20	-1,105.33	3,510.85	3,197.56	313.29	11.206		
11,300.00	7,247.86	7,227.86	7,247.86	119.50	250.60	-89.62	-273.20	-1,105.33	3,597.55	3,284.23	313.32	11.482		
11,400.00	7,247.48	7,227.48	7,247.48	122.24	250.59	-89.60	-273.20	-1,105.33	3,684.93	3,371.59	313.34	11.760		
11,500.00	7,247.10	7,227.10	7,247.10	124.98	250.57	-89.59	-273.20	-1,105.33	3,772.93	3,459.57	313.35	12.040		
11,600.00	7,246.72	7,226.72	7,246.72	127.73	250.56	-89.58	-273.20	-1,105.33	3,861.51	3,548.15	313.36	12.323		
11,700.00	7,246.34	7,226.34	7,246.34	130.48	250.55	-89.57	-273.20	-1,105.33	3,950.64	3,637.28	313.36	12.607		
11,800.00	7,245.96	7,225.96	7,245.96	133.24	250.53	-89.55	-273.20	-1,105.33	4,040.28	3,726.92	313.36	12.893		
11,900.00	7,245.58	7,225.58	7,245.58	136.00	250.52	-89.54	-273.20	-1,105.33	4,130.39	3,817.04	313.35	13.181		
12,000.00	7,245.21	7,225.21	7,245.21	138.76	250.51	-89.53	-273.20	-1,105.33	4,220.95	3,907.61	313.34	13.471		
12,100.00	7,244.83	7,224.83	7,244.83	141.53	250.50	-89.52	-273.20	-1,105.33	4,311.93	3,998.60	313.33	13.761		
12,200.00	7,244.45	7,224.45	7,244.45	144.30	250.48	-89.51	-273.20	-1,105.33	4,403.30	4,089.98	313.32	14.054		
12,300.00	7,244.07	7,224.07	7,244.07	147.08	250.47	-89.49	-273.20	-1,105.33	4,495.03	4,181.73	313.30	14.347		
12,400.00	7,243.69	7,223.69	7,243.69	149.86	250.46	-89.48	-273.20	-1,105.33	4,587.11	4,273.83	313.29	14.642		
12,500.00	7,243.31	7,223.31	7,243.31	152.64	250.44	-89.47	-273.20	-1,105.33	4,679.52	4,366.25	313.27	14.938		
12,600.00	7,242.93	7,222.93	7,242.93	155.42	250.43	-89.46	-273.20	-1,105.33	4,772.23	4,458.98	313.25	15.235		
12,700.00	7,242.55	7,222.55	7,242.55	158.21	250.42	-89.44	-273.20	-1,105.33	4,865.23	4,552.00	313.23	15.532		
12,800.00	7,242.17	7,222.17	7,242.17	161.00	250.40	-89.43	-273.20	-1,105.33	4,958.50	4,645.29	313.21	15.831		
12,900.00	7,241.79	7,221.79	7,241.79	163.79	250.39	-89.42	-273.20	-1,105.33	5,052.03	4,738.84	313.19	16.131		
13,000.00	7,241.41	7,221.41	7,241.41	166.58	250.38	-89.41	-273.20	-1,105.33	5,145.81	4,832.63	313.18	16.431		
13,100.00	7,241.03	7,221.03	7,241.03	169.38	250.36	-89.39	-273.20	-1,105.33	5,239.81	4,926.66	313.16	16.732		
13,200.00	7,240.65	7,220.65	7,240.65	172.18	250.35	-89.38	-273.20	-1,105.33	5,334.03	5,020.90	313.14	17.034		
13,300.00	7,240.27	7,220.27	7,240.27	174.98	250.34	-89.37	-273.20	-1,105.33	5,428.46	5,115.34	313.12	17.337		
13,400.00	7,239.89	7,219.89	7,239.89	177.78	250.32	-89.36	-273.20	-1,105.33	5,523.09	5,209.98	313.10	17.640		
13,500.00	7,239.51	7,219.51	7,239.51	180.58	250.31	-89.35	-273.20	-1,105.33	5,617.90	5,304.81	313.09	17.944		
13,600.00	7,239.13	7,219.13	7,239.13	183.39	250.30	-89.33	-273.20	-1,105.33	5,712.89	5,399.82	313.07	18.248		
13,700.00	7,238.75	7,218.75	7,238.75	186.20	250.28	-89.32	-273.20	-1,105.33	5,808.04	5,494.99	313.05	18.553		
13,800.00	7,238.37	7,218.37	7,238.37	189.00	250.27	-89.31	-273.20	-1,105.33	5,903.36	5,590.32	313.04	18.858		
13,900.00	7,237.99	7,217.99	7,237.99	191.81	250.26	-89.30	-273.20	-1,105.33	5,998.83	5,685.80	313.03	19.164		
14,000.00	7,237.62	7,217.62	7,237.62	194.63	250.24	-89.28	-273.20	-1,105.33	6,094.44	5,781.43	313.01	19.470		
14,100.00	7,237.24	7,217.24	7,237.24	197.44	250.23	-89.27	-273.20	-1,105.33	6,190.19	5,877.19	313.00	19.777		
14,200.00	7,236.86	7,216.86	7,236.86	200.25	250.22	-89.26	-273.20	-1,105.33	6,286.08	5,973.09	312.99	20.084		
14,300.00	7,236.48	7,216.48	7,236.48	203.07	250.20	-89.25	-273.20	-1,105.33	6,382.09	6,069.11	312.98	20.391		
14,400.00	7,236.10	7,216.10	7,236.10	205.88	250.19	-89.23	-273.20	-1,105.33	6,478.22	6,165.25	312.97	20.699		
14,500.00	7,235.72	7,215.72	7,235.72	208.70	250.18	-89.22	-273.20	-1,105.33	6,574.47	6,261.51	312.96	21.007		
14,600.00	7,235.34	7,215.34	7,235.34	211.52	250.16	-89.21	-273.20	-1,105.33	6,670.83	6,357.87	312.96	21.316		
14,700.00	7,234.96	7,214.96	7,234.96	214.34	250.15	-89.20	-273.20	-1,105.33	6,767.29	6,454.34	312.95	21.624		
14,800.00	7,234.58	7,214.58	7,234.58	217.16	250.14	-89.19	-273.20	-1,105.33	6,863.85	6,550.91	312.95	21.933		
14,900.00	7,234.20	7,214.20	7,234.20	219.98	250.12	-89.17	-273.20	-1,105.33	6,960.52	6,647.57	312.94	22.242		
15,000.00	7,233.82	7,213.82	7,233.82	222.81	250.11	-89.16	-273.20	-1,105.33	7,057.27	6,744.33	312.94	22.552		
15,100.00	7,233.44	7,213.44	7,233.44	225.63	250.10	-89.15	-273.20	-1,105.33	7,154.11	6,841.18	312.94	22.861		
15,200.00	7,233.06	7,213.06	7,233.06	228.45	250.08	-89.14	-273.20	-1,105.33	7,251.04	6,938.11	312.94	23.171		
15,216.01	7,233.00	7,213.00	7,233.00	228.91	250.08	-89.13	-273.20	-1,105.33	7,266.57	6,953.64	312.94	23.221		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.00	13.00	3.28	3.28	-74.62	408.07	-1,483.55	1,538.71					
100.00	100.00	87.00	100.00	3.28	3.61	-74.62	408.07	-1,483.55	1,538.65	1,531.75	6.90	223.019		
200.00	200.00	187.00	200.00	3.34	5.80	-74.62	408.07	-1,483.55	1,538.65	1,529.52	9.14	168.410		
300.00	299.98	286.98	299.98	3.45	8.90	-68.96	408.07	-1,483.55	1,538.03	1,525.68	12.34	124.595		
400.00	399.84	386.84	399.84	3.61	12.21	-69.18	408.07	-1,483.55	1,536.15	1,520.34	15.81	97.156		
500.00	499.45	486.45	499.45	3.82	15.59	-69.54	408.07	-1,483.55	1,533.07	1,513.68	19.39	79.054		
600.00	598.70	585.70	598.70	4.07	18.99	-70.04	408.07	-1,483.55	1,528.83	1,505.79	23.04	66.360		
700.00	697.47	684.47	697.47	4.35	22.39	-70.69	408.07	-1,483.55	1,523.52	1,496.79	26.72	57.011		
800.00	795.62	782.62	795.62	4.67	25.79	-71.48	408.07	-1,483.55	1,517.23	1,486.80	30.43	49.856		
900.00	893.06	880.06	893.06	5.01	29.16	-72.40	408.07	-1,483.55	1,510.09	1,475.94	34.15	44.214		
1,000.00	989.64	976.64	989.64	5.38	32.52	-73.47	408.07	-1,483.55	1,502.25	1,464.37	37.88	39.655		
1,100.00	1,085.42	1,072.42	1,085.42	5.78	35.84	-74.56	408.07	-1,483.55	1,494.02	1,452.41	41.61	35.903		
1,200.00	1,181.09	1,168.09	1,181.09	6.20	39.17	-75.59	408.07	-1,483.55	1,486.21	1,440.84	45.36	32.762		
1,300.00	1,276.76	1,263.76	1,276.76	6.65	42.50	-76.64	408.07	-1,483.55	1,478.93	1,429.79	49.13	30.100		
1,400.00	1,372.43	1,359.43	1,372.43	7.11	45.83	-77.70	408.07	-1,483.55	1,472.18	1,419.27	52.92	27.819		
1,500.00	1,468.10	1,455.10	1,468.10	7.57	49.16	-78.76	408.07	-1,483.55	1,465.99	1,409.27	56.72	25.847		
1,600.00	1,563.77	1,550.77	1,563.77	8.05	52.49	-79.84	408.07	-1,483.55	1,460.35	1,399.82	60.53	24.127		
1,700.00	1,659.44	1,646.44	1,659.44	8.53	55.83	-80.92	408.07	-1,483.55	1,455.27	1,390.93	64.34	22.617		
1,800.00	1,755.11	1,742.11	1,755.11	9.02	59.16	-82.00	408.07	-1,483.55	1,450.76	1,382.59	68.17	21.282		
1,900.00	1,850.78	1,837.78	1,850.78	9.52	62.50	-83.10	408.07	-1,483.55	1,446.81	1,374.81	72.00	20.094		
2,000.00	1,946.45	1,933.45	1,946.45	10.02	65.83	-84.20	408.07	-1,483.55	1,443.45	1,367.61	75.84	19.033		
2,100.00	2,042.12	2,029.12	2,042.12	10.52	69.17	-85.30	408.07	-1,483.55	1,440.66	1,360.99	79.68	18.081		
2,200.00	2,137.78	2,124.78	2,137.78	11.03	72.51	-86.40	408.07	-1,483.55	1,438.46	1,354.94	83.52	17.222		
2,300.00	2,233.45	2,220.45	2,233.45	11.54	75.84	-87.51	408.07	-1,483.55	1,436.85	1,349.48	87.37	16.445		
2,400.00	2,329.12	2,316.12	2,329.12	12.05	79.18	-88.62	408.07	-1,483.55	1,435.82	1,344.60	91.22	15.740		
2,500.00	2,424.79	2,411.79	2,424.79	12.56	82.52	-89.73	408.07	-1,483.55	1,435.39	1,340.31	95.08	15.097		
2,523.97	2,447.73	2,434.73	2,447.73	12.69	83.32	-90.00	408.07	-1,483.55	1,435.37	1,339.37	96.00	14.952		
2,600.00	2,520.46	2,507.46	2,520.46	13.08	85.85	-90.85	408.07	-1,483.55	1,435.54	1,336.61	98.93	14.511		
2,700.00	2,616.13	2,603.13	2,616.13	13.60	89.19	-91.96	408.07	-1,483.55	1,436.28	1,333.50	102.79	13.973		
2,800.00	2,711.80	2,701.20	2,711.80	14.12	92.61	-93.07	408.07	-1,483.55	1,437.62	1,330.89	106.73	13.470		
2,900.00	2,807.47	2,805.53	2,807.47	14.64	96.25	-94.17	408.07	-1,483.55	1,439.54	1,328.65	110.89	12.982		
3,000.00	2,903.14	2,909.86	2,903.14	15.16	99.89	-95.28	408.07	-1,483.55	1,442.04	1,326.99	115.05	12.534		
3,100.00	2,998.81	2,985.81	2,998.81	15.68	102.54	-96.38	408.07	-1,483.55	1,445.13	1,326.91	118.22	12.224		
3,200.00	3,094.48	3,081.48	3,094.48	16.21	105.88	-97.47	408.07	-1,483.55	1,448.80	1,326.72	122.08	11.868		
3,300.00	3,190.15	3,177.15	3,190.15	16.73	109.22	-98.56	408.07	-1,483.55	1,453.04	1,327.10	125.93	11.538		
3,400.00	3,285.82	3,272.82	3,285.82	17.26	112.56	-99.65	408.07	-1,483.55	1,457.84	1,328.05	129.79	11.232		
3,500.00	3,381.49	3,368.49	3,381.49	17.78	115.90	-100.72	408.07	-1,483.55	1,463.22	1,329.57	133.65	10.948		
3,600.00	3,477.16	3,464.16	3,477.16	18.31	119.23	-101.79	408.07	-1,483.55	1,469.15	1,331.64	137.50	10.684		
3,700.00	3,572.83	3,559.83	3,572.83	18.84	122.57	-102.85	408.07	-1,483.55	1,475.63	1,334.27	141.36	10.439		
3,800.00	3,668.50	3,655.50	3,668.50	19.37	125.91	-103.91	408.07	-1,483.55	1,482.65	1,337.43	145.21	10.210		
3,900.00	3,764.17	3,751.17	3,764.17	19.89	129.25	-104.95	408.07	-1,483.55	1,490.21	1,341.14	149.07	9.997		
4,000.00	3,859.84	3,846.84	3,859.84	20.42	132.59	-105.98	408.07	-1,483.55	1,498.29	1,345.37	152.92	9.798		
4,100.00	3,955.51	3,942.51	3,955.51	20.95	135.93	-107.00	408.07	-1,483.55	1,506.90	1,350.13	156.77	9.612		
4,200.00	4,051.18	4,038.18	4,051.18	21.48	139.27	-108.01	408.07	-1,483.55	1,516.02	1,355.39	160.62	9.438		
4,300.00	4,146.85	4,133.85	4,146.85	22.01	142.61	-109.01	408.07	-1,483.55	1,525.63	1,361.16	164.47	9.276		
4,400.00	4,242.52	4,229.52	4,242.52	22.55	145.94	-110.00	408.07	-1,483.55	1,535.74	1,367.42	168.32	9.124		
4,500.00	4,338.19	4,325.19	4,338.19	23.08	149.28	-110.98	408.07	-1,483.55	1,546.33	1,374.17	172.16	8.982		
4,600.00	4,433.86	4,420.86	4,433.86	23.61	152.62	-111.94	408.07	-1,483.55	1,557.39	1,381.38	176.01	8.848		
4,700.00	4,529.53	4,516.53	4,529.53	24.14	155.96	-112.89	408.07	-1,483.55	1,568.92	1,389.06	179.85	8.723		
4,800.00	4,625.19	4,612.19	4,625.19	24.67	159.30	-113.83	408.07	-1,483.55	1,580.89	1,397.20	183.69	8.606		
4,900.00	4,720.86	4,707.86	4,720.86	25.21	162.64	-114.75	408.07	-1,483.55	1,593.31	1,405.78	187.53	8.496		
5,000.00	4,816.53	4,803.53	4,816.53	25.74	165.98	-115.66	408.07	-1,483.55	1,606.16	1,414.79	191.37	8.393		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
5,100.00	4,912.20	4,900.80	4,912.20	26.27	169.37	-116.56	408.07	-1,483.55	1,619.43	1,424.16	195.27	8.293	
5,200.00	5,007.87	5,005.13	5,007.87	26.80	173.01	-117.44	408.07	-1,483.55	1,633.11	1,433.71	199.41	8.190	
5,300.00	5,103.54	5,109.46	5,103.54	27.34	176.66	-118.31	408.07	-1,483.55	1,647.20	1,443.65	203.54	8.093	
5,400.00	5,199.22	5,186.22	5,199.22	27.87	179.34	-119.18	408.07	-1,483.55	1,661.66	1,454.95	206.72	8.038	
5,500.00	5,295.46	5,282.46	5,295.46	28.39	182.70	-120.21	408.07	-1,483.55	1,675.49	1,464.93	210.56	7.957	
5,600.00	5,392.60	5,379.60	5,392.60	28.89	186.09	-121.11	408.07	-1,483.55	1,687.87	1,473.45	214.42	7.872	
5,700.00	5,490.50	5,477.50	5,490.50	29.37	189.50	-121.87	408.07	-1,483.55	1,698.66	1,480.37	218.29	7.782	
5,800.00	5,589.05	5,576.05	5,589.05	29.83	192.94	-122.50	408.07	-1,483.55	1,707.77	1,485.60	222.17	7.687	
5,900.00	5,688.14	5,675.14	5,688.14	30.26	196.40	-123.00	408.07	-1,483.55	1,715.10	1,489.05	226.05	7.587	
6,000.00	5,787.63	5,774.63	5,787.63	30.68	199.87	-123.37	408.07	-1,483.55	1,720.60	1,490.67	229.93	7.483	
6,100.00	5,887.41	5,874.41	5,887.41	31.07	203.36	-123.62	408.07	-1,483.55	1,724.20	1,490.40	233.80	7.375	
6,200.00	5,987.36	5,974.36	5,987.36	31.44	206.85	-123.73	408.07	-1,483.55	1,725.89	1,488.22	237.66	7.262	
6,300.00	6,087.36	6,074.36	6,087.36	31.80	210.34	-129.47	408.07	-1,483.55	1,726.02	1,484.50	241.52	7.147	
6,400.00	6,187.36	6,174.36	6,187.36	32.15	213.83	-129.47	408.07	-1,483.55	1,726.02	1,480.65	245.37	7.034	
6,500.00	6,287.36	6,274.36	6,287.36	32.51	217.32	-129.47	408.07	-1,483.55	1,726.02	1,476.79	249.23	6.925	
6,600.00	6,387.36	6,374.36	6,387.36	32.87	220.81	-129.47	408.07	-1,483.55	1,726.02	1,472.94	253.09	6.820	
6,700.00	6,487.36	6,474.36	6,487.36	33.23	224.30	-129.47	408.07	-1,483.55	1,726.02	1,469.08	256.94	6.717	
6,800.00	6,587.36	6,574.36	6,587.36	33.59	227.79	-129.47	408.07	-1,483.55	1,726.02	1,465.22	260.81	6.618	
6,900.00	6,687.26	6,674.26	6,687.26	33.95	231.28	-39.22	408.07	-1,483.55	1,723.60	1,458.95	264.65	6.513	
7,000.00	6,785.58	6,772.58	6,785.58	34.31	234.71	-40.39	408.07	-1,483.55	1,709.95	1,441.52	268.43	6.370	
7,100.00	6,879.94	6,866.94	6,879.94	34.65	238.00	-42.66	408.07	-1,483.55	1,684.76	1,412.70	272.06	6.193	
7,200.00	6,968.01	6,955.01	6,968.01	34.97	241.08	-46.15	408.07	-1,483.55	1,649.00	1,373.54	275.46	5.986	
7,300.00	7,047.61	7,034.61	7,047.61	35.27	243.86	-50.96	408.07	-1,483.55	1,604.10	1,325.52	278.58	5.758	
7,400.00	7,116.80	7,103.80	7,116.80	35.54	246.27	-57.13	408.07	-1,483.55	1,551.86	1,270.49	281.37	5.515	
7,500.00	7,173.86	7,160.86	7,173.86	35.81	248.26	-64.51	408.07	-1,483.55	1,494.43	1,210.63	283.80	5.266	
7,600.00	7,217.38	7,204.38	7,217.38	36.17	249.78	-72.60	408.07	-1,483.55	1,434.20	1,148.33	285.87	5.017	
7,700.00	7,246.31	7,233.31	7,246.31	36.80	250.79	-80.62	408.07	-1,483.55	1,373.71	1,086.12	287.59	4.777	
7,800.00	7,259.92	7,246.92	7,259.92	37.72	251.27	-87.73	408.07	-1,483.55	1,315.50	1,026.55	288.96	4.553	
7,900.00	7,260.77	7,247.77	7,260.77	38.86	251.30	-90.13	408.07	-1,483.55	1,261.87	971.80	290.07	4.350	
8,000.00	7,260.39	7,247.39	7,260.39	40.19	251.28	-90.11	408.07	-1,483.55	1,214.10	922.74	291.36	4.167	
8,100.00	7,260.01	7,247.01	7,260.01	41.67	251.27	-90.09	408.07	-1,483.55	1,172.93	880.08	292.85	4.005	
8,200.00	7,259.63	7,246.63	7,259.63	43.30	251.26	-90.07	408.07	-1,483.55	1,139.07	844.56	294.51	3.868	
8,300.00	7,259.25	7,246.25	7,259.25	45.05	251.24	-90.05	408.07	-1,483.55	1,113.20	816.90	296.29	3.757	
8,400.00	7,258.87	7,245.87	7,258.87	46.91	251.23	-90.03	408.07	-1,483.55	1,095.87	797.75	298.12	3.676	
8,500.00	7,258.49	7,245.49	7,258.49	48.87	251.22	-90.01	408.07	-1,483.55	1,087.50	787.60	299.90	3.626	
8,541.38	7,258.33	7,245.33	7,258.33	49.72	251.21	-90.00	408.07	-1,483.55	1,086.71	786.09	300.62	3.615 CC, ES	
8,600.00	7,258.11	7,245.11	7,258.11	50.92	251.20	-89.99	408.07	-1,483.55	1,088.29	786.72	301.57	3.609 SF	
8,700.00	7,257.73	7,244.73	7,257.73	53.04	251.19	-89.97	408.07	-1,483.55	1,098.23	795.17	303.06	3.624	
8,800.00	7,257.35	7,244.35	7,257.35	55.23	251.18	-89.95	408.07	-1,483.55	1,117.06	812.75	304.31	3.671	
8,900.00	7,256.97	7,243.97	7,256.97	57.47	251.16	-89.93	408.07	-1,483.55	1,144.36	839.05	305.31	3.748	
9,000.00	7,256.59	7,243.59	7,256.59	59.77	251.15	-89.91	408.07	-1,483.55	1,179.52	873.47	306.05	3.854	
9,100.00	7,256.21	7,243.21	7,256.21	62.12	251.14	-89.89	408.07	-1,483.55	1,221.88	915.31	306.57	3.986	
9,200.00	7,255.83	7,242.83	7,255.83	64.50	251.12	-89.87	408.07	-1,483.55	1,270.72	963.84	306.88	4.141	
9,300.00	7,255.45	7,242.45	7,255.45	66.93	251.11	-89.85	408.07	-1,483.55	1,325.31	1,018.29	307.02	4.317	
9,400.00	7,255.07	7,242.07	7,255.07	69.38	251.10	-89.83	408.07	-1,483.55	1,384.98	1,077.95	307.03	4.511	
9,500.00	7,254.69	7,241.69	7,254.69	71.87	251.08	-89.81	408.07	-1,483.55	1,449.10	1,142.17	306.93	4.721	
9,600.00	7,254.31	7,241.31	7,254.31	74.38	251.07	-89.79	408.07	-1,483.55	1,517.10	1,210.35	306.76	4.946	
9,700.00	7,253.93	7,240.93	7,253.93	76.92	251.06	-89.77	408.07	-1,483.55	1,588.50	1,281.97	306.53	5.182	
9,800.00	7,253.55	7,240.55	7,253.55	79.48	251.04	-89.75	408.07	-1,483.55	1,662.84	1,356.58	306.26	5.429	
9,900.00	7,253.18	7,240.18	7,253.18	82.06	251.03	-89.73	408.07	-1,483.55	1,739.76	1,433.79	305.97	5.686	
10,000.00	7,252.80	7,239.80	7,252.80	84.65	251.02	-89.71	408.07	-1,483.55	1,818.92	1,513.25	305.67	5.951	
10,100.00	7,252.42	7,239.42	7,252.42	87.27	251.00	-89.69	408.07	-1,483.55	1,900.05	1,594.69	305.37	6.222	

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,200.00	7,252.04	7,239.04	7,252.04	89.89	250.99	-89.67	408.07	-1,483.55	1,982.91	1,677.84	305.06	6.500		
10,300.00	7,251.66	7,238.66	7,251.66	92.54	250.98	-89.65	408.07	-1,483.55	2,067.28	1,762.52	304.76	6.783		
10,400.00	7,251.28	7,238.28	7,251.28	95.19	250.96	-89.63	408.07	-1,483.55	2,152.99	1,848.52	304.47	7.071		
10,500.00	7,250.90	7,237.90	7,250.90	97.86	250.95	-89.61	408.07	-1,483.55	2,239.88	1,935.70	304.19	7.363		
10,600.00	7,250.52	7,237.52	7,250.52	100.53	250.94	-89.59	408.07	-1,483.55	2,327.83	2,023.91	303.92	7.659		
10,700.00	7,250.14	7,237.14	7,250.14	103.22	250.92	-89.57	408.07	-1,483.55	2,416.72	2,113.06	303.66	7.959		
10,800.00	7,249.76	7,236.76	7,249.76	105.91	250.91	-89.55	408.07	-1,483.55	2,506.44	2,203.03	303.41	8.261		
10,900.00	7,249.38	7,236.38	7,249.38	108.62	250.90	-89.53	408.07	-1,483.55	2,596.91	2,293.74	303.17	8.566		
11,000.00	7,249.00	7,236.00	7,249.00	111.33	250.89	-89.51	408.07	-1,483.55	2,688.06	2,385.12	302.95	8.873		
11,100.00	7,248.62	7,235.62	7,248.62	114.04	250.87	-89.49	408.07	-1,483.55	2,779.82	2,477.09	302.73	9.182		
11,200.00	7,248.24	7,235.24	7,248.24	116.77	250.86	-89.47	408.07	-1,483.55	2,872.13	2,569.60	302.53	9.494		
11,300.00	7,247.86	7,234.86	7,247.86	119.50	250.85	-89.45	408.07	-1,483.55	2,964.93	2,662.59	302.34	9.807		
11,400.00	7,247.48	7,234.48	7,247.48	122.24	250.83	-89.43	408.07	-1,483.55	3,058.19	2,756.03	302.16	10.121		
11,500.00	7,247.10	7,234.10	7,247.10	124.98	250.82	-89.41	408.07	-1,483.55	3,151.87	2,849.88	301.99	10.437		
11,600.00	7,246.72	7,233.72	7,246.72	127.73	250.81	-89.39	408.07	-1,483.55	3,245.92	2,944.09	301.82	10.754		
11,700.00	7,246.34	7,233.34	7,246.34	130.48	250.79	-89.37	408.07	-1,483.55	3,340.31	3,038.64	301.67	11.073		
11,800.00	7,245.96	7,232.96	7,245.96	133.24	250.78	-89.35	408.07	-1,483.55	3,435.03	3,133.50	301.53	11.392		
11,900.00	7,245.58	7,232.58	7,245.58	136.00	250.77	-89.33	408.07	-1,483.55	3,530.03	3,228.64	301.39	11.712		
12,000.00	7,245.21	7,232.21	7,245.21	138.76	250.75	-89.31	408.07	-1,483.55	3,625.30	3,324.04	301.26	12.034		
12,100.00	7,244.83	7,231.83	7,244.83	141.53	250.74	-89.29	408.07	-1,483.55	3,720.83	3,419.68	301.14	12.356		
12,200.00	7,244.45	7,231.45	7,244.45	144.30	250.73	-89.27	408.07	-1,483.55	3,816.58	3,515.55	301.03	12.678		
12,300.00	7,244.07	7,231.07	7,244.07	147.08	250.71	-89.25	408.07	-1,483.55	3,912.54	3,611.62	300.92	13.002		
12,400.00	7,243.69	7,230.69	7,243.69	149.86	250.70	-89.23	408.07	-1,483.55	4,008.70	3,707.88	300.82	13.326		
12,500.00	7,243.31	7,230.31	7,243.31	152.64	250.69	-89.21	408.07	-1,483.55	4,105.05	3,804.32	300.73	13.650		
12,600.00	7,242.93	7,229.93	7,242.93	155.42	250.67	-89.19	408.07	-1,483.55	4,201.56	3,900.92	300.64	13.975		
12,700.00	7,242.55	7,229.55	7,242.55	158.21	250.66	-89.17	408.07	-1,483.55	4,298.23	3,997.68	300.56	14.301		
12,800.00	7,242.17	7,229.17	7,242.17	161.00	250.65	-89.15	408.07	-1,483.55	4,395.06	4,094.58	300.48	14.627		
12,900.00	7,241.79	7,228.79	7,241.79	163.79	250.63	-89.13	408.07	-1,483.55	4,492.02	4,191.62	300.40	14.953		
13,000.00	7,241.41	7,228.41	7,241.41	166.58	250.62	-89.11	408.07	-1,483.55	4,589.11	4,288.78	300.34	15.280		
13,100.00	7,241.03	7,228.03	7,241.03	169.38	250.61	-89.09	408.07	-1,483.55	4,686.33	4,386.06	300.27	15.607		
13,200.00	7,240.65	7,227.65	7,240.65	172.18	250.59	-89.07	408.07	-1,483.55	4,783.66	4,483.44	300.21	15.934		
13,300.00	7,240.27	7,227.27	7,240.27	174.98	250.58	-89.05	408.07	-1,483.55	4,881.10	4,580.94	300.16	16.262		
13,400.00	7,239.89	7,226.89	7,239.89	177.78	250.57	-89.03	408.07	-1,483.55	4,978.63	4,678.53	300.11	16.590		
13,500.00	7,239.51	7,226.51	7,239.51	180.58	250.55	-89.01	408.07	-1,483.55	5,076.27	4,776.21	300.06	16.918		
13,600.00	7,239.13	7,226.13	7,239.13	183.39	250.54	-88.99	408.07	-1,483.55	5,173.99	4,873.98	300.02	17.246		
13,700.00	7,238.75	7,225.75	7,238.75	186.20	250.53	-88.97	408.07	-1,483.55	5,271.81	4,971.83	299.98	17.574		
13,800.00	7,238.37	7,225.37	7,238.37	189.00	250.51	-88.95	408.07	-1,483.55	5,369.70	5,069.76	299.94	17.903		
13,900.00	7,237.99	7,224.99	7,237.99	191.81	250.50	-88.93	408.07	-1,483.55	5,467.66	5,167.76	299.91	18.231		
14,000.00	7,237.62	7,224.62	7,237.62	194.63	250.49	-88.91	408.07	-1,483.55	5,565.70	5,265.83	299.88	18.560		
14,100.00	7,237.24	7,224.24	7,237.24	197.44	250.47	-88.89	408.07	-1,483.55	5,663.81	5,363.96	299.85	18.889		
14,200.00	7,236.86	7,223.86	7,236.86	200.25	250.46	-88.87	408.07	-1,483.55	5,761.99	5,462.16	299.82	19.218		
14,300.00	7,236.48	7,223.48	7,236.48	203.07	250.45	-88.85	408.07	-1,483.55	5,860.22	5,560.42	299.80	19.547		
14,400.00	7,236.10	7,223.10	7,236.10	205.88	250.43	-88.83	408.07	-1,483.55	5,958.51	5,658.73	299.78	19.876		
14,500.00	7,235.72	7,222.72	7,235.72	208.70	250.42	-88.81	408.07	-1,483.55	6,056.86	5,757.10	299.77	20.205		
14,600.00	7,235.34	7,222.34	7,235.34	211.52	250.41	-88.79	408.07	-1,483.55	6,155.27	5,855.51	299.75	20.534		
14,700.00	7,234.96	7,221.96	7,234.96	214.34	250.40	-88.77	408.07	-1,483.55	6,253.72	5,953.98	299.74	20.864		
14,800.00	7,234.58	7,221.58	7,234.58	217.16	250.38	-88.75	408.07	-1,483.55	6,352.22	6,052.49	299.73	21.193		
14,900.00	7,234.20	7,221.20	7,234.20	219.98	250.37	-88.73	408.07	-1,483.55	6,450.77	6,151.04	299.73	21.522		
15,000.00	7,233.82	7,220.82	7,233.82	222.81	250.36	-88.71	408.07	-1,483.55	6,549.36	6,249.64	299.72	21.851		
15,100.00	7,233.44	7,220.44	7,233.44	225.63	250.34	-88.69	408.07	-1,483.55	6,647.99	6,348.27	299.72	22.180		
15,200.00	7,233.06	7,220.06	7,233.06	228.45	250.33	-88.67	408.07	-1,483.55	6,746.67	6,446.95	299.72	22.510		
15,216.01	7,233.00	7,220.00	7,233.00	228.91	250.33	-88.66	408.07	-1,483.55	6,762.47	6,462.75	299.72	22.562		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	50.00	3.28	3.28	-79.60	916.01	-4,991.52	5,075.12					
100.00	100.00	50.00	100.00	3.28	3.39	-79.60	916.01	-4,991.52	5,074.88	5,068.20	6.68	759.843		
200.00	200.00	150.00	200.00	3.34	4.79	-79.60	916.01	-4,991.52	5,074.88	5,066.75	8.13	624.433		
300.00	299.98	249.98	299.98	3.45	7.71	-73.90	916.01	-4,991.52	5,074.39	5,063.24	11.16	454.771		
400.00	399.84	349.84	399.84	3.61	10.97	-73.98	916.01	-4,991.52	5,072.94	5,058.37	14.57	348.124		
500.00	499.45	449.45	499.45	3.82	14.33	-74.12	916.01	-4,991.52	5,070.54	5,052.41	18.13	279.644		
600.00	598.70	548.70	598.70	4.07	17.72	-74.32	916.01	-4,991.52	5,067.20	5,045.44	21.77	232.794		
700.00	697.47	647.47	697.47	4.35	21.11	-74.57	916.01	-4,991.52	5,062.96	5,037.51	25.45	198.971		
800.00	795.62	745.62	795.62	4.67	24.50	-74.87	916.01	-4,991.52	5,057.84	5,028.69	29.15	173.504		
900.00	893.06	843.06	893.06	5.01	27.88	-75.23	916.01	-4,991.52	5,051.90	5,019.02	32.87	153.686		
1,000.00	989.64	939.64	989.64	5.38	31.23	-75.63	916.01	-4,991.52	5,045.17	5,008.57	36.60	137.852		
1,100.00	1,085.42	1,035.42	1,085.42	5.78	34.56	-76.00	916.01	-4,991.52	5,037.84	4,997.52	40.33	124.923		
1,200.00	1,181.09	1,131.09	1,181.09	6.20	37.88	-76.31	916.01	-4,991.52	5,030.58	4,986.50	44.08	114.130		
1,300.00	1,276.76	1,226.76	1,276.76	6.65	41.21	-76.62	916.01	-4,991.52	5,023.48	4,975.63	47.85	104.992		
1,400.00	1,372.43	1,322.43	1,372.43	7.11	44.54	-76.93	916.01	-4,991.52	5,016.53	4,964.90	51.63	97.164		
1,500.00	1,468.10	1,418.10	1,468.10	7.57	47.87	-77.24	916.01	-4,991.52	5,009.75	4,954.32	55.43	90.387		
1,600.00	1,563.77	1,513.77	1,563.77	8.05	51.21	-77.55	916.01	-4,991.52	5,003.13	4,943.89	59.23	84.467		
1,700.00	1,659.44	1,609.44	1,659.44	8.53	54.54	-77.87	916.01	-4,991.52	4,996.66	4,933.62	63.05	79.254		
1,800.00	1,755.11	1,705.11	1,755.11	9.02	57.87	-78.18	916.01	-4,991.52	4,990.36	4,923.49	66.87	74.630		
1,900.00	1,850.78	1,800.78	1,850.78	9.52	61.21	-78.49	916.01	-4,991.52	4,984.22	4,913.52	70.70	70.502		
2,000.00	1,946.45	1,896.45	1,946.45	10.02	64.79	-78.81	916.01	-4,991.52	4,978.24	4,903.47	74.78	66.575		
2,100.00	2,042.12	2,007.89	2,042.12	10.52	68.43	-79.12	916.01	-4,991.52	4,972.43	4,893.51	78.92	63.009		
2,200.00	2,137.78	2,087.78	2,137.78	11.03	71.21	-79.44	916.01	-4,991.52	4,966.78	4,884.57	82.21	60.417		
2,300.00	2,233.45	2,183.45	2,233.45	11.54	74.55	-79.75	916.01	-4,991.52	4,961.29	4,875.24	86.05	57.654		
2,400.00	2,329.12	2,279.12	2,329.12	12.05	77.89	-80.07	916.01	-4,991.52	4,955.97	4,866.07	89.90	55.127		
2,500.00	2,424.79	2,374.79	2,424.79	12.56	81.22	-80.39	916.01	-4,991.52	4,950.81	4,857.06	93.75	52.808		
2,600.00	2,520.46	2,470.46	2,520.46	13.08	84.56	-80.71	916.01	-4,991.52	4,945.82	4,848.22	97.60	50.672		
2,700.00	2,616.13	2,566.13	2,616.13	13.60	87.90	-81.03	916.01	-4,991.52	4,941.00	4,839.54	101.46	48.699		
2,800.00	2,711.80	2,661.80	2,711.80	14.12	91.24	-81.35	916.01	-4,991.52	4,936.34	4,831.03	105.32	46.871		
2,900.00	2,807.47	2,757.47	2,807.47	14.64	94.57	-81.67	916.01	-4,991.52	4,931.86	4,822.68	109.18	45.174		
3,000.00	2,903.14	2,853.14	2,903.14	15.16	97.91	-81.99	916.01	-4,991.52	4,927.53	4,814.50	113.04	43.593		
3,100.00	2,998.81	2,948.81	2,998.81	15.68	101.25	-82.31	916.01	-4,991.52	4,923.38	4,806.48	116.90	42.117		
3,200.00	3,094.48	3,044.48	3,094.48	16.21	104.59	-82.63	916.01	-4,991.52	4,919.40	4,798.64	120.76	40.737		
3,300.00	3,190.15	3,140.15	3,190.15	16.73	107.93	-82.95	916.01	-4,991.52	4,915.58	4,790.96	124.62	39.443		
3,400.00	3,285.82	3,235.82	3,285.82	17.26	111.27	-83.28	916.01	-4,991.52	4,911.94	4,783.45	128.49	38.228		
3,500.00	3,381.49	3,331.49	3,381.49	17.78	114.60	-83.60	916.01	-4,991.52	4,908.46	4,776.11	132.36	37.085		
3,600.00	3,477.16	3,427.16	3,477.16	18.31	117.94	-83.92	916.01	-4,991.52	4,905.16	4,768.93	136.22	36.008		
3,700.00	3,572.83	3,522.83	3,572.83	18.84	121.28	-84.25	916.01	-4,991.52	4,902.02	4,761.93	140.09	34.992		
3,800.00	3,668.50	3,618.50	3,668.50	19.37	124.62	-84.57	916.01	-4,991.52	4,899.06	4,755.10	143.96	34.031		
3,900.00	3,764.17	3,714.17	3,764.17	19.89	127.96	-84.89	916.01	-4,991.52	4,896.27	4,748.44	147.83	33.122		
4,000.00	3,859.84	3,809.84	3,859.84	20.42	131.30	-85.22	916.01	-4,991.52	4,893.64	4,741.95	151.70	32.259		
4,100.00	3,955.51	3,905.51	3,955.51	20.95	134.64	-85.54	916.01	-4,991.52	4,891.20	4,735.63	155.57	31.441		
4,200.00	4,051.18	4,001.18	4,051.18	21.48	137.97	-85.87	916.01	-4,991.52	4,888.92	4,729.48	159.44	30.664		
4,300.00	4,146.85	4,103.15	4,146.85	22.01	141.53	-86.20	916.01	-4,991.52	4,886.81	4,723.29	163.53	29.883		
4,400.00	4,242.52	4,207.48	4,242.52	22.55	145.18	-86.52	916.01	-4,991.52	4,884.88	4,717.18	167.70	29.128		
4,500.00	4,338.19	4,288.19	4,338.19	23.08	147.99	-86.85	916.01	-4,991.52	4,883.12	4,712.07	171.05	28.548		
4,600.00	4,433.86	4,383.86	4,433.86	23.61	151.33	-87.17	916.01	-4,991.52	4,881.54	4,706.61	174.92	27.907		
4,700.00	4,529.53	4,479.53	4,529.53	24.14	154.67	-87.50	916.01	-4,991.52	4,880.12	4,701.33	178.80	27.294		
4,800.00	4,625.19	4,575.19	4,625.19	24.67	158.01	-87.83	916.01	-4,991.52	4,878.88	4,696.21	182.67	26.709		
4,900.00	4,720.86	4,670.86	4,720.86	25.21	161.35	-88.15	916.01	-4,991.52	4,877.82	4,691.27	186.54	26.148		
5,000.00	4,816.53	4,766.53	4,816.53	25.74	164.69	-88.48	916.01	-4,991.52	4,876.92	4,686.51	190.42	25.612		
5,100.00	4,912.20	4,862.20	4,912.20	26.27	168.03	-88.81	916.01	-4,991.52	4,876.20	4,681.91	194.29	25.098		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	4,957.87	5,007.87	26.80	171.37	-89.14	916.01	-4,991.52	4,875.66	4,677.50	198.16	24.604		
5,300.00	5,103.54	5,053.54	5,103.54	27.34	174.70	-89.46	916.01	-4,991.52	4,875.29	4,673.25	202.04	24.131		
5,400.00	5,199.22	5,149.22	5,199.22	27.87	178.04	-89.79	916.01	-4,991.52	4,875.09	4,669.18	205.91	23.676		
5,467.42	5,264.00	5,214.00	5,264.00	28.22	180.31	-90.00	916.01	-4,991.52	4,875.05	4,666.53	208.52	23.379		
5,500.00	5,295.46	5,245.46	5,295.46	28.39	181.40	-90.10	916.01	-4,991.52	4,875.06	4,665.27	209.79	23.238		
5,600.00	5,392.60	5,342.60	5,392.60	28.89	184.79	-90.37	916.01	-4,991.52	4,875.16	4,661.48	213.68	22.815		
5,700.00	5,490.50	5,440.50	5,490.50	29.37	188.21	-90.61	916.01	-4,991.52	4,875.34	4,657.76	217.58	22.407		
5,800.00	5,589.05	5,539.05	5,589.05	29.83	191.65	-90.81	916.01	-4,991.52	4,875.55	4,654.07	221.48	22.014		
5,900.00	5,688.14	5,638.14	5,688.14	30.26	195.11	-90.97	916.01	-4,991.52	4,875.76	4,650.39	225.37	21.634		
6,000.00	5,787.63	5,737.63	5,787.63	30.68	198.58	-91.09	916.01	-4,991.52	4,875.94	4,646.68	229.26	21.268		
6,100.00	5,887.41	5,837.41	5,887.41	31.07	202.07	-91.17	916.01	-4,991.52	4,876.07	4,642.93	233.13	20.915		
6,200.00	5,987.36	5,937.36	5,987.36	31.44	205.55	-91.20	916.01	-4,991.52	4,876.13	4,639.14	236.99	20.575		
6,300.00	6,087.36	6,037.36	6,087.36	31.80	209.04	-96.94	916.01	-4,991.52	4,876.14	4,635.30	240.84	20.246		
6,400.00	6,187.36	6,137.36	6,187.36	32.15	212.54	-96.94	916.01	-4,991.52	4,876.14	4,631.45	244.69	19.928		
6,500.00	6,287.36	6,237.36	6,287.36	32.51	216.03	-96.94	916.01	-4,991.52	4,876.14	4,627.60	248.53	19.620		
6,600.00	6,387.36	6,337.36	6,387.36	32.87	219.52	-96.94	916.01	-4,991.52	4,876.14	4,623.75	252.38	19.320		
6,700.00	6,487.36	6,437.36	6,487.36	33.23	223.01	-96.94	916.01	-4,991.52	4,876.14	4,619.90	256.24	19.030		
6,800.00	6,587.36	6,537.36	6,587.36	33.59	226.50	-96.94	916.01	-4,991.52	4,876.14	4,616.05	260.09	18.748		
6,900.00	6,687.26	6,637.26	6,687.26	33.95	229.98	-6.53	916.01	-4,991.52	4,873.04	4,609.11	263.94	18.463		
7,000.00	6,785.58	6,735.58	6,785.58	34.31	233.42	-6.74	916.01	-4,991.52	4,855.52	4,587.80	267.72	18.136		
7,100.00	6,879.94	6,829.94	6,879.94	34.65	236.71	-7.16	916.01	-4,991.52	4,822.93	4,551.57	271.36	17.773		
7,200.00	6,968.01	6,918.01	6,968.01	34.97	239.79	-7.86	916.01	-4,991.52	4,776.09	4,501.33	274.76	17.383		
7,300.00	7,047.61	7,002.39	7,047.61	35.27	242.73	-8.96	916.01	-4,991.52	4,716.14	4,438.15	277.99	16.965		
7,400.00	7,116.80	7,066.80	7,116.80	35.54	244.98	-10.68	916.01	-4,991.52	4,644.58	4,364.09	280.49	16.559		
7,500.00	7,173.86	7,123.86	7,173.86	35.81	246.97	-13.55	916.01	-4,991.52	4,563.17	4,280.48	282.69	16.142		
7,600.00	7,217.38	7,167.38	7,217.38	36.17	248.49	-18.85	916.01	-4,991.52	4,473.93	4,189.55	284.38	15.732		
7,700.00	7,246.31	7,203.69	7,246.31	36.80	249.76	-30.72	916.01	-4,991.52	4,379.06	4,093.27	285.79	15.323		
7,800.00	7,259.92	7,209.92	7,259.92	37.72	249.97	-65.89	916.01	-4,991.52	4,280.90	3,994.78	286.11	14.962		
7,900.00	7,260.77	7,210.77	7,260.77	38.86	250.00	-91.63	916.01	-4,991.52	4,181.77	3,895.53	286.24	14.609		
8,000.00	7,260.39	7,210.39	7,260.39	40.19	249.99	-91.59	916.01	-4,991.52	4,082.67	3,796.34	286.33	14.259		
8,100.00	7,260.01	7,210.01	7,260.01	41.67	249.98	-91.56	916.01	-4,991.52	3,983.61	3,697.18	286.43	13.908		
8,200.00	7,259.63	7,209.63	7,259.63	43.30	249.96	-91.52	916.01	-4,991.52	3,884.60	3,598.05	286.55	13.557		
8,300.00	7,259.25	7,209.25	7,259.25	45.05	249.95	-91.48	916.01	-4,991.52	3,785.63	3,498.96	286.67	13.205		
8,400.00	7,258.87	7,208.87	7,258.87	46.91	249.94	-91.44	916.01	-4,991.52	3,686.73	3,399.92	286.82	12.854		
8,500.00	7,258.49	7,208.49	7,258.49	48.87	249.92	-91.40	916.01	-4,991.52	3,587.89	3,300.91	286.97	12.502		
8,600.00	7,258.11	7,208.11	7,258.11	50.92	249.91	-91.36	916.01	-4,991.52	3,489.11	3,201.96	287.15	12.151		
8,700.00	7,257.73	7,207.73	7,257.73	53.04	249.90	-91.32	916.01	-4,991.52	3,390.40	3,103.06	287.35	11.799		
8,800.00	7,257.35	7,207.35	7,257.35	55.23	249.89	-91.28	916.01	-4,991.52	3,291.78	3,004.21	287.57	11.447		
8,900.00	7,256.97	7,206.97	7,256.97	57.47	249.87	-91.24	916.01	-4,991.52	3,193.23	2,905.42	287.81	11.095		
9,000.00	7,256.59	7,206.59	7,256.59	59.77	249.86	-91.20	916.01	-4,991.52	3,094.78	2,806.70	288.09	10.743		
9,100.00	7,256.21	7,206.21	7,256.21	62.12	249.85	-91.16	916.01	-4,991.52	2,996.44	2,708.04	288.39	10.390		
9,200.00	7,255.83	7,205.83	7,255.83	64.50	249.83	-91.12	916.01	-4,991.52	2,898.20	2,609.47	288.74	10.038		
9,300.00	7,255.45	7,205.45	7,255.45	66.93	249.82	-91.08	916.01	-4,991.52	2,800.10	2,510.98	289.12	9.685		
9,400.00	7,255.07	7,205.07	7,255.07	69.38	249.81	-91.04	916.01	-4,991.52	2,702.13	2,412.57	289.55	9.332		
9,500.00	7,254.69	7,204.69	7,254.69	71.87	249.79	-91.00	916.01	-4,991.52	2,604.31	2,314.27	290.04	8.979		
9,600.00	7,254.31	7,204.31	7,254.31	74.38	249.78	-90.96	916.01	-4,991.52	2,506.67	2,216.09	290.58	8.626		
9,700.00	7,253.93	7,203.93	7,253.93	76.92	249.77	-90.92	916.01	-4,991.52	2,409.22	2,118.02	291.20	8.274		
9,800.00	7,253.55	7,203.55	7,253.55	79.48	249.75	-90.89	916.01	-4,991.52	2,311.99	2,020.09	291.89	7.921		
9,900.00	7,253.18	7,203.18	7,253.18	82.06	249.74	-90.85	916.01	-4,991.52	2,215.00	1,922.32	292.68	7.568		
10,000.00	7,252.80	7,202.80	7,252.80	84.65	249.73	-90.81	916.01	-4,991.52	2,118.29	1,824.72	293.58	7.216		
10,100.00	7,252.42	7,202.42	7,252.42	87.27	249.71	-90.77	916.01	-4,991.52	2,021.91	1,727.31	294.60	6.863		
10,200.00	7,252.04	7,202.04	7,252.04	89.89	249.70	-90.73	916.01	-4,991.52	1,925.89	1,630.13	295.76	6.512		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,251.66	7,201.66	7,251.66	92.54	249.69	-90.69	916.01	-4,991.52	1,830.30	1,533.21	297.09	6.161		
10,400.00	7,251.28	7,201.28	7,251.28	95.19	249.67	-90.65	916.01	-4,991.52	1,735.21	1,436.58	298.63	5.811		
10,500.00	7,250.90	7,200.90	7,250.90	97.86	249.66	-90.61	916.01	-4,991.52	1,640.70	1,340.31	300.40	5.462		
10,600.00	7,250.52	7,200.52	7,250.52	100.53	249.65	-90.57	916.01	-4,991.52	1,546.88	1,244.44	302.44	5.115		
10,700.00	7,250.14	7,200.14	7,250.14	103.22	249.63	-90.53	916.01	-4,991.52	1,453.89	1,149.08	304.81	4.770		
10,800.00	7,249.76	7,200.24	7,249.76	105.91	249.64	-90.49	916.01	-4,991.52	1,361.89	1,054.30	307.59	4.428		
10,900.00	7,249.38	7,200.62	7,249.38	108.62	249.65	-90.45	916.01	-4,991.52	1,271.09	960.26	310.84	4.089		
11,000.00	7,249.00	7,201.00	7,249.00	111.33	249.66	-90.41	916.01	-4,991.52	1,181.79	867.15	314.64	3.756		
11,100.00	7,248.62	7,201.38	7,248.62	114.04	249.68	-90.37	916.01	-4,991.52	1,094.33	775.24	319.09	3.430		
11,200.00	7,248.24	7,201.76	7,248.24	116.77	249.69	-90.33	916.01	-4,991.52	1,009.21	684.90	324.31	3.112		
11,300.00	7,247.86	7,202.14	7,247.86	119.50	249.70	-90.29	916.01	-4,991.52	927.07	596.64	330.43	2.806		
11,400.00	7,247.48	7,202.52	7,247.48	122.24	249.72	-90.25	916.01	-4,991.52	848.76	511.21	337.55	2.514		
11,500.00	7,247.10	7,202.90	7,247.10	124.98	249.73	-90.22	916.01	-4,991.52	775.46	429.73	345.73	2.243		
11,600.00	7,246.72	7,203.28	7,246.72	127.73	249.74	-90.18	916.01	-4,991.52	708.72	353.82	354.89	1.997		
11,700.00	7,246.34	7,203.66	7,246.34	130.48	249.76	-90.14	916.01	-4,991.52	650.56	285.84	364.72	1.784		
11,800.00	7,245.96	7,204.04	7,245.96	133.24	249.77	-90.10	916.01	-4,991.52	603.46	229.00	374.46	1.612		
11,900.00	7,245.58	7,204.42	7,245.58	136.00	249.78	-90.06	916.01	-4,991.52	570.18	187.31	382.87	1.489	Level 3	
12,000.00	7,245.21	7,204.79	7,245.21	138.76	249.80	-90.02	916.01	-4,991.52	553.22	164.76	388.45	1.424	Level 3	
12,045.30	7,245.03	7,204.97	7,245.03	140.02	249.80	-90.00	916.01	-4,991.52	551.36	161.65	389.71	1.415	Level 3, CC, ES, SF	
12,100.00	7,244.83	7,205.17	7,244.83	141.53	249.81	-89.98	916.01	-4,991.52	554.07	164.01	390.06	1.420	Level 3	
12,200.00	7,244.45	7,205.55	7,244.45	144.30	249.82	-89.94	916.01	-4,991.52	572.65	185.09	387.56	1.478	Level 3	
12,300.00	7,244.07	7,205.93	7,244.07	147.08	249.84	-89.90	916.01	-4,991.52	607.35	225.44	381.90	1.590		
12,400.00	7,243.69	7,206.31	7,243.69	149.86	249.85	-89.86	916.01	-4,991.52	655.60	281.12	374.48	1.751		
12,500.00	7,243.31	7,206.69	7,243.31	152.64	249.86	-89.82	916.01	-4,991.52	714.67	348.18	366.49	1.950		
12,600.00	7,242.93	7,207.07	7,242.93	155.42	249.88	-89.78	916.01	-4,991.52	782.11	423.37	358.74	2.180		
12,700.00	7,242.55	7,207.45	7,242.55	158.21	249.89	-89.74	916.01	-4,991.52	855.94	504.32	351.61	2.434		
12,800.00	7,242.17	7,207.83	7,242.17	161.00	249.90	-89.70	916.01	-4,991.52	934.65	589.39	345.26	2.707		
12,900.00	7,241.79	7,208.21	7,241.79	163.79	249.92	-89.66	916.01	-4,991.52	1,017.11	677.42	339.69	2.994		
13,000.00	7,241.41	7,208.59	7,241.41	166.58	249.93	-89.62	916.01	-4,991.52	1,102.47	767.64	334.83	3.293		
13,100.00	7,241.03	7,208.97	7,241.03	169.38	249.94	-89.58	916.01	-4,991.52	1,190.12	859.51	330.61	3.600		
13,200.00	7,240.65	7,209.35	7,240.65	172.18	249.95	-89.54	916.01	-4,991.52	1,279.58	952.63	326.94	3.914		
13,300.00	7,240.27	7,209.73	7,240.27	174.98	249.97	-89.51	916.01	-4,991.52	1,370.50	1,046.75	323.75	4.233		
13,400.00	7,239.89	7,209.89	7,239.89	177.78	249.28	-89.47	916.01	-4,991.52	1,462.60	1,142.35	320.25	4.567		
13,500.00	7,239.51	7,209.51	7,239.51	180.58	249.26	-89.43	916.01	-4,991.52	1,555.68	1,237.90	317.78	4.895		
13,600.00	7,239.13	7,209.13	7,239.13	183.39	249.25	-89.39	916.01	-4,991.52	1,649.57	1,333.97	315.60	5.227		
13,700.00	7,238.75	7,208.75	7,238.75	186.20	249.24	-89.35	916.01	-4,991.52	1,744.13	1,430.46	313.67	5.560		
13,800.00	7,238.37	7,208.37	7,238.37	189.00	249.22	-89.31	916.01	-4,991.52	1,839.28	1,527.32	311.96	5.896		
13,900.00	7,237.99	7,207.99	7,237.99	191.81	249.21	-89.27	916.01	-4,991.52	1,934.91	1,624.48	310.43	6.233		
14,000.00	7,237.62	7,207.62	7,237.62	194.63	249.20	-89.23	916.01	-4,991.52	2,030.96	1,721.89	309.07	6.571		
14,100.00	7,237.24	7,207.24	7,237.24	197.44	249.18	-89.19	916.01	-4,991.52	2,127.38	1,819.53	307.85	6.910		
14,200.00	7,236.86	7,206.86	7,236.86	200.25	249.17	-89.15	916.01	-4,991.52	2,224.11	1,917.37	306.75	7.251		
14,300.00	7,236.48	7,206.48	7,236.48	203.07	249.16	-89.11	916.01	-4,991.52	2,321.12	2,015.37	305.75	7.591		
14,400.00	7,236.10	7,206.10	7,236.10	205.88	249.14	-89.07	916.01	-4,991.52	2,418.38	2,113.52	304.86	7.933		
14,500.00	7,235.72	7,205.72	7,235.72	208.70	249.13	-89.03	916.01	-4,991.52	2,515.85	2,211.80	304.04	8.275		
14,600.00	7,235.34	7,205.34	7,235.34	211.52	249.12	-88.99	916.01	-4,991.52	2,613.51	2,310.20	303.30	8.617		
14,700.00	7,234.96	7,204.96	7,234.96	214.34	249.10	-88.95	916.01	-4,991.52	2,711.34	2,408.71	302.63	8.959		
14,800.00	7,234.58	7,204.58	7,234.58	217.16	249.09	-88.91	916.01	-4,991.52	2,809.32	2,507.31	302.01	9.302		
14,900.00	7,234.20	7,204.20	7,234.20	219.98	249.08	-88.87	916.01	-4,991.52	2,907.44	2,605.99	301.45	9.645		
15,000.00	7,233.82	7,203.82	7,233.82	222.81	249.06	-88.83	916.01	-4,991.52	3,005.69	2,704.75	300.94	9.988		
15,100.00	7,233.44	7,203.44	7,233.44	225.63	249.05	-88.80	916.01	-4,991.52	3,104.04	2,803.58	300.46	10.331		
15,200.00	7,233.06	7,203.06	7,233.06	228.45	249.04	-88.76	916.01	-4,991.52	3,202.50	2,902.47	300.03	10.674		
15,216.01	7,233.00	7,203.00	7,233.00	228.91	249.04	-88.75	916.01	-4,991.52	3,218.28	2,918.31	299.96	10.729		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
0.00	0.00	0.00	48.00	3.28	3.28	-79.63	936.80	-5,121.40	5,206.60					
100.00	100.00	52.00	100.00	3.28	3.40	-79.63	936.80	-5,121.40	5,206.38	5,199.69	6.69	778.466		
200.00	200.00	152.00	200.00	3.34	4.84	-79.63	936.80	-5,121.40	5,206.38	5,198.20	8.18	636.609		
300.00	299.98	251.98	299.98	3.45	7.78	-73.93	936.80	-5,121.40	5,205.89	5,194.67	11.22	463.926		
400.00	399.84	351.84	399.84	3.61	11.04	-74.01	936.80	-5,121.40	5,204.45	5,189.81	14.64	355.523		
500.00	499.45	451.45	499.45	3.82	14.39	-74.15	936.80	-5,121.40	5,202.05	5,183.85	18.20	285.825		
600.00	598.70	550.70	598.70	4.07	17.78	-74.34	936.80	-5,121.40	5,198.72	5,176.88	21.84	238.085		
700.00	697.47	649.47	697.47	4.35	21.18	-74.59	936.80	-5,121.40	5,194.48	5,168.96	25.51	203.588		
800.00	795.62	747.62	795.62	4.67	24.57	-74.89	936.80	-5,121.40	5,189.37	5,160.15	29.22	177.595		
900.00	893.06	845.06	893.06	5.01	27.95	-75.24	936.80	-5,121.40	5,183.43	5,150.49	32.94	157.356		
1,000.00	989.64	941.64	989.64	5.38	31.30	-75.63	936.80	-5,121.40	5,176.70	5,140.04	36.67	141.178		
1,100.00	1,085.42	1,037.42	1,085.42	5.78	34.63	-76.00	936.80	-5,121.40	5,169.38	5,128.98	40.40	127.965		
1,200.00	1,181.09	1,133.09	1,181.09	6.20	37.95	-76.30	936.80	-5,121.40	5,162.11	5,117.96	44.15	116.930		
1,300.00	1,276.76	1,228.76	1,276.76	6.65	41.28	-76.60	936.80	-5,121.40	5,155.00	5,107.08	47.92	107.585		
1,400.00	1,372.43	1,324.43	1,372.43	7.11	44.61	-76.90	936.80	-5,121.40	5,148.04	5,096.34	51.70	99.577		
1,500.00	1,468.10	1,420.10	1,468.10	7.57	47.94	-77.20	936.80	-5,121.40	5,141.24	5,085.74	55.50	92.643		
1,600.00	1,563.77	1,515.77	1,563.77	8.05	51.28	-77.51	936.80	-5,121.40	5,134.59	5,075.29	59.30	86.585		
1,700.00	1,659.44	1,611.44	1,659.44	8.53	54.61	-77.81	936.80	-5,121.40	5,128.10	5,064.99	63.12	81.249		
1,800.00	1,755.11	1,707.11	1,755.11	9.02	57.94	-78.12	936.80	-5,121.40	5,121.77	5,054.84	66.94	76.516		
1,900.00	1,850.78	1,802.78	1,850.78	9.52	61.28	-78.42	936.80	-5,121.40	5,115.60	5,044.83	70.77	72.290		
2,000.00	1,946.45	1,901.55	1,946.45	10.02	64.72	-78.73	936.80	-5,121.40	5,109.58	5,034.88	74.71	68.395		
2,100.00	2,042.12	2,005.89	2,042.12	10.52	68.36	-79.04	936.80	-5,121.40	5,103.73	5,024.88	78.85	64.730		
2,200.00	2,137.78	2,089.78	2,137.78	11.03	71.28	-79.34	936.80	-5,121.40	5,098.03	5,015.75	82.28	61.961		
2,300.00	2,233.45	2,185.45	2,233.45	11.54	74.62	-79.65	936.80	-5,121.40	5,092.49	5,006.37	86.12	59.131		
2,400.00	2,329.12	2,281.12	2,329.12	12.05	77.96	-79.96	936.80	-5,121.40	5,087.12	4,997.15	89.97	56.542		
2,500.00	2,424.79	2,376.79	2,424.79	12.56	81.29	-80.27	936.80	-5,121.40	5,081.90	4,988.08	93.82	54.166		
2,600.00	2,520.46	2,472.46	2,520.46	13.08	84.63	-80.58	936.80	-5,121.40	5,076.85	4,979.17	97.67	51.978		
2,700.00	2,616.13	2,568.13	2,616.13	13.60	87.97	-80.89	936.80	-5,121.40	5,071.95	4,970.43	101.53	49.956		
2,800.00	2,711.80	2,663.80	2,711.80	14.12	91.31	-81.20	936.80	-5,121.40	5,067.22	4,961.84	105.39	48.083		
2,900.00	2,807.47	2,759.47	2,807.47	14.64	94.64	-81.52	936.80	-5,121.40	5,062.66	4,953.41	109.24	46.342		
3,000.00	2,903.14	2,855.14	2,903.14	15.16	97.98	-81.83	936.80	-5,121.40	5,058.26	4,945.15	113.10	44.722		
3,100.00	2,998.81	2,950.81	2,998.81	15.68	101.32	-82.14	936.80	-5,121.40	5,054.02	4,937.05	116.97	43.209		
3,200.00	3,094.48	3,046.48	3,094.48	16.21	104.66	-82.45	936.80	-5,121.40	5,049.94	4,929.11	120.83	41.794		
3,300.00	3,190.15	3,142.15	3,190.15	16.73	108.00	-82.77	936.80	-5,121.40	5,046.03	4,921.34	124.69	40.468		
3,400.00	3,285.82	3,237.82	3,285.82	17.26	111.34	-83.08	936.80	-5,121.40	5,042.28	4,913.73	128.56	39.222		
3,500.00	3,381.49	3,333.49	3,381.49	17.78	114.67	-83.40	936.80	-5,121.40	5,038.70	4,906.28	132.42	38.050		
3,600.00	3,477.16	3,429.16	3,477.16	18.31	118.01	-83.71	936.80	-5,121.40	5,035.29	4,899.00	136.29	36.945		
3,700.00	3,572.83	3,524.83	3,572.83	18.84	121.35	-84.03	936.80	-5,121.40	5,032.04	4,891.88	140.16	35.903		
3,800.00	3,668.50	3,620.50	3,668.50	19.37	124.69	-84.34	936.80	-5,121.40	5,028.96	4,884.93	144.03	34.917		
3,900.00	3,764.17	3,716.17	3,764.17	19.89	128.03	-84.66	936.80	-5,121.40	5,026.05	4,878.15	147.90	33.984		
4,000.00	3,859.84	3,811.84	3,859.84	20.42	131.37	-84.97	936.80	-5,121.40	5,023.30	4,871.53	151.76	33.099		
4,100.00	3,955.51	3,907.51	3,955.51	20.95	134.71	-85.29	936.80	-5,121.40	5,020.72	4,865.08	155.63	32.260		
4,200.00	4,051.18	4,003.18	4,051.18	21.48	138.04	-85.61	936.80	-5,121.40	5,018.30	4,858.80	159.51	31.462		
4,300.00	4,146.85	4,101.15	4,146.85	22.01	141.46	-85.93	936.80	-5,121.40	5,016.06	4,852.60	163.46	30.687		
4,400.00	4,242.52	4,205.48	4,242.52	22.55	145.11	-86.24	936.80	-5,121.40	5,013.98	4,846.35	167.63	29.911		
4,500.00	4,338.19	4,309.81	4,338.19	23.08	148.75	-86.56	936.80	-5,121.40	5,012.07	4,840.26	171.81	29.173		
4,600.00	4,433.86	4,385.86	4,433.86	23.61	151.40	-86.88	936.80	-5,121.40	5,010.33	4,835.34	174.99	28.632		
4,700.00	4,529.53	4,481.53	4,529.53	24.14	154.74	-87.20	936.80	-5,121.40	5,008.76	4,829.89	178.86	28.003		
4,800.00	4,625.19	4,577.19	4,625.19	24.67	158.08	-87.51	936.80	-5,121.40	5,007.35	4,824.61	182.74	27.402		
4,900.00	4,720.86	4,672.86	4,720.86	25.21	161.42	-87.83	936.80	-5,121.40	5,006.12	4,819.51	186.61	26.826		
5,000.00	4,816.53	4,768.53	4,816.53	25.74	164.76	-88.15	936.80	-5,121.40	5,005.05	4,814.57	190.48	26.275		
5,100.00	4,912.20	4,864.20	4,912.20	26.27	168.10	-88.47	936.80	-5,121.40	5,004.16	4,809.80	194.36	25.747		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	4,959.87	5,007.87	26.80	171.44	-88.79	936.80	-5,121.40	5,003.43	4,805.20	198.23	25.240		
5,300.00	5,103.54	5,055.54	5,103.54	27.34	174.77	-89.11	936.80	-5,121.40	5,002.87	4,800.76	202.11	24.754		
5,400.00	5,199.22	5,151.22	5,199.22	27.87	178.11	-89.43	936.80	-5,121.40	5,002.48	4,796.50	205.98	24.286		
5,500.00	5,295.46	5,247.46	5,295.46	28.39	181.47	-89.72	936.80	-5,121.40	5,002.27	4,792.41	209.86	23.836		
5,600.00	5,392.60	5,344.60	5,392.60	28.89	184.86	-89.98	936.80	-5,121.40	5,002.21	4,788.45	213.75	23.402		
5,606.55	5,398.99	5,350.99	5,398.99	28.92	185.09	-90.00	936.80	-5,121.40	5,002.21	4,788.20	214.01	23.374		
5,700.00	5,490.50	5,442.50	5,490.50	29.37	188.28	-90.21	936.80	-5,121.40	5,002.24	4,784.59	217.65	22.983		
5,800.00	5,589.05	5,541.05	5,589.05	29.83	191.72	-90.41	936.80	-5,121.40	5,002.34	4,780.79	221.55	22.579		
5,900.00	5,688.14	5,640.14	5,688.14	30.26	195.18	-90.56	936.80	-5,121.40	5,002.45	4,777.01	225.44	22.190		
6,000.00	5,787.63	5,739.63	5,787.63	30.68	198.65	-90.68	936.80	-5,121.40	5,002.56	4,773.23	229.33	21.814		
6,100.00	5,887.41	5,839.41	5,887.41	31.07	202.14	-90.75	936.80	-5,121.40	5,002.64	4,769.44	233.20	21.452		
6,200.00	5,987.36	5,939.36	5,987.36	31.44	205.62	-90.79	936.80	-5,121.40	5,002.68	4,765.62	237.06	21.103		
6,300.00	6,087.36	6,039.36	6,087.36	31.80	209.11	-96.52	936.80	-5,121.40	5,002.68	4,761.78	240.91	20.766		
6,400.00	6,187.36	6,139.36	6,187.36	32.15	212.61	-96.52	936.80	-5,121.40	5,002.68	4,757.93	244.75	20.440		
6,500.00	6,287.36	6,239.36	6,287.36	32.51	216.10	-96.52	936.80	-5,121.40	5,002.68	4,754.08	248.60	20.123		
6,600.00	6,387.36	6,339.36	6,387.36	32.87	219.59	-96.52	936.80	-5,121.40	5,002.68	4,750.23	252.45	19.816		
6,700.00	6,487.36	6,439.36	6,487.36	33.23	223.08	-96.52	936.80	-5,121.40	5,002.68	4,746.38	256.30	19.518		
6,800.00	6,587.36	6,539.36	6,587.36	33.59	226.57	-96.52	936.80	-5,121.40	5,002.68	4,742.53	260.16	19.229		
6,900.00	6,687.26	6,639.26	6,687.26	33.95	230.05	-6.11	936.80	-5,121.40	4,999.59	4,735.58	264.01	18.937		
7,000.00	6,785.58	6,737.58	6,785.58	34.31	233.49	-6.31	936.80	-5,121.40	4,982.05	4,714.26	267.79	18.604		
7,100.00	6,879.94	6,831.94	6,879.94	34.65	236.78	-6.70	936.80	-5,121.40	4,949.44	4,678.01	271.43	18.235		
7,200.00	6,968.01	6,920.01	6,968.01	34.97	239.85	-7.35	936.80	-5,121.40	4,902.56	4,627.73	274.83	17.839		
7,300.00	7,047.61	7,000.39	7,047.61	35.27	242.66	-8.38	936.80	-5,121.40	4,842.56	4,564.64	277.92	17.424		
7,400.00	7,116.80	7,068.80	7,116.80	35.54	245.05	-9.99	936.80	-5,121.40	4,770.94	4,490.38	280.56	17.005		
7,500.00	7,173.86	7,125.86	7,173.86	35.81	247.04	-12.68	936.80	-5,121.40	4,689.45	4,406.69	282.76	16.585		
7,600.00	7,217.38	7,169.38	7,217.38	36.17	248.56	-17.67	936.80	-5,121.40	4,600.12	4,315.68	284.45	16.172		
7,700.00	7,246.31	7,201.69	7,246.31	36.80	249.69	-29.00	936.80	-5,121.40	4,505.15	4,219.45	285.70	15.769		
7,800.00	7,259.92	7,211.92	7,259.92	37.72	250.04	-64.35	936.80	-5,121.40	4,406.89	4,120.73	286.16	15.400		
7,900.00	7,260.77	7,212.77	7,260.77	38.86	250.07	-91.75	936.80	-5,121.40	4,307.65	4,021.37	286.28	15.047		
8,000.00	7,260.39	7,212.39	7,260.39	40.19	250.06	-91.71	936.80	-5,121.40	4,208.43	3,922.07	286.36	14.696		
8,100.00	7,260.01	7,212.01	7,260.01	41.67	250.05	-91.67	936.80	-5,121.40	4,109.25	3,822.79	286.46	14.345		
8,200.00	7,259.63	7,211.63	7,259.63	43.30	250.03	-91.63	936.80	-5,121.40	4,010.10	3,723.54	286.56	13.994		
8,300.00	7,259.25	7,211.25	7,259.25	45.05	250.02	-91.59	936.80	-5,121.40	3,911.00	3,624.33	286.67	13.643		
8,400.00	7,258.87	7,210.87	7,258.87	46.91	250.01	-91.55	936.80	-5,121.40	3,811.95	3,525.14	286.80	13.291		
8,500.00	7,258.49	7,210.49	7,258.49	48.87	249.99	-91.51	936.80	-5,121.40	3,712.94	3,426.00	286.94	12.940		
8,600.00	7,258.11	7,210.11	7,258.11	50.92	249.98	-91.47	936.80	-5,121.40	3,613.99	3,326.89	287.10	12.588		
8,700.00	7,257.73	7,209.73	7,257.73	53.04	249.97	-91.43	936.80	-5,121.40	3,515.10	3,227.83	287.28	12.236		
8,800.00	7,257.35	7,209.35	7,257.35	55.23	249.95	-91.39	936.80	-5,121.40	3,416.28	3,128.81	287.47	11.884		
8,900.00	7,256.97	7,208.97	7,256.97	57.47	249.94	-91.34	936.80	-5,121.40	3,317.52	3,029.84	287.69	11.532		
9,000.00	7,256.59	7,208.59	7,256.59	59.77	249.93	-91.30	936.80	-5,121.40	3,218.85	2,930.92	287.93	11.179		
9,100.00	7,256.21	7,208.21	7,256.21	62.12	249.92	-91.26	936.80	-5,121.40	3,120.25	2,832.06	288.20	10.827		
9,200.00	7,255.83	7,207.83	7,255.83	64.50	249.90	-91.22	936.80	-5,121.40	3,021.75	2,733.25	288.50	10.474		
9,300.00	7,255.45	7,207.45	7,255.45	66.93	249.89	-91.18	936.80	-5,121.40	2,923.35	2,634.52	288.83	10.121		
9,400.00	7,255.07	7,207.07	7,255.07	69.38	249.88	-91.14	936.80	-5,121.40	2,825.07	2,535.86	289.21	9.768		
9,500.00	7,254.69	7,206.69	7,254.69	71.87	249.86	-91.10	936.80	-5,121.40	2,726.90	2,437.28	289.62	9.415		
9,600.00	7,254.31	7,206.31	7,254.31	74.38	249.85	-91.06	936.80	-5,121.40	2,628.88	2,338.79	290.09	9.062		
9,700.00	7,253.93	7,205.93	7,253.93	76.92	249.84	-91.02	936.80	-5,121.40	2,531.01	2,240.39	290.62	8.709		
9,800.00	7,253.55	7,205.55	7,253.55	79.48	249.82	-90.98	936.80	-5,121.40	2,433.31	2,142.10	291.22	8.356		
9,900.00	7,253.18	7,205.18	7,253.18	82.06	249.81	-90.93	936.80	-5,121.40	2,335.81	2,043.93	291.89	8.002		
10,000.00	7,252.80	7,204.80	7,252.80	84.65	249.80	-90.89	936.80	-5,121.40	2,238.53	1,945.89	292.64	7.649		
10,100.00	7,252.42	7,204.42	7,252.42	87.27	249.78	-90.85	936.80	-5,121.40	2,141.50	1,848.00	293.50	7.296		
10,200.00	7,252.04	7,204.04	7,252.04	89.89	249.77	-90.81	936.80	-5,121.40	2,044.76	1,750.28	294.48	6.944		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,251.66	7,203.66	7,251.66	92.54	249.76	-90.77	936.80	-5,121.40	1,948.34	1,652.74	295.60	6.591		
10,400.00	7,251.28	7,203.28	7,251.28	95.19	249.74	-90.73	936.80	-5,121.40	1,852.31	1,555.43	296.88	6.239		
10,500.00	7,250.90	7,202.90	7,250.90	97.86	249.73	-90.69	936.80	-5,121.40	1,756.72	1,458.37	298.35	5.888		
10,600.00	7,250.52	7,202.52	7,250.52	100.53	249.72	-90.65	936.80	-5,121.40	1,661.64	1,361.60	300.04	5.538		
10,700.00	7,250.14	7,202.14	7,250.14	103.22	249.70	-90.61	936.80	-5,121.40	1,567.18	1,265.19	301.99	5.190		
10,800.00	7,249.76	7,201.76	7,249.76	105.91	249.69	-90.56	936.80	-5,121.40	1,473.45	1,169.19	304.26	4.843		
10,900.00	7,249.38	7,201.38	7,249.38	108.62	249.68	-90.52	936.80	-5,121.40	1,380.60	1,073.70	306.90	4.499		
11,000.00	7,249.00	7,201.00	7,249.00	111.33	249.66	-90.48	936.80	-5,121.40	1,288.82	978.83	309.99	4.158		
11,100.00	7,248.62	7,200.62	7,248.62	114.04	249.65	-90.44	936.80	-5,121.40	1,198.36	884.75	313.61	3.821		
11,200.00	7,248.24	7,200.24	7,248.24	116.77	249.64	-90.40	936.80	-5,121.40	1,109.53	791.66	317.87	3.491		
11,300.00	7,247.86	7,200.14	7,247.86	119.50	249.63	-90.36	936.80	-5,121.40	1,022.77	699.87	322.90	3.167		
11,400.00	7,247.48	7,200.52	7,247.48	122.24	249.65	-90.32	936.80	-5,121.40	938.65	609.81	328.84	2.854		
11,500.00	7,247.10	7,200.90	7,247.10	124.98	249.66	-90.28	936.80	-5,121.40	857.94	522.12	335.82	2.555		
11,600.00	7,246.72	7,201.28	7,246.72	127.73	249.67	-90.24	936.80	-5,121.40	781.70	437.76	343.94	2.273		
11,700.00	7,246.34	7,201.66	7,246.34	130.48	249.69	-90.20	936.80	-5,121.40	711.38	358.17	353.21	2.014		
11,800.00	7,245.96	7,202.04	7,245.96	133.24	249.70	-90.15	936.80	-5,121.40	648.89	285.48	363.41	1.786		
11,900.00	7,245.58	7,202.42	7,245.58	136.00	249.71	-90.11	936.80	-5,121.40	596.71	222.78	373.93	1.596		
12,000.00	7,245.21	7,202.79	7,245.21	138.76	249.73	-90.07	936.80	-5,121.40	557.73	174.17	383.55	1.454	Level 3	
12,100.00	7,244.83	7,203.17	7,244.83	141.53	249.74	-90.03	936.80	-5,121.40	534.84	144.23	390.61	1.369	Level 3	
12,175.01	7,244.54	7,203.46	7,244.54	143.61	249.75	-90.00	936.80	-5,121.40	529.56	136.30	393.25	1.347	Level 3, CC, ES, SF	
12,200.00	7,244.45	7,203.55	7,244.45	144.30	249.75	-89.99	936.80	-5,121.40	530.15	136.60	393.54	1.347	Level 3	
12,300.00	7,244.07	7,203.93	7,244.07	147.08	249.77	-89.95	936.80	-5,121.40	544.11	152.28	391.82	1.389	Level 3	
12,400.00	7,243.69	7,204.31	7,243.69	149.86	249.78	-89.91	936.80	-5,121.40	575.37	189.11	386.26	1.490	Level 3	
12,500.00	7,243.31	7,204.69	7,243.31	152.64	249.79	-89.87	936.80	-5,121.40	621.33	242.90	378.43	1.642		
12,600.00	7,242.93	7,205.07	7,242.93	155.42	249.81	-89.83	936.80	-5,121.40	679.00	309.20	369.81	1.836		
12,700.00	7,242.55	7,205.45	7,242.55	158.21	249.82	-89.78	936.80	-5,121.40	745.68	384.30	361.38	2.063		
12,800.00	7,242.17	7,205.83	7,242.17	161.00	249.83	-89.74	936.80	-5,121.40	819.17	465.53	353.64	2.316		
12,900.00	7,241.79	7,206.21	7,241.79	163.79	249.85	-89.70	936.80	-5,121.40	897.79	551.02	346.77	2.589		
13,000.00	7,241.41	7,206.59	7,241.41	166.58	249.86	-89.66	936.80	-5,121.40	980.32	639.54	340.78	2.877		
13,100.00	7,241.03	7,206.97	7,241.03	169.38	249.87	-89.62	936.80	-5,121.40	1,065.84	730.25	335.59	3.176		
13,200.00	7,240.65	7,207.35	7,240.65	172.18	249.89	-89.58	936.80	-5,121.40	1,153.70	822.59	331.11	3.484		
13,300.00	7,240.27	7,207.73	7,240.27	174.98	249.90	-89.54	936.80	-5,121.40	1,243.39	916.15	327.24	3.800		
13,400.00	7,239.89	7,208.11	7,239.89	177.78	249.91	-89.50	936.80	-5,121.40	1,334.54	1,010.66	323.88	4.121		
13,500.00	7,239.51	7,208.49	7,239.51	180.58	249.92	-89.46	936.80	-5,121.40	1,426.89	1,105.92	320.96	4.446		
13,600.00	7,239.13	7,208.87	7,239.13	183.39	249.94	-89.41	936.80	-5,121.40	1,520.20	1,201.78	318.41	4.774		
13,700.00	7,238.75	7,209.25	7,238.75	186.20	249.95	-89.37	936.80	-5,121.40	1,614.31	1,298.13	316.18	5.106		
13,800.00	7,238.37	7,209.63	7,238.37	189.00	249.96	-89.33	936.80	-5,121.40	1,709.09	1,394.87	314.22	5.439		
13,900.00	7,237.99	7,209.99	7,237.99	191.81	249.98	-89.29	936.80	-5,121.40	1,804.43	1,492.65	311.79	5.787		
14,000.00	7,237.62	7,209.62	7,237.62	194.63	249.27	-89.25	936.80	-5,121.40	1,900.26	1,590.03	310.22	6.125		
14,100.00	7,237.24	7,209.24	7,237.24	197.44	249.25	-89.21	936.80	-5,121.40	1,996.49	1,687.66	308.83	6.465		
14,200.00	7,236.86	7,208.86	7,236.86	200.25	249.24	-89.17	936.80	-5,121.40	2,093.07	1,785.49	307.58	6.805		
14,300.00	7,236.48	7,208.48	7,236.48	203.07	249.23	-89.13	936.80	-5,121.40	2,189.96	1,883.50	306.46	7.146		
14,400.00	7,236.10	7,208.10	7,236.10	205.88	249.21	-89.09	936.80	-5,121.40	2,287.12	1,981.67	305.46	7.488		
14,500.00	7,235.72	7,207.72	7,235.72	208.70	249.20	-89.05	936.80	-5,121.40	2,384.52	2,079.97	304.55	7.830		
14,600.00	7,235.34	7,207.34	7,235.34	211.52	249.19	-89.00	936.80	-5,121.40	2,482.12	2,178.39	303.73	8.172		
14,700.00	7,234.96	7,206.96	7,234.96	214.34	249.17	-88.96	936.80	-5,121.40	2,579.91	2,276.92	302.98	8.515		
14,800.00	7,234.58	7,206.58	7,234.58	217.16	249.16	-88.92	936.80	-5,121.40	2,677.85	2,375.55	302.30	8.858		
14,900.00	7,234.20	7,206.20	7,234.20	219.98	249.15	-88.88	936.80	-5,121.40	2,775.95	2,474.26	301.69	9.201		
15,000.00	7,233.82	7,205.82	7,233.82	222.81	249.13	-88.84	936.80	-5,121.40	2,874.18	2,573.05	301.12	9.545		
15,100.00	7,233.44	7,205.44	7,233.44	225.63	249.12	-88.80	936.80	-5,121.40	2,972.52	2,671.91	300.61	9.888		
15,200.00	7,233.06	7,205.06	7,233.06	228.45	249.11	-88.76	936.80	-5,121.40	3,070.97	2,770.83	300.14	10.232		
15,216.01	7,233.00	7,205.00	7,233.00	228.91	249.10	-88.75	936.80	-5,121.40	3,086.75	2,786.68	300.07	10.287		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	55.00	3.28	3.28	-96.21	-535.03	-4,918.67	4,947.99					
100.00	100.00	45.00	100.00	3.28	3.37	-96.21	-535.03	-4,918.67	4,947.68	4,941.02	6.66	743.178		
200.00	200.00	145.00	200.00	3.34	4.66	-96.21	-535.03	-4,918.67	4,947.68	4,939.68	8.00	618.344		
300.00	299.98	244.98	299.98	3.45	7.56	-90.49	-535.03	-4,918.67	4,947.69	4,936.69	11.00	449.771		
400.00	399.84	344.84	399.84	3.61	10.80	-90.55	-535.03	-4,918.67	4,947.74	4,933.34	14.41	343.462		
500.00	499.45	444.45	499.45	3.82	14.16	-90.65	-535.03	-4,918.67	4,947.83	4,929.87	17.96	275.465		
600.00	598.70	543.70	598.70	4.07	17.54	-90.79	-535.03	-4,918.67	4,947.99	4,926.39	21.59	229.128		
700.00	697.47	642.47	697.47	4.35	20.94	-90.96	-535.03	-4,918.67	4,948.23	4,922.96	25.27	195.791		
800.00	795.62	740.62	795.62	4.67	24.33	-91.17	-535.03	-4,918.67	4,948.59	4,919.62	28.98	170.767		
900.00	893.06	838.06	893.06	5.01	27.71	-91.42	-535.03	-4,918.67	4,949.12	4,916.42	32.70	151.349		
1,000.00	989.64	934.64	989.64	5.38	31.06	-91.69	-535.03	-4,918.67	4,949.84	4,913.41	36.43	135.878		
1,100.00	1,085.42	1,030.42	1,085.42	5.78	34.38	-92.00	-535.03	-4,918.67	4,950.81	4,910.65	40.16	123.277		
1,200.00	1,181.09	1,126.09	1,181.09	6.20	37.71	-92.32	-535.03	-4,918.67	4,951.96	4,908.04	43.91	112.766		
1,300.00	1,276.76	1,221.76	1,276.76	6.65	41.04	-92.65	-535.03	-4,918.67	4,953.28	4,905.59	47.69	103.874		
1,400.00	1,372.43	1,317.43	1,372.43	7.11	44.37	-92.97	-535.03	-4,918.67	4,954.77	4,903.29	51.47	96.261		
1,500.00	1,468.10	1,413.10	1,468.10	7.57	47.70	-93.29	-535.03	-4,918.67	4,956.43	4,901.16	55.27	89.675		
1,600.00	1,563.77	1,508.77	1,563.77	8.05	51.03	-93.61	-535.03	-4,918.67	4,958.26	4,899.18	59.08	83.925		
1,700.00	1,659.44	1,604.44	1,659.44	8.53	54.36	-93.93	-535.03	-4,918.67	4,960.26	4,897.36	62.90	78.863		
1,800.00	1,755.11	1,700.11	1,755.11	9.02	57.70	-94.25	-535.03	-4,918.67	4,962.43	4,895.71	66.72	74.376		
1,900.00	1,850.78	1,804.22	1,850.78	9.52	61.33	-94.57	-535.03	-4,918.67	4,964.77	4,893.92	70.84	70.080		
2,000.00	1,946.45	1,908.55	1,946.45	10.02	64.97	-94.89	-535.03	-4,918.67	4,967.28	4,892.30	74.98	66.247		
2,100.00	2,042.12	1,987.12	2,042.12	10.52	67.70	-95.21	-535.03	-4,918.67	4,969.96	4,891.73	78.22	63.536		
2,200.00	2,137.78	2,082.78	2,137.78	11.03	71.04	-95.53	-535.03	-4,918.67	4,972.80	4,890.74	82.07	60.596		
2,300.00	2,233.45	2,178.45	2,233.45	11.54	74.38	-95.85	-535.03	-4,918.67	4,975.82	4,889.91	85.91	57.919		
2,400.00	2,329.12	2,274.12	2,329.12	12.05	77.71	-96.17	-535.03	-4,918.67	4,979.01	4,889.25	89.76	55.471		
2,500.00	2,424.79	2,369.79	2,424.79	12.56	81.05	-96.49	-535.03	-4,918.67	4,982.36	4,888.75	93.61	53.225		
2,600.00	2,520.46	2,465.46	2,520.46	13.08	84.39	-96.81	-535.03	-4,918.67	4,985.88	4,888.42	97.46	51.158		
2,700.00	2,616.13	2,561.13	2,616.13	13.60	87.73	-97.13	-535.03	-4,918.67	4,989.57	4,888.25	101.32	49.248		
2,800.00	2,711.80	2,656.80	2,711.80	14.12	91.06	-97.44	-535.03	-4,918.67	4,993.42	4,888.25	105.17	47.479		
2,900.00	2,807.47	2,752.47	2,807.47	14.64	94.40	-97.76	-535.03	-4,918.67	4,997.44	4,888.42	109.03	45.836		
3,000.00	2,903.14	2,848.14	2,903.14	15.16	97.74	-98.08	-535.03	-4,918.67	5,001.63	4,888.75	112.89	44.307		
3,100.00	2,998.81	2,943.81	2,998.81	15.68	101.08	-98.39	-535.03	-4,918.67	5,005.99	4,889.24	116.75	42.880		
3,200.00	3,094.48	3,039.48	3,094.48	16.21	104.41	-98.71	-535.03	-4,918.67	5,010.50	4,889.90	120.61	41.545		
3,300.00	3,190.15	3,135.15	3,190.15	16.73	107.75	-99.02	-535.03	-4,918.67	5,015.19	4,890.72	124.47	40.294		
3,400.00	3,285.82	3,230.82	3,285.82	17.26	111.09	-99.34	-535.03	-4,918.67	5,020.04	4,891.71	128.33	39.119		
3,500.00	3,381.49	3,326.49	3,381.49	17.78	114.43	-99.65	-535.03	-4,918.67	5,025.05	4,892.86	132.19	38.014		
3,600.00	3,477.16	3,422.16	3,477.16	18.31	117.77	-99.96	-535.03	-4,918.67	5,030.22	4,894.17	136.05	36.973		
3,700.00	3,572.83	3,517.83	3,572.83	18.84	121.11	-100.28	-535.03	-4,918.67	5,035.56	4,895.65	139.92	35.990		
3,800.00	3,668.50	3,613.50	3,668.50	19.37	124.45	-100.59	-535.03	-4,918.67	5,041.06	4,897.28	143.78	35.061		
3,900.00	3,764.17	3,709.17	3,764.17	19.89	127.78	-100.90	-535.03	-4,918.67	5,046.73	4,899.08	147.64	34.182		
4,000.00	3,859.84	3,804.84	3,859.84	20.42	131.12	-101.21	-535.03	-4,918.67	5,052.55	4,901.04	151.51	33.349		
4,100.00	3,955.51	3,900.51	3,955.51	20.95	134.46	-101.52	-535.03	-4,918.67	5,058.53	4,903.16	155.37	32.558		
4,200.00	4,051.18	4,003.82	4,051.18	21.48	138.07	-101.83	-535.03	-4,918.67	5,064.68	4,905.18	159.50	31.753		
4,300.00	4,146.85	4,108.15	4,146.85	22.01	141.71	-102.14	-535.03	-4,918.67	5,070.98	4,907.32	163.67	30.983		
4,400.00	4,242.52	4,187.52	4,242.52	22.55	144.48	-102.45	-535.03	-4,918.67	5,077.45	4,910.48	166.97	30.410		
4,500.00	4,338.19	4,283.19	4,338.19	23.08	147.82	-102.75	-535.03	-4,918.67	5,084.07	4,913.24	170.83	29.761		
4,600.00	4,433.86	4,378.86	4,433.86	23.61	151.16	-103.06	-535.03	-4,918.67	5,090.85	4,916.16	174.70	29.141		
4,700.00	4,529.53	4,474.53	4,529.53	24.14	154.50	-103.36	-535.03	-4,918.67	5,097.79	4,919.23	178.56	28.549		
4,800.00	4,625.19	4,570.19	4,625.19	24.67	157.83	-103.67	-535.03	-4,918.67	5,104.88	4,922.46	182.43	27.983		
4,900.00	4,720.86	4,665.86	4,720.86	25.21	161.17	-103.97	-535.03	-4,918.67	5,112.13	4,925.84	186.29	27.442		
5,000.00	4,816.53	4,761.53	4,816.53	25.74	164.51	-104.28	-535.03	-4,918.67	5,119.54	4,929.38	190.16	26.923		
5,100.00	4,912.20	4,857.20	4,912.20	26.27	167.85	-104.58	-535.03	-4,918.67	5,127.10	4,933.08	194.02	26.426		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	4,952.87	5,007.87	26.80	171.19	-104.88	-535.03	-4,918.67	5,134.81	4,936.93	197.88	25.949		
5,300.00	5,103.54	5,048.54	5,103.54	27.34	174.53	-105.18	-535.03	-4,918.67	5,142.68	4,940.93	201.75	25.490		
5,400.00	5,199.22	5,144.22	5,199.22	27.87	177.87	-105.50	-535.03	-4,918.67	5,150.69	4,945.08	205.61	25.050		
5,500.00	5,295.46	5,240.46	5,295.46	28.39	181.23	-105.92	-535.03	-4,918.67	5,158.30	4,948.82	209.49	24.624		
5,600.00	5,392.60	5,337.60	5,392.60	28.89	184.62	-106.30	-535.03	-4,918.67	5,165.07	4,951.70	213.37	24.207		
5,700.00	5,490.50	5,435.50	5,490.50	29.37	188.04	-106.63	-535.03	-4,918.67	5,170.95	4,953.69	217.26	23.801		
5,800.00	5,589.05	5,534.05	5,589.05	29.83	191.48	-106.90	-535.03	-4,918.67	5,175.90	4,954.74	221.15	23.404		
5,900.00	5,688.14	5,633.14	5,688.14	30.26	194.94	-107.11	-535.03	-4,918.67	5,179.87	4,954.82	225.05	23.017		
6,000.00	5,787.63	5,732.63	5,787.63	30.68	198.41	-107.28	-535.03	-4,918.67	5,182.84	4,953.91	228.93	22.639		
6,100.00	5,887.41	5,832.41	5,887.41	31.07	201.89	-107.38	-535.03	-4,918.67	5,184.79	4,951.98	232.81	22.271		
6,200.00	5,987.36	5,932.36	5,987.36	31.44	205.38	-107.43	-535.03	-4,918.67	5,185.70	4,949.03	236.67	21.911		
6,300.00	6,087.36	6,032.36	6,087.36	31.80	208.87	-113.17	-535.03	-4,918.67	5,185.77	4,945.25	240.51	21.561		
6,400.00	6,187.36	6,132.36	6,187.36	32.15	212.36	-113.17	-535.03	-4,918.67	5,185.77	4,941.41	244.36	21.222		
6,500.00	6,287.36	6,232.36	6,287.36	32.51	215.85	-113.17	-535.03	-4,918.67	5,185.77	4,937.56	248.21	20.892		
6,600.00	6,387.36	6,332.36	6,387.36	32.87	219.34	-113.17	-535.03	-4,918.67	5,185.77	4,933.70	252.07	20.573		
6,700.00	6,487.36	6,432.36	6,487.36	33.23	222.83	-113.17	-535.03	-4,918.67	5,185.77	4,929.85	255.92	20.263		
6,800.00	6,587.36	6,532.36	6,587.36	33.59	226.32	-113.17	-535.03	-4,918.67	5,185.77	4,925.99	259.78	19.962		
6,900.00	6,687.26	6,632.26	6,687.26	33.95	229.81	-22.83	-535.03	-4,918.67	5,182.90	4,919.28	263.62	19.660		
7,000.00	6,785.58	6,730.58	6,785.58	34.31	233.24	-23.50	-535.03	-4,918.67	5,166.64	4,899.23	267.41	19.321		
7,100.00	6,879.94	6,824.94	6,879.94	34.65	236.54	-24.81	-535.03	-4,918.67	5,136.42	4,865.37	271.05	18.950		
7,200.00	6,968.01	6,913.01	6,968.01	34.97	239.61	-26.94	-535.03	-4,918.67	5,093.03	4,818.57	274.46	18.557		
7,300.00	7,047.61	7,007.39	7,047.61	35.27	242.90	-30.12	-535.03	-4,918.67	5,037.59	4,759.52	278.07	18.116		
7,400.00	7,116.80	7,061.80	7,116.80	35.54	244.80	-34.78	-535.03	-4,918.67	4,971.55	4,691.26	280.29	17.737		
7,500.00	7,173.86	7,118.86	7,173.86	35.81	246.80	-41.59	-535.03	-4,918.67	4,896.61	4,614.01	282.60	17.327		
7,600.00	7,217.38	7,162.38	7,217.38	36.17	248.32	-51.51	-535.03	-4,918.67	4,814.71	4,530.26	284.45	16.926		
7,700.00	7,246.31	7,208.69	7,246.31	36.80	249.93	-65.46	-535.03	-4,918.67	4,727.92	4,441.50	286.42	16.507		
7,800.00	7,259.92	7,204.92	7,259.92	37.72	249.80	-83.08	-535.03	-4,918.67	4,638.47	4,351.79	286.68	16.180		
7,900.00	7,260.77	7,205.77	7,260.77	38.86	249.83	-90.44	-535.03	-4,918.67	4,548.49	4,261.35	287.14	15.841		
8,000.00	7,260.39	7,205.39	7,260.39	40.19	249.82	-90.43	-535.03	-4,918.67	4,458.93	4,171.30	287.63	15.503		
8,100.00	7,260.01	7,205.01	7,260.01	41.67	249.80	-90.42	-535.03	-4,918.67	4,369.82	4,081.64	288.18	15.164		
8,200.00	7,259.63	7,204.63	7,259.63	43.30	249.79	-90.41	-535.03	-4,918.67	4,281.19	3,992.38	288.80	14.824		
8,300.00	7,259.25	7,204.25	7,259.25	45.05	249.78	-90.40	-535.03	-4,918.67	4,193.07	3,903.56	289.50	14.484		
8,400.00	7,258.87	7,203.87	7,258.87	46.91	249.76	-90.39	-535.03	-4,918.67	4,105.49	3,815.20	290.29	14.143		
8,500.00	7,258.49	7,203.49	7,258.49	48.87	249.75	-90.38	-535.03	-4,918.67	4,018.50	3,727.34	291.16	13.802		
8,600.00	7,258.11	7,203.11	7,258.11	50.92	249.74	-90.37	-535.03	-4,918.67	3,932.12	3,640.00	292.12	13.460		
8,700.00	7,257.73	7,202.73	7,257.73	53.04	249.72	-90.36	-535.03	-4,918.67	3,846.40	3,553.22	293.18	13.119		
8,800.00	7,257.35	7,202.35	7,257.35	55.23	249.71	-90.35	-535.03	-4,918.67	3,761.39	3,467.05	294.35	12.779		
8,900.00	7,256.97	7,201.97	7,256.97	57.47	249.70	-90.33	-535.03	-4,918.67	3,677.13	3,381.52	295.62	12.439		
9,000.00	7,256.59	7,201.59	7,256.59	59.77	249.68	-90.32	-535.03	-4,918.67	3,593.68	3,296.69	297.00	12.100		
9,100.00	7,256.21	7,201.21	7,256.21	62.12	249.67	-90.31	-535.03	-4,918.67	3,511.10	3,212.61	298.49	11.763		
9,200.00	7,255.83	7,200.83	7,255.83	64.50	249.66	-90.30	-535.03	-4,918.67	3,429.44	3,129.33	300.11	11.427		
9,300.00	7,255.45	7,200.45	7,255.45	66.93	249.64	-90.29	-535.03	-4,918.67	3,348.78	3,046.92	301.86	11.094		
9,400.00	7,255.07	7,200.07	7,255.07	69.38	249.63	-90.28	-535.03	-4,918.67	3,269.19	2,965.45	303.73	10.763		
9,500.00	7,254.69	7,200.31	7,254.69	71.87	249.64	-90.27	-535.03	-4,918.67	3,190.74	2,884.98	305.76	10.435		
9,600.00	7,254.31	7,200.69	7,254.31	74.38	249.65	-90.26	-535.03	-4,918.67	3,113.53	2,805.59	307.94	10.111		
9,700.00	7,253.93	7,201.07	7,253.93	76.92	249.67	-90.25	-535.03	-4,918.67	3,037.65	2,727.39	310.26	9.791		
9,800.00	7,253.55	7,201.45	7,253.55	79.48	249.68	-90.24	-535.03	-4,918.67	2,963.20	2,650.48	312.72	9.476		
9,900.00	7,253.18	7,201.83	7,253.18	82.06	249.69	-90.23	-535.03	-4,918.67	2,890.30	2,574.97	315.33	9.166		
10,000.00	7,252.80	7,202.20	7,252.80	84.65	249.71	-90.22	-535.03	-4,918.67	2,819.05	2,500.96	318.09	8.862		
10,100.00	7,252.42	7,202.58	7,252.42	87.27	249.72	-90.20	-535.03	-4,918.67	2,749.60	2,428.60	321.01	8.566		
10,200.00	7,252.04	7,202.96	7,252.04	89.89	249.73	-90.19	-535.03	-4,918.67	2,682.08	2,358.01	324.07	8.276		
10,300.00	7,251.66	7,203.34	7,251.66	92.54	249.75	-90.18	-535.03	-4,918.67	2,616.64	2,289.36	327.28	7.995		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,251.28	7,203.72	7,251.28	95.19	249.76	-90.17	-535.03	-4,918.67	2,553.44	2,222.81	330.63	7.723		
10,500.00	7,250.90	7,204.10	7,250.90	97.86	249.77	-90.16	-535.03	-4,918.67	2,492.65	2,158.53	334.12	7.460		
10,600.00	7,250.52	7,204.48	7,250.52	100.53	249.78	-90.15	-535.03	-4,918.67	2,434.45	2,096.71	337.74	7.208		
10,700.00	7,250.14	7,204.86	7,250.14	103.22	249.80	-90.14	-535.03	-4,918.67	2,379.03	2,037.56	341.47	6.967		
10,800.00	7,249.76	7,205.24	7,249.76	105.91	249.81	-90.13	-535.03	-4,918.67	2,326.60	1,981.29	345.31	6.738		
10,900.00	7,249.38	7,205.62	7,249.38	108.62	249.82	-90.12	-535.03	-4,918.67	2,277.34	1,928.12	349.22	6.521		
11,000.00	7,249.00	7,206.00	7,249.00	111.33	249.84	-90.11	-535.03	-4,918.67	2,231.49	1,878.29	353.19	6.318		
11,100.00	7,248.62	7,206.38	7,248.62	114.04	249.85	-90.10	-535.03	-4,918.67	2,189.24	1,832.05	357.20	6.129		
11,200.00	7,248.24	7,206.76	7,248.24	116.77	249.86	-90.09	-535.03	-4,918.67	2,150.82	1,789.63	361.20	5.955		
11,300.00	7,247.86	7,207.14	7,247.86	119.50	249.88	-90.07	-535.03	-4,918.67	2,116.43	1,751.27	365.16	5.796		
11,400.00	7,247.48	7,207.52	7,247.48	122.24	249.89	-90.06	-535.03	-4,918.67	2,086.27	1,717.22	369.05	5.653		
11,500.00	7,247.10	7,207.90	7,247.10	124.98	249.90	-90.05	-535.03	-4,918.67	2,060.52	1,687.71	372.82	5.527		
11,600.00	7,246.72	7,208.28	7,246.72	127.73	249.92	-90.04	-535.03	-4,918.67	2,039.36	1,662.93	376.43	5.418		
11,700.00	7,246.34	7,208.66	7,246.34	130.48	249.93	-90.03	-535.03	-4,918.67	2,022.93	1,643.08	379.85	5.326		
11,800.00	7,245.96	7,209.04	7,245.96	133.24	249.94	-90.02	-535.03	-4,918.67	2,011.34	1,628.30	383.04	5.251		
11,900.00	7,245.58	7,209.42	7,245.58	136.00	249.96	-90.01	-535.03	-4,918.67	2,004.68	1,618.72	385.95	5.194		
11,983.79	7,245.27	7,209.73	7,245.27	138.31	249.97	-90.00	-535.03	-4,918.67	2,002.93	1,614.76	388.17	5.160 CC		
12,000.00	7,245.21	7,209.79	7,245.21	138.76	249.97	-90.00	-535.03	-4,918.67	2,002.99	1,614.42	388.57	5.155 ES		
12,100.00	7,244.83	7,189.83	7,244.83	141.53	249.27	-89.99	-535.03	-4,918.67	2,006.30	1,616.13	390.16	5.142		
12,200.00	7,244.45	7,189.45	7,244.45	144.30	249.26	-89.98	-535.03	-4,918.67	2,014.56	1,622.46	392.10	5.138 SF		
12,300.00	7,244.07	7,189.07	7,244.07	147.08	249.25	-89.97	-535.03	-4,918.67	2,027.73	1,634.04	393.69	5.151		
12,400.00	7,243.69	7,188.69	7,243.69	149.86	249.23	-89.95	-535.03	-4,918.67	2,045.71	1,650.77	394.95	5.180		
12,500.00	7,243.31	7,188.31	7,243.31	152.64	249.22	-89.94	-535.03	-4,918.67	2,068.38	1,672.51	395.87	5.225		
12,600.00	7,242.93	7,187.93	7,242.93	155.42	249.21	-89.93	-535.03	-4,918.67	2,095.57	1,699.10	396.47	5.286		
12,700.00	7,242.55	7,187.55	7,242.55	158.21	249.19	-89.92	-535.03	-4,918.67	2,127.13	1,730.35	396.78	5.361		
12,800.00	7,242.17	7,187.17	7,242.17	161.00	249.18	-89.91	-535.03	-4,918.67	2,162.85	1,766.05	396.80	5.451		
12,900.00	7,241.79	7,186.79	7,241.79	163.79	249.17	-89.90	-535.03	-4,918.67	2,202.53	1,805.95	396.58	5.554		
13,000.00	7,241.41	7,186.41	7,241.41	166.58	249.15	-89.89	-535.03	-4,918.67	2,245.97	1,849.84	396.14	5.670		
13,100.00	7,241.03	7,186.03	7,241.03	169.38	249.14	-89.88	-535.03	-4,918.67	2,292.95	1,897.46	395.50	5.798		
13,200.00	7,240.65	7,185.65	7,240.65	172.18	249.13	-89.87	-535.03	-4,918.67	2,343.26	1,948.57	394.69	5.937		
13,300.00	7,240.27	7,185.27	7,240.27	174.98	249.11	-89.86	-535.03	-4,918.67	2,396.69	2,002.95	393.74	6.087		
13,400.00	7,239.89	7,184.89	7,239.89	177.78	249.10	-89.85	-535.03	-4,918.67	2,453.03	2,060.35	392.68	6.247		
13,500.00	7,239.51	7,184.51	7,239.51	180.58	249.09	-89.84	-535.03	-4,918.67	2,512.09	2,120.57	391.52	6.416		
13,600.00	7,239.13	7,184.13	7,239.13	183.39	249.07	-89.82	-535.03	-4,918.67	2,573.68	2,183.40	390.28	6.594		
13,700.00	7,238.75	7,183.75	7,238.75	186.20	249.06	-89.81	-535.03	-4,918.67	2,637.62	2,248.63	388.99	6.781		
13,800.00	7,238.37	7,183.37	7,238.37	189.00	249.05	-89.80	-535.03	-4,918.67	2,703.76	2,316.10	387.66	6.975		
13,900.00	7,237.99	7,182.99	7,237.99	191.81	249.03	-89.79	-535.03	-4,918.67	2,771.92	2,385.62	386.30	7.176		
14,000.00	7,237.62	7,182.62	7,237.62	194.63	249.02	-89.78	-535.03	-4,918.67	2,841.97	2,457.05	384.92	7.383		
14,100.00	7,237.24	7,182.24	7,237.24	197.44	249.01	-89.77	-535.03	-4,918.67	2,913.76	2,530.23	383.54	7.597		
14,200.00	7,236.86	7,181.86	7,236.86	200.25	249.00	-89.76	-535.03	-4,918.67	2,987.18	2,605.02	382.16	7.817		
14,300.00	7,236.48	7,181.48	7,236.48	203.07	248.98	-89.75	-535.03	-4,918.67	3,062.11	2,681.32	380.78	8.042		
14,400.00	7,236.10	7,181.10	7,236.10	205.88	248.97	-89.74	-535.03	-4,918.67	3,138.43	2,759.00	379.43	8.271		
14,500.00	7,235.72	7,180.72	7,235.72	208.70	248.96	-89.73	-535.03	-4,918.67	3,216.05	2,837.96	378.09	8.506		
14,600.00	7,235.34	7,180.34	7,235.34	211.52	248.94	-89.72	-535.03	-4,918.67	3,294.87	2,918.10	376.77	8.745		
14,700.00	7,234.96	7,179.96	7,234.96	214.34	248.93	-89.71	-535.03	-4,918.67	3,374.82	2,999.34	375.48	8.988		
14,800.00	7,234.58	7,179.58	7,234.58	217.16	248.92	-89.69	-535.03	-4,918.67	3,455.82	3,081.60	374.22	9.235		
14,900.00	7,234.20	7,179.20	7,234.20	219.98	248.90	-89.68	-535.03	-4,918.67	3,537.78	3,164.79	372.99	9.485		
15,000.00	7,233.82	7,178.82	7,233.82	222.81	248.89	-89.67	-535.03	-4,918.67	3,620.65	3,248.87	371.78	9.739		
15,100.00	7,233.44	7,178.44	7,233.44	225.63	248.88	-89.66	-535.03	-4,918.67	3,704.37	3,333.76	370.61	9.995		
15,200.00	7,233.06	7,178.06	7,233.06	228.45	248.86	-89.65	-535.03	-4,918.67	3,788.88	3,419.41	369.47	10.255		
15,216.01	7,233.00	7,178.00	7,233.00	228.91	248.86	-89.65	-535.03	-4,918.67	3,802.48	3,433.19	369.29	10.297		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
0.00	0.00	0.00	58.00	3.28	3.28	-112.95	-3,242.58	-7,656.43	8,314.96					
100.00	100.00	42.00	100.00	3.28	3.36	-112.95	-3,242.58	-7,656.43	8,314.75	8,308.11	6.65	1,251.157		
200.00	200.00	142.00	200.00	3.34	4.59	-112.95	-3,242.58	-7,656.43	8,314.75	8,306.83	7.93	1,048.833		
300.00	299.98	241.98	299.98	3.45	7.46	-107.22	-3,242.58	-7,656.43	8,315.27	8,304.36	10.91	762.423		
400.00	399.84	341.84	399.84	3.61	10.70	-107.23	-3,242.58	-7,656.43	8,316.82	8,302.52	14.31	581.338		
500.00	499.45	441.45	499.45	3.82	14.05	-107.23	-3,242.58	-7,656.43	8,319.41	8,301.55	17.86	465.781		
600.00	598.70	540.70	598.70	4.07	17.44	-107.24	-3,242.58	-7,656.43	8,323.05	8,301.56	21.49	387.225		
700.00	697.47	639.47	697.47	4.35	20.84	-107.26	-3,242.58	-7,656.43	8,327.74	8,302.57	25.17	330.828		
800.00	795.62	737.62	795.62	4.67	24.23	-107.27	-3,242.58	-7,656.43	8,333.50	8,304.62	28.88	288.575		
900.00	893.06	835.06	893.06	5.01	27.60	-107.28	-3,242.58	-7,656.43	8,340.34	8,307.74	32.60	255.845		
1,000.00	989.64	931.64	989.64	5.38	30.95	-107.29	-3,242.58	-7,656.43	8,348.28	8,311.95	36.33	229.809		
1,100.00	1,085.42	1,027.42	1,085.42	5.78	34.28	-107.40	-3,242.58	-7,656.43	8,357.19	8,317.13	40.06	208.633		
1,200.00	1,181.09	1,123.09	1,181.09	6.20	37.60	-107.58	-3,242.58	-7,656.43	8,366.29	8,322.49	43.81	190.982		
1,300.00	1,276.76	1,218.76	1,276.76	6.65	40.93	-107.76	-3,242.58	-7,656.43	8,375.49	8,327.91	47.57	176.049		
1,400.00	1,372.43	1,314.43	1,372.43	7.11	44.26	-107.95	-3,242.58	-7,656.43	8,384.78	8,333.42	51.36	163.263		
1,500.00	1,468.10	1,410.10	1,468.10	7.57	47.59	-108.13	-3,242.58	-7,656.43	8,394.16	8,339.01	55.15	152.201		
1,600.00	1,563.77	1,505.77	1,563.77	8.05	50.93	-108.31	-3,242.58	-7,656.43	8,403.63	8,344.67	58.96	142.541		
1,700.00	1,659.44	1,601.44	1,659.44	8.53	54.26	-108.49	-3,242.58	-7,656.43	8,413.19	8,350.42	62.77	134.036		
1,800.00	1,755.11	1,702.89	1,755.11	9.02	57.80	-108.67	-3,242.58	-7,656.43	8,422.84	8,356.05	66.79	126.112		
1,900.00	1,850.78	1,807.22	1,850.78	9.52	61.43	-108.85	-3,242.58	-7,656.43	8,432.57	8,361.66	70.91	118.911		
2,000.00	1,946.45	1,888.45	1,946.45	10.02	64.26	-109.03	-3,242.58	-7,656.43	8,442.40	8,368.16	74.24	113.717		
2,100.00	2,042.12	1,984.12	2,042.12	10.52	67.60	-109.21	-3,242.58	-7,656.43	8,452.32	8,374.24	78.07	108.260		
2,200.00	2,137.78	2,079.78	2,137.78	11.03	70.94	-109.39	-3,242.58	-7,656.43	8,462.32	8,380.41	81.91	103.312		
2,300.00	2,233.45	2,175.45	2,233.45	11.54	74.27	-109.57	-3,242.58	-7,656.43	8,472.42	8,386.67	85.75	98.803		
2,400.00	2,329.12	2,271.12	2,329.12	12.05	77.61	-109.74	-3,242.58	-7,656.43	8,482.60	8,393.01	89.59	94.679		
2,500.00	2,424.79	2,366.79	2,424.79	12.56	80.95	-109.92	-3,242.58	-7,656.43	8,492.87	8,399.43	93.44	90.894		
2,600.00	2,520.46	2,462.46	2,520.46	13.08	84.28	-110.10	-3,242.58	-7,656.43	8,503.22	8,405.94	97.28	87.406		
2,700.00	2,616.13	2,558.13	2,616.13	13.60	87.62	-110.28	-3,242.58	-7,656.43	8,513.67	8,412.53	101.13	84.183		
2,800.00	2,711.80	2,653.80	2,711.80	14.12	90.96	-110.45	-3,242.58	-7,656.43	8,524.20	8,419.21	104.98	81.197		
2,900.00	2,807.47	2,749.47	2,807.47	14.64	94.30	-110.63	-3,242.58	-7,656.43	8,534.81	8,425.98	108.83	78.421		
3,000.00	2,903.14	2,845.14	2,903.14	15.16	97.63	-110.81	-3,242.58	-7,656.43	8,545.51	8,432.83	112.69	75.835		
3,100.00	2,998.81	2,940.81	2,998.81	15.68	100.97	-110.98	-3,242.58	-7,656.43	8,556.30	8,439.76	116.54	73.420		
3,200.00	3,094.48	3,036.48	3,094.48	16.21	104.31	-111.16	-3,242.58	-7,656.43	8,567.17	8,446.78	120.39	71.160		
3,300.00	3,190.15	3,132.15	3,190.15	16.73	107.65	-111.33	-3,242.58	-7,656.43	8,578.13	8,453.88	124.25	69.041		
3,400.00	3,285.82	3,227.82	3,285.82	17.26	110.99	-111.50	-3,242.58	-7,656.43	8,589.17	8,461.07	128.10	67.049		
3,500.00	3,381.49	3,323.49	3,381.49	17.78	114.32	-111.68	-3,242.58	-7,656.43	8,600.30	8,468.34	131.96	65.174		
3,600.00	3,477.16	3,419.16	3,477.16	18.31	117.66	-111.85	-3,242.58	-7,656.43	8,611.51	8,475.69	135.82	63.406		
3,700.00	3,572.83	3,514.83	3,572.83	18.84	121.00	-112.02	-3,242.58	-7,656.43	8,622.81	8,483.13	139.67	61.735		
3,800.00	3,668.50	3,610.50	3,668.50	19.37	124.34	-112.20	-3,242.58	-7,656.43	8,634.18	8,490.65	143.53	60.155		
3,900.00	3,764.17	3,706.17	3,764.17	19.89	127.68	-112.37	-3,242.58	-7,656.43	8,645.64	8,498.25	147.39	58.659		
4,000.00	3,859.84	3,801.84	3,859.84	20.42	131.02	-112.54	-3,242.58	-7,656.43	8,657.19	8,505.94	151.25	57.239		
4,100.00	3,955.51	3,902.49	3,955.51	20.95	134.53	-112.71	-3,242.58	-7,656.43	8,668.81	8,513.53	155.28	55.827		
4,200.00	4,051.18	4,006.82	4,051.18	21.48	138.17	-112.88	-3,242.58	-7,656.43	8,680.52	8,521.08	159.44	54.443		
4,300.00	4,146.85	4,088.85	4,146.85	22.01	141.03	-113.05	-3,242.58	-7,656.43	8,692.31	8,529.49	162.82	53.385		
4,400.00	4,242.52	4,184.52	4,242.52	22.55	144.37	-113.22	-3,242.58	-7,656.43	8,704.18	8,537.50	166.68	52.220		
4,500.00	4,338.19	4,280.19	4,338.19	23.08	147.71	-113.39	-3,242.58	-7,656.43	8,716.13	8,545.59	170.54	51.108		
4,600.00	4,433.86	4,375.86	4,433.86	23.61	151.05	-113.56	-3,242.58	-7,656.43	8,728.17	8,553.76	174.40	50.046		
4,700.00	4,529.53	4,471.53	4,529.53	24.14	154.39	-113.73	-3,242.58	-7,656.43	8,740.28	8,562.02	178.26	49.030		
4,800.00	4,625.19	4,567.19	4,625.19	24.67	157.73	-113.90	-3,242.58	-7,656.43	8,752.47	8,570.35	182.12	48.058		
4,900.00	4,720.86	4,662.86	4,720.86	25.21	161.07	-114.07	-3,242.58	-7,656.43	8,764.75	8,578.76	185.98	47.127		
5,000.00	4,816.53	4,758.53	4,816.53	25.74	164.41	-114.23	-3,242.58	-7,656.43	8,777.10	8,587.26	189.84	46.234		
5,100.00	4,912.20	4,854.20	4,912.20	26.27	167.75	-114.40	-3,242.58	-7,656.43	8,789.53	8,595.83	193.70	45.377		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,007.87	4,949.87	5,007.87	26.80	171.09	-114.57	-3,242.58	-7,656.43	8,802.04	8,604.48	197.56	44.553		
5,300.00	5,103.54	5,045.54	5,103.54	27.34	174.43	-114.73	-3,242.58	-7,656.43	8,814.63	8,613.21	201.42	43.762		
5,400.00	5,199.22	5,141.22	5,199.22	27.87	177.76	-114.92	-3,242.58	-7,656.43	8,827.29	8,622.01	205.28	43.001		
5,500.00	5,295.46	5,237.46	5,295.46	28.39	181.12	-115.29	-3,242.58	-7,656.43	8,839.16	8,630.01	209.15	42.262		
5,600.00	5,392.60	5,334.60	5,392.60	28.89	184.51	-115.61	-3,242.58	-7,656.43	8,849.61	8,636.58	213.03	41.541		
5,700.00	5,490.50	5,432.50	5,490.50	29.37	187.93	-115.89	-3,242.58	-7,656.43	8,858.61	8,641.69	216.92	40.838		
5,800.00	5,589.05	5,531.05	5,589.05	29.83	191.37	-116.13	-3,242.58	-7,656.43	8,866.12	8,645.30	220.81	40.152		
5,900.00	5,688.14	5,630.14	5,688.14	30.26	194.83	-116.31	-3,242.58	-7,656.43	8,872.11	8,647.41	224.70	39.483		
6,000.00	5,787.63	5,729.63	5,787.63	30.68	198.30	-116.45	-3,242.58	-7,656.43	8,876.57	8,647.98	228.59	38.832		
6,100.00	5,887.41	5,829.41	5,887.41	31.07	201.79	-116.54	-3,242.58	-7,656.43	8,879.49	8,647.02	232.47	38.197		
6,200.00	5,987.36	5,929.36	5,987.36	31.44	205.28	-116.58	-3,242.58	-7,656.43	8,880.85	8,644.52	236.33	37.578		
6,300.00	6,087.36	6,029.36	6,087.36	31.80	208.77	-122.32	-3,242.58	-7,656.43	8,880.95	8,640.77	240.18	36.976		
6,400.00	6,187.36	6,129.36	6,187.36	32.15	212.26	-122.32	-3,242.58	-7,656.43	8,880.95	8,636.92	244.03	36.392		
6,500.00	6,287.36	6,229.36	6,287.36	32.51	215.75	-122.32	-3,242.58	-7,656.43	8,880.95	8,633.07	247.89	35.827		
6,600.00	6,387.36	6,329.36	6,387.36	32.87	219.24	-122.32	-3,242.58	-7,656.43	8,880.95	8,629.21	251.74	35.278		
6,700.00	6,487.36	6,429.36	6,487.36	33.23	222.73	-122.32	-3,242.58	-7,656.43	8,880.95	8,625.36	255.60	34.746		
6,800.00	6,587.36	6,529.36	6,587.36	33.59	226.22	-122.32	-3,242.58	-7,656.43	8,880.95	8,621.50	259.46	34.229		
6,900.00	6,687.26	6,629.26	6,687.26	33.95	229.71	-32.01	-3,242.58	-7,656.43	8,878.31	8,615.01	263.30	33.719		
7,000.00	6,785.58	6,727.58	6,785.58	34.31	233.14	-32.80	-3,242.58	-7,656.43	8,863.34	8,596.25	267.09	33.185		
7,100.00	6,879.94	6,821.94	6,879.94	34.65	236.43	-34.36	-3,242.58	-7,656.43	8,835.52	8,564.79	270.73	32.635		
7,200.00	6,968.01	6,910.01	6,968.01	34.97	239.51	-36.82	-3,242.58	-7,656.43	8,795.59	8,521.43	274.16	32.082		
7,300.00	7,047.61	6,989.61	7,047.61	35.27	242.28	-40.38	-3,242.58	-7,656.43	8,744.59	8,467.30	277.28	31.537		
7,400.00	7,116.80	7,058.80	7,116.80	35.54	244.70	-45.35	-3,242.58	-7,656.43	8,683.85	8,403.79	280.06	31.007		
7,500.00	7,173.86	7,115.86	7,173.86	35.81	246.69	-52.10	-3,242.58	-7,656.43	8,614.94	8,332.51	282.44	30.502		
7,600.00	7,217.38	7,159.38	7,217.38	36.17	248.21	-61.03	-3,242.58	-7,656.43	8,539.65	8,255.27	284.38	30.029		
7,700.00	7,246.31	7,188.31	7,246.31	36.80	249.22	-72.22	-3,242.58	-7,656.43	8,459.90	8,174.03	285.87	29.593		
7,800.00	7,259.92	7,201.92	7,259.92	37.72	249.70	-85.08	-3,242.58	-7,656.43	8,377.71	8,090.82	286.89	29.202		
7,900.00	7,260.77	7,202.77	7,260.77	38.86	249.73	-90.32	-3,242.58	-7,656.43	8,295.05	8,007.53	287.52	28.851		
8,000.00	7,260.39	7,202.39	7,260.39	40.19	249.71	-90.31	-3,242.58	-7,656.43	8,212.75	7,924.57	288.18	28.498		
8,100.00	7,260.01	7,202.01	7,260.01	41.67	249.70	-90.31	-3,242.58	-7,656.43	8,130.85	7,841.93	288.93	28.142		
8,200.00	7,259.63	7,201.63	7,259.63	43.30	249.69	-90.30	-3,242.58	-7,656.43	8,049.36	7,759.62	289.75	27.781		
8,300.00	7,259.25	7,201.25	7,259.25	45.05	249.67	-90.30	-3,242.58	-7,656.43	7,968.30	7,677.65	290.65	27.416		
8,400.00	7,258.87	7,200.87	7,258.87	46.91	249.66	-90.29	-3,242.58	-7,656.43	7,887.66	7,596.04	291.62	27.047		
8,500.00	7,258.49	7,200.49	7,258.49	48.87	249.65	-90.29	-3,242.58	-7,656.43	7,807.48	7,514.80	292.68	26.676		
8,600.00	7,258.11	7,200.11	7,258.11	50.92	249.63	-90.28	-3,242.58	-7,656.43	7,727.75	7,433.94	293.81	26.301		
8,700.00	7,257.73	7,200.27	7,257.73	53.04	249.64	-90.28	-3,242.58	-7,656.43	7,648.51	7,353.46	295.04	25.923		
8,800.00	7,257.35	7,200.65	7,257.35	55.23	249.65	-90.28	-3,242.58	-7,656.43	7,569.75	7,273.40	296.36	25.543		
8,900.00	7,256.97	7,201.03	7,256.97	57.47	249.66	-90.27	-3,242.58	-7,656.43	7,491.51	7,193.76	297.75	25.161		
9,000.00	7,256.59	7,201.41	7,256.59	59.77	249.68	-90.27	-3,242.58	-7,656.43	7,413.78	7,114.57	299.21	24.778		
9,100.00	7,256.21	7,201.79	7,256.21	62.12	249.69	-90.26	-3,242.58	-7,656.43	7,336.59	7,035.85	300.75	24.395		
9,200.00	7,255.83	7,202.17	7,255.83	64.50	249.70	-90.26	-3,242.58	-7,656.43	7,259.97	6,957.61	302.35	24.011		
9,300.00	7,255.45	7,202.55	7,255.45	66.93	249.72	-90.25	-3,242.58	-7,656.43	7,183.91	6,879.88	304.04	23.629		
9,400.00	7,255.07	7,202.93	7,255.07	69.38	249.73	-90.25	-3,242.58	-7,656.43	7,108.45	6,802.66	305.79	23.246		
9,500.00	7,254.69	7,203.31	7,254.69	71.87	249.74	-90.24	-3,242.58	-7,656.43	7,033.60	6,725.99	307.61	22.865		
9,600.00	7,254.31	7,203.69	7,254.31	74.38	249.76	-90.24	-3,242.58	-7,656.43	6,959.39	6,649.88	309.50	22.486		
9,700.00	7,253.93	7,204.07	7,253.93	76.92	249.77	-90.23	-3,242.58	-7,656.43	6,885.82	6,574.36	311.46	22.108		
9,800.00	7,253.55	7,204.45	7,253.55	79.48	249.78	-90.23	-3,242.58	-7,656.43	6,812.93	6,499.44	313.49	21.732		
9,900.00	7,253.18	7,204.83	7,253.18	82.06	249.80	-90.22	-3,242.58	-7,656.43	6,740.73	6,425.15	315.59	21.359		
10,000.00	7,252.80	7,205.20	7,252.80	84.65	249.81	-90.22	-3,242.58	-7,656.43	6,669.26	6,351.51	317.75	20.989		
10,100.00	7,252.42	7,205.58	7,252.42	87.27	249.82	-90.22	-3,242.58	-7,656.43	6,598.52	6,278.54	319.98	20.622		
10,200.00	7,252.04	7,205.96	7,252.04	89.89	249.84	-90.21	-3,242.58	-7,656.43	6,528.55	6,206.28	322.27	20.258		
10,300.00	7,251.66	7,206.34	7,251.66	92.54	249.85	-90.21	-3,242.58	-7,656.43	6,459.37	6,134.73	324.63	19.897		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,251.28	7,206.72	7,251.28	95.19	249.86	-90.20	-3,242.58	-7,656.43	6,391.00	6,063.95	327.06	19.541		
10,500.00	7,250.90	7,207.10	7,250.90	97.86	249.88	-90.20	-3,242.58	-7,656.43	6,323.48	5,993.94	329.54	19.189		
10,600.00	7,250.52	7,207.48	7,250.52	100.53	249.89	-90.19	-3,242.58	-7,656.43	6,256.83	5,924.73	332.09	18.841		
10,700.00	7,250.14	7,207.86	7,250.14	103.22	249.90	-90.19	-3,242.58	-7,656.43	6,191.07	5,856.36	334.71	18.497		
10,800.00	7,249.76	7,191.76	7,249.76	105.91	249.34	-90.18	-3,242.58	-7,656.43	6,126.24	5,789.44	336.80	18.189		
10,900.00	7,249.38	7,191.38	7,249.38	108.62	249.33	-90.18	-3,242.58	-7,656.43	6,062.37	5,722.86	339.51	17.856		
11,000.00	7,249.00	7,191.00	7,249.00	111.33	249.31	-90.17	-3,242.58	-7,656.43	5,999.48	5,657.20	342.28	17.528		
11,100.00	7,248.62	7,190.62	7,248.62	114.04	249.30	-90.17	-3,242.58	-7,656.43	5,937.62	5,592.51	345.11	17.205		
11,200.00	7,248.24	7,190.24	7,248.24	116.77	249.29	-90.16	-3,242.58	-7,656.43	5,876.80	5,528.81	347.99	16.888		
11,300.00	7,247.86	7,189.86	7,247.86	119.50	249.27	-90.16	-3,242.58	-7,656.43	5,817.06	5,466.13	350.93	16.576		
11,400.00	7,247.48	7,189.48	7,247.48	122.24	249.26	-90.16	-3,242.58	-7,656.43	5,758.45	5,404.52	353.93	16.270		
11,500.00	7,247.10	7,189.10	7,247.10	124.98	249.25	-90.15	-3,242.58	-7,656.43	5,700.98	5,344.00	356.98	15.970		
11,600.00	7,246.72	7,188.72	7,246.72	127.73	249.23	-90.15	-3,242.58	-7,656.43	5,644.70	5,284.62	360.08	15.676		
11,700.00	7,246.34	7,188.34	7,246.34	130.48	249.22	-90.14	-3,242.58	-7,656.43	5,589.65	5,226.42	363.23	15.389		
11,800.00	7,245.96	7,187.96	7,245.96	133.24	249.21	-90.14	-3,242.58	-7,656.43	5,535.85	5,169.42	366.43	15.107		
11,900.00	7,245.58	7,187.58	7,245.58	136.00	249.20	-90.13	-3,242.58	-7,656.43	5,483.35	5,113.67	369.68	14.833		
12,000.00	7,245.21	7,187.21	7,245.21	138.76	249.18	-90.13	-3,242.58	-7,656.43	5,432.18	5,059.21	372.97	14.565		
12,100.00	7,244.83	7,186.83	7,244.83	141.53	249.17	-90.12	-3,242.58	-7,656.43	5,382.38	5,006.09	376.29	14.304		
12,200.00	7,244.45	7,186.45	7,244.45	144.30	249.16	-90.12	-3,242.58	-7,656.43	5,334.00	4,954.34	379.66	14.049		
12,300.00	7,244.07	7,186.07	7,244.07	147.08	249.14	-90.11	-3,242.58	-7,656.43	5,287.06	4,904.00	383.06	13.802		
12,400.00	7,243.69	7,185.69	7,243.69	149.86	249.13	-90.11	-3,242.58	-7,656.43	5,241.61	4,855.11	386.50	13.562		
12,500.00	7,243.31	7,185.31	7,243.31	152.64	249.12	-90.10	-3,242.58	-7,656.43	5,197.69	4,807.73	389.96	13.329		
12,600.00	7,242.93	7,184.93	7,242.93	155.42	249.10	-90.10	-3,242.58	-7,656.43	5,155.33	4,761.89	393.44	13.103		
12,700.00	7,242.55	7,184.55	7,242.55	158.21	249.09	-90.09	-3,242.58	-7,656.43	5,114.58	4,717.63	396.95	12.885		
12,800.00	7,242.17	7,184.17	7,242.17	161.00	249.08	-90.09	-3,242.58	-7,656.43	5,075.47	4,675.00	400.47	12.674		
12,900.00	7,241.79	7,183.79	7,241.79	163.79	249.06	-90.09	-3,242.58	-7,656.43	5,038.04	4,634.04	404.00	12.470		
13,000.00	7,241.41	7,183.41	7,241.41	166.58	249.05	-90.08	-3,242.58	-7,656.43	5,002.33	4,594.80	407.53	12.275		
13,100.00	7,241.03	7,183.03	7,241.03	169.38	249.04	-90.08	-3,242.58	-7,656.43	4,968.38	4,557.31	411.07	12.086		
13,200.00	7,240.65	7,182.65	7,240.65	172.18	249.02	-90.07	-3,242.58	-7,656.43	4,936.22	4,521.62	414.60	11.906		
13,300.00	7,240.27	7,182.27	7,240.27	174.98	249.01	-90.07	-3,242.58	-7,656.43	4,905.89	4,487.76	418.13	11.733		
13,400.00	7,239.89	7,181.89	7,239.89	177.78	249.00	-90.06	-3,242.58	-7,656.43	4,877.42	4,455.79	421.63	11.568		
13,500.00	7,239.51	7,181.51	7,239.51	180.58	248.98	-90.06	-3,242.58	-7,656.43	4,850.85	4,425.73	425.12	11.411		
13,600.00	7,239.13	7,181.13	7,239.13	183.39	248.97	-90.05	-3,242.58	-7,656.43	4,826.20	4,397.62	428.58	11.261		
13,700.00	7,238.75	7,180.75	7,238.75	186.20	248.96	-90.05	-3,242.58	-7,656.43	4,803.50	4,371.50	432.00	11.119		
13,800.00	7,238.37	7,180.37	7,238.37	189.00	248.94	-90.04	-3,242.58	-7,656.43	4,782.79	4,347.41	435.39	10.985		
13,900.00	7,237.99	7,179.99	7,237.99	191.81	248.93	-90.04	-3,242.58	-7,656.43	4,764.09	4,325.37	438.73	10.859		
14,000.00	7,237.62	7,179.62	7,237.62	194.63	248.92	-90.03	-3,242.58	-7,656.43	4,747.43	4,305.41	442.01	10.740		
14,100.00	7,237.24	7,179.24	7,237.24	197.44	248.90	-90.03	-3,242.58	-7,656.43	4,732.82	4,287.57	445.25	10.630		
14,200.00	7,236.86	7,178.86	7,236.86	200.25	248.89	-90.03	-3,242.58	-7,656.43	4,720.28	4,271.86	448.42	10.527		
14,300.00	7,236.48	7,178.48	7,236.48	203.07	248.88	-90.02	-3,242.58	-7,656.43	4,709.83	4,258.31	451.52	10.431		
14,400.00	7,236.10	7,178.10	7,236.10	205.88	248.86	-90.02	-3,242.58	-7,656.43	4,701.48	4,246.94	454.54	10.343		
14,500.00	7,235.72	7,177.72	7,235.72	208.70	248.85	-90.01	-3,242.58	-7,656.43	4,695.26	4,237.76	457.49	10.263		
14,600.00	7,235.34	7,177.34	7,235.34	211.52	248.84	-90.01	-3,242.58	-7,656.43	4,691.15	4,230.79	460.36	10.190		
14,700.00	7,234.96	7,176.96	7,234.96	214.34	248.82	-90.00	-3,242.58	-7,656.43	4,689.17	4,226.04	463.13	10.125		
14,742.65	7,234.80	7,176.80	7,234.80	215.54	248.82	-90.00	-3,242.58	-7,656.43	4,688.98	4,224.69	464.29	10.099 CC		
14,800.00	7,234.58	7,176.58	7,234.58	217.16	248.81	-90.00	-3,242.58	-7,656.43	4,689.33	4,223.51	465.82	10.067		
14,900.00	7,234.20	7,176.20	7,234.20	219.98	248.80	-89.99	-3,242.58	-7,656.43	4,691.62	4,223.22	468.40	10.016 ES		
15,000.00	7,233.82	7,175.82	7,233.82	222.81	248.78	-89.99	-3,242.58	-7,656.43	4,696.04	4,225.14	470.89	9.973		
15,100.00	7,233.44	7,175.44	7,233.44	225.63	248.77	-89.98	-3,242.58	-7,656.43	4,702.58	4,229.30	473.28	9.936		
15,200.00	7,233.06	7,175.06	7,233.06	228.45	248.76	-89.98	-3,242.58	-7,656.43	4,711.23	4,235.67	475.56	9.907		
15,216.01	7,233.00	7,175.00	7,233.00	228.91	248.76	-89.98	-3,242.58	-7,656.43	4,712.81	4,236.90	475.92	9.903 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
0.00	0.00	0.00	45.00	3.28	3.28	-105.03	-1,750.71	-6,520.81	6,751.88					
100.00	100.00	55.00	100.00	3.28	3.42	-105.03	-1,750.71	-6,520.81	6,751.73	6,745.03	6.70	1,007.371		
200.00	200.00	155.00	200.00	3.34	4.92	-105.03	-1,750.71	-6,520.81	6,751.73	6,743.48	8.26	817.813		
300.00	299.98	254.98	299.98	3.45	7.87	-99.30	-1,750.71	-6,520.81	6,752.02	6,740.70	11.32	596.654		
400.00	399.84	354.84	399.84	3.61	11.14	-99.33	-1,750.71	-6,520.81	6,752.87	6,738.13	14.74	458.168		
500.00	499.45	454.45	499.45	3.82	14.50	-99.38	-1,750.71	-6,520.81	6,754.29	6,735.99	18.30	369.045		
600.00	598.70	553.70	598.70	4.07	17.89	-99.44	-1,750.71	-6,520.81	6,756.29	6,734.36	21.94	307.962		
700.00	697.47	652.47	697.47	4.35	21.29	-99.52	-1,750.71	-6,520.81	6,758.90	6,733.28	25.62	263.823		
800.00	795.62	750.62	795.62	4.67	24.68	-99.61	-1,750.71	-6,520.81	6,762.13	6,732.80	29.33	230.585		
900.00	893.06	848.06	893.06	5.01	28.05	-99.72	-1,750.71	-6,520.81	6,766.00	6,732.95	33.05	204.731		
1,000.00	989.64	944.64	989.64	5.38	31.40	-99.83	-1,750.71	-6,520.81	6,770.55	6,733.77	36.78	184.095		
1,100.00	1,085.42	1,040.42	1,085.42	5.78	34.73	-100.02	-1,750.71	-6,520.81	6,775.71	6,735.20	40.51	167.265		
1,200.00	1,181.09	1,136.09	1,181.09	6.20	38.06	-100.25	-1,750.71	-6,520.81	6,781.05	6,736.79	44.26	153.204		
1,300.00	1,276.76	1,231.76	1,276.76	6.65	41.39	-100.48	-1,750.71	-6,520.81	6,786.52	6,738.49	48.03	141.290		
1,400.00	1,372.43	1,327.43	1,372.43	7.11	44.72	-100.71	-1,750.71	-6,520.81	6,792.11	6,740.29	51.82	131.076		
1,500.00	1,468.10	1,423.10	1,468.10	7.57	48.05	-100.94	-1,750.71	-6,520.81	6,797.81	6,742.20	55.62	122.228		
1,600.00	1,563.77	1,518.77	1,563.77	8.05	51.38	-101.17	-1,750.71	-6,520.81	6,803.64	6,744.22	59.42	114.495		
1,700.00	1,659.44	1,614.44	1,659.44	8.53	54.71	-101.40	-1,750.71	-6,520.81	6,809.59	6,746.35	63.24	107.682		
1,800.00	1,755.11	1,710.11	1,755.11	9.02	58.05	-101.63	-1,750.71	-6,520.81	6,815.65	6,748.59	67.06	101.635		
1,900.00	1,850.78	1,805.78	1,850.78	9.52	61.38	-101.86	-1,750.71	-6,520.81	6,821.84	6,750.95	70.89	96.234		
2,000.00	1,946.45	1,901.45	1,946.45	10.02	64.72	-102.09	-1,750.71	-6,520.81	6,828.14	6,753.42	74.72	91.382		
2,100.00	2,042.12	2,002.89	2,042.12	10.52	68.25	-102.32	-1,750.71	-6,520.81	6,834.56	6,755.80	78.76	86.779		
2,200.00	2,137.78	2,107.22	2,137.78	11.03	71.89	-102.55	-1,750.71	-6,520.81	6,841.10	6,758.20	82.90	82.522		
2,300.00	2,233.45	2,188.45	2,233.45	11.54	74.73	-102.78	-1,750.71	-6,520.81	6,847.75	6,761.51	86.24	79.403		
2,400.00	2,329.12	2,284.12	2,329.12	12.05	78.06	-103.01	-1,750.71	-6,520.81	6,854.53	6,764.44	90.09	76.089		
2,500.00	2,424.79	2,379.79	2,424.79	12.56	81.40	-103.23	-1,750.71	-6,520.81	6,861.42	6,767.48	93.93	73.045		
2,600.00	2,520.46	2,475.46	2,520.46	13.08	84.74	-103.46	-1,750.71	-6,520.81	6,868.42	6,770.64	97.78	70.241		
2,700.00	2,616.13	2,571.13	2,616.13	13.60	88.07	-103.69	-1,750.71	-6,520.81	6,875.55	6,773.91	101.64	67.649		
2,800.00	2,711.80	2,666.80	2,711.80	14.12	91.41	-103.91	-1,750.71	-6,520.81	6,882.78	6,777.29	105.49	65.246		
2,900.00	2,807.47	2,762.47	2,807.47	14.64	94.75	-104.14	-1,750.71	-6,520.81	6,890.14	6,780.79	109.34	63.014		
3,000.00	2,903.14	2,858.14	2,903.14	15.16	98.09	-104.36	-1,750.71	-6,520.81	6,897.61	6,784.41	113.20	60.933		
3,100.00	2,998.81	2,953.81	2,998.81	15.68	101.43	-104.59	-1,750.71	-6,520.81	6,905.19	6,788.13	117.06	58.990		
3,200.00	3,094.48	3,049.48	3,094.48	16.21	104.76	-104.81	-1,750.71	-6,520.81	6,912.89	6,791.97	120.91	57.172		
3,300.00	3,190.15	3,145.15	3,190.15	16.73	108.10	-105.03	-1,750.71	-6,520.81	6,920.70	6,795.93	124.77	55.467		
3,400.00	3,285.82	3,240.82	3,285.82	17.26	111.44	-105.26	-1,750.71	-6,520.81	6,928.62	6,799.99	128.63	53.864		
3,500.00	3,381.49	3,336.49	3,381.49	17.78	114.78	-105.48	-1,750.71	-6,520.81	6,936.66	6,804.17	132.49	52.356		
3,600.00	3,477.16	3,432.16	3,477.16	18.31	118.12	-105.70	-1,750.71	-6,520.81	6,944.81	6,808.46	136.35	50.933		
3,700.00	3,572.83	3,527.83	3,572.83	18.84	121.46	-105.92	-1,750.71	-6,520.81	6,953.07	6,812.86	140.21	49.590		
3,800.00	3,668.50	3,623.50	3,668.50	19.37	124.79	-106.15	-1,750.71	-6,520.81	6,961.45	6,817.38	144.07	48.319		
3,900.00	3,764.17	3,719.17	3,764.17	19.89	128.13	-106.37	-1,750.71	-6,520.81	6,969.94	6,822.00	147.93	47.115		
4,000.00	3,859.84	3,814.84	3,859.84	20.42	131.47	-106.59	-1,750.71	-6,520.81	6,978.53	6,826.74	151.80	45.973		
4,100.00	3,955.51	3,910.51	3,955.51	20.95	134.81	-106.81	-1,750.71	-6,520.81	6,987.24	6,831.58	155.66	44.888		
4,200.00	4,051.18	4,006.18	4,051.18	21.48	138.15	-107.03	-1,750.71	-6,520.81	6,996.06	6,836.54	159.52	43.857		
4,300.00	4,146.85	4,101.85	4,146.85	22.01	141.49	-107.24	-1,750.71	-6,520.81	7,004.99	6,841.61	163.38	42.875		
4,400.00	4,242.52	4,202.48	4,242.52	22.55	145.00	-107.46	-1,750.71	-6,520.81	7,014.03	6,846.61	167.42	41.895		
4,500.00	4,338.19	4,306.81	4,338.19	23.08	148.64	-107.68	-1,750.71	-6,520.81	7,023.17	6,851.59	171.58	40.931		
4,600.00	4,433.86	4,388.86	4,433.86	23.61	151.51	-107.90	-1,750.71	-6,520.81	7,032.43	6,857.46	174.97	40.192		
4,700.00	4,529.53	4,484.53	4,529.53	24.14	154.84	-108.11	-1,750.71	-6,520.81	7,041.79	6,862.96	178.83	39.376		
4,800.00	4,625.19	4,580.19	4,625.19	24.67	158.18	-108.33	-1,750.71	-6,520.81	7,051.26	6,868.57	182.70	38.595		
4,900.00	4,720.86	4,675.86	4,720.86	25.21	161.52	-108.54	-1,750.71	-6,520.81	7,060.84	6,874.28	186.56	37.848		
5,000.00	4,816.53	4,771.53	4,816.53	25.74	164.86	-108.76	-1,750.71	-6,520.81	7,070.53	6,880.10	190.42	37.131		
5,100.00	4,912.20	4,867.20	4,912.20	26.27	168.20	-108.97	-1,750.71	-6,520.81	7,080.32	6,886.03	194.29	36.443		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	4,962.87	5,007.87	26.80	171.54	-109.19	-1,750.71	-6,520.81	7,090.22	6,892.07	198.15	35.782		
5,300.00	5,103.54	5,058.54	5,103.54	27.34	174.88	-109.40	-1,750.71	-6,520.81	7,100.22	6,898.21	202.01	35.147		
5,400.00	5,199.22	5,154.22	5,199.22	27.87	178.22	-109.63	-1,750.71	-6,520.81	7,110.32	6,904.45	205.87	34.537		
5,500.00	5,295.46	5,250.46	5,295.46	28.39	181.58	-110.01	-1,750.71	-6,520.81	7,119.84	6,910.09	209.75	33.945		
5,600.00	5,392.60	5,347.60	5,392.60	28.89	184.97	-110.34	-1,750.71	-6,520.81	7,128.24	6,914.61	213.63	33.367		
5,700.00	5,490.50	5,445.50	5,490.50	29.37	188.39	-110.63	-1,750.71	-6,520.81	7,135.50	6,917.98	217.52	32.804		
5,800.00	5,589.05	5,544.05	5,589.05	29.83	191.83	-110.87	-1,750.71	-6,520.81	7,141.57	6,920.16	221.41	32.255		
5,900.00	5,688.14	5,643.14	5,688.14	30.26	195.28	-111.06	-1,750.71	-6,520.81	7,146.43	6,921.12	225.30	31.719		
6,000.00	5,787.63	5,742.63	5,787.63	30.68	198.76	-111.20	-1,750.71	-6,520.81	7,150.05	6,920.86	229.19	31.197		
6,100.00	5,887.41	5,842.41	5,887.41	31.07	202.24	-111.29	-1,750.71	-6,520.81	7,152.42	6,919.35	233.07	30.688		
6,200.00	5,987.36	5,942.36	5,987.36	31.44	205.73	-111.34	-1,750.71	-6,520.81	7,153.52	6,916.59	236.93	30.193		
6,300.00	6,087.36	6,042.36	6,087.36	31.80	209.22	-117.07	-1,750.71	-6,520.81	7,153.61	6,912.83	240.78	29.710		
6,400.00	6,187.36	6,142.36	6,187.36	32.15	212.71	-117.07	-1,750.71	-6,520.81	7,153.61	6,908.98	244.63	29.243		
6,500.00	6,287.36	6,242.36	6,287.36	32.51	216.20	-117.07	-1,750.71	-6,520.81	7,153.61	6,905.13	248.48	28.790		
6,600.00	6,387.36	6,342.36	6,387.36	32.87	219.69	-117.07	-1,750.71	-6,520.81	7,153.61	6,901.28	252.33	28.350		
6,700.00	6,487.36	6,442.36	6,487.36	33.23	223.18	-117.07	-1,750.71	-6,520.81	7,153.61	6,897.42	256.19	27.923		
6,800.00	6,587.36	6,542.36	6,587.36	33.59	226.67	-117.07	-1,750.71	-6,520.81	7,153.61	6,893.57	260.04	27.509		
6,900.00	6,687.26	6,642.26	6,687.26	33.95	230.16	-26.75	-1,750.71	-6,520.81	7,150.83	6,886.94	263.89	27.098		
7,000.00	6,785.58	6,740.58	6,785.58	34.31	233.59	-27.47	-1,750.71	-6,520.81	7,135.07	6,867.39	267.68	26.656		
7,100.00	6,879.94	6,834.94	6,879.94	34.65	236.89	-28.90	-1,750.71	-6,520.81	7,105.78	6,834.46	271.32	26.190		
7,200.00	6,968.01	6,923.01	6,968.01	34.97	239.96	-31.18	-1,750.71	-6,520.81	7,063.73	6,789.00	274.73	25.711		
7,300.00	7,047.61	7,002.61	7,047.61	35.27	242.74	-34.55	-1,750.71	-6,520.81	7,010.00	6,732.16	277.85	25.230		
7,400.00	7,116.80	7,071.80	7,116.80	35.54	245.15	-39.38	-1,750.71	-6,520.81	6,946.00	6,665.40	280.60	24.755		
7,500.00	7,173.86	7,128.86	7,173.86	35.81	247.15	-46.24	-1,750.71	-6,520.81	6,873.36	6,590.43	282.93	24.293		
7,600.00	7,217.38	7,172.38	7,217.38	36.17	248.66	-55.80	-1,750.71	-6,520.81	6,793.95	6,509.13	284.82	23.853		
7,700.00	7,246.31	7,201.31	7,246.31	36.80	249.67	-68.56	-1,750.71	-6,520.81	6,709.80	6,423.57	286.24	23.442		
7,800.00	7,259.92	7,214.92	7,259.92	37.72	250.15	-84.00	-1,750.71	-6,520.81	6,623.04	6,335.88	287.16	23.064		
7,900.00	7,260.77	7,215.77	7,260.77	38.86	250.18	-90.39	-1,750.71	-6,520.81	6,535.73	6,248.05	287.68	22.718		
8,000.00	7,260.39	7,215.39	7,260.39	40.19	250.17	-90.38	-1,750.71	-6,520.81	6,448.78	6,160.54	288.23	22.374		
8,100.00	7,260.01	7,215.01	7,260.01	41.67	250.15	-90.37	-1,750.71	-6,520.81	6,362.20	6,073.36	288.85	22.026		
8,200.00	7,259.63	7,214.63	7,259.63	43.30	250.14	-90.37	-1,750.71	-6,520.81	6,276.03	5,986.50	289.54	21.676		
8,300.00	7,259.25	7,214.25	7,259.25	45.05	250.13	-90.36	-1,750.71	-6,520.81	6,190.28	5,899.98	290.30	21.324		
8,400.00	7,258.87	7,213.87	7,258.87	46.91	250.11	-90.35	-1,750.71	-6,520.81	6,104.95	5,813.82	291.13	20.970		
8,500.00	7,258.49	7,213.49	7,258.49	48.87	250.10	-90.35	-1,750.71	-6,520.81	6,020.08	5,728.04	292.04	20.614		
8,600.00	7,258.11	7,213.11	7,258.11	50.92	250.09	-90.34	-1,750.71	-6,520.81	5,935.68	5,642.65	293.03	20.256		
8,700.00	7,257.73	7,212.73	7,257.73	53.04	250.07	-90.33	-1,750.71	-6,520.81	5,851.77	5,557.68	294.09	19.898		
8,800.00	7,257.35	7,212.35	7,257.35	55.23	250.06	-90.33	-1,750.71	-6,520.81	5,768.38	5,473.14	295.24	19.538		
8,900.00	7,256.97	7,211.97	7,256.97	57.47	250.05	-90.32	-1,750.71	-6,520.81	5,685.52	5,389.05	296.47	19.178		
9,000.00	7,256.59	7,211.59	7,256.59	59.77	250.03	-90.31	-1,750.71	-6,520.81	5,603.22	5,305.44	297.78	18.817		
9,100.00	7,256.21	7,211.21	7,256.21	62.12	250.02	-90.30	-1,750.71	-6,520.81	5,521.50	5,222.33	299.17	18.456		
9,200.00	7,255.83	7,210.83	7,255.83	64.50	250.01	-90.30	-1,750.71	-6,520.81	5,440.40	5,139.75	300.65	18.096		
9,300.00	7,255.45	7,210.45	7,255.45	66.93	249.99	-90.29	-1,750.71	-6,520.81	5,359.93	5,057.72	302.21	17.736		
9,400.00	7,255.07	7,210.07	7,255.07	69.38	249.98	-90.28	-1,750.71	-6,520.81	5,280.13	4,976.28	303.86	17.377		
9,500.00	7,254.69	7,209.69	7,254.69	71.87	249.97	-90.28	-1,750.71	-6,520.81	5,201.03	4,895.44	305.59	17.020		
9,600.00	7,254.31	7,209.31	7,254.31	74.38	249.95	-90.27	-1,750.71	-6,520.81	5,122.66	4,815.25	307.41	16.664		
9,700.00	7,253.93	7,208.93	7,253.93	76.92	249.94	-90.26	-1,750.71	-6,520.81	5,045.06	4,735.74	309.32	16.310		
9,800.00	7,253.55	7,208.55	7,253.55	79.48	249.93	-90.26	-1,750.71	-6,520.81	4,968.25	4,656.93	311.32	15.959		
9,900.00	7,253.18	7,208.18	7,253.18	82.06	249.91	-90.25	-1,750.71	-6,520.81	4,892.29	4,578.88	313.41	15.610		
10,000.00	7,252.80	7,207.80	7,252.80	84.65	249.90	-90.24	-1,750.71	-6,520.81	4,817.20	4,501.61	315.58	15.264		
10,100.00	7,252.42	7,207.42	7,252.42	87.27	249.89	-90.24	-1,750.71	-6,520.81	4,743.03	4,425.18	317.85	14.922		
10,200.00	7,252.04	7,207.04	7,252.04	89.89	249.87	-90.23	-1,750.71	-6,520.81	4,669.82	4,349.61	320.21	14.584		
10,300.00	7,251.66	7,206.66	7,251.66	92.54	249.86	-90.22	-1,750.71	-6,520.81	4,597.63	4,274.97	322.66	14.249		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,251.28	7,206.28	7,251.28	95.19	249.85	-90.22	-1,750.71	-6,520.81	4,526.49	4,201.29	325.20	13.919		
10,500.00	7,250.90	7,205.90	7,250.90	97.86	249.83	-90.21	-1,750.71	-6,520.81	4,456.46	4,128.63	327.83	13.594		
10,600.00	7,250.52	7,205.52	7,250.52	100.53	249.82	-90.20	-1,750.71	-6,520.81	4,387.59	4,057.04	330.56	13.273		
10,700.00	7,250.14	7,205.14	7,250.14	103.22	249.81	-90.20	-1,750.71	-6,520.81	4,319.94	3,986.57	333.37	12.958		
10,800.00	7,249.76	7,204.76	7,249.76	105.91	249.79	-90.19	-1,750.71	-6,520.81	4,253.57	3,917.29	336.27	12.649		
10,900.00	7,249.38	7,204.38	7,249.38	108.62	249.78	-90.18	-1,750.71	-6,520.81	4,188.53	3,849.26	339.26	12.346		
11,000.00	7,249.00	7,204.00	7,249.00	111.33	249.77	-90.18	-1,750.71	-6,520.81	4,124.89	3,782.54	342.34	12.049		
11,100.00	7,248.62	7,203.62	7,248.62	114.04	249.75	-90.17	-1,750.71	-6,520.81	4,062.71	3,717.20	345.51	11.759		
11,200.00	7,248.24	7,203.24	7,248.24	116.77	249.74	-90.16	-1,750.71	-6,520.81	4,002.07	3,653.31	348.76	11.475		
11,300.00	7,247.86	7,202.86	7,247.86	119.50	249.73	-90.16	-1,750.71	-6,520.81	3,943.03	3,590.95	352.08	11.199		
11,400.00	7,247.48	7,202.48	7,247.48	122.24	249.72	-90.15	-1,750.71	-6,520.81	3,885.67	3,530.18	355.49	10.931		
11,500.00	7,247.10	7,202.10	7,247.10	124.98	249.70	-90.14	-1,750.71	-6,520.81	3,830.06	3,471.10	358.96	10.670		
11,600.00	7,246.72	7,201.72	7,246.72	127.73	249.69	-90.14	-1,750.71	-6,520.81	3,776.27	3,413.77	362.50	10.417		
11,700.00	7,246.34	7,201.34	7,246.34	130.48	249.68	-90.13	-1,750.71	-6,520.81	3,724.40	3,358.30	366.10	10.173		
11,800.00	7,245.96	7,200.96	7,245.96	133.24	249.66	-90.12	-1,750.71	-6,520.81	3,674.52	3,304.76	369.76	9.938		
11,900.00	7,245.58	7,200.58	7,245.58	136.00	249.65	-90.11	-1,750.71	-6,520.81	3,626.71	3,253.24	373.47	9.711		
12,000.00	7,245.21	7,200.21	7,245.21	138.76	249.64	-90.11	-1,750.71	-6,520.81	3,581.05	3,203.85	377.21	9.494		
12,100.00	7,244.83	7,200.17	7,244.83	141.53	249.63	-90.10	-1,750.71	-6,520.81	3,537.64	3,156.64	380.99	9.285		
12,200.00	7,244.45	7,200.55	7,244.45	144.30	249.65	-90.09	-1,750.71	-6,520.81	3,496.54	3,111.73	384.81	9.086		
12,300.00	7,244.07	7,200.93	7,244.07	147.08	249.66	-90.09	-1,750.71	-6,520.81	3,457.85	3,069.21	388.64	8.897		
12,400.00	7,243.69	7,201.31	7,243.69	149.86	249.67	-90.08	-1,750.71	-6,520.81	3,421.64	3,029.19	392.46	8.718		
12,500.00	7,243.31	7,201.69	7,243.31	152.64	249.69	-90.07	-1,750.71	-6,520.81	3,388.00	2,991.74	396.27	8.550		
12,600.00	7,242.93	7,202.07	7,242.93	155.42	249.70	-90.07	-1,750.71	-6,520.81	3,357.01	2,956.96	400.04	8.392		
12,700.00	7,242.55	7,202.45	7,242.55	158.21	249.71	-90.06	-1,750.71	-6,520.81	3,328.73	2,924.95	403.78	8.244		
12,800.00	7,242.17	7,202.83	7,242.17	161.00	249.73	-90.05	-1,750.71	-6,520.81	3,303.23	2,895.78	407.45	8.107		
12,900.00	7,241.79	7,203.21	7,241.79	163.79	249.74	-90.05	-1,750.71	-6,520.81	3,280.59	2,869.53	411.06	7.981		
13,000.00	7,241.41	7,203.59	7,241.41	166.58	249.75	-90.04	-1,750.71	-6,520.81	3,260.86	2,846.28	414.58	7.865		
13,100.00	7,241.03	7,203.97	7,241.03	169.38	249.77	-90.03	-1,750.71	-6,520.81	3,244.09	2,826.09	418.00	7.761		
13,200.00	7,240.65	7,204.35	7,240.65	172.18	249.78	-90.03	-1,750.71	-6,520.81	3,230.33	2,809.03	421.30	7.668		
13,300.00	7,240.27	7,204.73	7,240.27	174.98	249.79	-90.02	-1,750.71	-6,520.81	3,219.62	2,795.14	424.48	7.585		
13,400.00	7,239.89	7,205.11	7,239.89	177.78	249.81	-90.01	-1,750.71	-6,520.81	3,211.99	2,784.47	427.52	7.513		
13,500.00	7,239.51	7,205.49	7,239.51	180.58	249.82	-90.01	-1,750.71	-6,520.81	3,207.46	2,777.06	430.40	7.452		
13,595.40	7,239.15	7,205.85	7,239.15	183.26	249.83	-90.00	-1,750.71	-6,520.81	3,206.04	2,773.03	433.01	7.404 CC		
13,600.00	7,239.13	7,205.87	7,239.13	183.39	249.83	-90.00	-1,750.71	-6,520.81	3,206.04	2,772.91	433.13	7.402		
13,700.00	7,238.75	7,206.25	7,238.75	186.20	249.85	-89.99	-1,750.71	-6,520.81	3,207.75	2,772.06	435.69	7.363 ES		
13,800.00	7,238.37	7,206.63	7,238.37	189.00	249.86	-89.99	-1,750.71	-6,520.81	3,212.56	2,774.50	438.07	7.334		
13,900.00	7,237.99	7,207.01	7,237.99	191.81	249.87	-89.98	-1,750.71	-6,520.81	3,220.48	2,780.22	440.26	7.315		
14,000.00	7,237.62	7,207.39	7,237.62	194.63	249.89	-89.97	-1,750.71	-6,520.81	3,231.47	2,789.20	442.27	7.306 SF		
14,100.00	7,237.24	7,207.76	7,237.24	197.44	249.90	-89.97	-1,750.71	-6,520.81	3,245.51	2,801.41	444.10	7.308		
14,200.00	7,236.86	7,208.14	7,236.86	200.25	249.91	-89.96	-1,750.71	-6,520.81	3,262.55	2,816.82	445.73	7.320		
14,300.00	7,236.48	7,208.52	7,236.48	203.07	249.93	-89.95	-1,750.71	-6,520.81	3,282.55	2,835.38	447.18	7.341		
14,400.00	7,236.10	7,208.90	7,236.10	205.88	249.94	-89.95	-1,750.71	-6,520.81	3,305.46	2,857.02	448.44	7.371		
14,500.00	7,235.72	7,209.28	7,235.72	208.70	249.95	-89.94	-1,750.71	-6,520.81	3,331.21	2,881.70	449.52	7.411		
14,600.00	7,235.34	7,209.66	7,235.34	211.52	249.97	-89.93	-1,750.71	-6,520.81	3,359.75	2,909.33	450.42	7.459		
14,700.00	7,234.96	7,189.96	7,234.96	214.34	249.28	-89.93	-1,750.71	-6,520.81	3,390.99	2,940.54	450.46	7.528		
14,800.00	7,234.58	7,189.58	7,234.58	217.16	249.26	-89.92	-1,750.71	-6,520.81	3,424.87	2,973.87	451.00	7.594		
14,900.00	7,234.20	7,189.20	7,234.20	219.98	249.25	-89.91	-1,750.71	-6,520.81	3,461.31	3,009.92	451.39	7.668		
15,000.00	7,233.82	7,188.82	7,233.82	222.81	249.24	-89.90	-1,750.71	-6,520.81	3,500.23	3,048.59	451.64	7.750		
15,100.00	7,233.44	7,188.44	7,233.44	225.63	249.23	-89.90	-1,750.71	-6,520.81	3,541.54	3,089.80	451.74	7.840		
15,200.00	7,233.06	7,188.06	7,233.06	228.45	249.21	-89.89	-1,750.71	-6,520.81	3,585.17	3,133.44	451.72	7.937		
15,216.01	7,233.00	7,188.00	7,233.00	228.91	249.21	-89.89	-1,750.71	-6,520.81	3,592.36	3,140.65	451.71	7.953		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	40.00	3.28	3.28	-94.58	-614.12	-7,659.50	7,684.19					
100.00	100.00	100.00	126.98	3.28	3.29	-94.58	-613.83	-7,659.22	7,683.83	7,677.25	6.57	1,169.203		
200.00	200.00	181.93	221.92	3.34	3.33	-94.58	-613.23	-7,658.82	7,683.36	7,676.69	6.67	1,152.645		
300.00	299.98	254.83	294.82	3.45	3.40	-88.85	-612.78	-7,658.77	7,683.22	7,676.38	6.84	1,123.193		
300.97	300.95	255.54	295.54	3.45	3.40	-88.85	-612.77	-7,658.78	7,683.22	7,676.37	6.84	1,122.848		
400.00	399.84	329.38	369.37	3.61	3.49	-88.88	-612.58	-7,658.97	7,683.35	7,676.26	7.09	1,082.997		
500.00	499.45	408.83	448.82	3.82	3.62	-88.92	-612.64	-7,659.40	7,683.73	7,676.30	7.43	1,034.389		
600.00	598.70	517.16	557.15	4.07	3.84	-89.02	-612.90	-7,660.01	7,684.09	7,676.20	7.89	973.708		
700.00	697.47	604.95	644.94	4.35	4.05	-89.11	-613.52	-7,660.49	7,684.45	7,676.07	8.38	916.873		
800.00	795.62	691.68	731.66	4.67	4.28	-89.23	-614.38	-7,661.08	7,684.94	7,676.02	8.93	861.046		
900.00	893.06	789.76	829.74	5.01	4.56	-89.39	-615.38	-7,661.81	7,685.52	7,675.97	9.55	804.463		
1,000.00	989.64	890.82	930.79	5.38	4.87	-89.58	-616.38	-7,662.53	7,686.11	7,675.87	10.24	750.439		
1,100.00	1,085.42	991.92	1,031.88	5.78	5.20	-89.80	-617.26	-7,663.18	7,686.71	7,675.74	10.97	700.386		
1,200.00	1,181.09	1,090.72	1,130.67	6.20	5.53	-90.02	-617.86	-7,663.80	7,687.37	7,675.63	11.74	654.966		
1,300.00	1,276.76	1,183.97	1,223.92	6.65	5.86	-90.22	-618.21	-7,664.38	7,688.13	7,675.62	12.51	614.701		
1,400.00	1,372.43	1,291.63	1,331.58	7.11	6.25	-90.46	-618.51	-7,665.03	7,688.97	7,675.61	13.35	575.896		
1,500.00	1,468.10	1,380.05	1,420.00	7.57	6.57	-90.65	-618.73	-7,665.51	7,689.85	7,675.71	14.14	543.675		
1,600.00	1,563.77	1,474.11	1,514.06	8.05	6.92	-90.86	-619.10	-7,666.08	7,690.93	7,675.96	14.97	513.664		
1,700.00	1,659.44	1,565.09	1,605.04	8.53	7.27	-91.06	-619.44	-7,666.65	7,692.14	7,676.34	15.80	486.780		
1,800.00	1,755.11	1,664.06	1,704.00	9.02	7.65	-91.27	-619.70	-7,667.32	7,693.50	7,676.82	16.67	461.435		
1,900.00	1,850.78	1,760.95	1,800.89	9.52	8.03	-91.48	-619.79	-7,667.94	7,694.90	7,677.35	17.55	438.570		
2,000.00	1,946.45	1,857.13	1,897.07	10.02	8.41	-91.69	-619.95	-7,668.55	7,696.42	7,678.00	18.42	417.759		
2,100.00	2,042.12	1,949.35	1,989.29	10.52	8.77	-91.89	-620.17	-7,669.12	7,698.05	7,678.76	19.29	399.030		
2,200.00	2,137.78	2,067.39	2,107.32	11.03	9.24	-92.15	-620.35	-7,669.85	7,699.80	7,679.53	20.27	379.858		
2,300.00	2,233.45	2,174.93	2,214.87	11.54	9.68	-92.38	-620.44	-7,670.12	7,701.27	7,680.06	21.21	363.066		
2,400.00	2,329.12	2,285.44	2,325.37	12.05	10.12	-92.63	-621.06	-7,670.22	7,702.78	7,680.61	22.17	347.452		
2,500.00	2,424.79	2,379.80	2,419.73	12.56	10.50	-92.83	-621.62	-7,670.17	7,704.27	7,681.20	23.07	334.022		
2,600.00	2,520.46	2,476.88	2,516.80	13.08	10.90	-93.05	-622.06	-7,670.16	7,705.90	7,681.92	23.98	321.407		
2,700.00	2,616.13	2,604.07	2,643.99	13.60	11.42	-93.32	-622.47	-7,669.94	7,707.46	7,682.45	25.01	308.161		
2,800.00	2,711.80	2,718.88	2,758.80	14.12	11.89	-93.57	-622.51	-7,669.34	7,708.76	7,682.76	26.00	296.512		
2,900.00	2,807.47	2,800.01	2,839.93	14.64	12.22	-93.75	-622.29	-7,668.89	7,710.10	7,683.25	26.85	287.152		
3,000.00	2,903.14	2,860.98	2,900.90	15.16	12.47	-93.88	-621.92	-7,668.78	7,711.87	7,684.25	27.62	279.193		
3,100.00	2,998.81	2,916.22	2,956.14	15.68	12.69	-93.99	-621.41	-7,669.04	7,714.26	7,685.89	28.37	271.907		
3,200.00	3,094.48	2,974.77	3,014.69	16.21	12.94	-94.11	-620.76	-7,669.62	7,717.24	7,688.11	29.13	264.881		
3,300.00	3,190.15	3,050.53	3,090.43	16.73	13.25	-94.27	-619.82	-7,670.74	7,720.73	7,690.76	29.97	257.599		
3,400.00	3,285.82	3,124.33	3,164.21	17.26	13.56	-94.42	-618.76	-7,671.96	7,724.48	7,693.67	30.80	250.781		
3,500.00	3,381.49	3,179.28	3,219.15	17.78	13.79	-94.53	-617.88	-7,673.15	7,728.77	7,697.22	31.55	244.955		
3,600.00	3,477.16	3,245.69	3,285.52	18.31	14.06	-94.66	-616.71	-7,674.95	7,733.62	7,701.27	32.35	239.053		
3,700.00	3,572.83	3,327.85	3,367.62	18.84	14.41	-94.82	-615.10	-7,677.46	7,738.86	7,705.64	33.22	232.964		
3,800.00	3,668.50	3,444.79	3,484.47	19.37	14.90	-95.05	-612.24	-7,681.07	7,744.14	7,709.90	34.24	226.175		
3,900.00	3,764.17	3,569.71	3,609.30	19.89	15.42	-95.29	-608.82	-7,684.52	7,749.13	7,713.84	35.30	219.546		
4,000.00	3,859.84	3,668.41	3,707.93	20.42	15.84	-95.48	-606.38	-7,686.99	7,754.02	7,717.78	36.24	213.968		
4,100.00	3,955.51	3,764.52	3,803.99	20.95	16.24	-95.67	-604.33	-7,689.35	7,759.03	7,721.86	37.17	208.735		
4,200.00	4,051.18	3,860.77	3,900.20	21.48	16.65	-95.86	-602.49	-7,691.66	7,764.11	7,726.01	38.11	203.756		
4,300.00	4,146.85	3,955.91	3,995.30	22.01	17.05	-96.05	-600.89	-7,693.90	7,769.30	7,730.27	39.03	199.039		
4,400.00	4,242.52	4,067.93	4,107.28	22.55	17.52	-96.27	-599.36	-7,696.41	7,774.54	7,734.50	40.04	194.183		
4,500.00	4,338.19	4,163.30	4,202.62	23.08	17.92	-96.46	-597.93	-7,698.38	7,779.68	7,738.71	40.97	189.895		
4,600.00	4,433.86	4,257.28	4,296.57	23.61	18.32	-96.65	-596.81	-7,700.36	7,785.01	7,743.11	41.89	185.828		
4,700.00	4,529.53	4,354.55	4,393.82	24.14	18.73	-96.85	-595.88	-7,702.31	7,790.40	7,747.57	42.83	181.875		
4,800.00	4,625.19	4,457.29	4,496.54	24.67	19.16	-97.06	-595.28	-7,704.27	7,795.88	7,752.08	43.80	177.994		
4,900.00	4,720.86	4,559.69	4,634.92	25.21	19.74	-97.35	-594.71	-7,706.43	7,801.19	7,756.27	44.92	173.670		
5,000.00	4,816.53	4,662.33	4,731.55	25.74	20.15	-97.55	-594.44	-7,707.58	7,806.27	7,760.41	45.86	170.226		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	4,912.20	4,782.85	4,822.07	26.27	20.53	-97.74	-594.15	-7,708.69	7,811.48	7,764.71	46.77	167.017		
5,200.00	5,007.87	4,889.86	4,929.07	26.80	20.99	-97.96	-593.82	-7,709.99	7,816.78	7,769.02	47.76	163.683		
5,300.00	5,103.54	4,987.95	5,027.15	27.34	21.40	-98.16	-593.44	-7,711.08	7,822.07	7,773.37	48.70	160.612		
5,400.00	5,199.22	5,095.47	5,134.67	27.87	21.86	-98.39	-592.95	-7,712.22	7,827.39	7,777.70	49.69	157.528		
5,500.00	5,295.46	5,186.15	5,225.34	28.39	22.24	-98.67	-592.59	-7,713.11	7,832.45	7,781.86	50.59	154.820		
5,600.00	5,392.60	5,287.60	5,326.78	28.89	22.67	-98.93	-592.29	-7,714.12	7,837.09	7,785.57	51.52	152.120		
5,700.00	5,490.50	5,463.88	5,503.05	29.37	23.41	-99.25	-591.33	-7,714.85	7,840.58	7,787.83	52.75	148.632		
5,800.00	5,589.05	5,546.68	5,585.86	29.83	23.76	-99.40	-590.75	-7,714.88	7,843.23	7,789.67	53.56	146.451		
5,900.00	5,688.14	5,621.47	5,660.65	30.26	24.08	-99.52	-590.48	-7,715.14	7,845.70	7,791.40	54.30	144.480		
6,000.00	5,787.63	5,722.77	5,761.95	30.68	24.51	-99.63	-590.17	-7,715.57	7,847.69	7,792.55	55.15	142.308		
6,100.00	5,887.41	5,814.41	5,853.58	31.07	24.90	-99.70	-589.82	-7,716.03	7,849.18	7,793.25	55.93	140.351		
6,200.00	5,987.36	5,910.01	5,949.17	31.44	25.31	-99.74	-589.41	-7,716.58	7,850.13	7,793.43	56.70	138.446		
6,300.00	6,087.36	5,983.93	6,023.09	31.80	25.62	-105.47	-589.16	-7,717.15	7,850.82	7,793.46	57.37	136.853		
6,400.00	6,187.36	6,091.64	6,130.80	32.15	26.08	-105.47	-588.96	-7,718.11	7,851.64	7,793.46	58.18	134.949		
6,500.00	6,287.36	6,164.46	6,203.61	32.51	26.39	-105.47	-588.88	-7,718.79	7,852.51	7,793.67	58.84	133.444		
6,600.00	6,387.36	6,245.62	6,284.77	32.87	26.73	-105.47	-588.86	-7,719.84	7,853.74	7,794.19	59.55	131.893		
6,700.00	6,487.36	6,341.68	6,380.82	33.23	27.14	-105.46	-589.04	-7,721.12	7,855.08	7,794.76	60.32	130.231		
6,800.00	6,587.36	6,452.16	6,491.29	33.59	27.61	-105.46	-589.32	-7,722.56	7,856.41	7,795.26	61.15	128.471		
6,900.00	6,687.26	6,568.60	6,607.73	33.95	28.11	-15.08	-589.88	-7,723.74	7,854.50	7,792.49	62.01	126.663		
7,000.00	6,785.58	6,655.06	6,694.18	34.31	28.48	-15.50	-590.42	-7,724.52	7,838.50	7,775.77	62.73	124.954		
7,100.00	6,879.94	6,728.16	6,767.27	34.65	28.79	-16.34	-591.26	-7,725.27	7,808.06	7,744.67	63.38	123.187		
7,200.00	6,968.01	6,794.91	6,834.01	34.97	29.07	-17.72	-592.17	-7,726.12	7,763.95	7,699.95	63.99	121.324		
7,300.00	7,047.61	6,871.36	6,910.44	35.27	29.40	-19.87	-593.18	-7,727.23	7,707.14	7,642.51	64.63	119.256		
7,400.00	7,116.80	6,928.43	6,967.50	35.54	29.64	-23.11	-593.80	-7,728.14	7,638.95	7,573.80	65.15	117.246		
7,500.00	7,173.86	6,969.41	7,008.47	35.81	29.81	-28.11	-594.18	-7,728.92	7,561.16	7,495.57	65.59	115.281		
7,600.00	7,217.38	7,001.95	7,041.00	36.17	29.95	-36.28	-594.44	-7,729.61	7,475.63	7,409.66	65.97	113.316		
7,700.00	7,246.31	7,034.50	7,073.54	36.80	30.09	-50.47	-594.66	-7,730.34	7,384.40	7,318.06	66.34	111.304		
7,800.00	7,259.92	7,051.12	7,090.16	37.72	30.16	-74.24	-594.76	-7,730.72	7,289.69	7,223.04	66.64	109.381		
7,900.00	7,260.77	7,054.38	7,093.43	38.86	30.18	-86.04	-594.77	-7,730.79	7,193.81	7,126.91	66.89	107.541		
8,000.00	7,260.39	7,056.38	7,095.42	40.19	30.18	-86.10	-594.78	-7,730.84	7,097.99	7,030.83	67.16	105.687		
8,100.00	7,260.01	7,058.37	7,097.41	41.67	30.19	-86.15	-594.79	-7,730.88	7,002.29	6,934.84	67.46	103.806		
8,200.00	7,259.63	7,060.37	7,099.41	43.30	30.20	-86.21	-594.80	-7,730.93	6,906.72	6,838.94	67.78	101.901		
8,300.00	7,259.25	7,062.37	7,101.40	45.05	30.21	-86.27	-594.81	-7,730.98	6,811.26	6,743.13	68.13	99.971		
8,400.00	7,258.87	7,064.37	7,103.41	46.91	30.22	-86.32	-594.82	-7,731.02	6,715.94	6,647.43	68.52	98.017		
8,500.00	7,258.49	7,066.37	7,105.41	48.87	30.23	-86.38	-594.83	-7,731.07	6,620.76	6,551.83	68.94	96.041		
8,600.00	7,258.11	7,068.38	7,107.42	50.92	30.24	-86.43	-594.84	-7,731.11	6,525.72	6,456.33	69.39	94.043		
8,700.00	7,257.73	7,070.39	7,109.43	53.04	30.24	-86.49	-594.85	-7,731.16	6,430.84	6,360.96	69.88	92.026		
8,800.00	7,257.35	7,072.40	7,111.44	55.23	30.25	-86.55	-594.86	-7,731.20	6,336.10	6,265.69	70.41	89.990		
8,900.00	7,256.97	7,074.42	7,113.45	57.47	30.26	-86.60	-594.87	-7,731.25	6,241.54	6,170.56	70.98	87.936		
9,000.00	7,256.59	7,076.43	7,115.47	59.77	30.27	-86.66	-594.88	-7,731.30	6,147.14	6,075.55	71.59	85.868		
9,100.00	7,256.21	7,078.45	7,117.49	62.12	30.28	-86.72	-594.89	-7,731.34	6,052.92	5,980.68	72.24	83.787		
9,200.00	7,255.83	7,080.48	7,119.51	64.50	30.29	-86.77	-594.90	-7,731.39	5,958.89	5,885.95	72.94	81.694		
9,300.00	7,255.45	7,082.50	7,121.54	66.93	30.30	-86.83	-594.90	-7,731.44	5,865.06	5,791.37	73.69	79.593		
9,400.00	7,255.07	7,084.53	7,123.56	69.38	30.30	-86.89	-594.91	-7,731.48	5,771.43	5,696.95	74.48	77.485		
9,500.00	7,254.69	7,086.56	7,125.59	71.87	30.31	-86.94	-594.92	-7,731.53	5,678.02	5,602.69	75.33	75.373		
9,600.00	7,254.31	7,088.59	7,127.63	74.38	30.32	-87.00	-594.93	-7,731.58	5,584.84	5,508.61	76.23	73.260		
9,700.00	7,253.93	7,090.63	7,129.66	76.92	30.33	-87.06	-594.93	-7,731.62	5,491.90	5,414.71	77.19	71.147		
9,800.00	7,253.55	7,092.67	7,131.70	79.48	30.34	-87.11	-594.94	-7,731.67	5,399.21	5,321.00	78.21	69.038		
9,900.00	7,253.18	7,094.71	7,133.74	82.06	30.35	-87.17	-594.95	-7,731.72	5,306.78	5,227.50	79.28	66.935		
10,000.00	7,252.80	7,096.76	7,135.79	84.65	30.36	-87.23	-594.96	-7,731.76	5,214.63	5,134.21	80.42	64.841		
10,100.00	7,252.42	7,098.80	7,137.83	87.27	30.37	-87.29	-594.96	-7,731.81	5,122.78	5,041.15	81.63	62.759		
10,200.00	7,252.04	7,100.85	7,139.88	89.89	30.37	-87.34	-594.97	-7,731.86	5,031.23	4,948.33	82.90	60.691		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,251.66	7,102.91	7,141.93	92.54	30.38	-87.40	-594.98	-7,731.90	4,940.02	4,855.77	84.24	58.640		
10,400.00	7,251.28	7,104.96	7,143.99	95.19	30.39	-87.46	-594.98	-7,731.95	4,849.14	4,763.48	85.66	56.608		
10,500.00	7,250.90	7,107.02	7,146.05	97.86	30.40	-87.52	-594.99	-7,732.00	4,758.64	4,671.48	87.16	54.598		
10,600.00	7,250.52	7,109.08	7,148.11	100.53	30.41	-87.57	-594.99	-7,732.05	4,668.52	4,579.78	88.73	52.612		
10,700.00	7,250.14	7,111.14	7,150.17	103.22	30.42	-87.63	-595.00	-7,732.09	4,578.81	4,488.41	90.39	50.654		
10,800.00	7,249.76	7,113.21	7,152.23	105.91	30.43	-87.69	-595.01	-7,732.14	4,489.53	4,397.39	92.14	48.725		
10,900.00	7,249.38	7,114.82	7,153.85	108.62	30.43	-87.73	-595.02	-7,732.17	4,400.71	4,306.74	93.98	46.828		
11,000.00	7,249.00	7,116.76	7,155.79	111.33	30.44	-87.79	-595.03	-7,732.22	4,312.39	4,216.48	95.91	44.963		
11,100.00	7,248.62	7,118.69	7,157.71	114.04	30.45	-87.84	-595.04	-7,732.26	4,224.58	4,126.64	97.94	43.134		
11,200.00	7,248.24	7,120.60	7,159.62	116.77	30.46	-87.90	-595.04	-7,732.30	4,137.32	4,037.25	100.07	41.342		
11,300.00	7,247.86	7,122.50	7,161.52	119.50	30.47	-87.95	-595.05	-7,732.35	4,050.66	3,948.34	102.32	39.590		
11,400.00	7,247.48	7,124.39	7,163.41	122.24	30.47	-88.00	-595.06	-7,732.39	3,964.62	3,859.95	104.67	37.878		
11,500.00	7,247.10	7,126.26	7,165.28	124.98	30.48	-88.06	-595.07	-7,732.43	3,879.25	3,772.11	107.14	36.208		
11,600.00	7,246.72	7,128.12	7,167.14	127.73	30.49	-88.11	-595.08	-7,732.47	3,794.59	3,684.86	109.73	34.581		
11,700.00	7,246.34	7,129.97	7,168.99	130.48	30.50	-88.16	-595.08	-7,732.51	3,710.69	3,598.25	112.45	32.999		
11,800.00	7,245.96	7,131.80	7,170.82	133.24	30.51	-88.21	-595.09	-7,732.55	3,627.62	3,512.32	115.30	31.464		
11,900.00	7,245.58	7,133.63	7,172.65	136.00	30.51	-88.26	-595.10	-7,732.59	3,545.41	3,427.13	118.28	29.975		
12,000.00	7,245.21	7,135.44	7,174.46	138.76	30.52	-88.31	-595.11	-7,732.63	3,464.14	3,342.73	121.41	28.533		
12,100.00	7,244.83	7,137.23	7,176.25	141.53	30.53	-88.36	-595.12	-7,732.67	3,383.87	3,259.19	124.68	27.141		
12,200.00	7,244.45	7,139.02	7,178.04	144.30	30.54	-88.41	-595.13	-7,732.71	3,304.68	3,176.58	128.10	25.797		
12,300.00	7,244.07	7,140.79	7,179.81	147.08	30.54	-88.46	-595.14	-7,732.75	3,226.64	3,094.96	131.68	24.504		
12,400.00	7,243.69	7,142.56	7,181.57	149.86	30.55	-88.51	-595.15	-7,732.79	3,149.84	3,014.42	135.42	23.260		
12,500.00	7,243.31	7,144.31	7,183.32	152.64	30.56	-88.56	-595.16	-7,732.82	3,074.38	2,935.06	139.32	22.068		
12,600.00	7,242.93	7,146.04	7,185.06	155.42	30.57	-88.61	-595.17	-7,732.86	3,000.35	2,856.97	143.38	20.926		
12,700.00	7,242.55	7,147.77	7,186.79	158.21	30.57	-88.66	-595.17	-7,732.90	2,927.86	2,780.25	147.61	19.835		
12,800.00	7,242.17	7,149.49	7,188.50	161.00	30.58	-88.71	-595.18	-7,732.93	2,857.03	2,705.02	152.01	18.795		
12,900.00	7,241.79	7,151.19	7,190.21	163.79	30.59	-88.75	-595.19	-7,732.97	2,787.99	2,631.42	156.57	17.806		
13,000.00	7,241.41	7,152.89	7,191.90	166.58	30.60	-88.80	-595.20	-7,733.01	2,720.88	2,559.58	161.30	16.869		
13,100.00	7,241.03	7,154.57	7,193.58	169.38	30.60	-88.85	-595.21	-7,733.04	2,655.83	2,489.66	166.17	15.982		
13,200.00	7,240.65	7,156.24	7,195.25	172.18	30.61	-88.90	-595.22	-7,733.08	2,593.01	2,421.81	171.20	15.146		
13,300.00	7,240.27	7,157.90	7,196.91	174.98	30.62	-88.94	-595.23	-7,733.11	2,532.57	2,356.22	176.36	14.361		
13,400.00	7,239.89	7,159.55	7,198.56	177.78	30.62	-88.99	-595.24	-7,733.15	2,474.71	2,293.08	181.63	13.625		
13,500.00	7,239.51	7,161.19	7,200.20	180.58	30.63	-89.03	-595.25	-7,733.18	2,419.59	2,232.59	187.00	12.939		
13,600.00	7,239.13	7,162.82	7,201.83	183.39	30.64	-89.08	-595.26	-7,733.22	2,367.41	2,174.97	192.44	12.302		
13,700.00	7,238.75	7,164.43	7,203.45	186.20	30.65	-89.13	-595.27	-7,733.25	2,318.37	2,120.45	197.92	11.714		
13,800.00	7,238.37	7,166.04	7,205.05	189.00	30.65	-89.17	-595.28	-7,733.28	2,272.68	2,069.28	203.40	11.173		
13,900.00	7,237.99	7,167.64	7,206.65	191.81	30.66	-89.22	-595.29	-7,733.32	2,230.54	2,021.69	208.84	10.680		
14,000.00	7,237.62	7,169.23	7,208.24	194.63	30.67	-89.26	-595.30	-7,733.35	2,192.15	1,977.94	214.20	10.234		
14,100.00	7,237.24	7,170.80	7,209.81	197.44	30.67	-89.30	-595.31	-7,733.38	2,157.71	1,938.28	219.42	9.833		
14,200.00	7,236.86	7,172.37	7,211.38	200.25	30.68	-89.35	-595.32	-7,733.41	2,127.42	1,902.96	224.46	9.478		
14,300.00	7,236.48	7,173.93	7,212.94	203.07	30.69	-89.39	-595.33	-7,733.45	2,101.45	1,872.20	229.25	9.167		
14,400.00	7,236.10	7,175.48	7,214.49	205.88	30.69	-89.44	-595.34	-7,733.48	2,079.97	1,846.24	233.73	8.899		
14,500.00	7,235.72	7,177.01	7,216.02	208.70	30.70	-89.48	-595.35	-7,733.51	2,063.12	1,825.25	237.87	8.673		
14,600.00	7,235.34	7,178.54	7,217.55	211.52	30.71	-89.52	-595.36	-7,733.54	2,051.01	1,809.41	241.60	8.489		
14,700.00	7,234.96	7,180.06	7,219.07	214.34	30.71	-89.56	-595.37	-7,733.57	2,043.72	1,798.84	244.89	8.346		
14,799.18	7,234.58	7,181.56	7,220.57	217.14	30.72	-89.61	-595.39	-7,733.60	2,041.32	1,793.64	247.68	8.242 CC		
14,800.00	7,234.58	7,181.57	7,220.58	217.16	30.72	-89.61	-595.39	-7,733.60	2,041.32	1,793.62	247.70	8.241 ES		
14,900.00	7,234.20	7,183.07	7,222.08	219.98	30.73	-89.65	-595.40	-7,733.63	2,043.80	1,793.80	250.01	8.175		
15,000.00	7,233.82	7,184.56	7,223.57	222.81	30.73	-89.69	-595.41	-7,733.66	2,051.17	1,799.37	251.80	8.146 SF		
15,100.00	7,233.44	7,186.04	7,225.05	225.63	30.74	-89.73	-595.42	-7,733.69	2,063.36	1,810.29	253.07	8.153		
15,200.00	7,233.06	7,187.52	7,226.52	228.45	30.74	-89.77	-595.43	-7,733.72	2,080.29	1,826.45	253.84	8.195		
15,216.01	7,233.00	7,187.75	7,226.76	228.91	30.74	-89.78	-595.43	-7,733.73	2,083.43	1,829.52	253.91	8.205		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	63.00	3.28	3.28	-115.53	-1,705.05	-3,569.29	3,956.13					
100.00	100.00	37.00	100.00	3.28	3.34	-115.53	-1,705.05	-3,569.29	3,955.63	3,949.00	6.63	596.833		
200.00	200.00	137.00	200.00	3.34	4.47	-115.53	-1,705.05	-3,569.29	3,955.63	3,947.82	7.81	506.662		
300.00	299.98	236.98	299.98	3.45	7.31	-109.81	-1,705.05	-3,569.29	3,956.22	3,945.47	10.75	368.020		
400.00	399.84	336.84	399.84	3.61	10.54	-109.85	-1,705.05	-3,569.29	3,958.00	3,943.86	14.14	279.905		
500.00	499.45	436.45	499.45	3.82	13.88	-109.91	-1,705.05	-3,569.29	3,960.97	3,943.28	17.69	223.886		
600.00	598.70	535.70	598.70	4.07	17.27	-110.00	-1,705.05	-3,569.29	3,965.16	3,943.84	21.32	185.954		
700.00	697.47	634.47	697.47	4.35	20.67	-110.11	-1,705.05	-3,569.29	3,970.58	3,945.58	25.00	158.818		
800.00	795.62	732.62	795.62	4.67	24.06	-110.23	-1,705.05	-3,569.29	3,977.27	3,948.57	28.71	138.552		
900.00	893.06	830.06	893.06	5.01	27.43	-110.38	-1,705.05	-3,569.29	3,985.26	3,952.83	32.43	122.901		
1,000.00	989.64	926.64	989.64	5.38	30.78	-110.54	-1,705.05	-3,569.29	3,994.59	3,958.43	36.15	110.489		
1,100.00	1,085.42	1,022.42	1,085.42	5.78	34.11	-110.82	-1,705.05	-3,569.29	4,005.12	3,965.24	39.88	100.423		
1,200.00	1,181.09	1,118.09	1,181.09	6.20	37.43	-111.20	-1,705.05	-3,569.29	4,015.97	3,972.34	43.63	92.045		
1,300.00	1,276.76	1,213.76	1,276.76	6.65	40.76	-111.57	-1,705.05	-3,569.29	4,026.99	3,979.60	47.40	84.964		
1,400.00	1,372.43	1,309.43	1,372.43	7.11	44.09	-111.94	-1,705.05	-3,569.29	4,038.20	3,987.02	51.18	78.907		
1,500.00	1,468.10	1,405.10	1,468.10	7.57	47.42	-112.31	-1,705.05	-3,569.29	4,049.58	3,994.62	54.97	73.672		
1,600.00	1,563.77	1,500.77	1,563.77	8.05	50.75	-112.67	-1,705.05	-3,569.29	4,061.15	4,002.38	58.77	69.103		
1,700.00	1,659.44	1,603.56	1,659.44	8.53	54.33	-113.04	-1,705.05	-3,569.29	4,072.88	4,010.06	62.83	64.828		
1,800.00	1,755.11	1,707.89	1,755.11	9.02	57.97	-113.40	-1,705.05	-3,569.29	4,084.79	4,017.85	66.94	61.019		
1,900.00	1,850.78	1,787.78	1,850.78	9.52	60.75	-113.76	-1,705.05	-3,569.29	4,096.88	4,026.66	70.21	58.349		
2,000.00	1,946.45	1,883.45	1,946.45	10.02	64.09	-114.12	-1,705.05	-3,569.29	4,109.13	4,035.09	74.04	55.500		
2,100.00	2,042.12	1,979.12	2,042.12	10.52	67.43	-114.47	-1,705.05	-3,569.29	4,121.55	4,043.68	77.87	52.930		
2,200.00	2,137.78	2,074.78	2,137.78	11.03	70.76	-114.83	-1,705.05	-3,569.29	4,134.14	4,052.44	81.70	50.602		
2,300.00	2,233.45	2,170.45	2,233.45	11.54	74.10	-115.18	-1,705.05	-3,569.29	4,146.90	4,061.36	85.53	48.482		
2,400.00	2,329.12	2,266.12	2,329.12	12.05	77.43	-115.53	-1,705.05	-3,569.29	4,159.82	4,070.45	89.37	46.545		
2,500.00	2,424.79	2,361.79	2,424.79	12.56	80.77	-115.88	-1,705.05	-3,569.29	4,172.90	4,079.69	93.21	44.769		
2,600.00	2,520.46	2,457.46	2,520.46	13.08	84.11	-116.22	-1,705.05	-3,569.29	4,186.15	4,089.10	97.05	43.134		
2,700.00	2,616.13	2,553.13	2,616.13	13.60	87.45	-116.57	-1,705.05	-3,569.29	4,199.55	4,098.66	100.89	41.624		
2,800.00	2,711.80	2,648.80	2,711.80	14.12	90.78	-116.91	-1,705.05	-3,569.29	4,213.11	4,108.38	104.74	40.226		
2,900.00	2,807.47	2,744.47	2,807.47	14.64	94.12	-117.25	-1,705.05	-3,569.29	4,226.84	4,118.26	108.58	38.928		
3,000.00	2,903.14	2,840.14	2,903.14	15.16	97.46	-117.59	-1,705.05	-3,569.29	4,240.71	4,128.29	112.42	37.720		
3,100.00	2,998.81	2,935.81	2,998.81	15.68	100.80	-117.92	-1,705.05	-3,569.29	4,254.74	4,138.47	116.27	36.593		
3,200.00	3,094.48	3,031.48	3,094.48	16.21	104.14	-118.26	-1,705.05	-3,569.29	4,268.92	4,148.81	120.12	35.540		
3,300.00	3,190.15	3,127.15	3,190.15	16.73	107.47	-118.59	-1,705.05	-3,569.29	4,283.26	4,159.29	123.96	34.552		
3,400.00	3,285.82	3,222.82	3,285.82	17.26	110.81	-118.92	-1,705.05	-3,569.29	4,297.74	4,169.93	127.81	33.626		
3,500.00	3,381.49	3,318.49	3,381.49	17.78	114.15	-119.25	-1,705.05	-3,569.29	4,312.37	4,180.71	131.66	32.754		
3,600.00	3,477.16	3,414.16	3,477.16	18.31	117.49	-119.57	-1,705.05	-3,569.29	4,327.15	4,191.64	135.51	31.933		
3,700.00	3,572.83	3,509.83	3,572.83	18.84	120.83	-119.90	-1,705.05	-3,569.29	4,342.07	4,202.71	139.35	31.158		
3,800.00	3,668.50	3,605.50	3,668.50	19.37	124.17	-120.22	-1,705.05	-3,569.29	4,357.13	4,213.93	143.20	30.426		
3,900.00	3,764.17	3,701.17	3,764.17	19.89	127.50	-120.54	-1,705.05	-3,569.29	4,372.34	4,225.29	147.05	29.733		
4,000.00	3,859.84	3,803.16	3,859.84	20.42	131.06	-120.85	-1,705.05	-3,569.29	4,387.69	4,236.57	151.12	29.034		
4,100.00	3,955.51	3,907.49	3,955.51	20.95	134.71	-121.17	-1,705.05	-3,569.29	4,403.17	4,247.90	155.27	28.358		
4,200.00	4,051.18	3,988.18	4,051.18	21.48	137.52	-121.48	-1,705.05	-3,569.29	4,418.80	4,260.20	158.60	27.862		
4,300.00	4,146.85	4,083.85	4,146.85	22.01	140.86	-121.79	-1,705.05	-3,569.29	4,434.56	4,272.11	162.44	27.299		
4,400.00	4,242.52	4,179.52	4,242.52	22.55	144.20	-122.10	-1,705.05	-3,569.29	4,450.45	4,284.16	166.29	26.763		
4,500.00	4,338.19	4,275.19	4,338.19	23.08	147.54	-122.41	-1,705.05	-3,569.29	4,466.48	4,296.34	170.14	26.252		
4,600.00	4,433.86	4,370.86	4,433.86	23.61	150.88	-122.71	-1,705.05	-3,569.29	4,482.64	4,308.65	173.99	25.764		
4,700.00	4,529.53	4,466.53	4,529.53	24.14	154.22	-123.01	-1,705.05	-3,569.29	4,498.93	4,321.09	177.84	25.298		
4,800.00	4,625.19	4,562.19	4,625.19	24.67	157.56	-123.31	-1,705.05	-3,569.29	4,515.34	4,333.66	181.68	24.853		
4,900.00	4,720.86	4,657.86	4,720.86	25.21	160.89	-123.61	-1,705.05	-3,569.29	4,531.89	4,346.36	185.53	24.427		
5,000.00	4,816.53	4,753.53	4,816.53	25.74	164.23	-123.91	-1,705.05	-3,569.29	4,548.56	4,359.18	189.38	24.018		
5,100.00	4,912.20	4,849.20	4,912.20	26.27	167.57	-124.20	-1,705.05	-3,569.29	4,565.36	4,372.13	193.23	23.627		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,007.87	4,944.87	5,007.87	26.80	170.91	-124.49	-1,705.05	-3,569.29	4,582.28	4,385.21	197.07	23.252		
5,300.00	5,103.54	5,040.54	5,103.54	27.34	174.25	-124.79	-1,705.05	-3,569.29	4,599.32	4,398.40	200.92	22.891		
5,400.00	5,199.22	5,136.22	5,199.22	27.87	177.59	-125.10	-1,705.05	-3,569.29	4,616.48	4,411.71	204.77	22.545		
5,500.00	5,295.46	5,232.46	5,295.46	28.39	180.95	-125.63	-1,705.05	-3,569.29	4,632.58	4,423.95	208.62	22.206		
5,600.00	5,392.60	5,329.60	5,392.60	28.89	184.34	-126.10	-1,705.05	-3,569.29	4,646.76	4,434.26	212.49	21.868		
5,700.00	5,490.50	5,427.50	5,490.50	29.37	187.76	-126.50	-1,705.05	-3,569.29	4,658.97	4,442.59	216.37	21.532		
5,800.00	5,589.05	5,526.05	5,589.05	29.83	191.20	-126.82	-1,705.05	-3,569.29	4,669.17	4,448.90	220.26	21.198		
5,900.00	5,688.14	5,625.14	5,688.14	30.26	194.66	-127.09	-1,705.05	-3,569.29	4,677.31	4,453.16	224.15	20.867		
6,000.00	5,787.63	5,724.63	5,787.63	30.68	198.13	-127.28	-1,705.05	-3,569.29	4,683.38	4,455.34	228.04	20.538		
6,100.00	5,887.41	5,824.41	5,887.41	31.07	201.61	-127.41	-1,705.05	-3,569.29	4,687.34	4,455.42	231.91	20.212		
6,200.00	5,987.36	5,924.36	5,987.36	31.44	205.10	-127.47	-1,705.05	-3,569.29	4,689.18	4,453.40	235.78	19.888		
6,300.00	6,087.36	6,024.36	6,087.36	31.80	208.59	-133.20	-1,705.05	-3,569.29	4,689.33	4,449.70	239.63	19.569		
6,400.00	6,187.36	6,124.36	6,187.36	32.15	212.08	-133.20	-1,705.05	-3,569.29	4,689.33	4,445.84	243.49	19.259		
6,500.00	6,287.36	6,224.36	6,287.36	32.51	215.57	-133.20	-1,705.05	-3,569.29	4,689.33	4,441.98	247.35	18.958		
6,600.00	6,387.36	6,324.36	6,387.36	32.87	219.06	-133.20	-1,705.05	-3,569.29	4,689.33	4,438.12	251.21	18.667		
6,700.00	6,487.36	6,424.36	6,487.36	33.23	222.55	-133.20	-1,705.05	-3,569.29	4,689.33	4,434.26	255.07	18.385		
6,800.00	6,587.36	6,524.36	6,587.36	33.59	226.04	-133.20	-1,705.05	-3,569.29	4,689.33	4,430.40	258.93	18.110		
6,900.00	6,687.26	6,624.26	6,687.26	33.95	229.53	-42.92	-1,705.05	-3,569.29	4,687.05	4,424.27	262.78	17.836		
7,000.00	6,785.58	6,722.58	6,785.58	34.31	232.96	-43.88	-1,705.05	-3,569.29	4,674.12	4,407.55	266.57	17.535		
7,100.00	6,879.94	6,816.94	6,879.94	34.65	236.26	-45.72	-1,705.05	-3,569.29	4,650.15	4,379.94	270.21	17.209		
7,200.00	6,968.01	6,905.01	6,968.01	34.97	239.33	-48.53	-1,705.05	-3,569.29	4,615.89	4,342.25	273.64	16.868		
7,300.00	7,047.61	6,984.61	7,047.61	35.27	242.11	-52.40	-1,705.05	-3,569.29	4,572.38	4,295.59	276.79	16.519		
7,400.00	7,116.80	7,053.80	7,116.80	35.54	244.53	-57.42	-1,705.05	-3,569.29	4,520.93	4,241.32	279.61	16.168		
7,500.00	7,173.86	7,110.86	7,173.86	35.81	246.52	-63.61	-1,705.05	-3,569.29	4,463.08	4,181.01	282.08	15.822		
7,600.00	7,217.38	7,154.38	7,217.38	36.17	248.04	-70.85	-1,705.05	-3,569.29	4,400.53	4,116.37	284.16	15.486		
7,700.00	7,246.31	7,183.31	7,246.31	36.80	249.05	-78.83	-1,705.05	-3,569.29	4,335.07	4,049.23	285.84	15.166		
7,800.00	7,259.92	7,203.08	7,259.92	37.72	249.74	-87.03	-1,705.05	-3,569.29	4,268.51	3,981.19	287.32	14.856		
7,900.00	7,260.77	7,202.23	7,260.77	38.86	249.71	-90.19	-1,705.05	-3,569.29	4,202.57	3,914.37	288.20	14.582		
8,000.00	7,260.39	7,202.61	7,260.39	40.19	249.72	-90.18	-1,705.05	-3,569.29	4,137.98	3,848.72	289.26	14.306		
8,100.00	7,260.01	7,202.99	7,260.01	41.67	249.73	-90.17	-1,705.05	-3,569.29	4,074.82	3,784.37	290.46	14.029		
8,200.00	7,259.63	7,203.37	7,259.63	43.30	249.75	-90.17	-1,705.05	-3,569.29	4,013.16	3,721.36	291.80	13.753		
8,300.00	7,259.25	7,203.75	7,259.25	45.05	249.76	-90.16	-1,705.05	-3,569.29	3,953.07	3,659.79	293.28	13.479		
8,400.00	7,258.87	7,204.13	7,258.87	46.91	249.77	-90.15	-1,705.05	-3,569.29	3,894.62	3,599.73	294.89	13.207		
8,500.00	7,258.49	7,204.51	7,258.49	48.87	249.79	-90.15	-1,705.05	-3,569.29	3,837.88	3,541.24	296.64	12.938		
8,600.00	7,258.11	7,204.89	7,258.11	50.92	249.80	-90.14	-1,705.05	-3,569.29	3,782.94	3,484.43	298.51	12.673		
8,700.00	7,257.73	7,205.27	7,257.73	53.04	249.81	-90.13	-1,705.05	-3,569.29	3,729.87	3,429.36	300.50	12.412		
8,800.00	7,257.35	7,205.65	7,257.35	55.23	249.83	-90.13	-1,705.05	-3,569.29	3,678.75	3,376.13	302.62	12.157		
8,900.00	7,256.97	7,206.03	7,256.97	57.47	249.84	-90.12	-1,705.05	-3,569.29	3,629.67	3,324.83	304.84	11.907		
9,000.00	7,256.59	7,206.41	7,256.59	59.77	249.85	-90.11	-1,705.05	-3,569.29	3,582.70	3,275.54	307.16	11.664		
9,100.00	7,256.21	7,206.79	7,256.21	62.12	249.87	-90.11	-1,705.05	-3,569.29	3,537.94	3,228.36	309.58	11.428		
9,200.00	7,255.83	7,207.17	7,255.83	64.50	249.88	-90.10	-1,705.05	-3,569.29	3,495.47	3,183.39	312.08	11.200		
9,300.00	7,255.45	7,207.55	7,255.45	66.93	249.89	-90.09	-1,705.05	-3,569.29	3,455.38	3,140.71	314.67	10.981		
9,400.00	7,255.07	7,207.93	7,255.07	69.38	249.91	-90.08	-1,705.05	-3,569.29	3,417.73	3,100.42	317.32	10.771		
9,500.00	7,254.69	7,208.31	7,254.69	71.87	249.92	-90.08	-1,705.05	-3,569.29	3,382.63	3,062.60	320.03	10.550		
9,600.00	7,254.31	7,208.69	7,254.31	74.38	249.93	-90.07	-1,705.05	-3,569.29	3,350.15	3,027.36	322.79	10.379		
9,700.00	7,253.93	7,209.07	7,253.93	76.92	249.95	-90.06	-1,705.05	-3,569.29	3,320.36	2,994.77	325.58	10.198		
9,800.00	7,253.55	7,209.45	7,253.55	79.48	249.96	-90.06	-1,705.05	-3,569.29	3,293.33	2,964.93	328.40	10.028		
9,900.00	7,253.18	7,209.83	7,253.18	82.06	249.97	-90.05	-1,705.05	-3,569.29	3,269.15	2,937.91	331.24	9.869		
10,000.00	7,252.80	7,189.80	7,252.80	84.65	249.27	-90.04	-1,705.05	-3,569.29	3,247.86	2,914.50	333.36	9.743		
10,100.00	7,252.42	7,189.42	7,252.42	87.27	249.26	-90.04	-1,705.05	-3,569.29	3,229.54	2,893.37	336.17	9.607		
10,200.00	7,252.04	7,189.04	7,252.04	89.89	249.25	-90.03	-1,705.05	-3,569.29	3,214.22	2,875.27	338.95	9.483		
10,300.00	7,251.66	7,188.66	7,251.66	92.54	249.23	-90.02	-1,705.05	-3,569.29	3,201.95	2,860.25	341.70	9.371		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,251.28	7,188.28	7,251.28	95.19	249.22	-90.02	-1,705.05	-3,569.29	3,192.76	2,848.36	344.40	9.270		
10,500.00	7,250.90	7,187.90	7,250.90	97.86	249.21	-90.01	-1,705.05	-3,569.29	3,186.70	2,839.64	347.05	9.182		
10,600.00	7,250.52	7,187.52	7,250.52	100.53	249.19	-90.00	-1,705.05	-3,569.29	3,183.76	2,834.12	349.63	9.106		
10,643.59	7,250.35	7,187.35	7,250.35	101.70	249.19	-90.00	-1,705.05	-3,569.29	3,183.46	2,832.72	350.74	9.076 CC		
10,700.00	7,250.14	7,187.14	7,250.14	103.22	249.18	-90.00	-1,705.05	-3,569.29	3,183.96	2,831.82	352.14	9.042 ES		
10,800.00	7,249.76	7,186.76	7,249.76	105.91	249.17	-89.99	-1,705.05	-3,569.29	3,187.30	2,832.73	354.56	8.989		
10,900.00	7,249.38	7,186.38	7,249.38	108.62	249.15	-89.98	-1,705.05	-3,569.29	3,193.77	2,836.87	356.90	8.949		
11,000.00	7,249.00	7,186.00	7,249.00	111.33	249.14	-89.98	-1,705.05	-3,569.29	3,203.35	2,844.22	359.13	8.920		
11,100.00	7,248.62	7,185.62	7,248.62	114.04	249.13	-89.97	-1,705.05	-3,569.29	3,216.01	2,854.76	361.25	8.902		
11,200.00	7,248.24	7,185.24	7,248.24	116.77	249.11	-89.96	-1,705.05	-3,569.29	3,231.72	2,868.45	363.27	8.896 SF		
11,300.00	7,247.86	7,184.86	7,247.86	119.50	249.10	-89.96	-1,705.05	-3,569.29	3,250.43	2,885.25	365.18	8.901		
11,400.00	7,247.48	7,184.48	7,247.48	122.24	249.09	-89.95	-1,705.05	-3,569.29	3,272.09	2,905.12	366.96	8.917		
11,500.00	7,247.10	7,184.10	7,247.10	124.98	249.07	-89.94	-1,705.05	-3,569.29	3,296.64	2,928.00	368.64	8.943		
11,600.00	7,246.72	7,183.72	7,246.72	127.73	249.06	-89.93	-1,705.05	-3,569.29	3,324.02	2,953.83	370.19	8.979		
11,700.00	7,246.34	7,183.34	7,246.34	130.48	249.05	-89.93	-1,705.05	-3,569.29	3,354.16	2,982.53	371.63	9.025		
11,800.00	7,245.96	7,182.96	7,245.96	133.24	249.03	-89.92	-1,705.05	-3,569.29	3,386.99	3,014.03	372.96	9.081		
11,900.00	7,245.58	7,182.58	7,245.58	136.00	249.02	-89.91	-1,705.05	-3,569.29	3,422.42	3,048.25	374.17	9.147		
12,000.00	7,245.21	7,182.21	7,245.21	138.76	249.01	-89.91	-1,705.05	-3,569.29	3,460.38	3,085.10	375.28	9.221		
12,100.00	7,244.83	7,181.83	7,244.83	141.53	248.99	-89.90	-1,705.05	-3,569.29	3,500.79	3,124.51	376.28	9.304		
12,200.00	7,244.45	7,181.45	7,244.45	144.30	248.98	-89.89	-1,705.05	-3,569.29	3,543.56	3,166.38	377.18	9.395		
12,300.00	7,244.07	7,181.07	7,244.07	147.08	248.97	-89.89	-1,705.05	-3,569.29	3,588.60	3,210.62	377.98	9.494		
12,400.00	7,243.69	7,180.69	7,243.69	149.86	248.95	-89.88	-1,705.05	-3,569.29	3,635.84	3,257.15	378.69	9.601		
12,500.00	7,243.31	7,180.31	7,243.31	152.64	248.94	-89.87	-1,705.05	-3,569.29	3,685.19	3,305.87	379.32	9.715		
12,600.00	7,242.93	7,179.93	7,242.93	155.42	248.93	-89.87	-1,705.05	-3,569.29	3,736.56	3,356.70	379.86	9.837		
12,700.00	7,242.55	7,179.55	7,242.55	158.21	248.91	-89.86	-1,705.05	-3,569.29	3,789.88	3,409.55	380.33	9.965		
12,800.00	7,242.17	7,179.17	7,242.17	161.00	248.90	-89.85	-1,705.05	-3,569.29	3,845.05	3,464.33	380.73	10.099		
12,900.00	7,241.79	7,178.79	7,241.79	163.79	248.89	-89.85	-1,705.05	-3,569.29	3,902.02	3,520.96	381.06	10.240		
13,000.00	7,241.41	7,178.41	7,241.41	166.58	248.87	-89.84	-1,705.05	-3,569.29	3,960.68	3,579.36	381.32	10.387		
13,100.00	7,241.03	7,178.03	7,241.03	169.38	248.86	-89.83	-1,705.05	-3,569.29	4,020.98	3,639.45	381.53	10.539		
13,200.00	7,240.65	7,177.65	7,240.65	172.18	248.85	-89.83	-1,705.05	-3,569.29	4,082.84	3,701.15	381.69	10.697		
13,300.00	7,240.27	7,177.27	7,240.27	174.98	248.84	-89.82	-1,705.05	-3,569.29	4,146.18	3,764.38	381.80	10.860		
13,400.00	7,239.89	7,176.89	7,239.89	177.78	248.82	-89.81	-1,705.05	-3,569.29	4,210.95	3,829.09	381.86	11.027		
13,500.00	7,239.51	7,176.51	7,239.51	180.58	248.81	-89.80	-1,705.05	-3,569.29	4,277.07	3,895.19	381.89	11.200		
13,600.00	7,239.13	7,176.13	7,239.13	183.39	248.80	-89.80	-1,705.05	-3,569.29	4,344.50	3,962.62	381.87	11.377		
13,700.00	7,238.75	7,175.75	7,238.75	186.20	248.78	-89.79	-1,705.05	-3,569.29	4,413.15	4,031.33	381.83	11.558		
13,800.00	7,238.37	7,175.37	7,238.37	189.00	248.77	-89.78	-1,705.05	-3,569.29	4,482.99	4,101.24	381.75	11.743		
13,900.00	7,237.99	7,174.99	7,237.99	191.81	248.76	-89.78	-1,705.05	-3,569.29	4,553.95	4,172.31	381.64	11.932		
14,000.00	7,237.62	7,174.62	7,237.62	194.63	248.74	-89.77	-1,705.05	-3,569.29	4,625.98	4,244.47	381.52	12.125		
14,100.00	7,237.24	7,174.24	7,237.24	197.44	248.73	-89.76	-1,705.05	-3,569.29	4,699.04	4,317.68	381.36	12.322		
14,200.00	7,236.86	7,173.86	7,236.86	200.25	248.72	-89.76	-1,705.05	-3,569.29	4,773.08	4,391.89	381.19	12.521		
14,300.00	7,236.48	7,173.48	7,236.48	203.07	248.70	-89.75	-1,705.05	-3,569.29	4,848.05	4,467.04	381.00	12.724		
14,400.00	7,236.10	7,173.10	7,236.10	205.88	248.69	-89.74	-1,705.05	-3,569.29	4,923.90	4,543.10	380.80	12.930		
14,500.00	7,235.72	7,172.72	7,235.72	208.70	248.68	-89.74	-1,705.05	-3,569.29	5,000.61	4,620.03	380.58	13.139		
14,600.00	7,235.34	7,172.34	7,235.34	211.52	248.66	-89.73	-1,705.05	-3,569.29	5,078.13	4,697.78	380.35	13.351		
14,700.00	7,234.96	7,171.96	7,234.96	214.34	248.65	-89.72	-1,705.05	-3,569.29	5,156.42	4,776.31	380.11	13.566		
14,800.00	7,234.58	7,171.58	7,234.58	217.16	248.64	-89.72	-1,705.05	-3,569.29	5,235.45	4,855.59	379.86	13.783		
14,900.00	7,234.20	7,171.20	7,234.20	219.98	248.62	-89.71	-1,705.05	-3,569.29	5,315.18	4,935.58	379.60	14.002		
15,000.00	7,233.82	7,170.82	7,233.82	222.81	248.61	-89.70	-1,705.05	-3,569.29	5,395.59	5,016.26	379.34	14.224		
15,100.00	7,233.44	7,170.44	7,233.44	225.63	248.60	-89.70	-1,705.05	-3,569.29	5,476.65	5,097.59	379.07	14.448		
15,200.00	7,233.06	7,170.06	7,233.06	228.45	248.58	-89.69	-1,705.05	-3,569.29	5,558.33	5,179.53	378.79	14.674		
15,216.01	7,233.00	7,170.00	7,233.00	228.91	248.58	-89.69	-1,705.05	-3,569.29	5,571.46	5,192.71	378.75	14.710		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	61.09	3.28	3.28	-93.09	-493.51	-9,146.20	9,159.71					
100.00	100.00	185.68	212.66	3.28	3.34	-93.08	-492.06	-9,144.63	9,158.55	9,151.93	6.62	1,382.932		
200.00	200.00	288.90	315.87	3.34	3.45	-93.08	-491.56	-9,143.31	9,157.25	9,150.46	6.79	1,349.275		
300.00	299.98	368.38	395.35	3.45	3.57	-87.38	-491.38	-9,142.41	9,156.02	9,149.00	7.02	1,304.824		
400.00	399.84	464.46	491.42	3.61	3.76	-87.43	-491.15	-9,141.44	9,154.76	9,147.40	7.36	1,243.575		
500.00	499.45	546.60	573.55	3.82	3.95	-87.50	-490.92	-9,140.69	9,153.45	9,145.69	7.75	1,180.761		
600.00	598.70	617.00	643.96	4.07	4.13	-87.58	-491.02	-9,140.19	9,152.23	9,144.06	8.17	1,119.629		
700.00	697.47	700.00	742.74	4.35	4.35	-87.70	-491.18	-9,139.71	9,151.10	9,142.42	8.68	1,053.899		
800.00	795.62	844.53	871.48	4.67	4.79	-87.88	-491.06	-9,138.77	9,149.58	9,140.14	9.44	969.476		
900.00	893.06	924.86	951.81	5.01	5.06	-88.03	-490.92	-9,138.17	9,147.98	9,137.94	10.05	910.573		
1,000.00	989.64	984.00	1,010.95	5.38	5.26	-88.15	-490.98	-9,137.84	9,146.57	9,135.94	10.62	860.972		
1,100.00	1,085.42	984.00	1,010.95	5.78	5.26	-88.16	-490.98	-9,137.84	9,145.91	9,134.88	11.03	829.275		
1,158.92	1,141.78	1,033.48	1,060.42	6.03	5.42	-88.25	-491.00	-9,137.94	9,145.55	9,134.11	11.44	799.295		
1,200.00	1,181.09	1,044.69	1,071.63	6.20	5.46	-88.27	-490.99	-9,138.06	9,145.62	9,133.96	11.66	784.581		
1,300.00	1,276.76	1,112.00	1,138.93	6.65	5.68	-88.39	-490.75	-9,139.50	9,146.66	9,134.33	12.33	741.980		
1,400.00	1,372.43	1,112.00	1,138.93	7.11	5.68	-88.39	-490.75	-9,139.50	9,147.93	9,135.14	12.78	715.585		
1,500.00	1,468.10	1,112.00	1,138.93	7.57	5.68	-88.39	-490.75	-9,139.50	9,150.29	9,137.04	13.25	690.571		
1,600.00	1,563.77	1,112.00	1,138.93	8.05	5.68	-88.39	-490.75	-9,139.50	9,153.74	9,140.01	13.72	666.954		
1,700.00	1,659.44	1,172.59	1,199.47	8.53	5.89	-88.50	-490.45	-9,141.98	9,157.48	9,143.07	14.41	635.579		
1,800.00	1,755.11	1,241.00	1,267.74	9.02	6.12	-88.62	-490.23	-9,146.22	9,162.78	9,147.66	15.13	605.686		
1,900.00	1,850.78	1,241.00	1,267.74	9.52	6.12	-88.62	-490.23	-9,146.22	9,168.15	9,152.54	15.62	587.050		
2,000.00	1,946.45	1,241.00	1,267.74	10.02	6.12	-88.62	-490.23	-9,146.22	9,174.61	9,158.50	16.11	569.520		
2,100.00	2,042.12	1,241.00	1,267.74	10.52	6.12	-88.62	-490.23	-9,146.22	9,182.16	9,165.55	16.60	553.036		
2,200.00	2,137.78	1,289.08	1,315.66	11.03	6.29	-88.70	-490.11	-9,150.15	9,190.25	9,172.98	17.27	532.154		
2,300.00	2,233.45	1,311.61	1,338.10	11.54	6.37	-88.74	-490.05	-9,152.27	9,199.33	9,181.49	17.85	515.451		
2,400.00	2,329.12	1,369.00	1,395.14	12.05	6.58	-88.84	-489.91	-9,158.48	9,209.54	9,190.99	18.55	496.392		
2,500.00	2,424.79	1,369.00	1,395.14	12.56	6.58	-88.84	-489.91	-9,158.48	9,220.07	9,201.02	19.05	484.016		
2,600.00	2,520.46	1,369.00	1,395.14	13.08	6.58	-88.84	-489.91	-9,158.48	9,231.67	9,212.12	19.54	472.347		
2,700.00	2,616.13	1,369.00	1,395.14	13.60	6.58	-88.84	-489.91	-9,158.48	9,244.33	9,224.29	20.04	461.339		
2,800.00	2,711.80	1,428.09	1,453.75	14.12	6.80	-88.95	-489.95	-9,166.01	9,257.31	9,236.56	20.75	446.029		
2,900.00	2,807.47	1,452.10	1,477.53	14.64	6.89	-88.99	-490.07	-9,169.38	9,271.37	9,250.03	21.34	434.479		
3,000.00	2,903.14	1,498.00	1,522.90	15.16	7.07	-89.07	-490.47	-9,176.30	9,286.34	9,264.33	22.01	421.924		
3,100.00	2,998.81	1,498.00	1,522.90	15.68	7.07	-89.07	-490.47	-9,176.30	9,301.91	9,279.42	22.50	413.473		
3,200.00	3,094.48	1,498.00	1,522.90	16.21	7.07	-89.07	-490.47	-9,176.30	9,318.53	9,295.55	22.98	405.474		
3,300.00	3,190.15	1,545.07	1,569.31	16.73	7.26	-89.15	-491.04	-9,184.09	9,335.70	9,312.04	23.65	394.662		
3,400.00	3,285.82	1,567.62	1,591.50	17.26	7.36	-89.19	-491.33	-9,188.09	9,353.81	9,329.58	24.23	386.083		
3,500.00	3,381.49	1,626.00	1,648.80	17.78	7.60	-89.30	-492.15	-9,199.23	9,373.01	9,348.06	24.95	375.700		
3,600.00	3,477.16	1,626.00	1,648.80	18.31	7.60	-89.30	-492.15	-9,199.23	9,392.48	9,367.06	25.42	369.453		
3,700.00	3,572.83	1,626.00	1,648.80	18.84	7.60	-89.30	-492.15	-9,199.23	9,412.97	9,387.08	25.89	363.526		
3,800.00	3,668.50	1,626.00	1,648.80	19.37	7.60	-89.30	-492.15	-9,199.23	9,434.48	9,408.12	26.36	357.903		
3,900.00	3,764.17	1,676.09	1,697.77	19.89	7.83	-89.38	-492.98	-9,209.72	9,456.40	9,429.36	27.04	349.697		
4,000.00	3,859.84	1,696.85	1,718.01	20.42	7.93	-89.42	-493.37	-9,214.33	9,479.32	9,451.72	27.59	343.532		
4,100.00	3,955.51	1,754.00	1,773.54	20.95	8.19	-89.52	-494.57	-9,227.81	9,503.35	9,475.04	28.31	335.724		
4,200.00	4,051.18	1,754.00	1,773.54	21.48	8.19	-89.52	-494.57	-9,227.81	9,527.60	9,498.84	28.76	331.272		
4,300.00	4,146.85	1,754.00	1,773.54	22.01	8.19	-89.52	-494.57	-9,227.81	9,552.83	9,523.62	29.21	327.042		
4,400.00	4,242.52	1,754.00	1,773.54	22.55	8.19	-89.52	-494.57	-9,227.81	9,579.04	9,549.38	29.65	323.024		
4,500.00	4,338.19	1,815.15	1,832.67	23.08	8.51	-89.63	-495.84	-9,243.32	9,605.56	9,575.18	30.38	316.151		
4,600.00	4,433.86	1,883.00	1,897.99	23.61	8.86	-89.74	-496.97	-9,261.65	9,633.27	9,602.13	31.14	309.311		
4,700.00	4,529.53	1,883.00	1,897.99	24.14	8.86	-89.74	-496.97	-9,261.65	9,661.14	9,629.56	31.58	305.938		
4,800.00	4,625.19	1,883.00	1,897.99	24.67	8.86	-89.74	-496.97	-9,261.65	9,689.95	9,657.94	32.01	302.733		
4,900.00	4,720.86	1,927.93	1,941.07	25.21	9.12	-89.82	-497.64	-9,274.38	9,719.38	9,686.73	32.66	297.618		
5,000.00	4,816.53	1,957.43	1,969.29	25.74	9.29	-89.86	-498.10	-9,282.96	9,749.51	9,716.29	33.23	293.418		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	4,912.20	2,011.00	2,020.39	26.27	9.60	-89.95	-498.98	-9,299.01	9,780.39	9,746.47	33.92	288.350		
5,200.00	5,007.87	2,011.00	2,020.39	26.80	9.60	-89.95	-498.98	-9,299.01	9,811.73	9,777.40	34.33	285.786		
5,300.00	5,103.54	2,060.35	2,067.33	27.34	9.91	-90.03	-499.82	-9,314.22	9,843.72	9,808.72	35.00	281.235		
5,400.00	5,199.22	2,102.27	2,107.13	27.87	10.17	-90.16	-500.52	-9,327.36	9,876.24	9,840.61	35.63	277.182		
5,500.00	5,295.46	2,102.27	2,107.13	28.39	10.17	-91.23	-504.37	-9,411.08	9,908.24	9,855.91	35.63	277.182		
5,600.00	5,392.60	2,454.79	2,442.77	28.89	12.52	-91.99	-505.62	-9,434.96	9,939.23	9,900.90	38.33	259.276		
5,700.00	5,490.50	2,525.00	2,509.67	29.37	13.01	-92.72	-506.58	-9,456.27	9,970.63	9,931.54	39.08	255.108		
7,600.00	7,217.38	7,019.00	6,871.93	36.17	39.67	-26.82	-533.13	-10,306.87	9,966.85	9,899.62	67.23	148.243		
7,700.00	7,246.31	7,059.98	6,912.88	36.80	39.82	-39.34	-534.12	-10,308.11	9,874.17	9,806.59	67.59	146.099		
7,800.00	7,259.92	7,085.70	6,938.59	37.72	39.91	-65.89	-534.65	-10,308.87	9,777.71	9,709.85	67.86	144.097		
7,900.00	7,260.77	7,091.59	6,944.47	38.86	39.93	-81.86	-534.76	-10,309.05	9,679.86	9,611.82	68.04	142.272		
8,000.00	7,260.39	7,095.57	6,948.44	40.19	39.95	-81.98	-534.83	-10,309.16	9,582.00	9,513.78	68.22	140.451		
8,100.00	7,260.01	7,099.52	6,952.40	41.67	39.96	-82.09	-534.90	-10,309.28	9,484.18	9,415.76	68.42	138.611		
8,200.00	7,259.63	7,103.45	6,956.33	43.30	39.98	-82.20	-534.97	-10,309.39	9,386.40	9,317.77	68.64	136.753		
8,300.00	7,259.25	7,107.37	6,960.24	45.05	39.99	-82.32	-535.04	-10,309.51	9,288.68	9,219.81	68.87	134.878		
8,400.00	7,258.87	7,111.26	6,964.13	46.91	40.01	-82.43	-535.11	-10,309.62	9,190.99	9,121.88	69.11	132.985		
8,500.00	7,258.49	7,115.14	6,968.00	48.87	40.02	-82.54	-535.17	-10,309.73	9,093.36	9,023.99	69.38	131.075		
8,600.00	7,258.11	7,118.99	6,971.86	50.92	40.03	-82.65	-535.23	-10,309.85	8,995.78	8,926.13	69.65	129.149		
8,700.00	7,257.73	7,122.83	6,975.69	53.04	40.05	-82.76	-535.29	-10,309.96	8,898.25	8,828.30	69.95	127.206		
8,800.00	7,257.35	7,126.65	6,979.51	55.23	40.06	-82.87	-535.35	-10,310.07	8,800.78	8,730.51	70.27	125.247		
8,900.00	7,256.97	7,130.44	6,983.30	57.47	40.07	-82.98	-535.41	-10,310.18	8,703.36	8,632.76	70.60	123.273		
9,000.00	7,256.59	7,134.22	6,987.08	59.77	40.09	-83.09	-535.47	-10,310.29	8,606.00	8,535.05	70.96	121.285		
9,100.00	7,256.21	7,137.98	6,990.84	62.12	40.10	-83.20	-535.52	-10,310.39	8,508.70	8,437.37	71.33	119.282		
9,200.00	7,255.83	7,141.73	6,994.58	64.50	40.12	-83.31	-535.57	-10,310.50	8,411.47	8,339.74	71.73	117.267		
9,300.00	7,255.45	7,145.45	6,998.30	66.93	40.13	-83.41	-535.62	-10,310.61	8,314.30	8,242.15	72.15	115.239		
9,400.00	7,255.07	7,150.11	7,002.96	69.38	40.15	-83.55	-535.68	-10,310.74	8,217.19	8,144.60	72.59	113.194		
9,500.00	7,254.69	7,155.35	7,008.19	71.87	40.16	-83.70	-535.75	-10,310.89	8,120.15	8,047.09	73.07	111.136		
9,600.00	7,254.31	7,160.46	7,013.30	74.38	40.18	-83.85	-535.82	-10,311.03	8,023.19	7,949.63	73.56	109.069		
9,700.00	7,253.93	7,165.45	7,018.29	76.92	40.20	-83.99	-535.88	-10,311.17	7,926.29	7,852.21	74.08	106.994		
9,800.00	7,253.55	7,170.31	7,023.15	79.48	40.22	-84.13	-535.94	-10,311.30	7,829.48	7,754.85	74.63	104.913		
9,900.00	7,253.18	7,175.07	7,027.90	82.06	40.24	-84.27	-536.00	-10,311.43	7,732.74	7,657.54	75.20	102.826		
10,000.00	7,252.80	7,179.71	7,032.54	84.65	40.25	-84.40	-536.05	-10,311.55	7,636.09	7,560.29	75.80	100.734		
10,100.00	7,252.42	7,184.24	7,037.08	87.27	40.27	-84.53	-536.11	-10,311.67	7,539.52	7,463.09	76.44	98.639		
10,200.00	7,252.04	7,188.68	7,041.51	89.89	40.28	-84.66	-536.16	-10,311.79	7,443.04	7,365.95	77.10	96.542		
10,300.00	7,251.66	7,193.01	7,045.84	92.54	40.30	-84.79	-536.21	-10,311.90	7,346.66	7,268.87	77.79	94.444		
10,400.00	7,251.28	7,197.24	7,050.07	95.19	40.31	-84.91	-536.26	-10,312.01	7,250.37	7,171.86	78.51	92.347		
10,500.00	7,250.90	7,201.39	7,054.21	97.86	40.33	-85.03	-536.30	-10,312.12	7,154.18	7,074.91	79.27	90.251		
10,600.00	7,250.52	7,205.44	7,058.26	100.53	40.34	-85.15	-536.35	-10,312.22	7,058.10	6,978.04	80.06	88.157		
10,700.00	7,250.14	7,209.40	7,062.22	103.22	40.36	-85.26	-536.39	-10,312.32	6,962.13	6,881.23	80.89	86.068		
10,800.00	7,249.76	7,213.28	7,066.10	105.91	40.37	-85.38	-536.44	-10,312.41	6,866.27	6,784.51	81.76	83.985		
10,900.00	7,249.38	7,217.08	7,069.90	108.62	40.39	-85.49	-536.48	-10,312.51	6,770.52	6,687.86	82.66	81.908		
11,000.00	7,249.00	7,220.80	7,073.62	111.33	40.40	-85.59	-536.51	-10,312.60	6,674.91	6,591.30	83.60	79.839		
11,100.00	7,248.62	7,224.44	7,077.26	114.04	40.41	-85.70	-536.55	-10,312.69	6,579.42	6,494.83	84.59	77.780		
11,200.00	7,248.24	7,228.01	7,080.82	116.77	40.43	-85.80	-536.59	-10,312.77	6,484.06	6,398.44	85.62	75.732		
11,300.00	7,247.86	7,231.50	7,084.32	119.50	40.44	-85.91	-536.63	-10,312.85	6,388.85	6,302.16	86.69	73.697		
11,400.00	7,247.48	7,234.93	7,087.74	122.24	40.45	-86.00	-536.66	-10,312.93	6,293.78	6,205.97	87.81	71.675		
11,500.00	7,247.10	7,238.28	7,091.10	124.98	40.46	-86.10	-536.69	-10,313.01	6,198.87	6,109.89	88.98	69.667		
11,600.00	7,246.72	7,241.57	7,094.39	127.73	40.47	-86.20	-536.73	-10,313.09	6,104.12	6,013.92	90.20	67.676		
11,700.00	7,246.34	7,244.80	7,097.61	130.48	40.49	-86.29	-536.76	-10,313.16	6,009.54	5,918.07	91.47	65.703		
11,800.00	7,245.96	7,247.96	7,100.77	133.24	40.50	-86.38	-536.79	-10,313.23	5,915.14	5,822.35	92.79	63.748		
11,900.00	7,245.58	7,251.07	7,103.88	136.00	40.51	-86.47	-536.82	-10,313.30	5,820.92	5,726.75	94.17	61.814		
12,000.00	7,245.21	7,254.11	7,106.92	138.76	40.52	-86.56	-536.84	-10,313.37	5,726.89	5,631.29	95.61	59.900		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	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: 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	
12,100.00	7,244.83	7,257.10	7,109.91	141.53	40.53	-86.65	-536.87	-10,313.44	5,633.08	5,535.97	97.11	58.009	
12,200.00	7,244.45	7,260.03	7,112.84	144.30	40.54	-86.74	-536.90	-10,313.50	5,539.47	5,440.80	98.67	56.142	
12,300.00	7,244.07	7,262.91	7,115.72	147.08	40.55	-86.82	-536.92	-10,313.57	5,446.10	5,345.80	100.30	54.299	
12,400.00	7,243.69	7,265.74	7,118.54	149.86	40.56	-86.90	-536.95	-10,313.63	5,352.96	5,250.96	102.00	52.482	
12,500.00	7,243.31	7,268.51	7,121.32	152.64	40.57	-86.98	-536.97	-10,313.69	5,260.07	5,156.31	103.77	50.692	
12,600.00	7,242.93	7,271.24	7,124.04	155.42	40.58	-87.06	-537.00	-10,313.75	5,167.45	5,061.84	105.61	48.929	
12,700.00	7,242.55	7,273.92	7,126.72	158.21	40.59	-87.14	-537.02	-10,313.80	5,075.11	4,967.57	107.53	47.195	
12,800.00	7,242.17	7,276.55	7,129.35	161.00	40.60	-87.22	-537.04	-10,313.86	4,983.06	4,873.52	109.54	45.491	
12,900.00	7,241.79	7,279.13	7,131.93	163.79	40.61	-87.29	-537.07	-10,313.91	4,891.32	4,779.69	111.63	43.817	
13,000.00	7,241.41	7,281.67	7,134.47	166.58	40.62	-87.37	-537.09	-10,313.97	4,799.91	4,686.10	113.81	42.174	
13,100.00	7,241.03	7,284.17	7,136.97	169.38	40.63	-87.44	-537.11	-10,314.02	4,708.85	4,592.76	116.09	40.563	
13,200.00	7,240.65	7,286.62	7,139.42	172.18	40.64	-87.51	-537.13	-10,314.07	4,618.16	4,499.70	118.46	38.985	
13,300.00	7,240.27	7,289.03	7,141.83	174.98	40.64	-87.58	-537.15	-10,314.12	4,527.86	4,406.92	120.94	37.440	
13,400.00	7,239.89	7,291.40	7,144.20	177.78	40.65	-87.65	-537.17	-10,314.16	4,437.98	4,314.46	123.52	35.929	
13,500.00	7,239.51	7,293.74	7,146.54	180.58	40.66	-87.72	-537.18	-10,314.21	4,348.53	4,222.31	126.22	34.453	
13,600.00	7,239.13	7,296.03	7,148.83	183.39	40.67	-87.78	-537.20	-10,314.26	4,259.56	4,130.53	129.03	33.012	
13,700.00	7,238.75	7,298.29	7,151.09	186.20	40.68	-87.85	-537.22	-10,314.30	4,171.08	4,039.11	131.97	31.606	
13,800.00	7,238.37	7,300.51	7,153.31	189.00	40.69	-87.91	-537.24	-10,314.35	4,083.13	3,948.10	135.04	30.237	
13,900.00	7,237.99	7,302.69	7,155.49	191.81	40.69	-87.98	-537.25	-10,314.39	3,995.75	3,857.51	138.24	28.904	
14,000.00	7,237.62	7,302.60	7,155.39	194.63	40.69	-87.98	-537.26	-10,314.39	3,908.99	3,767.41	141.58	27.610	
14,100.00	7,237.24	7,304.56	7,157.36	197.44	40.70	-88.03	-537.28	-10,314.42	3,822.86	3,677.78	145.07	26.351	
14,200.00	7,236.86	7,306.50	7,159.30	200.25	40.70	-88.09	-537.30	-10,314.46	3,737.42	3,588.70	148.72	25.130	
14,300.00	7,236.48	7,308.41	7,161.21	203.07	40.71	-88.14	-537.31	-10,314.50	3,652.72	3,500.18	152.53	23.947	
14,400.00	7,236.10	7,310.30	7,163.09	205.88	40.72	-88.20	-537.33	-10,314.53	3,568.81	3,412.29	156.52	22.802	
14,500.00	7,235.72	7,312.15	7,164.95	208.70	40.72	-88.25	-537.34	-10,314.57	3,485.75	3,325.07	160.67	21.694	
14,600.00	7,235.34	7,313.99	7,166.78	211.52	40.73	-88.31	-537.36	-10,314.60	3,403.60	3,238.58	165.02	20.626	
14,700.00	7,234.96	7,315.79	7,168.58	214.34	40.74	-88.36	-537.37	-10,314.64	3,322.42	3,152.87	169.55	19.595	
14,800.00	7,234.58	7,317.57	7,170.36	217.16	40.74	-88.41	-537.39	-10,314.67	3,242.30	3,068.02	174.28	18.604	
14,900.00	7,234.20	7,319.32	7,172.12	219.98	40.75	-88.46	-537.40	-10,314.70	3,163.31	2,984.09	179.22	17.650	
15,000.00	7,233.82	7,321.06	7,173.85	222.81	40.76	-88.51	-537.42	-10,314.74	3,085.54	2,901.17	184.37	16.736	
15,100.00	7,233.44	7,322.76	7,175.56	225.63	40.76	-88.56	-537.43	-10,314.77	3,009.08	2,819.35	189.73	15.860	
15,200.00	7,233.06	7,324.45	7,177.24	228.45	40.77	-88.61	-537.45	-10,314.80	2,934.04	2,738.73	195.31	15.023	
15,216.01	7,233.00	7,324.71	7,177.51	228.91	40.77	-88.62	-537.45	-10,314.80	2,922.16	2,725.94	196.22	14.892 CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	40.00	3.28	3.28	-92.75	-439.10	-9,149.17	9,159.79					
100.00	100.00	60.00	100.00	3.28	3.44	-92.75	-439.10	-9,149.17	9,159.70	9,152.98	6.73	1,361.457		
200.00	200.00	160.00	200.00	3.34	5.05	-92.75	-439.10	-9,149.17	9,159.70	9,151.32	8.39	1,092.098		
300.00	299.98	259.98	299.98	3.45	8.03	-87.03	-439.10	-9,149.17	9,159.61	9,148.14	11.48	798.194		
400.00	399.84	359.84	399.84	3.61	11.30	-87.07	-439.10	-9,149.17	9,159.34	9,144.44	14.91	614.493		
500.00	499.45	459.45	499.45	3.82	14.67	-87.13	-439.10	-9,149.17	9,158.90	9,140.43	18.47	495.837		
600.00	598.70	558.70	598.70	4.07	18.06	-87.22	-439.10	-9,149.17	9,158.29	9,136.18	22.11	414.226		
700.00	697.47	657.47	697.47	4.35	21.46	-87.33	-439.10	-9,149.17	9,157.54	9,131.75	25.79	355.079		
800.00	795.62	755.62	795.62	4.67	24.85	-87.46	-439.10	-9,149.17	9,156.66	9,127.16	29.50	310.425		
900.00	893.06	853.06	893.06	5.01	28.23	-87.62	-439.10	-9,149.17	9,155.67	9,122.45	33.22	275.612		
1,000.00	989.64	949.64	989.64	5.38	31.58	-87.80	-439.10	-9,149.17	9,154.60	9,117.65	36.95	247.766		
1,100.00	1,085.42	1,045.42	1,085.42	5.78	34.90	-87.98	-439.10	-9,149.17	9,153.49	9,112.81	40.68	225.011		
1,200.00	1,181.09	1,141.09	1,181.09	6.20	38.23	-88.15	-439.10	-9,149.17	9,152.46	9,108.03	44.43	205.979		
1,300.00	1,276.76	1,236.76	1,276.76	6.65	41.56	-88.33	-439.10	-9,149.17	9,151.53	9,103.32	48.21	189.842		
1,400.00	1,372.43	1,332.43	1,372.43	7.11	44.89	-88.50	-439.10	-9,149.17	9,150.69	9,098.70	51.99	175.999		
1,500.00	1,468.10	1,428.10	1,468.10	7.57	48.22	-88.68	-439.10	-9,149.17	9,149.94	9,094.15	55.79	164.002		
1,600.00	1,563.77	1,523.77	1,563.77	8.05	51.55	-88.85	-439.10	-9,149.17	9,149.28	9,089.68	59.60	153.510		
1,700.00	1,659.44	1,619.44	1,659.44	8.53	54.89	-89.03	-439.10	-9,149.17	9,148.72	9,085.30	63.42	144.262		
1,800.00	1,755.11	1,715.11	1,755.11	9.02	58.22	-89.20	-439.10	-9,149.17	9,148.25	9,081.01	67.24	136.050		
1,900.00	1,850.78	1,810.78	1,850.78	9.52	61.56	-89.37	-439.10	-9,149.17	9,147.87	9,076.80	71.07	128.713		
2,000.00	1,946.45	1,906.45	1,946.45	10.02	64.89	-89.55	-439.10	-9,149.17	9,147.58	9,072.68	74.91	122.120		
2,100.00	2,042.12	2,002.12	2,042.12	10.52	68.23	-89.72	-439.10	-9,149.17	9,147.39	9,068.64	78.75	116.164		
2,200.00	2,137.78	2,102.22	2,137.78	11.03	71.72	-89.90	-439.10	-9,149.17	9,147.29	9,064.55	82.74	110.550		
2,258.78	2,194.02	2,154.02	2,194.02	11.33	73.52	-90.00	-439.10	-9,149.17	9,147.27	9,062.42	84.85	107.806		
2,300.00	2,233.45	2,206.55	2,233.45	11.54	75.36	-90.07	-439.10	-9,149.17	9,147.28	9,060.39	86.89	105.273		
2,400.00	2,329.12	2,289.12	2,329.12	12.05	78.24	-90.25	-439.10	-9,149.17	9,147.37	9,057.08	90.28	101.318		
2,500.00	2,424.79	2,384.79	2,424.79	12.56	81.57	-90.42	-439.10	-9,149.17	9,147.54	9,053.41	94.13	97.175		
2,600.00	2,520.46	2,480.46	2,520.46	13.08	84.91	-90.60	-439.10	-9,149.17	9,147.81	9,049.82	97.99	93.356		
2,700.00	2,616.13	2,576.13	2,616.13	13.60	88.25	-90.77	-439.10	-9,149.17	9,148.18	9,046.33	101.84	89.826		
2,800.00	2,711.80	2,671.80	2,711.80	14.12	91.59	-90.94	-439.10	-9,149.17	9,148.63	9,042.93	105.70	86.552		
2,900.00	2,807.47	2,767.47	2,807.47	14.64	94.92	-91.12	-439.10	-9,149.17	9,149.18	9,039.62	109.56	83.509		
3,000.00	2,903.14	2,863.14	2,903.14	15.16	98.26	-91.29	-439.10	-9,149.17	9,149.82	9,036.40	113.42	80.672		
3,100.00	2,998.81	2,958.81	2,998.81	15.68	101.60	-91.47	-439.10	-9,149.17	9,150.55	9,033.27	117.28	78.023		
3,200.00	3,094.48	3,054.48	3,094.48	16.21	104.94	-91.64	-439.10	-9,149.17	9,151.38	9,030.23	121.14	75.542		
3,300.00	3,190.15	3,150.15	3,190.15	16.73	108.28	-91.82	-439.10	-9,149.17	9,152.29	9,027.29	125.01	73.215		
3,400.00	3,285.82	3,245.82	3,285.82	17.26	111.61	-91.99	-439.10	-9,149.17	9,153.30	9,024.43	128.87	71.027		
3,500.00	3,381.49	3,341.49	3,381.49	17.78	114.95	-92.16	-439.10	-9,149.17	9,154.41	9,021.67	132.74	68.967		
3,600.00	3,477.16	3,437.16	3,477.16	18.31	118.29	-92.34	-439.10	-9,149.17	9,155.60	9,019.00	136.60	67.024		
3,700.00	3,572.83	3,532.83	3,572.83	18.84	121.63	-92.51	-439.10	-9,149.17	9,156.89	9,016.42	140.47	65.189		
3,800.00	3,668.50	3,628.50	3,668.50	19.37	124.97	-92.69	-439.10	-9,149.17	9,158.27	9,013.93	144.33	63.452		
3,900.00	3,764.17	3,724.17	3,764.17	19.89	128.31	-92.86	-439.10	-9,149.17	9,159.74	9,011.54	148.20	61.806		
4,000.00	3,859.84	3,819.84	3,859.84	20.42	131.65	-93.03	-439.10	-9,149.17	9,161.30	9,009.24	152.07	60.244		
4,100.00	3,955.51	3,915.51	3,955.51	20.95	134.98	-93.21	-439.10	-9,149.17	9,162.96	9,007.02	155.94	58.760		
4,200.00	4,051.18	4,011.18	4,051.18	21.48	138.32	-93.38	-439.10	-9,149.17	9,164.71	9,004.90	159.81	57.349		
4,300.00	4,146.85	4,106.85	4,146.85	22.01	141.66	-93.56	-439.10	-9,149.17	9,166.55	9,002.87	163.68	56.004		
4,400.00	4,242.52	4,202.52	4,242.52	22.55	145.00	-93.73	-439.10	-9,149.17	9,168.48	9,000.94	167.55	54.722		
4,500.00	4,338.19	4,301.81	4,338.19	23.08	148.47	-93.90	-439.10	-9,149.17	9,170.51	8,998.97	171.54	53.459		
4,600.00	4,433.86	4,406.14	4,433.86	23.61	152.11	-94.08	-439.10	-9,149.17	9,172.63	8,996.91	175.72	52.202		
4,700.00	4,529.53	4,489.53	4,529.53	24.14	155.02	-94.25	-439.10	-9,149.17	9,174.83	8,995.68	179.16	51.211		
4,800.00	4,625.19	4,585.19	4,625.19	24.67	158.36	-94.42	-439.10	-9,149.17	9,177.13	8,994.11	183.03	50.141		
4,900.00	4,720.86	4,680.86	4,720.86	25.21	161.70	-94.60	-439.10	-9,149.17	9,179.53	8,992.63	186.90	49.115		
5,000.00	4,816.53	4,776.53	4,816.53	25.74	165.04	-94.77	-439.10	-9,149.17	9,182.01	8,991.24	190.77	48.131		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	4,912.20	4,872.20	4,912.20	26.27	168.38	-94.94	-439.10	-9,149.17	9,184.59	8,989.94	194.64	47.187		
5,200.00	5,007.87	4,967.87	5,007.87	26.80	171.71	-95.12	-439.10	-9,149.17	9,187.25	8,988.74	198.51	46.280		
5,300.00	5,103.54	5,063.54	5,103.54	27.34	175.05	-95.29	-439.10	-9,149.17	9,190.01	8,987.63	202.38	45.409		
5,400.00	5,199.22	5,159.22	5,199.22	27.87	178.39	-95.47	-439.10	-9,149.17	9,192.86	8,986.60	206.26	44.570		
5,500.00	5,295.46	5,255.46	5,295.46	28.39	181.75	-95.68	-439.10	-9,149.17	9,195.60	8,985.46	210.14	43.760		
5,600.00	5,392.60	5,352.60	5,392.60	28.89	185.14	-95.88	-439.10	-9,149.17	9,198.06	8,984.03	214.03	42.976		
5,700.00	5,490.50	5,450.50	5,490.50	29.37	188.56	-96.04	-439.10	-9,149.17	9,200.22	8,982.30	217.92	42.218		
5,800.00	5,589.05	5,549.05	5,589.05	29.83	192.00	-96.18	-439.10	-9,149.17	9,202.04	8,980.23	221.82	41.485		
5,900.00	5,688.14	5,648.14	5,688.14	30.26	195.46	-96.29	-439.10	-9,149.17	9,203.52	8,977.81	225.71	40.776		
6,000.00	5,787.63	5,747.63	5,787.63	30.68	198.93	-96.38	-439.10	-9,149.17	9,204.63	8,975.03	229.60	40.090		
6,100.00	5,887.41	5,847.41	5,887.41	31.07	202.41	-96.43	-439.10	-9,149.17	9,205.36	8,971.89	233.47	39.428		
6,200.00	5,987.36	5,947.36	5,987.36	31.44	205.90	-96.46	-439.10	-9,149.17	9,205.70	8,968.37	237.33	38.788		
6,300.00	6,087.36	6,047.36	6,087.36	31.80	209.39	-102.19	-439.10	-9,149.17	9,205.73	8,964.55	241.18	38.170		
6,400.00	6,187.36	6,147.36	6,187.36	32.15	212.88	-102.19	-439.10	-9,149.17	9,205.73	8,960.70	245.03	37.571		
6,500.00	6,287.36	6,247.36	6,287.36	32.51	216.38	-102.19	-439.10	-9,149.17	9,205.73	8,956.85	248.87	36.990		
6,600.00	6,387.36	6,347.36	6,387.36	32.87	219.87	-102.19	-439.10	-9,149.17	9,205.73	8,953.00	252.72	36.426		
6,700.00	6,487.36	6,447.36	6,487.36	33.23	223.36	-102.19	-439.10	-9,149.17	9,205.73	8,949.15	256.58	35.879		
6,800.00	6,587.36	6,547.36	6,587.36	33.59	226.85	-102.19	-439.10	-9,149.17	9,205.73	8,945.30	260.43	35.348		
6,900.00	6,687.26	6,647.26	6,687.26	33.95	230.33	-11.81	-439.10	-9,149.17	9,202.68	8,938.40	264.28	34.822		
7,000.00	6,785.58	6,745.58	6,785.58	34.31	233.77	-12.16	-439.10	-9,149.17	9,185.42	8,917.35	268.06	34.266		
7,100.00	6,879.94	6,839.94	6,879.94	34.65	237.06	-12.86	-439.10	-9,149.17	9,153.31	8,881.61	271.70	33.689		
7,200.00	6,968.01	6,928.01	6,968.01	34.97	240.13	-14.02	-439.10	-9,149.17	9,107.15	8,832.05	275.10	33.105		
7,300.00	7,047.61	7,007.61	7,047.61	35.27	242.91	-15.82	-439.10	-9,149.17	9,048.10	8,769.92	278.18	32.526		
7,400.00	7,116.80	7,076.80	7,116.80	35.54	245.33	-18.61	-439.10	-9,149.17	8,977.61	8,696.75	280.86	31.964		
7,500.00	7,173.86	7,133.86	7,173.86	35.81	247.32	-23.10	-439.10	-9,149.17	8,897.44	8,614.34	283.09	31.429		
7,600.00	7,217.38	7,177.38	7,217.38	36.17	248.84	-30.90	-439.10	-9,149.17	8,809.56	8,524.73	284.82	30.930		
7,700.00	7,246.31	7,206.31	7,246.31	36.80	249.85	-45.87	-439.10	-9,149.17	8,716.15	8,430.13	286.02	30.474		
7,800.00	7,259.92	7,219.92	7,259.92	37.72	250.32	-75.38	-439.10	-9,149.17	8,619.53	8,332.86	286.67	30.068		
7,900.00	7,260.77	7,220.77	7,260.77	38.86	250.35	-90.96	-439.10	-9,149.17	8,521.97	8,235.10	286.87	29.707		
8,000.00	7,260.39	7,220.39	7,260.39	40.19	250.34	-90.95	-439.10	-9,149.17	8,424.45	8,137.41	287.04	29.350		
8,100.00	7,260.01	7,220.01	7,260.01	41.67	250.33	-90.94	-439.10	-9,149.17	8,326.98	8,039.76	287.23	28.991		
8,200.00	7,259.63	7,219.63	7,259.63	43.30	250.31	-90.93	-439.10	-9,149.17	8,229.58	7,942.15	287.43	28.632		
8,300.00	7,259.25	7,219.25	7,259.25	45.05	250.30	-90.92	-439.10	-9,149.17	8,132.24	7,844.58	287.65	28.271		
8,400.00	7,258.87	7,218.87	7,258.87	46.91	250.29	-90.91	-439.10	-9,149.17	8,034.96	7,747.07	287.90	27.909		
8,500.00	7,258.49	7,218.49	7,258.49	48.87	250.27	-90.89	-439.10	-9,149.17	7,937.75	7,649.60	288.16	27.547		
8,600.00	7,258.11	7,218.11	7,258.11	50.92	250.26	-90.88	-439.10	-9,149.17	7,840.62	7,552.18	288.44	27.183		
8,700.00	7,257.73	7,217.73	7,257.73	53.04	250.25	-90.87	-439.10	-9,149.17	7,743.55	7,454.81	288.75	26.818		
8,800.00	7,257.35	7,217.35	7,257.35	55.23	250.23	-90.86	-439.10	-9,149.17	7,646.56	7,357.49	289.07	26.452		
8,900.00	7,256.97	7,216.97	7,256.97	57.47	250.22	-90.85	-439.10	-9,149.17	7,549.65	7,260.23	289.43	26.085		
9,000.00	7,256.59	7,216.59	7,256.59	59.77	250.21	-90.84	-439.10	-9,149.17	7,452.83	7,163.02	289.80	25.717		
9,100.00	7,256.21	7,216.21	7,256.21	62.12	250.19	-90.83	-439.10	-9,149.17	7,356.08	7,065.88	290.21	25.348		
9,200.00	7,255.83	7,215.83	7,255.83	64.50	250.18	-90.81	-439.10	-9,149.17	7,259.43	6,968.79	290.64	24.978		
9,300.00	7,255.45	7,215.45	7,255.45	66.93	250.17	-90.80	-439.10	-9,149.17	7,162.86	6,871.77	291.09	24.607		
9,400.00	7,255.07	7,215.07	7,255.07	69.38	250.15	-90.79	-439.10	-9,149.17	7,066.40	6,774.81	291.58	24.235		
9,500.00	7,254.69	7,214.69	7,254.69	71.87	250.14	-90.78	-439.10	-9,149.17	6,970.03	6,677.93	292.10	23.862		
9,600.00	7,254.31	7,214.31	7,254.31	74.38	250.13	-90.77	-439.10	-9,149.17	6,873.76	6,581.11	292.65	23.488		
9,700.00	7,253.93	7,213.93	7,253.93	76.92	250.11	-90.76	-439.10	-9,149.17	6,777.61	6,484.38	293.23	23.114		
9,800.00	7,253.55	7,213.55	7,253.55	79.48	250.10	-90.74	-439.10	-9,149.17	6,681.56	6,387.72	293.85	22.738		
9,900.00	7,253.18	7,213.18	7,253.18	82.06	250.09	-90.73	-439.10	-9,149.17	6,585.64	6,291.14	294.50	22.362		
10,000.00	7,252.80	7,212.80	7,252.80	84.65	250.08	-90.72	-439.10	-9,149.17	6,489.83	6,194.65	295.19	21.986		
10,100.00	7,252.42	7,212.42	7,252.42	87.27	250.06	-90.71	-439.10	-9,149.17	6,394.16	6,098.24	295.91	21.608		
10,200.00	7,252.04	7,212.04	7,252.04	89.89	250.05	-90.70	-439.10	-9,149.17	6,298.62	6,001.94	296.68	21.230		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,251.66	7,211.66	7,251.66	92.54	250.04	-90.69	-439.10	-9,149.17	6,203.22	5,905.73	297.49	20.852		
10,400.00	7,251.28	7,211.28	7,251.28	95.19	250.02	-90.67	-439.10	-9,149.17	6,107.96	5,809.62	298.34	20.473		
10,500.00	7,250.90	7,210.90	7,250.90	97.86	250.01	-90.66	-439.10	-9,149.17	6,012.87	5,713.63	299.24	20.094		
10,600.00	7,250.52	7,210.52	7,250.52	100.53	250.00	-90.65	-439.10	-9,149.17	5,917.93	5,617.74	300.18	19.714		
10,700.00	7,250.14	7,210.14	7,250.14	103.22	249.98	-90.64	-439.10	-9,149.17	5,823.16	5,521.98	301.18	19.335		
10,800.00	7,249.76	7,209.76	7,249.76	105.91	249.97	-90.63	-439.10	-9,149.17	5,728.57	5,426.35	302.22	18.955		
10,900.00	7,249.38	7,209.38	7,249.38	108.62	249.96	-90.62	-439.10	-9,149.17	5,634.17	5,330.85	303.32	18.575		
11,000.00	7,249.00	7,209.00	7,249.00	111.33	249.94	-90.60	-439.10	-9,149.17	5,539.96	5,235.49	304.47	18.195		
11,100.00	7,248.62	7,208.62	7,248.62	114.04	249.93	-90.59	-439.10	-9,149.17	5,445.96	5,140.28	305.68	17.816		
11,200.00	7,248.24	7,208.24	7,248.24	116.77	249.92	-90.58	-439.10	-9,149.17	5,352.18	5,045.23	306.95	17.436		
11,300.00	7,247.86	7,207.86	7,247.86	119.50	249.90	-90.57	-439.10	-9,149.17	5,258.63	4,950.34	308.29	17.058		
11,400.00	7,247.48	7,207.48	7,247.48	122.24	249.89	-90.56	-439.10	-9,149.17	5,165.32	4,855.63	309.68	16.679		
11,500.00	7,247.10	7,207.10	7,247.10	124.98	249.88	-90.55	-439.10	-9,149.17	5,072.26	4,761.11	311.15	16.302		
11,600.00	7,246.72	7,206.72	7,246.72	127.73	249.86	-90.54	-439.10	-9,149.17	4,979.47	4,666.78	312.69	15.925		
11,700.00	7,246.34	7,206.34	7,246.34	130.48	249.85	-90.52	-439.10	-9,149.17	4,886.97	4,572.67	314.30	15.549		
11,800.00	7,245.96	7,205.96	7,245.96	133.24	249.84	-90.51	-439.10	-9,149.17	4,794.77	4,478.77	315.99	15.174		
11,900.00	7,245.58	7,205.58	7,245.58	136.00	249.82	-90.50	-439.10	-9,149.17	4,702.88	4,385.12	317.76	14.800		
12,000.00	7,245.21	7,205.21	7,245.21	138.76	249.81	-90.49	-439.10	-9,149.17	4,611.34	4,291.72	319.62	14.427		
12,100.00	7,244.83	7,204.83	7,244.83	141.53	249.80	-90.48	-439.10	-9,149.17	4,520.15	4,198.58	321.57	14.057		
12,200.00	7,244.45	7,204.45	7,244.45	144.30	249.78	-90.47	-439.10	-9,149.17	4,429.34	4,105.73	323.61	13.687		
12,300.00	7,244.07	7,204.07	7,244.07	147.08	249.77	-90.45	-439.10	-9,149.17	4,338.94	4,013.19	325.75	13.320		
12,400.00	7,243.69	7,203.69	7,243.69	149.86	249.76	-90.44	-439.10	-9,149.17	4,248.97	3,920.98	327.99	12.955		
12,500.00	7,243.31	7,203.31	7,243.31	152.64	249.74	-90.43	-439.10	-9,149.17	4,159.45	3,829.12	330.34	12.592		
12,600.00	7,242.93	7,202.93	7,242.93	155.42	249.73	-90.42	-439.10	-9,149.17	4,070.43	3,737.63	332.80	12.231		
12,700.00	7,242.55	7,202.55	7,242.55	158.21	249.72	-90.41	-439.10	-9,149.17	3,981.92	3,646.54	335.38	11.873		
12,800.00	7,242.17	7,202.17	7,242.17	161.00	249.70	-90.40	-439.10	-9,149.17	3,893.97	3,555.89	338.08	11.518		
12,900.00	7,241.79	7,201.79	7,241.79	163.79	249.69	-90.38	-439.10	-9,149.17	3,806.62	3,465.70	340.92	11.166		
13,000.00	7,241.41	7,201.41	7,241.41	166.58	249.68	-90.37	-439.10	-9,149.17	3,719.90	3,376.01	343.89	10.817		
13,100.00	7,241.03	7,201.03	7,241.03	169.38	249.66	-90.36	-439.10	-9,149.17	3,633.87	3,286.86	347.01	10.472		
13,200.00	7,240.65	7,200.65	7,240.65	172.18	249.65	-90.35	-439.10	-9,149.17	3,548.56	3,198.29	350.27	10.131		
13,300.00	7,240.27	7,200.27	7,240.27	174.98	249.64	-90.34	-439.10	-9,149.17	3,464.05	3,110.36	353.69	9.794		
13,400.00	7,239.89	7,200.11	7,239.89	177.78	249.63	-90.33	-439.10	-9,149.17	3,380.38	3,023.09	357.28	9.461		
13,500.00	7,239.51	7,200.49	7,239.51	180.58	249.65	-90.31	-439.10	-9,149.17	3,297.61	2,936.55	361.06	9.133		
13,600.00	7,239.13	7,200.87	7,239.13	183.39	249.66	-90.30	-439.10	-9,149.17	3,215.83	2,850.81	365.02	8.810		
13,700.00	7,238.75	7,201.25	7,238.75	186.20	249.67	-90.29	-439.10	-9,149.17	3,135.11	2,765.94	369.17	8.492		
13,800.00	7,238.37	7,201.63	7,238.37	189.00	249.69	-90.28	-439.10	-9,149.17	3,055.52	2,682.02	373.50	8.181		
13,900.00	7,237.99	7,202.01	7,237.99	191.81	249.70	-90.27	-439.10	-9,149.17	2,977.17	2,599.14	378.03	7.875		
14,000.00	7,237.62	7,202.39	7,237.62	194.63	249.71	-90.26	-439.10	-9,149.17	2,900.15	2,517.38	382.76	7.577		
14,100.00	7,237.24	7,202.76	7,237.24	197.44	249.73	-90.25	-439.10	-9,149.17	2,824.57	2,436.86	387.70	7.285		
14,200.00	7,236.86	7,203.14	7,236.86	200.25	249.74	-90.23	-439.10	-9,149.17	2,750.54	2,357.69	392.85	7.001		
14,300.00	7,236.48	7,203.52	7,236.48	203.07	249.75	-90.22	-439.10	-9,149.17	2,678.21	2,280.00	398.21	6.726		
14,400.00	7,236.10	7,203.90	7,236.10	205.88	249.76	-90.21	-439.10	-9,149.17	2,607.70	2,203.93	403.77	6.458		
14,500.00	7,235.72	7,204.28	7,235.72	208.70	249.78	-90.20	-439.10	-9,149.17	2,539.18	2,129.64	409.54	6.200		
14,600.00	7,235.34	7,204.66	7,235.34	211.52	249.79	-90.19	-439.10	-9,149.17	2,472.80	2,057.30	415.50	5.951		
14,700.00	7,234.96	7,205.04	7,234.96	214.34	249.80	-90.18	-439.10	-9,149.17	2,408.75	1,987.10	421.64	5.713		
14,800.00	7,234.58	7,205.42	7,234.58	217.16	249.82	-90.16	-439.10	-9,149.17	2,347.21	1,919.26	427.95	5.485		
14,900.00	7,234.20	7,205.80	7,234.20	219.98	249.83	-90.15	-439.10	-9,149.17	2,288.38	1,853.99	434.39	5.268		
15,000.00	7,233.82	7,206.18	7,233.82	222.81	249.84	-90.14	-439.10	-9,149.17	2,232.49	1,791.54	440.95	5.063		
15,100.00	7,233.44	7,206.56	7,233.44	225.63	249.86	-90.13	-439.10	-9,149.17	2,179.75	1,732.19	447.57	4.870		
15,200.00	7,233.06	7,206.94	7,233.06	228.45	249.87	-90.12	-439.10	-9,149.17	2,130.41	1,676.20	454.21	4.690		
15,216.01	7,233.00	7,207.00	7,233.00	228.91	249.87	-90.12	-439.10	-9,149.17	2,122.84	1,667.57	455.27	4.663 CC, ES, 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	27.00	3.28	3.28	-92.93	-468.25	-9,146.40	9,158.42					
100.00	100.00	109.46	136.46	3.28	3.29	-92.93	-468.53	-9,146.05	9,158.11	9,151.54	6.58	1,392.521		
200.00	200.00	184.84	211.84	3.34	3.33	-92.93	-468.45	-9,145.85	9,157.85	9,151.18	6.67	1,372.622		
300.00	299.98	258.40	285.40	3.45	3.40	-87.21	-468.40	-9,145.86	9,157.78	9,150.93	6.85	1,337.020		
400.00	399.84	345.18	372.18	3.61	3.52	-87.24	-468.49	-9,146.06	9,157.75	9,150.63	7.12	1,285.373		
500.00	499.45	433.18	460.18	3.82	3.68	-87.29	-468.61	-9,146.38	9,157.70	9,150.22	7.48	1,223.766		
600.00	598.70	599.17	626.17	4.07	4.05	-87.43	-469.04	-9,146.73	9,157.47	9,149.37	8.10	1,130.518		
700.00	697.47	675.90	702.89	4.35	4.25	-87.52	-469.43	-9,146.50	9,156.52	9,147.94	8.58	1,066.757		
800.00	795.62	727.00	753.99	4.67	4.40	-87.60	-469.68	-9,146.54	9,155.84	9,146.80	9.04	1,012.559		
845.11	839.67	727.00	753.99	4.82	4.40	-87.60	-469.68	-9,146.54	9,155.75	9,146.55	9.20	995.557		
900.00	893.06	727.00	753.99	5.01	4.40	-87.60	-469.68	-9,146.54	9,155.89	9,146.50	9.39	975.009		
1,000.00	989.64	797.35	824.34	5.38	4.60	-87.70	-469.58	-9,147.27	9,156.07	9,146.09	9.98	917.842		
1,100.00	1,085.42	856.00	882.96	5.78	4.78	-87.79	-468.84	-9,148.76	9,157.24	9,146.68	10.56	867.091		
1,200.00	1,181.09	856.00	882.96	6.20	4.78	-87.79	-468.84	-9,148.76	9,158.92	9,147.93	10.99	833.460		
1,300.00	1,276.76	856.00	882.96	6.65	4.78	-87.79	-468.84	-9,148.76	9,161.70	9,150.26	11.43	801.341		
1,400.00	1,372.43	908.63	935.54	7.11	4.95	-87.88	-467.69	-9,150.91	9,164.96	9,152.91	12.06	760.254		
1,500.00	1,468.10	932.96	959.82	7.57	5.03	-87.92	-467.02	-9,152.22	9,169.24	9,156.64	12.60	727.735		
1,600.00	1,563.77	984.00	1,010.72	8.05	5.20	-88.00	-465.33	-9,155.61	9,174.49	9,161.25	13.24	692.848		
1,700.00	1,659.44	984.00	1,010.72	8.53	5.20	-88.00	-465.33	-9,155.61	9,180.28	9,166.56	13.72	669.041		
1,800.00	1,755.11	984.00	1,010.72	9.02	5.20	-88.00	-465.33	-9,155.61	9,187.14	9,172.94	14.21	646.706		
1,900.00	1,850.78	1,038.54	1,065.02	9.52	5.39	-88.08	-462.87	-9,160.13	9,194.55	9,179.67	14.88	617.830		
2,000.00	1,946.45	1,067.28	1,093.58	10.02	5.49	-88.12	-461.22	-9,162.84	9,202.85	9,187.38	15.47	594.747		
2,100.00	2,042.12	1,112.00	1,137.95	10.52	5.65	-88.18	-458.18	-9,167.54	9,211.98	9,195.85	16.13	571.257		
2,200.00	2,137.78	1,112.00	1,137.95	11.03	5.65	-88.18	-458.18	-9,167.54	9,221.81	9,205.19	16.62	554.869		
2,300.00	2,233.45	1,174.90	1,200.20	11.54	5.89	-88.26	-452.98	-9,174.85	9,232.24	9,214.89	17.35	532.123		
2,400.00	2,329.12	1,241.00	1,265.44	12.05	6.15	-88.34	-446.41	-9,183.21	9,243.39	9,225.29	18.10	510.670		
2,500.00	2,424.79	1,287.09	1,310.80	12.56	6.34	-88.38	-441.01	-9,189.32	9,254.96	9,236.17	18.78	492.698		
2,600.00	2,520.46	1,369.00	1,391.11	13.08	6.70	-88.46	-429.33	-9,200.39	9,266.72	9,247.10	19.62	472.251		
2,700.00	2,616.13	1,424.08	1,444.88	13.60	6.95	-88.50	-420.20	-9,208.12	9,278.84	9,258.47	20.37	455.588		
2,800.00	2,711.80	1,498.00	1,516.73	14.12	7.31	-88.54	-406.76	-9,219.14	9,291.59	9,270.39	21.20	438.234		
2,900.00	2,807.47	1,498.00	1,516.73	14.64	7.31	-88.54	-406.76	-9,219.14	9,304.79	9,283.10	21.70	428.852		
3,000.00	2,903.14	1,560.99	1,577.68	15.16	7.63	-88.57	-394.40	-9,229.14	9,318.56	9,296.06	22.50	414.071		
3,100.00	2,998.81	1,626.00	1,640.33	15.68	7.98	-88.60	-380.96	-9,240.09	9,333.04	9,309.71	23.33	400.095		
3,200.00	3,094.48	1,652.22	1,665.52	16.21	8.13	-88.61	-375.30	-9,244.68	9,347.98	9,324.01	23.96	390.120		
3,300.00	3,190.15	1,705.93	1,716.93	16.73	8.44	-88.63	-363.07	-9,254.32	9,363.47	9,338.72	24.75	378.334		
3,400.00	3,285.82	1,754.00	1,762.70	17.26	8.72	-88.64	-351.41	-9,263.22	9,379.43	9,353.93	25.51	367.724		
3,500.00	3,381.49	1,754.00	1,762.70	17.78	8.72	-88.64	-351.41	-9,263.22	9,396.21	9,370.22	25.99	361.517		
3,600.00	3,477.16	1,819.03	1,824.27	18.31	9.14	-88.65	-334.80	-9,275.95	9,413.30	9,386.43	26.87	350.274		
3,700.00	3,572.83	1,883.00	1,884.40	18.84	9.56	-88.65	-317.71	-9,289.49	9,431.49	9,403.74	27.75	339.827		
3,800.00	3,668.50	1,883.00	1,884.40	19.37	9.56	-88.65	-317.71	-9,289.49	9,450.01	9,421.78	28.23	334.738		
3,900.00	3,764.17	2,078.78	2,067.94	19.89	10.95	-88.64	-263.69	-9,331.01	9,468.22	9,438.19	30.03	315.247		
4,000.00	3,859.84	2,164.40	2,148.50	20.42	11.58	-88.64	-240.80	-9,348.84	9,486.27	9,455.16	31.11	304.953		
4,100.00	3,955.51	2,230.94	2,211.21	20.95	12.07	-88.65	-223.52	-9,362.83	9,504.58	9,472.53	32.05	296.551		
4,200.00	4,051.18	2,324.90	2,299.93	21.48	12.77	-88.66	-199.88	-9,382.79	9,523.16	9,489.97	33.19	286.952		
4,300.00	4,146.85	2,427.89	2,397.44	22.01	13.54	-88.68	-174.76	-9,404.44	9,541.58	9,507.19	34.39	277.415		
4,400.00	4,242.52	2,499.16	2,464.74	22.55	14.08	-88.68	-156.84	-9,419.60	9,560.19	9,524.81	35.38	270.187		
4,500.00	4,338.19	2,609.50	2,568.57	23.08	14.94	-88.69	-128.02	-9,443.30	9,578.96	9,542.28	36.67	261.187		
4,600.00	4,433.86	2,685.13	2,639.69	23.61	15.54	-88.69	-108.02	-9,459.47	9,597.60	9,559.88	37.72	254.443		
4,700.00	4,529.53	2,732.85	2,684.40	24.14	15.92	-88.69	-95.04	-9,469.93	9,616.72	9,578.16	38.56	249.404		
4,800.00	4,625.19	2,782.00	2,730.29	24.67	16.32	-88.69	-81.32	-9,481.00	9,636.35	9,596.94	39.41	244.531		
4,900.00	4,720.86	3,007.41	2,941.41	25.21	18.17	-88.69	-20.16	-9,530.95	9,655.86	9,614.22	41.64	231.868		
5,000.00	4,816.53	3,083.84	3,013.37	25.74	18.80	-88.69	-0.20	-9,547.19	9,674.42	9,631.71	42.71	226.510		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	4,912.20	3,132.64	3,059.18	26.27	19.20	-88.69	12.81	-9,557.84	9,693.47	9,649.90	43.56	222.521		
5,200.00	5,007.87	3,210.32	3,131.95	26.80	19.83	-88.69	33.76	-9,575.18	9,712.97	9,668.33	44.64	217.587		
5,300.00	5,103.54	3,465.19	3,372.47	27.34	21.89	-88.72	98.19	-9,629.54	9,731.55	9,684.46	47.09	206.668		
5,400.00	5,199.22	3,531.27	3,435.04	27.87	22.42	-88.76	114.46	-9,643.22	9,749.64	9,701.57	48.06	202.844		
5,500.00	5,295.46	3,613.59	3,512.98	28.39	23.08	-89.14	134.53	-9,660.46	9,768.03	9,718.88	49.16	198.713		
5,600.00	5,392.60	3,701.10	3,595.59	28.89	23.79	-89.50	156.73	-9,678.95	9,786.58	9,736.31	50.27	194.667		
5,700.00	5,490.50	5,575.54	5,422.64	29.37	33.81	-90.48	380.97	-9,879.06	9,792.30	9,731.73	60.58	161.646		
5,800.00	5,589.05	5,703.90	5,550.99	29.83	34.18	-90.63	380.41	-9,879.71	9,793.03	9,731.59	61.44	159.386		
5,900.00	5,688.14	5,812.60	5,659.69	30.26	34.49	-90.73	379.41	-9,879.94	9,793.50	9,731.29	62.22	157.404		
6,000.00	5,787.63	5,921.10	5,768.17	30.68	34.80	-90.81	377.48	-9,880.00	9,793.90	9,730.93	62.97	155.537		
6,100.00	5,887.41	6,055.02	5,902.07	31.07	35.17	-90.88	375.04	-9,879.81	9,794.08	9,730.32	63.76	153.599		
6,200.00	5,987.36	6,192.77	6,039.79	31.44	35.56	-90.91	372.21	-9,878.96	9,793.73	9,729.18	64.55	151.727		
6,300.00	6,087.36	6,298.51	6,145.52	31.80	35.86	-96.65	370.35	-9,878.10	9,793.14	9,727.91	65.23	150.134		
6,400.00	6,187.36	6,406.14	6,253.13	32.15	36.17	-96.67	368.62	-9,877.28	9,792.57	9,726.65	65.92	148.552		
6,500.00	6,287.36	6,548.13	6,395.09	32.51	36.59	-96.68	366.83	-9,875.68	9,791.56	9,724.84	66.72	146.762		
6,600.00	6,387.36	6,640.18	6,487.14	32.87	36.87	-96.68	366.15	-9,874.62	9,790.50	9,723.13	67.38	145.311		
6,700.00	6,487.36	6,714.51	6,561.46	33.23	37.10	-96.68	365.69	-9,873.91	9,789.62	9,721.63	67.99	143.988		
6,800.00	6,587.36	6,798.28	6,645.22	33.59	37.35	-96.69	365.08	-9,873.29	9,788.97	9,720.34	68.63	142.627		
6,900.00	6,687.26	6,896.06	6,743.01	33.95	37.66	-6.28	364.60	-9,872.67	9,785.30	9,715.98	69.32	141.165		
7,000.00	6,785.58	6,970.31	6,817.25	34.31	37.90	-6.47	364.44	-9,872.32	9,767.34	9,697.40	69.93	139.667		
7,100.00	6,879.94	7,187.42	7,034.35	34.65	38.59	-6.90	364.07	-9,870.29	9,733.94	9,662.96	70.97	137.147		
7,200.00	6,968.01	7,258.57	7,105.48	34.97	38.81	-7.56	363.31	-9,869.13	9,685.75	9,614.21	71.54	135.388		
7,300.00	7,047.61	7,316.80	7,163.70	35.27	38.99	-8.58	362.38	-9,868.24	9,624.72	9,552.68	72.03	133.613		
7,400.00	7,116.80	7,365.48	7,212.37	35.54	39.15	-10.19	361.59	-9,867.61	9,552.34	9,479.88	72.46	131.833		
7,500.00	7,173.86	7,407.65	7,254.53	35.81	39.28	-12.85	360.91	-9,867.14	9,470.34	9,397.52	72.82	130.055		
7,600.00	7,217.38	7,475.83	7,322.70	36.17	39.49	-18.00	359.84	-9,866.33	9,380.58	9,307.37	73.21	128.134		
7,700.00	7,246.31	7,519.88	7,366.73	36.80	39.63	-30.02	359.20	-9,865.71	9,285.25	9,211.77	73.48	126.357		
7,800.00	7,259.92	7,539.10	7,385.95	37.72	39.70	-69.30	358.92	-9,865.42	9,186.78	9,113.13	73.65	124.735		
7,900.00	7,260.77	7,537.99	7,384.84	38.86	39.69	-98.41	358.94	-9,865.44	9,087.49	9,013.75	73.74	123.243		
8,000.00	7,260.39	7,534.98	7,381.84	40.19	39.68	-98.26	358.98	-9,865.48	8,988.21	8,914.39	73.82	121.757		
8,100.00	7,260.01	7,532.01	7,378.87	41.67	39.67	-98.10	359.02	-9,865.53	8,888.94	8,815.03	73.91	120.265		
8,200.00	7,259.63	7,529.08	7,375.93	43.30	39.66	-97.95	359.06	-9,865.57	8,789.69	8,715.68	74.01	118.766		
8,300.00	7,259.25	7,526.18	7,373.03	45.05	39.65	-97.80	359.10	-9,865.62	8,690.46	8,616.34	74.11	117.259		
8,400.00	7,258.87	7,523.31	7,370.17	46.91	39.65	-97.65	359.15	-9,865.66	8,591.24	8,517.02	74.22	115.746		
8,500.00	7,258.49	7,520.48	7,367.34	48.87	39.64	-97.50	359.19	-9,865.70	8,492.04	8,417.70	74.34	114.226		
8,600.00	7,258.11	7,517.68	7,364.54	50.92	39.63	-97.35	359.23	-9,865.74	8,392.86	8,318.39	74.47	112.698		
8,700.00	7,257.73	7,514.91	7,361.77	53.04	39.62	-97.20	359.27	-9,865.78	8,293.70	8,219.09	74.61	111.164		
8,800.00	7,257.35	7,512.18	7,359.04	55.23	39.61	-97.06	359.31	-9,865.82	8,194.56	8,119.81	74.75	109.622		
8,900.00	7,256.97	7,509.47	7,356.33	57.47	39.60	-96.92	359.35	-9,865.86	8,095.44	8,020.54	74.91	108.074		
9,000.00	7,256.59	7,506.80	7,353.66	59.77	39.59	-96.78	359.38	-9,865.90	7,996.34	7,921.27	75.07	106.519		
9,100.00	7,256.21	7,504.16	7,351.02	62.12	39.58	-96.64	359.42	-9,865.94	7,897.27	7,822.02	75.24	104.957		
9,200.00	7,255.83	7,501.54	7,348.41	64.50	39.58	-96.50	359.46	-9,865.98	7,798.21	7,722.79	75.43	103.389		
9,300.00	7,255.45	7,498.96	7,345.82	66.93	39.57	-96.36	359.50	-9,866.01	7,699.18	7,623.56	75.62	101.814		
9,400.00	7,255.07	7,496.41	7,343.27	69.38	39.56	-96.23	359.54	-9,866.05	7,600.18	7,524.35	75.83	100.232		
9,500.00	7,254.69	7,493.88	7,340.74	71.87	39.55	-96.10	359.58	-9,866.08	7,501.20	7,425.15	76.04	98.644		
9,600.00	7,254.31	7,491.38	7,338.25	74.38	39.54	-95.96	359.61	-9,866.12	7,402.24	7,325.97	76.27	97.049		
9,700.00	7,253.93	7,488.91	7,335.77	76.92	39.54	-95.83	359.65	-9,866.15	7,303.32	7,226.80	76.52	95.449		
9,800.00	7,253.55	7,486.46	7,333.33	79.48	39.53	-95.70	359.69	-9,866.19	7,204.42	7,127.65	76.77	93.842		
9,900.00	7,253.18	7,484.05	7,330.91	82.06	39.52	-95.57	359.72	-9,866.22	7,105.56	7,028.51	77.04	92.229		
10,000.00	7,252.80	7,481.65	7,328.52	84.65	39.51	-95.45	359.76	-9,866.25	7,006.72	6,929.40	77.33	90.611		
10,100.00	7,252.42	7,479.29	7,326.16	87.27	39.51	-95.32	359.79	-9,866.28	6,907.92	6,830.29	77.63	88.986		
10,200.00	7,252.04	7,476.95	7,323.81	89.89	39.50	-95.20	359.83	-9,866.31	6,809.16	6,731.21	77.95	87.357		

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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

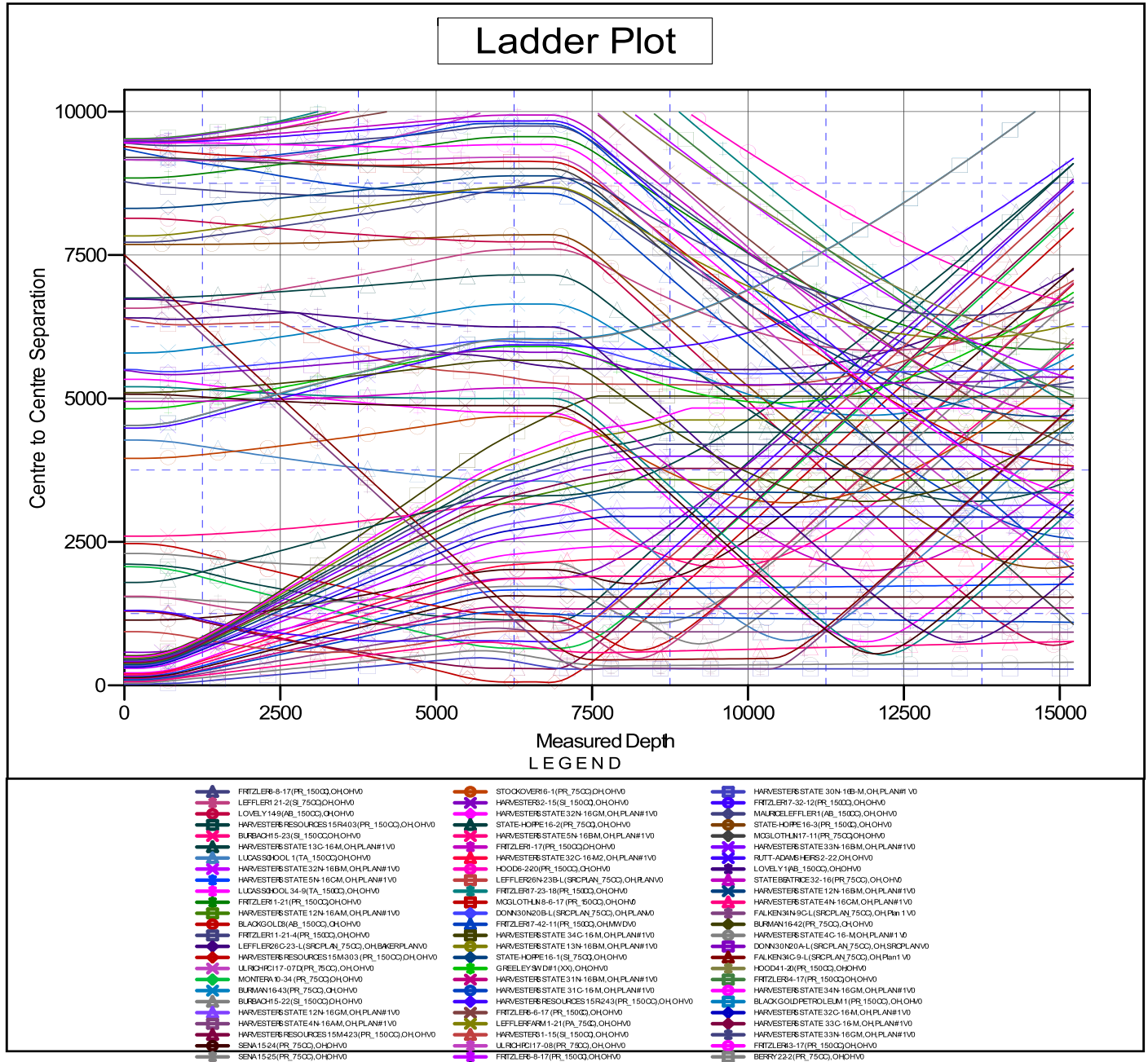
Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I17-17D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical 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		
10,300.00	7,251.66	7,474.63	7,321.50	92.54	39.49	-95.08	359.86	-9,866.34	6,710.43	6,632.15	78.28	85.722		
10,400.00	7,251.28	7,472.34	7,319.21	95.19	39.48	-94.95	359.90	-9,866.37	6,611.73	6,533.10	78.63	84.083		
10,500.00	7,250.90	7,470.07	7,316.94	97.86	39.48	-94.83	359.93	-9,866.40	6,513.08	6,434.07	79.01	82.439		
10,600.00	7,250.52	7,467.83	7,314.70	100.53	39.47	-94.71	359.97	-9,866.43	6,414.47	6,335.07	79.40	80.790		
10,700.00	7,250.14	7,465.61	7,312.48	103.22	39.46	-94.60	360.00	-9,866.46	6,315.90	6,236.09	79.81	79.137		
10,800.00	7,249.76	7,463.41	7,310.28	105.91	39.46	-94.48	360.03	-9,866.49	6,217.37	6,137.13	80.24	77.481		
10,900.00	7,249.38	7,461.23	7,308.10	108.62	39.45	-94.36	360.07	-9,866.52	6,118.90	6,038.20	80.70	75.821		
11,000.00	7,249.00	7,459.08	7,305.95	111.33	39.44	-94.25	360.10	-9,866.54	6,020.47	5,939.29	81.18	74.159		
11,100.00	7,248.62	7,456.95	7,303.82	114.04	39.43	-94.14	360.13	-9,866.57	5,922.09	5,840.40	81.69	72.493		
11,200.00	7,248.24	7,454.84	7,301.71	116.77	39.43	-94.02	360.16	-9,866.60	5,823.77	5,741.55	82.23	70.826		
11,300.00	7,247.86	7,452.75	7,299.62	119.50	39.42	-93.91	360.20	-9,866.62	5,725.51	5,642.72	82.79	69.157		
11,400.00	7,247.48	7,450.68	7,297.55	122.24	39.41	-93.80	360.23	-9,866.65	5,627.31	5,543.92	83.38	67.487		
11,500.00	7,247.10	7,448.63	7,295.51	124.98	39.41	-93.69	360.26	-9,866.67	5,529.17	5,445.16	84.01	65.816		
11,600.00	7,246.72	7,446.61	7,293.48	127.73	39.40	-93.58	360.29	-9,866.70	5,431.10	5,346.43	84.67	64.146		
11,700.00	7,246.34	7,444.60	7,291.48	130.48	39.40	-93.48	360.32	-9,866.72	5,333.10	5,247.74	85.36	62.476		
11,800.00	7,245.96	7,442.61	7,289.49	133.24	39.39	-93.37	360.35	-9,866.74	5,235.17	5,149.08	86.09	60.807		
11,900.00	7,245.58	7,440.65	7,287.52	136.00	39.38	-93.27	360.38	-9,866.77	5,137.33	5,050.46	86.87	59.140		
12,000.00	7,245.21	7,438.70	7,285.57	138.76	39.38	-93.16	360.42	-9,866.79	5,039.57	4,951.89	87.68	57.476		
12,100.00	7,244.83	7,436.77	7,283.64	141.53	39.37	-93.06	360.45	-9,866.81	4,941.89	4,853.35	88.54	55.816		
12,200.00	7,244.45	7,434.86	7,281.73	144.30	39.36	-92.96	360.48	-9,866.83	4,844.32	4,754.87	89.45	54.160		
12,300.00	7,244.07	7,432.97	7,279.84	147.08	39.36	-92.86	360.50	-9,866.86	4,746.84	4,656.44	90.40	52.509		
12,400.00	7,243.69	7,431.09	7,277.97	149.86	39.35	-92.76	360.53	-9,866.88	4,649.47	4,558.05	91.41	50.864		
12,500.00	7,243.31	7,429.23	7,276.11	152.64	39.35	-92.66	360.56	-9,866.90	4,552.21	4,459.73	92.48	49.226		
12,600.00	7,242.93	7,427.39	7,274.27	155.42	39.34	-92.56	360.59	-9,866.92	4,455.07	4,361.47	93.60	47.596		
12,700.00	7,242.55	7,425.57	7,272.45	158.21	39.34	-92.46	360.62	-9,866.94	4,358.06	4,263.27	94.79	45.975		
12,800.00	7,242.17	7,423.77	7,270.65	161.00	39.33	-92.36	360.65	-9,866.96	4,261.19	4,165.14	96.05	44.364		
12,900.00	7,241.79	7,421.98	7,268.86	163.79	39.32	-92.27	360.68	-9,866.98	4,164.47	4,067.08	97.38	42.764		
13,000.00	7,241.41	7,420.21	7,267.09	166.58	39.32	-92.17	360.71	-9,867.00	4,067.90	3,969.11	98.79	41.176		
13,100.00	7,241.03	7,418.45	7,265.33	169.38	39.31	-92.08	360.73	-9,867.02	3,971.50	3,871.22	100.28	39.602		
13,200.00	7,240.65	7,416.71	7,263.59	172.18	39.31	-91.99	360.76	-9,867.04	3,875.29	3,773.42	101.87	38.043		
13,300.00	7,240.27	7,414.99	7,261.87	174.98	39.30	-91.90	360.79	-9,867.06	3,779.27	3,675.73	103.54	36.499		
13,400.00	7,239.89	7,413.28	7,260.16	177.78	39.30	-91.80	360.82	-9,867.08	3,683.46	3,578.14	105.32	34.973		
13,500.00	7,239.51	7,411.59	7,258.47	180.58	39.29	-91.71	360.84	-9,867.09	3,587.88	3,480.67	107.21	33.465		
13,600.00	7,239.13	7,409.91	7,256.80	183.39	39.29	-91.62	360.87	-9,867.11	3,492.55	3,383.33	109.22	31.978		
13,700.00	7,238.75	7,408.25	7,255.13	186.20	39.28	-91.53	360.90	-9,867.13	3,397.48	3,286.13	111.35	30.511		
13,800.00	7,238.37	7,406.61	7,253.49	189.00	39.28	-91.45	360.92	-9,867.15	3,302.71	3,189.09	113.62	29.067		
13,900.00	7,237.99	7,404.97	7,251.86	191.81	39.27	-91.36	360.95	-9,867.16	3,208.25	3,092.21	116.04	27.647		
14,000.00	7,237.62	7,403.50	7,250.38	194.63	39.27	-91.28	360.97	-9,867.18	3,114.14	2,995.52	118.62	26.253		
14,100.00	7,237.24	7,402.24	7,249.12	197.44	39.26	-91.21	360.99	-9,867.19	3,020.41	2,899.03	121.37	24.886		
14,200.00	7,236.86	7,400.97	7,247.85	200.25	39.26	-91.14	361.02	-9,867.21	2,927.08	2,802.78	124.31	23.547		
14,300.00	7,236.48	7,399.69	7,246.58	203.07	39.25	-91.08	361.04	-9,867.22	2,834.22	2,706.77	127.45	22.238		
14,400.00	7,236.10	7,398.40	7,245.29	205.88	39.25	-91.01	361.06	-9,867.23	2,741.85	2,611.05	130.81	20.961		
14,500.00	7,235.72	7,397.11	7,243.99	208.70	39.25	-90.94	361.08	-9,867.25	2,650.04	2,515.64	134.40	19.717		
14,600.00	7,235.34	7,395.80	7,242.68	211.52	39.24	-90.87	361.10	-9,867.26	2,558.85	2,420.59	138.26	18.507		
14,700.00	7,234.96	7,394.48	7,241.36	214.34	39.24	-90.80	361.12	-9,867.27	2,468.33	2,325.93	142.40	17.334		
14,800.00	7,234.58	7,393.15	7,240.03	217.16	39.23	-90.73	361.14	-9,867.29	2,378.57	2,231.74	146.84	16.199		
14,900.00	7,234.20	7,391.81	7,238.70	219.98	39.23	-90.65	361.16	-9,867.30	2,289.66	2,138.05	151.61	15.102		
15,000.00	7,233.82	7,390.46	7,237.35	222.81	39.22	-90.58	361.18	-9,867.32	2,201.71	2,044.96	156.74	14.047		
15,100.00	7,233.44	7,389.10	7,235.99	225.63	39.22	-90.51	361.21	-9,867.33	2,114.82	1,952.55	162.26	13.033		
15,200.00	7,233.06	7,387.73	7,234.62	228.45	39.22	-90.43	361.23	-9,867.35	2,029.14	1,860.93	168.21	12.063		
15,216.01	7,233.00	7,387.51	7,234.39	228.91	39.22	-90.42	361.23	-9,867.35	2,015.54	1,846.34	169.20	11.912 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 30C-16-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4822.00ft (Original Well Elev)
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4822.00ft (Original Well Elev)
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 30C-16-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 @ 4822.00ft (Original Well Elev)
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.5000000

Coordinates are relative to: HARVESTERS STATE 30C-16-M
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.48°

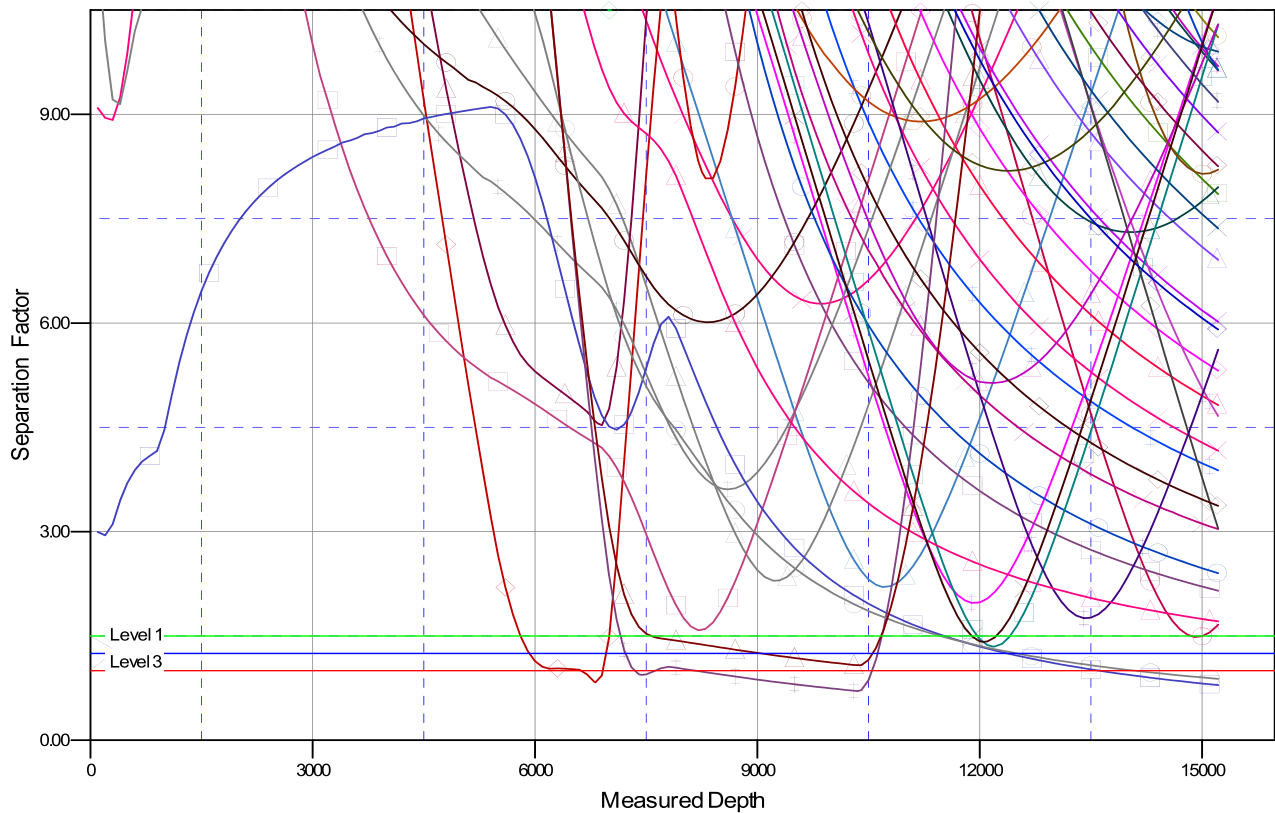


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 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.48°

Separation Factor Plot



LEGEND

FRITZLER-8-17(PR_1500Q,OH,OHV0)	STOCKOVER-6-1(PR_750Q,OH,OHV0)	HARVESTERS STATE 30N-16B-M,OH,PLAN#1V0
LEIFLER-21-2(SL_750Q,OH,OHV0)	HARVESTERS-2-15(SL_150Q,OH,OHV0)	FRITZLER-7-32-12(PR_150Q,OH,OHV0)
LOVELY-149(AE_1500Q,OH,OHV0)	HARVESTERS STATE 32N-16GM,OH,PLAN#1V0	MAURZELF-1(AE_150Q,OH,OHV0)
HARVESTERS-RESOURCES15R403(PR_150Q,OH,OHV0)	STATE-HOPE-16-2(PR_160M,OH,OHV0)	STATE-HOPE-16-3(PR_150Q,OH,OHV0)
BURBACH-15-23(SL_150Q,OH,OHV0)	HARVESTERS STATE 5N-16BM,OH,PLAN#1V0	MOGLOTH-17-11(PR_750Q,OH,OHV0)
HARVESTERS STATE 13C-16M,OH,PLAN#1V0	FRITZLER-17(PR_150Q,OH,OHV0)	HARVESTERS STATE 33N-16BM,OH,PLAN#1V0
LUCAS-SCHOOL 1(TA_150Q,OH,OHV0)	HARVESTERS STATE 32C-16M2,OH,PLAN#1V0	RUIT-ADAMS-HERS-2-22,OH,OHV0
HARVESTERS STATE 32N-16BM,OH,PLAN#1V0	HODD-220(PR_150Q,OH,OHV0)	LOVELY-1AB_150Q,OH,OHV0
HARVESTERS STATE 5N-16GM,OH,PLAN#1V0	LEIFLER-20N-23B-L(SRCP,PLAN_750Q,OH,PLAN#1V0)	STATE-BATTS-32-16(PR_750Q,OH,OHV0)
LUCAS-SCHOOL 34-9(TA_150Q,OH,OHV0)	FRITZLER-7-23-18(PR_150Q,OH,OHV0)	HARVESTERS STATE 12N-16BM,OH,PLAN#1V0
FRITZLER-1-21(PR_150Q,OH,OHV0)	MOGLOTH-16-6-17(PR_150Q,OH,OHV0)	HARVESTERS STATE 4N-16GM,OH,PLAN#1V0
HARVESTERS STATE 12N-16AM,OH,PLAN#1V0	DONN-ON-20B-L(SRCP,PLAN_750Q,OH,PLAN#1V0)	FALKEN-9C-L(SRCP,PLAN_750Q,OH,PLAN#1V0)
BLACKGOLD-AB_150Q,OH,OHV0	FRITZLER-7-42-11(PR_150Q,OH,OHV0)	BURMAN-16-42(PR_750Q,OH,OHV0)
FRITZLER-1-21-4(PR_150Q,OH,OHV0)	HARVESTERS STATE 34C-16M,OH,PLAN#1V0	HARVESTERS STATE 4C-16-M,OH,PLAN#1V0
LEIFLER-23C-23-L(SRCP,PLAN_750Q,OH,PLAN#1V0)	HARVESTERS STATE 13N-16BM,OH,PLAN#1V0	DONN-ON-20A-L(SRCP,PLAN_750Q,OH,PLAN#1V0)
HARVESTERS-RESOURCES15M403(PR_150Q,OH,OHV0)	STATE-HOPE-16-1(CS_750Q,OH,OHV0)	FALKEN-9C-L(SRCP,PLAN_750Q,OH,PLAN#1V0)
ULRICH-17-07(PR_750Q,OH,OHV0)	GRIELEY-SW-100X,OH,OHV0	HODD-41-2(PR_150Q,OH,OHV0)
MONTERA-10-34(PR_750Q,OH,OHV0)	HARVESTERS STATE 31N-16BM,OH,PLAN#1V0	FRITZLER-84-17(PR_150Q,OH,OHV0)
BURMAN-16-43(PR_750Q,OH,OHV0)	HARVESTERS STATE 31C-16M,OH,PLAN#1V0	HARVESTERS STATE 34N-16GM,OH,PLAN#1V0
BURBACH-15-22(SL_150Q,OH,OHV0)	HARVESTERS-RESOURCES15R423(PR_150Q,OH,OHV0)	BLACKGOLD-PETROLEUM 1(PR_150Q,OH,OHV0)
HARVESTERS STATE 12N-16GM,OH,PLAN#1V0	FRITZLER-6-17(PR_150Q,OH,OHV0)	HARVESTERS STATE 32C-16M,OH,PLAN#1V0
HARVESTERS-RESOURCES15M423(PR_150Q,OH,OHV0)	LEIFLER-14M-1-2(PA_750Q,OH,OHV0)	HARVESTERS STATE 33C-16M,OH,PLAN#1V0
SENA-15-24(PR_750Q,OH,OHV0)	HARVESTERS-11-15(SL_150Q,OH,OHV0)	HARVESTERS STATE 33N-16GM,OH,PLAN#1V0
FRITZLER-8-17(PR_150Q,OH,OHV0)	ULRICH-17-08(PR_750Q,OH,OHV0)	FRITZLER-3-17(PR_150Q,OH,OHV0)
FRITZLER-8-17(PR_150Q,OH,OHV0)	FRITZLER-8-17(PR_150Q,OH,OHV0)	BERRY-23-2(PR_750Q,OH,OHV0)