



SRC ENERGY

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

**OH
PLAN #1**

Anticollision Report

03 October, 2017





Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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	10/3/2017		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	15,491.55	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
HARVESTERS STATE 7-15 PAD						
BERG 33-15 (AB_150CC) - OH - OH	3,868.20	3,585.01	401.39	363.02	10.460	CC
BERG 33-15 (AB_150CC) - OH - OH	3,900.00	3,614.06	401.60	362.90	10.378	ES
BERG 33-15 (AB_150CC) - OH - OH	4,100.00	3,797.63	411.97	371.41	10.157	SF
BERRY 22-2(PR_75CC) - OH - OH	7,488.44	6,851.11	1,470.03	1,400.26	21.070	CC
BERRY 22-2(PR_75CC) - OH - OH	7,500.00	6,859.49	1,470.12	1,400.20	21.026	ES
BERRY 22-2(PR_75CC) - OH - OH	7,700.00	6,978.07	1,500.59	1,428.05	20.688	SF
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	7,494.76	6,963.12	1,488.79	1,418.63	21.222	CC
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	7,500.00	6,967.23	1,488.80	1,418.59	21.203	ES
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	7,700.00	7,110.96	1,516.64	1,443.91	20.853	SF
BLACKGOLD 3(AB_150CC) - OH - OH	0.00	24.91	2,920.06			
BLACKGOLD 3(AB_150CC) - OH - OH	100.00	122.82	2,920.08	2,913.50	443.816	ES
BLACKGOLD 3(AB_150CC) - OH - OH	12,300.00	7,144.88	6,647.74	6,504.22	46.321	SF
BURBACH 15-22(SI_150CC) - OH - OH	200.00	181.00	2,506.21	2,497.25	279.559	CC
BURBACH 15-22(SI_150CC) - OH - OH	400.00	380.84	2,509.41	2,493.81	160.907	ES
BURBACH 15-22(SI_150CC) - OH - OH	10,500.00	7,112.01	4,238.33	3,904.34	12.690	SF
BURBACH 15-23(SI_150CC) - OH - OH	1,295.09	1,234.62	2,526.07	2,477.82	52.350	CC
BURBACH 15-23(SI_150CC) - OH - OH	9,900.00	7,100.26	2,778.00	2,455.70	8.619	ES
BURBACH 15-23(SI_150CC) - OH - OH	10,300.00	7,101.91	2,815.69	2,485.28	8.522	SF
BURMAN 16-42(PR_75CC) - OH - OH	12,104.84	7,077.33	1,621.51	1,241.53	4.267	CC, ES
BURMAN 16-42(PR_75CC) - OH - OH	12,200.00	7,076.81	1,624.30	1,242.46	4.254	SF
BURMAN 16-43(PR_75CC) - OH - OH	12,119.52	7,074.25	120.63	-259.64	0.317	Level 1, CC, ES, SF
DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN	10,469.26	7,326.78	442.22	322.31	3.688	CC
DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN	15,491.56	12,359.07	571.75	178.28	1.453	Level 3, ES, SF
DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN	10,426.35	7,398.23	600.06	474.45	4.777	CC
DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN	15,491.56	12,452.16	688.90	279.11	1.681	ES, SF
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	5,667.63	15,910.01	4,854.82	4,591.08	18.408	CC
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	5,800.00	15,913.17	4,856.62	4,589.78	18.201	ES
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	11,400.00	19,118.26	5,362.30	4,909.86	11.852	SF
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	5,636.38	15,862.36	4,663.06	4,398.48	17.624	CC
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	5,700.00	15,864.19	4,663.49	4,397.34	17.522	ES
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	11,400.00	19,018.34	5,163.22	4,712.60	11.458	SF
FRITZLER 11-21-4(PR_150CC) - OH - OH	14,387.62	7,131.91	367.75	136.35	1.589	CC
FRITZLER 11-21-4(PR_150CC) - OH - OH	14,400.00	7,132.26	367.96	135.89	1.586	ES, SF
FRITZLER 11-21(PR_150CC) - OH - OH	14,985.55	7,040.74	1,034.88	575.96	2.255	CC
FRITZLER 11-21(PR_150CC) - OH - OH	15,000.00	7,040.66	1,034.98	575.55	2.253	ES, SF
FRITZLER 1-17(PR_150CC) - OH - OH	15,491.56	7,053.00	838.36	494.75	2.440	CC, ES, SF
FRITZLER 17-23-18(PR_150CC) - OH - OH	15,491.56	7,409.22	2,971.26	2,845.37	23.603	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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 17-32-12(PR_150CC) - OH - OH	15,491.56	7,462.98	2,678.01	2,443.14	11.402	CC, ES, SF
FRITZLER 17-42-11(PR_150CC) - OH - MWD	15,491.56	7,429.11	2,265.82	1,999.00	8.492	CC, ES, SF
FRITZLER 34-17(PR_150CC) - OH - OH	15,491.56	7,201.34	2,088.32	1,996.01	22.622	CC, ES, SF
FRITZLER 43-17(PR_150CC) - OH - OH	15,491.56	7,195.46	1,816.05	1,572.44	7.455	CC, ES, SF
FRITZLER 6-6-17 (PR_150CC) - OH - OH	15,491.56	7,075.02	1,754.34	1,587.21	10.497	CC, ES, SF
FRITZLER 6-8-17(PR_150CC) - OH - OH	15,491.56	7,147.40	1,479.82	1,384.08	15.457	CC, ES, SF
FRITZLER 8-8-17(PR_150CC) - OH - OH	15,491.56	7,139.93	411.55	177.84	1.761	CC, ES, SF
GREELEY SWD #1(XX) - OH - OH	10,688.19	7,066.99	95.69	-245.81	0.280	Level 1, CC, SF
GREELEY SWD #1(XX) - OH - OH	10,700.00	7,066.93	96.41	-245.90	0.282	Level 1, ES
HARVESTER 31-15(SI_150CC) - OH - OH	0.00	0.00	1,388.02			
HARVESTER 31-15(SI_150CC) - OH - OH	10,400.00	7,341.08	5,442.65	5,341.54	53.828	SF
HARVESTER 32-15(SI_150CC) - OH - OH	100.00	77.20	577.89	571.32	87.966	CC, ES
HARVESTER 32-15(SI_150CC) - OH - OH	7,100.00	6,550.83	2,898.81	2,835.25	45.611	SF
HARVESTER STATE 30C-16-M - OH - PLAN #1	200.00	203.00	499.84	493.16	74.866	CC, ES
HARVESTER STATE 30C-16-M - OH - PLAN #1	15,491.56	15,216.01	4,822.87	4,365.01	10.534	SF
HARVESTER STATE 30C-16B-M - OH - PLAN #1	200.00	203.00	480.17	473.50	71.920	CC, ES
HARVESTER STATE 30N-16B-M - OH - PLAN #1	15,491.56	14,942.37	4,602.61	4,144.87	10.055	SF
HARVESTER STATE 31C-16-M - OH - PLAN #1	200.00	202.00	400.02	393.34	59.922	CC, ES
HARVESTER STATE 31C-16-M - OH - PLAN #1	15,491.56	14,997.24	3,723.32	3,265.84	8.139	SF
HARVESTER STATE 33C-16-M - OH - PLAN #1	989.63	1,017.83	96.37	85.53	8.889	CC
HARVESTER STATE 33C-16-M - OH - PLAN #1	1,000.00	1,028.21	96.39	85.47	8.829	ES
HARVESTER STATE 33C-16-M - OH - PLAN #1	15,491.56	15,258.04	1,056.15	598.89	2.310	SF
HARVESTER STATE 34C-16-M - OH - PLAN #1	1,406.84	1,398.71	18.55	4.43	1.314	Level 3, CC
HARVESTER STATE 34C-16-M - OH - PLAN #1	15,491.56	15,791.96	236.06	-172.28	0.578	Level 1, ES, SF
HARVESTER STATE 5C-16-M - OH - PLAN #1	200.00	202.00	359.94	353.27	53.919	CC, ES
HARVESTER STATE 5C-16-M - OH - PLAN #1	15,491.56	14,987.41	3,283.40	2,826.06	7.179	SF
HARVESTER STATE 12N-16B-M - OH - PLAN #1	846.17	878.42	136.46	126.65	13.917	CC, ES
HARVESTER STATE 12N-16B-M - OH - PLAN #1	15,491.56	14,979.18	1,471.47	1,015.22	3.225	SF
HARVESTER STATE 13C-16-M - OH - PLAN #1	1,230.72	1,244.81	37.63	24.93	2.962	CC
HARVESTER STATE 13C-16-M - OH - PLAN #1	15,491.56	15,437.48	432.73	-17.96	0.960	Level 1, ES, SF
HARVESTER STATE 33N-16C-M - OH - PLAN #1	1,164.30	1,184.14	56.91	44.73	4.672	CC
HARVESTER STATE 33N-16C-M - OH - PLAN #1	1,200.00	1,219.84	57.13	44.67	4.582	ES
HARVESTER STATE 33C-16C-M - OH - PLAN #1	15,486.80	15,278.33	631.30	173.54	1.379	Level 3, SF
HARVESTER STATE 4C-16-M - OH - PLAN #1	200.00	203.00	460.13	456.17	116.065	CC, ES
HARVESTER STATE 4C-16-M - OH - PLAN #1	15,491.56	15,116.21	4,418.70	3,961.09	9.656	SF
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	7,612.68	11,587.00	250.59	148.97	2.466	CC
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	7,700.00	11,587.00	269.71	146.70	2.193	ES, SF
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	7,477.97	11,662.00	542.88	418.16	4.353	CC
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	7,500.00	11,662.00	543.69	416.17	4.263	ES
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	7,600.00	11,662.00	567.04	429.24	4.115	SF
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	7,348.37	11,562.37	815.86	678.08	5.921	CC, ES
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	7,500.00	11,565.00	846.90	701.08	5.808	SF
HARVESTERS RESOURCES 15R-403(PR_150CC) - OH	7,313.93	11,654.27	1,240.63	1,099.27	8.776	CC, ES
HARVESTERS RESOURCES 15R-403(PR_150CC) - OH	7,400.00	11,686.35	1,248.93	1,104.05	8.620	SF
HARVESTERS STATE 12N-16A-M - OH - PLAN #1	942.09	973.75	115.92	105.42	11.042	CC, ES
HARVESTERS STATE 12N-16A-M - OH - PLAN #1	15,491.56	14,915.55	1,274.46	823.63	2.827	SF
HARVESTERS STATE 12N-16C-M - OH - PLAN #1	723.28	753.31	157.43	148.45	17.531	CC, ES
HARVESTERS STATE 12N-16C-M - OH - PLAN #1	15,491.56	15,000.73	1,679.47	1,222.59	3.676	SF
HARVESTERS STATE 13N-16B-M - OH - PLAN #1	1,339.44	1,347.20	18.56	4.96	1.365	Level 3, CC
HARVESTERS STATE 13N-16B-M - OH - PLAN #1	15,491.56	15,346.22	217.78	-221.63	0.496	Level 1, ES, SF
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	200.00	202.00	379.99	373.31	56.921	CC, ES
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	15,491.56	14,817.75	3,507.50	3,050.96	7.683	SF
HARVESTERS STATE 32C-16-M - OH - PLAN #1	667.64	702.13	177.74	169.10	20.557	CC, ES

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 @ 4819.00ft
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Reference Well:	HARVESTERS STATE 34N-16C-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 32C-16-M - OH - PLAN #1	15,491.56	15,081.89	1,893.17	1,396.56	3.812	SF
HARVESTERS STATE 32C-16-M2 - OH - PLAN #1	200.00	202.00	299.83	293.16	44.914	CC, ES
HARVESTERS STATE 32C-16-M2 - OH - PLAN #1	15,491.56	15,002.44	2,622.35	2,165.15	5.736	SF
HARVESTERS STATE 32N-16B-M - OH - PLAN #1	200.00	201.00	200.01	193.34	29.965	CC, ES
HARVESTERS STATE 32N-16B-M - OH - PLAN #1	15,491.56	14,871.88	2,090.84	1,634.55	4.582	SF
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	200.00	202.00	280.17	273.49	41.968	CC, ES
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	15,491.56	14,909.96	2,402.28	1,945.35	5.257	SF
HARVESTERS STATE 33N-16B-M - OH - PLAN #1	1,092.16	1,117.66	76.23	64.61	6.557	CC
HARVESTERS STATE 33N-16B-M - OH - PLAN #1	1,100.00	1,125.50	76.24	64.56	6.524	ES
HARVESTERS STATE 33N-16B-M - OH - PLAN #1	15,482.27	15,147.37	839.95	384.41	1.844	SF
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	200.00	202.00	420.06	413.38	62.923	CC, ES
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	15,491.56	14,732.12	3,947.21	3,490.54	8.643	SF
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	200.00	202.00	440.10	433.42	65.926	CC, ES
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	15,491.56	14,969.16	4,063.26	3,606.30	8.892	SF
HARVESTERS STATE 5N-16B-M - OH - PLAN #1	200.00	202.00	319.88	313.20	47.917	CC, ES
HARVESTERS STATE 5N-16B-M - OH - PLAN #1	15,491.56	14,805.04	2,943.35	2,486.62	6.444	SF
HARVESTERS STATE 5N-16C-M - OH - PLAN #1	200.00	202.00	339.91	333.23	50.917	CC, ES
HARVESTERS STATE 5N-16C-M - OH - PLAN #1	15,491.56	14,872.41	3,062.38	2,605.54	6.703	SF
HOOD 41-20(PR_150CC) - OH - OH	15,491.56	7,045.00	1,337.66	916.12	3.173	CC, ES, SF
HOOD 6-2-20(PR_150CC) - OH - OH	15,491.56	7,469.82	2,186.43	1,974.54	10.318	CC, ES, SF
LEFFLER 1 21-2(SI_75CC) - OH - OH	12,335.16	7,047.82	1,007.20	836.01	5.883	CC, ES
LEFFLER 1 21-2(SI_75CC) - OH - OH	12,500.00	7,056.89	1,020.56	845.15	5.818	SF
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	8,000.00	9,999.21	691.84	557.89	5.165	SF
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	8,100.00	9,900.43	687.54	555.47	5.206	ES
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	10,280.65	7,720.04	684.01	563.28	5.666	CC
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	7,900.00	9,960.19	428.16	288.58	3.067	SF
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	10,273.38	7,593.64	400.25	277.89	3.271	CC
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	10,300.00	7,572.70	400.44	277.54	3.258	ES
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,668.62	7,049.86	1,222.60	800.28	2.895	CC
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,700.00	7,049.69	1,223.00	799.63	2.889	ES
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,800.00	7,049.15	1,229.64	803.68	2.887	SF
LOVELY 1(AB_150CC) - OH - OH	13,641.08	7,102.99	5,576.39	5,152.98	13.170	CC
LOVELY 1(AB_150CC) - OH - OH	13,800.00	7,103.85	5,578.65	5,151.10	13.048	ES
LOVELY 1(AB_150CC) - OH - OH	14,900.00	7,109.80	5,716.72	5,264.70	12.647	SF
LOVELY 14-9(AB_150CC) - OH - OH	15,137.72	7,108.09	5,520.04	5,054.49	11.857	CC
LOVELY 14-9(AB_150CC) - OH - OH	15,300.00	7,108.96	5,522.43	5,052.63	11.755	ES
LOVELY 14-9(AB_150CC) - OH - OH	15,491.56	7,110.00	5,531.37	5,056.81	11.656	SF
LUCAS SCHOOL 1(TA_150CC) - OH - OH	200.00	203.00	4,556.41	4,546.80	474.380	CC
LUCAS SCHOOL 1(TA_150CC) - OH - OH	400.00	402.84	4,560.33	4,543.99	279.152	ES
LUCAS SCHOOL 1(TA_150CC) - OH - OH	12,600.00	7,122.65	5,859.06	5,472.04	15.139	SF
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	200.00	163.00	5,558.19	5,549.73	656.427	CC
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	12,300.00	7,084.27	5,591.65	5,206.41	14.515	ES
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	13,600.00	7,077.24	5,779.59	5,365.85	13.969	SF
MAURICE LEFFLER 1(AB_150CC) - OH - OH	13,688.13	4,452.00	2,792.20	2,636.56	17.939	CC
MAURICE LEFFLER 1(AB_150CC) - OH - OH	13,700.00	4,452.00	2,792.23	2,636.40	17.919	ES
MAURICE LEFFLER 1(AB_150CC) - OH - OH	15,100.00	4,452.00	3,128.86	2,933.39	16.006	SF
MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH	15,491.56	7,151.12	1,014.06	755.29	3.919	CC, ES, SF
MCGLOTHLIN 17-11(PR_75CC) - OH - OH	15,491.56	7,076.00	4,502.38	4,030.97	9.551	CC, ES, SF
MONTERA 10-34 (PR_75CC) - OH - OH	225.54	263.42	2,566.01	2,559.25	379.336	CC, ES
MONTERA 10-34 (PR_75CC) - OH - OH	11,900.00	7,247.59	7,166.19	7,037.81	55.820	SF
RUTT-ADAMS HEIRS 2-22 - OH - OH	8,368.62	7,084.54	1,022.85	732.87	3.527	CC
RUTT-ADAMS HEIRS 2-22 - OH - OH	8,400.00	7,084.37	1,023.33	732.73	3.521	ES, SF
SENA 15-21(PR_75CC) - OH - OH	200.00	203.00	1,920.39	1,910.79	199.937	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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
HARVESTERS STATE 7-15 PAD						
SENA 15-21(PR_75CC) - OH - OH	300.00	303.02	1,921.72	1,908.86	149.411	ES
SENA 15-21(PR_75CC) - OH - OH	9,700.00	7,132.34	4,542.87	4,227.90	14.423	SF
SENA 15-24(PR_75CC) - OH - OH	200.00	183.00	1,124.23	1,115.21	124.613	CC
SENA 15-24(PR_75CC) - OH - OH	800.00	778.62	1,135.17	1,104.89	37.484	ES
SENA 15-24(PR_75CC) - OH - OH	8,900.00	7,122.67	3,103.99	2,804.76	10.373	SF
SENA 15-25(PR_75CC) - OH - OH	200.00	210.00	1,735.75	1,725.94	176.856	CC
SENA 15-25(PR_75CC) - OH - OH	400.00	389.84	1,739.08	1,723.19	109.390	ES
SENA 15-25(PR_75CC) - OH - OH	9,600.00	7,125.88	3,836.73	3,523.20	12.237	SF
STATE 1(AB_150CC) - OH - OH	12,281.47	7,074.37	4,275.86	3,891.15	11.114	CC
STATE 1(AB_150CC) - OH - OH	12,400.00	7,073.73	4,277.51	3,889.84	11.034	ES
STATE 1(AB_150CC) - OH - OH	13,100.00	7,069.94	4,353.50	3,950.62	10.806	SF
STATE BEATRICE 16-1(AB_150CC) - OH - OH	12,411.23	7,075.67	4,297.42	3,909.08	11.066	CC
STATE BEATRICE 16-1(AB_150CC) - OH - OH	12,500.00	7,075.19	4,298.33	3,907.78	11.006	ES
STATE BEATRICE 16-1(AB_150CC) - OH - OH	13,300.00	7,070.86	4,388.36	3,980.56	10.761	SF
STATE BEATRICE 32-16(PR_75CC) - OH - OH	12,217.14	7,069.72	2,824.42	2,441.63	7.379	CC
STATE BEATRICE 32-16(PR_75CC) - OH - OH	12,300.00	7,069.27	2,825.63	2,440.90	7.344	ES
STATE BEATRICE 32-16(PR_75CC) - OH - OH	12,600.00	7,067.65	2,850.25	2,459.38	7.292	SF
STATE-HOPPE 16-1(SI_75CC) - OH - OH	14,970.80	7,051.82	133.02	-325.88	0.290	Level 1, CC, ES, SF
STATE-HOPPE 16-2(PR_75CC) - OH - OH	13,826.43	7,071.01	1,618.18	1,190.71	3.786	CC, ES
STATE-HOPPE 16-2(PR_75CC) - OH - OH	13,900.00	7,070.61	1,619.85	1,190.92	3.777	SF
STATE-HOPPE 16-3(PR_150CC) - OH - OH	15,030.17	7,081.37	2,781.11	2,534.73	11.288	CC
STATE-HOPPE 16-3(PR_150CC) - OH - OH	15,100.00	7,082.46	2,781.98	2,533.92	11.215	ES
STATE-HOPPE 16-3(PR_150CC) - OH - OH	15,491.56	7,088.58	2,819.11	2,564.08	11.054	SF
STOCKOVER 16-1(PR_75CC) - OH - OH	10,874.65	7,068.98	1,646.49	1,300.01	4.752	CC
STOCKOVER 16-1(PR_75CC) - OH - OH	10,900.00	7,068.84	1,646.68	1,299.69	4.746	ES
STOCKOVER 16-1(PR_75CC) - OH - OH	11,000.00	7,068.30	1,651.25	1,302.38	4.733	SF
ULRICH PC I 17-07D(PR_75CC) - OH - OH	15,491.56	7,232.45	3,555.58	3,326.10	15.494	CC, ES, SF
ULRICH PC I 17-08(PR_75CC) - OH - OH	15,491.56	7,067.00	3,096.33	2,630.15	6.642	CC, ES, SF
ULRICH PC I17-17D(PR_75CC) - OH - OH	15,491.56	7,342.70	4,106.12	3,859.85	16.673	CC, ES, SF

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH														
Reference Measured Depth (ft)	Vertical Depth (ft)	Offset Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance			Separation Factor	Warning	
				Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)			
0.00	0.00	0.00	36.00	3.28	3.28	164.36	-1,260.14	352.70	1,309.06					
100.00	100.00	61.29	97.29	3.28	3.28	164.36	-1,260.20	352.71	1,308.63	1,302.06	6.57	199.263		
200.00	200.00	160.09	196.09	3.34	3.31	164.37	-1,260.52	352.68	1,308.93	1,302.28	6.65	196.805		
300.00	299.98	262.16	298.15	3.44	3.40	-18.79	-1,260.83	352.48	1,307.52	1,300.67	6.84	191.055		
400.00	399.84	362.62	398.62	3.59	3.54	-18.89	-1,260.94	352.40	1,302.65	1,295.51	7.13	182.580		
500.00	499.45	461.90	497.90	3.79	3.73	-19.07	-1,261.04	352.43	1,294.51	1,287.00	7.52	172.227		
600.00	598.70	557.95	593.95	4.03	3.94	-19.32	-1,261.20	352.56	1,283.19	1,275.22	7.97	161.002		
700.00	697.47	654.37	690.37	4.31	4.18	-19.64	-1,261.69	352.66	1,268.93	1,260.44	8.49	149.435		
800.00	795.62	754.70	790.70	4.64	4.46	-20.05	-1,262.28	352.51	1,251.46	1,242.38	9.08	137.805		
900.00	893.06	854.82	890.82	5.00	4.76	-20.53	-1,262.71	351.97	1,230.55	1,220.83	9.72	126.598		
1,000.00	989.64	952.96	988.95	5.40	5.07	-21.12	-1,262.99	351.47	1,206.38	1,195.98	10.39	116.056		
1,100.00	1,085.27	1,047.67	1,083.66	5.83	5.39	-21.80	-1,263.24	350.81	1,179.06	1,167.96	11.09	106.270		
1,200.00	1,179.82	1,140.70	1,176.69	6.29	5.71	-22.59	-1,263.66	350.26	1,148.92	1,137.09	11.82	97.188		
1,300.00	1,273.17	1,234.53	1,270.51	6.79	6.04	-23.54	-1,264.11	349.65	1,115.85	1,103.27	12.58	88.705		
1,400.00	1,365.21	1,327.37	1,363.35	7.33	6.38	-24.63	-1,264.59	348.92	1,079.93	1,066.57	13.36	80.836		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)			
1,500.00	1,456.49	1,420.84	1,456.81	7.89	6.73	-25.55	-1,264.94	348.16	1,042.44	1,028.28	14.16	73.623		
1,600.00	1,547.76	1,514.23	1,550.20	8.46	7.08	-26.52	-1,265.04	347.51	1,004.99	990.01	14.97	67.124		
1,700.00	1,639.04	1,607.10	1,643.07	9.05	7.44	-27.55	-1,265.08	346.61	967.64	951.84	15.80	61.233		
1,800.00	1,730.31	1,695.99	1,731.95	9.65	7.78	-28.60	-1,265.19	345.69	930.64	913.99	16.64	55.920		
1,900.00	1,821.58	1,786.17	1,822.13	10.26	8.13	-29.76	-1,265.45	344.85	894.12	876.62	17.50	51.083		
2,000.00	1,912.85	1,877.85	1,913.80	10.87	8.49	-31.02	-1,265.79	343.97	858.03	839.64	18.38	46.673		
2,100.00	2,004.13	1,968.66	2,004.61	11.49	8.85	-32.37	-1,266.16	343.01	822.34	803.06	19.28	42.652		
2,200.00	2,095.40	2,059.82	2,095.76	12.11	9.22	-33.83	-1,266.69	341.92	787.18	766.99	20.19	38.982		
2,300.00	2,186.67	2,150.42	2,186.36	12.74	9.58	-35.42	-1,267.16	341.01	752.59	731.47	21.12	35.626		
2,400.00	2,277.95	2,241.06	2,276.99	13.38	9.95	-37.17	-1,267.64	340.40	718.76	696.68	22.08	32.559		
2,500.00	2,369.22	2,333.66	2,369.58	14.01	10.32	-39.11	-1,268.22	339.65	685.63	662.58	23.05	29.749		
2,600.00	2,460.49	2,426.96	2,462.88	14.65	10.70	-41.25	-1,268.56	338.73	653.01	628.97	24.04	27.164		
2,700.00	2,551.77	2,517.91	2,553.82	15.29	11.08	-43.57	-1,268.70	338.02	621.29	596.23	25.06	24.795		
2,800.00	2,643.04	2,609.26	2,645.18	15.93	11.45	-46.15	-1,268.71	337.49	590.69	564.59	26.10	22.630		
2,900.00	2,734.31	2,699.30	2,735.22	16.58	11.82	-48.93	-1,268.83	337.03	561.50	534.32	27.18	20.661		
3,000.00	2,825.58	2,790.65	2,826.57	17.23	12.20	-52.00	-1,269.09	336.54	533.92	505.64	28.28	18.879		
3,100.00	2,916.86	2,882.01	2,917.92	17.87	12.58	-55.38	-1,269.32	336.09	508.08	478.67	29.41	17.273		
3,200.00	3,008.13	2,973.08	3,008.99	18.52	12.95	-59.05	-1,269.52	335.70	484.31	453.74	30.58	15.838		
3,300.00	3,099.40	3,064.25	3,100.16	19.17	13.33	-63.02	-1,269.91	335.25	462.94	431.18	31.77	14.574		
3,400.00	3,190.68	3,155.07	3,190.97	19.83	13.71	-67.28	-1,270.37	334.84	444.30	411.34	32.97	13.476		
3,500.00	3,281.95	3,247.33	3,283.24	20.48	14.09	-71.95	-1,270.55	334.67	428.79	394.61	34.18	12.546		
3,600.00	3,373.22	3,340.27	3,376.17	21.13	14.48	-76.94	-1,270.42	334.15	416.25	380.87	35.38	11.766		
3,700.00	3,464.49	3,431.68	3,467.58	21.79	14.86	-82.11	-1,269.98	333.57	407.33	370.79	36.54	11.147		
3,800.00	3,555.77	3,523.07	3,558.97	22.44	15.24	-87.40	-1,269.73	332.88	402.38	364.72	37.66	10.685		
3,868.20	3,618.02	3,585.01	3,620.90	22.89	15.50	-91.01	-1,269.71	332.41	401.39	363.02	38.38	10.460 CC		
3,900.00	3,647.04	3,614.06	3,649.96	23.10	15.62	-92.70	-1,269.75	332.20	401.60	362.90	38.70	10.378 ES		
4,000.00	3,738.31	3,706.26	3,742.15	23.75	16.01	-97.97	-1,270.29	331.47	404.86	365.19	39.67	10.206		
4,100.00	3,829.59	3,797.63	3,833.51	24.41	16.40	-103.04	-1,271.13	330.72	411.97	371.41	40.56	10.157 SF		
4,200.00	3,920.86	3,888.39	3,924.27	25.07	16.78	-107.91	-1,271.83	330.06	422.87	381.50	41.38	10.220		
4,300.00	4,012.13	3,980.08	4,015.96	25.73	17.16	-112.61	-1,272.32	329.42	437.31	395.17	42.14	10.377		
4,400.00	4,103.41	4,071.93	4,107.81	26.38	17.55	-117.04	-1,272.79	328.70	454.82	411.95	42.87	10.609		
4,500.00	4,194.68	4,162.37	4,198.24	27.04	17.93	-121.10	-1,273.21	328.00	475.13	431.58	43.55	10.909		
4,600.00	4,285.95	4,252.36	4,288.23	27.70	18.31	-124.86	-1,273.30	327.43	498.20	453.99	44.21	11.268		
4,700.00	4,377.22	4,342.75	4,378.61	28.36	18.69	-128.40	-1,272.72	326.63	523.67	478.80	44.87	11.672		
4,800.00	4,468.50	4,434.22	4,470.08	29.02	19.08	-131.66	-1,272.19	325.89	551.08	505.54	45.54	12.101		
4,900.00	4,559.77	4,525.16	4,561.01	29.68	19.46	-134.63	-1,271.64	324.99	580.05	533.84	46.21	12.552		
5,000.00	4,651.04	4,612.76	4,648.60	30.34	19.83	-137.29	-1,270.58	324.00	610.75	563.91	46.85	13.038		
5,100.00	4,742.32	4,698.22	4,734.04	31.00	20.19	-139.62	-1,269.40	323.78	643.37	595.91	47.46	13.556		
5,200.00	4,833.59	4,796.58	4,832.40	31.66	20.60	-142.05	-1,268.20	323.47	676.88	628.59	48.29	14.016		
5,300.00	4,924.86	4,897.55	4,933.36	32.32	21.03	-144.32	-1,267.83	322.15	710.14	660.96	49.17	14.441		
5,400.00	5,016.13	4,983.76	5,019.57	32.99	21.39	-146.02	-1,268.28	321.53	743.81	693.95	49.86	14.918		
5,500.00	5,107.41	5,067.89	5,103.69	33.65	21.75	-147.52	-1,268.42	321.72	778.87	728.34	50.53	15.414		
5,600.00	5,198.68	5,152.29	5,188.09	34.31	22.10	-148.93	-1,267.66	321.98	815.32	764.11	51.20	15.923		
5,700.00	5,289.95	5,239.26	5,275.05	34.97	22.46	-150.28	-1,266.40	322.57	852.85	800.92	51.93	16.423		
5,800.00	5,381.23	5,330.44	5,366.22	35.63	22.85	-151.56	-1,265.03	323.45	890.97	838.23	52.74	16.895		
5,900.00	5,472.50	5,427.64	5,463.40	36.30	23.25	-152.77	-1,264.20	324.80	929.11	875.47	53.65	17.319		
6,000.00	5,563.77	5,525.66	5,561.41	36.96	23.67	-153.89	-1,264.22	325.68	966.63	912.05	54.58	17.712		
6,100.00	5,655.05	5,610.07	5,645.83	37.62	24.02	-154.80	-1,263.98	326.35	1,004.62	949.31	55.31	18.165		
6,200.00	5,746.32	5,698.87	5,734.62	38.28	24.39	-155.67	-1,263.50	327.44	1,043.23	987.12	56.11	18.593		
6,300.00	5,837.59	5,798.45	5,834.19	38.95	24.81	-156.61	-1,263.04	328.15	1,081.79	1,024.72	57.07	18.954		
6,400.00	5,928.86	5,887.68	5,923.42	39.61	25.19	-157.41	-1,262.72	328.29	1,120.26	1,062.37	57.89	19.352		
6,500.00	6,020.14	5,973.42	6,009.16	40.27	25.55	-158.10	-1,262.47	329.22	1,159.19	1,100.53	58.66	19.760		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
6,600.00	6,111.41	6,069.43	6,105.14	40.94	25.96	-158.77	-1,262.39	331.18	1,198.44	1,138.85	59.59	20.110		
6,700.00	6,202.68	6,162.34	6,198.03	41.60	26.35	-159.37	-1,262.76	332.91	1,237.34	1,176.85	60.48	20.457		
6,800.00	6,293.96	6,248.38	6,284.07	42.26	26.71	-159.92	-1,262.73	334.05	1,276.53	1,215.25	61.28	20.832		
6,900.00	6,385.23	6,339.72	6,375.39	42.93	27.10	-160.46	-1,262.51	335.86	1,316.21	1,254.06	62.15	21.178		
7,000.00	6,476.50	6,446.83	6,482.48	43.59	27.55	-161.04	-1,263.02	337.82	1,355.34	1,292.10	63.24	21.431		
7,100.00	6,567.77	6,549.03	6,584.65	44.25	27.98	-161.53	-1,264.80	339.73	1,393.44	1,329.18	64.26	21.683		
7,200.00	6,658.64	6,637.03	6,672.63	44.91	28.36	177.96	-1,266.13	340.34	1,433.46	1,368.35	65.11	22.016		
7,300.00	6,747.14	6,721.52	6,757.12	45.52	28.72	158.88	-1,266.68	340.14	1,478.35	1,412.41	65.94	22.420		
7,400.00	6,831.10	6,809.46	6,845.06	46.07	29.09	144.47	-1,267.59	340.36	1,526.70	1,459.85	66.85	22.837		
7,500.00	6,908.46	6,887.03	6,922.62	46.54	29.42	133.40	-1,268.45	340.61	1,578.09	1,510.41	67.68	23.316		
7,600.00	6,977.30	6,956.00	6,991.59	46.95	29.71	124.46	-1,269.21	340.83	1,632.14	1,563.67	68.47	23.837		
7,700.00	7,035.93	7,014.68	7,050.27	47.30	29.96	116.73	-1,269.86	341.02	1,688.46	1,619.25	69.22	24.394		
7,800.00	7,082.92	7,061.63	7,097.21	47.59	30.16	109.66	-1,270.38	341.17	1,746.63	1,676.70	69.93	24.978		
7,900.00	7,117.09	7,095.68	7,131.26	47.84	30.31	102.90	-1,270.76	341.28	1,806.05	1,735.45	70.60	25.580		
8,000.00	7,137.62	7,116.00	7,151.58	48.06	30.39	96.38	-1,270.98	341.35	1,865.94	1,794.69	71.25	26.190		
8,100.00	7,143.99	7,122.09	7,157.67	48.28	30.42	90.28	-1,271.05	341.37	1,925.29	1,853.44	71.85	26.796		
8,200.00	7,143.45	7,121.23	7,156.81	48.53	30.42	90.25	-1,271.04	341.37	1,985.70	1,913.25	72.45	27.408		
8,300.00	7,142.91	7,120.37	7,155.95	48.89	30.41	90.21	-1,271.03	341.36	2,049.22	1,976.15	73.07	28.044		
8,400.00	7,142.37	7,119.52	7,155.09	49.40	30.41	90.18	-1,271.02	341.36	2,115.56	2,041.87	73.70	28.706		
8,500.00	7,141.83	7,118.66	7,154.23	50.12	30.41	90.15	-1,271.01	341.36	2,184.47	2,110.15	74.32	29.394		
8,600.00	7,141.29	7,117.80	7,153.37	51.08	30.40	90.12	-1,271.00	341.36	2,255.70	2,180.78	74.92	30.106		
8,700.00	7,140.75	7,116.94	7,152.52	52.30	30.40	90.09	-1,271.00	341.35	2,329.05	2,253.54	75.51	30.842		
8,800.00	7,140.21	7,116.08	7,151.66	53.75	30.39	90.06	-1,270.99	341.35	2,404.32	2,328.24	76.08	31.601		
8,900.00	7,139.67	7,115.22	7,150.80	55.40	30.39	90.03	-1,270.98	341.35	2,481.34	2,404.71	76.63	32.381		
9,000.00	7,139.12	7,114.37	7,149.94	57.20	30.39	89.99	-1,270.97	341.34	2,559.95	2,482.80	77.15	33.181		
9,100.00	7,138.58	7,113.51	7,149.08	59.13	30.38	89.96	-1,270.96	341.34	2,640.00	2,562.36	77.65	34.000		
9,200.00	7,138.04	7,112.65	7,148.22	61.15	30.38	89.93	-1,270.95	341.34	2,721.38	2,643.26	78.12	34.836		
9,300.00	7,137.50	7,111.79	7,147.37	63.26	30.38	89.90	-1,270.94	341.34	2,803.96	2,725.39	78.57	35.689		
9,400.00	7,136.96	7,110.93	7,146.51	65.44	30.37	89.87	-1,270.93	341.33	2,887.64	2,808.65	78.99	36.556		
9,500.00	7,136.42	7,110.07	7,145.65	67.68	30.37	89.84	-1,270.92	341.33	2,972.33	2,892.93	79.39	37.438		
9,600.00	7,135.88	7,109.21	7,144.79	69.97	30.37	89.80	-1,270.91	341.33	3,057.94	2,978.17	79.78	38.332		
9,700.00	7,135.34	7,108.36	7,143.93	72.31	30.36	89.77	-1,270.90	341.32	3,144.40	3,064.27	80.14	39.238		
9,800.00	7,134.80	7,107.50	7,143.07	74.69	30.36	89.74	-1,270.89	341.32	3,231.65	3,151.17	80.48	40.155		
9,900.00	7,134.26	7,106.64	7,142.22	77.10	30.35	89.71	-1,270.88	341.32	3,319.61	3,238.81	80.80	41.082		
10,000.00	7,133.71	7,105.78	7,141.36	79.54	30.35	89.68	-1,270.87	341.32	3,408.24	3,327.13	81.11	42.019		
10,100.00	7,133.17	7,104.92	7,140.50	82.02	30.35	89.65	-1,270.86	341.31	3,497.48	3,416.07	81.41	42.964		
10,200.00	7,132.63	7,104.06	7,139.64	84.52	30.34	89.61	-1,270.85	341.31	3,587.29	3,505.60	81.68	43.917		
10,300.00	7,132.09	7,103.21	7,138.78	87.04	30.34	89.58	-1,270.84	341.31	3,677.62	3,595.67	81.95	44.877		
10,400.00	7,131.55	7,102.35	7,137.92	89.58	30.34	89.55	-1,270.83	341.31	3,768.44	3,686.24	82.20	45.844		
10,500.00	7,131.01	7,101.49	7,137.06	92.15	30.33	89.52	-1,270.82	341.30	3,859.72	3,777.27	82.44	46.817		
10,600.00	7,130.47	7,100.63	7,136.21	94.73	30.33	89.49	-1,270.81	341.30	3,951.41	3,868.74	82.67	47.796		
10,700.00	7,129.93	7,099.77	7,135.35	97.33	30.33	89.46	-1,270.81	341.30	4,043.51	3,960.61	82.89	48.780		
10,800.00	7,129.39	7,098.91	7,134.49	99.94	30.32	89.43	-1,270.80	341.29	4,135.96	4,052.86	83.10	49.769		
10,900.00	7,128.84	7,098.05	7,133.63	102.56	30.32	89.39	-1,270.79	341.29	4,228.76	4,145.46	83.30	50.763		
11,000.00	7,128.30	7,097.20	7,132.77	105.20	30.31	89.36	-1,270.78	341.29	4,321.89	4,238.39	83.50	51.761		
11,100.00	7,127.76	7,096.34	7,131.91	107.85	30.31	89.33	-1,270.77	341.29	4,415.31	4,331.63	83.68	52.762		
11,200.00	7,127.22	7,095.48	7,131.06	110.51	30.31	89.30	-1,270.76	341.28	4,509.01	4,425.15	83.86	53.767		
11,300.00	7,126.68	7,094.62	7,130.20	113.18	30.30	89.27	-1,270.75	341.28	4,602.98	4,518.95	84.03	54.776		
11,400.00	7,126.14	7,093.76	7,129.34	115.86	30.30	89.24	-1,270.74	341.28	4,697.20	4,613.00	84.20	55.787		
11,500.00	7,125.60	7,092.90	7,128.48	118.55	30.30	89.20	-1,270.73	341.27	4,791.65	4,707.30	84.36	56.801		
11,600.00	7,125.06	7,092.04	7,127.62	121.25	30.29	89.17	-1,270.72	341.27	4,886.33	4,801.81	84.51	57.817		
11,700.00	7,124.52	7,091.19	7,126.76	123.95	30.29	89.14	-1,270.71	341.27	4,981.21	4,896.55	84.66	58.836		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
11,800.00	7,123.97	7,090.33	7,125.91	126.66	30.28	89.11	-1,270.70	341.27	5,076.29	4,991.48	84.81	59.857	
11,900.00	7,123.43	7,089.47	7,125.05	129.38	30.28	89.08	-1,270.69	341.26	5,171.55	5,086.60	84.95	60.880	
12,000.00	7,122.89	7,088.61	7,124.19	132.10	30.28	89.05	-1,270.68	341.26	5,266.99	5,181.91	85.08	61.904	
12,100.00	7,122.35	7,087.75	7,123.33	134.83	30.27	89.02	-1,270.67	341.26	5,362.59	5,277.38	85.21	62.931	
12,200.00	7,121.81	7,086.89	7,122.47	137.56	30.27	88.98	-1,270.66	341.26	5,458.35	5,373.01	85.34	63.958	
12,300.00	7,121.27	7,086.04	7,121.61	140.30	30.27	88.95	-1,270.65	341.25	5,554.27	5,468.80	85.47	64.987	
12,400.00	7,120.73	7,085.18	7,120.75	143.05	30.26	88.92	-1,270.64	341.25	5,650.32	5,564.73	85.59	66.017	
12,500.00	7,120.19	7,084.32	7,119.90	145.80	30.26	88.89	-1,270.63	341.25	5,746.51	5,660.80	85.71	67.048	
12,600.00	7,119.65	7,083.46	7,119.04	148.55	30.26	88.86	-1,270.62	341.24	5,842.82	5,757.00	85.82	68.079	
12,700.00	7,119.10	7,082.60	7,118.18	151.30	30.25	88.83	-1,270.62	341.24	5,939.26	5,853.32	85.94	69.112	
12,800.00	7,118.56	7,081.74	7,117.32	154.07	30.25	88.79	-1,270.61	341.24	6,035.81	5,949.76	86.05	70.145	
12,900.00	7,118.02	7,080.88	7,116.46	156.83	30.24	88.76	-1,270.60	341.24	6,132.48	6,046.32	86.16	71.179	
13,000.00	7,117.48	7,080.03	7,115.60	159.60	30.24	88.73	-1,270.59	341.23	6,229.24	6,142.98	86.26	72.213	
13,100.00	7,116.94	7,079.17	7,114.75	162.37	30.24	88.70	-1,270.58	341.23	6,326.11	6,239.75	86.37	73.247	
13,200.00	7,116.40	7,078.31	7,113.89	165.14	30.23	88.67	-1,270.57	341.23	6,423.08	6,336.61	86.47	74.282	
13,300.00	7,115.86	7,077.45	7,113.03	167.92	30.23	88.64	-1,270.56	341.22	6,520.13	6,433.56	86.57	75.317	
13,400.00	7,115.32	7,076.59	7,112.17	170.70	30.23	88.61	-1,270.55	341.22	6,617.28	6,530.61	86.67	76.352	
13,500.00	7,114.78	7,075.73	7,111.31	173.48	30.22	88.57	-1,270.54	341.22	6,714.51	6,627.74	86.77	77.387	
13,600.00	7,114.24	7,074.88	7,110.45	176.26	30.22	88.54	-1,270.53	341.22	6,811.81	6,724.95	86.86	78.422	
13,700.00	7,113.69	7,074.02	7,109.60	179.05	30.22	88.51	-1,270.52	341.21	6,909.20	6,822.24	86.96	79.457	
13,800.00	7,113.15	7,073.16	7,108.74	181.84	30.21	88.48	-1,270.51	341.21	7,006.66	6,919.61	87.05	80.492	
13,900.00	7,112.61	7,072.30	7,107.88	184.63	30.21	88.45	-1,270.50	341.21	7,104.18	7,017.04	87.14	81.526	
14,000.00	7,112.07	7,071.44	7,107.02	187.42	30.20	88.42	-1,270.49	341.21	7,201.78	7,114.55	87.23	82.560	
14,100.00	7,111.53	7,070.58	7,106.16	190.22	30.20	88.38	-1,270.48	341.20	7,299.44	7,212.12	87.32	83.594	
14,200.00	7,110.99	7,069.72	7,105.30	193.01	30.20	88.35	-1,270.47	341.20	7,397.17	7,309.76	87.41	84.627	
14,300.00	7,110.45	7,068.87	7,104.45	195.81	30.19	88.32	-1,270.46	341.20	7,494.95	7,407.45	87.50	85.660	
14,400.00	7,109.91	7,068.01	7,103.59	198.61	30.19	88.29	-1,270.45	341.19	7,592.79	7,505.21	87.58	86.692	
14,500.00	7,109.37	7,067.15	7,102.73	201.42	30.19	88.26	-1,270.44	341.19	7,690.69	7,603.02	87.67	87.724	
14,600.00	7,108.82	7,066.29	7,101.87	204.22	30.18	88.23	-1,270.44	341.19	7,788.64	7,700.88	87.75	88.755	
14,700.00	7,108.28	7,065.43	7,101.01	207.03	30.18	88.20	-1,270.43	341.19	7,886.64	7,798.80	87.84	89.785	
14,800.00	7,107.74	7,064.57	7,100.15	209.83	30.18	88.16	-1,270.42	341.18	7,984.69	7,896.77	87.92	90.815	
14,900.00	7,107.20	7,063.72	7,099.29	212.64	30.17	88.13	-1,270.41	341.18	8,082.79	7,994.78	88.01	91.843	
15,000.00	7,106.66	7,062.86	7,098.44	215.45	30.17	88.10	-1,270.40	341.18	8,180.93	8,092.84	88.09	92.871	
15,100.00	7,106.12	7,062.00	7,097.58	218.26	30.16	88.07	-1,270.39	341.17	8,279.12	8,190.95	88.17	93.898	
15,200.00	7,105.58	7,061.14	7,096.72	221.07	30.16	88.04	-1,270.38	341.17	8,377.35	8,289.10	88.25	94.925	
15,300.00	7,105.04	7,060.28	7,095.86	223.89	30.16	88.01	-1,270.37	341.17	8,475.63	8,387.29	88.33	95.950	
15,400.00	7,104.50	7,059.42	7,095.00	226.70	30.15	87.97	-1,270.36	341.17	8,573.94	8,485.52	88.41	96.974	
15,491.56	7,104.00	7,058.64	7,094.22	229.28	30.15	87.95	-1,270.35	341.16	8,663.99	8,575.50	88.49	97.911	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	68.00	3.28	3.28	172.19	-3,999.34	548.31	4,037.32					
100.00	100.00	31.38	99.38	3.28	3.28	172.19	-3,999.34	548.29	4,036.75	4,030.19	6.57	614.854		
200.00	200.00	127.08	195.08	3.34	3.30	172.20	-3,999.42	548.08	4,036.80	4,030.17	6.63	608.539		
300.00	299.98	218.03	286.03	3.44	3.36	-10.94	-3,999.68	547.81	4,035.33	4,028.53	6.80	593.609		
400.00	399.84	313.23	381.23	3.59	3.47	-10.97	-4,000.09	547.72	4,030.61	4,023.55	7.06	570.902		
500.00	499.45	415.18	483.17	3.79	3.63	-11.03	-4,000.52	547.77	4,022.47	4,015.05	7.43	541.693		
600.00	598.70	513.32	581.31	4.03	3.83	-11.10	-4,000.94	547.77	4,010.93	4,003.07	7.87	509.790		
700.00	697.47	615.46	683.46	4.31	4.08	-11.20	-4,001.39	547.52	3,995.97	3,987.58	8.39	476.282		
800.00	795.62	717.32	785.31	4.64	4.35	-11.32	-4,001.74	547.03	3,977.52	3,968.55	8.97	443.308		
900.00	893.06	808.52	876.51	5.00	4.62	-11.46	-4,002.16	546.34	3,955.79	3,946.21	9.57	413.162		
1,000.00	989.64	908.30	976.29	5.40	4.93	-11.63	-4,002.69	545.28	3,930.77	3,920.52	10.24	383.712		
1,100.00	1,085.27	986.33	1,054.30	5.83	5.19	-11.80	-4,003.32	544.21	3,902.65	3,891.77	10.88	358.692		
1,200.00	1,179.82	1,071.39	1,139.34	6.29	5.47	-12.00	-4,004.32	542.79	3,871.61	3,860.04	11.57	334.673		
1,300.00	1,273.17	1,161.02	1,228.95	6.79	5.79	-12.23	-4,005.56	541.20	3,837.53	3,825.23	12.30	312.049		
1,400.00	1,365.21	1,258.70	1,326.61	7.33	6.14	-12.50	-4,006.94	539.39	3,800.27	3,787.19	13.08	290.591		
1,500.00	1,456.49	1,357.48	1,425.36	7.89	6.50	-12.62	-4,008.15	537.31	3,761.07	3,747.20	13.88	271.044		
1,600.00	1,547.76	1,450.74	1,518.59	8.46	6.85	-12.72	-4,009.18	535.37	3,721.78	3,707.11	14.67	253.773		
1,700.00	1,639.04	1,538.86	1,606.69	9.05	7.18	-12.83	-4,010.17	533.61	3,682.52	3,667.06	15.45	238.306		
1,800.00	1,730.31	1,631.66	1,699.46	9.65	7.54	-12.94	-4,011.32	531.86	3,643.39	3,627.12	16.27	223.948		
1,900.00	1,821.58	1,731.53	1,799.31	10.26	7.93	-13.06	-4,012.25	529.97	3,603.99	3,586.87	17.12	210.518		
2,000.00	1,912.85	1,813.34	1,881.11	10.87	8.25	-13.17	-4,013.10	528.60	3,564.73	3,546.81	17.92	198.930		
2,100.00	2,004.13	1,901.79	1,969.54	11.49	8.60	-13.28	-4,014.17	527.16	3,525.65	3,506.90	18.75	188.030		
2,200.00	2,095.40	1,987.95	2,055.67	12.11	8.94	-13.40	-4,015.34	525.64	3,486.70	3,467.11	19.58	178.056		
2,300.00	2,186.67	2,072.32	2,140.02	12.74	9.28	-13.51	-4,016.66	524.06	3,447.93	3,427.51	20.42	168.890		
2,400.00	2,277.95	2,162.90	2,230.57	13.38	9.64	-13.63	-4,018.23	522.32	3,409.32	3,388.05	21.27	160.253		
2,500.00	2,369.22	2,278.57	2,346.21	14.01	10.11	-13.79	-4,019.94	520.12	3,370.52	3,348.30	22.22	151.715		
2,600.00	2,460.49	2,407.65	2,475.27	14.65	10.64	-13.99	-4,020.45	518.06	3,330.78	3,307.59	23.20	143.593		
2,700.00	2,551.77	2,534.01	2,601.61	15.29	11.15	-14.20	-4,019.34	516.21	3,289.88	3,265.72	24.16	136.153		
2,800.00	2,643.04	2,625.83	2,693.41	15.93	11.53	-14.35	-4,018.15	514.82	3,248.68	3,223.64	25.03	129.766		
2,900.00	2,734.31	2,716.54	2,784.10	16.58	11.90	-14.51	-4,016.97	513.32	3,207.47	3,181.56	25.91	123.806		
3,000.00	2,825.58	2,803.53	2,871.07	17.23	12.26	-14.66	-4,015.93	511.79	3,166.34	3,139.57	26.77	118.263		
3,100.00	2,916.86	2,893.95	2,961.47	17.87	12.63	-14.82	-4,014.91	510.15	3,125.30	3,097.65	27.65	113.021		
3,200.00	3,008.13	2,980.16	3,047.66	18.52	12.99	-14.97	-4,014.02	508.52	3,084.35	3,055.82	28.52	108.131		
3,300.00	3,099.40	3,073.90	3,141.37	19.17	13.38	-15.14	-4,013.12	506.67	3,043.47	3,014.05	29.42	103.461		
3,400.00	3,190.68	3,169.90	3,237.35	19.83	13.78	-15.32	-4,012.06	504.73	3,002.47	2,972.15	30.32	99.040		
3,500.00	3,281.95	3,255.80	3,323.23	20.48	14.13	-15.49	-4,011.04	503.07	2,961.44	2,930.25	31.20	94.932		
3,600.00	3,373.22	3,338.26	3,405.67	21.13	14.48	-15.65	-4,010.32	501.42	2,920.70	2,888.63	32.07	91.069		
3,700.00	3,464.49	3,422.97	3,490.35	21.79	14.83	-15.81	-4,009.85	499.48	2,880.21	2,847.26	32.96	87.398		
3,800.00	3,555.77	3,510.26	3,577.62	22.44	15.20	-15.98	-4,009.56	497.20	2,839.90	2,806.05	33.85	83.903		
3,900.00	3,647.04	3,596.35	3,663.67	23.10	15.56	-16.15	-4,009.42	494.95	2,799.75	2,765.01	34.74	80.591		
4,000.00	3,738.31	3,686.61	3,753.91	23.75	15.94	-16.33	-4,009.31	492.94	2,759.74	2,724.09	35.64	77.428		
4,100.00	3,829.59	3,773.65	3,840.94	24.41	16.30	-16.53	-4,009.22	491.22	2,719.82	2,683.28	36.54	74.429		
4,200.00	3,920.86	3,864.53	3,931.80	25.07	16.69	-16.73	-4,009.27	489.33	2,680.04	2,642.59	37.45	71.563		
4,300.00	4,012.13	3,957.13	4,024.38	25.73	17.08	-16.95	-4,009.21	487.72	2,640.26	2,601.90	38.36	68.824		
4,400.00	4,103.41	4,048.49	4,115.73	26.38	17.46	-17.18	-4,009.08	486.24	2,600.47	2,561.20	39.27	66.213		
4,500.00	4,194.68	4,140.24	4,207.48	27.04	17.85	-17.43	-4,008.86	485.29	2,560.74	2,520.55	40.19	63.717		
4,600.00	4,285.95	4,236.45	4,303.68	27.70	18.25	-17.73	-4,008.24	485.51	2,520.96	2,479.85	41.11	61.320		
4,700.00	4,377.22	4,343.06	4,410.28	28.36	18.69	-18.09	-4,007.01	486.31	2,480.90	2,438.86	42.04	59.007		
4,800.00	4,468.50	4,444.54	4,511.74	29.02	19.12	-18.45	-4,005.09	487.02	2,440.22	2,397.24	42.97	56.788		
4,900.00	4,559.77	4,528.00	4,595.18	29.68	19.47	-18.76	-4,003.46	487.74	2,399.61	2,355.72	43.89	54.675		
5,000.00	4,651.04	4,604.41	4,671.58	30.34	19.79	-19.04	-4,002.41	488.23	2,359.52	2,314.71	44.81	52.658		
5,100.00	4,742.32	4,676.85	4,744.02	31.00	20.09	-19.31	-4,001.97	488.57	2,320.14	2,274.41	45.73	50.735		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - BERRY 22-2(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,762.43	4,829.60	31.66	20.45	-19.64	-4,001.98	489.00	2,281.39	2,234.72	46.66	48.891		
5,300.00	4,924.86	4,854.24	4,921.41	32.32	20.83	-20.00	-4,002.02	489.46	2,242.73	2,195.13	47.60	47.116		
5,400.00	5,016.13	4,945.33	5,012.50	32.99	21.21	-20.36	-4,002.10	489.66	2,204.13	2,155.59	48.54	45.409		
5,500.00	5,107.41	5,036.60	5,103.77	33.65	21.59	-20.74	-4,002.17	490.03	2,165.65	2,116.16	49.48	43.766		
5,600.00	5,198.68	5,130.86	5,198.03	34.31	21.99	-21.16	-4,002.12	490.60	2,127.19	2,076.76	50.43	42.182		
5,700.00	5,289.95	5,231.42	5,298.59	34.97	22.41	-21.62	-4,001.77	491.30	2,088.60	2,037.22	51.37	40.654		
5,800.00	5,381.23	5,336.26	5,403.41	35.63	22.85	-22.14	-4,000.61	492.22	2,049.48	1,997.16	52.32	39.174		
5,900.00	5,472.50	5,447.04	5,514.15	36.30	23.32	-22.75	-3,998.33	494.34	2,009.98	1,956.72	53.26	37.742		
6,000.00	5,563.77	5,544.98	5,611.97	36.96	23.74	-23.37	-3,994.65	497.47	1,969.46	1,915.25	54.21	36.329		
6,100.00	5,655.05	5,619.83	5,686.75	37.62	24.05	-23.85	-3,992.36	499.53	1,929.61	1,874.40	55.21	34.953		
6,200.00	5,746.32	5,696.35	5,763.24	38.28	24.38	-24.33	-3,990.81	501.04	1,890.59	1,834.39	56.20	33.640		
6,300.00	5,837.59	5,779.26	5,846.14	38.95	24.73	-24.83	-3,989.90	501.96	1,852.26	1,795.07	57.19	32.387		
6,400.00	5,928.86	5,866.79	5,933.67	39.61	25.10	-25.36	-3,989.46	502.33	1,814.38	1,756.20	58.18	31.186		
6,500.00	6,020.14	5,962.46	6,029.34	40.27	25.50	-25.96	-3,989.06	502.52	1,776.66	1,717.50	59.16	30.032		
6,600.00	6,111.41	6,055.16	6,122.04	40.94	25.90	-26.55	-3,988.45	502.46	1,738.80	1,678.66	60.15	28.909		
6,700.00	6,202.68	6,147.79	6,214.66	41.60	26.29	-27.17	-3,987.91	502.29	1,701.15	1,640.01	61.14	27.823		
6,800.00	6,293.96	6,243.68	6,310.55	42.26	26.70	-27.84	-3,987.11	502.08	1,663.43	1,601.30	62.13	26.772		
6,900.00	6,385.23	6,335.18	6,402.04	42.93	27.09	-28.51	-3,986.15	501.82	1,625.71	1,562.57	63.14	25.746		
7,000.00	6,476.50	6,423.00	6,489.86	43.59	27.46	-29.18	-3,985.36	501.64	1,588.34	1,524.17	64.17	24.750		
7,100.00	6,567.77	6,514.66	6,581.52	44.25	27.85	-29.90	-3,984.70	501.15	1,551.23	1,486.03	65.20	23.792		
7,200.00	6,658.64	6,604.26	6,671.11	44.91	28.23	-30.33	-3,984.06	500.73	1,517.13	1,450.85	66.28	22.890		
7,300.00	6,747.14	6,694.23	6,761.08	45.52	28.61	-30.95	-3,983.14	500.80	1,491.16	1,423.72	67.44	22.110		
7,400.00	6,831.10	6,782.35	6,849.19	46.07	28.98	-31.56	-3,982.00	500.93	1,474.93	1,406.28	68.65	21.484		
7,488.44	6,899.91	6,851.11	6,917.95	46.49	29.28	-31.05	-3,981.13	500.71	1,470.03	1,400.26	69.77	21.070 CC		
7,500.00	6,908.46	6,859.49	6,926.33	46.54	29.31	-31.96	-3,981.02	500.69	1,470.12	1,400.20	69.92	21.026 ES		
7,600.00	6,977.30	6,925.24	6,992.07	46.95	29.59	-32.09	-3,980.20	500.57	1,478.35	1,407.13	71.22	20.758		
7,700.00	7,035.93	6,978.07	7,044.89	47.30	29.82	-101.50	-3,979.46	500.88	1,500.59	1,428.05	72.53	20.688 SF		
7,800.00	7,082.92	7,018.49	7,085.30	47.59	29.99	-102.45	-3,978.85	501.39	1,536.93	1,463.10	73.83	20.818		
7,900.00	7,117.09	7,046.74	7,113.55	47.84	30.11	-100.89	-3,978.50	501.79	1,586.53	1,511.47	75.06	21.137		
8,000.00	7,137.62	7,063.11	7,129.92	48.06	30.18	-96.57	-3,978.33	502.04	1,647.73	1,571.55	76.18	21.630		
8,100.00	7,143.99	7,067.25	7,134.06	48.28	30.20	-89.16	-3,978.29	502.11	1,718.26	1,641.11	77.15	22.271		
8,200.00	7,143.45	7,065.45	7,132.25	48.53	30.19	-89.07	-3,978.31	502.08	1,793.78	1,715.76	78.01	22.993		
8,300.00	7,142.91	7,063.65	7,130.46	48.89	30.18	-88.98	-3,978.33	502.05	1,871.59	1,792.77	78.83	23.743		
8,400.00	7,142.37	7,061.86	7,128.67	49.40	30.17	-88.89	-3,978.34	502.02	1,951.43	1,871.84	79.58	24.520		
8,500.00	7,141.83	7,060.09	7,126.90	50.12	30.16	-88.80	-3,978.36	502.00	2,033.05	1,952.76	80.29	25.321		
8,600.00	7,141.29	7,058.32	7,125.13	51.08	30.16	-88.72	-3,978.38	501.97	2,116.24	2,035.30	80.95	26.144		
8,700.00	7,140.75	7,056.56	7,123.37	52.30	30.15	-88.63	-3,978.39	501.94	2,200.84	2,119.28	81.55	26.986		
8,800.00	7,140.21	7,054.82	7,121.63	53.75	30.14	-88.54	-3,978.41	501.92	2,286.67	2,204.55	82.12	27.846		
8,900.00	7,139.67	7,053.08	7,119.89	55.40	30.14	-88.46	-3,978.43	501.89	2,373.61	2,290.97	82.64	28.722		
9,000.00	7,139.12	7,051.35	7,118.16	57.20	30.13	-88.37	-3,978.45	501.86	2,461.55	2,378.42	83.12	29.613		
9,100.00	7,138.58	7,049.63	7,116.44	59.13	30.12	-88.28	-3,978.46	501.84	2,550.37	2,466.79	83.57	30.516		
9,200.00	7,138.04	7,047.92	7,114.73	61.15	30.11	-88.20	-3,978.48	501.81	2,639.99	2,556.00	83.99	31.432		
9,300.00	7,137.50	7,046.22	7,113.03	63.26	30.11	-88.11	-3,978.50	501.79	2,730.33	2,645.95	84.38	32.358		
9,400.00	7,136.96	7,044.52	7,111.33	65.44	30.10	-88.03	-3,978.52	501.76	2,821.32	2,736.57	84.74	33.293		
9,500.00	7,136.42	7,042.84	7,109.65	67.68	30.09	-87.95	-3,978.54	501.74	2,912.90	2,827.82	85.08	34.237		
9,600.00	7,135.88	7,041.16	7,107.97	69.97	30.08	-87.86	-3,978.56	501.71	3,005.01	2,919.62	85.39	35.190		
9,700.00	7,135.34	7,039.49	7,106.31	72.31	30.08	-87.78	-3,978.58	501.69	3,097.61	3,011.92	85.69	36.149		
9,800.00	7,134.80	7,037.84	7,104.65	74.69	30.07	-87.70	-3,978.60	501.66	3,190.66	3,104.69	85.97	37.114		
9,900.00	7,134.26	7,036.19	7,103.00	77.10	30.06	-87.62	-3,978.62	501.64	3,284.12	3,197.89	86.23	38.086		
10,000.00	7,133.71	7,034.55	7,101.36	79.54	30.06	-87.54	-3,978.64	501.61	3,377.95	3,291.47	86.47	39.063		
10,100.00	7,133.17	7,032.91	7,099.73	82.02	30.05	-87.45	-3,978.66	501.59	3,472.12	3,385.42	86.71	40.045		
10,200.00	7,132.63	7,031.29	7,098.10	84.52	30.04	-87.37	-3,978.68	501.57	3,566.61	3,479.69	86.93	41.031		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,132.09	7,029.67	7,096.49	87.04	30.04	-87.29	-3,978.70	501.54	3,661.40	3,574.26	87.13	42.021	
10,400.00	7,131.55	7,028.06	7,094.88	89.58	30.03	-87.21	-3,978.72	501.52	3,756.45	3,669.12	87.33	43.015	
10,500.00	7,131.01	7,026.46	7,093.28	92.15	30.02	-87.13	-3,978.74	501.50	3,851.75	3,764.23	87.52	44.012	
10,600.00	7,130.47	7,024.87	7,091.69	94.73	30.02	-87.05	-3,978.76	501.48	3,947.28	3,859.59	87.69	45.012	
10,700.00	7,129.93	7,023.29	7,090.10	97.33	30.01	-86.98	-3,978.78	501.45	4,043.03	3,955.17	87.86	46.015	
10,800.00	7,129.39	7,021.71	7,088.53	99.94	30.00	-86.90	-3,978.80	501.43	4,138.98	4,050.95	88.03	47.020	
10,900.00	7,128.84	7,020.15	7,086.96	102.56	30.00	-86.82	-3,978.82	501.41	4,235.11	4,146.93	88.18	48.028	
11,000.00	7,128.30	7,018.59	7,085.40	105.20	29.99	-86.74	-3,978.84	501.39	4,331.42	4,243.09	88.33	49.038	
11,100.00	7,127.76	7,017.03	7,083.85	107.85	29.98	-86.67	-3,978.87	501.37	4,427.90	4,339.43	88.47	50.050	
11,200.00	7,127.22	7,015.49	7,082.31	110.51	29.98	-86.59	-3,978.89	501.34	4,524.52	4,435.91	88.61	51.063	
11,300.00	7,126.68	7,013.95	7,080.77	113.18	29.97	-86.51	-3,978.91	501.32	4,621.29	4,532.55	88.74	52.078	
11,400.00	7,126.14	7,012.43	7,079.24	115.86	29.96	-86.44	-3,978.93	501.30	4,718.19	4,629.33	88.86	53.094	
11,500.00	7,125.60	7,010.90	7,077.72	118.55	29.96	-86.36	-3,978.95	501.28	4,815.22	4,726.23	88.99	54.111	
11,600.00	7,125.06	7,009.39	7,076.21	121.25	29.95	-86.29	-3,978.98	501.26	4,912.37	4,823.26	89.11	55.130	
11,700.00	7,124.52	7,007.88	7,074.70	123.95	29.94	-86.21	-3,979.00	501.24	5,009.62	4,920.40	89.22	56.149	
11,800.00	7,123.97	7,006.39	7,073.20	126.66	29.94	-86.14	-3,979.02	501.22	5,106.99	5,017.66	89.33	57.170	
11,900.00	7,123.43	7,004.89	7,071.71	129.38	29.93	-86.07	-3,979.04	501.20	5,204.45	5,115.01	89.44	58.191	
12,000.00	7,122.89	7,003.41	7,070.23	132.10	29.92	-85.99	-3,979.07	501.18	5,302.01	5,212.47	89.54	59.212	
12,100.00	7,122.35	7,000.01	7,066.83	134.83	29.91	-85.82	-3,979.12	501.13	5,399.66	5,310.02	89.64	60.239	
12,200.00	7,121.81	7,000.01	7,066.83	137.56	29.91	-85.82	-3,979.12	501.13	5,497.38	5,407.64	89.74	61.258	
12,300.00	7,121.27	7,000.01	7,066.83	140.30	29.91	-85.82	-3,979.12	501.13	5,595.19	5,505.35	89.84	62.278	
12,400.00	7,120.73	7,000.01	7,066.83	143.05	29.91	-85.82	-3,979.12	501.13	5,693.08	5,603.14	89.94	63.297	
12,500.00	7,120.19	7,000.01	7,066.83	145.80	29.91	-85.82	-3,979.12	501.13	5,791.04	5,701.00	90.04	64.316	
12,600.00	7,119.65	7,000.01	7,066.83	148.55	29.91	-85.82	-3,979.12	501.13	5,889.07	5,798.93	90.14	65.336	
12,700.00	7,119.10	7,000.01	7,066.83	151.30	29.91	-85.82	-3,979.12	501.13	5,987.16	5,896.93	90.23	66.355	
12,800.00	7,118.56	7,000.01	7,066.83	154.07	29.91	-85.82	-3,979.12	501.13	6,085.31	5,994.99	90.32	67.374	
12,900.00	7,118.02	7,000.01	7,066.83	156.83	29.91	-85.82	-3,979.12	501.13	6,183.53	6,093.11	90.41	68.393	
13,000.00	7,117.48	7,000.01	7,066.83	159.60	29.91	-85.82	-3,979.12	501.13	6,281.80	6,191.30	90.50	69.412	
13,100.00	7,116.94	7,000.01	7,066.83	162.37	29.91	-85.82	-3,979.12	501.13	6,380.12	6,289.53	90.59	70.430	
13,200.00	7,116.40	7,000.01	7,066.83	165.14	29.91	-85.82	-3,979.12	501.13	6,478.49	6,387.82	90.67	71.448	
13,300.00	7,115.86	7,000.01	7,066.83	167.92	29.91	-85.82	-3,979.12	501.13	6,576.92	6,486.16	90.76	72.466	
13,400.00	7,115.32	7,000.01	7,066.83	170.70	29.91	-85.82	-3,979.12	501.13	6,675.39	6,584.55	90.84	73.483	
13,500.00	7,114.78	7,000.01	7,066.83	173.48	29.91	-85.82	-3,979.12	501.13	6,773.91	6,682.98	90.93	74.499	
13,600.00	7,114.24	7,000.01	7,066.83	176.26	29.91	-85.82	-3,979.12	501.13	6,872.46	6,781.46	91.01	75.515	
13,700.00	7,113.69	7,000.01	7,066.83	179.05	29.91	-85.82	-3,979.12	501.13	6,971.06	6,879.97	91.09	76.531	
13,800.00	7,113.15	7,000.01	7,066.83	181.84	29.91	-85.82	-3,979.12	501.13	7,069.70	6,978.53	91.17	77.546	
13,900.00	7,112.61	7,000.01	7,066.83	184.63	29.91	-85.82	-3,979.12	501.13	7,168.38	7,077.13	91.25	78.560	
14,000.00	7,112.07	7,000.01	7,066.83	187.42	29.91	-85.82	-3,979.12	501.13	7,267.09	7,175.77	91.33	79.573	
14,100.00	7,111.53	7,000.01	7,066.83	190.22	29.91	-85.82	-3,979.12	501.13	7,365.84	7,274.44	91.40	80.586	
14,200.00	7,110.99	7,000.01	7,066.83	193.01	29.91	-85.82	-3,979.12	501.13	7,464.62	7,373.14	91.48	81.597	
14,300.00	7,110.45	7,000.01	7,066.83	195.81	29.91	-85.82	-3,979.12	501.13	7,563.43	7,471.88	91.56	82.608	
14,400.00	7,109.91	7,000.01	7,066.83	198.61	29.91	-85.82	-3,979.12	501.13	7,662.28	7,570.64	91.63	83.618	
14,500.00	7,109.37	7,000.01	7,066.83	201.42	29.91	-85.82	-3,979.12	501.13	7,761.15	7,669.44	91.71	84.628	
14,600.00	7,108.82	7,000.01	7,066.83	204.22	29.91	-85.82	-3,979.12	501.13	7,860.05	7,768.27	91.78	85.636	
14,700.00	7,108.28	7,000.01	7,066.83	207.03	29.91	-85.82	-3,979.12	501.13	7,958.98	7,867.12	91.86	86.643	
14,800.00	7,107.74	7,000.01	7,066.83	209.83	29.91	-85.82	-3,979.12	501.13	8,057.94	7,966.00	91.93	87.649	
14,900.00	7,107.20	7,000.01	7,066.83	212.64	29.91	-85.82	-3,979.12	501.13	8,156.92	8,064.91	92.01	88.655	
15,000.00	7,106.66	7,000.01	7,066.83	215.45	29.91	-85.82	-3,979.12	501.13	8,255.92	8,163.84	92.08	89.659	
15,100.00	7,106.12	6,976.11	7,042.93	218.26	29.81	-84.64	-3,979.49	500.86	8,354.88	8,262.82	92.06	90.755	
15,200.00	7,105.58	6,975.45	7,042.27	221.07	29.81	-84.61	-3,979.50	500.85	8,453.92	8,361.79	92.13	91.761	
15,300.00	7,105.04	6,974.80	7,041.62	223.89	29.80	-84.58	-3,979.51	500.85	8,552.99	8,460.79	92.20	92.765	
15,400.00	7,104.50	6,974.15	7,040.98	226.70	29.80	-84.55	-3,979.52	500.84	8,652.09	8,559.82	92.27	93.769	

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)		
15,491.56	7,104.00	6,973.57	7,040.39	229.28	29.80	-84.52	-3,979.52	500.83	8,742.83	8,650.50	92.33	94.686	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	22.22	-1.78	3.28	3.28	172.19	-3,999.35	548.30	4,036.76				
100.00	100.00	115.64	91.64	3.28	3.29	172.20	-3,999.49	548.20	4,036.89	4,030.31	6.58	613.811	
200.00	200.00	214.82	190.82	3.34	3.36	172.20	-3,999.73	548.08	4,037.12	4,030.43	6.69	603.254	
300.00	299.98	320.59	296.59	3.44	3.48	-10.94	-3,999.91	547.87	4,035.55	4,028.63	6.92	583.281	
400.00	399.84	420.79	396.79	3.59	3.65	-10.97	-4,000.05	547.53	4,030.50	4,023.26	7.24	557.023	
500.00	499.45	522.47	498.47	3.79	3.86	-11.02	-4,000.13	547.22	4,021.98	4,014.33	7.65	526.089	
600.00	598.70	620.23	596.23	4.03	4.09	-11.10	-4,000.23	546.85	4,010.07	4,001.95	8.12	493.750	
700.00	697.47	720.54	696.54	4.31	4.36	-11.20	-4,000.30	546.56	3,994.74	3,986.07	8.67	460.801	
800.00	795.62	815.50	791.49	4.64	4.64	-11.32	-4,000.40	546.36	3,976.09	3,966.83	9.26	429.598	
900.00	893.06	914.29	890.28	5.00	4.95	-11.47	-4,000.52	546.05	3,954.09	3,944.19	9.90	399.461	
1,000.00	989.64	1,009.28	985.27	5.40	5.26	-11.64	-4,000.66	545.77	3,928.80	3,918.23	10.57	371.751	
1,100.00	1,085.27	1,108.66	1,084.65	5.83	5.60	-11.85	-4,000.76	545.50	3,900.18	3,888.90	11.29	345.587	
1,200.00	1,179.82	1,198.73	1,174.73	6.29	5.92	-12.08	-4,000.88	545.17	3,868.34	3,856.34	12.00	322.368	
1,300.00	1,273.17	1,284.96	1,260.96	6.79	6.23	-12.34	-4,001.13	544.81	3,833.43	3,820.70	12.72	301.253	
1,400.00	1,365.21	1,377.48	1,353.47	7.33	6.57	-12.63	-4,001.50	544.37	3,795.45	3,781.96	13.49	281.291	
1,500.00	1,456.49	1,474.40	1,450.38	7.89	6.94	-12.78	-4,001.83	543.82	3,755.66	3,741.37	14.29	262.829	
1,600.00	1,547.76	1,566.41	1,542.39	8.46	7.29	-12.91	-4,002.05	543.21	3,715.79	3,700.71	15.08	246.445	
1,700.00	1,639.04	1,656.95	1,632.93	9.05	7.63	-13.04	-4,002.28	542.61	3,675.95	3,660.07	15.88	231.551	
1,800.00	1,730.31	1,746.26	1,722.24	9.65	7.98	-13.17	-4,002.54	542.05	3,636.15	3,619.47	16.68	217.975	
1,900.00	1,821.58	1,833.83	1,809.81	10.26	8.33	-13.30	-4,002.88	541.40	3,596.46	3,578.97	17.49	205.595	
2,000.00	1,912.85	1,921.87	1,897.84	10.87	8.68	-13.43	-4,003.35	540.63	3,556.88	3,538.57	18.32	194.199	
2,100.00	2,004.13	2,014.13	1,990.10	11.49	9.04	-13.56	-4,003.91	539.60	3,517.37	3,498.20	19.16	183.569	
2,200.00	2,095.40	2,113.75	2,089.71	12.11	9.44	-13.71	-4,004.39	538.41	3,477.73	3,457.70	20.04	173.565	
2,300.00	2,186.67	2,209.14	2,185.09	12.74	9.83	-13.86	-4,004.72	537.15	3,437.98	3,417.07	20.91	164.457	
2,400.00	2,277.95	2,311.06	2,287.00	13.38	10.24	-14.02	-4,004.84	535.79	3,398.03	3,376.23	21.80	155.886	
2,500.00	2,369.22	2,408.71	2,384.65	14.01	10.64	-14.17	-4,004.69	534.56	3,357.88	3,335.20	22.68	148.044	
2,600.00	2,460.49	2,497.92	2,473.85	14.65	11.00	-14.32	-4,004.48	533.59	3,317.69	3,294.14	23.54	140.916	
2,700.00	2,551.77	2,591.53	2,567.45	15.29	11.39	-14.49	-4,004.22	532.74	3,277.51	3,253.08	24.42	134.198	
2,800.00	2,643.04	2,682.86	2,658.78	15.93	11.76	-14.66	-4,003.90	531.97	3,237.31	3,212.01	25.30	127.961	
2,900.00	2,734.31	2,769.43	2,745.34	16.58	12.12	-14.82	-4,003.66	531.23	3,197.18	3,171.02	26.17	122.189	
3,000.00	2,825.58	2,861.08	2,837.00	17.23	12.50	-14.99	-4,003.50	530.51	3,157.19	3,130.14	27.05	116.717	
3,100.00	2,916.86	2,946.99	2,922.91	17.87	12.85	-15.17	-4,003.31	529.93	3,117.20	3,089.28	27.92	111.638	
3,200.00	3,008.13	3,028.92	3,004.83	18.52	13.19	-15.34	-4,003.37	529.52	3,077.54	3,048.75	28.79	106.902	
3,300.00	3,099.40	3,116.68	3,092.59	19.17	13.56	-15.52	-4,003.62	529.10	3,038.09	3,008.41	29.67	102.386	
3,400.00	3,190.68	3,211.39	3,187.30	19.83	13.95	-15.72	-4,003.89	528.58	2,998.66	2,968.08	30.58	98.069	
3,500.00	3,281.95	3,293.38	3,269.29	20.48	14.29	-15.90	-4,004.23	528.11	2,959.37	2,927.92	31.45	94.086	
3,600.00	3,373.22	3,379.15	3,355.05	21.13	14.65	-16.10	-4,004.80	527.58	2,920.34	2,887.99	32.34	90.292	
3,700.00	3,464.49	3,497.70	3,473.59	21.79	15.15	-16.37	-4,005.26	526.90	2,881.12	2,847.81	33.30	86.509	
3,800.00	3,555.77	3,605.51	3,581.41	22.44	15.60	-16.64	-4,004.62	526.69	2,841.11	2,806.87	34.24	82.978	
3,900.00	3,647.04	3,703.68	3,679.57	23.10	16.01	-16.90	-4,003.63	526.53	2,800.77	2,765.61	35.16	79.668	
4,000.00	3,738.31	3,801.29	3,777.17	23.75	16.41	-17.16	-4,002.39	526.32	2,760.24	2,724.16	36.07	76.521	
4,100.00	3,829.59	3,884.30	3,860.18	24.41	16.76	-17.40	-4,001.36	526.12	2,719.77	2,682.80	36.97	73.574	
4,200.00	3,920.86	3,969.73	3,945.60	25.07	17.12	-17.64	-4,000.55	525.79	2,679.56	2,641.70	37.87	70.761	
4,300.00	4,012.13	4,056.94	4,032.81	25.73	17.48	-17.89	-3,999.88	525.39	2,639.57	2,600.79	38.78	68.073	
4,400.00	4,103.41	4,140.65	4,116.52	26.38	17.84	-18.13	-3,999.41	524.88	2,599.77	2,560.08	39.68	65.516	
4,500.00	4,194.68	4,223.91	4,199.78	27.04	18.19	-18.38	-3,999.28	524.38	2,560.36	2,519.77	40.59	63.078	
4,600.00	4,285.95	4,316.05	4,291.91	27.70	18.57	-18.66	-3,999.19	523.85	2,521.07	2,479.56	41.51	60.731	
4,700.00	4,377.22	4,404.04	4,379.90	28.36	18.95	-18.93	-3,999.15	523.40	2,481.90	2,439.47	42.43	58.490	
4,800.00	4,468.50	4,496.10	4,471.96	29.02	19.34	-19.23	-3,999.14	522.98	2,442.82	2,399.46	43.36	56.339	
4,900.00	4,559.77	4,589.17	4,565.03	29.68	19.73	-19.55	-3,999.07	522.56	2,403.76	2,359.47	44.29	54.274	
5,000.00	4,651.04	4,676.61	4,652.47	30.34	20.10	-19.85	-3,999.05	522.11	2,364.78	2,319.56	45.22	52.298	
5,100.00	4,742.32	4,761.59	4,737.44	31.00	20.46	-20.16	-3,999.21	521.76	2,326.07	2,279.92	46.15	50.404	

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,850.06	4,825.91	31.66	20.83	-20.49	-3,999.49	521.76	2,287.65	2,240.57	47.08	48.586		
5,300.00	4,924.86	4,941.71	4,917.57	32.32	21.22	-20.85	-3,999.80	521.78	2,249.33	2,201.30	48.03	46.836		
5,400.00	5,016.13	5,032.36	5,008.21	32.99	21.60	-21.22	-4,000.10	521.81	2,211.09	2,162.12	48.97	45.153		
5,500.00	5,107.41	5,121.98	5,097.83	33.65	21.98	-21.60	-4,000.47	521.84	2,173.00	2,123.08	49.92	43.534		
5,600.00	5,198.68	5,212.87	5,188.72	34.31	22.36	-21.99	-4,000.89	521.93	2,135.05	2,084.19	50.87	41.974		
5,700.00	5,289.95	5,307.80	5,283.66	34.97	22.76	-22.42	-4,001.28	521.90	2,097.12	2,045.31	51.82	40.471		
5,800.00	5,381.23	5,399.13	5,374.98	35.63	23.15	-22.84	-4,001.60	521.82	2,059.23	2,006.45	52.78	39.019		
5,900.00	5,472.50	5,488.23	5,464.08	36.30	23.52	-23.27	-4,001.95	521.78	2,021.48	1,967.74	53.74	37.618		
6,000.00	5,563.77	5,599.66	5,575.51	36.96	23.99	-23.83	-4,001.88	521.90	1,983.50	1,928.81	54.68	36.272		
6,100.00	5,655.05	5,692.39	5,668.24	37.62	24.38	-24.34	-4,001.16	522.15	1,945.07	1,889.42	55.65	34.952		
6,200.00	5,746.32	5,775.35	5,751.19	38.28	24.73	-24.80	-4,000.70	522.24	1,906.91	1,850.28	56.63	33.671		
6,300.00	5,837.59	5,861.61	5,837.46	38.95	25.10	-25.29	-4,000.64	522.18	1,869.24	1,811.62	57.62	32.442		
6,400.00	5,928.86	5,953.24	5,929.09	39.61	25.49	-25.82	-4,000.74	522.03	1,831.83	1,773.23	58.60	31.259		
6,500.00	6,020.14	6,045.14	6,020.99	40.27	25.88	-26.37	-4,000.81	521.66	1,794.47	1,734.88	59.59	30.115		
6,600.00	6,111.41	6,135.69	6,111.53	40.94	26.27	-26.93	-4,000.98	521.23	1,757.32	1,696.73	60.58	29.007		
6,700.00	6,202.68	6,230.40	6,206.24	41.60	26.67	-27.54	-4,001.14	520.67	1,720.28	1,658.71	61.57	27.938		
6,800.00	6,293.96	6,329.48	6,305.32	42.26	27.09	-28.20	-4,000.97	519.90	1,683.05	1,620.49	62.56	26.903		
6,900.00	6,385.23	6,423.87	6,399.70	42.93	27.49	-28.86	-4,000.54	518.94	1,645.68	1,582.12	63.56	25.891		
7,000.00	6,476.50	6,514.86	6,490.68	43.59	27.88	-29.52	-4,000.10	518.03	1,608.47	1,543.89	64.58	24.907		
7,100.00	6,567.77	6,612.23	6,588.04	44.25	28.29	-30.26	-3,999.48	516.84	1,571.26	1,505.68	65.58	23.958		
7,200.00	6,658.64	6,701.36	6,677.17	44.91	28.67	-30.67	-3,998.86	515.62	1,536.96	1,470.30	66.66	23.056		
7,300.00	6,747.14	6,791.14	6,766.94	45.52	29.05	-30.99	-3,998.31	514.18	1,501.82	1,443.00	67.81	22.279		
7,400.00	6,831.10	6,884.16	6,859.93	46.07	29.45	-31.26	-3,997.74	512.10	1,469.27	1,418.28	69.09	21.659		
7,494.76	6,904.60	6,963.12	6,938.85	46.52	29.79	-31.96	-3,997.10	509.84	1,438.79	1,418.63	70.15	21.222 CC		
7,500.00	6,908.46	6,967.23	6,942.96	46.54	29.81	-32.37	-3,997.06	509.72	1,488.80	1,418.59	70.22	21.203 ES		
7,600.00	6,977.30	7,043.19	7,018.88	46.95	30.13	-32.99	-3,996.31	507.35	1,495.99	1,424.52	71.47	20.932		
7,700.00	7,035.93	7,110.96	7,086.60	47.30	30.42	-102.72	-3,995.59	504.80	1,516.64	1,443.91	72.73	20.853 SF		
7,800.00	7,082.92	7,159.97	7,135.57	47.59	30.63	-104.09	-3,995.06	502.85	1,551.17	1,477.15	74.02	20.956		
7,900.00	7,117.09	7,197.64	7,173.20	47.84	30.79	-103.13	-3,994.65	501.34	1,599.02	1,523.76	75.26	21.246		
8,000.00	7,137.62	7,221.92	7,197.46	48.06	30.89	-99.49	-3,994.39	500.37	1,658.81	1,582.40	76.41	21.709		
8,100.00	7,143.99	7,232.22	7,207.75	48.28	30.94	-92.79	-3,994.27	499.96	1,728.49	1,651.06	77.42	22.325		
8,200.00	7,143.45	7,235.66	7,211.19	48.53	30.95	-92.96	-3,994.24	499.83	1,803.47	1,725.15	78.33	23.025		
8,300.00	7,142.91	7,239.11	7,214.63	48.89	30.97	-93.13	-3,994.20	499.69	1,880.78	1,801.60	79.18	23.753		
8,400.00	7,142.37	7,242.55	7,218.07	49.40	30.98	-93.30	-3,994.16	499.55	1,960.14	1,880.16	79.98	24.507		
8,500.00	7,141.83	7,245.99	7,221.51	50.12	31.00	-93.47	-3,994.12	499.41	2,041.31	1,960.57	80.74	25.284		
8,600.00	7,141.29	7,249.43	7,224.95	51.08	31.01	-93.63	-3,994.09	499.28	2,124.08	2,042.64	81.44	26.083		
8,700.00	7,140.75	7,252.88	7,228.39	52.30	31.03	-93.80	-3,994.05	499.14	2,208.27	2,126.18	82.09	26.901		
8,800.00	7,140.21	7,256.32	7,231.83	53.75	31.04	-93.97	-3,994.01	499.00	2,293.72	2,211.02	82.70	27.737		
8,900.00	7,139.67	7,259.76	7,235.27	55.40	31.05	-94.14	-3,993.97	498.86	2,380.30	2,297.04	83.26	28.588		
9,000.00	7,139.12	7,263.20	7,238.71	57.20	31.07	-94.31	-3,993.94	498.73	2,467.89	2,384.11	83.79	29.454		
9,100.00	7,138.58	7,266.65	7,242.15	59.13	31.08	-94.48	-3,993.90	498.59	2,556.39	2,472.11	84.28	30.332		
9,200.00	7,138.04	7,270.09	7,245.59	61.15	31.10	-94.64	-3,993.86	498.45	2,645.71	2,560.97	84.74	31.222		
9,300.00	7,137.50	7,273.53	7,249.03	63.26	31.11	-94.81	-3,993.82	498.32	2,735.75	2,650.59	85.17	32.123		
9,400.00	7,136.96	7,276.97	7,252.47	65.44	31.13	-94.98	-3,993.79	498.18	2,826.47	2,740.90	85.57	33.032		
9,500.00	7,136.42	7,280.42	7,255.91	67.68	31.14	-95.15	-3,993.75	498.04	2,917.78	2,831.84	85.94	33.950		
9,600.00	7,135.88	7,283.86	7,259.35	69.97	31.16	-95.32	-3,993.71	497.90	3,009.65	2,923.35	86.30	34.875		
9,700.00	7,135.34	7,287.30	7,262.79	72.31	31.17	-95.48	-3,993.68	497.77	3,102.01	3,015.38	86.63	35.808		
9,800.00	7,134.80	7,290.74	7,266.23	74.69	31.19	-95.65	-3,993.64	497.63	3,194.83	3,107.89	86.94	36.746		
9,900.00	7,134.26	7,294.19	7,269.67	77.10	31.20	-95.82	-3,993.60	497.49	3,288.07	3,200.83	87.24	37.690		
10,000.00	7,133.71	7,297.63	7,273.11	79.54	31.22	-95.99	-3,993.56	497.35	3,381.69	3,294.17	87.52	38.639		
10,100.00	7,133.17	7,301.07	7,276.55	82.02	31.23	-96.15	-3,993.53	497.22	3,475.67	3,387.88	87.79	39.592		
10,200.00	7,132.63	7,304.51	7,279.99	84.52	31.25	-96.32	-3,993.49	497.08	3,569.96	3,481.92	88.04	40.550		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,132.09	7,307.96	7,283.43	87.04	31.26	-96.49	-3,993.45	496.94	3,664.56	3,576.28	88.28	41.511	
10,400.00	7,131.55	7,311.40	7,286.86	89.58	31.28	-96.66	-3,993.41	496.80	3,759.43	3,670.92	88.51	42.475	
10,500.00	7,131.01	7,314.84	7,290.30	92.15	31.29	-96.82	-3,993.38	496.67	3,854.56	3,765.83	88.73	43.442	
10,600.00	7,130.47	7,318.28	7,293.74	94.73	31.30	-96.99	-3,993.34	496.53	3,949.93	3,860.99	88.94	44.412	
10,700.00	7,129.93	7,321.73	7,297.18	97.33	31.32	-97.16	-3,993.30	496.39	4,045.51	3,956.37	89.14	45.384	
10,800.00	7,129.39	7,325.17	7,300.62	99.94	31.33	-97.32	-3,993.26	496.26	4,141.31	4,051.97	89.33	46.359	
10,900.00	7,128.84	7,328.61	7,304.06	102.56	31.35	-97.49	-3,993.23	496.12	4,237.29	4,147.77	89.52	47.335	
11,000.00	7,128.30	7,332.05	7,307.50	105.20	31.36	-97.66	-3,993.19	495.98	4,333.45	4,243.76	89.70	48.313	
11,100.00	7,127.76	7,335.50	7,310.94	107.85	31.38	-97.82	-3,993.15	495.84	4,429.78	4,339.92	89.87	49.292	
11,200.00	7,127.22	7,338.94	7,314.38	110.51	31.39	-97.99	-3,993.11	495.71	4,526.27	4,436.24	90.03	50.273	
11,300.00	7,126.68	7,342.38	7,317.82	113.18	31.41	-98.15	-3,993.08	495.57	4,622.90	4,532.71	90.19	51.255	
11,400.00	7,126.14	7,345.82	7,321.26	115.86	31.42	-98.32	-3,993.04	495.43	4,719.68	4,629.33	90.35	52.237	
11,500.00	7,125.60	7,349.27	7,324.70	118.55	31.44	-98.49	-3,993.00	495.29	4,816.58	4,726.08	90.50	53.221	
11,600.00	7,125.06	7,352.71	7,328.14	121.25	31.45	-98.65	-3,992.96	495.16	4,913.60	4,822.95	90.65	54.205	
11,700.00	7,124.52	7,356.15	7,331.58	123.95	31.47	-98.82	-3,992.93	495.02	5,010.74	4,919.95	90.79	55.190	
11,800.00	7,123.97	7,359.59	7,335.02	126.66	31.48	-98.98	-3,992.89	494.88	5,107.98	5,017.05	90.93	56.175	
11,900.00	7,123.43	7,363.04	7,338.46	129.38	31.50	-99.15	-3,992.85	494.74	5,205.33	5,114.27	91.07	57.160	
12,000.00	7,122.89	7,366.48	7,341.90	132.10	31.51	-99.31	-3,992.81	494.61	5,302.77	5,211.58	91.20	58.146	
12,100.00	7,122.35	7,369.92	7,345.34	134.83	31.53	-99.48	-3,992.78	494.47	5,400.31	5,308.98	91.33	59.132	
12,200.00	7,121.81	7,373.36	7,348.78	137.56	31.54	-99.64	-3,992.74	494.33	5,497.93	5,406.48	91.45	60.118	
12,300.00	7,121.27	7,376.81	7,352.22	140.30	31.56	-99.81	-3,992.70	494.19	5,595.64	5,504.06	91.58	61.103	
12,400.00	7,120.73	7,380.25	7,355.66	143.05	31.57	-99.97	-3,992.66	494.06	5,693.42	5,601.72	91.70	62.089	
12,500.00	7,120.19	7,383.69	7,359.10	145.80	31.58	-100.14	-3,992.63	493.92	5,791.27	5,699.46	91.82	63.074	
12,600.00	7,119.65	7,387.13	7,362.54	148.55	31.60	-100.30	-3,992.59	493.78	5,889.20	5,797.26	91.93	64.059	
12,700.00	7,119.10	7,390.58	7,365.98	151.30	31.61	-100.46	-3,992.55	493.65	5,987.19	5,895.14	92.05	65.044	
12,800.00	7,118.56	7,394.02	7,369.41	154.07	31.63	-100.63	-3,992.51	493.51	6,085.24	5,993.08	92.16	66.028	
12,900.00	7,118.02	7,397.46	7,372.85	156.83	31.64	-100.79	-3,992.48	493.37	6,183.36	6,091.09	92.27	67.012	
13,000.00	7,117.48	7,400.90	7,376.29	159.60	31.66	-100.96	-3,992.44	493.23	6,281.53	6,189.15	92.38	67.996	
13,100.00	7,116.94	7,404.35	7,379.73	162.37	31.67	-101.12	-3,992.40	493.10	6,379.76	6,287.27	92.49	68.978	
13,200.00	7,116.40	7,407.79	7,383.17	165.14	31.69	-101.28	-3,992.36	492.96	6,478.04	6,385.44	92.60	69.960	
13,300.00	7,115.86	7,411.23	7,386.61	167.92	31.70	-101.45	-3,992.33	492.82	6,576.37	6,483.67	92.70	70.941	
13,400.00	7,115.32	7,414.67	7,390.05	170.70	31.72	-101.61	-3,992.29	492.68	6,674.75	6,581.94	92.81	71.922	
13,500.00	7,114.78	7,418.12	7,393.49	173.48	31.73	-101.77	-3,992.25	492.55	6,773.17	6,680.27	92.91	72.902	
13,600.00	7,114.24	7,421.56	7,396.93	176.26	31.75	-101.93	-3,992.21	492.41	6,871.64	6,778.63	93.01	73.881	
13,700.00	7,113.69	7,425.00	7,400.37	179.05	31.76	-102.10	-3,992.18	492.27	6,970.15	6,877.04	93.11	74.859	
13,800.00	7,113.15	7,428.44	7,403.81	181.84	31.78	-102.26	-3,992.14	492.13	7,068.70	6,975.49	93.21	75.836	
13,900.00	7,112.61	7,400.00	7,375.39	184.63	31.65	-100.91	-3,992.45	493.27	7,167.36	7,074.18	93.18	76.920	
14,000.00	7,112.07	7,400.00	7,375.39	187.42	31.65	-100.91	-3,992.45	493.27	7,266.00	7,172.74	93.26	77.909	
14,100.00	7,111.53	7,400.00	7,375.39	190.22	31.65	-100.91	-3,992.45	493.27	7,364.68	7,271.33	93.35	78.897	
14,200.00	7,110.99	7,400.00	7,375.39	193.01	31.65	-100.91	-3,992.45	493.27	7,463.39	7,369.96	93.43	79.885	
14,300.00	7,110.45	7,400.00	7,375.39	195.81	31.65	-100.91	-3,992.45	493.27	7,562.14	7,468.63	93.51	80.871	
14,400.00	7,109.91	7,400.00	7,375.39	198.61	31.65	-100.91	-3,992.45	493.27	7,660.91	7,567.33	93.59	81.857	
14,500.00	7,109.37	7,400.00	7,375.39	201.42	31.65	-100.91	-3,992.45	493.27	7,759.72	7,666.06	93.67	82.843	
14,600.00	7,108.82	7,400.00	7,375.39	204.22	31.65	-100.91	-3,992.45	493.27	7,858.56	7,764.82	93.75	83.827	
14,700.00	7,108.28	7,400.00	7,375.39	207.03	31.65	-100.91	-3,992.45	493.27	7,957.43	7,863.61	93.83	84.810	
14,800.00	7,107.74	7,400.00	7,375.39	209.83	31.65	-100.91	-3,992.45	493.27	8,056.33	7,962.43	93.90	85.793	
14,900.00	7,107.20	7,400.00	7,375.39	212.64	31.65	-100.91	-3,992.45	493.27	8,155.25	8,061.27	93.98	86.775	
15,000.00	7,106.66	7,400.00	7,375.39	215.45	31.65	-100.91	-3,992.45	493.27	8,254.20	8,160.14	94.06	87.755	
15,100.00	7,106.12	7,400.00	7,375.39	218.26	31.65	-100.91	-3,992.45	493.27	8,353.18	8,259.04	94.14	88.735	
15,200.00	7,105.58	7,400.00	7,375.39	221.07	31.65	-100.91	-3,992.45	493.27	8,452.18	8,357.96	94.21	89.714	
15,300.00	7,105.04	7,400.00	7,375.39	223.89	31.65	-100.91	-3,992.45	493.27	8,551.20	8,456.91	94.29	90.692	
15,400.00	7,104.50	7,400.00	7,375.39	226.70	31.65	-100.91	-3,992.45	493.27	8,650.24	8,555.88	94.36	91.668	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)		
15,491.56	7,104.00	7,400.00	7,375.39	229.28	31.65	-100.91	-3,992.45	493.27	8,740.95	8,646.52	94.43	92.561	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - BLACKGOLD 3(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	24.91	-0.09	3.28	3.28	-23.26	2,682.77	-1,153.06	2,920.06					
100.00	100.00	122.82	97.82	3.28	3.29	-23.26	2,682.69	-1,153.27	2,920.08	2,913.50	6.58	443.816 ES		
200.00	200.00	220.38	195.38	3.34	3.36	-23.26	2,682.86	-1,153.34	2,920.27	2,913.57	6.70	436.057		
300.00	299.98	330.15	305.15	3.44	3.49	153.61	2,682.85	-1,152.99	2,921.68	2,914.75	6.93	421.496		
400.00	399.84	421.57	396.57	3.59	3.64	153.62	2,682.94	-1,152.87	2,926.41	2,919.17	7.24	404.431		
500.00	499.45	530.16	505.15	3.79	3.87	153.63	2,682.87	-1,152.81	2,934.14	2,926.48	7.66	383.042		
600.00	598.70	637.22	612.21	4.03	4.13	153.65	2,682.71	-1,152.53	2,944.84	2,936.67	8.16	360.753		
700.00	697.47	741.85	716.84	4.31	4.42	153.68	2,682.15	-1,151.93	2,958.17	2,949.44	8.73	338.904		
800.00	795.62	837.85	812.84	4.64	4.70	153.70	2,681.86	-1,151.46	2,974.86	2,965.54	9.33	319.003		
900.00	893.06	944.15	919.13	5.00	5.04	153.74	2,681.22	-1,150.64	2,994.29	2,984.28	10.00	299.363		
1,000.00	989.64	1,033.03	1,008.02	5.40	5.33	153.74	2,680.74	-1,150.08	3,016.93	3,006.26	10.66	282.956		
1,100.00	1,085.27	1,124.07	1,099.06	5.83	5.65	153.74	2,680.45	-1,149.60	3,042.89	3,031.52	11.36	267.808		
1,200.00	1,179.82	1,222.51	1,197.49	6.29	5.99	153.75	2,680.09	-1,149.09	3,071.88	3,059.76	12.12	253.480		
1,300.00	1,273.17	1,315.44	1,290.42	6.79	6.33	153.75	2,679.68	-1,148.67	3,103.88	3,090.99	12.88	240.947		
1,400.00	1,365.21	1,401.14	1,376.12	7.33	6.65	153.71	2,679.47	-1,148.15	3,139.02	3,125.38	13.64	230.138		
1,500.00	1,456.49	1,494.24	1,469.22	7.89	7.00	154.03	2,679.33	-1,147.55	3,175.95	3,161.51	14.44	219.930		
1,600.00	1,547.76	1,595.56	1,570.53	8.46	7.39	154.38	2,678.91	-1,147.07	3,212.82	3,197.53	15.29	210.173		
1,700.00	1,639.04	1,684.57	1,659.54	9.05	7.73	154.68	2,678.29	-1,147.02	3,249.65	3,233.55	16.10	201.904		
1,800.00	1,730.31	1,767.30	1,742.27	9.65	8.05	154.94	2,677.74	-1,147.29	3,286.71	3,269.82	16.89	194.633		
1,900.00	1,821.58	1,872.46	1,847.43	10.26	8.46	155.27	2,677.17	-1,147.49	3,323.92	3,306.14	17.79	186.870		
2,000.00	1,912.85	1,961.16	1,936.12	10.87	8.81	155.54	2,676.31	-1,147.66	3,360.83	3,342.20	18.62	180.465		
2,100.00	2,004.13	2,047.61	2,022.57	11.49	9.16	155.80	2,675.62	-1,148.17	3,398.06	3,378.61	19.46	174.663		
2,200.00	2,095.40	2,145.98	2,120.94	12.11	9.55	156.08	2,674.85	-1,148.56	3,435.33	3,414.98	20.35	168.824		
2,300.00	2,186.67	2,240.81	2,215.76	12.74	9.93	156.35	2,673.91	-1,148.78	3,472.42	3,451.19	21.23	163.551		
2,400.00	2,277.95	2,328.54	2,303.48	13.38	10.29	156.59	2,673.09	-1,149.14	3,509.69	3,487.60	22.08	158.921		
2,500.00	2,369.22	2,422.40	2,397.34	14.01	10.67	156.84	2,672.12	-1,149.77	3,546.99	3,524.02	22.97	154.409		
2,600.00	2,460.49	2,511.21	2,486.13	14.65	11.03	157.07	2,671.15	-1,150.56	3,584.37	3,560.53	23.84	150.373		
2,700.00	2,551.77	2,599.05	2,573.97	15.29	11.39	157.29	2,670.26	-1,151.42	3,621.88	3,597.18	24.70	146.639		
2,800.00	2,643.04	2,679.84	2,654.76	15.93	11.72	157.49	2,669.63	-1,152.16	3,659.64	3,634.11	25.53	143.361		
2,900.00	2,734.31	2,758.75	2,733.66	16.58	12.05	157.69	2,669.28	-1,152.84	3,697.73	3,671.38	26.35	140.353		
3,000.00	2,825.58	2,845.53	2,820.44	17.23	12.40	157.89	2,669.13	-1,153.75	3,736.14	3,708.93	27.21	137.325		
3,100.00	2,916.86	2,940.21	2,915.11	17.87	12.79	158.12	2,668.90	-1,154.74	3,774.55	3,746.44	28.11	134.274		
3,200.00	3,008.13	3,032.00	3,006.89	18.52	13.17	158.32	2,668.51	-1,156.14	3,812.96	3,783.96	29.00	131.473		
3,300.00	3,099.40	3,120.80	3,095.67	19.17	13.54	158.51	2,668.14	-1,157.51	3,851.44	3,821.56	29.88	128.903		
3,400.00	3,190.68	3,204.84	3,179.71	19.83	13.89	158.69	2,667.86	-1,159.04	3,890.09	3,859.36	30.73	126.589		
3,500.00	3,281.95	3,290.38	3,265.22	20.48	14.25	158.86	2,667.62	-1,160.94	3,928.93	3,897.33	31.59	124.370		
3,600.00	3,373.22	3,379.35	3,354.16	21.13	14.62	159.03	2,667.40	-1,163.13	3,967.90	3,935.43	32.47	122.196		
3,700.00	3,464.49	3,477.18	3,451.96	21.79	15.03	159.22	2,667.15	-1,165.50	4,006.88	3,973.47	33.40	119.953		
3,800.00	3,555.77	3,564.89	3,539.65	22.44	15.39	159.39	2,666.88	-1,167.47	4,045.80	4,011.52	34.28	118.025		
3,900.00	3,647.04	3,711.61	3,686.33	23.10	16.01	159.65	2,665.84	-1,170.74	4,084.50	4,049.01	35.49	115.077		
4,000.00	3,738.31	3,816.22	3,790.90	23.75	16.45	159.84	2,664.07	-1,172.94	4,122.24	4,085.77	36.47	113.030		
4,100.00	3,829.59	3,908.91	3,883.56	24.41	16.84	160.00	2,662.35	-1,174.79	4,159.82	4,122.44	37.38	111.283		
4,200.00	3,920.86	3,999.55	3,974.16	25.07	17.22	160.15	2,660.64	-1,176.67	4,197.42	4,159.14	38.28	109.652		
4,300.00	4,012.13	4,094.78	4,069.35	25.73	17.62	160.31	2,658.79	-1,178.74	4,235.02	4,195.81	39.21	108.021		
4,400.00	4,103.41	4,188.94	4,163.47	26.38	18.02	160.46	2,656.90	-1,180.76	4,272.58	4,232.46	40.13	106.479		
4,500.00	4,194.68	4,284.18	4,258.67	27.04	18.42	160.61	2,654.95	-1,182.74	4,310.12	4,269.07	41.05	104.987		
4,600.00	4,285.95	4,375.16	4,349.61	27.70	18.80	160.76	2,653.07	-1,184.61	4,347.65	4,305.70	41.96	103.622		
4,700.00	4,377.22	4,468.91	4,443.32	28.36	19.20	160.90	2,651.13	-1,186.59	4,385.22	4,342.34	42.88	102.275		
4,800.00	4,468.50	4,563.42	4,537.79	29.02	19.60	161.04	2,649.09	-1,188.68	4,422.76	4,378.95	43.80	100.972		
4,900.00	4,559.77	4,654.33	4,628.65	29.68	19.98	161.18	2,647.10	-1,190.69	4,460.29	4,415.59	44.71	99.770		
5,000.00	4,651.04	4,759.78	4,734.05	30.34	20.43	161.33	2,644.76	-1,193.01	4,497.83	4,452.13	45.70	98.425		
5,100.00	4,742.32	4,865.46	4,839.67	31.00	20.88	161.48	2,641.98	-1,195.18	4,534.96	4,488.27	46.69	97.125		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - BLACKGOLD 3(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,954.06	4,928.22	31.66	21.25	161.60	2,639.58	-1,196.96	4,572.05	4,524.47	47.58	96.084		
5,300.00	4,924.86	5,038.78	5,012.90	32.32	21.61	161.72	2,637.44	-1,198.61	4,609.31	4,560.86	48.45	95.131		
5,400.00	5,016.13	5,123.32	5,097.40	32.99	21.97	161.84	2,635.47	-1,200.16	4,646.72	4,597.40	49.32	94.219		
5,500.00	5,107.41	5,204.80	5,178.85	33.65	22.32	161.95	2,633.73	-1,201.65	4,684.35	4,634.19	50.17	93.378		
5,600.00	5,198.68	5,288.27	5,262.29	34.31	22.67	162.07	2,632.15	-1,203.14	4,722.19	4,671.16	51.02	92.549		
5,700.00	5,289.95	5,365.84	5,339.84	34.97	23.00	162.18	2,630.90	-1,204.32	4,760.26	4,708.42	51.84	91.818		
5,800.00	5,381.23	5,451.05	5,425.04	35.63	23.36	162.30	2,629.86	-1,205.26	4,798.60	4,745.89	52.71	91.035		
5,900.00	5,472.50	5,538.38	5,512.35	36.30	23.73	162.42	2,628.83	-1,206.25	4,837.01	4,783.41	53.59	90.255		
6,000.00	5,563.77	5,617.28	5,591.24	36.96	24.07	162.53	2,628.01	-1,207.26	4,875.60	4,821.18	54.42	89.594		
6,100.00	5,655.05	5,687.58	5,661.54	37.62	24.36	162.63	2,627.59	-1,208.00	4,914.56	4,859.37	55.19	89.051		
6,200.00	5,746.32	5,816.30	5,790.26	38.28	24.91	162.82	2,626.89	-1,208.28	4,953.42	4,897.09	56.33	87.929		
6,300.00	5,837.59	5,911.02	5,884.97	38.95	25.31	162.97	2,626.04	-1,208.10	4,991.91	4,934.65	57.26	87.176		
6,400.00	5,928.86	6,062.67	6,036.61	39.61	25.96	163.20	2,624.43	-1,206.64	5,030.29	4,971.74	58.55	85.907		
6,500.00	6,020.14	6,192.09	6,165.96	40.27	26.51	163.41	2,621.44	-1,203.77	5,067.08	5,007.38	59.70	84.872		
6,600.00	6,111.41	6,387.09	6,360.73	40.94	27.34	163.74	2,614.23	-1,197.82	5,102.18	5,040.92	61.25	83.298		
6,700.00	6,202.68	6,436.66	6,410.24	41.60	27.55	163.81	2,612.13	-1,196.76	5,137.44	5,075.53	61.91	82.986		
6,800.00	6,293.96	6,500.00	6,473.55	42.26	27.82	163.90	2,610.15	-1,196.05	5,173.73	5,111.09	62.64	82.591		
6,900.00	6,385.23	6,524.67	6,498.22	42.93	27.92	163.93	2,609.57	-1,195.93	5,210.73	5,147.60	63.13	82.544		
7,000.00	6,476.50	6,574.64	6,548.17	43.59	28.14	164.00	2,608.70	-1,195.80	5,248.61	5,184.84	63.76	82.312		
7,100.00	6,567.77	6,639.01	6,612.54	44.25	28.41	164.08	2,608.03	-1,195.85	5,287.18	5,222.69	64.49	81.980		
7,200.00	6,658.64	6,717.26	6,690.79	44.91	28.74	144.14	2,607.39	-1,196.10	5,324.70	5,259.38	65.31	81.524		
7,300.00	6,747.14	6,790.46	6,763.99	45.52	29.06	126.19	2,606.95	-1,196.59	5,358.66	5,292.57	66.09	81.079		
7,400.00	6,831.10	6,843.29	6,816.81	46.07	29.28	113.24	2,606.82	-1,197.13	5,388.55	5,321.85	66.70	80.784		
7,500.00	6,908.46	6,900.00	6,873.51	46.54	29.52	104.26	2,607.04	-1,197.90	5,414.08	5,346.77	67.32	80.426		
7,600.00	6,977.30	6,957.59	6,931.10	46.95	29.76	98.11	2,607.43	-1,198.75	5,434.71	5,366.77	67.94	79.993		
7,700.00	7,035.93	7,019.88	6,993.38	47.30	30.03	94.06	2,607.80	-1,199.58	5,450.03	5,381.39	68.64	79.401		
7,800.00	7,082.92	7,064.91	7,038.41	47.59	30.22	91.42	2,608.08	-1,200.16	5,460.13	5,390.82	69.31	78.776		
7,900.00	7,117.09	7,098.00	7,071.50	47.84	30.36	89.91	2,608.31	-1,200.58	5,465.11	5,395.07	70.04	78.025		
8,000.00	7,137.62	7,118.27	7,091.76	48.06	30.45	89.32	2,608.45	-1,200.83	5,465.10	5,394.24	70.86	77.128		
8,100.00	7,143.99	7,125.27	7,098.75	48.28	30.47	89.55	2,608.50	-1,200.91	5,460.24	5,388.49	71.76	76.094		
8,200.00	7,143.45	7,125.82	7,099.31	48.53	30.48	89.55	2,608.51	-1,200.92	5,454.04	5,381.26	72.78	74.939		
8,300.00	7,142.91	7,126.37	7,099.86	48.89	30.48	89.56	2,608.51	-1,200.92	5,449.67	5,375.72	73.95	73.690		
8,400.00	7,142.37	7,126.91	7,100.40	49.40	30.48	89.56	2,608.51	-1,200.93	5,447.14	5,371.87	75.27	72.373		
8,488.27	7,141.89	7,127.39	7,100.88	50.02	30.48	89.57	2,608.52	-1,200.93	5,446.42	5,369.89	76.53	71.165		
8,500.00	7,141.83	7,127.45	7,100.94	50.12	30.48	89.57	2,608.52	-1,200.94	5,446.43	5,369.73	76.70	71.010		
8,600.00	7,141.29	7,127.99	7,101.48	51.08	30.49	89.57	2,608.52	-1,200.94	5,447.57	5,369.32	78.24	69.622		
8,700.00	7,140.75	7,128.52	7,102.01	52.30	30.49	89.58	2,608.53	-1,200.95	5,450.54	5,370.65	79.89	68.229		
8,800.00	7,140.21	7,129.04	7,102.53	53.75	30.49	89.59	2,608.53	-1,200.95	5,455.34	5,373.72	81.61	66.846		
8,900.00	7,139.67	7,129.56	7,103.05	55.40	30.49	89.59	2,608.53	-1,200.96	5,461.96	5,378.55	83.41	65.486		
9,000.00	7,139.12	7,130.08	7,103.57	57.20	30.50	89.60	2,608.54	-1,200.96	5,470.41	5,385.15	85.26	64.159		
9,100.00	7,138.58	7,130.59	7,104.08	59.13	30.50	89.60	2,608.54	-1,200.97	5,480.67	5,393.50	87.17	62.874		
9,200.00	7,138.04	7,131.10	7,104.59	61.15	30.50	89.61	2,608.54	-1,200.98	5,492.73	5,403.61	89.12	61.636		
9,300.00	7,137.50	7,131.60	7,105.09	63.26	30.50	89.61	2,608.55	-1,200.98	5,506.58	5,415.48	91.09	60.450		
9,400.00	7,136.96	7,132.10	7,105.59	65.44	30.50	89.62	2,608.55	-1,200.99	5,522.20	5,429.11	93.09	59.318		
9,500.00	7,136.42	7,132.59	7,106.08	67.68	30.51	89.62	2,608.56	-1,200.99	5,539.59	5,444.48	95.11	58.243		
9,600.00	7,135.88	7,133.08	7,106.57	69.97	30.51	89.63	2,608.56	-1,201.00	5,558.72	5,461.59	97.14	57.225		
9,700.00	7,135.34	7,133.57	7,107.06	72.31	30.51	89.63	2,608.56	-1,201.00	5,579.58	5,480.42	99.17	56.264		
9,800.00	7,134.80	7,134.05	7,107.54	74.69	30.51	89.64	2,608.57	-1,201.01	5,602.15	5,500.95	101.20	55.359		
9,900.00	7,134.26	7,134.53	7,108.02	77.10	30.51	89.64	2,608.57	-1,201.01	5,626.40	5,523.19	103.22	54.510		
10,000.00	7,133.71	7,135.00	7,108.49	79.54	30.52	89.65	2,608.57	-1,201.02	5,652.32	5,547.10	105.23	53.715		
10,100.00	7,133.17	7,135.47	7,108.96	82.02	30.52	89.65	2,608.58	-1,201.02	5,679.89	5,572.66	107.22	52.972		
10,200.00	7,132.63	7,135.94	7,109.42	84.52	30.52	89.66	2,608.58	-1,201.03	5,709.07	5,599.86	109.20	52.280		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - BLACKGOLD 3(AB_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,300.00	7,132.09	7,136.40	7,109.88	87.04	30.52	89.66	2,608.58	-1,201.03	5,739.84	5,628.68	111.16	51.636	
10,400.00	7,131.55	7,136.85	7,110.34	89.58	30.52	89.67	2,608.59	-1,201.04	5,772.18	5,659.09	113.09	51.040	
10,500.00	7,131.01	7,137.31	7,110.80	92.15	30.53	89.67	2,608.59	-1,201.04	5,806.07	5,691.07	115.00	50.488	
10,600.00	7,130.47	7,137.76	7,111.25	94.73	30.53	89.68	2,608.60	-1,201.05	5,841.47	5,724.59	116.88	49.980	
10,700.00	7,129.93	7,138.20	7,111.69	97.33	30.53	89.68	2,608.60	-1,201.05	5,878.36	5,759.64	118.72	49.513	
10,800.00	7,129.39	7,138.65	7,112.13	99.94	30.53	89.69	2,608.60	-1,201.06	5,916.71	5,796.17	120.54	49.085	
10,900.00	7,128.84	7,139.09	7,112.57	102.56	30.53	89.69	2,608.61	-1,201.06	5,956.49	5,834.17	122.32	48.695	
11,000.00	7,128.30	7,139.52	7,113.01	105.20	30.54	89.70	2,608.61	-1,201.07	5,997.68	5,873.60	124.07	48.340	
11,100.00	7,127.76	7,139.95	7,113.44	107.85	30.54	89.70	2,608.61	-1,201.07	6,040.24	5,914.45	125.79	48.020	
11,200.00	7,127.22	7,140.38	7,113.87	110.51	30.54	89.71	2,608.62	-1,201.08	6,084.14	5,956.68	127.46	47.732	
11,300.00	7,126.68	7,140.81	7,114.29	113.18	30.54	89.71	2,608.62	-1,201.08	6,129.36	6,000.26	129.11	47.475	
11,400.00	7,126.14	7,141.23	7,114.72	115.86	30.54	89.71	2,608.62	-1,201.09	6,175.88	6,045.16	130.71	47.248	
11,500.00	7,125.60	7,141.65	7,115.13	118.55	30.54	89.72	2,608.62	-1,201.09	6,223.65	6,091.36	132.28	47.049	
11,600.00	7,125.06	7,142.06	7,115.55	121.25	30.55	89.72	2,608.63	-1,201.10	6,272.65	6,138.83	133.81	46.876	
11,700.00	7,124.52	7,142.47	7,115.96	123.95	30.55	89.73	2,608.63	-1,201.10	6,322.85	6,187.54	135.31	46.729	
11,800.00	7,123.97	7,142.88	7,116.37	126.66	30.55	89.73	2,608.63	-1,201.10	6,374.23	6,237.46	136.77	46.607	
11,900.00	7,123.43	7,143.29	7,116.78	129.38	30.55	89.74	2,608.64	-1,201.11	6,426.75	6,288.56	138.19	46.507	
12,000.00	7,122.89	7,143.69	7,117.18	132.10	30.55	89.74	2,608.64	-1,201.11	6,480.39	6,340.81	139.57	46.430	
12,100.00	7,122.35	7,144.09	7,117.58	134.83	30.55	89.74	2,608.64	-1,201.12	6,535.12	6,394.19	140.92	46.374	
12,200.00	7,121.81	7,144.48	7,117.97	137.56	30.56	89.75	2,608.65	-1,201.12	6,590.91	6,448.67	142.24	46.338	
12,300.00	7,121.27	7,144.88	7,118.37	140.30	30.56	89.75	2,608.65	-1,201.13	6,647.74	6,504.22	143.52	46.321 SF	
12,400.00	7,120.73	7,145.27	7,118.75	143.05	30.56	89.76	2,608.65	-1,201.13	6,705.57	6,560.81	144.76	46.322	
12,500.00	7,120.19	7,145.65	7,119.14	145.80	30.56	89.76	2,608.66	-1,201.13	6,764.40	6,618.43	145.97	46.341	
12,600.00	7,119.65	7,146.04	7,119.53	148.55	30.56	89.76	2,608.66	-1,201.14	6,824.18	6,677.03	147.15	46.377	
12,700.00	7,119.10	7,146.42	7,119.91	151.30	30.56	89.77	2,608.66	-1,201.14	6,884.89	6,736.60	148.29	46.428	
12,800.00	7,118.56	7,146.80	7,120.28	154.07	30.57	89.77	2,608.66	-1,201.15	6,946.51	6,797.11	149.40	46.495	
12,900.00	7,118.02	7,147.17	7,120.66	156.83	30.57	89.78	2,608.67	-1,201.15	7,009.02	6,858.54	150.48	46.577	
13,000.00	7,117.48	7,147.55	7,121.03	159.60	30.57	89.78	2,608.67	-1,201.15	7,072.39	6,920.86	151.53	46.672	
13,100.00	7,116.94	7,147.92	7,121.40	162.37	30.57	89.78	2,608.67	-1,201.16	7,136.60	6,984.04	152.55	46.781	
13,200.00	7,116.40	7,148.28	7,121.77	165.14	30.57	89.79	2,608.68	-1,201.16	7,201.62	7,048.08	153.54	46.903	
13,300.00	7,115.86	7,148.65	7,122.13	167.92	30.57	89.79	2,608.68	-1,201.16	7,267.44	7,112.93	154.50	47.037	
13,400.00	7,115.32	7,149.01	7,122.49	170.70	30.58	89.80	2,608.68	-1,201.17	7,334.03	7,178.59	155.44	47.183	
13,500.00	7,114.78	7,149.37	7,122.85	173.48	30.58	89.80	2,608.69	-1,201.17	7,401.37	7,245.03	156.35	47.340	
13,600.00	7,114.24	7,149.72	7,123.21	176.26	30.58	89.80	2,608.69	-1,201.18	7,469.45	7,312.22	157.23	47.508	
13,700.00	7,113.69	7,150.08	7,123.56	179.05	30.58	89.81	2,608.69	-1,201.18	7,538.23	7,380.15	158.08	47.686	
13,800.00	7,113.15	7,150.43	7,123.91	181.84	30.58	89.81	2,608.69	-1,201.18	7,607.71	7,448.80	158.91	47.874	
13,900.00	7,112.61	7,150.78	7,124.26	184.63	30.58	89.81	2,608.70	-1,201.19	7,677.86	7,518.15	159.72	48.072	
14,000.00	7,112.07	7,151.12	7,124.61	187.42	30.58	89.82	2,608.70	-1,201.19	7,748.67	7,588.17	160.50	48.279	
14,100.00	7,111.53	7,151.47	7,124.95	190.22	30.59	89.82	2,608.70	-1,201.19	7,820.12	7,658.86	161.26	48.495	
14,200.00	7,110.99	7,151.81	7,125.29	193.01	30.59	89.83	2,608.70	-1,201.20	7,892.18	7,730.19	161.99	48.719	
14,300.00	7,110.45	7,152.15	7,125.63	195.81	30.59	89.83	2,608.71	-1,201.20	7,964.85	7,802.14	162.71	48.952	
14,400.00	7,109.91	7,152.48	7,125.97	198.61	30.59	89.83	2,608.71	-1,201.20	8,038.11	7,874.71	163.40	49.192	
14,500.00	7,109.37	7,152.81	7,126.30	201.42	30.59	89.84	2,608.71	-1,201.21	8,111.94	7,947.86	164.08	49.440	
14,600.00	7,108.82	7,153.15	7,126.63	204.22	30.59	89.84	2,608.71	-1,201.21	8,186.32	8,021.59	164.73	49.695	
14,700.00	7,108.28	7,153.48	7,126.96	207.03	30.59	89.84	2,608.72	-1,201.21	8,261.24	8,095.88	165.37	49.957	
14,800.00	7,107.74	7,153.80	7,127.29	209.83	30.60	89.85	2,608.72	-1,201.22	8,336.69	8,170.71	165.98	50.226	
14,900.00	7,107.20	7,154.13	7,127.61	212.64	30.60	89.85	2,608.72	-1,201.22	8,412.66	8,246.07	166.58	50.501	
15,000.00	7,106.66	7,154.45	7,127.94	215.45	30.60	89.85	2,608.73	-1,201.22	8,489.12	8,321.95	167.16	50.783	
15,100.00	7,106.12	7,154.77	7,128.26	218.26	30.60	89.86	2,608.73	-1,201.23	8,566.06	8,398.33	167.73	51.071	
15,200.00	7,105.58	7,155.09	7,128.57	221.07	30.60	89.86	2,608.73	-1,201.23	8,643.48	8,475.20	168.28	51.364	
15,300.00	7,105.04	7,155.40	7,128.89	223.89	30.60	89.86	2,608.73	-1,201.23	8,721.36	8,552.54	168.81	51.663	
15,400.00	7,104.50	7,155.72	7,129.20	226.70	30.60	89.87	2,608.74	-1,201.24	8,799.68	8,630.35	169.33	51.968	

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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)		
15,491.56	7,104.00	7,156.00	7,129.49	229.28	30.60	89.87	2,608.74	-1,201.24	8,871.78	8,701.99	169.79	52.251	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-22(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	19.00	3.28	3.28	-59.69	1,264.96	-2,163.55	2,506.28					
100.00	100.00	81.00	100.00	3.28	3.57	-59.69	1,264.96	-2,163.55	2,506.21	2,499.36	6.86	365.526		
200.00	200.00	181.00	200.00	3.34	5.63	-59.69	1,264.96	-2,163.55	2,506.21	2,497.25	8.96	279.559 CC		
300.00	299.98	280.98	299.98	3.44	8.71	117.20	1,264.96	-2,163.55	2,507.01	2,494.86	12.14	206.431		
400.00	399.84	380.84	399.84	3.59	12.01	117.26	1,264.96	-2,163.55	2,509.41	2,493.81	15.60	160.907 ES		
500.00	499.45	480.45	499.45	3.79	15.38	117.37	1,264.96	-2,163.55	2,513.42	2,494.25	19.17	131.123		
600.00	598.70	579.70	598.70	4.03	18.78	117.51	1,264.96	-2,163.55	2,519.07	2,496.26	22.81	110.433		
700.00	697.47	678.47	697.47	4.31	22.18	117.70	1,264.96	-2,163.55	2,526.39	2,499.89	26.50	95.345		
800.00	795.62	776.62	795.62	4.64	25.58	117.91	1,264.96	-2,163.55	2,535.42	2,505.21	30.21	83.921		
900.00	893.06	874.06	893.06	5.00	28.95	118.16	1,264.96	-2,163.55	2,546.21	2,512.26	33.94	75.012		
1,000.00	989.64	970.64	989.64	5.40	32.31	118.43	1,264.96	-2,163.55	2,558.81	2,521.13	37.68	67.902		
1,100.00	1,085.27	1,066.27	1,085.27	5.83	35.63	118.73	1,264.96	-2,163.55	2,573.28	2,531.86	41.42	62.120		
1,200.00	1,179.82	1,160.82	1,179.82	6.29	38.92	119.04	1,264.96	-2,163.55	2,589.69	2,544.53	45.16	57.345		
1,300.00	1,273.17	1,254.17	1,273.17	6.79	42.17	119.37	1,264.96	-2,163.55	2,608.11	2,559.23	48.88	53.355		
1,400.00	1,365.21	1,346.21	1,365.21	7.33	45.37	119.71	1,264.96	-2,163.55	2,628.59	2,576.01	52.59	49.984		
1,500.00	1,456.49	1,437.49	1,456.49	7.89	48.55	120.40	1,264.96	-2,163.55	2,650.46	2,594.18	56.29	47.090		
1,600.00	1,547.76	1,528.76	1,547.76	8.46	51.73	121.11	1,264.96	-2,163.55	2,672.78	2,612.78	59.99	44.551		
1,700.00	1,639.04	1,620.04	1,639.04	9.05	54.91	121.81	1,264.96	-2,163.55	2,695.53	2,631.82	63.71	42.309		
1,800.00	1,730.31	1,711.31	1,730.31	9.65	58.09	122.50	1,264.96	-2,163.55	2,718.70	2,651.26	67.44	40.315		
1,900.00	1,821.58	1,802.58	1,821.58	10.26	61.27	123.17	1,264.96	-2,163.55	2,742.29	2,671.12	71.17	38.533		
2,000.00	1,912.85	1,906.15	1,912.85	10.87	64.88	123.84	1,264.96	-2,163.55	2,766.28	2,690.95	75.33	36.722		
2,100.00	2,004.13	1,985.13	2,004.13	11.49	67.64	124.49	1,264.96	-2,163.55	2,790.66	2,712.02	78.64	35.487		
2,200.00	2,095.40	2,076.40	2,095.40	12.11	70.82	125.14	1,264.96	-2,163.55	2,815.42	2,733.04	82.38	34.177		
2,300.00	2,186.67	2,167.67	2,186.67	12.74	74.00	125.78	1,264.96	-2,163.55	2,840.55	2,754.43	86.12	32.984		
2,400.00	2,277.95	2,258.95	2,277.95	13.38	77.18	126.40	1,264.96	-2,163.55	2,866.05	2,776.19	89.86	31.894		
2,500.00	2,369.22	2,350.22	2,369.22	14.01	80.37	127.02	1,264.96	-2,163.55	2,891.90	2,798.29	93.61	30.895		
2,600.00	2,460.49	2,441.49	2,460.49	14.65	83.55	127.62	1,264.96	-2,163.55	2,918.09	2,820.74	97.35	29.976		
2,700.00	2,551.77	2,532.77	2,551.77	15.29	86.74	128.22	1,264.96	-2,163.55	2,944.62	2,843.53	101.09	29.129		
2,800.00	2,643.04	2,624.04	2,643.04	15.93	89.92	128.81	1,264.96	-2,163.55	2,971.47	2,866.63	104.83	28.345		
2,900.00	2,734.31	2,715.31	2,734.31	16.58	93.10	129.38	1,264.96	-2,163.55	2,998.63	2,890.06	108.57	27.618		
3,000.00	2,825.58	2,806.58	2,825.58	17.23	96.29	129.95	1,264.96	-2,163.55	3,026.11	2,913.79	112.32	26.943		
3,100.00	2,916.86	2,902.14	2,916.86	17.87	99.62	130.51	1,264.96	-2,163.55	3,053.88	2,937.68	116.20	26.280		
3,200.00	3,008.13	2,989.13	3,008.13	18.52	102.66	131.06	1,264.96	-2,163.55	3,081.95	2,962.15	119.79	25.727		
3,300.00	3,099.40	3,080.40	3,099.40	19.17	105.84	131.60	1,264.96	-2,163.55	3,110.30	2,986.77	123.53	25.178		
3,400.00	3,190.68	3,171.68	3,190.68	19.83	109.03	132.13	1,264.96	-2,163.55	3,138.92	3,011.65	127.27	24.664		
3,500.00	3,281.95	3,262.95	3,281.95	20.48	112.21	132.65	1,264.96	-2,163.55	3,167.82	3,036.81	131.00	24.181		
3,600.00	3,373.22	3,354.22	3,373.22	21.13	115.40	133.17	1,264.96	-2,163.55	3,196.97	3,062.23	134.74	23.727		
3,700.00	3,464.49	3,445.49	3,464.49	21.79	118.58	133.67	1,264.96	-2,163.55	3,226.38	3,087.91	138.47	23.300		
3,800.00	3,555.77	3,536.77	3,555.77	22.44	121.77	134.17	1,264.96	-2,163.55	3,256.03	3,113.83	142.20	22.897		
3,900.00	3,647.04	3,628.04	3,647.04	23.10	124.95	134.66	1,264.96	-2,163.55	3,285.93	3,139.99	145.93	22.516		
4,000.00	3,738.31	3,719.31	3,738.31	23.75	128.14	135.14	1,264.96	-2,163.55	3,316.06	3,166.39	149.66	22.157		
4,100.00	3,829.59	3,810.59	3,829.59	24.41	131.32	135.61	1,264.96	-2,163.55	3,346.41	3,193.02	153.39	21.816		
4,200.00	3,920.86	3,901.86	3,920.86	25.07	134.51	136.08	1,264.96	-2,163.55	3,376.99	3,219.87	157.12	21.493		
4,300.00	4,012.13	4,006.87	4,012.13	25.73	138.17	136.54	1,264.96	-2,163.55	3,407.79	3,246.46	161.33	21.124		
4,400.00	4,103.41	4,084.41	4,103.41	26.38	140.88	136.99	1,264.96	-2,163.55	3,438.79	3,274.22	164.57	20.895		
4,500.00	4,194.68	4,175.68	4,194.68	27.04	144.07	137.43	1,264.96	-2,163.55	3,470.00	3,301.70	168.30	20.618		
4,600.00	4,285.95	4,266.95	4,285.95	27.70	147.25	137.86	1,264.96	-2,163.55	3,501.40	3,329.39	172.02	20.355		
4,700.00	4,377.22	4,358.22	4,377.22	28.36	150.44	138.29	1,264.96	-2,163.55	3,533.00	3,357.26	175.74	20.104		
4,800.00	4,468.50	4,449.50	4,468.50	29.02	153.62	138.71	1,264.96	-2,163.55	3,564.79	3,385.33	179.46	19.864		
4,900.00	4,559.77	4,540.77	4,559.77	29.68	156.81	139.13	1,264.96	-2,163.55	3,596.76	3,413.58	183.18	19.635		
5,000.00	4,651.04	4,632.04	4,651.04	30.34	159.99	139.53	1,264.96	-2,163.55	3,628.91	3,442.01	186.90	19.416		
5,100.00	4,742.32	4,723.32	4,742.32	31.00	163.18	139.93	1,264.96	-2,163.55	3,661.23	3,470.62	190.62	19.207		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-22(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,814.59	4,833.59	31.66	166.36	140.33	1,264.96	-2,163.55	3,693.73	3,499.39	194.33	19.007		
5,300.00	4,924.86	4,905.86	4,924.86	32.32	169.55	140.71	1,264.96	-2,163.55	3,726.38	3,528.33	198.05	18.815		
5,400.00	5,016.13	5,002.87	5,016.13	32.99	172.94	141.10	1,264.96	-2,163.55	3,759.20	3,557.23	201.97	18.613		
5,500.00	5,107.41	5,088.41	5,107.41	33.65	175.92	141.47	1,264.96	-2,163.55	3,792.17	3,586.69	205.48	18.455		
5,600.00	5,198.68	5,179.68	5,198.68	34.31	179.11	141.84	1,264.96	-2,163.55	3,825.30	3,616.10	209.19	18.286		
5,700.00	5,289.95	5,270.95	5,289.95	34.97	182.29	142.20	1,264.96	-2,163.55	3,858.57	3,645.66	212.91	18.123		
5,800.00	5,381.23	5,362.23	5,381.23	35.63	185.48	142.56	1,264.96	-2,163.55	3,891.99	3,675.37	216.62	17.967		
5,900.00	5,472.50	5,453.50	5,472.50	36.30	188.67	142.91	1,264.96	-2,163.55	3,925.55	3,705.21	220.33	17.817		
6,000.00	5,563.77	5,544.77	5,563.77	36.96	191.85	143.26	1,264.96	-2,163.55	3,959.24	3,735.20	224.04	17.672		
6,100.00	5,655.05	5,636.05	5,655.05	37.62	195.04	143.60	1,264.96	-2,163.55	3,993.07	3,765.32	227.75	17.532		
6,200.00	5,746.32	5,727.32	5,746.32	38.28	198.22	143.93	1,264.96	-2,163.55	4,027.03	3,795.57	231.46	17.398		
6,300.00	5,837.59	5,818.59	5,837.59	38.95	201.41	144.26	1,264.96	-2,163.55	4,061.12	3,825.95	235.17	17.269		
6,400.00	5,928.86	5,909.86	5,928.86	39.61	204.59	144.59	1,264.96	-2,163.55	4,095.33	3,856.45	238.88	17.144		
6,500.00	6,020.14	6,001.14	6,020.14	40.27	207.78	144.90	1,264.96	-2,163.55	4,129.66	3,887.07	242.59	17.023		
6,600.00	6,111.41	6,107.59	6,111.41	40.94	211.50	145.22	1,264.96	-2,163.55	4,164.11	3,917.28	246.83	16.871		
6,700.00	6,202.68	6,183.68	6,202.68	41.60	214.15	145.53	1,264.96	-2,163.55	4,198.67	3,948.67	250.00	16.794		
6,800.00	6,293.96	6,274.96	6,293.96	42.26	217.34	145.83	1,264.96	-2,163.55	4,233.35	3,979.64	253.71	16.686		
6,900.00	6,385.23	6,366.23	6,385.23	42.93	220.52	146.13	1,264.96	-2,163.55	4,268.14	4,010.72	257.42	16.581		
7,000.00	6,476.50	6,457.50	6,476.50	43.59	223.71	146.43	1,264.96	-2,163.55	4,303.03	4,041.90	261.12	16.479		
7,100.00	6,567.77	6,548.77	6,567.77	44.25	226.90	146.72	1,264.96	-2,163.55	4,338.03	4,073.20	264.83	16.380		
7,200.00	6,658.64	6,639.64	6,658.64	44.91	230.07	147.00	1,264.96	-2,163.55	4,370.14	4,101.62	268.52	16.275		
7,300.00	6,747.14	6,728.14	6,747.14	45.52	233.16	147.26	1,264.96	-2,163.55	4,399.59	4,122.48	272.11	16.150		
7,400.00	6,831.10	6,812.10	6,831.10	46.07	236.09	147.50	1,264.96	-2,163.55	4,411.09	4,135.59	275.50	16.011		
7,500.00	6,908.46	6,889.46	6,908.46	46.54	238.79	147.72	1,264.96	-2,163.55	4,419.63	4,141.02	278.61	15.863		
7,600.00	6,977.30	6,958.30	6,977.30	46.95	241.19	147.90	1,264.96	-2,163.55	4,420.44	4,139.04	281.40	15.709		
7,700.00	7,035.93	7,016.93	7,035.93	47.30	243.24	148.00	1,264.96	-2,163.55	4,413.93	4,130.09	283.84	15.551		
7,800.00	7,082.92	7,063.92	7,082.92	47.59	244.88	148.00	1,264.96	-2,163.55	4,400.67	4,114.74	285.94	15.390		
7,900.00	7,117.09	7,101.91	7,117.09	47.84	246.20	147.90	1,264.96	-2,163.55	4,381.33	4,093.51	287.82	15.223		
8,000.00	7,137.62	7,118.62	7,137.62	48.06	246.79	147.79	1,264.96	-2,163.55	4,356.59	4,067.51	289.08	15.070		
8,100.00	7,143.99	7,124.99	7,143.99	48.28	247.01	147.60	1,264.96	-2,163.55	4,327.19	4,037.07	290.12	14.915		
8,200.00	7,143.45	7,124.45	7,143.45	48.53	246.99	147.40	1,264.96	-2,163.55	4,296.84	4,005.79	291.05	14.763		
8,300.00	7,142.91	7,123.91	7,142.91	48.89	246.97	147.20	1,264.96	-2,163.55	4,268.62	3,976.48	292.14	14.611		
8,400.00	7,142.37	7,123.37	7,142.37	49.40	246.95	147.00	1,264.96	-2,163.55	4,242.58	3,949.20	293.37	14.461		
8,500.00	7,141.83	7,122.83	7,141.83	50.12	246.93	146.80	1,264.96	-2,163.55	4,218.74	3,924.00	294.74	14.313		
8,600.00	7,141.29	7,122.29	7,141.29	51.08	246.92	146.60	1,264.96	-2,163.55	4,197.15	3,900.91	296.23	14.168		
8,700.00	7,140.75	7,121.75	7,140.75	52.30	246.90	146.40	1,264.96	-2,163.55	4,177.84	3,880.00	297.84	14.027		
8,800.00	7,140.21	7,121.21	7,140.21	53.75	246.88	146.20	1,264.96	-2,163.55	4,160.84	3,861.30	299.55	13.891		
8,900.00	7,139.67	7,120.67	7,139.67	55.40	246.86	146.00	1,264.96	-2,163.55	4,146.19	3,844.85	301.34	13.759		
9,000.00	7,139.12	7,120.12	7,139.12	57.20	246.84	145.80	1,264.96	-2,163.55	4,133.91	3,830.69	303.22	13.633		
9,100.00	7,138.58	7,119.58	7,138.58	59.13	246.82	145.60	1,264.96	-2,163.55	4,124.01	3,818.85	305.16	13.514		
9,200.00	7,138.04	7,119.04	7,138.04	61.15	246.80	145.40	1,264.96	-2,163.55	4,116.52	3,809.36	307.16	13.402		
9,300.00	7,137.50	7,118.50	7,137.50	63.26	246.78	145.20	1,264.96	-2,163.55	4,111.46	3,802.25	309.21	13.297		
9,400.00	7,136.96	7,117.96	7,136.96	65.44	246.76	145.00	1,264.96	-2,163.55	4,108.81	3,797.53	311.29	13.199		
9,458.57	7,136.64	7,117.64	7,136.64	66.75	246.75	144.80	1,264.96	-2,163.55	4,108.40	3,795.88	312.52	13.146		
9,500.00	7,136.42	7,117.42	7,136.42	67.68	246.75	144.60	1,264.96	-2,163.55	4,108.61	3,795.22	313.39	13.110		
9,600.00	7,135.88	7,116.88	7,135.88	69.97	246.73	144.40	1,264.96	-2,163.55	4,110.83	3,795.32	315.51	13.029		
9,700.00	7,135.34	7,116.34	7,135.34	72.31	246.71	144.20	1,264.96	-2,163.55	4,115.48	3,797.85	317.63	12.957		
9,800.00	7,134.80	7,115.80	7,134.80	74.69	246.69	144.00	1,264.96	-2,163.55	4,122.56	3,802.81	319.75	12.893		
9,900.00	7,134.26	7,115.26	7,134.26	77.10	246.67	143.80	1,264.96	-2,163.55	4,132.04	3,810.18	321.87	12.838		
10,000.00	7,133.71	7,114.71	7,133.71	79.54	246.65	143.60	1,264.96	-2,163.55	4,143.92	3,819.96	323.96	12.791		
10,100.00	7,133.17	7,114.17	7,133.17	82.02	246.63	143.40	1,264.96	-2,163.55	4,158.17	3,832.13	326.04	12.754		
10,200.00	7,132.63	7,113.63	7,132.63	84.52	246.61	143.20	1,264.96	-2,163.55	4,174.76	3,846.68	328.08	12.725		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-22(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,132.09	7,113.09	7,132.09	87.04	246.59	89.94	1,264.96	-2,163.55	4,193.68	3,863.58	330.09	12.705		
10,400.00	7,131.55	7,112.55	7,131.55	89.58	246.58	89.93	1,264.96	-2,163.55	4,214.88	3,882.81	332.06	12.693		
10,500.00	7,131.01	7,112.01	7,131.01	92.15	246.56	89.92	1,264.96	-2,163.55	4,238.33	3,904.34	333.99	12.690 SF		
10,600.00	7,130.47	7,111.47	7,130.47	94.73	246.54	89.91	1,264.96	-2,163.55	4,264.01	3,928.13	335.88	12.695		
10,700.00	7,129.93	7,110.93	7,129.93	97.33	246.52	89.91	1,264.96	-2,163.55	4,291.86	3,954.15	337.71	12.709		
10,800.00	7,129.39	7,110.39	7,129.39	99.94	246.50	89.90	1,264.96	-2,163.55	4,321.84	3,982.35	339.49	12.730		
10,900.00	7,128.84	7,109.84	7,128.84	102.56	246.48	89.89	1,264.96	-2,163.55	4,353.92	4,012.69	341.22	12.760		
11,000.00	7,128.30	7,109.30	7,128.30	105.20	246.46	89.88	1,264.96	-2,163.55	4,388.04	4,045.14	342.90	12.797		
11,100.00	7,127.76	7,108.76	7,127.76	107.85	246.44	89.88	1,264.96	-2,163.55	4,424.16	4,079.64	344.52	12.842		
11,200.00	7,127.22	7,108.22	7,127.22	110.51	246.42	89.87	1,264.96	-2,163.55	4,462.22	4,116.14	346.08	12.894		
11,300.00	7,126.68	7,107.68	7,126.68	113.18	246.41	89.86	1,264.96	-2,163.55	4,502.19	4,154.60	347.59	12.953		
11,400.00	7,126.14	7,107.14	7,126.14	115.86	246.39	89.85	1,264.96	-2,163.55	4,544.01	4,194.97	349.03	13.019		
11,500.00	7,125.60	7,106.60	7,125.60	118.55	246.37	89.85	1,264.96	-2,163.55	4,587.62	4,237.19	350.43	13.092		
11,600.00	7,125.06	7,106.06	7,125.06	121.25	246.35	89.84	1,264.96	-2,163.55	4,632.98	4,281.22	351.76	13.171		
11,700.00	7,124.52	7,105.52	7,124.52	123.95	246.33	89.83	1,264.96	-2,163.55	4,680.04	4,327.00	353.04	13.256		
11,800.00	7,123.97	7,104.97	7,123.97	126.66	246.31	89.82	1,264.96	-2,163.55	4,728.75	4,374.49	354.26	13.348		
11,900.00	7,123.43	7,104.43	7,123.43	129.38	246.29	89.82	1,264.96	-2,163.55	4,779.05	4,423.62	355.43	13.446		
12,000.00	7,122.89	7,103.89	7,122.89	132.10	246.27	89.81	1,264.96	-2,163.55	4,830.90	4,474.35	356.55	13.549		
12,100.00	7,122.35	7,103.35	7,122.35	134.83	246.25	89.80	1,264.96	-2,163.55	4,884.25	4,526.63	357.62	13.658		
12,200.00	7,121.81	7,102.81	7,121.81	137.56	246.24	89.79	1,264.96	-2,163.55	4,939.05	4,580.41	358.63	13.772		
12,300.00	7,121.27	7,102.27	7,121.27	140.30	246.22	89.79	1,264.96	-2,163.55	4,995.24	4,635.64	359.60	13.891		
12,400.00	7,120.73	7,101.73	7,120.73	143.05	246.20	89.78	1,264.96	-2,163.55	5,052.79	4,692.27	360.52	14.015		
12,500.00	7,120.19	7,101.19	7,120.19	145.80	246.18	89.77	1,264.96	-2,163.55	5,111.65	4,750.25	361.40	14.144		
12,600.00	7,119.65	7,100.65	7,119.65	148.55	246.16	89.76	1,264.96	-2,163.55	5,171.77	4,809.54	362.23	14.278		
12,700.00	7,119.10	7,100.10	7,119.10	151.30	246.14	89.76	1,264.96	-2,163.55	5,233.12	4,870.10	363.02	14.416		
12,800.00	7,118.56	7,100.44	7,118.56	154.07	246.15	89.75	1,264.96	-2,163.55	5,295.64	4,931.84	363.80	14.556		
12,900.00	7,118.02	7,100.98	7,118.02	156.83	246.17	89.74	1,264.96	-2,163.55	5,359.30	4,994.75	364.55	14.701		
13,000.00	7,117.48	7,101.52	7,117.48	159.60	246.19	89.73	1,264.96	-2,163.55	5,424.05	5,058.79	365.26	14.850		
13,100.00	7,116.94	7,102.06	7,116.94	162.37	246.21	89.73	1,264.96	-2,163.55	5,489.86	5,123.92	365.94	15.002		
13,200.00	7,116.40	7,102.60	7,116.40	165.14	246.23	89.72	1,264.96	-2,163.55	5,556.69	5,190.11	366.58	15.158		
13,300.00	7,115.86	7,103.14	7,115.86	167.92	246.25	89.71	1,264.96	-2,163.55	5,624.51	5,257.32	367.19	15.318		
13,400.00	7,115.32	7,103.68	7,115.32	170.70	246.27	89.70	1,264.96	-2,163.55	5,693.27	5,325.51	367.77	15.481		
13,500.00	7,114.78	7,104.22	7,114.78	173.48	246.29	89.70	1,264.96	-2,163.55	5,762.95	5,394.64	368.32	15.647		
13,600.00	7,114.24	7,104.77	7,114.24	176.26	246.30	89.69	1,264.96	-2,163.55	5,833.52	5,464.68	368.84	15.816		
13,700.00	7,113.69	7,105.31	7,113.69	179.05	246.32	89.68	1,264.96	-2,163.55	5,904.93	5,535.59	369.33	15.988		
13,800.00	7,113.15	7,105.85	7,113.15	181.84	246.34	89.67	1,264.96	-2,163.55	5,977.16	5,607.36	369.80	16.163		
13,900.00	7,112.61	7,106.39	7,112.61	184.63	246.36	89.66	1,264.96	-2,163.55	6,050.18	5,679.93	370.25	16.341		
14,000.00	7,112.07	7,106.93	7,112.07	187.42	246.38	89.66	1,264.96	-2,163.55	6,123.97	5,753.30	370.67	16.521		
14,100.00	7,111.53	7,107.47	7,111.53	190.22	246.40	89.65	1,264.96	-2,163.55	6,198.48	5,827.42	371.07	16.704		
14,200.00	7,110.99	7,108.01	7,110.99	193.01	246.42	89.64	1,264.96	-2,163.55	6,273.71	5,902.26	371.45	16.890		
14,300.00	7,110.45	7,108.55	7,110.45	195.81	246.44	89.63	1,264.96	-2,163.55	6,349.62	5,977.82	371.81	17.078		
14,400.00	7,109.91	7,109.09	7,109.91	198.61	246.46	89.63	1,264.96	-2,163.55	6,426.20	6,054.05	372.15	17.268		
14,500.00	7,109.37	7,109.63	7,109.37	201.42	246.47	89.62	1,264.96	-2,163.55	6,503.40	6,130.93	372.47	17.460		
14,600.00	7,108.82	7,089.82	7,108.82	204.22	245.78	89.61	1,264.96	-2,163.55	6,581.22	6,209.16	372.07	17.688		
14,700.00	7,108.28	7,089.28	7,108.28	207.03	245.76	89.60	1,264.96	-2,163.55	6,659.64	6,287.32	372.32	17.887		
14,800.00	7,107.74	7,088.74	7,107.74	209.83	245.74	89.60	1,264.96	-2,163.55	6,738.62	6,366.06	372.56	18.087		
14,900.00	7,107.20	7,088.20	7,107.20	212.64	245.73	89.59	1,264.96	-2,163.55	6,818.16	6,445.38	372.78	18.290		
15,000.00	7,106.66	7,087.66	7,106.66	215.45	245.71	89.58	1,264.96	-2,163.55	6,898.23	6,525.24	372.99	18.494		
15,100.00	7,106.12	7,087.12	7,106.12	218.26	245.69	89.57	1,264.96	-2,163.55	6,978.81	6,605.62	373.19	18.701		
15,200.00	7,105.58	7,086.58	7,105.58	221.07	245.67	89.57	1,264.96	-2,163.55	7,059.89	6,686.52	373.37	18.908		
15,300.00	7,105.04	7,086.04	7,105.04	223.89	245.65	89.56	1,264.96	-2,163.55	7,141.45	6,767.90	373.55	19.118		
15,400.00	7,104.50	7,085.50	7,104.50	226.70	245.63	89.55	1,264.96	-2,163.55	7,223.47	6,849.76	373.71	19.329		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)		
15,491.56	7,104.00	7,085.00	7,104.00	229.28	245.61	89.54	1,264.96	-2,163.55	7,298.97	6,925.12	373.85	19.524	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-23(SI_150CC - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	34.00	3.28	3.28	-91.55	-68.36	-2,533.60	2,534.75					
100.00	100.00	66.00	100.00	3.28	3.48	-91.55	-68.36	-2,533.60	2,534.52	2,527.76	6.76	374.865		
200.00	200.00	166.00	200.00	3.34	5.21	-91.55	-68.36	-2,533.60	2,534.52	2,525.97	8.55	296.494		
300.00	299.98	265.98	299.98	3.44	8.22	85.36	-68.36	-2,533.60	2,534.38	2,522.72	11.66	217.325		
400.00	399.84	365.84	399.84	3.59	11.50	85.49	-68.36	-2,533.60	2,533.96	2,518.87	15.09	167.904		
500.00	499.45	465.45	499.45	3.79	14.87	85.70	-68.36	-2,533.60	2,533.29	2,514.63	18.66	135.791		
600.00	598.70	564.70	598.70	4.03	18.27	85.99	-68.36	-2,533.60	2,532.40	2,510.11	22.29	113.590		
700.00	697.47	663.47	697.47	4.31	21.67	86.36	-68.36	-2,533.60	2,531.34	2,505.36	25.98	97.436		
800.00	795.62	761.62	795.62	4.64	25.06	86.80	-68.36	-2,533.60	2,530.18	2,500.49	29.70	85.203		
900.00	893.06	859.06	893.06	5.00	28.43	87.32	-68.36	-2,533.60	2,529.00	2,495.57	33.43	75.645		
1,000.00	989.64	955.64	989.64	5.40	31.79	87.91	-68.36	-2,533.60	2,527.89	2,490.71	37.18	67.988		
1,100.00	1,085.27	1,051.27	1,085.27	5.83	35.11	88.56	-68.36	-2,533.60	2,526.95	2,486.02	40.94	61.730		
1,200.00	1,179.82	1,145.82	1,179.82	6.29	38.40	89.28	-68.36	-2,533.60	2,526.30	2,481.61	44.69	56.531		
1,295.09	1,268.62	1,234.62	1,268.62	6.77	41.48	90.00	-68.36	-2,533.60	2,526.07	2,477.82	48.25	52.350 CC		
1,300.00	1,273.17	1,239.17	1,273.17	6.79	41.64	90.04	-68.36	-2,533.60	2,526.07	2,477.64	48.44	52.152		
1,400.00	1,365.21	1,331.21	1,365.21	7.33	44.85	90.85	-68.36	-2,533.60	2,526.41	2,474.23	52.18	48.421		
1,500.00	1,456.49	1,422.49	1,456.49	7.89	48.03	91.69	-68.36	-2,533.60	2,527.40	2,471.48	55.91	45.202		
1,600.00	1,547.76	1,513.76	1,547.76	8.46	51.21	92.54	-68.36	-2,533.60	2,529.05	2,469.38	59.67	42.386		
1,700.00	1,639.04	1,605.04	1,639.04	9.05	54.39	93.38	-68.36	-2,533.60	2,531.36	2,467.92	63.43	39.905		
1,800.00	1,730.31	1,703.69	1,730.31	9.65	57.82	94.22	-68.36	-2,533.60	2,534.32	2,466.86	67.47	37.563		
1,900.00	1,821.58	1,787.58	1,821.58	10.26	60.75	95.06	-68.36	-2,533.60	2,537.95	2,466.95	71.00	35.748		
2,000.00	1,912.85	1,878.85	1,912.85	10.87	63.93	95.90	-68.36	-2,533.60	2,542.22	2,467.43	74.79	33.993		
2,100.00	2,004.13	1,970.13	2,004.13	11.49	67.11	96.74	-68.36	-2,533.60	2,547.14	2,468.56	78.58	32.414		
2,200.00	2,095.40	2,061.40	2,095.40	12.11	70.29	97.57	-68.36	-2,533.60	2,552.70	2,470.32	82.38	30.986		
2,300.00	2,186.67	2,152.67	2,186.67	12.74	73.48	98.40	-68.36	-2,533.60	2,558.91	2,472.72	86.18	29.691		
2,400.00	2,277.95	2,243.95	2,277.95	13.38	76.66	99.22	-68.36	-2,533.60	2,565.75	2,475.76	89.99	28.512		
2,500.00	2,369.22	2,335.22	2,369.22	14.01	79.84	100.05	-68.36	-2,533.60	2,573.22	2,479.43	93.79	27.435		
2,600.00	2,460.49	2,426.49	2,460.49	14.65	83.03	100.86	-68.36	-2,533.60	2,581.32	2,483.72	97.60	26.448		
2,700.00	2,551.77	2,517.77	2,551.77	15.29	86.21	101.68	-68.36	-2,533.60	2,590.03	2,488.63	101.40	25.542		
2,800.00	2,643.04	2,609.04	2,643.04	15.93	89.40	102.49	-68.36	-2,533.60	2,599.36	2,494.15	105.21	24.706		
2,900.00	2,734.31	2,700.31	2,734.31	16.58	92.58	103.29	-68.36	-2,533.60	2,609.30	2,500.28	109.01	23.935		
3,000.00	2,825.58	2,808.42	2,825.58	17.23	96.35	104.09	-68.36	-2,533.60	2,619.83	2,506.43	113.41	23.101		
3,100.00	2,916.86	2,882.86	2,916.86	17.87	98.95	104.88	-68.36	-2,533.60	2,630.96	2,514.34	116.62	22.560		
3,200.00	3,008.13	2,974.13	3,008.13	18.52	102.13	105.67	-68.36	-2,533.60	2,642.67	2,522.25	120.42	21.945		
3,300.00	3,099.40	3,065.40	3,099.40	19.17	105.32	106.45	-68.36	-2,533.60	2,654.96	2,530.74	124.22	21.373		
3,400.00	3,190.68	3,156.68	3,190.68	19.83	108.50	107.22	-68.36	-2,533.60	2,667.82	2,539.80	128.02	20.839		
3,500.00	3,281.95	3,247.95	3,281.95	20.48	111.69	107.99	-68.36	-2,533.60	2,681.24	2,549.43	131.81	20.341		
3,600.00	3,373.22	3,339.22	3,373.22	21.13	114.87	108.75	-68.36	-2,533.60	2,695.21	2,559.61	135.61	19.875		
3,700.00	3,464.49	3,430.49	3,464.49	21.79	118.06	109.51	-68.36	-2,533.60	2,709.73	2,570.33	139.40	19.439		
3,800.00	3,555.77	3,521.77	3,555.77	22.44	121.24	110.26	-68.36	-2,533.60	2,724.78	2,581.60	143.18	19.030		
3,900.00	3,647.04	3,613.04	3,647.04	23.10	124.43	111.00	-68.36	-2,533.60	2,740.36	2,593.39	146.97	18.646		
4,000.00	3,738.31	3,704.31	3,738.31	23.75	127.61	111.73	-68.36	-2,533.60	2,756.45	2,605.70	150.75	18.285		
4,100.00	3,829.59	3,804.41	3,829.59	24.41	131.11	112.46	-68.36	-2,533.60	2,773.06	2,618.22	154.84	17.909		
4,200.00	3,920.86	3,886.86	3,920.86	25.07	133.99	113.18	-68.36	-2,533.60	2,790.16	2,631.85	158.31	17.625		
4,300.00	4,012.13	3,978.13	4,012.13	25.73	137.17	113.89	-68.36	-2,533.60	2,807.75	2,645.67	162.08	17.323		
4,400.00	4,103.41	4,069.41	4,103.41	26.38	140.36	114.59	-68.36	-2,533.60	2,825.83	2,659.98	165.85	17.038		
4,500.00	4,194.68	4,160.68	4,194.68	27.04	143.54	115.29	-68.36	-2,533.60	2,844.38	2,674.76	169.62	16.769		
4,600.00	4,285.95	4,251.95	4,285.95	27.70	146.73	115.97	-68.36	-2,533.60	2,863.39	2,690.00	173.39	16.514		
4,700.00	4,377.22	4,343.22	4,377.22	28.36	149.91	116.65	-68.36	-2,533.60	2,882.85	2,705.70	177.15	16.273		
4,800.00	4,468.50	4,434.50	4,468.50	29.02	153.10	117.33	-68.36	-2,533.60	2,902.76	2,721.85	180.91	16.045		
4,900.00	4,559.77	4,525.77	4,559.77	29.68	156.28	117.99	-68.36	-2,533.60	2,923.10	2,738.44	184.67	15.829		
5,000.00	4,651.04	4,617.04	4,651.04	30.34	159.47	118.64	-68.36	-2,533.60	2,943.87	2,755.45	188.42	15.624		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-23(SI_150CC - OH - OH)													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	4,708.32	4,742.32	31.00	162.66	119.29	-68.36	-2,533.60	2,965.06	2,772.89	192.17	15.429		
5,200.00	4,833.59	4,800.41	4,833.59	31.66	165.87	119.93	-68.36	-2,533.60	2,986.66	2,790.70	195.95	15.242		
5,300.00	4,924.86	4,909.14	4,924.86	32.32	169.66	120.56	-68.36	-2,533.60	3,008.65	2,808.34	200.31	15.020		
5,400.00	5,016.13	4,982.13	5,016.13	32.99	172.21	121.19	-68.36	-2,533.60	3,031.04	2,827.63	203.42	14.901		
5,500.00	5,107.41	5,073.41	5,107.41	33.65	175.40	121.80	-68.36	-2,533.60	3,053.81	2,846.65	207.16	14.742		
5,600.00	5,198.68	5,164.68	5,198.68	34.31	178.58	122.41	-68.36	-2,533.60	3,076.95	2,866.06	210.90	14.590		
5,700.00	5,289.95	5,255.95	5,289.95	34.97	181.77	123.01	-68.36	-2,533.60	3,100.46	2,885.83	214.63	14.445		
5,800.00	5,381.23	5,347.23	5,381.23	35.63	184.96	123.60	-68.36	-2,533.60	3,124.33	2,905.96	218.37	14.308		
5,900.00	5,472.50	5,438.50	5,472.50	36.30	188.14	124.18	-68.36	-2,533.60	3,148.55	2,926.45	222.10	14.176		
6,000.00	5,563.77	5,529.77	5,563.77	36.96	191.33	124.75	-68.36	-2,533.60	3,173.11	2,947.27	225.83	14.051		
6,100.00	5,655.05	5,621.05	5,655.05	37.62	194.51	125.32	-68.36	-2,533.60	3,198.00	2,968.44	229.56	13.931		
6,200.00	5,746.32	5,712.32	5,746.32	38.28	197.70	125.88	-68.36	-2,533.60	3,223.21	2,989.93	233.29	13.817		
6,300.00	5,837.59	5,803.59	5,837.59	38.95	200.89	126.43	-68.36	-2,533.60	3,248.75	3,011.74	237.01	13.707		
6,400.00	5,928.86	5,905.14	5,928.86	39.61	204.43	126.98	-68.36	-2,533.60	3,274.59	3,033.50	241.09	13.582		
6,500.00	6,020.14	5,986.14	6,020.14	40.27	207.26	127.51	-68.36	-2,533.60	3,300.74	3,056.29	244.45	13.502		
6,600.00	6,111.41	6,077.41	6,111.41	40.94	210.44	128.04	-68.36	-2,533.60	3,327.19	3,079.01	248.17	13.407		
6,700.00	6,202.68	6,168.68	6,202.68	41.60	213.63	128.56	-68.36	-2,533.60	3,353.92	3,102.03	251.89	13.315		
6,800.00	6,293.96	6,259.96	6,293.96	42.26	216.81	129.07	-68.36	-2,533.60	3,380.94	3,125.33	255.61	13.227		
6,900.00	6,385.23	6,351.23	6,385.23	42.93	220.00	129.58	-68.36	-2,533.60	3,408.23	3,148.91	259.32	13.143		
7,000.00	6,476.50	6,442.50	6,476.50	43.59	223.19	130.08	-68.36	-2,533.60	3,435.79	3,172.76	263.03	13.062		
7,100.00	6,567.77	6,533.77	6,567.77	44.25	226.37	130.57	-68.36	-2,533.60	3,463.61	3,196.87	266.74	12.985		
7,200.00	6,658.64	6,624.64	6,658.64	44.91	229.54	112.82	-68.36	-2,533.60	3,487.34	3,216.90	270.44	12.895		
7,300.00	6,747.14	6,713.14	6,747.14	45.52	232.63	97.56	-68.36	-2,533.60	3,500.33	3,226.31	274.02	12.774		
7,400.00	6,831.10	6,802.90	6,831.10	46.07	235.77	87.60	-68.36	-2,533.60	3,502.58	3,224.98	277.60	12.617		
7,500.00	6,908.46	6,874.46	6,908.46	46.54	238.26	81.77	-68.36	-2,533.60	3,494.45	3,213.96	280.49	12.458		
7,600.00	6,977.30	6,943.30	6,977.30	46.95	240.67	78.92	-68.36	-2,533.60	3,476.57	3,193.33	283.24	12.274		
7,700.00	7,035.93	7,001.93	7,035.93	47.30	242.71	78.27	-68.36	-2,533.60	3,449.79	3,164.16	285.64	12.078		
7,800.00	7,082.92	7,048.92	7,082.92	47.59	244.35	79.36	-68.36	-2,533.60	3,415.13	3,127.47	287.66	11.872		
7,900.00	7,117.09	7,083.09	7,117.09	47.84	245.55	81.87	-68.36	-2,533.60	3,373.72	3,084.41	289.31	11.661		
8,000.00	7,137.62	7,103.62	7,137.62	48.06	246.26	85.57	-68.36	-2,533.60	3,326.75	3,036.17	290.58	11.449		
8,100.00	7,143.99	7,109.99	7,143.99	48.28	246.49	90.19	-68.36	-2,533.60	3,275.43	2,983.96	291.47	11.238		
8,200.00	7,143.45	7,109.45	7,143.45	48.53	246.47	90.18	-68.36	-2,533.60	3,223.53	2,931.29	292.24	11.030		
8,300.00	7,142.91	7,108.91	7,142.91	48.89	246.45	90.17	-68.36	-2,533.60	3,173.93	2,880.78	293.15	10.827		
8,400.00	7,142.37	7,108.37	7,142.37	49.40	246.43	90.16	-68.36	-2,533.60	3,126.75	2,832.54	294.21	10.628		
8,500.00	7,141.83	7,107.83	7,141.83	50.12	246.41	90.15	-68.36	-2,533.60	3,082.09	2,786.68	295.42	10.433		
8,600.00	7,141.29	7,107.29	7,141.29	51.08	246.39	90.14	-68.36	-2,533.60	3,040.07	2,743.31	296.76	10.244		
8,700.00	7,140.75	7,106.75	7,140.75	52.30	246.37	90.13	-68.36	-2,533.60	3,000.79	2,702.55	298.24	10.062		
8,800.00	7,140.21	7,106.21	7,140.21	53.75	246.35	90.12	-68.36	-2,533.60	2,964.36	2,664.51	299.85	9.886		
8,900.00	7,139.67	7,105.67	7,139.67	55.40	246.34	90.10	-68.36	-2,533.60	2,930.90	2,629.32	301.57	9.719		
9,000.00	7,139.12	7,105.12	7,139.12	57.20	246.32	90.09	-68.36	-2,533.60	2,900.50	2,597.09	303.41	9.560		
9,100.00	7,138.58	7,104.58	7,138.58	59.13	246.30	90.08	-68.36	-2,533.60	2,873.25	2,567.92	305.33	9.410		
9,200.00	7,138.04	7,104.04	7,138.04	61.15	246.28	90.07	-68.36	-2,533.60	2,849.26	2,541.93	307.34	9.271		
9,300.00	7,137.50	7,103.50	7,137.50	63.26	246.26	90.06	-68.36	-2,533.60	2,828.61	2,519.20	309.41	9.142		
9,400.00	7,136.96	7,102.96	7,136.96	65.44	246.24	90.05	-68.36	-2,533.60	2,811.36	2,499.83	311.53	9.024		
9,500.00	7,136.42	7,102.42	7,136.42	67.68	246.22	90.04	-68.36	-2,533.60	2,797.58	2,483.90	313.68	8.919		
9,600.00	7,135.88	7,101.88	7,135.88	69.97	246.20	90.03	-68.36	-2,533.60	2,787.32	2,471.47	315.85	8.825		
9,700.00	7,135.34	7,101.34	7,135.34	72.31	246.18	90.02	-68.36	-2,533.60	2,780.62	2,462.60	318.02	8.744		
9,800.00	7,134.80	7,100.80	7,134.80	74.69	246.17	90.00	-68.36	-2,533.60	2,777.51	2,457.34	320.18	8.675		
9,836.45	7,134.60	7,100.60	7,134.60	75.56	246.16	90.00	-68.36	-2,533.60	2,777.27	2,456.31	320.96	8.653		
9,900.00	7,134.26	7,100.26	7,134.26	77.10	246.15	89.99	-68.36	-2,533.60	2,778.00	2,455.70	322.30	8.619 ES		
10,000.00	7,133.71	7,100.29	7,133.71	79.54	246.15	89.98	-68.36	-2,533.60	2,782.08	2,457.67	324.41	8.576		
10,100.00	7,133.17	7,100.83	7,133.17	82.02	246.17	89.97	-68.36	-2,533.60	2,789.75	2,463.27	326.48	8.545		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-23(SI_150CC - OH - OH)													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,132.63	7,101.37	7,132.63	84.52	246.19	89.96	-68.36	-2,533.60	2,800.97	2,472.48	328.48	8.527		
10,300.00	7,132.09	7,101.91	7,132.09	87.04	246.20	89.95	-68.36	-2,533.60	2,815.69	2,485.28	330.41	8.522 SF		
10,400.00	7,131.55	7,102.45	7,131.55	89.58	246.22	89.94	-68.36	-2,533.60	2,833.87	2,501.62	332.25	8.529		
10,500.00	7,131.01	7,102.99	7,131.01	92.15	246.24	89.93	-68.36	-2,533.60	2,855.44	2,521.43	334.01	8.549		
10,600.00	7,130.47	7,103.53	7,130.47	94.73	246.26	89.91	-68.36	-2,533.60	2,880.32	2,544.65	335.67	8.581		
10,700.00	7,129.93	7,104.07	7,129.93	97.33	246.28	89.90	-68.36	-2,533.60	2,908.43	2,571.19	337.24	8.624		
10,800.00	7,129.39	7,104.61	7,129.39	99.94	246.30	89.89	-68.36	-2,533.60	2,939.67	2,600.96	338.70	8.679		
10,900.00	7,128.84	7,105.16	7,128.84	102.56	246.32	89.88	-68.36	-2,533.60	2,973.95	2,633.88	340.07	8.745		
11,000.00	7,128.30	7,105.70	7,128.30	105.20	246.34	89.87	-68.36	-2,533.60	3,011.15	2,669.82	341.34	8.822		
11,100.00	7,127.76	7,106.24	7,127.76	107.85	246.36	89.86	-68.36	-2,533.60	3,051.19	2,708.68	342.51	8.908		
11,200.00	7,127.22	7,106.78	7,127.22	110.51	246.37	89.85	-68.36	-2,533.60	3,093.94	2,750.35	343.59	9.005		
11,300.00	7,126.68	7,107.32	7,126.68	113.18	246.39	89.84	-68.36	-2,533.60	3,139.29	2,794.72	344.57	9.111		
11,400.00	7,126.14	7,107.86	7,126.14	115.86	246.41	89.83	-68.36	-2,533.60	3,187.14	2,841.67	345.47	9.225		
11,500.00	7,125.60	7,108.40	7,125.60	118.55	246.43	89.81	-68.36	-2,533.60	3,237.37	2,891.08	346.29	9.349		
11,600.00	7,125.06	7,108.94	7,125.06	121.25	246.45	89.80	-68.36	-2,533.60	3,289.87	2,942.85	347.03	9.480		
11,700.00	7,124.52	7,109.48	7,124.52	123.95	246.47	89.79	-68.36	-2,533.60	3,344.54	2,996.85	347.69	9.619		
11,800.00	7,123.97	7,089.97	7,123.97	126.66	245.79	89.78	-68.36	-2,533.60	3,401.27	3,053.69	347.58	9.785		
11,900.00	7,123.43	7,089.43	7,123.43	129.38	245.77	89.77	-68.36	-2,533.60	3,459.97	3,111.89	348.08	9.940		
12,000.00	7,122.89	7,088.89	7,122.89	132.10	245.75	89.76	-68.36	-2,533.60	3,520.52	3,172.01	348.51	10.102		
12,100.00	7,122.35	7,088.35	7,122.35	134.83	245.73	89.75	-68.36	-2,533.60	3,582.84	3,233.96	348.88	10.270		
12,200.00	7,121.81	7,087.81	7,121.81	137.56	245.71	89.74	-68.36	-2,533.60	3,646.84	3,297.64	349.20	10.443		
12,300.00	7,121.27	7,087.27	7,121.27	140.30	245.69	89.73	-68.36	-2,533.60	3,712.43	3,362.95	349.48	10.623		
12,400.00	7,120.73	7,086.73	7,120.73	143.05	245.67	89.71	-68.36	-2,533.60	3,779.53	3,429.82	349.71	10.807		
12,500.00	7,120.19	7,086.19	7,120.19	145.80	245.66	89.70	-68.36	-2,533.60	3,848.06	3,498.15	349.91	10.997		
12,600.00	7,119.65	7,085.65	7,119.65	148.55	245.64	89.69	-68.36	-2,533.60	3,917.94	3,567.87	350.06	11.192		
12,700.00	7,119.10	7,085.10	7,119.10	151.30	245.62	89.68	-68.36	-2,533.60	3,989.10	3,638.91	350.19	11.391		
12,800.00	7,118.56	7,084.56	7,118.56	154.07	245.60	89.67	-68.36	-2,533.60	4,061.48	3,711.20	350.28	11.595		
12,900.00	7,118.02	7,084.02	7,118.02	156.83	245.58	89.66	-68.36	-2,533.60	4,135.01	3,784.66	350.35	11.802		
13,000.00	7,117.48	7,083.48	7,117.48	159.60	245.56	89.65	-68.36	-2,533.60	4,209.63	3,859.24	350.39	12.014		
13,100.00	7,116.94	7,082.94	7,116.94	162.37	245.54	89.64	-68.36	-2,533.60	4,285.29	3,934.87	350.42	12.229		
13,200.00	7,116.40	7,082.40	7,116.40	165.14	245.52	89.62	-68.36	-2,533.60	4,361.92	4,011.51	350.42	12.448		
13,300.00	7,115.86	7,081.86	7,115.86	167.92	245.50	89.61	-68.36	-2,533.60	4,439.49	4,089.09	350.40	12.670		
13,400.00	7,115.32	7,081.32	7,115.32	170.70	245.49	89.60	-68.36	-2,533.60	4,517.94	4,167.57	350.37	12.895		
13,500.00	7,114.78	7,080.78	7,114.78	173.48	245.47	89.59	-68.36	-2,533.60	4,597.22	4,246.90	350.32	13.123		
13,600.00	7,114.24	7,080.24	7,114.24	176.26	245.45	89.58	-68.36	-2,533.60	4,677.30	4,327.03	350.27	13.354		
13,700.00	7,113.69	7,079.69	7,113.69	179.05	245.43	89.57	-68.36	-2,533.60	4,758.13	4,407.94	350.20	13.587		
13,800.00	7,113.15	7,079.15	7,113.15	181.84	245.41	89.56	-68.36	-2,533.60	4,839.68	4,489.57	350.12	13.823		
13,900.00	7,112.61	7,078.61	7,112.61	184.63	245.39	89.55	-68.36	-2,533.60	4,921.91	4,571.88	350.03	14.061		
14,000.00	7,112.07	7,078.07	7,112.07	187.42	245.37	89.54	-68.36	-2,533.60	5,004.79	4,654.85	349.93	14.302		
14,100.00	7,111.53	7,077.53	7,111.53	190.22	245.35	89.52	-68.36	-2,533.60	5,088.28	4,738.45	349.83	14.545		
14,200.00	7,110.99	7,076.99	7,110.99	193.01	245.33	89.51	-68.36	-2,533.60	5,172.36	4,822.63	349.72	14.790		
14,300.00	7,110.45	7,076.45	7,110.45	195.81	245.32	89.50	-68.36	-2,533.60	5,256.99	4,907.38	349.61	15.037		
14,400.00	7,109.91	7,075.91	7,109.91	198.61	245.30	89.49	-68.36	-2,533.60	5,342.16	4,992.67	349.49	15.286		
14,500.00	7,109.37	7,075.37	7,109.37	201.42	245.28	89.48	-68.36	-2,533.60	5,427.83	5,078.46	349.37	15.536		
14,600.00	7,108.82	7,074.82	7,108.82	204.22	245.26	89.47	-68.36	-2,533.60	5,513.98	5,164.74	349.24	15.788		
14,700.00	7,108.28	7,074.28	7,108.28	207.03	245.24	89.46	-68.36	-2,533.60	5,600.60	5,251.48	349.12	16.042		
14,800.00	7,107.74	7,073.74	7,107.74	209.83	245.22	89.45	-68.36	-2,533.60	5,687.65	5,338.66	348.99	16.297		
14,900.00	7,107.20	7,073.20	7,107.20	212.64	245.20	89.43	-68.36	-2,533.60	5,775.12	5,426.26	348.86	16.554		
15,000.00	7,106.66	7,072.66	7,106.66	215.45	245.18	89.42	-68.36	-2,533.60	5,863.00	5,514.27	348.73	16.813		
15,100.00	7,106.12	7,072.12	7,106.12	218.26	245.16	89.41	-68.36	-2,533.60	5,951.25	5,602.66	348.60	17.072		
15,200.00	7,105.58	7,071.58	7,105.58	221.07	245.15	89.40	-68.36	-2,533.60	6,039.87	5,691.41	348.46	17.333		
15,300.00	7,105.04	7,071.04	7,105.04	223.89	245.13	89.39	-68.36	-2,533.60	6,128.85	5,780.52	348.33	17.595		

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



Anticollision Report



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

Offset Design												Offset Site Error:	0.00 ft
HARVESTERS STATE 7-15 PAD - BURBACH 15-23(SI_150CC - OH - OH)												Offset Well Error:	3.28 ft
Survey Program: 100-2" Cone@2.448 Sigma													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.00	7,104.50	7,070.50	7,104.50	226.70	245.11	89.38	-68.36	-2,533.60	6,218.15	5,869.96	348.20	17.858	
15,491.56	7,104.00	7,070.00	7,104.00	229.28	245.09	89.37	-68.36	-2,533.60	6,300.21	5,952.13	348.08	18.100	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-42(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	45.00	3.28	3.28	-104.47	-1,237.44	-4,795.13	4,952.43					
100.00	100.00	55.00	100.00	3.28	3.42	-104.47	-1,237.44	-4,795.13	4,952.22	4,945.52	6.70	738.880		
200.00	200.00	155.00	200.00	3.34	4.92	-104.47	-1,237.44	-4,795.13	4,952.22	4,943.97	8.26	599.845		
300.00	299.98	254.98	299.98	3.44	7.87	72.43	-1,237.44	-4,795.13	4,951.69	4,940.38	11.31	437.772		
400.00	399.84	354.84	399.84	3.59	11.14	72.51	-1,237.44	-4,795.13	4,950.12	4,935.39	14.72	336.181		
500.00	499.45	454.45	499.45	3.79	14.50	72.66	-1,237.44	-4,795.13	4,947.50	4,929.22	18.28	270.621		
600.00	598.70	553.70	598.70	4.03	17.89	72.86	-1,237.44	-4,795.13	4,943.86	4,921.94	21.92	225.573		
700.00	697.47	652.47	697.47	4.31	21.29	73.12	-1,237.44	-4,795.13	4,939.23	4,913.63	25.60	192.941		
800.00	795.62	750.62	795.62	4.64	24.68	73.44	-1,237.44	-4,795.13	4,933.65	4,904.34	29.31	168.306		
900.00	893.06	848.06	893.06	5.00	28.05	73.81	-1,237.44	-4,795.13	4,927.15	4,894.11	33.05	149.094		
1,000.00	989.64	944.64	989.64	5.40	31.40	74.23	-1,237.44	-4,795.13	4,919.80	4,883.00	36.79	133.718		
1,100.00	1,085.27	1,040.27	1,085.27	5.83	34.73	74.70	-1,237.44	-4,795.13	4,911.63	4,871.09	40.54	121.150		
1,200.00	1,179.82	1,134.82	1,179.82	6.29	38.01	75.22	-1,237.44	-4,795.13	4,902.74	4,858.45	44.29	110.697		
1,300.00	1,273.17	1,228.17	1,273.17	6.79	41.26	75.79	-1,237.44	-4,795.13	4,893.17	4,845.14	48.03	101.873		
1,400.00	1,365.21	1,320.21	1,365.21	7.33	44.46	76.40	-1,237.44	-4,795.13	4,883.03	4,831.26	51.76	94.332		
1,500.00	1,456.49	1,411.49	1,456.49	7.89	47.64	76.84	-1,237.44	-4,795.13	4,872.73	4,817.23	55.50	87.804		
1,600.00	1,547.76	1,502.76	1,547.76	8.46	50.82	77.27	-1,237.44	-4,795.13	4,862.75	4,803.51	59.24	82.080		
1,700.00	1,639.04	1,605.96	1,639.04	9.05	54.42	77.70	-1,237.44	-4,795.13	4,853.10	4,789.67	63.42	76.520		
1,800.00	1,730.31	1,685.31	1,730.31	9.65	57.18	78.13	-1,237.44	-4,795.13	4,843.77	4,776.98	66.78	72.531		
1,900.00	1,821.58	1,776.58	1,821.58	10.26	60.36	78.57	-1,237.44	-4,795.13	4,834.76	4,764.20	70.57	68.513		
2,000.00	1,912.85	1,867.85	1,912.85	10.87	63.55	79.00	-1,237.44	-4,795.13	4,826.09	4,751.73	74.36	64.902		
2,100.00	2,004.13	1,959.13	2,004.13	11.49	66.73	79.44	-1,237.44	-4,795.13	4,817.75	4,739.59	78.16	61.639		
2,200.00	2,095.40	2,050.40	2,095.40	12.11	69.91	79.88	-1,237.44	-4,795.13	4,809.74	4,727.77	81.97	58.679		
2,300.00	2,186.67	2,141.67	2,186.67	12.74	73.09	80.32	-1,237.44	-4,795.13	4,802.07	4,716.29	85.78	55.982		
2,400.00	2,277.95	2,232.95	2,277.95	13.38	76.28	80.76	-1,237.44	-4,795.13	4,794.73	4,705.13	89.60	53.515		
2,500.00	2,369.22	2,324.22	2,369.22	14.01	79.46	81.20	-1,237.44	-4,795.13	4,787.73	4,694.31	93.42	51.252		
2,600.00	2,460.49	2,415.49	2,460.49	14.65	82.64	81.64	-1,237.44	-4,795.13	4,781.06	4,683.82	97.24	49.168		
2,700.00	2,551.77	2,506.77	2,551.77	15.29	85.83	82.09	-1,237.44	-4,795.13	4,774.74	4,673.67	101.07	47.244		
2,800.00	2,643.04	2,601.96	2,643.04	15.93	89.15	82.53	-1,237.44	-4,795.13	4,768.76	4,663.73	105.03	45.402		
2,900.00	2,734.31	2,689.31	2,734.31	16.58	92.20	82.98	-1,237.44	-4,795.13	4,763.12	4,654.39	108.73	43.807		
3,000.00	2,825.58	2,780.58	2,825.58	17.23	95.38	83.42	-1,237.44	-4,795.13	4,757.83	4,645.27	112.56	42.268		
3,100.00	2,916.86	2,871.86	2,916.86	17.87	98.57	83.87	-1,237.44	-4,795.13	4,752.88	4,636.48	116.40	40.833		
3,200.00	3,008.13	2,963.13	3,008.13	18.52	101.75	84.32	-1,237.44	-4,795.13	4,748.28	4,628.04	120.24	39.491		
3,300.00	3,099.40	3,054.40	3,099.40	19.17	104.94	84.77	-1,237.44	-4,795.13	4,744.02	4,619.95	124.08	38.235		
3,400.00	3,190.68	3,145.68	3,190.68	19.83	108.12	85.21	-1,237.44	-4,795.13	4,740.12	4,612.20	127.92	37.056		
3,500.00	3,281.95	3,236.95	3,281.95	20.48	111.30	85.66	-1,237.44	-4,795.13	4,736.56	4,604.80	131.76	35.949		
3,600.00	3,373.22	3,328.22	3,373.22	21.13	114.49	86.11	-1,237.44	-4,795.13	4,733.35	4,597.75	135.60	34.907		
3,700.00	3,464.49	3,419.49	3,464.49	21.79	117.68	86.57	-1,237.44	-4,795.13	4,730.50	4,591.05	139.44	33.924		
3,800.00	3,555.77	3,510.77	3,555.77	22.44	120.86	87.02	-1,237.44	-4,795.13	4,727.99	4,584.71	143.29	32.997		
3,900.00	3,647.04	3,602.04	3,647.04	23.10	124.05	87.47	-1,237.44	-4,795.13	4,725.84	4,578.71	147.13	32.120		
4,000.00	3,738.31	3,706.69	3,738.31	23.75	127.70	87.92	-1,237.44	-4,795.13	4,724.04	4,572.60	151.44	31.194		
4,100.00	3,829.59	3,784.59	3,829.59	24.41	130.42	88.37	-1,237.44	-4,795.13	4,722.59	4,567.77	154.82	30.504		
4,200.00	3,920.86	3,875.86	3,920.86	25.07	133.60	88.82	-1,237.44	-4,795.13	4,721.50	4,562.83	158.67	29.757		
4,300.00	4,012.13	3,967.13	4,012.13	25.73	136.79	89.28	-1,237.44	-4,795.13	4,720.76	4,558.24	162.51	29.049		
4,400.00	4,103.41	4,058.41	4,103.41	26.38	139.97	89.73	-1,237.44	-4,795.13	4,720.37	4,554.01	166.36	28.375		
4,459.66	4,157.86	4,112.86	4,157.86	26.78	141.87	90.00	-1,237.44	-4,795.13	4,720.30	4,551.65	168.65	27.989		
4,500.00	4,194.68	4,149.68	4,194.68	27.04	143.16	90.18	-1,237.44	-4,795.13	4,720.33	4,550.13	170.20	27.734		
4,600.00	4,285.95	4,240.95	4,285.95	27.70	146.34	90.64	-1,237.44	-4,795.13	4,720.65	4,546.61	174.05	27.123		
4,700.00	4,377.22	4,332.22	4,377.22	28.36	149.53	91.09	-1,237.44	-4,795.13	4,721.33	4,543.44	177.89	26.541		
4,800.00	4,468.50	4,423.50	4,468.50	29.02	152.71	91.54	-1,237.44	-4,795.13	4,722.35	4,540.62	181.73	25.985		
4,900.00	4,559.77	4,514.77	4,559.77	29.68	155.90	91.99	-1,237.44	-4,795.13	4,723.73	4,538.16	185.58	25.454		
5,000.00	4,651.04	4,606.04	4,651.04	30.34	159.09	92.44	-1,237.44	-4,795.13	4,725.46	4,536.05	189.42	24.947		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-42(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	4,702.68	4,742.32	31.00	162.46	92.90	-1,237.44	-4,795.13	4,727.55	4,534.10	193.45	24.438		
5,200.00	4,833.59	4,788.59	4,833.59	31.66	165.46	93.35	-1,237.44	-4,795.13	4,729.99	4,532.88	197.10	23.998		
5,300.00	4,924.86	4,879.86	4,924.86	32.32	168.64	93.80	-1,237.44	-4,795.13	4,732.77	4,531.83	200.94	23.553		
5,400.00	5,016.13	4,971.13	5,016.13	32.99	171.83	94.25	-1,237.44	-4,795.13	4,735.91	4,531.13	204.78	23.127		
5,500.00	5,107.41	5,062.41	5,107.41	33.65	175.01	94.70	-1,237.44	-4,795.13	4,739.40	4,530.78	208.62	22.718		
5,600.00	5,198.68	5,153.68	5,198.68	34.31	178.20	95.15	-1,237.44	-4,795.13	4,743.24	4,530.78	212.46	22.326		
5,700.00	5,289.95	5,244.95	5,289.95	34.97	181.39	95.60	-1,237.44	-4,795.13	4,747.43	4,531.13	216.29	21.949		
5,800.00	5,381.23	5,336.23	5,381.23	35.63	184.57	96.04	-1,237.44	-4,795.13	4,751.96	4,531.83	220.13	21.587		
5,900.00	5,472.50	5,427.50	5,472.50	36.30	187.76	96.49	-1,237.44	-4,795.13	4,756.84	4,532.88	223.96	21.239		
6,000.00	5,563.77	5,518.77	5,563.77	36.96	190.94	96.94	-1,237.44	-4,795.13	4,762.07	4,534.27	227.80	20.905		
6,100.00	5,655.05	5,610.05	5,655.05	37.62	194.13	97.38	-1,237.44	-4,795.13	4,767.64	4,536.01	231.63	20.583		
6,200.00	5,746.32	5,701.32	5,746.32	38.28	197.32	97.83	-1,237.44	-4,795.13	4,773.56	4,538.10	235.46	20.273		
6,300.00	5,837.59	5,807.41	5,837.59	38.95	201.02	98.27	-1,237.44	-4,795.13	4,779.81	4,540.01	239.81	19.932		
6,400.00	5,928.86	5,898.68	5,928.86	39.61	203.69	98.71	-1,237.44	-4,795.13	4,786.41	4,543.30	243.12	19.688		
6,500.00	6,020.14	5,975.14	6,020.14	40.27	206.87	99.16	-1,237.44	-4,795.13	4,793.35	4,546.41	246.94	19.411		
6,600.00	6,111.41	6,066.41	6,111.41	40.94	210.06	99.60	-1,237.44	-4,795.13	4,800.62	4,549.86	250.77	19.144		
6,700.00	6,202.68	6,157.68	6,202.68	41.60	213.24	100.04	-1,237.44	-4,795.13	4,808.23	4,553.64	254.59	18.886		
6,800.00	6,293.96	6,248.96	6,293.96	42.26	216.43	100.48	-1,237.44	-4,795.13	4,816.18	4,557.77	258.41	18.638		
6,900.00	6,385.23	6,340.23	6,385.23	42.93	219.62	100.91	-1,237.44	-4,795.13	4,824.45	4,562.22	262.23	18.398		
7,000.00	6,476.50	6,431.50	6,476.50	43.59	222.80	101.35	-1,237.44	-4,795.13	4,833.06	4,567.01	266.05	18.166		
7,100.00	6,567.77	6,522.77	6,567.77	44.25	225.99	101.78	-1,237.44	-4,795.13	4,842.00	4,572.14	269.86	17.942		
7,200.00	6,658.64	6,613.64	6,658.64	44.91	229.16	85.20	-1,237.44	-4,795.13	4,845.27	4,571.61	273.66	17.705		
7,300.00	6,747.14	6,702.14	6,747.14	45.52	232.25	70.85	-1,237.44	-4,795.13	4,833.91	4,556.57	277.35	17.429		
7,400.00	6,831.10	6,786.10	6,831.10	46.07	235.18	61.50	-1,237.44	-4,795.13	4,808.21	4,527.40	280.81	17.122		
7,500.00	6,908.46	6,863.46	6,908.46	46.54	237.88	56.11	-1,237.44	-4,795.13	4,768.87	4,484.88	283.99	16.792		
7,600.00	6,977.30	6,932.30	6,977.30	46.95	240.28	53.75	-1,237.44	-4,795.13	4,716.89	4,430.07	286.81	16.446		
7,700.00	7,035.93	7,009.07	7,035.93	47.30	242.96	53.99	-1,237.44	-4,795.13	4,653.57	4,363.70	289.87	16.054		
7,800.00	7,082.92	7,037.92	7,082.92	47.59	243.97	56.89	-1,237.44	-4,795.13	4,580.45	4,289.22	291.23	15.728		
7,900.00	7,117.09	7,072.09	7,117.09	47.84	245.16	63.09	-1,237.44	-4,795.13	4,499.29	4,206.53	292.75	15.369		
8,000.00	7,137.62	7,107.38	7,137.62	48.06	246.40	73.95	-1,237.44	-4,795.13	4,411.99	4,117.69	294.30	14.991		
8,100.00	7,143.99	7,101.01	7,143.99	48.28	246.17	90.77	-1,237.44	-4,795.13	4,320.60	4,026.22	294.38	14.677		
8,200.00	7,143.45	7,101.55	7,143.45	48.53	246.19	90.75	-1,237.44	-4,795.13	4,228.08	3,933.36	294.72	14.346		
8,300.00	7,142.91	7,102.09	7,142.91	48.89	246.21	90.73	-1,237.44	-4,795.13	4,135.90	3,840.81	295.09	14.016		
8,400.00	7,142.37	7,102.63	7,142.37	49.40	246.23	90.71	-1,237.44	-4,795.13	4,044.10	3,748.59	295.51	13.685		
8,500.00	7,141.83	7,103.17	7,141.83	50.12	246.25	90.69	-1,237.44	-4,795.13	3,952.70	3,656.71	295.98	13.354		
8,600.00	7,141.29	7,103.71	7,141.29	51.08	246.27	90.67	-1,237.44	-4,795.13	3,861.72	3,565.21	296.51	13.024		
8,700.00	7,140.75	7,104.25	7,140.75	52.30	246.29	90.65	-1,237.44	-4,795.13	3,771.19	3,474.10	297.09	12.694		
8,800.00	7,140.21	7,104.79	7,140.21	53.75	246.31	90.63	-1,237.44	-4,795.13	3,681.16	3,383.43	297.74	12.364		
8,900.00	7,139.67	7,105.33	7,139.67	55.40	246.32	90.61	-1,237.44	-4,795.13	3,591.66	3,293.21	298.45	12.034		
9,000.00	7,139.12	7,105.88	7,139.12	57.20	246.34	90.59	-1,237.44	-4,795.13	3,502.72	3,203.48	299.24	11.705		
9,100.00	7,138.58	7,106.42	7,138.58	59.13	246.36	90.57	-1,237.44	-4,795.13	3,414.40	3,114.28	300.12	11.377		
9,200.00	7,138.04	7,106.96	7,138.04	61.15	246.38	90.56	-1,237.44	-4,795.13	3,326.73	3,025.65	301.08	11.049		
9,300.00	7,137.50	7,107.50	7,137.50	63.26	246.40	90.54	-1,237.44	-4,795.13	3,239.78	2,937.65	302.14	10.723		
9,400.00	7,136.96	7,108.04	7,136.96	65.44	246.42	90.52	-1,237.44	-4,795.13	3,153.61	2,850.31	303.30	10.398		
9,500.00	7,136.42	7,108.58	7,136.42	67.68	246.44	90.50	-1,237.44	-4,795.13	3,068.27	2,763.70	304.57	10.074		
9,600.00	7,135.88	7,109.12	7,135.88	69.97	246.46	90.48	-1,237.44	-4,795.13	2,983.85	2,677.89	305.96	9.752		
9,700.00	7,135.34	7,109.66	7,135.34	72.31	246.48	90.46	-1,237.44	-4,795.13	2,900.41	2,592.93	307.48	9.433		
9,800.00	7,134.80	7,089.80	7,134.80	74.69	245.78	90.44	-1,237.44	-4,795.13	2,818.05	2,509.63	308.42	9.137		
9,900.00	7,134.26	7,089.26	7,134.26	77.10	245.76	90.42	-1,237.44	-4,795.13	2,736.87	2,426.69	310.18	8.823		
10,000.00	7,133.71	7,088.71	7,133.71	79.54	245.74	90.40	-1,237.44	-4,795.13	2,656.98	2,344.88	312.09	8.513		
10,100.00	7,133.17	7,088.17	7,133.17	82.02	245.72	90.38	-1,237.44	-4,795.13	2,578.48	2,264.31	314.17	8.207		
10,200.00	7,132.63	7,087.63	7,132.63	84.52	245.71	90.36	-1,237.44	-4,795.13	2,501.52	2,185.11	316.41	7.906		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-42(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,132.09	7,087.09	7,132.09	87.04	245.69	90.35	-1,237.44	-4,795.13	2,426.24	2,107.41	318.83	7.610		
10,400.00	7,131.55	7,086.55	7,131.55	89.58	245.67	90.33	-1,237.44	-4,795.13	2,352.80	2,031.37	321.43	7.320		
10,500.00	7,131.01	7,086.01	7,131.01	92.15	245.65	90.31	-1,237.44	-4,795.13	2,281.39	1,957.17	324.22	7.037		
10,600.00	7,130.47	7,085.47	7,130.47	94.73	245.63	90.29	-1,237.44	-4,795.13	2,212.19	1,885.00	327.19	6.761		
10,700.00	7,129.93	7,084.93	7,129.93	97.33	245.61	90.27	-1,237.44	-4,795.13	2,145.42	1,815.07	330.35	6.494		
10,800.00	7,129.39	7,084.39	7,129.39	99.94	245.59	90.25	-1,237.44	-4,795.13	2,081.31	1,747.62	333.68	6.237		
10,900.00	7,128.84	7,083.84	7,128.84	102.56	245.57	90.23	-1,237.44	-4,795.13	2,020.12	1,682.93	337.19	5.991		
11,000.00	7,128.30	7,083.30	7,128.30	105.20	245.56	90.21	-1,237.44	-4,795.13	1,962.12	1,621.27	340.86	5.756		
11,100.00	7,127.76	7,082.76	7,127.76	107.85	245.54	90.19	-1,237.44	-4,795.13	1,907.61	1,562.95	344.65	5.535		
11,200.00	7,127.22	7,082.22	7,127.22	110.51	245.52	90.17	-1,237.44	-4,795.13	1,856.88	1,508.32	348.56	5.327		
11,300.00	7,126.68	7,081.68	7,126.68	113.18	245.50	90.15	-1,237.44	-4,795.13	1,810.26	1,457.74	352.52	5.135		
11,400.00	7,126.14	7,081.14	7,126.14	115.86	245.48	90.13	-1,237.44	-4,795.13	1,768.07	1,411.56	356.51	4.959		
11,500.00	7,125.60	7,080.60	7,125.60	118.55	245.46	90.12	-1,237.44	-4,795.13	1,730.64	1,370.18	360.46	4.801		
11,600.00	7,125.06	7,080.06	7,125.06	121.25	245.44	90.10	-1,237.44	-4,795.13	1,698.28	1,333.96	364.31	4.662		
11,700.00	7,124.52	7,079.52	7,124.52	123.95	245.42	90.08	-1,237.44	-4,795.13	1,671.28	1,303.27	368.01	4.541		
11,800.00	7,123.97	7,078.97	7,123.97	126.66	245.40	90.06	-1,237.44	-4,795.13	1,649.91	1,278.44	371.47	4.442		
11,900.00	7,123.43	7,078.43	7,123.43	129.38	245.39	90.04	-1,237.44	-4,795.13	1,634.39	1,259.75	374.64	4.363		
12,000.00	7,122.89	7,077.89	7,122.89	132.10	245.37	90.02	-1,237.44	-4,795.13	1,624.89	1,247.43	377.46	4.305		
12,100.00	7,122.35	7,077.35	7,122.35	134.83	245.35	90.00	-1,237.44	-4,795.13	1,621.51	1,241.64	379.87	4.269		
12,104.84	7,122.33	7,077.33	7,122.33	134.96	245.35	90.00	-1,237.44	-4,795.13	1,621.51	1,241.53	379.97	4.267 CC, ES		
12,200.00	7,121.81	7,076.81	7,121.81	137.56	245.33	89.98	-1,237.44	-4,795.13	1,624.30	1,242.46	381.84	4.254 SF		
12,300.00	7,121.27	7,076.27	7,121.27	140.30	245.31	89.96	-1,237.44	-4,795.13	1,633.21	1,249.86	383.35	4.260		
12,400.00	7,120.73	7,075.73	7,120.73	143.05	245.29	89.94	-1,237.44	-4,795.13	1,648.15	1,263.76	384.39	4.288		
12,500.00	7,120.19	7,075.19	7,120.19	145.80	245.27	89.92	-1,237.44	-4,795.13	1,668.96	1,283.98	384.98	4.335		
12,600.00	7,119.65	7,074.65	7,119.65	148.55	245.25	89.91	-1,237.44	-4,795.13	1,695.42	1,310.28	385.14	4.402		
12,700.00	7,119.10	7,074.10	7,119.10	151.30	245.23	89.89	-1,237.44	-4,795.13	1,727.28	1,342.36	384.91	4.487		
12,800.00	7,118.56	7,073.56	7,118.56	154.07	245.22	89.87	-1,237.44	-4,795.13	1,764.23	1,379.89	384.34	4.590		
12,900.00	7,118.02	7,073.02	7,118.02	156.83	245.20	89.85	-1,237.44	-4,795.13	1,805.97	1,422.51	383.46	4.710		
13,000.00	7,117.48	7,072.48	7,117.48	159.60	245.18	89.83	-1,237.44	-4,795.13	1,852.18	1,469.84	382.33	4.844		
13,100.00	7,116.94	7,071.94	7,116.94	162.37	245.16	89.81	-1,237.44	-4,795.13	1,902.52	1,521.52	381.00	4.993		
13,200.00	7,116.40	7,071.40	7,116.40	165.14	245.14	89.79	-1,237.44	-4,795.13	1,956.68	1,577.17	379.52	5.156		
13,300.00	7,115.86	7,070.86	7,115.86	167.92	245.12	89.77	-1,237.44	-4,795.13	2,014.36	1,636.45	377.91	5.330		
13,400.00	7,115.32	7,070.32	7,115.32	170.70	245.10	89.75	-1,237.44	-4,795.13	2,075.25	1,699.03	376.22	5.516		
13,500.00	7,114.78	7,069.78	7,114.78	173.48	245.08	89.73	-1,237.44	-4,795.13	2,139.09	1,764.61	374.47	5.712		
13,600.00	7,114.24	7,069.24	7,114.24	176.26	245.06	89.71	-1,237.44	-4,795.13	2,205.61	1,832.91	372.70	5.918		
13,700.00	7,113.69	7,068.69	7,113.69	179.05	245.05	89.70	-1,237.44	-4,795.13	2,274.58	1,903.67	370.92	6.132		
13,800.00	7,113.15	7,068.15	7,113.15	181.84	245.03	89.68	-1,237.44	-4,795.13	2,345.79	1,976.65	369.14	6.355		
13,900.00	7,112.61	7,067.61	7,112.61	184.63	245.01	89.66	-1,237.44	-4,795.13	2,419.04	2,051.65	367.39	6.584		
14,000.00	7,112.07	7,067.07	7,112.07	187.42	244.99	89.64	-1,237.44	-4,795.13	2,494.15	2,128.48	365.68	6.821		
14,100.00	7,111.53	7,066.53	7,111.53	190.22	244.97	89.62	-1,237.44	-4,795.13	2,570.96	2,206.96	364.00	7.063		
14,200.00	7,110.99	7,065.99	7,110.99	193.01	244.95	89.60	-1,237.44	-4,795.13	2,649.31	2,286.94	362.37	7.311		
14,300.00	7,110.45	7,065.45	7,110.45	195.81	244.93	89.58	-1,237.44	-4,795.13	2,729.08	2,368.29	360.78	7.564		
14,400.00	7,109.91	7,064.91	7,109.91	198.61	244.91	89.56	-1,237.44	-4,795.13	2,810.14	2,450.88	359.25	7.822		
14,500.00	7,109.37	7,064.37	7,109.37	201.42	244.89	89.54	-1,237.44	-4,795.13	2,892.38	2,534.61	357.78	8.084		
14,600.00	7,108.82	7,063.82	7,108.82	204.22	244.88	89.52	-1,237.44	-4,795.13	2,975.72	2,619.37	356.35	8.351		
14,700.00	7,108.28	7,063.28	7,108.28	207.03	244.86	89.50	-1,237.44	-4,795.13	3,060.05	2,705.07	354.98	8.620		
14,800.00	7,107.74	7,062.74	7,107.74	209.83	244.84	89.48	-1,237.44	-4,795.13	3,145.30	2,791.64	353.66	8.893		
14,900.00	7,107.20	7,062.20	7,107.20	212.64	244.82	89.47	-1,237.44	-4,795.13	3,231.40	2,879.00	352.40	9.170		
15,000.00	7,106.66	7,061.66	7,106.66	215.45	244.80	89.45	-1,237.44	-4,795.13	3,318.28	2,967.09	351.18	9.449		
15,100.00	7,106.12	7,061.12	7,106.12	218.26	244.78	89.43	-1,237.44	-4,795.13	3,405.87	3,055.86	350.02	9.731		
15,200.00	7,105.58	7,060.58	7,105.58	221.07	244.76	89.41	-1,237.44	-4,795.13	3,494.14	3,145.24	348.90	10.015		
15,300.00	7,105.04	7,060.04	7,105.04	223.89	244.74	89.39	-1,237.44	-4,795.13	3,583.02	3,235.19	347.83	10.301		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.00	7,104.50	7,059.50	7,104.50	226.70	244.72	89.37	-1,237.44	-4,795.13	3,672.47	3,325.67	346.80	10.590	
15,491.56	7,104.00	7,059.00	7,104.00	229.28	244.71	89.35	-1,237.44	-4,795.13	3,754.84	3,408.94	345.90	10.855	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-43(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	48.00	3.28	3.28	-119.70	-2,738.38	-4,800.98	5,527.24					
100.00	100.00	52.00	100.00	3.28	3.40	-119.70	-2,738.38	-4,800.98	5,527.04	5,520.35	6.69	826.412		
200.00	200.00	152.00	200.00	3.34	4.84	-119.70	-2,738.38	-4,800.98	5,527.04	5,518.86	8.18	675.818		
300.00	299.98	251.98	299.98	3.44	7.78	57.20	-2,738.38	-4,800.98	5,526.09	5,514.87	11.22	492.689		
400.00	399.84	351.84	399.84	3.59	11.04	57.29	-2,738.38	-4,800.98	5,523.26	5,508.63	14.63	377.651		
500.00	499.45	451.45	499.45	3.79	14.39	57.45	-2,738.38	-4,800.98	5,518.54	5,500.36	18.18	303.529		
600.00	598.70	550.70	598.70	4.03	17.78	57.66	-2,738.38	-4,800.98	5,511.97	5,490.15	21.81	252.669		
700.00	697.47	649.47	697.47	4.31	21.18	57.94	-2,738.38	-4,800.98	5,503.56	5,478.06	25.50	215.861		
800.00	795.62	747.62	795.62	4.64	24.57	58.28	-2,738.38	-4,800.98	5,493.35	5,464.14	29.21	188.088		
900.00	893.06	845.06	893.06	5.00	27.95	58.69	-2,738.38	-4,800.98	5,481.36	5,448.43	32.93	166.433		
1,000.00	989.64	941.64	989.64	5.40	31.30	59.15	-2,738.38	-4,800.98	5,467.66	5,430.99	36.67	149.100		
1,100.00	1,085.27	1,037.27	1,085.27	5.83	34.62	59.67	-2,738.38	-4,800.98	5,452.29	5,411.88	40.41	134.926		
1,200.00	1,179.82	1,131.82	1,179.82	6.29	37.91	60.26	-2,738.38	-4,800.98	5,435.30	5,391.16	44.14	123.127		
1,300.00	1,273.17	1,225.17	1,273.17	6.79	41.16	60.90	-2,738.38	-4,800.98	5,416.77	5,368.90	47.87	113.159		
1,400.00	1,365.21	1,317.21	1,365.21	7.33	44.36	61.60	-2,738.38	-4,800.98	5,396.76	5,345.18	51.58	104.629		
1,500.00	1,456.49	1,408.49	1,456.49	7.89	47.54	61.98	-2,738.38	-4,800.98	5,376.07	5,320.78	55.29	97.239		
1,600.00	1,547.76	1,500.24	1,547.76	8.46	50.73	62.34	-2,738.38	-4,800.98	5,355.60	5,296.58	59.03	90.731		
1,700.00	1,639.04	1,608.96	1,639.04	9.05	54.52	62.70	-2,738.38	-4,800.98	5,335.37	5,272.00	63.37	84.190		
1,800.00	1,730.31	1,682.31	1,730.31	9.65	57.08	63.06	-2,738.38	-4,800.98	5,315.38	5,248.88	66.50	79.932		
1,900.00	1,821.58	1,773.58	1,821.58	10.26	60.26	63.43	-2,738.38	-4,800.98	5,295.62	5,225.36	70.26	75.372		
2,000.00	1,912.85	1,864.85	1,912.85	10.87	63.44	63.80	-2,738.38	-4,800.98	5,276.11	5,202.08	74.03	71.271		
2,100.00	2,004.13	1,956.13	2,004.13	11.49	66.62	64.17	-2,738.38	-4,800.98	5,256.84	5,179.04	77.81	67.563		
2,200.00	2,095.40	2,047.40	2,095.40	12.11	69.81	64.54	-2,738.38	-4,800.98	5,237.83	5,156.23	81.59	64.196		
2,300.00	2,186.67	2,138.67	2,186.67	12.74	72.99	64.92	-2,738.38	-4,800.98	5,219.06	5,133.67	85.38	61.126		
2,400.00	2,277.95	2,229.95	2,277.95	13.38	76.17	65.30	-2,738.38	-4,800.98	5,200.54	5,111.36	89.18	58.316		
2,500.00	2,369.22	2,321.22	2,369.22	14.01	79.36	65.68	-2,738.38	-4,800.98	5,182.28	5,089.30	92.98	55.735		
2,600.00	2,460.49	2,412.49	2,460.49	14.65	82.54	66.06	-2,738.38	-4,800.98	5,164.28	5,067.50	96.79	53.357		
2,700.00	2,551.77	2,503.77	2,551.77	15.29	85.72	66.45	-2,738.38	-4,800.98	5,146.54	5,045.95	100.60	51.160		
2,800.00	2,643.04	2,604.96	2,643.04	15.93	89.25	66.84	-2,738.38	-4,800.98	5,129.07	5,024.31	104.76	48.962		
2,900.00	2,734.31	2,686.31	2,734.31	16.58	92.09	67.23	-2,738.38	-4,800.98	5,111.86	5,003.63	108.23	47.232		
3,000.00	2,825.58	2,777.58	2,825.58	17.23	95.28	67.62	-2,738.38	-4,800.98	5,094.92	4,982.87	112.05	45.470		
3,100.00	2,916.86	2,868.86	2,916.86	17.87	98.46	68.01	-2,738.38	-4,800.98	5,078.26	4,962.38	115.87	43.826		
3,200.00	3,008.13	2,960.13	3,008.13	18.52	101.65	68.41	-2,738.38	-4,800.98	5,061.86	4,942.16	119.70	42.288		
3,300.00	3,099.40	3,051.40	3,099.40	19.17	104.83	68.81	-2,738.38	-4,800.98	5,045.75	4,922.22	123.53	40.846		
3,400.00	3,190.68	3,142.68	3,190.68	19.83	108.02	69.21	-2,738.38	-4,800.98	5,029.92	4,902.55	127.36	39.493		
3,500.00	3,281.95	3,233.95	3,281.95	20.48	111.20	69.61	-2,738.38	-4,800.98	5,014.37	4,883.17	131.20	38.220		
3,600.00	3,373.22	3,325.22	3,373.22	21.13	114.39	70.02	-2,738.38	-4,800.98	4,999.10	4,864.07	135.03	37.021		
3,700.00	3,464.49	3,416.49	3,464.49	21.79	117.57	70.42	-2,738.38	-4,800.98	4,984.12	4,845.25	138.87	35.890		
3,800.00	3,555.77	3,507.77	3,555.77	22.44	120.76	70.83	-2,738.38	-4,800.98	4,969.44	4,826.72	142.71	34.821		
3,900.00	3,647.04	3,600.96	3,647.04	23.10	124.01	71.25	-2,738.38	-4,800.98	4,955.04	4,808.42	146.62	33.794		
4,000.00	3,738.31	3,709.69	3,738.31	23.75	127.80	71.66	-2,738.38	-4,800.98	4,940.95	4,789.87	151.08	32.705		
4,100.00	3,829.59	3,781.59	3,829.59	24.41	130.31	72.07	-2,738.38	-4,800.98	4,927.15	4,772.90	154.25	31.943		
4,200.00	3,920.86	3,872.86	3,920.86	25.07	133.50	72.49	-2,738.38	-4,800.98	4,913.65	4,755.55	158.10	31.080		
4,300.00	4,012.13	3,964.13	4,012.13	25.73	136.68	72.91	-2,738.38	-4,800.98	4,900.46	4,738.51	161.95	30.260		
4,400.00	4,103.41	4,055.41	4,103.41	26.38	139.87	73.33	-2,738.38	-4,800.98	4,887.57	4,721.77	165.80	29.479		
4,500.00	4,194.68	4,146.68	4,194.68	27.04	143.05	73.76	-2,738.38	-4,800.98	4,874.99	4,705.34	169.65	28.735		
4,600.00	4,285.95	4,237.95	4,285.95	27.70	146.24	74.18	-2,738.38	-4,800.98	4,862.72	4,689.22	173.50	28.026		
4,700.00	4,377.22	4,329.22	4,377.22	28.36	149.42	74.61	-2,738.38	-4,800.98	4,850.76	4,673.40	177.36	27.350		
4,800.00	4,468.50	4,420.50	4,468.50	29.02	152.61	75.04	-2,738.38	-4,800.98	4,839.12	4,657.91	181.22	26.704		
4,900.00	4,559.77	4,511.77	4,559.77	29.68	155.80	75.47	-2,738.38	-4,800.98	4,827.80	4,642.73	185.07	26.086		
5,000.00	4,651.04	4,603.04	4,651.04	30.34	158.98	75.90	-2,738.38	-4,800.98	4,816.80	4,627.87	188.93	25.495		
5,100.00	4,742.32	4,705.68	4,742.32	31.00	162.56	76.33	-2,738.38	-4,800.98	4,806.12	4,612.93	193.19	24.878		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-43(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	4,833.59	4,785.59	4,833.59	31.66	165.35	76.77	-2,738.38	-4,800.98	4,795.76	4,599.11	196.65	24.387	
5,300.00	4,924.86	4,876.86	4,924.86	32.32	168.54	77.20	-2,738.38	-4,800.98	4,785.73	4,585.22	200.51	23.867	
5,400.00	5,016.13	4,968.13	5,016.13	32.99	171.72	77.64	-2,738.38	-4,800.98	4,776.03	4,571.65	204.38	23.369	
5,500.00	5,107.41	5,059.41	5,107.41	33.65	174.91	78.08	-2,738.38	-4,800.98	4,766.66	4,558.42	208.24	22.890	
5,600.00	5,198.68	5,150.68	5,198.68	34.31	178.10	78.52	-2,738.38	-4,800.98	4,757.62	4,545.52	212.10	22.431	
5,700.00	5,289.95	5,241.95	5,289.95	34.97	181.28	78.97	-2,738.38	-4,800.98	4,748.91	4,532.95	215.97	21.989	
5,800.00	5,381.23	5,333.23	5,381.23	35.63	184.47	79.41	-2,738.38	-4,800.98	4,740.55	4,520.72	219.83	21.565	
5,900.00	5,472.50	5,424.50	5,472.50	36.30	187.65	79.85	-2,738.38	-4,800.98	4,732.52	4,508.82	223.69	21.156	
6,000.00	5,563.77	5,515.77	5,563.77	36.96	190.84	80.30	-2,738.38	-4,800.98	4,724.83	4,497.27	227.56	20.763	
6,100.00	5,655.05	5,607.05	5,655.05	37.62	194.02	80.75	-2,738.38	-4,800.98	4,717.48	4,486.05	231.42	20.385	
6,200.00	5,746.32	5,701.68	5,746.32	38.28	197.33	81.20	-2,738.38	-4,800.98	4,710.47	4,475.06	235.41	20.010	
6,300.00	5,837.59	5,789.59	5,837.59	38.95	200.40	81.65	-2,738.38	-4,800.98	4,703.81	4,464.65	239.15	19.669	
6,400.00	5,928.86	5,880.86	5,928.86	39.61	203.58	82.10	-2,738.38	-4,800.98	4,697.49	4,454.47	243.02	19.330	
6,500.00	6,020.14	5,972.14	6,020.14	40.27	206.77	82.55	-2,738.38	-4,800.98	4,691.52	4,444.64	246.88	19.003	
6,600.00	6,111.41	6,063.41	6,111.41	40.94	209.95	83.00	-2,738.38	-4,800.98	4,685.90	4,435.16	250.75	18.688	
6,700.00	6,202.68	6,154.68	6,202.68	41.60	213.14	83.46	-2,738.38	-4,800.98	4,680.63	4,426.02	254.61	18.383	
6,800.00	6,293.96	6,245.96	6,293.96	42.26	216.33	83.91	-2,738.38	-4,800.98	4,675.71	4,417.24	258.48	18.090	
6,900.00	6,385.23	6,337.23	6,385.23	42.93	219.51	84.37	-2,738.38	-4,800.98	4,671.15	4,408.81	262.34	17.806	
7,000.00	6,476.50	6,428.50	6,476.50	43.59	222.70	84.82	-2,738.38	-4,800.98	4,666.93	4,400.73	266.20	17.532	
7,100.00	6,567.77	6,519.77	6,567.77	44.25	225.88	85.28	-2,738.38	-4,800.98	4,663.07	4,393.01	270.06	17.267	
7,200.00	6,658.64	6,610.64	6,658.64	44.91	229.06	85.75	-2,738.38	-4,800.98	4,653.36	4,379.45	273.90	16.989	
7,300.00	6,747.14	6,700.86	6,747.14	45.52	232.21	86.22	-2,738.38	-4,800.98	4,628.63	4,350.97	277.67	16.670	
7,400.00	6,831.10	6,783.10	6,831.10	46.07	235.08	86.69	-2,738.38	-4,800.98	4,589.38	4,308.30	281.08	16.328	
7,500.00	6,908.46	6,860.46	6,908.46	46.54	237.78	87.16	-2,738.38	-4,800.98	4,536.51	4,252.26	284.25	15.960	
7,600.00	6,977.30	6,929.30	6,977.30	46.95	240.18	87.63	-2,738.38	-4,800.98	4,471.26	4,184.21	287.05	15.577	
7,700.00	7,035.93	6,987.93	7,035.93	47.30	242.23	88.10	-2,738.38	-4,800.98	4,395.16	4,105.74	289.42	15.186	
7,800.00	7,082.92	7,034.92	7,082.92	47.59	243.87	88.57	-2,738.38	-4,800.98	4,310.00	4,018.69	291.31	14.795	
7,900.00	7,117.09	7,069.09	7,117.09	47.84	245.06	89.04	-2,738.38	-4,800.98	4,217.81	3,925.12	292.69	14.410	
8,000.00	7,137.62	7,089.62	7,137.62	48.06	245.78	89.51	-2,738.38	-4,800.98	4,120.79	3,827.26	293.52	14.039	
8,100.00	7,143.99	7,104.01	7,143.99	48.28	246.28	90.00	-2,738.38	-4,800.98	4,021.27	3,727.19	294.08	13.674	
8,200.00	7,143.45	7,104.55	7,143.45	48.53	246.30	90.47	-2,738.38	-4,800.98	3,921.32	3,627.20	294.13	13.332	
8,300.00	7,142.91	7,105.09	7,142.91	48.89	246.32	90.94	-2,738.38	-4,800.98	3,821.37	3,527.20	294.17	12.990	
8,400.00	7,142.37	7,105.63	7,142.37	49.40	246.33	91.41	-2,738.38	-4,800.98	3,721.42	3,427.20	294.22	12.648	
8,500.00	7,141.83	7,106.17	7,141.83	50.12	246.35	91.88	-2,738.38	-4,800.98	3,621.48	3,327.21	294.27	12.307	
8,600.00	7,141.29	7,106.71	7,141.29	51.08	246.37	92.35	-2,738.38	-4,800.98	3,521.54	3,227.21	294.33	11.965	
8,700.00	7,140.75	7,107.25	7,140.75	52.30	246.39	92.82	-2,738.38	-4,800.98	3,421.60	3,127.22	294.38	11.623	
8,800.00	7,140.21	7,107.79	7,140.21	53.75	246.41	93.29	-2,738.38	-4,800.98	3,321.67	3,027.23	294.44	11.281	
8,900.00	7,139.67	7,108.33	7,139.67	55.40	246.43	93.76	-2,738.38	-4,800.98	3,221.74	2,927.23	294.50	10.940	
9,000.00	7,139.12	7,108.88	7,139.12	57.20	246.45	94.23	-2,738.38	-4,800.98	3,121.81	2,827.24	294.57	10.598	
9,100.00	7,138.58	7,109.42	7,138.58	59.13	246.47	94.70	-2,738.38	-4,800.98	3,021.89	2,727.25	294.63	10.256	
9,200.00	7,138.04	7,109.96	7,138.04	61.15	246.49	95.17	-2,738.38	-4,800.98	2,921.97	2,627.27	294.71	9.915	
9,300.00	7,137.50	7,089.50	7,137.50	63.26	245.77	95.64	-2,738.38	-4,800.98	2,822.06	2,528.01	294.05	9.597	
9,400.00	7,136.96	7,088.96	7,136.96	65.44	245.75	96.11	-2,738.38	-4,800.98	2,722.16	2,428.07	294.09	9.256	
9,500.00	7,136.42	7,088.42	7,136.42	67.68	245.73	96.58	-2,738.38	-4,800.98	2,622.26	2,328.12	294.14	8.915	
9,600.00	7,135.88	7,087.88	7,135.88	69.97	245.71	97.05	-2,738.38	-4,800.98	2,522.37	2,228.18	294.19	8.574	
9,700.00	7,135.34	7,087.34	7,135.34	72.31	245.70	97.52	-2,738.38	-4,800.98	2,422.49	2,128.24	294.25	8.233	
9,800.00	7,134.80	7,086.80	7,134.80	74.69	245.68	97.99	-2,738.38	-4,800.98	2,322.62	2,028.30	294.32	7.891	
9,900.00	7,134.26	7,086.26	7,134.26	77.10	245.66	98.46	-2,738.38	-4,800.98	2,222.77	1,928.37	294.40	7.550	
10,000.00	7,133.71	7,085.71	7,133.71	79.54	245.64	98.93	-2,738.38	-4,800.98	2,122.92	1,828.44	294.48	7.209	
10,100.00	7,133.17	7,085.17	7,133.17	82.02	245.62	99.40	-2,738.38	-4,800.98	2,023.09	1,728.51	294.58	6.868	
10,200.00	7,132.63	7,084.63	7,132.63	84.52	245.60	99.87	-2,738.38	-4,800.98	1,923.28	1,628.59	294.69	6.526	
10,300.00	7,132.09	7,084.09	7,132.09	87.04	245.58	100.34	-2,738.38	-4,800.98	1,823.49	1,528.67	294.82	6.185	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,131.55	7,083.55	7,131.55	89.58	245.56	94.41	-2,738.38	-4,800.98	1,723.72	1,428.76	294.96	5.844		
10,500.00	7,131.01	7,083.01	7,131.01	92.15	245.54	94.15	-2,738.38	-4,800.98	1,623.99	1,328.85	295.13	5.503		
10,600.00	7,130.47	7,082.47	7,130.47	94.73	245.53	93.90	-2,738.38	-4,800.98	1,524.28	1,228.95	295.33	5.161		
10,700.00	7,129.93	7,081.93	7,129.93	97.33	245.51	93.64	-2,738.38	-4,800.98	1,424.62	1,129.06	295.56	4.820		
10,800.00	7,129.39	7,081.39	7,129.39	99.94	245.49	93.39	-2,738.38	-4,800.98	1,325.01	1,029.17	295.84	4.479		
10,900.00	7,128.84	7,080.84	7,128.84	102.56	245.47	93.13	-2,738.38	-4,800.98	1,225.46	929.28	296.18	4.138		
11,000.00	7,128.30	7,080.30	7,128.30	105.20	245.45	92.87	-2,738.38	-4,800.98	1,125.99	829.40	296.59	3.796		
11,100.00	7,127.76	7,079.76	7,127.76	107.85	245.43	92.62	-2,738.38	-4,800.98	1,026.62	729.51	297.11	3.455		
11,200.00	7,127.22	7,079.22	7,127.22	110.51	245.41	92.36	-2,738.38	-4,800.98	927.39	629.62	297.77	3.114		
11,300.00	7,126.68	7,078.68	7,126.68	113.18	245.39	92.11	-2,738.38	-4,800.98	828.34	529.70	298.64	2.774		
11,400.00	7,126.14	7,078.14	7,126.14	115.86	245.37	91.85	-2,738.38	-4,800.98	729.56	429.74	299.82	2.433		
11,500.00	7,125.60	7,077.60	7,125.60	118.55	245.36	91.59	-2,738.38	-4,800.98	631.15	329.66	301.49	2.093		
11,600.00	7,125.06	7,077.06	7,125.06	121.25	245.34	91.33	-2,738.38	-4,800.98	533.34	229.38	303.95	1.755		
11,700.00	7,124.52	7,076.52	7,124.52	123.95	245.32	91.08	-2,738.38	-4,800.98	436.52	128.68	307.84	1.418	Level 3	
11,800.00	7,123.97	7,075.97	7,123.97	126.66	245.30	90.82	-2,738.38	-4,800.98	341.53	27.09	314.44	1.086	Level 2	
11,900.00	7,123.43	7,075.43	7,123.43	129.38	245.28	90.56	-2,738.38	-4,800.98	250.48	-76.22	326.70	0.767	Level 1	
12,000.00	7,122.89	7,074.89	7,122.89	132.10	245.26	90.31	-2,738.38	-4,800.98	169.82	-180.77	350.58	0.484	Level 1	
12,100.00	7,122.35	7,074.35	7,122.35	134.83	245.24	90.05	-2,738.38	-4,800.98	122.20	-257.44	379.64	0.322	Level 1	
12,119.52	7,122.25	7,074.25	7,122.25	135.36	245.24	90.00	-2,738.38	-4,800.98	120.63	-259.64	380.27	0.317	Level 1, CC, ES, SF	
12,200.00	7,121.81	7,073.81	7,121.81	137.56	245.22	89.79	-2,738.38	-4,800.98	145.01	-212.62	357.63	0.405	Level 1	
12,300.00	7,121.27	7,073.27	7,121.27	140.30	245.20	89.54	-2,738.38	-4,800.98	217.08	-108.96	326.04	0.666	Level 1	
12,400.00	7,120.73	7,072.73	7,120.73	143.05	245.19	89.28	-2,738.38	-4,800.98	305.31	-5.10	310.42	0.984	Level 1	
12,500.00	7,120.19	7,072.19	7,120.19	145.80	245.17	89.02	-2,738.38	-4,800.98	399.14	96.18	302.96	1.317	Level 3	
12,600.00	7,119.65	7,071.65	7,119.65	148.55	245.15	88.77	-2,738.38	-4,800.98	495.38	196.27	299.11	1.656		
12,700.00	7,119.10	7,071.10	7,119.10	151.30	245.13	88.51	-2,738.38	-4,800.98	592.87	295.91	296.96	1.996		
12,800.00	7,118.56	7,070.56	7,118.56	154.07	245.11	88.25	-2,738.38	-4,800.98	691.08	395.40	295.68	2.337		
12,900.00	7,118.02	7,070.02	7,118.02	156.83	245.09	88.00	-2,738.38	-4,800.98	789.73	494.85	294.88	2.678		
13,000.00	7,117.48	7,069.48	7,117.48	159.60	245.07	87.74	-2,738.38	-4,800.98	888.69	594.32	294.36	3.019		
13,100.00	7,116.94	7,068.94	7,116.94	162.37	245.05	87.48	-2,738.38	-4,800.98	987.86	693.83	294.02	3.360		
13,200.00	7,116.40	7,068.40	7,116.40	165.14	245.03	87.23	-2,738.38	-4,800.98	1,087.17	793.38	293.79	3.701		
13,300.00	7,115.86	7,067.86	7,115.86	167.92	245.02	86.97	-2,738.38	-4,800.98	1,186.61	892.97	293.63	4.041		
13,400.00	7,115.32	7,067.32	7,115.32	170.70	245.00	86.71	-2,738.38	-4,800.98	1,286.13	992.60	293.53	4.382		
13,500.00	7,114.78	7,066.78	7,114.78	173.48	244.98	86.46	-2,738.38	-4,800.98	1,385.72	1,092.26	293.46	4.722		
13,600.00	7,114.24	7,066.24	7,114.24	176.26	244.96	86.20	-2,738.38	-4,800.98	1,485.36	1,191.95	293.41	5.062		
13,700.00	7,113.69	7,065.69	7,113.69	179.05	244.94	85.95	-2,738.38	-4,800.98	1,585.05	1,291.66	293.39	5.403		
13,800.00	7,113.15	7,065.15	7,113.15	181.84	244.92	85.69	-2,738.38	-4,800.98	1,684.78	1,391.40	293.38	5.743		
13,900.00	7,112.61	7,064.61	7,112.61	184.63	244.90	85.43	-2,738.38	-4,800.98	1,784.53	1,491.16	293.38	6.083		
14,000.00	7,112.07	7,064.07	7,112.07	187.42	244.88	85.18	-2,738.38	-4,800.98	1,884.31	1,590.93	293.39	6.423		
14,100.00	7,111.53	7,063.53	7,111.53	190.22	244.86	84.92	-2,738.38	-4,800.98	1,984.12	1,690.72	293.40	6.763		
14,200.00	7,110.99	7,062.99	7,110.99	193.01	244.85	84.67	-2,738.38	-4,800.98	2,083.94	1,790.52	293.42	7.102		
14,300.00	7,110.45	7,062.45	7,110.45	195.81	244.83	84.41	-2,738.38	-4,800.98	2,183.78	1,890.33	293.44	7.442		
14,400.00	7,109.91	7,061.91	7,109.91	198.61	244.81	84.16	-2,738.38	-4,800.98	2,283.63	1,990.16	293.47	7.781		
14,500.00	7,109.37	7,061.37	7,109.37	201.42	244.79	83.91	-2,738.38	-4,800.98	2,383.50	2,089.99	293.50	8.121		
14,600.00	7,108.82	7,060.82	7,108.82	204.22	244.77	83.65	-2,738.38	-4,800.98	2,483.37	2,189.84	293.54	8.460		
14,700.00	7,108.28	7,060.28	7,108.28	207.03	244.75	83.40	-2,738.38	-4,800.98	2,583.26	2,289.69	293.57	8.799		
14,800.00	7,107.74	7,059.74	7,107.74	209.83	244.73	83.14	-2,738.38	-4,800.98	2,683.15	2,389.54	293.61	9.139		
14,900.00	7,107.20	7,059.20	7,107.20	212.64	244.71	82.89	-2,738.38	-4,800.98	2,783.05	2,489.41	293.64	9.478		
15,000.00	7,106.66	7,058.66	7,106.66	215.45	244.69	82.64	-2,738.38	-4,800.98	2,882.96	2,589.28	293.68	9.817		
15,100.00	7,106.12	7,058.12	7,106.12	218.26	244.68	82.39	-2,738.38	-4,800.98	2,982.87	2,689.15	293.72	10.155		
15,200.00	7,105.58	7,057.58	7,105.58	221.07	244.66	82.13	-2,738.38	-4,800.98	3,082.79	2,789.03	293.77	10.494		
15,300.00	7,105.04	7,057.04	7,105.04	223.89	244.64	81.88	-2,738.38	-4,800.98	3,182.72	2,888.91	293.81	10.833		
15,400.00	7,104.50	7,056.50	7,104.50	226.70	244.62	81.63	-2,738.38	-4,800.98	3,282.65	2,988.79	293.85	11.171		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)								
15,491.56	7,104.00	7,056.00	7,104.00	229.28	244.60	81.40	-2,738.38	-4,800.98	3,374.15	3,080.25	293.89	11.481							



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
0.00	0.00	25.00	66.00	3.28	3.28	-140.13	-3,909.50	-3,265.62	5,094.39					
100.00	100.00	880.35	916.42	3.28	5.07	-140.28	-3,863.33	-3,209.30	5,088.37	5,079.97	8.39	606.302		
200.00	200.00	979.00	1,013.75	3.34	5.48	-140.32	-3,853.12	-3,196.83	5,072.32	5,063.55	8.78	577.942		
300.00	299.98	1,077.45	1,110.87	3.44	5.91	36.74	-3,842.93	-3,184.40	5,054.90	5,045.67	9.23	547.767		
400.00	399.84	1,175.39	1,207.49	3.59	6.35	36.98	-3,832.79	-3,172.02	5,034.73	5,024.99	9.74	516.895		
500.00	499.45	1,272.70	1,303.50	3.79	6.81	37.29	-3,822.71	-3,159.73	5,011.84	5,001.53	10.30	486.355		
600.00	598.70	1,369.28	1,398.78	4.03	7.27	37.67	-3,812.71	-3,147.53	4,986.25	4,975.34	10.91	456.850		
700.00	697.47	1,464.99	1,493.20	4.31	7.74	38.10	-3,802.80	-3,135.43	4,958.01	4,946.45	11.56	428.811		
800.00	795.62	1,559.72	1,586.67	4.64	8.21	38.61	-3,792.99	-3,123.47	4,927.16	4,914.92	12.24	402.458		
900.00	893.06	1,653.37	1,679.05	5.00	8.68	39.19	-3,783.30	-3,111.64	4,893.75	4,880.80	12.95	377.867		
1,000.00	989.64	1,745.80	1,770.25	5.40	9.15	39.84	-3,773.73	-3,099.96	4,857.82	4,844.14	13.68	355.019		
1,100.00	1,085.27	1,836.92	1,860.14	5.83	9.62	40.56	-3,764.29	-3,088.45	4,819.45	4,805.02	14.44	333.838		
1,200.00	1,179.82	1,926.61	1,948.62	6.29	10.08	41.37	-3,755.01	-3,077.11	4,778.70	4,763.49	15.21	314.221		
1,300.00	1,273.17	2,014.75	2,035.59	6.79	10.54	42.26	-3,745.88	-3,065.98	4,735.64	4,719.64	16.00	296.050		
1,400.00	1,365.21	2,101.25	2,120.92	7.33	10.99	43.23	-3,736.93	-3,055.05	4,690.35	4,673.55	16.80	279.203		
1,500.00	1,456.49	2,186.80	2,205.32	7.89	11.43	43.58	-3,728.07	-3,044.24	4,643.90	4,626.29	17.61	263.673		
1,600.00	1,547.76	2,272.34	2,289.71	8.46	11.88	43.89	-3,719.21	-3,033.44	4,597.56	4,579.13	18.44	249.373		
1,700.00	1,639.04	2,357.88	2,374.10	9.05	12.33	44.21	-3,710.36	-3,022.63	4,551.34	4,532.07	19.28	236.119		
1,800.00	1,730.31	2,443.42	2,458.50	9.65	12.79	44.53	-3,701.50	-3,011.82	4,505.25	4,485.12	20.13	223.831		
1,900.00	1,821.58	2,528.96	2,542.89	10.26	13.24	44.86	-3,692.64	-3,001.01	4,459.28	4,438.28	20.99	212.431		
2,000.00	1,912.85	2,614.50	2,627.28	10.87	13.69	45.20	-3,683.79	-2,990.21	4,413.43	4,391.57	21.87	201.844		
2,100.00	2,004.13	2,700.04	2,711.67	11.49	14.15	45.55	-3,674.93	-2,979.40	4,367.72	4,344.97	22.75	191.999		
2,200.00	2,095.40	2,785.58	2,796.07	12.11	14.61	45.90	-3,666.07	-2,968.59	4,322.15	4,298.51	23.64	182.831		
2,300.00	2,186.67	2,871.13	2,880.46	12.74	15.06	46.25	-3,657.22	-2,957.79	4,276.72	4,252.18	24.54	174.282		
2,400.00	2,277.95	2,956.67	2,964.85	13.38	15.52	46.62	-3,648.36	-2,946.98	4,231.44	4,205.99	25.45	166.296		
2,500.00	2,369.22	3,042.21	3,049.24	14.01	15.98	46.99	-3,639.50	-2,936.17	4,186.30	4,159.94	26.36	158.827		
2,600.00	2,460.49	3,127.75	3,133.63	14.65	16.44	47.37	-3,630.65	-2,925.37	4,141.32	4,114.05	27.28	151.829		
2,700.00	2,551.77	3,213.29	3,218.03	15.29	16.90	47.76	-3,621.79	-2,914.56	4,096.51	4,068.31	28.20	145.262		
2,800.00	2,643.04	3,301.17	3,302.42	15.93	17.37	48.15	-3,612.93	-2,903.75	4,051.86	4,022.72	29.14	139.041		
2,900.00	2,734.31	3,384.37	3,386.81	16.58	17.82	48.55	-3,604.08	-2,892.94	4,007.38	3,977.31	30.07	133.285		
3,000.00	2,825.58	3,469.91	3,471.20	17.23	18.28	48.96	-3,595.22	-2,882.14	3,963.08	3,932.07	31.01	127.812		
3,100.00	2,916.86	3,555.45	3,555.60	17.87	18.75	49.38	-3,586.36	-2,871.33	3,918.96	3,887.01	31.95	122.648		
3,200.00	3,008.13	3,641.00	3,639.99	18.52	19.21	49.81	-3,577.51	-2,860.52	3,875.04	3,842.13	32.90	117.769		
3,300.00	3,099.40	3,726.54	3,724.38	19.17	19.67	50.25	-3,568.65	-2,849.72	3,831.30	3,797.45	33.86	113.153		
3,400.00	3,190.68	3,812.08	3,808.77	19.83	20.13	50.69	-3,559.79	-2,838.91	3,787.78	3,752.96	34.82	108.781		
3,500.00	3,281.95	3,902.38	3,893.16	20.48	20.62	51.15	-3,550.94	-2,828.10	3,744.46	3,708.65	35.81	104.571		
3,600.00	3,373.22	3,983.16	3,977.56	21.13	21.06	51.61	-3,542.08	-2,817.29	3,701.36	3,664.61	36.76	100.698		
3,700.00	3,464.49	4,068.70	4,061.95	21.79	21.52	52.09	-3,533.22	-2,806.49	3,658.49	3,620.76	37.73	96.957		
3,800.00	3,555.77	4,154.24	4,146.34	22.44	21.99	52.57	-3,524.37	-2,795.68	3,615.85	3,577.14	38.71	93.399		
3,900.00	3,647.04	4,239.78	4,230.73	23.10	22.45	53.06	-3,515.51	-2,784.87	3,573.45	3,533.75	39.70	90.011		
4,000.00	3,738.31	4,325.32	4,315.12	23.75	22.92	53.57	-3,506.65	-2,774.07	3,531.31	3,490.62	40.69	86.781		
4,100.00	3,829.59	4,410.87	4,399.52	24.41	23.38	54.08	-3,497.80	-2,763.26	3,489.42	3,447.73	41.69	83.701		
4,200.00	3,920.86	4,496.41	4,483.91	25.07	23.85	54.61	-3,488.94	-2,752.45	3,447.80	3,405.11	42.69	80.761		
4,300.00	4,012.13	4,581.95	4,568.30	25.73	24.31	55.15	-3,480.08	-2,741.65	3,406.46	3,362.77	43.70	77.951		
4,400.00	4,103.41	4,667.49	4,652.69	26.38	24.78	55.70	-3,471.23	-2,730.84	3,365.42	3,320.70	44.71	75.265		
4,500.00	4,194.68	4,753.03	4,737.09	27.04	25.25	56.26	-3,462.37	-2,720.03	3,324.67	3,278.93	45.73	72.695		
4,600.00	4,285.95	4,838.57	4,821.48	27.70	25.71	56.84	-3,453.51	-2,709.22	3,284.23	3,237.47	46.76	70.235		
4,700.00	4,377.22	4,924.11	4,905.87	28.36	26.18	57.42	-3,444.66	-2,698.42	3,244.11	3,196.32	47.79	67.878		
4,800.00	4,468.50	5,009.65	4,990.26	29.02	26.64	58.02	-3,435.80	-2,687.61	3,204.33	3,155.50	48.83	65.619		
4,900.00	4,559.77	5,095.19	5,074.65	29.68	27.11	58.63	-3,426.94	-2,676.80	3,164.90	3,115.02	49.88	63.452		
5,000.00	4,651.04	5,180.73	5,159.05	30.34	27.58	59.26	-3,418.09	-2,666.00	3,125.83	3,074.90	50.93	61.373		
5,100.00	4,742.32	5,266.28	5,243.44	31.00	28.04	59.90	-3,409.23	-2,655.19	3,087.13	3,035.14	51.99	59.378		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	4,833.59	5,351.82	5,327.83	31.66	28.51	60.55	-3,400.37	-2,644.38	3,048.83	2,995.77	53.06	57.461		
5,300.00	4,924.86	5,437.36	5,412.22	32.32	28.98	61.22	-3,391.52	-2,633.57	3,010.92	2,956.79	54.13	55.620		
5,400.00	5,016.13	5,527.12	5,496.62	32.99	29.47	61.90	-3,382.66	-2,622.77	2,973.44	2,918.20	55.24	53.831		
5,500.00	5,107.41	5,608.44	5,581.01	33.65	29.91	62.59	-3,373.80	-2,611.96	2,936.39	2,880.08	56.31	52.149		
5,600.00	5,198.68	5,693.98	5,665.40	34.31	30.38	63.30	-3,364.95	-2,601.15	2,899.79	2,842.38	57.41	50.512		
5,700.00	5,289.95	5,779.52	5,749.79	34.97	30.84	64.03	-3,356.09	-2,590.35	2,863.66	2,805.14	58.52	48.939		
5,800.00	5,381.23	5,865.06	5,834.18	35.63	31.31	64.77	-3,347.23	-2,579.54	2,828.02	2,768.39	59.63	47.425		
5,900.00	5,472.50	5,950.60	5,918.58	36.30	31.78	65.53	-3,338.38	-2,568.73	2,792.88	2,732.12	60.76	45.968		
6,000.00	5,563.77	6,036.15	6,002.97	36.96	32.25	66.30	-3,329.52	-2,557.93	2,758.27	2,696.38	61.89	44.566		
6,100.00	5,655.05	6,128.34	6,087.36	37.62	32.75	67.09	-3,320.66	-2,547.12	2,724.20	2,661.14	63.07	43.196		
6,200.00	5,746.32	6,207.23	6,171.75	38.28	33.18	67.90	-3,311.81	-2,536.31	2,690.70	2,626.51	64.19	41.919		
6,300.00	5,837.59	6,260.38	6,224.19	38.95	33.47	68.41	-3,306.30	-2,529.60	2,657.99	2,592.67	65.32	40.694		
6,400.00	5,928.86	6,284.83	6,248.37	39.61	33.60	68.65	-3,303.78	-2,526.97	2,627.58	2,561.19	66.40	39.573		
6,500.00	6,020.14	6,300.00	6,263.41	40.27	33.68	68.80	-3,302.22	-2,525.82	2,600.13	2,532.70	67.44	38.557		
6,600.00	6,111.41	6,325.01	6,288.27	40.94	33.79	69.06	-3,299.66	-2,524.70	2,575.67	2,507.21	68.46	37.622		
6,700.00	6,202.68	6,338.78	6,301.96	41.60	33.85	69.20	-3,298.25	-2,524.50	2,554.26	2,484.85	69.41	36.799		
6,800.00	6,293.96	6,350.00	6,313.12	42.26	33.90	69.32	-3,297.12	-2,524.56	2,536.06	2,465.76	70.30	36.077		
6,900.00	6,385.23	6,375.02	6,338.00	42.93	33.99	69.60	-3,294.60	-2,525.40	2,520.97	2,449.79	71.19	35.414		
7,000.00	6,476.50	6,400.00	6,362.79	43.59	34.08	69.88	-3,292.11	-2,527.22	2,509.25	2,437.22	72.03	34.837		
7,100.00	6,567.77	6,411.19	6,373.86	44.25	34.11	70.01	-3,291.01	-2,528.35	2,500.76	2,428.03	72.73	34.386		
7,200.00	6,658.64	6,425.01	6,387.52	44.91	34.16	70.01	-3,289.65	-2,530.02	2,489.73	2,416.39	73.35	33.945		
7,300.00	6,747.14	6,450.00	6,412.10	45.52	34.23	70.01	-3,287.23	-2,533.79	2,467.22	2,393.30	73.91	33.380		
7,400.00	6,831.10	6,450.00	6,412.10	46.07	34.23	70.01	-3,287.23	-2,533.79	2,433.65	2,359.52	74.12	32.832		
7,500.00	6,908.46	6,500.00	6,460.76	46.54	34.34	70.01	-3,282.50	-2,544.23	2,389.04	2,314.37	74.67	31.996		
7,600.00	6,977.30	6,500.00	6,460.76	46.95	34.34	70.01	-3,282.50	-2,544.23	2,333.81	2,259.19	74.62	31.277		
7,700.00	7,035.93	6,525.01	6,484.76	47.30	34.39	70.01	-3,280.21	-2,550.88	2,269.43	2,194.70	74.73	30.370		
7,800.00	7,082.92	6,525.01	6,484.76	47.59	34.39	-1.50	-3,280.21	-2,550.88	2,196.36	2,121.90	74.47	29.495		
7,900.00	7,117.09	6,550.00	6,508.46	47.84	34.44	-9.16	-3,277.96	-2,558.47	2,115.93	2,041.48	74.45	28.422		
8,000.00	7,137.62	6,550.00	6,508.46	48.06	34.44	-19.71	-3,277.96	-2,558.47	2,029.52	1,955.44	74.08	27.398		
8,100.00	7,143.99	6,550.00	6,508.46	48.28	34.44	-34.62	-3,277.96	-2,558.47	1,938.98	1,865.28	73.69	26.311		
8,200.00	7,143.45	6,575.20	6,532.04	48.53	34.47	-35.52	-3,275.75	-2,567.06	1,846.75	1,773.07	73.68	25.065		
8,300.00	7,142.91	6,600.00	6,554.91	48.89	34.51	-36.44	-3,273.63	-2,576.43	1,755.73	1,682.07	73.66	23.835		
8,400.00	7,142.37	6,600.00	6,554.91	49.40	34.51	-36.44	-3,273.63	-2,576.43	1,665.03	1,591.77	73.26	22.727		
8,500.00	7,141.83	6,600.00	6,554.91	50.12	34.51	-36.44	-3,273.63	-2,576.43	1,575.46	1,502.62	72.85	21.627		
8,600.00	7,141.29	6,625.01	6,577.58	51.08	34.53	-37.40	-3,271.56	-2,586.77	1,486.89	1,414.04	72.85	20.409		
8,700.00	7,140.75	6,625.01	6,577.58	52.30	34.53	-37.40	-3,271.56	-2,586.77	1,399.49	1,327.05	72.44	19.320		
8,800.00	7,140.21	6,650.00	6,599.82	53.75	34.55	-38.40	-3,269.54	-2,597.98	1,313.37	1,240.87	72.51	18.114		
8,900.00	7,139.67	6,650.00	6,599.82	55.40	34.55	-38.40	-3,269.54	-2,597.98	1,229.00	1,156.86	72.14	17.036		
9,000.00	7,139.12	6,680.01	6,625.92	57.20	34.57	-39.65	-3,267.22	-2,612.60	1,146.07	1,073.62	72.45	15.819		
9,100.00	7,138.58	6,700.00	6,642.92	59.13	34.58	-40.51	-3,265.72	-2,623.01	1,065.41	992.73	72.68	14.659		
9,200.00	7,138.04	6,725.01	6,663.72	61.15	34.59	-41.61	-3,263.91	-2,636.79	987.21	914.02	73.19	13.488		
9,300.00	7,137.50	6,750.00	6,683.94	63.26	34.59	-42.74	-3,262.18	-2,651.36	911.87	837.92	73.95	12.331		
9,400.00	7,136.96	6,771.95	6,701.23	65.44	34.59	-43.76	-3,260.73	-2,664.81	839.86	764.89	74.98	11.202		
9,500.00	7,136.42	6,800.00	6,722.63	67.68	34.59	-45.09	-3,258.95	-2,682.85	771.85	695.27	76.58	10.079		
9,600.00	7,135.88	6,835.58	6,748.61	69.97	34.59	-46.82	-3,256.86	-2,707.06	708.48	629.57	78.91	8.979		
9,700.00	7,135.34	6,873.30	6,774.64	72.31	34.58	-48.67	-3,254.82	-2,734.28	650.51	568.56	81.95	7.938		
9,800.00	7,134.80	6,915.60	6,801.86	74.69	34.58	-50.76	-3,252.78	-2,766.58	598.74	512.92	85.82	6.977		
9,900.00	7,134.26	6,962.92	6,829.72	77.10	34.58	-53.07	-3,250.81	-2,804.76	553.89	463.40	90.49	6.121		
10,000.00	7,133.71	7,015.59	6,857.32	79.54	34.59	-55.54	-3,249.02	-2,849.57	516.58	420.78	95.80	5.392		
10,100.00	7,133.17	7,073.71	6,883.39	82.02	34.65	-58.07	-3,247.55	-2,901.47	487.11	385.65	101.46	4.801		
10,200.00	7,132.63	7,137.06	6,906.32	84.52	34.77	-60.45	-3,246.55	-2,960.49	465.44	358.35	107.09	4.346		
10,300.00	7,132.09	7,204.97	6,924.29	87.04	35.02	-62.44	-3,246.21	-3,025.95	451.16	338.80	112.37	4.015		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,131.55	7,276.27	6,935.59	89.58	35.46	-63.78	-3,246.67	-3,096.30	443.69	326.62	117.07	3.790		
10,469.26	7,131.18	7,326.78	6,938.82	91.36	35.87	-64.22	-3,247.49	-3,146.69	442.22	322.31	119.91	3.688	CC	
10,500.00	7,131.01	7,350.83	6,938.98	92.15	36.10	-64.27	-3,248.02	-3,170.73	442.50	321.45	121.05	3.656		
10,600.00	7,130.47	7,450.81	6,938.57	94.73	37.28	-64.38	-3,250.35	-3,270.69	444.01	319.39	124.62	3.563		
10,700.00	7,129.93	7,550.80	6,938.15	97.33	38.76	-64.50	-3,252.67	-3,370.64	445.53	317.10	128.43	3.469		
10,800.00	7,129.39	7,650.78	6,937.73	99.94	40.50	-64.61	-3,255.00	-3,470.60	447.04	314.58	132.46	3.375		
10,900.00	7,128.84	7,750.77	6,937.32	102.56	42.43	-64.71	-3,257.32	-3,570.56	448.56	311.86	136.70	3.281		
11,000.00	7,128.30	7,850.75	6,936.90	105.20	44.54	-64.82	-3,259.65	-3,670.51	450.08	308.98	141.10	3.190		
11,100.00	7,127.76	7,950.73	6,936.48	107.85	46.79	-64.93	-3,261.97	-3,770.47	451.60	305.94	145.65	3.100		
11,200.00	7,127.22	8,050.72	6,936.07	110.51	49.16	-65.04	-3,264.30	-3,870.43	453.12	302.78	150.34	3.014		
11,300.00	7,126.68	8,150.70	6,935.65	113.18	51.63	-65.15	-3,266.62	-3,970.38	454.64	299.50	155.14	2.931		
11,400.00	7,126.14	8,250.69	6,935.23	115.86	54.20	-65.25	-3,268.95	-4,070.34	456.17	296.13	160.04	2.850		
11,500.00	7,125.60	8,350.67	6,934.81	118.55	56.84	-65.36	-3,271.27	-4,170.30	457.70	292.67	165.02	2.774		
11,600.00	7,125.06	8,450.66	6,934.40	121.25	59.55	-65.46	-3,273.60	-4,270.26	459.22	289.14	170.08	2.700		
11,700.00	7,124.52	8,550.64	6,933.98	123.95	62.32	-65.56	-3,275.92	-4,370.21	460.75	285.54	175.21	2.630		
11,800.00	7,123.97	8,650.63	6,933.56	126.66	65.14	-65.67	-3,278.24	-4,470.17	462.29	281.88	180.40	2.563		
11,900.00	7,123.43	8,750.61	6,933.15	129.38	68.01	-65.77	-3,280.57	-4,570.13	463.82	278.17	185.65	2.498		
12,000.00	7,122.89	8,850.60	6,932.73	132.10	70.92	-65.87	-3,282.89	-4,670.08	465.35	274.41	190.94	2.437		
12,100.00	7,122.35	8,950.58	6,932.31	134.83	73.86	-65.97	-3,285.22	-4,770.04	466.89	270.61	196.27	2.379		
12,200.00	7,121.81	9,050.57	6,931.89	137.56	76.83	-66.07	-3,287.54	-4,870.00	468.43	266.78	201.65	2.323		
12,300.00	7,121.27	9,150.55	6,931.48	140.30	79.83	-66.17	-3,289.87	-4,969.95	469.96	262.91	207.06	2.270		
12,400.00	7,120.73	9,250.54	6,931.06	143.05	82.85	-66.27	-3,292.19	-5,069.91	471.50	259.00	212.50	2.219		
12,500.00	7,120.19	9,350.52	6,930.64	145.80	85.90	-66.37	-3,294.52	-5,169.87	473.05	255.07	217.97	2.170		
12,600.00	7,119.65	9,450.51	6,930.23	148.55	88.97	-66.47	-3,296.84	-5,269.82	474.59	251.11	223.48	2.124		
12,700.00	7,119.10	9,550.49	6,929.81	151.30	92.05	-66.57	-3,299.17	-5,369.78	476.13	247.13	229.00	2.079		
12,800.00	7,118.56	9,650.48	6,929.39	154.07	95.15	-66.66	-3,301.49	-5,469.74	477.68	243.13	234.55	2.037		
12,900.00	7,118.02	9,750.46	6,928.97	156.83	98.27	-66.76	-3,303.82	-5,569.70	479.23	239.10	240.13	1.996		
13,000.00	7,117.48	9,850.45	6,928.56	159.60	101.39	-66.85	-3,306.14	-5,669.65	480.77	235.05	245.72	1.957		
13,100.00	7,116.94	9,950.43	6,928.14	162.37	104.53	-66.95	-3,308.47	-5,769.61	482.32	230.99	251.33	1.919		
13,200.00	7,116.40	10,050.42	6,927.72	165.14	107.69	-67.04	-3,310.79	-5,869.57	483.87	226.91	256.97	1.883		
13,300.00	7,115.86	10,150.40	6,927.31	167.92	110.85	-67.13	-3,313.12	-5,969.52	485.43	222.81	262.61	1.848		
13,400.00	7,115.32	10,250.39	6,926.89	170.70	114.02	-67.23	-3,315.44	-6,069.48	486.98	218.70	268.28	1.815		
13,500.00	7,114.78	10,350.37	6,926.47	173.48	117.20	-67.32	-3,317.77	-6,169.44	488.53	214.57	273.96	1.783		
13,600.00	7,114.24	10,450.36	6,926.06	176.26	120.38	-67.41	-3,320.09	-6,269.39	490.09	210.44	279.66	1.752		
13,700.00	7,113.69	10,537.16	6,925.69	179.05	123.15	-67.54	-3,323.25	-6,356.13	492.88	207.90	284.98	1.730		
13,800.00	7,113.15	10,637.05	6,925.28	181.84	126.33	-67.76	-3,328.46	-6,455.89	497.12	206.22	290.89	1.709		
13,900.00	7,112.61	10,734.71	6,924.87	184.63	129.45	-67.97	-3,333.58	-6,553.41	501.39	204.67	296.72	1.690		
14,000.00	7,112.07	10,814.80	6,924.53	187.42	132.00	-68.22	-3,339.83	-6,633.25	508.03	206.39	301.64	1.684		
14,100.00	7,111.53	10,894.28	6,924.20	190.22	134.50	-68.61	-3,349.32	-6,712.15	518.57	212.26	306.31	1.693		
14,200.00	7,110.99	10,972.87	6,923.87	193.01	136.94	-69.10	-3,361.93	-6,789.72	532.98	222.31	310.67	1.716		
14,300.00	7,110.45	11,066.09	6,923.48	195.81	139.82	-69.76	-3,379.61	-6,881.25	550.17	233.52	316.65	1.737		
14,400.00	7,109.91	11,192.42	6,922.96	198.61	143.75	-70.50	-3,401.11	-7,005.72	565.76	239.68	326.09	1.735		
14,500.00	7,109.37	11,331.09	6,922.38	201.42	148.17	-70.97	-3,415.37	-7,143.62	574.89	239.82	335.08	1.716		
14,600.00	7,108.82	11,467.53	6,921.81	204.22	152.59	-71.10	-3,419.63	-7,279.96	577.18	235.04	342.13	1.687		
14,700.00	7,108.28	11,567.53	6,921.39	207.03	155.84	-71.09	-3,419.61	-7,379.96	576.57	228.69	347.88	1.657		
14,800.00	7,107.74	11,667.52	6,920.97	209.83	159.10	-71.08	-3,419.60	-7,479.96	575.96	222.33	353.62	1.629		
14,900.00	7,107.20	11,767.52	6,920.56	212.64	162.36	-71.07	-3,419.59	-7,579.95	575.35	215.97	359.38	1.601		
15,000.00	7,106.66	11,867.52	6,920.14	215.45	165.62	-71.06	-3,419.57	-7,679.95	574.74	209.61	365.13	1.574		
15,100.00	7,106.12	11,967.52	6,919.72	218.26	168.88	-71.06	-3,419.56	-7,779.95	574.13	203.24	370.89	1.548		
15,200.00	7,105.58	12,067.52	6,919.30	221.07	172.15	-71.05	-3,419.55	-7,879.95	573.52	196.87	376.65	1.523		
15,300.00	7,105.04	12,167.52	6,918.89	223.89	175.42	-71.04	-3,419.53	-7,979.94	572.91	190.50	382.42	1.498	Level 3	
15,400.00	7,104.50	12,267.51	6,918.47	226.70	178.70	-71.03	-3,419.52	-8,079.94	572.30	184.12	388.18	1.474	Level 3	

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

Offset Design	HARVESTERS STATE 7-15 PAD - DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN											Offset Site Error:	0.00 ft
Survey Program:	25-MWD											Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	12,359.07	6,918.09	229.28	181.70	-71.03	-3,419.51	-8,171.50	571.75	178.28	393.47	1.453	Level 3, ES, SF



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	25.00	66.00	3.28	0.00	-140.27	-3,929.53	-3,265.63	5,109.78					
100.00	100.00	59.00	100.00	3.28	0.07	-140.27	-3,929.53	-3,265.63	5,109.36	5,106.00	3.36	1,520.906		
200.00	200.00	870.34	908.21	3.34	3.68	-140.47	-3,902.25	-3,220.42	5,108.84	5,101.75	7.10	719.802		
300.00	299.98	969.09	1,005.89	3.44	4.19	36.54	-3,894.77	-3,208.02	5,093.59	5,085.96	7.64	666.839		
400.00	399.84	1,067.44	1,103.17	3.59	4.69	36.74	-3,887.31	-3,195.66	5,075.58	5,067.35	8.23	616.776		
500.00	499.45	1,165.25	1,199.93	3.79	5.19	37.00	-3,879.89	-3,183.37	5,054.82	5,045.96	8.86	570.225		
600.00	598.70	1,262.42	1,296.05	4.03	5.70	37.32	-3,872.52	-3,171.16	5,031.35	5,021.81	9.54	527.486		
700.00	697.47	1,358.82	1,391.40	4.31	6.20	37.70	-3,865.21	-3,159.05	5,005.19	4,994.94	10.24	488.560		
800.00	795.62	1,454.34	1,485.89	4.64	6.70	38.15	-3,857.97	-3,147.05	4,976.38	4,965.40	10.98	453.265		
900.00	893.06	1,548.86	1,579.39	5.00	7.19	38.67	-3,850.80	-3,135.17	4,944.97	4,933.23	11.74	421.320		
1,000.00	989.64	1,642.27	1,671.78	5.40	7.68	39.26	-3,843.72	-3,123.43	4,911.00	4,898.48	12.52	392.405		
1,100.00	1,085.27	1,734.44	1,762.96	5.83	8.17	39.92	-3,836.73	-3,111.85	4,874.53	4,861.22	13.31	366.198		
1,200.00	1,179.82	1,825.28	1,852.81	6.29	8.64	40.66	-3,829.84	-3,100.44	4,835.62	4,821.50	14.12	342.396		
1,300.00	1,273.17	1,914.66	1,941.22	6.79	9.11	41.48	-3,823.07	-3,089.21	4,794.35	4,779.40	14.95	320.724		
1,400.00	1,365.21	2,002.48	2,028.10	7.33	9.58	42.39	-3,816.41	-3,078.17	4,750.78	4,734.99	15.79	300.931		
1,500.00	1,456.49	2,089.40	2,114.07	7.89	10.04	42.70	-3,809.82	-3,067.25	4,706.00	4,689.37	16.63	282.921		
1,600.00	1,547.76	2,176.31	2,200.04	8.46	10.49	42.98	-3,803.23	-3,056.33	4,661.32	4,643.83	17.49	266.524		
1,700.00	1,639.04	2,263.22	2,286.01	9.05	10.95	43.27	-3,796.64	-3,045.41	4,616.73	4,598.37	18.36	251.483		
1,800.00	1,730.31	2,350.13	2,371.98	9.65	11.41	43.56	-3,790.05	-3,034.49	4,572.25	4,553.01	19.24	237.666		
1,900.00	1,821.58	2,437.04	2,457.95	10.26	11.87	43.86	-3,783.45	-3,023.57	4,527.86	4,507.74	20.13	224.954		
2,000.00	1,912.85	2,523.95	2,543.92	10.87	12.33	44.16	-3,776.86	-3,012.65	4,483.59	4,462.56	21.03	213.235		
2,100.00	2,004.13	2,610.86	2,629.89	11.49	12.79	44.47	-3,770.27	-3,001.73	4,439.42	4,417.49	21.93	202.411		
2,200.00	2,095.40	2,702.23	2,715.85	12.11	13.27	44.79	-3,763.68	-2,990.81	4,395.37	4,372.50	22.87	192.221		
2,300.00	2,186.67	2,784.68	2,801.82	12.74	13.71	45.11	-3,757.09	-2,979.89	4,351.43	4,327.67	23.76	183.104		
2,400.00	2,277.95	2,871.59	2,887.79	13.38	14.17	45.43	-3,750.50	-2,968.97	4,307.61	4,282.92	24.69	174.470		
2,500.00	2,369.22	2,958.50	2,973.76	14.01	14.63	45.77	-3,743.91	-2,958.05	4,263.92	4,238.30	25.62	166.431		
2,600.00	2,460.49	3,045.41	3,059.73	14.65	15.08	46.11	-3,737.32	-2,947.13	4,220.35	4,193.80	26.55	158.931		
2,700.00	2,551.77	3,132.33	3,145.70	15.29	15.54	46.45	-3,730.73	-2,936.21	4,176.92	4,149.42	27.49	151.921		
2,800.00	2,643.04	3,230.78	3,231.67	15.93	16.07	46.80	-3,724.14	-2,925.29	4,133.62	4,105.13	28.49	145.085		
2,900.00	2,734.31	3,306.15	3,317.64	16.58	16.46	47.16	-3,717.55	-2,914.37	4,090.46	4,061.07	29.39	139.199		
3,000.00	2,825.58	3,393.06	3,403.61	17.23	16.92	47.53	-3,710.96	-2,903.45	4,047.44	4,017.10	30.34	133.414		
3,100.00	2,916.86	3,479.97	3,489.58	17.87	17.38	47.90	-3,704.37	-2,892.53	4,004.57	3,973.28	31.29	127.970		
3,200.00	3,008.13	3,566.88	3,575.55	18.52	17.84	48.29	-3,697.78	-2,881.61	3,961.86	3,929.61	32.25	122.839		
3,300.00	3,099.40	3,653.79	3,661.52	19.17	18.30	48.67	-3,691.19	-2,870.69	3,919.31	3,886.09	33.22	117.996		
3,400.00	3,190.68	3,740.70	3,747.49	19.83	18.76	49.07	-3,684.60	-2,859.77	3,876.92	3,842.73	34.18	113.418		
3,500.00	3,281.95	3,827.61	3,833.46	20.48	19.22	49.48	-3,678.01	-2,848.85	3,834.69	3,799.54	35.15	109.086		
3,600.00	3,373.22	3,914.52	3,919.43	21.13	19.69	49.89	-3,671.42	-2,837.93	3,792.65	3,756.52	36.13	104.981		
3,700.00	3,464.49	4,001.43	4,005.40	21.79	20.15	50.31	-3,664.83	-2,827.01	3,750.78	3,713.68	37.10	101.086		
3,800.00	3,555.77	4,088.34	4,091.37	22.44	20.61	50.74	-3,658.24	-2,816.09	3,709.10	3,671.02	38.09	97.387		
3,900.00	3,647.04	4,175.25	4,177.34	23.10	21.07	51.18	-3,651.65	-2,805.17	3,667.62	3,628.55	39.07	93.869		
4,000.00	3,738.31	4,262.16	4,263.31	23.75	21.53	51.63	-3,645.06	-2,794.25	3,626.33	3,586.27	40.06	90.522		
4,100.00	3,829.59	4,349.07	4,349.28	24.41	21.99	52.09	-3,638.47	-2,783.33	3,585.26	3,544.20	41.05	87.332		
4,200.00	3,920.86	4,435.98	4,435.25	25.07	22.45	52.55	-3,631.88	-2,772.41	3,544.39	3,502.34	42.05	84.290		
4,300.00	4,012.13	4,522.12	4,521.22	25.73	22.93	53.03	-3,625.29	-2,761.49	3,503.75	3,460.68	43.07	81.350		
4,400.00	4,103.41	4,609.81	4,607.19	26.38	23.37	53.52	-3,618.70	-2,750.57	3,463.34	3,419.28	44.06	78.613		
4,500.00	4,194.68	4,696.72	4,693.16	27.04	23.83	54.02	-3,612.11	-2,739.64	3,423.16	3,378.10	45.06	75.961		
4,600.00	4,285.95	4,783.63	4,779.13	27.70	24.29	54.52	-3,605.52	-2,728.72	3,383.24	3,337.16	46.08	73.424		
4,700.00	4,377.22	4,870.54	4,865.10	28.36	24.75	55.04	-3,598.93	-2,717.80	3,343.56	3,296.47	47.10	70.995		
4,800.00	4,468.50	4,957.45	4,951.07	29.02	25.21	55.57	-3,592.34	-2,706.88	3,304.15	3,256.03	48.12	68.667		
4,900.00	4,559.77	5,044.36	5,037.04	29.68	25.67	56.12	-3,585.75	-2,695.96	3,265.02	3,215.87	49.15	66.436		
5,000.00	4,651.04	5,131.27	5,123.00	30.34	26.13	56.67	-3,579.16	-2,685.04	3,226.16	3,175.99	50.18	64.295		
5,100.00	4,742.32	5,218.18	5,208.97	31.00	26.66	57.23	-3,572.57	-2,674.12	3,187.60	3,136.33	51.28	62.165		

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

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWVD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	5,305.09	5,294.94	31.66	27.05	57.81	-3,565.98	-2,663.20	3,149.35	3,097.09	52.26	60.267		
5,300.00	4,924.86	5,392.00	5,380.91	32.32	27.51	58.40	-3,559.39	-2,652.28	3,111.41	3,058.11	53.30	58.371		
5,400.00	5,016.13	5,478.91	5,466.88	32.99	27.97	59.00	-3,552.80	-2,641.36	3,073.80	3,019.45	54.36	56.549		
5,500.00	5,107.41	5,565.82	5,552.85	33.65	28.43	59.62	-3,546.21	-2,630.44	3,036.53	2,981.12	55.41	54.796		
5,600.00	5,198.68	5,652.73	5,638.82	34.31	28.90	60.25	-3,539.62	-2,619.52	2,999.62	2,943.14	56.48	53.110		
5,700.00	5,289.95	5,739.64	5,724.79	34.97	29.36	60.89	-3,533.03	-2,608.60	2,963.06	2,905.51	57.55	51.487		
5,800.00	5,381.23	5,826.55	5,810.76	35.63	29.82	61.55	-3,526.44	-2,597.68	2,926.89	2,868.27	58.63	49.925		
5,900.00	5,472.50	5,913.47	5,896.73	36.30	30.28	62.22	-3,519.85	-2,586.76	2,891.11	2,831.40	59.71	48.420		
6,000.00	5,563.77	6,000.38	5,982.70	36.96	30.74	62.90	-3,513.26	-2,575.84	2,855.74	2,794.95	60.80	46.971		
6,100.00	5,655.05	6,087.29	6,068.67	37.62	31.20	63.60	-3,506.67	-2,564.92	2,820.80	2,758.90	61.89	45.575		
6,200.00	5,746.32	6,174.20	6,154.64	38.28	31.66	64.32	-3,500.08	-2,554.00	2,786.29	2,723.29	63.00	44.229		
6,300.00	5,837.59	6,261.11	6,240.61	38.95	32.12	65.05	-3,493.49	-2,543.08	2,752.24	2,688.13	64.11	42.933		
6,400.00	5,928.86	6,348.02	6,326.58	39.61	32.58	65.79	-3,486.90	-2,532.16	2,718.66	2,653.44	65.22	41.683		
6,500.00	6,020.14	6,387.39	6,365.54	40.27	32.79	66.13	-3,483.91	-2,527.33	2,686.11	2,619.81	66.30	40.514		
6,600.00	6,111.41	6,400.00	6,378.05	40.94	32.85	66.25	-3,482.96	-2,526.12	2,656.25	2,588.92	67.33	39.454		
6,700.00	6,202.68	6,425.01	6,402.94	41.60	32.97	66.48	-3,481.09	-2,524.44	2,629.19	2,560.86	68.34	38.473		
6,800.00	6,293.96	6,450.00	6,427.85	42.26	33.08	66.72	-3,479.24	-2,523.75	2,605.17	2,535.85	69.32	37.583		
6,900.00	6,385.23	6,450.00	6,427.85	42.93	33.08	66.72	-3,479.24	-2,523.75	2,584.15	2,513.97	70.17	36.825		
7,000.00	6,476.50	6,478.83	6,456.60	43.59	33.18	67.01	-3,477.13	-2,524.16	2,566.08	2,495.01	71.07	36.104		
7,100.00	6,567.77	6,500.00	6,477.68	44.25	33.26	67.23	-3,475.60	-2,525.30	2,551.28	2,479.38	71.90	35.484		
7,200.00	6,658.64	6,525.01	6,502.52	44.91	33.34	50.02	-3,473.82	-2,527.55	2,533.95	2,461.28	72.67	34.871		
7,300.00	6,747.14	6,525.01	6,502.52	45.52	33.34	33.98	-3,473.82	-2,527.55	2,505.35	2,432.20	73.15	34.250		
7,400.00	6,831.10	6,550.00	6,527.24	46.07	33.41	22.24	-3,472.07	-2,530.77	2,465.77	2,392.12	73.64	33.483		
7,500.00	6,908.46	6,569.72	6,546.65	46.54	33.46	13.25	-3,470.72	-2,533.99	2,415.86	2,341.89	73.97	32.659		
7,600.00	6,977.30	6,600.00	6,576.23	46.95	33.53	5.78	-3,468.68	-2,540.12	2,356.43	2,282.15	74.28	31.724		
7,700.00	7,035.93	6,600.00	6,576.23	47.30	33.53	-1.54	-3,468.68	-2,540.12	2,287.86	2,213.64	74.23	30.822		
7,800.00	7,082.92	6,625.01	6,600.42	47.59	33.58	-9.52	-3,467.03	-2,546.23	2,211.80	2,137.49	74.32	29.761		
7,900.00	7,117.09	6,625.01	6,600.42	47.84	33.58	-19.47	-3,467.03	-2,546.23	2,129.26	2,055.16	74.10	28.735		
8,000.00	7,137.62	6,650.00	6,624.34	48.06	33.63	-33.25	-3,465.43	-2,553.29	2,041.96	1,967.86	74.10	27.556		
8,100.00	7,143.99	6,650.00	6,624.34	48.28	33.63	-50.54	-3,465.43	-2,553.29	1,951.53	1,877.68	73.84	26.428		
8,200.00	7,143.45	6,650.00	6,624.34	48.53	33.63	-50.54	-3,465.43	-2,553.29	1,860.83	1,787.23	73.59	25.285		
8,300.00	7,142.91	6,650.00	6,624.34	48.89	33.63	-50.54	-3,465.43	-2,553.29	1,771.13	1,697.77	73.36	24.141		
8,400.00	7,142.37	6,675.53	6,648.47	49.40	33.66	-51.83	-3,463.84	-2,561.46	1,681.92	1,608.45	73.48	22.891		
8,500.00	7,141.83	6,700.00	6,671.28	50.12	33.70	-53.09	-3,462.37	-2,570.20	1,594.32	1,520.69	73.63	21.654		
8,600.00	7,141.29	6,700.00	6,671.28	51.08	33.70	-53.09	-3,462.37	-2,570.20	1,507.56	1,434.01	73.56	20.495		
8,700.00	7,140.75	6,708.32	6,678.95	52.30	33.71	-53.53	-3,461.87	-2,573.37	1,422.47	1,348.79	73.68	19.305		
8,800.00	7,140.21	6,725.01	6,694.23	53.75	33.73	-54.42	-3,460.90	-2,580.03	1,339.12	1,265.08	74.04	18.086		
8,900.00	7,139.67	6,735.92	6,704.11	55.40	33.74	-55.00	-3,460.28	-2,584.60	1,257.72	1,183.22	74.51	16.880		
9,000.00	7,139.12	6,750.00	6,716.75	57.20	33.75	-55.77	-3,459.49	-2,590.75	1,178.67	1,103.42	75.24	15.665		
9,100.00	7,138.58	6,769.86	6,734.35	59.13	33.77	-56.86	-3,458.40	-2,599.89	1,102.32	1,025.98	76.35	14.439		
9,200.00	7,138.04	6,800.00	6,760.49	61.15	33.79	-58.54	-3,456.82	-2,614.81	1,029.30	951.37	77.92	13.209		
9,300.00	7,137.50	6,812.30	6,770.94	63.26	33.80	-59.24	-3,456.20	-2,621.25	959.79	880.01	79.78	12.030		
9,400.00	7,136.96	6,837.62	6,792.08	65.44	33.81	-60.68	-3,454.96	-2,635.14	894.80	812.50	82.30	10.872		
9,500.00	7,136.42	6,866.33	6,815.35	67.68	33.82	-62.32	-3,453.63	-2,651.89	834.93	749.48	85.45	9.771		
9,600.00	7,135.88	6,900.00	6,841.66	69.97	33.84	-64.26	-3,452.18	-2,672.85	780.95	691.72	89.24	8.751		
9,700.00	7,135.34	6,936.25	6,868.71	72.31	33.85	-66.32	-3,450.74	-2,696.94	733.63	640.02	93.60	7.838		
9,800.00	7,134.80	6,978.88	6,898.70	74.69	33.87	-68.71	-3,449.23	-2,727.18	693.60	595.19	98.41	7.048		
9,900.00	7,134.26	7,027.62	6,930.44	77.10	33.90	-71.35	-3,447.75	-2,764.13	661.28	557.88	103.40	6.395		
10,000.00	7,133.71	7,083.20	6,963.07	79.54	33.96	-74.16	-3,446.38	-2,809.07	636.69	528.36	108.33	5.878		
10,100.00	7,133.17	7,146.11	6,995.14	82.02	34.07	-77.04	-3,445.27	-2,863.16	619.35	506.42	112.93	5.484		
10,200.00	7,132.63	7,216.43	7,024.48	84.52	34.30	-79.75	-3,444.58	-2,927.02	608.34	491.21	117.13	5.194		
10,300.00	7,132.09	7,293.54	7,048.38	87.04	34.69	-82.02	-3,444.51	-3,000.28	602.37	481.40	120.97	4.979		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,131.55	7,375.93	7,063.97	89.58	35.29	-83.54	-3,445.24	-3,081.12	600.16	475.50	124.65	4.815		
10,426.35	7,131.41	7,398.23	7,066.38	90.26	35.48	-83.78	-3,445.57	-3,103.29	600.06	474.45	125.61	4.777	CC	
10,500.00	7,131.01	7,461.38	7,069.00	92.15	36.11	-84.07	-3,446.84	-3,166.35	600.73	472.41	128.33	4.681		
10,600.00	7,130.47	7,561.36	7,068.40	94.73	37.35	-84.08	-3,449.19	-3,266.30	602.50	470.34	132.16	4.559		
10,700.00	7,129.93	7,661.35	7,067.80	97.33	38.84	-84.09	-3,451.55	-3,366.25	604.27	468.02	136.25	4.435		
10,800.00	7,129.39	7,761.33	7,067.19	99.94	40.56	-84.10	-3,453.91	-3,466.21	606.03	465.47	140.56	4.311		
10,900.00	7,128.84	7,861.32	7,066.59	102.56	42.48	-84.11	-3,456.26	-3,566.16	607.80	462.71	145.08	4.189		
11,000.00	7,128.30	7,961.30	7,065.99	105.20	44.56	-84.13	-3,458.62	-3,666.12	609.56	459.78	149.78	4.070		
11,100.00	7,127.76	8,061.29	7,065.39	107.85	46.79	-84.14	-3,460.97	-3,766.07	611.33	456.69	154.64	3.953		
11,200.00	7,127.22	8,161.27	7,064.79	110.51	49.15	-84.15	-3,463.33	-3,866.03	613.10	453.47	159.63	3.841		
11,300.00	7,126.68	8,261.26	7,064.18	113.18	51.61	-84.16	-3,465.69	-3,965.98	614.86	450.13	164.74	3.732		
11,400.00	7,126.14	8,361.24	7,063.58	115.86	54.16	-84.17	-3,468.04	-4,065.94	616.63	446.68	169.94	3.628		
11,500.00	7,125.60	8,461.22	7,062.98	118.55	56.80	-84.18	-3,470.40	-4,165.89	618.39	443.15	175.24	3.529		
11,600.00	7,125.06	8,561.21	7,062.38	121.25	59.50	-84.19	-3,472.76	-4,265.85	620.16	439.54	180.62	3.434		
11,700.00	7,124.52	8,661.19	7,061.78	123.95	62.26	-84.20	-3,475.11	-4,365.80	621.92	435.86	186.06	3.343		
11,800.00	7,123.97	8,761.18	7,061.17	126.66	65.08	-84.21	-3,477.47	-4,465.76	623.69	432.13	191.56	3.256		
11,900.00	7,123.43	8,861.16	7,060.57	129.38	67.94	-84.23	-3,479.82	-4,565.71	625.46	428.34	197.12	3.173		
12,000.00	7,122.89	8,961.15	7,059.97	132.10	70.84	-84.24	-3,482.18	-4,665.67	627.22	424.50	202.72	3.094		
12,100.00	7,122.35	9,061.13	7,059.37	134.83	73.77	-84.25	-3,484.54	-4,765.62	628.99	420.62	208.36	3.019		
12,200.00	7,121.81	9,161.11	7,058.77	137.56	76.74	-84.26	-3,486.89	-4,865.58	630.75	416.71	214.04	2.947		
12,300.00	7,121.27	9,261.10	7,058.16	140.30	79.74	-84.27	-3,489.25	-4,965.53	632.52	412.76	219.76	2.878		
12,400.00	7,120.73	9,361.08	7,057.56	143.05	82.76	-84.28	-3,491.61	-5,065.49	634.29	408.79	225.50	2.813		
12,500.00	7,120.19	9,461.07	7,056.96	145.80	85.81	-84.29	-3,493.96	-5,165.44	636.05	404.78	231.27	2.750		
12,600.00	7,119.65	9,561.05	7,056.36	148.55	88.87	-84.30	-3,496.32	-5,265.40	637.82	400.75	237.07	2.690		
12,700.00	7,119.10	9,661.04	7,055.76	151.30	91.95	-84.31	-3,498.67	-5,365.35	639.59	396.70	242.88	2.633		
12,800.00	7,118.56	9,761.02	7,055.15	154.07	95.05	-84.32	-3,501.03	-5,465.30	641.35	392.63	248.72	2.579		
12,900.00	7,118.02	9,861.00	7,054.55	156.83	98.16	-84.33	-3,503.39	-5,565.26	643.12	388.54	254.57	2.526		
13,000.00	7,117.48	9,960.99	7,053.95	159.60	101.29	-84.34	-3,505.74	-5,665.21	644.88	384.44	260.45	2.476		
13,100.00	7,116.94	10,060.97	7,053.35	162.37	104.43	-84.35	-3,508.10	-5,765.17	646.65	380.32	266.33	2.428		
13,200.00	7,116.40	10,160.96	7,052.75	165.14	107.58	-84.36	-3,510.46	-5,865.12	648.42	376.18	272.24	2.382		
13,300.00	7,115.86	10,260.94	7,052.14	167.92	110.74	-84.37	-3,512.81	-5,965.08	650.18	372.03	278.15	2.338		
13,400.00	7,115.32	10,360.93	7,051.54	170.70	113.91	-84.38	-3,515.17	-6,065.03	651.95	367.87	284.08	2.295		
13,500.00	7,114.78	10,460.91	7,050.94	173.48	117.09	-84.39	-3,517.53	-6,164.99	653.72	363.70	290.02	2.254		
13,600.00	7,114.24	10,560.89	7,050.34	176.26	120.28	-84.40	-3,519.88	-6,264.94	655.48	359.52	295.96	2.215		
13,700.00	7,113.69	10,660.88	7,049.74	179.05	123.47	-84.41	-3,522.24	-6,364.90	657.25	355.33	301.92	2.177		
13,800.00	7,113.15	10,760.86	7,049.13	181.84	126.67	-84.42	-3,524.59	-6,464.85	659.01	351.12	307.89	2.140		
13,900.00	7,112.61	10,860.85	7,048.53	184.63	129.88	-84.43	-3,526.95	-6,564.81	660.78	346.92	313.87	2.105		
14,000.00	7,112.07	10,960.83	7,047.93	187.42	133.09	-84.44	-3,529.31	-6,664.76	662.55	342.70	319.85	2.071		
14,100.00	7,111.53	11,060.82	7,047.33	190.22	136.31	-84.45	-3,531.66	-6,764.72	664.31	338.47	325.84	2.039		
14,200.00	7,110.99	11,160.80	7,046.73	193.01	139.53	-84.46	-3,534.02	-6,864.67	666.08	334.24	331.84	2.007		
14,300.00	7,110.45	11,260.79	7,046.12	195.81	142.76	-84.47	-3,536.38	-6,964.63	667.85	330.00	337.84	1.977		
14,400.00	7,109.91	11,360.77	7,045.52	198.61	146.00	-84.48	-3,538.73	-7,064.58	669.61	325.76	343.86	1.947		
14,500.00	7,109.37	11,460.75	7,044.92	201.42	149.23	-84.49	-3,541.09	-7,164.54	671.38	321.51	349.87	1.919		
14,600.00	7,108.82	11,560.74	7,044.32	204.22	152.47	-84.49	-3,543.44	-7,264.49	673.15	317.25	355.90	1.891		
14,700.00	7,108.28	11,660.72	7,043.72	207.03	155.72	-84.50	-3,545.80	-7,364.44	674.91	312.99	361.92	1.865		
14,800.00	7,107.74	11,760.71	7,043.11	209.83	158.96	-84.51	-3,548.16	-7,464.40	676.68	308.72	367.96	1.839		
14,900.00	7,107.20	11,860.69	7,042.51	212.64	162.22	-84.52	-3,550.51	-7,564.35	678.45	304.45	373.99	1.814		
15,000.00	7,106.66	11,960.68	7,041.91	215.45	165.47	-84.53	-3,552.87	-7,664.31	680.21	300.18	380.03	1.790		
15,100.00	7,106.12	12,060.66	7,041.31	218.26	168.73	-84.54	-3,555.23	-7,764.26	681.98	295.90	386.08	1.766		
15,200.00	7,105.58	12,160.64	7,040.70	221.07	171.99	-84.55	-3,557.58	-7,864.22	683.75	291.62	392.13	1.744		
15,300.00	7,105.04	12,260.63	7,040.10	223.89	175.25	-84.56	-3,559.94	-7,964.17	685.51	287.33	398.18	1.722		
15,400.00	7,104.50	12,360.61	7,039.50	226.70	178.51	-84.57	-3,562.29	-8,064.13	687.28	283.04	404.24	1.700		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)						
15,491.56	7,104.00	12,452.16	7,038.95	229.28	181.50	-84.58	-3,564.45	-8,155.65	688.90	279.11	409.79	1.681 ES, SF					



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	15,808.20	7,241.41	3.28	248.31	0.52	2,443.61	22.08	7,642.62					
100.00	100.00	15,807.96	7,241.41	3.28	248.30	0.51	2,443.61	21.84	7,547.94	7,423.65	124.29	60.729		
200.00	200.00	15,807.71	7,241.41	3.34	248.30	0.51	2,443.61	21.59	7,453.40	7,328.58	124.81	59.717		
300.00	299.98	15,807.37	7,241.41	3.44	248.29	177.60	2,443.61	21.25	7,359.59	7,234.21	125.38	58.696		
400.00	399.84	15,806.85	7,241.41	3.59	248.27	177.79	2,443.61	20.73	7,267.25	7,141.20	126.04	57.657		
500.00	499.45	15,806.15	7,241.41	3.79	248.25	177.93	2,443.61	20.03	7,176.53	7,049.73	126.80	56.598		
600.00	598.70	15,805.26	7,241.41	4.03	248.23	178.05	2,443.61	19.14	7,087.60	6,959.95	127.66	55.521		
700.00	697.47	15,804.19	7,241.42	4.31	248.20	178.15	2,443.61	18.07	7,000.66	6,872.04	128.62	54.428		
800.00	795.62	15,802.95	7,241.42	4.64	248.16	178.23	2,443.62	16.83	6,915.88	6,786.17	129.70	53.320		
900.00	893.06	15,801.52	7,241.42	5.00	248.12	178.30	2,443.62	15.40	6,833.44	6,702.54	130.91	52.201		
1,000.00	989.64	15,800.15	7,241.43	5.40	248.08	178.36	2,443.62	13.79	6,753.54	6,621.30	132.24	51.070		
1,100.00	1,085.27	15,801.93	7,241.43	5.83	248.13	178.40	2,443.62	12.01	6,676.37	6,542.61	133.75	49.915		
1,200.00	1,179.82	15,803.88	7,241.44	6.29	248.19	178.44	2,443.63	10.06	6,602.11	6,466.69	135.41	48.755		
1,300.00	1,273.17	15,806.00	7,241.44	6.79	248.25	178.47	2,443.63	7.94	6,530.95	6,393.72	137.23	47.592		
1,400.00	1,365.21	15,808.30	7,241.45	7.33	248.31	178.49	2,443.64	5.65	6,463.10	6,323.90	139.20	46.430		
1,500.00	1,456.49	15,810.68	7,241.45	7.89	248.38	178.46	2,443.64	3.26	6,397.54	6,256.23	141.31	45.274		
1,600.00	1,547.76	15,813.06	7,241.46	8.46	248.45	178.43	2,443.64	0.88	6,332.89	6,189.38	143.51	44.129		
1,700.00	1,639.04	15,815.45	7,241.46	9.05	248.52	178.41	2,443.65	-1.50	6,269.16	6,123.37	145.80	43.000		
1,800.00	1,730.31	15,817.83	7,241.47	9.65	248.58	178.38	2,443.65	-3.89	6,206.39	6,058.23	148.16	41.890		
1,900.00	1,821.58	15,820.21	7,241.48	10.26	248.65	178.35	2,443.66	-6.27	6,144.61	5,994.01	150.60	40.800		
2,000.00	1,912.85	15,822.60	7,241.48	10.87	248.72	178.32	2,443.66	-8.65	6,083.84	5,930.72	153.12	39.733		
2,100.00	2,004.13	15,824.98	7,241.49	11.49	248.79	178.29	2,443.67	-11.04	6,024.12	5,868.41	155.71	38.689		
2,200.00	2,095.40	15,827.36	7,241.49	12.11	248.85	178.27	2,443.67	-13.42	5,965.47	5,807.11	158.36	37.670		
2,300.00	2,186.67	15,829.75	7,241.50	12.74	248.92	178.24	2,443.67	-15.80	5,907.94	5,746.86	161.08	36.677		
2,400.00	2,277.95	15,832.13	7,241.50	13.38	248.99	178.21	2,443.68	-18.19	5,851.55	5,687.68	163.86	35.710		
2,500.00	2,369.22	15,834.51	7,241.51	14.01	249.06	178.18	2,443.68	-20.57	5,796.33	5,629.62	166.71	34.770		
2,600.00	2,460.49	15,836.90	7,241.52	14.65	249.12	178.15	2,443.69	-22.95	5,742.32	5,572.72	169.60	33.857		
2,700.00	2,551.77	15,839.28	7,241.52	15.29	249.19	178.12	2,443.69	-25.34	5,689.56	5,517.00	172.56	32.972		
2,800.00	2,643.04	15,841.66	7,241.53	15.93	249.26	178.10	2,443.70	-27.72	5,638.08	5,462.52	175.56	32.115		
2,900.00	2,734.31	15,844.05	7,241.53	16.58	249.33	178.07	2,443.70	-30.10	5,587.91	5,409.30	178.61	31.286		
3,000.00	2,825.58	15,846.43	7,241.54	17.23	249.39	178.04	2,443.70	-32.49	5,539.09	5,357.39	181.70	30.485		
3,100.00	2,916.86	15,848.81	7,241.55	17.87	249.46	178.01	2,443.71	-34.87	5,491.65	5,306.82	184.83	29.712		
3,200.00	3,008.13	15,851.20	7,241.55	18.52	249.53	177.98	2,443.71	-37.25	5,445.64	5,257.65	188.00	28.967		
3,300.00	3,099.40	15,853.58	7,241.56	19.17	249.59	177.96	2,443.72	-39.64	5,401.09	5,209.89	191.19	28.249		
3,400.00	3,190.68	15,855.96	7,241.56	19.83	249.66	177.93	2,443.72	-42.02	5,358.03	5,163.61	194.42	27.559		
3,500.00	3,281.95	15,858.35	7,241.57	20.48	249.73	177.90	2,443.73	-44.40	5,316.50	5,118.83	197.67	26.896		
3,600.00	3,373.22	15,860.73	7,241.57	21.13	249.80	177.87	2,443.73	-46.79	5,276.55	5,075.60	200.94	26.259		
3,700.00	3,464.49	15,863.11	7,241.58	21.79	249.86	177.84	2,443.73	-49.17	5,238.19	5,033.97	204.22	25.649		
3,800.00	3,555.77	15,865.50	7,241.59	22.44	249.93	177.82	2,443.74	-51.55	5,201.47	4,993.96	207.52	25.065		
3,900.00	3,647.04	15,867.88	7,241.59	23.10	250.00	177.79	2,443.74	-53.94	5,166.43	4,955.62	210.81	24.507		
4,000.00	3,738.31	15,870.26	7,241.60	23.75	250.07	177.76	2,443.75	-56.32	5,133.10	4,918.99	214.11	23.974		
4,100.00	3,829.59	15,872.65	7,241.60	24.41	250.13	177.73	2,443.75	-58.70	5,101.50	4,884.10	217.40	23.466		
4,200.00	3,920.86	15,875.03	7,241.61	25.07	250.20	177.70	2,443.76	-61.09	5,071.68	4,851.01	220.68	22.982		
4,300.00	4,012.13	15,877.41	7,241.62	25.73	250.27	177.67	2,443.76	-63.47	5,043.67	4,819.73	223.94	22.523		
4,400.00	4,103.41	15,879.80	7,241.62	26.38	250.34	177.65	2,443.76	-65.85	5,017.49	4,790.32	227.17	22.086		
4,500.00	4,194.68	15,882.18	7,241.63	27.04	250.40	177.62	2,443.77	-68.24	4,993.18	4,762.80	230.38	21.673		
4,600.00	4,285.95	15,884.56	7,241.63	27.70	250.47	177.59	2,443.77	-70.62	4,970.76	4,737.21	233.55	21.283		
4,700.00	4,377.22	15,886.95	7,241.64	28.36	250.54	177.56	2,443.78	-73.00	4,950.26	4,713.57	236.68	20.915		
4,800.00	4,468.50	15,889.33	7,241.64	29.02	250.61	177.53	2,443.78	-75.39	4,931.70	4,691.93	239.77	20.569		
4,900.00	4,559.77	15,908.35	7,241.65	29.68	251.14	177.51	2,443.79	-77.77	4,915.10	4,671.90	243.20	20.210		
5,000.00	4,651.04	15,905.97	7,241.66	30.34	251.08	177.48	2,443.79	-80.15	4,900.48	4,654.42	246.06	19.916		
5,100.00	4,742.32	15,903.58	7,241.66	31.00	251.01	177.45	2,443.79	-82.54	4,887.87	4,639.02	248.86	19.641		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	4,833.59	15,901.20	7,241.67	31.66	250.94	177.42	2,443.80	-84.92	4,877.28	4,625.70	251.58	19.387		
5,300.00	4,924.86	15,901.25	7,241.67	32.32	250.94	177.39	2,443.80	-87.30	4,868.71	4,614.43	254.29	19.147		
5,400.00	5,016.13	15,903.63	7,241.68	32.99	251.01	177.37	2,443.81	-89.69	4,862.19	4,605.22	256.97	18.921		
5,500.00	5,107.41	15,906.02	7,241.69	33.65	251.08	177.34	2,443.81	-92.07	4,857.71	4,598.14	259.57	18.714		
5,600.00	5,198.68	15,908.40	7,241.69	34.31	251.15	177.31	2,443.82	-94.45	4,855.29	4,593.20	262.09	18.525		
5,667.63	5,260.41	15,910.01	7,241.70	34.76	251.19	177.29	2,443.82	-96.07	4,854.82	4,591.08	263.74	18.408	CC	
5,700.00	5,289.95	15,910.78	7,241.70	34.97	251.21	177.28	2,443.82	-96.84	4,854.93	4,590.42	264.51	18.354		
5,800.00	5,381.23	15,913.17	7,241.70	35.63	251.28	177.25	2,443.82	-99.22	4,856.62	4,589.78	266.84	18.201	ES	
5,900.00	5,472.50	15,915.55	7,241.71	36.30	251.35	177.22	2,443.83	-101.60	4,860.38	4,591.31	269.07	18.064		
6,000.00	5,563.77	15,917.93	7,241.71	36.96	251.41	177.20	2,443.83	-103.99	4,866.18	4,594.98	271.20	17.943		
6,100.00	5,655.05	15,920.32	7,241.72	37.62	251.48	177.17	2,443.84	-106.37	4,874.03	4,600.80	273.22	17.839		
6,200.00	5,746.32	15,922.70	7,241.73	38.28	251.55	177.14	2,443.84	-108.75	4,883.91	4,608.77	275.14	17.751		
6,300.00	5,837.59	15,925.08	7,241.73	38.95	251.62	177.11	2,443.85	-111.14	4,895.81	4,618.85	276.95	17.677		
6,400.00	5,928.86	15,927.47	7,241.74	39.61	251.68	177.08	2,443.85	-113.52	4,909.72	4,631.06	278.66	17.619		
6,500.00	6,020.14	15,929.85	7,241.74	40.27	251.75	177.06	2,443.85	-115.90	4,925.62	4,645.36	280.26	17.575		
6,600.00	6,111.41	15,932.23	7,241.75	40.94	251.82	177.03	2,443.86	-118.29	4,943.49	4,661.74	281.75	17.546		
6,700.00	6,202.68	15,934.62	7,241.76	41.60	251.89	177.00	2,443.86	-120.67	4,963.31	4,680.18	283.13	17.530		
6,800.00	6,293.96	15,937.00	7,241.76	42.26	251.95	176.97	2,443.87	-123.06	4,985.06	4,700.65	284.41	17.528		
6,900.00	6,385.23	15,939.38	7,241.77	42.93	252.02	176.94	2,443.87	-125.44	5,008.71	4,723.13	285.58	17.539		
7,000.00	6,476.50	15,941.77	7,241.77	43.59	252.09	176.92	2,443.88	-127.82	5,034.23	4,747.58	286.65	17.562		
7,100.00	6,567.77	15,944.15	7,241.78	44.25	252.16	176.89	2,443.88	-130.21	5,061.60	4,773.99	287.61	17.599		
7,200.00	6,658.64	15,952.75	7,241.80	44.91	252.40	157.37	2,443.90	-138.81	5,090.72	4,802.07	288.65	17.636		
7,300.00	6,747.14	15,976.72	7,241.86	45.52	253.08	139.14	2,443.94	-162.78	5,120.94	4,830.93	290.01	17.658		
7,400.00	6,831.10	16,015.57	7,241.95	46.07	254.18	125.32	2,444.01	-201.63	5,151.29	4,859.62	291.67	17.661		
7,500.00	6,908.46	16,068.34	7,242.08	46.54	255.67	114.93	2,444.10	-254.39	5,180.73	4,887.10	293.62	17.644		
7,600.00	6,977.30	16,133.72	7,242.24	46.95	257.52	107.04	2,444.22	-319.78	5,208.13	4,912.27	295.87	17.603		
7,700.00	7,035.93	16,210.12	7,242.43	47.30	259.68	101.04	2,444.36	-396.17	5,232.43	4,934.02	298.41	17.535		
7,800.00	7,082.92	16,304.43	7,242.64	47.59	262.35	96.60	2,444.51	-481.69	5,252.64	4,951.12	301.51	17.421		
7,900.00	7,117.09	16,388.18	7,242.86	47.84	264.73	93.51	2,444.68	-574.24	5,267.91	4,963.47	304.44	17.304		
8,000.00	7,137.62	16,485.47	7,243.10	48.06	267.48	91.69	2,444.85	-671.52	5,277.62	4,969.69	307.92	17.139		
8,100.00	7,143.99	16,585.10	7,243.34	48.28	270.30	91.08	2,445.03	-771.16	5,281.35	4,969.69	311.66	16.946		
8,200.00	7,143.45	16,685.10	7,243.59	48.53	273.14	91.08	2,445.21	-871.15	5,282.13	4,966.54	315.59	16.737		
8,300.00	7,142.91	16,785.09	7,243.83	48.89	275.97	91.09	2,445.39	-971.14	5,282.91	4,963.23	319.68	16.525		
8,400.00	7,142.37	16,885.09	7,244.08	49.40	278.80	91.10	2,445.57	-1,071.14	5,283.70	4,959.77	323.92	16.312		
8,500.00	7,141.83	16,985.08	7,244.32	50.12	281.64	91.11	2,445.75	-1,171.13	5,284.48	4,956.18	328.29	16.097		
8,600.00	7,141.29	17,085.07	7,244.57	51.08	284.48	91.12	2,445.93	-1,271.12	5,285.26	4,952.47	332.79	15.882		
8,700.00	7,140.75	17,185.07	7,244.81	52.30	287.31	91.13	2,446.11	-1,371.12	5,286.04	4,948.66	337.39	15.668		
8,800.00	7,140.21	17,285.06	7,245.06	53.75	290.15	91.13	2,446.29	-1,471.11	5,286.83	4,944.74	342.09	15.455		
8,900.00	7,139.67	17,385.06	7,245.30	55.40	292.98	91.14	2,446.47	-1,571.11	5,287.61	4,940.73	346.87	15.244		
9,000.00	7,139.12	17,485.05	7,245.54	57.20	295.82	91.15	2,446.65	-1,671.10	5,288.39	4,936.65	351.74	15.035		
9,100.00	7,138.58	17,585.04	7,245.79	59.13	298.66	91.16	2,446.82	-1,771.09	5,289.17	4,932.50	356.68	14.829		
9,200.00	7,138.04	17,685.04	7,246.03	61.15	301.50	91.17	2,447.00	-1,871.09	5,289.96	4,928.28	361.68	14.626		
9,300.00	7,137.50	17,785.03	7,246.28	63.26	304.34	91.18	2,447.18	-1,971.08	5,290.74	4,924.01	366.73	14.427		
9,400.00	7,136.96	17,885.03	7,246.52	65.44	307.18	91.18	2,447.36	-2,071.07	5,291.52	4,919.69	371.84	14.231		
9,500.00	7,136.42	17,985.02	7,246.77	67.68	310.02	91.19	2,447.54	-2,171.07	5,292.31	4,915.32	376.99	14.038		
9,600.00	7,135.88	18,085.01	7,247.01	69.97	312.86	91.20	2,447.72	-2,271.06	5,293.09	4,910.91	382.18	13.850		
9,700.00	7,135.34	18,185.01	7,247.25	72.31	315.70	91.21	2,447.90	-2,371.05	5,293.88	4,906.46	387.41	13.665		
9,800.00	7,134.80	18,285.00	7,247.50	74.69	318.54	91.22	2,448.08	-2,471.05	5,294.66	4,901.98	392.68	13.483		
9,900.00	7,134.26	18,385.00	7,247.74	77.10	321.38	91.23	2,448.26	-2,571.04	5,295.44	4,897.47	397.97	13.306		
10,000.00	7,133.71	18,484.99	7,247.99	79.54	324.22	91.23	2,448.44	-2,671.03	5,296.23	4,892.93	403.29	13.132		
10,100.00	7,133.17	18,584.98	7,248.23	82.02	327.06	91.24	2,448.62	-2,771.03	5,297.01	4,888.37	408.64	12.963		
10,200.00	7,132.63	18,684.98	7,248.48	84.52	329.90	91.25	2,448.80	-2,871.02	5,297.80	4,883.79	414.01	12.796		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,132.09	18,784.97	7,248.72	87.04	332.74	91.26	2,448.98	-2,971.01	5,298.58	4,879.18	419.40	12.634		
10,400.00	7,131.55	18,884.97	7,248.96	89.58	335.59	91.27	2,449.16	-3,071.01	5,299.37	4,874.56	424.81	12.475		
10,500.00	7,131.01	18,984.96	7,249.21	92.15	338.43	91.28	2,449.34	-3,171.00	5,300.15	4,869.91	430.24	12.319		
10,600.00	7,130.47	19,084.95	7,249.45	94.73	341.27	91.28	2,449.52	-3,271.00	5,300.93	4,865.26	435.68	12.167		
10,700.00	7,129.93	19,118.26	7,249.53	97.33	342.22	91.29	2,449.58	-3,304.30	5,302.14	4,863.01	439.13	12.074		
10,800.00	7,129.39	19,118.26	7,249.53	99.94	342.22	91.29	2,449.58	-3,304.30	5,305.12	4,863.67	441.46	12.017		
10,900.00	7,128.84	19,118.26	7,249.53	102.56	342.22	91.29	2,449.58	-3,304.30	5,309.99	4,866.34	443.65	11.969		
11,000.00	7,128.30	19,118.26	7,249.53	105.20	342.22	91.29	2,449.58	-3,304.30	5,316.73	4,871.03	445.70	11.929		
11,100.00	7,127.76	19,118.26	7,249.53	107.85	342.22	91.29	2,449.58	-3,304.30	5,325.35	4,877.74	447.61	11.897		
11,200.00	7,127.22	19,118.26	7,249.53	110.51	342.22	91.29	2,449.58	-3,304.30	5,335.82	4,886.45	449.37	11.874		
11,300.00	7,126.68	19,118.26	7,249.53	113.18	342.22	91.29	2,449.58	-3,304.30	5,348.14	4,897.16	450.98	11.859		
11,400.00	7,126.14	19,118.26	7,249.53	115.86	342.22	91.29	2,449.58	-3,304.30	5,362.30	4,909.86	452.44	11.852 SF		
11,500.00	7,125.60	19,118.26	7,249.53	118.55	342.22	91.29	2,449.58	-3,304.30	5,378.29	4,924.52	453.76	11.853		
11,600.00	7,125.06	19,118.26	7,249.53	121.25	342.22	91.29	2,449.58	-3,304.30	5,396.07	4,941.14	454.93	11.861		
11,700.00	7,124.52	19,118.26	7,249.53	123.95	342.22	91.29	2,449.58	-3,304.30	5,415.65	4,959.69	455.96	11.877		
11,800.00	7,123.97	19,118.26	7,249.53	126.66	342.22	91.29	2,449.58	-3,304.30	5,437.00	4,980.16	456.84	11.901		
11,900.00	7,123.43	19,118.26	7,249.53	129.38	342.22	91.29	2,449.58	-3,304.30	5,460.09	5,002.51	457.58	11.933		
12,000.00	7,122.89	19,118.26	7,249.53	132.10	342.22	91.29	2,449.58	-3,304.30	5,484.91	5,026.73	458.18	11.971		
12,100.00	7,122.35	19,118.26	7,249.53	134.83	342.22	91.29	2,449.58	-3,304.30	5,511.44	5,052.79	458.64	12.017		
12,200.00	7,121.81	19,118.26	7,249.53	137.56	342.22	91.29	2,449.58	-3,304.30	5,539.64	5,080.67	458.97	12.070		
12,300.00	7,121.27	19,118.26	7,249.53	140.30	342.22	91.29	2,449.58	-3,304.30	5,569.49	5,110.33	459.17	12.130		
12,400.00	7,120.73	19,118.26	7,249.53	143.05	342.22	91.29	2,449.58	-3,304.30	5,600.97	5,141.74	459.24	12.196		
12,500.00	7,120.19	19,118.26	7,249.53	145.80	342.22	91.29	2,449.58	-3,304.30	5,634.05	5,174.87	459.18	12.270		
12,600.00	7,119.65	19,118.26	7,249.53	148.55	342.22	91.29	2,449.58	-3,304.30	5,668.71	5,209.69	459.01	12.350		
12,700.00	7,119.10	19,118.26	7,249.53	151.30	342.22	91.29	2,449.58	-3,304.30	5,704.90	5,246.17	458.73	12.436		
12,800.00	7,118.56	19,118.26	7,249.53	154.07	342.22	91.29	2,449.58	-3,304.30	5,742.61	5,284.27	458.33	12.529		
12,900.00	7,118.02	19,118.26	7,249.53	156.83	342.22	91.29	2,449.58	-3,304.30	5,781.80	5,323.97	457.83	12.629		
13,000.00	7,117.48	19,118.26	7,249.53	159.60	342.22	91.29	2,449.58	-3,304.30	5,822.44	5,365.21	457.23	12.734		
13,100.00	7,116.94	19,118.26	7,249.53	162.37	342.22	91.29	2,449.58	-3,304.30	5,864.51	5,407.98	456.53	12.846		
13,200.00	7,116.40	19,118.26	7,249.53	165.14	342.22	91.29	2,449.58	-3,304.30	5,907.98	5,452.23	455.74	12.963		
13,300.00	7,115.86	19,118.26	7,249.53	167.92	342.22	91.29	2,449.58	-3,304.30	5,952.80	5,497.93	454.87	13.087		
13,400.00	7,115.32	19,118.26	7,249.53	170.70	342.22	91.29	2,449.58	-3,304.30	5,998.96	5,545.05	453.91	13.216		
13,500.00	7,114.78	19,118.26	7,249.53	173.48	342.22	91.29	2,449.58	-3,304.30	6,046.42	5,593.54	452.87	13.351		
13,600.00	7,114.24	19,118.26	7,249.53	176.26	342.22	91.29	2,449.58	-3,304.30	6,095.15	5,643.38	451.76	13.492		
13,700.00	7,113.69	19,118.26	7,249.53	179.05	342.22	91.29	2,449.58	-3,304.30	6,145.12	5,694.53	450.59	13.638		
13,800.00	7,113.15	19,118.26	7,249.53	181.84	342.22	91.29	2,449.58	-3,304.30	6,196.30	5,746.95	449.35	13.790		
13,900.00	7,112.61	19,118.26	7,249.53	184.63	342.22	91.29	2,449.58	-3,304.30	6,248.66	5,800.62	448.05	13.946		
14,000.00	7,112.07	19,118.26	7,249.53	187.42	342.22	91.29	2,449.58	-3,304.30	6,302.18	5,855.49	446.69	14.109		
14,100.00	7,111.53	19,118.26	7,249.53	190.22	342.22	91.29	2,449.58	-3,304.30	6,356.82	5,911.53	445.28	14.276		
14,200.00	7,110.99	19,118.26	7,249.53	193.01	342.22	91.29	2,449.58	-3,304.30	6,412.55	5,968.72	443.83	14.448		
14,300.00	7,110.45	19,118.26	7,249.53	195.81	342.22	91.29	2,449.58	-3,304.30	6,469.35	6,027.02	442.33	14.626		
14,400.00	7,109.91	19,118.26	7,249.53	198.61	342.22	91.29	2,449.58	-3,304.30	6,527.18	6,086.39	440.79	14.808		
14,500.00	7,109.37	19,118.26	7,249.53	201.42	342.22	91.29	2,449.58	-3,304.30	6,586.03	6,146.81	439.22	14.995		
14,600.00	7,108.82	19,118.26	7,249.53	204.22	342.22	91.29	2,449.58	-3,304.30	6,645.86	6,208.25	437.61	15.187		
14,700.00	7,108.28	19,118.26	7,249.53	207.03	342.22	91.29	2,449.58	-3,304.30	6,706.64	6,270.67	435.97	15.383		
14,800.00	7,107.74	19,118.26	7,249.53	209.83	342.22	91.29	2,449.58	-3,304.30	6,768.36	6,334.06	434.31	15.584		
14,900.00	7,107.20	19,118.26	7,249.53	212.64	342.22	91.29	2,449.58	-3,304.30	6,830.99	6,398.37	432.62	15.790		
15,000.00	7,106.66	19,118.26	7,249.53	215.45	342.22	91.29	2,449.58	-3,304.30	6,894.50	6,463.58	430.91	16.000		
15,100.00	7,106.12	19,118.26	7,249.53	218.26	342.22	91.29	2,449.58	-3,304.30	6,958.86	6,529.68	429.18	16.214		
15,200.00	7,105.58	19,118.26	7,249.53	221.07	342.22	91.29	2,449.58	-3,304.30	7,024.06	6,596.62	427.44	16.433		
15,300.00	7,105.04	19,118.26	7,249.53	223.89	342.22	91.29	2,449.58	-3,304.30	7,090.07	6,664.38	425.68	16.656		
15,400.00	7,104.50	19,118.26	7,249.53	226.70	342.22	91.29	2,449.58	-3,304.30	7,156.86	6,732.95	423.92	16.883		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)		
15,491.56	7,104.00	19,118.26	7,249.53	229.28	342.22	91.29	2,449.58	-3,304.30	7,218.70	6,796.41	422.29	17.094	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	15,721.18	7,133.46	3.28	248.17	-0.15	2,283.28	-5.97	7,489.97					
100.00	100.00	15,721.42	7,133.46	3.28	248.17	-0.16	2,283.28	-6.21	7,394.80	7,272.51	122.28	60.473		
200.00	200.00	15,721.67	7,133.46	3.34	248.18	-0.16	2,283.28	-6.46	7,299.75	7,176.97	122.78	59.454		
300.00	299.98	15,722.02	7,133.46	3.44	248.19	177.01	2,283.27	-6.81	7,205.40	7,082.07	123.33	58.423		
400.00	399.84	15,722.61	7,133.47	3.59	248.21	177.25	2,283.27	-7.40	7,112.45	6,988.48	123.97	57.370		
500.00	499.45	15,723.42	7,133.47	3.79	248.23	177.44	2,283.26	-8.21	7,021.06	6,896.34	124.72	56.294		
600.00	598.70	15,724.45	7,133.47	4.03	248.26	177.60	2,283.25	-9.24	6,931.41	6,805.83	125.57	55.197		
700.00	697.47	15,725.71	7,133.47	4.31	248.30	177.72	2,283.24	-10.50	6,843.67	6,717.12	126.54	54.081		
800.00	795.62	15,727.18	7,133.48	4.64	248.34	177.83	2,283.22	-11.98	6,758.03	6,630.39	127.64	52.948		
900.00	893.06	15,728.88	7,133.48	5.00	248.39	177.92	2,283.20	-13.67	6,674.67	6,545.82	128.86	51.799		
1,000.00	989.64	15,730.80	7,133.49	5.40	248.44	177.99	2,283.18	-15.59	6,593.79	6,463.58	130.21	50.639		
1,100.00	1,085.27	15,732.93	7,133.49	5.83	248.50	178.04	2,283.16	-17.72	6,515.58	6,383.87	131.71	49.468		
1,200.00	1,179.82	15,735.27	7,133.50	6.29	248.57	178.09	2,283.14	-20.06	6,440.24	6,306.87	133.36	48.290		
1,300.00	1,273.17	15,737.83	7,133.50	6.79	248.64	178.12	2,283.11	-22.62	6,367.95	6,232.77	135.17	47.109		
1,400.00	1,365.21	15,740.59	7,133.51	7.33	248.72	178.15	2,283.08	-25.38	6,298.91	6,161.76	137.15	45.928		
1,500.00	1,456.49	15,743.46	7,133.52	7.89	248.80	178.12	2,283.05	-28.25	6,232.14	6,092.88	139.26	44.752		
1,600.00	1,547.76	15,746.34	7,133.52	8.46	248.88	178.08	2,283.02	-31.13	6,166.28	6,024.80	141.47	43.586		
1,700.00	1,639.04	15,749.21	7,133.53	9.05	248.96	178.05	2,282.99	-34.00	6,101.34	5,957.57	143.78	42.436		
1,800.00	1,730.31	15,752.09	7,133.54	9.65	249.04	178.01	2,282.97	-36.87	6,037.36	5,891.20	146.16	41.306		
1,900.00	1,821.58	15,754.96	7,133.55	10.26	249.12	177.98	2,282.94	-39.75	5,974.37	5,825.74	148.63	40.196		
2,000.00	1,912.85	15,757.83	7,133.55	10.87	249.20	177.94	2,282.91	-42.62	5,912.40	5,761.22	151.18	39.109		
2,100.00	2,004.13	15,760.71	7,133.56	11.49	249.28	177.91	2,282.88	-45.50	5,851.47	5,697.67	153.80	38.045		
2,200.00	2,095.40	15,763.58	7,133.57	12.11	249.37	177.87	2,282.85	-48.37	5,791.64	5,635.13	156.50	37.007		
2,300.00	2,186.67	15,766.46	7,133.57	12.74	249.45	177.84	2,282.82	-51.25	5,732.92	5,573.64	159.27	35.994		
2,400.00	2,277.95	15,769.33	7,133.58	13.38	249.53	177.80	2,282.79	-54.12	5,675.35	5,513.24	162.11	35.009		
2,500.00	2,369.22	15,772.21	7,133.59	14.01	249.61	177.77	2,282.76	-57.00	5,618.97	5,453.96	165.01	34.052		
2,600.00	2,460.49	15,775.08	7,133.59	14.65	249.69	177.73	2,282.73	-59.87	5,563.82	5,395.84	167.98	33.122		
2,700.00	2,551.77	15,777.96	7,133.60	15.29	249.77	177.70	2,282.70	-62.74	5,509.93	5,338.92	171.00	32.221		
2,800.00	2,643.04	15,780.83	7,133.61	15.93	249.85	177.66	2,282.67	-65.62	5,457.33	5,283.25	174.08	31.349		
2,900.00	2,734.31	15,783.71	7,133.62	16.58	249.93	177.63	2,282.64	-68.49	5,406.08	5,228.86	177.22	30.506		
3,000.00	2,825.58	15,786.58	7,133.62	17.23	250.02	177.59	2,282.61	-71.37	5,356.20	5,175.80	180.40	29.691		
3,100.00	2,916.86	15,789.45	7,133.63	17.87	250.10	177.56	2,282.58	-74.24	5,307.73	5,124.11	183.62	28.906		
3,200.00	3,008.13	15,792.32	7,133.64	18.52	250.18	177.52	2,282.55	-77.12	5,260.72	5,073.53	187.18	28.105		
3,300.00	3,099.40	15,795.19	7,133.64	19.17	250.26	177.48	2,282.52	-79.99	5,215.19	5,024.82	190.38	27.394		
3,400.00	3,190.68	15,798.06	7,133.65	19.83	250.34	177.45	2,282.49	-82.87	5,171.20	4,977.60	193.61	26.710		
3,500.00	3,281.95	15,800.93	7,133.66	20.48	250.42	177.41	2,282.46	-85.74	5,128.79	4,931.89	196.89	26.048		
3,600.00	3,373.22	15,803.80	7,133.66	21.13	250.50	177.38	2,282.43	-88.61	5,087.98	4,887.70	200.28	25.404		
3,700.00	3,464.49	15,806.67	7,133.67	21.79	250.58	177.34	2,282.41	-91.49	5,048.82	4,845.13	203.69	24.787		
3,800.00	3,555.77	15,809.54	7,133.68	22.44	250.66	177.31	2,282.38	-94.36	5,011.35	4,804.25	207.10	24.197		
3,900.00	3,647.04	15,812.41	7,133.69	23.10	250.74	177.27	2,282.35	-97.24	4,975.60	4,765.08	210.53	23.634		
4,000.00	3,738.31	15,815.28	7,133.69	23.75	250.82	177.24	2,282.32	-100.11	4,941.62	4,727.67	213.95	23.097		
4,100.00	3,829.59	15,818.15	7,133.70	24.41	250.90	177.20	2,282.29	-102.99	4,909.44	4,692.07	217.37	22.586		
4,200.00	3,920.86	15,821.02	7,133.71	25.07	250.98	177.17	2,282.26	-105.86	4,879.10	4,658.32	220.78	22.100		
4,300.00	4,012.13	15,823.89	7,133.71	25.73	251.06	177.13	2,282.23	-108.73	4,850.62	4,626.46	224.17	21.639		
4,400.00	4,103.41	15,826.76	7,133.72	26.38	251.14	177.10	2,282.20	-111.61	4,824.05	4,596.52	227.53	21.202		
4,500.00	4,194.68	15,829.63	7,133.73	27.04	251.22	177.06	2,282.17	-114.48	4,799.42	4,568.55	230.86	20.789		
4,600.00	4,285.95	15,832.50	7,133.73	27.70	251.30	177.03	2,282.14	-117.36	4,776.75	4,542.58	234.16	20.399		
4,700.00	4,377.22	15,835.37	7,133.74	28.36	251.38	176.99	2,282.11	-120.23	4,756.07	4,518.65	237.41	20.033		
4,800.00	4,468.50	15,838.24	7,133.75	29.02	251.46	176.96	2,282.08	-123.11	4,737.41	4,496.79	240.62	19.689		
4,900.00	4,559.77	15,841.11	7,133.76	29.68	251.54	176.92	2,282.05	-125.98	4,720.80	4,477.03	243.76	19.366		
5,000.00	4,651.04	15,844.00	7,133.76	30.34	251.62	176.88	2,282.02	-128.86	4,706.25	4,459.40	246.84	19.066		
5,100.00	4,742.32	15,846.95	7,133.77	31.00	251.70	176.85	2,281.99	-131.73	4,693.78	4,443.93	249.85	18.786		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Minimum	Separation		
Depth	Depth	Depth	Depth			Toolface	+N/-S	+E/-W	Centres	Ellipses	Separation	Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
5,200.00	4,833.59	15,849.82	7,133.78	31.66	251.80	176.81	2,281.96	-134.60	4,683.42	4,430.62	252.79	18.527		
5,300.00	4,924.86	15,852.70	7,133.78	32.32	251.88	176.78	2,281.93	-137.48	4,675.16	4,419.52	255.65	18.288		
5,400.00	5,016.13	15,855.57	7,133.79	32.99	251.96	176.74	2,281.90	-140.35	4,669.04	4,410.63	258.41	18.068		
5,500.00	5,107.41	15,858.44	7,133.80	33.65	252.05	176.71	2,281.88	-143.23	4,665.05	4,403.96	261.09	17.868		
5,600.00	5,198.68	15,861.32	7,133.80	34.31	252.13	176.67	2,281.85	-146.10	4,663.20	4,399.53	263.67	17.686		
5,636.38	5,231.88	15,862.36	7,133.81	34.55	252.16	176.66	2,281.83	-147.15	4,663.06	4,398.48	264.58	17.624	CC	
5,700.00	5,289.95	15,864.19	7,133.81	34.97	252.21	176.64	2,281.82	-148.98	4,663.49	4,397.34	266.15	17.522	ES	
5,800.00	5,381.23	15,867.07	7,133.82	35.63	252.29	176.60	2,281.79	-151.85	4,665.93	4,397.40	268.52	17.376		
5,900.00	5,472.50	15,869.94	7,133.83	36.30	252.37	176.57	2,281.76	-154.73	4,670.50	4,399.71	270.79	17.248		
6,000.00	5,563.77	15,872.82	7,133.83	36.96	252.45	176.53	2,281.73	-157.60	4,677.20	4,404.26	272.94	17.136		
6,100.00	5,655.05	15,875.69	7,133.84	37.62	252.53	176.50	2,281.70	-160.47	4,686.03	4,411.04	274.99	17.041		
6,200.00	5,746.32	15,878.57	7,133.85	38.28	252.61	176.46	2,281.67	-163.35	4,696.97	4,420.05	276.92	16.962		
6,300.00	5,837.59	15,881.44	7,133.85	38.95	252.70	176.43	2,281.64	-166.22	4,710.00	4,431.28	278.73	16.898		
6,400.00	5,928.86	15,884.32	7,133.86	39.61	252.78	176.39	2,281.61	-169.10	4,725.12	4,444.69	280.43	16.850		
6,500.00	6,020.14	15,887.19	7,133.87	40.27	252.86	176.36	2,281.58	-171.97	4,742.29	4,460.29	282.00	16.816		
6,600.00	6,111.41	15,910.00	7,133.88	40.94	253.50	176.32	2,281.55	-174.85	4,761.50	4,477.48	284.02	16.765		
6,700.00	6,202.68	15,892.94	7,133.88	41.60	253.02	176.28	2,281.52	-177.72	4,782.73	4,497.91	284.81	16.792		
6,800.00	6,293.96	15,895.81	7,133.89	42.26	253.10	176.25	2,281.49	-180.59	4,805.93	4,519.89	286.05	16.801		
6,900.00	6,385.23	15,901.38	7,133.90	42.93	253.26	176.21	2,281.46	-183.47	4,831.10	4,543.86	287.24	16.819		
7,000.00	6,476.50	15,901.56	7,133.90	43.59	253.26	176.18	2,281.43	-186.34	4,858.19	4,570.02	288.17	16.858		
7,100.00	6,567.77	15,904.44	7,133.91	44.25	253.35	176.14	2,281.40	-189.22	4,887.18	4,598.11	289.07	16.906		
7,200.00	6,658.64	15,913.53	7,133.93	44.91	253.60	156.47	2,281.31	-198.31	4,917.87	4,627.83	290.04	16.956		
7,300.00	6,747.14	15,937.98	7,133.99	45.52	254.29	138.08	2,281.06	-222.76	4,949.49	4,658.16	291.33	16.989		
7,400.00	6,831.10	15,977.28	7,134.09	46.07	255.40	124.13	2,280.66	-262.06	4,981.00	4,688.08	292.92	17.005		
7,500.00	6,908.46	16,030.47	7,134.22	46.54	256.91	113.65	2,280.11	-315.24	5,011.32	4,716.52	294.80	16.999		
7,600.00	6,977.30	16,096.22	7,134.38	46.95	258.77	105.70	2,279.44	-380.99	5,039.31	4,742.33	296.97	16.969		
7,700.00	7,035.93	16,172.94	7,134.57	47.30	260.94	99.67	2,278.65	-457.70	5,063.86	4,764.41	299.45	16.910		
7,800.00	7,082.92	16,258.72	7,134.78	47.59	263.36	95.23	2,277.77	-543.48	5,083.99	4,781.73	302.26	16.820		
7,900.00	7,117.09	16,351.45	7,135.00	47.84	265.98	92.19	2,276.82	-636.20	5,098.84	4,793.44	305.40	16.695		
8,000.00	7,137.62	16,448.85	7,135.24	48.06	268.74	90.43	2,275.82	-733.60	5,107.79	4,798.93	308.86	16.537		
8,100.00	7,143.99	16,548.52	7,135.48	48.28	271.56	89.91	2,274.80	-833.27	5,110.45	4,797.86	312.60	16.348		
8,200.00	7,143.45	16,648.52	7,135.73	48.53	274.39	89.91	2,273.78	-933.26	5,110.02	4,793.49	316.53	16.144		
8,300.00	7,142.91	16,748.52	7,135.97	48.89	277.22	89.92	2,272.75	-1,033.25	5,109.58	4,788.95	320.62	15.936		
8,400.00	7,142.37	16,848.51	7,136.22	49.40	280.05	89.93	2,271.73	-1,133.24	5,109.14	4,784.27	324.87	15.727		
8,500.00	7,141.83	16,948.51	7,136.46	50.12	282.89	89.94	2,270.70	-1,233.23	5,108.70	4,779.46	329.24	15.517		
8,600.00	7,141.29	17,048.50	7,136.71	51.08	285.72	89.95	2,269.68	-1,333.22	5,108.26	4,774.53	333.74	15.306		
8,700.00	7,140.75	17,148.50	7,136.95	52.30	288.55	89.96	2,268.65	-1,433.21	5,107.83	4,769.48	338.35	15.096		
8,800.00	7,140.21	17,248.50	7,137.19	53.75	291.38	89.97	2,267.63	-1,533.20	5,107.39	4,764.34	343.05	14.888		
8,900.00	7,139.67	17,348.49	7,137.44	55.40	294.22	89.98	2,266.61	-1,633.19	5,106.95	4,759.11	347.84	14.682		
9,000.00	7,139.12	17,448.49	7,137.68	57.20	297.05	89.99	2,265.58	-1,733.18	5,106.52	4,753.80	352.71	14.478		
9,100.00	7,138.58	17,548.48	7,137.93	59.13	299.89	89.99	2,264.56	-1,833.17	5,106.08	4,748.42	357.65	14.277		
9,200.00	7,138.04	17,648.48	7,138.17	61.15	302.72	90.00	2,263.53	-1,933.16	5,105.64	4,742.98	362.66	14.078		
9,300.00	7,137.50	17,748.48	7,138.42	63.26	305.56	90.01	2,262.51	-2,033.15	5,105.20	4,737.49	367.72	13.883		
9,400.00	7,136.96	17,848.47	7,138.66	65.44	308.39	90.02	2,261.48	-2,133.14	5,104.77	4,731.94	372.83	13.692		
9,500.00	7,136.42	17,948.47	7,138.90	67.68	311.23	90.03	2,260.46	-2,233.13	5,104.33	4,726.34	377.99	13.504		
9,600.00	7,135.88	18,048.46	7,139.15	69.97	314.07	90.04	2,259.43	-2,333.13	5,103.90	4,720.71	383.18	13.320		
9,700.00	7,135.34	18,148.46	7,139.39	72.31	316.90	90.05	2,258.41	-2,433.12	5,103.46	4,715.04	388.42	13.139		
9,800.00	7,134.80	18,248.46	7,139.64	74.69	319.74	90.06	2,257.38	-2,533.11	5,103.02	4,709.34	393.69	12.962		
9,900.00	7,134.26	18,348.45	7,139.88	77.10	322.58	90.06	2,256.36	-2,633.10	5,102.59	4,703.60	398.98	12.789		
10,000.00	7,133.71	18,448.45	7,140.13	79.54	325.42	90.07	2,255.33	-2,733.09	5,102.15	4,697.84	404.31	12.619		
10,100.00	7,133.17	18,548.44	7,140.37	82.02	328.25	90.08	2,254.31	-2,833.08	5,101.71	4,692.06	409.66	12.454		
10,200.00	7,132.63	18,648.44	7,140.62	84.52	331.09	90.09	2,253.28	-2,933.07	5,101.28	4,686.25	415.03	12.291		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,132.09	18,748.44	7,140.86	87.04	333.93	90.10	2,252.26	-3,033.06	5,100.84	4,680.42	420.42	12.133		
10,400.00	7,131.55	18,848.43	7,141.10	89.58	336.77	90.11	2,251.23	-3,133.05	5,100.41	4,674.57	425.84	11.977		
10,500.00	7,131.01	18,948.43	7,141.35	92.15	339.61	90.12	2,250.21	-3,233.04	5,099.97	4,668.71	431.26	11.826		
10,592.11	7,130.51	19,018.34	7,141.52	94.53	341.60	90.12	2,249.49	-3,302.95	5,099.62	4,664.00	435.62	11.707		
10,600.00	7,130.47	19,018.34	7,141.52	94.73	341.60	90.12	2,249.49	-3,302.95	5,099.63	4,663.81	435.82	11.701		
10,700.00	7,129.93	19,018.34	7,141.52	97.33	341.60	90.12	2,249.49	-3,302.95	5,100.76	4,662.56	438.20	11.640		
10,800.00	7,129.39	19,018.34	7,141.52	99.94	341.60	90.12	2,249.49	-3,302.95	5,103.86	4,663.42	440.44	11.588		
10,900.00	7,128.84	19,018.34	7,141.52	102.56	341.60	90.12	2,249.49	-3,302.95	5,108.91	4,666.38	442.52	11.545		
11,000.00	7,128.30	19,018.34	7,141.52	105.20	341.60	90.12	2,249.49	-3,302.95	5,115.91	4,671.45	444.45	11.511		
11,100.00	7,127.76	19,018.34	7,141.52	107.85	341.60	90.12	2,249.49	-3,302.95	5,124.85	4,678.62	446.23	11.485		
11,200.00	7,127.22	19,018.34	7,141.52	110.51	341.60	90.12	2,249.49	-3,302.95	5,135.72	4,687.87	447.85	11.467		
11,300.00	7,126.68	19,018.34	7,141.52	113.18	341.60	90.12	2,249.49	-3,302.95	5,148.52	4,699.21	449.31	11.459		
11,400.00	7,126.14	19,018.34	7,141.52	115.86	341.60	90.12	2,249.49	-3,302.95	5,163.22	4,712.60	450.61	11.458 SF		
11,500.00	7,125.60	19,018.34	7,141.52	118.55	341.60	90.12	2,249.49	-3,302.95	5,179.81	4,728.05	451.76	11.466		
11,600.00	7,125.06	19,018.34	7,141.52	121.25	341.60	90.12	2,249.49	-3,302.95	5,198.27	4,745.52	452.75	11.482		
11,700.00	7,124.52	19,018.34	7,141.52	123.95	341.60	90.12	2,249.49	-3,302.95	5,218.58	4,764.99	453.58	11.505		
11,800.00	7,123.97	19,018.34	7,141.52	126.66	341.60	90.12	2,249.49	-3,302.95	5,240.72	4,786.45	454.26	11.537		
11,900.00	7,123.43	19,018.34	7,141.52	129.38	341.60	90.12	2,249.49	-3,302.95	5,264.67	4,809.87	454.79	11.576		
12,000.00	7,122.89	19,018.34	7,141.52	132.10	341.60	90.12	2,249.49	-3,302.95	5,290.40	4,835.22	455.18	11.623		
12,100.00	7,122.35	19,018.34	7,141.52	134.83	341.60	90.12	2,249.49	-3,302.95	5,317.88	4,862.46	455.42	11.677		
12,200.00	7,121.81	19,018.34	7,141.52	137.56	341.60	90.12	2,249.49	-3,302.95	5,347.10	4,891.58	455.52	11.738		
12,300.00	7,121.27	19,018.34	7,141.52	140.30	341.60	90.12	2,249.49	-3,302.95	5,378.01	4,922.53	455.48	11.807		
12,400.00	7,120.73	19,018.34	7,141.52	143.05	341.60	90.12	2,249.49	-3,302.95	5,410.60	4,955.29	455.32	11.883		
12,500.00	7,120.19	19,018.34	7,141.52	145.80	341.60	90.12	2,249.49	-3,302.95	5,444.83	4,989.81	455.02	11.966		
12,600.00	7,119.65	19,018.34	7,141.52	148.55	341.60	90.12	2,249.49	-3,302.95	5,480.67	5,026.07	454.61	12.056		
12,700.00	7,119.10	19,018.34	7,141.52	151.30	341.60	90.12	2,249.49	-3,302.95	5,518.09	5,064.02	454.07	12.152		
12,800.00	7,118.56	19,018.34	7,141.52	154.07	341.60	90.12	2,249.49	-3,302.95	5,557.06	5,103.63	453.43	12.256		
12,900.00	7,118.02	19,018.34	7,141.52	156.83	341.60	90.12	2,249.49	-3,302.95	5,597.54	5,144.87	452.68	12.365		
13,000.00	7,117.48	19,018.34	7,141.52	159.60	341.60	90.12	2,249.49	-3,302.95	5,639.51	5,187.68	451.83	12.482		
13,100.00	7,116.94	19,018.34	7,141.52	162.37	341.60	90.12	2,249.49	-3,302.95	5,682.93	5,232.05	450.88	12.604		
13,200.00	7,116.40	19,018.34	7,141.52	165.14	341.60	90.12	2,249.49	-3,302.95	5,727.76	5,277.92	449.84	12.733		
13,300.00	7,115.86	19,018.34	7,141.52	167.92	341.60	90.12	2,249.49	-3,302.95	5,773.98	5,325.26	448.72	12.868		
13,400.00	7,115.32	19,018.34	7,141.52	170.70	341.60	90.12	2,249.49	-3,302.95	5,821.55	5,374.03	447.51	13.009		
13,500.00	7,114.78	19,018.34	7,141.52	173.48	341.60	90.12	2,249.49	-3,302.95	5,870.43	5,424.20	446.23	13.155		
13,600.00	7,114.24	19,018.34	7,141.52	176.26	341.60	90.12	2,249.49	-3,302.95	5,920.60	5,475.72	444.89	13.308		
13,700.00	7,113.69	19,018.34	7,141.52	179.05	341.60	90.12	2,249.49	-3,302.95	5,972.03	5,528.56	443.47	13.467		
13,800.00	7,113.15	19,018.34	7,141.52	181.84	341.60	90.12	2,249.49	-3,302.95	6,024.68	5,582.68	442.00	13.631		
13,900.00	7,112.61	19,018.34	7,141.52	184.63	341.60	90.12	2,249.49	-3,302.95	6,078.51	5,638.04	440.47	13.800		
14,000.00	7,112.07	19,018.34	7,141.52	187.42	341.60	90.12	2,249.49	-3,302.95	6,133.50	5,694.62	438.89	13.975		
14,100.00	7,111.53	19,018.34	7,141.52	190.22	341.60	90.12	2,249.49	-3,302.95	6,189.62	5,752.37	437.26	14.156		
14,200.00	7,110.99	19,018.34	7,141.52	193.01	341.60	90.12	2,249.49	-3,302.95	6,246.84	5,811.25	435.59	14.341		
14,300.00	7,110.45	19,018.34	7,141.52	195.81	341.60	90.12	2,249.49	-3,302.95	6,305.13	5,871.25	433.88	14.532		
14,400.00	7,109.91	19,018.34	7,141.52	198.61	341.60	90.12	2,249.49	-3,302.95	6,364.45	5,932.31	432.13	14.728		
14,500.00	7,109.37	19,018.34	7,141.52	201.42	341.60	90.12	2,249.49	-3,302.95	6,424.78	5,994.42	430.36	14.929		
14,600.00	7,108.82	19,018.34	7,141.52	204.22	341.60	90.12	2,249.49	-3,302.95	6,486.09	6,057.53	428.55	15.135		
14,700.00	7,108.28	19,018.34	7,141.52	207.03	341.60	90.12	2,249.49	-3,302.95	6,548.35	6,121.63	426.73	15.346		
14,800.00	7,107.74	19,018.34	7,141.52	209.83	341.60	90.12	2,249.49	-3,302.95	6,611.54	6,186.67	424.88	15.561		
14,900.00	7,107.20	19,018.34	7,141.52	212.64	341.60	90.12	2,249.49	-3,302.95	6,675.63	6,252.62	423.01	15.781		
15,000.00	7,106.66	19,018.34	7,141.52	215.45	341.60	90.12	2,249.49	-3,302.95	6,740.60	6,319.47	421.13	16.006		
15,100.00	7,106.12	19,018.34	7,141.52	218.26	341.60	90.12	2,249.49	-3,302.95	6,806.41	6,387.18	419.23	16.235		
15,200.00	7,105.58	19,018.34	7,141.52	221.07	341.60	90.12	2,249.49	-3,302.95	6,873.05	6,455.72	417.32	16.469		
15,300.00	7,105.04	19,018.34	7,141.52	223.89	341.60	90.12	2,249.49	-3,302.95	6,940.49	6,525.08	415.41	16.708		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,400.00	7,104.50	19,018.34	7,141.52	226.70	341.60	90.12	2,249.49	-3,302.95	7,008.71	6,595.22	413.49	16.950	
15,491.56	7,104.00	19,018.34	7,141.52	229.28	341.60	90.12	2,249.49	-3,302.95	7,071.83	6,660.10	411.73	17.176	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1,488.17	1,534.77	3.28	8.00	-116.55	-3,757.36	-7,518.52	8,544.08					
100.00	100.00	1,519.50	1,565.55	3.28	8.17	-116.54	-3,753.00	-7,514.55	8,526.51	8,515.69	10.82	788.076		
200.00	200.00	1,584.00	1,629.02	3.34	8.51	-116.51	-3,744.32	-7,507.10	8,509.91	8,498.78	11.13	764.713		
300.00	299.98	1,584.00	1,629.02	3.44	8.51	60.66	-3,744.32	-7,507.10	8,492.84	8,481.64	11.20	758.306		
400.00	399.84	1,703.13	1,746.29	3.59	9.13	61.08	-3,727.75	-7,494.25	8,474.39	8,462.53	11.86	714.632		
500.00	499.45	1,754.20	1,796.59	3.79	9.39	61.49	-3,720.74	-7,488.85	8,454.59	8,442.33	12.26	689.643		
600.00	598.70	1,848.00	1,889.09	4.03	9.88	61.99	-3,708.72	-7,478.90	8,433.57	8,420.67	12.90	653.933		
700.00	697.47	1,911.47	1,951.68	4.31	10.21	62.49	-3,700.80	-7,472.06	8,411.03	8,397.59	13.44	625.873		
800.00	795.62	800.00	2,056.16	4.64	4.86	63.10	-3,687.09	-7,461.30	8,387.28	8,377.99	9.29	903.224		
900.00	893.06	2,290.00	2,324.61	5.00	12.22	64.10	-3,652.73	-7,428.72	8,360.33	8,344.55	15.78	529.866		
1,000.00	989.64	2,498.94	2,529.74	5.40	13.39	65.11	-3,624.89	-7,400.40	8,330.48	8,313.38	17.10	487.292		
1,100.00	1,085.27	2,551.59	2,581.41	5.83	13.69	65.83	-3,617.96	-7,393.07	8,299.32	8,281.59	17.73	468.045		
1,200.00	1,179.82	2,871.41	2,894.49	6.29	15.55	67.34	-3,572.29	-7,346.66	8,266.40	8,246.77	19.63	421.131		
1,300.00	1,273.17	2,913.40	2,935.47	6.79	15.80	68.17	-3,565.78	-7,340.22	8,230.89	8,210.61	20.29	405.759		
1,400.00	1,365.21	2,954.84	2,975.97	7.33	16.05	69.03	-3,559.59	-7,333.99	8,194.80	8,173.83	20.97	390.733		
1,500.00	1,456.49	1,500.00	3,087.81	7.89	7.67	69.46	-3,543.44	-7,316.65	8,158.51	8,143.70	14.82	550.654		
1,600.00	1,547.76	3,150.15	3,166.96	8.46	17.22	69.73	-3,532.27	-7,303.69	8,121.86	8,098.94	22.92	354.371		
1,700.00	1,639.04	3,200.00	3,215.79	9.05	17.52	69.90	-3,525.72	-7,296.05	8,086.04	8,062.34	23.70	341.174		
1,800.00	1,730.31	3,275.66	3,289.93	9.65	17.96	70.16	-3,515.86	-7,284.64	8,050.76	8,026.15	24.61	327.130		
1,900.00	1,821.58	3,343.84	3,356.69	10.26	18.36	70.39	-3,506.84	-7,274.14	8,015.44	7,989.94	25.50	314.331		
2,000.00	1,912.85	3,391.00	3,402.90	10.87	18.64	70.55	-3,500.66	-7,267.05	7,980.67	7,954.36	26.31	303.340		
2,100.00	2,004.13	3,391.00	3,402.90	11.49	18.64	70.55	-3,500.66	-7,267.05	7,946.78	7,919.85	26.92	295.173		
2,200.00	2,095.40	3,436.89	3,447.95	12.11	18.90	70.71	-3,494.69	-7,260.63	7,913.49	7,885.75	27.75	285.215		
2,300.00	2,186.67	3,486.00	3,496.27	12.74	19.18	70.89	-3,488.31	-7,254.64	7,881.42	7,852.83	28.59	275.655		
2,400.00	2,277.95	3,486.00	3,496.27	13.38	19.18	70.89	-3,488.31	-7,254.64	7,849.91	7,820.68	29.23	268.556		
2,500.00	2,369.22	2,500.00	3,597.78	14.01	13.72	71.25	-3,474.54	-7,242.64	7,818.86	7,793.66	25.20	310.322		
2,600.00	2,460.49	3,614.94	3,623.16	14.65	19.89	71.35	-3,470.93	-7,239.75	7,788.35	7,757.26	31.10	250.457		
2,700.00	2,551.77	3,636.85	3,644.73	15.29	20.01	71.43	-3,467.85	-7,237.53	7,758.81	7,726.96	31.85	243.593		
2,800.00	2,643.04	4,073.80	4,073.18	15.93	22.53	73.11	-3,397.59	-7,189.28	7,729.22	7,694.73	34.50	224.053		
2,900.00	2,734.31	4,120.91	4,119.33	16.58	22.80	73.29	-3,390.84	-7,182.61	7,696.98	7,661.60	35.38	217.552		
3,000.00	2,825.58	4,248.00	4,243.85	17.23	23.56	73.76	-3,374.01	-7,163.59	7,664.56	7,627.95	36.61	209.384		
3,100.00	2,916.86	4,298.76	4,293.54	17.87	23.85	73.94	-3,367.19	-7,155.77	7,632.37	7,594.85	37.51	203.471		
3,200.00	3,008.13	4,343.00	4,336.99	18.52	24.11	74.11	-3,361.53	-7,149.67	7,601.45	7,563.06	38.39	197.987		
3,300.00	3,099.40	4,343.00	4,336.99	19.17	24.11	74.11	-3,361.53	-7,149.67	7,571.24	7,532.14	39.09	193.669		
3,400.00	3,190.68	4,445.54	4,437.78	19.83	24.70	74.49	-3,348.11	-7,136.39	7,541.66	7,501.43	40.23	187.453		
3,500.00	3,281.95	4,482.45	4,474.06	20.48	24.91	74.64	-3,343.15	-7,131.75	7,512.54	7,471.44	41.10	182.796		
3,600.00	3,373.22	4,534.00	4,524.77	21.13	25.20	74.83	-3,336.34	-7,125.55	7,484.19	7,442.16	42.03	178.069		
3,700.00	3,464.49	4,587.37	4,577.34	21.79	25.49	75.04	-3,329.63	-7,119.26	7,456.49	7,413.52	42.97	173.534		
3,800.00	3,555.77	4,629.00	4,618.39	22.44	25.72	75.19	-3,324.76	-7,114.29	7,429.30	7,385.44	43.86	169.384		
3,900.00	3,647.04	4,666.95	4,655.85	23.10	25.92	75.33	-3,320.54	-7,109.93	7,402.92	7,358.19	44.74	165.480		
4,000.00	3,738.31	4,693.78	4,682.38	23.75	26.07	75.43	-3,317.66	-7,107.08	7,377.52	7,331.96	45.57	161.903		
4,100.00	3,829.59	4,724.00	4,712.28	24.41	26.23	75.55	-3,314.52	-7,104.11	7,353.08	7,306.67	46.41	158.422		
4,200.00	3,920.86	4,200.00	4,815.71	25.07	23.54	75.93	-3,304.24	-7,093.72	7,328.98	7,284.32	44.67	164.087		
4,300.00	4,012.13	4,867.36	4,854.26	25.73	26.96	76.08	-3,300.69	-7,089.84	7,305.39	7,256.95	48.45	150.785		
4,400.00	4,103.41	4,915.00	4,901.51	26.38	27.19	76.25	-3,296.45	-7,085.55	7,282.77	7,233.40	49.37	147.516		
4,500.00	4,194.68	4,915.00	4,901.51	27.04	27.19	76.25	-3,296.45	-7,085.55	7,261.05	7,210.95	50.09	144.947		
4,600.00	4,285.95	4,985.54	4,971.57	27.70	27.53	76.51	-3,290.40	-7,079.85	7,239.97	7,188.86	51.11	141.662		
4,700.00	4,377.22	5,030.14	5,015.88	28.36	27.74	76.68	-3,286.67	-7,076.57	7,219.77	7,167.76	52.02	138.800		
4,800.00	4,468.50	5,104.00	5,089.34	29.02	28.09	76.95	-3,280.64	-7,071.69	7,200.48	7,147.43	53.05	135.740		
4,900.00	4,559.77	5,104.00	5,089.34	29.68	28.09	76.95	-3,280.64	-7,071.69	7,181.79	7,128.02	53.77	133.564		
5,000.00	4,651.04	5,157.94	5,143.03	30.34	28.33	77.15	-3,276.57	-7,068.56	7,164.00	7,109.29	54.71	130.945		
5,100.00	4,742.32	5,198.29	5,183.24	31.00	28.50	77.30	-3,273.87	-7,066.47	7,147.10	7,091.50	55.59	128.558		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21-4(PR_150CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 172-MWD													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,200.00	4,833.59	5,238.99	5,223.81	31.66	28.68	77.44	-3,271.43	-7,064.57	7,131.06	7,074.58	56.48	126.260		
5,300.00	4,924.86	5,294.00	5,278.71	32.32	28.92	77.64	-3,268.60	-7,062.35	7,115.91	7,058.49	57.42	123.922		
5,400.00	5,016.13	5,333.68	5,318.33	32.99	29.08	77.78	-3,266.82	-7,060.93	7,101.51	7,043.22	58.29	121.825		
5,500.00	5,107.41	5,393.95	5,378.51	33.65	29.32	77.99	-3,264.33	-7,058.94	7,087.78	7,028.53	59.24	119.637		
5,600.00	5,198.68	5,454.50	5,439.00	34.31	29.56	78.20	-3,262.09	-7,057.14	7,074.67	7,014.47	60.20	117.528		
5,700.00	5,289.95	5,515.35	5,499.79	34.97	29.80	78.41	-3,260.12	-7,055.53	7,062.18	7,001.03	61.15	115.492		
5,800.00	5,381.23	5,579.00	5,563.40	35.63	30.05	78.63	-3,258.35	-7,054.07	7,050.31	6,988.20	62.11	113.509		
5,900.00	5,472.50	5,636.96	5,621.33	36.30	30.27	78.83	-3,256.97	-7,052.94	7,039.06	6,976.02	63.04	111.653		
6,000.00	5,563.77	5,697.61	5,681.96	36.96	30.49	79.04	-3,255.72	-7,051.99	7,028.44	6,964.45	63.99	109.845		
6,100.00	5,655.05	5,758.47	5,742.81	37.62	30.71	79.25	-3,254.67	-7,051.25	7,018.44	6,953.52	64.93	108.098		
6,200.00	5,746.32	5,819.54	5,803.87	38.28	30.94	79.45	-3,253.82	-7,050.74	7,009.07	6,943.20	65.87	106.412		
6,300.00	5,837.59	5,882.84	5,867.17	38.95	31.17	79.67	-3,253.14	-7,050.45	7,000.32	6,933.51	66.81	104.773		
6,400.00	5,928.86	5,951.62	5,935.94	39.61	31.41	79.90	-3,252.50	-7,050.36	6,992.12	6,924.34	67.77	103.167		
6,500.00	6,020.14	6,020.43	6,004.74	40.27	31.65	80.13	-3,251.88	-7,050.49	6,984.45	6,915.71	68.74	101.614		
6,600.00	6,111.41	6,089.28	6,073.59	40.94	31.89	80.36	-3,251.29	-7,050.83	6,977.30	6,907.60	69.70	100.112		
6,700.00	6,202.68	6,161.29	6,145.60	41.60	32.15	80.61	-3,250.71	-7,051.42	6,970.68	6,900.01	70.67	98.642		
6,800.00	6,293.96	6,260.24	6,244.54	42.26	32.49	80.94	-3,249.84	-7,052.28	6,964.36	6,892.61	71.75	97.068		
6,900.00	6,385.23	6,359.04	6,343.33	42.93	32.84	81.28	-3,248.81	-7,053.05	6,958.17	6,885.35	72.83	95.544		
7,000.00	6,476.50	6,457.70	6,441.98	43.59	33.19	81.62	-3,247.64	-7,053.72	6,952.13	6,878.23	73.91	94.068		
7,100.00	6,567.77	6,532.68	6,516.95	44.25	33.46	81.88	-3,246.68	-7,054.31	6,946.42	6,871.53	74.90	92.749		
7,200.00	6,658.64	6,611.41	6,595.68	44.91	33.74	82.10	-3,245.64	-7,055.06	6,934.92	6,859.04	75.89	91.386		
7,300.00	6,747.14	6,688.25	6,672.50	45.52	34.01	82.31	-3,244.58	-7,055.92	6,908.56	6,831.74	76.82	89.938		
7,400.00	6,831.10	6,754.22	6,738.46	46.07	34.25	82.50	-3,243.66	-7,056.78	6,867.84	6,790.22	77.62	88.478		
7,500.00	6,908.46	6,809.45	6,793.67	46.54	34.44	82.68	-3,242.97	-7,057.67	6,813.80	6,735.50	78.30	87.018		
7,600.00	6,977.30	6,859.14	6,843.35	46.95	34.61	82.81	-3,242.44	-7,058.62	6,747.67	6,668.79	78.88	85.539		
7,700.00	7,035.93	6,902.07	6,886.27	47.30	34.76	82.99	-3,242.05	-7,059.56	6,670.93	6,591.57	79.36	84.059		
7,800.00	7,082.92	6,937.13	6,921.32	47.59	34.89	83.10	-3,241.77	-7,060.41	6,585.34	6,505.61	79.73	82.599		
7,900.00	7,117.09	6,963.39	6,947.58	47.84	34.98	83.24	-3,241.59	-7,061.08	6,492.90	6,412.92	79.98	81.182		
8,000.00	7,137.62	6,980.10	6,964.28	48.06	35.04	83.38	-3,241.49	-7,061.54	6,395.78	6,315.66	80.12	79.829		
8,100.00	7,143.99	6,986.73	6,970.90	48.28	35.06	83.50	-3,241.45	-7,061.72	6,296.34	6,216.19	80.15	78.559		
8,200.00	7,143.45	6,988.37	6,972.55	48.53	35.07	83.60	-3,241.44	-7,061.77	6,196.54	6,116.41	80.13	77.334		
8,300.00	7,142.91	6,990.03	6,974.20	48.89	35.07	83.70	-3,241.43	-7,061.81	6,096.74	6,016.63	80.11	76.108		
8,400.00	7,142.37	6,991.70	6,975.87	49.40	35.08	83.78	-3,241.42	-7,061.86	5,996.95	5,916.87	80.09	74.882		
8,500.00	7,141.83	6,993.39	6,977.56	50.12	35.08	83.84	-3,241.41	-7,061.91	5,897.17	5,817.10	80.07	73.654		
8,600.00	7,141.29	7,010.00	6,994.17	51.08	35.14	83.88	-3,241.32	-7,062.39	5,797.42	5,717.32	80.10	72.373		
8,700.00	7,140.75	7,010.00	6,994.17	52.30	35.14	83.90	-3,241.32	-7,062.39	5,697.65	5,617.57	80.08	71.150		
8,800.00	7,140.21	7,010.00	6,994.17	53.75	35.14	83.92	-3,241.32	-7,062.39	5,597.88	5,517.83	80.05	69.927		
8,900.00	7,139.67	7,010.00	6,994.17	55.40	35.14	83.93	-3,241.32	-7,062.39	5,498.13	5,418.10	80.03	68.702		
9,000.00	7,139.12	7,010.00	6,994.17	57.20	35.14	83.94	-3,241.32	-7,062.39	5,398.38	5,318.37	80.00	67.476		
9,100.00	7,138.58	7,010.00	6,994.17	59.13	35.14	83.94	-3,241.32	-7,062.39	5,298.64	5,218.66	79.98	66.249		
9,200.00	7,138.04	7,010.00	6,994.17	61.15	35.14	83.94	-3,241.32	-7,062.39	5,198.91	5,118.95	79.96	65.020		
9,300.00	7,137.50	7,010.00	6,994.17	63.26	35.14	83.94	-3,241.32	-7,062.39	5,099.19	5,019.26	79.94	63.790		
9,400.00	7,136.96	7,010.00	6,994.17	65.44	35.14	83.94	-3,241.32	-7,062.39	4,999.49	4,919.57	79.92	62.559		
9,500.00	7,136.42	7,011.25	6,995.42	67.68	35.15	83.94	-3,241.32	-7,062.42	4,899.79	4,819.89	79.90	61.323		
9,600.00	7,135.88	7,013.42	6,997.58	69.97	35.15	83.94	-3,241.31	-7,062.49	4,800.11	4,720.22	79.89	60.084		
9,700.00	7,135.34	7,015.59	6,999.76	72.31	35.16	83.94	-3,241.29	-7,062.55	4,700.44	4,620.56	79.88	58.843		
9,800.00	7,134.80	7,017.78	7,001.94	74.69	35.17	83.94	-3,241.28	-7,062.61	4,600.78	4,520.91	79.87	57.601		
9,900.00	7,134.26	7,019.98	7,004.14	77.10	35.18	83.94	-3,241.27	-7,062.68	4,501.14	4,421.27	79.87	56.357		
10,000.00	7,133.71	7,022.19	7,006.35	79.54	35.19	83.94	-3,241.26	-7,062.74	4,401.51	4,321.65	79.86	55.113		
10,100.00	7,133.17	7,024.41	7,008.57	82.02	35.19	83.94	-3,241.24	-7,062.81	4,301.90	4,222.04	79.86	53.867		
10,200.00	7,132.63	7,026.65	7,010.81	84.52	35.20	83.94	-3,241.23	-7,062.88	4,202.31	4,122.44	79.86	52.619		
10,300.00	7,132.09	7,028.89	7,013.05	87.04	35.21	83.94	-3,241.21	-7,062.94	4,102.73	4,022.86	79.87	51.370		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,131.55	7,031.15	7,015.31	89.58	35.22	-75.60	-3,241.20	-7,063.01	4,003.17	3,923.30	79.87	50.120		
10,500.00	7,131.01	7,033.42	7,017.57	92.15	35.22	-75.93	-3,241.18	-7,063.08	3,903.64	3,823.75	79.88	48.867		
10,600.00	7,130.47	7,035.70	7,019.85	94.73	35.23	-76.27	-3,241.17	-7,063.15	3,804.12	3,724.23	79.90	47.613		
10,700.00	7,129.93	7,037.99	7,022.15	97.33	35.24	-76.60	-3,241.15	-7,063.22	3,704.64	3,624.72	79.92	46.356		
10,800.00	7,129.39	7,040.30	7,024.45	99.94	35.25	-76.94	-3,241.13	-7,063.28	3,605.17	3,525.23	79.94	45.098		
10,900.00	7,128.84	7,042.62	7,026.77	102.56	35.26	-77.28	-3,241.11	-7,063.35	3,505.74	3,425.77	79.97	43.836		
11,000.00	7,128.30	7,044.95	7,029.09	105.20	35.27	-77.63	-3,241.09	-7,063.43	3,406.34	3,326.33	80.01	42.572		
11,100.00	7,127.76	7,047.29	7,031.44	107.85	35.27	-77.97	-3,241.07	-7,063.50	3,306.98	3,226.91	80.06	41.306		
11,200.00	7,127.22	7,049.64	7,033.79	110.51	35.28	-78.32	-3,241.05	-7,063.57	3,207.65	3,127.53	80.12	40.035		
11,300.00	7,126.68	7,052.01	7,036.15	113.18	35.29	-78.68	-3,241.03	-7,063.64	3,108.36	3,028.17	80.19	38.762		
11,400.00	7,126.14	7,054.39	7,038.53	115.86	35.30	-79.03	-3,241.01	-7,063.71	3,009.12	2,928.84	80.28	37.484		
11,500.00	7,125.60	7,056.78	7,040.92	118.55	35.31	-79.39	-3,240.99	-7,063.79	2,909.92	2,829.55	80.38	36.202		
11,600.00	7,125.06	7,059.19	7,043.33	121.25	35.32	-79.75	-3,240.97	-7,063.86	2,810.79	2,730.29	80.50	34.916		
11,700.00	7,124.52	7,061.61	7,045.75	123.95	35.32	-80.11	-3,240.95	-7,063.93	2,711.71	2,631.06	80.65	33.624		
11,800.00	7,123.97	7,064.04	7,048.18	126.66	35.33	-80.48	-3,240.92	-7,064.01	2,612.70	2,531.88	80.82	32.327		
11,900.00	7,123.43	7,066.48	7,050.62	129.38	35.34	-80.85	-3,240.90	-7,064.08	2,513.77	2,432.74	81.03	31.023		
12,000.00	7,122.89	7,068.94	7,053.08	132.10	35.35	-81.22	-3,240.87	-7,064.16	2,414.92	2,333.65	81.28	29.712		
12,100.00	7,122.35	7,071.41	7,055.55	134.83	35.36	-81.60	-3,240.85	-7,064.24	2,316.17	2,234.60	81.57	28.394		
12,200.00	7,121.81	7,073.90	7,058.03	137.56	35.37	-81.98	-3,240.82	-7,064.31	2,217.53	2,135.61	81.92	27.068		
12,300.00	7,121.27	7,076.40	7,060.53	140.30	35.38	-82.36	-3,240.79	-7,064.39	2,119.02	2,036.67	82.35	25.733		
12,400.00	7,120.73	7,078.91	7,063.04	143.05	35.38	-82.74	-3,240.76	-7,064.47	2,020.64	1,937.79	82.85	24.388		
12,500.00	7,120.19	7,081.44	7,065.57	145.80	35.39	-83.13	-3,240.73	-7,064.55	1,922.43	1,838.97	83.46	23.033		
12,600.00	7,119.65	7,083.98	7,068.11	148.55	35.40	-83.52	-3,240.70	-7,064.63	1,824.41	1,740.21	84.20	21.668		
12,700.00	7,119.10	7,086.53	7,070.66	151.30	35.41	-83.91	-3,240.67	-7,064.71	1,726.62	1,641.53	85.09	20.292		
12,800.00	7,118.56	7,089.10	7,073.23	154.07	35.42	-84.30	-3,240.64	-7,064.79	1,629.08	1,542.91	86.17	18.905		
12,900.00	7,118.02	7,091.69	7,075.81	156.83	35.43	-84.70	-3,240.61	-7,064.87	1,531.87	1,444.37	87.49	17.508		
13,000.00	7,117.48	7,094.29	7,078.41	159.60	35.44	-85.10	-3,240.58	-7,064.95	1,435.03	1,345.91	89.12	16.103		
13,100.00	7,116.94	7,096.90	7,081.02	162.37	35.45	-85.50	-3,240.54	-7,065.04	1,338.64	1,247.53	91.11	14.692		
13,200.00	7,116.40	7,099.53	7,083.65	165.14	35.46	-85.91	-3,240.51	-7,065.12	1,242.83	1,149.24	93.59	13.280		
13,300.00	7,115.86	7,102.17	7,086.29	167.92	35.47	-86.32	-3,240.47	-7,065.20	1,147.72	1,051.05	96.67	11.872		
13,400.00	7,115.32	7,104.83	7,088.94	170.70	35.48	-86.73	-3,240.44	-7,065.29	1,053.52	952.98	100.53	10.479		
13,500.00	7,114.78	7,107.50	7,091.61	173.48	35.49	-87.14	-3,240.40	-7,065.37	960.48	855.07	105.40	9.112		
13,600.00	7,114.24	7,110.19	7,094.30	176.26	35.49	-87.56	-3,240.36	-7,065.46	868.97	757.39	111.58	7.788		
13,700.00	7,113.69	7,112.89	7,097.00	179.05	35.50	-87.98	-3,240.33	-7,065.55	779.55	660.09	119.46	6.526		
13,800.00	7,113.15	7,115.61	7,099.72	181.84	35.51	-88.40	-3,240.29	-7,065.63	693.02	563.47	129.54	5.350		
13,900.00	7,112.61	7,118.34	7,102.45	184.63	35.52	-88.83	-3,240.25	-7,065.72	610.60	468.14	142.46	4.286		
14,000.00	7,112.07	7,121.09	7,105.20	187.42	35.53	-89.26	-3,240.20	-7,065.81	534.20	375.42	158.78	3.364		
14,100.00	7,111.53	7,123.86	7,107.97	190.22	35.54	-89.69	-3,240.16	-7,065.90	466.80	288.10	178.70	2.612		
14,200.00	7,110.99	7,126.64	7,110.75	193.01	35.55	-90.12	-3,240.12	-7,065.99	412.81	211.92	200.89	2.055		
14,300.00	7,110.45	7,129.44	7,113.54	195.81	35.56	-90.56	-3,240.07	-7,066.08	378.03	157.04	221.00	1.711		
14,387.62	7,109.97	7,131.91	7,116.01	198.27	35.57	-90.94	-3,240.03	-7,066.16	367.75	136.35	231.40	1.589 CC		
14,400.00	7,109.91	7,132.26	7,116.36	198.61	35.57	-90.99	-3,240.03	-7,066.18	367.96	135.89	232.07	1.586 ES, SF		
14,500.00	7,109.37	7,135.09	7,119.18	201.42	35.58	-91.44	-3,239.98	-7,066.27	384.52	154.55	229.97	1.672		
14,600.00	7,108.82	7,137.94	7,122.03	204.22	35.59	-91.88	-3,239.93	-7,066.36	424.63	206.86	217.77	1.950		
14,700.00	7,108.28	7,140.80	7,124.89	207.03	35.60	-92.32	-3,239.89	-7,066.46	482.44	280.77	201.67	2.392		
14,800.00	7,107.74	7,143.68	7,127.77	209.83	35.61	-92.77	-3,239.84	-7,066.55	552.42	366.50	185.92	2.971		
14,900.00	7,107.20	7,146.58	7,130.67	212.64	35.62	-93.22	-3,239.79	-7,066.65	630.53	458.34	172.19	3.662		
15,000.00	7,106.66	7,149.50	7,133.58	215.45	35.63	-93.68	-3,239.73	-7,066.75	714.11	553.35	160.76	4.442		
15,100.00	7,106.12	7,152.43	7,136.52	218.26	35.64	-94.13	-3,239.68	-7,066.84	801.45	650.08	151.38	5.294		
15,200.00	7,105.58	7,155.38	7,139.46	221.07	35.65	-94.59	-3,239.63	-7,066.94	891.45	747.76	143.69	6.204		
15,300.00	7,105.04	7,158.35	7,142.43	223.89	35.66	-95.05	-3,239.57	-7,067.04	983.37	846.02	137.35	7.159		
15,400.00	7,104.50	7,161.34	7,145.42	226.70	35.67	-95.51	-3,239.52	-7,067.14	1,076.73	944.64	132.09	8.151		

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



Anticollision Report



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

Offset Design	HARVESTERS STATE 7-15 PAD - FRITZLER 11-21-4(PR_150CC) - OH - OH											Offset Site Error:	0.00 ft
Survey Program:	172-MWD											Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	7,164.09	7,148.16	229.28	35.68	-95.94	-3,239.46	-7,067.23	1,163.17	1,035.14	128.03	9.085	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	66.00	3.28	3.28	-117.05	-3,910.72	-7,660.13	8,600.91					
100.00	100.00	34.00	100.00	3.28	3.33	-117.05	-3,910.72	-7,660.13	8,600.65	8,594.04	6.62	1,299.589		
200.00	200.00	134.00	200.00	3.34	4.40	-117.05	-3,910.72	-7,660.13	8,600.65	8,592.92	7.74	1,111.661		
300.00	299.98	233.98	299.98	3.44	7.21	59.85	-3,910.72	-7,660.13	8,599.78	8,589.13	10.65	807.394		
400.00	399.84	333.84	399.84	3.59	10.44	59.92	-3,910.72	-7,660.13	8,597.15	8,583.12	14.03	612.908		
500.00	499.45	433.45	499.45	3.79	13.78	60.05	-3,910.72	-7,660.13	8,592.78	8,575.21	17.57	489.062		
600.00	598.70	532.70	598.70	4.03	17.17	60.22	-3,910.72	-7,660.13	8,586.67	8,565.48	21.20	405.078		
700.00	697.47	631.47	697.47	4.31	20.56	60.45	-3,910.72	-7,660.13	8,578.86	8,553.98	24.88	344.874		
800.00	795.62	729.62	795.62	4.64	23.95	60.73	-3,910.72	-7,660.13	8,569.35	8,540.77	28.58	299.793		
900.00	893.06	827.06	893.06	5.00	27.32	61.05	-3,910.72	-7,660.13	8,558.19	8,525.88	32.31	264.861		
1,000.00	989.64	923.64	989.64	5.40	30.67	61.42	-3,910.72	-7,660.13	8,545.40	8,509.35	36.05	237.048		
1,100.00	1,085.27	1,019.27	1,085.27	5.83	34.00	61.85	-3,910.72	-7,660.13	8,531.03	8,491.24	39.79	214.408		
1,200.00	1,179.82	1,113.82	1,179.82	6.29	37.28	62.32	-3,910.72	-7,660.13	8,515.11	8,471.59	43.52	195.639		
1,300.00	1,273.17	1,207.17	1,273.17	6.79	40.53	62.83	-3,910.72	-7,660.13	8,497.70	8,450.45	47.25	179.841		
1,400.00	1,365.21	1,300.79	1,365.21	7.33	43.79	63.40	-3,910.72	-7,660.13	8,478.85	8,427.83	51.02	166.189		
1,500.00	1,456.49	1,409.51	1,456.49	7.89	47.57	63.65	-3,910.72	-7,660.13	8,459.29	8,403.95	55.34	152.869		
1,600.00	1,547.76	1,481.76	1,547.76	8.46	50.09	63.88	-3,910.72	-7,660.13	8,439.87	8,381.48	58.40	144.519		
1,700.00	1,639.04	1,573.04	1,639.04	9.05	53.27	64.11	-3,910.72	-7,660.13	8,420.62	8,358.48	62.14	135.512		
1,800.00	1,730.31	1,664.31	1,730.31	9.65	56.45	64.34	-3,910.72	-7,660.13	8,401.51	8,335.62	65.89	127.508		
1,900.00	1,821.58	1,755.58	1,821.58	10.26	59.63	64.58	-3,910.72	-7,660.13	8,382.56	8,312.91	69.65	120.350		
2,000.00	1,912.85	1,846.85	1,912.85	10.87	62.81	64.81	-3,910.72	-7,660.13	8,363.77	8,290.35	73.42	113.915		
2,100.00	2,004.13	1,938.13	2,004.13	11.49	66.00	65.05	-3,910.72	-7,660.13	8,345.14	8,267.94	77.20	108.101		
2,200.00	2,095.40	2,029.40	2,095.40	12.11	69.18	65.29	-3,910.72	-7,660.13	8,326.66	8,245.68	80.98	102.822		
2,300.00	2,186.67	2,120.67	2,186.67	12.74	72.36	65.52	-3,910.72	-7,660.13	8,308.35	8,223.58	84.77	98.011		
2,400.00	2,277.95	2,211.95	2,277.95	13.38	75.54	65.76	-3,910.72	-7,660.13	8,290.19	8,201.63	88.56	93.607		
2,500.00	2,369.22	2,303.22	2,369.22	14.01	78.73	66.00	-3,910.72	-7,660.13	8,272.20	8,179.84	92.36	89.563		
2,600.00	2,460.49	2,405.51	2,460.49	14.65	82.30	66.24	-3,910.72	-7,660.13	8,254.37	8,157.82	96.55	85.495		
2,700.00	2,551.77	2,485.77	2,551.77	15.29	85.10	66.48	-3,910.72	-7,660.13	8,236.70	8,136.73	99.97	82.392		
2,800.00	2,643.04	2,577.04	2,643.04	15.93	88.28	66.72	-3,910.72	-7,660.13	8,219.20	8,115.42	103.78	79.199		
2,900.00	2,734.31	2,668.31	2,734.31	16.58	91.46	66.97	-3,910.72	-7,660.13	8,201.87	8,094.28	107.59	76.232		
3,000.00	2,825.58	2,759.58	2,825.58	17.23	94.65	67.21	-3,910.72	-7,660.13	8,184.70	8,073.29	111.41	73.467		
3,100.00	2,916.86	2,850.86	2,916.86	17.87	97.83	67.46	-3,910.72	-7,660.13	8,167.70	8,052.48	115.22	70.886		
3,200.00	3,008.13	2,942.13	3,008.13	18.52	101.02	67.70	-3,910.72	-7,660.13	8,150.87	8,031.83	119.04	68.470		
3,300.00	3,099.40	3,033.40	3,099.40	19.17	104.20	67.95	-3,910.72	-7,660.13	8,134.21	8,011.35	122.87	66.204		
3,400.00	3,190.68	3,124.68	3,190.68	19.83	107.39	68.20	-3,910.72	-7,660.13	8,117.72	7,991.03	126.69	64.076		
3,500.00	3,281.95	3,215.95	3,281.95	20.48	110.57	68.44	-3,910.72	-7,660.13	8,101.41	7,970.89	130.52	62.072		
3,600.00	3,373.22	3,307.22	3,373.22	21.13	113.76	68.69	-3,910.72	-7,660.13	8,085.27	7,950.92	134.34	60.183		
3,700.00	3,464.49	3,401.51	3,464.49	21.79	117.05	68.94	-3,910.72	-7,660.13	8,069.30	7,931.02	138.28	58.355		
3,800.00	3,555.77	3,489.77	3,555.77	22.44	120.13	69.19	-3,910.72	-7,660.13	8,053.51	7,911.50	142.01	56.713		
3,900.00	3,647.04	3,581.04	3,647.04	23.10	123.31	69.44	-3,910.72	-7,660.13	8,037.89	7,892.05	145.84	55.115		
4,000.00	3,738.31	3,672.31	3,738.31	23.75	126.50	69.70	-3,910.72	-7,660.13	8,022.45	7,872.78	149.67	53.600		
4,100.00	3,829.59	3,763.59	3,829.59	24.41	129.68	69.95	-3,910.72	-7,660.13	8,007.20	7,853.69	153.51	52.161		
4,200.00	3,920.86	3,854.86	3,920.86	25.07	132.87	70.20	-3,910.72	-7,660.13	7,992.12	7,834.77	157.35	50.793		
4,300.00	4,012.13	3,946.13	4,012.13	25.73	136.05	70.46	-3,910.72	-7,660.13	7,977.22	7,816.03	161.19	49.491		
4,400.00	4,103.41	4,037.41	4,103.41	26.38	139.24	70.71	-3,910.72	-7,660.13	7,962.50	7,797.48	165.03	48.250		
4,500.00	4,194.68	4,128.68	4,194.68	27.04	142.42	70.97	-3,910.72	-7,660.13	7,947.97	7,779.10	168.87	47.066		
4,600.00	4,285.95	4,219.95	4,285.95	27.70	145.61	71.23	-3,910.72	-7,660.13	7,933.62	7,760.91	172.71	45.936		
4,700.00	4,377.22	4,311.22	4,377.22	28.36	148.80	71.49	-3,910.72	-7,660.13	7,919.45	7,742.90	176.55	44.856		
4,800.00	4,468.50	4,402.50	4,468.50	29.02	151.98	71.74	-3,910.72	-7,660.13	7,905.48	7,725.08	180.40	43.822		
4,900.00	4,559.77	4,506.23	4,559.77	29.68	155.60	72.00	-3,910.72	-7,660.13	7,891.68	7,707.00	184.68	42.732		
5,000.00	4,651.04	4,585.04	4,651.04	30.34	158.35	72.26	-3,910.72	-7,660.13	7,878.08	7,689.99	188.09	41.884		
5,100.00	4,742.32	4,676.32	4,742.32	31.00	161.54	72.53	-3,910.72	-7,660.13	7,864.66	7,672.72	191.94	40.974		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,767.59	4,833.59	31.66	164.72	72.79	-3,910.72	-7,660.13	7,851.44	7,655.65	195.79	40.101		
5,300.00	4,924.86	4,858.86	4,924.86	32.32	167.91	73.05	-3,910.72	-7,660.13	7,838.40	7,638.76	199.64	39.263		
5,400.00	5,016.13	4,950.13	5,016.13	32.99	171.10	73.31	-3,910.72	-7,660.13	7,825.56	7,622.07	203.49	38.457		
5,500.00	5,107.41	5,041.41	5,107.41	33.65	174.28	73.58	-3,910.72	-7,660.13	7,812.90	7,605.56	207.34	37.681		
5,600.00	5,198.68	5,132.68	5,198.68	34.31	177.47	73.84	-3,910.72	-7,660.13	7,800.45	7,589.25	211.20	36.935		
5,700.00	5,289.95	5,223.95	5,289.95	34.97	180.65	74.11	-3,910.72	-7,660.13	7,788.18	7,573.13	215.05	36.216		
5,800.00	5,381.23	5,315.23	5,381.23	35.63	183.84	74.37	-3,910.72	-7,660.13	7,776.11	7,557.21	218.90	35.523		
5,900.00	5,472.50	5,406.50	5,472.50	36.30	187.02	74.64	-3,910.72	-7,660.13	7,764.24	7,541.48	222.76	34.855		
6,000.00	5,563.77	5,502.23	5,563.77	36.96	190.37	74.91	-3,910.72	-7,660.13	7,752.57	7,525.80	226.77	34.187		
6,100.00	5,655.05	5,589.05	5,655.05	37.62	193.40	75.18	-3,910.72	-7,660.13	7,741.09	7,510.62	230.47	33.588		
6,200.00	5,746.32	5,680.32	5,746.32	38.28	196.58	75.45	-3,910.72	-7,660.13	7,729.81	7,495.49	234.33	32.987		
6,300.00	5,837.59	5,771.59	5,837.59	38.95	199.77	75.72	-3,910.72	-7,660.13	7,718.73	7,480.55	238.18	32.407		
6,400.00	5,928.86	5,862.86	5,928.86	39.61	202.95	75.99	-3,910.72	-7,660.13	7,707.86	7,465.81	242.04	31.845		
6,500.00	6,020.14	5,954.14	6,020.14	40.27	206.14	76.26	-3,910.72	-7,660.13	7,697.18	7,451.28	245.90	31.302		
6,600.00	6,111.41	6,045.41	6,111.41	40.94	209.33	76.53	-3,910.72	-7,660.13	7,686.71	7,436.95	249.76	30.776		
6,700.00	6,202.68	6,136.68	6,202.68	41.60	212.51	76.80	-3,910.72	-7,660.13	7,676.44	7,422.82	253.62	30.267		
6,800.00	6,293.96	6,227.96	6,293.96	42.26	215.70	77.07	-3,910.72	-7,660.13	7,666.37	7,408.89	257.48	29.774		
6,900.00	6,385.23	6,319.23	6,385.23	42.93	218.88	77.35	-3,910.72	-7,660.13	7,656.51	7,395.17	261.34	29.297		
7,000.00	6,476.50	6,410.50	6,476.50	43.59	222.07	77.62	-3,910.72	-7,660.13	7,646.85	7,381.65	265.20	28.834		
7,100.00	6,567.77	6,501.77	6,567.77	44.25	225.26	77.89	-3,910.72	-7,660.13	7,637.40	7,368.34	269.07	28.385		
7,200.00	6,658.64	6,607.36	6,658.64	44.91	228.94	61.00	-3,910.72	-7,660.13	7,622.05	7,348.64	273.41	27.877		
7,300.00	6,747.14	6,681.14	6,747.14	45.52	231.52	45.70	-3,910.72	-7,660.13	7,591.89	7,315.30	276.59	27.448		
7,400.00	6,831.10	6,765.10	6,831.10	46.07	234.45	34.68	-3,910.72	-7,660.13	7,547.51	7,267.46	280.05	26.951		
7,500.00	6,908.46	6,842.46	6,908.46	46.54	237.15	26.68	-3,910.72	-7,660.13	7,489.95	7,206.76	283.19	26.449		
7,600.00	6,977.30	6,911.30	6,977.30	46.95	239.55	20.39	-3,910.72	-7,660.13	7,420.58	7,134.63	285.95	25.951		
7,700.00	7,035.93	6,969.93	7,035.93	47.30	241.60	14.61	-3,910.72	-7,660.13	7,341.05	7,052.78	288.27	25.466		
7,800.00	7,082.92	7,016.92	7,082.92	47.59	243.24	7.84	-3,910.72	-7,660.13	7,253.29	6,963.19	290.10	25.003		
7,900.00	7,117.09	7,051.09	7,117.09	47.84	244.43	-3.43	-3,910.72	-7,660.13	7,159.44	6,868.04	291.40	24.569		
8,000.00	7,137.62	7,071.62	7,137.62	48.06	245.15	-32.00	-3,910.72	-7,660.13	7,061.80	6,769.65	292.14	24.172		
8,100.00	7,143.99	7,077.99	7,143.99	48.28	245.37	-92.06	-3,910.72	-7,660.13	6,962.79	6,670.46	292.33	23.818		
8,200.00	7,143.45	7,077.45	7,143.45	48.53	245.35	-92.03	-3,910.72	-7,660.13	6,863.92	6,571.67	292.24	23.487		
8,300.00	7,142.91	7,076.91	7,142.91	48.89	245.33	-92.00	-3,910.72	-7,660.13	6,765.08	6,472.91	292.17	23.155		
8,400.00	7,142.37	7,076.37	7,142.37	49.40	245.31	-91.97	-3,910.72	-7,660.13	6,666.27	6,374.19	292.09	22.823		
8,500.00	7,141.83	7,075.83	7,141.83	50.12	245.29	-91.94	-3,910.72	-7,660.13	6,567.51	6,275.49	292.02	22.490		
8,600.00	7,141.29	7,075.29	7,141.29	51.08	245.28	-91.91	-3,910.72	-7,660.13	6,468.78	6,176.83	291.95	22.157		
8,700.00	7,140.75	7,074.75	7,140.75	52.30	245.26	-91.88	-3,910.72	-7,660.13	6,370.09	6,078.20	291.89	21.824		
8,800.00	7,140.21	7,074.21	7,140.21	53.75	245.24	-91.85	-3,910.72	-7,660.13	6,271.44	5,979.61	291.83	21.490		
8,900.00	7,139.67	7,073.67	7,139.67	55.40	245.22	-91.82	-3,910.72	-7,660.13	6,172.83	5,881.05	291.78	21.156		
9,000.00	7,139.12	7,073.12	7,139.12	57.20	245.20	-91.79	-3,910.72	-7,660.13	6,074.27	5,782.53	291.74	20.821		
9,100.00	7,138.58	7,072.58	7,138.58	59.13	245.18	-91.76	-3,910.72	-7,660.13	5,975.76	5,684.06	291.70	20.486		
9,200.00	7,138.04	7,072.04	7,138.04	61.15	245.16	-91.73	-3,910.72	-7,660.13	5,877.30	5,585.63	291.67	20.150		
9,300.00	7,137.50	7,071.50	7,137.50	63.26	245.14	-91.70	-3,910.72	-7,660.13	5,778.89	5,487.24	291.65	19.814		
9,400.00	7,136.96	7,070.96	7,136.96	65.44	245.12	-91.67	-3,910.72	-7,660.13	5,680.53	5,388.89	291.64	19.478		
9,500.00	7,136.42	7,070.42	7,136.42	67.68	245.11	-91.64	-3,910.72	-7,660.13	5,582.24	5,290.60	291.64	19.141		
9,600.00	7,135.88	7,069.88	7,135.88	69.97	245.09	-91.61	-3,910.72	-7,660.13	5,484.01	5,192.35	291.66	18.803		
9,700.00	7,135.34	7,069.34	7,135.34	72.31	245.07	-91.58	-3,910.72	-7,660.13	5,385.84	5,094.16	291.68	18.465		
9,800.00	7,134.80	7,068.80	7,134.80	74.69	245.05	-91.55	-3,910.72	-7,660.13	5,287.74	4,996.01	291.72	18.126		
9,900.00	7,134.26	7,068.26	7,134.26	77.10	245.03	-91.52	-3,910.72	-7,660.13	5,189.71	4,897.93	291.78	17.787		
10,000.00	7,133.71	7,067.71	7,133.71	79.54	245.01	-91.49	-3,910.72	-7,660.13	5,091.76	4,799.91	291.85	17.447		
10,100.00	7,133.17	7,067.17	7,133.17	82.02	244.99	-91.46	-3,910.72	-7,660.13	4,993.89	4,701.95	291.94	17.106		
10,200.00	7,132.63	7,066.63	7,132.63	84.52	244.97	-91.43	-3,910.72	-7,660.13	4,896.10	4,604.05	292.05	16.764		
10,300.00	7,132.09	7,066.09	7,132.09	87.04	244.95	-91.40	-3,910.72	-7,660.13	4,798.41	4,506.22	292.19	16.422		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,131.55	7,065.55	7,131.55	89.58	244.94	-91.37	-3,910.72	-7,660.13	4,700.81	4,408.46	292.35	16.079		
10,500.00	7,131.01	7,065.01	7,131.01	92.15	244.92	-91.34	-3,910.72	-7,660.13	4,603.32	4,310.78	292.54	15.736		
10,600.00	7,130.47	7,064.47	7,130.47	94.73	244.90	-91.31	-3,910.72	-7,660.13	4,505.94	4,213.18	292.76	15.391		
10,700.00	7,129.93	7,063.93	7,129.93	97.33	244.88	-91.28	-3,910.72	-7,660.13	4,408.67	4,115.66	293.02	15.046		
10,800.00	7,129.39	7,063.39	7,129.39	99.94	244.86	-91.25	-3,910.72	-7,660.13	4,311.53	4,018.23	293.31	14.700		
10,900.00	7,128.84	7,062.84	7,128.84	102.56	244.84	-91.22	-3,910.72	-7,660.13	4,214.53	3,920.89	293.64	14.353		
11,000.00	7,128.30	7,062.30	7,128.30	105.20	244.82	-91.19	-3,910.72	-7,660.13	4,117.66	3,823.64	294.02	14.005		
11,100.00	7,127.76	7,061.76	7,127.76	107.85	244.80	-91.16	-3,910.72	-7,660.13	4,020.95	3,726.51	294.45	13.656		
11,200.00	7,127.22	7,061.22	7,127.22	110.51	244.78	-91.13	-3,910.72	-7,660.13	3,924.41	3,629.48	294.93	13.306		
11,300.00	7,126.68	7,060.68	7,126.68	113.18	244.77	-91.10	-3,910.72	-7,660.13	3,828.04	3,532.57	295.47	12.956		
11,400.00	7,126.14	7,060.14	7,126.14	115.86	244.75	-91.07	-3,910.72	-7,660.13	3,731.86	3,435.78	296.08	12.604		
11,500.00	7,125.60	7,059.60	7,125.60	118.55	244.73	-91.04	-3,910.72	-7,660.13	3,635.89	3,339.13	296.76	12.252		
11,600.00	7,125.06	7,059.06	7,125.06	121.25	244.71	-91.01	-3,910.72	-7,660.13	3,540.14	3,242.62	297.52	11.899		
11,700.00	7,124.52	7,058.52	7,124.52	123.95	244.69	-90.98	-3,910.72	-7,660.13	3,444.64	3,146.27	298.37	11.545		
11,800.00	7,123.97	7,057.97	7,123.97	126.66	244.67	-90.95	-3,910.72	-7,660.13	3,349.39	3,050.08	299.31	11.190		
11,900.00	7,123.43	7,057.43	7,123.43	129.38	244.65	-90.92	-3,910.72	-7,660.13	3,254.43	2,954.07	300.36	10.835		
12,000.00	7,122.89	7,056.89	7,122.89	132.10	244.63	-90.89	-3,910.72	-7,660.13	3,159.79	2,858.25	301.53	10.479		
12,100.00	7,122.35	7,056.35	7,122.35	134.83	244.61	-90.86	-3,910.72	-7,660.13	3,065.48	2,762.65	302.83	10.123		
12,200.00	7,121.81	7,055.81	7,121.81	137.56	244.60	-90.83	-3,910.72	-7,660.13	2,971.54	2,667.28	304.26	9.766		
12,300.00	7,121.27	7,055.27	7,121.27	140.30	244.58	-90.80	-3,910.72	-7,660.13	2,878.01	2,572.16	305.85	9.410		
12,400.00	7,120.73	7,054.73	7,120.73	143.05	244.56	-90.77	-3,910.72	-7,660.13	2,784.94	2,477.32	307.61	9.053		
12,500.00	7,120.19	7,054.19	7,120.19	145.80	244.54	-90.74	-3,910.72	-7,660.13	2,692.35	2,382.80	309.56	8.697		
12,600.00	7,119.65	7,053.65	7,119.65	148.55	244.52	-90.71	-3,910.72	-7,660.13	2,600.32	2,288.61	311.71	8.342		
12,700.00	7,119.10	7,053.10	7,119.10	151.30	244.50	-90.68	-3,910.72	-7,660.13	2,508.90	2,194.82	314.08	7.988		
12,800.00	7,118.56	7,052.56	7,118.56	154.07	244.48	-90.65	-3,910.72	-7,660.13	2,418.16	2,101.45	316.71	7.635		
12,900.00	7,118.02	7,052.02	7,118.02	156.83	244.46	-90.62	-3,910.72	-7,660.13	2,328.17	2,008.57	319.60	7.285		
13,000.00	7,117.48	7,051.48	7,117.48	159.60	244.44	-90.59	-3,910.72	-7,660.13	2,239.04	1,916.25	322.78	6.937		
13,100.00	7,116.94	7,050.94	7,116.94	162.37	244.43	-90.56	-3,910.72	-7,660.13	2,150.86	1,824.56	326.30	6.592		
13,200.00	7,116.40	7,050.40	7,116.40	165.14	244.41	-90.53	-3,910.72	-7,660.13	2,063.75	1,733.59	330.17	6.251		
13,300.00	7,115.86	7,049.86	7,115.86	167.92	244.39	-90.50	-3,910.72	-7,660.13	1,977.87	1,643.45	334.42	5.914		
13,400.00	7,115.32	7,049.32	7,115.32	170.70	244.37	-90.47	-3,910.72	-7,660.13	1,893.38	1,554.28	339.10	5.583		
13,500.00	7,114.78	7,048.78	7,114.78	173.48	244.35	-90.45	-3,910.72	-7,660.13	1,810.46	1,466.22	344.24	5.259		
13,600.00	7,114.24	7,048.24	7,114.24	176.26	244.33	-90.42	-3,910.72	-7,660.13	1,729.36	1,379.48	349.88	4.943		
13,700.00	7,113.69	7,047.69	7,113.69	179.05	244.31	-90.39	-3,910.72	-7,660.13	1,650.33	1,294.29	356.04	4.635		
13,800.00	7,113.15	7,047.15	7,113.15	181.84	244.29	-90.36	-3,910.72	-7,660.13	1,573.68	1,210.93	362.75	4.338		
13,900.00	7,112.61	7,046.61	7,112.61	184.63	244.27	-90.33	-3,910.72	-7,660.13	1,499.79	1,129.74	370.05	4.053		
14,000.00	7,112.07	7,046.07	7,112.07	187.42	244.26	-90.30	-3,910.72	-7,660.13	1,429.08	1,051.16	377.92	3.781		
14,100.00	7,111.53	7,045.53	7,111.53	190.22	244.24	-90.27	-3,910.72	-7,660.13	1,362.04	975.70	386.35	3.525		
14,200.00	7,110.99	7,044.99	7,110.99	193.01	244.22	-90.24	-3,910.72	-7,660.13	1,299.25	903.97	395.28	3.287		
14,300.00	7,110.45	7,044.45	7,110.45	195.81	244.20	-90.21	-3,910.72	-7,660.13	1,241.35	836.74	404.60	3.068		
14,400.00	7,109.91	7,043.91	7,109.91	198.61	244.18	-90.18	-3,910.72	-7,660.13	1,189.05	774.88	414.17	2.871		
14,500.00	7,109.37	7,043.37	7,109.37	201.42	244.16	-90.15	-3,910.72	-7,660.13	1,143.12	719.40	423.72	2.698		
14,600.00	7,108.82	7,042.82	7,108.82	204.22	244.14	-90.12	-3,910.72	-7,660.13	1,104.37	671.39	432.98	2.551		
14,700.00	7,108.28	7,042.28	7,108.28	207.03	244.12	-90.09	-3,910.72	-7,660.13	1,073.55	632.00	441.55	2.431		
14,800.00	7,107.74	7,041.74	7,107.74	209.83	244.10	-90.06	-3,910.72	-7,660.13	1,051.38	602.33	449.05	2.341		
14,900.00	7,107.20	7,041.20	7,107.20	212.64	244.09	-90.03	-3,910.72	-7,660.13	1,038.41	583.30	455.11	2.282		
14,985.55	7,106.74	7,040.74	7,106.74	215.04	244.07	-90.00	-3,910.72	-7,660.13	1,034.88	575.96	458.92	2.255 CC		
15,000.00	7,106.66	7,040.66	7,106.66	215.45	244.07	-90.00	-3,910.72	-7,660.13	1,034.98	575.55	459.43	2.253 ES, SF		
15,100.00	7,106.12	7,040.12	7,106.12	218.26	244.05	-89.97	-3,910.72	-7,660.13	1,041.19	579.35	461.84	2.254		
15,200.00	7,105.58	7,039.58	7,105.58	221.07	244.03	-89.94	-3,910.72	-7,660.13	1,056.86	594.51	462.35	2.286		
15,300.00	7,105.04	7,039.04	7,105.04	223.89	244.01	-89.91	-3,910.72	-7,660.13	1,081.60	620.48	461.11	2.346		
15,400.00	7,104.50	7,038.50	7,104.50	226.70	243.99	-89.88	-3,910.72	-7,660.13	1,114.78	656.41	458.37	2.432		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)		
15,491.56	7,104.00	7,038.00	7,104.00	229.28	243.97	-89.85	-3,910.72	-7,660.13	1,151.96	697.14	454.82	2.533	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 1-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	51.00	3.28	3.28	-106.14	-2,593.32	-8,960.44	9,328.32					
100.00	100.00	49.00	100.00	3.28	3.39	-106.14	-2,593.32	-8,960.44	9,328.18	9,321.50	6.67	1,397.604		
200.00	200.00	149.00	200.00	3.34	4.76	-106.14	-2,593.32	-8,960.44	9,328.18	9,320.07	8.10	1,151.372		
300.00	299.98	248.98	299.98	3.44	7.68	70.75	-2,593.32	-8,960.44	9,327.60	9,316.48	11.12	838.721		
400.00	399.84	348.84	399.84	3.59	10.94	70.81	-2,593.32	-8,960.44	9,325.87	9,311.35	14.52	642.074		
500.00	499.45	448.45	499.45	3.79	14.29	70.91	-2,593.32	-8,960.44	9,323.01	9,304.93	18.08	515.705		
600.00	598.70	547.70	598.70	4.03	17.68	71.06	-2,593.32	-8,960.44	9,319.01	9,297.30	21.71	429.228		
700.00	697.47	646.47	697.47	4.31	21.08	71.25	-2,593.32	-8,960.44	9,313.90	9,288.51	25.39	366.794		
800.00	795.62	744.62	795.62	4.64	24.47	71.47	-2,593.32	-8,960.44	9,307.70	9,278.59	29.11	319.790		
900.00	893.06	842.06	893.06	5.00	27.84	71.74	-2,593.32	-8,960.44	9,300.43	9,267.59	32.84	283.219		
1,000.00	989.64	938.64	989.64	5.40	31.20	72.05	-2,593.32	-8,960.44	9,292.13	9,255.55	36.58	254.008		
1,100.00	1,085.27	1,034.27	1,085.27	5.83	34.52	72.39	-2,593.32	-8,960.44	9,282.83	9,242.50	40.33	230.173		
1,200.00	1,179.82	1,128.82	1,179.82	6.29	37.80	72.77	-2,593.32	-8,960.44	9,272.58	9,228.50	44.08	210.378		
1,300.00	1,273.17	1,222.17	1,273.17	6.79	41.05	73.18	-2,593.32	-8,960.44	9,261.41	9,213.59	47.81	193.693		
1,400.00	1,365.21	1,314.21	1,365.21	7.33	44.26	73.63	-2,593.32	-8,960.44	9,249.37	9,197.83	51.54	179.448		
1,500.00	1,456.49	1,405.49	1,456.49	7.89	47.43	73.87	-2,593.32	-8,960.44	9,236.95	9,181.68	55.27	167.123		
1,600.00	1,547.76	1,503.24	1,547.76	8.46	50.84	74.09	-2,593.32	-8,960.44	9,224.69	9,165.45	59.24	155.719		
1,700.00	1,639.04	1,588.04	1,639.04	9.05	53.79	74.31	-2,593.32	-8,960.44	9,212.59	9,149.82	62.77	146.764		
1,800.00	1,730.31	1,679.31	1,730.31	9.65	56.97	74.54	-2,593.32	-8,960.44	9,200.66	9,134.12	66.54	138.272		
1,900.00	1,821.58	1,770.58	1,821.58	10.26	60.16	74.77	-2,593.32	-8,960.44	9,188.89	9,118.57	70.32	130.674		
2,000.00	1,912.85	1,861.85	1,912.85	10.87	63.34	74.99	-2,593.32	-8,960.44	9,177.29	9,103.19	74.11	123.840		
2,100.00	2,004.13	1,953.13	2,004.13	11.49	66.52	75.22	-2,593.32	-8,960.44	9,165.86	9,087.96	77.90	117.662		
2,200.00	2,095.40	2,044.40	2,095.40	12.11	69.70	75.45	-2,593.32	-8,960.44	9,154.60	9,072.90	81.70	112.052		
2,300.00	2,186.67	2,135.67	2,186.67	12.74	72.88	75.67	-2,593.32	-8,960.44	9,143.51	9,058.00	85.50	106.936		
2,400.00	2,277.95	2,226.95	2,277.95	13.38	76.07	75.90	-2,593.32	-8,960.44	9,132.58	9,043.27	89.31	102.252		
2,500.00	2,369.22	2,318.22	2,369.22	14.01	79.25	76.13	-2,593.32	-8,960.44	9,121.83	9,028.70	93.13	97.950		
2,600.00	2,460.49	2,409.49	2,460.49	14.65	82.44	76.36	-2,593.32	-8,960.44	9,111.24	9,014.30	96.94	93.984		
2,700.00	2,551.77	2,500.77	2,551.77	15.29	85.62	76.59	-2,593.32	-8,960.44	9,100.83	9,000.06	100.76	90.318		
2,800.00	2,643.04	2,607.96	2,643.04	15.93	89.36	76.82	-2,593.32	-8,960.44	9,090.59	8,985.44	105.14	86.459		
2,900.00	2,734.31	2,683.31	2,734.31	16.58	91.99	77.05	-2,593.32	-8,960.44	9,080.52	8,972.10	108.41	83.758		
3,000.00	2,825.58	2,774.58	2,825.58	17.23	95.17	77.28	-2,593.32	-8,960.44	9,070.62	8,958.38	112.24	80.814		
3,100.00	2,916.86	2,865.86	2,916.86	17.87	98.36	77.51	-2,593.32	-8,960.44	9,060.90	8,944.82	116.07	78.063		
3,200.00	3,008.13	2,957.13	3,008.13	18.52	101.54	77.74	-2,593.32	-8,960.44	9,051.35	8,931.44	119.90	75.489		
3,300.00	3,099.40	3,048.40	3,099.40	19.17	104.73	77.97	-2,593.32	-8,960.44	9,041.97	8,918.24	123.74	73.074		
3,400.00	3,190.68	3,139.68	3,190.68	19.83	107.91	78.21	-2,593.32	-8,960.44	9,032.77	8,905.20	127.57	70.805		
3,500.00	3,281.95	3,230.95	3,281.95	20.48	111.10	78.44	-2,593.32	-8,960.44	9,023.75	8,892.34	131.41	68.669		
3,600.00	3,373.22	3,322.22	3,373.22	21.13	114.28	78.67	-2,593.32	-8,960.44	9,014.90	8,879.65	135.25	66.655		
3,700.00	3,464.49	3,413.49	3,464.49	21.79	117.47	78.90	-2,593.32	-8,960.44	9,006.23	8,867.14	139.09	64.753		
3,800.00	3,555.77	3,504.77	3,555.77	22.44	120.65	79.14	-2,593.32	-8,960.44	8,997.74	8,854.81	142.93	62.953		
3,900.00	3,647.04	3,603.96	3,647.04	23.10	124.11	79.37	-2,593.32	-8,960.44	8,989.42	8,842.37	147.05	61.133		
4,000.00	3,738.31	3,687.31	3,738.31	23.75	127.02	79.61	-2,593.32	-8,960.44	8,981.28	8,830.67	150.61	59.632		
4,100.00	3,829.59	3,778.59	3,829.59	24.41	130.21	79.84	-2,593.32	-8,960.44	8,973.32	8,818.87	154.46	58.096		
4,200.00	3,920.86	3,869.86	3,920.86	25.07	133.39	80.08	-2,593.32	-8,960.44	8,965.54	8,807.24	158.30	56.636		
4,300.00	4,012.13	3,961.13	4,012.13	25.73	136.58	80.31	-2,593.32	-8,960.44	8,957.94	8,795.79	162.15	55.246		
4,400.00	4,103.41	4,052.41	4,103.41	26.38	139.76	80.55	-2,593.32	-8,960.44	8,950.52	8,784.53	165.99	53.921		
4,500.00	4,194.68	4,143.68	4,194.68	27.04	142.95	80.79	-2,593.32	-8,960.44	8,943.28	8,773.44	169.84	52.657		
4,600.00	4,285.95	4,234.95	4,285.95	27.70	146.13	81.02	-2,593.32	-8,960.44	8,936.22	8,762.53	173.69	51.450		
4,700.00	4,377.22	4,326.22	4,377.22	28.36	149.32	81.26	-2,593.32	-8,960.44	8,929.34	8,751.81	177.54	50.296		
4,800.00	4,468.50	4,417.50	4,468.50	29.02	152.50	81.50	-2,593.32	-8,960.44	8,922.65	8,741.26	181.39	49.192		
4,900.00	4,559.77	4,508.77	4,559.77	29.68	155.69	81.73	-2,593.32	-8,960.44	8,916.13	8,730.90	185.23	48.134		
5,000.00	4,651.04	4,600.04	4,651.04	30.34	158.88	81.97	-2,593.32	-8,960.44	8,909.80	8,720.72	189.09	47.121		
5,100.00	4,742.32	4,708.68	4,742.32	31.00	162.67	82.21	-2,593.32	-8,960.44	8,903.65	8,710.11	193.54	46.004		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 1-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,782.59	4,833.59	31.66	165.25	82.45	-2,593.32	-8,960.44	8,897.69	8,700.90	196.79	45.215		
5,300.00	4,924.86	4,873.86	4,924.86	32.32	168.43	82.69	-2,593.32	-8,960.44	8,891.91	8,691.27	200.64	44.318		
5,400.00	5,016.13	4,965.13	5,016.13	32.99	171.62	82.92	-2,593.32	-8,960.44	8,886.31	8,681.82	204.49	43.456		
5,500.00	5,107.41	5,056.41	5,107.41	33.65	174.80	83.16	-2,593.32	-8,960.44	8,880.89	8,672.55	208.34	42.626		
5,600.00	5,198.68	5,147.68	5,198.68	34.31	177.99	83.40	-2,593.32	-8,960.44	8,875.67	8,663.47	212.19	41.828		
5,700.00	5,289.95	5,238.95	5,289.95	34.97	181.18	83.64	-2,593.32	-8,960.44	8,870.62	8,654.58	216.05	41.059		
5,800.00	5,381.23	5,330.23	5,381.23	35.63	184.36	83.88	-2,593.32	-8,960.44	8,865.77	8,645.87	219.90	40.317		
5,900.00	5,472.50	5,421.50	5,472.50	36.30	187.55	84.12	-2,593.32	-8,960.44	8,861.09	8,637.34	223.75	39.602		
6,000.00	5,563.77	5,512.77	5,563.77	36.96	190.73	84.36	-2,593.32	-8,960.44	8,856.61	8,629.00	227.61	38.912		
6,100.00	5,655.05	5,604.05	5,655.05	37.62	193.92	84.60	-2,593.32	-8,960.44	8,852.31	8,620.85	231.46	38.245		
6,200.00	5,746.32	5,704.68	5,746.32	38.28	197.43	84.84	-2,593.32	-8,960.44	8,848.20	8,612.55	235.64	37.549		
6,300.00	5,837.59	5,786.59	5,837.59	38.95	200.29	85.08	-2,593.32	-8,960.44	8,844.27	8,605.10	239.17	36.979		
6,400.00	5,928.86	5,877.86	5,928.86	39.61	203.48	85.33	-2,593.32	-8,960.44	8,840.53	8,597.51	243.02	36.377		
6,500.00	6,020.14	5,969.14	6,020.14	40.27	206.66	85.57	-2,593.32	-8,960.44	8,836.98	8,590.10	246.88	35.795		
6,600.00	6,111.41	6,060.41	6,111.41	40.94	209.85	85.81	-2,593.32	-8,960.44	8,833.61	8,582.88	250.73	35.231		
6,700.00	6,202.68	6,151.68	6,202.68	41.60	213.04	86.05	-2,593.32	-8,960.44	8,830.44	8,575.85	254.59	34.686		
6,800.00	6,293.96	6,242.96	6,293.96	42.26	216.22	86.29	-2,593.32	-8,960.44	8,827.45	8,569.01	258.44	34.157		
6,900.00	6,385.23	6,334.23	6,385.23	42.93	219.41	86.53	-2,593.32	-8,960.44	8,824.65	8,562.36	262.29	33.644		
7,000.00	6,476.50	6,425.50	6,476.50	43.59	222.59	86.77	-2,593.32	-8,960.44	8,822.04	8,555.89	266.15	33.147		
7,100.00	6,567.77	6,516.77	6,567.77	44.25	225.78	87.02	-2,593.32	-8,960.44	8,819.61	8,549.61	270.00	32.665		
7,200.00	6,658.64	6,607.64	6,658.64	44.91	228.95	70.29	-2,593.32	-8,960.44	8,811.16	8,537.33	273.83	32.177		
7,300.00	6,747.14	6,703.86	6,747.14	45.52	232.31	55.45	-2,593.32	-8,960.44	8,787.51	8,509.71	277.80	31.632		
7,400.00	6,831.10	6,780.10	6,831.10	46.07	234.97	45.20	-2,593.32	-8,960.44	8,749.14	8,468.14	281.00	31.135		
7,500.00	6,908.46	6,857.46	6,908.46	46.54	237.67	38.43	-2,593.32	-8,960.44	8,696.97	8,412.80	284.17	30.605		
7,600.00	6,977.30	6,926.30	6,977.30	46.95	240.07	34.08	-2,593.32	-8,960.44	8,632.24	8,345.27	286.97	30.081		
7,700.00	7,035.93	6,984.93	7,035.93	47.30	242.12	31.46	-2,593.32	-8,960.44	8,556.51	8,267.17	289.34	29.573		
7,800.00	7,082.92	7,031.92	7,082.92	47.59	243.76	30.33	-2,593.32	-8,960.44	8,471.60	8,180.37	291.23	29.089		
7,900.00	7,117.09	7,066.09	7,117.09	47.84	244.95	30.99	-2,593.32	-8,960.44	8,379.56	8,086.96	292.60	28.638		
8,000.00	7,137.62	7,086.62	7,137.62	48.06	245.67	36.06	-2,593.32	-8,960.44	8,282.63	7,989.19	293.44	28.226		
8,100.00	7,143.99	7,107.01	7,143.99	48.28	246.38	98.67	-2,593.32	-8,960.44	8,183.15	7,888.94	294.20	27.814		
8,200.00	7,143.45	7,107.55	7,143.45	48.53	246.40	98.57	-2,593.32	-8,960.44	8,083.21	7,788.96	294.25	27.470		
8,300.00	7,142.91	7,108.09	7,142.91	48.89	246.42	98.46	-2,593.32	-8,960.44	7,983.28	7,688.98	294.30	27.126		
8,400.00	7,142.37	7,108.63	7,142.37	49.40	246.44	98.36	-2,593.32	-8,960.44	7,883.35	7,589.00	294.35	26.782		
8,500.00	7,141.83	7,109.17	7,141.83	50.12	246.46	98.25	-2,593.32	-8,960.44	7,783.42	7,489.02	294.40	26.438		
8,600.00	7,141.29	7,109.71	7,141.29	51.08	246.48	98.15	-2,593.32	-8,960.44	7,683.49	7,389.04	294.45	26.094		
8,700.00	7,140.75	7,089.75	7,140.75	52.30	245.78	98.04	-2,593.32	-8,960.44	7,583.56	7,289.77	293.79	25.813		
8,800.00	7,140.21	7,089.21	7,140.21	53.75	245.76	97.94	-2,593.32	-8,960.44	7,483.64	7,189.83	293.81	25.471		
8,900.00	7,139.67	7,088.67	7,139.67	55.40	245.74	97.83	-2,593.32	-8,960.44	7,383.72	7,089.89	293.83	25.129		
9,000.00	7,139.12	7,088.12	7,139.12	57.20	245.72	97.73	-2,593.32	-8,960.44	7,283.80	6,989.94	293.85	24.787		
9,100.00	7,138.58	7,087.58	7,138.58	59.13	245.70	97.62	-2,593.32	-8,960.44	7,183.88	6,890.00	293.88	24.445		
9,200.00	7,138.04	7,087.04	7,138.04	61.15	245.69	97.52	-2,593.32	-8,960.44	7,083.96	6,790.06	293.90	24.103		
9,300.00	7,137.50	7,086.50	7,137.50	63.26	245.67	97.41	-2,593.32	-8,960.44	6,984.05	6,690.12	293.93	23.761		
9,400.00	7,136.96	7,085.96	7,136.96	65.44	245.65	97.31	-2,593.32	-8,960.44	6,884.14	6,590.18	293.96	23.419		
9,500.00	7,136.42	7,085.42	7,136.42	67.68	245.63	97.20	-2,593.32	-8,960.44	6,784.23	6,490.24	293.99	23.076		
9,600.00	7,135.88	7,084.88	7,135.88	69.97	245.61	97.10	-2,593.32	-8,960.44	6,684.33	6,390.30	294.03	22.734		
9,700.00	7,135.34	7,084.34	7,135.34	72.31	245.59	96.99	-2,593.32	-8,960.44	6,584.42	6,290.36	294.06	22.391		
9,800.00	7,134.80	7,083.80	7,134.80	74.69	245.57	96.89	-2,593.32	-8,960.44	6,484.52	6,190.42	294.10	22.048		
9,900.00	7,134.26	7,083.26	7,134.26	77.10	245.55	96.78	-2,593.32	-8,960.44	6,384.63	6,090.48	294.15	21.706		
10,000.00	7,133.71	7,082.71	7,133.71	79.54	245.53	96.68	-2,593.32	-8,960.44	6,284.73	5,990.54	294.19	21.363		
10,100.00	7,133.17	7,082.17	7,133.17	82.02	245.52	96.57	-2,593.32	-8,960.44	6,184.84	5,890.60	294.24	21.020		
10,200.00	7,132.63	7,081.63	7,132.63	84.52	245.50	96.47	-2,593.32	-8,960.44	6,084.96	5,790.67	294.29	20.677		
10,300.00	7,132.09	7,081.09	7,132.09	87.04	245.48	96.36	-2,593.32	-8,960.44	5,985.07	5,690.73	294.34	20.334		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,131.55	7,080.55	7,131.55	89.58	245.46	96.26	-2,593.32	-8,960.44	5,885.19	5,590.80	294.40	19.991		
10,500.00	7,131.01	7,080.01	7,131.01	92.15	245.44	96.15	-2,593.32	-8,960.44	5,785.32	5,490.86	294.46	19.647		
10,600.00	7,130.47	7,079.47	7,130.47	94.73	245.42	96.04	-2,593.32	-8,960.44	5,685.45	5,390.93	294.52	19.304		
10,700.00	7,129.93	7,078.93	7,129.93	97.33	245.40	95.94	-2,593.32	-8,960.44	5,585.58	5,290.99	294.59	18.961		
10,800.00	7,129.39	7,078.39	7,129.39	99.94	245.38	95.83	-2,593.32	-8,960.44	5,485.72	5,191.06	294.66	18.617		
10,900.00	7,128.84	7,077.84	7,128.84	102.56	245.36	95.73	-2,593.32	-8,960.44	5,385.87	5,091.13	294.73	18.274		
11,000.00	7,128.30	7,077.30	7,128.30	105.20	245.35	95.62	-2,593.32	-8,960.44	5,286.01	4,991.20	294.81	17.930		
11,100.00	7,127.76	7,076.76	7,127.76	107.85	245.33	95.52	-2,593.32	-8,960.44	5,186.17	4,891.27	294.90	17.586		
11,200.00	7,127.22	7,076.22	7,127.22	110.51	245.31	95.41	-2,593.32	-8,960.44	5,086.33	4,791.35	294.99	17.243		
11,300.00	7,126.68	7,075.68	7,126.68	113.18	245.29	95.30	-2,593.32	-8,960.44	4,986.50	4,691.42	295.08	16.899		
11,400.00	7,126.14	7,075.14	7,126.14	115.86	245.27	95.20	-2,593.32	-8,960.44	4,886.67	4,591.49	295.18	16.555		
11,500.00	7,125.60	7,074.60	7,125.60	118.55	245.25	95.09	-2,593.32	-8,960.44	4,786.85	4,491.57	295.28	16.211		
11,600.00	7,125.06	7,074.06	7,125.06	121.25	245.23	94.99	-2,593.32	-8,960.44	4,687.04	4,391.65	295.40	15.867		
11,700.00	7,124.52	7,073.52	7,124.52	123.95	245.21	94.88	-2,593.32	-8,960.44	4,587.24	4,291.73	295.52	15.523		
11,800.00	7,123.97	7,072.97	7,123.97	126.66	245.19	94.77	-2,593.32	-8,960.44	4,487.45	4,191.80	295.64	15.179		
11,900.00	7,123.43	7,072.43	7,123.43	129.38	245.18	94.67	-2,593.32	-8,960.44	4,387.66	4,091.89	295.78	14.834		
12,000.00	7,122.89	7,071.89	7,122.89	132.10	245.16	94.56	-2,593.32	-8,960.44	4,287.89	3,991.97	295.92	14.490		
12,100.00	7,122.35	7,071.35	7,122.35	134.83	245.14	94.46	-2,593.32	-8,960.44	4,188.12	3,892.05	296.07	14.146		
12,200.00	7,121.81	7,070.81	7,121.81	137.56	245.12	94.35	-2,593.32	-8,960.44	4,088.37	3,792.14	296.23	13.801		
12,300.00	7,121.27	7,070.27	7,121.27	140.30	245.10	94.24	-2,593.32	-8,960.44	3,988.63	3,692.22	296.41	13.457		
12,400.00	7,120.73	7,069.73	7,120.73	143.05	245.08	94.14	-2,593.32	-8,960.44	3,888.90	3,592.31	296.59	13.112		
12,500.00	7,120.19	7,069.19	7,120.19	145.80	245.06	94.03	-2,593.32	-8,960.44	3,789.19	3,492.40	296.79	12.767		
12,600.00	7,119.65	7,068.65	7,119.65	148.55	245.04	93.92	-2,593.32	-8,960.44	3,689.50	3,392.49	297.00	12.422		
12,700.00	7,119.10	7,068.10	7,119.10	151.30	245.02	93.82	-2,593.32	-8,960.44	3,589.82	3,292.58	297.23	12.077		
12,800.00	7,118.56	7,067.56	7,118.56	154.07	245.01	93.71	-2,593.32	-8,960.44	3,490.15	3,192.67	297.48	11.732		
12,900.00	7,118.02	7,067.02	7,118.02	156.83	244.99	93.60	-2,593.32	-8,960.44	3,390.51	3,092.77	297.74	11.387		
13,000.00	7,117.48	7,066.48	7,117.48	159.60	244.97	93.50	-2,593.32	-8,960.44	3,290.89	2,992.86	298.03	11.042		
13,100.00	7,116.94	7,065.94	7,116.94	162.37	244.95	93.39	-2,593.32	-8,960.44	3,191.29	2,892.95	298.34	10.697		
13,200.00	7,116.40	7,065.40	7,116.40	165.14	244.93	93.29	-2,593.32	-8,960.44	3,091.72	2,793.05	298.68	10.351		
13,300.00	7,115.86	7,064.86	7,115.86	167.92	244.91	93.18	-2,593.32	-8,960.44	2,992.18	2,693.14	299.04	10.006		
13,400.00	7,115.32	7,064.32	7,115.32	170.70	244.89	93.07	-2,593.32	-8,960.44	2,892.67	2,593.23	299.44	9.660		
13,500.00	7,114.78	7,063.78	7,114.78	173.48	244.87	92.97	-2,593.32	-8,960.44	2,793.19	2,493.31	299.88	9.314		
13,600.00	7,114.24	7,063.24	7,114.24	176.26	244.85	92.86	-2,593.32	-8,960.44	2,693.76	2,393.39	300.36	8.968		
13,700.00	7,113.69	7,062.69	7,113.69	179.05	244.84	92.75	-2,593.32	-8,960.44	2,594.36	2,293.47	300.89	8.622		
13,800.00	7,113.15	7,062.15	7,113.15	181.84	244.82	92.65	-2,593.32	-8,960.44	2,495.01	2,193.54	301.47	8.276		
13,900.00	7,112.61	7,061.61	7,112.61	184.63	244.80	92.54	-2,593.32	-8,960.44	2,395.72	2,093.60	302.12	7.930		
14,000.00	7,112.07	7,061.07	7,112.07	187.42	244.78	92.43	-2,593.32	-8,960.44	2,296.49	1,993.65	302.84	7.583		
14,100.00	7,111.53	7,060.53	7,111.53	190.22	244.76	92.33	-2,593.32	-8,960.44	2,197.33	1,893.69	303.64	7.237		
14,200.00	7,110.99	7,059.99	7,110.99	193.01	244.74	92.22	-2,593.32	-8,960.44	2,098.25	1,793.70	304.55	6.890		
14,300.00	7,110.45	7,059.45	7,110.45	195.81	244.72	92.11	-2,593.32	-8,960.44	1,999.26	1,693.69	305.57	6.543		
14,400.00	7,109.91	7,058.91	7,109.91	198.61	244.70	92.01	-2,593.32	-8,960.44	1,900.38	1,593.65	306.72	6.196		
14,500.00	7,109.37	7,058.37	7,109.37	201.42	244.68	91.90	-2,593.32	-8,960.44	1,801.61	1,493.58	308.04	5.849		
14,600.00	7,108.82	7,057.82	7,108.82	204.22	244.67	91.79	-2,593.32	-8,960.44	1,703.00	1,393.45	309.55	5.502		
14,700.00	7,108.28	7,057.28	7,108.28	207.03	244.65	91.69	-2,593.32	-8,960.44	1,604.55	1,293.26	311.29	5.154		
14,800.00	7,107.74	7,056.74	7,107.74	209.83	244.63	91.58	-2,593.32	-8,960.44	1,506.31	1,192.99	313.32	4.808		
14,900.00	7,107.20	7,056.20	7,107.20	212.64	244.61	91.47	-2,593.32	-8,960.44	1,408.32	1,092.62	315.69	4.461		
15,000.00	7,106.66	7,055.66	7,106.66	215.45	244.59	91.37	-2,593.32	-8,960.44	1,310.62	992.13	318.49	4.115		
15,100.00	7,106.12	7,055.12	7,106.12	218.26	244.57	91.26	-2,593.32	-8,960.44	1,213.31	891.47	321.83	3.770		
15,200.00	7,105.58	7,054.58	7,105.58	221.07	244.55	91.15	-2,593.32	-8,960.44	1,116.47	790.61	325.86	3.426		
15,300.00	7,105.04	7,054.04	7,105.04	223.89	244.53	91.04	-2,593.32	-8,960.44	1,020.24	689.48	330.75	3.085		
15,400.00	7,104.50	7,053.50	7,104.50	226.70	244.51	90.94	-2,593.32	-8,960.44	924.80	588.02	336.78	2.746		
15,491.56	7,104.00	7,053.00	7,104.00	229.28	244.50	90.84	-2,593.32	-8,960.44	838.36	494.75	343.61	2.440	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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	34.00	3.28	3.28	-105.89	-2,560.16	-8,992.70	9,350.09					
100.00	100.00	30.22	64.22	3.28	3.28	-105.89	-2,560.23	-8,992.74	9,350.16	9,343.59	6.57	1,424.168		
200.00	200.00	76.01	110.01	3.34	3.28	-105.89	-2,560.59	-8,992.96	9,350.83	9,344.21	6.62	1,412.336		
300.00	299.98	121.00	154.99	3.44	3.29	70.96	-2,561.25	-8,993.36	9,351.51	9,344.78	6.73	1,389.841		
400.00	399.84	166.93	200.91	3.59	3.31	70.97	-2,562.04	-8,994.00	9,351.64	9,344.74	6.90	1,355.532		
500.00	499.45	208.00	241.97	3.79	3.34	70.99	-2,562.70	-8,994.84	9,351.22	9,344.09	7.13	1,312.260		
600.00	598.70	208.00	241.97	4.03	3.34	71.01	-2,562.70	-8,994.84	9,350.53	9,343.16	7.37	1,268.480		
700.00	697.47	257.30	291.24	4.31	3.39	71.07	-2,563.31	-8,996.46	9,349.23	9,341.53	7.70	1,213.726		
800.00	795.62	300.00	333.88	4.64	3.44	71.15	-2,563.59	-8,998.63	9,347.86	9,339.78	8.08	1,157.233		
900.00	893.06	300.00	333.88	5.00	3.44	71.18	-2,563.59	-8,998.63	9,346.01	9,337.57	8.44	1,107.282		
1,000.00	989.64	300.00	333.88	5.40	3.44	71.22	-2,563.59	-8,998.63	9,344.11	9,335.27	8.84	1,057.181		
1,100.00	1,085.27	351.44	385.19	5.83	3.52	71.36	-2,563.53	-9,002.19	9,341.58	9,332.24	9.34	1,000.116		
1,200.00	1,179.82	391.00	424.60	6.29	3.59	71.49	-2,563.12	-9,005.64	9,338.99	9,329.13	9.87	946.449		
1,300.00	1,273.17	391.00	424.60	6.79	3.59	71.55	-2,563.12	-9,005.64	9,336.03	9,325.67	10.36	900.734		
1,400.00	1,365.21	391.00	424.60	7.33	3.59	71.60	-2,563.12	-9,005.64	9,333.03	9,322.14	10.90	856.545		
1,500.00	1,456.49	443.18	476.48	7.89	3.69	71.74	-2,562.06	-9,011.10	9,329.91	9,318.37	11.54	808.146		
1,600.00	1,547.76	481.00	514.00	8.46	3.78	71.85	-2,560.90	-9,015.72	9,327.88	9,315.69	12.19	765.160		
1,700.00	1,639.04	481.00	514.00	9.05	3.78	71.85	-2,560.90	-9,015.72	9,326.62	9,313.85	12.77	730.156		
1,795.57	1,726.26	511.93	544.63	9.62	3.86	71.93	-2,559.76	-9,019.87	9,326.22	9,312.82	13.41	695.590		
1,800.00	1,730.31	513.00	545.69	9.65	3.86	71.94	-2,559.72	-9,020.03	9,326.22	9,312.79	13.44	694.098		
1,900.00	1,821.58	537.25	569.66	10.26	3.92	72.01	-2,558.74	-9,023.50	9,326.68	9,312.59	14.09	661.809		
2,000.00	1,912.85	572.00	603.97	10.87	4.02	72.10	-2,557.20	-9,028.82	9,328.00	9,313.22	14.78	630.988		
2,100.00	2,004.13	572.00	603.97	11.49	4.02	72.10	-2,557.20	-9,028.82	9,330.16	9,314.77	15.39	606.079		
2,200.00	2,095.40	572.00	603.97	12.11	4.02	72.10	-2,557.20	-9,028.82	9,333.39	9,317.38	16.01	582.999		
2,300.00	2,186.67	622.79	653.98	12.74	4.19	72.25	-2,554.78	-9,037.36	9,337.07	9,320.30	16.76	556.954		
2,400.00	2,277.95	642.53	673.37	13.38	4.26	72.31	-2,553.80	-9,040.94	9,341.86	9,324.42	17.44	535.675		
2,500.00	2,369.22	693.00	722.80	14.01	4.44	72.46	-2,551.21	-9,050.78	9,347.76	9,329.55	18.21	513.355		
2,600.00	2,460.49	693.00	722.80	14.65	4.44	72.46	-2,551.21	-9,050.78	9,354.12	9,335.29	18.83	496.743		
2,700.00	2,551.77	693.00	722.80	15.29	4.44	72.46	-2,551.21	-9,050.78	9,361.54	9,342.09	19.45	481.243		
2,800.00	2,643.04	726.45	755.47	15.93	4.58	72.55	-2,549.53	-9,057.78	9,369.80	9,349.62	20.18	464.283		
2,900.00	2,734.31	761.00	789.15	16.58	4.72	72.65	-2,547.97	-9,065.31	9,378.95	9,358.03	20.92	448.407		
3,000.00	2,825.58	761.00	789.15	17.23	4.72	72.65	-2,547.97	-9,065.31	9,388.91	9,367.38	21.54	435.968		
3,100.00	2,916.86	806.94	833.82	17.87	4.93	72.79	-2,545.71	-9,075.80	9,399.60	9,377.28	22.32	421.064		
3,200.00	3,008.13	855.00	880.38	18.52	5.16	72.93	-2,542.70	-9,087.33	9,411.16	9,388.05	23.11	407.246		
3,300.00	3,099.40	855.00	880.38	19.17	5.16	72.93	-2,542.70	-9,087.33	9,423.41	9,399.69	23.72	397.213		
3,400.00	3,190.68	855.00	880.38	19.83	5.16	72.93	-2,542.70	-9,087.33	9,436.70	9,412.37	24.34	387.768		
3,500.00	3,281.95	903.16	926.83	20.48	5.42	73.08	-2,539.29	-9,099.56	9,450.51	9,425.38	25.13	376.042		
3,600.00	3,373.22	949.00	970.84	21.13	5.67	73.22	-2,535.95	-9,111.93	9,465.50	9,439.57	25.93	365.027		
3,700.00	3,464.49	949.00	970.84	21.79	5.67	73.22	-2,535.95	-9,111.93	9,481.05	9,454.52	26.53	357.307		
3,800.00	3,555.77	978.09	998.68	22.44	5.85	73.32	-2,533.69	-9,120.07	9,497.54	9,470.27	27.26	348.398		
3,900.00	3,647.04	1,017.91	1,036.69	23.10	6.09	73.44	-2,530.23	-9,131.40	9,514.70	9,486.66	28.03	339.390		
4,000.00	3,738.31	1,044.00	1,061.55	23.75	6.25	73.53	-2,527.75	-9,138.95	9,532.55	9,503.80	28.75	331.595		
4,100.00	3,829.59	1,044.00	1,061.55	24.41	6.25	73.53	-2,527.75	-9,138.95	9,551.34	9,522.01	29.34	325.572		
4,200.00	3,920.86	1,093.36	1,108.40	25.07	6.59	73.69	-2,522.78	-9,153.69	9,570.64	9,540.48	30.16	317.342		
4,300.00	4,012.13	1,139.00	1,151.47	25.73	6.90	73.84	-2,518.00	-9,167.97	9,591.05	9,560.08	30.97	309.735		
4,400.00	4,103.41	1,139.00	1,151.47	26.38	6.90	73.84	-2,518.00	-9,167.97	9,612.03	9,580.48	31.54	304.731		
4,500.00	4,194.68	1,139.00	1,151.47	27.04	6.90	73.84	-2,518.00	-9,167.97	9,634.00	9,601.88	32.12	299.982		
4,600.00	4,285.95	1,176.73	1,186.90	27.70	7.18	73.96	-2,513.82	-9,180.26	9,656.66	9,623.78	32.88	293.693		
4,700.00	4,377.22	1,197.28	1,206.12	28.36	7.34	74.03	-2,511.40	-9,187.13	9,680.19	9,646.64	33.55	288.511		
4,800.00	4,468.50	1,234.00	1,240.31	29.02	7.62	74.15	-2,506.84	-9,199.72	9,704.58	9,670.27	34.31	282.864		
4,900.00	4,559.77	1,234.00	1,240.31	29.68	7.62	74.15	-2,506.84	-9,199.72	9,729.66	9,694.80	34.86	279.093		
5,000.00	4,651.04	1,234.00	1,240.31	30.34	7.62	74.15	-2,506.84	-9,199.72	9,755.70	9,720.29	35.41	275.509		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	4,742.32	1,275.82	1,279.02	31.00	7.97	74.30	-2,501.39	-9,214.56	9,782.32	9,746.13	36.19	270.300		
5,200.00	4,833.59	1,294.73	1,296.45	31.66	8.13	74.36	-2,498.87	-9,221.45	9,809.84	9,773.00	36.84	266.301		
5,300.00	4,924.86	1,329.00	1,327.91	32.32	8.42	74.48	-2,494.21	-9,234.22	9,838.20	9,800.63	37.57	261.865		
5,400.00	5,016.13	1,329.00	1,327.91	32.99	8.42	74.48	-2,494.21	-9,234.22	9,867.25	9,829.15	38.10	259.005		
5,500.00	5,107.41	1,329.00	1,327.91	33.65	8.42	74.48	-2,494.21	-9,234.22	9,897.21	9,858.60	38.62	256.286		
5,600.00	5,198.68	1,370.55	1,365.84	34.31	8.80	74.62	-2,488.36	-9,250.16	9,927.74	9,888.35	39.39	252.046		
5,700.00	5,289.95	1,389.43	1,382.99	34.97	8.98	74.69	-2,485.62	-9,257.57	9,959.13	9,919.12	40.02	248.879		
5,800.00	5,381.23	1,423.00	1,413.34	35.63	9.29	74.80	-2,480.62	-9,270.99	9,991.33	9,950.60	40.73	245.301		
8,300.00	7,142.91	3,414.00	3,219.47	48.89	30.15	9.48	-2,243.31	-10,073.66	9,920.89	9,857.14	63.76	155.603		
8,400.00	7,142.37	3,414.00	3,219.47	49.40	30.15	9.48	-2,243.31	-10,073.66	9,829.15	9,765.34	63.81	154.041		
8,500.00	7,141.83	3,439.25	3,242.51	50.12	30.42	9.58	-2,240.41	-10,083.55	9,737.52	9,673.47	64.05	152.040		
8,600.00	7,141.29	3,471.69	3,272.13	51.08	30.76	9.70	-2,236.78	-10,096.29	9,645.93	9,581.59	64.34	149.922		
8,700.00	7,140.75	3,504.29	3,301.89	52.30	31.10	9.83	-2,233.23	-10,109.12	9,554.38	9,489.74	64.64	147.808		
8,800.00	7,140.21	3,541.03	3,335.41	53.75	31.48	9.98	-2,229.23	-10,123.59	9,462.87	9,397.89	64.98	145.634		
8,900.00	7,139.67	3,578.34	3,369.45	55.40	31.88	10.13	-2,224.94	-10,138.28	9,371.36	9,306.04	65.32	143.461		
9,000.00	7,139.12	3,613.21	3,401.23	57.20	32.24	10.28	-2,220.72	-10,151.98	9,279.89	9,214.23	65.66	141.336		
9,100.00	7,138.58	3,830.25	3,599.82	59.13	34.50	11.26	-2,195.51	-10,235.80	9,188.37	9,121.09	67.28	136.563		
9,200.00	7,138.04	3,846.17	3,614.46	61.15	34.66	11.34	-2,193.65	-10,241.81	9,096.24	9,028.74	67.49	134.774		
9,300.00	7,137.50	3,862.27	3,629.23	63.26	34.82	11.41	-2,191.75	-10,247.90	9,004.21	8,936.50	67.71	132.983		
9,400.00	7,136.96	3,887.00	3,651.90	65.44	35.07	11.54	-2,188.76	-10,257.34	8,912.29	8,844.30	67.99	131.076		
9,500.00	7,136.42	3,887.00	3,651.90	67.68	35.07	11.54	-2,188.76	-10,257.34	8,820.47	8,752.36	68.11	129.500		
9,600.00	7,135.88	3,887.00	3,651.90	69.97	35.07	11.54	-2,188.76	-10,257.34	8,728.83	8,660.59	68.24	127.917		
9,700.00	7,135.34	3,923.34	3,685.13	72.31	35.45	11.72	-2,184.35	-10,271.37	8,637.17	8,568.55	68.63	125.859		
9,800.00	7,134.80	3,938.33	3,698.81	74.69	35.61	11.79	-2,182.55	-10,277.22	8,545.71	8,476.84	68.87	124.081		
9,900.00	7,134.26	3,953.52	3,712.66	77.10	35.77	11.87	-2,180.74	-10,283.19	8,454.37	8,385.24	69.13	122.302		
10,000.00	7,133.71	3,982.00	3,738.58	79.54	36.07	12.02	-2,177.39	-10,294.50	8,363.19	8,293.70	69.48	120.365		
10,100.00	7,133.17	7,310.99	6,929.75	82.02	57.64	80.06	-1,988.72	-11,003.73	8,270.11	8,184.93	85.17	97.096		
10,200.00	7,132.63	7,312.22	6,930.98	84.52	57.65	80.13	-1,988.75	-11,003.77	8,170.74	8,085.41	85.32	95.761		
10,300.00	7,132.09	7,313.46	6,932.22	87.04	57.65	80.21	-1,988.78	-11,003.80	8,071.38	7,985.90	85.48	94.424		
10,400.00	7,131.55	7,314.72	6,933.48	89.58	57.65	80.28	-1,988.82	-11,003.84	7,972.04	7,886.40	85.64	93.084		
10,500.00	7,131.01	7,316.00	6,934.76	92.15	57.66	80.36	-1,988.85	-11,003.87	7,872.72	7,786.90	85.81	91.741		
10,600.00	7,130.47	7,317.29	6,936.05	94.73	57.66	80.44	-1,988.89	-11,003.91	7,773.41	7,687.42	85.99	90.396		
10,700.00	7,129.93	7,318.60	6,937.36	97.33	57.66	80.52	-1,988.93	-11,003.95	7,674.12	7,587.94	86.18	89.048		
10,800.00	7,129.39	7,319.92	6,938.68	99.94	57.66	80.60	-1,988.96	-11,003.98	7,574.85	7,488.47	86.37	87.698		
10,900.00	7,128.84	7,321.27	6,940.02	102.56	57.67	80.69	-1,989.00	-11,004.02	7,475.60	7,389.02	86.58	86.345		
11,000.00	7,128.30	7,322.63	6,941.38	105.20	57.67	80.77	-1,989.04	-11,004.06	7,376.36	7,289.57	86.79	84.989		
11,100.00	7,127.76	7,324.01	6,942.76	107.85	57.67	80.85	-1,989.08	-11,004.10	7,277.15	7,190.14	87.02	83.631		
11,200.00	7,127.22	7,325.40	6,944.16	110.51	57.68	80.94	-1,989.12	-11,004.14	7,177.96	7,090.71	87.25	82.270		
11,300.00	7,126.68	7,326.82	6,945.57	113.18	57.68	81.03	-1,989.16	-11,004.18	7,078.80	6,991.30	87.49	80.906		
11,400.00	7,126.14	7,328.25	6,947.00	115.86	57.68	81.11	-1,989.20	-11,004.23	6,979.65	6,891.90	87.75	79.541		
11,500.00	7,125.60	7,329.70	6,948.45	118.55	57.69	81.20	-1,989.25	-11,004.27	6,880.53	6,792.51	88.02	78.172		
11,600.00	7,125.06	7,331.18	6,949.93	121.25	57.69	81.29	-1,989.29	-11,004.31	6,781.44	6,693.14	88.30	76.802		
11,700.00	7,124.52	7,332.67	6,951.42	123.95	57.70	81.38	-1,989.34	-11,004.36	6,682.37	6,593.77	88.59	75.429		
11,800.00	7,123.97	7,334.18	6,952.93	126.66	57.70	81.48	-1,989.38	-11,004.40	6,583.33	6,494.43	88.90	74.053		
11,900.00	7,123.43	7,335.72	6,954.46	129.38	57.70	81.57	-1,989.43	-11,004.45	6,484.31	6,395.09	89.22	72.676		
12,000.00	7,122.89	7,337.28	6,956.02	132.10	57.71	81.67	-1,989.47	-11,004.50	6,385.33	6,295.77	89.56	71.296		
12,100.00	7,122.35	7,338.85	6,957.60	134.83	57.71	81.77	-1,989.52	-11,004.55	6,286.38	6,196.47	89.92	69.914		
12,200.00	7,121.81	7,340.45	6,959.19	137.56	57.71	81.86	-1,989.57	-11,004.59	6,187.46	6,097.18	90.29	68.530		
12,300.00	7,121.27	7,342.08	6,960.82	140.30	57.72	81.96	-1,989.62	-11,004.64	6,088.58	5,997.90	90.68	67.145		
12,400.00	7,120.73	7,343.72	6,962.46	143.05	57.72	82.07	-1,989.67	-11,004.70	5,989.73	5,898.65	91.09	65.757		
12,500.00	7,120.19	7,345.39	6,964.13	145.80	57.73	82.17	-1,989.72	-11,004.75	5,890.93	5,799.41	91.52	64.368		
12,600.00	7,119.65	7,347.09	6,965.82	148.55	57.73	82.27	-1,989.78	-11,004.80	5,792.16	5,700.19	91.97	62.978		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-23-18(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 121-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
12,700.00	7,119.10	7,348.81	6,967.54	151.30	57.73	82.38	-1,989.83	-11,004.86	5,693.43	5,600.99	92.45	61.586	
12,800.00	7,118.56	7,350.55	6,969.28	154.07	57.74	82.49	-1,989.88	-11,004.91	5,594.75	5,501.80	92.95	60.192	
12,900.00	7,118.02	7,352.32	6,971.05	156.83	57.74	82.60	-1,989.94	-11,004.97	5,496.12	5,402.64	93.47	58.798	
13,000.00	7,117.48	7,354.12	6,972.85	159.60	57.75	82.71	-1,990.00	-11,005.03	5,397.53	5,303.50	94.03	57.403	
13,100.00	7,116.94	7,355.95	6,974.67	162.37	57.75	82.82	-1,990.06	-11,005.09	5,299.00	5,204.39	94.61	56.008	
13,200.00	7,116.40	7,357.80	6,976.52	165.14	57.76	82.94	-1,990.12	-11,005.15	5,200.52	5,105.30	95.23	54.612	
13,300.00	7,115.86	7,359.68	6,978.40	167.92	57.76	83.05	-1,990.18	-11,005.21	5,102.10	5,006.23	95.87	53.216	
13,400.00	7,115.32	7,361.59	6,980.31	170.70	57.77	83.17	-1,990.24	-11,005.27	5,003.74	4,907.19	96.56	51.821	
13,500.00	7,114.78	7,363.53	6,982.24	173.48	57.77	83.29	-1,990.31	-11,005.34	4,905.45	4,808.17	97.28	50.426	
13,600.00	7,114.24	7,365.50	6,984.21	176.26	57.77	83.41	-1,990.37	-11,005.40	4,807.23	4,709.18	98.04	49.032	
13,700.00	7,113.69	7,367.50	6,986.21	179.05	57.78	83.54	-1,990.44	-11,005.47	4,709.08	4,610.23	98.85	47.639	
13,800.00	7,113.15	7,369.53	6,988.24	181.84	57.78	83.67	-1,990.51	-11,005.54	4,611.01	4,511.30	99.70	46.248	
13,900.00	7,112.61	7,371.60	6,990.30	184.63	57.79	83.79	-1,990.58	-11,005.61	4,513.02	4,412.41	100.60	44.860	
14,000.00	7,112.07	7,386.00	7,004.69	187.42	57.82	84.69	-1,991.08	-11,006.12	4,415.14	4,313.58	101.57	43.471	
14,100.00	7,111.53	7,386.00	7,004.69	190.22	57.82	84.69	-1,991.08	-11,006.12	4,317.33	4,214.75	102.58	42.089	
14,200.00	7,110.99	7,386.00	7,004.69	193.01	57.82	84.69	-1,991.08	-11,006.12	4,219.62	4,115.97	103.65	40.711	
14,300.00	7,110.45	7,386.00	7,004.69	195.81	57.82	84.69	-1,991.08	-11,006.12	4,122.02	4,017.23	104.79	39.337	
14,400.00	7,109.91	7,386.00	7,004.69	198.61	57.82	84.69	-1,991.08	-11,006.12	4,024.54	3,918.54	106.00	37.968	
14,500.00	7,109.37	7,386.00	7,004.69	201.42	57.82	84.69	-1,991.08	-11,006.12	3,927.18	3,819.90	107.28	36.605	
14,600.00	7,108.82	7,386.00	7,004.69	204.22	57.82	84.69	-1,991.08	-11,006.12	3,829.96	3,721.31	108.66	35.249	
14,700.00	7,108.28	7,386.00	7,004.69	207.03	57.82	84.69	-1,991.08	-11,006.12	3,732.89	3,622.78	110.12	33.900	
14,800.00	7,107.74	7,386.00	7,004.69	209.83	57.82	84.69	-1,991.08	-11,006.12	3,635.98	3,524.31	111.67	32.559	
14,900.00	7,107.20	7,394.23	7,012.91	212.64	57.85	85.21	-1,991.37	-11,006.42	3,539.23	3,425.89	113.34	31.227	
15,000.00	7,106.66	7,396.69	7,015.36	215.45	57.85	85.36	-1,991.46	-11,006.51	3,442.66	3,327.55	115.11	29.906	
15,100.00	7,106.12	7,399.17	7,017.84	218.26	57.86	85.52	-1,991.55	-11,006.60	3,346.30	3,229.28	117.02	28.597	
15,200.00	7,105.58	7,401.69	7,020.36	221.07	57.87	85.68	-1,991.63	-11,006.69	3,250.15	3,131.10	119.05	27.300	
15,300.00	7,105.04	7,404.24	7,022.91	223.89	57.87	85.84	-1,991.72	-11,006.79	3,154.24	3,033.00	121.24	26.017	
15,400.00	7,104.50	7,406.82	7,025.49	226.70	57.88	86.00	-1,991.82	-11,006.88	3,058.59	2,935.01	123.58	24.750	
15,491.56	7,104.00	7,409.22	7,027.88	229.28	57.89	86.15	-1,991.90	-11,006.97	2,971.26	2,845.37	125.88	23.603 CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	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: 120-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	34.00	3.28	3.28	-105.89	-2,551.07	-8,960.15	9,316.30					
100.00	100.00	0.00	34.00	3.28	3.28	-105.89	-2,551.07	-8,960.15	9,316.47	9,309.90	6.56	1,419.132		
200.00	200.00	59.13	93.13	3.34	3.28	-105.89	-2,551.45	-8,960.39	9,317.19	9,310.57	6.62	1,407.467		
300.00	299.98	577.00	610.23	3.44	3.96	71.14	-2,536.86	-8,959.24	9,316.08	9,308.67	7.41	1,257.197		
400.00	399.84	577.00	610.23	3.59	3.96	71.23	-2,536.86	-8,959.24	9,311.60	9,304.04	7.55	1,232.878		
500.00	499.45	621.91	654.79	3.79	4.08	71.37	-2,531.30	-8,959.81	9,306.73	9,298.86	7.87	1,182.800		
600.00	598.70	667.00	699.45	4.03	4.21	71.54	-2,525.21	-8,960.97	9,301.54	9,293.30	8.24	1,129.241		
700.00	697.47	735.95	767.60	4.31	4.43	71.78	-2,515.00	-8,963.30	9,295.78	9,287.04	8.74	1,063.735		
800.00	795.62	910.01	939.00	4.64	5.07	72.29	-2,485.30	-8,969.25	9,288.52	9,278.80	9.71	956.388		
900.00	893.06	996.89	1,024.07	5.00	5.45	72.67	-2,467.98	-8,972.55	9,280.04	9,269.59	10.45	888.360		
1,000.00	989.64	1,077.66	1,102.68	5.40	5.84	73.08	-2,449.83	-8,976.28	9,270.84	9,259.62	11.22	826.074		
1,100.00	1,085.27	1,152.75	1,175.32	5.83	6.22	73.51	-2,431.22	-8,980.22	9,260.91	9,248.88	12.04	769.409		
1,200.00	1,179.82	1,205.22	1,225.80	6.29	6.51	73.90	-2,417.26	-8,983.36	9,250.53	9,237.74	12.79	723.493		
1,300.00	1,273.17	1,264.38	1,282.42	6.79	6.86	74.33	-2,400.57	-8,987.33	9,239.78	9,226.15	13.63	678.106		
1,400.00	1,365.21	1,323.00	1,338.14	7.33	7.22	74.78	-2,382.89	-8,991.63	9,228.63	9,214.12	14.51	635.959		
1,500.00	1,456.49	1,381.70	1,393.55	7.89	7.61	75.04	-2,364.10	-8,996.30	9,217.57	9,202.12	15.45	596.508		
1,600.00	1,547.76	1,417.00	1,426.69	8.46	7.85	75.19	-2,352.30	-8,999.28	9,207.18	9,190.92	16.26	566.327		
1,700.00	1,639.04	1,451.24	1,458.72	9.05	8.09	75.34	-2,340.61	-9,002.37	9,197.59	9,180.51	17.08	538.385		
1,800.00	1,730.31	1,476.57	1,482.37	9.65	8.27	75.45	-2,331.85	-9,004.83	9,188.90	9,171.04	17.86	514.561		
1,900.00	1,821.58	1,512.00	1,515.35	10.26	8.53	75.61	-2,319.47	-9,008.52	9,181.11	9,162.40	18.71	490.584		
2,000.00	1,912.85	1,540.06	1,541.42	10.87	8.74	75.73	-2,309.54	-9,011.58	9,174.15	9,154.61	19.53	469.627		
2,100.00	2,004.13	1,587.25	1,585.15	11.49	9.10	75.94	-2,292.60	-9,016.88	9,167.93	9,147.43	20.51	447.031		
2,200.00	2,095.40	1,627.01	1,621.88	12.11	9.41	76.12	-2,278.09	-9,021.49	9,162.47	9,141.03	21.44	427.389		
2,300.00	2,186.67	1,661.30	1,653.44	12.74	9.69	76.27	-2,265.36	-9,025.63	9,157.82	9,135.48	22.34	410.014		
2,400.00	2,277.95	1,701.00	1,689.87	13.38	10.01	76.45	-2,250.38	-9,030.63	9,154.01	9,130.73	23.28	393.204		
2,500.00	2,369.22	1,728.17	1,714.70	14.01	10.24	76.58	-2,239.97	-9,034.18	9,151.03	9,126.89	24.14	379.133		
2,600.00	2,460.49	1,760.68	1,744.34	14.65	10.51	76.73	-2,227.33	-9,038.57	9,148.90	9,123.86	25.04	365.362		
2,700.00	2,551.77	1,796.00	1,776.41	15.29	10.81	76.89	-2,213.39	-9,043.50	9,147.64	9,121.66	25.97	352.232		
2,800.00	2,643.04	1,910.16	1,879.52	15.93	11.84	77.43	-2,167.05	-9,059.43	9,146.86	9,119.24	27.62	331.122		
2,885.32	2,720.91	1,957.05	1,921.68	16.48	12.27	77.65	-2,147.58	-9,065.94	9,146.61	9,118.02	28.59	319.888		
2,900.00	2,734.31	1,965.06	1,928.87	16.58	12.34	77.69	-2,144.24	-9,067.06	9,146.62	9,117.86	28.76	318.039		
3,000.00	2,825.58	2,008.14	1,967.51	17.23	12.75	77.89	-2,126.16	-9,073.12	9,147.10	9,117.31	29.79	307.057		
3,100.00	2,916.86	2,042.34	1,998.16	17.87	13.07	78.06	-2,111.81	-9,078.04	9,148.41	9,117.67	30.74	297.611		
3,200.00	3,008.13	2,085.00	2,036.37	18.52	13.47	78.26	-2,093.94	-9,084.34	9,150.58	9,118.81	31.77	288.035		
3,300.00	3,099.40	2,182.86	2,123.95	19.17	14.41	78.73	-2,052.71	-9,098.75	9,153.40	9,120.06	33.33	274.602		
3,400.00	3,190.68	2,225.42	2,161.99	19.83	14.83	78.93	-2,034.66	-9,104.96	9,156.73	9,122.36	34.37	266.414		
3,500.00	3,281.95	2,274.00	2,205.37	20.48	15.30	79.16	-2,014.02	-9,112.17	9,160.84	9,125.37	35.46	258.312		
3,600.00	3,373.22	2,311.30	2,238.67	21.13	15.67	79.34	-1,998.20	-9,117.79	9,165.73	9,129.28	36.45	251.478		
3,700.00	3,464.49	2,352.78	2,275.74	21.79	16.08	79.54	-1,980.69	-9,124.14	9,171.42	9,133.95	37.47	244.770		
3,800.00	3,555.77	2,369.00	2,290.24	22.44	16.24	79.61	-1,973.87	-9,126.65	9,177.96	9,139.72	38.24	240.010		
3,900.00	3,647.04	2,417.31	2,333.45	23.10	16.72	79.84	-1,953.66	-9,134.29	9,185.28	9,145.96	39.32	233.587		
4,000.00	3,738.31	2,464.00	2,375.22	23.75	17.18	80.07	-1,934.26	-9,141.96	9,193.55	9,153.16	40.39	227.639		
4,100.00	3,829.59	2,497.89	2,405.55	24.41	17.52	80.23	-1,920.25	-9,147.61	9,202.58	9,161.26	41.32	222.713		
4,200.00	3,920.86	2,573.01	2,472.83	25.07	18.26	80.58	-1,889.23	-9,160.08	9,212.24	9,169.59	42.66	215.953		
4,300.00	4,012.13	2,620.94	2,515.84	25.73	18.74	80.81	-1,869.65	-9,168.08	9,222.56	9,178.84	43.72	210.943		
4,400.00	4,103.41	2,749.25	2,631.05	26.38	20.01	81.41	-1,817.33	-9,189.29	9,233.47	9,187.89	45.57	202.602		
4,500.00	4,194.68	2,843.96	2,715.35	27.04	20.98	81.86	-1,776.84	-9,204.30	9,244.49	9,197.37	47.12	196.183		
4,600.00	4,285.95	2,882.82	2,749.71	27.70	21.39	82.05	-1,759.77	-9,210.42	9,256.13	9,208.02	48.11	192.411		
4,700.00	4,377.22	2,922.77	2,785.03	28.36	21.80	82.24	-1,742.23	-9,216.81	9,268.56	9,219.46	49.10	188.783		
4,800.00	4,468.50	4,800.00	2,939.09	29.02	40.81	83.05	-1,669.46	-9,243.94	9,281.40	9,213.64	67.76	136.980		
4,900.00	4,559.77	3,186.94	3,021.08	29.68	24.50	83.48	-1,630.86	-9,257.49	9,294.13	9,241.22	52.91	175.662		
5,000.00	4,651.04	3,228.48	3,058.04	30.34	24.93	83.68	-1,612.92	-9,263.66	9,307.62	9,253.73	53.90	172.699		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	4,742.32	3,274.19	3,098.79	31.00	25.39	83.90	-1,593.40	-9,270.56	9,321.86	9,266.95	54.92	169.744		
5,200.00	4,833.59	3,410.07	3,220.74	31.66	26.77	84.53	-1,537.13	-9,291.17	9,336.80	9,279.97	56.83	164.283		
5,300.00	4,924.86	3,449.02	3,255.80	32.32	27.16	84.71	-1,521.17	-9,296.94	9,351.90	9,294.13	57.77	161.888		
5,400.00	5,016.13	3,490.23	3,292.93	32.99	27.57	84.90	-1,504.41	-9,303.15	9,367.75	9,309.03	58.72	159.535		
5,500.00	5,107.41	3,534.77	3,333.08	33.65	28.02	85.11	-1,486.38	-9,309.99	9,384.34	9,324.65	59.70	157.197		
5,600.00	5,198.68	3,580.44	3,374.19	34.31	28.48	85.32	-1,467.79	-9,317.09	9,401.65	9,340.97	60.68	154.932		
5,700.00	5,289.95	3,677.88	3,461.80	34.97	29.46	85.76	-1,427.91	-9,332.21	9,419.56	9,357.38	62.18	151.491		
5,800.00	5,381.23	3,765.39	3,540.65	35.63	30.34	86.17	-1,392.35	-9,345.52	9,437.76	9,374.19	63.57	148.472		
5,900.00	5,472.50	3,834.89	3,603.40	36.30	31.03	86.48	-1,364.39	-9,356.03	9,456.44	9,391.67	64.77	146.001		
6,000.00	5,563.77	3,881.00	3,644.87	36.96	31.49	86.69	-1,345.47	-9,362.95	9,475.70	9,409.96	65.74	144.148		
6,100.00	5,655.05	3,881.00	3,644.87	37.62	31.49	86.69	-1,345.47	-9,362.95	9,495.86	9,429.62	66.24	143.359		
6,200.00	5,746.32	3,930.86	3,689.47	38.28	32.01	86.92	-1,324.52	-9,370.60	9,516.64	9,449.39	67.25	141.520		
6,300.00	5,837.59	3,976.00	3,729.52	38.95	32.49	87.13	-1,305.01	-9,377.87	9,538.49	9,470.29	68.20	139.865		
6,400.00	5,928.86	3,976.00	3,729.52	39.61	32.49	87.13	-1,305.01	-9,377.87	9,561.02	9,492.34	68.68	139.214		
6,500.00	6,020.14	3,976.00	3,729.52	40.27	32.49	87.13	-1,305.01	-9,377.87	9,584.54	9,515.39	69.15	138.603		
6,600.00	6,111.41	4,016.97	3,765.60	40.94	32.93	87.33	-1,286.88	-9,384.73	9,608.79	9,538.73	70.06	137.159		
6,700.00	6,202.68	4,038.43	3,784.42	41.60	33.17	87.43	-1,277.22	-9,388.41	9,633.93	9,563.19	70.74	136.180		
6,800.00	6,293.96	6,531.76	6,146.56	42.26	50.73	96.64	-642.54	-9,620.71	9,658.38	9,569.80	88.57	109.043		
6,900.00	6,385.23	6,610.55	6,225.32	42.93	50.94	96.84	-640.76	-9,621.64	9,665.36	9,575.98	89.38	108.139		
7,000.00	6,476.50	6,707.89	6,322.64	43.59	51.19	97.08	-639.11	-9,622.95	9,672.57	9,582.34	90.22	107.207		
7,100.00	6,567.77	6,812.46	6,427.19	44.25	51.45	97.34	-637.86	-9,624.32	9,679.84	9,588.75	91.08	106.275		
7,200.00	6,658.64	6,906.89	6,521.61	44.91	51.68	80.59	-637.09	-9,625.54	9,681.07	9,589.17	91.91	105.337		
7,300.00	6,747.14	6,998.38	6,613.09	45.52	51.91	65.97	-636.54	-9,626.73	9,667.20	9,574.51	92.68	104.303		
7,400.00	6,831.10	7,083.03	6,697.74	46.07	52.11	56.21	-636.13	-9,627.84	9,638.50	9,545.12	93.39	103.212		
7,500.00	6,908.46	7,160.91	6,775.61	46.54	52.30	50.26	-635.76	-9,628.87	9,595.72	9,501.71	94.00	102.079		
7,600.00	6,977.30	7,230.45	6,845.14	46.95	52.48	47.18	-635.43	-9,629.78	9,539.89	9,445.35	94.54	100.907		
7,700.00	7,035.93	7,289.95	6,904.64	47.30	52.62	46.50	-635.14	-9,630.56	9,472.39	9,377.38	95.01	99.704		
7,800.00	7,082.92	7,337.95	6,952.63	47.59	52.74	48.32	-634.91	-9,631.19	9,394.84	9,299.45	95.39	98.484		
7,900.00	7,117.09	7,373.26	6,987.94	47.84	52.83	53.59	-634.74	-9,631.65	9,309.12	9,213.40	95.71	97.261		
8,000.00	7,137.62	7,397.21	7,011.89	48.06	52.89	65.01	-634.63	-9,631.97	9,217.28	9,121.31	95.97	96.047		
8,100.00	7,143.99	7,407.61	7,022.29	48.28	52.92	88.12	-634.58	-9,632.10	9,121.54	9,025.38	96.15	94.865		
8,200.00	7,143.45	7,408.58	7,023.25	48.53	52.92	88.15	-634.58	-9,632.11	9,024.67	8,928.37	96.30	93.712		
8,300.00	7,142.91	7,409.54	7,024.21	48.89	52.92	88.17	-634.57	-9,632.12	8,927.87	8,831.41	96.47	92.549		
8,400.00	7,142.37	7,410.49	7,025.17	49.40	52.93	88.19	-634.57	-9,632.13	8,831.15	8,734.50	96.65	91.377		
8,500.00	7,141.83	7,411.43	7,026.11	50.12	52.93	88.22	-634.56	-9,632.15	8,734.50	8,637.66	96.84	90.195		
8,600.00	7,141.29	7,412.37	7,027.05	51.08	52.93	88.24	-634.56	-9,632.16	8,637.92	8,540.87	97.05	89.003		
8,700.00	7,140.75	7,413.30	7,027.98	52.30	52.93	88.27	-634.55	-9,632.17	8,541.43	8,444.15	97.28	87.802		
8,800.00	7,140.21	7,414.22	7,028.90	53.75	52.94	88.29	-634.55	-9,632.18	8,445.01	8,347.49	97.53	86.591		
8,900.00	7,139.67	7,415.14	7,029.81	55.40	52.94	88.31	-634.55	-9,632.19	8,348.68	8,250.89	97.79	85.371		
9,000.00	7,139.12	7,416.04	7,030.72	57.20	52.94	88.34	-634.54	-9,632.20	8,252.44	8,154.36	98.08	84.142		
9,100.00	7,138.58	7,416.95	7,031.62	59.13	52.94	88.36	-634.54	-9,632.21	8,156.29	8,057.90	98.38	82.903		
9,200.00	7,138.04	7,417.84	7,032.52	61.15	52.95	88.38	-634.53	-9,632.22	8,060.23	7,961.52	98.71	81.656		
9,300.00	7,137.50	7,418.73	7,033.40	63.26	52.95	88.40	-634.53	-9,632.24	7,964.27	7,865.21	99.06	80.399		
9,400.00	7,136.96	7,419.61	7,034.28	65.44	52.95	88.43	-634.52	-9,632.25	7,868.40	7,768.97	99.43	79.135		
9,500.00	7,136.42	7,420.48	7,035.16	67.68	52.95	88.45	-634.52	-9,632.26	7,772.65	7,672.82	99.83	77.861		
9,600.00	7,135.88	7,421.35	7,036.02	69.97	52.95	88.47	-634.52	-9,632.27	7,677.00	7,576.75	100.25	76.580		
9,700.00	7,135.34	7,422.21	7,036.88	72.31	52.96	88.49	-634.51	-9,632.28	7,581.46	7,480.77	100.69	75.291		
9,800.00	7,134.80	7,423.06	7,037.74	74.69	52.96	88.51	-634.51	-9,632.29	7,486.04	7,384.87	101.17	73.995		
9,900.00	7,134.26	7,423.91	7,038.59	77.10	52.96	88.54	-634.50	-9,632.30	7,390.74	7,289.07	101.67	72.692		
10,000.00	7,133.71	7,424.75	7,039.43	79.54	52.96	88.56	-634.50	-9,632.31	7,295.57	7,193.36	102.20	71.383		
10,100.00	7,133.17	7,425.59	7,040.26	82.02	52.97	88.58	-634.50	-9,632.32	7,200.52	7,097.76	102.77	70.067		
10,200.00	7,132.63	7,426.42	7,041.09	84.52	52.97	88.60	-634.49	-9,632.33	7,105.62	7,002.26	103.36	68.746		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-32-12(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 120-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,132.09	7,427.24	7,041.91	87.04	52.97	88.62	-634.49	-9,632.34	7,010.85	6,906.86	103.99	67.421		
10,400.00	7,131.55	7,428.06	7,042.73	89.58	52.97	88.64	-634.48	-9,632.35	6,916.23	6,811.58	104.65	66.090		
10,500.00	7,131.01	7,428.87	7,043.54	92.15	52.97	88.66	-634.48	-9,632.36	6,821.77	6,716.42	105.34	64.757		
10,600.00	7,130.47	7,429.67	7,044.35	94.73	52.98	88.68	-634.48	-9,632.37	6,727.46	6,621.38	106.08	63.420		
10,700.00	7,129.93	7,430.47	7,045.15	97.33	52.98	88.70	-634.47	-9,632.38	6,633.32	6,526.47	106.85	62.080		
10,800.00	7,129.39	7,431.27	7,045.94	99.94	52.98	88.72	-634.47	-9,632.39	6,539.36	6,431.70	107.66	60.739		
10,900.00	7,128.84	7,432.05	7,046.73	102.56	52.98	88.74	-634.47	-9,632.40	6,445.58	6,337.06	108.52	59.397		
11,000.00	7,128.30	7,432.84	7,047.51	105.20	52.98	88.76	-634.46	-9,632.41	6,351.98	6,242.57	109.41	58.055		
11,100.00	7,127.76	7,433.61	7,048.29	107.85	52.99	88.78	-634.46	-9,632.41	6,258.59	6,148.23	110.35	56.714		
11,200.00	7,127.22	7,434.38	7,049.06	110.51	52.99	88.80	-634.45	-9,632.42	6,165.40	6,054.06	111.34	55.373		
11,300.00	7,126.68	7,435.15	7,049.82	113.18	52.99	88.82	-634.45	-9,632.43	6,072.43	5,960.05	112.38	54.036		
11,400.00	7,126.14	7,435.91	7,050.58	115.86	52.99	88.84	-634.45	-9,632.44	5,979.68	5,866.22	113.46	52.701		
11,500.00	7,125.60	7,436.66	7,051.34	118.55	52.99	88.86	-634.44	-9,632.45	5,887.18	5,772.57	114.60	51.371		
11,600.00	7,125.06	7,437.41	7,052.09	121.25	53.00	88.88	-634.44	-9,632.46	5,794.92	5,679.12	115.79	50.045		
11,700.00	7,124.52	7,438.16	7,052.83	123.95	53.00	88.90	-634.44	-9,632.47	5,702.92	5,585.88	117.04	48.725		
11,800.00	7,123.97	7,438.90	7,053.57	126.66	53.00	88.92	-634.43	-9,632.48	5,611.20	5,492.85	118.35	47.412		
11,900.00	7,123.43	7,439.63	7,054.30	129.38	53.00	88.94	-634.43	-9,632.48	5,519.76	5,400.04	119.72	46.107		
12,000.00	7,122.89	7,440.36	7,055.03	132.10	53.00	88.95	-634.43	-9,632.49	5,428.63	5,307.48	121.15	44.810		
12,100.00	7,122.35	7,441.08	7,055.76	134.83	53.00	88.97	-634.42	-9,632.50	5,337.81	5,215.17	122.64	43.523		
12,200.00	7,121.81	7,441.80	7,056.48	137.56	53.01	88.99	-634.42	-9,632.51	5,247.33	5,123.12	124.21	42.247		
12,300.00	7,121.27	7,442.52	7,057.19	140.30	53.01	89.01	-634.42	-9,632.52	5,157.19	5,031.35	125.84	40.981		
12,400.00	7,120.73	7,443.22	7,057.90	143.05	53.01	89.03	-634.41	-9,632.53	5,067.43	4,939.88	127.55	39.729		
12,500.00	7,120.19	7,443.93	7,058.60	145.80	53.01	89.04	-634.41	-9,632.53	4,978.06	4,848.73	129.34	38.489		
12,600.00	7,119.65	7,444.63	7,059.30	148.55	53.01	89.06	-634.41	-9,632.54	4,889.10	4,757.90	131.20	37.264		
12,700.00	7,119.10	7,445.32	7,060.00	151.30	53.02	89.08	-634.40	-9,632.55	4,800.58	4,667.43	133.15	36.055		
12,800.00	7,118.56	7,446.01	7,060.69	154.07	53.02	89.10	-634.40	-9,632.56	4,712.51	4,577.33	135.18	34.861		
12,900.00	7,118.02	7,446.70	7,061.37	156.83	53.02	89.12	-634.40	-9,632.57	4,624.93	4,487.62	137.30	33.684		
13,000.00	7,117.48	7,447.38	7,062.05	159.60	53.02	89.13	-634.39	-9,632.57	4,537.86	4,398.34	139.52	32.525		
13,100.00	7,116.94	7,448.05	7,062.73	162.37	53.02	89.15	-634.39	-9,632.58	4,451.34	4,309.50	141.83	31.385		
13,200.00	7,116.40	7,448.73	7,063.40	165.14	53.02	89.17	-634.39	-9,632.59	4,365.39	4,221.14	144.24	30.264		
13,300.00	7,115.86	7,449.39	7,064.07	167.92	53.03	89.18	-634.38	-9,632.60	4,280.05	4,133.29	146.76	29.163		
13,400.00	7,115.32	7,450.06	7,064.73	170.70	53.03	89.20	-634.38	-9,632.60	4,195.36	4,045.97	149.39	28.084		
13,500.00	7,114.78	7,450.71	7,065.39	173.48	53.03	89.22	-634.38	-9,632.61	4,111.36	3,959.23	152.13	27.026		
13,600.00	7,114.24	7,451.37	7,066.04	176.26	53.03	89.23	-634.38	-9,632.62	4,028.08	3,873.10	154.98	25.991		
13,700.00	7,113.69	7,452.02	7,066.69	179.05	53.03	89.25	-634.37	-9,632.63	3,945.59	3,787.63	157.95	24.979		
13,800.00	7,113.15	7,452.66	7,067.34	181.84	53.03	89.27	-634.37	-9,632.63	3,863.92	3,702.87	161.05	23.991		
13,900.00	7,112.61	7,453.31	7,067.98	184.63	53.04	89.28	-634.37	-9,632.64	3,783.13	3,618.85	164.28	23.028		
14,000.00	7,112.07	7,453.94	7,068.62	187.42	53.04	89.30	-634.36	-9,632.65	3,703.28	3,535.64	167.65	22.090		
14,100.00	7,111.53	7,454.58	7,069.25	190.22	53.04	89.32	-634.36	-9,632.66	3,624.43	3,453.29	171.14	21.178		
14,200.00	7,110.99	7,455.21	7,069.88	193.01	53.04	89.33	-634.36	-9,632.66	3,546.65	3,371.87	174.78	20.292		
14,300.00	7,110.45	7,455.83	7,070.50	195.81	53.04	89.35	-634.36	-9,632.67	3,470.00	3,291.44	178.56	19.433		
14,400.00	7,109.91	7,456.45	7,071.12	198.61	53.04	89.36	-634.35	-9,632.68	3,394.57	3,212.08	182.49	18.601		
14,500.00	7,109.37	7,457.07	7,071.74	201.42	53.04	89.38	-634.35	-9,632.68	3,320.44	3,133.87	186.57	17.797		
14,600.00	7,108.82	7,457.68	7,072.35	204.22	53.05	89.39	-634.35	-9,632.69	3,247.70	3,056.90	190.80	17.021		
14,700.00	7,108.28	7,458.29	7,072.96	207.03	53.05	89.41	-634.34	-9,632.70	3,176.44	2,981.26	195.18	16.274		
14,800.00	7,107.74	7,458.90	7,073.57	209.83	53.05	89.43	-634.34	-9,632.70	3,106.76	2,907.05	199.71	15.556		
14,900.00	7,107.20	7,459.50	7,074.17	212.64	53.05	89.44	-634.34	-9,632.71	3,038.78	2,834.38	204.39	14.867		
15,000.00	7,106.66	7,460.10	7,074.77	215.45	53.05	89.46	-634.34	-9,632.72	2,972.60	2,763.38	209.22	14.208		
15,100.00	7,106.12	7,460.69	7,075.36	218.26	53.05	89.47	-634.33	-9,632.72	2,908.36	2,694.17	214.19	13.578		
15,200.00	7,105.58	7,461.28	7,075.95	221.07	53.06	89.49	-634.33	-9,632.73	2,846.18	2,626.88	219.30	12.979		
15,300.00	7,105.04	7,461.87	7,076.54	223.89	53.06	89.50	-634.33	-9,632.74	2,786.21	2,561.68	224.53	12.409		
15,400.00	7,104.50	7,462.45	7,077.12	226.70	53.06	89.52	-634.32	-9,632.74	2,728.58	2,498.70	229.88	11.870		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	7,462.98	7,077.65	229.28	53.06	89.53	-634.32	-9,632.75	2,678.01	2,443.14	234.86	11.402	CC, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2,156.44	2,092.71	3.28	14.94	-102.97	-2,016.73	-8,754.36	9,224.18					
100.00	100.00	2,207.00	2,138.89	3.28	15.40	-102.86	-1,997.19	-8,747.88	9,201.70	9,183.92	17.78	517.540		
200.00	200.00	2,251.88	2,179.93	3.34	15.79	-102.76	-1,979.91	-8,742.32	9,179.78	9,161.61	18.17	505.124		
300.00	299.98	2,302.00	2,225.88	3.44	16.24	74.65	-1,960.75	-8,736.48	9,158.12	9,139.46	18.66	490.766		
400.00	399.84	2,356.43	2,275.85	3.59	16.72	75.23	-1,940.08	-8,730.31	9,136.08	9,116.85	19.23	475.066		
500.00	499.45	2,537.92	2,442.02	3.79	18.35	76.19	-1,870.44	-8,708.54	9,112.49	9,091.59	20.90	435.950		
600.00	598.70	2,585.00	2,484.87	4.03	18.78	76.82	-1,851.70	-8,703.13	9,088.56	9,067.04	21.52	422.259		
700.00	697.47	2,643.77	2,538.32	4.31	19.32	77.50	-1,828.15	-8,696.63	9,064.43	9,042.13	22.30	406.565		
800.00	795.62	2,844.56	2,720.50	4.64	21.20	78.72	-1,746.93	-8,673.65	9,039.66	9,015.32	24.33	371.494		
900.00	893.06	2,913.77	2,783.06	5.00	21.85	79.51	-1,718.55	-8,665.23	9,013.67	8,988.38	25.29	356.436		
1,000.00	989.64	2,964.00	2,828.67	5.40	22.32	80.24	-1,698.40	-8,659.17	8,987.69	8,961.57	26.12	344.092		
1,100.00	1,085.27	3,030.53	2,889.45	5.83	22.93	81.04	-1,672.58	-8,651.05	8,961.69	8,934.58	27.11	330.547		
1,200.00	1,179.82	3,100.51	2,953.74	6.29	23.56	81.87	-1,646.36	-8,642.29	8,935.61	8,907.44	28.17	317.236		
1,300.00	1,273.17	3,170.19	3,017.60	6.79	24.19	82.72	-1,619.85	-8,633.71	8,909.53	8,880.27	29.26	304.510		
1,400.00	1,365.21	3,248.26	3,089.09	7.33	24.90	83.62	-1,589.98	-8,624.10	8,883.48	8,853.02	30.46	291.598		
1,500.00	1,456.49	3,284.99	3,122.81	7.89	25.23	83.82	-1,576.14	-8,619.57	8,857.83	8,826.48	31.35	282.544		
1,600.00	1,547.76	3,322.83	3,157.72	8.46	25.57	84.00	-1,562.30	-8,614.95	8,832.94	8,800.67	32.27	273.758		
1,700.00	1,639.04	3,346.00	3,179.19	9.05	25.77	84.11	-1,554.05	-8,612.14	8,808.84	8,775.76	33.08	266.295		
1,800.00	1,730.31	3,386.57	3,216.88	9.65	26.12	84.29	-1,539.83	-8,607.35	8,785.52	8,751.49	34.04	258.131		
1,900.00	1,821.58	3,415.85	3,244.15	10.26	26.37	84.43	-1,529.69	-8,604.03	8,763.08	8,728.16	34.92	250.980		
2,000.00	1,912.85	3,477.38	3,301.60	10.87	26.89	84.71	-1,508.71	-8,597.29	8,741.45	8,705.40	36.05	242.473		
2,100.00	2,004.13	3,562.21	3,381.02	11.49	27.59	85.10	-1,480.52	-8,587.56	8,720.08	8,682.71	37.37	233.366		
2,200.00	2,095.40	3,624.00	3,626.20	12.11	29.76	86.29	-1,394.95	-8,554.62	8,698.45	8,658.45	40.00	217.462		
2,300.00	2,186.67	3,914.89	3,710.78	12.74	30.53	86.72	-1,364.03	-8,542.36	8,676.58	8,635.19	41.39	209.626		
2,400.00	2,277.95	3,949.18	3,742.52	13.38	30.84	86.88	-1,351.86	-8,537.81	8,655.23	8,612.87	42.37	204.296		
2,500.00	2,369.22	3,980.35	3,771.32	14.01	31.11	87.03	-1,340.65	-8,533.83	8,634.74	8,591.41	43.32	199.309		
2,600.00	2,460.49	4,015.00	3,803.31	14.65	31.42	87.19	-1,328.02	-8,529.60	8,615.11	8,570.79	44.31	194.411		
2,700.00	2,551.77	4,065.03	3,849.44	15.29	31.86	87.44	-1,309.58	-8,523.66	8,596.27	8,550.82	45.44	189.174		
2,800.00	2,643.04	4,120.42	3,900.45	15.93	32.36	87.71	-1,288.99	-8,517.19	8,578.10	8,531.48	46.62	184.011		
2,900.00	2,734.31	4,171.33	3,947.35	16.58	32.81	87.95	-1,270.08	-8,511.33	8,560.63	8,512.87	47.76	179.237		
3,000.00	2,825.58	4,236.14	4,007.13	17.23	33.39	88.27	-1,246.15	-8,503.98	8,543.88	8,494.85	49.02	174.281		
3,100.00	2,916.86	4,575.72	4,316.74	17.87	36.56	89.96	-1,114.18	-8,459.84	8,525.82	8,473.14	52.68	161.846		
3,200.00	3,008.13	4,658.17	4,389.84	18.52	37.40	90.40	-1,077.82	-8,448.32	8,508.07	8,453.87	54.20	156.970		
3,300.00	3,099.40	4,679.00	4,408.34	19.17	37.61	90.51	-1,068.72	-8,445.38	8,491.02	8,435.88	55.15	153.972		
3,400.00	3,190.68	4,728.54	4,452.48	19.83	38.11	90.77	-1,047.29	-8,438.51	8,474.77	8,418.42	56.36	150.377		
3,500.00	3,281.95	4,774.00	4,493.17	20.48	38.57	91.00	-1,027.95	-8,432.50	8,459.56	8,402.03	57.53	147.046		
3,600.00	3,373.22	4,774.00	4,493.17	21.13	38.57	91.00	-1,027.95	-8,432.50	8,445.22	8,386.95	58.28	144.915		
3,700.00	3,464.49	4,820.60	4,535.17	21.79	39.01	91.24	-1,008.63	-8,426.58	8,431.80	8,372.35	59.44	141.846		
3,800.00	3,555.77	4,869.00	4,579.16	22.44	39.48	91.49	-989.34	-8,420.68	8,419.33	8,358.70	60.63	138.873		
3,900.00	3,647.04	4,918.56	4,624.51	23.10	39.93	91.74	-970.24	-8,414.72	8,407.63	8,345.84	61.80	136.050		
4,000.00	3,738.31	4,997.82	4,697.34	23.75	40.66	92.13	-940.52	-8,405.06	8,396.50	8,333.27	63.23	132.800		
4,100.00	3,829.59	5,067.04	4,760.71	24.41	41.29	92.48	-913.97	-8,396.59	8,385.95	8,321.38	64.57	129.875		
4,200.00	3,920.86	5,099.50	4,790.44	25.07	41.59	92.65	-901.57	-8,392.71	8,376.19	8,310.60	65.59	127.701		
4,300.00	4,012.13	5,152.00	4,838.75	25.73	42.06	92.91	-881.92	-8,386.64	8,367.34	8,300.55	66.79	125.283		
4,400.00	4,103.41	5,176.00	4,860.92	26.38	42.27	93.03	-873.13	-8,383.96	8,359.31	8,291.59	67.72	123.432		
4,500.00	4,194.68	5,215.64	4,897.68	27.04	42.62	93.22	-858.91	-8,379.65	8,352.17	8,283.38	68.79	121.418		
4,600.00	4,285.95	5,247.00	4,926.86	27.70	42.89	93.37	-847.93	-8,376.36	8,345.89	8,276.11	69.78	119.603		
4,700.00	4,377.22	5,298.10	4,974.65	28.36	43.31	93.62	-830.58	-8,371.21	8,340.44	8,269.53	70.91	117.614		
4,800.00	4,468.50	5,342.00	5,015.93	29.02	43.68	93.83	-816.25	-8,366.99	8,335.83	8,263.84	71.99	115.797		
4,900.00	4,559.77	5,374.00	5,046.18	29.68	43.92	93.98	-806.24	-8,364.08	8,332.08	8,259.15	72.94	114.233		
5,000.00	4,651.04	5,407.77	5,078.30	30.34	44.17	94.13	-796.20	-8,361.22	8,329.24	8,255.34	73.90	112.708		
5,100.00	4,742.32	5,437.00	5,106.25	31.00	44.40	94.27	-787.95	-8,358.92	8,327.30	8,252.47	74.82	111.291		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	4,833.59	5,487.53	5,154.83	31.66	44.74	94.49	-774.55	-8,355.26	8,326.17	8,250.30	75.87	109.749		
5,300.00	4,924.86	5,539.03	5,204.66	32.32	45.09	94.71	-761.96	-8,351.87	8,325.83	8,248.93	76.91	108.261		
5,400.00	5,016.13	5,676.51	5,338.61	32.99	45.92	95.28	-732.45	-8,342.84	8,325.61	8,247.18	78.43	106.159		
5,500.00	5,107.41	5,800.00	5,457.00	33.65	45.01	95.74	-711.97	-8,335.01	8,325.41	8,247.19	78.21	106.444		
5,545.84	5,149.25	5,838.81	5,498.27	33.95	46.78	95.90	-705.38	-8,332.23	8,325.33	8,245.05	80.28	103.699		
5,600.00	5,198.68	5,858.27	5,517.50	34.31	46.88	95.97	-702.58	-8,331.02	8,325.46	8,244.71	80.75	103.101		
5,700.00	5,289.95	5,909.00	5,567.71	34.97	47.12	96.16	-695.94	-8,328.27	8,326.37	8,244.69	81.68	101.941		
5,800.00	5,381.23	5,960.24	5,618.54	35.63	47.34	96.34	-689.91	-8,325.80	8,327.95	8,245.37	82.58	100.844		
5,900.00	5,472.50	6,034.08	5,691.85	36.30	47.66	96.60	-681.83	-8,322.38	8,329.97	8,246.39	83.57	99.671		
6,000.00	5,563.77	6,097.00	5,754.41	36.96	47.92	96.82	-675.65	-8,319.74	8,332.49	8,247.98	84.51	98.598		
6,100.00	5,655.05	6,142.59	5,799.78	37.62	48.09	96.97	-671.50	-8,318.07	8,335.65	8,250.30	85.36	97.655		
6,200.00	5,746.32	6,192.00	5,848.98	38.28	48.28	97.13	-667.21	-8,316.56	8,339.54	8,253.33	86.22	96.726		
6,300.00	5,837.59	6,240.10	5,896.89	38.95	48.47	97.30	-663.08	-8,315.32	8,344.12	8,257.05	87.07	95.836		
6,400.00	5,928.86	6,297.96	5,954.51	39.61	48.69	97.49	-657.94	-8,314.04	8,349.34	8,261.39	87.95	94.932		
6,500.00	6,020.14	6,388.76	6,044.99	40.27	49.02	97.79	-650.53	-8,312.26	8,354.95	8,265.99	88.96	93.919		
6,600.00	6,111.41	6,476.56	6,132.55	40.94	49.33	98.07	-644.33	-8,310.73	8,360.82	8,270.88	89.94	92.965		
6,700.00	6,202.68	6,569.60	6,225.41	41.60	49.65	98.37	-638.68	-8,309.28	8,366.92	8,276.00	90.92	92.029		
6,800.00	6,293.96	6,623.33	6,279.06	42.26	49.82	98.53	-635.85	-8,308.63	8,373.43	8,281.69	91.74	91.272		
6,900.00	6,385.23	6,686.30	6,341.96	42.93	50.01	98.73	-632.94	-8,308.24	8,380.55	8,287.96	92.59	90.511		
7,000.00	6,476.50	6,792.26	6,447.84	43.59	50.33	99.04	-629.01	-8,307.85	8,387.96	8,294.39	93.57	89.642		
7,100.00	6,567.77	6,908.20	6,563.74	44.25	50.66	99.38	-625.89	-8,307.28	8,395.25	8,300.69	94.57	88.775		
7,200.00	6,658.64	7,002.30	6,657.81	44.91	50.92	82.68	-623.66	-8,306.77	8,396.60	8,301.11	95.49	87.935		
7,300.00	6,747.14	7,096.15	6,751.64	45.52	51.18	68.16	-621.63	-8,306.25	8,382.97	8,286.60	96.37	86.986		
7,400.00	6,831.10	7,186.98	6,842.45	46.07	51.43	58.57	-619.98	-8,305.75	8,354.63	8,257.45	97.19	85.964		
7,500.00	6,908.46	7,268.96	6,924.43	46.54	51.65	52.86	-618.76	-8,305.29	8,312.32	8,214.40	97.91	84.896		
7,600.00	6,977.30	7,340.09	6,995.55	46.95	51.85	50.10	-617.87	-8,304.90	8,257.10	8,158.56	98.54	83.791		
7,700.00	7,035.93	7,400.69	7,056.15	47.30	52.01	49.86	-617.22	-8,304.58	8,190.35	8,091.25	99.10	82.649		
7,800.00	7,082.92	7,455.52	7,110.98	47.59	52.16	52.34	-616.72	-8,304.28	8,113.68	8,014.08	99.60	81.466		
7,900.00	7,117.09	7,498.54	7,153.99	47.84	52.27	58.48	-616.31	-8,303.98	8,028.91	7,928.89	100.02	80.269		
8,000.00	7,137.62	7,523.77	7,179.22	48.06	52.34	70.58	-616.07	-8,303.78	7,938.12	7,837.75	100.37	79.088		
8,100.00	7,143.99	7,530.81	7,186.26	48.28	52.36	92.10	-616.01	-8,303.73	7,843.51	7,742.88	100.63	77.941		
8,200.00	7,143.45	7,529.05	7,184.49	48.53	52.35	92.05	-616.02	-8,303.74	7,747.82	7,646.96	100.86	76.815		
8,300.00	7,142.91	7,527.29	7,182.74	48.89	52.35	92.01	-616.04	-8,303.76	7,652.25	7,551.14	101.11	75.680		
8,400.00	7,142.37	7,525.55	7,181.00	49.40	52.35	91.96	-616.06	-8,303.77	7,556.79	7,455.40	101.38	74.536		
8,500.00	7,141.83	7,523.82	7,179.27	50.12	52.34	91.92	-616.07	-8,303.78	7,461.44	7,359.76	101.68	73.382		
8,600.00	7,141.29	7,522.10	7,177.55	51.08	52.34	91.88	-616.09	-8,303.80	7,366.22	7,264.22	102.00	72.218		
8,700.00	7,140.75	7,520.40	7,175.85	52.30	52.33	91.83	-616.11	-8,303.81	7,271.13	7,168.79	102.34	71.046		
8,800.00	7,140.21	7,518.71	7,174.16	53.75	52.33	91.79	-616.12	-8,303.83	7,176.17	7,073.46	102.72	69.864		
8,900.00	7,139.67	7,517.03	7,172.48	55.40	52.32	91.75	-616.14	-8,303.84	7,081.35	6,978.24	103.12	68.674		
9,000.00	7,139.12	7,515.37	7,170.82	57.20	52.32	91.71	-616.15	-8,303.85	6,986.68	6,883.13	103.54	67.476		
9,100.00	7,138.58	7,513.72	7,169.16	59.13	52.31	91.67	-616.17	-8,303.87	6,892.15	6,788.15	104.00	66.269		
9,200.00	7,138.04	7,512.08	7,167.52	61.15	52.31	91.62	-616.18	-8,303.88	6,797.78	6,693.29	104.49	65.054		
9,300.00	7,137.50	7,510.45	7,165.90	63.26	52.30	91.58	-616.20	-8,303.89	6,703.57	6,598.56	105.02	63.832		
9,400.00	7,136.96	7,508.83	7,164.28	65.44	52.30	91.54	-616.22	-8,303.90	6,609.54	6,503.96	105.58	62.603		
9,500.00	7,136.42	7,507.23	7,162.67	67.68	52.30	91.50	-616.23	-8,303.92	6,515.68	6,409.50	106.17	61.368		
9,600.00	7,135.88	7,505.63	7,161.08	69.97	52.29	91.46	-616.25	-8,303.93	6,422.00	6,315.19	106.81	60.126		
9,700.00	7,135.34	7,504.05	7,159.50	72.31	52.29	91.42	-616.26	-8,303.94	6,328.52	6,221.04	107.48	58.879		
9,800.00	7,134.80	7,502.48	7,157.93	74.69	52.28	91.38	-616.28	-8,303.95	6,235.24	6,127.04	108.20	57.628		
9,900.00	7,134.26	7,500.92	7,156.37	77.10	52.28	91.34	-616.29	-8,303.97	6,142.17	6,033.22	108.96	56.372		
10,000.00	7,133.71	7,499.38	7,154.82	79.54	52.27	91.30	-616.31	-8,303.98	6,049.33	5,939.56	109.76	55.113		
10,100.00	7,133.17	7,497.84	7,153.29	82.02	52.27	91.26	-616.32	-8,303.99	5,956.71	5,846.10	110.61	53.852		
10,200.00	7,132.63	7,496.31	7,151.76	84.52	52.27	91.23	-616.33	-8,304.00	5,864.34	5,752.82	111.51	52.589		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,132.09	7,494.80	7,150.25	87.04	52.26	91.19	-616.35	-8,304.01	5,772.22	5,659.75	112.47	51.325		
10,400.00	7,131.55	7,493.29	7,148.74	89.58	52.26	91.15	-616.36	-8,304.02	5,680.36	5,566.89	113.47	50.061		
10,500.00	7,131.01	7,491.80	7,147.25	92.15	52.25	91.11	-616.38	-8,304.03	5,588.79	5,474.26	114.53	48.798		
10,600.00	7,130.47	7,490.32	7,145.77	94.73	52.25	91.07	-616.39	-8,304.04	5,497.51	5,381.86	115.65	47.537		
10,700.00	7,129.93	7,488.84	7,144.29	97.33	52.25	91.04	-616.40	-8,304.05	5,406.53	5,289.71	116.82	46.279		
10,800.00	7,129.39	7,487.38	7,142.83	99.94	52.24	91.00	-616.42	-8,304.06	5,315.88	5,197.82	118.06	45.025		
10,900.00	7,128.84	7,485.93	7,141.38	102.56	52.24	90.96	-616.43	-8,304.08	5,225.58	5,106.21	119.37	43.776		
11,000.00	7,128.30	7,484.49	7,139.94	105.20	52.23	90.93	-616.45	-8,304.09	5,135.63	5,014.88	120.74	42.534		
11,100.00	7,127.76	7,483.05	7,138.50	107.85	52.23	90.89	-616.46	-8,304.10	5,046.05	4,923.87	122.18	41.299		
11,200.00	7,127.22	7,481.63	7,137.08	110.51	52.23	90.85	-616.47	-8,304.11	4,956.88	4,833.18	123.70	40.072		
11,300.00	7,126.68	7,480.22	7,135.67	113.18	52.22	90.82	-616.49	-8,304.12	4,868.13	4,742.84	125.29	38.855		
11,400.00	7,126.14	7,478.82	7,134.27	115.86	52.22	90.78	-616.50	-8,304.12	4,779.82	4,652.86	126.96	37.649		
11,500.00	7,125.60	7,477.42	7,132.87	118.55	52.22	90.75	-616.51	-8,304.13	4,691.98	4,563.27	128.71	36.454		
11,600.00	7,125.06	7,476.04	7,131.49	121.25	52.21	90.71	-616.52	-8,304.14	4,604.63	4,474.09	130.54	35.273		
11,700.00	7,124.52	7,474.66	7,130.11	123.95	52.21	90.68	-616.54	-8,304.15	4,517.81	4,385.35	132.47	34.106		
11,800.00	7,123.97	7,473.30	7,128.75	126.66	52.20	90.64	-616.55	-8,304.16	4,431.55	4,297.07	134.48	32.954		
11,900.00	7,123.43	7,471.94	7,127.39	129.38	52.20	90.61	-616.56	-8,304.17	4,345.87	4,209.29	136.59	31.818		
12,000.00	7,122.89	7,470.59	7,126.04	132.10	52.20	90.57	-616.58	-8,304.18	4,260.82	4,122.03	138.79	30.700		
12,100.00	7,122.35	7,469.25	7,124.70	134.83	52.19	90.54	-616.59	-8,304.19	4,176.43	4,035.33	141.09	29.600		
12,200.00	7,121.81	7,467.92	7,123.37	137.56	52.19	90.51	-616.60	-8,304.20	4,092.74	3,949.24	143.50	28.520		
12,300.00	7,121.27	7,466.60	7,122.05	140.30	52.19	90.47	-616.61	-8,304.21	4,009.80	3,863.78	146.02	27.461		
12,400.00	7,120.73	7,465.29	7,120.74	143.05	52.18	90.44	-616.62	-8,304.22	3,927.65	3,779.01	148.65	26.423		
12,500.00	7,120.19	7,463.99	7,119.44	145.80	52.18	90.41	-616.64	-8,304.22	3,846.35	3,694.96	151.39	25.407		
12,600.00	7,119.65	7,462.69	7,118.14	148.55	52.18	90.37	-616.65	-8,304.23	3,765.95	3,611.71	154.25	24.415		
12,700.00	7,119.10	7,461.41	7,116.86	151.30	52.17	90.34	-616.66	-8,304.24	3,686.51	3,529.29	157.22	23.448		
12,800.00	7,118.56	7,460.13	7,115.58	154.07	52.17	90.31	-616.67	-8,304.25	3,608.09	3,447.77	160.32	22.505		
12,900.00	7,118.02	7,458.86	7,114.31	156.83	52.17	90.28	-616.68	-8,304.26	3,530.76	3,367.21	163.54	21.589		
13,000.00	7,117.48	7,457.60	7,113.05	159.60	52.16	90.25	-616.70	-8,304.26	3,454.59	3,287.70	166.89	20.699		
13,100.00	7,116.94	7,456.34	7,111.79	162.37	52.16	90.21	-616.71	-8,304.27	3,379.67	3,209.30	170.37	19.837		
13,200.00	7,116.40	7,455.10	7,110.55	165.14	52.15	90.18	-616.72	-8,304.28	3,306.07	3,132.10	173.97	19.003		
13,300.00	7,115.86	7,453.86	7,109.31	167.92	52.15	90.15	-616.73	-8,304.29	3,233.89	3,056.18	177.70	18.198		
13,400.00	7,115.32	7,452.63	7,108.08	170.70	52.15	90.12	-616.74	-8,304.29	3,163.22	2,981.66	181.56	17.423		
13,500.00	7,114.78	7,451.41	7,106.86	173.48	52.15	90.09	-616.75	-8,304.30	3,094.17	2,908.64	185.53	16.677		
13,600.00	7,114.24	7,450.20	7,105.65	176.26	52.14	90.06	-616.76	-8,304.31	3,026.85	2,837.22	189.63	15.962		
13,700.00	7,113.69	7,448.99	7,104.44	179.05	52.14	90.03	-616.78	-8,304.32	2,961.38	2,767.54	193.84	15.278		
13,800.00	7,113.15	7,448.25	7,103.70	181.84	52.14	90.01	-616.79	-8,304.33	2,897.87	2,699.73	198.15	14.625		
13,900.00	7,112.61	7,447.13	7,102.58	184.63	52.13	89.98	-616.80	-8,304.34	2,836.47	2,633.92	202.55	14.004		
14,000.00	7,112.07	7,446.00	7,101.45	187.42	52.13	89.95	-616.81	-8,304.34	2,777.32	2,570.29	207.03	13.415		
14,100.00	7,111.53	7,444.87	7,100.32	190.22	52.13	89.92	-616.82	-8,304.35	2,720.56	2,508.97	211.58	12.858		
14,200.00	7,110.99	7,443.74	7,099.19	193.01	52.12	89.89	-616.83	-8,304.36	2,666.33	2,450.16	216.18	12.334		
14,300.00	7,110.45	7,442.61	7,098.06	195.81	52.12	89.87	-616.84	-8,304.36	2,614.81	2,394.02	220.79	11.843		
14,400.00	7,109.91	7,441.48	7,096.93	198.61	52.12	89.84	-616.85	-8,304.37	2,566.16	2,340.74	225.41	11.384		
14,500.00	7,109.37	7,440.35	7,095.80	201.42	52.12	89.81	-616.86	-8,304.37	2,520.53	2,290.52	230.01	10.959		
14,600.00	7,108.82	7,439.22	7,094.67	204.22	52.11	89.78	-616.87	-8,304.38	2,478.10	2,243.56	234.54	10.566		
14,700.00	7,108.28	7,438.09	7,093.54	207.03	52.11	89.75	-616.88	-8,304.38	2,439.03	2,200.05	238.98	10.206		
14,800.00	7,107.74	7,436.96	7,092.41	209.83	52.11	89.72	-616.89	-8,304.39	2,403.49	2,160.19	243.30	9.879		
14,900.00	7,107.20	7,435.82	7,091.28	212.64	52.10	89.69	-616.90	-8,304.40	2,371.64	2,124.19	247.45	9.584		
15,000.00	7,106.66	7,434.69	7,090.14	215.45	52.10	89.67	-616.91	-8,304.40	2,343.62	2,092.22	251.41	9.322		
15,100.00	7,106.12	7,433.56	7,089.01	218.26	52.10	89.64	-616.92	-8,304.41	2,319.58	2,064.45	255.13	9.092		
15,200.00	7,105.58	7,432.42	7,087.87	221.07	52.09	89.61	-616.93	-8,304.41	2,299.64	2,041.06	258.58	8.894		
15,300.00	7,105.04	7,431.29	7,086.74	223.89	52.09	89.58	-616.94	-8,304.42	2,283.91	2,022.18	261.72	8.726		
15,400.00	7,104.50	7,430.15	7,085.60	226.70	52.09	89.55	-616.95	-8,304.43	2,272.47	2,007.92	264.55	8.590		

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

Offset Design	HARVESTERS STATE 7-15 PAD - FRITZLER 17-42-11(PR_150CC) - OH - MWD											Offset Site Error:	0.00 ft
Survey Program:	57-MWD											Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	7,429.11	7,084.56	229.28	52.08	89.52	-616.96	-8,304.43	2,265.82	1,999.00	266.82	8.492	CC, ES, SF



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 34-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 168-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	34.00	3.28	3.28	-106.21	-2,616.99	-9,001.34	9,374.11					
100.00	100.00	37.36	71.36	3.28	3.28	-106.21	-2,616.90	-9,001.43	9,374.15	9,367.59	6.57	1,427.758		
200.00	200.00	93.96	127.96	3.34	3.29	-106.21	-2,616.47	-9,001.87	9,374.69	9,368.07	6.62	1,415.510		
300.00	299.98	168.00	201.98	3.44	3.30	70.67	-2,615.35	-9,003.02	9,375.14	9,368.40	6.74	1,391.542		
400.00	399.84	168.00	201.98	3.59	3.30	70.67	-2,615.35	-9,003.02	9,374.98	9,368.10	6.89	1,361.206		
500.00	499.45	211.42	245.37	3.79	3.33	70.71	-2,614.51	-9,004.19	9,374.35	9,367.24	7.11	1,318.174		
600.00	598.70	259.00	292.90	4.03	3.37	70.77	-2,613.60	-9,006.15	9,373.53	9,366.13	7.39	1,267.582		
700.00	697.47	259.00	292.90	4.31	3.37	70.80	-2,613.60	-9,006.15	9,372.15	9,364.47	7.68	1,220.034		
800.00	795.62	290.60	324.45	4.64	3.40	70.87	-2,613.09	-9,007.81	9,370.51	9,362.47	8.04	1,165.460		
900.00	893.06	318.33	352.14	5.00	3.44	70.95	-2,612.78	-9,009.45	9,368.50	9,360.07	8.44	1,110.642		
1,000.00	989.64	350.00	383.74	5.40	3.48	71.04	-2,612.59	-9,011.54	9,366.14	9,357.27	8.87	1,055.429		
1,100.00	1,085.27	401.39	434.99	5.83	3.57	71.19	-2,612.44	-9,015.20	9,363.31	9,353.92	9.38	997.815		
1,200.00	1,179.82	469.94	503.36	6.29	3.70	71.40	-2,612.30	-9,020.30	9,359.79	9,349.82	9.97	938.665		
1,300.00	1,273.17	532.00	565.24	6.79	3.84	71.62	-2,612.11	-9,025.02	9,355.47	9,344.87	10.60	882.826		
1,400.00	1,365.21	575.84	608.93	7.33	3.95	71.81	-2,612.05	-9,028.53	9,350.61	9,339.39	11.23	832.816		
1,500.00	1,456.49	610.23	643.20	7.89	4.04	71.90	-2,612.15	-9,031.48	9,345.89	9,334.03	11.86	787.697		
1,600.00	1,547.76	644.00	676.83	8.46	4.14	71.99	-2,612.39	-9,034.56	9,341.90	9,329.38	12.52	746.153		
1,700.00	1,639.04	707.33	739.87	9.05	4.33	72.14	-2,613.05	-9,040.57	9,338.50	9,325.23	13.27	703.576		
1,800.00	1,730.31	828.42	860.40	9.65	4.73	72.44	-2,614.62	-9,052.06	9,335.33	9,321.11	14.22	656.404		
1,900.00	1,821.58	897.03	928.69	10.26	4.97	72.61	-2,615.23	-9,058.62	9,332.28	9,317.24	15.04	620.464		
2,000.00	1,912.85	2,000.00	1,113.55	10.87	9.56	73.08	-2,615.53	-9,075.79	9,328.96	9,309.01	19.96	467.410		
2,100.00	2,004.13	1,130.74	1,161.41	11.49	5.85	73.20	-2,615.46	-9,080.01	9,325.50	9,308.43	17.07	546.370		
2,200.00	2,095.40	1,154.18	1,184.75	12.11	5.95	73.26	-2,615.37	-9,082.29	9,322.89	9,305.12	17.77	524.608		
2,300.00	2,186.67	1,190.00	1,220.36	12.74	6.09	73.35	-2,615.16	-9,086.12	9,321.15	9,302.63	18.52	503.180		
2,400.00	2,277.95	1,190.00	1,220.36	13.38	6.09	73.35	-2,615.16	-9,086.12	9,320.23	9,301.08	19.15	486.749		
2,467.19	2,339.28	1,223.97	1,254.10	13.80	6.24	73.44	-2,614.92	-9,090.09	9,320.02	9,300.32	19.70	473.172		
2,500.00	2,369.22	1,233.75	1,263.80	14.01	6.28	73.47	-2,614.85	-9,091.27	9,320.06	9,300.12	19.94	467.417		
2,600.00	2,460.49	1,285.00	1,314.63	14.65	6.50	73.60	-2,614.52	-9,097.85	9,320.79	9,300.02	20.76	448.886		
2,700.00	2,551.77	1,285.00	1,314.63	15.29	6.50	73.60	-2,614.52	-9,097.85	9,322.15	9,300.76	21.39	435.778		
2,800.00	2,643.04	1,327.87	1,357.10	15.93	6.69	73.71	-2,614.46	-9,103.71	9,324.33	9,302.14	22.19	420.219		
2,900.00	2,734.31	1,379.00	1,407.70	16.58	6.92	73.84	-2,614.92	-9,111.05	9,327.30	9,304.28	23.02	405.142		
3,000.00	2,825.58	1,379.00	1,407.70	17.23	6.92	73.84	-2,614.92	-9,111.05	9,330.97	9,307.32	23.65	394.541		
3,100.00	2,916.86	1,427.42	1,455.55	17.87	7.15	73.97	-2,615.44	-9,118.43	9,335.36	9,310.88	24.48	381.408		
3,200.00	3,008.13	1,475.00	1,502.49	18.52	7.38	74.09	-2,615.58	-9,126.20	9,340.57	9,315.27	25.30	369.186		
3,300.00	3,099.40	1,475.00	1,502.49	19.17	7.38	74.09	-2,615.58	-9,126.20	9,346.51	9,320.58	25.93	360.513		
3,400.00	3,190.68	1,530.26	1,556.92	19.83	7.65	74.23	-2,615.68	-9,135.73	9,353.11	9,326.32	26.78	349.192		
3,500.00	3,281.95	1,570.00	1,596.02	20.48	7.85	74.34	-2,615.94	-9,142.85	9,360.47	9,332.89	27.58	339.407		
3,600.00	3,373.22	1,608.09	1,633.45	21.13	8.05	74.43	-2,616.24	-9,149.87	9,368.52	9,340.15	28.37	330.269		
3,700.00	3,464.49	1,665.00	1,689.32	21.79	8.34	74.58	-2,616.60	-9,160.72	9,377.24	9,348.01	29.24	320.725		
3,800.00	3,555.77	1,665.00	1,689.32	22.44	8.34	74.58	-2,616.60	-9,160.72	9,386.66	9,356.81	29.85	314.420		
3,900.00	3,647.04	1,711.04	1,734.43	23.10	8.59	74.70	-2,616.82	-9,169.91	9,396.77	9,366.09	30.68	306.315		
4,000.00	3,738.31	1,759.00	1,781.31	23.75	8.85	74.83	-2,616.99	-9,180.02	9,407.78	9,376.27	31.51	298.577		
4,100.00	3,829.59	1,759.00	1,781.31	24.41	8.85	74.83	-2,616.99	-9,180.02	9,419.45	9,387.34	32.12	293.290		
4,200.00	3,920.86	1,804.01	1,825.22	25.07	9.11	74.94	-2,617.42	-9,189.88	9,431.90	9,398.96	32.93	286.396		
4,300.00	4,012.13	1,853.00	1,872.94	25.73	9.39	75.07	-2,618.57	-9,200.91	9,445.08	9,411.32	33.77	279.705		
4,400.00	4,103.41	1,885.90	1,904.96	26.38	9.58	75.15	-2,619.58	-9,208.45	9,458.89	9,424.36	34.53	273.969		
4,500.00	4,194.68	1,947.00	1,964.35	27.04	9.94	75.30	-2,621.43	-9,222.66	9,473.26	9,437.84	35.42	267.463		
4,600.00	4,285.95	1,997.39	2,013.28	27.70	10.25	75.42	-2,622.93	-9,234.57	9,488.13	9,451.87	36.26	261.662		
4,700.00	4,377.22	2,042.00	2,056.58	28.36	10.52	75.53	-2,624.25	-9,245.23	9,503.49	9,466.41	37.07	256.339		
4,800.00	4,468.50	2,042.00	2,056.58	29.02	10.52	75.53	-2,624.25	-9,245.23	9,519.71	9,482.05	37.66	252.781		
4,900.00	4,559.77	2,042.00	2,056.58	29.68	10.52	75.53	-2,624.25	-9,245.23	9,536.96	9,498.72	38.24	249.393		
5,000.00	4,651.04	2,082.09	2,095.35	30.34	10.78	75.63	-2,625.36	-9,255.38	9,554.60	9,515.58	39.02	244.834		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 34-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 168-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	2,094.31	2,107.11	31.00	10.86	75.67	-2,625.67	-9,258.68	9,573.44	9,533.78	39.66	241.385		
5,200.00	4,833.59	2,137.00	2,147.98	31.66	11.14	75.77	-2,626.67	-9,270.97	9,593.52	9,553.07	40.45	237.152		
5,300.00	4,924.86	2,469.25	2,468.10	32.32	13.35	76.62	-2,631.18	-9,359.47	9,611.97	9,569.17	42.80	224.578		
5,400.00	5,016.13	2,513.00	2,510.26	32.99	13.64	76.74	-2,630.49	-9,371.15	9,630.41	9,586.80	43.61	220.838		
5,500.00	5,107.41	2,513.00	2,510.26	33.65	13.64	76.74	-2,630.49	-9,371.15	9,649.33	9,605.15	44.18	218.424		
5,600.00	5,198.68	2,513.00	2,510.26	34.31	13.64	76.74	-2,630.49	-9,371.15	9,669.24	9,624.50	44.74	216.123		
5,700.00	5,289.95	2,568.96	2,563.98	34.97	14.03	76.89	-2,629.53	-9,386.80	9,689.80	9,644.19	45.61	212.455		
5,800.00	5,381.23	2,609.00	2,602.36	35.63	14.31	77.00	-2,629.05	-9,398.21	9,711.00	9,664.61	46.39	209.348		
5,900.00	5,472.50	2,609.00	2,602.36	36.30	14.31	77.00	-2,629.05	-9,398.21	9,733.01	9,686.07	46.94	207.371		
6,000.00	5,563.77	2,645.24	2,637.00	36.96	14.58	77.10	-2,628.79	-9,408.87	9,755.66	9,707.98	47.69	204.577		
6,100.00	5,655.05	2,663.26	2,654.16	37.62	14.71	77.14	-2,628.75	-9,414.34	9,779.21	9,730.88	48.33	202.345		
6,200.00	5,746.32	2,704.00	2,692.83	38.28	15.02	77.25	-2,628.85	-9,427.16	9,803.69	9,754.59	49.10	199.663		
6,300.00	5,837.59	2,704.00	2,692.83	38.95	15.02	77.25	-2,628.85	-9,427.16	9,828.71	9,779.09	49.63	198.048		
6,400.00	5,928.86	3,303.35	3,264.34	39.61	19.51	78.81	-2,623.82	-9,606.38	9,854.21	9,800.51	53.70	183.488		
6,500.00	6,020.14	3,364.25	3,322.93	40.27	19.95	78.95	-2,626.20	-9,622.86	9,875.56	9,820.95	54.61	180.842		
6,600.00	6,111.41	3,425.73	3,381.99	40.94	20.40	79.09	-2,629.40	-9,639.63	9,897.31	9,841.79	55.52	178.281		
6,700.00	6,202.68	3,558.72	3,509.69	41.60	21.36	79.38	-2,637.22	-9,675.92	9,919.27	9,862.43	56.85	174.496		
6,800.00	6,293.96	6,800.00	3,675.10	42.26	44.53	79.78	-2,642.15	-9,721.84	9,940.77	9,867.41	73.35	135.519		
6,900.00	6,385.23	3,778.84	3,721.79	42.93	22.94	79.90	-2,643.09	-9,734.47	9,961.94	9,902.70	59.24	168.173		
7,000.00	6,476.50	3,829.00	3,770.01	43.59	23.30	80.02	-2,643.90	-9,748.24	9,984.11	9,924.03	60.08	166.185		
7,500.00	6,908.46	4,343.23	4,265.93	46.54	26.97	31.10	-2,651.27	-9,883.74	9,975.89	9,910.32	65.58	152.123		
7,600.00	6,977.30	6,934.77	6,817.52	46.95	40.42	32.90	-2,653.85	-10,244.87	9,916.94	9,838.69	78.25	126.739		
7,700.00	7,035.93	6,989.45	6,872.19	47.30	40.60	29.98	-2,654.78	-10,245.79	9,841.94	9,763.14	78.80	124.901		
7,800.00	7,082.92	7,045.68	6,928.40	47.59	40.79	28.38	-2,656.06	-10,246.72	9,757.58	9,678.31	79.27	123.086		
7,900.00	7,117.09	7,087.27	6,969.97	47.84	40.92	28.09	-2,657.27	-10,247.38	9,665.91	9,586.29	79.62	121.397		
8,000.00	7,137.62	7,113.05	6,995.72	48.06	41.01	30.32	-2,658.12	-10,247.79	9,569.16	9,489.32	79.84	119.858		
8,100.00	7,143.99	7,122.30	7,004.97	48.28	41.04	69.32	-2,658.45	-10,247.93	9,469.73	9,389.80	79.93	118.482		
8,200.00	7,143.45	7,123.47	7,006.14	48.53	41.04	69.57	-2,658.49	-10,247.95	9,369.76	9,289.81	79.95	117.193		
8,300.00	7,142.91	7,124.63	7,007.30	48.89	41.05	69.82	-2,658.53	-10,247.96	9,269.80	9,189.82	79.98	115.903		
8,400.00	7,142.37	7,125.80	7,008.46	49.40	41.05	70.06	-2,658.57	-10,247.98	9,169.83	9,089.82	80.01	114.612		
8,500.00	7,141.83	7,126.95	7,009.62	50.12	41.05	70.31	-2,658.61	-10,248.00	9,069.87	8,989.83	80.04	113.320		
8,600.00	7,141.29	7,128.11	7,010.77	51.08	41.06	70.56	-2,658.66	-10,248.02	8,969.91	8,889.84	80.07	112.028		
8,700.00	7,140.75	7,129.26	7,011.93	52.30	41.06	70.81	-2,658.70	-10,248.04	8,869.94	8,789.84	80.10	110.734		
8,800.00	7,140.21	7,130.41	7,013.08	53.75	41.07	71.06	-2,658.74	-10,248.05	8,769.98	8,689.85	80.13	109.441		
8,900.00	7,139.67	7,131.56	7,014.22	55.40	41.07	71.31	-2,658.78	-10,248.07	8,670.02	8,589.85	80.17	108.146		
9,000.00	7,139.12	7,132.70	7,015.36	57.20	41.07	71.56	-2,658.82	-10,248.09	8,570.06	8,489.86	80.21	106.851		
9,100.00	7,138.58	7,133.84	7,016.50	59.13	41.08	71.81	-2,658.87	-10,248.11	8,470.10	8,389.86	80.24	105.555		
9,200.00	7,138.04	7,134.98	7,017.64	61.15	41.08	72.06	-2,658.91	-10,248.12	8,370.15	8,289.86	80.28	104.259		
9,300.00	7,137.50	7,136.12	7,018.78	63.26	41.08	72.32	-2,658.95	-10,248.14	8,270.19	8,189.87	80.32	102.963		
9,400.00	7,136.96	7,137.25	7,019.91	65.44	41.09	72.57	-2,658.99	-10,248.16	8,170.23	8,089.87	80.36	101.665		
9,500.00	7,136.42	7,138.38	7,021.04	67.68	41.09	72.82	-2,659.04	-10,248.17	8,070.28	7,989.87	80.41	100.368		
9,600.00	7,135.88	7,139.51	7,022.16	69.97	41.10	73.07	-2,659.08	-10,248.19	7,970.32	7,889.87	80.45	99.070		
9,700.00	7,135.34	7,140.63	7,023.29	72.31	41.10	73.32	-2,659.12	-10,248.21	7,870.37	7,789.87	80.50	97.772		
9,800.00	7,134.80	7,141.75	7,024.41	74.69	41.10	73.57	-2,659.17	-10,248.23	7,770.42	7,689.87	80.55	96.473		
9,900.00	7,134.26	7,142.87	7,025.53	77.10	41.11	73.82	-2,659.21	-10,248.24	7,670.47	7,589.87	80.59	95.174		
10,000.00	7,133.71	7,143.99	7,026.64	79.54	41.11	74.08	-2,659.25	-10,248.26	7,570.52	7,489.87	80.64	93.875		
10,100.00	7,133.17	7,145.10	7,027.75	82.02	41.11	74.33	-2,659.29	-10,248.28	7,470.57	7,389.87	80.70	92.575		
10,200.00	7,132.63	7,146.21	7,028.86	84.52	41.12	74.58	-2,659.34	-10,248.29	7,370.62	7,289.87	80.75	91.276		
10,300.00	7,132.09	7,147.32	7,029.97	87.04	41.12	74.83	-2,659.38	-10,248.31	7,270.68	7,189.87	80.81	89.976		
10,400.00	7,131.55	7,148.43	7,031.07	89.58	41.13	75.08	-2,659.42	-10,248.33	7,170.73	7,089.87	80.86	88.676		
10,500.00	7,131.01	7,149.53	7,032.18	92.15	41.13	75.34	-2,659.47	-10,248.34	7,070.79	6,989.86	80.92	87.375		
10,600.00	7,130.47	7,150.63	7,033.27	94.73	41.13	75.59	-2,659.51	-10,248.36	6,970.84	6,889.86	80.99	86.075		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 34-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 168-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,700.00	7,129.93	7,151.73	7,034.37	97.33	41.14	75.84	-2,659.55	-10,248.38	6,870.90	6,789.86	81.05	84.775		
10,800.00	7,129.39	7,152.82	7,035.46	99.94	41.14	76.09	-2,659.60	-10,248.39	6,770.97	6,689.85	81.11	83.474		
10,900.00	7,128.84	7,153.91	7,036.55	102.56	41.14	76.34	-2,659.64	-10,248.41	6,671.03	6,589.85	81.18	82.174		
11,000.00	7,128.30	7,155.00	7,037.64	105.20	41.15	76.60	-2,659.68	-10,248.42	6,571.09	6,489.84	81.25	80.874		
11,100.00	7,127.76	7,156.09	7,038.73	107.85	41.15	76.85	-2,659.73	-10,248.44	6,471.16	6,389.84	81.32	79.573		
11,200.00	7,127.22	7,157.17	7,039.81	110.51	41.15	77.10	-2,659.77	-10,248.46	6,371.23	6,289.83	81.40	78.273		
11,300.00	7,126.68	7,158.25	7,040.89	113.18	41.16	77.35	-2,659.81	-10,248.47	6,271.30	6,189.82	81.47	76.973		
11,400.00	7,126.14	7,159.33	7,041.97	115.86	41.16	77.61	-2,659.86	-10,248.49	6,171.37	6,089.82	81.55	75.672		
11,500.00	7,125.60	7,160.41	7,043.04	118.55	41.17	77.86	-2,659.90	-10,248.51	6,071.45	5,989.81	81.64	74.372		
11,600.00	7,125.06	7,161.48	7,044.12	121.25	41.17	78.11	-2,659.94	-10,248.52	5,971.52	5,889.80	81.72	73.072		
11,700.00	7,124.52	7,162.55	7,045.19	123.95	41.17	78.36	-2,659.99	-10,248.54	5,871.60	5,789.79	81.81	71.773		
11,800.00	7,123.97	7,163.62	7,046.25	126.66	41.18	78.61	-2,660.03	-10,248.55	5,771.68	5,689.78	81.90	70.473		
11,900.00	7,123.43	7,164.69	7,047.32	129.38	41.18	78.87	-2,660.07	-10,248.57	5,671.77	5,589.78	81.99	69.174		
12,000.00	7,122.89	7,165.75	7,048.38	132.10	41.18	79.12	-2,660.12	-10,248.58	5,571.86	5,489.77	82.09	67.875		
12,100.00	7,122.35	7,166.81	7,049.44	134.83	41.19	79.37	-2,660.16	-10,248.60	5,471.95	5,389.76	82.19	66.576		
12,200.00	7,121.81	7,167.87	7,050.50	137.56	41.19	79.62	-2,660.21	-10,248.62	5,372.04	5,289.74	82.30	65.277		
12,300.00	7,121.27	7,168.92	7,051.55	140.30	41.19	79.87	-2,660.25	-10,248.63	5,272.14	5,189.73	82.41	63.978		
12,400.00	7,120.73	7,169.98	7,052.60	143.05	41.20	80.12	-2,660.29	-10,248.65	5,172.24	5,089.72	82.52	62.680		
12,500.00	7,120.19	7,171.03	7,053.65	145.80	41.20	80.38	-2,660.34	-10,248.66	5,072.34	4,989.71	82.64	61.382		
12,600.00	7,119.65	7,172.07	7,054.70	148.55	41.20	80.63	-2,660.38	-10,248.68	4,972.45	4,889.69	82.76	60.084		
12,700.00	7,119.10	7,173.12	7,055.74	151.30	41.21	80.88	-2,660.43	-10,248.69	4,872.56	4,789.68	82.89	58.787		
12,800.00	7,118.56	7,174.16	7,056.79	154.07	41.21	81.13	-2,660.47	-10,248.71	4,772.68	4,689.66	83.02	57.490		
12,900.00	7,118.02	7,175.20	7,057.83	156.83	41.21	81.38	-2,660.51	-10,248.72	4,672.80	4,589.65	83.16	56.193		
13,000.00	7,117.48	7,176.24	7,058.86	159.60	41.22	81.63	-2,660.56	-10,248.74	4,572.93	4,489.63	83.30	54.896		
13,100.00	7,116.94	7,177.28	7,059.90	162.37	41.22	81.88	-2,660.60	-10,248.75	4,473.06	4,389.61	83.45	53.600		
13,200.00	7,116.40	7,178.31	7,060.93	165.14	41.22	82.13	-2,660.65	-10,248.77	4,373.20	4,289.59	83.61	52.304		
13,300.00	7,115.86	7,179.34	7,061.96	167.92	41.23	82.38	-2,660.69	-10,248.79	4,273.35	4,189.57	83.78	51.008		
13,400.00	7,115.32	7,180.37	7,062.99	170.70	41.23	82.63	-2,660.73	-10,248.80	4,173.50	4,089.55	83.95	49.712		
13,500.00	7,114.78	7,181.40	7,064.01	173.48	41.23	82.88	-2,660.78	-10,248.82	4,073.66	3,989.52	84.14	48.417		
13,600.00	7,114.24	7,182.42	7,065.03	176.26	41.24	83.13	-2,660.82	-10,248.83	3,973.82	3,889.49	84.33	47.122		
13,700.00	7,113.69	7,183.44	7,066.05	179.05	41.24	83.38	-2,660.87	-10,248.85	3,874.00	3,789.46	84.54	45.827		
13,800.00	7,113.15	7,184.46	7,067.07	181.84	41.25	83.63	-2,660.91	-10,248.86	3,774.18	3,689.43	84.75	44.532		
13,900.00	7,112.61	7,185.48	7,068.09	184.63	41.25	83.88	-2,660.96	-10,248.88	3,674.37	3,589.39	84.98	43.237		
14,000.00	7,112.07	7,186.49	7,069.10	187.42	41.25	84.13	-2,661.00	-10,248.89	3,574.58	3,489.35	85.23	41.942		
14,100.00	7,111.53	7,187.50	7,070.11	190.22	41.26	84.37	-2,661.04	-10,248.90	3,474.79	3,389.31	85.49	40.648		
14,200.00	7,110.99	7,188.51	7,071.12	193.01	41.26	84.62	-2,661.09	-10,248.92	3,375.02	3,289.26	85.76	39.353		
14,300.00	7,110.45	7,189.52	7,072.12	195.81	41.26	84.87	-2,661.13	-10,248.93	3,275.26	3,189.21	86.06	38.059		
14,400.00	7,109.91	7,190.52	7,073.13	198.61	41.27	85.12	-2,661.18	-10,248.95	3,175.52	3,089.14	86.37	36.764		
14,500.00	7,109.37	7,191.52	7,074.13	201.42	41.27	85.36	-2,661.22	-10,248.96	3,075.79	2,989.08	86.72	35.470		
14,600.00	7,108.82	7,192.52	7,075.13	204.22	41.27	85.61	-2,661.27	-10,248.98	2,976.08	2,889.00	87.08	34.175		
14,700.00	7,108.28	7,193.52	7,076.12	207.03	41.28	85.86	-2,661.31	-10,248.99	2,876.39	2,788.91	87.48	32.880		
14,800.00	7,107.74	7,194.52	7,077.12	209.83	41.28	86.10	-2,661.36	-10,249.01	2,776.73	2,688.81	87.91	31.585		
14,900.00	7,107.20	7,195.51	7,078.11	212.64	41.28	86.35	-2,661.40	-10,249.02	2,677.08	2,588.70	88.38	30.289		
15,000.00	7,106.66	7,196.50	7,079.10	215.45	41.28	86.59	-2,661.44	-10,249.04	2,577.47	2,488.57	88.90	28.994		
15,100.00	7,106.12	7,197.49	7,080.09	218.26	41.29	86.84	-2,661.49	-10,249.05	2,477.88	2,388.42	89.46	27.698		
15,200.00	7,105.58	7,198.47	7,081.07	221.07	41.29	87.08	-2,661.53	-10,249.06	2,378.33	2,288.25	90.08	26.402		
15,300.00	7,105.04	7,199.46	7,082.05	223.89	41.29	87.33	-2,661.58	-10,249.08	2,278.82	2,188.05	90.77	25.105		
15,400.00	7,104.50	7,200.44	7,083.03	226.70	41.30	87.57	-2,661.62	-10,249.09	2,179.35	2,087.82	91.54	23.809		
15,491.56	7,104.00	7,201.34	7,083.93	229.28	41.30	87.79	-2,661.66	-10,249.11	2,088.32	1,996.01	92.32	22.622 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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 43-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 118-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	34.00	3.28	3.28	-105.91	-2,549.25	-8,945.41	9,301.62					
100.00	100.00	37.39	71.39	3.28	3.28	-105.91	-2,549.17	-8,945.49	9,301.66	9,295.09	6.57	1,416.734		
200.00	200.00	94.03	128.03	3.34	3.29	-105.90	-2,548.75	-8,945.93	9,302.20	9,295.58	6.62	1,404.672		
300.00	299.98	461.86	495.70	3.44	3.71	71.08	-2,539.29	-8,944.95	9,299.89	9,292.74	7.16	1,299.607		
400.00	399.84	713.35	747.01	3.59	4.34	71.28	-2,531.40	-8,940.01	9,295.71	9,287.77	7.94	1,170.864		
500.00	499.45	787.35	820.92	3.79	4.56	71.45	-2,528.45	-8,937.94	9,289.18	9,280.82	8.36	1,111.787		
600.00	598.70	850.00	883.47	4.03	4.76	71.65	-2,525.04	-8,936.94	9,282.17	9,273.38	8.79	1,055.714		
700.00	697.47	874.26	907.68	4.31	4.84	71.83	-2,523.47	-8,936.77	9,274.59	9,265.44	9.15	1,013.352		
800.00	795.62	920.42	953.72	4.64	5.00	72.06	-2,520.11	-8,936.75	9,266.56	9,256.93	9.63	962.533		
900.00	893.06	977.61	1,010.70	5.00	5.20	72.32	-2,515.22	-8,937.24	9,258.03	9,247.84	10.18	909.104		
1,000.00	989.64	1,063.88	1,096.42	5.40	5.51	72.69	-2,505.66	-8,938.82	9,248.83	9,237.94	10.89	849.106		
1,100.00	1,085.27	1,177.05	1,208.53	5.83	5.96	73.18	-2,490.43	-8,941.25	9,238.44	9,226.67	11.76	785.339		
1,200.00	1,179.82	1,542.40	1,567.35	6.29	7.63	74.52	-2,422.60	-8,948.48	9,226.02	9,212.13	13.89	664.210		
1,300.00	1,273.17	1,836.93	1,852.38	6.79	9.27	75.87	-2,348.65	-8,951.65	9,211.11	9,195.12	15.99	575.953		
1,400.00	1,365.21	1,400.00	1,980.29	7.33	6.73	76.72	-2,311.75	-8,951.74	9,194.11	9,180.15	13.96	658.573		
1,500.00	1,456.49	2,038.80	2,046.19	7.89	10.51	77.02	-2,292.18	-8,951.55	9,176.72	9,158.43	18.29	501.783		
1,600.00	1,547.76	2,081.00	2,086.61	8.46	10.77	77.19	-2,280.08	-8,951.73	9,160.18	9,141.06	19.12	479.055		
1,700.00	1,639.04	2,103.38	2,108.03	9.05	10.92	77.28	-2,273.62	-8,951.95	9,144.42	9,124.57	19.85	460.670		
1,800.00	1,730.31	2,137.49	2,140.66	9.65	11.14	77.42	-2,263.64	-8,952.45	9,129.46	9,108.79	20.67	441.754		
1,900.00	1,821.58	2,175.00	2,176.46	10.26	11.38	77.58	-2,252.49	-8,953.21	9,115.29	9,093.77	21.51	423.677		
2,000.00	1,912.85	2,378.15	2,369.82	10.87	12.77	78.43	-2,190.29	-8,956.43	9,101.02	9,077.53	23.49	387.469		
2,100.00	2,004.13	2,443.96	2,432.40	11.49	13.22	78.71	-2,169.92	-8,957.14	9,086.90	9,062.34	24.56	369.956		
2,200.00	2,095.40	2,572.74	2,555.02	12.11	14.12	79.25	-2,130.62	-8,958.13	9,073.13	9,047.06	26.07	347.990		
2,300.00	2,186.67	2,624.43	2,604.26	12.74	14.48	79.46	-2,114.88	-8,958.46	9,059.69	9,032.62	27.07	334.725		
2,400.00	2,277.95	2,743.56	2,717.23	13.38	15.34	79.97	-2,077.08	-8,959.31	9,046.67	9,018.12	28.55	316.882		
2,500.00	2,369.22	2,798.46	2,789.06	14.01	15.74	80.21	-2,059.00	-8,959.70	9,033.95	9,004.36	29.60	305.243		
2,600.00	2,460.49	2,854.70	2,822.22	14.65	16.16	80.46	-2,040.64	-8,960.18	9,021.87	8,991.22	30.65	294.331		
2,700.00	2,551.77	2,915.08	2,879.73	15.29	16.59	80.71	-2,022.27	-8,960.58	9,010.41	8,978.68	31.73	283.975		
2,800.00	2,643.04	2,966.55	2,929.09	15.93	16.95	80.92	-2,007.67	-8,960.86	8,999.56	8,966.82	32.74	274.869		
2,900.00	2,734.31	2,900.00	3,023.91	16.58	16.48	81.34	-1,979.05	-8,961.66	8,989.34	8,956.42	32.93	273.006		
3,000.00	2,825.58	3,190.65	3,143.82	17.23	18.50	81.85	-1,943.59	-8,961.80	8,979.05	8,943.46	35.59	252.287		
3,100.00	2,916.86	3,100.00	3,244.95	17.87	17.88	82.29	-1,914.35	-8,961.36	8,968.88	8,933.25	35.62	251.775		
3,200.00	3,008.13	3,352.39	3,299.14	18.52	19.62	82.52	-1,898.49	-8,961.06	8,959.11	8,921.09	38.02	235.662		
3,300.00	3,099.40	3,385.64	3,331.02	19.17	19.85	82.66	-1,889.03	-8,961.07	8,950.16	8,911.25	38.91	230.008		
3,400.00	3,190.68	3,439.24	3,382.38	19.83	20.23	82.88	-1,873.69	-8,961.36	8,942.02	8,902.07	39.95	223.837		
3,500.00	3,281.95	3,524.26	3,463.96	20.48	20.82	83.24	-1,849.76	-8,961.69	8,934.28	8,893.08	41.20	216.834		
3,600.00	3,373.22	3,578.27	3,515.75	21.13	21.20	83.46	-1,834.42	-8,961.98	8,927.12	8,884.88	42.25	211.314		
3,700.00	3,464.49	3,634.20	3,569.29	21.79	21.60	83.70	-1,818.26	-8,962.44	8,920.61	8,877.30	43.31	205.991		
3,800.00	3,555.77	3,693.00	3,625.54	22.44	22.01	83.94	-1,801.14	-8,963.06	8,914.73	8,870.35	44.39	200.835		
3,900.00	3,647.04	3,750.71	3,680.60	23.10	22.44	84.19	-1,783.88	-8,963.80	8,909.48	8,864.01	45.47	195.921		
4,000.00	3,738.31	3,813.19	3,739.94	23.75	22.90	84.46	-1,764.33	-8,964.77	8,904.85	8,858.25	46.60	191.086		
4,100.00	3,829.59	3,883.20	3,806.29	24.41	23.43	84.76	-1,742.04	-8,965.91	8,900.79	8,853.00	47.79	186.241		
4,200.00	3,920.86	3,970.32	3,888.82	25.07	24.09	85.15	-1,714.14	-8,967.30	8,897.20	8,848.08	49.12	181.149		
4,300.00	4,012.13	4,031.56	3,946.87	25.73	24.55	85.41	-1,694.66	-8,968.25	8,894.10	8,843.86	50.24	177.034		
4,400.00	4,103.41	4,071.00	3,984.31	26.38	24.84	85.58	-1,682.30	-8,968.92	8,891.67	8,840.47	51.20	173.673		
4,500.00	4,194.68	4,128.40	4,038.91	27.04	25.27	85.83	-1,664.64	-8,970.04	8,889.94	8,837.65	52.28	170.038		
4,600.00	4,285.95	4,179.23	4,087.38	27.70	25.64	86.05	-1,649.37	-8,971.25	8,888.98	8,835.66	53.32	166.721		
4,700.00	4,377.22	4,540.73	4,429.99	28.36	28.39	87.63	-1,534.22	-8,974.35	8,887.46	8,830.74	56.72	156.682		
4,800.00	4,468.50	4,582.08	4,468.88	29.02	28.72	87.81	-1,520.18	-8,974.09	8,885.34	8,827.63	57.71	153.966		
4,900.00	4,559.77	4,621.83	4,506.35	29.68	29.03	87.99	-1,506.90	-8,973.99	8,884.03	8,825.35	58.68	151.393		
5,000.00	4,651.04	4,672.55	4,554.30	30.34	29.42	88.21	-1,490.38	-8,974.05	8,883.49	8,823.77	59.73	148.734		
5,032.23	4,680.46	4,691.79	4,572.57	30.55	29.56	88.30	-1,484.32	-8,974.10	8,883.46	8,823.38	60.08	147.851		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 43-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 118-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	4,733.00	4,611.82	31.00	29.87	88.47	-1,471.75	-8,974.25	8,883.60	8,822.76	60.84	146.019		
5,200.00	4,833.59	4,780.83	4,657.51	31.66	30.22	88.68	-1,457.66	-8,974.55	8,884.38	8,822.54	61.84	143.671		
5,300.00	4,924.86	4,830.00	4,704.59	32.32	30.57	88.88	-1,443.47	-8,975.02	8,885.88	8,823.03	62.84	141.395		
5,400.00	5,016.13	4,961.84	4,831.91	32.99	31.46	89.42	-1,409.32	-8,976.11	8,887.56	8,823.18	64.39	138.033		
5,500.00	5,107.41	5,029.43	4,897.61	33.65	31.90	89.69	-1,393.43	-8,976.68	8,889.65	8,824.18	65.47	135.782		
5,600.00	5,198.68	5,106.40	4,972.64	34.31	32.38	89.98	-1,376.28	-8,977.45	8,892.21	8,825.61	66.60	133.522		
5,700.00	5,289.95	5,240.71	5,104.35	34.97	33.15	90.49	-1,350.07	-8,978.72	8,894.96	8,826.94	68.02	130.761		
5,800.00	5,381.23	5,351.06	5,213.35	35.63	33.73	90.87	-1,332.89	-8,979.50	8,897.60	8,828.35	69.25	128.482		
5,900.00	5,472.50	5,474.99	5,336.26	36.30	34.32	91.29	-1,317.16	-8,980.41	8,900.42	8,829.93	70.49	126.259		
6,000.00	5,563.77	5,563.19	5,424.08	36.96	34.70	91.57	-1,309.02	-8,981.01	8,903.19	8,831.67	71.52	124.485		
6,100.00	5,655.05	5,619.77	5,680.06	37.62	35.70	92.34	-1,291.87	-8,980.57	8,904.96	8,831.78	73.18	121.693		
6,200.00	5,746.32	5,872.00	5,732.24	38.28	35.89	92.49	-1,289.62	-8,980.33	8,906.80	8,832.78	74.02	120.338		
6,300.00	5,837.59	5,926.72	5,786.93	38.95	36.08	92.64	-1,287.69	-8,980.34	8,909.22	8,834.37	74.85	119.026		
6,400.00	5,928.86	5,992.48	5,852.66	39.61	36.30	92.83	-1,286.00	-8,980.65	8,912.16	8,836.44	75.72	117.698		
6,500.00	6,020.14	6,074.38	5,934.54	40.27	36.57	93.05	-1,284.18	-8,981.20	8,915.46	8,838.82	76.64	116.332		
6,600.00	6,111.41	6,182.15	6,042.29	40.94	36.93	93.35	-1,282.00	-8,981.88	8,918.91	8,841.27	77.64	114.873		
6,700.00	6,202.68	6,264.57	6,124.69	41.60	37.20	93.57	-1,280.43	-8,982.32	8,922.46	8,843.90	78.56	113.574		
6,800.00	6,293.96	6,332.00	6,192.11	42.26	37.42	93.76	-1,279.06	-8,982.83	8,926.43	8,847.00	79.43	112.382		
6,900.00	6,385.23	6,401.89	6,261.97	42.93	37.66	93.95	-1,277.55	-8,983.52	8,930.82	8,850.51	80.31	111.211		
7,000.00	6,476.50	6,477.67	6,337.74	43.59	37.91	94.15	-1,275.94	-8,984.42	8,935.58	8,854.38	81.20	110.042		
7,100.00	6,567.77	6,559.18	6,419.22	44.25	38.19	94.38	-1,274.29	-8,985.53	8,940.69	8,858.58	82.12	108.876		
7,200.00	6,658.64	6,660.63	6,520.64	44.91	38.53	77.70	-1,272.31	-8,986.88	8,939.79	8,856.69	83.10	107.581		
7,300.00	6,747.14	6,741.59	6,601.58	45.52	38.80	63.04	-1,270.77	-8,987.91	8,923.68	8,839.71	83.97	106.272		
7,400.00	6,831.10	6,809.57	6,669.54	46.07	39.03	53.14	-1,269.51	-8,988.89	8,892.86	8,808.12	84.73	104.950		
7,500.00	6,908.46	6,874.06	6,734.01	46.54	39.26	46.97	-1,268.34	-8,989.94	8,848.07	8,762.65	85.42	103.581		
7,600.00	6,977.30	6,934.46	6,794.39	46.95	39.46	43.57	-1,267.10	-8,990.97	8,790.35	8,704.32	86.04	102.171		
7,700.00	7,035.93	6,986.14	6,846.04	47.30	39.64	42.43	-1,265.90	-8,991.88	8,721.06	8,634.50	86.56	100.748		
7,800.00	7,082.92	7,035.38	6,895.27	47.59	39.82	43.64	-1,264.65	-8,992.76	8,641.83	8,554.80	87.03	99.294		
7,900.00	7,117.09	7,079.03	6,938.89	47.84	39.97	48.20	-1,263.55	-8,993.50	8,554.50	8,467.06	87.44	97.837		
8,000.00	7,137.62	7,105.97	6,965.82	48.06	40.07	59.20	-1,262.88	-8,993.94	8,461.17	8,373.44	87.73	96.442		
8,100.00	7,143.99	7,115.65	6,975.49	48.28	40.10	85.62	-1,262.65	-8,994.09	8,364.14	8,276.21	87.92	95.130		
8,200.00	7,143.45	7,116.91	6,976.75	48.53	40.10	85.67	-1,262.62	-8,994.11	8,266.07	8,178.00	88.06	93.864		
8,300.00	7,142.91	7,118.16	6,978.01	48.89	40.11	85.71	-1,262.59	-8,994.13	8,168.04	8,079.83	88.22	92.592		
8,400.00	7,142.37	7,119.41	6,979.26	49.40	40.11	85.75	-1,262.56	-8,994.15	8,070.07	7,981.69	88.38	91.313		
8,500.00	7,141.83	7,120.65	6,980.50	50.12	40.12	85.80	-1,262.52	-8,994.17	7,972.14	7,883.59	88.55	90.028		
8,600.00	7,141.29	7,121.89	6,981.73	51.08	40.12	85.84	-1,262.49	-8,994.19	7,874.27	7,785.53	88.74	88.735		
8,700.00	7,140.75	7,123.12	6,982.96	52.30	40.13	85.88	-1,262.47	-8,994.21	7,776.45	7,687.51	88.94	87.437		
8,800.00	7,140.21	7,124.34	6,984.19	53.75	40.13	85.93	-1,262.44	-8,994.23	7,678.69	7,589.54	89.15	86.131		
8,900.00	7,139.67	7,125.56	6,985.40	55.40	40.13	85.97	-1,262.41	-8,994.25	7,580.98	7,491.60	89.38	84.819		
9,000.00	7,139.12	7,126.77	6,986.62	57.20	40.14	86.01	-1,262.38	-8,994.27	7,483.34	7,393.72	89.62	83.500		
9,100.00	7,138.58	7,127.98	6,987.82	59.13	40.14	86.06	-1,262.35	-8,994.29	7,385.76	7,295.88	89.88	82.175		
9,200.00	7,138.04	7,129.18	6,989.02	61.15	40.15	86.10	-1,262.32	-8,994.30	7,288.24	7,198.09	90.15	80.843		
9,300.00	7,137.50	7,130.37	6,990.22	63.26	40.15	86.14	-1,262.29	-8,994.32	7,190.79	7,100.35	90.45	79.504		
9,400.00	7,136.96	7,131.56	6,991.41	65.44	40.16	86.18	-1,262.26	-8,994.34	7,093.42	7,002.66	90.76	78.160		
9,500.00	7,136.42	7,132.75	6,992.59	67.68	40.16	86.22	-1,262.23	-8,994.36	6,996.11	6,905.03	91.08	76.809		
9,600.00	7,135.88	7,133.93	6,993.77	69.97	40.16	86.27	-1,262.20	-8,994.38	6,898.89	6,807.45	91.43	75.452		
9,700.00	7,135.34	7,135.10	6,994.94	72.31	40.17	86.31	-1,262.18	-8,994.40	6,801.74	6,709.93	91.81	74.088		
9,800.00	7,134.80	7,136.26	6,996.11	74.69	40.17	86.35	-1,262.15	-8,994.41	6,704.68	6,612.48	92.20	72.720		
9,900.00	7,134.26	7,137.43	6,997.27	77.10	40.18	86.39	-1,262.12	-8,994.43	6,607.70	6,515.09	92.62	71.345		
10,000.00	7,133.71	7,138.58	6,998.42	79.54	40.18	86.43	-1,262.09	-8,994.45	6,510.82	6,417.76	93.06	69.966		
10,100.00	7,133.17	7,139.73	6,999.57	82.02	40.19	86.47	-1,262.06	-8,994.47	6,414.03	6,320.51	93.52	68.581		
10,200.00	7,132.63	7,140.88	7,000.72	84.52	40.19	86.51	-1,262.04	-8,994.48	6,317.34	6,223.32	94.02	67.192		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 43-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 118-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,132.09	7,142.02	7,001.86	87.04	40.19	86.55	-1,262.01	-8,994.50	6,220.76	6,126.22	94.54	65.798		
10,400.00	7,131.55	7,143.15	7,002.99	89.58	40.20	86.59	-1,261.98	-8,994.52	6,124.29	6,029.19	95.10	64.400		
10,500.00	7,131.01	7,144.28	7,004.12	92.15	40.20	86.63	-1,261.95	-8,994.54	6,027.93	5,932.24	95.68	62.999		
10,600.00	7,130.47	7,145.41	7,005.24	94.73	40.21	86.67	-1,261.93	-8,994.55	5,931.69	5,835.38	96.30	61.594		
10,700.00	7,129.93	7,146.53	7,006.36	97.33	40.21	86.71	-1,261.90	-8,994.57	5,835.57	5,738.62	96.96	60.187		
10,800.00	7,129.39	7,147.64	7,007.47	99.94	40.21	86.75	-1,261.87	-8,994.59	5,739.59	5,641.94	97.65	58.778		
10,900.00	7,128.84	7,148.75	7,008.58	102.56	40.22	86.79	-1,261.85	-8,994.61	5,643.75	5,545.37	98.38	57.367		
11,000.00	7,128.30	7,149.85	7,009.69	105.20	40.22	86.83	-1,261.82	-8,994.62	5,548.06	5,448.91	99.15	55.955		
11,100.00	7,127.76	7,150.95	7,010.78	107.85	40.22	86.87	-1,261.79	-8,994.64	5,452.52	5,352.55	99.97	54.543		
11,200.00	7,127.22	7,152.04	7,011.88	110.51	40.23	86.90	-1,261.77	-8,994.65	5,357.14	5,256.31	100.83	53.131		
11,300.00	7,126.68	7,153.13	7,012.96	113.18	40.23	86.94	-1,261.74	-8,994.67	5,261.94	5,160.20	101.74	51.720		
11,400.00	7,126.14	7,154.21	7,014.05	115.86	40.24	86.98	-1,261.72	-8,994.69	5,166.91	5,064.21	102.70	50.311		
11,500.00	7,125.60	7,155.29	7,015.13	118.55	40.24	87.02	-1,261.69	-8,994.70	5,072.08	4,968.36	103.71	48.905		
11,600.00	7,125.06	7,156.37	7,016.20	121.25	40.24	87.06	-1,261.67	-8,994.72	4,977.45	4,872.66	104.78	47.502		
11,700.00	7,124.52	7,157.44	7,017.27	123.95	40.25	87.09	-1,261.64	-8,994.74	4,883.03	4,777.12	105.91	46.104		
11,800.00	7,123.97	7,158.50	7,018.33	126.66	40.25	87.13	-1,261.61	-8,994.75	4,788.84	4,681.73	107.11	44.711		
11,900.00	7,123.43	7,159.56	7,019.39	129.38	40.26	87.17	-1,261.59	-8,994.77	4,694.89	4,586.52	108.36	43.325		
12,000.00	7,122.89	7,160.61	7,020.44	132.10	40.26	87.21	-1,261.56	-8,994.78	4,601.19	4,491.50	109.69	41.946		
12,100.00	7,122.35	7,161.66	7,021.49	134.83	40.26	87.24	-1,261.54	-8,994.80	4,507.76	4,396.67	111.10	40.575		
12,200.00	7,121.81	7,162.71	7,022.54	137.56	40.27	87.28	-1,261.51	-8,994.81	4,414.62	4,302.05	112.58	39.214		
12,300.00	7,121.27	7,163.75	7,023.58	140.30	40.27	87.32	-1,261.49	-8,994.83	4,321.79	4,207.65	114.14	37.864		
12,400.00	7,120.73	7,164.78	7,024.61	143.05	40.27	87.35	-1,261.46	-8,994.85	4,229.29	4,113.50	115.79	36.525		
12,500.00	7,120.19	7,165.82	7,025.64	145.80	40.28	87.39	-1,261.44	-8,994.86	4,137.13	4,019.60	117.53	35.200		
12,600.00	7,119.65	7,166.84	7,026.67	148.55	40.28	87.43	-1,261.42	-8,994.88	4,045.35	3,925.97	119.37	33.888		
12,700.00	7,119.10	7,167.86	7,027.69	151.30	40.28	87.46	-1,261.39	-8,994.89	3,953.96	3,832.65	121.31	32.593		
12,800.00	7,118.56	7,168.88	7,028.71	154.07	40.29	87.50	-1,261.37	-8,994.91	3,863.00	3,739.64	123.37	31.313		
12,900.00	7,118.02	7,169.90	7,029.72	156.83	40.29	87.53	-1,261.34	-8,994.92	3,772.50	3,646.97	125.53	30.052		
13,000.00	7,117.48	7,170.90	7,030.73	159.60	40.30	87.57	-1,261.32	-8,994.94	3,682.49	3,554.67	127.82	28.810		
13,100.00	7,116.94	7,171.91	7,031.73	162.37	40.30	87.60	-1,261.30	-8,994.95	3,593.01	3,462.77	130.24	27.588		
13,200.00	7,116.40	7,172.91	7,032.73	165.14	40.30	87.64	-1,261.27	-8,994.97	3,504.09	3,371.30	132.79	26.388		
13,300.00	7,115.86	7,173.90	7,033.73	167.92	40.31	87.68	-1,261.25	-8,994.98	3,415.79	3,280.30	135.49	25.212		
13,400.00	7,115.32	7,174.89	7,034.72	170.70	40.31	87.71	-1,261.23	-8,994.99	3,328.15	3,189.82	138.33	24.059		
13,500.00	7,114.78	7,175.88	7,035.71	173.48	40.31	87.74	-1,261.20	-8,995.01	3,241.23	3,099.88	141.34	22.932		
13,600.00	7,114.24	7,176.86	7,036.69	176.26	40.32	87.78	-1,261.18	-8,995.02	3,155.08	3,010.56	144.52	21.831		
13,700.00	7,113.69	7,177.84	7,037.67	179.05	40.32	87.81	-1,261.16	-8,995.04	3,069.77	2,921.89	147.88	20.759		
13,800.00	7,113.15	7,178.82	7,038.64	181.84	40.32	87.85	-1,261.13	-8,995.05	2,985.37	2,833.95	151.42	19.716		
13,900.00	7,112.61	7,179.79	7,039.61	184.63	40.33	87.88	-1,261.11	-8,995.07	2,901.96	2,746.80	155.16	18.703		
14,000.00	7,112.07	7,180.75	7,040.58	187.42	40.33	87.92	-1,261.09	-8,995.08	2,819.63	2,660.52	159.11	17.721		
14,100.00	7,111.53	7,181.71	7,041.54	190.22	40.33	87.95	-1,261.07	-8,995.09	2,738.48	2,575.21	163.27	16.773		
14,200.00	7,110.99	7,182.67	7,042.49	193.01	40.34	87.98	-1,261.04	-8,995.11	2,658.61	2,490.96	167.66	15.857		
14,300.00	7,110.45	7,183.63	7,043.45	195.81	40.34	88.02	-1,261.02	-8,995.12	2,580.15	2,407.87	172.27	14.977		
14,400.00	7,109.91	7,184.57	7,044.40	198.61	40.34	88.05	-1,261.00	-8,995.14	2,503.22	2,326.09	177.13	14.132		
14,500.00	7,109.37	7,185.52	7,045.34	201.42	40.35	88.08	-1,260.98	-8,995.15	2,427.97	2,245.75	182.22	13.324		
14,600.00	7,108.82	7,186.46	7,046.28	204.22	40.35	88.12	-1,260.95	-8,995.16	2,354.57	2,167.01	187.56	12.554		
14,700.00	7,108.28	7,187.43	7,047.25	207.03	40.35	88.15	-1,260.94	-8,995.18	2,283.19	2,090.05	193.14	11.821		
14,800.00	7,107.74	7,188.43	7,048.25	209.83	40.36	88.19	-1,260.91	-8,995.20	2,214.02	2,015.06	198.95	11.128		
14,900.00	7,107.20	7,189.44	7,049.26	212.64	40.36	88.22	-1,260.89	-8,995.21	2,147.28	1,942.29	204.99	10.475		
15,000.00	7,106.66	7,190.45	7,050.27	215.45	40.36	88.26	-1,260.87	-8,995.23	2,083.20	1,871.97	211.23	9.862		
15,100.00	7,106.12	7,191.47	7,051.28	218.26	40.37	88.29	-1,260.85	-8,995.24	2,022.05	1,804.40	217.65	9.290		
15,200.00	7,105.58	7,192.48	7,052.30	221.07	40.37	88.33	-1,260.82	-8,995.26	1,964.08	1,739.87	224.21	8.760		
15,300.00	7,105.04	7,193.50	7,053.32	223.89	40.37	88.37	-1,260.80	-8,995.27	1,909.59	1,678.73	230.85	8.272		
15,400.00	7,104.50	7,194.52	7,054.34	226.70	40.38	88.40	-1,260.78	-8,995.29	1,858.89	1,621.35	237.53	7.826		

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



Anticollision Report



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

Offset Design	HARVESTERS STATE 7-15 PAD - FRITZLER 43-17(PR_150CC) - OH - OH											Offset Site Error:	0.00 ft
Survey Program:	118-MWD											Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	7,195.46	7,055.28	229.28	40.38	88.44	-1,260.76	-8,995.30	1,816.05	1,572.44	243.62	7.455 CC, ES, SF	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 89-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	34.00	3.28	3.28	-105.89	-2,555.06	-8,976.29	9,332.91					
100.00	100.00	168.98	202.95	3.28	3.32	-105.87	-2,552.51	-8,976.02	9,332.47	9,325.86	6.61	1,412.758		
200.00	200.00	303.30	337.24	3.34	3.46	-105.86	-2,549.36	-8,975.02	9,331.08	9,324.28	6.80	1,372.174		
300.00	299.98	404.33	438.22	3.44	3.63	71.07	-2,546.33	-8,974.37	9,329.08	9,322.01	7.07	1,319.575		
400.00	399.84	491.03	524.86	3.59	3.81	71.18	-2,543.19	-8,973.91	9,325.90	9,318.50	7.40	1,260.457		
500.00	499.45	542.00	575.78	3.79	3.93	71.29	-2,541.01	-8,973.90	9,321.94	9,314.23	7.72	1,208.178		
600.00	598.70	586.87	620.60	4.03	4.04	71.42	-2,538.99	-8,974.17	9,317.44	9,309.37	8.07	1,154.438		
700.00	697.47	648.00	681.67	4.31	4.21	71.59	-2,536.27	-8,975.12	9,312.60	9,304.08	8.52	1,093.164		
800.00	795.62	660.93	694.58	4.64	4.24	71.71	-2,535.71	-8,975.41	9,307.17	9,298.30	8.88	1,048.357		
900.00	893.06	703.98	737.59	5.00	4.37	71.89	-2,534.00	-8,976.52	9,301.41	9,292.05	9.36	993.751		
1,000.00	989.64	789.38	822.89	5.40	4.62	72.16	-2,530.86	-8,978.90	9,294.96	9,284.95	10.01	928.566		
1,100.00	1,085.27	828.23	861.69	5.83	4.74	72.38	-2,529.34	-8,980.15	9,287.86	9,277.30	10.56	879.463		
1,200.00	1,179.82	884.00	917.35	6.29	4.93	72.65	-2,526.68	-8,982.50	9,280.45	9,269.24	11.20	828.363		
1,300.00	1,273.17	884.00	917.35	6.79	4.93	72.80	-2,526.68	-8,982.50	9,272.65	9,260.95	11.70	792.654		
1,400.00	1,365.21	921.73	954.97	7.33	5.05	73.05	-2,524.68	-8,984.52	9,264.62	9,252.27	12.35	749.984		
1,500.00	1,456.49	946.24	979.40	7.89	5.14	73.13	-2,523.38	-8,986.05	9,256.89	9,243.90	12.99	712.679		
1,600.00	1,547.76	979.00	1,012.03	8.46	5.25	73.22	-2,521.65	-8,988.38	9,250.01	9,236.34	13.67	676.651		
1,700.00	1,639.04	1,007.13	1,040.03	9.05	5.35	73.30	-2,520.07	-8,990.58	9,243.91	9,229.56	14.35	644.123		
1,800.00	1,730.31	1,049.22	1,081.88	9.65	5.51	73.42	-2,517.38	-8,994.13	9,238.51	9,223.41	15.09	612.064		
1,900.00	1,821.58	1,101.70	1,133.99	10.26	5.71	73.58	-2,513.45	-8,998.95	9,233.76	9,217.87	15.89	581.124		
2,000.00	1,912.85	1,168.00	1,199.70	10.87	5.97	73.78	-2,507.48	-9,005.42	9,229.50	9,212.75	16.75	550.971		
2,100.00	2,004.13	1,198.78	1,230.15	11.49	6.10	73.87	-2,504.35	-9,008.64	9,225.86	9,208.38	17.49	527.566		
2,200.00	2,095.40	1,228.84	1,259.85	12.11	6.23	73.97	-2,501.09	-9,012.01	9,223.03	9,204.80	18.23	506.016		
2,300.00	2,186.67	1,263.00	1,293.53	12.74	6.37	74.08	-2,497.16	-9,016.11	9,221.01	9,202.02	18.99	485.627		
2,400.00	2,277.95	1,263.00	1,293.53	13.38	6.37	74.08	-2,497.16	-9,016.11	9,219.88	9,200.27	19.61	470.167		
2,493.36	2,363.16	1,309.93	1,339.68	13.97	6.58	74.23	-2,491.29	-9,022.26	9,219.43	9,199.03	20.40	452.004		
2,500.00	2,369.22	1,311.66	1,341.38	14.01	6.59	74.24	-2,491.06	-9,022.50	9,219.43	9,198.98	20.45	450.920		
2,600.00	2,460.49	1,358.00	1,386.78	14.65	6.80	74.40	-2,484.67	-9,029.24	9,219.98	9,198.71	21.28	433.345		
2,700.00	2,551.77	1,375.61	1,404.00	15.29	6.89	74.46	-2,482.13	-9,031.92	9,221.23	9,199.24	21.98	419.469		
2,800.00	2,643.04	1,467.38	1,493.76	15.93	7.33	74.77	-2,469.03	-9,045.84	9,223.01	9,199.97	23.04	400.340		
2,900.00	2,734.31	1,547.00	1,571.77	16.58	7.73	75.03	-2,458.36	-9,057.66	9,224.96	9,200.92	24.04	383.671		
3,000.00	2,825.58	1,598.29	1,622.05	17.23	7.99	75.20	-2,451.75	-9,065.33	9,227.43	9,202.52	24.92	370.302		
3,100.00	2,916.86	1,642.00	1,664.84	17.87	8.21	75.35	-2,446.05	-9,072.15	9,230.67	9,204.91	25.76	358.353		
3,200.00	3,008.13	1,744.38	1,765.14	18.52	8.75	75.69	-2,433.23	-9,088.21	9,234.38	9,207.49	26.89	343.407		
3,300.00	3,099.40	1,861.75	1,880.17	19.17	9.37	76.07	-2,418.09	-9,105.92	9,237.74	9,209.63	28.11	328.647		
3,400.00	3,190.68	1,896.83	1,914.51	19.83	9.56	76.19	-2,413.42	-9,111.36	9,241.82	9,212.90	28.91	319.624		
3,500.00	3,281.95	3,500.00	2,016.30	20.48	18.63	76.54	-2,400.05	-9,127.61	9,246.35	9,208.62	37.73	245.066		
3,600.00	3,373.22	2,080.82	2,094.80	21.13	10.57	76.80	-2,390.17	-9,139.80	9,250.91	9,219.80	31.11	297.327		
3,700.00	3,464.49	2,132.44	2,145.36	21.79	10.86	76.97	-2,383.72	-9,147.95	9,256.19	9,224.19	32.01	289.199		
3,800.00	3,555.77	2,363.67	2,371.46	22.44	12.17	77.75	-2,350.02	-9,182.60	9,260.49	9,226.61	33.88	273.362		
3,900.00	3,647.04	2,401.00	2,408.05	23.10	12.38	77.87	-2,345.06	-9,188.05	9,265.37	9,230.67	34.70	266.983		
4,000.00	3,738.31	2,466.29	2,472.08	23.75	12.75	78.09	-2,336.80	-9,197.78	9,270.85	9,235.18	35.68	259.868		
4,100.00	3,829.59	2,516.15	2,520.93	24.41	13.04	78.25	-2,330.25	-9,205.36	9,276.88	9,240.31	36.56	253.709		
4,200.00	3,920.86	2,555.72	2,559.64	25.07	13.27	78.38	-2,324.92	-9,211.58	9,283.60	9,246.20	37.40	248.228		
4,300.00	4,012.13	2,607.21	2,609.94	25.73	13.57	78.56	-2,317.82	-9,219.94	9,291.02	9,252.72	38.30	242.595		
4,400.00	4,103.41	2,710.74	2,711.11	26.38	14.18	78.90	-2,303.53	-9,236.66	9,298.69	9,259.20	39.49	235.482		
4,500.00	4,194.68	4,500.00	2,823.38	27.04	24.74	79.28	-2,288.22	-9,255.06	9,306.65	9,257.18	49.46	188.148		
4,600.00	4,285.95	2,906.86	2,903.08	27.70	15.33	79.55	-2,278.18	-9,267.73	9,314.55	9,272.76	41.79	222.881		
4,700.00	4,377.22	2,937.51	2,933.14	28.36	15.50	79.64	-2,274.75	-9,272.62	9,323.12	9,280.55	42.57	219.029		
4,800.00	4,468.50	2,969.00	2,964.02	29.02	15.68	79.74	-2,271.39	-9,277.82	9,332.46	9,289.12	43.34	215.324		
4,900.00	4,559.77	3,206.78	3,197.23	29.68	17.05	80.50	-2,245.55	-9,316.26	9,342.06	9,296.83	45.23	206.532		
5,000.00	4,651.04	3,262.59	3,252.14	30.34	17.36	80.67	-2,240.48	-9,324.82	9,350.99	9,304.86	46.13	202.700		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 89-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	3,663.02	3,647.23	31.00	19.53	81.88	-2,205.45	-9,379.60	9,358.55	9,309.75	48.80	191.773		
5,200.00	4,833.59	3,729.00	3,712.36	31.66	19.88	82.08	-2,198.67	-9,387.64	9,365.24	9,315.48	49.76	188.212		
5,300.00	4,924.86	3,729.00	3,712.36	32.32	19.88	82.08	-2,198.67	-9,387.64	9,372.73	9,322.36	50.37	186.072		
5,400.00	5,016.13	3,783.85	3,766.42	32.99	20.19	82.25	-2,192.67	-9,394.72	9,380.74	9,329.47	51.27	182.951		
5,500.00	5,107.41	3,824.00	3,805.87	33.65	20.41	82.38	-2,187.84	-9,400.40	9,389.78	9,337.69	52.10	180.240		
5,600.00	5,198.68	3,824.00	3,805.87	34.31	20.41	82.38	-2,187.84	-9,400.40	9,399.59	9,346.89	52.70	178.376		
5,700.00	5,289.95	3,869.38	3,850.38	34.97	20.68	82.53	-2,182.11	-9,407.22	9,410.16	9,356.61	53.54	175.743		
5,800.00	5,381.23	3,916.00	3,896.01	35.63	20.96	82.68	-2,176.10	-9,414.59	9,421.54	9,367.14	54.40	173.194		
5,900.00	5,472.50	3,954.15	3,933.33	36.30	21.19	82.80	-2,171.15	-9,420.79	9,433.57	9,378.36	55.20	170.890		
6,000.00	5,563.77	4,164.49	4,139.51	36.96	22.43	83.47	-2,145.49	-9,453.47	9,445.21	9,388.23	56.98	165.772		
6,100.00	5,655.05	4,219.16	4,193.14	37.62	22.75	83.64	-2,138.80	-9,461.77	9,456.96	9,399.09	57.87	163.415		
6,200.00	5,746.32	4,287.96	4,260.51	38.28	23.16	83.86	-2,129.72	-9,472.34	9,469.19	9,410.34	58.85	160.912		
6,300.00	5,837.59	4,364.93	4,335.73	38.95	23.63	84.11	-2,118.57	-9,484.23	9,481.81	9,421.94	59.88	158.353		
6,400.00	5,928.86	4,422.10	4,391.49	39.61	23.98	84.30	-2,109.60	-9,493.10	9,494.85	9,434.06	60.79	156.179		
6,500.00	6,020.14	4,469.16	4,437.29	40.27	24.28	84.46	-2,101.77	-9,500.56	9,508.50	9,446.85	61.65	154.230		
6,600.00	6,111.41	4,512.75	4,479.64	40.94	24.56	84.61	-2,094.21	-9,507.61	9,522.79	9,460.30	62.49	152.399		
6,700.00	6,202.68	6,350.56	6,301.31	41.60	33.27	89.82	-1,965.43	-9,648.46	9,527.40	9,455.66	71.74	132.810		
6,800.00	6,293.96	6,800.00	6,335.05	42.26	34.87	89.91	-1,964.99	-9,648.11	9,526.41	9,452.27	74.14	128.492		
6,900.00	6,385.23	6,452.95	6,403.68	42.93	33.64	90.08	-1,963.93	-9,647.53	9,525.76	9,452.30	73.45	129.683		
6,922.15	6,405.45	6,461.68	6,412.41	43.07	33.67	90.10	-1,963.79	-9,647.51	9,525.74	9,452.10	73.64	129.364		
7,000.00	6,476.50	6,492.34	6,443.07	43.59	33.79	90.18	-1,963.28	-9,647.53	9,525.94	9,451.68	74.27	128.263		
7,100.00	6,567.77	6,566.00	6,516.71	44.25	34.06	90.37	-1,961.96	-9,648.08	9,526.95	9,451.74	75.21	126.676		
7,200.00	6,658.64	6,566.00	6,516.71	44.91	34.06	73.43	-1,961.96	-9,648.08	9,522.13	9,446.27	75.86	125.518		
7,300.00	6,747.14	6,626.43	6,577.12	45.52	34.29	58.60	-1,960.90	-9,648.96	9,502.59	9,425.88	76.71	123.883		
7,400.00	6,831.10	6,677.66	6,628.35	46.07	34.49	48.42	-1,960.12	-9,649.91	9,468.48	9,391.03	77.45	122.258		
7,500.00	6,908.46	6,725.36	6,676.02	46.54	34.67	41.82	-1,959.51	-9,650.96	9,420.58	9,342.47	78.10	120.617		
7,600.00	6,977.30	6,771.70	6,722.34	46.95	34.85	37.78	-1,959.01	-9,652.14	9,359.95	9,281.27	78.69	118.954		
7,700.00	7,035.93	6,818.12	6,768.75	47.30	35.03	35.71	-1,958.55	-9,653.40	9,287.95	9,208.75	79.20	117.266		
7,800.00	7,082.92	6,856.03	6,806.64	47.59	35.18	35.46	-1,958.21	-9,654.49	9,206.24	9,126.61	79.63	115.618		
7,900.00	7,117.09	6,884.42	6,835.02	47.84	35.29	37.64	-1,957.96	-9,655.34	9,116.74	9,036.78	79.95	114.030		
8,000.00	7,137.62	6,902.54	6,853.13	48.06	35.36	45.19	-1,957.81	-9,655.89	9,021.57	8,941.40	80.17	112.525		
8,100.00	7,143.99	6,909.86	6,860.44	48.28	35.39	75.78	-1,957.75	-9,656.12	8,923.03	8,842.73	80.30	111.122		
8,200.00	7,143.45	6,911.86	6,862.44	48.53	35.40	75.90	-1,957.73	-9,656.18	8,823.62	8,743.24	80.38	109.778		
8,300.00	7,142.91	6,913.87	6,864.45	48.89	35.41	76.02	-1,957.72	-9,656.24	8,724.22	8,643.76	80.46	108.431		
8,400.00	7,142.37	6,915.89	6,866.48	49.40	35.42	76.13	-1,957.70	-9,656.31	8,624.83	8,544.28	80.54	107.081		
8,500.00	7,141.83	6,917.93	6,868.51	50.12	35.42	76.25	-1,957.69	-9,656.37	8,525.45	8,444.82	80.64	105.729		
8,600.00	7,141.29	6,919.97	6,870.55	51.08	35.43	76.37	-1,957.67	-9,656.43	8,426.09	8,345.36	80.73	104.373		
8,700.00	7,140.75	6,922.03	6,872.60	52.30	35.44	76.49	-1,957.65	-9,656.50	8,326.75	8,245.92	80.83	103.014		
8,800.00	7,140.21	6,924.09	6,874.67	53.75	35.45	76.61	-1,957.64	-9,656.56	8,227.42	8,146.48	80.94	101.653		
8,900.00	7,139.67	6,926.17	6,876.74	55.40	35.46	76.73	-1,957.62	-9,656.63	8,128.10	8,047.05	81.05	100.288		
9,000.00	7,139.12	6,928.26	6,878.83	57.20	35.46	76.86	-1,957.61	-9,656.70	8,028.80	7,947.64	81.16	98.920		
9,100.00	7,138.58	6,930.36	6,880.93	59.13	35.47	76.98	-1,957.59	-9,656.76	7,929.52	7,848.23	81.29	97.550		
9,200.00	7,138.04	6,932.47	6,883.04	61.15	35.48	77.10	-1,957.57	-9,656.83	7,830.26	7,748.84	81.42	96.176		
9,300.00	7,137.50	6,934.59	6,885.16	63.26	35.49	77.23	-1,957.56	-9,656.90	7,731.01	7,649.46	81.55	94.799		
9,400.00	7,136.96	6,936.72	6,887.29	65.44	35.50	77.35	-1,957.54	-9,656.97	7,631.79	7,550.09	81.69	93.420		
9,500.00	7,136.42	6,938.87	6,889.44	67.68	35.50	77.48	-1,957.52	-9,657.03	7,532.58	7,450.74	81.84	92.037		
9,600.00	7,135.88	6,941.03	6,891.59	69.97	35.51	77.61	-1,957.51	-9,657.10	7,433.39	7,351.39	82.00	90.651		
9,700.00	7,135.34	6,944.00	6,894.57	72.31	35.52	77.78	-1,957.49	-9,657.20	7,334.23	7,252.06	82.17	89.259		
9,800.00	7,134.80	6,944.00	6,894.57	74.69	35.52	77.78	-1,957.49	-9,657.20	7,235.08	7,152.75	82.33	87.877		
9,900.00	7,134.26	6,944.00	6,894.57	77.10	35.52	77.78	-1,957.49	-9,657.20	7,135.96	7,053.46	82.51	86.491		
10,000.00	7,133.71	6,944.00	6,894.57	79.54	35.52	77.78	-1,957.49	-9,657.20	7,036.87	6,954.18	82.69	85.101		
10,100.00	7,133.17	6,944.00	6,894.57	82.02	35.52	77.78	-1,957.49	-9,657.20	6,937.80	6,854.92	82.88	83.709		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 89-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,132.63	6,944.00	6,894.57	84.52	35.52	77.78	-1,957.49	-9,657.20	6,838.76	6,755.68	83.08	82.313		
10,300.00	7,132.09	6,944.00	6,894.57	87.04	35.52	77.78	-1,957.49	-9,657.20	6,739.75	6,656.45	83.30	80.914		
10,400.00	7,131.55	6,944.00	6,894.57	89.58	35.52	77.78	-1,957.49	-9,657.20	6,640.76	6,557.25	83.52	79.512		
10,500.00	7,131.01	6,944.00	6,894.57	92.15	35.52	77.78	-1,957.49	-9,657.20	6,541.81	6,458.06	83.76	78.106		
10,600.00	7,130.47	6,944.00	6,894.57	94.73	35.52	77.78	-1,957.49	-9,657.20	6,442.89	6,358.89	84.00	76.698		
10,700.00	7,129.93	6,944.00	6,894.57	97.33	35.52	77.78	-1,957.49	-9,657.20	6,344.01	6,259.74	84.27	75.286		
10,800.00	7,129.39	6,944.00	6,894.57	99.94	35.52	77.78	-1,957.49	-9,657.20	6,245.16	6,160.62	84.54	73.871		
10,900.00	7,128.84	6,944.00	6,894.57	102.56	35.52	77.78	-1,957.49	-9,657.20	6,146.34	6,061.51	84.83	72.453		
11,000.00	7,128.30	6,944.00	6,894.57	105.20	35.52	77.78	-1,957.49	-9,657.20	6,047.57	5,962.43	85.14	71.033		
11,100.00	7,127.76	6,944.00	6,894.57	107.85	35.52	77.78	-1,957.49	-9,657.20	5,948.84	5,863.37	85.46	69.609		
11,200.00	7,127.22	6,968.85	6,919.41	110.51	35.63	79.25	-1,957.28	-9,658.03	5,850.06	5,764.16	85.90	68.104		
11,300.00	7,126.68	6,970.71	6,921.26	113.18	35.63	79.36	-1,957.27	-9,658.10	5,751.40	5,665.14	86.27	66.671		
11,400.00	7,126.14	6,972.59	6,923.14	115.86	35.64	79.47	-1,957.25	-9,658.16	5,652.79	5,566.14	86.65	65.235		
11,500.00	7,125.60	6,974.49	6,925.04	118.55	35.65	79.59	-1,957.24	-9,658.23	5,554.22	5,467.16	87.06	63.798		
11,600.00	7,125.06	6,976.42	6,926.96	121.25	35.66	79.70	-1,957.22	-9,658.30	5,455.71	5,368.22	87.49	62.357		
11,700.00	7,124.52	6,978.36	6,928.91	123.95	35.66	79.82	-1,957.20	-9,658.36	5,357.25	5,269.31	87.95	60.915		
11,800.00	7,123.97	6,980.34	6,930.88	126.66	35.67	79.94	-1,957.18	-9,658.43	5,258.85	5,170.42	88.43	59.472		
11,900.00	7,123.43	6,982.33	6,932.88	129.38	35.68	80.06	-1,957.17	-9,658.51	5,160.51	5,071.57	88.93	58.026		
12,000.00	7,122.89	6,984.35	6,934.90	132.10	35.69	80.18	-1,957.15	-9,658.58	5,062.23	4,972.76	89.47	56.580		
12,100.00	7,122.35	6,986.40	6,936.94	134.83	35.70	80.30	-1,957.13	-9,658.65	4,964.02	4,873.98	90.04	55.132		
12,200.00	7,121.81	6,988.47	6,939.01	137.56	35.70	80.42	-1,957.11	-9,658.73	4,865.88	4,775.24	90.64	53.683		
12,300.00	7,121.27	6,990.57	6,941.11	140.30	35.71	80.55	-1,957.09	-9,658.80	4,767.82	4,676.54	91.28	52.234		
12,400.00	7,120.73	6,992.70	6,943.23	143.05	35.72	80.68	-1,957.07	-9,658.88	4,669.84	4,577.88	91.95	50.785		
12,500.00	7,120.19	6,994.85	6,945.38	145.80	35.73	80.81	-1,957.05	-9,658.96	4,571.94	4,479.27	92.67	49.336		
12,600.00	7,119.65	6,997.03	6,947.56	148.55	35.74	80.94	-1,957.03	-9,659.04	4,474.13	4,380.70	93.43	47.888		
12,700.00	7,119.10	6,999.24	6,949.77	151.30	35.75	81.07	-1,957.00	-9,659.13	4,376.43	4,282.19	94.24	46.441		
12,800.00	7,118.56	7,001.47	6,952.00	154.07	35.76	81.20	-1,956.98	-9,659.21	4,278.82	4,183.73	95.10	44.995		
12,900.00	7,118.02	7,003.74	6,954.27	156.83	35.77	81.34	-1,956.96	-9,659.30	4,181.33	4,085.33	96.01	43.552		
13,000.00	7,117.48	7,006.04	6,956.56	159.60	35.78	81.48	-1,956.94	-9,659.38	4,083.96	3,986.98	96.98	42.112		
13,100.00	7,116.94	7,008.37	6,958.89	162.37	35.79	81.62	-1,956.91	-9,659.47	3,986.72	3,888.71	98.01	40.676		
13,200.00	7,116.40	7,010.72	6,961.25	165.14	35.79	81.76	-1,956.89	-9,659.56	3,889.61	3,790.50	99.11	39.244		
13,300.00	7,115.86	7,013.11	6,963.63	167.92	35.80	81.91	-1,956.86	-9,659.65	3,792.65	3,692.37	100.29	37.817		
13,400.00	7,115.32	7,015.54	6,966.05	170.70	35.81	82.05	-1,956.84	-9,659.75	3,695.86	3,594.31	101.54	36.396		
13,500.00	7,114.78	7,017.99	6,968.51	173.48	35.82	82.20	-1,956.81	-9,659.84	3,599.23	3,496.35	102.89	34.983		
13,600.00	7,114.24	7,020.48	6,971.00	176.26	35.83	82.35	-1,956.79	-9,659.94	3,502.80	3,398.47	104.32	33.577		
13,700.00	7,113.69	7,023.01	6,973.52	179.05	35.84	82.51	-1,956.76	-9,660.04	3,406.56	3,300.70	105.86	32.181		
13,800.00	7,113.15	7,025.57	6,976.08	181.84	35.85	82.66	-1,956.73	-9,660.14	3,310.55	3,203.04	107.50	30.795		
13,900.00	7,112.61	7,028.16	6,978.67	184.63	35.87	82.82	-1,956.70	-9,660.25	3,214.77	3,105.50	109.27	29.421		
14,000.00	7,112.07	7,030.80	6,981.30	187.42	35.88	82.98	-1,956.67	-9,660.35	3,119.26	3,008.10	111.16	28.060		
14,100.00	7,111.53	7,033.47	6,983.97	190.22	35.89	83.14	-1,956.64	-9,660.46	3,024.04	2,910.83	113.20	26.713		
14,200.00	7,110.99	7,036.17	6,986.67	193.01	35.90	83.30	-1,956.61	-9,660.57	2,929.13	2,813.73	115.40	25.383		
14,300.00	7,110.45	7,038.92	6,989.42	195.81	35.91	83.47	-1,956.58	-9,660.69	2,834.57	2,716.80	117.76	24.070		
14,400.00	7,109.91	7,041.71	6,992.20	198.61	35.92	83.64	-1,956.55	-9,660.80	2,740.39	2,620.07	120.31	22.777		
14,500.00	7,109.37	7,044.54	6,995.03	201.42	35.93	83.81	-1,956.52	-9,660.92	2,646.63	2,523.56	123.07	21.505		
14,600.00	7,108.82	7,047.41	6,997.90	204.22	35.94	83.99	-1,956.48	-9,661.04	2,553.34	2,427.29	126.05	20.257		
14,700.00	7,108.28	7,050.32	7,000.81	207.03	35.95	84.16	-1,956.45	-9,661.16	2,460.58	2,331.30	129.28	19.033		
14,800.00	7,107.74	7,053.28	7,003.76	209.83	35.97	84.34	-1,956.41	-9,661.29	2,368.40	2,235.62	132.78	17.837		
14,900.00	7,107.20	7,056.28	7,006.76	212.64	35.98	84.53	-1,956.37	-9,661.42	2,276.87	2,140.29	136.58	16.671		
15,000.00	7,106.66	7,059.33	7,009.81	215.45	35.99	84.71	-1,956.34	-9,661.55	2,186.09	2,045.37	140.71	15.536		
15,100.00	7,106.12	7,062.43	7,012.90	218.26	36.00	84.90	-1,956.30	-9,661.68	2,096.13	1,950.92	145.21	14.435		
15,200.00	7,105.58	7,065.57	7,016.04	221.07	36.02	85.09	-1,956.26	-9,661.82	2,007.13	1,857.01	150.12	13.370		
15,300.00	7,105.04	7,068.76	7,019.23	223.89	36.03	85.29	-1,956.22	-9,661.96	1,919.19	1,763.73	155.47	12.345		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	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: 89-MWD												Offset Well Error:	3.28 ft
HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.00	7,104.50	7,072.00	7,022.47	226.70	36.04	85.49	-1,956.18	-9,662.10	1,832.49	1,671.18	161.31	11.360	
15,491.56	7,104.00	7,075.02	7,025.48	229.28	36.05	85.67	-1,956.14	-9,662.23	1,754.34	1,587.21	167.13	10.497 CC, ES, SF	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	34.00	3.28	3.28	-106.22	-2,613.35	-8,984.65	9,357.07					
100.00	100.00	43.32	77.32	3.28	3.28	-106.22	-2,613.24	-8,984.74	9,357.09	9,350.52	6.57	1,425.152		
200.00	200.00	111.80	145.79	3.34	3.29	-106.21	-2,612.62	-8,985.22	9,357.51	9,350.88	6.63	1,411.540		
300.00	299.98	171.00	204.98	3.44	3.33	70.66	-2,611.65	-8,985.94	9,357.67	9,350.90	6.76	1,383.447		
400.00	399.84	208.64	242.61	3.59	3.36	70.69	-2,610.97	-8,986.62	9,357.25	9,350.30	6.95	1,347.327		
500.00	499.45	263.00	296.94	3.79	3.41	70.74	-2,610.26	-8,988.13	9,356.49	9,349.29	7.20	1,299.181		
600.00	598.70	263.00	296.94	4.03	3.41	70.76	-2,610.26	-8,988.13	9,355.16	9,347.71	7.45	1,256.129		
700.00	697.47	263.00	296.94	4.31	3.41	70.79	-2,610.26	-8,988.13	9,353.75	9,346.01	7.74	1,209.137		
800.00	795.62	305.12	339.03	4.64	3.47	70.87	-2,610.15	-8,989.87	9,351.75	9,343.63	8.12	1,152.337		
900.00	893.06	354.00	387.82	5.00	3.55	70.98	-2,610.83	-8,992.73	9,349.91	9,341.36	8.55	1,093.483		
1,000.00	989.64	354.00	387.82	5.40	3.55	71.03	-2,610.83	-8,992.73	9,347.32	9,338.37	8.95	1,044.528		
1,100.00	1,085.27	354.00	387.82	5.83	3.55	71.08	-2,610.83	-8,992.73	9,344.67	9,335.29	9.38	996.088		
1,200.00	1,179.82	386.63	420.35	6.29	3.61	71.19	-2,611.80	-8,995.05	9,341.74	9,331.84	9.90	943.618		
1,300.00	1,273.17	411.29	444.92	6.79	3.66	71.30	-2,612.85	-8,996.94	9,338.51	9,328.07	10.44	894.396		
1,400.00	1,365.21	445.00	478.46	7.33	3.73	71.44	-2,614.73	-8,999.71	9,335.00	9,323.96	11.04	845.909		
1,500.00	1,456.49	554.50	587.30	7.89	3.99	71.67	-2,623.00	-9,008.30	9,331.28	9,319.45	11.83	788.816		
1,600.00	1,547.76	624.71	657.03	8.46	4.19	71.81	-2,629.43	-9,013.47	9,327.60	9,315.02	12.58	741.550		
1,700.00	1,639.04	742.52	773.90	9.05	4.57	72.04	-2,641.71	-9,021.75	9,324.03	9,310.53	13.50	690.580		
1,800.00	1,730.31	811.85	842.71	9.65	4.81	72.17	-2,648.61	-9,026.71	9,320.59	9,306.27	14.31	651.129		
1,900.00	1,821.58	1,383.00	1,411.90	10.26	7.01	73.42	-2,680.00	-9,058.31	9,313.49	9,296.51	16.98	548.582		
2,000.00	1,912.85	1,383.00	1,411.90	10.87	7.01	73.42	-2,680.00	-9,058.31	9,306.11	9,288.52	17.59	529.095		
2,100.00	2,004.13	1,383.00	1,411.90	11.49	7.01	73.42	-2,680.00	-9,058.31	9,299.80	9,281.59	18.21	510.820		
2,200.00	2,095.40	1,383.00	1,411.90	12.11	7.01	73.42	-2,680.00	-9,058.31	9,294.56	9,275.73	18.83	493.685		
2,300.00	2,186.67	1,383.00	1,411.90	12.74	7.01	73.42	-2,680.00	-9,058.31	9,290.39	9,270.94	19.45	477.616		
2,400.00	2,277.95	1,411.36	1,440.18	13.38	7.13	73.49	-2,680.62	-9,060.37	9,286.84	9,266.65	20.19	460.006		
2,500.00	2,369.22	1,445.00	1,473.62	14.01	7.27	73.57	-2,681.71	-9,063.83	9,284.86	9,263.91	20.95	443.214		
2,600.00	2,460.49	1,445.00	1,473.62	14.65	7.27	73.57	-2,681.71	-9,063.83	9,283.30	9,261.72	21.58	430.190		
2,694.22	2,546.49	1,445.00	1,473.62	15.25	7.27	73.57	-2,681.71	-9,063.83	9,282.83	9,260.65	22.17	418.629		
2,700.00	2,551.77	1,445.00	1,473.62	15.29	7.27	73.57	-2,681.71	-9,063.83	9,282.83	9,260.62	22.21	417.942		
2,800.00	2,643.04	1,454.14	1,482.69	15.93	7.31	73.59	-2,682.07	-9,064.92	9,283.42	9,260.54	22.88	405.756		
2,900.00	2,734.31	1,522.09	1,550.08	16.58	7.62	73.75	-2,685.19	-9,073.04	9,284.67	9,260.88	23.79	390.281		
3,000.00	2,825.58	1,569.00	1,596.58	17.23	7.83	73.85	-2,687.82	-9,078.65	9,286.35	9,261.73	24.62	377.243		
3,100.00	2,916.86	1,610.98	1,638.14	17.87	8.03	73.94	-2,690.74	-9,083.78	9,288.66	9,263.23	25.43	365.270		
3,200.00	3,008.13	1,665.00	1,691.49	18.52	8.29	74.06	-2,695.65	-9,090.69	9,291.82	9,265.52	26.30	353.344		
3,300.00	3,099.40	1,665.00	1,691.49	19.17	8.29	74.06	-2,695.65	-9,090.69	9,295.59	9,268.66	26.93	345.210		
3,400.00	3,190.68	1,665.00	1,691.49	19.83	8.29	74.06	-2,695.65	-9,090.69	9,300.44	9,272.88	27.56	337.514		
3,500.00	3,281.95	1,712.42	1,738.16	20.48	8.53	74.15	-2,700.91	-9,097.28	9,305.80	9,277.40	28.40	327.658		
3,600.00	3,373.22	1,883.22	1,905.83	21.13	9.43	74.48	-2,721.80	-9,122.14	9,312.04	9,282.20	29.83	312.132		
3,700.00	3,464.49	3,700.00	2,008.86	21.79	19.55	74.67	-2,735.46	-9,136.72	9,317.65	9,278.51	39.15	238.014		
3,800.00	3,555.77	2,078.62	2,097.74	22.44	10.48	74.84	-2,747.10	-9,148.78	9,322.80	9,290.76	32.04	290.971		
3,900.00	3,647.04	2,136.00	2,154.05	23.10	10.79	74.95	-2,754.35	-9,157.12	9,328.86	9,295.91	32.95	283.104		
4,000.00	3,738.31	2,136.00	2,154.05	23.75	10.79	74.95	-2,754.35	-9,157.12	9,335.32	9,301.75	33.58	278.011		
4,100.00	3,829.59	2,198.96	2,215.73	24.41	11.14	75.06	-2,762.46	-9,166.80	9,342.63	9,308.11	34.52	270.636		
4,200.00	3,920.86	2,404.33	2,417.04	25.07	12.30	75.44	-2,789.99	-9,196.69	9,349.23	9,313.04	36.20	258.290		
4,300.00	4,012.13	2,454.26	2,465.95	25.73	12.59	75.53	-2,797.06	-9,203.76	9,355.87	9,318.78	37.09	252.281		
4,400.00	4,103.41	2,517.00	2,527.27	26.38	12.95	75.63	-2,806.59	-9,213.00	9,363.18	9,325.14	38.04	246.126		
4,500.00	4,194.68	2,554.82	2,564.18	27.04	13.18	75.70	-2,812.56	-9,218.71	9,370.98	9,332.11	38.87	241.083		
4,600.00	4,285.95	2,607.00	2,615.09	27.70	13.49	75.79	-2,820.78	-9,226.67	9,379.21	9,339.43	39.78	235.805		
4,700.00	4,377.22	3,319.42	3,313.88	28.36	17.59	77.04	-2,920.93	-9,319.38	9,387.48	9,343.30	44.18	212.493		
4,800.00	4,468.50	3,491.29	3,483.65	29.02	18.51	77.35	-2,942.64	-9,335.06	9,389.48	9,343.78	45.70	205.455		
4,900.00	4,559.77	3,550.00	3,541.56	29.68	18.83	77.45	-2,950.69	-9,340.36	9,391.55	9,344.89	46.66	201.285		
5,000.00	4,651.04	3,550.00	3,541.56	30.34	18.83	77.45	-2,950.69	-9,340.36	9,394.24	9,346.92	47.31	198.561		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	3,600.12	3,590.94	31.00	19.10	77.54	-2,957.72	-9,345.34	9,397.60	9,349.38	48.22	194.870		
5,200.00	4,833.59	3,644.00	3,634.14	31.66	19.35	77.61	-2,963.74	-9,350.13	9,401.75	9,352.65	49.10	191.465		
5,300.00	4,924.86	3,644.00	3,634.14	32.32	19.35	77.61	-2,963.74	-9,350.13	9,406.67	9,356.92	49.75	189.090		
5,400.00	5,016.13	3,683.73	3,673.19	32.99	19.58	77.68	-2,969.30	-9,354.88	9,412.31	9,361.70	50.60	186.002		
5,500.00	5,107.41	3,739.00	3,727.32	33.65	19.91	77.78	-2,977.64	-9,362.26	9,419.03	9,367.49	51.54	182.739		
5,600.00	5,198.68	3,739.00	3,727.32	34.31	19.91	77.78	-2,977.64	-9,362.26	9,426.15	9,373.98	52.17	180.667		
5,700.00	5,289.95	3,766.69	3,754.37	34.97	20.08	77.82	-2,982.04	-9,366.22	9,434.24	9,381.28	52.96	178.139		
5,800.00	5,381.23	3,807.52	3,794.19	35.63	20.33	77.89	-2,988.76	-9,372.24	9,442.98	9,389.16	53.82	175.457		
5,900.00	5,472.50	4,305.00	4,281.41	36.30	23.29	78.71	-3,066.22	-9,434.78	9,447.82	9,390.54	57.28	164.936		
6,000.00	5,563.77	4,347.64	4,323.39	36.96	23.54	78.78	-3,071.89	-9,439.59	9,453.11	9,394.95	58.16	162.540		
6,100.00	5,655.05	4,399.00	4,373.88	37.62	23.83	78.87	-3,078.94	-9,445.88	9,459.22	9,400.14	59.08	160.104		
6,200.00	5,746.32	4,399.00	4,373.88	38.28	23.83	78.87	-3,078.94	-9,445.88	9,465.97	9,406.25	59.72	158.513		
6,300.00	5,837.59	4,462.75	4,436.48	38.95	24.21	78.98	-3,087.52	-9,454.27	9,473.32	9,412.61	60.70	156.056		
6,400.00	5,928.86	4,495.00	4,468.16	39.61	24.40	79.04	-3,091.62	-9,458.72	9,481.31	9,419.79	61.51	154.133		
6,500.00	6,020.14	4,556.29	4,528.30	40.27	24.76	79.15	-3,099.59	-9,467.46	9,489.83	9,427.35	62.49	151.870		
6,600.00	6,111.41	4,623.61	4,594.21	40.94	25.17	79.27	-3,109.00	-9,477.38	9,498.92	9,435.42	63.50	149.598		
6,700.00	6,202.68	4,709.60	4,678.39	41.60	25.69	79.42	-3,121.18	-9,490.06	9,508.15	9,443.53	64.62	147.146		
6,800.00	6,293.96	6,247.33	6,204.18	42.26	33.00	82.71	-3,213.97	-9,610.31	9,507.30	9,434.96	72.35	131.416		
6,900.00	6,385.23	6,333.29	6,290.13	42.93	33.31	82.92	-3,213.98	-9,611.14	9,502.77	9,429.40	73.37	129.516		
7,000.00	6,476.50	6,421.99	6,378.83	43.59	33.64	83.14	-3,213.87	-9,612.06	9,498.46	9,424.06	74.40	127.662		
7,100.00	6,567.77	6,513.73	6,470.57	44.25	33.97	83.36	-3,213.55	-9,613.03	9,494.33	9,418.89	75.44	125.851		
7,200.00	6,658.64	6,604.92	6,561.75	44.91	34.30	83.57	-3,213.00	-9,614.00	9,484.16	9,407.70	76.47	124.032		
7,300.00	6,747.14	6,723.11	6,679.93	45.52	34.71	83.71	-3,211.90	-9,615.18	9,458.80	9,381.29	77.52	122.019		
7,400.00	6,831.10	6,881.76	6,838.55	46.07	35.25	84.29	-3,209.42	-9,615.82	9,418.26	9,339.65	78.61	119.806		
7,500.00	6,908.46	6,978.58	6,935.36	46.54	35.58	84.71	-3,207.35	-9,615.67	9,363.60	9,284.18	79.42	117.893		
7,600.00	6,977.30	7,030.92	6,987.68	46.95	35.76	85.06	-3,206.28	-9,615.61	9,296.71	9,216.70	80.01	116.188		
7,700.00	7,035.93	7,075.71	7,032.46	47.30	35.91	85.30	-3,205.44	-9,615.64	9,219.22	9,138.72	80.50	114.528		
7,800.00	7,082.92	7,111.81	7,068.56	47.59	36.03	85.51	-3,204.81	-9,615.70	9,132.93	9,052.06	80.87	112.934		
7,900.00	7,117.09	7,138.25	7,095.00	47.84	36.12	85.68	-3,204.38	-9,615.77	9,039.91	8,958.78	81.13	111.429		
8,000.00	7,137.62	7,154.32	7,111.06	48.06	36.18	85.81	-3,204.13	-9,615.83	8,942.37	8,861.10	81.27	110.033		
8,100.00	7,143.99	7,159.52	7,116.26	48.28	36.19	85.93	-3,204.05	-9,615.85	8,842.77	8,761.40	81.30	108.760		
8,200.00	7,143.45	7,159.38	7,116.13	48.53	36.19	86.06	-3,204.06	-9,615.85	8,742.77	8,661.48	81.29	107.552		
8,300.00	7,142.91	7,159.25	7,115.99	48.89	36.19	86.19	-3,204.06	-9,615.84	8,642.83	8,561.56	81.27	106.343		
8,400.00	7,142.37	7,159.11	7,115.86	49.40	36.19	86.32	-3,204.06	-9,615.84	8,542.90	8,461.64	81.26	105.132		
8,500.00	7,141.83	7,158.97	7,115.72	50.12	36.19	86.45	-3,204.06	-9,615.84	8,442.97	8,361.73	81.24	103.920		
8,600.00	7,141.29	7,158.84	7,115.58	51.08	36.19	86.58	-3,204.06	-9,615.84	8,343.04	8,261.81	81.23	102.708		
8,700.00	7,140.75	7,158.70	7,115.44	52.30	36.19	86.71	-3,204.07	-9,615.84	8,243.12	8,161.90	81.22	101.494		
8,800.00	7,140.21	7,158.56	7,115.30	53.75	36.19	86.84	-3,204.07	-9,615.84	8,143.19	8,061.99	81.21	100.279		
8,900.00	7,139.67	7,158.42	7,115.16	55.40	36.19	86.97	-3,204.07	-9,615.84	8,043.27	7,962.07	81.19	99.063		
9,000.00	7,139.12	7,158.28	7,115.02	57.20	36.19	87.10	-3,204.07	-9,615.84	7,943.35	7,862.17	81.18	97.847		
9,100.00	7,138.58	7,158.14	7,114.88	59.13	36.19	87.23	-3,204.08	-9,615.84	7,843.43	7,762.26	81.17	96.629		
9,200.00	7,138.04	7,158.00	7,114.74	61.15	36.19	87.36	-3,204.08	-9,615.84	7,743.51	7,662.35	81.16	95.410		
9,300.00	7,137.50	7,157.85	7,114.60	63.26	36.19	87.49	-3,204.08	-9,615.84	7,643.60	7,562.45	81.15	94.191		
9,400.00	7,136.96	7,157.71	7,114.45	65.44	36.19	87.62	-3,204.08	-9,615.84	7,543.68	7,462.54	81.14	92.970		
9,500.00	7,136.42	7,157.56	7,114.31	67.68	36.19	87.75	-3,204.08	-9,615.84	7,443.77	7,362.64	81.13	91.749		
9,600.00	7,135.88	7,157.42	7,114.16	69.97	36.19	87.88	-3,204.09	-9,615.84	7,343.86	7,262.74	81.12	90.527		
9,700.00	7,135.34	7,157.27	7,114.02	72.31	36.19	88.01	-3,204.09	-9,615.84	7,243.96	7,162.84	81.12	89.303		
9,800.00	7,134.80	7,157.13	7,113.87	74.69	36.18	88.14	-3,204.09	-9,615.84	7,144.06	7,062.95	81.11	88.079		
9,900.00	7,134.26	7,156.98	7,113.73	77.10	36.18	88.27	-3,204.09	-9,615.84	7,044.16	6,963.05	81.10	86.854		
10,000.00	7,133.71	7,156.83	7,113.58	79.54	36.18	88.40	-3,204.10	-9,615.84	6,944.26	6,863.16	81.10	85.629		
10,100.00	7,133.17	7,156.69	7,113.43	82.02	36.18	88.53	-3,204.10	-9,615.84	6,844.37	6,763.27	81.09	84.402		
10,200.00	7,132.63	7,156.54	7,113.28	84.52	36.18	88.66	-3,204.10	-9,615.83	6,744.47	6,663.39	81.09	83.175		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,132.09	7,156.39	7,113.13	87.04	36.18	-93.06	-3,204.10	-9,615.83	6,644.59	6,563.50	81.08	81.947		
10,400.00	7,131.55	7,156.24	7,112.98	89.58	36.18	-93.04	-3,204.10	-9,615.83	6,544.70	6,463.62	81.08	80.718		
10,500.00	7,131.01	7,156.08	7,112.83	92.15	36.18	-93.01	-3,204.11	-9,615.83	6,444.82	6,363.74	81.08	79.488		
10,600.00	7,130.47	7,155.93	7,112.68	94.73	36.18	-92.98	-3,204.11	-9,615.83	6,344.95	6,263.87	81.08	78.257		
10,700.00	7,129.93	7,155.78	7,112.52	97.33	36.18	-92.95	-3,204.11	-9,615.83	6,245.07	6,163.99	81.08	77.025		
10,800.00	7,129.39	7,155.62	7,112.37	99.94	36.18	-92.93	-3,204.11	-9,615.83	6,145.20	6,064.12	81.08	75.793		
10,900.00	7,128.84	7,155.47	7,112.21	102.56	36.18	-92.90	-3,204.12	-9,615.83	6,045.34	5,964.26	81.08	74.560		
11,000.00	7,128.30	7,155.31	7,112.06	105.20	36.18	-92.87	-3,204.12	-9,615.83	5,945.48	5,864.40	81.08	73.326		
11,100.00	7,127.76	7,155.16	7,111.90	107.85	36.18	-92.84	-3,204.12	-9,615.83	5,845.62	5,764.54	81.09	72.091		
11,200.00	7,127.22	7,155.00	7,111.75	110.51	36.18	-92.81	-3,204.12	-9,615.83	5,745.77	5,664.68	81.09	70.855		
11,300.00	7,126.68	7,154.84	7,111.59	113.18	36.18	-92.78	-3,204.13	-9,615.83	5,645.93	5,564.83	81.10	69.618		
11,400.00	7,126.14	7,154.68	7,111.43	115.86	36.18	-92.76	-3,204.13	-9,615.83	5,546.09	5,464.98	81.11	68.381		
11,500.00	7,125.60	7,154.52	7,111.27	118.55	36.18	-92.73	-3,204.13	-9,615.83	5,446.26	5,365.14	81.12	67.142		
11,600.00	7,125.06	7,154.36	7,111.11	121.25	36.18	-92.70	-3,204.13	-9,615.83	5,346.43	5,265.30	81.13	65.902		
11,700.00	7,124.52	7,154.20	7,110.95	123.95	36.17	-92.67	-3,204.14	-9,615.83	5,246.61	5,165.47	81.14	64.662		
11,800.00	7,123.97	7,154.04	7,110.79	126.66	36.17	-92.64	-3,204.14	-9,615.83	5,146.79	5,065.64	81.15	63.420		
11,900.00	7,123.43	7,153.88	7,110.62	129.38	36.17	-92.61	-3,204.14	-9,615.82	5,046.99	4,965.82	81.17	62.177		
12,000.00	7,122.89	7,153.71	7,110.46	132.10	36.17	-92.58	-3,204.14	-9,615.82	4,947.19	4,866.00	81.19	60.933		
12,100.00	7,122.35	7,153.55	7,110.29	134.83	36.17	-92.55	-3,204.15	-9,615.82	4,847.40	4,766.19	81.21	59.688		
12,200.00	7,121.81	7,153.38	7,110.13	137.56	36.17	-92.52	-3,204.15	-9,615.82	4,747.62	4,666.38	81.24	58.441		
12,300.00	7,121.27	7,153.22	7,109.96	140.30	36.17	-92.49	-3,204.15	-9,615.82	4,647.85	4,566.58	81.27	57.193		
12,400.00	7,120.73	7,153.05	7,109.80	143.05	36.17	-92.46	-3,204.15	-9,615.82	4,548.09	4,466.79	81.30	55.943		
12,500.00	7,120.19	7,152.88	7,109.63	145.80	36.17	-92.43	-3,204.16	-9,615.82	4,448.33	4,367.00	81.33	54.692		
12,600.00	7,119.65	7,152.71	7,109.46	148.55	36.17	-92.40	-3,204.16	-9,615.82	4,348.59	4,267.22	81.37	53.439		
12,700.00	7,119.10	7,152.54	7,109.29	151.30	36.17	-92.37	-3,204.16	-9,615.82	4,248.87	4,167.45	81.42	52.185		
12,800.00	7,118.56	7,152.37	7,109.12	154.07	36.17	-92.34	-3,204.16	-9,615.82	4,149.15	4,067.68	81.47	50.928		
12,900.00	7,118.02	7,152.20	7,108.95	156.83	36.17	-92.31	-3,204.17	-9,615.82	4,049.45	3,967.92	81.53	49.669		
13,000.00	7,117.48	7,152.03	7,108.77	159.60	36.17	-92.28	-3,204.17	-9,615.82	3,949.77	3,868.17	81.59	48.408		
13,100.00	7,116.94	7,151.85	7,108.60	162.37	36.17	-92.24	-3,204.17	-9,615.82	3,850.10	3,768.43	81.67	47.145		
13,200.00	7,116.40	7,151.68	7,108.42	165.14	36.17	-92.21	-3,204.17	-9,615.82	3,750.45	3,668.70	81.75	45.879		
13,300.00	7,115.86	7,151.50	7,108.25	167.92	36.17	-92.18	-3,204.18	-9,615.82	3,650.81	3,568.98	81.84	44.610		
13,400.00	7,115.32	7,151.33	7,108.07	170.70	36.16	-92.15	-3,204.18	-9,615.82	3,551.20	3,469.26	81.94	43.338		
13,500.00	7,114.78	7,151.15	7,107.89	173.48	36.16	-92.12	-3,204.18	-9,615.82	3,451.61	3,369.56	82.06	42.063		
13,600.00	7,114.24	7,150.97	7,107.72	176.26	36.16	-92.09	-3,204.18	-9,615.81	3,352.05	3,269.86	82.19	40.784		
13,700.00	7,113.69	7,150.79	7,107.54	179.05	36.16	-92.05	-3,204.19	-9,615.81	3,252.51	3,170.17	82.34	39.501		
13,800.00	7,113.15	7,150.61	7,107.36	181.84	36.16	-92.02	-3,204.19	-9,615.81	3,153.00	3,070.49	82.51	38.214		
13,900.00	7,112.61	7,150.43	7,107.17	184.63	36.16	-91.99	-3,204.19	-9,615.81	3,053.53	2,970.82	82.70	36.922		
14,000.00	7,112.07	7,150.25	7,106.99	187.42	36.16	-91.95	-3,204.20	-9,615.81	2,954.09	2,871.16	82.92	35.625		
14,100.00	7,111.53	7,150.06	7,106.81	190.22	36.16	-91.92	-3,204.20	-9,615.81	2,854.68	2,771.51	83.17	34.323		
14,200.00	7,110.99	7,149.88	7,106.62	193.01	36.16	-91.89	-3,204.20	-9,615.81	2,755.32	2,671.87	83.46	33.015		
14,300.00	7,110.45	7,149.69	7,106.44	195.81	36.16	-91.85	-3,204.20	-9,615.81	2,656.01	2,572.23	83.78	31.701		
14,400.00	7,109.91	7,149.51	7,106.25	198.61	36.16	-91.82	-3,204.21	-9,615.81	2,556.76	2,472.60	84.16	30.380		
14,500.00	7,109.37	7,149.32	7,106.06	201.42	36.16	-91.79	-3,204.21	-9,615.81	2,457.56	2,372.97	84.59	29.052		
14,600.00	7,108.82	7,149.13	7,105.87	204.22	36.16	-91.75	-3,204.21	-9,615.81	2,358.43	2,273.34	85.09	27.716		
14,700.00	7,108.28	7,148.94	7,105.68	207.03	36.16	-91.72	-3,204.22	-9,615.81	2,259.38	2,173.70	85.67	26.372		
14,800.00	7,107.74	7,148.75	7,105.49	209.83	36.16	-91.68	-3,204.22	-9,615.81	2,160.41	2,074.07	86.35	25.020		
14,900.00	7,107.20	7,148.56	7,105.30	212.64	36.16	-91.65	-3,204.22	-9,615.81	2,061.55	1,974.41	87.14	23.659		
15,000.00	7,106.66	7,148.36	7,105.11	215.45	36.15	-91.61	-3,204.22	-9,615.81	1,962.80	1,874.74	88.06	22.290		
15,100.00	7,106.12	7,148.17	7,104.91	218.26	36.15	-91.58	-3,204.23	-9,615.80	1,864.18	1,775.04	89.14	20.912		
15,200.00	7,105.58	7,147.97	7,104.72	221.07	36.15	-91.54	-3,204.23	-9,615.80	1,765.72	1,675.29	90.43	19.527		
15,300.00	7,105.04	7,147.78	7,104.52	223.89	36.15	-91.51	-3,204.23	-9,615.80	1,667.44	1,575.49	91.95	18.135		
15,400.00	7,104.50	7,147.58	7,104.32	226.70	36.15	-91.47	-3,204.24	-9,615.80	1,569.38	1,475.62	93.76	16.738		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)						
15,491.56	7,104.00	7,147.40	7,104.14	229.28	36.15	-91.44	-3,204.24	-9,615.80	1,479.82	1,384.08	95.74	15.457	CC, ES, SF				



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	961.68	985.66	3.28	5.70	-106.97	-2,696.23	-8,836.81	9,291.41					
100.00	100.00	1,026.33	1,048.58	3.28	6.04	-107.05	-2,707.02	-8,826.56	9,280.95	9,271.67	9.27	1,000.883		
200.00	200.00	1,071.76	1,092.85	3.34	6.29	-107.11	-2,714.46	-8,819.66	9,271.02	9,261.47	9.55	971.166		
300.00	299.98	1,098.00	1,118.48	3.44	6.43	69.92	-2,718.63	-8,815.82	9,261.13	9,251.35	9.77	947.626		
400.00	399.84	1,147.12	1,166.55	3.59	6.69	70.07	-2,726.13	-8,809.07	9,250.66	9,240.50	10.16	910.355		
500.00	499.45	1,193.00	1,211.58	3.79	6.93	70.25	-2,732.75	-8,803.33	9,239.76	9,229.17	10.59	872.883		
600.00	598.70	1,245.06	1,262.69	4.03	7.21	70.45	-2,740.42	-8,797.06	9,228.24	9,217.15	11.09	832.201		
700.00	697.47	1,320.14	1,336.22	4.31	7.62	70.67	-2,752.53	-8,787.87	9,215.85	9,204.09	11.76	783.538		
800.00	795.62	1,392.90	1,407.55	4.64	8.02	70.92	-2,763.98	-8,779.26	9,202.59	9,190.13	12.47	738.250		
900.00	893.06	1,707.33	1,717.07	5.00	9.70	71.32	-2,804.49	-8,741.83	9,187.66	9,173.21	14.45	635.876		
1,000.00	989.64	1,757.00	1,765.95	5.40	9.97	71.69	-2,810.76	-8,735.57	9,170.42	9,155.33	15.09	607.605		
1,100.00	1,085.27	1,781.56	1,790.12	5.83	10.11	72.05	-2,813.94	-8,732.63	9,152.69	9,137.05	15.64	585.230		
1,200.00	1,179.82	1,851.00	1,858.42	6.29	10.49	72.47	-2,823.39	-8,724.37	9,134.42	9,117.96	16.46	554.980		
1,300.00	1,273.17	2,253.15	2,252.92	6.79	12.81	73.34	-2,877.23	-8,668.52	9,112.01	9,092.88	19.13	476.309		
1,400.00	1,365.21	2,321.00	2,319.65	7.33	13.19	73.90	-2,884.81	-8,658.80	9,088.88	9,068.88	20.00	454.402		
1,500.00	1,456.49	2,349.18	2,347.40	7.89	13.35	73.98	-2,887.75	-8,654.97	9,065.74	9,045.05	20.68	438.297		
1,600.00	1,547.76	2,383.12	2,380.85	8.46	13.53	74.04	-2,891.47	-8,650.52	9,043.29	9,021.88	21.41	422.328		
1,700.00	1,639.04	2,511.00	2,506.62	9.05	14.26	74.24	-2,907.45	-8,633.88	9,021.52	8,998.86	22.66	398.143		
1,800.00	1,730.31	2,572.50	2,567.00	9.65	14.61	74.33	-2,915.63	-8,625.50	8,999.33	8,975.76	23.57	381.800		
1,900.00	1,821.58	2,749.02	2,740.12	10.26	15.66	74.60	-2,939.70	-8,600.94	8,977.07	8,951.94	25.13	357.195		
2,000.00	1,912.85	2,838.24	2,827.18	10.87	16.21	74.73	-2,953.84	-8,587.50	8,954.29	8,928.05	26.24	341.226		
2,100.00	2,004.13	2,890.00	2,877.83	11.49	16.53	74.80	-2,961.37	-8,579.96	8,931.80	8,904.65	27.14	329.058		
2,200.00	2,095.40	2,935.26	2,922.24	12.11	16.80	74.87	-2,967.51	-8,573.74	8,909.86	8,881.86	28.00	318.192		
2,300.00	2,186.67	2,984.00	2,970.18	12.74	17.08	74.95	-2,973.78	-8,567.58	8,888.67	8,859.78	28.88	307.741		
2,400.00	2,277.95	3,040.85	3,026.09	13.38	17.41	75.05	-2,981.34	-8,560.61	8,868.00	8,838.19	29.82	297.428		
2,500.00	2,369.22	3,078.00	3,062.54	14.01	17.63	75.10	-2,986.76	-8,555.93	8,847.68	8,817.03	30.65	288.705		
2,600.00	2,460.49	3,138.06	3,121.62	14.65	17.96	75.20	-2,994.97	-8,548.83	8,827.83	8,796.24	31.59	279.414		
2,700.00	2,551.77	3,169.00	3,152.18	15.29	18.14	75.25	-2,998.51	-8,545.61	8,808.76	8,776.37	32.39	271.936		
2,800.00	2,643.04	3,219.15	3,201.82	15.93	18.39	75.34	-3,003.77	-8,540.81	8,790.34	8,757.06	33.27	264.178		
2,900.00	2,734.31	3,262.00	3,244.28	16.58	18.62	75.42	-3,008.09	-8,537.04	8,772.55	8,738.43	34.12	257.086		
3,000.00	2,825.58	3,333.00	3,314.63	17.23	18.98	75.56	-3,015.65	-8,531.00	8,755.26	8,720.15	35.11	249.348		
3,100.00	2,916.86	3,398.81	3,379.75	17.87	19.32	75.68	-3,023.24	-8,525.45	8,738.33	8,702.25	36.08	242.197		
3,200.00	3,008.13	3,574.71	3,554.00	18.52	20.23	76.00	-3,042.03	-8,510.43	8,721.17	8,683.59	37.58	232.056		
3,300.00	3,099.40	3,610.28	3,589.21	19.17	20.41	76.07	-3,045.98	-8,507.32	8,704.02	8,665.61	38.41	226.621		
3,400.00	3,190.68	4,112.00	4,082.51	19.83	23.30	76.90	-3,113.84	-8,448.18	8,682.85	8,641.17	41.69	208.285		
3,500.00	3,281.95	4,144.52	4,114.44	20.48	23.49	76.96	-3,118.28	-8,443.87	8,662.11	8,619.59	42.52	203.709		
3,600.00	3,373.22	4,207.00	4,175.91	21.13	23.85	77.06	-3,126.25	-8,436.10	8,642.03	8,598.52	43.51	198.618		
3,700.00	3,464.49	4,256.51	4,224.62	21.79	24.14	77.15	-3,132.77	-8,430.13	8,622.42	8,577.98	44.44	194.027		
3,800.00	3,555.77	4,301.00	4,268.26	22.44	24.40	77.22	-3,139.47	-8,424.63	8,603.20	8,557.86	45.34	189.739		
3,900.00	3,647.04	4,358.85	4,325.00	23.10	24.75	77.31	-3,148.39	-8,417.73	8,584.50	8,538.17	46.32	185.324		
4,000.00	3,738.31	4,396.00	4,361.53	23.75	24.96	77.37	-3,153.80	-8,413.66	8,566.52	8,519.33	47.19	181.531		
4,100.00	3,829.59	4,461.54	4,426.07	24.41	25.34	77.48	-3,162.95	-8,406.91	8,549.09	8,500.89	48.20	177.373		
4,200.00	3,920.86	4,491.00	4,455.11	25.07	25.50	77.53	-3,166.95	-8,403.98	8,532.20	8,483.18	49.02	174.055		
4,300.00	4,012.13	4,550.87	4,514.21	25.73	25.83	77.64	-3,174.76	-8,398.48	8,515.87	8,465.88	49.99	170.356		
4,400.00	4,103.41	4,585.00	4,547.97	26.38	26.01	77.70	-3,178.97	-8,395.66	8,500.31	8,449.48	50.83	167.238		
4,500.00	4,194.68	4,621.90	4,584.52	27.04	26.20	77.77	-3,183.27	-8,392.92	8,485.50	8,433.83	51.67	164.229		
4,600.00	4,285.95	4,680.00	4,642.17	27.70	26.49	77.89	-3,189.45	-8,389.36	8,471.59	8,418.98	52.61	161.024		
4,700.00	4,377.22	4,680.00	4,642.17	28.36	26.49	77.89	-3,189.45	-8,389.36	8,458.26	8,404.99	53.27	158.776		
4,800.00	4,468.50	4,724.27	4,686.18	29.02	26.69	77.98	-3,193.78	-8,387.21	8,445.80	8,391.66	54.13	156.019		
4,900.00	4,559.77	4,900.00	4,773.61	29.68	27.49	78.17	-3,201.43	-8,383.74	8,434.04	8,378.45	55.59	151.728		
5,000.00	4,651.04	4,930.54	4,891.63	30.34	27.62	78.43	-3,209.84	-8,378.79	8,421.89	8,365.53	56.36	149.438		
5,100.00	4,742.32	4,964.00	4,925.00	31.00	27.76	78.51	-3,211.91	-8,377.50	8,410.18	8,353.02	57.16	147.140		

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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 8-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 172-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	5,026.60	4,987.46	31.66	28.03	78.66	-3,215.57	-8,375.46	8,399.05	8,340.97	58.07	144.625		
5,300.00	4,924.86	5,075.21	5,035.99	32.32	28.22	78.77	-3,218.10	-8,374.27	8,388.62	8,329.69	58.93	142.359		
5,400.00	5,016.13	5,130.17	5,090.92	32.99	28.43	78.91	-3,219.64	-8,373.40	8,378.78	8,319.00	59.79	140.146		
5,500.00	5,107.41	5,188.37	5,149.12	33.65	28.63	79.07	-3,219.76	-8,372.98	8,369.52	8,308.88	60.64	138.012		
5,600.00	5,198.68	5,249.00	5,209.75	34.31	28.83	79.24	-3,219.71	-8,372.79	8,360.78	8,299.28	61.50	135.950		
5,700.00	5,289.95	5,312.92	5,273.67	34.97	29.04	79.42	-3,219.75	-8,372.80	8,352.55	8,290.18	62.36	133.933		
5,800.00	5,381.23	5,387.67	5,348.41	35.63	29.29	79.62	-3,220.06	-8,373.00	8,344.78	8,281.51	63.27	131.893		
5,900.00	5,472.50	5,473.02	5,433.77	36.30	29.57	79.86	-3,220.50	-8,373.31	8,337.30	8,273.08	64.22	129.833		
6,000.00	5,563.77	5,558.45	5,519.20	36.96	29.85	80.09	-3,221.02	-8,373.67	8,330.07	8,264.91	65.16	127.834		
6,100.00	5,655.05	5,647.37	5,608.11	37.62	30.14	80.33	-3,221.63	-8,374.10	8,323.10	8,256.98	66.12	125.875		
6,200.00	5,746.32	5,746.08	5,706.82	38.28	30.47	80.60	-3,222.13	-8,374.55	8,316.27	8,249.16	67.11	123.916		
6,300.00	5,837.59	5,844.56	5,805.29	38.95	30.79	80.88	-3,222.38	-8,374.95	8,309.56	8,241.46	68.10	122.017		
6,400.00	5,928.86	5,945.48	5,906.21	39.61	31.12	81.16	-3,222.41	-8,375.29	8,302.96	8,233.85	69.11	120.145		
6,500.00	6,020.14	6,050.72	6,011.46	40.27	31.49	81.45	-3,222.80	-8,375.45	8,296.41	8,226.27	70.14	118.284		
6,600.00	6,111.41	6,156.39	6,117.12	40.94	31.85	81.74	-3,223.67	-8,375.38	8,289.90	8,218.73	71.17	116.473		
6,700.00	6,202.68	6,286.70	6,247.43	41.60	32.34	82.10	-3,225.23	-8,374.86	8,283.33	8,211.00	72.33	114.520		
6,800.00	6,293.96	6,426.92	6,387.63	42.26	32.87	82.48	-3,226.97	-8,373.51	8,276.42	8,202.88	73.53	112.551		
6,900.00	6,385.23	6,523.29	6,483.98	42.93	33.25	82.74	-3,228.28	-8,372.19	8,269.33	8,194.75	74.57	110.889		
7,000.00	6,476.50	6,600.49	6,561.16	43.59	33.55	82.95	-3,229.69	-8,371.21	8,262.55	8,187.01	75.54	109.379		
7,100.00	6,567.77	6,678.01	6,638.65	44.25	33.86	83.15	-3,231.48	-8,370.33	8,256.11	8,179.60	76.51	107.911		
7,200.00	6,658.64	6,755.64	6,716.25	44.91	34.16	83.33	-3,233.63	-8,369.56	8,243.83	8,166.36	77.47	106.419		
7,300.00	6,747.14	6,841.78	6,802.35	45.52	34.51	83.59	-3,236.02	-8,368.79	8,216.55	8,138.14	78.41	104.791		
7,400.00	6,831.10	6,923.12	6,883.66	46.07	34.83	83.82	-3,237.94	-8,368.12	8,174.77	8,095.51	79.26	103.140		
7,500.00	6,908.46	6,997.73	6,958.26	46.54	35.12	84.03	-3,239.41	-8,367.56	8,119.48	8,039.48	80.00	101.488		
7,600.00	6,977.30	7,080.69	7,041.20	46.95	35.45	84.26	-3,240.76	-8,366.93	8,051.96	7,971.25	80.71	99.769		
7,700.00	7,035.93	7,166.83	7,127.33	47.30	35.80	28.61	-3,242.13	-8,366.01	7,973.65	7,892.31	81.34	98.025		
7,800.00	7,082.92	7,234.75	7,195.23	47.59	36.07	21.42	-3,243.21	-8,365.08	7,886.52	7,804.69	81.83	96.378		
7,900.00	7,117.09	7,282.96	7,243.43	47.84	36.26	17.61	-3,243.97	-8,364.30	7,792.78	7,710.62	82.16	94.847		
8,000.00	7,137.62	7,310.56	7,271.03	48.06	36.37	7.52	-3,244.40	-8,363.81	7,694.80	7,612.46	82.34	93.452		
8,100.00	7,143.99	7,317.22	7,277.69	48.28	36.40	-115.61	-3,244.50	-8,363.69	7,595.02	7,512.65	82.37	92.203		
8,200.00	7,143.45	7,313.81	7,274.27	48.53	36.38	-115.18	-3,244.45	-8,363.75	7,495.16	7,412.82	82.34	91.027		
8,300.00	7,142.91	7,310.44	7,270.90	48.89	36.37	-114.74	-3,244.40	-8,363.81	7,395.31	7,313.00	82.31	89.850		
8,400.00	7,142.37	7,307.10	7,267.57	49.40	36.36	-114.31	-3,244.34	-8,363.88	7,295.46	7,213.18	82.28	88.670		
8,500.00	7,141.83	7,303.80	7,264.27	50.12	36.34	-113.88	-3,244.29	-8,363.93	7,195.61	7,113.36	82.25	87.489		
8,600.00	7,141.29	7,300.54	7,261.01	51.08	36.33	-113.46	-3,244.24	-8,363.99	7,095.76	7,013.55	82.22	86.306		
8,700.00	7,140.75	7,297.32	7,257.79	52.30	36.32	-113.03	-3,244.19	-8,364.05	6,995.92	6,913.74	82.19	85.122		
8,800.00	7,140.21	7,294.13	7,254.60	53.75	36.30	-112.61	-3,244.14	-8,364.11	6,896.08	6,813.93	82.16	83.936		
8,900.00	7,139.67	7,290.98	7,251.45	55.40	36.29	-112.19	-3,244.09	-8,364.16	6,796.25	6,714.12	82.13	82.748		
9,000.00	7,139.12	7,287.87	7,248.34	57.20	36.28	-111.77	-3,244.04	-8,364.22	6,696.42	6,614.31	82.11	81.559		
9,100.00	7,138.58	7,284.79	7,245.26	59.13	36.27	-111.35	-3,243.99	-8,364.27	6,596.59	6,514.51	82.08	80.368		
9,200.00	7,138.04	7,281.74	7,242.21	61.15	36.26	-110.94	-3,243.95	-8,364.32	6,496.77	6,414.72	82.06	79.176		
9,300.00	7,137.50	7,278.72	7,239.20	63.26	36.24	-110.52	-3,243.90	-8,364.37	6,396.95	6,314.92	82.03	77.981		
9,400.00	7,136.96	7,275.74	7,236.21	65.44	36.23	-110.11	-3,243.85	-8,364.42	6,297.14	6,215.13	82.01	76.786		
9,500.00	7,136.42	7,272.79	7,233.27	67.68	36.22	-109.71	-3,243.81	-8,364.47	6,197.33	6,115.34	81.99	75.588		
9,600.00	7,135.88	7,269.87	7,230.35	69.97	36.21	-109.30	-3,243.76	-8,364.52	6,097.53	6,015.56	81.97	74.389		
9,700.00	7,135.34	7,266.98	7,227.46	72.31	36.20	-108.90	-3,243.71	-8,364.57	5,997.73	5,915.78	81.95	73.189		
9,800.00	7,134.80	7,264.13	7,224.61	74.69	36.19	-108.49	-3,243.67	-8,364.61	5,897.94	5,816.01	81.93	71.987		
9,900.00	7,134.26	7,261.30	7,221.78	77.10	36.17	-108.10	-3,243.62	-8,364.66	5,798.16	5,716.24	81.91	70.783		
10,000.00	7,133.71	7,258.50	7,218.98	79.54	36.16	-107.70	-3,243.58	-8,364.71	5,698.38	5,616.48	81.90	69.578		
10,100.00	7,133.17	7,255.74	7,216.22	82.02	36.15	-107.30	-3,243.54	-8,364.75	5,598.61	5,516.72	81.89	68.371		
10,200.00	7,132.63	7,253.00	7,213.48	84.52	36.14	-106.91	-3,243.49	-8,364.79	5,498.84	5,416.97	81.87	67.162		
10,300.00	7,132.09	7,250.29	7,210.77	87.04	36.13	-106.52	-3,243.45	-8,364.84	5,399.08	5,317.22	81.86	65.952		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 8-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 172-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,131.55	7,247.60	7,208.09	89.58	36.12	-106.13	-3,243.41	-8,364.88	5,299.33	5,217.48	81.86	64.740		
10,500.00	7,131.01	7,244.95	7,205.43	92.15	36.11	-105.75	-3,243.37	-8,364.92	5,199.59	5,117.75	81.85	63.527		
10,600.00	7,130.47	7,242.32	7,202.80	94.73	36.10	-105.37	-3,243.33	-8,364.96	5,099.86	5,018.02	81.84	62.311		
10,700.00	7,129.93	7,239.72	7,200.20	97.33	36.09	-104.99	-3,243.28	-8,365.00	5,000.14	4,918.30	81.84	61.094		
10,800.00	7,129.39	7,237.14	7,197.63	99.94	36.08	-104.61	-3,243.24	-8,365.04	4,900.43	4,818.58	81.84	59.875		
10,900.00	7,128.84	7,234.60	7,195.08	102.56	36.07	-104.23	-3,243.20	-8,365.08	4,800.73	4,718.88	81.85	58.654		
11,000.00	7,128.30	7,232.07	7,192.56	105.20	36.06	-103.86	-3,243.16	-8,365.12	4,701.04	4,619.18	81.86	57.431		
11,100.00	7,127.76	7,229.57	7,190.06	107.85	36.05	-103.49	-3,243.12	-8,365.15	4,601.36	4,519.50	81.87	56.206		
11,200.00	7,127.22	7,227.10	7,187.59	110.51	36.04	-103.12	-3,243.09	-8,365.19	4,501.70	4,419.82	81.88	54.978		
11,300.00	7,126.68	7,224.65	7,185.14	113.18	36.03	-102.76	-3,243.05	-8,365.23	4,402.05	4,320.15	81.90	53.749		
11,400.00	7,126.14	7,222.22	7,182.71	115.86	36.02	-102.39	-3,243.01	-8,365.26	4,302.42	4,220.49	81.92	52.517		
11,500.00	7,125.60	7,219.82	7,180.31	118.55	36.01	-102.03	-3,242.97	-8,365.30	4,202.80	4,120.85	81.95	51.283		
11,600.00	7,125.06	7,217.44	7,177.93	121.25	36.00	-101.67	-3,242.93	-8,365.33	4,103.20	4,021.21	81.99	50.046		
11,700.00	7,124.52	7,215.09	7,175.58	123.95	35.99	-101.32	-3,242.90	-8,365.37	4,003.62	3,921.59	82.03	48.806		
11,800.00	7,123.97	7,212.75	7,173.24	126.66	35.98	-100.96	-3,242.86	-8,365.40	3,904.06	3,821.97	82.08	47.563		
11,900.00	7,123.43	7,210.44	7,170.93	129.38	35.97	-100.61	-3,242.82	-8,365.43	3,804.52	3,722.38	82.14	46.318		
12,000.00	7,122.89	7,208.15	7,168.64	132.10	35.96	-100.26	-3,242.79	-8,365.46	3,705.00	3,622.79	82.21	45.069		
12,100.00	7,122.35	7,205.88	7,166.38	134.83	35.95	-99.92	-3,242.75	-8,365.50	3,605.51	3,523.22	82.29	43.816		
12,200.00	7,121.81	7,203.64	7,164.13	137.56	35.94	-99.57	-3,242.71	-8,365.53	3,506.05	3,423.67	82.38	42.560		
12,300.00	7,121.27	7,201.41	7,161.91	140.30	35.93	-99.23	-3,242.68	-8,365.56	3,406.61	3,324.13	82.49	41.299		
12,400.00	7,120.73	7,199.21	7,159.70	143.05	35.93	-98.89	-3,242.64	-8,365.59	3,307.21	3,224.61	82.61	40.035		
12,500.00	7,120.19	7,197.02	7,157.52	145.80	35.92	-98.56	-3,242.61	-8,365.62	3,207.85	3,125.10	82.75	38.765		
12,600.00	7,119.65	7,194.86	7,155.36	148.55	35.91	-98.22	-3,242.58	-8,365.65	3,108.53	3,025.61	82.91	37.491		
12,700.00	7,119.10	7,192.72	7,153.21	151.30	35.90	-97.89	-3,242.54	-8,365.68	3,009.25	2,926.14	83.10	36.212		
12,800.00	7,118.56	7,190.59	7,151.09	154.07	35.89	-97.56	-3,242.51	-8,365.71	2,910.01	2,826.70	83.32	34.926		
12,900.00	7,118.02	7,188.49	7,148.98	156.83	35.88	-97.24	-3,242.48	-8,365.73	2,810.83	2,727.27	83.57	33.635		
13,000.00	7,117.48	7,186.40	7,146.90	159.60	35.88	-96.91	-3,242.44	-8,365.76	2,711.71	2,627.86	83.86	32.337		
13,100.00	7,116.94	7,184.34	7,144.83	162.37	35.87	-96.59	-3,242.41	-8,365.79	2,612.66	2,528.47	84.19	31.032		
13,200.00	7,116.40	7,182.29	7,142.78	165.14	35.86	-96.27	-3,242.38	-8,365.82	2,513.68	2,429.10	84.58	29.720		
13,300.00	7,115.86	7,180.26	7,140.75	167.92	35.85	-95.96	-3,242.35	-8,365.84	2,414.78	2,329.75	85.03	28.399		
13,400.00	7,115.32	7,178.25	7,138.74	170.70	35.84	-95.64	-3,242.31	-8,365.87	2,315.97	2,230.42	85.55	27.071		
13,500.00	7,114.78	7,176.25	7,136.75	173.48	35.83	-95.33	-3,242.28	-8,365.89	2,217.27	2,131.10	86.16	25.733		
13,600.00	7,114.24	7,174.28	7,134.77	176.26	35.83	-95.02	-3,242.25	-8,365.92	2,118.69	2,031.81	86.88	24.387		
13,700.00	7,113.69	7,172.32	7,132.82	179.05	35.82	-94.71	-3,242.22	-8,365.94	2,020.24	1,932.53	87.72	23.032		
13,800.00	7,113.15	7,170.37	7,130.87	181.84	35.81	-94.41	-3,242.19	-8,365.97	1,921.96	1,833.25	88.70	21.668		
13,900.00	7,112.61	7,168.45	7,128.95	184.63	35.80	-94.11	-3,242.16	-8,365.99	1,823.86	1,733.99	89.87	20.295		
14,000.00	7,112.07	7,166.54	7,127.04	187.42	35.80	-93.81	-3,242.13	-8,366.01	1,725.97	1,634.72	91.25	18.915		
14,100.00	7,111.53	7,164.65	7,125.15	190.22	35.79	-93.51	-3,242.10	-8,366.04	1,628.34	1,535.45	92.90	17.529		
14,200.00	7,110.99	7,162.77	7,123.28	193.01	35.78	-93.21	-3,242.07	-8,366.06	1,531.02	1,436.15	94.86	16.139		
14,300.00	7,110.45	7,160.92	7,121.42	195.81	35.77	-92.92	-3,242.04	-8,366.08	1,434.06	1,336.83	97.23	14.749		
14,400.00	7,109.91	7,159.07	7,119.57	198.61	35.77	-92.63	-3,242.01	-8,366.11	1,337.54	1,237.46	100.08	13.364		
14,500.00	7,109.37	7,157.24	7,117.75	201.42	35.76	-92.34	-3,241.98	-8,366.13	1,241.58	1,138.03	103.55	11.990		
14,600.00	7,108.82	7,155.43	7,115.93	204.22	35.75	-92.06	-3,241.95	-8,366.15	1,146.30	1,038.51	107.79	10.635		
14,700.00	7,108.28	7,153.63	7,114.14	207.03	35.74	-91.77	-3,241.92	-8,366.17	1,051.90	938.90	113.00	9.309		
14,800.00	7,107.74	7,151.85	7,112.36	209.83	35.74	-91.49	-3,241.89	-8,366.19	958.63	839.18	119.44	8.026		
14,900.00	7,107.20	7,150.09	7,110.59	212.64	35.73	-91.21	-3,241.87	-8,366.21	866.85	739.38	127.48	6.800		
15,000.00	7,106.66	7,148.33	7,108.84	215.45	35.72	-90.93	-3,241.84	-8,366.23	777.11	639.56	137.55	5.650		
15,100.00	7,106.12	7,146.60	7,107.10	218.26	35.72	-90.66	-3,241.81	-8,366.25	690.19	539.94	150.25	4.594		
15,200.00	7,105.58	7,144.87	7,105.38	221.07	35.71	-90.39	-3,241.78	-8,366.27	607.30	441.05	166.24	3.653		
15,300.00	7,105.04	7,143.16	7,103.67	223.89	35.70	-90.12	-3,241.76	-8,366.29	530.34	344.18	186.16	2.849		
15,400.00	7,104.50	7,141.47	7,101.97	226.70	35.70	-89.85	-3,241.73	-8,366.31	462.28	252.27	210.00	2.201		
15,491.56	7,104.00	7,139.93	7,100.43	229.28	35.69	-89.60	-3,241.71	-8,366.33	411.55	177.84	233.71	1.761	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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - GREELEY SWD #1(XX) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	63.00	3.28	3.28	-131.18	-2,946.28	-3,368.42	4,475.57					
100.00	100.00	37.00	100.00	3.28	3.34	-131.18	-2,946.28	-3,368.42	4,475.13	4,468.50	6.63	675.216		
200.00	200.00	137.00	200.00	3.34	4.47	-131.18	-2,946.28	-3,368.42	4,475.13	4,467.32	7.81	573.203		
300.00	299.98	236.98	299.98	3.44	7.31	45.72	-2,946.28	-3,368.42	4,473.91	4,463.17	10.74	416.376		
400.00	399.84	336.84	399.84	3.59	10.54	45.82	-2,946.28	-3,368.42	4,470.26	4,456.13	14.13	316.429		
500.00	499.45	436.45	499.45	3.79	13.88	45.99	-2,946.28	-3,368.42	4,464.18	4,446.51	17.67	252.597		
600.00	598.70	535.70	598.70	4.03	17.27	46.23	-2,946.28	-3,368.42	4,455.70	4,434.40	21.30	209.172		
700.00	697.47	634.47	697.47	4.31	20.67	46.53	-2,946.28	-3,368.42	4,444.84	4,419.86	24.98	177.948		
800.00	795.62	732.62	795.62	4.64	24.06	46.90	-2,946.28	-3,368.42	4,431.63	4,402.94	28.68	154.498		
900.00	893.06	830.06	893.06	5.00	27.43	47.34	-2,946.28	-3,368.42	4,416.11	4,383.70	32.41	136.275		
1,000.00	989.64	926.64	989.64	5.40	30.78	47.85	-2,946.28	-3,368.42	4,398.33	4,362.19	36.13	121.721		
1,100.00	1,085.27	1,022.27	1,085.27	5.83	34.10	48.43	-2,946.28	-3,368.42	4,378.34	4,338.48	39.86	109.838		
1,200.00	1,179.82	1,116.82	1,179.82	6.29	37.39	49.09	-2,946.28	-3,368.42	4,356.20	4,312.62	43.58	99.954		
1,300.00	1,273.17	1,210.17	1,273.17	6.79	40.63	49.81	-2,946.28	-3,368.42	4,331.99	4,284.70	47.29	91.605		
1,400.00	1,365.21	1,302.21	1,365.21	7.33	43.84	50.61	-2,946.28	-3,368.42	4,305.77	4,254.79	50.98	84.459		
1,500.00	1,456.49	1,406.51	1,456.49	7.89	47.47	51.04	-2,946.28	-3,368.42	4,278.57	4,223.45	55.12	77.626		
1,600.00	1,547.76	1,484.76	1,547.76	8.46	50.19	51.44	-2,946.28	-3,368.42	4,251.59	4,193.22	58.36	72.848		
1,700.00	1,639.04	1,576.04	1,639.04	9.05	53.37	51.85	-2,946.28	-3,368.42	4,224.82	4,162.75	62.07	68.060		
1,800.00	1,730.31	1,667.31	1,730.31	9.65	56.56	52.27	-2,946.28	-3,368.42	4,198.29	4,132.49	65.80	63.804		
1,900.00	1,821.58	1,758.58	1,821.58	10.26	59.74	52.69	-2,946.28	-3,368.42	4,171.98	4,102.45	69.54	59.997		
2,000.00	1,912.85	1,849.85	1,912.85	10.87	62.92	53.11	-2,946.28	-3,368.42	4,145.91	4,072.63	73.28	56.575		
2,100.00	2,004.13	1,941.13	2,004.13	11.49	66.10	53.54	-2,946.28	-3,368.42	4,120.09	4,043.05	77.04	53.482		
2,200.00	2,095.40	2,032.40	2,095.40	12.11	69.28	53.97	-2,946.28	-3,368.42	4,094.50	4,013.70	80.80	50.675		
2,300.00	2,186.67	2,123.67	2,186.67	12.74	72.47	54.41	-2,946.28	-3,368.42	4,069.17	3,984.60	84.57	48.117		
2,400.00	2,277.95	2,214.95	2,277.95	13.38	75.65	54.86	-2,946.28	-3,368.42	4,044.09	3,955.74	88.34	45.777		
2,500.00	2,369.22	2,306.22	2,369.22	14.01	78.83	55.31	-2,946.28	-3,368.42	4,019.27	3,927.14	92.12	43.629		
2,600.00	2,460.49	2,402.51	2,460.49	14.65	82.19	55.76	-2,946.28	-3,368.42	3,994.71	3,898.62	96.09	41.575		
2,700.00	2,551.77	2,488.77	2,551.77	15.29	85.20	56.22	-2,946.28	-3,368.42	3,970.42	3,870.72	99.70	39.823		
2,800.00	2,643.04	2,580.04	2,643.04	15.93	88.38	56.68	-2,946.28	-3,368.42	3,946.40	3,842.90	103.50	38.130		
2,900.00	2,734.31	2,671.31	2,734.31	16.58	91.57	57.15	-2,946.28	-3,368.42	3,922.67	3,815.37	107.30	36.558		
3,000.00	2,825.58	2,762.58	2,825.58	17.23	94.75	57.62	-2,946.28	-3,368.42	3,899.21	3,788.11	111.10	35.095		
3,100.00	2,916.86	2,853.86	2,916.86	17.87	97.94	58.10	-2,946.28	-3,368.42	3,876.05	3,761.13	114.91	33.730		
3,200.00	3,008.13	2,945.13	3,008.13	18.52	101.12	58.58	-2,946.28	-3,368.42	3,853.18	3,734.45	118.73	32.454		
3,300.00	3,099.40	3,036.40	3,099.40	19.17	104.31	59.07	-2,946.28	-3,368.42	3,830.60	3,708.06	122.54	31.259		
3,400.00	3,190.68	3,127.68	3,190.68	19.83	107.49	59.57	-2,946.28	-3,368.42	3,808.34	3,681.97	126.37	30.138		
3,500.00	3,281.95	3,218.95	3,281.95	20.48	110.68	60.06	-2,946.28	-3,368.42	3,786.38	3,656.19	130.19	29.084		
3,600.00	3,373.22	3,310.22	3,373.22	21.13	113.86	60.57	-2,946.28	-3,368.42	3,764.74	3,630.72	134.02	28.092		
3,700.00	3,464.49	3,401.49	3,464.49	21.79	117.05	61.08	-2,946.28	-3,368.42	3,743.42	3,605.57	137.85	27.156		
3,800.00	3,555.77	3,507.23	3,555.77	22.44	120.74	61.59	-2,946.28	-3,368.42	3,722.42	3,580.24	142.19	26.180		
3,900.00	3,647.04	3,584.04	3,647.04	23.10	123.42	62.11	-2,946.28	-3,368.42	3,701.76	3,556.24	145.52	25.438		
4,000.00	3,738.31	3,675.31	3,738.31	23.75	126.60	62.63	-2,946.28	-3,368.42	3,681.43	3,532.07	149.36	24.648		
4,100.00	3,829.59	3,766.59	3,829.59	24.41	129.79	63.16	-2,946.28	-3,368.42	3,661.45	3,508.25	153.20	23.899		
4,200.00	3,920.86	3,857.86	3,920.86	25.07	132.97	63.70	-2,946.28	-3,368.42	3,641.82	3,484.77	157.05	23.189		
4,300.00	4,012.13	3,949.13	4,012.13	25.73	136.16	64.23	-2,946.28	-3,368.42	3,622.54	3,461.64	160.90	22.515		
4,400.00	4,103.41	4,040.41	4,103.41	26.38	139.34	64.78	-2,946.28	-3,368.42	3,603.62	3,438.87	164.75	21.873		
4,500.00	4,194.68	4,131.68	4,194.68	27.04	142.53	65.33	-2,946.28	-3,368.42	3,585.07	3,416.46	168.60	21.263		
4,600.00	4,285.95	4,222.95	4,285.95	27.70	145.71	65.88	-2,946.28	-3,368.42	3,566.88	3,394.42	172.46	20.682		
4,700.00	4,377.22	4,314.22	4,377.22	28.36	148.90	66.44	-2,946.28	-3,368.42	3,549.08	3,372.76	176.32	20.129		
4,800.00	4,468.50	4,405.50	4,468.50	29.02	152.09	67.00	-2,946.28	-3,368.42	3,531.66	3,351.48	180.18	19.601		
4,900.00	4,559.77	4,503.23	4,559.77	29.68	155.50	67.57	-2,946.28	-3,368.42	3,514.63	3,330.35	184.27	19.073		
5,000.00	4,651.04	4,588.04	4,651.04	30.34	158.46	68.14	-2,946.28	-3,368.42	3,497.99	3,310.08	187.91	18.615		
5,100.00	4,742.32	4,679.32	4,742.32	31.00	161.64	68.72	-2,946.28	-3,368.42	3,481.75	3,289.97	191.78	18.155		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - GREELEY SWD #1(XX) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,770.59	4,833.59	31.66	164.83	69.30	-2,946.28	-3,368.42	3,465.91	3,270.27	195.65	17.715		
5,300.00	4,924.86	4,861.86	4,924.86	32.32	168.01	69.89	-2,946.28	-3,368.42	3,450.49	3,250.97	199.52	17.294		
5,400.00	5,016.13	4,953.13	5,016.13	32.99	171.20	70.48	-2,946.28	-3,368.42	3,435.49	3,232.09	203.39	16.891		
5,500.00	5,107.41	5,044.41	5,107.41	33.65	174.39	71.07	-2,946.28	-3,368.42	3,420.90	3,213.64	207.27	16.505		
5,600.00	5,198.68	5,135.68	5,198.68	34.31	177.57	71.67	-2,946.28	-3,368.42	3,406.75	3,195.60	211.14	16.135		
5,700.00	5,289.95	5,226.95	5,289.95	34.97	180.76	72.27	-2,946.28	-3,368.42	3,393.02	3,178.00	215.02	15.780		
5,800.00	5,381.23	5,318.23	5,381.23	35.63	183.94	72.88	-2,946.28	-3,368.42	3,379.74	3,160.84	218.90	15.440		
5,900.00	5,472.50	5,409.50	5,472.50	36.30	187.13	73.49	-2,946.28	-3,368.42	3,366.90	3,144.12	222.78	15.113		
6,000.00	5,563.77	5,500.77	5,563.77	36.96	190.32	74.11	-2,946.28	-3,368.42	3,354.51	3,127.84	226.66	14.800		
6,100.00	5,655.05	5,607.96	5,655.05	37.62	194.06	74.73	-2,946.28	-3,368.42	3,342.57	3,111.47	231.10	14.464		
6,200.00	5,746.32	5,683.32	5,746.32	38.28	196.69	75.35	-2,946.28	-3,368.42	3,331.09	3,096.66	234.42	14.210		
6,300.00	5,837.59	5,774.59	5,837.59	38.95	199.87	75.98	-2,946.28	-3,368.42	3,320.07	3,081.76	238.31	13.932		
6,400.00	5,928.86	5,865.86	5,928.86	39.61	203.06	76.60	-2,946.28	-3,368.42	3,309.52	3,067.33	242.19	13.665		
6,500.00	6,020.14	5,957.14	6,020.14	40.27	206.24	77.24	-2,946.28	-3,368.42	3,299.44	3,053.37	246.07	13.408		
6,600.00	6,111.41	6,048.41	6,111.41	40.94	209.43	77.87	-2,946.28	-3,368.42	3,289.84	3,039.88	249.96	13.162		
6,700.00	6,202.68	6,139.68	6,202.68	41.60	212.62	78.51	-2,946.28	-3,368.42	3,280.72	3,026.88	253.84	12.924		
6,800.00	6,293.96	6,230.96	6,293.96	42.26	215.80	79.16	-2,946.28	-3,368.42	3,272.08	3,014.36	257.72	12.696		
6,900.00	6,385.23	6,322.23	6,385.23	42.93	218.99	79.80	-2,946.28	-3,368.42	3,263.93	3,002.33	261.61	12.477		
7,000.00	6,476.50	6,413.50	6,476.50	43.59	222.17	80.45	-2,946.28	-3,368.42	3,256.28	2,990.79	265.49	12.265		
7,100.00	6,567.77	6,504.77	6,567.77	44.25	225.36	81.10	-2,946.28	-3,368.42	3,249.12	2,979.75	269.37	12.062		
7,200.00	6,658.64	6,604.36	6,658.64	44.91	228.84	81.67	-2,946.28	-3,368.42	3,236.29	2,962.76	273.52	11.832		
7,300.00	6,747.14	6,684.14	6,747.14	45.52	231.62	82.24	-2,946.28	-3,368.42	3,220.71	2,931.78	276.94	11.587		
7,400.00	6,831.10	6,768.10	6,831.10	46.07	234.55	82.82	-2,946.28	-3,368.42	3,166.89	2,886.47	280.42	11.294		
7,500.00	6,908.46	6,845.46	6,908.46	46.54	237.25	83.40	-2,946.28	-3,368.42	3,111.75	2,828.16	283.59	10.973		
7,600.00	6,977.30	6,914.30	6,977.30	46.95	239.66	83.98	-2,946.28	-3,368.42	3,044.54	2,758.16	286.38	10.631		
7,700.00	7,035.93	6,972.93	7,035.93	47.30	241.70	84.56	-2,946.28	-3,368.42	2,966.80	2,678.06	288.74	10.275		
7,800.00	7,082.92	7,019.92	7,082.92	47.59	243.34	85.14	-2,946.28	-3,368.42	2,880.35	2,589.73	290.62	9.911		
7,900.00	7,117.09	7,054.09	7,117.09	47.84	244.54	85.72	-2,946.28	-3,368.42	2,787.21	2,495.24	291.97	9.546		
8,000.00	7,137.62	7,074.62	7,137.62	48.06	245.25	86.30	-2,946.28	-3,368.42	2,689.61	2,396.84	292.77	9.187		
8,100.00	7,143.99	7,080.99	7,143.99	48.28	245.47	86.88	-2,946.28	-3,368.42	2,589.92	2,296.91	293.01	8.839		
8,200.00	7,143.45	7,080.45	7,143.45	48.53	245.46	87.46	-2,946.28	-3,368.42	2,489.99	2,197.02	292.97	8.499		
8,300.00	7,142.91	7,079.91	7,142.91	48.89	245.44	88.04	-2,946.28	-3,368.42	2,390.07	2,097.14	292.93	8.159		
8,400.00	7,142.37	7,079.37	7,142.37	49.40	245.42	88.62	-2,946.28	-3,368.42	2,290.16	1,997.27	292.89	7.819		
8,500.00	7,141.83	7,078.83	7,141.83	50.12	245.40	89.20	-2,946.28	-3,368.42	2,190.25	1,897.40	292.85	7.479		
8,600.00	7,141.29	7,078.29	7,141.29	51.08	245.38	89.78	-2,946.28	-3,368.42	2,090.35	1,797.55	292.80	7.139		
8,700.00	7,140.75	7,077.75	7,140.75	52.30	245.36	90.36	-2,946.28	-3,368.42	1,990.46	1,697.70	292.76	6.799		
8,800.00	7,140.21	7,077.21	7,140.21	53.75	245.34	90.94	-2,946.28	-3,368.42	1,890.58	1,597.87	292.71	6.459		
8,900.00	7,139.67	7,076.67	7,139.67	55.40	245.32	91.52	-2,946.28	-3,368.42	1,790.72	1,498.06	292.66	6.119		
9,000.00	7,139.12	7,076.12	7,139.12	57.20	245.30	92.10	-2,946.28	-3,368.42	1,690.87	1,398.27	292.61	5.779		
9,100.00	7,138.58	7,075.58	7,138.58	59.13	245.29	92.68	-2,946.28	-3,368.42	1,591.05	1,298.50	292.55	5.439		
9,200.00	7,138.04	7,075.04	7,138.04	61.15	245.27	93.26	-2,946.28	-3,368.42	1,491.24	1,198.75	292.49	5.098		
9,300.00	7,137.50	7,074.50	7,137.50	63.26	245.25	93.84	-2,946.28	-3,368.42	1,391.46	1,099.04	292.43	4.758		
9,400.00	7,136.96	7,073.96	7,136.96	65.44	245.23	94.42	-2,946.28	-3,368.42	1,291.72	999.36	292.36	4.418		
9,500.00	7,136.42	7,073.42	7,136.42	67.68	245.21	95.00	-2,946.28	-3,368.42	1,192.02	899.73	292.29	4.078		
9,600.00	7,135.88	7,072.88	7,135.88	69.97	245.19	95.58	-2,946.28	-3,368.42	1,092.37	800.16	292.21	3.738		
9,700.00	7,135.34	7,072.34	7,135.34	72.31	245.17	96.16	-2,946.28	-3,368.42	992.80	700.67	292.13	3.399		
9,800.00	7,134.80	7,071.80	7,134.80	74.69	245.15	96.74	-2,946.28	-3,368.42	893.32	601.27	292.04	3.059		
9,900.00	7,134.26	7,071.26	7,134.26	77.10	245.13	97.32	-2,946.28	-3,368.42	793.96	502.00	291.97	2.719		
10,000.00	7,133.71	7,070.71	7,133.71	79.54	245.12	97.90	-2,946.28	-3,368.42	694.80	402.89	291.91	2.380		
10,100.00	7,133.17	7,070.17	7,133.17	82.02	245.10	98.48	-2,946.28	-3,368.42	595.91	304.00	291.91	2.041		
10,200.00	7,132.63	7,069.63	7,132.63	84.52	245.08	99.06	-2,946.28	-3,368.42	497.47	205.43	292.04	1.703		
10,300.00	7,132.09	7,069.09	7,132.09	87.04	245.06	99.64	-2,946.28	-3,368.42	399.80	107.26	292.54	1.367	Level 3	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,131.55	7,068.55	7,131.55	89.58	245.04	-90.93	-2,946.28	-3,368.42	303.65	9.58	294.08	1.033 Level 2		
10,500.00	7,131.01	7,068.01	7,131.01	92.15	245.02	-90.61	-2,946.28	-3,368.42	211.12	-87.91	299.03	0.706 Level 1		
10,600.00	7,130.47	7,067.47	7,130.47	94.73	245.00	-90.29	-2,946.28	-3,368.42	130.13	-185.90	316.02	0.412 Level 1		
10,688.19	7,129.99	7,066.99	7,129.99	97.02	244.99	-90.00	-2,946.28	-3,368.42	95.69	-245.81	341.49	0.280 Level 1, CC, SF		
10,700.00	7,129.93	7,066.93	7,129.93	97.33	244.98	-89.96	-2,946.28	-3,368.42	96.41	-245.90	342.31	0.282 Level 1, ES		
10,800.00	7,129.39	7,066.39	7,129.39	99.94	244.96	-89.64	-2,946.28	-3,368.42	147.16	-177.64	324.81	0.453 Level 1		
10,900.00	7,128.84	7,065.84	7,128.84	102.56	244.95	-89.31	-2,946.28	-3,368.42	232.42	-78.57	310.99	0.747 Level 1		
11,000.00	7,128.30	7,065.30	7,128.30	105.20	244.93	-88.99	-2,946.28	-3,368.42	326.16	21.40	304.76	1.070 Level 2		
11,100.00	7,127.76	7,064.76	7,127.76	107.85	244.91	-88.67	-2,946.28	-3,368.42	422.78	121.20	301.57	1.402 Level 3		
11,200.00	7,127.22	7,064.22	7,127.22	110.51	244.89	-88.34	-2,946.28	-3,368.42	520.67	220.95	299.72	1.737		
11,300.00	7,126.68	7,063.68	7,126.68	113.18	244.87	-88.02	-2,946.28	-3,368.42	619.24	320.71	298.53	2.074		
11,400.00	7,126.14	7,063.14	7,126.14	115.86	244.85	-87.70	-2,946.28	-3,368.42	718.20	420.48	297.72	2.412		
11,500.00	7,125.60	7,062.60	7,125.60	118.55	244.83	-87.37	-2,946.28	-3,368.42	817.42	520.28	297.14	2.751		
11,600.00	7,125.06	7,062.06	7,125.06	121.25	244.81	-87.05	-2,946.28	-3,368.42	916.80	620.10	296.71	3.090		
11,700.00	7,124.52	7,061.52	7,124.52	123.95	244.79	-86.73	-2,946.28	-3,368.42	1,016.31	719.94	296.37	3.429		
11,800.00	7,123.97	7,060.97	7,123.97	126.66	244.78	-86.40	-2,946.28	-3,368.42	1,115.90	819.80	296.11	3.769		
11,900.00	7,123.43	7,060.43	7,123.43	129.38	244.76	-86.08	-2,946.28	-3,368.42	1,215.57	919.67	295.89	4.108		
12,000.00	7,122.89	7,059.89	7,122.89	132.10	244.74	-85.76	-2,946.28	-3,368.42	1,315.28	1,019.56	295.72	4.448		
12,100.00	7,122.35	7,059.35	7,122.35	134.83	244.72	-85.44	-2,946.28	-3,368.42	1,415.03	1,119.45	295.58	4.787		
12,200.00	7,121.81	7,058.81	7,121.81	137.56	244.70	-85.11	-2,946.28	-3,368.42	1,514.81	1,219.35	295.46	5.127		
12,300.00	7,121.27	7,058.27	7,121.27	140.30	244.68	-84.79	-2,946.28	-3,368.42	1,614.63	1,319.26	295.36	5.467		
12,400.00	7,120.73	7,057.73	7,120.73	143.05	244.66	-84.47	-2,946.28	-3,368.42	1,714.46	1,419.18	295.28	5.806		
12,500.00	7,120.19	7,057.19	7,120.19	145.80	244.64	-84.15	-2,946.28	-3,368.42	1,814.31	1,519.10	295.21	6.146		
12,600.00	7,119.65	7,056.65	7,119.65	148.55	244.62	-83.83	-2,946.28	-3,368.42	1,914.18	1,619.03	295.15	6.486		
12,700.00	7,119.10	7,056.10	7,119.10	151.30	244.61	-83.51	-2,946.28	-3,368.42	2,014.06	1,718.96	295.10	6.825		
12,800.00	7,118.56	7,055.56	7,118.56	154.07	244.59	-83.19	-2,946.28	-3,368.42	2,113.95	1,818.89	295.05	7.165		
12,900.00	7,118.02	7,055.02	7,118.02	156.83	244.57	-82.87	-2,946.28	-3,368.42	2,213.85	1,918.83	295.02	7.504		
13,000.00	7,117.48	7,054.48	7,117.48	159.60	244.55	-82.55	-2,946.28	-3,368.42	2,313.76	2,018.77	294.99	7.844		
13,100.00	7,116.94	7,053.94	7,116.94	162.37	244.53	-82.23	-2,946.28	-3,368.42	2,413.67	2,118.71	294.96	8.183		
13,200.00	7,116.40	7,053.40	7,116.40	165.14	244.51	-81.92	-2,946.28	-3,368.42	2,513.60	2,218.65	294.95	8.522		
13,300.00	7,115.86	7,052.86	7,115.86	167.92	244.49	-81.60	-2,946.28	-3,368.42	2,613.52	2,318.59	294.93	8.862		
13,400.00	7,115.32	7,052.32	7,115.32	170.70	244.47	-81.28	-2,946.28	-3,368.42	2,713.46	2,418.54	294.92	9.201		
13,500.00	7,114.78	7,051.78	7,114.78	173.48	244.45	-80.97	-2,946.28	-3,368.42	2,813.40	2,518.49	294.91	9.540		
13,600.00	7,114.24	7,051.24	7,114.24	176.26	244.44	-80.65	-2,946.28	-3,368.42	2,913.34	2,618.43	294.91	9.879		
13,700.00	7,113.69	7,050.69	7,113.69	179.05	244.42	-80.33	-2,946.28	-3,368.42	3,013.29	2,718.38	294.90	10.218		
13,800.00	7,113.15	7,050.15	7,113.15	181.84	244.40	-80.02	-2,946.28	-3,368.42	3,113.24	2,818.33	294.90	10.557		
13,900.00	7,112.61	7,049.61	7,112.61	184.63	244.38	-79.71	-2,946.28	-3,368.42	3,213.19	2,918.28	294.91	10.896		
14,000.00	7,112.07	7,049.07	7,112.07	187.42	244.36	-79.39	-2,946.28	-3,368.42	3,313.14	3,018.23	294.91	11.234		
14,100.00	7,111.53	7,048.53	7,111.53	190.22	244.34	-79.08	-2,946.28	-3,368.42	3,413.10	3,118.18	294.92	11.573		
14,200.00	7,110.99	7,047.99	7,110.99	193.01	244.32	-78.77	-2,946.28	-3,368.42	3,513.06	3,218.13	294.93	11.911		
14,300.00	7,110.45	7,047.45	7,110.45	195.81	244.30	-78.46	-2,946.28	-3,368.42	3,613.03	3,318.08	294.94	12.250		
14,400.00	7,109.91	7,046.91	7,109.91	198.61	244.28	-78.15	-2,946.28	-3,368.42	3,712.99	3,418.03	294.96	12.588		
14,500.00	7,109.37	7,046.37	7,109.37	201.42	244.27	-77.84	-2,946.28	-3,368.42	3,812.96	3,517.99	294.97	12.927		
14,600.00	7,108.82	7,045.82	7,108.82	204.22	244.25	-77.53	-2,946.28	-3,368.42	3,912.92	3,617.94	294.99	13.265		
14,700.00	7,108.28	7,045.28	7,108.28	207.03	244.23	-77.22	-2,946.28	-3,368.42	4,012.89	3,717.89	295.00	13.603		
14,800.00	7,107.74	7,044.74	7,107.74	209.83	244.21	-76.91	-2,946.28	-3,368.42	4,112.86	3,817.84	295.02	13.941		
14,900.00	7,107.20	7,044.20	7,107.20	212.64	244.19	-76.60	-2,946.28	-3,368.42	4,212.84	3,917.79	295.05	14.279		
15,000.00	7,106.66	7,043.66	7,106.66	215.45	244.17	-76.30	-2,946.28	-3,368.42	4,312.81	4,017.74	295.07	14.616		
15,100.00	7,106.12	7,043.12	7,106.12	218.26	244.15	-75.99	-2,946.28	-3,368.42	4,412.78	4,117.69	295.09	14.954		
15,200.00	7,105.58	7,042.58	7,105.58	221.07	244.13	-75.69	-2,946.28	-3,368.42	4,512.76	4,217.64	295.12	15.291		
15,300.00	7,105.04	7,042.04	7,105.04	223.89	244.11	-75.38	-2,946.28	-3,368.42	4,612.74	4,317.59	295.14	15.629		
15,400.00	7,104.50	7,041.50	7,104.50	226.70	244.10	-75.08	-2,946.28	-3,368.42	4,712.71	4,417.54	295.17	15.966		

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

Offset Design	HARVESTERS STATE 7-15 PAD - GREELEY SWD #1(XX) - OH - OH											Offset Site Error:	0.00 ft
Survey Program:	100-2" Cone@2.448 Sigma											Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	7,041.00	7,104.00	229.28	244.08	-74.80	-2,946.28	-3,368.42	4,804.26	4,509.06	295.19	16.275	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	9.00	3.28	3.28	20.79	1,297.65	492.56	1,388.02					
100.00	100.00	87.93	96.93	3.28	3.29	20.79	1,297.73	492.62	1,388.09	1,381.52	6.57	211.273		
200.00	200.00	188.32	197.32	3.34	3.33	20.79	1,297.90	492.83	1,388.32	1,381.65	6.67	208.136		
300.00	299.98	291.80	300.80	3.44	3.44	-162.35	1,297.91	493.03	1,390.06	1,383.18	6.88	202.064		
400.00	399.84	384.08	393.07	3.59	3.58	-162.36	1,297.91	493.47	1,395.23	1,388.05	7.17	194.586		
500.00	499.45	487.29	496.28	3.79	3.78	-162.38	1,298.00	494.49	1,403.96	1,396.40	7.57	185.501		
600.00	598.70	581.33	590.32	4.03	3.99	-162.41	1,298.02	495.41	1,415.95	1,407.92	8.03	176.412		
700.00	697.47	685.46	694.43	4.31	4.26	-162.46	1,297.98	496.96	1,431.36	1,422.78	8.57	166.923		
800.00	795.62	785.15	794.11	4.64	4.55	-162.53	1,297.64	498.23	1,449.71	1,440.54	9.17	158.107		
900.00	893.06	879.33	888.29	5.00	4.84	-162.60	1,297.42	499.36	1,471.41	1,461.62	9.79	150.237		
1,000.00	989.64	978.84	987.78	5.40	5.16	-162.70	1,297.17	500.84	1,496.45	1,485.98	10.48	142.854		
1,100.00	1,085.27	1,068.60	1,077.54	5.83	5.46	-162.79	1,297.03	501.85	1,524.71	1,513.55	11.16	136.660		
1,200.00	1,179.82	1,163.25	1,172.18	6.29	5.79	-162.90	1,297.17	503.19	1,556.54	1,544.65	11.88	130.973		
1,300.00	1,273.17	1,265.99	1,274.91	6.79	6.16	-163.04	1,296.90	504.70	1,591.22	1,578.55	12.67	125.588		
1,400.00	1,365.21	1,360.66	1,369.58	7.33	6.51	-163.18	1,296.30	505.63	1,628.58	1,615.13	13.45	121.112		
1,500.00	1,456.49	1,453.07	1,461.98	7.89	6.85	-163.55	1,295.84	506.27	1,667.75	1,653.53	14.23	117.216		
1,600.00	1,547.76	1,545.51	1,554.42	8.46	7.20	-163.89	1,295.12	507.28	1,706.87	1,691.85	15.02	113.650		
1,700.00	1,639.04	1,634.37	1,643.26	9.05	7.55	-164.21	1,294.49	508.29	1,746.09	1,730.28	15.81	110.465		
1,800.00	1,730.31	1,723.58	1,732.47	9.65	7.89	-164.53	1,294.12	509.04	1,785.55	1,768.94	16.61	107.516		
1,900.00	1,821.58	1,820.98	1,829.87	10.26	8.27	-164.86	1,293.64	509.77	1,824.96	1,807.50	17.46	104.534		
2,000.00	1,912.85	1,919.61	1,928.50	10.87	8.66	-165.20	1,292.82	509.94	1,863.95	1,845.63	18.32	101.718		
2,100.00	2,004.13	2,001.72	2,010.60	11.49	8.99	-165.49	1,292.40	509.68	1,903.15	1,884.04	19.11	99.569		
2,200.00	2,095.40	2,101.56	2,110.44	12.11	9.38	-165.82	1,291.91	509.38	1,942.43	1,922.42	20.00	97.109		
2,300.00	2,186.67	2,179.69	2,188.57	12.74	9.69	-166.07	1,291.62	509.18	1,981.86	1,961.08	20.78	95.375		
2,400.00	2,277.95	2,267.63	2,276.50	13.38	10.05	-166.34	1,291.72	509.01	2,021.78	2,000.16	21.61	93.544		
2,500.00	2,369.22	2,357.10	2,365.98	14.01	10.41	-166.60	1,291.75	509.20	2,061.77	2,039.31	22.46	91.800		
2,600.00	2,460.49	2,451.22	2,460.10	14.65	10.79	-166.86	1,291.88	509.29	2,101.86	2,078.52	23.34	90.069		
2,700.00	2,551.77	2,542.06	2,550.93	15.29	11.16	-167.12	1,291.91	508.92	2,141.77	2,117.57	24.20	88.513		
2,800.00	2,643.04	2,626.79	2,635.66	15.93	11.50	-167.35	1,292.21	508.56	2,181.99	2,156.97	25.02	87.194		
2,900.00	2,734.31	2,718.75	2,727.63	16.58	11.88	-167.60	1,292.63	508.17	2,222.34	2,196.45	25.90	85.813		
3,000.00	2,825.58	2,817.41	2,826.28	17.23	12.28	-167.86	1,292.99	507.46	2,262.58	2,235.76	26.81	84.379		
3,100.00	2,916.86	2,920.20	2,929.07	17.87	12.70	-168.12	1,292.83	506.46	2,302.32	2,274.56	27.76	82.937		
3,200.00	3,008.13	3,002.12	3,010.98	18.52	13.04	-168.33	1,292.81	505.48	2,342.17	2,313.59	28.58	81.956		
3,300.00	3,099.40	3,103.62	3,112.47	19.17	13.46	-168.60	1,292.88	503.74	2,382.02	2,352.50	29.52	80.689		
3,400.00	3,190.68	3,186.25	3,195.08	19.83	13.80	-168.81	1,292.95	502.22	2,421.89	2,391.55	30.35	79.808		
3,500.00	3,281.95	3,290.66	3,299.48	20.48	14.24	-169.05	1,292.89	500.73	2,461.77	2,430.46	31.31	78.620		
3,600.00	3,373.22	3,383.85	3,392.66	21.13	14.63	-169.26	1,292.45	499.42	2,501.31	2,469.10	32.21	77.660		
3,700.00	3,464.49	3,473.08	3,481.88	21.79	15.00	-169.46	1,292.09	498.07	2,540.89	2,507.81	33.08	76.811		
3,800.00	3,555.77	3,558.44	3,567.23	22.44	15.35	-169.64	1,291.81	497.02	2,580.65	2,546.72	33.93	76.065		
3,900.00	3,647.04	3,637.45	3,646.24	23.10	15.68	-169.79	1,291.71	496.55	2,620.72	2,585.99	34.73	75.457		
4,000.00	3,738.31	3,714.76	3,723.55	23.75	16.01	-169.92	1,292.01	496.45	2,661.36	2,625.84	35.52	74.919		
4,100.00	3,829.59	3,810.34	3,819.12	24.41	16.41	-170.09	1,292.50	496.31	2,702.13	2,665.69	36.44	74.153		
4,200.00	3,920.86	3,906.73	3,915.52	25.07	16.81	-170.25	1,292.89	495.86	2,742.76	2,705.39	37.36	73.407		
4,300.00	4,012.13	3,994.09	4,002.87	25.73	17.18	-170.40	1,293.26	495.27	2,783.38	2,745.15	38.23	72.813		
4,400.00	4,103.41	4,091.19	4,099.97	26.38	17.58	-170.57	1,293.61	494.71	2,823.98	2,784.83	39.16	72.120		
4,500.00	4,194.68	4,184.91	4,193.69	27.04	17.98	-170.71	1,293.78	494.23	2,864.45	2,824.39	40.07	71.495		
4,600.00	4,285.95	4,273.20	4,281.98	27.70	18.35	-170.85	1,293.96	493.67	2,904.93	2,864.00	40.94	70.962		
4,700.00	4,377.22	4,363.14	4,371.91	28.36	18.73	-170.99	1,294.20	493.25	2,945.52	2,903.70	41.82	70.435		
4,800.00	4,468.50	4,452.13	4,460.91	29.02	19.10	-171.11	1,294.47	492.84	2,986.15	2,943.45	42.70	69.940		
4,900.00	4,559.77	4,537.78	4,546.56	29.68	19.46	-171.23	1,294.79	492.65	3,026.90	2,983.35	43.55	69.505		
5,000.00	4,651.04	4,624.28	4,633.06	30.34	19.82	-171.34	1,295.27	492.70	3,067.87	3,023.46	44.41	69.082		
5,100.00	4,742.32	4,716.76	4,725.53	31.00	20.21	-171.46	1,295.75	492.71	3,108.81	3,063.50	45.31	68.608		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,796.00	4,804.77	31.66	20.55	-171.55	1,296.29	492.96	3,149.96	3,103.84	46.12	68.300		
5,300.00	4,924.86	4,870.73	4,879.49	32.32	20.86	-171.63	1,297.07	493.52	3,191.52	3,144.62	46.89	68.061		
5,400.00	5,016.13	4,958.19	4,966.94	32.99	21.23	-171.72	1,298.31	494.30	3,233.43	3,185.67	47.76	67.703		
5,500.00	5,107.41	5,071.18	5,079.92	33.65	21.71	-171.85	1,299.70	494.65	3,275.12	3,226.30	48.82	67.087		
5,600.00	5,198.68	5,188.83	5,197.57	34.31	22.21	-171.98	1,300.21	494.58	3,316.00	3,266.09	49.91	66.438		
5,700.00	5,289.95	5,275.80	5,284.53	34.97	22.57	-172.09	1,300.36	494.03	3,356.58	3,305.80	50.78	66.104		
5,800.00	5,381.23	5,390.38	5,399.12	35.63	23.06	-172.22	1,300.47	492.94	3,397.07	3,345.22	51.85	65.520		
5,900.00	5,472.50	5,485.84	5,494.56	36.30	23.46	-172.34	1,300.10	491.66	3,437.05	3,384.27	52.78	65.124		
6,000.00	5,563.77	5,573.13	5,581.84	36.96	23.83	-172.45	1,299.83	490.22	3,477.06	3,423.42	53.65	64.814		
6,100.00	5,655.05	5,663.75	5,672.45	37.62	24.22	-172.56	1,299.58	489.10	3,517.18	3,462.64	54.54	64.486		
6,200.00	5,746.32	5,754.26	5,762.95	38.28	24.60	-172.66	1,299.35	487.79	3,557.30	3,501.87	55.44	64.170		
6,300.00	5,837.59	5,841.36	5,850.04	38.95	24.97	-172.77	1,299.28	486.05	3,597.50	3,541.20	56.30	63.893		
6,400.00	5,928.86	5,927.24	5,935.90	39.61	25.33	-172.88	1,299.32	484.47	3,637.85	3,580.69	57.16	63.638		
6,500.00	6,020.14	6,015.89	6,024.54	40.27	25.71	-172.98	1,299.46	482.84	3,678.31	3,620.27	58.05	63.370		
6,600.00	6,111.41	6,110.50	6,119.12	40.94	26.11	-173.09	1,299.67	480.81	3,718.79	3,659.82	58.97	63.061		
6,700.00	6,202.68	6,217.97	6,226.57	41.60	26.57	-173.22	1,299.51	478.49	3,758.93	3,698.93	60.00	62.654		
6,800.00	6,293.96	6,293.54	6,302.12	42.26	26.89	-173.31	1,299.46	476.76	3,799.16	3,738.38	60.78	62.509		
6,900.00	6,385.23	6,400.31	6,408.85	42.93	27.34	-173.44	1,299.53	473.79	3,839.44	3,777.64	61.80	62.129		
7,000.00	6,476.50	6,472.28	6,480.78	43.59	27.65	-173.53	1,299.62	471.56	3,879.75	3,817.19	62.55	62.023		
7,100.00	6,567.77	6,553.35	6,561.81	44.25	27.99	-173.63	1,300.09	468.98	3,920.45	3,857.07	63.38	61.859		
7,200.00	6,658.64	6,646.99	6,655.38	44.91	28.39	-165.73	1,300.81	465.36	3,962.08	3,897.78	64.30	61.622		
7,300.00	6,747.14	6,747.17	6,755.47	45.52	28.82	146.59	1,301.40	461.27	4,005.01	3,939.75	65.26	61.374		
7,400.00	6,831.10	6,834.73	6,842.97	46.07	29.19	132.14	1,301.68	457.90	4,048.35	3,982.25	66.10	61.246		
7,500.00	6,908.46	6,907.00	6,915.17	46.54	29.50	121.21	1,302.06	454.75	4,091.64	4,024.83	66.81	61.240		
7,600.00	6,977.30	6,973.44	6,981.53	46.95	29.78	112.78	1,302.57	451.54	4,134.23	4,066.74	67.49	61.258		
7,700.00	7,035.93	7,041.16	7,049.15	47.30	30.07	106.23	1,303.15	448.07	4,175.46	4,107.24	68.21	61.211		
7,800.00	7,082.92	7,104.03	7,111.94	47.59	30.34	101.05	1,303.55	444.78	4,214.65	4,145.67	68.98	61.098		
7,900.00	7,117.09	7,140.57	7,148.41	47.84	30.50	96.69	1,303.79	442.68	4,251.46	4,181.80	69.66	61.029		
8,000.00	7,137.62	7,166.37	7,174.17	48.06	30.61	93.20	1,304.01	441.03	4,285.43	4,215.03	70.41	60.868		
8,100.00	7,143.99	7,179.31	7,187.07	48.28	30.67	90.50	1,304.13	440.16	4,316.05	4,244.85	71.20	60.617		
8,200.00	7,143.45	7,185.80	7,193.55	48.53	30.69	90.59	1,304.20	439.70	4,345.96	4,273.87	72.09	60.282		
8,300.00	7,142.91	7,192.58	7,200.30	48.89	30.72	90.69	1,304.27	439.22	4,377.94	4,304.84	73.10	59.887		
8,400.00	7,142.37	7,199.65	7,207.36	49.40	30.75	90.79	1,304.35	438.71	4,411.94	4,337.73	74.21	59.450		
8,500.00	7,141.83	7,208.30	7,215.99	50.12	30.79	90.90	1,304.44	438.07	4,447.92	4,372.51	75.42	58.977		
8,600.00	7,141.29	7,216.89	7,224.55	51.08	30.83	91.02	1,304.53	437.45	4,485.83	4,409.14	76.69	58.492		
8,700.00	7,140.75	7,225.32	7,232.96	52.30	30.86	91.14	1,304.61	436.84	4,525.62	4,447.61	78.02	58.008		
8,800.00	7,140.21	7,233.61	7,241.23	53.75	30.90	91.25	1,304.69	436.25	4,567.24	4,487.86	79.39	57.533		
8,900.00	7,139.67	7,241.76	7,249.36	55.40	30.93	91.37	1,304.75	435.68	4,610.64	4,529.86	80.78	57.074		
9,000.00	7,139.12	7,249.78	7,257.35	57.20	30.97	91.48	1,304.81	435.11	4,655.78	4,573.58	82.20	56.638		
9,100.00	7,138.58	7,257.65	7,265.21	59.13	31.00	91.59	1,304.87	434.56	4,702.60	4,618.96	83.63	56.228		
9,200.00	7,138.04	7,265.40	7,272.94	61.15	31.04	91.69	1,304.92	434.03	4,751.05	4,665.98	85.07	55.848		
9,300.00	7,137.50	7,270.85	7,278.37	63.26	31.06	91.77	1,304.95	433.65	4,801.08	4,714.59	86.49	55.509		
9,400.00	7,136.96	7,277.23	7,284.74	65.44	31.09	91.86	1,305.00	433.21	4,852.66	4,764.74	87.91	55.198		
9,500.00	7,136.42	7,283.62	7,291.11	67.68	31.12	91.95	1,305.04	432.76	4,905.72	4,816.39	89.32	54.920		
9,600.00	7,135.88	7,290.00	7,297.48	69.97	31.14	92.03	1,305.08	432.32	4,960.22	4,869.50	90.72	54.675		
9,700.00	7,135.34	7,296.39	7,303.85	72.31	31.17	92.12	1,305.12	431.88	5,016.11	4,924.01	92.10	54.462		
9,800.00	7,134.80	7,302.77	7,310.22	74.69	31.20	92.21	1,305.16	431.44	5,073.36	4,979.89	93.46	54.282		
9,900.00	7,134.26	7,309.15	7,316.59	77.10	31.23	92.30	1,305.20	431.00	5,131.90	5,037.10	94.80	54.133		
10,000.00	7,133.71	7,315.54	7,322.96	79.54	31.25	92.39	1,305.24	430.55	5,191.70	5,095.59	96.12	54.015		
10,100.00	7,133.17	7,321.92	7,329.33	82.02	31.28	92.47	1,305.28	430.11	5,252.72	5,155.32	97.41	53.926		
10,200.00	7,132.63	7,328.31	7,335.70	84.52	31.31	92.56	1,305.33	429.67	5,314.91	5,216.24	98.67	53.866		
10,300.00	7,132.09	7,334.69	7,342.06	87.04	31.34	92.65	1,305.37	429.23	5,378.24	5,278.33	99.90	53.834		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,131.55	7,341.08	7,348.43	89.58	31.37	92.74	1,305.41	428.78	5,442.65	5,341.54	101.11	53.828	SF	
10,500.00	7,131.01	7,347.46	7,354.80	92.15	31.39	92.83	1,305.45	428.34	5,508.13	5,405.83	102.29	53.847		
10,600.00	7,130.47	7,353.85	7,361.17	94.73	31.42	92.92	1,305.49	427.90	5,574.62	5,471.17	103.44	53.890		
10,700.00	7,129.93	7,360.23	7,367.54	97.33	31.45	93.00	1,305.53	427.46	5,642.09	5,537.52	104.57	53.956		
10,800.00	7,129.39	7,366.61	7,373.91	99.94	31.48	93.09	1,305.57	427.01	5,710.51	5,604.84	105.66	54.044		
10,900.00	7,128.84	7,373.00	7,380.28	102.56	31.50	93.18	1,305.61	426.57	5,779.84	5,673.11	106.73	54.153		
11,000.00	7,128.30	7,379.38	7,386.65	105.20	31.53	93.27	1,305.65	426.13	5,850.05	5,742.28	107.77	54.282		
11,100.00	7,127.76	7,385.77	7,393.02	107.85	31.56	93.36	1,305.70	425.69	5,921.11	5,812.33	108.78	54.430		
11,200.00	7,127.22	7,392.15	7,399.39	110.51	31.59	93.44	1,305.74	425.24	5,993.00	5,883.23	109.77	54.596		
11,300.00	7,126.68	7,398.54	7,405.75	113.18	31.62	93.53	1,305.78	424.80	6,065.67	5,954.94	110.73	54.779		
11,400.00	7,126.14	7,404.92	7,412.12	115.86	31.64	93.62	1,305.82	424.36	6,139.10	6,027.44	111.66	54.978		
11,500.00	7,125.60	7,411.31	7,418.49	118.55	31.67	93.71	1,305.86	423.92	6,213.27	6,100.70	112.57	55.193		
11,600.00	7,125.06	7,417.69	7,424.86	121.25	31.70	93.79	1,305.90	423.48	6,288.15	6,174.69	113.46	55.423		
11,700.00	7,124.52	7,424.08	7,431.23	123.95	31.73	93.88	1,305.94	423.03	6,363.71	6,249.39	114.32	55.666		
11,800.00	7,123.97	7,430.46	7,437.60	126.66	31.76	93.97	1,305.98	422.59	6,439.93	6,324.77	115.16	55.923		
11,900.00	7,123.43	7,436.84	7,443.97	129.38	31.78	94.06	1,306.03	422.15	6,516.79	6,400.82	115.97	56.193		
12,000.00	7,122.89	7,443.23	7,450.34	132.10	31.81	94.15	1,306.07	421.71	6,594.26	6,477.50	116.76	56.475		
12,100.00	7,122.35	7,449.61	7,456.71	134.83	31.84	94.23	1,306.11	421.26	6,672.33	6,554.79	117.54	56.769		
12,200.00	7,121.81	7,456.00	7,463.08	137.56	31.87	94.32	1,306.15	420.82	6,750.97	6,632.68	118.29	57.073		
12,300.00	7,121.27	7,463.00	7,469.11	140.30	31.81	94.14	1,306.06	421.72	6,830.19	6,711.29	118.89	57.448		
12,400.00	7,120.73	7,470.00	7,476.11	143.05	31.81	94.14	1,306.06	421.72	6,909.93	6,790.37	119.56	57.792		
12,500.00	7,120.19	7,477.00	7,483.11	145.80	31.81	94.14	1,306.06	421.72	6,990.20	6,869.98	120.22	58.146		
12,600.00	7,119.65	7,484.00	7,490.11	148.55	31.81	94.14	1,306.06	421.72	7,070.97	6,950.12	120.85	58.510		
12,700.00	7,119.10	7,491.00	7,497.11	151.30	31.81	94.14	1,306.06	421.72	7,152.22	7,030.75	121.47	58.881		
12,800.00	7,118.56	7,498.00	7,504.11	154.07	31.81	94.14	1,306.06	421.72	7,233.95	7,111.88	122.07	59.262		
12,900.00	7,118.02	7,505.00	7,511.11	156.83	31.81	94.14	1,306.06	421.72	7,316.13	7,193.48	122.65	59.650		
13,000.00	7,117.48	7,512.00	7,518.11	159.60	31.81	94.14	1,306.06	421.72	7,398.74	7,275.53	123.22	60.045		
13,100.00	7,116.94	7,519.00	7,525.11	162.37	31.81	94.14	1,306.06	421.72	7,481.79	7,358.02	123.77	60.448		
13,200.00	7,116.40	7,526.00	7,532.11	165.14	31.81	94.14	1,306.06	421.72	7,565.24	7,440.93	124.31	60.858		
13,300.00	7,115.86	7,533.00	7,539.11	167.92	31.81	94.14	1,306.06	421.72	7,649.09	7,524.26	124.83	61.275		
13,400.00	7,115.32	7,540.00	7,546.11	170.70	31.81	94.14	1,306.06	421.72	7,733.32	7,607.98	125.34	61.698		
13,500.00	7,114.78	7,547.00	7,553.11	173.48	31.81	94.14	1,306.06	421.72	7,817.93	7,692.09	125.84	62.127		
13,600.00	7,114.24	7,554.00	7,560.11	176.26	31.81	94.14	1,306.06	421.72	7,902.89	7,776.57	126.32	62.562		
13,700.00	7,113.69	7,561.00	7,567.11	179.05	31.81	94.14	1,306.06	421.72	7,988.20	7,861.41	126.79	63.003		
13,800.00	7,113.15	7,568.00	7,574.11	181.84	31.81	94.14	1,306.06	421.72	8,073.85	7,946.61	127.25	63.449		
13,900.00	7,112.61	7,575.00	7,581.11	184.63	31.81	94.14	1,306.06	421.72	8,159.83	8,032.13	127.70	63.900		
14,000.00	7,112.07	7,582.00	7,588.11	187.42	31.81	94.14	1,306.06	421.72	8,246.12	8,117.99	128.13	64.357		
14,100.00	7,111.53	7,589.00	7,595.11	190.22	31.81	94.14	1,306.06	421.72	8,332.72	8,204.17	128.56	64.818		
14,200.00	7,110.99	7,596.00	7,602.11	193.01	31.81	94.14	1,306.06	421.72	8,419.62	8,290.65	128.97	65.283		
14,300.00	7,110.45	7,603.00	7,609.11	195.81	31.81	94.14	1,306.06	421.72	8,506.80	8,377.43	129.37	65.753		
14,400.00	7,109.91	7,610.00	7,616.11	198.61	31.81	94.14	1,306.06	421.72	8,594.27	8,464.50	129.77	66.228		
14,500.00	7,109.37	7,617.00	7,623.11	201.42	31.81	94.14	1,306.06	421.72	8,682.00	8,551.85	130.15	66.706		
14,600.00	7,108.82	7,624.00	7,630.11	204.22	31.81	94.14	1,306.06	421.72	8,770.00	8,639.47	130.53	67.188		
14,700.00	7,108.28	7,631.00	7,637.11	207.03	31.81	94.14	1,306.06	421.72	8,858.25	8,727.35	130.90	67.674		
14,800.00	7,107.74	7,638.00	7,644.11	209.83	31.81	94.14	1,306.06	421.72	8,946.75	8,815.49	131.25	68.164		
14,900.00	7,107.20	7,645.00	7,651.11	212.64	31.81	94.14	1,306.06	421.72	9,035.48	8,903.88	131.60	68.657		
15,000.00	7,106.66	7,652.00	7,658.11	215.45	31.81	94.14	1,306.06	421.72	9,124.46	8,992.51	131.95	69.153		
15,100.00	7,106.12	7,659.00	7,665.11	218.26	31.81	94.14	1,306.06	421.72	9,213.65	9,081.37	132.28	69.653		
15,200.00	7,105.58	7,666.00	7,672.11	221.07	31.81	94.14	1,306.06	421.72	9,303.07	9,170.46	132.61	70.155		
15,300.00	7,105.04	7,673.00	7,679.11	223.89	31.81	94.14	1,306.06	421.72	9,392.70	9,259.77	132.93	70.661		
15,400.00	7,104.50	7,680.00	7,686.11	226.70	31.81	94.14	1,306.06	421.72	9,482.54	9,349.30	133.24	71.169		
15,491.56	7,104.00	7,687.00	7,693.11	229.28	31.81	94.14	1,306.06	421.72	9,564.97	9,431.45	133.52	71.637		

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

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	19.00	3.28	3.28	64.92	244.81	523.18	577.94				
100.00	100.00	77.20	96.20	3.28	3.28	64.88	245.33	523.22	577.89	571.32	6.57	87.966 CC, ES	
200.00	200.00	179.23	198.22	3.34	3.33	64.73	246.93	523.17	578.51	571.85	6.67	86.786	
300.00	299.98	280.70	299.68	3.44	3.43	-118.67	248.24	522.69	579.48	572.61	6.87	84.354	
400.00	399.84	378.14	397.10	3.59	3.57	-119.18	249.38	522.36	582.23	575.06	7.16	81.280	
500.00	499.45	475.62	494.58	3.79	3.76	-119.91	250.55	522.51	587.21	579.66	7.55	77.814	
600.00	598.70	572.82	591.77	4.03	3.98	-120.87	251.82	522.94	594.41	586.40	8.01	74.221	
700.00	697.47	671.35	690.29	4.31	4.23	-122.08	253.39	523.46	603.88	595.34	8.54	70.681	
800.00	795.62	767.94	786.87	4.64	4.50	-123.43	254.72	524.08	615.61	606.47	9.13	67.393	
900.00	893.06	863.98	882.89	5.00	4.79	-124.94	256.35	524.83	630.04	620.26	9.78	64.447	
1,000.00	989.64	960.72	979.62	5.40	5.11	-126.57	257.81	525.72	647.13	636.67	10.47	61.837	
1,100.00	1,085.27	1,056.02	1,074.90	5.83	5.42	-128.27	259.18	526.52	666.94	655.75	11.19	59.608	
1,200.00	1,179.82	1,151.01	1,169.87	6.29	5.75	-130.05	260.65	527.24	689.75	677.81	11.95	57.743	
1,300.00	1,273.17	1,244.94	1,263.79	6.79	6.09	-131.85	261.94	527.79	715.49	702.77	12.73	56.218	
1,400.00	1,365.21	1,335.89	1,354.73	7.33	6.42	-133.61	263.41	528.12	744.53	731.01	13.52	55.065	
1,500.00	1,456.49	1,427.70	1,446.54	7.89	6.76	-135.76	264.83	528.56	775.96	761.63	14.33	54.140	
1,600.00	1,547.76	1,522.23	1,541.05	8.46	7.12	-137.83	265.98	528.69	807.96	792.79	15.16	53.279	
1,700.00	1,639.04	1,612.50	1,631.31	9.05	7.47	-139.68	267.18	528.60	840.76	824.78	15.98	52.600	
1,800.00	1,730.31	1,709.66	1,728.47	9.65	7.84	-141.53	268.27	528.15	874.01	857.16	16.85	51.878	
1,900.00	1,821.58	1,798.42	1,817.22	10.26	8.19	-143.10	269.00	527.79	907.78	890.11	17.67	51.373	
2,000.00	1,912.85	1,887.37	1,906.18	10.87	8.54	-144.55	269.78	527.63	942.34	923.84	18.50	50.940	
2,100.00	2,004.13	1,983.22	2,002.01	11.49	8.92	-146.02	270.63	527.28	977.37	958.00	19.37	50.451	
2,200.00	2,095.40	2,080.94	2,099.74	12.11	9.31	-147.42	271.01	526.54	1,012.32	992.06	20.26	49.964	
2,300.00	2,186.67	2,171.48	2,190.27	12.74	9.67	-148.62	271.00	525.79	1,047.38	1,026.27	21.11	49.620	
2,400.00	2,277.95	2,265.08	2,283.87	13.38	10.05	-149.77	270.98	525.15	1,082.91	1,060.94	21.98	49.274	
2,500.00	2,369.22	2,359.49	2,378.27	14.01	10.43	-150.86	270.62	524.45	1,118.49	1,095.63	22.86	48.938	
2,600.00	2,460.49	2,453.25	2,472.03	14.65	10.81	-151.88	270.14	523.60	1,154.20	1,130.47	23.73	48.636	
2,700.00	2,551.77	2,546.80	2,565.58	15.29	11.19	-152.82	269.33	522.96	1,190.02	1,165.41	24.61	48.357	
2,800.00	2,643.04	2,637.63	2,656.39	15.93	11.56	-153.67	268.39	522.44	1,226.03	1,200.55	25.47	48.134	
2,900.00	2,734.31	2,728.17	2,746.94	16.58	11.93	-154.45	267.49	522.27	1,262.45	1,236.12	26.33	47.940	
3,000.00	2,825.58	2,822.59	2,841.34	17.23	12.31	-155.23	266.40	521.96	1,298.89	1,271.66	27.23	47.709	
3,100.00	2,916.86	2,909.40	2,928.15	17.87	12.67	-155.92	265.64	521.49	1,335.67	1,307.61	28.06	47.594	
3,200.00	3,008.13	2,999.65	3,018.40	18.52	13.04	-156.61	265.09	520.99	1,372.84	1,343.91	28.93	47.456	
3,300.00	3,099.40	3,087.21	3,105.96	19.17	13.41	-157.25	264.76	520.42	1,410.35	1,380.58	29.77	47.368	
3,400.00	3,190.68	3,179.31	3,198.05	19.83	13.79	-157.90	264.63	519.67	1,448.15	1,417.49	30.65	47.241	
3,500.00	3,281.95	3,270.74	3,289.48	20.48	14.17	-158.51	264.45	518.87	1,486.04	1,454.51	31.53	47.129	
3,600.00	3,373.22	3,360.02	3,378.75	21.13	14.54	-159.07	264.28	518.24	1,524.13	1,491.74	32.39	47.051	
3,700.00	3,464.49	3,451.28	3,470.02	21.79	14.92	-159.60	264.02	518.09	1,562.47	1,529.20	33.27	46.960	
3,800.00	3,555.77	3,544.91	3,563.64	22.44	15.31	-160.12	263.68	517.89	1,600.82	1,566.65	34.17	46.847	
3,900.00	3,647.04	3,638.61	3,657.35	23.10	15.70	-160.62	263.25	517.55	1,639.15	1,604.08	35.07	46.737	
4,000.00	3,738.31	3,732.40	3,751.13	23.75	16.10	-161.10	262.72	517.08	1,677.45	1,641.48	35.97	46.629	
4,100.00	3,829.59	3,826.28	3,845.00	24.41	16.49	-161.56	262.11	516.49	1,715.72	1,678.84	36.88	46.524	
4,200.00	3,920.86	3,920.23	3,938.95	25.07	16.88	-162.01	261.41	515.76	1,753.95	1,716.17	37.78	46.421	
4,300.00	4,012.13	4,014.27	4,032.98	25.73	17.28	-162.44	260.63	514.89	1,792.14	1,753.45	38.69	46.320	
4,400.00	4,103.41	4,108.39	4,127.09	26.38	17.68	-162.85	259.75	513.90	1,830.29	1,790.69	39.60	46.221	
4,500.00	4,194.68	4,202.59	4,221.28	27.04	18.07	-163.25	258.78	512.77	1,868.39	1,827.88	40.51	46.123	
4,600.00	4,285.95	4,292.03	4,310.71	27.70	18.45	-163.62	257.84	511.75	1,906.56	1,865.18	41.38	46.072	
4,700.00	4,377.22	4,378.64	4,397.31	28.36	18.81	-163.95	257.00	511.03	1,944.96	1,902.73	42.23	46.053	
4,800.00	4,468.50	4,461.99	4,480.67	29.02	19.16	-164.25	256.42	510.54	1,983.73	1,940.67	43.06	46.072	
4,900.00	4,559.77	4,549.71	4,568.37	29.68	19.53	-164.57	256.22	509.87	2,022.90	1,978.98	43.92	46.062	
5,000.00	4,651.04	4,640.17	4,658.83	30.34	19.91	-164.89	256.04	509.14	2,062.14	2,017.35	44.80	46.031	
5,100.00	4,742.32	4,730.37	4,749.04	31.00	20.29	-165.18	255.90	508.62	2,101.55	2,055.87	45.68	46.005	

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 32-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,821.79	4,840.45	31.66	20.68	-165.47	255.63	508.31	2,140.93	2,094.36	46.57	45.969		
5,300.00	4,924.86	4,903.40	4,922.06	32.32	21.02	-165.71	255.60	508.16	2,180.63	2,133.25	47.38	46.021		
5,400.00	5,016.13	4,993.56	5,012.22	32.99	21.41	-165.98	255.81	507.91	2,220.58	2,172.32	48.27	46.007		
5,500.00	5,107.41	5,088.32	5,106.98	33.65	21.81	-166.25	256.04	507.47	2,260.54	2,211.35	49.19	45.956		
5,600.00	5,198.68	5,177.80	5,196.46	34.31	22.18	-166.50	256.19	507.07	2,300.47	2,250.40	50.07	45.948		
5,700.00	5,289.95	5,272.53	5,291.19	34.97	22.59	-166.75	256.40	506.49	2,340.44	2,289.45	50.99	45.900		
5,800.00	5,381.23	5,370.58	5,389.24	35.63	23.00	-167.02	256.48	505.52	2,380.23	2,328.29	51.94	45.825		
5,900.00	5,472.50	5,460.91	5,479.56	36.30	23.38	-167.26	256.38	504.58	2,419.89	2,367.07	52.83	45.807		
6,000.00	5,563.77	5,550.49	5,569.13	36.96	23.76	-167.48	256.36	503.86	2,459.71	2,406.00	53.71	45.797		
6,100.00	5,655.05	5,647.35	5,665.99	37.62	24.17	-167.71	256.23	503.30	2,499.52	2,444.86	54.65	45.734		
6,200.00	5,746.32	5,745.01	5,763.65	38.28	24.59	-167.93	255.75	502.75	2,539.04	2,483.43	55.60	45.662		
6,300.00	5,837.59	5,831.97	5,850.61	38.95	24.96	-168.11	255.29	502.26	2,578.55	2,522.08	56.46	45.666		
6,400.00	5,928.86	5,912.74	5,931.37	39.61	25.30	-168.28	255.14	501.96	2,618.43	2,561.16	57.27	45.720		
6,500.00	6,020.14	6,005.18	6,023.81	40.27	25.69	-168.47	255.15	501.51	2,658.48	2,600.31	58.18	45.695		
6,600.00	6,111.41	6,105.45	6,124.08	40.94	26.12	-168.68	255.01	500.77	2,698.38	2,639.23	59.15	45.616		
6,700.00	6,202.68	6,193.28	6,211.91	41.60	26.49	-168.85	254.81	500.13	2,738.22	2,678.20	60.02	45.619		
6,800.00	6,293.96	6,278.87	6,297.50	42.26	26.85	-169.01	254.71	499.70	2,778.23	2,717.36	60.87	45.640		
6,900.00	6,385.23	6,368.56	6,387.19	42.93	27.24	-169.17	254.69	499.44	2,818.40	2,756.64	61.76	45.636		
7,000.00	6,476.50	6,459.70	6,478.32	43.59	27.62	-169.33	254.68	499.21	2,858.59	2,795.93	62.66	45.624		
7,100.00	6,567.77	6,550.83	6,569.46	44.25	28.01	-169.48	254.67	499.00	2,898.81	2,835.25	63.55	45.611 SF		
7,200.00	6,658.64	6,641.57	6,660.20	44.91	28.40	-169.63	254.67	498.80	2,940.28	2,875.83	64.45	45.620		
7,300.00	6,747.14	6,729.97	6,748.60	45.52	28.77	-150.76	254.66	498.63	2,984.29	2,918.96	65.32	45.686		
7,400.00	6,831.10	6,813.86	6,832.49	46.07	29.13	-136.17	254.66	498.48	3,029.96	2,963.82	66.14	45.809		
7,500.00	6,908.46	6,891.16	6,909.79	46.54	29.46	-125.06	254.65	498.36	3,076.59	3,009.68	66.90	45.984		
7,600.00	6,977.30	6,959.97	6,978.60	46.95	29.75	-116.33	254.65	498.26	3,123.55	3,055.94	67.61	46.200		
7,700.00	7,035.93	7,018.58	7,037.21	47.30	30.00	-109.21	254.64	498.18	3,170.32	3,102.05	68.27	46.437		
7,800.00	7,082.92	7,065.56	7,084.19	47.59	30.20	-103.21	254.64	498.12	3,216.36	3,147.45	68.91	46.674		
7,900.00	7,117.09	7,099.76	7,118.39	47.84	30.35	-98.05	254.64	498.08	3,261.12	3,191.57	69.56	46.885		
8,000.00	7,137.62	7,120.33	7,138.96	48.06	30.44	-93.61	254.64	498.06	3,303.98	3,233.76	70.22	47.053		
8,100.00	7,143.99	7,126.79	7,145.42	48.28	30.46	-89.90	254.64	498.06	3,344.23	3,273.32	70.90	47.167		
8,200.00	7,143.45	7,126.35	7,144.98	48.53	30.46	-89.89	254.64	498.06	3,384.27	3,312.61	71.66	47.229		
8,300.00	7,142.91	7,125.92	7,144.54	48.89	30.46	-89.88	254.64	498.06	3,426.76	3,354.26	72.50	47.265		
8,400.00	7,142.37	7,125.48	7,144.11	49.40	30.46	-89.87	254.64	498.06	3,471.61	3,398.20	73.42	47.286		
8,500.00	7,141.83	7,125.04	7,143.67	50.12	30.46	-89.86	254.64	498.06	3,518.74	3,444.34	74.39	47.300		
8,600.00	7,141.29	7,124.60	7,143.23	51.08	30.45	-89.86	254.64	498.06	3,568.04	3,492.63	75.41	47.315		
8,700.00	7,140.75	7,124.17	7,142.80	52.30	30.45	-89.85	254.64	498.06	3,619.44	3,542.98	76.46	47.337		
8,800.00	7,140.21	7,123.73	7,142.36	53.75	30.45	-89.84	254.64	498.06	3,672.84	3,595.31	77.53	47.372		
8,900.00	7,139.67	7,123.30	7,141.92	55.40	30.45	-89.83	254.64	498.06	3,728.16	3,649.54	78.61	47.424		
9,000.00	7,139.12	7,122.86	7,141.49	57.20	30.45	-89.82	254.64	498.06	3,785.31	3,705.61	79.70	47.495		
9,100.00	7,138.58	7,122.42	7,141.05	59.13	30.45	-89.81	254.64	498.06	3,844.21	3,763.43	80.78	47.588		
9,200.00	7,138.04	7,121.99	7,140.61	61.15	30.44	-89.81	254.64	498.06	3,904.79	3,822.94	81.85	47.704		
9,300.00	7,137.50	7,121.55	7,140.18	63.26	30.44	-89.80	254.64	498.06	3,966.96	3,884.05	82.91	47.845		
9,400.00	7,136.96	7,121.12	7,139.74	65.44	30.44	-89.79	254.64	498.06	4,030.66	3,946.70	83.96	48.009		
9,500.00	7,136.42	7,120.68	7,139.31	67.68	30.44	-89.78	254.64	498.06	4,095.80	4,010.83	84.98	48.198		
9,600.00	7,135.88	7,120.25	7,138.87	69.97	30.44	-89.77	254.64	498.06	4,162.33	4,076.35	85.98	48.411		
9,700.00	7,135.34	7,119.81	7,138.44	72.31	30.43	-89.77	254.64	498.06	4,230.18	4,143.23	86.95	48.648		
9,800.00	7,134.80	7,119.38	7,138.00	74.69	30.43	-89.76	254.64	498.06	4,299.28	4,211.38	87.91	48.908		
9,900.00	7,134.26	7,118.94	7,137.57	77.10	30.43	-89.75	254.64	498.06	4,369.58	4,280.75	88.83	49.190		
10,000.00	7,133.71	7,118.51	7,137.13	79.54	30.43	-89.74	254.64	498.06	4,441.02	4,351.29	89.73	49.493		
10,100.00	7,133.17	7,118.07	7,136.70	82.02	30.43	-89.73	254.64	498.07	4,513.54	4,422.94	90.60	49.817		
10,200.00	7,132.63	7,117.64	7,136.27	84.52	30.43	-89.73	254.64	498.07	4,587.10	4,495.65	91.45	50.161		
10,300.00	7,132.09	7,117.21	7,135.83	87.04	30.42	-89.72	254.64	498.07	4,661.64	4,569.37	92.27	50.524		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 32-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,131.55	7,116.77	7,135.40	89.58	30.42	89.71	254.64	498.07	4,737.12	4,644.06	93.06	50.904		
10,500.00	7,131.01	7,116.34	7,134.97	92.15	30.42	89.70	254.64	498.07	4,813.49	4,719.66	93.83	51.302		
10,600.00	7,130.47	7,115.90	7,134.53	94.73	30.42	89.69	254.64	498.07	4,890.71	4,796.14	94.57	51.716		
10,700.00	7,129.93	7,115.47	7,134.10	97.33	30.42	89.69	254.64	498.07	4,968.75	4,873.46	95.29	52.145		
10,800.00	7,129.39	7,115.04	7,133.67	99.94	30.41	89.68	254.64	498.07	5,047.56	4,951.58	95.98	52.589		
10,900.00	7,128.84	7,114.61	7,133.23	102.56	30.41	89.67	254.64	498.07	5,127.11	5,030.46	96.65	53.047		
11,000.00	7,128.30	7,114.17	7,132.80	105.20	30.41	89.66	254.64	498.07	5,207.37	5,110.07	97.30	53.519		
11,100.00	7,127.76	7,113.74	7,132.37	107.85	30.41	89.65	254.64	498.07	5,288.30	5,190.37	97.93	54.003		
11,200.00	7,127.22	7,113.31	7,131.94	110.51	30.41	89.65	254.64	498.07	5,369.87	5,271.34	98.53	54.499		
11,300.00	7,126.68	7,112.88	7,131.51	113.18	30.40	89.64	254.64	498.07	5,452.05	5,352.94	99.12	55.006		
11,400.00	7,126.14	7,112.45	7,131.07	115.86	30.40	89.63	254.64	498.07	5,534.83	5,435.14	99.68	55.524		
11,500.00	7,125.60	7,112.01	7,130.64	118.55	30.40	89.62	254.64	498.07	5,618.16	5,517.93	100.23	56.052		
11,600.00	7,125.06	7,111.58	7,130.21	121.25	30.40	89.61	254.64	498.07	5,702.03	5,601.26	100.76	56.590		
11,700.00	7,124.52	7,111.15	7,129.78	123.95	30.40	89.61	254.64	498.07	5,786.41	5,685.13	101.27	57.137		
11,800.00	7,123.97	7,110.72	7,129.35	126.66	30.40	89.60	254.64	498.07	5,871.28	5,769.51	101.77	57.693		
11,900.00	7,123.43	7,110.29	7,128.92	129.38	30.39	89.59	254.64	498.07	5,956.62	5,854.37	102.25	58.257		
12,000.00	7,122.89	7,109.86	7,128.49	132.10	30.39	89.58	254.64	498.07	6,042.41	5,939.70	102.71	58.828		
12,100.00	7,122.35	7,109.43	7,128.06	134.83	30.39	89.57	254.64	498.07	6,128.63	6,025.47	103.16	59.408		
12,200.00	7,121.81	7,109.00	7,127.63	137.56	30.39	89.57	254.64	498.07	6,215.26	6,111.66	103.60	59.994		
12,300.00	7,121.27	7,108.57	7,127.20	140.30	30.39	89.56	254.64	498.08	6,302.29	6,198.27	104.02	60.587		
12,400.00	7,120.73	7,108.14	7,126.77	143.05	30.38	89.55	254.64	498.08	6,389.70	6,285.27	104.43	61.187		
12,500.00	7,120.19	7,107.71	7,126.34	145.80	30.38	89.54	254.64	498.08	6,477.47	6,372.65	104.83	61.793		
12,600.00	7,119.65	7,107.28	7,125.91	148.55	30.38	89.53	254.64	498.08	6,565.60	6,460.39	105.21	62.404		
12,700.00	7,119.10	7,106.85	7,125.48	151.30	30.38	89.53	254.64	498.08	6,654.06	6,548.47	105.58	63.021		
12,800.00	7,118.56	7,106.42	7,125.05	154.07	30.38	89.52	254.64	498.08	6,742.84	6,636.89	105.95	63.644		
12,900.00	7,118.02	7,105.99	7,124.62	156.83	30.38	89.51	254.64	498.08	6,831.93	6,725.63	106.30	64.271		
13,000.00	7,117.48	7,105.56	7,124.19	159.60	30.37	89.50	254.64	498.08	6,921.32	6,814.68	106.64	64.903		
13,100.00	7,116.94	7,105.13	7,123.76	162.37	30.37	89.49	254.64	498.08	7,011.00	6,904.02	106.97	65.540		
13,200.00	7,116.40	7,104.70	7,123.33	165.14	30.37	89.49	254.64	498.08	7,100.95	6,993.65	107.30	66.181		
13,300.00	7,115.86	7,104.28	7,122.90	167.92	30.37	89.48	254.64	498.08	7,191.16	7,083.55	107.61	66.826		
13,400.00	7,115.32	7,103.85	7,122.48	170.70	30.37	89.47	254.64	498.08	7,281.64	7,173.72	107.92	67.475		
13,500.00	7,114.78	7,103.42	7,122.05	173.48	30.36	89.46	254.64	498.08	7,372.36	7,264.14	108.21	68.128		
13,600.00	7,114.24	7,102.99	7,121.62	176.26	30.36	89.45	254.64	498.08	7,463.31	7,354.81	108.50	68.784		
13,700.00	7,113.69	7,102.57	7,121.19	179.05	30.36	89.45	254.64	498.08	7,554.50	7,445.71	108.79	69.444		
13,800.00	7,113.15	7,102.14	7,120.77	181.84	30.36	89.44	254.64	498.08	7,645.90	7,536.84	109.06	70.107		
13,900.00	7,112.61	7,101.71	7,120.34	184.63	30.36	89.43	254.64	498.08	7,737.52	7,628.19	109.33	70.773		
14,000.00	7,112.07	7,101.28	7,119.91	187.42	30.36	89.42	254.64	498.08	7,829.34	7,719.75	109.59	71.441		
14,100.00	7,111.53	7,100.86	7,119.48	190.22	30.35	89.41	254.64	498.08	7,921.36	7,811.52	109.85	72.113		
14,200.00	7,110.99	7,100.43	7,119.06	193.01	30.35	89.41	254.64	498.08	8,013.57	7,903.48	110.10	72.788		
14,300.00	7,110.45	7,100.00	7,118.63	195.81	30.35	89.40	254.64	498.08	8,105.97	7,995.63	110.34	73.465		
14,400.00	7,109.91	7,099.58	7,118.20	198.61	30.35	89.39	254.64	498.08	8,198.55	8,087.97	110.58	74.144		
14,500.00	7,109.37	7,099.15	7,117.78	201.42	30.35	89.38	254.64	498.09	8,291.29	8,180.48	110.81	74.826		
14,600.00	7,108.82	7,098.72	7,117.35	204.22	30.34	89.37	254.64	498.09	8,384.21	8,273.17	111.04	75.509		
14,700.00	7,108.28	7,098.30	7,116.93	207.03	30.34	89.37	254.64	498.09	8,477.28	8,366.03	111.26	76.195		
14,800.00	7,107.74	7,097.87	7,116.50	209.83	30.34	89.36	254.64	498.09	8,570.51	8,459.04	111.47	76.883		
14,900.00	7,107.20	7,097.45	7,116.08	212.64	30.34	89.35	254.64	498.09	8,663.90	8,552.21	111.69	77.573		
15,000.00	7,106.66	7,097.02	7,115.65	215.45	30.34	89.34	254.64	498.09	8,757.42	8,645.53	111.89	78.265		
15,100.00	7,106.12	7,096.60	7,115.23	218.26	30.34	89.33	254.64	498.09	8,851.09	8,739.00	112.10	78.958		
15,200.00	7,105.58	7,096.17	7,114.80	221.07	30.33	89.33	254.64	498.09	8,944.90	8,832.60	112.30	79.653		
15,300.00	7,105.04	7,095.75	7,114.38	223.89	30.33	89.32	254.64	498.09	9,038.84	8,926.35	112.49	80.350		
15,400.00	7,104.50	7,095.32	7,113.95	226.70	30.33	89.31	254.64	498.09	9,132.91	9,020.22	112.69	81.048		
15,491.56	7,104.00	7,094.94	7,113.56	229.28	30.33	89.30	254.64	498.09	9,219.15	9,106.29	112.86	81.688		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 30C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	3.00	0.00	3.28	3.28	0.48	499.82	4.17	499.84					
100.00	100.00	103.00	100.00	3.28	3.29	0.48	499.82	4.17	499.84	493.27	6.57	76.078		
200.00	200.00	203.00	200.00	3.34	3.34	0.48	499.82	4.17	499.84	493.16	6.68	74.866 CC, ES		
300.00	299.98	287.69	284.67	3.44	3.43	177.33	501.16	4.04	503.15	496.27	6.88	73.144		
400.00	399.84	372.29	369.19	3.59	3.56	177.30	504.98	3.65	512.88	505.69	7.18	71.398		
500.00	499.45	455.88	452.54	3.79	3.72	177.25	511.19	3.03	528.95	521.38	7.57	69.833		
600.00	598.70	537.97	534.18	4.03	3.91	177.18	519.64	2.18	551.27	543.24	8.03	68.630		
700.00	697.47	618.11	613.63	4.31	4.12	177.10	530.13	1.13	579.69	571.15	8.54	67.891		
800.00	795.62	695.91	690.43	4.64	4.34	177.01	542.42	-0.10	614.02	604.94	9.08	67.651		
900.00	893.06	771.01	764.24	5.00	4.57	176.91	556.26	-1.49	654.05	644.41	9.63	67.887		
1,000.00	989.64	843.12	834.73	5.40	4.81	176.80	571.35	-3.01	699.53	689.34	10.20	68.613		
1,100.00	1,085.27	911.98	901.67	5.83	5.05	176.69	587.40	-4.62	750.22	739.46	10.76	69.720		
1,200.00	1,179.82	977.41	964.90	6.29	5.29	176.57	604.13	-6.30	805.84	794.52	11.32	71.212		
1,300.00	1,273.17	1,039.25	1,024.30	6.79	5.53	176.44	621.27	-8.02	866.09	854.23	11.86	73.036		
1,400.00	1,365.21	1,114.00	1,095.81	7.33	5.84	176.31	642.91	-10.19	930.09	917.62	12.47	74.614		
1,500.00	1,456.49	1,189.57	1,168.11	7.89	6.16	176.29	664.80	-12.39	995.58	982.49	13.09	76.064		
1,600.00	1,547.76	1,265.14	1,240.41	8.46	6.49	176.27	686.68	-14.59	1,061.07	1,047.35	13.72	77.330		
1,700.00	1,639.04	1,340.71	1,312.71	9.05	6.83	176.26	708.57	-16.79	1,126.56	1,112.19	14.37	78.381		
1,800.00	1,730.31	1,416.28	1,385.00	9.65	7.18	176.25	730.46	-18.98	1,192.05	1,177.01	15.04	79.255		
1,900.00	1,821.58	1,508.15	1,457.30	10.26	7.61	176.24	752.35	-21.18	1,257.54	1,241.75	15.79	79.622		
2,000.00	1,912.85	1,567.42	1,529.60	10.87	7.89	176.23	774.23	-23.38	1,323.04	1,306.62	16.42	80.588		
2,100.00	2,004.13	1,642.99	1,601.90	11.49	8.26	176.23	796.12	-25.58	1,388.53	1,371.41	17.12	81.093		
2,200.00	2,095.40	1,718.56	1,674.19	12.11	8.62	176.22	818.01	-27.77	1,454.02	1,436.18	17.84	81.514		
2,300.00	2,186.67	1,805.87	1,746.49	12.74	9.05	176.21	839.90	-29.97	1,519.51	1,500.90	18.61	81.628		
2,400.00	2,277.95	1,869.70	1,818.79	13.38	9.37	176.21	861.78	-32.17	1,585.00	1,565.71	19.29	82.157		
2,500.00	2,369.22	1,945.27	1,891.09	14.01	9.74	176.20	883.67	-34.36	1,650.50	1,630.47	20.03	82.400		
2,600.00	2,460.49	2,020.84	1,963.38	14.65	10.12	176.20	905.56	-36.56	1,715.99	1,695.21	20.77	82.602		
2,700.00	2,551.77	2,103.59	2,035.68	15.29	10.54	176.19	927.45	-38.76	1,781.48	1,759.92	21.56	82.640		
2,800.00	2,643.04	2,171.98	2,107.98	15.93	10.88	176.19	949.33	-40.96	1,846.97	1,824.69	22.28	82.908		
2,900.00	2,734.31	2,247.55	2,180.27	16.58	11.27	176.18	971.22	-43.15	1,912.46	1,889.43	23.04	83.021		
3,000.00	2,825.58	2,323.12	2,252.57	17.23	11.65	176.18	993.11	-45.35	1,977.96	1,954.16	23.80	83.113		
3,100.00	2,916.86	2,401.31	2,324.87	17.87	12.05	176.18	1,015.00	-47.55	2,043.45	2,018.87	24.58	83.145		
3,200.00	3,008.13	2,474.26	2,397.17	18.52	12.43	176.17	1,036.88	-49.75	2,108.94	2,083.61	25.33	83.247		
3,300.00	3,099.40	2,549.83	2,469.46	19.17	12.82	176.17	1,058.77	-51.94	2,174.43	2,148.33	26.11	83.293		
3,400.00	3,190.68	2,625.40	2,541.76	19.83	13.21	176.17	1,080.66	-54.14	2,239.92	2,213.04	26.88	83.327		
3,500.00	3,281.95	2,700.97	2,614.06	20.48	13.60	176.16	1,102.55	-56.34	2,305.42	2,277.76	27.66	83.353		
3,600.00	3,373.22	2,776.54	2,686.36	21.13	13.99	176.16	1,124.43	-58.54	2,370.91	2,342.47	28.44	83.370		
3,700.00	3,464.49	2,852.11	2,758.65	21.79	14.39	176.16	1,146.32	-60.73	2,436.40	2,407.18	29.22	83.380		
3,800.00	3,555.77	2,927.68	2,830.95	22.44	14.78	176.16	1,168.21	-62.93	2,501.89	2,471.89	30.00	83.383		
3,900.00	3,647.04	3,003.25	2,903.25	23.10	15.18	176.16	1,190.10	-65.13	2,567.38	2,536.59	30.79	83.382		
4,000.00	3,738.31	3,078.82	2,975.55	23.75	15.57	176.15	1,211.98	-67.33	2,632.88	2,601.30	31.58	83.376		
4,100.00	3,829.59	3,154.39	3,047.84	24.41	15.97	176.15	1,233.87	-69.52	2,698.37	2,666.00	32.37	83.366		
4,200.00	3,920.86	3,229.96	3,120.14	25.07	16.36	176.15	1,255.76	-71.72	2,763.86	2,730.70	33.16	83.353		
4,300.00	4,012.13	3,305.53	3,192.44	25.73	16.76	176.15	1,277.65	-73.92	2,829.35	2,795.40	33.95	83.337		
4,400.00	4,103.41	3,381.10	3,264.73	26.38	17.16	176.15	1,299.53	-76.12	2,894.84	2,860.10	34.74	83.319		
4,500.00	4,194.68	3,456.67	3,337.03	27.04	17.55	176.14	1,321.42	-78.31	2,960.34	2,924.80	35.54	83.298		
4,600.00	4,285.95	3,532.24	3,409.33	27.70	17.95	176.14	1,343.31	-80.51	3,025.83	2,989.49	36.34	83.275		
4,700.00	4,377.22	3,607.81	3,481.63	28.36	18.35	176.14	1,365.20	-82.71	3,091.32	3,054.19	37.13	83.251		
4,800.00	4,468.50	3,683.37	3,553.92	29.02	18.75	176.14	1,387.08	-84.91	3,156.81	3,118.88	37.93	83.226		
4,900.00	4,559.77	3,758.94	3,626.22	29.68	19.15	176.14	1,408.97	-87.10	3,222.30	3,183.57	38.73	83.199		
5,000.00	4,651.04	3,834.51	3,698.52	30.34	19.55	176.14	1,430.86	-89.30	3,287.80	3,248.27	39.53	83.171		
5,100.00	4,742.32	3,910.08	3,770.82	31.00	19.95	176.14	1,452.74	-91.50	3,353.29	3,312.96	40.33	83.143		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 30C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,200.00	4,833.59	3,985.65	3,843.11	31.66	20.35	176.13	1,474.63	-93.70	3,418.78	3,377.65	41.13	83.113		
5,300.00	4,924.86	4,061.22	3,915.41	32.32	20.75	176.13	1,496.52	-95.89	3,484.27	3,442.34	41.94	83.084		
5,400.00	5,016.13	4,136.79	3,987.71	32.99	21.15	176.13	1,518.41	-98.09	3,549.76	3,507.02	42.74	83.053		
5,500.00	5,107.41	4,212.36	4,060.00	33.65	21.55	176.13	1,540.29	-100.29	3,615.26	3,571.71	43.55	83.022		
5,600.00	5,198.68	4,287.93	4,132.30	34.31	21.95	176.13	1,562.18	-102.48	3,680.75	3,636.40	44.35	82.991		
5,700.00	5,289.95	4,363.50	4,204.60	34.97	22.35	176.13	1,584.07	-104.68	3,746.24	3,701.08	45.16	82.959		
5,800.00	5,381.23	4,439.07	4,276.90	35.63	22.75	176.13	1,605.96	-106.88	3,811.73	3,765.77	45.96	82.928		
5,900.00	5,472.50	4,514.64	4,349.19	36.30	23.15	176.13	1,627.84	-109.08	3,877.22	3,830.45	46.77	82.896		
6,000.00	5,563.77	4,609.79	4,421.49	36.96	23.66	176.13	1,649.73	-111.27	3,942.72	3,895.04	47.68	82.863		
6,100.00	5,655.05	4,665.78	4,493.79	37.62	23.96	176.13	1,671.62	-113.47	4,008.21	3,959.82	48.39	82.831		
6,200.00	5,746.32	4,741.35	4,566.09	38.28	24.36	176.12	1,693.51	-115.67	4,073.70	4,024.50	49.20	82.799		
6,300.00	5,837.59	4,816.92	4,638.38	38.95	24.76	176.12	1,715.39	-117.87	4,139.19	4,089.18	50.01	82.766		
6,400.00	5,928.86	4,907.51	4,710.68	39.61	25.25	176.12	1,737.28	-120.06	4,204.69	4,153.79	50.90	82.611		
6,500.00	6,020.14	4,968.06	4,782.98	40.27	25.57	176.12	1,759.17	-122.26	4,270.18	4,218.54	51.63	82.701		
6,600.00	6,111.41	5,043.63	4,855.28	40.94	25.97	176.12	1,781.06	-124.46	4,335.67	4,283.22	52.45	82.669		
6,700.00	6,202.68	5,119.20	4,927.57	41.60	26.37	176.12	1,802.94	-126.66	4,401.16	4,347.90	53.26	82.636		
6,800.00	6,293.96	5,200.00	6,293.96	42.26	32.54	176.39	2,005.06	-146.95	4,455.33	4,391.22	64.11	69.494		
6,900.00	6,385.23	6,600.87	6,385.23	42.93	32.87	176.42	2,005.06	-146.95	4,496.12	4,431.14	64.98	69.194		
7,000.00	6,476.50	6,707.86	6,476.50	43.59	33.26	176.45	2,005.06	-146.95	4,536.91	4,471.00	65.91	68.838		
7,100.00	6,567.77	6,783.42	6,567.77	44.25	33.53	176.48	2,005.06	-146.95	4,577.70	4,510.99	66.72	68.615		
7,200.00	6,658.64	6,876.62	6,660.96	44.91	33.87	156.05	2,005.05	-148.18	4,618.35	4,550.76	67.59	68.327		
7,300.00	6,747.14	6,974.33	6,757.63	45.52	34.22	137.23	2,004.95	-161.70	4,658.01	4,589.53	68.47	68.025		
7,400.00	6,831.10	7,074.86	6,853.72	46.07	34.57	123.23	2,004.72	-190.86	4,695.69	4,626.33	69.35	67.706		
7,500.00	6,908.46	7,178.95	6,947.10	46.54	34.91	113.01	2,004.36	-236.58	4,730.46	4,660.23	70.24	67.349		
7,600.00	6,977.30	7,287.14	7,034.92	46.95	35.23	105.52	2,003.87	-299.55	4,761.47	4,690.31	71.16	66.909		
7,700.00	7,035.93	7,399.66	7,113.58	47.30	35.54	100.02	2,003.24	-379.80	4,787.93	4,715.72	72.21	66.307		
7,800.00	7,082.92	7,516.26	7,178.89	47.59	35.86	96.07	2,002.49	-476.20	4,809.16	4,735.67	73.49	65.441		
7,900.00	7,117.09	7,636.13	7,226.56	47.84	36.36	93.41	2,001.63	-585.98	4,824.60	4,749.50	75.10	64.245		
8,000.00	7,137.62	7,757.88	7,253.09	48.06	37.31	91.86	2,000.70	-704.61	4,833.84	4,756.75	77.09	62.706		
8,100.00	7,143.99	7,872.60	7,257.87	48.28	38.54	91.35	1,999.81	-819.12	4,836.67	4,757.33	79.34	60.960		
8,200.00	7,143.45	7,972.60	7,257.49	48.53	39.82	91.35	1,999.02	-919.12	4,836.48	4,754.72	81.76	59.155		
8,300.00	7,142.91	8,072.60	7,257.11	48.89	41.26	91.35	1,998.24	-1,019.11	4,836.29	4,751.81	84.49	57.244		
8,400.00	7,142.37	8,172.60	7,256.73	49.40	42.85	91.36	1,997.46	-1,119.11	4,836.10	4,748.60	87.50	55.269		
8,500.00	7,141.83	8,272.60	7,256.35	50.12	44.57	91.36	1,996.68	-1,219.11	4,835.91	4,745.14	90.78	53.273		
8,600.00	7,141.29	8,372.60	7,255.97	51.08	46.40	91.36	1,995.90	-1,319.10	4,835.72	4,741.44	94.28	51.290		
8,700.00	7,140.75	8,472.60	7,255.59	52.30	48.34	91.36	1,995.11	-1,419.10	4,835.53	4,737.54	98.00	49.344		
8,800.00	7,140.21	8,572.60	7,255.21	53.75	50.36	91.36	1,994.33	-1,519.09	4,835.34	4,733.45	101.90	47.454		
8,900.00	7,139.67	8,672.60	7,254.83	55.40	52.46	91.37	1,993.55	-1,619.09	4,835.15	4,729.19	105.96	45.632		
9,000.00	7,139.12	8,772.59	7,254.45	57.20	54.63	91.37	1,992.77	-1,719.09	4,834.96	4,724.79	110.17	43.887		
9,100.00	7,138.58	8,872.59	7,254.07	59.13	56.86	91.37	1,991.99	-1,819.08	4,834.77	4,720.26	114.51	42.221		
9,200.00	7,138.04	8,972.59	7,253.69	61.15	59.14	91.37	1,991.20	-1,919.08	4,834.58	4,715.61	118.97	40.638		
9,300.00	7,137.50	9,072.59	7,253.32	63.26	61.47	91.37	1,990.42	-2,019.07	4,834.39	4,710.86	123.53	39.137		
9,400.00	7,136.96	9,172.59	7,252.94	65.44	63.85	91.38	1,989.64	-2,119.07	4,834.20	4,706.02	128.18	37.715		
9,500.00	7,136.42	9,272.59	7,252.56	67.68	66.26	91.38	1,988.86	-2,219.07	4,834.01	4,701.10	132.91	36.370		
9,600.00	7,135.88	9,372.59	7,252.18	69.97	68.71	91.38	1,988.08	-2,319.06	4,833.82	4,696.10	137.72	35.098		
9,700.00	7,135.34	9,472.59	7,251.80	72.31	71.19	91.38	1,987.29	-2,419.06	4,833.63	4,691.03	142.60	33.897		
9,800.00	7,134.80	9,572.59	7,251.42	74.69	73.69	91.38	1,986.51	-2,519.05	4,833.44	4,685.90	147.53	32.761		
9,900.00	7,134.26	9,672.59	7,251.04	77.10	76.22	91.39	1,985.73	-2,619.05	4,833.25	4,680.72	152.53	31.688		
10,000.00	7,133.71	9,772.59	7,250.66	79.54	78.78	91.39	1,984.95	-2,719.05	4,833.06	4,675.49	157.57	30.673		
10,100.00	7,133.17	9,872.59	7,250.28	82.02	81.35	91.39	1,984.17	-2,819.04	4,832.87	4,670.22	162.65	29.713		
10,200.00	7,132.63	9,972.59	7,249.90	84.52	83.94	91.39	1,983.38	-2,919.04	4,832.68	4,664.90	167.77	28.805		
10,300.00	7,132.09	10,072.59	7,249.52	87.04	86.55	91.39	1,982.60	-3,019.03	4,832.49	4,659.55	172.94	27.944		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 30C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,131.55	10,172.59	7,249.14	89.58	89.17	91.40	1,981.82	-3,119.03	4,832.30	4,654.17	178.13	27.128		
10,500.00	7,131.01	10,272.59	7,248.76	92.15	91.81	91.40	1,981.04	-3,219.02	4,832.11	4,648.75	183.36	26.353		
10,600.00	7,130.47	10,372.59	7,248.38	94.73	94.46	91.40	1,980.26	-3,319.02	4,831.92	4,643.31	188.61	25.618		
10,700.00	7,129.93	10,472.59	7,248.00	97.33	97.12	91.40	1,979.47	-3,419.02	4,831.73	4,637.83	193.89	24.919		
10,800.00	7,129.39	10,572.59	7,247.62	99.94	99.80	91.40	1,978.69	-3,519.01	4,831.54	4,632.34	199.20	24.255		
10,900.00	7,128.84	10,672.59	7,247.24	102.56	102.48	91.40	1,977.91	-3,619.01	4,831.35	4,626.82	204.53	23.622		
11,000.00	7,128.30	10,772.59	7,246.86	105.20	105.17	91.41	1,977.13	-3,719.00	4,831.16	4,621.29	209.87	23.019		
11,100.00	7,127.76	10,872.59	7,246.48	107.85	107.87	91.41	1,976.35	-3,819.00	4,830.97	4,615.73	215.24	22.445		
11,200.00	7,127.22	10,972.59	7,246.10	110.51	110.58	91.41	1,975.56	-3,919.00	4,830.78	4,610.16	220.62	21.896		
11,300.00	7,126.68	11,072.59	7,245.73	113.18	113.30	91.41	1,974.78	-4,018.99	4,830.59	4,604.57	226.02	21.372		
11,400.00	7,126.14	11,172.59	7,245.35	115.86	116.02	91.41	1,974.00	-4,118.99	4,830.40	4,598.96	231.44	20.871		
11,500.00	7,125.60	11,272.59	7,244.97	118.55	118.75	91.42	1,973.22	-4,218.98	4,830.21	4,593.34	236.87	20.392		
11,600.00	7,125.06	11,372.59	7,244.59	121.25	121.49	91.42	1,972.44	-4,318.98	4,830.02	4,587.71	242.31	19.933		
11,700.00	7,124.52	11,472.59	7,244.21	123.95	124.23	91.42	1,971.65	-4,418.98	4,829.83	4,582.06	247.76	19.494		
11,800.00	7,123.97	11,572.59	7,243.83	126.66	126.97	91.42	1,970.87	-4,518.97	4,829.64	4,576.41	253.23	19.072		
11,900.00	7,123.43	11,672.59	7,243.45	129.38	129.73	91.42	1,970.09	-4,618.97	4,829.45	4,570.74	258.71	18.668		
12,000.00	7,122.89	11,772.59	7,243.07	132.10	132.48	91.43	1,969.31	-4,718.96	4,829.26	4,565.06	264.19	18.279		
12,100.00	7,122.35	11,872.59	7,242.69	134.83	135.24	91.43	1,968.52	-4,818.96	4,829.07	4,559.38	269.69	17.906		
12,200.00	7,121.81	11,972.58	7,242.31	137.56	138.00	91.43	1,967.74	-4,918.96	4,828.88	4,553.68	275.20	17.547		
12,300.00	7,121.27	12,072.58	7,241.93	140.30	140.77	91.43	1,966.96	-5,018.95	4,828.69	4,547.98	280.71	17.202		
12,400.00	7,120.73	12,172.58	7,241.55	143.05	143.54	91.43	1,966.18	-5,118.95	4,828.50	4,542.27	286.23	16.869		
12,500.00	7,120.19	12,272.58	7,241.17	145.80	146.32	91.44	1,965.40	-5,218.94	4,828.31	4,536.55	291.76	16.549		
12,600.00	7,119.65	12,372.58	7,240.79	148.55	149.09	91.44	1,964.61	-5,318.94	4,828.12	4,530.82	297.30	16.240		
12,700.00	7,119.10	12,472.58	7,240.41	151.30	151.88	91.44	1,963.83	-5,418.93	4,827.93	4,525.09	302.84	15.942		
12,800.00	7,118.56	12,572.58	7,240.03	154.07	154.66	91.44	1,963.05	-5,518.93	4,827.74	4,519.35	308.39	15.655		
12,900.00	7,118.02	12,672.58	7,239.65	156.83	157.44	91.44	1,962.27	-5,618.93	4,827.55	4,513.61	313.94	15.377		
13,000.00	7,117.48	12,772.58	7,239.27	159.60	160.23	91.45	1,961.49	-5,718.92	4,827.36	4,507.86	319.50	15.109		
13,100.00	7,116.94	12,872.58	7,238.89	162.37	163.02	91.45	1,960.70	-5,818.92	4,827.17	4,502.10	325.07	14.850		
13,200.00	7,116.40	12,972.58	7,238.51	165.14	165.82	91.45	1,959.92	-5,918.91	4,826.98	4,496.34	330.64	14.599		
13,300.00	7,115.86	13,072.58	7,238.13	167.92	168.61	91.45	1,959.14	-6,018.91	4,826.79	4,490.57	336.21	14.356		
13,400.00	7,115.32	13,172.58	7,237.76	170.70	171.41	91.45	1,958.36	-6,118.91	4,826.60	4,484.80	341.79	14.121		
13,500.00	7,114.78	13,272.58	7,237.38	173.48	174.21	91.46	1,957.58	-6,218.90	4,826.41	4,479.03	347.38	13.894		
13,600.00	7,114.24	13,372.58	7,237.00	176.26	177.01	91.46	1,956.79	-6,318.90	4,826.22	4,473.25	352.97	13.673		
13,700.00	7,113.69	13,472.58	7,236.62	179.05	179.81	91.46	1,956.01	-6,418.89	4,826.03	4,467.47	358.56	13.459		
13,800.00	7,113.15	13,572.58	7,236.24	181.84	182.62	91.46	1,955.23	-6,518.89	4,825.84	4,461.68	364.16	13.252		
13,900.00	7,112.61	13,672.58	7,235.86	184.63	185.43	91.46	1,954.45	-6,618.89	4,825.65	4,455.89	369.76	13.051		
14,000.00	7,112.07	13,772.58	7,235.48	187.42	188.23	91.47	1,953.67	-6,718.88	4,825.46	4,450.10	375.36	12.856		
14,100.00	7,111.53	13,872.58	7,235.10	190.22	191.04	91.47	1,952.88	-6,818.88	4,825.27	4,444.30	380.97	12.666		
14,200.00	7,110.99	13,972.58	7,234.72	193.01	193.85	91.47	1,952.10	-6,918.87	4,825.08	4,438.50	386.58	12.482		
14,300.00	7,110.45	14,072.58	7,234.34	195.81	196.67	91.47	1,951.32	-7,018.87	4,824.89	4,432.70	392.19	12.302		
14,400.00	7,109.91	14,172.58	7,233.96	198.61	199.48	91.47	1,950.54	-7,118.87	4,824.70	4,426.89	397.81	12.128		
14,500.00	7,109.37	14,272.58	7,233.58	201.42	202.30	91.48	1,949.76	-7,218.86	4,824.51	4,421.08	403.43	11.959		
14,600.00	7,108.82	14,372.58	7,233.20	204.22	205.11	91.48	1,948.97	-7,318.86	4,824.32	4,415.27	409.05	11.794		
14,700.00	7,108.28	14,472.58	7,232.82	207.03	207.93	91.48	1,948.19	-7,418.85	4,824.13	4,409.46	414.67	11.634		
14,800.00	7,107.74	14,572.58	7,232.44	209.83	210.75	91.48	1,947.41	-7,518.85	4,823.94	4,403.64	420.30	11.477		
14,900.00	7,107.20	14,672.58	7,232.06	212.64	213.57	91.48	1,946.63	-7,618.84	4,823.75	4,397.82	425.93	11.325		
15,000.00	7,106.66	14,772.58	7,231.68	215.45	216.39	91.49	1,945.85	-7,718.84	4,823.56	4,392.00	431.56	11.177		
15,100.00	7,106.12	14,872.58	7,231.30	218.26	219.21	91.49	1,945.06	-7,818.84	4,823.37	4,386.18	437.19	11.033		
15,200.00	7,105.58	14,972.58	7,230.92	221.07	222.03	91.49	1,944.28	-7,918.83	4,823.18	4,380.36	442.83	10.892		
15,300.00	7,105.04	15,072.57	7,230.54	223.89	224.85	91.49	1,943.50	-8,018.83	4,822.99	4,374.53	448.46	10.755		
15,400.00	7,104.50	15,172.57	7,230.17	226.70	227.68	91.49	1,942.72	-8,118.82	4,822.80	4,368.70	454.10	10.621		
15,452.59	7,104.21	15,216.01	7,230.00	228.18	228.91	91.49	1,942.38	-8,162.26	4,822.71	4,365.91	456.80	10.558		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 30C-16-M - OH - PLAN #1											Offset Site Error:	0.00 ft
Survey Program:	0-MWD+IFR1											Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	15,216.01	7,230.00	229.28	228.91	91.49	1,942.38	-8,162.26	4,822.87	4,365.01	457.86	10.534 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 30N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	3.00	0.00	3.28	3.28	0.50	480.15	4.17	480.17					
100.00	100.00	103.00	100.00	3.28	3.29	0.50	480.15	4.17	480.17	473.60	6.57	73.084		
200.00	200.00	203.00	200.00	3.34	3.34	0.50	480.15	4.17	480.17	473.50	6.68	71.920	CC, ES	
300.00	299.98	302.98	299.98	3.44	3.45	177.37	480.15	4.17	481.92	475.03	6.89	69.955		
400.00	399.84	387.98	384.97	3.59	3.58	177.37	481.49	4.00	488.71	481.52	7.18	68.021		
500.00	499.45	472.61	469.51	3.79	3.75	177.33	485.31	3.51	501.89	494.32	7.57	66.279		
600.00	598.70	555.95	552.61	4.03	3.94	177.27	491.49	2.72	521.38	513.35	8.03	64.923		
700.00	697.47	637.52	633.74	4.31	4.16	177.19	499.85	1.65	547.05	538.51	8.54	64.052		
800.00	795.62	716.91	712.44	4.64	4.39	177.09	510.19	0.32	578.72	569.64	9.09	63.699		
900.00	893.06	793.73	788.29	5.00	4.62	176.97	522.25	-1.22	616.20	606.55	9.65	63.852		
1,000.00	989.64	867.66	860.95	5.40	4.87	176.85	535.76	-2.95	659.26	649.03	10.23	64.473		
1,100.00	1,085.27	954.54	946.10	5.83	5.16	176.71	552.86	-5.15	706.71	695.87	10.84	65.176		
1,200.00	1,179.82	1,040.85	1,030.69	6.29	5.47	176.59	569.86	-7.32	757.20	745.71	11.50	65.852		
1,300.00	1,273.17	1,125.34	1,113.51	6.79	5.79	176.49	586.50	-9.46	810.67	798.51	12.17	66.637		
1,400.00	1,365.21	1,207.93	1,194.44	7.33	6.12	176.40	602.77	-11.54	867.06	854.21	12.84	67.506		
1,500.00	1,456.49	1,289.41	1,274.30	7.89	6.45	176.39	618.82	-13.60	925.03	911.50	13.53	68.375		
1,600.00	1,547.76	1,370.88	1,354.16	8.46	6.78	176.40	634.86	-15.65	983.01	968.79	14.22	69.123		
1,700.00	1,639.04	1,452.36	1,434.01	9.05	7.12	176.40	650.91	-17.71	1,040.99	1,026.06	14.93	69.724		
1,800.00	1,730.31	1,533.84	1,513.87	9.65	7.47	176.40	666.96	-19.77	1,098.96	1,083.31	15.65	70.206		
1,900.00	1,821.58	1,615.32	1,593.72	10.26	7.82	176.40	683.00	-21.82	1,156.94	1,140.55	16.39	70.593		
2,000.00	1,912.85	1,703.21	1,673.58	10.87	8.21	176.41	699.05	-23.88	1,214.92	1,197.76	17.16	70.790		
2,100.00	2,004.13	1,778.27	1,753.43	11.49	8.54	176.41	715.10	-25.93	1,272.90	1,255.01	17.89	71.148		
2,200.00	2,095.40	1,859.75	1,833.29	12.11	8.90	176.41	731.14	-27.99	1,330.88	1,312.22	18.65	71.343		
2,300.00	2,186.67	1,941.23	1,913.14	12.74	9.27	176.41	747.19	-30.05	1,388.85	1,369.43	19.43	71.495		
2,400.00	2,277.95	2,022.70	1,993.00	13.38	9.63	176.41	763.24	-32.10	1,446.83	1,426.63	20.20	71.614		
2,500.00	2,369.22	2,104.18	2,072.85	14.01	10.00	176.41	779.28	-34.16	1,504.81	1,483.82	20.99	71.704		
2,600.00	2,460.49	2,185.66	2,152.71	14.65	10.37	176.41	795.33	-36.22	1,562.79	1,541.01	21.77	71.770		
2,700.00	2,551.77	2,267.14	2,232.56	15.29	10.75	176.42	811.38	-38.27	1,620.76	1,598.20	22.57	71.818		
2,800.00	2,643.04	2,348.61	2,312.42	15.93	11.12	176.42	827.42	-40.33	1,678.74	1,655.38	23.36	71.849		
2,900.00	2,734.31	2,430.09	2,392.27	16.58	11.50	176.42	843.47	-42.38	1,736.72	1,712.56	24.17	71.868		
3,000.00	2,825.58	2,511.57	2,472.13	17.23	11.87	176.42	859.52	-44.44	1,794.70	1,769.73	24.97	71.876		
3,100.00	2,916.86	2,606.95	2,551.98	17.87	12.31	176.42	875.56	-46.50	1,852.68	1,826.84	25.84	71.701		
3,200.00	3,008.13	2,674.52	2,631.84	18.52	12.63	176.42	891.61	-48.55	1,910.65	1,884.07	26.59	71.867		
3,300.00	3,099.40	2,756.00	2,711.69	19.17	13.01	176.42	907.66	-50.61	1,968.63	1,941.23	27.40	71.852		
3,400.00	3,190.68	2,837.48	2,791.55	19.83	13.39	176.42	923.71	-52.67	2,026.61	1,998.40	28.21	71.833		
3,500.00	3,281.95	2,918.95	2,871.40	20.48	13.77	176.42	939.75	-54.72	2,084.59	2,055.56	29.03	71.809		
3,600.00	3,373.22	3,000.43	2,951.26	21.13	14.15	176.42	955.80	-56.78	2,142.57	2,112.72	29.85	71.782		
3,700.00	3,464.49	3,081.91	3,031.11	21.79	14.54	176.42	971.85	-58.84	2,200.54	2,169.88	30.67	71.752		
3,800.00	3,555.77	3,163.39	3,110.97	22.44	14.92	176.42	987.89	-60.89	2,258.52	2,227.03	31.49	71.720		
3,900.00	3,647.04	3,244.86	3,190.83	23.10	15.30	176.42	1,003.94	-62.95	2,316.50	2,284.19	32.31	71.687		
4,000.00	3,738.31	3,326.34	3,270.68	23.75	15.69	176.42	1,019.99	-65.00	2,374.48	2,341.34	33.14	71.651		
4,100.00	3,829.59	3,407.82	3,350.54	24.41	16.07	176.42	1,036.03	-67.06	2,432.46	2,398.49	33.97	71.615		
4,200.00	3,920.86	3,489.30	3,430.39	25.07	16.46	176.42	1,052.08	-69.12	2,490.43	2,455.64	34.79	71.578		
4,300.00	4,012.13	3,570.77	3,510.25	25.73	16.85	176.43	1,068.13	-71.17	2,548.41	2,512.79	35.62	71.540		
4,400.00	4,103.41	3,652.25	3,590.10	26.38	17.23	176.43	1,084.17	-73.23	2,606.39	2,569.94	36.45	71.501		
4,500.00	4,194.68	3,733.73	3,669.96	27.04	17.62	176.43	1,100.22	-75.29	2,664.37	2,627.08	37.28	71.463		
4,600.00	4,285.95	3,815.21	3,749.81	27.70	18.01	176.43	1,116.27	-77.34	2,722.34	2,684.23	38.12	71.424		
4,700.00	4,377.22	3,896.68	3,829.67	28.36	18.39	176.43	1,132.31	-79.40	2,780.32	2,741.37	38.95	71.385		
4,800.00	4,468.50	3,978.16	3,909.52	29.02	18.78	176.43	1,148.36	-81.45	2,838.30	2,798.52	39.78	71.346		
4,900.00	4,559.77	4,059.64	3,989.38	29.68	19.17	176.43	1,164.41	-83.51	2,896.28	2,855.66	40.62	71.307		
5,000.00	4,651.04	4,141.12	4,069.23	30.34	19.56	176.43	1,180.45	-85.57	2,954.26	2,912.80	41.45	71.269		
5,100.00	4,742.32	4,222.59	4,149.09	31.00	19.94	176.43	1,196.50	-87.62	3,012.23	2,969.95	42.29	71.230		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 30N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,304.07	4,228.94	31.66	20.33	176.43	1,212.55	-89.68	3,070.21	3,027.09	43.13	71.192		
5,300.00	4,924.86	4,385.55	4,308.80	32.32	20.72	176.43	1,228.60	-91.74	3,128.19	3,084.23	43.96	71.154		
5,400.00	5,016.13	4,467.03	4,388.65	32.99	21.11	176.43	1,244.64	-93.79	3,186.17	3,141.37	44.80	71.117		
5,500.00	5,107.41	4,548.50	4,468.51	33.65	21.50	176.43	1,260.69	-95.85	3,244.15	3,198.50	45.64	71.079		
5,600.00	5,198.68	4,629.98	4,548.36	34.31	21.89	176.43	1,276.74	-97.91	3,302.12	3,255.64	46.48	71.043		
5,700.00	5,289.95	4,711.46	4,628.22	34.97	22.28	176.43	1,292.78	-99.96	3,360.10	3,312.78	47.32	71.006		
5,800.00	5,381.23	4,807.07	4,708.07	35.63	22.74	176.43	1,308.83	-102.02	3,418.08	3,369.85	48.23	70.873		
5,900.00	5,472.50	4,874.41	4,787.93	36.30	23.06	176.43	1,324.88	-104.07	3,476.06	3,427.05	49.00	70.934		
6,000.00	5,563.77	4,955.89	4,867.78	36.96	23.45	176.43	1,340.92	-106.13	3,534.04	3,484.19	49.85	70.899		
6,100.00	5,655.05	5,037.37	4,947.64	37.62	23.84	176.43	1,356.97	-108.19	3,592.01	3,541.32	50.69	70.864		
6,200.00	5,746.32	5,118.84	5,027.49	38.28	24.23	176.43	1,373.02	-110.24	3,649.99	3,598.46	51.53	70.829		
6,300.00	5,837.59	5,200.32	5,107.35	38.95	24.62	176.43	1,389.06	-112.30	3,707.97	3,655.59	52.38	70.795		
6,400.00	5,928.86	5,281.80	5,187.20	39.61	25.01	176.43	1,405.11	-114.36	3,765.95	3,712.73	53.22	70.761		
6,500.00	6,020.14	5,363.28	5,267.06	40.27	25.40	176.43	1,421.16	-116.41	3,823.92	3,769.86	54.07	70.728		
6,600.00	6,111.41	5,444.75	5,346.91	40.94	25.79	176.43	1,437.20	-118.47	3,881.90	3,826.99	54.91	70.695		
6,700.00	6,202.68	5,526.23	5,426.77	41.60	26.18	176.43	1,453.25	-120.52	3,939.88	3,884.12	55.76	70.662		
6,800.00	6,293.96	5,607.71	5,506.62	42.26	26.58	176.43	1,469.30	-122.58	3,997.86	3,941.26	56.60	70.630		
6,900.00	6,385.23	5,689.19	5,586.48	42.93	26.97	176.43	1,485.34	-124.64	4,055.84	3,998.39	57.45	70.598		
7,000.00	6,476.50	5,770.66	5,666.33	43.59	27.36	176.43	1,501.39	-126.69	4,113.81	4,055.52	58.30	70.566		
7,100.00	6,567.77	5,852.14	5,746.19	44.25	27.75	176.43	1,517.44	-128.75	4,171.79	4,112.65	59.14	70.535		
7,200.00	6,658.64	5,933.40	5,825.83	44.91	28.14	153.90	1,533.44	-130.80	4,229.58	4,169.59	59.99	70.505		
7,300.00	6,747.14	6,012.91	5,903.76	45.52	28.52	133.03	1,549.10	-132.81	4,286.12	4,225.32	60.81	70.488		
7,400.00	6,831.10	6,088.73	5,978.07	46.07	28.89	117.36	1,564.03	-134.72	4,340.25	4,278.69	61.57	70.497		
7,500.00	6,908.46	6,158.98	6,046.92	46.54	29.22	105.82	1,577.87	-136.49	4,390.98	4,328.73	62.26	70.529		
7,600.00	6,977.30	6,221.94	6,108.62	46.95	29.53	97.26	1,590.27	-138.08	4,437.51	4,374.62	62.89	70.561		
7,700.00	7,035.93	6,276.05	6,161.65	47.30	29.79	90.87	1,600.93	-139.45	4,479.16	4,415.68	63.49	70.553		
7,800.00	7,082.92	6,319.98	6,204.71	47.59	30.00	86.11	1,609.58	-140.56	4,515.42	4,451.33	64.09	70.453		
7,900.00	7,117.09	6,352.65	6,236.73	47.84	30.16	82.63	1,616.01	-141.38	4,545.82	4,481.07	64.74	70.214		
8,000.00	7,137.62	6,373.26	6,256.93	48.06	30.26	80.23	1,620.07	-141.90	4,569.99	4,504.52	65.47	69.802		
8,100.00	7,143.99	6,381.29	6,264.81	48.28	30.29	78.79	1,621.65	-142.10	4,587.60	4,521.32	66.28	69.214		
8,200.00	7,143.45	6,383.17	6,266.65	48.53	30.30	78.81	1,622.02	-142.15	4,603.06	4,535.84	67.22	68.476		
8,300.00	7,142.91	7,803.98	7,068.35	48.89	40.58	89.07	1,777.20	-1,015.38	4,614.48	4,531.14	83.34	55.368		
8,400.00	7,142.37	7,903.98	7,068.07	49.40	42.21	89.08	1,776.45	-1,115.37	4,614.31	4,527.91	86.41	53.403		
8,500.00	7,141.83	8,003.98	7,067.78	50.12	43.97	89.08	1,775.69	-1,215.37	4,614.14	4,524.42	89.73	51.423		
8,600.00	7,141.29	8,103.98	7,067.50	51.08	45.84	89.08	1,774.94	-1,315.36	4,613.98	4,520.69	93.28	49.462		
8,700.00	7,140.75	8,203.99	7,067.21	52.30	47.80	89.09	1,774.19	-1,415.36	4,613.81	4,516.76	97.04	47.544		
8,800.00	7,140.21	8,303.99	7,066.93	53.75	49.86	89.09	1,773.44	-1,515.36	4,613.64	4,512.65	100.99	45.686		
8,900.00	7,139.67	8,403.99	7,066.64	55.40	51.99	89.09	1,772.68	-1,615.35	4,613.47	4,508.38	105.09	43.899		
9,000.00	7,139.12	8,503.99	7,066.36	57.20	54.19	89.10	1,771.93	-1,715.35	4,613.30	4,503.96	109.34	42.191		
9,100.00	7,138.58	8,603.99	7,066.07	59.13	56.45	89.10	1,771.18	-1,815.35	4,613.13	4,499.41	113.72	40.565		
9,200.00	7,138.04	8,703.99	7,065.79	61.15	58.76	89.10	1,770.43	-1,915.34	4,612.96	4,494.75	118.21	39.022		
9,300.00	7,137.50	8,803.99	7,065.50	63.26	61.11	89.11	1,769.67	-2,015.34	4,612.80	4,489.99	122.81	37.561		
9,400.00	7,136.96	8,896.01	7,065.22	65.44	63.32	89.11	1,768.92	-2,115.34	4,612.63	4,485.33	127.30	36.234		
9,500.00	7,136.42	9,003.99	7,064.93	67.68	65.95	89.11	1,768.17	-2,215.33	4,612.46	4,480.20	132.26	34.874		
9,600.00	7,135.88	9,103.99	7,064.65	69.97	68.42	89.12	1,767.42	-2,315.33	4,612.29	4,475.19	137.10	33.642		
9,700.00	7,135.34	9,196.01	7,064.36	72.31	70.71	89.12	1,766.67	-2,415.32	4,612.12	4,470.32	141.80	32.525		
9,800.00	7,134.80	9,303.99	7,064.08	74.69	73.44	89.12	1,765.91	-2,515.32	4,611.95	4,464.99	146.96	31.381		
9,900.00	7,134.26	9,403.99	7,063.79	77.10	75.98	89.13	1,765.16	-2,615.32	4,611.79	4,459.81	151.98	30.345		
10,000.00	7,133.71	9,496.01	7,063.51	79.54	78.35	89.13	1,764.41	-2,715.31	4,611.62	4,454.78	156.84	29.404		
10,100.00	7,133.17	9,603.99	7,063.22	82.02	81.14	89.13	1,763.66	-2,815.31	4,611.45	4,449.30	162.15	28.439		
10,200.00	7,132.63	9,703.99	7,062.94	84.52	83.75	89.13	1,762.90	-2,915.31	4,611.28	4,443.98	167.30	27.564		
10,300.00	7,132.09	9,803.99	7,062.66	87.04	86.37	89.14	1,762.15	-3,015.30	4,611.11	4,438.63	172.48	26.735		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 30N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,131.55	9,903.99	7,062.37	89.58	89.01	89.14	1,761.40	-3,115.30	4,610.94	4,433.25	177.69	25.949		
10,500.00	7,131.01	10,003.99	7,062.09	92.15	91.66	89.14	1,760.65	-3,215.29	4,610.78	4,427.84	182.94	25.204		
10,600.00	7,130.47	10,103.99	7,061.80	94.73	94.32	89.15	1,759.89	-3,315.29	4,610.61	4,422.40	188.21	24.497		
10,700.00	7,129.93	10,203.99	7,061.52	97.33	96.99	89.15	1,759.14	-3,415.29	4,610.44	4,416.93	193.51	23.826		
10,800.00	7,129.39	10,303.99	7,061.23	99.94	99.67	89.15	1,758.39	-3,515.28	4,610.27	4,411.44	198.83	23.187		
10,900.00	7,128.84	10,404.00	7,060.95	102.56	102.37	89.16	1,757.64	-3,615.28	4,610.10	4,405.93	204.17	22.580		
11,000.00	7,128.30	10,504.00	7,060.66	105.20	105.07	89.16	1,756.88	-3,715.28	4,609.93	4,400.40	209.53	22.001		
11,100.00	7,127.76	10,604.00	7,060.38	107.85	107.78	89.16	1,756.13	-3,815.27	4,609.77	4,394.85	214.91	21.449		
11,200.00	7,127.22	10,704.00	7,060.09	110.51	110.50	89.17	1,755.38	-3,915.27	4,609.60	4,389.29	220.31	20.923		
11,300.00	7,126.68	10,804.00	7,059.81	113.18	113.22	89.17	1,754.63	-4,015.26	4,609.43	4,383.70	225.72	20.421		
11,400.00	7,126.14	10,904.00	7,059.52	115.86	115.95	89.17	1,753.87	-4,115.26	4,609.26	4,378.11	231.15	19.940		
11,500.00	7,125.60	11,004.00	7,059.24	118.55	118.69	89.18	1,753.12	-4,215.26	4,609.09	4,372.50	236.59	19.481		
11,600.00	7,125.06	11,104.00	7,058.95	121.25	121.43	89.18	1,752.37	-4,315.25	4,608.92	4,366.88	242.05	19.041		
11,700.00	7,124.52	11,204.00	7,058.67	123.95	124.18	89.18	1,751.62	-4,415.25	4,608.76	4,361.24	247.51	18.620		
11,800.00	7,123.97	11,304.00	7,058.38	126.66	126.93	89.19	1,750.86	-4,515.25	4,608.59	4,355.60	252.99	18.216		
11,900.00	7,123.43	11,404.00	7,058.10	129.38	129.69	89.19	1,750.11	-4,615.24	4,608.42	4,349.94	258.48	17.829		
12,000.00	7,122.89	11,504.00	7,057.81	132.10	132.45	89.19	1,749.36	-4,715.24	4,608.25	4,344.28	263.98	17.457		
12,100.00	7,122.35	11,604.00	7,057.53	134.83	135.21	89.19	1,748.61	-4,815.24	4,608.08	4,338.60	269.48	17.100		
12,200.00	7,121.81	11,704.00	7,057.24	137.56	137.98	89.20	1,747.85	-4,915.23	4,607.92	4,332.92	275.00	16.756		
12,300.00	7,121.27	11,804.00	7,056.96	140.30	140.75	89.20	1,747.10	-5,015.23	4,607.75	4,327.23	280.52	16.426		
12,400.00	7,120.73	11,904.00	7,056.68	143.05	143.53	89.20	1,746.35	-5,115.22	4,607.58	4,321.53	286.05	16.108		
12,500.00	7,120.19	12,004.00	7,056.39	145.80	146.31	89.21	1,745.60	-5,215.22	4,607.41	4,315.82	291.59	15.801		
12,600.00	7,119.65	12,104.00	7,056.11	148.55	149.09	89.21	1,744.84	-5,315.22	4,607.24	4,310.11	297.13	15.506		
12,700.00	7,119.10	12,204.00	7,055.82	151.30	151.88	89.21	1,744.09	-5,415.21	4,607.08	4,304.39	302.68	15.221		
12,800.00	7,118.56	12,304.00	7,055.54	154.07	154.66	89.22	1,743.34	-5,515.21	4,606.91	4,298.67	308.24	14.946		
12,900.00	7,118.02	12,404.00	7,055.25	156.83	157.46	89.22	1,742.59	-5,615.21	4,606.74	4,292.93	313.80	14.680		
13,000.00	7,117.48	12,504.01	7,054.97	159.60	160.25	89.22	1,741.83	-5,715.20	4,606.57	4,287.20	319.37	14.424		
13,100.00	7,116.94	12,604.01	7,054.68	162.37	163.04	89.23	1,741.08	-5,815.20	4,606.40	4,281.46	324.95	14.176		
13,200.00	7,116.40	12,704.01	7,054.40	165.14	165.84	89.23	1,740.33	-5,915.19	4,606.24	4,275.71	330.53	13.936		
13,300.00	7,115.86	12,804.01	7,054.11	167.92	168.64	89.23	1,739.58	-6,015.19	4,606.07	4,269.96	336.11	13.704		
13,400.00	7,115.32	12,904.01	7,053.83	170.70	171.44	89.24	1,738.82	-6,115.19	4,605.90	4,264.20	341.70	13.480		
13,500.00	7,114.78	13,004.01	7,053.54	173.48	174.24	89.24	1,738.07	-6,215.18	4,605.73	4,258.44	347.29	13.262		
13,600.00	7,114.24	13,095.99	7,053.26	176.26	176.82	89.24	1,737.32	-6,315.18	4,605.56	4,252.90	352.66	13.060		
13,700.00	7,113.69	13,204.01	7,052.97	179.05	179.85	89.25	1,736.57	-6,415.18	4,605.40	4,246.91	358.48	12.847		
13,800.00	7,113.15	13,295.99	7,052.69	181.84	182.44	89.25	1,735.81	-6,515.17	4,605.23	4,241.37	363.86	12.657		
13,900.00	7,112.61	13,395.99	7,052.40	184.63	185.25	89.25	1,735.06	-6,615.17	4,605.06	4,235.59	369.47	12.464		
14,000.00	7,112.07	13,504.01	7,052.12	187.42	188.28	89.25	1,734.31	-6,715.16	4,604.89	4,229.59	375.30	12.270		
14,100.00	7,111.53	13,604.01	7,051.83	190.22	191.10	89.26	1,733.56	-6,815.16	4,604.72	4,223.81	380.92	12.088		
14,200.00	7,110.99	13,704.01	7,051.55	193.01	193.91	89.26	1,732.80	-6,915.16	4,604.56	4,218.02	386.53	11.912		
14,300.00	7,110.45	13,804.01	7,051.26	195.81	196.72	89.26	1,732.05	-7,015.15	4,604.39	4,212.23	392.15	11.741		
14,400.00	7,109.91	13,904.01	7,050.98	198.61	199.54	89.27	1,731.30	-7,115.15	4,604.22	4,206.44	397.78	11.575		
14,500.00	7,109.37	14,004.01	7,050.70	201.42	202.36	89.27	1,730.55	-7,215.15	4,604.05	4,200.65	403.40	11.413		
14,600.00	7,108.82	14,104.01	7,050.41	204.22	205.18	89.27	1,729.80	-7,315.14	4,603.89	4,194.86	409.03	11.256		
14,700.00	7,108.28	14,204.01	7,050.13	207.03	208.00	89.28	1,729.04	-7,415.14	4,603.72	4,189.06	414.66	11.102		
14,800.00	7,107.74	14,304.01	7,049.84	209.83	210.82	89.28	1,728.29	-7,515.14	4,603.55	4,183.26	420.29	10.953		
14,900.00	7,107.20	14,404.01	7,049.56	212.64	213.64	89.28	1,727.54	-7,615.13	4,603.38	4,177.46	425.93	10.808		
15,000.00	7,106.66	14,504.01	7,049.27	215.45	216.46	89.29	1,726.79	-7,715.13	4,603.21	4,171.65	431.56	10.666		
15,100.00	7,106.12	14,604.01	7,048.99	218.26	219.29	89.29	1,726.03	-7,815.12	4,603.05	4,165.85	437.20	10.528		
15,200.00	7,105.58	14,704.02	7,048.70	221.07	222.11	89.29	1,725.28	-7,915.12	4,602.88	4,160.04	442.84	10.394		
15,300.00	7,105.04	14,804.02	7,048.42	223.89	224.94	89.30	1,724.53	-8,015.12	4,602.71	4,154.23	448.48	10.263		
15,400.00	7,104.50	14,904.02	7,048.13	226.70	227.76	89.30	1,723.78	-8,115.11	4,602.54	4,148.41	454.13	10.135		
15,450.58	7,104.22	14,946.56	7,047.99	228.12	228.96	89.30	1,723.39	-8,165.69	4,602.46	4,145.70	456.76	10.076		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 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	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)		
15,491.56	7,104.00	14,942.37	7,048.00	229.28	228.85	89.30	1,723.43	-8,161.50	4,602.61	4,144.87	457.75	10.055 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 31C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.48	400.00	3.34	400.02					
100.00	100.00	102.00	100.00	3.28	3.29	0.48	400.00	3.34	400.02	393.45	6.57	60.887		
200.00	200.00	202.00	200.00	3.34	3.34	0.48	400.00	3.34	400.02	393.34	6.68	59.922	CC, ES	
300.00	299.98	301.98	299.98	3.44	3.45	177.35	400.00	3.34	401.76	394.87	6.89	58.331		
400.00	399.84	401.84	399.84	3.59	3.61	177.38	400.00	3.34	406.99	399.79	7.20	56.535		
500.00	499.45	501.45	499.45	3.79	3.81	177.43	400.00	3.34	415.69	408.09	7.60	54.684		
600.00	598.70	600.70	598.70	4.03	4.05	177.49	400.00	3.34	427.87	419.79	8.08	52.937		
700.00	697.47	697.08	685.07	4.31	4.28	177.49	401.22	2.82	444.88	436.28	8.60	51.735		
800.00	795.62	771.97	769.86	4.64	4.53	177.36	404.76	1.33	468.00	458.84	9.16	51.079		
900.00	893.06	865.46	863.16	5.00	4.82	177.16	410.36	-1.04	496.25	486.46	9.78	50.724		
1,000.00	989.64	960.32	957.81	5.40	5.14	176.98	416.09	-3.46	527.87	517.43	10.45	50.537		
1,100.00	1,085.27	1,054.01	1,051.31	5.83	5.46	176.84	421.75	-5.85	562.79	551.65	11.13	50.544		
1,200.00	1,179.82	1,146.44	1,143.53	6.29	5.79	176.72	427.34	-8.21	600.94	589.10	11.85	50.718		
1,300.00	1,273.17	1,237.48	1,234.38	6.79	6.12	176.62	432.84	-10.53	642.30	629.72	12.58	51.056		
1,400.00	1,365.21	1,327.03	1,323.73	7.33	6.46	176.54	438.25	-12.82	686.80	673.48	13.33	51.539		
1,500.00	1,456.49	1,415.70	1,412.21	7.89	6.80	176.53	443.60	-15.08	733.04	718.96	14.08	52.064		
1,600.00	1,547.76	1,504.37	1,500.69	8.46	7.15	176.53	448.96	-17.34	779.27	764.43	14.84	52.509		
1,700.00	1,639.04	1,606.96	1,589.17	9.05	7.55	176.52	454.32	-19.60	825.51	809.84	15.67	52.674		
1,800.00	1,730.31	1,681.70	1,677.65	9.65	7.85	176.52	459.67	-21.87	871.74	855.34	16.41	53.138		
1,900.00	1,821.58	1,770.37	1,766.12	10.26	8.21	176.51	465.03	-24.13	917.98	900.78	17.20	53.357		
2,000.00	1,912.85	1,859.04	1,854.60	10.87	8.57	176.51	470.38	-26.39	964.22	946.20	18.01	53.528		
2,100.00	2,004.13	1,947.71	1,943.08	11.49	8.93	176.50	475.74	-28.65	1,010.45	991.62	18.83	53.662		
2,200.00	2,095.40	2,036.38	2,031.56	12.11	9.30	176.50	481.10	-30.92	1,056.69	1,037.04	19.65	53.765		
2,300.00	2,186.67	2,125.05	2,120.04	12.74	9.66	176.50	486.45	-33.18	1,102.93	1,082.44	20.48	53.843		
2,400.00	2,277.95	2,213.72	2,208.51	13.38	10.03	176.50	491.81	-35.44	1,149.16	1,127.84	21.32	53.901		
2,500.00	2,369.22	2,302.39	2,296.99	14.01	10.41	176.49	497.17	-37.70	1,195.40	1,173.24	22.16	53.943		
2,600.00	2,460.49	2,408.94	2,385.47	14.65	10.85	176.49	502.52	-39.97	1,241.63	1,218.55	23.08	53.796		
2,700.00	2,551.77	2,479.73	2,473.95	15.29	11.15	176.49	507.88	-42.23	1,287.87	1,264.02	23.85	53.990		
2,800.00	2,643.04	2,568.39	2,562.43	15.93	11.53	176.49	513.24	-44.49	1,334.11	1,309.40	24.71	54.000		
2,900.00	2,734.31	2,657.06	2,650.91	16.58	11.90	176.49	518.59	-46.75	1,380.34	1,354.78	25.56	54.002		
3,000.00	2,825.58	2,745.73	2,739.38	17.23	12.28	176.48	523.95	-49.02	1,426.58	1,400.16	26.42	53.998		
3,100.00	2,916.86	2,834.40	2,827.86	17.87	12.66	176.48	529.31	-51.28	1,472.82	1,445.54	27.28	53.990		
3,200.00	3,008.13	2,923.07	2,916.34	18.52	13.04	176.48	534.66	-53.54	1,519.05	1,490.91	28.14	53.977		
3,300.00	3,099.40	3,011.74	3,004.82	19.17	13.42	176.48	540.02	-55.80	1,565.29	1,536.28	29.01	53.962		
3,400.00	3,190.68	3,100.41	3,093.30	19.83	13.80	176.48	545.37	-58.07	1,611.53	1,581.65	29.87	53.944		
3,500.00	3,281.95	3,189.08	3,181.77	20.48	14.18	176.48	550.73	-60.33	1,657.76	1,627.02	30.74	53.923		
3,600.00	3,373.22	3,277.75	3,270.25	21.13	14.56	176.47	556.09	-62.59	1,704.00	1,672.38	31.61	53.902		
3,700.00	3,464.49	3,366.42	3,358.73	21.79	14.95	176.47	561.44	-64.85	1,750.23	1,717.75	32.48	53.878		
3,800.00	3,555.77	3,455.09	3,447.21	22.44	15.33	176.47	566.80	-67.12	1,796.47	1,763.11	33.36	53.854		
3,900.00	3,647.04	3,543.75	3,535.69	23.10	15.71	176.47	572.16	-69.38	1,842.71	1,808.47	34.23	53.829		
4,000.00	3,738.31	3,632.42	3,624.17	23.75	16.10	176.47	577.51	-71.64	1,888.94	1,853.84	35.11	53.804		
4,100.00	3,829.59	3,721.09	3,712.64	24.41	16.48	176.47	582.87	-73.90	1,935.18	1,899.19	35.98	53.778		
4,200.00	3,920.86	3,809.76	3,801.12	25.07	16.87	176.47	588.23	-76.17	1,981.42	1,944.55	36.86	53.752		
4,300.00	4,012.13	3,901.57	3,889.60	25.73	17.26	176.47	593.58	-78.43	2,027.65	1,989.90	37.75	53.706		
4,400.00	4,103.41	3,987.10	3,978.08	26.38	17.64	176.47	598.94	-80.69	2,073.89	2,035.27	38.62	53.699		
4,500.00	4,194.68	4,075.77	4,066.56	27.04	18.02	176.47	604.30	-82.95	2,120.12	2,080.62	39.50	53.672		
4,600.00	4,285.95	4,164.44	4,155.04	27.70	18.41	176.47	609.65	-85.22	2,166.36	2,125.98	40.38	53.646		
4,700.00	4,377.22	4,253.11	4,243.51	28.36	18.79	176.46	615.01	-87.48	2,212.60	2,171.33	41.26	53.620		
4,800.00	4,468.50	4,341.78	4,331.99	29.02	19.18	176.46	620.36	-89.74	2,258.83	2,216.69	42.15	53.594		
4,900.00	4,559.77	4,430.44	4,420.47	29.68	19.57	176.46	625.72	-92.00	2,305.07	2,262.04	43.03	53.568		
5,000.00	4,651.04	4,519.11	4,508.95	30.34	19.95	176.46	631.08	-94.27	2,351.31	2,307.39	43.92	53.542		
5,100.00	4,742.32	4,607.78	4,597.43	31.00	20.34	176.46	636.43	-96.53	2,397.54	2,352.74	44.80	53.517		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 31C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,703.55	4,685.90	31.66	20.76	176.46	641.79	-98.79	2,443.78	2,398.06	45.72	53.455		
5,300.00	4,924.86	4,785.12	4,774.38	32.32	21.12	176.46	647.15	-101.05	2,490.02	2,443.44	46.57	53.467		
5,400.00	5,016.13	4,873.79	4,862.86	32.99	21.50	176.46	652.50	-103.32	2,536.25	2,488.79	47.46	53.443		
5,500.00	5,107.41	4,962.46	4,951.34	33.65	21.89	176.46	657.86	-105.58	2,582.49	2,534.14	48.34	53.419		
5,600.00	5,198.68	5,051.13	5,039.82	34.31	22.28	176.46	663.22	-107.84	2,628.72	2,579.49	49.23	53.395		
5,700.00	5,289.95	5,139.80	5,128.30	34.97	22.67	176.46	668.57	-110.11	2,674.96	2,624.84	50.12	53.371		
5,800.00	5,381.23	5,228.47	5,216.77	35.63	23.06	176.46	673.93	-112.37	2,721.20	2,670.19	51.01	53.348		
5,900.00	5,472.50	5,317.14	5,305.25	36.30	23.45	176.46	679.29	-114.63	2,767.43	2,715.54	51.90	53.326		
6,000.00	5,563.77	5,405.80	5,393.73	36.96	23.84	176.46	684.64	-116.89	2,813.67	2,760.88	52.79	53.303		
6,100.00	5,655.05	5,505.53	5,482.21	37.62	24.27	176.46	690.00	-119.16	2,859.91	2,806.18	53.72	53.233		
6,200.00	5,746.32	5,583.14	5,570.69	38.28	24.61	176.46	695.35	-121.42	2,906.14	2,851.58	54.57	53.259		
6,300.00	5,837.59	5,671.81	5,659.16	38.95	25.00	176.46	700.71	-123.68	2,952.38	2,896.92	55.46	53.238		
6,400.00	5,928.86	5,760.48	5,747.64	39.61	25.39	176.46	706.07	-125.94	2,998.62	2,942.27	56.35	53.216		
6,500.00	6,020.14	5,849.15	5,836.12	40.27	25.78	176.46	711.42	-128.21	3,044.85	2,987.61	57.24	53.196		
6,600.00	6,111.41	5,937.82	5,924.60	40.94	26.17	176.46	716.78	-130.47	3,091.09	3,032.96	58.13	53.175		
6,700.00	6,202.68	6,026.49	6,013.08	41.60	26.56	176.45	722.14	-132.73	3,137.32	3,078.30	59.02	53.155		
6,800.00	6,293.96	6,115.16	6,101.56	42.26	26.95	176.45	727.49	-134.99	3,183.56	3,123.65	59.91	53.135		
6,900.00	6,385.23	6,203.83	6,190.03	42.93	27.34	176.45	732.85	-137.26	3,229.80	3,168.99	60.81	53.115		
7,000.00	6,476.50	6,307.51	6,278.51	43.59	27.79	176.45	738.21	-139.52	3,276.03	3,214.27	61.77	53.039		
7,100.00	6,567.77	6,381.16	6,366.99	44.25	28.12	176.45	743.56	-141.78	3,322.27	3,259.68	62.59	53.076		
7,200.00	6,658.64	6,469.59	6,455.22	44.91	28.51	155.44	748.90	-144.04	3,368.35	3,304.87	63.48	53.058		
7,300.00	6,747.14	6,556.11	6,541.56	45.52	28.89	136.20	754.13	-146.24	3,413.47	3,349.12	64.35	53.047		
7,400.00	6,831.10	6,638.59	6,623.86	46.07	29.25	121.99	759.11	-148.35	3,456.78	3,391.63	65.16	53.054		
7,500.00	6,908.46	6,726.37	6,711.12	46.54	29.64	111.73	764.43	-155.56	3,497.56	3,431.55	66.01	52.989		
7,600.00	6,977.30	6,823.55	6,805.54	46.95	30.07	104.28	770.26	-177.40	3,534.88	3,467.92	66.95	52.795		
7,700.00	7,035.93	6,933.16	6,906.61	47.30	30.56	98.94	776.60	-218.96	3,567.85	3,499.79	68.06	52.424		
7,800.00	7,082.92	7,059.80	7,012.50	47.59	31.15	95.28	783.40	-287.70	3,595.56	3,526.17	69.40	51.812		
7,900.00	7,117.09	7,208.51	7,116.58	47.84	31.96	93.00	790.31	-393.22	3,617.07	3,545.96	71.11	50.863		
8,000.00	7,137.62	7,382.52	7,203.49	48.06	33.23	91.87	796.44	-543.22	3,631.37	3,557.93	73.44	49.450		
8,100.00	7,143.99	7,578.58	7,248.91	48.28	35.22	91.65	800.30	-733.11	3,637.51	3,560.93	76.57	47.505		
8,200.00	7,143.45	7,706.17	7,250.73	48.53	36.82	91.69	801.16	-860.65	3,638.77	3,559.47	79.29	45.890		
8,300.00	7,142.91	7,806.16	7,250.36	48.89	38.26	91.69	801.73	-960.64	3,639.92	3,557.94	81.99	44.397		
8,400.00	7,142.37	7,906.16	7,250.00	49.40	39.85	91.69	802.30	-1,060.63	3,641.08	3,556.10	84.98	42.846		
8,500.00	7,141.83	8,006.15	7,249.63	50.12	41.58	91.69	802.87	-1,160.62	3,642.24	3,554.00	88.24	41.275		
8,600.00	7,141.29	8,106.14	7,249.26	51.08	43.43	91.69	803.43	-1,260.61	3,643.40	3,551.66	91.75	39.712		
8,700.00	7,140.75	8,206.14	7,248.90	52.30	45.38	91.70	804.00	-1,360.60	3,644.56	3,549.10	95.46	38.178		
8,800.00	7,140.21	8,306.13	7,248.53	53.75	47.43	91.70	804.57	-1,460.59	3,645.72	3,546.35	99.37	36.689		
8,900.00	7,139.67	8,406.12	7,248.16	55.40	49.56	91.70	805.13	-1,560.59	3,646.88	3,543.44	103.44	35.255		
9,000.00	7,139.12	8,506.12	7,247.80	57.20	51.76	91.70	805.70	-1,660.58	3,648.04	3,540.37	107.67	33.883		
9,100.00	7,138.58	8,606.11	7,247.43	59.13	54.02	91.71	806.27	-1,760.57	3,649.20	3,537.18	112.02	32.576		
9,200.00	7,138.04	8,706.10	7,247.07	61.15	56.33	91.71	806.83	-1,860.56	3,650.36	3,533.86	116.50	31.335		
9,300.00	7,137.50	8,806.10	7,246.70	63.26	58.70	91.71	807.40	-1,960.55	3,651.52	3,530.45	121.07	30.160		
9,400.00	7,136.96	8,906.09	7,246.33	65.44	61.10	91.71	807.97	-2,060.54	3,652.68	3,526.93	125.74	29.049		
9,500.00	7,136.42	9,006.08	7,245.97	67.68	63.55	91.71	808.53	-2,160.53	3,653.84	3,523.34	130.50	27.999		
9,600.00	7,135.88	9,106.08	7,245.60	69.97	66.03	91.72	809.10	-2,260.52	3,655.00	3,519.67	135.33	27.009		
9,700.00	7,135.34	9,206.07	7,245.24	72.31	68.53	91.72	809.67	-2,360.51	3,656.16	3,515.94	140.22	26.074		
9,800.00	7,134.80	9,306.06	7,244.87	74.69	71.07	91.72	810.23	-2,460.50	3,657.32	3,512.14	145.17	25.193		
9,900.00	7,134.26	9,406.06	7,244.50	77.10	73.63	91.72	810.80	-2,560.49	3,658.48	3,508.29	150.18	24.360		
10,000.00	7,133.71	9,506.05	7,244.14	79.54	76.21	91.73	811.37	-2,660.48	3,659.64	3,504.39	155.24	23.574		
10,100.00	7,133.17	9,606.04	7,243.77	82.02	78.81	91.73	811.93	-2,760.48	3,660.80	3,500.45	160.34	22.831		
10,200.00	7,132.63	9,706.04	7,243.40	84.52	81.43	91.73	812.50	-2,860.47	3,661.96	3,496.47	165.48	22.129		
10,300.00	7,132.09	9,806.03	7,243.04	87.04	84.06	91.73	813.07	-2,960.46	3,663.11	3,492.45	170.66	21.464		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 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	7,131.55	9,906.02	7,242.67	89.58	86.71	91.73	813.63	-3,060.45	3,664.27	3,488.40	175.88	20.835		
10,500.00	7,131.01	10,006.01	7,242.31	92.15	89.37	91.74	814.20	-3,160.44	3,665.43	3,484.32	181.12	20.238		
10,600.00	7,130.47	10,106.01	7,241.94	94.73	92.04	91.74	814.77	-3,260.43	3,666.59	3,480.21	186.39	19.672		
10,700.00	7,129.93	10,206.00	7,241.57	97.33	94.72	91.74	815.34	-3,360.42	3,667.75	3,476.07	191.68	19.134		
10,800.00	7,129.39	10,305.99	7,241.21	99.94	97.42	91.74	815.90	-3,460.41	3,668.91	3,471.91	197.00	18.624		
10,900.00	7,128.84	10,405.99	7,240.84	102.56	100.12	91.75	816.47	-3,560.40	3,670.07	3,467.73	202.34	18.138		
11,000.00	7,128.30	10,505.98	7,240.48	105.20	102.83	91.75	817.04	-3,660.39	3,671.23	3,463.53	207.70	17.675		
11,100.00	7,127.76	10,605.97	7,240.11	107.85	105.55	91.75	817.60	-3,760.38	3,672.39	3,459.31	213.08	17.234		
11,200.00	7,127.22	10,705.97	7,239.74	110.51	108.28	91.75	818.17	-3,860.38	3,673.55	3,455.07	218.48	16.814		
11,300.00	7,126.68	10,805.96	7,239.38	113.18	111.02	91.75	818.74	-3,960.37	3,674.71	3,450.82	223.89	16.413		
11,400.00	7,126.14	10,905.95	7,239.01	115.86	113.76	91.76	819.30	-4,060.36	3,675.87	3,446.55	229.32	16.029		
11,500.00	7,125.60	11,005.95	7,238.64	118.55	116.50	91.76	819.87	-4,160.35	3,677.03	3,442.27	234.76	15.663		
11,600.00	7,125.06	11,105.94	7,238.28	121.25	119.26	91.76	820.44	-4,260.34	3,678.19	3,437.97	240.22	15.312		
11,700.00	7,124.52	11,205.93	7,237.91	123.95	122.01	91.76	821.00	-4,360.33	3,679.35	3,433.67	245.68	14.976		
11,800.00	7,123.97	11,305.93	7,237.55	126.66	124.77	91.76	821.57	-4,460.32	3,680.51	3,429.35	251.16	14.654		
11,900.00	7,123.43	11,405.92	7,237.18	129.38	127.54	91.77	822.14	-4,560.31	3,681.67	3,425.02	256.65	14.345		
12,000.00	7,122.89	11,505.91	7,236.81	132.10	130.31	91.77	822.70	-4,660.30	3,682.83	3,420.68	262.14	14.049		
12,100.00	7,122.35	11,605.91	7,236.45	134.83	133.08	91.77	823.27	-4,760.29	3,683.99	3,416.34	267.65	13.764		
12,200.00	7,121.81	11,705.90	7,236.08	137.56	135.86	91.77	823.84	-4,860.28	3,685.15	3,411.98	273.17	13.491		
12,300.00	7,121.27	11,805.89	7,235.72	140.30	138.64	91.78	824.40	-4,960.28	3,686.31	3,407.62	278.69	13.227		
12,400.00	7,120.73	11,905.89	7,235.35	143.05	141.43	91.78	824.97	-5,060.27	3,687.47	3,403.25	284.22	12.974		
12,500.00	7,120.19	12,005.88	7,234.98	145.80	144.22	91.78	825.54	-5,160.26	3,688.63	3,398.87	289.76	12.730		
12,600.00	7,119.65	12,105.87	7,234.62	148.55	147.01	91.78	826.10	-5,260.25	3,689.79	3,394.48	295.30	12.495		
12,700.00	7,119.10	12,205.86	7,234.25	151.30	149.80	91.78	826.67	-5,360.24	3,690.95	3,390.09	300.85	12.268		
12,800.00	7,118.56	12,305.86	7,233.88	154.07	152.60	91.79	827.24	-5,460.23	3,692.10	3,385.69	306.41	12.049		
12,900.00	7,118.02	12,405.85	7,233.52	156.83	155.39	91.79	827.81	-5,560.22	3,693.26	3,381.29	311.98	11.838		
13,000.00	7,117.48	12,505.84	7,233.15	159.60	158.19	91.79	828.37	-5,660.21	3,694.42	3,376.88	317.54	11.634		
13,100.00	7,116.94	12,605.84	7,232.79	162.37	161.00	91.79	828.94	-5,760.20	3,695.58	3,372.46	323.12	11.437		
13,200.00	7,116.40	12,705.83	7,232.42	165.14	163.80	91.80	829.51	-5,860.19	3,696.74	3,368.05	328.70	11.247		
13,300.00	7,115.86	12,805.82	7,232.05	167.92	166.61	91.80	830.07	-5,960.18	3,697.90	3,363.62	334.28	11.062		
13,400.00	7,115.32	12,905.82	7,231.69	170.70	169.42	91.80	830.64	-6,060.17	3,699.06	3,359.19	339.87	10.884		
13,500.00	7,114.78	13,005.81	7,231.32	173.48	172.23	91.80	831.21	-6,160.17	3,700.22	3,354.76	345.46	10.711		
13,600.00	7,114.24	13,105.80	7,230.95	176.26	175.04	91.80	831.77	-6,260.16	3,701.38	3,350.32	351.06	10.543		
13,700.00	7,113.69	13,205.80	7,230.59	179.05	177.85	91.81	832.34	-6,360.15	3,702.54	3,345.88	356.66	10.381		
13,800.00	7,113.15	13,305.79	7,230.22	181.84	180.67	91.81	832.91	-6,460.14	3,703.70	3,341.44	362.26	10.224		
13,900.00	7,112.61	13,405.78	7,229.86	184.63	183.48	91.81	833.47	-6,560.13	3,704.86	3,336.99	367.87	10.071		
14,000.00	7,112.07	13,505.78	7,229.49	187.42	186.30	91.81	834.04	-6,660.12	3,706.02	3,332.54	373.48	9.923		
14,100.00	7,111.53	13,605.77	7,229.12	190.22	189.12	91.81	834.61	-6,760.11	3,707.18	3,328.09	379.09	9.779		
14,200.00	7,110.99	13,705.76	7,228.76	193.01	191.94	91.82	835.17	-6,860.10	3,708.34	3,323.63	384.71	9.639		
14,300.00	7,110.45	13,805.76	7,228.39	195.81	194.76	91.82	835.74	-6,960.09	3,709.50	3,319.17	390.33	9.503		
14,400.00	7,109.91	13,905.75	7,228.03	198.61	197.59	91.82	836.31	-7,060.08	3,710.66	3,314.71	395.95	9.371		
14,500.00	7,109.37	14,005.74	7,227.66	201.42	200.41	91.82	836.87	-7,160.08	3,711.82	3,310.24	401.58	9.243		
14,600.00	7,108.82	14,105.74	7,227.29	204.22	203.24	91.82	837.44	-7,260.07	3,712.98	3,305.77	407.21	9.118		
14,700.00	7,108.28	14,205.73	7,226.93	207.03	206.06	91.83	838.01	-7,360.06	3,714.14	3,301.30	412.84	8.997		
14,800.00	7,107.74	14,305.72	7,226.56	209.83	208.89	91.83	838.57	-7,460.05	3,715.30	3,296.83	418.47	8.878		
14,900.00	7,107.20	14,405.71	7,226.19	212.64	211.72	91.83	839.14	-7,560.04	3,716.46	3,292.35	424.10	8.763		
15,000.00	7,106.66	14,505.71	7,225.83	215.45	214.55	91.83	839.71	-7,660.03	3,717.62	3,287.88	429.74	8.651		
15,100.00	7,106.12	14,605.70	7,225.46	218.26	217.38	91.84	840.28	-7,760.02	3,718.78	3,283.40	435.38	8.541		
15,200.00	7,105.58	14,705.69	7,225.10	221.07	220.21	91.84	840.84	-7,860.01	3,719.94	3,278.92	441.02	8.435		
15,300.00	7,105.04	14,805.69	7,224.73	223.89	223.04	91.84	841.41	-7,960.00	3,721.10	3,274.43	446.67	8.331		
15,400.00	7,104.50	14,905.68	7,224.36	226.70	225.87	91.84	841.98	-8,059.99	3,722.26	3,269.95	452.31	8.229		
15,491.56	7,104.00	14,997.24	7,224.03	229.28	228.46	91.84	842.49	-8,151.55	3,723.32	3,265.84	457.48	8.139 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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 33C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.48	100.18	0.83	100.18					
100.00	100.00	101.00	100.00	3.28	3.28	0.48	100.18	0.83	100.18	93.61	6.57	15.249		
200.00	200.00	201.04	200.04	3.34	3.34	0.48	100.18	0.83	100.18	93.50	6.67	15.008		
300.00	299.98	304.65	303.62	3.44	3.45	177.31	98.27	0.68	100.08	93.19	6.90	14.512		
400.00	399.84	408.25	407.07	3.59	3.61	177.21	92.64	0.21	99.87	92.64	7.23	13.808		
500.00	499.45	511.85	510.23	3.79	3.82	177.05	83.28	-0.57	99.53	91.86	7.67	12.970		
600.00	598.70	615.42	612.97	4.03	4.08	176.82	70.21	-1.66	99.08	90.88	8.21	12.076		
700.00	697.47	718.98	715.15	4.31	4.37	176.53	53.46	-3.05	98.52	89.71	8.81	11.184		
800.00	795.62	822.51	816.62	4.64	4.72	176.16	33.04	-4.75	97.84	88.37	9.47	10.329		
900.00	893.06	926.01	917.26	5.00	5.10	175.73	8.99	-6.75	97.05	86.87	10.18	9.531		
989.63	979.66	1,017.83	1,005.80	5.35	5.47	175.29	-15.26	-8.77	96.37	85.53	10.84	8.889 CC		
1,000.00	989.64	1,028.21	1,015.79	5.40	5.51	175.24	-18.08	-9.00	96.39	85.47	10.92	8.829 ES		
1,100.00	1,085.27	1,128.18	1,111.96	5.83	5.94	174.89	-45.26	-11.26	98.49	86.83	11.67	8.441		
1,200.00	1,179.82	1,228.02	1,208.01	6.29	6.39	174.73	-72.41	-13.52	104.07	91.61	12.46	8.351		
1,300.00	1,273.17	1,327.60	1,303.82	6.79	6.86	174.74	-99.49	-15.77	113.12	99.82	13.29	8.510		
1,400.00	1,365.21	1,426.81	1,399.26	7.33	7.33	174.89	-126.47	-18.01	125.62	111.46	14.15	8.875		
1,500.00	1,456.49	1,525.77	1,494.46	7.89	7.81	175.10	-153.38	-20.25	140.04	124.99	15.04	9.310		
1,600.00	1,547.76	1,624.72	1,589.66	8.46	8.30	175.27	-180.29	-22.49	154.46	138.52	15.94	9.687		
1,700.00	1,639.04	1,723.67	1,684.86	9.05	8.80	175.41	-207.20	-24.73	168.89	152.02	16.87	10.014		
1,800.00	1,730.31	1,822.63	1,780.06	9.65	9.30	175.53	-234.10	-26.96	183.31	165.51	17.80	10.298		
1,900.00	1,821.58	1,921.58	1,875.25	10.26	9.81	175.64	-261.01	-29.20	197.74	178.99	18.75	10.546		
2,000.00	1,912.85	2,020.53	1,970.45	10.87	10.32	175.72	-287.92	-31.44	212.17	192.46	19.71	10.765		
2,100.00	2,004.13	2,119.49	2,065.65	11.49	10.84	175.80	-314.83	-33.68	226.60	205.92	20.68	10.959		
2,200.00	2,095.40	2,218.44	2,160.85	12.11	11.35	175.87	-341.74	-35.92	241.02	219.37	21.65	11.131		
2,300.00	2,186.67	2,317.39	2,256.05	12.74	11.88	175.93	-368.64	-38.15	255.45	232.82	22.64	11.285		
2,400.00	2,277.95	2,416.35	2,351.25	13.38	12.40	175.98	-395.55	-40.39	269.88	246.26	23.63	11.423		
2,500.00	2,369.22	2,515.30	2,446.44	14.01	12.92	176.03	-422.46	-42.63	284.31	259.69	24.62	11.548		
2,600.00	2,460.49	2,614.25	2,541.64	14.65	13.45	176.08	-449.37	-44.87	298.74	273.12	25.62	11.661		
2,700.00	2,551.77	2,713.21	2,636.84	15.29	13.98	176.12	-476.28	-47.10	313.17	286.55	26.62	11.764		
2,800.00	2,643.04	2,812.16	2,732.04	15.93	14.51	176.15	-503.19	-49.34	327.60	299.97	27.63	11.857		
2,900.00	2,734.31	2,911.11	2,827.24	16.58	15.04	176.18	-530.09	-51.58	342.03	313.39	28.64	11.943		
3,000.00	2,825.58	3,010.07	2,922.43	17.23	15.57	176.21	-557.00	-53.82	356.46	326.81	29.65	12.021		
3,100.00	2,916.86	3,109.02	3,017.63	17.87	16.10	176.24	-583.91	-56.06	370.89	340.22	30.67	12.094		
3,200.00	3,008.13	3,207.97	3,112.83	18.52	16.64	176.27	-610.82	-58.29	385.32	353.64	31.69	12.161		
3,300.00	3,099.40	3,306.93	3,208.03	19.17	17.17	176.29	-637.73	-60.53	399.75	367.05	32.71	12.222		
3,400.00	3,190.68	3,405.88	3,303.23	19.83	17.71	176.32	-664.64	-62.77	414.18	380.45	33.73	12.280		
3,500.00	3,281.95	3,504.83	3,398.42	20.48	18.25	176.34	-691.54	-65.01	428.61	393.86	34.75	12.333		
3,600.00	3,373.22	3,603.79	3,493.62	21.13	18.78	176.36	-718.45	-67.24	443.04	407.26	35.78	12.383		
3,700.00	3,464.49	3,702.74	3,588.82	21.79	19.32	176.37	-745.36	-69.48	457.47	420.67	36.81	12.429		
3,800.00	3,555.77	3,801.69	3,684.02	22.44	19.86	176.39	-772.27	-71.72	471.90	434.07	37.84	12.472		
3,900.00	3,647.04	3,900.65	3,779.22	23.10	20.40	176.41	-799.18	-73.96	486.33	447.47	38.87	12.513		
4,000.00	3,738.31	4,000.40	3,874.42	23.75	20.94	176.42	-826.08	-76.20	500.77	460.86	39.90	12.550		
4,100.00	3,829.59	4,101.45	3,969.61	24.41	21.49	176.44	-852.99	-78.43	515.20	474.25	40.94	12.583		
4,200.00	3,920.86	4,202.49	4,064.81	25.07	22.04	176.45	-879.90	-80.67	529.63	487.64	41.99	12.614		
4,300.00	4,012.13	4,296.46	4,160.01	25.73	22.56	176.46	-906.81	-82.91	544.06	501.06	43.00	12.653		
4,400.00	4,103.41	4,404.59	4,255.21	26.38	23.15	176.48	-933.72	-85.15	558.49	514.41	44.08	12.670		
4,500.00	4,194.68	4,505.64	4,350.41	27.04	23.70	176.49	-960.63	-87.38	572.92	527.79	45.12	12.696		
4,600.00	4,285.95	4,606.68	4,445.60	27.70	24.25	176.50	-987.53	-89.62	587.35	541.18	46.17	12.721		
4,700.00	4,377.22	4,707.73	4,540.80	28.36	24.80	176.51	-1,014.44	-91.86	601.78	554.56	47.22	12.744		
4,800.00	4,468.50	4,808.78	4,636.00	29.02	25.36	176.52	-1,041.35	-94.10	616.21	567.94	48.27	12.766		
4,900.00	4,559.77	4,909.82	4,731.20	29.68	25.91	176.53	-1,068.26	-96.33	630.64	581.33	49.32	12.787		
5,000.00	4,651.04	4,989.13	4,826.40	30.34	26.35	176.54	-1,095.17	-98.57	645.07	594.81	50.26	12.835		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 33C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	5,088.08	4,921.59	31.00	26.89	176.55	-1,122.07	-100.81	659.50	608.20	51.30	12.856		
5,200.00	4,833.59	5,187.04	5,016.79	31.66	27.43	176.55	-1,148.98	-103.05	673.94	621.59	52.34	12.876		
5,300.00	4,924.86	5,285.99	5,111.99	32.32	27.97	176.56	-1,175.89	-105.29	688.37	634.98	53.38	12.895		
5,400.00	5,016.13	5,384.94	5,207.19	32.99	28.52	176.57	-1,202.80	-107.52	702.80	648.37	54.42	12.914		
5,500.00	5,107.41	5,483.90	5,302.39	33.65	29.06	176.58	-1,229.71	-109.76	717.23	661.76	55.46	12.931		
5,600.00	5,198.68	5,582.85	5,397.59	34.31	29.60	176.58	-1,256.62	-112.00	731.66	675.15	56.51	12.948		
5,700.00	5,289.95	5,681.80	5,492.78	34.97	30.15	176.59	-1,283.52	-114.24	746.09	688.54	57.55	12.964		
5,800.00	5,381.23	5,780.76	5,587.98	35.63	30.69	176.60	-1,310.43	-116.47	760.52	701.93	58.59	12.980		
5,900.00	5,472.50	5,879.71	5,683.18	36.30	31.23	176.60	-1,337.34	-118.71	774.95	715.32	59.64	12.995		
6,000.00	5,563.77	5,978.66	5,778.38	36.96	31.78	176.61	-1,364.25	-120.95	789.38	728.70	60.68	13.009		
6,100.00	5,655.05	6,077.62	5,873.58	37.62	32.32	176.62	-1,391.16	-123.19	803.81	742.09	61.72	13.023		
6,200.00	5,746.32	6,176.57	5,968.77	38.28	32.86	176.62	-1,418.06	-125.43	818.25	755.48	62.77	13.036		
6,300.00	5,837.59	6,275.52	6,063.97	38.95	33.41	176.63	-1,444.97	-127.66	832.68	768.86	63.81	13.049		
6,400.00	5,928.86	6,374.48	6,159.17	39.61	33.95	176.63	-1,471.88	-129.90	847.11	782.25	64.86	13.061		
6,500.00	6,020.14	6,473.43	6,254.37	40.27	34.50	176.64	-1,498.79	-132.14	861.54	795.63	65.90	13.073		
6,600.00	6,111.41	6,572.38	6,349.57	40.94	35.04	176.64	-1,525.70	-134.38	875.97	809.02	66.95	13.084		
6,700.00	6,202.68	6,671.34	6,444.76	41.60	35.59	176.65	-1,552.61	-136.61	890.40	822.41	67.99	13.095		
6,800.00	6,293.96	6,770.29	6,539.96	42.26	36.13	176.65	-1,579.51	-138.85	904.83	835.79	69.04	13.106		
6,900.00	6,385.23	6,869.24	6,635.16	42.93	36.68	176.66	-1,606.42	-141.09	919.26	849.18	70.09	13.116		
7,000.00	6,476.50	6,967.99	6,729.81	43.59	37.21	176.63	-1,633.22	-148.70	933.70	862.56	71.14	13.125		
7,100.00	6,567.77	7,062.99	6,818.76	44.25	37.71	175.16	-1,658.50	-170.09	948.41	876.23	72.18	13.139		
7,200.00	6,658.64	7,152.66	6,899.00	44.91	38.13	155.42	-1,681.41	-202.69	963.86	890.69	73.17	13.173		
7,300.00	6,747.14	7,239.37	6,971.65	45.52	38.50	137.57	-1,702.26	-245.05	979.57	905.50	74.08	13.224		
7,400.00	6,831.10	7,323.71	7,036.35	46.07	38.83	124.49	-1,720.91	-295.74	994.97	920.09	74.88	13.287		
7,500.00	6,908.46	7,406.14	7,092.80	46.54	39.12	115.09	-1,737.29	-353.44	1,009.54	933.94	75.60	13.354		
7,600.00	6,977.30	7,487.04	7,140.76	46.95	39.38	108.29	-1,751.32	-417.00	1,022.76	946.49	76.28	13.409		
7,700.00	7,035.93	7,566.76	7,180.05	47.30	39.61	103.35	-1,762.93	-485.32	1,034.22	957.23	76.98	13.434		
7,800.00	7,082.92	7,645.57	7,210.51	47.59	39.84	99.83	-1,772.08	-557.37	1,043.54	965.73	77.81	13.412		
7,900.00	7,117.09	7,723.71	7,232.03	47.84	40.08	97.47	-1,778.72	-632.16	1,050.42	971.58	78.84	13.323		
8,000.00	7,137.62	7,800.00	7,244.37	48.06	40.37	96.10	-1,782.77	-707.28	1,054.67	974.57	80.10	13.167		
8,100.00	7,143.99	7,880.50	7,247.96	48.28	40.76	95.65	-1,784.39	-787.63	1,056.14	974.40	81.74	12.921		
8,200.00	7,143.45	7,980.50	7,247.36	48.53	41.46	95.65	-1,784.97	-887.63	1,056.14	972.08	84.06	12.564		
8,300.00	7,142.91	8,080.50	7,246.76	48.89	42.45	95.64	-1,785.55	-987.63	1,056.14	969.45	86.69	12.183		
8,400.00	7,142.37	8,180.50	7,246.17	49.40	43.70	95.64	-1,786.14	-1,087.62	1,056.14	966.54	89.60	11.788		
8,500.00	7,141.83	8,280.50	7,245.57	50.12	45.16	95.64	-1,786.72	-1,187.62	1,056.13	963.37	92.76	11.385		
8,600.00	7,141.29	8,380.50	7,244.98	51.08	46.80	95.63	-1,787.30	-1,287.61	1,056.13	959.97	96.17	10.982		
8,700.00	7,140.75	8,480.50	7,244.38	52.30	48.57	95.63	-1,787.89	-1,387.61	1,056.13	956.36	99.78	10.585		
8,800.00	7,140.21	8,580.50	7,243.79	53.75	50.46	95.63	-1,788.47	-1,487.61	1,056.13	952.56	103.57	10.197		
8,900.00	7,139.67	8,680.50	7,243.19	55.40	52.45	95.63	-1,789.06	-1,587.60	1,056.13	948.59	107.54	9.821		
9,000.00	7,139.12	8,780.50	7,242.59	57.20	54.53	95.62	-1,789.64	-1,687.60	1,056.13	944.48	111.65	9.459		
9,100.00	7,138.58	8,880.50	7,242.00	59.13	56.67	95.62	-1,790.22	-1,787.60	1,056.13	940.23	115.90	9.113		
9,200.00	7,138.04	8,980.50	7,241.40	61.15	58.89	95.62	-1,790.81	-1,887.59	1,056.13	935.86	120.26	8.782		
9,300.00	7,137.50	9,080.50	7,240.81	63.26	61.15	95.61	-1,791.39	-1,987.59	1,056.12	931.39	124.73	8.467		
9,400.00	7,136.96	9,180.50	7,240.21	65.44	63.47	95.61	-1,791.98	-2,087.59	1,056.12	926.82	129.30	8.168		
9,500.00	7,136.42	9,280.50	7,239.61	67.68	65.83	95.61	-1,792.56	-2,187.58	1,056.12	922.16	133.96	7.884		
9,600.00	7,135.88	9,380.50	7,239.02	69.97	68.23	95.60	-1,793.14	-2,287.58	1,056.12	917.43	138.69	7.615		
9,700.00	7,135.34	9,480.50	7,238.42	72.31	70.67	95.60	-1,793.73	-2,387.58	1,056.12	912.63	143.49	7.360		
9,800.00	7,134.80	9,580.50	7,237.83	74.69	73.13	95.60	-1,794.31	-2,487.57	1,056.12	907.76	148.36	7.119		
9,900.00	7,134.26	9,680.50	7,237.23	77.10	75.63	95.60	-1,794.89	-2,587.57	1,056.12	902.84	153.28	6.890		
10,000.00	7,133.71	9,780.50	7,236.64	79.54	78.15	95.59	-1,795.48	-2,687.57	1,056.12	897.87	158.25	6.674		
10,100.00	7,133.17	9,880.50	7,236.04	82.02	80.69	95.59	-1,796.06	-2,787.56	1,056.11	892.84	163.27	6.468		
10,200.00	7,132.63	9,980.50	7,235.44	84.52	83.25	95.59	-1,796.65	-2,887.56	1,056.11	887.78	168.33	6.274		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 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	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	7,132.09	10,080.50	7,234.85	87.04	85.84	95.58	-1,797.23	-2,987.56	1,056.11	882.68	173.44	6.089		
10,400.00	7,131.55	10,180.50	7,234.25	89.58	88.44	95.58	-1,797.81	-3,087.55	1,056.11	877.54	178.57	5.914		
10,500.00	7,131.01	10,280.50	7,233.66	92.15	91.05	95.58	-1,798.40	-3,187.55	1,056.11	872.37	183.74	5.748		
10,600.00	7,130.47	10,380.50	7,233.06	94.73	93.68	95.57	-1,798.98	-3,287.54	1,056.11	867.16	188.94	5.590		
10,700.00	7,129.93	10,480.50	7,232.46	97.33	96.32	95.57	-1,799.56	-3,387.54	1,056.11	861.94	194.17	5.439		
10,800.00	7,129.39	10,580.50	7,231.87	99.94	98.98	95.57	-1,800.15	-3,487.54	1,056.11	856.68	199.43	5.296		
10,900.00	7,128.84	10,680.50	7,231.27	102.56	101.65	95.57	-1,800.73	-3,587.53	1,056.11	851.40	204.70	5.159		
11,000.00	7,128.30	10,780.50	7,230.68	105.20	104.32	95.56	-1,801.32	-3,687.53	1,056.10	846.10	210.00	5.029		
11,100.00	7,127.76	10,880.50	7,230.08	107.85	107.01	95.56	-1,801.90	-3,787.53	1,056.10	840.78	215.32	4.905		
11,200.00	7,127.22	10,980.50	7,229.48	110.51	109.70	95.56	-1,802.48	-3,887.52	1,056.10	835.44	220.66	4.786		
11,300.00	7,126.68	11,080.50	7,228.89	113.18	112.41	95.55	-1,803.07	-3,987.52	1,056.10	830.09	226.01	4.673		
11,400.00	7,126.14	11,180.50	7,228.29	115.86	115.12	95.55	-1,803.65	-4,087.52	1,056.10	824.72	231.38	4.564		
11,500.00	7,125.60	11,280.50	7,227.70	118.55	117.84	95.55	-1,804.23	-4,187.51	1,056.10	819.33	236.77	4.460		
11,600.00	7,125.06	11,380.50	7,227.10	121.25	120.56	95.54	-1,804.82	-4,287.51	1,056.10	813.93	242.17	4.361		
11,700.00	7,124.52	11,480.50	7,226.51	123.95	123.29	95.54	-1,805.40	-4,387.51	1,056.10	808.51	247.58	4.266		
11,800.00	7,123.97	11,580.50	7,225.91	126.66	126.03	95.54	-1,805.99	-4,487.50	1,056.09	803.09	253.01	4.174		
11,900.00	7,123.43	11,680.50	7,225.31	129.38	128.77	95.54	-1,806.57	-4,587.50	1,056.09	797.65	258.45	4.086		
12,000.00	7,122.89	11,780.50	7,224.72	132.10	131.51	95.53	-1,807.15	-4,687.50	1,056.09	792.20	263.89	4.002		
12,100.00	7,122.35	11,880.50	7,224.12	134.83	134.27	95.53	-1,807.74	-4,787.49	1,056.09	786.74	269.35	3.921		
12,200.00	7,121.81	11,980.50	7,223.53	137.56	137.02	95.53	-1,808.32	-4,887.49	1,056.09	781.27	274.82	3.843		
12,300.00	7,121.27	12,080.50	7,222.93	140.30	139.78	95.52	-1,808.91	-4,987.49	1,056.09	775.79	280.30	3.768		
12,400.00	7,120.73	12,180.50	7,222.33	143.05	142.54	95.52	-1,809.49	-5,087.48	1,056.09	770.31	285.78	3.695		
12,500.00	7,120.19	12,280.50	7,221.74	145.80	145.31	95.52	-1,810.07	-5,187.48	1,056.09	764.81	291.27	3.626		
12,600.00	7,119.65	12,380.50	7,221.14	148.55	148.08	95.52	-1,810.66	-5,287.48	1,056.09	759.31	296.78	3.559		
12,700.00	7,119.10	12,480.50	7,220.55	151.30	150.86	95.51	-1,811.24	-5,387.47	1,056.08	753.80	302.28	3.494		
12,800.00	7,118.56	12,580.50	7,219.95	154.07	153.63	95.51	-1,811.82	-5,487.47	1,056.08	748.29	307.80	3.431		
12,900.00	7,118.02	12,680.50	7,219.36	156.83	156.41	95.51	-1,812.41	-5,587.46	1,056.08	742.76	313.32	3.371		
13,000.00	7,117.48	12,780.50	7,218.76	159.60	159.20	95.50	-1,812.99	-5,687.46	1,056.08	737.23	318.85	3.312		
13,100.00	7,116.94	12,880.50	7,218.16	162.37	161.98	95.50	-1,813.58	-5,787.46	1,056.08	731.70	324.38	3.256		
13,200.00	7,116.40	12,980.50	7,217.57	165.14	164.77	95.50	-1,814.16	-5,887.45	1,056.08	726.16	329.92	3.201		
13,300.00	7,115.86	13,080.50	7,216.97	167.92	167.56	95.49	-1,814.74	-5,987.45	1,056.08	720.62	335.46	3.148		
13,400.00	7,115.32	13,180.50	7,216.38	170.70	170.36	95.49	-1,815.33	-6,087.45	1,056.08	715.07	341.01	3.097		
13,500.00	7,114.78	13,280.50	7,215.78	173.48	173.15	95.49	-1,815.91	-6,187.44	1,056.08	709.51	346.56	3.047		
13,600.00	7,114.24	13,380.50	7,215.18	176.26	175.95	95.49	-1,816.49	-6,287.44	1,056.07	703.95	352.12	2.999		
13,700.00	7,113.69	13,480.50	7,214.59	179.05	178.75	95.48	-1,817.08	-6,387.44	1,056.07	698.39	357.69	2.953		
13,800.00	7,113.15	13,580.50	7,213.99	181.84	181.55	95.48	-1,817.66	-6,487.43	1,056.07	692.82	363.25	2.907		
13,900.00	7,112.61	13,680.50	7,213.40	184.63	184.35	95.48	-1,818.25	-6,587.43	1,056.07	687.25	368.82	2.863		
14,000.00	7,112.07	13,780.50	7,212.80	187.42	187.15	95.47	-1,818.83	-6,687.43	1,056.07	681.67	374.40	2.821		
14,100.00	7,111.53	13,880.50	7,212.20	190.22	189.96	95.47	-1,819.41	-6,787.42	1,056.07	676.09	379.97	2.779		
14,200.00	7,110.99	13,980.50	7,211.61	193.01	192.77	95.47	-1,820.00	-6,887.42	1,056.07	670.51	385.56	2.739		
14,300.00	7,110.45	14,080.50	7,211.01	195.81	195.58	95.46	-1,820.58	-6,987.42	1,056.07	664.93	391.14	2.700		
14,400.00	7,109.91	14,180.50	7,210.42	198.61	198.39	95.46	-1,821.16	-7,087.41	1,056.07	659.34	396.73	2.662		
14,500.00	7,109.37	14,280.50	7,209.82	201.42	201.20	95.46	-1,821.75	-7,187.41	1,056.06	653.75	402.32	2.625		
14,600.00	7,108.82	14,380.50	7,209.23	204.22	204.01	95.46	-1,822.33	-7,287.41	1,056.06	648.15	407.91	2.589		
14,700.00	7,108.28	14,480.50	7,208.63	207.03	206.83	95.45	-1,822.92	-7,387.40	1,056.06	642.55	413.51	2.554		
14,800.00	7,107.74	14,580.50	7,208.03	209.83	209.64	95.45	-1,823.50	-7,487.40	1,056.06	636.95	419.11	2.520		
14,900.00	7,107.20	14,680.50	7,207.44	212.64	212.46	95.45	-1,824.08	-7,587.39	1,056.06	631.35	424.71	2.487		
15,000.00	7,106.66	14,780.50	7,206.84	215.45	215.28	95.44	-1,824.67	-7,687.39	1,056.06	625.75	430.31	2.454		
15,100.00	7,106.12	14,880.50	7,206.25	218.26	218.10	95.44	-1,825.25	-7,787.39	1,056.06	620.14	435.92	2.423		
15,200.00	7,105.58	14,980.50	7,205.65	221.07	220.92	95.44	-1,825.83	-7,887.38	1,056.06	614.53	441.53	2.392		
15,300.00	7,105.04	15,080.50	7,205.05	223.89	223.74	95.43	-1,826.42	-7,987.38	1,056.06	608.92	447.14	2.362		
15,400.00	7,104.50	15,180.50	7,204.46	226.70	226.56	95.43	-1,827.00	-8,087.38	1,056.06	603.30	452.75	2.333		

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



Anticollision Report



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

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,477.59	7,104.08	15,258.09	7,204.00	228.88	228.75	95.43	-1,827.46	-8,164.97	1,056.05	598.94	457.11	2.310	
15,491.56	7,104.00	15,258.04	7,204.00	229.28	228.75	95.43	-1,827.46	-8,164.92	1,056.15	598.89	457.26	2.310 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 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	0.00	0.00	3.28	3.28	180.00	-20.04	0.00	20.04					
100.00	100.00	100.00	100.00	3.28	3.28	180.00	-20.04	0.00	20.04	13.47	6.57	3.050		
200.00	200.00	200.00	200.00	3.34	3.34	180.00	-20.04	0.00	20.04	13.36	6.67	3.002		
300.00	299.98	299.31	299.29	3.44	3.44	-3.18	-21.76	-0.08	20.03	13.14	6.89	2.907		
400.00	399.84	398.61	398.45	3.59	3.59	-3.31	-26.91	-0.32	19.99	12.78	7.21	2.772		
500.00	499.45	497.92	497.39	3.79	3.79	-3.53	-35.50	-0.72	19.94	12.30	7.64	2.610		
600.00	598.70	597.23	595.96	4.03	4.03	-3.84	-47.50	-1.27	19.86	11.71	8.15	2.437		
700.00	697.47	696.55	694.07	4.31	4.30	-4.24	-62.92	-1.98	19.76	11.03	8.73	2.263		
800.00	795.62	795.87	791.58	4.64	4.62	-4.73	-81.72	-2.85	19.64	10.26	9.37	2.095		
900.00	893.06	895.19	888.39	5.00	4.98	-5.32	-103.88	-3.88	19.50	9.43	10.06	1.937		
1,000.00	989.64	994.52	984.37	5.40	5.37	-6.01	-129.39	-5.06	19.34	8.54	10.80	1.791		
1,100.00	1,085.27	1,093.85	1,079.42	5.83	5.80	-6.80	-158.21	-6.39	19.16	7.60	11.57	1.657		
1,200.00	1,179.82	1,193.20	1,173.42	6.29	6.26	-7.70	-190.30	-7.87	18.97	6.61	12.37	1.534		
1,300.00	1,273.17	1,292.55	1,266.26	6.79	6.76	-8.70	-225.64	-9.51	18.77	5.57	13.20	1.422	Level 3	
1,400.00	1,365.21	1,391.91	1,357.82	7.33	7.28	-9.83	-264.17	-11.29	18.55	4.49	14.06	1.320	Level 3	
1,406.84	1,371.47	1,398.71	1,364.03	7.37	7.32	-9.91	-266.92	-11.42	18.55	4.43	14.12	1.314	Level 3, CC	
1,500.00	1,456.49	1,491.25	1,447.97	7.89	7.84	-10.22	-305.84	-13.22	19.85	4.91	14.94	1.329	Level 3	
1,600.00	1,547.76	1,590.38	1,536.44	8.46	8.44	-9.16	-350.51	-15.28	24.56	8.74	15.82	1.553		
1,700.00	1,639.04	1,689.08	1,622.92	9.05	9.06	-7.60	-398.00	-17.48	32.69	15.99	16.70	1.957		
1,800.00	1,730.31	1,787.10	1,707.15	9.65	9.71	-6.19	-448.08	-19.80	44.24	26.65	17.59	2.516		
1,900.00	1,821.58	1,885.35	1,790.09	10.26	10.39	-5.12	-500.68	-22.23	58.64	40.11	18.53	3.164		
2,000.00	1,912.85	1,984.25	1,873.41	10.87	11.09	-4.45	-553.91	-24.69	73.39	53.83	19.56	3.753		
2,100.00	2,004.13	2,083.15	1,956.73	11.49	11.80	-4.00	-607.15	-27.15	88.14	67.54	20.60	4.279		
2,200.00	2,095.40	2,182.06	2,040.05	12.11	12.53	-3.68	-660.38	-29.62	102.89	81.24	21.65	4.752		
2,300.00	2,186.67	2,280.96	2,123.37	12.74	13.25	-3.44	-713.61	-32.08	117.65	94.92	22.72	5.177		
2,400.00	2,277.95	2,379.87	2,206.69	13.38	13.99	-3.25	-766.84	-34.54	132.40	108.60	23.81	5.561		
2,500.00	2,369.22	2,478.77	2,290.02	14.01	14.73	-3.11	-820.07	-37.00	147.16	122.26	24.90	5.910		
2,600.00	2,460.49	2,577.67	2,373.34	14.65	15.48	-2.98	-873.30	-39.46	161.92	135.92	26.00	6.228		
2,700.00	2,551.77	2,676.58	2,456.66	15.29	16.23	-2.88	-926.54	-41.93	176.68	149.57	27.11	6.517		
2,800.00	2,643.04	2,775.48	2,539.98	15.93	16.98	-2.80	-979.77	-44.39	191.44	163.22	28.23	6.783		
2,900.00	2,734.31	2,874.39	2,623.30	16.58	17.74	-2.72	-1,033.00	-46.85	206.20	176.86	29.35	7.026		
3,000.00	2,825.58	2,973.29	2,706.62	17.23	18.50	-2.66	-1,086.23	-49.31	220.96	190.49	30.47	7.251		
3,100.00	2,916.86	3,072.20	2,789.94	17.87	19.26	-2.61	-1,139.46	-51.77	235.73	204.12	31.61	7.458		
3,200.00	3,008.13	3,171.10	2,873.26	18.52	20.02	-2.56	-1,192.69	-54.24	250.49	217.75	32.74	7.650		
3,300.00	3,099.40	3,270.00	2,956.58	19.17	20.79	-2.51	-1,245.93	-56.70	265.25	231.37	33.88	7.829		
3,400.00	3,190.68	3,368.91	3,039.90	19.83	21.56	-2.47	-1,299.16	-59.16	280.01	244.99	35.03	7.994		
3,500.00	3,281.95	3,467.81	3,123.23	20.48	22.32	-2.44	-1,352.39	-61.62	294.77	258.60	36.17	8.149		
3,600.00	3,373.22	3,566.72	3,206.55	21.13	23.09	-2.41	-1,405.62	-64.08	309.54	272.21	37.32	8.294		
3,700.00	3,464.49	3,665.62	3,289.87	21.79	23.87	-2.38	-1,458.85	-66.55	324.30	285.82	38.47	8.429		
3,800.00	3,555.77	3,764.53	3,373.19	22.44	24.64	-2.35	-1,512.08	-69.01	339.06	299.43	39.63	8.556		
3,900.00	3,647.04	3,863.43	3,456.51	23.10	25.41	-2.33	-1,565.32	-71.47	353.82	313.04	40.78	8.675		
4,000.00	3,738.31	3,962.33	3,539.83	23.75	26.19	-2.31	-1,618.55	-73.93	368.58	326.64	41.94	8.788		
4,100.00	3,829.59	4,061.24	3,623.15	24.41	26.96	-2.28	-1,671.78	-76.39	383.35	340.24	43.10	8.894		
4,200.00	3,920.86	4,160.14	3,706.47	25.07	27.74	-2.27	-1,725.01	-78.86	398.11	353.84	44.26	8.994		
4,300.00	4,012.13	4,259.05	3,789.79	25.73	28.51	-2.25	-1,778.24	-81.32	412.87	367.44	45.43	9.088		
4,400.00	4,103.41	4,357.95	3,873.11	26.38	29.29	-2.23	-1,831.47	-83.78	427.63	381.04	46.59	9.178		
4,500.00	4,194.68	4,456.86	3,956.43	27.04	30.07	-2.22	-1,884.71	-86.24	442.40	394.64	47.76	9.263		
4,600.00	4,285.95	4,555.76	4,039.76	27.70	30.85	-2.20	-1,937.94	-88.70	457.16	408.23	48.93	9.344		
4,700.00	4,377.22	4,654.66	4,123.08	28.36	31.63	-2.19	-1,991.17	-91.17	471.92	421.83	50.10	9.420		
4,800.00	4,468.50	4,753.57	4,206.40	29.02	32.41	-2.18	-2,044.40	-93.63	486.69	435.42	51.26	9.494		
4,900.00	4,559.77	4,852.47	4,289.72	29.68	33.19	-2.16	-2,097.63	-96.09	501.45	449.01	52.44	9.563		
5,000.00	4,651.04	4,951.38	4,373.04	30.34	33.97	-2.15	-2,150.86	-98.55	516.21	462.60	53.61	9.630		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 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		
5,100.00	4,742.32	5,050.28	4,456.36	31.00	34.75	-2.14	-2,204.10	-101.01	530.97	476.19	54.78	9.693		
5,200.00	4,833.59	5,149.19	4,539.68	31.66	35.53	-2.13	-2,257.33	-103.48	545.74	489.78	55.95	9.754		
5,300.00	4,924.86	5,248.09	4,623.00	32.32	36.31	-2.12	-2,310.56	-105.94	560.50	503.37	57.13	9.811		
5,400.00	5,016.13	5,346.99	4,706.32	32.99	37.09	-2.11	-2,363.79	-108.40	575.26	516.96	58.30	9.867		
5,500.00	5,107.41	5,445.90	4,789.64	33.65	37.87	-2.11	-2,417.02	-110.86	590.02	530.55	59.48	9.920		
5,600.00	5,198.68	5,544.80	4,872.97	34.31	38.66	-2.10	-2,470.25	-113.32	604.79	544.13	60.65	9.971		
5,700.00	5,289.95	5,643.71	4,956.29	34.97	39.44	-2.09	-2,523.49	-115.79	619.55	557.72	61.83	10.020		
5,800.00	5,381.23	5,742.61	5,039.61	35.63	40.22	-2.08	-2,576.72	-118.25	634.31	571.31	63.01	10.067		
5,900.00	5,472.50	5,863.39	5,142.22	36.30	41.16	-2.08	-2,640.34	-121.19	647.81	583.25	64.56	10.034		
6,000.00	5,563.77	5,992.33	5,254.57	36.96	42.12	-2.09	-2,703.52	-124.11	656.99	590.88	66.12	9.937		
6,100.00	5,655.05	6,122.08	5,370.38	37.62	43.03	-2.11	-2,761.93	-126.81	661.67	594.15	67.52	9.800		
6,200.00	5,746.32	6,252.11	5,488.98	38.28	43.90	-2.15	-2,815.16	-129.28	661.82	593.06	68.76	9.625		
6,300.00	5,837.59	6,381.89	5,609.64	38.95	44.71	-2.20	-2,862.87	-131.48	657.44	587.61	69.83	9.415		
6,400.00	5,928.86	6,510.89	5,731.60	39.61	45.45	-2.27	-2,904.83	-133.42	648.55	577.83	70.72	9.171		
6,500.00	6,020.14	6,638.60	5,854.08	40.27	46.14	-2.36	-2,940.93	-135.09	635.21	563.78	71.42	8.893		
6,600.00	6,111.41	6,764.55	5,976.33	40.94	46.76	-2.48	-2,971.16	-136.49	617.50	545.54	71.96	8.581		
6,700.00	6,202.68	6,888.29	6,097.61	41.60	47.33	-2.61	-2,995.60	-137.62	595.52	523.20	72.32	8.235		
6,800.00	6,293.96	7,009.43	6,217.27	42.26	47.83	-2.78	-3,014.44	-138.49	569.40	496.88	72.52	7.852		
6,900.00	6,385.23	7,127.63	6,334.69	42.93	48.27	-2.99	-3,027.94	-139.12	539.28	466.72	72.56	7.432		
7,000.00	6,476.50	7,242.62	6,449.36	43.59	48.66	-3.24	-3,036.42	-139.51	505.31	432.85	72.46	6.973		
7,100.00	6,567.77	7,354.17	6,560.84	44.25	48.98	-3.57	-3,040.24	-139.69	467.66	395.43	72.23	6.474		
7,200.00	6,658.64	7,452.45	6,659.04	44.91	49.23	-25.01	-3,040.57	-142.14	427.33	354.73	72.60	5.886		
7,300.00	6,747.14	7,545.11	6,750.43	45.52	49.46	-45.58	-3,040.66	-156.91	387.98	314.73	73.25	5.297		
7,400.00	6,831.10	7,640.00	6,840.78	46.07	49.68	-61.97	-3,040.84	-185.62	351.09	277.52	73.56	4.773		
7,500.00	6,908.46	7,737.86	6,928.42	46.54	49.90	-75.22	-3,041.10	-228.93	317.87	244.52	73.35	4.334		
7,600.00	6,977.30	7,839.29	7,011.15	46.95	50.10	-86.30	-3,041.46	-287.43	289.42	217.06	72.36	4.000		
7,700.00	7,035.93	7,944.69	7,086.15	47.30	50.28	-95.71	-3,041.91	-361.31	266.55	196.18	70.37	3.788		
7,800.00	7,082.92	8,054.11	7,150.02	47.59	50.42	-103.53	-3,042.46	-450.00	249.57	182.21	67.36	3.705		
7,900.00	7,117.09	8,167.21	7,199.08	47.84	50.53	-109.53	-3,043.08	-551.73	238.25	174.37	63.88	3.730		
8,000.00	7,137.62	8,283.13	7,229.90	48.06	50.60	-113.35	-3,043.76	-663.31	231.97	170.81	61.16	3.793		
8,100.00	7,143.99	8,400.60	7,240.00	48.28	50.65	-114.66	-3,044.48	-780.18	230.09	169.32	60.77	3.786		
8,106.75	7,143.96	8,408.54	7,239.90	48.29	50.65	-114.65	-3,044.53	-788.12	230.07	169.20	60.88	3.779		
8,200.00	7,143.45	8,500.41	7,239.59	48.53	50.69	-114.69	-3,045.09	-879.98	230.17	167.34	62.83	3.663		
8,300.00	7,142.91	8,600.41	7,239.19	48.89	50.75	-114.72	-3,045.70	-979.98	230.25	165.00	65.24	3.529		
8,400.00	7,142.37	8,700.41	7,238.78	49.40	50.85	-114.75	-3,046.32	-1,079.98	230.33	162.35	67.98	3.388		
8,500.00	7,141.83	8,800.41	7,238.38	50.12	51.02	-114.77	-3,046.93	-1,179.97	230.41	159.42	70.99	3.246		
8,600.00	7,141.29	8,900.41	7,237.97	51.08	51.33	-114.80	-3,047.54	-1,279.97	230.49	156.24	74.25	3.104		
8,700.00	7,140.75	9,000.41	7,237.57	52.30	51.96	-114.83	-3,048.15	-1,379.97	230.57	152.84	77.73	2.966		
8,800.00	7,140.21	9,100.41	7,237.16	53.75	53.10	-114.86	-3,048.77	-1,479.97	230.64	149.25	81.39	2.834		
8,900.00	7,139.67	9,200.41	7,236.75	55.40	54.69	-114.89	-3,049.38	-1,579.96	230.72	145.50	85.22	2.707		
9,000.00	7,139.12	9,300.41	7,236.35	57.20	56.54	-114.91	-3,049.99	-1,679.96	230.80	141.61	89.19	2.588		
9,100.00	7,138.58	9,400.41	7,235.94	59.13	58.53	-114.94	-3,050.60	-1,779.96	230.88	137.60	93.28	2.475		
9,200.00	7,138.04	9,500.41	7,235.54	61.15	60.63	-114.97	-3,051.22	-1,879.96	230.96	133.47	97.49	2.369		
9,300.00	7,137.50	9,600.41	7,235.13	63.26	62.80	-115.00	-3,051.83	-1,979.95	231.04	129.26	101.78	2.270		
9,400.00	7,136.96	9,700.41	7,234.73	65.44	65.04	-115.02	-3,052.44	-2,079.95	231.12	124.96	106.16	2.177		
9,500.00	7,136.42	9,800.41	7,234.32	67.68	67.33	-115.05	-3,053.05	-2,179.95	231.20	120.59	110.61	2.090		
9,600.00	7,135.88	9,900.41	7,233.91	69.97	69.67	-115.08	-3,053.67	-2,279.94	231.28	116.15	115.13	2.009		
9,700.00	7,135.34	10,000.41	7,233.51	72.31	72.04	-115.11	-3,054.28	-2,379.94	231.36	111.66	119.70	1.933		
9,800.00	7,134.80	10,100.41	7,233.10	74.69	74.46	-115.14	-3,054.89	-2,479.94	231.44	107.12	124.32	1.862		
9,900.00	7,134.26	10,200.41	7,232.70	77.10	76.90	-115.16	-3,055.50	-2,579.94	231.52	102.54	128.98	1.795		
10,000.00	7,133.71	10,300.41	7,232.29	79.54	79.37	-115.19	-3,056.12	-2,679.93	231.60	97.91	133.68	1.732		
10,100.00	7,133.17	10,400.41	7,231.89	82.02	81.87	-115.22	-3,056.73	-2,779.93	231.68	93.26	138.42	1.674		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 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		
10,200.00	7,132.63	10,500.41	7,231.48	84.52	84.39	-115.25	-3,057.34	-2,879.93	231.76	88.57	143.19	1.619		
10,300.00	7,132.09	10,600.41	7,231.07	87.04	86.94	-115.27	-3,057.95	-2,979.92	231.84	83.85	147.99	1.567		
10,400.00	7,131.55	10,700.41	7,230.67	89.58	89.50	-115.30	-3,058.57	-3,079.92	231.92	79.11	152.81	1.518		
10,500.00	7,131.01	10,800.41	7,230.26	92.15	92.08	-115.33	-3,059.18	-3,179.92	232.00	74.34	157.66	1.472 Level 3		
10,600.00	7,130.47	10,900.41	7,229.86	94.73	94.68	-115.36	-3,059.79	-3,279.92	232.08	69.55	162.52	1.428 Level 3		
10,700.00	7,129.93	11,000.41	7,229.45	97.33	97.29	-115.38	-3,060.40	-3,379.91	232.16	64.75	167.41	1.387 Level 3		
10,800.00	7,129.39	11,100.41	7,229.05	99.94	99.92	-115.41	-3,061.02	-3,479.91	232.24	59.93	172.31	1.348 Level 3		
10,900.00	7,128.84	11,200.41	7,228.64	102.56	102.55	-115.44	-3,061.63	-3,579.91	232.32	55.09	177.23	1.311 Level 3		
11,000.00	7,128.30	11,300.41	7,228.23	105.20	105.20	-115.47	-3,062.24	-3,679.90	232.40	50.24	182.16	1.276 Level 3		
11,100.00	7,127.76	11,400.41	7,227.83	107.85	107.86	-115.49	-3,062.85	-3,779.90	232.48	45.38	187.10	1.243 Level 2		
11,200.00	7,127.22	11,500.40	7,227.42	110.51	110.53	-115.52	-3,063.47	-3,879.90	232.56	40.51	192.05	1.211 Level 2		
11,300.00	7,126.68	11,600.40	7,227.02	113.18	113.21	-115.55	-3,064.08	-3,979.90	232.64	35.62	197.02	1.181 Level 2		
11,400.00	7,126.14	11,700.40	7,226.61	115.86	115.90	-115.58	-3,064.69	-4,079.89	232.72	30.73	201.99	1.152 Level 2		
11,500.00	7,125.60	11,800.40	7,226.21	118.55	118.60	-115.60	-3,065.30	-4,179.89	232.80	25.83	206.98	1.125 Level 2		
11,600.00	7,125.06	11,900.40	7,225.80	121.25	121.30	-115.63	-3,065.92	-4,279.89	232.88	20.92	211.97	1.099 Level 2		
11,700.00	7,124.52	12,000.40	7,225.39	123.95	124.01	-115.66	-3,066.53	-4,379.89	232.96	16.00	216.96	1.074 Level 2		
11,800.00	7,123.97	12,100.40	7,224.99	126.66	126.73	-115.69	-3,067.14	-4,479.88	233.04	11.08	221.97	1.050 Level 2		
11,900.00	7,123.43	12,200.40	7,224.58	129.38	129.45	-115.71	-3,067.75	-4,579.88	233.12	6.15	226.98	1.027 Level 2		
12,000.00	7,122.89	12,300.40	7,224.18	132.10	132.18	-115.74	-3,068.37	-4,679.88	233.21	1.21	231.99	1.005 Level 2		
12,100.00	7,122.35	12,400.40	7,223.77	134.83	134.92	-115.77	-3,068.98	-4,779.87	233.29	-3.73	237.01	0.984 Level 1		
12,200.00	7,121.81	12,500.40	7,223.36	137.56	137.66	-115.80	-3,069.59	-4,879.87	233.37	-8.67	242.04	0.964 Level 1		
12,300.00	7,121.27	12,600.40	7,222.96	140.30	140.40	-115.82	-3,070.20	-4,979.87	233.45	-13.62	247.07	0.945 Level 1		
12,400.00	7,120.73	12,700.40	7,222.55	143.05	143.15	-115.85	-3,070.82	-5,079.87	233.53	-18.57	252.10	0.926 Level 1		
12,500.00	7,120.19	12,800.40	7,222.15	145.80	145.90	-115.88	-3,071.43	-5,179.86	233.61	-23.52	257.13	0.909 Level 1		
12,600.00	7,119.65	12,900.40	7,221.74	148.55	148.66	-115.91	-3,072.04	-5,279.86	233.69	-28.48	262.17	0.891 Level 1		
12,700.00	7,119.10	13,000.40	7,221.34	151.30	151.42	-115.93	-3,072.65	-5,379.86	233.77	-33.44	267.22	0.875 Level 1		
12,800.00	7,118.56	13,100.40	7,220.93	154.07	154.19	-115.96	-3,073.26	-5,479.85	233.85	-38.41	272.26	0.859 Level 1		
12,900.00	7,118.02	13,200.40	7,220.52	156.83	156.96	-115.99	-3,073.88	-5,579.85	233.94	-43.37	277.31	0.844 Level 1		
13,000.00	7,117.48	13,300.40	7,220.12	159.60	159.73	-116.01	-3,074.49	-5,679.85	234.02	-48.34	282.35	0.829 Level 1		
13,100.00	7,116.94	13,400.40	7,219.71	162.37	162.50	-116.04	-3,075.10	-5,779.85	234.10	-53.31	287.41	0.815 Level 1		
13,200.00	7,116.40	13,500.40	7,219.31	165.14	165.28	-116.07	-3,075.71	-5,879.84	234.18	-58.28	292.46	0.801 Level 1		
13,300.00	7,115.86	13,600.40	7,218.90	167.92	168.06	-116.10	-3,076.33	-5,979.84	234.26	-63.25	297.51	0.787 Level 1		
13,400.00	7,115.32	13,700.40	7,218.50	170.70	170.84	-116.12	-3,076.94	-6,079.84	234.34	-68.22	302.56	0.775 Level 1		
13,500.00	7,114.78	13,800.40	7,218.09	173.48	173.62	-116.15	-3,077.55	-6,179.84	234.42	-73.20	307.62	0.762 Level 1		
13,600.00	7,114.24	13,900.40	7,217.68	176.26	176.41	-116.18	-3,078.16	-6,279.83	234.51	-78.17	312.68	0.750 Level 1		
13,700.00	7,113.69	14,000.40	7,217.28	179.05	179.20	-116.20	-3,078.78	-6,379.83	234.59	-83.15	317.73	0.738 Level 1		
13,800.00	7,113.15	14,100.40	7,216.87	181.84	181.99	-116.23	-3,079.39	-6,479.83	234.67	-88.12	322.79	0.727 Level 1		
13,900.00	7,112.61	14,200.40	7,216.47	184.63	184.79	-116.26	-3,080.00	-6,579.82	234.75	-93.10	327.85	0.716 Level 1		
14,000.00	7,112.07	14,300.40	7,216.06	187.42	187.58	-116.28	-3,080.61	-6,679.82	234.83	-98.08	332.91	0.705 Level 1		
14,100.00	7,111.53	14,400.40	7,215.66	190.22	190.38	-116.31	-3,081.23	-6,779.82	234.92	-103.05	337.97	0.695 Level 1		
14,200.00	7,110.99	14,500.40	7,215.25	193.01	193.18	-116.34	-3,081.84	-6,879.82	235.00	-108.03	343.03	0.685 Level 1		
14,300.00	7,110.45	14,600.40	7,214.84	195.81	195.98	-116.37	-3,082.45	-6,979.81	235.08	-113.01	348.09	0.675 Level 1		
14,400.00	7,109.91	14,700.40	7,214.44	198.61	198.78	-116.39	-3,083.06	-7,079.81	235.16	-117.98	353.15	0.666 Level 1		
14,500.00	7,109.37	14,800.40	7,214.03	201.42	201.59	-116.42	-3,083.68	-7,179.81	235.24	-122.96	358.20	0.657 Level 1		
14,600.00	7,108.82	14,900.40	7,213.63	204.22	204.39	-116.45	-3,084.29	-7,279.80	235.33	-127.94	363.26	0.648 Level 1		
14,700.00	7,108.28	15,000.40	7,213.22	207.03	207.20	-116.47	-3,084.90	-7,379.80	235.41	-132.91	368.32	0.639 Level 1		
14,800.00	7,107.74	15,100.40	7,212.82	209.83	210.01	-116.50	-3,085.51	-7,479.80	235.49	-137.89	373.38	0.631 Level 1		
14,900.00	7,107.20	15,200.40	7,212.41	212.64	212.82	-116.53	-3,086.13	-7,579.80	235.57	-142.86	378.44	0.622 Level 1		
15,000.00	7,106.66	15,300.40	7,212.00	215.45	215.63	-116.55	-3,086.74	-7,679.79	235.66	-147.84	383.49	0.614 Level 1		
15,100.00	7,106.12	15,400.40	7,211.60	218.26	218.44	-116.58	-3,087.35	-7,779.79	235.74	-152.81	388.55	0.607 Level 1		
15,200.00	7,105.58	15,500.40	7,211.19	221.07	221.26	-116.61	-3,087.96	-7,879.79	235.82	-157.79	393.61	0.599 Level 1		
15,300.00	7,105.04	15,600.40	7,210.79	223.89	224.07	-116.63	-3,088.58	-7,979.78	235.90	-162.76	398.66	0.592 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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,400.00	7,104.50	15,700.40	7,210.38	226.70	226.89	-116.66	-3,089.19	-8,079.78	235.99	-167.73	403.72	0.585	Level 1
15,491.56	7,104.00	15,791.96	7,210.01	229.28	229.47	-116.68	-3,089.75	-8,171.34	236.06	-172.28	408.34	0.578	Level 1, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 5C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.49	359.93	3.06	359.94					
100.00	100.00	102.00	100.00	3.28	3.29	0.49	359.93	3.06	359.94	353.37	6.57	54.787		
200.00	200.00	202.00	200.00	3.34	3.34	0.49	359.93	3.06	359.94	353.27	6.68	53.919 CC, ES		
300.00	299.98	301.98	299.98	3.44	3.45	177.36	359.93	3.06	361.69	354.80	6.89	52.512		
400.00	399.84	401.84	399.84	3.59	3.61	177.40	359.93	3.06	366.91	359.71	7.20	50.968		
500.00	499.45	501.45	499.45	3.79	3.81	177.45	359.93	3.06	375.62	368.02	7.60	49.413		
600.00	598.70	600.70	598.70	4.03	4.05	177.52	359.93	3.06	387.79	379.71	8.08	47.979		
700.00	697.47	706.77	691.21	4.31	4.33	177.41	360.73	1.78	404.25	395.61	8.65	46.743		
800.00	795.62	808.93	789.01	4.64	4.63	177.17	362.27	-0.68	424.83	415.58	9.26	45.895		
900.00	893.06	888.14	886.03	5.00	4.88	176.96	363.79	-3.12	448.82	438.98	9.84	45.616		
1,000.00	989.64	984.31	982.17	5.40	5.20	176.79	365.30	-5.54	476.17	465.66	10.51	45.296		
1,100.00	1,085.27	1,079.48	1,077.29	5.83	5.53	176.66	366.80	-7.94	506.87	495.65	11.22	45.192		
1,200.00	1,179.82	1,173.52	1,171.29	6.29	5.87	176.55	368.28	-10.30	540.86	528.91	11.94	45.284		
1,300.00	1,273.17	1,266.31	1,264.05	6.79	6.21	176.47	369.74	-12.64	578.10	565.41	12.69	45.552		
1,400.00	1,365.21	1,357.76	1,355.45	7.33	6.55	176.40	371.18	-14.94	618.56	605.10	13.45	45.976		
1,500.00	1,456.49	1,448.41	1,446.06	7.89	6.90	176.40	372.60	-17.22	660.78	646.55	14.23	46.448		
1,600.00	1,547.76	1,539.06	1,536.67	8.46	7.25	176.41	374.03	-19.50	703.00	688.00	15.01	46.846		
1,700.00	1,639.04	1,629.70	1,627.28	9.05	7.60	176.41	375.45	-21.78	745.23	729.43	15.80	47.162		
1,800.00	1,730.31	1,720.35	1,717.88	9.65	7.96	176.42	376.88	-24.06	787.46	770.85	16.61	47.411		
1,900.00	1,821.58	1,811.00	1,808.49	10.26	8.33	176.42	378.30	-26.34	829.68	812.25	17.43	47.608		
2,000.00	1,912.85	1,901.65	1,899.10	10.87	8.70	176.42	379.73	-28.62	871.91	853.65	18.25	47.763		
2,100.00	2,004.13	2,007.71	1,989.71	11.49	9.13	176.42	381.15	-30.90	914.13	894.98	19.15	47.727		
2,200.00	2,095.40	2,082.94	2,080.31	12.11	9.44	176.43	382.58	-33.18	956.36	936.43	19.93	47.980		
2,300.00	2,186.67	2,173.59	2,170.92	12.74	9.81	176.43	384.00	-35.46	998.58	977.80	20.78	48.053		
2,400.00	2,277.95	2,264.24	2,261.53	13.38	10.19	176.43	385.43	-37.75	1,040.81	1,019.18	21.63	48.108		
2,500.00	2,369.22	2,354.89	2,352.14	14.01	10.57	176.43	386.85	-40.03	1,083.04	1,060.54	22.49	48.149		
2,600.00	2,460.49	2,445.53	2,442.75	14.65	10.95	176.43	388.28	-42.31	1,125.26	1,101.91	23.36	48.179		
2,700.00	2,551.77	2,536.18	2,533.35	15.29	11.33	176.43	389.70	-44.59	1,167.49	1,143.27	24.22	48.198		
2,800.00	2,643.04	2,628.83	2,623.96	15.93	11.71	176.44	391.13	-46.87	1,209.71	1,184.62	25.09	48.210		
2,900.00	2,734.31	2,717.48	2,714.57	16.58	12.09	176.44	392.55	-49.15	1,251.94	1,225.97	25.97	48.215		
3,000.00	2,825.58	2,808.12	2,805.18	17.23	12.48	176.44	393.98	-51.43	1,294.17	1,267.32	26.84	48.216		
3,100.00	2,916.86	2,901.23	2,895.78	17.87	12.87	176.44	395.40	-53.71	1,336.39	1,308.66	27.73	48.193		
3,200.00	3,008.13	2,989.42	2,986.39	18.52	13.25	176.44	396.83	-55.99	1,378.62	1,350.02	28.60	48.204		
3,300.00	3,099.40	3,080.07	3,077.00	19.17	13.63	176.44	398.25	-58.27	1,420.84	1,391.36	29.48	48.193		
3,400.00	3,190.68	3,170.71	3,167.61	19.83	14.02	176.44	399.68	-60.55	1,463.07	1,432.70	30.37	48.180		
3,500.00	3,281.95	3,261.36	3,258.21	20.48	14.41	176.44	401.10	-62.83	1,505.29	1,474.04	31.25	48.165		
3,600.00	3,373.22	3,352.01	3,348.82	21.13	14.80	176.44	402.53	-65.12	1,547.52	1,515.38	32.14	48.149		
3,700.00	3,464.49	3,442.66	3,439.43	21.79	15.18	176.44	403.96	-67.40	1,589.75	1,556.72	33.03	48.131		
3,800.00	3,555.77	3,533.30	3,530.04	22.44	15.57	176.44	405.38	-69.68	1,631.97	1,598.05	33.92	48.113		
3,900.00	3,647.04	3,623.95	3,620.64	23.10	15.96	176.45	406.81	-71.96	1,674.20	1,639.39	34.81	48.093		
4,000.00	3,738.31	3,714.60	3,711.25	23.75	16.35	176.45	408.23	-74.24	1,716.42	1,680.72	35.70	48.073		
4,100.00	3,829.59	3,805.25	3,801.86	24.41	16.75	176.45	409.66	-76.52	1,758.65	1,722.05	36.60	48.053		
4,200.00	3,920.86	3,904.11	3,892.47	25.07	17.17	176.45	411.08	-78.80	1,800.88	1,763.35	37.53	47.987		
4,300.00	4,012.13	3,986.54	3,983.08	25.73	17.53	176.45	412.51	-81.08	1,843.10	1,804.71	38.39	48.011		
4,400.00	4,103.41	4,077.19	4,073.68	26.38	17.92	176.45	413.93	-83.36	1,885.33	1,846.04	39.29	47.990		
4,500.00	4,194.68	4,167.84	4,164.29	27.04	18.31	176.45	415.36	-85.64	1,927.55	1,887.37	40.18	47.969		
4,600.00	4,285.95	4,258.48	4,254.90	27.70	18.70	176.45	416.78	-87.92	1,969.78	1,928.70	41.08	47.948		
4,700.00	4,377.22	4,349.13	4,345.51	28.36	19.10	176.45	418.21	-90.20	2,012.00	1,970.02	41.98	47.927		
4,800.00	4,468.50	4,439.78	4,436.11	29.02	19.49	176.45	419.63	-92.49	2,054.23	2,011.35	42.88	47.906		
4,900.00	4,559.77	4,530.43	4,526.72	29.68	19.88	176.45	421.06	-94.77	2,096.46	2,052.68	43.78	47.885		
5,000.00	4,651.04	4,621.07	4,617.33	30.34	20.28	176.45	422.48	-97.05	2,138.68	2,094.00	44.68	47.865		
5,100.00	4,742.32	4,711.72	4,707.94	31.00	20.67	176.45	423.91	-99.33	2,180.91	2,135.32	45.58	47.844		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 5C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,802.37	4,798.54	31.66	21.06	176.45	425.33	-101.61	2,223.13	2,176.65	46.49	47.824		
5,300.00	4,924.86	4,906.98	4,889.15	32.32	21.52	176.45	426.76	-103.89	2,265.36	2,217.91	47.45	47.743		
5,400.00	5,016.13	4,983.66	4,979.76	32.99	21.85	176.45	428.18	-106.17	2,307.59	2,259.29	48.29	47.785		
5,500.00	5,107.41	5,074.31	5,070.37	33.65	22.25	176.45	429.61	-108.45	2,349.81	2,300.62	49.20	47.765		
5,600.00	5,198.68	5,164.96	5,160.97	34.31	22.64	176.45	431.03	-110.73	2,392.04	2,341.94	50.10	47.746		
5,700.00	5,289.95	5,255.61	5,251.58	34.97	23.04	176.45	432.46	-113.01	2,434.26	2,383.26	51.00	47.727		
5,800.00	5,381.23	5,346.25	5,342.19	35.63	23.43	176.45	433.88	-115.29	2,476.49	2,424.58	51.91	47.708		
5,900.00	5,472.50	5,436.90	5,432.80	36.30	23.83	176.45	435.31	-117.57	2,518.71	2,465.90	52.81	47.690		
6,000.00	5,563.77	5,527.55	5,523.41	36.96	24.22	176.45	436.74	-119.85	2,560.94	2,507.22	53.72	47.672		
6,100.00	5,655.05	5,618.20	5,614.01	37.62	24.62	176.45	438.16	-122.14	2,603.17	2,548.54	54.63	47.654		
6,200.00	5,746.32	5,708.84	5,704.62	38.28	25.01	176.46	439.59	-124.42	2,645.39	2,589.86	55.53	47.636		
6,300.00	5,837.59	5,800.51	5,795.23	38.95	25.41	176.46	441.01	-126.70	2,687.62	2,631.17	56.44	47.615		
6,400.00	5,928.86	5,909.86	5,885.84	39.61	25.89	176.46	442.44	-128.98	2,729.84	2,672.41	57.33	47.530		
6,500.00	6,020.14	5,980.79	5,976.44	40.27	26.20	176.46	443.86	-131.26	2,772.07	2,713.81	58.26	47.585		
6,600.00	6,111.41	6,071.43	6,067.05	40.94	26.59	176.46	445.29	-133.54	2,814.30	2,755.13	59.16	47.568		
6,700.00	6,202.68	6,162.08	6,157.66	41.60	26.99	176.46	446.71	-135.82	2,856.52	2,796.45	60.07	47.552		
6,800.00	6,293.96	6,252.73	6,248.27	42.26	27.39	176.46	448.14	-138.10	2,898.75	2,837.77	60.98	47.536		
6,900.00	6,385.23	6,343.38	6,338.87	42.93	27.78	176.46	449.56	-140.38	2,940.97	2,879.08	61.89	47.520		
7,000.00	6,476.50	6,434.03	6,429.48	43.59	28.18	176.46	450.99	-142.66	2,983.20	2,920.40	62.80	47.504		
7,100.00	6,567.77	6,524.67	6,520.09	44.25	28.57	176.46	452.41	-144.94	3,025.43	2,961.72	63.71	47.488		
7,200.00	6,658.64	6,615.07	6,610.44	44.91	28.97	155.90	453.83	-147.22	3,067.51	3,002.89	64.62	47.473		
7,300.00	6,747.14	6,709.14	6,704.12	45.52	29.38	137.10	455.27	-154.74	3,108.65	3,043.11	65.55	47.425		
7,400.00	6,831.10	6,807.31	6,799.61	46.07	29.82	123.14	456.62	-177.06	3,147.83	3,081.33	66.50	47.333		
7,500.00	6,908.46	6,910.07	6,894.64	46.54	30.28	112.98	457.84	-215.85	3,184.10	3,116.62	67.48	47.184		
7,600.00	6,977.30	7,018.33	6,986.64	46.95	30.79	105.57	458.87	-272.67	3,216.55	3,148.03	68.52	46.946		
7,700.00	7,035.93	7,132.74	7,071.92	47.30	31.38	100.16	459.64	-348.69	3,244.34	3,174.67	69.67	46.566		
7,800.00	7,082.92	7,253.36	7,145.59	47.59	32.12	96.31	460.09	-443.98	3,266.73	3,195.67	71.05	45.975		
7,900.00	7,117.09	7,379.49	7,201.99	47.84	33.11	93.73	460.13	-556.57	3,283.07	3,210.27	72.79	45.101		
8,000.00	7,137.62	7,509.51	7,235.75	48.06	34.39	92.23	459.71	-681.89	3,292.88	3,217.93	74.94	43.938		
8,100.00	7,143.99	7,634.54	7,243.93	48.28	35.87	91.74	458.89	-806.48	3,295.88	3,218.48	77.40	42.584		
8,200.00	7,143.45	7,734.54	7,243.62	48.53	37.23	91.74	458.12	-906.47	3,295.71	3,215.85	79.85	41.271		
8,300.00	7,142.91	7,834.54	7,243.31	48.89	38.74	91.75	457.36	-1,006.47	3,295.54	3,212.91	82.63	39.884		
8,400.00	7,142.37	7,934.54	7,243.00	49.40	40.40	91.75	456.59	-1,106.46	3,295.36	3,209.67	85.69	38.456		
8,500.00	7,141.83	8,034.54	7,242.69	50.12	42.19	91.75	455.82	-1,206.46	3,295.19	3,206.17	89.02	37.017		
8,600.00	7,141.29	8,134.54	7,242.37	51.08	44.09	91.76	455.05	-1,306.46	3,295.02	3,202.44	92.58	35.592		
8,700.00	7,140.75	8,234.54	7,242.06	52.30	46.09	91.76	454.29	-1,406.45	3,294.85	3,198.50	96.34	34.200		
8,800.00	7,140.21	8,334.54	7,241.75	53.75	48.18	91.77	453.52	-1,506.45	3,294.67	3,194.38	100.29	32.852		
8,900.00	7,139.67	8,434.54	7,241.44	55.40	50.34	91.77	452.75	-1,606.45	3,294.50	3,190.10	104.40	31.556		
9,000.00	7,139.12	8,534.54	7,241.13	57.20	52.57	91.77	451.98	-1,706.44	3,294.33	3,185.67	108.66	30.319		
9,100.00	7,138.58	8,634.54	7,240.81	59.13	54.85	91.78	451.22	-1,806.44	3,294.16	3,181.12	113.04	29.141		
9,200.00	7,138.04	8,734.54	7,240.50	61.15	57.19	91.78	450.45	-1,906.43	3,293.98	3,176.45	117.54	28.025		
9,300.00	7,137.50	8,834.54	7,240.19	63.26	59.58	91.79	449.68	-2,006.43	3,293.81	3,171.67	122.14	26.968		
9,400.00	7,136.96	8,934.54	7,239.88	65.44	62.00	91.79	448.91	-2,106.43	3,293.64	3,166.81	126.83	25.970		
9,500.00	7,136.42	9,034.54	7,239.57	67.68	64.46	91.80	448.15	-2,206.42	3,293.47	3,161.87	131.60	25.027		
9,600.00	7,135.88	9,134.54	7,239.25	69.97	66.95	91.80	447.38	-2,306.42	3,293.29	3,156.86	136.44	24.138		
9,700.00	7,135.34	9,234.53	7,238.94	72.31	69.47	91.80	446.61	-2,406.41	3,293.12	3,151.78	141.34	23.298		
9,800.00	7,134.80	9,334.53	7,238.63	74.69	72.02	91.81	445.84	-2,506.41	3,292.95	3,146.64	146.31	22.507		
9,900.00	7,134.26	9,434.53	7,238.32	77.10	74.59	91.81	445.08	-2,606.41	3,292.78	3,141.45	151.33	21.759		
10,000.00	7,133.71	9,534.53	7,238.01	79.54	77.18	91.82	444.31	-2,706.40	3,292.60	3,136.21	156.39	21.053		
10,100.00	7,133.17	9,634.53	7,237.69	82.02	79.78	91.82	443.54	-2,806.40	3,292.43	3,130.93	161.50	20.386		
10,200.00	7,132.63	9,734.53	7,237.38	84.52	82.41	91.82	442.77	-2,906.40	3,292.26	3,125.61	166.65	19.755		
10,300.00	7,132.09	9,834.53	7,237.07	87.04	85.04	91.83	442.00	-3,006.39	3,292.09	3,120.25	171.83	19.159		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 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	7,131.55	9,934.53	7,236.76	89.58	87.70	91.83	441.24	-3,106.39	3,291.92	3,114.87	177.05	18.593		
10,500.00	7,131.01	10,034.53	7,236.45	92.15	90.36	91.84	440.47	-3,206.38	3,291.74	3,109.45	182.30	18.057		
10,600.00	7,130.47	10,134.53	7,236.13	94.73	93.04	91.84	439.70	-3,306.38	3,291.57	3,104.00	187.57	17.549		
10,700.00	7,129.93	10,234.53	7,235.82	97.33	95.73	91.84	438.93	-3,406.38	3,291.40	3,098.53	192.87	17.066		
10,800.00	7,129.39	10,334.53	7,235.51	99.94	98.42	91.85	438.17	-3,506.37	3,291.23	3,093.04	198.19	16.607		
10,900.00	7,128.84	10,434.53	7,235.20	102.56	101.13	91.85	437.40	-3,606.37	3,291.05	3,087.52	203.53	16.170		
11,000.00	7,128.30	10,534.53	7,234.89	105.20	103.84	91.86	436.63	-3,706.36	3,290.88	3,081.99	208.89	15.754		
11,100.00	7,127.76	10,634.53	7,234.58	107.85	106.56	91.86	435.86	-3,806.36	3,290.71	3,076.44	214.27	15.358		
11,200.00	7,127.22	10,734.53	7,234.26	110.51	109.29	91.86	435.10	-3,906.36	3,290.54	3,070.87	219.67	14.979		
11,300.00	7,126.68	10,834.53	7,233.95	113.18	112.03	91.87	434.33	-4,006.35	3,290.37	3,065.28	225.08	14.618		
11,400.00	7,126.14	10,934.53	7,233.64	115.86	114.77	91.87	433.56	-4,106.35	3,290.19	3,059.68	230.51	14.274		
11,500.00	7,125.60	11,034.53	7,233.33	118.55	117.51	91.88	432.79	-4,206.35	3,290.02	3,054.07	235.95	13.944		
11,600.00	7,125.06	11,134.53	7,233.02	121.25	120.26	91.88	432.03	-4,306.34	3,289.85	3,048.45	241.40	13.628		
11,700.00	7,124.52	11,234.53	7,232.70	123.95	123.02	91.89	431.26	-4,406.34	3,289.68	3,042.81	246.87	13.326		
11,800.00	7,123.97	11,334.53	7,232.39	126.66	125.78	91.89	430.49	-4,506.33	3,289.51	3,037.16	252.35	13.036		
11,900.00	7,123.43	11,434.53	7,232.08	129.38	128.55	91.89	429.72	-4,606.33	3,289.33	3,031.50	257.83	12.758		
12,000.00	7,122.89	11,534.52	7,231.77	132.10	131.32	91.90	428.96	-4,706.33	3,289.16	3,025.83	263.33	12.491		
12,100.00	7,122.35	11,634.52	7,231.46	134.83	134.09	91.90	428.19	-4,806.32	3,288.99	3,020.16	268.83	12.234		
12,200.00	7,121.81	11,734.52	7,231.14	137.56	136.87	91.91	427.42	-4,906.32	3,288.82	3,014.47	274.35	11.988		
12,300.00	7,121.27	11,834.52	7,230.83	140.30	139.65	91.91	426.65	-5,006.31	3,288.65	3,008.78	279.87	11.751		
12,400.00	7,120.73	11,934.52	7,230.52	143.05	142.43	91.91	425.89	-5,106.31	3,288.47	3,003.08	285.40	11.522		
12,500.00	7,120.19	12,034.52	7,230.21	145.80	145.21	91.92	425.12	-5,206.31	3,288.30	2,997.37	290.93	11.303		
12,600.00	7,119.65	12,134.52	7,229.90	148.55	148.00	91.92	424.35	-5,306.30	3,288.13	2,991.66	296.47	11.091		
12,700.00	7,119.10	12,234.52	7,229.58	151.30	150.79	91.93	423.58	-5,406.30	3,287.96	2,985.93	302.02	10.886		
12,800.00	7,118.56	12,334.52	7,229.27	154.07	153.59	91.93	422.82	-5,506.29	3,287.79	2,980.21	307.58	10.689		
12,900.00	7,118.02	12,434.52	7,228.96	156.83	156.38	91.93	422.05	-5,606.29	3,287.62	2,974.48	313.14	10.499		
13,000.00	7,117.48	12,534.52	7,228.65	159.60	159.18	91.94	421.28	-5,706.29	3,287.44	2,968.74	318.71	10.315		
13,100.00	7,116.94	12,634.52	7,228.34	162.37	161.98	91.94	420.51	-5,806.28	3,287.27	2,962.99	324.28	10.137		
13,200.00	7,116.40	12,734.52	7,228.02	165.14	164.78	91.95	419.74	-5,906.28	3,287.10	2,957.25	329.85	9.965		
13,300.00	7,115.86	12,834.52	7,227.71	167.92	167.59	91.95	418.98	-6,006.28	3,286.93	2,951.49	335.43	9.799		
13,400.00	7,115.32	12,934.52	7,227.40	170.70	170.39	91.95	418.21	-6,106.27	3,286.76	2,945.74	341.02	9.638		
13,500.00	7,114.78	13,034.52	7,227.09	173.48	173.20	91.96	417.44	-6,206.27	3,286.58	2,939.98	346.61	9.482		
13,600.00	7,114.24	13,134.52	7,226.78	176.26	176.01	91.96	416.67	-6,306.26	3,286.41	2,934.21	352.20	9.331		
13,700.00	7,113.69	13,234.52	7,226.47	179.05	178.82	91.97	415.91	-6,406.26	3,286.24	2,928.44	357.80	9.185		
13,800.00	7,113.15	13,334.52	7,226.15	181.84	181.63	91.97	415.14	-6,506.26	3,286.07	2,922.67	363.40	9.043		
13,900.00	7,112.61	13,434.52	7,225.84	184.63	184.45	91.98	414.37	-6,606.25	3,285.90	2,916.90	369.00	8.905		
14,000.00	7,112.07	13,534.52	7,225.53	187.42	187.26	91.98	413.60	-6,706.25	3,285.73	2,911.12	374.61	8.771		
14,100.00	7,111.53	13,634.52	7,225.22	190.22	190.08	91.98	412.84	-6,806.24	3,285.55	2,905.33	380.22	8.641		
14,200.00	7,110.99	13,734.52	7,224.91	193.01	192.90	91.99	412.07	-6,906.24	3,285.38	2,899.55	385.83	8.515		
14,300.00	7,110.45	13,834.52	7,224.59	195.81	195.72	91.99	411.30	-7,006.24	3,285.21	2,893.76	391.45	8.392		
14,400.00	7,109.91	13,934.51	7,224.28	198.61	198.54	92.00	410.53	-7,106.23	3,285.04	2,887.97	397.07	8.273		
14,500.00	7,109.37	14,034.51	7,223.97	201.42	201.36	92.00	409.77	-7,206.23	3,284.87	2,882.18	402.69	8.157		
14,600.00	7,108.82	14,134.51	7,223.66	204.22	204.18	92.00	409.00	-7,306.23	3,284.70	2,876.38	408.31	8.045		
14,700.00	7,108.28	14,234.51	7,223.35	207.03	207.00	92.01	408.23	-7,406.22	3,284.53	2,870.58	413.94	7.935		
14,800.00	7,107.74	14,334.51	7,223.03	209.83	209.83	92.01	407.46	-7,506.22	3,284.35	2,864.78	419.57	7.828		
14,900.00	7,107.20	14,434.51	7,222.72	212.64	212.65	92.02	406.70	-7,606.21	3,284.18	2,858.98	425.20	7.724		
15,000.00	7,106.66	14,534.51	7,222.41	215.45	215.48	92.02	405.93	-7,706.21	3,284.01	2,853.18	430.83	7.622		
15,100.00	7,106.12	14,634.51	7,222.10	218.26	218.30	92.02	405.16	-7,806.21	3,283.84	2,847.37	436.47	7.524		
15,200.00	7,105.58	14,734.51	7,221.79	221.07	221.13	92.03	404.39	-7,906.20	3,283.67	2,841.56	442.11	7.427		
15,300.00	7,105.04	14,834.51	7,221.47	223.89	223.96	92.03	403.63	-8,006.20	3,283.50	2,835.75	447.74	7.333		
15,400.00	7,104.50	14,934.51	7,221.16	226.70	226.79	92.04	402.86	-8,106.19	3,283.32	2,829.94	453.39	7.242		
15,460.78	7,104.17	14,995.29	7,220.97	228.41	228.51	92.04	402.39	-8,166.97	3,283.22	2,826.41	456.81	7.187		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 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							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	14,987.41	7,221.00	229.28	228.28	92.04	402.45	-8,159.09	3,283.40	2,826.06	457.33	7.179 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 12N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.46	139.89	1.11	139.89					
100.00	100.00	101.00	100.00	3.28	3.28	0.46	139.89	1.11	139.89	133.32	6.57	21.293		
200.00	200.00	201.05	200.05	3.34	3.34	0.46	139.88	1.11	139.89	133.21	6.67	20.958		
300.00	299.98	306.16	305.13	3.44	3.45	177.28	137.93	0.90	139.77	132.87	6.90	20.259		
400.00	399.84	411.25	410.06	3.59	3.61	177.15	132.14	0.29	139.49	132.25	7.24	19.271		
500.00	499.45	516.33	514.69	3.79	3.83	176.93	122.54	-0.74	139.04	131.36	7.69	18.089		
600.00	598.70	621.39	618.87	4.03	4.09	176.63	109.12	-2.17	138.44	130.22	8.22	16.835		
700.00	697.47	726.41	722.45	4.31	4.40	176.24	91.93	-4.00	137.68	128.85	8.83	15.586		
800.00	795.62	831.39	825.29	4.64	4.75	175.76	70.98	-6.24	136.77	127.27	9.50	14.393		
846.17	840.70	878.42	871.13	4.80	4.92	175.52	60.52	-7.35	136.46	126.65	9.80	13.917 CC, ES		
900.00	893.06	932.24	923.58	5.00	5.12	175.28	48.49	-8.63	136.96	126.79	10.17	13.470		
1,000.00	989.64	1,032.17	1,020.94	5.40	5.51	174.92	26.15	-11.02	140.58	129.70	10.88	12.925		
1,100.00	1,085.27	1,131.91	1,118.13	5.83	5.93	174.70	3.85	-13.39	147.67	136.04	11.63	12.698		
1,200.00	1,179.82	1,231.35	1,215.02	6.29	6.35	174.62	-18.37	-15.76	158.23	145.81	12.42	12.740		
1,300.00	1,273.17	1,330.36	1,311.50	6.79	6.79	174.64	-40.51	-18.12	172.24	158.99	13.24	13.006		
1,400.00	1,365.21	1,428.82	1,407.44	7.33	7.24	174.75	-62.52	-20.47	189.67	175.58	14.09	13.458		
1,500.00	1,456.49	1,526.93	1,503.04	7.89	7.69	174.92	-84.45	-22.81	209.01	194.05	14.96	13.967		
1,600.00	1,547.76	1,625.04	1,598.64	8.46	8.15	175.06	-106.38	-25.15	228.36	212.51	15.85	14.407		
1,700.00	1,639.04	1,723.15	1,694.23	9.05	8.61	175.18	-128.32	-27.49	247.71	230.95	16.75	14.786		
1,800.00	1,730.31	1,821.26	1,789.83	9.65	9.08	175.28	-150.25	-29.83	267.05	249.39	17.67	15.114		
1,900.00	1,821.58	1,919.37	1,885.43	10.26	9.56	175.37	-172.18	-32.17	286.40	267.81	18.60	15.401		
2,000.00	1,912.85	2,017.48	1,981.03	10.87	10.03	175.44	-194.11	-34.50	305.75	286.22	19.53	15.652		
2,100.00	2,004.13	2,115.59	2,076.63	11.49	10.51	175.51	-216.04	-36.84	325.10	304.62	20.48	15.874		
2,200.00	2,095.40	2,213.69	2,172.22	12.11	11.00	175.57	-237.98	-39.18	344.45	323.02	21.43	16.070		
2,300.00	2,186.67	2,311.80	2,267.82	12.74	11.48	175.62	-259.91	-41.52	363.80	341.41	22.39	16.246		
2,400.00	2,277.95	2,409.91	2,363.42	13.38	11.97	175.67	-281.84	-43.86	383.15	359.79	23.36	16.402		
2,500.00	2,369.22	2,508.02	2,459.02	14.01	12.46	175.71	-303.77	-46.20	402.50	378.17	24.33	16.543		
2,600.00	2,460.49	2,606.13	2,554.62	14.65	12.95	175.75	-325.70	-48.54	421.85	396.55	25.31	16.671		
2,700.00	2,551.77	2,704.24	2,650.21	15.29	13.44	175.79	-347.64	-50.88	441.21	414.92	26.28	16.786		
2,800.00	2,643.04	2,802.35	2,745.81	15.93	13.94	175.82	-369.57	-53.22	460.56	433.29	27.27	16.891		
2,900.00	2,734.31	2,900.46	2,841.41	16.58	14.43	175.85	-391.50	-55.55	479.91	451.66	28.25	16.986		
3,000.00	2,825.58	3,001.43	2,937.01	17.23	14.94	175.88	-413.43	-57.89	499.26	470.01	29.25	17.066		
3,100.00	2,916.86	3,103.32	3,032.61	17.87	15.46	175.90	-435.36	-60.23	518.61	488.35	30.26	17.137		
3,200.00	3,008.13	3,205.21	3,128.20	18.52	15.98	175.93	-457.30	-62.57	537.96	506.69	31.27	17.202		
3,300.00	3,099.40	3,307.10	3,223.80	19.17	16.49	175.95	-479.23	-64.91	557.32	525.03	32.29	17.261		
3,400.00	3,190.68	3,408.99	3,319.40	19.83	17.01	175.97	-501.16	-67.25	576.67	543.37	33.30	17.316		
3,500.00	3,281.95	3,489.12	3,415.00	20.48	17.42	175.99	-523.09	-69.59	596.02	561.80	34.22	17.419		
3,600.00	3,373.22	3,587.23	3,510.60	21.13	17.92	176.01	-545.03	-71.93	615.37	580.15	35.22	17.474		
3,700.00	3,464.49	3,685.34	3,606.19	21.79	18.42	176.03	-566.96	-74.26	634.72	598.50	36.22	17.525		
3,800.00	3,555.77	3,783.45	3,701.79	22.44	18.92	176.04	-588.89	-76.60	654.08	616.85	37.22	17.572		
3,900.00	3,647.04	3,881.56	3,797.39	23.10	19.43	176.06	-610.82	-78.94	673.43	635.20	38.23	17.617		
4,000.00	3,738.31	3,979.66	3,892.99	23.75	19.93	176.07	-632.75	-81.28	692.78	653.55	39.23	17.658		
4,100.00	3,829.59	4,077.77	3,988.59	24.41	20.43	176.08	-654.69	-83.62	712.13	671.89	40.24	17.698		
4,200.00	3,920.86	4,175.88	4,084.18	25.07	20.93	176.10	-676.62	-85.96	731.49	690.24	41.25	17.734		
4,300.00	4,012.13	4,273.99	4,179.78	25.73	21.44	176.11	-698.55	-88.30	750.84	708.58	42.26	17.769		
4,400.00	4,103.41	4,372.10	4,275.38	26.38	21.94	176.12	-720.48	-90.64	770.19	726.93	43.26	17.802		
4,500.00	4,194.68	4,470.21	4,370.98	27.04	22.45	176.13	-742.41	-92.98	789.54	745.27	44.27	17.833		
4,600.00	4,285.95	4,568.32	4,466.57	27.70	22.95	176.14	-764.35	-95.31	808.89	763.61	45.29	17.862		
4,700.00	4,377.22	4,666.43	4,562.17	28.36	23.46	176.15	-786.28	-97.65	828.25	781.95	46.30	17.890		
4,800.00	4,468.50	4,764.54	4,657.77	29.02	23.96	176.16	-808.21	-99.99	847.60	800.29	47.31	17.916		
4,900.00	4,559.77	4,862.65	4,753.37	29.68	24.47	176.17	-830.14	-102.33	866.95	818.63	48.32	17.941		
5,000.00	4,651.04	4,960.76	4,848.97	30.34	24.97	176.18	-852.08	-104.67	886.31	836.97	49.34	17.965		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 12N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	5,058.87	4,944.56	31.00	25.48	176.19	-874.01	-107.01	905.66	855.31	50.35	17.987		
5,200.00	4,833.59	5,156.98	5,040.16	31.66	25.98	176.20	-895.94	-109.35	925.01	873.65	51.36	18.009		
5,300.00	4,924.86	5,255.09	5,135.76	32.32	26.49	176.20	-917.87	-111.69	944.36	891.98	52.38	18.029		
5,400.00	5,016.13	5,353.20	5,231.36	32.99	26.99	176.21	-939.80	-114.03	963.72	910.32	53.39	18.049		
5,500.00	5,107.41	5,451.31	5,326.96	33.65	27.50	176.22	-961.74	-116.36	983.07	928.66	54.41	18.068		
5,600.00	5,198.68	5,549.42	5,422.55	34.31	28.01	176.23	-983.67	-118.70	1,002.42	946.99	55.43	18.085		
5,700.00	5,289.95	5,647.52	5,518.15	34.97	28.51	176.23	-1,005.60	-121.04	1,021.77	965.33	56.44	18.103		
5,800.00	5,381.23	5,745.63	5,613.75	35.63	29.02	176.24	-1,027.53	-123.38	1,041.13	983.67	57.46	18.119		
5,900.00	5,472.50	5,843.74	5,709.35	36.30	29.53	176.24	-1,049.46	-125.72	1,060.48	1,002.00	58.48	18.135		
6,000.00	5,563.77	5,941.85	5,804.95	36.96	30.03	176.25	-1,071.40	-128.06	1,079.83	1,020.34	59.50	18.150		
6,100.00	5,655.05	6,039.96	5,900.54	37.62	30.54	176.26	-1,093.33	-130.40	1,099.18	1,038.67	60.51	18.164		
6,200.00	5,746.32	6,138.07	5,996.14	38.28	31.05	176.26	-1,115.26	-132.74	1,118.54	1,057.01	61.53	18.178		
6,300.00	5,837.59	6,236.18	6,091.74	38.95	31.56	176.27	-1,137.19	-135.07	1,137.89	1,075.34	62.55	18.192		
6,400.00	5,928.86	6,334.29	6,187.34	39.61	32.06	176.27	-1,159.12	-137.41	1,157.24	1,093.67	63.57	18.205		
6,500.00	6,020.14	6,432.40	6,282.94	40.27	32.57	176.28	-1,181.06	-139.75	1,176.60	1,112.01	64.59	18.217		
6,600.00	6,111.41	6,530.51	6,378.53	40.94	33.08	176.28	-1,202.99	-142.09	1,195.95	1,130.34	65.61	18.229		
6,700.00	6,202.68	6,628.50	6,474.01	41.60	33.59	176.28	-1,224.89	-144.61	1,215.30	1,148.68	66.63	18.241		
6,800.00	6,293.96	6,724.73	6,566.99	42.26	34.08	175.83	-1,246.29	-156.44	1,234.73	1,167.09	67.64	18.255		
6,900.00	6,385.23	6,816.11	6,652.71	42.93	34.51	174.80	-1,266.10	-180.85	1,254.60	1,185.98	68.61	18.285		
7,000.00	6,476.50	6,899.64	6,727.34	43.59	34.89	173.38	-1,283.43	-213.97	1,275.59	1,206.09	69.50	18.353		
7,100.00	6,567.77	6,973.82	6,789.57	44.25	35.19	171.77	-1,297.94	-251.58	1,298.58	1,228.31	70.27	18.480		
7,200.00	6,658.64	7,041.32	6,842.13	44.91	35.45	151.19	-1,310.25	-292.04	1,323.62	1,252.72	70.90	18.668		
7,300.00	6,747.14	7,106.92	6,888.93	45.52	35.68	132.41	-1,321.27	-336.62	1,349.23	1,277.82	71.41	18.894		
7,400.00	6,831.10	7,171.16	6,930.18	46.07	35.89	118.47	-1,331.04	-384.85	1,374.36	1,302.56	71.81	19.140		
7,500.00	6,908.46	7,234.40	6,965.95	46.54	36.09	108.31	-1,339.58	-436.26	1,398.07	1,325.96	72.11	19.389		
7,600.00	6,977.30	7,300.00	6,997.62	46.95	36.30	100.84	-1,347.21	-493.17	1,419.53	1,347.10	72.43	19.598		
7,700.00	7,035.93	7,358.83	7,021.02	47.30	36.50	95.42	-1,352.92	-546.82	1,438.05	1,365.34	72.71	19.779		
7,800.00	7,082.92	7,420.39	7,040.23	47.59	36.74	91.52	-1,357.71	-605.08	1,453.05	1,379.87	73.18	19.855		
7,900.00	7,117.09	7,481.67	7,053.82	47.84	37.03	88.89	-1,361.21	-664.72	1,464.11	1,390.22	73.89	19.815		
8,000.00	7,137.62	7,542.79	7,061.74	48.06	37.40	87.37	-1,363.42	-725.25	1,470.90	1,396.00	74.89	19.640		
8,100.00	7,143.99	7,607.11	7,063.98	48.28	37.90	86.89	-1,364.35	-789.50	1,473.22	1,396.94	76.28	19.312		
8,200.00	7,143.45	7,707.11	7,063.75	48.53	38.90	86.90	-1,364.95	-889.50	1,473.19	1,394.55	78.64	18.734		
8,300.00	7,142.91	7,807.11	7,063.52	48.89	40.16	86.91	-1,365.55	-989.50	1,473.16	1,391.84	81.33	18.114		
8,400.00	7,142.37	7,907.11	7,063.29	49.40	41.63	86.92	-1,366.15	-1,089.49	1,473.14	1,388.82	84.32	17.472		
8,500.00	7,141.83	8,007.11	7,063.06	50.12	43.26	86.93	-1,366.75	-1,189.49	1,473.11	1,385.53	87.58	16.821		
8,600.00	7,141.29	8,107.11	7,062.83	51.08	45.03	86.95	-1,367.35	-1,289.49	1,473.08	1,382.00	91.08	16.174		
8,700.00	7,140.75	8,207.11	7,062.60	52.30	46.92	86.96	-1,367.95	-1,389.49	1,473.05	1,378.26	94.80	15.539		
8,800.00	7,140.21	8,307.10	7,062.37	53.75	48.91	86.97	-1,368.55	-1,489.48	1,473.03	1,374.32	98.71	14.924		
8,900.00	7,139.67	8,407.10	7,062.14	55.40	50.98	86.98	-1,369.15	-1,589.48	1,473.00	1,370.22	102.78	14.331		
9,000.00	7,139.12	8,507.10	7,061.91	57.20	53.13	87.00	-1,369.74	-1,689.48	1,472.97	1,365.96	107.01	13.765		
9,100.00	7,138.58	8,607.10	7,061.68	59.13	55.35	87.01	-1,370.34	-1,789.48	1,472.95	1,361.58	111.37	13.226		
9,200.00	7,138.04	8,707.10	7,061.45	61.15	57.62	87.02	-1,370.94	-1,889.47	1,472.92	1,357.07	115.85	12.715		
9,300.00	7,137.50	8,807.10	7,061.22	63.26	59.95	87.03	-1,371.54	-1,989.47	1,472.89	1,352.46	120.43	12.231		
9,400.00	7,136.96	8,907.10	7,060.99	65.44	62.32	87.04	-1,372.14	-2,089.47	1,472.86	1,347.76	125.10	11.773		
9,500.00	7,136.42	9,007.10	7,060.76	67.68	64.73	87.06	-1,372.74	-2,189.47	1,472.84	1,342.98	129.86	11.342		
9,600.00	7,135.88	9,107.10	7,060.53	69.97	67.17	87.07	-1,373.34	-2,289.46	1,472.81	1,338.12	134.69	10.935		
9,700.00	7,135.34	9,207.10	7,060.30	72.31	69.65	87.08	-1,373.94	-2,389.46	1,472.78	1,333.19	139.59	10.551		
9,800.00	7,134.80	9,307.10	7,060.07	74.69	72.16	87.09	-1,374.54	-2,489.46	1,472.76	1,328.21	144.55	10.189		
9,900.00	7,134.26	9,407.10	7,059.84	77.10	74.69	87.10	-1,375.13	-2,589.46	1,472.73	1,323.17	149.56	9.847		
10,000.00	7,133.71	9,507.10	7,059.61	79.54	77.24	87.12	-1,375.73	-2,689.45	1,472.70	1,318.08	154.62	9.524		
10,100.00	7,133.17	9,607.10	7,059.38	82.02	79.82	87.13	-1,376.33	-2,789.45	1,472.68	1,312.95	159.73	9.220		
10,200.00	7,132.63	9,707.10	7,059.15	84.52	82.41	87.14	-1,376.93	-2,889.45	1,472.65	1,307.77	164.88	8.932		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 12N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,132.09	9,807.10	7,058.92	87.04	85.03	87.15	-1,377.53	-2,989.45	1,472.62	1,302.57	170.06	8.659		
10,400.00	7,131.55	9,907.10	7,058.69	89.58	87.65	87.16	-1,378.13	-3,089.44	1,472.60	1,297.32	175.28	8.402		
10,500.00	7,131.01	10,007.10	7,058.46	92.15	90.29	87.18	-1,378.73	-3,189.44	1,472.57	1,292.05	180.52	8.157		
10,600.00	7,130.47	10,107.10	7,058.22	94.73	92.95	87.19	-1,379.33	-3,289.44	1,472.55	1,286.75	185.79	7.926		
10,700.00	7,129.93	10,207.10	7,057.99	97.33	95.61	87.20	-1,379.92	-3,389.44	1,472.52	1,281.43	191.09	7.706		
10,800.00	7,129.39	10,307.10	7,057.76	99.94	98.29	87.21	-1,380.52	-3,489.43	1,472.49	1,276.08	196.42	7.497		
10,900.00	7,128.84	10,407.09	7,057.53	102.56	100.98	87.22	-1,381.12	-3,589.43	1,472.47	1,270.71	201.76	7.298		
11,000.00	7,128.30	10,507.09	7,057.30	105.20	103.68	87.24	-1,381.72	-3,689.43	1,472.44	1,265.32	207.13	7.109		
11,100.00	7,127.76	10,607.09	7,057.07	107.85	106.38	87.25	-1,382.32	-3,789.43	1,472.42	1,259.91	212.51	6.929		
11,200.00	7,127.22	10,707.09	7,056.84	110.51	109.09	87.26	-1,382.92	-3,889.42	1,472.39	1,254.48	217.91	6.757		
11,300.00	7,126.68	10,807.09	7,056.61	113.18	111.81	87.27	-1,383.52	-3,989.42	1,472.36	1,249.04	223.32	6.593		
11,400.00	7,126.14	10,907.09	7,056.38	115.86	114.54	87.28	-1,384.12	-4,089.42	1,472.34	1,243.58	228.75	6.436		
11,500.00	7,125.60	11,007.09	7,056.15	118.55	117.27	87.30	-1,384.72	-4,189.42	1,472.31	1,238.11	234.20	6.287		
11,600.00	7,125.06	11,107.09	7,055.92	121.25	120.01	87.31	-1,385.31	-4,289.41	1,472.29	1,232.63	239.66	6.143		
11,700.00	7,124.52	11,207.09	7,055.69	123.95	122.76	87.32	-1,385.91	-4,389.41	1,472.26	1,227.14	245.12	6.006		
11,800.00	7,123.97	11,307.09	7,055.46	126.66	125.51	87.33	-1,386.51	-4,489.41	1,472.24	1,221.63	250.60	5.875		
11,900.00	7,123.43	11,407.09	7,055.23	129.38	128.26	87.34	-1,387.11	-4,589.41	1,472.21	1,216.12	256.09	5.749		
12,000.00	7,122.89	11,507.09	7,055.00	132.10	131.02	87.36	-1,387.71	-4,689.40	1,472.19	1,210.59	261.59	5.628		
12,100.00	7,122.35	11,607.09	7,054.77	134.83	133.78	87.37	-1,388.31	-4,789.40	1,472.16	1,205.06	267.10	5.512		
12,200.00	7,121.81	11,707.09	7,054.54	137.56	136.55	87.38	-1,388.91	-4,889.40	1,472.14	1,199.51	272.62	5.400		
12,300.00	7,121.27	11,807.09	7,054.31	140.30	139.32	87.39	-1,389.51	-4,989.40	1,472.11	1,193.96	278.15	5.293		
12,400.00	7,120.73	11,907.09	7,054.08	143.05	142.09	87.41	-1,390.11	-5,089.39	1,472.09	1,188.40	283.68	5.189		
12,500.00	7,120.19	12,007.09	7,053.85	145.80	144.87	87.42	-1,390.70	-5,189.39	1,472.06	1,182.84	289.22	5.090		
12,600.00	7,119.65	12,107.09	7,053.62	148.55	147.65	87.43	-1,391.30	-5,289.39	1,472.04	1,177.26	294.77	4.994		
12,700.00	7,119.10	12,207.09	7,053.39	151.30	150.43	87.44	-1,391.90	-5,389.39	1,472.01	1,171.69	300.33	4.901		
12,800.00	7,118.56	12,307.09	7,053.16	154.07	153.22	87.45	-1,392.50	-5,489.38	1,471.99	1,166.10	305.89	4.812		
12,900.00	7,118.02	12,407.08	7,052.93	156.83	156.01	87.47	-1,393.10	-5,589.38	1,471.96	1,160.51	311.45	4.726		
13,000.00	7,117.48	12,507.08	7,052.70	159.60	158.80	87.48	-1,393.70	-5,689.38	1,471.94	1,154.91	317.02	4.643		
13,100.00	7,116.94	12,607.08	7,052.47	162.37	161.60	87.49	-1,394.30	-5,789.37	1,471.91	1,149.31	322.60	4.563		
13,200.00	7,116.40	12,707.08	7,052.23	165.14	164.39	87.50	-1,394.90	-5,889.37	1,471.89	1,143.70	328.18	4.485		
13,300.00	7,115.86	12,807.08	7,052.00	167.92	167.19	87.51	-1,395.49	-5,989.37	1,471.86	1,138.09	333.77	4.410		
13,400.00	7,115.32	12,907.08	7,051.77	170.70	169.99	87.53	-1,396.09	-6,089.37	1,471.84	1,132.48	339.36	4.337		
13,500.00	7,114.78	13,007.08	7,051.54	173.48	172.79	87.54	-1,396.69	-6,189.36	1,471.82	1,126.86	344.96	4.267		
13,600.00	7,114.24	13,107.08	7,051.31	176.26	175.60	87.55	-1,397.29	-6,289.36	1,471.79	1,121.24	350.56	4.198		
13,700.00	7,113.69	13,207.08	7,051.08	179.05	178.40	87.56	-1,397.89	-6,389.36	1,471.77	1,115.61	356.16	4.132		
13,800.00	7,113.15	13,307.08	7,050.85	181.84	181.21	87.57	-1,398.49	-6,489.36	1,471.74	1,109.98	361.77	4.068		
13,900.00	7,112.61	13,407.08	7,050.62	184.63	184.02	87.59	-1,399.09	-6,589.35	1,471.72	1,104.34	367.38	4.006		
14,000.00	7,112.07	13,507.08	7,050.39	187.42	186.83	87.60	-1,399.69	-6,689.35	1,471.70	1,098.70	372.99	3.946		
14,100.00	7,111.53	13,607.08	7,050.16	190.22	189.64	87.61	-1,400.29	-6,789.35	1,471.67	1,093.06	378.61	3.887		
14,200.00	7,110.99	13,707.08	7,049.93	193.01	192.45	87.62	-1,400.88	-6,889.35	1,471.65	1,087.42	384.23	3.830		
14,300.00	7,110.45	13,807.08	7,049.70	195.81	195.27	87.63	-1,401.48	-6,989.34	1,471.62	1,081.77	389.85	3.775		
14,400.00	7,109.91	13,907.08	7,049.47	198.61	198.08	87.65	-1,402.08	-7,089.34	1,471.60	1,076.12	395.48	3.721		
14,500.00	7,109.37	14,007.08	7,049.24	201.42	200.90	87.66	-1,402.68	-7,189.34	1,471.58	1,070.47	401.10	3.669		
14,600.00	7,108.82	14,107.08	7,049.01	204.22	203.72	87.67	-1,403.28	-7,289.34	1,471.55	1,064.82	406.74	3.618		
14,700.00	7,108.28	14,207.08	7,048.78	207.03	206.54	87.68	-1,403.88	-7,389.33	1,471.53	1,059.16	412.37	3.568		
14,800.00	7,107.74	14,307.08	7,048.55	209.83	209.36	87.69	-1,404.48	-7,489.33	1,471.51	1,053.50	418.01	3.520		
14,900.00	7,107.20	14,407.08	7,048.32	212.64	212.18	87.71	-1,405.08	-7,589.33	1,471.48	1,047.84	423.64	3.473		
15,000.00	7,106.66	14,507.07	7,048.09	215.45	215.00	87.72	-1,405.68	-7,689.33	1,471.46	1,042.17	429.28	3.428		
15,100.00	7,106.12	14,607.07	7,047.86	218.26	217.83	87.73	-1,406.27	-7,789.32	1,471.44	1,036.51	434.93	3.383		
15,200.00	7,105.58	14,707.07	7,047.63	221.07	220.65	87.74	-1,406.87	-7,889.32	1,471.41	1,030.84	440.57	3.340		
15,300.00	7,105.04	14,807.07	7,047.40	223.89	223.48	87.75	-1,407.47	-7,989.32	1,471.39	1,025.17	446.22	3.297		
15,400.00	7,104.50	14,907.07	7,047.17	226.70	226.30	87.77	-1,408.07	-8,089.32	1,471.37	1,019.50	451.87	3.256		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,475.97	7,104.08	14,983.04	7,046.99	228.84	228.45	87.78	-1,408.53	-8,165.28	1,471.35	1,015.19	456.16	3.226	
15,491.56	7,104.00	14,979.18	7,047.00	229.28	228.34	87.78	-1,408.50	-8,161.42	1,471.47	1,015.22	456.26	3.225 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 13C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.40	40.07	0.28	40.07					
100.00	100.00	100.00	100.00	3.28	3.28	0.40	40.07	0.28	40.07	33.50	6.57	6.099		
200.00	200.00	200.00	200.00	3.34	3.34	0.40	40.07	0.28	40.07	33.39	6.67	6.003		
300.00	299.98	301.42	301.39	3.44	3.44	177.24	38.27	0.16	40.04	33.15	6.89	5.810		
400.00	399.84	402.83	402.66	3.59	3.60	177.17	32.90	-0.18	39.97	32.75	7.22	5.535		
500.00	499.45	504.24	503.67	3.79	3.80	177.05	23.96	-0.75	39.85	32.20	7.65	5.206		
600.00	598.70	605.65	604.29	4.03	4.05	176.87	11.45	-1.54	39.69	31.51	8.17	4.855		
700.00	697.47	707.04	704.40	4.31	4.34	176.65	-4.60	-2.56	39.47	30.71	8.77	4.502		
800.00	795.62	808.43	803.87	4.64	4.67	176.38	-24.17	-3.80	39.21	29.80	9.42	4.164		
900.00	893.06	909.81	902.57	5.00	5.04	176.05	-47.24	-5.27	38.91	28.79	10.12	3.845		
1,000.00	989.64	1,011.17	1,000.38	5.40	5.44	175.67	-73.78	-6.96	38.56	27.70	10.86	3.550		
1,100.00	1,085.27	1,112.53	1,097.17	5.83	5.89	175.23	-103.75	-8.86	38.17	26.53	11.64	3.279		
1,200.00	1,179.82	1,213.86	1,192.83	6.29	6.36	174.72	-137.12	-10.98	37.74	25.29	12.45	3.031		
1,230.72	1,208.63	1,244.81	1,221.81	6.45	6.51	174.56	-147.95	-11.67	37.63	24.93	12.70	2.962 CC		
1,300.00	1,273.17	1,314.08	1,286.64	6.79	6.86	174.36	-172.30	-13.22	38.47	25.19	13.28	2.896		
1,400.00	1,365.21	1,413.99	1,380.15	7.33	7.38	174.49	-207.42	-15.45	42.63	28.47	14.16	3.011		
1,500.00	1,456.49	1,513.81	1,473.57	7.89	7.91	174.81	-242.52	-17.68	48.71	33.65	15.06	3.235		
1,600.00	1,547.76	1,613.62	1,566.98	8.46	8.45	175.06	-277.61	-19.91	54.80	38.81	15.98	3.428		
1,700.00	1,639.04	1,713.43	1,660.40	9.05	9.00	175.27	-312.70	-22.14	60.89	43.96	16.93	3.596		
1,800.00	1,730.31	1,813.25	1,753.81	9.65	9.56	175.43	-347.79	-24.37	66.98	49.09	17.89	3.743		
1,900.00	1,821.58	1,913.06	1,847.23	10.26	10.13	175.57	-382.88	-26.60	73.07	54.20	18.87	3.872		
2,000.00	1,912.85	2,012.88	1,940.65	10.87	10.70	175.69	-417.97	-28.83	79.16	59.30	19.86	3.985		
2,100.00	2,004.13	2,112.69	2,034.06	11.49	11.27	175.79	-453.06	-31.06	85.26	64.39	20.87	4.086		
2,200.00	2,095.40	2,212.50	2,127.48	12.11	11.85	175.88	-488.15	-33.29	91.35	69.47	21.88	4.176		
2,300.00	2,186.67	2,312.32	2,220.89	12.74	12.44	175.95	-523.24	-35.52	97.44	74.55	22.89	4.256		
2,400.00	2,277.95	2,412.13	2,314.31	13.38	13.02	176.02	-558.33	-37.75	103.54	79.62	23.92	4.328		
2,500.00	2,369.22	2,511.95	2,407.72	14.01	13.61	176.08	-593.42	-39.98	109.63	84.68	24.95	4.394		
2,600.00	2,460.49	2,611.76	2,501.14	14.65	14.20	176.13	-628.51	-42.22	115.72	89.73	25.99	4.453		
2,700.00	2,551.77	2,711.57	2,594.56	15.29	14.80	176.18	-663.60	-44.45	121.82	94.78	27.03	4.506		
2,800.00	2,643.04	2,811.39	2,687.97	15.93	15.39	176.22	-698.69	-46.68	127.91	99.83	28.08	4.556		
2,900.00	2,734.31	2,911.20	2,781.39	16.58	15.99	176.26	-733.78	-48.91	134.00	104.87	29.13	4.600		
3,000.00	2,825.58	3,011.02	2,874.80	17.23	16.59	176.30	-768.87	-51.14	140.10	109.91	30.18	4.642		
3,100.00	2,916.86	3,110.83	2,968.22	17.87	17.18	176.33	-803.96	-53.37	146.19	114.95	31.24	4.680		
3,200.00	3,008.13	3,210.65	3,061.64	18.52	17.78	176.36	-839.05	-55.60	152.28	119.99	32.30	4.715		
3,300.00	3,099.40	3,310.46	3,155.05	19.17	18.38	176.39	-874.14	-57.83	158.38	125.02	33.36	4.748		
3,400.00	3,190.68	3,410.27	3,248.47	19.83	18.99	176.42	-909.24	-60.06	164.47	130.05	34.42	4.778		
3,500.00	3,281.95	3,510.09	3,341.88	20.48	19.59	176.44	-944.33	-62.29	170.56	135.07	35.49	4.806		
3,600.00	3,373.22	3,609.90	3,435.30	21.13	20.19	176.46	-979.42	-64.52	176.66	140.10	36.56	4.832		
3,700.00	3,464.49	3,709.72	3,528.72	21.79	20.80	176.48	-1,014.51	-66.75	182.75	145.12	37.63	4.857		
3,800.00	3,555.77	3,809.53	3,622.13	22.44	21.40	176.50	-1,049.60	-68.98	188.84	150.15	38.70	4.880		
3,900.00	3,647.04	3,909.34	3,715.55	23.10	22.01	176.52	-1,084.69	-71.21	194.94	155.17	39.77	4.902		
4,000.00	3,738.31	4,009.16	3,808.96	23.75	22.61	176.54	-1,119.78	-73.44	201.03	160.19	40.84	4.922		
4,100.00	3,829.59	4,108.97	3,902.38	24.41	23.22	176.56	-1,154.87	-75.67	207.13	165.21	41.92	4.941		
4,200.00	3,920.86	4,208.79	3,995.80	25.07	23.83	176.57	-1,189.96	-77.90	213.22	170.22	42.99	4.959		
4,300.00	4,012.13	4,308.60	4,089.21	25.73	24.43	176.59	-1,225.05	-80.13	219.31	175.24	44.07	4.976		
4,400.00	4,103.41	4,408.42	4,182.63	26.38	25.04	176.60	-1,260.14	-82.36	225.41	180.26	45.15	4.992		
4,500.00	4,194.68	4,508.23	4,276.04	27.04	25.65	176.61	-1,295.23	-84.59	231.50	185.27	46.23	5.008		
4,600.00	4,285.95	4,608.04	4,369.46	27.70	26.26	176.62	-1,330.32	-86.82	237.60	190.29	47.31	5.022		
4,700.00	4,377.22	4,707.86	4,462.88	28.36	26.87	176.64	-1,365.41	-89.05	243.69	195.30	48.39	5.036		
4,800.00	4,468.50	4,807.67	4,556.29	29.02	27.47	176.65	-1,400.50	-91.28	249.78	200.31	49.47	5.049		
4,900.00	4,559.77	4,907.49	4,649.71	29.68	28.08	176.66	-1,435.59	-93.51	255.88	205.32	50.55	5.061		
5,000.00	4,651.04	5,007.30	4,743.12	30.34	28.69	176.67	-1,470.68	-95.74	261.97	210.33	51.64	5.073		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 13C-16-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,100.00	4,742.32	5,107.11	4,836.54	31.00	29.30	176.68	-1,505.77	-97.97	268.06	215.34	52.72	5.085	
5,200.00	4,833.59	5,206.93	4,929.96	31.66	29.91	176.69	-1,540.86	-100.20	274.16	220.35	53.80	5.095	
5,300.00	4,924.86	5,306.74	5,023.37	32.32	30.52	176.70	-1,575.96	-102.43	280.25	225.36	54.89	5.106	
5,400.00	5,016.13	5,406.56	5,116.79	32.99	31.13	176.70	-1,611.05	-104.66	286.35	230.37	55.97	5.116	
5,500.00	5,107.41	5,506.37	5,210.20	33.65	31.74	176.71	-1,646.14	-106.89	292.44	235.38	57.06	5.125	
5,600.00	5,198.68	5,606.19	5,303.62	34.31	32.35	176.72	-1,681.23	-109.12	298.53	240.39	58.15	5.134	
5,700.00	5,289.95	5,706.00	5,397.04	34.97	32.97	176.73	-1,716.32	-111.35	304.63	245.40	59.23	5.143	
5,800.00	5,381.23	5,805.81	5,490.45	35.63	33.58	176.73	-1,751.41	-113.58	310.72	250.40	60.32	5.151	
5,900.00	5,472.50	5,905.63	5,583.87	36.30	34.19	176.74	-1,786.50	-115.81	316.82	255.41	61.41	5.159	
6,000.00	5,563.77	6,005.44	5,677.28	36.96	34.80	176.75	-1,821.59	-118.04	322.91	260.42	62.49	5.167	
6,100.00	5,655.05	6,105.26	5,770.70	37.62	35.41	176.75	-1,856.68	-120.27	329.00	265.42	63.58	5.174	
6,200.00	5,746.32	6,205.07	5,864.12	38.28	36.02	176.76	-1,891.77	-122.50	335.10	270.43	64.67	5.182	
6,300.00	5,837.59	6,304.88	5,957.53	38.95	36.63	176.77	-1,926.86	-124.74	341.19	275.43	65.76	5.189	
6,400.00	5,928.86	6,404.70	6,050.95	39.61	37.25	176.77	-1,961.95	-126.97	347.29	280.44	66.85	5.195	
6,500.00	6,020.14	6,504.51	6,144.36	40.27	37.86	176.78	-1,997.04	-129.20	353.38	285.44	67.94	5.202	
6,600.00	6,111.41	6,604.33	6,237.78	40.94	38.47	176.78	-2,032.13	-131.43	359.47	290.45	69.03	5.208	
6,700.00	6,202.68	6,704.14	6,331.20	41.60	39.08	176.79	-2,067.22	-133.66	365.57	295.45	70.12	5.214	
6,800.00	6,293.96	6,803.95	6,424.61	42.26	39.69	176.79	-2,102.31	-135.89	371.66	300.46	71.21	5.219	
6,900.00	6,385.23	6,903.77	6,518.03	42.93	40.31	176.80	-2,137.40	-138.12	377.76	305.46	72.30	5.225	
7,000.00	6,476.50	7,003.58	6,611.44	43.59	40.92	176.80	-2,172.49	-140.35	383.85	310.46	73.39	5.230	
7,100.00	6,567.77	7,103.40	6,704.80	44.25	41.53	176.59	-2,207.57	-144.08	389.94	315.46	74.48	5.235	
7,200.00	6,658.64	7,202.17	6,795.82	44.91	42.11	157.93	-2,241.88	-160.63	396.11	320.49	75.62	5.238	
7,300.00	6,747.14	7,299.71	6,882.25	45.52	42.64	141.15	-2,274.57	-191.54	402.28	325.56	76.73	5.243	
7,400.00	6,831.10	7,396.13	6,962.34	46.07	43.10	129.05	-2,304.98	-235.60	408.29	330.50	77.78	5.249	
7,500.00	6,908.46	7,491.57	7,034.54	46.54	43.50	120.51	-2,332.52	-291.45	413.93	335.16	78.77	5.255	
7,600.00	6,977.30	7,586.15	7,097.57	46.95	43.85	114.46	-2,356.70	-357.57	419.06	339.33	79.72	5.256	
7,700.00	7,035.93	7,680.00	7,150.35	47.30	44.14	110.14	-2,377.09	-432.34	423.49	342.80	80.69	5.248	
7,800.00	7,082.92	7,773.27	7,192.03	47.59	44.40	107.10	-2,393.38	-514.08	427.10	345.34	81.76	5.224	
7,900.00	7,117.09	7,866.10	7,221.96	47.84	44.64	105.07	-2,405.29	-601.05	429.77	346.77	83.00	5.178	
8,000.00	7,137.62	7,958.61	7,239.69	48.06	44.87	103.90	-2,412.65	-691.47	431.42	346.94	84.49	5.106	
8,100.00	7,143.99	8,051.27	7,244.98	48.28	45.13	103.52	-2,415.35	-783.85	432.00	345.76	86.25	5.009	
8,200.00	7,143.45	8,151.27	7,244.48	48.53	45.50	103.52	-2,415.94	-883.85	432.01	343.50	88.51	4.881	
8,300.00	7,142.91	8,251.27	7,243.98	48.89	46.04	103.53	-2,416.53	-983.85	432.02	340.97	91.05	4.745	
8,400.00	7,142.37	8,351.27	7,243.48	49.40	46.82	103.53	-2,417.12	-1,083.84	432.03	338.18	93.85	4.604	
8,500.00	7,141.83	8,451.27	7,242.97	50.12	47.86	103.54	-2,417.70	-1,183.84	432.04	335.16	96.88	4.459	
8,600.00	7,141.29	8,551.27	7,242.47	51.08	49.17	103.54	-2,418.29	-1,283.84	432.05	331.91	100.14	4.314	
8,700.00	7,140.75	8,651.27	7,241.97	52.30	50.68	103.55	-2,418.88	-1,383.84	432.06	328.46	103.59	4.171	
8,800.00	7,140.21	8,751.27	7,241.47	53.75	52.37	103.55	-2,419.47	-1,483.83	432.07	324.84	107.23	4.029	
8,900.00	7,139.67	8,851.27	7,240.97	55.40	54.20	103.56	-2,420.06	-1,583.83	432.08	321.06	111.02	3.892	
9,000.00	7,139.12	8,951.27	7,240.47	57.20	56.14	103.57	-2,420.64	-1,683.83	432.09	317.13	114.96	3.759	
9,100.00	7,138.58	9,051.27	7,239.97	59.13	58.17	103.57	-2,421.23	-1,783.82	432.10	313.07	119.03	3.630	
9,200.00	7,138.04	9,151.27	7,239.47	61.15	60.29	103.58	-2,421.82	-1,883.82	432.10	308.89	123.21	3.507	
9,300.00	7,137.50	9,251.27	7,238.97	63.26	62.47	103.58	-2,422.41	-1,983.82	432.11	304.61	127.51	3.389	
9,400.00	7,136.96	9,351.27	7,238.47	65.44	64.71	103.59	-2,423.00	-2,083.81	432.12	300.23	131.89	3.276	
9,500.00	7,136.42	9,451.27	7,237.97	67.68	67.00	103.59	-2,423.59	-2,183.81	432.13	295.76	136.37	3.169	
9,600.00	7,135.88	9,551.27	7,237.47	69.97	69.34	103.60	-2,424.17	-2,283.81	432.14	291.22	140.92	3.067	
9,700.00	7,135.34	9,651.27	7,236.97	72.31	71.71	103.60	-2,424.76	-2,383.81	432.15	286.61	145.54	2.969	
9,800.00	7,134.80	9,751.27	7,236.47	74.69	74.13	103.61	-2,425.35	-2,483.80	432.16	281.93	150.23	2.877	
9,900.00	7,134.26	9,851.27	7,235.96	77.10	76.57	103.61	-2,425.94	-2,583.80	432.17	277.19	154.98	2.789	
10,000.00	7,133.71	9,951.27	7,235.46	79.54	79.05	103.62	-2,426.53	-2,683.80	432.18	272.40	159.77	2.705	
10,100.00	7,133.17	10,051.27	7,234.96	82.02	81.55	103.62	-2,427.11	-2,783.79	432.19	267.57	164.62	2.625	
10,200.00	7,132.63	10,151.27	7,234.46	84.52	84.07	103.63	-2,427.70	-2,883.79	432.20	262.68	169.51	2.550	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 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		
10,300.00	7,132.09	10,251.27	7,233.96	87.04	86.62	103.63	-2,428.29	-2,983.79	432.21	257.76	174.45	2.478		
10,400.00	7,131.55	10,351.27	7,233.46	89.58	89.18	103.64	-2,428.88	-3,083.78	432.22	252.80	179.41	2.409		
10,500.00	7,131.01	10,451.27	7,232.96	92.15	91.77	103.64	-2,429.47	-3,183.78	432.22	247.81	184.42	2.344		
10,600.00	7,130.47	10,551.27	7,232.46	94.73	94.37	103.65	-2,430.06	-3,283.78	432.23	242.78	189.45	2.281		
10,700.00	7,129.93	10,651.27	7,231.96	97.33	96.98	103.65	-2,430.64	-3,383.78	432.24	237.73	194.52	2.222		
10,800.00	7,129.39	10,751.27	7,231.46	99.94	99.61	103.66	-2,431.23	-3,483.77	432.25	232.65	199.61	2.166		
10,900.00	7,128.84	10,851.27	7,230.96	102.56	102.25	103.66	-2,431.82	-3,583.77	432.26	227.54	204.72	2.111		
11,000.00	7,128.30	10,951.27	7,230.46	105.20	104.90	103.67	-2,432.41	-3,683.77	432.27	222.41	209.86	2.060		
11,100.00	7,127.76	11,051.27	7,229.96	107.85	107.56	103.67	-2,433.00	-3,783.76	432.28	217.26	215.02	2.010		
11,200.00	7,127.22	11,151.27	7,229.46	110.51	110.24	103.68	-2,433.58	-3,883.76	432.29	212.09	220.20	1.963		
11,300.00	7,126.68	11,251.27	7,228.96	113.18	112.92	103.69	-2,434.17	-3,983.76	432.30	206.91	225.39	1.918		
11,400.00	7,126.14	11,351.27	7,228.45	115.86	115.61	103.69	-2,434.76	-4,083.75	432.31	201.70	230.61	1.875		
11,500.00	7,125.60	11,451.27	7,227.95	118.55	118.31	103.70	-2,435.35	-4,183.75	432.32	196.48	235.84	1.833		
11,600.00	7,125.06	11,551.27	7,227.45	121.25	121.02	103.70	-2,435.94	-4,283.75	432.33	191.24	241.08	1.793		
11,700.00	7,124.52	11,651.27	7,226.95	123.95	123.73	103.71	-2,436.53	-4,383.75	432.34	185.99	246.34	1.755		
11,800.00	7,123.97	11,751.27	7,226.45	126.66	126.45	103.71	-2,437.11	-4,483.74	432.35	180.73	251.61	1.718		
11,900.00	7,123.43	11,851.27	7,225.95	129.38	129.18	103.72	-2,437.70	-4,583.74	432.36	175.46	256.90	1.683		
12,000.00	7,122.89	11,951.27	7,225.45	132.10	131.91	103.72	-2,438.29	-4,683.74	432.36	170.17	262.19	1.649		
12,100.00	7,122.35	12,051.27	7,224.95	134.83	134.64	103.73	-2,438.88	-4,783.73	432.37	164.87	267.50	1.616		
12,200.00	7,121.81	12,151.27	7,224.45	137.56	137.39	103.73	-2,439.47	-4,883.73	432.38	159.57	272.82	1.585		
12,300.00	7,121.27	12,251.27	7,223.95	140.30	140.13	103.74	-2,440.05	-4,983.73	432.39	154.25	278.14	1.555		
12,400.00	7,120.73	12,351.27	7,223.45	143.05	142.88	103.74	-2,440.64	-5,083.72	432.40	148.92	283.48	1.525		
12,500.00	7,120.19	12,451.27	7,222.95	145.80	145.64	103.75	-2,441.23	-5,183.72	432.41	143.59	288.82	1.497 Level 3		
12,600.00	7,119.65	12,551.27	7,222.45	148.55	148.40	103.75	-2,441.82	-5,283.72	432.42	138.25	294.17	1.470 Level 3		
12,700.00	7,119.10	12,651.27	7,221.95	151.30	151.16	103.76	-2,442.41	-5,383.72	432.43	132.90	299.53	1.444 Level 3		
12,800.00	7,118.56	12,751.27	7,221.45	154.07	153.93	103.76	-2,443.00	-5,483.71	432.44	127.54	304.90	1.418 Level 3		
12,900.00	7,118.02	12,851.27	7,220.94	156.83	156.70	103.77	-2,443.58	-5,583.71	432.45	122.18	310.27	1.394 Level 3		
13,000.00	7,117.48	12,951.27	7,220.44	159.60	159.47	103.77	-2,444.17	-5,683.71	432.46	116.81	315.65	1.370 Level 3		
13,100.00	7,116.94	13,051.27	7,219.94	162.37	162.25	103.78	-2,444.76	-5,783.70	432.47	111.43	321.04	1.347 Level 3		
13,200.00	7,116.40	13,151.27	7,219.44	165.14	165.03	103.78	-2,445.35	-5,883.70	432.48	106.05	326.43	1.325 Level 3		
13,300.00	7,115.86	13,251.27	7,218.94	167.92	167.81	103.79	-2,445.94	-5,983.70	432.49	100.66	331.83	1.303 Level 3		
13,400.00	7,115.32	13,351.27	7,218.44	170.70	170.59	103.79	-2,446.52	-6,083.69	432.50	95.27	337.23	1.283 Level 3		
13,500.00	7,114.78	13,451.27	7,217.94	173.48	173.38	103.80	-2,447.11	-6,183.69	432.51	89.87	342.63	1.262 Level 3		
13,600.00	7,114.24	13,551.27	7,217.44	176.26	176.17	103.81	-2,447.70	-6,283.69	432.51	84.47	348.05	1.243 Level 2		
13,700.00	7,113.69	13,651.27	7,216.94	179.05	178.96	103.81	-2,448.29	-6,383.69	432.52	79.06	353.46	1.224 Level 2		
13,800.00	7,113.15	13,751.27	7,216.44	181.84	181.75	103.82	-2,448.88	-6,483.68	432.53	73.65	358.88	1.205 Level 2		
13,900.00	7,112.61	13,851.27	7,215.94	184.63	184.55	103.82	-2,449.47	-6,583.68	432.54	68.24	364.31	1.187 Level 2		
14,000.00	7,112.07	13,951.27	7,215.44	187.42	187.34	103.83	-2,450.05	-6,683.68	432.55	62.82	369.74	1.170 Level 2		
14,100.00	7,111.53	14,051.27	7,214.94	190.22	190.14	103.83	-2,450.64	-6,783.67	432.56	57.39	375.17	1.153 Level 2		
14,200.00	7,110.99	14,151.27	7,214.44	193.01	192.94	103.84	-2,451.23	-6,883.67	432.57	51.97	380.60	1.137 Level 2		
14,300.00	7,110.45	14,251.27	7,213.94	195.81	195.75	103.84	-2,451.82	-6,983.67	432.58	46.54	386.04	1.121 Level 2		
14,400.00	7,109.91	14,351.27	7,213.43	198.61	198.55	103.85	-2,452.41	-7,083.66	432.59	41.11	391.48	1.105 Level 2		
14,500.00	7,109.37	14,451.27	7,212.93	201.42	201.36	103.85	-2,452.99	-7,183.66	432.60	35.67	396.93	1.090 Level 2		
14,600.00	7,108.82	14,551.27	7,212.43	204.22	204.16	103.86	-2,453.58	-7,283.66	432.61	30.23	402.38	1.075 Level 2		
14,700.00	7,108.28	14,651.27	7,211.93	207.03	206.97	103.86	-2,454.17	-7,383.66	432.62	24.79	407.83	1.061 Level 2		
14,800.00	7,107.74	14,751.27	7,211.43	209.83	209.78	103.87	-2,454.76	-7,483.65	432.63	19.35	413.28	1.047 Level 2		
14,900.00	7,107.20	14,851.27	7,210.93	212.64	212.59	103.87	-2,455.35	-7,583.65	432.64	13.90	418.74	1.033 Level 2		
15,000.00	7,106.66	14,951.27	7,210.43	215.45	215.41	103.88	-2,455.94	-7,683.65	432.65	8.45	424.20	1.020 Level 2		
15,100.00	7,106.12	15,051.27	7,209.93	218.26	218.22	103.88	-2,456.52	-7,783.64	432.66	3.00	429.66	1.007 Level 2		
15,200.00	7,105.58	15,151.27	7,209.43	221.07	221.03	103.89	-2,457.11	-7,883.64	432.67	-2.45	435.12	0.994 Level 1		
15,300.00	7,105.04	15,251.27	7,208.93	223.89	223.85	103.89	-2,457.70	-7,983.64	432.67	-7.91	440.59	0.982 Level 1		
15,400.00	7,104.50	15,351.27	7,208.43	226.70	226.67	103.90	-2,458.29	-8,083.63	432.68	-13.37	446.05	0.970 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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,407.89	7,104.45	15,359.16	7,208.39	226.92	226.89	103.90	-2,458.33	-8,091.53	432.69	-13.80	446.48	0.969	Level 1
15,491.56	7,104.00	15,437.48	7,208.00	229.28	229.10	103.90	-2,458.80	-8,169.84	432.73	-17.96	450.68	0.960	Level 1, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 33N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.53	60.10	0.56	60.10					
100.00	100.00	100.00	100.00	3.28	3.28	0.53	60.10	0.56	60.10	53.54	6.57	9.149		
200.00	200.00	200.00	200.00	3.34	3.34	0.53	60.10	0.56	60.10	53.43	6.67	9.006		
300.00	299.98	302.14	302.12	3.44	3.44	177.37	58.29	0.43	60.07	53.18	6.89	8.714		
400.00	399.84	404.27	404.10	3.59	3.60	177.29	52.84	0.05	59.96	52.74	7.22	8.300		
500.00	499.45	506.40	505.82	3.79	3.81	177.16	43.77	-0.57	59.78	52.12	7.66	7.804		
600.00	598.70	608.53	607.14	4.03	4.06	176.97	31.09	-1.45	59.53	51.35	8.18	7.275		
700.00	697.47	710.64	707.94	4.31	4.35	176.73	14.82	-2.58	59.21	50.43	8.78	6.745		
800.00	795.62	812.73	808.07	4.64	4.68	176.42	-5.02	-3.95	58.82	49.39	9.44	6.234		
900.00	893.06	914.81	907.42	5.00	5.06	176.07	-28.40	-5.57	58.37	48.23	10.14	5.757		
1,000.00	989.64	1,016.87	1,005.85	5.40	5.47	175.65	-55.30	-7.43	57.85	46.96	10.89	5.314		
1,100.00	1,085.27	1,118.91	1,103.24	5.83	5.91	175.16	-85.67	-9.53	57.26	45.59	11.67	4.908		
1,164.30	1,146.19	1,184.14	1,164.91	6.13	6.22	174.82	-106.83	-10.99	56.91	44.73	12.18	4.672 CC		
1,200.00	1,179.82	1,219.84	1,198.60	6.29	6.39	174.67	-118.60	-11.81	57.13	44.67	12.47	4.582 ES		
1,300.00	1,273.17	1,319.79	1,292.93	6.79	6.88	174.48	-151.58	-14.09	60.11	46.81	13.30	4.519		
1,400.00	1,365.21	1,419.57	1,387.10	7.33	7.38	174.59	-184.50	-16.36	66.56	52.39	14.17	4.696		
1,500.00	1,456.49	1,519.22	1,481.14	7.89	7.90	174.83	-217.38	-18.64	74.94	59.87	15.07	4.972		
1,600.00	1,547.76	1,618.87	1,575.18	8.46	8.43	175.03	-250.26	-20.91	83.33	67.33	15.99	5.210		
1,700.00	1,639.04	1,718.52	1,669.22	9.05	8.97	175.18	-283.13	-23.19	91.71	74.78	16.94	5.415		
1,800.00	1,730.31	1,818.16	1,763.26	9.65	9.51	175.32	-316.01	-25.46	100.10	82.20	17.89	5.594		
1,900.00	1,821.58	1,917.81	1,857.30	10.26	10.06	175.43	-348.89	-27.73	108.48	89.62	18.86	5.751		
2,000.00	1,912.85	2,017.46	1,951.34	10.87	10.62	175.52	-381.77	-30.01	116.87	97.02	19.85	5.888		
2,100.00	2,004.13	2,117.11	2,045.38	11.49	11.18	175.60	-414.64	-32.28	125.25	104.41	20.84	6.010		
2,200.00	2,095.40	2,216.75	2,139.42	12.11	11.74	175.68	-447.52	-34.56	133.64	111.80	21.84	6.118		
2,300.00	2,186.67	2,316.40	2,233.46	12.74	12.30	175.74	-480.40	-36.83	142.03	119.18	22.85	6.215		
2,400.00	2,277.95	2,416.05	2,327.50	13.38	12.87	175.80	-513.27	-39.11	150.41	126.55	23.87	6.302		
2,500.00	2,369.22	2,515.70	2,421.55	14.01	13.44	175.85	-546.15	-41.38	158.80	133.91	24.89	6.380		
2,600.00	2,460.49	2,615.34	2,515.59	14.65	14.02	175.89	-579.03	-43.65	167.19	141.27	25.92	6.451		
2,700.00	2,551.77	2,714.99	2,609.63	15.29	14.59	175.93	-611.90	-45.93	175.58	148.63	26.95	6.515		
2,800.00	2,643.04	2,814.64	2,703.67	15.93	15.17	175.97	-644.78	-48.20	183.96	155.98	27.99	6.573		
2,900.00	2,734.31	2,914.29	2,797.71	16.58	15.75	176.00	-677.66	-50.48	192.35	163.33	29.03	6.627		
3,000.00	2,825.58	3,013.93	2,891.75	17.23	16.33	176.04	-710.53	-52.75	200.74	170.67	30.07	6.676		
3,100.00	2,916.86	3,113.58	2,985.79	17.87	16.91	176.07	-743.41	-55.02	209.13	178.01	31.11	6.721		
3,200.00	3,008.13	3,213.23	3,079.83	18.52	17.49	176.09	-776.29	-57.30	217.51	185.35	32.16	6.763		
3,300.00	3,099.40	3,312.88	3,173.87	19.17	18.07	176.12	-809.17	-59.57	225.90	192.69	33.21	6.801		
3,400.00	3,190.68	3,412.52	3,267.91	19.83	18.65	176.14	-842.04	-61.85	234.29	200.02	34.27	6.837		
3,500.00	3,281.95	3,512.17	3,361.95	20.48	19.24	176.16	-874.92	-64.12	242.68	207.35	35.32	6.870		
3,600.00	3,373.22	3,611.82	3,455.99	21.13	19.82	176.18	-907.80	-66.40	251.06	214.69	36.38	6.901		
3,700.00	3,464.49	3,711.47	3,550.03	21.79	20.41	176.20	-940.67	-68.67	259.45	222.02	37.44	6.930		
3,800.00	3,555.77	3,811.11	3,644.07	22.44	20.99	176.22	-973.55	-70.94	267.84	229.34	38.50	6.957		
3,900.00	3,647.04	3,910.76	3,738.11	23.10	21.58	176.23	-1,006.43	-73.22	276.23	236.67	39.56	6.983		
4,000.00	3,738.31	4,010.41	3,832.15	23.75	22.17	176.25	-1,039.30	-75.49	284.62	243.99	40.62	7.007		
4,100.00	3,829.59	4,110.06	3,926.19	24.41	22.76	176.26	-1,072.18	-77.77	293.00	251.32	41.68	7.029		
4,200.00	3,920.86	4,209.71	4,020.23	25.07	23.34	176.28	-1,105.06	-80.04	301.39	258.64	42.75	7.050		
4,300.00	4,012.13	4,309.35	4,114.27	25.73	23.93	176.29	-1,137.93	-82.32	309.78	265.96	43.82	7.070		
4,400.00	4,103.41	4,409.00	4,208.31	26.38	24.52	176.30	-1,170.81	-84.59	318.17	273.28	44.88	7.089		
4,500.00	4,194.68	4,508.65	4,302.35	27.04	25.11	176.31	-1,203.69	-86.86	326.56	280.61	45.95	7.107		
4,600.00	4,285.95	4,608.30	4,396.39	27.70	25.70	176.32	-1,236.57	-89.14	334.94	287.92	47.02	7.124		
4,700.00	4,377.22	4,707.94	4,490.43	28.36	26.29	176.33	-1,269.44	-91.41	343.33	295.24	48.09	7.140		
4,800.00	4,468.50	4,807.59	4,584.47	29.02	26.88	176.34	-1,302.32	-93.69	351.72	302.56	49.16	7.155		
4,900.00	4,559.77	4,907.24	4,678.51	29.68	27.47	176.35	-1,335.20	-95.96	360.11	309.88	50.23	7.169		
5,000.00	4,651.04	5,006.89	4,772.55	30.34	28.06	176.36	-1,368.07	-98.23	368.49	317.20	51.30	7.183		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 33N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	5,106.53	4,866.59	31.00	28.65	176.37	-1,400.95	-100.51	376.88	324.51	52.37	7.196		
5,200.00	4,833.59	5,206.18	4,960.63	31.66	29.24	176.38	-1,433.83	-102.78	385.27	331.83	53.44	7.209		
5,300.00	4,924.86	5,305.83	5,054.67	32.32	29.83	176.39	-1,466.70	-105.06	393.66	339.14	54.52	7.221		
5,400.00	5,016.13	5,405.48	5,148.71	32.99	30.42	176.40	-1,499.58	-107.33	402.05	346.46	55.59	7.232		
5,500.00	5,107.41	5,505.12	5,242.75	33.65	31.02	176.40	-1,532.46	-109.61	410.44	353.77	56.66	7.243		
5,600.00	5,198.68	5,604.77	5,336.79	34.31	31.61	176.41	-1,565.33	-111.88	418.82	361.08	57.74	7.254		
5,700.00	5,289.95	5,704.42	5,430.83	34.97	32.20	176.42	-1,598.21	-114.15	427.21	368.40	58.81	7.264		
5,800.00	5,381.23	5,804.07	5,524.87	35.63	32.79	176.42	-1,631.09	-116.43	435.60	375.71	59.89	7.273		
5,900.00	5,472.50	5,903.71	5,618.91	36.30	33.38	176.43	-1,663.97	-118.70	443.99	383.02	60.96	7.283		
6,000.00	5,563.77	6,003.36	5,712.96	36.96	33.98	176.44	-1,696.84	-120.98	452.38	390.33	62.04	7.292		
6,100.00	5,655.05	6,103.01	5,807.00	37.62	34.57	176.44	-1,729.72	-123.25	460.76	397.65	63.12	7.300		
6,200.00	5,746.32	6,202.66	5,901.04	38.28	35.16	176.45	-1,762.60	-125.52	469.15	404.96	64.19	7.308		
6,300.00	5,837.59	6,302.30	5,995.08	38.95	35.75	176.45	-1,795.47	-127.80	477.54	412.27	65.27	7.316		
6,400.00	5,928.86	6,401.95	6,089.12	39.61	36.35	176.46	-1,828.35	-130.07	485.93	419.58	66.35	7.324		
6,500.00	6,020.14	6,501.60	6,183.16	40.27	36.94	176.46	-1,861.23	-132.35	494.32	426.89	67.43	7.331		
6,600.00	6,111.41	6,601.25	6,277.20	40.94	37.53	176.47	-1,894.10	-134.62	502.70	434.20	68.50	7.338		
6,700.00	6,202.68	6,700.89	6,371.24	41.60	38.12	176.47	-1,926.98	-136.90	511.09	441.51	69.58	7.345		
6,800.00	6,293.96	6,800.54	6,465.28	42.26	38.72	176.48	-1,959.86	-139.17	519.48	448.82	70.66	7.352		
6,900.00	6,385.23	6,900.19	6,559.32	42.93	39.31	176.48	-1,992.73	-141.44	527.87	456.13	71.74	7.358		
7,000.00	6,476.50	6,998.86	6,651.86	43.59	39.89	175.65	-2,025.15	-151.48	536.33	463.49	72.84	7.363		
7,100.00	6,567.77	7,092.96	6,737.73	44.25	40.41	173.40	-2,055.34	-175.04	545.56	471.60	73.97	7.376		
7,200.00	6,658.64	7,181.30	6,814.50	44.91	40.85	152.78	-2,082.45	-209.14	556.49	481.43	75.05	7.414		
7,300.00	6,747.14	7,266.52	6,883.63	45.52	41.23	134.20	-2,106.95	-252.40	568.44	492.46	75.97	7.482		
7,400.00	6,831.10	7,349.21	6,944.90	46.07	41.56	120.51	-2,128.77	-303.38	580.76	504.11	76.65	7.577		
7,500.00	6,908.46	7,429.86	6,998.14	46.54	41.85	110.61	-2,147.84	-360.81	592.81	515.75	77.06	7.693		
7,600.00	6,977.30	7,508.88	7,043.23	46.95	42.10	103.41	-2,164.11	-423.57	604.03	526.75	77.29	7.816		
7,700.00	7,035.93	7,586.62	7,080.08	47.30	42.33	98.17	-2,177.53	-490.63	613.92	536.48	77.44	7.928		
7,800.00	7,082.92	7,663.38	7,108.62	47.59	42.54	94.43	-2,188.07	-561.04	622.05	544.38	77.67	8.009		
7,900.00	7,117.09	7,739.43	7,128.81	47.84	42.74	91.92	-2,195.71	-633.92	628.10	549.97	78.13	8.039		
8,000.00	7,137.62	7,815.01	7,140.59	48.06	42.96	90.47	-2,200.44	-708.38	631.85	552.89	78.96	8.002		
8,100.00	7,143.99	7,891.53	7,143.97	48.28	43.22	90.00	-2,202.24	-784.76	633.15	552.91	80.24	7.891		
8,200.00	7,143.45	8,008.47	7,143.40	48.53	43.77	90.00	-2,202.85	-884.75	633.12	550.41	82.72	7.654		
8,300.00	7,142.91	8,108.47	7,142.83	48.89	44.49	89.99	-2,203.46	-984.75	633.10	547.77	85.33	7.419		
8,400.00	7,142.37	8,191.53	7,142.26	49.40	45.30	89.99	-2,204.08	-1,084.75	633.07	545.10	87.97	7.196		
8,500.00	7,141.83	8,308.47	7,141.70	50.12	46.74	89.99	-2,204.69	-1,184.74	633.05	541.64	91.41	6.925		
8,600.00	7,141.29	8,408.47	7,141.13	51.08	48.23	89.99	-2,205.30	-1,284.74	633.02	538.20	94.82	6.676		
8,700.00	7,140.75	8,508.47	7,140.56	52.30	49.89	89.98	-2,205.92	-1,384.74	633.00	534.55	98.45	6.430		
8,800.00	7,140.21	8,591.53	7,139.99	53.75	51.38	89.98	-2,206.53	-1,484.73	632.97	531.05	101.93	6.210		
8,900.00	7,139.67	8,708.47	7,139.42	55.40	53.61	89.98	-2,207.14	-1,584.73	632.95	526.70	106.25	5.957		
9,000.00	7,139.12	8,791.53	7,138.85	57.20	55.28	89.98	-2,207.75	-1,684.73	632.92	522.90	110.03	5.753		
9,100.00	7,138.58	8,908.47	7,138.28	59.13	57.73	89.97	-2,208.37	-1,784.72	632.90	518.24	114.66	5.520		
9,200.00	7,138.04	8,991.53	7,137.72	61.15	59.53	89.97	-2,208.98	-1,884.72	632.87	514.20	118.67	5.333		
9,300.00	7,137.50	9,108.47	7,137.15	63.26	62.13	89.97	-2,209.59	-1,984.72	632.85	509.29	123.56	5.122		
9,400.00	7,136.96	9,208.47	7,136.58	65.44	64.42	89.97	-2,210.21	-2,084.71	632.82	504.66	128.16	4.938		
9,500.00	7,136.42	9,291.53	7,136.01	67.68	66.35	89.96	-2,210.82	-2,184.71	632.80	500.36	132.44	4.778		
9,600.00	7,135.88	9,408.47	7,135.44	69.97	69.12	89.96	-2,211.43	-2,284.71	632.77	495.16	137.61	4.598		
9,700.00	7,135.34	9,491.53	7,134.87	72.31	71.12	89.96	-2,212.05	-2,384.70	632.75	490.72	142.03	4.455		
9,800.00	7,134.80	9,608.47	7,134.31	74.69	73.98	89.96	-2,212.66	-2,484.70	632.72	485.38	147.35	4.294		
9,900.00	7,134.26	9,708.47	7,133.74	77.10	76.45	89.95	-2,213.27	-2,584.69	632.70	480.40	152.30	4.154		
10,000.00	7,133.71	9,791.53	7,133.17	79.54	78.53	89.95	-2,213.88	-2,684.69	632.67	475.79	156.88	4.033		
10,100.00	7,133.17	9,908.47	7,132.60	82.02	81.48	89.95	-2,214.50	-2,784.69	632.65	470.29	162.36	3.897		
10,200.00	7,132.63	10,008.47	7,132.03	84.52	84.03	89.95	-2,215.11	-2,884.68	632.62	465.17	167.46	3.778		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 33N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,132.09	10,108.47	7,131.46	87.04	86.60	89.94	-2,215.72	-2,984.68	632.60	460.01	172.59	3.665		
10,400.00	7,131.55	10,208.47	7,130.89	89.58	89.18	89.94	-2,216.34	-3,084.68	632.57	454.81	177.76	3.558		
10,500.00	7,131.01	10,308.47	7,130.33	92.15	91.78	89.94	-2,216.95	-3,184.67	632.55	449.58	182.97	3.457		
10,600.00	7,130.47	10,391.53	7,129.76	94.73	93.96	89.94	-2,217.56	-3,284.67	632.52	444.77	187.75	3.369		
10,700.00	7,129.93	10,508.48	7,129.19	97.33	97.03	89.93	-2,218.18	-3,384.67	632.50	439.04	193.46	3.269		
10,800.00	7,129.39	10,591.53	7,128.62	99.94	99.23	89.93	-2,218.79	-3,484.66	632.47	434.18	198.30	3.190		
10,900.00	7,128.84	10,708.48	7,128.05	102.56	102.33	89.93	-2,219.40	-3,584.66	632.45	428.39	204.06	3.099		
11,000.00	7,128.30	10,808.48	7,127.48	105.20	105.00	89.93	-2,220.01	-3,684.66	632.42	423.04	209.39	3.020		
11,100.00	7,127.76	10,891.53	7,126.92	107.85	107.22	89.92	-2,220.63	-3,784.65	632.40	418.12	214.28	2.951		
11,200.00	7,127.22	11,008.48	7,126.35	110.51	110.36	89.92	-2,221.24	-3,884.65	632.37	412.27	220.11	2.873		
11,300.00	7,126.68	11,091.53	7,125.78	113.18	112.60	89.92	-2,221.85	-3,984.65	632.35	407.32	225.03	2.810		
11,400.00	7,126.14	11,208.48	7,125.21	115.86	115.76	89.92	-2,222.47	-4,084.64	632.32	401.43	230.89	2.739		
11,500.00	7,125.60	11,308.48	7,124.64	118.55	118.47	89.91	-2,223.08	-4,184.64	632.30	395.99	236.31	2.676		
11,600.00	7,125.06	11,391.53	7,124.07	121.25	120.72	89.91	-2,223.69	-4,284.64	632.27	391.00	241.28	2.621		
11,700.00	7,124.52	11,508.48	7,123.50	123.95	123.91	89.91	-2,224.30	-4,384.63	632.25	385.06	247.18	2.558		
11,800.00	7,123.97	11,608.48	7,122.94	126.66	126.63	89.91	-2,224.92	-4,484.63	632.22	379.58	252.64	2.502		
11,900.00	7,123.43	11,708.48	7,122.37	129.38	129.37	89.90	-2,225.53	-4,584.62	632.20	374.09	258.11	2.449		
12,000.00	7,122.89	11,808.48	7,121.80	132.10	132.11	89.90	-2,226.14	-4,684.62	632.17	368.59	263.58	2.398		
12,100.00	7,122.35	11,908.48	7,121.23	134.83	134.85	89.90	-2,226.76	-4,784.62	632.15	363.08	269.07	2.349		
12,200.00	7,121.81	12,008.48	7,120.66	137.56	137.60	89.90	-2,227.37	-4,884.61	632.12	357.56	274.57	2.302		
12,300.00	7,121.27	12,108.48	7,120.09	140.30	140.36	89.89	-2,227.98	-4,984.61	632.10	352.03	280.07	2.257		
12,400.00	7,120.73	12,208.48	7,119.53	143.05	143.12	89.89	-2,228.60	-5,084.61	632.07	346.49	285.59	2.213		
12,500.00	7,120.19	12,308.48	7,118.96	145.80	145.88	89.89	-2,229.21	-5,184.60	632.05	340.94	291.11	2.171		
12,600.00	7,119.65	12,408.48	7,118.39	148.55	148.64	89.89	-2,229.82	-5,284.60	632.02	335.39	296.64	2.131		
12,700.00	7,119.10	12,491.53	7,117.82	151.30	150.94	89.88	-2,230.43	-5,384.60	632.00	330.29	301.70	2.095		
12,800.00	7,118.56	12,608.48	7,117.25	154.07	154.19	89.88	-2,231.05	-5,484.59	631.97	324.26	307.72	2.054		
12,900.00	7,118.02	12,691.53	7,116.68	156.83	156.49	89.88	-2,231.66	-5,584.59	631.95	319.15	312.79	2.020		
13,000.00	7,117.48	12,808.48	7,116.12	159.60	159.74	89.88	-2,232.27	-5,684.59	631.92	313.10	318.82	1.982		
13,100.00	7,116.94	12,908.48	7,115.55	162.37	162.52	89.87	-2,232.89	-5,784.58	631.90	307.52	324.38	1.948		
13,200.00	7,116.40	13,008.48	7,114.98	165.14	165.31	89.87	-2,233.50	-5,884.58	631.87	301.93	329.95	1.915		
13,300.00	7,115.86	13,108.48	7,114.41	167.92	168.09	89.87	-2,234.11	-5,984.58	631.85	296.33	335.52	1.883		
13,400.00	7,115.32	13,191.53	7,113.84	170.70	170.41	89.87	-2,234.73	-6,084.57	631.82	291.20	340.62	1.855		
13,500.00	7,114.78	13,308.48	7,113.27	173.48	173.67	89.86	-2,235.34	-6,184.57	631.80	285.12	346.67	1.822		
13,600.00	7,114.24	13,408.48	7,112.70	176.26	176.47	89.86	-2,235.95	-6,284.57	631.77	279.51	352.26	1.793		
13,700.00	7,113.69	13,508.48	7,112.14	179.05	179.26	89.86	-2,236.56	-6,384.56	631.75	273.90	357.85	1.765		
13,800.00	7,113.15	13,591.53	7,111.57	181.84	181.58	89.86	-2,237.18	-6,484.56	631.72	268.76	362.97	1.740		
13,900.00	7,112.61	13,708.48	7,111.00	184.63	184.86	89.85	-2,237.79	-6,584.55	631.70	262.66	369.04	1.712		
14,000.00	7,112.07	13,808.48	7,110.43	187.42	187.66	89.85	-2,238.40	-6,684.55	631.67	257.04	374.64	1.686		
14,100.00	7,111.53	13,908.48	7,109.86	190.22	190.46	89.85	-2,239.02	-6,784.55	631.65	251.41	380.24	1.661		
14,200.00	7,110.99	14,008.48	7,109.29	193.01	193.27	89.85	-2,239.63	-6,884.54	631.62	245.77	385.85	1.637		
14,300.00	7,110.45	14,091.53	7,108.73	195.81	195.60	89.84	-2,240.24	-6,984.54	631.60	240.62	390.98	1.615		
14,400.00	7,109.91	14,208.48	7,108.16	198.61	198.88	89.84	-2,240.86	-7,084.54	631.57	234.50	397.07	1.591		
14,500.00	7,109.37	14,308.48	7,107.59	201.42	201.69	89.84	-2,241.47	-7,184.53	631.55	228.86	402.69	1.568		
14,600.00	7,108.82	14,408.48	7,107.02	204.22	204.50	89.84	-2,242.08	-7,284.53	631.52	223.22	408.31	1.547		
14,700.00	7,108.28	14,508.48	7,106.45	207.03	207.31	89.83	-2,242.69	-7,384.53	631.50	217.57	413.93	1.526		
14,800.00	7,107.74	14,608.48	7,105.88	209.83	210.13	89.83	-2,243.31	-7,484.52	631.47	211.92	419.55	1.505		
14,900.00	7,107.20	14,708.48	7,105.31	212.64	212.94	89.83	-2,243.92	-7,584.52	631.45	206.27	425.18	1.485 Level 3		
15,000.00	7,106.66	14,791.53	7,104.75	215.45	215.28	89.83	-2,244.53	-7,684.52	631.42	201.09	430.33	1.467 Level 3		
15,100.00	7,106.12	14,908.48	7,104.18	218.26	218.57	89.82	-2,245.15	-7,784.51	631.40	194.96	436.44	1.447 Level 3		
15,200.00	7,105.58	15,008.48	7,103.61	221.07	221.39	89.82	-2,245.76	-7,884.51	631.37	189.30	442.08	1.428 Level 3		
15,300.00	7,105.04	15,108.48	7,103.04	223.89	224.21	89.82	-2,246.37	-7,984.51	631.35	183.64	447.71	1.410 Level 3		
15,400.00	7,104.50	15,191.53	7,102.47	226.70	226.55	89.82	-2,246.99	-8,084.50	631.32	178.45	452.87	1.394 Level 3		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,486.80	7,104.03	15,278.33	7,101.98	229.14	229.00	89.81	-2,247.52	-8,171.30	631.30	173.54	457.77	1.379	Level 3, SF
15,491.56	7,104.00	15,274.57	7,102.00	229.28	228.89	89.81	-2,247.49	-8,167.54	631.36	173.83	457.53	1.380	Level 3



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 4C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	3.00	0.00	3.28	0.01	0.48	460.12	3.89	460.13					
100.00	100.00	103.00	100.00	3.28	0.19	0.48	460.12	3.89	460.13	456.66	3.47	132.475		
200.00	200.00	203.00	200.00	3.34	0.63	0.48	460.12	3.89	460.13	456.17	3.96	116.065 CC, ES		
300.00	299.98	302.98	299.98	3.44	1.07	177.36	460.12	3.89	461.88	457.37	4.51	102.499		
400.00	399.84	402.84	399.84	3.59	1.50	177.38	460.12	3.89	467.11	462.01	5.10	91.652		
500.00	499.45	502.45	499.45	3.79	1.94	177.42	460.12	3.89	475.81	470.08	5.73	82.983		
600.00	598.70	587.01	583.99	4.03	2.31	177.44	461.43	3.72	489.51	483.15	6.36	76.970		
700.00	697.47	670.57	667.47	4.31	2.68	177.43	465.15	3.21	509.52	502.49	7.03	72.526		
800.00	795.62	752.33	749.00	4.64	3.05	177.39	471.12	2.40	535.69	527.98	7.71	69.468		
900.00	893.06	831.85	828.11	5.00	3.40	177.32	479.14	1.31	567.87	559.46	8.41	67.560		
1,000.00	989.64	908.77	904.38	5.40	3.74	177.23	488.97	-0.03	605.84	596.74	9.10	66.596		
1,100.00	1,085.27	982.75	977.47	5.83	4.07	177.12	500.33	-1.58	649.37	639.59	9.78	66.399		
1,200.00	1,179.82	1,058.60	1,052.09	6.29	4.42	177.00	513.79	-3.41	698.11	687.65	10.47	66.700		
1,300.00	1,273.17	1,143.84	1,135.86	6.79	4.80	176.88	529.40	-5.53	750.39	739.19	11.20	66.990		
1,400.00	1,365.21	1,227.21	1,217.79	7.33	5.17	176.77	544.67	-7.61	805.60	793.66	11.94	67.456		
1,500.00	1,456.49	1,309.50	1,298.67	7.89	5.54	176.75	559.74	-9.66	862.42	849.74	12.68	67.997		
1,600.00	1,547.76	1,408.22	1,379.53	8.46	6.00	176.73	574.81	-11.71	919.24	905.74	13.50	68.087		
1,700.00	1,639.04	1,474.07	1,460.40	9.05	6.31	176.72	589.88	-13.76	976.07	961.89	14.18	68.822		
1,800.00	1,730.31	1,556.36	1,541.27	9.65	6.69	176.70	604.94	-15.81	1,032.89	1,017.94	14.95	69.095		
1,900.00	1,821.58	1,638.64	1,622.14	10.26	7.07	176.69	620.01	-17.86	1,089.72	1,073.99	15.72	69.303		
2,000.00	1,912.85	1,720.93	1,703.01	10.87	7.46	176.68	635.08	-19.91	1,146.54	1,130.03	16.51	69.458		
2,100.00	2,004.13	1,803.21	1,783.88	11.49	7.85	176.67	650.15	-21.96	1,203.37	1,186.07	17.30	69.572		
2,200.00	2,095.40	1,885.50	1,864.75	12.11	8.23	176.66	665.22	-24.01	1,260.19	1,242.10	18.09	69.653		
2,300.00	2,186.67	1,967.79	1,945.61	12.74	8.62	176.66	680.29	-26.06	1,317.01	1,298.12	18.89	69.709		
2,400.00	2,277.95	2,050.07	2,026.48	13.38	9.01	176.65	695.35	-28.11	1,373.84	1,354.14	19.70	69.744		
2,500.00	2,369.22	2,132.36	2,107.35	14.01	9.40	176.64	710.42	-30.16	1,430.66	1,410.16	20.51	69.762		
2,600.00	2,460.49	2,214.64	2,188.22	14.65	9.79	176.64	725.49	-32.21	1,487.49	1,466.17	21.32	69.768		
2,700.00	2,551.77	2,303.07	2,269.09	15.29	10.21	176.63	740.56	-34.26	1,544.31	1,522.15	22.17	69.673		
2,800.00	2,643.04	2,379.21	2,349.96	15.93	10.57	176.62	755.63	-36.31	1,601.14	1,578.18	22.96	69.749		
2,900.00	2,734.31	2,461.50	2,430.82	16.58	10.96	176.62	770.70	-38.36	1,657.96	1,634.18	23.78	69.730		
3,000.00	2,825.58	2,543.79	2,511.69	17.23	11.35	176.62	785.76	-40.41	1,714.79	1,690.19	24.60	69.704		
3,100.00	2,916.86	2,626.07	2,592.56	17.87	11.74	176.61	800.83	-42.46	1,771.61	1,746.18	25.43	69.675		
3,200.00	3,008.13	2,708.36	2,673.43	18.52	12.13	176.61	815.90	-44.51	1,828.44	1,802.18	26.25	69.643		
3,300.00	3,099.40	2,809.36	2,754.30	19.17	12.61	176.60	830.97	-46.56	1,885.26	1,858.09	27.17	69.385		
3,400.00	3,190.68	2,872.93	2,835.17	19.83	12.91	176.60	846.04	-48.61	1,942.08	1,914.17	27.92	69.571		
3,500.00	3,281.95	2,955.22	2,916.03	20.48	13.30	176.60	861.11	-50.66	1,998.91	1,970.16	28.75	69.533		
3,600.00	3,373.22	3,037.50	2,996.90	21.13	13.69	176.59	876.18	-52.71	2,055.73	2,026.15	29.58	69.494		
3,700.00	3,464.49	3,119.79	3,077.77	21.79	14.08	176.59	891.24	-54.76	2,112.56	2,082.14	30.42	69.454		
3,800.00	3,555.77	3,202.07	3,158.64	22.44	14.47	176.59	906.31	-56.81	2,169.38	2,138.13	31.25	69.414		
3,900.00	3,647.04	3,284.36	3,239.51	23.10	14.86	176.58	921.38	-58.86	2,226.21	2,194.12	32.09	69.373		
4,000.00	3,738.31	3,366.64	3,320.38	23.75	15.25	176.58	936.45	-60.91	2,283.03	2,250.10	32.93	69.333		
4,100.00	3,829.59	3,448.93	3,401.24	24.41	15.65	176.58	951.52	-62.96	2,339.86	2,306.09	33.77	69.292		
4,200.00	3,920.86	3,531.22	3,482.11	25.07	16.04	176.58	966.59	-65.01	2,396.68	2,362.07	34.61	69.252		
4,300.00	4,012.13	3,613.50	3,562.98	25.73	16.43	176.57	981.65	-67.06	2,453.51	2,418.06	35.45	69.212		
4,400.00	4,103.41	3,704.21	3,643.85	26.38	16.86	176.57	996.72	-69.11	2,510.33	2,474.00	36.33	69.098		
4,500.00	4,194.68	3,778.07	3,724.72	27.04	17.21	176.57	1,011.79	-71.16	2,567.16	2,530.02	37.13	69.133		
4,600.00	4,285.95	3,860.36	3,805.59	27.70	17.60	176.57	1,026.86	-73.21	2,623.98	2,586.00	37.98	69.095		
4,700.00	4,377.22	3,942.65	3,886.46	28.36	18.00	176.57	1,041.93	-75.26	2,680.80	2,641.98	38.82	69.057		
4,800.00	4,468.50	4,024.93	3,967.32	29.02	18.39	176.56	1,057.00	-77.31	2,737.63	2,697.96	39.66	69.019		
4,900.00	4,559.77	4,107.22	4,048.19	29.68	18.78	176.56	1,072.06	-79.36	2,794.45	2,753.94	40.51	68.982		
5,000.00	4,651.04	4,189.50	4,129.06	30.34	19.17	176.56	1,087.13	-81.41	2,851.28	2,809.92	41.36	68.946		
5,100.00	4,742.32	4,271.79	4,209.93	31.00	19.56	176.56	1,102.20	-83.46	2,908.10	2,865.90	42.20	68.910		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,200.00	4,833.59	4,354.07	4,290.80	31.66	19.96	176.56	1,117.27	-85.51	2,964.93	2,921.88	43.05	68.874		
5,300.00	4,924.86	4,436.36	4,371.67	32.32	20.35	176.56	1,132.34	-87.56	3,021.75	2,977.86	43.90	68.839		
5,400.00	5,016.13	4,518.65	4,452.53	32.99	20.74	176.56	1,147.41	-89.61	3,078.58	3,033.83	44.74	68.805		
5,500.00	5,107.41	4,600.93	4,533.40	33.65	21.13	176.55	1,162.47	-91.66	3,135.40	3,089.81	45.59	68.771		
5,600.00	5,198.68	4,683.22	4,614.27	34.31	21.53	176.55	1,177.54	-93.71	3,192.23	3,145.79	46.44	68.738		
5,700.00	5,289.95	4,765.50	4,695.14	34.97	21.92	176.55	1,192.61	-95.76	3,249.05	3,201.76	47.29	68.705		
5,800.00	5,381.23	4,847.79	4,776.01	35.63	22.31	176.55	1,207.68	-97.81	3,305.88	3,257.74	48.14	68.673		
5,900.00	5,472.50	4,930.08	4,856.88	36.30	22.70	176.55	1,222.75	-99.85	3,362.70	3,313.71	48.99	68.641		
6,000.00	5,563.77	5,012.36	4,937.74	36.96	23.10	176.55	1,237.82	-101.90	3,419.53	3,369.69	49.84	68.610		
6,100.00	5,655.05	5,105.35	5,018.61	37.62	23.54	176.55	1,252.88	-103.95	3,476.35	3,425.61	50.74	68.512		
6,200.00	5,746.32	5,176.93	5,099.48	38.28	23.88	176.55	1,267.95	-106.00	3,533.17	3,481.63	51.54	68.549		
6,300.00	5,837.59	5,259.22	5,180.35	38.95	24.27	176.54	1,283.02	-108.05	3,590.00	3,537.61	52.39	68.519		
6,400.00	5,928.86	5,341.50	5,261.22	39.61	24.67	176.54	1,298.09	-110.10	3,646.82	3,593.58	53.25	68.490		
6,500.00	6,020.14	5,423.79	5,342.09	40.27	25.06	176.54	1,313.16	-112.15	3,703.65	3,649.55	54.10	68.461		
6,600.00	6,111.41	5,506.08	5,422.95	40.94	25.45	176.54	1,328.23	-114.20	3,760.47	3,705.52	54.95	68.432		
6,700.00	6,202.68	5,588.36	5,503.82	41.60	25.84	176.54	1,343.29	-116.25	3,817.30	3,761.49	55.81	68.404		
6,800.00	6,293.96	5,670.65	5,584.69	42.26	26.24	176.54	1,358.36	-118.30	3,874.12	3,817.46	56.66	68.376		
6,900.00	6,385.23	5,752.93	5,665.56	42.93	26.63	176.54	1,373.43	-120.35	3,930.95	3,873.43	57.51	68.349		
7,000.00	6,476.50	5,835.22	5,746.43	43.59	27.02	176.54	1,388.50	-122.40	3,987.77	3,929.40	58.37	68.322		
7,100.00	6,567.77	5,917.50	5,827.30	44.25	27.41	176.54	1,403.57	-124.45	4,044.60	3,985.37	59.22	68.295		
7,200.00	6,658.64	6,000.44	5,907.94	44.91	27.81	154.17	1,418.60	-126.50	4,101.25	4,041.17	60.08	68.264		
7,300.00	6,747.14	6,079.86	5,986.86	45.52	28.19	133.47	1,433.30	-128.50	4,156.70	4,095.80	60.90	68.256		
7,400.00	6,831.10	6,156.41	6,062.09	46.07	28.55	117.95	1,447.32	-130.41	4,209.82	4,148.15	61.67	68.269		
7,500.00	6,908.46	6,227.34	6,131.79	46.54	28.89	106.52	1,460.31	-132.17	4,259.66	4,197.30	62.36	68.304		
7,600.00	6,977.30	6,290.89	6,194.25	46.95	29.20	98.04	1,471.94	-133.76	4,305.45	4,242.45	63.00	68.339		
7,700.00	7,035.93	6,345.50	6,247.92	47.30	29.46	91.71	1,481.94	-135.12	4,346.56	4,282.95	63.61	68.336		
7,800.00	7,082.92	6,389.83	6,291.49	47.59	29.67	86.98	1,490.06	-136.22	4,382.47	4,318.25	64.22	68.246		
7,900.00	7,117.09	6,422.79	6,323.88	47.84	29.83	83.51	1,496.10	-137.04	4,412.77	4,347.90	64.87	68.023		
8,000.00	7,137.62	6,443.56	6,344.29	48.06	29.92	81.08	1,499.90	-137.56	4,437.09	4,371.49	65.60	67.637		
8,100.00	7,143.99	6,451.63	6,352.22	48.28	29.96	79.60	1,501.38	-137.76	4,455.10	4,388.69	66.41	67.082		
8,200.00	7,143.45	6,453.48	6,354.04	48.53	29.97	79.62	1,501.72	-137.81	4,471.11	4,403.76	67.35	66.386		
8,300.00	7,142.91	6,455.33	6,355.86	48.89	29.98	79.65	1,502.06	-137.85	4,489.28	4,420.85	68.43	65.602		
8,400.00	7,142.37	6,457.18	6,357.45	49.40	42.93	91.47	1,654.32	-1,155.86	4,493.56	4,405.88	87.68	51.251		
8,500.00	7,141.83	6,459.03	6,357.03	50.12	44.72	91.47	1,652.67	-1,255.84	4,492.49	4,401.47	91.02	49.356		
8,600.00	7,141.29	6,461.02	6,356.61	51.08	46.61	91.47	1,651.01	-1,355.82	4,491.43	4,396.84	94.59	47.482		
8,700.00	7,140.75	6,461.01	6,356.19	52.30	48.60	91.48	1,649.35	-1,455.80	4,490.36	4,392.00	98.36	45.651		
8,800.00	7,140.21	6,461.01	6,355.77	53.75	50.67	91.48	1,647.69	-1,555.78	4,489.29	4,386.98	102.31	43.878		
8,900.00	7,139.67	6,461.00	6,355.35	55.40	52.81	91.48	1,646.03	-1,655.76	4,488.23	4,381.80	106.42	42.173		
9,000.00	7,139.12	6,460.99	6,354.93	57.20	55.02	91.48	1,644.37	-1,755.74	4,487.16	4,376.48	110.68	40.543		
9,100.00	7,138.58	6,460.99	6,354.51	59.13	57.28	91.48	1,642.71	-1,855.72	4,486.09	4,371.04	115.05	38.991		
9,200.00	7,138.04	6,460.98	6,354.09	61.15	59.60	91.49	1,641.06	-1,955.70	4,485.02	4,365.48	119.54	37.518		
9,300.00	7,137.50	6,460.98	6,353.67	63.26	61.96	91.49	1,639.40	-2,055.68	4,483.96	4,359.83	124.13	36.123		
9,400.00	7,136.96	6,460.97	6,353.25	65.44	64.36	91.49	1,637.74	-2,155.65	4,482.89	4,354.08	128.81	34.802		
9,500.00	7,136.42	6,460.96	6,352.83	67.68	66.80	91.49	1,636.08	-2,255.63	4,481.82	4,348.25	133.57	33.554		
9,600.00	7,135.88	6,460.96	6,352.40	69.97	69.27	91.49	1,634.42	-2,355.61	4,480.75	4,342.35	138.40	32.375		
9,700.00	7,135.34	6,460.95	6,351.98	72.31	71.77	91.50	1,632.76	-2,455.59	4,479.69	4,336.39	143.30	31.261		
9,800.00	7,134.80	6,460.95	6,351.56	74.69	74.29	91.50	1,631.10	-2,555.57	4,478.62	4,330.37	148.25	30.209		
9,900.00	7,134.26	6,460.94	6,351.14	77.10	76.84	91.50	1,629.45	-2,655.55	4,477.55	4,324.29	153.26	29.216		
10,000.00	7,133.71	6,460.94	6,350.72	79.54	79.41	91.50	1,627.79	-2,755.53	4,476.49	4,318.17	158.31	28.276		
10,100.00	7,133.17	6,460.93	6,350.30	82.02	81.99	91.50	1,626.13	-2,855.51	4,475.42	4,312.01	163.41	27.387		
10,200.00	7,132.63	6,460.92	6,349.88	84.52	84.60	91.51	1,624.47	-2,955.49	4,474.35	4,305.80	168.55	26.546		
10,300.00	7,132.09	6,460.92	6,349.46	87.04	87.22	91.51	1,622.81	-3,055.47	4,473.28	4,299.56	173.72	25.749		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 STATE 4C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,131.55	10,109.91	7,249.04	89.58	89.85	91.51	1,621.15	-3,155.45	4,472.22	4,293.29	178.93	24.994		
10,500.00	7,131.01	10,209.91	7,248.62	92.15	92.50	91.51	1,619.49	-3,255.43	4,471.15	4,286.98	184.17	24.278		
10,600.00	7,130.47	10,309.90	7,248.20	94.73	95.16	91.51	1,617.84	-3,355.41	4,470.08	4,280.65	189.43	23.598		
10,700.00	7,129.93	10,409.90	7,247.78	97.33	97.83	91.51	1,616.18	-3,455.39	4,469.02	4,274.30	194.72	22.951		
10,800.00	7,129.39	10,509.89	7,247.36	99.94	100.51	91.52	1,614.52	-3,555.37	4,467.95	4,267.92	200.03	22.337		
10,900.00	7,128.84	10,609.88	7,246.94	102.56	103.20	91.52	1,612.86	-3,655.35	4,466.88	4,261.52	205.36	21.751		
11,000.00	7,128.30	10,709.88	7,246.52	105.20	105.90	91.52	1,611.20	-3,755.33	4,465.81	4,255.10	210.71	21.194		
11,100.00	7,127.76	10,809.87	7,246.10	107.85	108.61	91.52	1,609.54	-3,855.31	4,464.75	4,248.66	216.09	20.662		
11,200.00	7,127.22	10,909.87	7,245.68	110.51	111.32	91.52	1,607.88	-3,955.29	4,463.68	4,242.21	221.47	20.154		
11,300.00	7,126.68	11,009.86	7,245.26	113.18	114.04	91.53	1,606.23	-4,055.27	4,462.61	4,235.73	226.88	19.670		
11,400.00	7,126.14	11,109.85	7,244.84	115.86	116.77	91.53	1,604.57	-4,155.25	4,461.55	4,229.25	232.30	19.206		
11,500.00	7,125.60	11,209.85	7,244.42	118.55	119.50	91.53	1,602.91	-4,255.23	4,460.48	4,222.75	237.73	18.763		
11,600.00	7,125.06	11,309.84	7,244.00	121.25	122.24	91.53	1,601.25	-4,355.21	4,459.41	4,216.24	243.17	18.338		
11,700.00	7,124.52	11,409.84	7,243.58	123.95	124.99	91.53	1,599.59	-4,455.18	4,458.34	4,209.71	248.63	17.932		
11,800.00	7,123.97	11,509.83	7,243.16	126.66	127.74	91.54	1,597.93	-4,555.16	4,457.28	4,203.18	254.10	17.541		
11,900.00	7,123.43	11,609.83	7,242.74	129.38	130.49	91.54	1,596.27	-4,655.14	4,456.21	4,196.63	259.58	17.167		
12,000.00	7,122.89	11,709.82	7,242.32	132.10	133.25	91.54	1,594.62	-4,755.12	4,455.14	4,190.07	265.07	16.808		
12,100.00	7,122.35	11,809.81	7,241.90	134.83	136.01	91.54	1,592.96	-4,855.10	4,454.08	4,183.51	270.57	16.462		
12,200.00	7,121.81	11,909.81	7,241.48	137.56	138.77	91.54	1,591.30	-4,955.08	4,453.01	4,176.94	276.07	16.130		
12,300.00	7,121.27	12,009.80	7,241.06	140.30	141.54	91.55	1,589.64	-5,055.06	4,451.94	4,170.35	281.59	15.810		
12,400.00	7,120.73	12,109.80	7,240.64	143.05	144.32	91.55	1,587.98	-5,155.04	4,450.87	4,163.76	287.11	15.502		
12,500.00	7,120.19	12,209.79	7,240.22	145.80	147.09	91.55	1,586.32	-5,255.02	4,449.81	4,157.17	292.64	15.206		
12,600.00	7,119.65	12,309.79	7,239.80	148.55	149.87	91.55	1,584.66	-5,355.00	4,448.74	4,150.56	298.18	14.920		
12,700.00	7,119.10	12,409.78	7,239.38	151.30	152.65	91.55	1,583.01	-5,454.98	4,447.67	4,143.96	303.72	14.644		
12,800.00	7,118.56	12,509.77	7,238.96	154.07	155.44	91.55	1,581.35	-5,554.96	4,446.61	4,137.34	309.27	14.378		
12,900.00	7,118.02	12,609.77	7,238.54	156.83	158.22	91.56	1,579.69	-5,654.94	4,445.54	4,130.72	314.82	14.121		
13,000.00	7,117.48	12,709.76	7,238.11	159.60	161.01	91.56	1,578.03	-5,754.92	4,444.47	4,124.09	320.38	13.872		
13,100.00	7,116.94	12,809.76	7,237.69	162.37	163.80	91.56	1,576.37	-5,854.90	4,443.40	4,117.46	325.95	13.632		
13,200.00	7,116.40	12,909.75	7,237.27	165.14	166.60	91.56	1,574.71	-5,954.88	4,442.34	4,110.82	331.52	13.400		
13,300.00	7,115.86	13,009.74	7,236.85	167.92	169.39	91.56	1,573.06	-6,054.86	4,441.27	4,104.18	337.09	13.175		
13,400.00	7,115.32	13,109.74	7,236.43	170.70	172.19	91.57	1,571.40	-6,154.84	4,440.20	4,097.53	342.67	12.958		
13,500.00	7,114.78	13,209.73	7,236.01	173.48	174.99	91.57	1,569.74	-6,254.82	4,439.14	4,090.88	348.26	12.747		
13,600.00	7,114.24	13,309.73	7,235.59	176.26	177.79	91.57	1,568.08	-6,354.80	4,438.07	4,084.22	353.84	12.542		
13,700.00	7,113.69	13,409.72	7,235.17	179.05	180.59	91.57	1,566.42	-6,454.78	4,437.00	4,077.57	359.44	12.344		
13,800.00	7,113.15	13,509.72	7,234.75	181.84	183.40	91.57	1,564.76	-6,554.76	4,435.94	4,070.90	365.03	12.152		
13,900.00	7,112.61	13,609.71	7,234.33	184.63	186.20	91.58	1,563.10	-6,654.73	4,434.87	4,064.24	370.63	11.966		
14,000.00	7,112.07	13,709.70	7,233.91	187.42	189.01	91.58	1,561.45	-6,754.71	4,433.80	4,057.57	376.23	11.785		
14,100.00	7,111.53	13,809.70	7,233.49	190.22	191.82	91.58	1,559.79	-6,854.69	4,432.73	4,050.89	381.84	11.609		
14,200.00	7,110.99	13,909.69	7,233.07	193.01	194.63	91.58	1,558.13	-6,954.67	4,431.67	4,044.22	387.45	11.438		
14,300.00	7,110.45	14,009.69	7,232.65	195.81	197.44	91.58	1,556.47	-7,054.65	4,430.60	4,037.54	393.06	11.272		
14,400.00	7,109.91	14,109.68	7,232.23	198.61	200.25	91.59	1,554.81	-7,154.63	4,429.53	4,030.86	398.67	11.111		
14,500.00	7,109.37	14,209.67	7,231.81	201.42	203.07	91.59	1,553.15	-7,254.61	4,428.47	4,024.17	404.29	10.954		
14,600.00	7,108.82	14,309.67	7,231.39	204.22	205.88	91.59	1,551.49	-7,354.59	4,427.40	4,017.49	409.91	10.801		
14,700.00	7,108.28	14,409.66	7,230.97	207.03	208.70	91.59	1,549.84	-7,454.57	4,426.33	4,010.80	415.53	10.652		
14,800.00	7,107.74	14,509.66	7,230.55	209.83	211.52	91.59	1,548.18	-7,554.55	4,425.26	4,004.11	421.16	10.507		
14,900.00	7,107.20	14,609.65	7,230.13	212.64	214.34	91.60	1,546.52	-7,654.53	4,424.20	3,997.41	426.78	10.366		
15,000.00	7,106.66	14,709.65	7,229.71	215.45	217.15	91.60	1,544.86	-7,754.51	4,423.13	3,990.72	432.41	10.229		
15,100.00	7,106.12	14,809.64	7,229.29	218.26	219.97	91.60	1,543.20	-7,854.49	4,422.06	3,984.02	438.05	10.095		
15,200.00	7,105.58	14,909.63	7,228.87	221.07	222.80	91.60	1,541.54	-7,954.47	4,421.00	3,977.32	443.68	9.964		
15,300.00	7,105.04	15,009.63	7,228.45	223.89	225.62	91.60	1,539.88	-8,054.45	4,419.93	3,970.62	449.31	9.837		
15,400.00	7,104.50	15,109.62	7,228.03	226.70	228.44	91.61	1,538.23	-8,154.43	4,418.86	3,963.91	454.95	9.713		
15,453.74	7,104.20	15,116.21	7,228.00	228.21	228.63	91.61	1,538.12	-8,161.02	4,418.54	3,961.93	456.61	9.677		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 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	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)						
15,491.56	7,104.00	15,116.21	7,228.00	229.28	228.63	91.61	1,538.12	-8,161.02	4,418.70	3,961.09	457.61	9.656 SF					



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-303 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.11	0.11	3.28	3.28	7.96	1,770.52	247.53	1,787.74					
100.00	100.00	112.41	111.41	3.28	3.29	7.96	1,770.15	247.60	1,787.42	1,780.84	6.57	271.886		
200.00	200.00	218.90	217.90	3.34	3.34	7.97	1,769.22	247.67	1,786.56	1,779.88	6.68	267.468		
230.78	230.78	250.90	249.90	3.36	3.37	-175.17	1,768.89	247.63	1,786.40	1,779.67	6.74	265.216		
300.00	299.98	322.43	321.42	3.44	3.46	-175.17	1,768.07	247.58	1,787.19	1,780.29	6.90	259.080		
400.00	399.84	412.72	411.70	3.59	3.60	-175.17	1,767.22	247.40	1,791.45	1,784.26	7.19	249.029		
500.00	499.45	507.41	506.39	3.79	3.79	-175.19	1,766.79	247.00	1,799.63	1,792.05	7.58	237.343		
600.00	598.70	616.35	615.33	4.03	4.05	-175.22	1,766.15	246.63	1,811.15	1,803.07	8.08	224.065		
700.00	697.47	709.96	708.94	4.31	4.30	-175.25	1,765.56	246.00	1,826.02	1,817.41	8.61	212.006		
800.00	795.62	807.68	806.65	4.64	4.59	-175.30	1,765.15	244.94	1,844.49	1,835.28	9.21	200.335		
900.00	893.06	910.20	909.16	5.00	4.91	-175.36	1,764.45	243.78	1,866.10	1,856.23	9.86	189.171		
1,000.00	989.64	993.55	992.50	5.40	5.19	-175.40	1,764.06	242.66	1,891.30	1,880.81	10.50	180.186		
1,100.00	1,085.27	1,061.00	1,059.93	5.83	5.42	-175.46	1,764.63	240.92	1,920.95	1,909.86	11.10	173.114		
1,200.00	1,179.82	1,136.36	1,135.20	6.29	5.67	-175.57	1,766.33	237.79	1,955.05	1,943.31	11.74	166.497		
1,300.00	1,273.17	1,202.54	1,201.22	6.79	5.91	-175.69	1,768.75	233.97	1,993.50	1,981.13	12.37	161.142		
1,400.00	1,365.21	1,269.12	1,267.53	7.33	6.15	-175.84	1,772.21	229.08	2,036.38	2,023.37	13.01	156.470		
1,500.00	1,456.49	1,343.00	1,340.94	7.89	6.42	-176.14	1,776.84	222.12	2,081.80	2,068.10	13.70	151.997		
1,600.00	1,547.76	1,410.15	1,407.49	8.46	6.68	-176.44	1,781.74	214.63	2,128.04	2,113.68	14.36	148.232		
1,700.00	1,639.04	1,482.99	1,479.53	9.05	6.97	-176.78	1,787.81	205.76	2,175.16	2,160.10	15.05	144.481		
1,800.00	1,730.31	1,564.26	1,559.83	9.65	7.31	-177.15	1,794.97	195.53	2,222.74	2,206.93	15.81	140.580		
1,900.00	1,821.58	1,660.69	1,655.10	10.26	7.73	-177.58	1,803.46	183.31	2,270.43	2,253.76	16.67	136.231		
2,000.00	1,912.85	1,766.16	1,759.39	10.87	8.20	-178.02	1,811.82	169.89	2,317.37	2,299.78	17.59	131.740		
2,100.00	2,004.13	1,869.70	1,861.86	11.49	8.66	-178.43	1,819.53	157.25	2,364.06	2,345.54	18.52	127.644		
2,200.00	2,095.40	1,978.76	1,969.88	12.11	9.16	-178.83	1,826.53	143.96	2,409.86	2,390.36	19.50	123.598		
2,300.00	2,186.67	2,058.79	2,049.21	12.74	9.53	-179.10	1,831.38	134.56	2,455.47	2,435.16	20.31	120.893		
2,400.00	2,277.95	2,129.45	2,119.21	13.38	9.86	-179.34	1,836.14	126.15	2,501.70	2,480.63	21.07	118.726		
2,500.00	2,369.22	2,199.46	2,188.50	14.01	10.20	-179.57	1,841.36	117.61	2,548.60	2,526.77	21.83	116.751		
2,600.00	2,460.49	2,299.18	2,287.20	14.65	10.67	-179.89	1,848.89	105.58	2,595.64	2,572.86	22.78	113.926		
2,700.00	2,551.77	2,367.33	2,354.67	15.29	11.00	-179.90	1,854.15	97.57	2,642.88	2,619.34	23.53	112.300		
2,800.00	2,643.04	2,457.63	2,444.07	15.93	11.44	-179.64	1,861.45	87.19	2,690.49	2,666.06	24.43	110.116		
2,900.00	2,734.31	2,535.97	2,521.68	16.58	11.82	-179.43	1,867.69	78.46	2,738.07	2,712.82	25.25	108.422		
3,000.00	2,825.58	2,626.33	2,611.16	17.23	12.26	-179.20	1,875.25	68.35	2,786.03	2,759.87	26.16	106.501		
3,100.00	2,916.86	2,727.34	2,711.21	17.87	12.75	-178.94	1,883.13	57.00	2,833.50	2,806.36	27.14	104.387		
3,200.00	3,008.13	2,812.18	2,795.22	18.52	13.17	-178.73	1,889.62	47.08	2,880.88	2,852.86	28.02	102.809		
3,300.00	3,099.40	2,891.79	2,873.98	19.17	13.57	-178.52	1,895.91	37.39	2,928.50	2,899.63	28.87	101.451		
3,400.00	3,190.68	2,979.04	2,960.28	19.83	14.01	-178.30	1,903.01	26.57	2,976.36	2,946.59	29.77	99.983		
3,500.00	3,281.95	3,063.85	3,046.02	20.48	14.53	-178.05	1,910.96	13.99	3,023.75	2,992.95	30.80	98.170		
3,600.00	3,373.22	3,162.67	3,142.05	21.13	14.93	-177.88	1,916.96	4.67	3,071.21	3,039.57	31.64	97.054		
3,700.00	3,464.49	3,256.55	3,234.93	21.79	15.40	-177.66	1,924.26	-6.97	3,118.85	3,086.25	32.60	95.661		
3,800.00	3,555.77	3,396.82	3,373.92	22.44	16.11	-177.36	1,933.25	-23.59	3,165.16	3,131.26	33.90	93.355		
3,900.00	3,647.04	3,486.75	3,463.12	23.10	16.55	-177.19	1,938.47	-33.65	3,211.13	3,176.29	34.83	92.192		
4,000.00	3,738.31	3,558.65	3,534.55	23.75	16.90	-177.08	1,942.74	-40.79	3,257.25	3,221.62	35.62	91.438		
4,100.00	3,829.59	3,622.00	3,597.44	24.41	17.21	-176.98	1,947.04	-47.06	3,304.09	3,267.74	36.35	90.905		
4,200.00	3,920.86	3,689.11	3,669.25	25.07	17.56	-176.88	1,951.38	-53.33	3,350.93	3,313.03	37.08	90.372		
4,300.00	4,012.13	3,756.22	3,735.98	25.73	17.87	-176.78	1,955.67	-59.60	3,397.77	3,358.43	37.81	89.839		
4,400.00	4,103.41	3,823.33	3,802.79	26.38	18.18	-176.68	1,959.91	-65.87	3,444.61	3,403.80	38.54	89.306		
4,500.00	4,194.68	3,890.44	3,869.60	27.04	18.49	-176.58	1,964.15	-72.14	3,491.45	3,449.24	39.27	88.773		
4,600.00	4,285.95	3,957.55	3,936.45	27.70	18.80	-176.48	1,968.39	-78.41	3,538.29	3,494.68	40.00	88.240		
4,700.00	4,377.22	4,024.66	4,003.36	28.36	19.11	-176.38	1,972.63	-84.68	3,585.13	3,539.82	40.73	87.707		
4,800.00	4,468.50	4,091.77	4,070.27	29.02	19.42	-176.28	1,976.87	-90.95	3,631.97	3,584.66	41.46	87.174		
4,900.00	4,559.77	4,158.88	4,137.16	29.68	19.73	-176.18	1,981.11	-97.22	3,678.81	3,629.50	42.19	86.641		
5,000.00	4,651.04	4,225.99	4,204.05	30.34	20.04	-176.08	1,985.35	-103.49	3,725.65	3,674.34	42.92	86.108		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-303 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	5,100.00	7,187.09	31.00	29.41	174.98	-1,753.82	-183.74	2,446.34	2,418.88	27.47	89.058		
5,200.00	4,833.59	10,737.37	7,186.40	31.66	86.53	174.77	-1,825.10	-185.42	2,354.58	2,308.33	46.24	50.916		
5,300.00	4,924.86	10,792.37	7,185.47	32.32	87.64	174.60	-1,880.09	-186.41	2,262.62	2,215.80	46.82	48.331		
5,400.00	5,016.13	10,826.26	7,184.84	32.99	88.32	174.48	-1,913.96	-187.02	2,170.62	2,123.19	47.43	45.768		
5,500.00	5,107.41	10,863.95	7,184.25	33.65	89.09	174.36	-1,951.65	-187.50	2,078.72	2,030.68	48.04	43.275		
5,600.00	5,198.68	10,912.67	7,183.37	34.31	90.08	174.18	-2,000.35	-188.26	1,986.73	1,938.13	48.60	40.879		
5,700.00	5,289.95	10,953.18	7,182.48	34.97	90.90	174.00	-2,040.84	-188.92	1,894.60	1,845.40	49.20	38.511		
5,800.00	5,381.23	10,994.32	7,181.59	35.63	91.74	173.81	-2,081.97	-189.56	1,802.48	1,752.69	49.79	36.202		
5,900.00	5,472.50	11,020.55	7,181.09	36.30	92.27	173.67	-2,108.19	-189.99	1,710.46	1,659.97	50.49	33.876		
6,000.00	5,563.77	11,057.02	7,180.58	36.96	93.02	173.45	-2,144.65	-190.74	1,618.65	1,567.51	51.14	31.650		
6,100.00	5,655.05	11,091.59	7,180.16	37.62	93.72	173.22	-2,179.21	-191.45	1,526.93	1,475.10	51.82	29.464		
6,200.00	5,746.32	11,128.97	7,179.81	38.28	94.49	172.98	-2,216.59	-191.94	1,435.30	1,382.81	52.49	27.344		
6,300.00	5,837.59	11,165.32	7,179.55	38.95	95.23	172.71	-2,252.93	-192.37	1,343.77	1,290.58	53.19	25.265		
6,400.00	5,928.86	11,204.39	7,179.38	39.61	96.03	172.39	-2,292.00	-192.84	1,252.36	1,198.49	53.86	23.251		
6,500.00	6,020.14	11,247.33	7,179.13	40.27	96.91	171.96	-2,334.94	-193.42	1,160.90	1,106.41	54.48	21.307		
6,600.00	6,111.41	11,288.40	7,178.81	40.94	97.75	171.46	-2,376.00	-194.17	1,069.37	1,014.22	55.14	19.392		
6,700.00	6,202.68	11,325.91	7,178.54	41.60	98.52	170.88	-2,413.49	-195.17	977.91	922.01	55.90	17.494		
6,800.00	6,293.96	11,362.95	7,178.36	42.26	99.28	170.15	-2,450.51	-196.42	886.59	829.88	56.71	15.633		
6,900.00	6,385.23	11,403.92	7,178.26	42.93	100.12	169.14	-2,491.45	-198.01	795.42	737.94	57.48	13.839		
7,000.00	6,476.50	11,441.78	7,178.20	43.59	100.90	167.99	-2,529.29	-199.39	704.33	645.92	58.40	12.059		
7,100.00	6,567.77	11,480.62	7,178.29	44.25	101.70	166.49	-2,568.09	-200.91	613.48	554.05	59.42	10.324		
7,200.00	6,658.64	11,520.16	7,178.46	44.91	102.51	166.40	-2,607.60	-202.52	522.57	462.28	60.29	8.667		
7,300.00	6,747.14	11,560.50	7,178.80	45.52	103.34	172.28	-2,647.90	-204.27	432.81	372.41	60.40	7.166		
7,400.00	6,831.10	11,587.00	7,179.03	46.07	103.88	177.65	-2,674.38	-205.42	348.38	286.32	62.06	5.614		
7,500.00	6,908.46	11,587.00	7,179.03	46.54	103.88	176.20	-2,674.38	-205.42	281.69	208.50	73.19	3.849		
7,600.00	6,977.30	11,587.00	7,179.03	46.95	103.88	173.27	-2,674.38	-205.42	251.01	153.03	97.98	2.562		
7,612.68	6,985.33	11,587.00	7,179.03	47.00	103.88	172.80	-2,674.38	-205.42	250.59	148.97	101.62	2.466 CC		
7,700.00	7,035.93	11,587.00	7,179.03	47.30	103.88	168.84	-2,674.38	-205.42	269.71	146.70	123.01	2.193 ES, SF		
7,800.00	7,082.92	11,587.00	7,179.03	47.59	103.88	162.02	-2,674.38	-205.42	329.13	193.51	135.61	2.427		
7,900.00	7,117.09	11,587.00	7,179.03	47.84	103.88	150.63	-2,674.38	-205.42	410.93	270.26	140.67	2.921		
8,000.00	7,137.62	11,587.00	7,179.03	48.06	103.88	130.68	-2,674.38	-205.42	502.87	359.66	143.21	3.511		
8,100.00	7,143.99	11,587.00	7,179.03	48.28	103.88	101.45	-2,674.38	-205.42	598.58	453.60	144.98	4.129		
8,200.00	7,143.45	11,587.00	7,179.03	48.53	103.88	101.45	-2,674.38	-205.42	695.42	549.16	146.26	4.755		
8,300.00	7,142.91	11,587.00	7,179.03	48.89	103.88	101.45	-2,674.38	-205.42	793.05	645.92	147.13	5.390		
8,400.00	7,142.37	11,587.00	7,179.03	49.40	103.88	101.45	-2,674.38	-205.42	891.20	743.45	147.75	6.032		
8,500.00	7,141.83	11,587.00	7,179.03	50.12	103.88	101.45	-2,674.38	-205.42	989.72	841.51	148.22	6.678		
8,600.00	7,141.29	11,587.00	7,179.03	51.08	103.88	101.45	-2,674.38	-205.42	1,088.52	939.94	148.57	7.327		
8,700.00	7,140.75	11,587.00	7,179.03	52.30	103.88	101.45	-2,674.38	-205.42	1,187.51	1,038.66	148.85	7.978		
8,800.00	7,140.21	11,587.00	7,179.03	53.75	103.88	101.45	-2,674.38	-205.42	1,286.66	1,137.58	149.08	8.630		
8,900.00	7,139.67	11,587.00	7,179.03	55.40	103.88	101.45	-2,674.38	-205.42	1,385.93	1,236.66	149.27	9.285		
9,000.00	7,139.12	11,587.00	7,179.03	57.20	103.88	101.45	-2,674.38	-205.42	1,485.30	1,335.87	149.43	9.940		
9,100.00	7,138.58	11,587.00	7,179.03	59.13	103.88	101.45	-2,674.38	-205.42	1,584.75	1,435.18	149.57	10.595		
9,200.00	7,138.04	11,587.00	7,179.03	61.15	103.88	101.45	-2,674.38	-205.42	1,684.27	1,534.58	149.69	11.252		
9,300.00	7,137.50	11,587.00	7,179.03	63.26	103.88	101.45	-2,674.38	-205.42	1,783.84	1,634.04	149.79	11.909		
9,400.00	7,136.96	11,587.00	7,179.03	65.44	103.88	101.45	-2,674.38	-205.42	1,883.45	1,733.56	149.89	12.566		
9,500.00	7,136.42	11,587.00	7,179.03	67.68	103.88	101.45	-2,674.38	-205.42	1,983.10	1,833.13	149.97	13.223		
9,600.00	7,135.88	11,587.00	7,179.03	69.97	103.88	101.45	-2,674.38	-205.42	2,082.79	1,932.74	150.05	13.881		
9,700.00	7,135.34	11,587.00	7,179.03	72.31	103.88	101.45	-2,674.38	-205.42	2,182.50	2,032.38	150.12	14.538		
9,800.00	7,134.80	11,587.00	7,179.03	74.69	103.88	101.45	-2,674.38	-205.42	2,282.24	2,132.06	150.19	15.196		
9,900.00	7,134.26	11,587.00	7,179.03	77.10	103.88	101.45	-2,674.38	-205.42	2,382.01	2,231.76	150.25	15.854		
10,000.00	7,133.71	11,587.00	7,179.03	79.54	103.88	101.45	-2,674.38	-205.42	2,481.79	2,331.48	150.31	16.511		
10,100.00	7,133.17	11,587.00	7,179.03	82.02	103.88	101.45	-2,674.38	-205.42	2,581.59	2,431.22	150.36	17.169		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,132.63	11,587.00	7,179.03	84.52	103.88	101.45	-2,674.38	-205.42	2,681.40	2,530.98	150.42	17.827		
10,300.00	7,132.09	11,587.00	7,179.03	87.04	103.88	101.45	-2,674.38	-205.42	2,781.22	2,630.76	150.47	18.484		
10,400.00	7,131.55	11,587.00	7,179.03	89.58	103.88	101.45	-2,674.38	-205.42	2,881.06	2,730.55	150.52	19.141		
10,500.00	7,131.01	11,587.00	7,179.03	92.15	103.88	101.45	-2,674.38	-205.42	2,980.91	2,830.35	150.56	19.798		
10,600.00	7,130.47	11,587.00	7,179.03	94.73	103.88	101.45	-2,674.38	-205.42	3,080.77	2,930.16	150.61	20.455		
10,700.00	7,129.93	11,587.00	7,179.03	97.33	103.88	101.45	-2,674.38	-205.42	3,180.64	3,029.98	150.66	21.112		
10,800.00	7,129.39	11,587.00	7,179.03	99.94	103.88	101.45	-2,674.38	-205.42	3,280.52	3,129.81	150.70	21.768		
10,900.00	7,128.84	11,587.00	7,179.03	102.56	103.88	101.45	-2,674.38	-205.42	3,380.40	3,229.65	150.75	22.424		
11,000.00	7,128.30	11,587.00	7,179.03	105.20	103.88	101.45	-2,674.38	-205.42	3,480.29	3,329.50	150.79	23.080		
11,100.00	7,127.76	11,587.00	7,179.03	107.85	103.88	101.45	-2,674.38	-205.42	3,580.19	3,429.35	150.84	23.736		
11,200.00	7,127.22	11,587.00	7,179.03	110.51	103.88	101.45	-2,674.38	-205.42	3,680.09	3,529.21	150.88	24.391		
11,300.00	7,126.68	11,587.00	7,179.03	113.18	103.88	101.45	-2,674.38	-205.42	3,779.99	3,629.07	150.92	25.046		
11,400.00	7,126.14	11,587.00	7,179.03	115.86	103.88	101.45	-2,674.38	-205.42	3,879.91	3,728.94	150.97	25.701		
11,500.00	7,125.60	11,587.00	7,179.03	118.55	103.88	101.45	-2,674.38	-205.42	3,979.82	3,828.81	151.01	26.355		
11,600.00	7,125.06	11,587.00	7,179.03	121.25	103.88	101.45	-2,674.38	-205.42	4,079.74	3,928.69	151.05	27.009		
11,700.00	7,124.52	11,587.00	7,179.03	123.95	103.88	101.45	-2,674.38	-205.42	4,179.67	4,028.57	151.10	27.662		
11,800.00	7,123.97	11,587.00	7,179.03	126.66	103.88	101.45	-2,674.38	-205.42	4,279.59	4,128.45	151.14	28.316		
11,900.00	7,123.43	11,587.00	7,179.03	129.38	103.88	101.45	-2,674.38	-205.42	4,379.53	4,228.34	151.18	28.968		
12,000.00	7,122.89	11,587.00	7,179.03	132.10	103.88	101.45	-2,674.38	-205.42	4,479.46	4,328.23	151.23	29.621		
12,100.00	7,122.35	11,587.00	7,179.03	134.83	103.88	101.45	-2,674.38	-205.42	4,579.40	4,428.12	151.27	30.273		
12,200.00	7,121.81	11,587.00	7,179.03	137.56	103.88	101.45	-2,674.38	-205.42	4,679.34	4,528.02	151.32	30.924		
12,300.00	7,121.27	11,587.00	7,179.03	140.30	103.88	101.45	-2,674.38	-205.42	4,779.28	4,627.92	151.36	31.575		
12,400.00	7,120.73	11,587.00	7,179.03	143.05	103.88	101.45	-2,674.38	-205.42	4,879.22	4,727.82	151.41	32.226		
12,500.00	7,120.19	11,587.00	7,179.03	145.80	103.88	101.45	-2,674.38	-205.42	4,979.17	4,827.72	151.45	32.876		
12,600.00	7,119.65	11,587.00	7,179.03	148.55	103.88	101.45	-2,674.38	-205.42	5,079.12	4,927.62	151.50	33.526		
12,700.00	7,119.10	11,587.00	7,179.03	151.30	103.88	101.45	-2,674.38	-205.42	5,179.07	5,027.52	151.54	34.175		
12,800.00	7,118.56	11,587.00	7,179.03	154.07	103.88	101.45	-2,674.38	-205.42	5,279.02	5,127.43	151.59	34.824		
12,900.00	7,118.02	11,587.00	7,179.03	156.83	103.88	101.45	-2,674.38	-205.42	5,378.98	5,227.34	151.64	35.472		
13,000.00	7,117.48	11,587.00	7,179.03	159.60	103.88	101.45	-2,674.38	-205.42	5,478.93	5,327.25	151.69	36.120		
13,100.00	7,116.94	11,587.00	7,179.03	162.37	103.88	101.45	-2,674.38	-205.42	5,578.89	5,427.15	151.74	36.767		
13,200.00	7,116.40	11,587.00	7,179.03	165.14	103.88	101.45	-2,674.38	-205.42	5,678.85	5,527.07	151.78	37.414		
13,300.00	7,115.86	11,587.00	7,179.03	167.92	103.88	101.45	-2,674.38	-205.42	5,778.81	5,626.98	151.83	38.060		
13,400.00	7,115.32	11,587.00	7,179.03	170.70	103.88	101.45	-2,674.38	-205.42	5,878.77	5,726.89	151.88	38.706		
13,500.00	7,114.78	11,587.00	7,179.03	173.48	103.88	101.45	-2,674.38	-205.42	5,978.73	5,826.80	151.93	39.351		
13,600.00	7,114.24	11,587.00	7,179.03	176.26	103.88	101.45	-2,674.38	-205.42	6,078.70	5,926.72	151.98	39.996		
13,700.00	7,113.69	11,587.00	7,179.03	179.05	103.88	101.45	-2,674.38	-205.42	6,178.66	6,026.63	152.04	40.640		
13,800.00	7,113.15	11,587.00	7,179.03	181.84	103.88	101.45	-2,674.38	-205.42	6,278.63	6,126.54	152.09	41.283		
13,900.00	7,112.61	11,587.00	7,179.03	184.63	103.88	101.45	-2,674.38	-205.42	6,378.60	6,226.46	152.14	41.926		
14,000.00	7,112.07	11,587.00	7,179.03	187.42	103.88	101.45	-2,674.38	-205.42	6,478.57	6,326.37	152.19	42.568		
14,100.00	7,111.53	11,587.00	7,179.03	190.22	103.88	101.45	-2,674.38	-205.42	6,578.54	6,426.29	152.25	43.210		
14,200.00	7,110.99	11,587.00	7,179.03	193.01	103.88	101.45	-2,674.38	-205.42	6,678.51	6,526.21	152.30	43.851		
14,300.00	7,110.45	11,587.00	7,179.03	195.81	103.88	101.45	-2,674.38	-205.42	6,778.48	6,626.12	152.36	44.491		
14,400.00	7,109.91	11,587.00	7,179.03	198.61	103.88	101.45	-2,674.38	-205.42	6,878.45	6,726.04	152.41	45.131		
14,500.00	7,109.37	11,587.00	7,179.03	201.42	103.88	101.45	-2,674.38	-205.42	6,978.42	6,825.96	152.47	45.770		
14,600.00	7,108.82	11,587.00	7,179.03	204.22	103.88	101.45	-2,674.38	-205.42	7,078.40	6,925.88	152.52	46.409		
14,700.00	7,108.28	11,587.00	7,179.03	207.03	103.88	101.45	-2,674.38	-205.42	7,178.37	7,025.79	152.58	47.047		
14,800.00	7,107.74	11,587.00	7,179.03	209.83	103.88	101.45	-2,674.38	-205.42	7,278.35	7,125.71	152.64	47.684		
14,900.00	7,107.20	11,587.00	7,179.03	212.64	103.88	101.45	-2,674.38	-205.42	7,378.32	7,225.63	152.70	48.320		
15,000.00	7,106.66	11,587.00	7,179.03	215.45	103.88	101.45	-2,674.38	-205.42	7,478.30	7,325.55	152.75	48.956		
15,100.00	7,106.12	11,587.00	7,179.03	218.26	103.88	101.45	-2,674.38	-205.42	7,578.28	7,425.46	152.81	49.592		
15,200.00	7,105.58	11,587.00	7,179.03	221.07	103.88	101.45	-2,674.38	-205.42	7,678.26	7,525.38	152.87	50.226		
15,300.00	7,105.04	11,587.00	7,179.03	223.89	103.88	101.45	-2,674.38	-205.42	7,778.23	7,625.30	152.93	50.860		

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



Anticollision Report



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

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 146-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,400.00	7,104.50	11,587.00	7,179.03	226.70	103.88	101.45	-2,674.38	-205.42	7,878.21	7,725.22	153.00	51.493	
15,491.56	7,104.00	11,587.00	7,179.03	229.28	103.88	101.45	-2,674.38	-205.42	7,969.76	7,816.70	153.05	52.072	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-423(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 146-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	1.04	0.04	3.28	3.28	8.94	1,771.98	278.68	1,793.76				
100.00	100.00	105.45	104.45	3.28	3.29	8.95	1,771.81	278.89	1,793.63	1,787.06	6.57	272.884	
200.00	200.00	214.86	213.86	3.34	3.34	8.96	1,771.22	279.41	1,793.18	1,786.50	6.68	268.603	
227.89	227.89	246.27	245.26	3.36	3.37	-174.17	1,770.93	279.52	1,793.07	1,786.34	6.73	266.500	
300.00	299.98	318.14	317.13	3.44	3.45	-174.18	1,770.30	279.17	1,794.00	1,787.11	6.89	260.409	
400.00	399.84	422.68	421.66	3.59	3.61	-174.21	1,769.31	278.23	1,798.13	1,790.93	7.21	249.567	
500.00	499.45	525.95	524.92	3.79	3.83	-174.22	1,767.89	278.25	1,805.45	1,797.83	7.62	237.048	
600.00	598.70	617.85	616.81	4.03	4.05	-174.22	1,766.77	278.47	1,816.41	1,808.33	8.08	224.804	
700.00	697.47	720.97	719.93	4.31	4.33	-174.22	1,765.56	279.00	1,830.90	1,822.27	8.64	211.959	
800.00	795.62	822.99	821.93	4.64	4.64	-174.22	1,764.00	279.63	1,848.50	1,839.25	9.25	199.813	
900.00	893.06	916.29	915.22	5.00	4.93	-174.21	1,762.67	280.35	1,869.63	1,859.74	9.88	189.165	
1,000.00	989.64	1,005.91	1,004.83	5.40	5.23	-174.19	1,761.53	281.46	1,894.35	1,883.81	10.54	179.735	
1,100.00	1,085.27	1,091.71	1,090.62	5.83	5.53	-174.18	1,760.99	282.33	1,922.99	1,911.78	11.21	171.521	
1,200.00	1,179.82	1,184.66	1,183.56	6.29	5.86	-174.19	1,760.69	282.99	1,955.19	1,943.26	11.94	163.816	
1,300.00	1,273.17	1,279.71	1,278.62	6.79	6.20	-174.19	1,760.37	283.71	1,990.67	1,977.97	12.69	156.836	
1,400.00	1,365.21	1,371.79	1,370.69	7.33	6.55	-174.20	1,759.97	284.24	2,029.25	2,015.79	13.46	150.760	
1,500.00	1,456.49	1,454.87	1,453.77	7.89	6.86	-174.29	1,759.86	284.77	2,069.89	2,055.70	14.20	145.774	
1,600.00	1,547.76	1,546.45	1,545.35	8.46	7.21	-174.38	1,759.88	285.41	2,110.70	2,095.72	14.98	140.898	
1,700.00	1,639.04	1,636.40	1,635.30	9.05	7.56	-174.46	1,759.92	286.13	2,151.53	2,135.76	15.77	136.440	
1,800.00	1,730.31	1,731.52	1,730.41	9.65	7.93	-174.55	1,759.92	286.77	2,192.32	2,175.72	16.60	132.101	
1,900.00	1,821.58	1,834.96	1,833.85	10.26	8.34	-174.64	1,759.52	287.52	2,232.77	2,215.29	17.48	127.745	
2,000.00	1,912.85	1,905.69	1,904.58	10.87	8.61	-174.72	1,759.53	287.56	2,273.48	2,255.28	18.19	124.954	
2,100.00	2,004.13	1,977.82	1,976.70	11.49	8.88	-174.81	1,760.19	286.86	2,314.89	2,295.98	18.91	122.400	
2,200.00	2,095.40	2,045.37	2,044.23	12.11	9.14	-174.92	1,761.47	285.64	2,357.11	2,337.50	19.61	120.211	
2,300.00	2,186.67	2,107.00	2,105.81	12.74	9.37	-175.02	1,763.35	284.14	2,400.31	2,380.04	20.27	118.402	
2,400.00	2,277.95	2,167.67	2,166.40	13.38	9.61	-175.13	1,765.97	282.45	2,444.60	2,423.67	20.93	116.794	
2,500.00	2,369.22	2,231.33	2,229.93	14.01	9.86	-175.25	1,769.53	280.59	2,489.99	2,468.38	21.60	115.256	
2,600.00	2,460.49	2,302.26	2,300.69	14.65	10.13	-175.37	1,774.03	278.63	2,536.09	2,513.77	22.32	113.630	
2,700.00	2,551.77	2,372.47	2,370.70	15.29	10.41	-175.49	1,778.97	276.78	2,582.83	2,559.80	23.03	112.145	
2,800.00	2,643.04	2,446.26	2,444.25	15.93	10.71	-175.62	1,784.66	274.69	2,630.15	2,606.39	23.77	110.670	
2,900.00	2,734.31	2,518.30	2,515.99	16.58	11.00	-175.75	1,790.63	272.18	2,677.94	2,653.45	24.49	109.343	
3,000.00	2,825.58	2,586.58	2,583.95	17.23	11.28	-175.88	1,796.77	269.76	2,726.33	2,701.14	25.19	108.216	
3,100.00	2,916.86	2,656.72	2,653.72	17.87	11.57	-176.01	1,803.54	267.24	2,775.31	2,749.40	25.91	107.122	
3,200.00	3,008.13	2,721.59	2,718.20	18.52	11.84	-176.13	1,810.24	264.76	2,824.88	2,798.29	26.59	106.250	
3,300.00	3,099.40	2,789.02	2,785.14	19.17	12.13	-176.26	1,817.81	261.83	2,875.18	2,847.89	27.28	105.383	
3,400.00	3,190.68	2,884.39	2,879.77	19.83	12.54	-176.44	1,828.69	257.31	2,925.62	2,897.45	28.17	103.838	
3,500.00	3,281.95	2,993.15	2,987.77	20.48	13.01	-176.65	1,840.34	252.01	2,975.45	2,946.29	29.17	102.021	
3,600.00	3,373.22	3,081.15	3,075.16	21.13	13.39	-176.82	1,849.58	247.14	3,025.09	2,995.07	30.02	100.786	
3,700.00	3,464.49	3,179.63	3,172.94	21.79	13.83	-177.01	1,859.77	241.44	3,074.58	3,043.64	30.94	99.363	
3,800.00	3,555.77	3,279.04	3,271.74	22.44	14.27	-177.19	1,869.42	236.19	3,123.57	3,091.69	31.88	97.977	
3,900.00	3,647.04	3,355.37	3,347.62	23.10	14.61	-177.31	1,876.86	232.63	3,172.67	3,140.01	32.66	97.155	
4,000.00	3,738.31	3,430.34	3,422.13	23.75	14.94	-177.42	1,884.42	229.21	3,222.09	3,188.67	33.42	96.407	
4,100.00	3,829.59	3,510.77	3,502.05	24.41	15.30	-177.54	1,892.76	225.57	3,271.77	3,237.54	34.23	95.586	
4,200.00	3,920.86	3,593.00	3,583.40	25.07	15.78	-177.68	1,901.18	221.93	3,320.37	3,279.32	35.08	94.785	
4,300.00	4,012.13	3,675.23	3,665.46	25.73	16.26	-177.83	1,909.63	218.24	3,368.95	3,326.78	35.97	93.999	
4,400.00	4,103.41	3,759.46	3,749.46	26.38	16.74	-177.98	1,918.11	214.49	3,417.57	3,375.18	36.90	93.224	
4,500.00	4,194.68	3,843.69	3,833.45	27.04	17.22	-178.13	1,926.61	210.74	3,466.14	3,423.54	37.86	92.458	
4,600.00	4,285.95	3,927.92	3,917.42	27.70	17.70	-178.28	1,935.13	206.99	3,514.67	3,471.97	38.85	91.699	
4,700.00	4,377.22	4,012.15	4,001.42	28.36	18.18	-178.43	1,943.67	203.24	3,563.17	3,520.37	39.87	90.945	
4,800.00	4,468.50	4,096.38	4,085.42	29.02	18.66	-178.58	1,952.23	199.49	3,611.64	3,568.74	40.92	90.195	
4,900.00	4,559.77	4,180.61	4,169.42	29.68	19.14	-178.73	1,960.80	195.74	3,660.07	3,617.07	42.00	89.449	
5,000.00	4,651.04	4,264.84	4,253.42	30.34	19.62	-178.88	1,969.38	191.99	3,708.47	3,665.37	43.11	88.706	

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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-423(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 146-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,100.00	4,742.32	10,753.00	7,228.03	31.00	85.43	-164.86	-1,764.14	180.55	2,501.08	2,453.66	47.42	52.741	
5,200.00	4,833.59	10,767.13	7,228.01	31.66	85.71	-164.61	-1,778.27	180.92	2,410.74	2,362.53	48.20	50.013	
5,300.00	4,924.86	10,785.00	7,228.22	32.32	86.08	-164.29	-1,796.12	181.53	2,320.96	2,271.93	49.04	47.332	
5,400.00	5,016.13	10,821.86	7,228.86	32.99	86.83	-163.60	-1,832.96	182.73	2,231.56	2,181.64	49.92	44.704	
5,500.00	5,107.41	10,849.00	7,229.42	33.65	87.39	-163.06	-1,860.08	183.65	2,142.41	2,091.56	50.85	42.134	
5,600.00	5,198.68	10,868.11	7,229.98	34.31	87.78	-162.66	-1,879.16	184.42	2,053.77	2,001.93	51.84	39.616	
5,700.00	5,289.95	10,895.91	7,231.09	34.97	88.35	-162.06	-1,906.92	185.53	1,965.72	1,912.82	52.89	37.163	
5,800.00	5,381.23	10,940.36	7,233.18	35.63	89.27	-161.09	-1,951.31	186.34	1,878.00	1,824.04	53.97	34.798	
5,900.00	5,472.50	11,115.15	7,237.25	36.30	92.81	-157.03	-2,125.85	179.41	1,789.49	1,735.03	54.46	32.857	
6,000.00	5,563.77	11,148.01	7,236.78	36.96	93.48	-156.11	-2,158.65	177.46	1,698.95	1,643.40	55.55	30.584	
6,100.00	5,655.05	11,177.27	7,236.54	37.62	94.07	-155.21	-2,187.88	176.15	1,608.88	1,552.11	56.76	28.345	
6,200.00	5,746.32	11,216.21	7,236.26	38.28	94.86	-153.89	-2,226.78	174.61	1,519.09	1,461.07	58.02	26.182	
6,300.00	5,837.59	11,271.91	7,235.66	38.95	96.00	-151.75	-2,282.45	172.54	1,429.42	1,370.15	59.27	24.117	
6,400.00	5,928.86	11,318.88	7,234.62	39.61	96.96	-149.71	-2,329.37	170.63	1,339.53	1,278.82	60.71	22.064	
6,500.00	6,020.14	11,360.99	7,233.52	40.27	97.82	-147.62	-2,371.44	169.13	1,249.86	1,187.48	62.38	20.036	
6,600.00	6,111.41	11,391.42	7,232.71	40.94	98.44	-145.94	-2,401.84	168.31	1,160.70	1,096.27	64.43	18.015	
6,700.00	6,202.68	11,418.00	7,232.21	41.60	98.99	-144.32	-2,428.41	167.89	1,072.46	1,005.59	66.87	16.039	
6,800.00	6,293.96	11,442.77	7,231.96	42.26	99.50	-142.67	-2,453.19	167.87	985.43	915.65	69.78	14.122	
6,900.00	6,385.23	11,487.00	7,231.68	42.93	100.42	-139.37	-2,497.40	168.49	899.70	826.60	73.10	12.308	
7,000.00	6,476.50	11,541.04	7,230.47	43.59	101.54	-134.79	-2,551.43	168.56	814.38	737.35	77.03	10.573	
7,100.00	6,567.77	11,571.18	7,229.84	44.25	102.16	-131.91	-2,581.57	168.57	730.86	648.65	82.21	8.890	
7,200.00	6,658.64	11,597.56	7,229.57	44.91	102.71	-140.76	-2,607.94	168.92	653.66	564.18	89.48	7.305	
7,300.00	6,747.14	11,631.04	7,229.61	45.52	103.41	-149.19	-2,641.41	169.93	592.12	491.88	100.24	5.907	
7,400.00	6,831.10	11,662.00	7,229.66	46.07	104.06	-155.22	-2,672.35	170.90	552.89	438.95	113.94	4.852	
7,477.97	6,892.08	11,662.00	7,229.66	46.44	104.06	-160.72	-2,672.35	170.90	542.88	418.16	124.73	4.353 CC	
7,500.00	6,908.46	11,662.00	7,229.66	46.54	104.06	-162.09	-2,672.35	170.90	543.69	416.17	127.52	4.263 ES	
7,600.00	6,977.30	11,662.00	7,229.66	46.95	104.06	-167.67	-2,672.35	170.90	567.04	429.24	137.80	4.115 SF	
7,700.00	7,035.93	11,662.00	7,229.66	47.30	104.06	-172.92	-2,672.35	170.90	618.77	474.89	143.88	4.301	
7,800.00	7,082.92	11,662.00	7,229.66	47.59	104.06	-179.02	-2,672.35	170.90	691.44	544.56	146.88	4.708	
7,900.00	7,117.09	11,662.00	7,229.66	47.84	104.06	-171.90	-2,672.35	170.90	777.72	629.46	148.26	5.246	
8,000.00	7,137.62	11,662.00	7,229.66	48.06	104.06	-154.26	-2,672.35	170.90	871.79	722.84	148.95	5.853	
8,100.00	7,143.99	11,662.00	7,229.66	48.28	104.06	-117.09	-2,672.35	170.90	969.43	820.04	149.39	6.489	
8,200.00	7,143.45	11,662.00	7,229.66	48.53	104.06	-117.09	-2,672.35	170.90	1,067.91	918.20	149.71	7.133	
8,300.00	7,142.91	11,662.00	7,229.66	48.89	104.06	-117.09	-2,672.35	170.90	1,166.64	1,016.69	149.95	7.780	
8,400.00	7,142.37	11,662.00	7,229.66	49.40	104.06	-117.09	-2,672.35	170.90	1,265.58	1,115.44	150.14	8.429	
8,500.00	7,141.83	11,662.00	7,229.66	50.12	104.06	-117.09	-2,672.35	170.90	1,364.67	1,214.37	150.30	9.080	
8,600.00	7,141.29	11,662.00	7,229.66	51.08	104.06	-117.09	-2,672.35	170.90	1,463.89	1,313.46	150.43	9.732	
8,700.00	7,140.75	11,662.00	7,229.66	52.30	104.06	-117.09	-2,672.35	170.90	1,563.20	1,412.67	150.53	10.384	
8,800.00	7,140.21	11,662.00	7,229.66	53.75	104.06	-117.09	-2,672.35	170.90	1,662.60	1,511.97	150.62	11.038	
8,900.00	7,139.67	11,662.00	7,229.66	55.40	104.06	-117.09	-2,672.35	170.90	1,762.06	1,611.36	150.70	11.692	
9,000.00	7,139.12	11,662.00	7,229.66	57.20	104.06	-117.09	-2,672.35	170.90	1,861.58	1,710.81	150.77	12.347	
9,100.00	7,138.58	11,662.00	7,229.66	59.13	104.06	-117.09	-2,672.35	170.90	1,961.16	1,810.32	150.83	13.002	
9,200.00	7,138.04	11,662.00	7,229.66	61.15	104.06	-117.09	-2,672.35	170.90	2,060.77	1,909.88	150.89	13.658	
9,300.00	7,137.50	11,662.00	7,229.66	63.26	104.06	-117.09	-2,672.35	170.90	2,160.42	2,009.48	150.94	14.313	
9,400.00	7,136.96	11,662.00	7,229.66	65.44	104.06	-117.09	-2,672.35	170.90	2,260.10	2,109.11	150.99	14.969	
9,500.00	7,136.42	11,662.00	7,229.66	67.68	104.06	-117.09	-2,672.35	170.90	2,359.80	2,208.77	151.03	15.625	
9,600.00	7,135.88	11,662.00	7,229.66	69.97	104.06	-117.09	-2,672.35	170.90	2,459.53	2,308.46	151.07	16.281	
9,700.00	7,135.34	11,662.00	7,229.66	72.31	104.06	-117.09	-2,672.35	170.90	2,559.28	2,408.17	151.11	16.936	
9,800.00	7,134.80	11,662.00	7,229.66	74.69	104.06	-117.09	-2,672.35	170.90	2,659.05	2,507.90	151.15	17.592	
9,900.00	7,134.26	11,662.00	7,229.66	77.10	104.06	-117.09	-2,672.35	170.90	2,758.84	2,607.65	151.19	18.248	
10,000.00	7,133.71	11,662.00	7,229.66	79.54	104.06	-117.09	-2,672.35	170.90	2,858.64	2,707.42	151.22	18.904	
10,100.00	7,133.17	11,662.00	7,229.66	82.02	104.06	-117.09	-2,672.35	170.90	2,958.46	2,807.20	151.26	19.559	

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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-423(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,132.63	11,662.00	7,229.66	84.52	104.06	117.09	-2,672.35	170.90	3,058.28	2,906.99	151.29	20.215		
10,300.00	7,132.09	11,662.00	7,229.66	87.04	104.06	117.09	-2,672.35	170.90	3,158.12	3,006.80	151.33	20.870		
10,400.00	7,131.55	11,662.00	7,229.66	89.58	104.06	117.09	-2,672.35	170.90	3,257.97	3,106.61	151.36	21.525		
10,500.00	7,131.01	11,662.00	7,229.66	92.15	104.06	117.09	-2,672.35	170.90	3,357.83	3,206.43	151.39	22.180		
10,600.00	7,130.47	11,662.00	7,229.66	94.73	104.06	117.09	-2,672.35	170.90	3,457.69	3,306.27	151.43	22.834		
10,700.00	7,129.93	11,662.00	7,229.66	97.33	104.06	117.09	-2,672.35	170.90	3,557.56	3,406.11	151.46	23.489		
10,800.00	7,129.39	11,662.00	7,229.66	99.94	104.06	117.09	-2,672.35	170.90	3,657.44	3,505.95	151.49	24.143		
10,900.00	7,128.84	11,662.00	7,229.66	102.56	104.06	117.09	-2,672.35	170.90	3,757.33	3,605.80	151.53	24.796		
11,000.00	7,128.30	11,662.00	7,229.66	105.20	104.06	117.09	-2,672.35	170.90	3,857.22	3,705.66	151.56	25.450		
11,100.00	7,127.76	11,662.00	7,229.66	107.85	104.06	117.09	-2,672.35	170.90	3,957.12	3,805.53	151.60	26.103		
11,200.00	7,127.22	11,662.00	7,229.66	110.51	104.06	117.09	-2,672.35	170.90	4,057.02	3,905.39	151.63	26.756		
11,300.00	7,126.68	11,662.00	7,229.66	113.18	104.06	117.09	-2,672.35	170.90	4,156.93	4,005.27	151.66	27.409		
11,400.00	7,126.14	11,662.00	7,229.66	115.86	104.06	117.09	-2,672.35	170.90	4,256.84	4,105.14	151.70	28.061		
11,500.00	7,125.60	11,662.00	7,229.66	118.55	104.06	117.09	-2,672.35	170.90	4,356.76	4,205.02	151.74	28.713		
11,600.00	7,125.06	11,662.00	7,229.66	121.25	104.06	117.09	-2,672.35	170.90	4,456.68	4,304.90	151.77	29.364		
11,700.00	7,124.52	11,662.00	7,229.66	123.95	104.06	117.09	-2,672.35	170.90	4,556.60	4,404.79	151.81	30.015		
11,800.00	7,123.97	11,662.00	7,229.66	126.66	104.06	117.09	-2,672.35	170.90	4,656.53	4,504.68	151.85	30.666		
11,900.00	7,123.43	11,662.00	7,229.66	129.38	104.06	117.09	-2,672.35	170.90	4,756.46	4,604.57	151.88	31.316		
12,000.00	7,122.89	11,662.00	7,229.66	132.10	104.06	117.09	-2,672.35	170.90	4,856.39	4,704.47	151.92	31.966		
12,100.00	7,122.35	11,662.00	7,229.66	134.83	104.06	117.09	-2,672.35	170.90	4,956.32	4,804.36	151.96	32.616		
12,200.00	7,121.81	11,662.00	7,229.66	137.56	104.06	117.09	-2,672.35	170.90	5,056.26	4,904.26	152.00	33.265		
12,300.00	7,121.27	11,662.00	7,229.66	140.30	104.06	117.09	-2,672.35	170.90	5,156.20	5,004.16	152.04	33.913		
12,400.00	7,120.73	11,662.00	7,229.66	143.05	104.06	117.09	-2,672.35	170.90	5,256.14	5,104.06	152.08	34.562		
12,500.00	7,120.19	11,662.00	7,229.66	145.80	104.06	117.09	-2,672.35	170.90	5,356.09	5,203.97	152.12	35.209		
12,600.00	7,119.65	11,662.00	7,229.66	148.55	104.06	117.09	-2,672.35	170.90	5,456.03	5,303.87	152.16	35.856		
12,700.00	7,119.10	11,662.00	7,229.66	151.30	104.06	117.09	-2,672.35	170.90	5,555.98	5,403.78	152.21	36.503		
12,800.00	7,118.56	11,662.00	7,229.66	154.07	104.06	117.09	-2,672.35	170.90	5,655.93	5,503.68	152.25	37.149		
12,900.00	7,118.02	11,662.00	7,229.66	156.83	104.06	117.09	-2,672.35	170.90	5,755.88	5,603.59	152.29	37.795		
13,000.00	7,117.48	11,662.00	7,229.66	159.60	104.06	117.09	-2,672.35	170.90	5,855.84	5,703.50	152.34	38.440		
13,100.00	7,116.94	11,667.12	7,229.67	162.37	104.16	117.86	-2,677.47	171.06	5,955.79	5,803.29	152.51	39.053		
13,200.00	7,116.40	11,664.56	7,229.66	165.14	104.11	117.47	-2,674.91	170.98	6,055.75	5,903.26	152.49	39.713		
13,300.00	7,115.86	11,662.01	7,229.66	167.92	104.06	117.09	-2,672.36	170.90	6,155.71	6,003.24	152.47	40.373		
13,400.00	7,115.32	11,659.45	7,229.66	170.70	104.00	116.71	-2,669.80	170.82	6,255.67	6,103.21	152.46	41.032		
13,500.00	7,114.78	11,656.90	7,229.65	173.48	103.95	116.35	-2,667.25	170.74	6,355.63	6,203.18	152.44	41.692		
13,600.00	7,114.24	11,654.34	7,229.65	176.26	103.90	115.99	-2,664.69	170.66	6,455.59	6,303.16	152.43	42.352		
13,700.00	7,113.69	11,651.78	7,229.64	179.05	103.84	115.65	-2,662.14	170.58	6,555.55	6,403.13	152.42	43.011		
13,800.00	7,113.15	11,649.23	7,229.64	181.84	103.79	115.31	-2,659.59	170.50	6,655.50	6,503.10	152.40	43.670		
13,900.00	7,112.61	11,646.67	7,229.63	184.63	103.74	114.98	-2,657.03	170.42	6,755.46	6,603.07	152.39	44.329		
14,000.00	7,112.07	11,644.12	7,229.63	187.42	103.68	114.66	-2,654.48	170.34	6,855.43	6,703.04	152.38	44.988		
14,100.00	7,111.53	11,641.56	7,229.62	190.22	103.63	114.35	-2,651.92	170.26	6,955.39	6,803.01	152.37	45.647		
14,200.00	7,110.99	11,639.01	7,229.62	193.01	103.58	114.04	-2,649.37	170.18	7,055.35	6,902.98	152.36	46.306		
14,300.00	7,110.45	11,636.45	7,229.62	195.81	103.52	113.74	-2,646.82	170.10	7,155.31	7,002.95	152.36	46.965		
14,400.00	7,109.91	11,633.90	7,229.61	198.61	103.47	113.45	-2,644.26	170.02	7,255.27	7,102.92	152.35	47.623		
14,500.00	7,109.37	11,631.34	7,229.61	201.42	103.42	113.16	-2,641.71	169.94	7,355.23	7,202.89	152.34	48.281		
14,600.00	7,108.82	11,628.79	7,229.60	204.22	103.36	112.88	-2,639.15	169.86	7,455.19	7,302.85	152.34	48.939		
14,700.00	7,108.28	11,626.23	7,229.60	207.03	103.31	112.61	-2,636.60	169.78	7,555.15	7,402.82	152.33	49.597		
14,800.00	7,107.74	11,623.68	7,229.59	209.83	103.26	112.34	-2,634.05	169.70	7,655.11	7,502.79	152.33	50.254		
14,900.00	7,107.20	11,621.12	7,229.59	212.64	103.20	112.08	-2,631.49	169.61	7,755.08	7,602.75	152.32	50.912		
15,000.00	7,106.66	11,618.56	7,229.58	215.45	103.15	111.83	-2,628.94	169.53	7,855.04	7,702.72	152.32	51.569		
15,100.00	7,106.12	11,616.01	7,229.58	218.26	103.10	111.58	-2,626.38	169.45	7,955.00	7,802.68	152.32	52.226		
15,200.00	7,105.58	11,613.45	7,229.57	221.07	103.04	111.33	-2,623.83	169.37	8,054.96	7,902.64	152.32	52.882		
15,300.00	7,105.04	11,610.90	7,229.57	223.89	102.99	111.09	-2,621.27	169.29	8,154.92	8,002.61	152.32	53.539		

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

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 146-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,400.00	7,104.50	11,608.34	7,229.57	226.70	102.94	110.86	-2,618.72	169.21	8,254.89	8,102.57	152.32	54.195	
15,491.56	7,104.00	11,610.00	7,229.56	229.28	102.97	110.65	-2,616.38	169.14	8,346.41	8,194.01	152.40	54.765	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-243(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 146-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	-1.00	3.28	3.28	9.83	1,767.61	306.21	1,793.94				
100.00	100.00	78.06	77.05	3.28	3.29	9.85	1,768.01	306.82	1,794.58	1,788.01	6.57	273.150	
200.00	200.00	159.46	158.42	3.34	3.30	9.90	1,769.26	308.73	1,796.48	1,789.84	6.64	270.459	
300.00	299.98	281.02	279.92	3.44	3.41	-173.13	1,770.93	312.40	1,800.12	1,793.27	6.85	262.876	
400.00	399.84	373.22	372.07	3.59	3.54	-173.05	1,771.19	315.15	1,806.14	1,799.01	7.13	253.252	
500.00	499.45	463.16	461.98	3.79	3.70	-173.04	1,773.19	316.04	1,817.10	1,809.60	7.50	242.388	
600.00	598.70	591.93	590.74	4.03	3.99	-173.07	1,774.53	316.00	1,830.14	1,822.12	8.02	228.130	
700.00	697.47	679.25	678.07	4.31	4.22	-173.08	1,775.05	316.32	1,846.33	1,837.80	8.53	216.482	
800.00	795.62	767.08	765.89	4.64	4.47	-173.07	1,776.14	317.02	1,866.60	1,857.51	9.09	205.377	
900.00	893.06	876.92	875.71	5.00	4.81	-173.09	1,777.53	317.85	1,890.30	1,880.53	9.76	193.638	
1,000.00	989.64	971.01	969.80	5.40	5.12	-173.10	1,778.40	318.41	1,916.97	1,906.54	10.43	183.840	
1,100.00	1,085.27	1,051.89	1,050.67	5.83	5.39	-173.11	1,779.48	318.82	1,947.36	1,936.28	11.08	175.789	
1,200.00	1,179.82	1,143.14	1,141.90	6.29	5.72	-173.13	1,781.13	319.34	1,981.48	1,969.69	11.79	168.047	
1,300.00	1,273.17	1,247.42	1,246.16	6.79	6.09	-173.18	1,782.91	319.24	2,018.64	2,006.06	12.58	160.493	
1,400.00	1,365.21	1,334.94	1,333.67	7.33	6.41	-173.23	1,784.27	318.60	2,058.79	2,045.47	13.32	154.595	
1,500.00	1,456.49	1,428.60	1,427.32	7.89	6.76	-173.39	1,785.81	317.81	2,100.76	2,086.67	14.10	149.042	
1,600.00	1,547.76	1,499.71	1,498.41	8.46	7.03	-173.49	1,787.07	317.76	2,143.00	2,128.22	14.78	144.962	
1,700.00	1,639.04	1,564.96	1,563.63	9.05	7.29	-173.55	1,788.74	319.16	2,186.24	2,170.79	15.45	141.473	
1,800.00	1,730.31	1,632.00	1,630.57	9.65	7.55	-173.57	1,791.10	321.80	2,230.57	2,214.43	16.14	138.216	
1,900.00	1,821.58	1,702.50	1,700.89	10.26	7.84	-173.56	1,794.05	325.84	2,275.72	2,258.88	16.85	135.091	
2,000.00	1,912.85	1,768.97	1,767.11	10.87	8.11	-173.53	1,797.11	330.79	2,321.54	2,304.00	17.54	132.376	
2,100.00	2,004.13	1,822.00	1,819.86	11.49	8.33	-173.48	1,800.02	335.32	2,368.37	2,350.21	18.16	130.441	
2,200.00	2,095.40	1,889.08	1,886.52	12.11	8.61	-173.42	1,804.45	341.39	2,416.21	2,397.35	18.86	128.144	
2,300.00	2,186.67	1,958.07	1,955.01	12.74	8.91	-173.36	1,809.84	347.71	2,465.02	2,445.45	19.57	125.974	
2,400.00	2,277.95	2,035.52	2,031.84	13.38	9.25	-173.30	1,816.16	355.07	2,514.22	2,493.88	20.33	123.647	
2,500.00	2,369.22	2,110.70	2,106.47	14.01	9.58	-173.26	1,822.79	361.30	2,563.81	2,542.72	21.09	121.570	
2,600.00	2,460.49	2,200.10	2,195.21	14.65	9.97	-173.21	1,830.84	368.63	2,613.55	2,591.61	21.94	119.134	
2,700.00	2,551.77	2,295.82	2,290.14	15.29	10.40	-173.14	1,839.04	377.69	2,663.10	2,640.26	22.84	116.620	
2,800.00	2,643.04	2,420.93	2,414.32	15.93	10.97	-173.03	1,848.37	389.78	2,711.65	2,687.72	23.93	113.305	
2,900.00	2,734.31	2,500.26	2,493.11	16.58	11.33	-172.98	1,854.07	396.95	2,759.94	2,735.21	24.74	111.575	
3,000.00	2,825.58	2,574.10	2,566.43	17.23	11.67	-172.93	1,859.67	403.68	2,808.60	2,783.09	25.51	110.116	
3,100.00	2,916.86	2,641.27	2,633.08	17.87	11.99	-172.89	1,865.11	410.04	2,857.76	2,831.53	26.23	108.944	
3,200.00	3,008.13	2,725.82	2,716.90	18.52	12.38	-172.83	1,872.40	418.41	2,907.43	2,880.35	27.08	107.371	
3,300.00	3,099.40	3,300.00	2,841.04	19.17	15.12	-172.71	1,881.72	431.93	2,956.15	2,925.88	30.27	97.672	
3,400.00	3,190.68	2,971.40	2,960.43	19.83	13.54	-172.58	1,889.04	445.16	3,003.69	2,974.36	29.32	102.434	
3,500.00	3,281.95	3,066.95	3,055.42	20.48	13.99	-172.53	1,894.86	453.75	3,051.05	3,020.79	30.26	100.837	
3,600.00	3,373.22	3,137.11	3,125.16	21.13	14.32	-172.50	1,899.31	459.93	3,098.59	3,067.57	31.02	99.905	
3,700.00	3,464.49	3,206.14	3,193.70	21.79	14.65	-172.45	1,903.94	466.66	3,146.60	3,114.84	31.77	99.053	
3,800.00	3,555.77	3,318.57	3,305.34	22.44	15.18	-172.39	1,911.79	477.45	3,194.91	3,162.08	32.83	97.320	
3,900.00	3,647.04	3,410.87	3,397.14	23.10	15.61	-172.36	1,917.59	485.01	3,242.31	3,208.56	33.75	96.079	
4,000.00	3,738.31	3,493.65	3,479.45	23.75	16.00	-172.33	1,922.89	492.11	3,289.88	3,255.28	34.60	95.091	
4,100.00	3,829.59	3,571.61	3,556.93	24.41	16.37	-172.29	1,927.96	499.12	3,337.60	3,302.19	35.41	94.244	
4,200.00	3,920.86	10,255.29	7,119.58	25.07	77.19	-152.16	-1,385.42	636.07	3,277.04	3,232.48	44.56	73.542	
4,300.00	4,012.13	10,331.17	7,120.08	25.73	78.68	-150.89	-1,461.20	632.26	3,188.29	3,142.67	45.62	69.892	
4,400.00	4,103.41	10,475.00	7,117.64	26.38	81.52	-148.15	-1,604.79	624.42	3,098.46	3,051.51	46.95	65.994	
4,500.00	4,194.68	10,525.77	7,115.97	27.04	82.53	-147.08	-1,655.44	621.35	3,008.38	2,960.45	47.93	62.765	
4,600.00	4,285.95	10,588.13	7,113.64	27.70	83.77	-145.67	-1,717.61	617.25	2,918.25	2,869.27	48.98	59.583	
4,700.00	4,377.22	10,625.81	7,112.22	28.36	84.51	-144.80	-1,755.14	614.10	2,828.11	2,778.14	49.97	56.597	
4,800.00	4,468.50	10,653.28	7,111.27	29.02	85.05	-144.14	-1,782.48	611.64	2,738.21	2,687.23	50.98	53.711	
4,900.00	4,559.77	10,676.35	7,110.55	29.68	85.51	-143.56	-1,805.46	609.73	2,648.68	2,596.63	52.04	50.895	
5,000.00	4,651.04	10,699.00	7,109.94	30.34	85.96	-142.97	-1,828.04	608.06	2,559.60	2,506.43	53.17	48.138	
5,100.00	4,742.32	10,724.82	7,109.40	31.00	86.47	-142.29	-1,853.78	606.13	2,470.98	2,416.60	54.38	45.439	

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-243(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	10,763.28	7,108.82	31.66	87.24	-141.23	-1,892.10	602.86	2,382.74	2,327.07	55.67	42.801		
5,300.00	4,924.86	10,794.00	7,108.40	32.32	87.84	-140.36	-1,922.69	600.07	2,294.77	2,237.74	57.03	40.237		
5,400.00	5,016.13	10,826.00	7,108.14	32.99	88.48	-139.42	-1,954.56	597.17	2,207.32	2,148.84	58.48	37.743		
5,500.00	5,107.41	10,857.52	7,108.09	33.65	89.11	-138.45	-1,985.95	594.37	2,120.47	2,060.43	60.04	35.318		
5,600.00	5,198.68	10,906.74	7,107.93	34.31	90.08	-136.86	-2,034.96	589.85	2,033.92	1,972.22	61.69	32.968		
5,700.00	5,289.95	10,940.85	7,107.73	34.97	90.76	-135.69	-2,068.94	586.82	1,947.78	1,884.29	63.49	30.678		
5,800.00	5,381.23	10,966.82	7,107.71	35.63	91.28	-134.75	-2,094.81	584.61	1,862.39	1,796.94	65.46	28.453		
5,900.00	5,472.50	10,985.00	7,107.84	36.30	91.65	-134.08	-2,112.93	583.10	1,777.99	1,710.38	67.61	26.297		
6,000.00	5,563.77	11,017.00	7,108.42	36.96	92.29	-132.86	-2,144.83	580.62	1,694.72	1,624.77	69.94	24.230		
6,100.00	5,655.05	11,035.61	7,108.98	37.62	92.67	-132.12	-2,163.38	579.30	1,612.73	1,540.19	72.53	22.234		
6,200.00	5,746.32	11,067.51	7,110.19	38.28	93.31	-130.82	-2,195.19	577.22	1,532.14	1,456.78	75.35	20.333		
6,300.00	5,837.59	11,109.91	7,111.91	38.95	94.17	-128.99	-2,237.47	574.59	1,452.79	1,374.35	78.43	18.523		
6,400.00	5,928.86	11,153.81	7,113.68	39.61	95.06	-126.99	-2,281.27	572.05	1,374.78	1,292.94	81.84	16.798		
6,500.00	6,020.14	11,216.98	7,115.74	40.27	96.35	-123.91	-2,344.27	568.06	1,297.82	1,212.27	85.56	15.169		
6,600.00	6,111.41	11,258.03	7,116.43	40.94	97.18	-121.74	-2,385.26	566.00	1,222.42	1,132.61	89.81	13.611		
6,700.00	6,202.68	11,302.76	7,116.99	41.60	98.10	-119.24	-2,429.95	564.10	1,149.26	1,054.69	94.57	12.152		
6,800.00	6,293.96	11,338.72	7,117.50	42.26	98.83	-117.14	-2,465.88	562.57	1,078.84	978.97	99.87	10.802		
6,900.00	6,385.23	11,384.21	7,118.08	42.93	99.77	-114.36	-2,511.33	560.70	1,011.64	905.93	105.72	9.569		
7,000.00	6,476.50	11,418.88	7,118.52	43.59	100.48	-112.17	-2,545.97	559.36	948.45	836.32	112.12	8.459		
7,100.00	6,567.77	11,459.06	7,119.25	44.25	101.31	-109.54	-2,586.12	558.01	890.35	771.33	119.02	7.481		
7,200.00	6,658.64	11,500.01	7,120.05	44.91	102.15	-122.79	-2,627.04	556.66	843.49	717.00	126.49	6.669		
7,300.00	6,747.14	11,542.36	7,120.93	45.52	103.02	-134.73	-2,669.35	555.25	818.86	684.61	134.25	6.099		
7,348.37	6,788.45	11,562.37	7,121.35	45.79	103.44	-139.03	-2,689.35	554.59	815.86	678.08	137.79	5.921 CC, ES		
7,400.00	6,831.10	11,565.00	7,121.41	46.07	103.49	-143.85	-2,691.98	554.50	819.49	678.42	141.07	5.809		
7,500.00	6,908.46	11,565.00	7,121.41	46.54	103.49	-151.36	-2,691.98	554.50	846.90	701.08	145.82	5.808 SF		
7,600.00	6,977.30	11,565.00	7,121.41	46.95	103.49	-157.03	-2,691.98	554.50	898.30	749.75	148.55	6.047		
7,700.00	7,035.93	11,565.00	7,121.41	47.30	103.49	-161.88	-2,691.98	554.50	968.74	818.93	149.81	6.467		
7,800.00	7,082.92	11,565.00	7,121.41	47.59	103.49	-167.10	-2,691.98	554.50	1,052.87	902.63	150.25	7.008		
7,900.00	7,117.09	11,565.00	7,121.41	47.84	103.49	-175.32	-2,691.98	554.50	1,145.88	995.53	150.34	7.622		
8,000.00	7,137.62	11,565.00	7,121.41	48.06	103.49	160.44	-2,691.98	554.50	1,243.73	1,093.37	150.36	8.272		
8,100.00	7,143.99	11,565.00	7,121.41	48.28	103.49	77.59	-2,691.98	554.50	1,343.25	1,192.85	150.40	8.931		
8,200.00	7,143.45	11,565.00	7,121.41	48.53	103.49	77.59	-2,691.98	554.50	1,442.75	1,292.30	150.45	9.589		
8,300.00	7,142.91	11,565.00	7,121.41	48.89	103.49	77.59	-2,691.98	554.50	1,542.31	1,391.82	150.50	10.248		
8,400.00	7,142.37	11,565.00	7,121.41	49.40	103.49	77.59	-2,691.98	554.50	1,641.93	1,491.40	150.53	10.907		
8,500.00	7,141.83	11,565.00	7,121.41	50.12	103.49	77.59	-2,691.98	554.50	1,741.60	1,591.03	150.57	11.567		
8,600.00	7,141.29	11,565.00	7,121.41	51.08	103.49	77.59	-2,691.98	554.50	1,841.30	1,690.70	150.59	12.227		
8,700.00	7,140.75	11,565.00	7,121.41	52.30	103.49	77.59	-2,691.98	554.50	1,941.03	1,790.41	150.62	12.887		
8,800.00	7,140.21	11,565.00	7,121.41	53.75	103.49	77.59	-2,691.98	554.50	2,040.78	1,890.14	150.64	13.547		
8,900.00	7,139.67	11,565.00	7,121.41	55.40	103.49	77.59	-2,691.98	554.50	2,140.56	1,989.90	150.67	14.207		
9,000.00	7,139.12	11,565.00	7,121.41	57.20	103.49	77.59	-2,691.98	554.50	2,240.36	2,089.67	150.69	14.868		
9,100.00	7,138.58	11,565.00	7,121.41	59.13	103.49	77.59	-2,691.98	554.50	2,340.18	2,189.47	150.71	15.528		
9,200.00	7,138.04	11,565.00	7,121.41	61.15	103.49	77.59	-2,691.98	554.50	2,440.01	2,289.28	150.73	16.188		
9,300.00	7,137.50	11,565.00	7,121.41	63.26	103.49	77.59	-2,691.98	554.50	2,539.85	2,389.11	150.75	16.848		
9,400.00	7,136.96	11,565.00	7,121.41	65.44	103.49	77.59	-2,691.98	554.50	2,639.71	2,488.94	150.77	17.509		
9,500.00	7,136.42	11,565.00	7,121.41	67.68	103.49	77.59	-2,691.98	554.50	2,739.58	2,588.79	150.79	18.169		
9,600.00	7,135.88	11,565.00	7,121.41	69.97	103.49	77.59	-2,691.98	554.50	2,839.45	2,688.65	150.81	18.829		
9,700.00	7,135.34	11,565.00	7,121.41	72.31	103.49	77.59	-2,691.98	554.50	2,939.34	2,788.51	150.83	19.488		
9,800.00	7,134.80	11,565.00	7,121.41	74.69	103.49	77.59	-2,691.98	554.50	3,039.23	2,888.38	150.85	20.148		
9,900.00	7,134.26	11,565.00	7,121.41	77.10	103.49	77.59	-2,691.98	554.50	3,139.13	2,988.26	150.87	20.807		
10,000.00	7,133.71	11,565.00	7,121.41	79.54	103.49	77.59	-2,691.98	554.50	3,239.03	3,088.14	150.89	21.466		
10,100.00	7,133.17	11,565.00	7,121.41	82.02	103.49	77.59	-2,691.98	554.50	3,338.94	3,188.03	150.91	22.125		
10,200.00	7,132.63	11,565.00	7,121.41	84.52	103.49	77.59	-2,691.98	554.50	3,438.86	3,287.93	150.93	22.784		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-243(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,132.09	11,565.00	7,121.41	87.04	103.49	77.59	-2,691.98	554.50	3,538.78	3,387.82	150.96	23.442		
10,400.00	7,131.55	11,565.00	7,121.41	89.58	103.49	77.59	-2,691.98	554.50	3,638.71	3,487.73	150.98	24.101		
10,500.00	7,131.01	11,565.00	7,121.41	92.15	103.49	77.59	-2,691.98	554.50	3,738.63	3,587.63	151.00	24.759		
10,600.00	7,130.47	11,565.00	7,121.41	94.73	103.49	77.59	-2,691.98	554.50	3,838.57	3,687.54	151.03	25.416		
10,700.00	7,129.93	11,565.00	7,121.41	97.33	103.49	77.59	-2,691.98	554.50	3,938.50	3,787.45	151.05	26.073		
10,800.00	7,129.39	11,565.00	7,121.41	99.94	103.49	77.59	-2,691.98	554.50	4,038.44	3,887.36	151.08	26.730		
10,900.00	7,128.84	11,565.00	7,121.41	102.56	103.49	77.59	-2,691.98	554.50	4,138.39	3,987.28	151.11	27.387		
11,000.00	7,128.30	11,565.00	7,121.41	105.20	103.49	77.59	-2,691.98	554.50	4,238.33	4,087.20	151.14	28.043		
11,100.00	7,127.76	11,565.00	7,121.41	107.85	103.49	77.59	-2,691.98	554.50	4,338.28	4,187.11	151.16	28.699		
11,200.00	7,127.22	11,565.00	7,121.41	110.51	103.49	77.59	-2,691.98	554.50	4,438.23	4,287.04	151.19	29.355		
11,300.00	7,126.68	11,565.00	7,121.41	113.18	103.49	77.59	-2,691.98	554.50	4,538.18	4,386.96	151.22	30.010		
11,400.00	7,126.14	11,565.00	7,121.41	115.86	103.49	77.59	-2,691.98	554.50	4,638.13	4,486.88	151.25	30.665		
11,500.00	7,125.60	11,565.00	7,121.41	118.55	103.49	77.59	-2,691.98	554.50	4,738.09	4,586.81	151.28	31.319		
11,600.00	7,125.06	11,565.00	7,121.41	121.25	103.49	77.59	-2,691.98	554.50	4,838.05	4,686.73	151.32	31.973		
11,700.00	7,124.52	11,565.00	7,121.41	123.95	103.49	77.59	-2,691.98	554.50	4,938.01	4,786.66	151.35	32.627		
11,800.00	7,123.97	11,565.00	7,121.41	126.66	103.49	77.59	-2,691.98	554.50	5,037.97	4,886.59	151.38	33.280		
11,900.00	7,123.43	11,565.00	7,121.41	129.38	103.49	77.59	-2,691.98	554.50	5,137.93	4,986.52	151.41	33.933		
12,000.00	7,122.89	11,565.00	7,121.41	132.10	103.49	77.59	-2,691.98	554.50	5,237.90	5,086.45	151.45	34.585		
12,100.00	7,122.35	11,565.00	7,121.41	134.83	103.49	77.59	-2,691.98	554.50	5,337.86	5,186.38	151.48	35.237		
12,200.00	7,121.81	11,565.00	7,121.41	137.56	103.49	77.59	-2,691.98	554.50	5,437.83	5,286.31	151.52	35.888		
12,300.00	7,121.27	11,565.00	7,121.41	140.30	103.49	77.59	-2,691.98	554.50	5,537.80	5,386.24	151.56	36.539		
12,400.00	7,120.73	11,565.00	7,121.41	143.05	103.49	77.59	-2,691.98	554.50	5,637.77	5,486.17	151.59	37.190		
12,500.00	7,120.19	11,565.00	7,121.41	145.80	103.49	77.59	-2,691.98	554.50	5,737.74	5,586.10	151.63	37.840		
12,600.00	7,119.65	11,565.00	7,121.41	148.55	103.49	77.59	-2,691.98	554.50	5,837.71	5,686.04	151.67	38.489		
12,700.00	7,119.10	11,565.00	7,121.41	151.30	103.49	77.59	-2,691.98	554.50	5,937.68	5,785.97	151.71	39.138		
12,800.00	7,118.56	11,565.00	7,121.41	154.07	103.49	77.59	-2,691.98	554.50	6,037.65	5,885.90	151.75	39.786		
12,900.00	7,118.02	11,565.00	7,121.41	156.83	103.49	77.59	-2,691.98	554.50	6,137.63	5,985.83	151.79	40.434		
13,000.00	7,117.48	11,565.00	7,121.41	159.60	103.49	77.59	-2,691.98	554.50	6,237.60	6,085.77	151.83	41.082		
13,100.00	7,116.94	11,565.00	7,121.41	162.37	103.49	77.59	-2,691.98	554.50	6,337.58	6,185.70	151.88	41.728		
13,200.00	7,116.40	11,565.00	7,121.41	165.14	103.49	77.59	-2,691.98	554.50	6,437.55	6,285.63	151.92	42.375		
13,300.00	7,115.86	11,565.00	7,121.41	167.92	103.49	77.59	-2,691.98	554.50	6,537.53	6,385.57	151.96	43.020		
13,400.00	7,115.32	11,565.00	7,121.41	170.70	103.49	77.59	-2,691.98	554.50	6,637.51	6,485.50	152.01	43.665		
13,500.00	7,114.78	11,565.00	7,121.41	173.48	103.49	77.59	-2,691.98	554.50	6,737.49	6,585.43	152.05	44.310		
13,600.00	7,114.24	11,565.00	7,121.41	176.26	103.49	77.59	-2,691.98	554.50	6,837.47	6,685.37	152.10	44.954		
13,700.00	7,113.69	11,565.00	7,121.41	179.05	103.49	77.59	-2,691.98	554.50	6,937.45	6,785.30	152.15	45.597		
13,800.00	7,113.15	11,565.00	7,121.41	181.84	103.49	77.59	-2,691.98	554.50	7,037.43	6,885.23	152.19	46.240		
13,900.00	7,112.61	11,565.00	7,121.41	184.63	103.49	77.59	-2,691.98	554.50	7,137.41	6,985.16	152.24	46.882		
14,000.00	7,112.07	11,565.00	7,121.41	187.42	103.49	77.59	-2,691.98	554.50	7,237.39	7,085.10	152.29	47.523		
14,100.00	7,111.53	11,565.00	7,121.41	190.22	103.49	77.59	-2,691.98	554.50	7,337.37	7,185.03	152.34	48.164		
14,200.00	7,110.99	11,565.00	7,121.41	193.01	103.49	77.59	-2,691.98	554.50	7,437.35	7,284.96	152.39	48.805		
14,300.00	7,110.45	11,565.00	7,121.41	195.81	103.49	77.59	-2,691.98	554.50	7,537.34	7,384.89	152.44	49.444		
14,400.00	7,109.91	11,565.00	7,121.41	198.61	103.49	77.59	-2,691.98	554.50	7,637.32	7,484.83	152.49	50.083		
14,500.00	7,109.37	11,565.00	7,121.41	201.42	103.49	77.59	-2,691.98	554.50	7,737.30	7,584.76	152.54	50.721		
14,600.00	7,108.82	11,565.00	7,121.41	204.22	103.49	77.59	-2,691.98	554.50	7,837.29	7,684.69	152.60	51.359		
14,700.00	7,108.28	11,565.00	7,121.41	207.03	103.49	77.59	-2,691.98	554.50	7,937.27	7,784.62	152.65	51.996		
14,800.00	7,107.74	11,565.00	7,121.41	209.83	103.49	77.59	-2,691.98	554.50	8,037.26	7,884.55	152.71	52.632		
14,900.00	7,107.20	11,565.00	7,121.41	212.64	103.49	77.59	-2,691.98	554.50	8,137.24	7,984.48	152.76	53.268		
15,000.00	7,106.66	11,565.00	7,121.41	215.45	103.49	77.59	-2,691.98	554.50	8,237.23	8,084.41	152.82	53.903		
15,100.00	7,106.12	11,565.00	7,121.41	218.26	103.49	77.59	-2,691.98	554.50	8,337.21	8,184.34	152.87	54.537		
15,200.00	7,105.58	11,565.00	7,121.41	221.07	103.49	77.59	-2,691.98	554.50	8,437.20	8,284.27	152.93	55.171		
15,300.00	7,105.04	11,565.00	7,121.41	223.89	103.49	77.59	-2,691.98	554.50	8,537.19	8,384.20	152.99	55.803		
15,400.00	7,104.50	11,565.00	7,121.41	226.70	103.49	77.59	-2,691.98	554.50	8,637.17	8,484.13	153.04	56.436		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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)		
15,491.56	7,104.00	11,565.00	7,121.41	229.28	103.49	77.59	-2,691.98	554.50	8,728.72	8,575.62	153.10	57.014	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-403(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	14.48	3.48	3.28	3.28	43.89	1,764.01	1,696.81	2,447.63					
100.00	100.00	146.09	135.08	3.28	3.30	43.87	1,763.91	1,695.42	2,446.85	2,440.27	6.58	371.963		
200.00	200.00	257.11	246.06	3.34	3.37	43.81	1,764.16	1,692.50	2,445.19	2,438.48	6.71	364.442		
276.76	276.75	342.61	331.49	3.41	3.48	-139.42	1,764.90	1,689.18	2,444.39	2,437.49	6.89	354.739		
300.00	299.98	357.77	346.64	3.44	3.50	-139.44	1,765.11	1,688.55	2,444.48	2,437.54	6.94	352.173		
400.00	399.84	443.66	432.43	3.59	3.66	-139.57	1,766.81	1,684.84	2,446.90	2,439.66	7.24	337.884		
500.00	499.45	540.81	529.45	3.79	3.87	-139.74	1,769.24	1,680.43	2,452.25	2,444.60	7.65	320.519		
600.00	598.70	634.24	622.71	4.03	4.11	-139.93	1,772.23	1,675.75	2,460.51	2,452.38	8.13	302.617		
700.00	697.47	725.78	714.05	4.31	4.37	-140.14	1,775.69	1,670.86	2,471.70	2,463.03	8.67	284.986		
800.00	795.62	818.94	806.98	4.64	4.66	-140.37	1,779.88	1,665.65	2,486.02	2,476.74	9.28	267.924		
900.00	893.06	917.35	905.12	5.00	4.99	-140.65	1,784.21	1,659.92	2,502.96	2,493.00	9.95	251.468		
1,000.00	989.64	995.94	983.51	5.40	5.27	-140.81	1,787.90	1,655.59	2,523.15	2,512.54	10.60	237.966		
1,100.00	1,085.27	1,214.30	1,199.81	5.83	6.15	-142.11	1,804.58	1,631.97	2,546.16	2,534.27	11.88	214.260		
1,200.00	1,179.82	1,358.30	1,341.17	6.29	6.82	-143.08	1,815.19	1,606.61	2,566.83	2,553.86	12.97	197.892		
1,300.00	1,273.17	1,449.56	1,430.64	6.79	7.27	-143.62	1,821.59	1,589.83	2,590.20	2,576.35	13.86	186.898		
1,400.00	1,365.21	1,519.78	1,499.47	7.33	7.62	-143.95	1,826.76	1,576.95	2,617.14	2,602.46	14.67	178.366		
1,500.00	1,456.49	1,725.12	1,700.57	7.89	8.70	-145.85	1,837.14	1,536.85	2,643.26	2,627.05	16.21	163.028		
1,600.00	1,547.76	1,838.02	1,811.17	8.46	9.31	-146.85	1,840.23	1,514.36	2,668.83	2,651.54	17.29	154.368		
1,700.00	1,639.04	1,886.86	1,859.10	9.05	9.57	-147.27	1,841.59	1,505.12	2,695.35	2,677.31	18.03	149.468		
1,800.00	1,730.31	1,947.40	1,918.65	9.65	9.89	-147.77	1,843.52	1,494.35	2,723.37	2,704.53	18.84	144.557		
1,900.00	1,821.58	2,011.00	1,981.31	10.26	10.23	-148.28	1,845.76	1,483.76	2,752.70	2,733.04	19.66	140.007		
2,000.00	1,912.85	2,062.66	2,032.29	10.87	10.50	-148.69	1,847.91	1,475.70	2,783.47	2,763.06	20.41	136.364		
2,100.00	2,004.13	2,117.90	2,086.87	11.49	10.78	-149.11	1,850.77	1,467.63	2,815.84	2,794.67	21.18	132.951		
2,200.00	2,095.40	2,196.80	2,164.79	12.11	11.19	-149.72	1,855.41	1,456.17	2,849.23	2,827.14	22.08	129.028		
2,300.00	2,186.67	2,265.90	2,232.98	12.74	11.55	-150.25	1,859.95	1,445.98	2,883.42	2,860.49	22.93	125.736		
2,400.00	2,277.95	2,334.63	2,300.77	13.38	11.92	-150.77	1,865.02	1,435.82	2,918.59	2,894.81	23.78	122.729		
2,500.00	2,369.22	2,411.00	2,376.05	14.01	12.32	-151.34	1,871.21	1,424.52	2,954.68	2,930.00	24.68	119.737		
2,600.00	2,460.49	2,510.41	2,474.19	14.65	12.85	-152.06	1,878.56	1,410.51	2,990.90	2,965.19	25.71	116.322		
2,700.00	2,551.77	2,585.79	2,548.71	15.29	13.24	-152.58	1,883.94	1,400.46	3,027.60	3,001.01	26.59	113.857		
2,800.00	2,643.04	2,679.93	2,641.84	15.93	13.72	-153.20	1,890.47	1,388.40	3,064.68	3,037.10	27.58	111.105		
2,900.00	2,734.31	2,780.15	2,741.00	16.58	14.24	-153.85	1,897.15	1,375.53	3,101.84	3,073.22	28.62	108.396		
3,000.00	2,825.58	2,914.37	2,873.41	17.23	14.96	-154.74	1,905.96	1,355.37	3,138.29	3,108.40	29.89	104.984		
3,100.00	2,916.86	3,013.85	2,971.20	17.87	15.52	-155.41	1,912.49	1,338.39	3,174.30	3,143.34	30.96	102.531		
3,200.00	3,008.13	3,108.03	3,063.96	18.52	16.04	-156.02	1,918.10	1,323.08	3,210.47	3,178.49	31.99	100.364		
3,300.00	3,099.40	3,195.97	3,150.60	19.17	16.53	-156.57	1,923.10	1,308.92	3,246.78	3,213.81	32.97	98.470		
3,400.00	3,190.68	3,286.02	3,239.35	19.83	17.02	-157.12	1,928.29	1,294.52	3,283.49	3,249.52	33.96	96.675		
3,500.00	3,281.95	3,437.14	3,388.91	20.48	17.81	-157.95	1,934.05	1,273.68	3,319.80	3,284.47	35.33	93.955		
3,600.00	3,373.22	3,504.34	3,455.49	21.13	18.15	-158.30	1,935.88	1,264.78	3,355.51	3,319.36	36.15	92.818		
3,700.00	3,464.49	3,566.65	3,517.30	21.79	18.46	-158.61	1,937.78	1,257.09	3,392.04	3,355.11	36.93	91.843		
3,800.00	3,555.77	3,626.00	3,576.13	22.44	18.76	-158.91	1,940.21	1,249.70	3,429.56	3,391.87	37.69	90.995		
3,900.00	3,647.04	3,685.72	3,635.28	23.10	19.07	-159.21	1,943.28	1,242.11	3,468.02	3,429.58	38.45	90.199		
4,000.00	3,738.31	3,752.50	3,701.36	23.75	19.42	-159.55	1,947.38	1,233.32	3,507.36	3,468.10	39.26	89.342		
4,100.00	3,829.59	3,829.30	3,777.14	24.41	19.84	-159.96	1,952.86	1,222.15	3,547.28	3,507.13	40.14	88.363		
4,200.00	3,920.86	10,471.98	7,236.70	25.07	79.69	-142.11	-1,450.61	973.78	3,478.61	3,425.31	53.30	65.269		
4,300.00	4,012.13	10,530.67	7,235.94	25.73	80.85	-140.93	-1,509.27	972.25	3,391.58	3,336.94	54.64	62.076		
4,400.00	4,103.41	10,582.72	7,235.02	26.38	81.88	-139.84	-1,561.29	970.80	3,304.61	3,248.64	55.97	59.044		
4,500.00	4,194.68	10,646.67	7,233.55	27.04	83.14	-138.43	-1,625.20	968.90	3,217.70	3,160.26	57.45	56.010		
4,600.00	4,285.95	10,716.61	7,231.41	27.70	84.53	-136.79	-1,695.07	966.58	3,130.78	3,071.75	59.03	53.035		
4,700.00	4,377.22	10,740.00	7,230.59	28.36	85.00	-136.23	-1,718.42	965.67	3,044.00	2,983.70	60.30	50.481		
4,800.00	4,468.50	10,758.29	7,230.03	29.02	85.37	-135.78	-1,736.69	965.04	2,957.80	2,896.21	61.59	48.022		
4,900.00	4,559.77	10,772.00	7,229.72	29.68	85.64	-135.43	-1,750.40	964.70	2,872.34	2,809.42	62.92	45.652		
5,000.00	4,651.04	10,794.47	7,229.33	30.34	86.09	-134.85	-1,772.86	964.29	2,787.59	2,723.20	64.39	43.291		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-403(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	10,804.00	7,229.19	31.00	86.28	-134.60	-1,782.39	964.14	2,703.61	2,637.78	65.83	41.067		
5,200.00	4,833.59	10,835.00	7,229.00	31.66	86.90	-133.78	-1,813.39	963.93	2,620.47	2,552.91	67.55	38.791		
5,300.00	4,924.86	10,846.62	7,229.04	32.32	87.13	-133.46	-1,825.01	963.95	2,538.26	2,469.07	69.19	36.685		
5,400.00	5,016.13	10,871.51	7,229.21	32.99	87.63	-132.77	-1,849.89	964.11	2,457.04	2,385.99	71.05	34.581		
5,500.00	5,107.41	10,913.40	7,229.51	33.65	88.48	-131.57	-1,891.78	964.69	2,376.68	2,303.48	73.20	32.469		
5,600.00	5,198.68	10,966.67	7,229.67	34.31	89.55	-129.98	-1,945.04	965.46	2,296.98	2,221.38	75.59	30.386		
5,700.00	5,289.95	11,029.36	7,229.49	34.97	90.82	-128.03	-2,007.73	966.22	2,217.93	2,139.69	78.24	28.348		
5,800.00	5,381.23	11,072.15	7,229.14	35.63	91.69	-126.64	-2,050.51	966.59	2,139.58	2,058.75	80.83	26.470		
5,900.00	5,472.50	11,140.91	7,228.10	36.30	93.08	-124.33	-2,119.27	966.76	2,061.94	1,978.06	83.88	24.583		
6,000.00	5,563.77	11,174.45	7,227.47	36.96	93.76	-123.15	-2,152.80	966.73	1,985.36	1,898.65	86.71	22.896		
6,100.00	5,655.05	11,213.42	7,226.74	37.62	94.55	-121.75	-2,191.76	966.84	1,910.23	1,820.43	89.80	21.272		
6,200.00	5,746.32	11,249.71	7,225.95	38.28	95.29	-120.41	-2,228.04	967.14	1,836.66	1,743.59	93.07	19.735		
6,300.00	5,837.59	11,285.95	7,225.06	38.95	96.03	-119.03	-2,264.27	967.52	1,764.82	1,668.27	96.55	18.279		
6,400.00	5,928.86	11,310.00	7,224.66	39.61	96.52	-118.10	-2,288.31	967.85	1,695.26	1,595.20	100.06	16.942		
6,500.00	6,020.14	11,340.83	7,224.39	40.27	97.15	-116.89	-2,319.14	968.34	1,628.21	1,524.34	103.87	15.675		
6,600.00	6,111.41	11,394.21	7,223.87	40.94	98.25	-114.75	-2,372.51	968.98	1,563.54	1,455.28	108.26	14.442		
6,700.00	6,202.68	11,435.59	7,223.27	41.60	99.09	-113.04	-2,413.88	969.37	1,501.49	1,388.81	112.68	13.325		
6,800.00	6,293.96	11,469.12	7,222.75	42.26	99.78	-111.63	-2,447.41	969.81	1,442.71	1,325.56	117.15	12.315		
6,900.00	6,385.23	11,506.84	7,222.15	42.93	100.56	-110.02	-2,485.12	970.45	1,387.65	1,265.80	121.85	11.388		
7,000.00	6,476.50	11,543.38	7,221.53	43.59	101.31	-108.43	-2,521.65	971.11	1,336.67	1,210.05	126.62	10.557		
7,100.00	6,567.77	11,578.07	7,220.92	44.25	102.02	-106.90	-2,556.32	971.96	1,290.43	1,159.07	131.36	9.824		
7,200.00	6,658.64	11,613.43	7,220.25	44.91	102.75	-121.68	-2,591.67	972.87	1,255.06	1,118.93	136.12	9.220		
7,300.00	6,747.14	11,649.01	7,219.53	45.52	103.49	-135.01	-2,627.22	973.98	1,240.85	1,100.10	140.75	8.816		
7,313.93	6,759.15	11,654.27	7,219.42	45.60	103.59	-136.50	-2,632.48	974.14	1,240.63	1,099.27	141.36	8.776 CC, ES		
7,400.00	6,831.10	11,686.35	7,218.69	46.07	104.26	-144.06	-2,664.54	975.13	1,248.93	1,104.05	144.88	8.620 SF		
7,500.00	6,908.46	11,711.00	7,218.13	46.54	104.77	-150.48	-2,689.17	975.84	1,278.92	1,131.05	147.88	8.648		
7,600.00	6,977.30	11,711.00	7,218.13	46.95	104.77	-156.05	-2,689.17	975.84	1,329.36	1,180.06	149.31	8.903		
7,700.00	7,035.93	11,711.00	7,218.13	47.30	104.77	-160.62	-2,689.17	975.84	1,397.08	1,247.02	150.06	9.310		
7,800.00	7,082.92	11,711.00	7,218.13	47.59	104.77	-165.15	-2,689.17	975.84	1,478.16	1,327.78	150.38	9.829		
7,900.00	7,117.09	11,711.00	7,218.13	47.84	104.77	-171.30	-2,689.17	975.84	1,568.71	1,418.22	150.49	10.424		
8,000.00	7,137.62	11,711.00	7,218.13	48.06	104.77	174.82	-2,689.17	975.84	1,665.15	1,514.61	150.54	11.061		
8,100.00	7,143.99	11,711.00	7,218.13	48.28	104.77	115.44	-2,689.17	975.84	1,764.35	1,613.75	150.59	11.716		
8,200.00	7,143.45	11,711.00	7,218.13	48.53	104.77	115.44	-2,689.17	975.84	1,864.00	1,713.34	150.66	12.373		
8,300.00	7,142.91	11,711.00	7,218.13	48.89	104.77	115.44	-2,689.17	975.84	1,963.69	1,812.98	150.71	13.029		
8,400.00	7,142.37	11,711.00	7,218.13	49.40	104.77	115.44	-2,689.17	975.84	2,063.41	1,912.65	150.76	13.686		
8,500.00	7,141.83	11,711.00	7,218.13	50.12	104.77	115.44	-2,689.17	975.84	2,163.16	2,012.35	150.81	14.343		
8,600.00	7,141.29	11,711.00	7,218.13	51.08	104.77	115.44	-2,689.17	975.84	2,262.93	2,112.07	150.86	15.001		
8,700.00	7,140.75	11,711.00	7,218.13	52.30	104.77	115.44	-2,689.17	975.84	2,362.71	2,211.82	150.90	15.658		
8,800.00	7,140.21	11,711.00	7,218.13	53.75	104.77	115.44	-2,689.17	975.84	2,462.52	2,311.58	150.93	16.315		
8,900.00	7,139.67	11,711.00	7,218.13	55.40	104.77	115.44	-2,689.17	975.84	2,562.34	2,411.37	150.97	16.972		
9,000.00	7,139.12	11,711.00	7,218.13	57.20	104.77	115.44	-2,689.17	975.84	2,662.17	2,511.17	151.01	17.629		
9,100.00	7,138.58	11,711.00	7,218.13	59.13	104.77	115.44	-2,689.17	975.84	2,762.02	2,610.98	151.04	18.287		
9,200.00	7,138.04	11,711.00	7,218.13	61.15	104.77	115.44	-2,689.17	975.84	2,861.88	2,710.80	151.07	18.944		
9,300.00	7,137.50	11,711.00	7,218.13	63.26	104.77	115.44	-2,689.17	975.84	2,961.74	2,810.64	151.11	19.600		
9,400.00	7,136.96	11,711.00	7,218.13	65.44	104.77	115.44	-2,689.17	975.84	3,061.62	2,910.48	151.14	20.257		
9,500.00	7,136.42	11,711.00	7,218.13	67.68	104.77	115.44	-2,689.17	975.84	3,161.50	3,010.33	151.17	20.914		
9,600.00	7,135.88	11,711.00	7,218.13	69.97	104.77	115.44	-2,689.17	975.84	3,261.39	3,110.19	151.20	21.570		
9,700.00	7,135.34	11,711.00	7,218.13	72.31	104.77	115.44	-2,689.17	975.84	3,361.29	3,210.06	151.23	22.226		
9,800.00	7,134.80	11,711.00	7,218.13	74.69	104.77	115.44	-2,689.17	975.84	3,461.19	3,309.93	151.26	22.882		
9,900.00	7,134.26	11,711.00	7,218.13	77.10	104.77	115.44	-2,689.17	975.84	3,561.10	3,409.81	151.29	23.538		
10,000.00	7,133.71	11,711.00	7,218.13	79.54	104.77	115.44	-2,689.17	975.84	3,661.01	3,509.69	151.32	24.194		
10,100.00	7,133.17	11,711.00	7,218.13	82.02	104.77	115.44	-2,689.17	975.84	3,760.93	3,609.58	151.35	24.849		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15R-403(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,132.63	11,711.00	7,218.13	84.52	104.77	115.44	-2,689.17	975.84	3,860.85	3,709.47	151.38	25.504		
10,300.00	7,132.09	11,711.00	7,218.13	87.04	104.77	115.44	-2,689.17	975.84	3,960.78	3,809.36	151.41	26.159		
10,400.00	7,131.55	11,711.00	7,218.13	89.58	104.77	115.44	-2,689.17	975.84	4,060.71	3,909.26	151.45	26.813		
10,500.00	7,131.01	11,711.00	7,218.13	92.15	104.77	115.44	-2,689.17	975.84	4,160.64	4,009.16	151.48	27.467		
10,600.00	7,130.47	11,711.00	7,218.13	94.73	104.77	115.44	-2,689.17	975.84	4,260.58	4,109.07	151.51	28.121		
10,700.00	7,129.93	11,711.00	7,218.13	97.33	104.77	115.44	-2,689.17	975.84	4,360.51	4,208.97	151.54	28.775		
10,800.00	7,129.39	11,711.00	7,218.13	99.94	104.77	115.44	-2,689.17	975.84	4,460.46	4,308.88	151.57	29.428		
10,900.00	7,128.84	11,711.00	7,218.13	102.56	104.77	115.44	-2,689.17	975.84	4,560.40	4,408.79	151.61	30.081		
11,000.00	7,128.30	11,711.00	7,218.13	105.20	104.77	115.44	-2,689.17	975.84	4,660.35	4,508.71	151.64	30.733		
11,100.00	7,127.76	11,711.00	7,218.13	107.85	104.77	115.44	-2,689.17	975.84	4,760.30	4,608.62	151.67	31.385		
11,200.00	7,127.22	11,711.00	7,218.13	110.51	104.77	115.44	-2,689.17	975.84	4,860.25	4,708.54	151.71	32.037		
11,300.00	7,126.68	11,711.00	7,218.13	113.18	104.77	115.44	-2,689.17	975.84	4,960.20	4,808.46	151.74	32.688		
11,400.00	7,126.14	11,711.00	7,218.13	115.86	104.77	115.44	-2,689.17	975.84	5,060.16	4,908.38	151.78	33.339		
11,500.00	7,125.60	11,711.00	7,218.13	118.55	104.77	115.44	-2,689.17	975.84	5,160.11	5,008.30	151.81	33.990		
11,600.00	7,125.06	11,711.00	7,218.13	121.25	104.77	115.44	-2,689.17	975.84	5,260.07	5,108.22	151.85	34.640		
11,700.00	7,124.52	11,711.00	7,218.13	123.95	104.77	115.44	-2,689.17	975.84	5,360.03	5,208.14	151.89	35.290		
11,800.00	7,123.97	11,711.00	7,218.13	126.66	104.77	115.44	-2,689.17	975.84	5,459.99	5,308.07	151.92	35.939		
11,900.00	7,123.43	11,900.00	7,218.01	129.38	108.68	116.31	-2,694.56	976.00	5,559.95	5,404.02	155.93	35.657		
12,000.00	7,122.89	12,000.00	7,218.06	132.10	110.75	115.92	-2,692.19	975.93	5,659.92	5,501.88	158.04	35.813		
12,100.00	7,122.35	12,100.00	7,218.12	134.83	112.82	115.54	-2,689.82	975.86	5,759.88	5,599.73	160.15	35.965		
12,200.00	7,121.81	12,200.00	7,218.17	137.56	114.89	115.17	-2,687.45	975.78	5,859.85	5,697.59	162.26	36.113		
12,300.00	7,121.27	11,721.25	7,217.90	140.30	104.98	117.14	-2,699.41	976.12	5,959.81	5,807.43	152.39	39.110		
12,400.00	7,120.73	11,717.75	7,217.98	143.05	104.91	116.53	-2,695.91	976.02	6,059.78	5,907.45	152.34	39.779		
12,500.00	7,120.19	11,714.17	7,218.06	145.80	104.83	115.94	-2,692.33	975.92	6,159.76	6,007.47	152.28	40.449		
12,600.00	7,119.65	11,710.51	7,218.14	148.55	104.76	115.36	-2,688.68	975.82	6,259.73	6,107.49	152.23	41.119		
12,700.00	7,119.10	11,706.77	7,218.23	151.30	104.68	114.80	-2,684.94	975.72	6,359.70	6,207.52	152.18	41.791		
12,800.00	7,118.56	11,702.95	7,218.31	154.07	104.60	114.24	-2,681.13	975.61	6,459.67	6,307.54	152.13	42.463		
12,900.00	7,118.02	11,699.05	7,218.40	156.83	104.52	113.70	-2,677.22	975.50	6,559.64	6,407.57	152.07	43.136		
13,000.00	7,117.48	11,695.05	7,218.49	159.60	104.44	113.17	-2,673.23	975.38	6,659.61	6,507.59	152.01	43.809		
13,100.00	7,116.94	11,690.97	7,218.59	162.37	104.35	112.66	-2,669.15	975.26	6,759.58	6,607.62	151.96	44.484		
13,200.00	7,116.40	11,686.79	7,218.68	165.14	104.27	112.15	-2,664.97	975.14	6,859.54	6,707.65	151.90	45.159		
13,300.00	7,115.86	11,682.51	7,218.78	167.92	104.18	111.66	-2,660.69	975.01	6,959.51	6,807.68	151.84	45.836		
13,400.00	7,115.32	11,678.13	7,218.88	170.70	104.09	111.18	-2,656.31	974.88	7,059.48	6,907.71	151.77	46.513		
13,500.00	7,114.78	11,673.64	7,218.98	173.48	104.00	110.71	-2,651.83	974.75	7,159.45	7,007.74	151.71	47.192		
13,600.00	7,114.24	11,669.04	7,219.08	176.26	103.90	110.25	-2,647.24	974.61	7,259.41	7,107.77	151.64	47.871		
13,700.00	7,113.69	11,664.34	7,219.19	179.05	103.80	109.79	-2,642.53	974.46	7,359.38	7,207.80	151.58	48.552		
13,800.00	7,113.15	11,659.51	7,219.30	181.84	103.70	109.35	-2,637.71	974.31	7,459.34	7,307.83	151.51	49.234		
13,900.00	7,112.61	11,655.74	7,219.39	184.63	103.63	109.02	-2,633.94	974.19	7,559.31	7,407.84	151.47	49.907		
14,000.00	7,112.07	11,653.16	7,219.44	187.42	103.57	108.80	-2,631.37	974.11	7,659.27	7,507.82	151.46	50.571		
14,100.00	7,111.53	11,650.58	7,219.50	190.22	103.52	108.59	-2,628.79	974.03	7,759.24	7,607.79	151.45	51.234		
14,200.00	7,110.99	11,648.00	7,219.56	193.01	103.47	108.38	-2,626.21	973.95	7,859.20	7,707.76	151.44	51.898		
14,300.00	7,110.45	11,645.43	7,219.61	195.81	103.41	108.17	-2,623.64	973.87	7,959.17	7,807.74	151.43	52.561		
14,400.00	7,109.91	11,642.85	7,219.67	198.61	103.36	107.97	-2,621.06	973.79	8,059.13	7,907.71	151.42	53.224		
14,500.00	7,109.37	11,640.27	7,219.72	201.42	103.31	107.78	-2,618.48	973.70	8,159.09	8,007.68	151.41	53.886		
14,600.00	7,108.82	11,637.69	7,219.77	204.22	103.25	107.58	-2,615.91	973.62	8,259.06	8,107.65	151.41	54.549		
14,700.00	7,108.28	11,635.11	7,219.83	207.03	103.20	107.40	-2,613.33	973.54	8,359.02	8,207.62	151.40	55.211		
14,800.00	7,107.74	11,632.53	7,219.88	209.83	103.15	107.21	-2,610.75	973.46	8,458.99	8,307.59	151.40	55.873		
14,900.00	7,107.20	11,629.95	7,219.93	212.64	103.09	107.03	-2,608.17	973.38	8,558.95	8,407.56	151.39	56.535		
15,000.00	7,106.66	11,627.37	7,219.98	215.45	103.04	106.85	-2,605.59	973.30	8,658.92	8,507.53	151.39	57.196		
15,100.00	7,106.12	11,625.00	7,220.03	218.26	102.99	106.70	-2,603.23	973.22	8,758.88	8,607.49	151.39	57.856		
15,200.00	7,105.58	11,625.00	7,220.03	221.07	102.99	106.70	-2,603.23	973.22	8,858.85	8,707.40	151.45	58.493		
15,300.00	7,105.04	11,625.00	7,220.03	223.89	102.99	106.70	-2,603.23	973.22	8,958.81	8,807.30	151.51	59.129		

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



Anticollision Report



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

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 146-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,400.00	7,104.50	11,625.00	7,220.03	226.70	102.99	106.70	-2,603.23	973.22	9,058.78	8,907.21	151.57	59.764	
15,491.56	7,104.00	11,625.00	7,220.03	229.28	102.99	106.70	-2,603.23	973.22	9,150.31	8,998.68	151.63	60.346	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.53	119.85	1.11	119.86					
100.00	100.00	101.00	100.00	3.28	3.28	0.53	119.85	1.11	119.86	113.29	6.57	18.244		
200.00	200.00	201.04	200.04	3.34	3.34	0.53	119.85	1.11	119.86	113.18	6.67	17.957		
300.00	299.98	305.39	304.37	3.44	3.45	177.36	117.92	0.93	119.75	112.85	6.90	17.360		
400.00	399.84	409.73	408.55	3.59	3.61	177.25	112.21	0.39	119.50	112.26	7.24	16.515		
500.00	499.45	514.06	512.43	3.79	3.82	177.06	102.73	-0.50	119.11	111.43	7.68	15.508		
600.00	598.70	618.37	615.88	4.03	4.08	176.79	89.49	-1.75	118.58	110.37	8.21	14.436		
700.00	697.47	722.65	718.75	4.31	4.38	176.45	72.52	-3.35	117.92	109.10	8.82	13.368		
800.00	795.62	826.89	820.90	4.64	4.73	176.02	51.84	-5.29	117.12	107.63	9.49	12.345		
900.00	893.06	931.10	922.19	5.00	5.12	175.52	27.48	-7.59	116.20	106.00	10.20	11.390		
942.09	933.82	973.75	963.41	5.16	5.29	175.29	16.59	-8.61	115.92	105.42	10.50	11.042 CC, ES		
1,000.00	989.64	1,031.65	1,019.37	5.40	5.52	175.03	1.77	-10.01	116.50	105.59	10.91	10.676		
1,100.00	1,085.27	1,131.57	1,115.93	5.83	5.95	174.70	-23.81	-12.42	120.26	108.60	11.67	10.309		
1,200.00	1,179.82	1,231.31	1,212.31	6.29	6.39	174.53	-49.34	-14.83	127.49	115.03	12.46	10.233		
1,300.00	1,273.17	1,330.73	1,308.39	6.79	6.85	174.51	-74.80	-17.22	138.18	124.90	13.29	10.399		
1,400.00	1,365.21	1,429.72	1,404.05	7.33	7.31	174.62	-100.14	-19.61	152.32	138.18	14.15	10.767		
1,500.00	1,456.49	1,528.42	1,499.43	7.89	7.78	174.79	-125.41	-21.99	168.37	153.34	15.03	11.203		
1,600.00	1,547.76	1,627.12	1,594.82	8.46	8.26	174.93	-150.67	-24.37	184.43	168.50	15.93	11.579		
1,700.00	1,639.04	1,725.82	1,690.20	9.05	8.75	175.05	-175.94	-26.75	200.49	183.65	16.84	11.903		
1,800.00	1,730.31	1,824.52	1,785.58	9.65	9.24	175.15	-201.21	-29.13	216.55	198.77	17.77	12.184		
1,900.00	1,821.58	1,923.23	1,880.96	10.26	9.74	175.23	-226.48	-31.51	232.61	213.89	18.72	12.429		
2,000.00	1,912.85	2,021.93	1,976.35	10.87	10.24	175.31	-251.75	-33.89	248.67	229.00	19.67	12.643		
2,100.00	2,004.13	2,120.63	2,071.73	11.49	10.74	175.37	-277.01	-36.27	264.73	244.10	20.63	12.833		
2,200.00	2,095.40	2,219.33	2,167.11	12.11	11.25	175.43	-302.28	-38.65	280.79	259.19	21.60	13.000		
2,300.00	2,186.67	2,318.03	2,262.49	12.74	11.76	175.49	-327.55	-41.03	296.85	274.27	22.57	13.150		
2,400.00	2,277.95	2,416.73	2,357.88	13.38	12.27	175.53	-352.82	-43.41	312.91	289.35	23.56	13.284		
2,500.00	2,369.22	2,515.43	2,453.26	14.01	12.78	175.57	-378.09	-45.79	328.97	304.43	24.54	13.404		
2,600.00	2,460.49	2,614.14	2,548.64	14.65	13.30	175.61	-403.35	-48.17	345.03	319.50	25.53	13.512		
2,700.00	2,551.77	2,712.84	2,644.02	15.29	13.81	175.65	-428.62	-50.55	361.09	334.56	26.53	13.611		
2,800.00	2,643.04	2,811.54	2,739.41	15.93	14.33	175.68	-453.89	-52.93	377.15	349.62	27.53	13.700		
2,900.00	2,734.31	2,910.24	2,834.79	16.58	14.85	175.71	-479.16	-55.31	393.21	364.68	28.53	13.782		
3,000.00	2,825.58	3,008.94	2,930.17	17.23	15.37	175.74	-504.43	-57.69	409.28	379.74	29.54	13.857		
3,100.00	2,916.86	3,107.64	3,025.56	17.87	15.89	175.76	-529.70	-60.07	425.34	394.79	30.54	13.925		
3,200.00	3,008.13	3,206.35	3,120.94	18.52	16.41	175.79	-554.96	-62.45	441.40	409.84	31.55	13.988		
3,300.00	3,099.40	3,305.05	3,216.32	19.17	16.94	175.81	-580.23	-64.83	457.46	424.89	32.57	14.047		
3,400.00	3,190.68	3,403.75	3,311.70	19.83	17.46	175.83	-605.50	-67.21	473.52	439.94	33.58	14.101		
3,500.00	3,281.95	3,502.45	3,407.09	20.48	17.98	175.85	-630.77	-69.59	489.58	454.99	34.60	14.151		
3,600.00	3,373.22	3,601.15	3,502.47	21.13	18.51	175.86	-656.04	-71.97	505.65	470.03	35.62	14.197		
3,700.00	3,464.49	3,700.15	3,597.85	21.79	19.03	175.88	-681.30	-74.36	521.71	485.07	36.64	14.240		
3,800.00	3,555.77	3,801.45	3,693.23	22.44	19.57	175.90	-706.57	-76.74	537.77	500.10	37.67	14.276		
3,900.00	3,647.04	3,902.74	3,788.62	23.10	20.11	175.91	-731.84	-79.12	553.83	515.13	38.70	14.309		
4,000.00	3,738.31	4,004.04	3,884.00	23.75	20.65	175.92	-757.11	-81.50	569.89	530.15	39.74	14.341		
4,100.00	3,829.59	4,105.34	3,979.38	24.41	21.20	175.94	-782.38	-83.88	585.96	545.18	40.78	14.370		
4,200.00	3,920.86	4,206.64	4,074.76	25.07	21.74	175.95	-807.64	-86.26	602.02	560.20	41.81	14.397		
4,300.00	4,012.13	4,307.94	4,170.15	25.73	22.28	175.96	-832.91	-88.64	618.08	575.23	42.85	14.423		
4,400.00	4,103.41	4,390.76	4,265.53	26.38	22.72	175.97	-858.18	-91.02	634.14	590.34	43.80	14.477		
4,500.00	4,194.68	4,489.46	4,360.91	27.04	23.25	175.98	-883.45	-93.40	650.21	605.37	44.83	14.503		
4,600.00	4,285.95	4,588.17	4,456.30	27.70	23.78	175.99	-908.72	-95.78	666.27	620.41	45.86	14.528		
4,700.00	4,377.22	4,686.87	4,551.68	28.36	24.31	176.00	-933.98	-98.16	682.33	635.44	46.89	14.552		
4,800.00	4,468.50	4,785.57	4,647.06	29.02	24.84	176.01	-959.25	-100.54	698.39	650.47	47.92	14.575		
4,900.00	4,559.77	4,884.27	4,742.44	29.68	25.37	176.02	-984.52	-102.92	714.45	665.51	48.95	14.596		
5,000.00	4,651.04	4,982.97	4,837.83	30.34	25.90	176.03	-1,009.79	-105.30	730.52	680.54	49.98	14.616		

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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	5,081.67	4,933.21	31.00	26.43	176.04	-1,035.06	-107.68	746.58	695.57	51.01	14.635		
5,200.00	4,833.59	5,180.38	5,028.59	31.66	26.96	176.04	-1,060.32	-110.06	762.64	710.60	52.04	14.654		
5,300.00	4,924.86	5,279.08	5,123.97	32.32	27.49	176.05	-1,085.59	-112.44	778.70	725.63	53.08	14.671		
5,400.00	5,016.13	5,377.78	5,219.36	32.99	28.02	176.06	-1,110.86	-114.82	794.77	740.66	54.11	14.688		
5,500.00	5,107.41	5,476.48	5,314.74	33.65	28.55	176.07	-1,136.13	-117.20	810.83	755.69	55.14	14.704		
5,600.00	5,198.68	5,575.18	5,410.12	34.31	29.08	176.07	-1,161.40	-119.58	826.89	770.71	56.18	14.719		
5,700.00	5,289.95	5,673.88	5,505.50	34.97	29.61	176.08	-1,186.66	-121.96	842.95	785.74	57.21	14.734		
5,800.00	5,381.23	5,772.58	5,600.89	35.63	30.14	176.08	-1,211.93	-124.34	859.02	800.77	58.25	14.748		
5,900.00	5,472.50	5,871.29	5,696.27	36.30	30.67	176.09	-1,237.20	-126.72	875.08	815.80	59.28	14.761		
6,000.00	5,563.77	5,969.99	5,791.65	36.96	31.20	176.10	-1,262.47	-129.10	891.14	830.82	60.32	14.774		
6,100.00	5,655.05	6,068.69	5,887.04	37.62	31.74	176.10	-1,287.74	-131.48	907.20	845.85	61.35	14.787		
6,200.00	5,746.32	6,167.39	5,982.42	38.28	32.27	176.11	-1,313.00	-133.86	923.27	860.88	62.39	14.799		
6,300.00	5,837.59	6,266.09	6,077.80	38.95	32.80	176.11	-1,338.27	-136.24	939.33	875.90	63.42	14.810		
6,400.00	5,928.86	6,364.79	6,173.18	39.61	33.33	176.12	-1,363.54	-138.62	955.39	890.93	64.46	14.821		
6,500.00	6,020.14	6,463.50	6,268.57	40.27	33.86	176.12	-1,388.81	-141.00	971.45	905.96	65.50	14.832		
6,600.00	6,111.41	6,562.03	6,363.78	40.94	34.39	176.12	-1,414.03	-143.55	987.52	920.98	66.53	14.842		
6,700.00	6,202.68	6,658.51	6,456.23	41.60	34.90	175.57	-1,438.59	-155.38	1,003.70	936.13	67.57	14.855		
6,800.00	6,293.96	6,750.11	6,541.44	42.26	35.36	174.31	-1,461.32	-179.86	1,020.45	951.88	68.57	14.882		
6,900.00	6,385.23	6,833.80	6,615.58	42.93	35.74	172.57	-1,481.18	-213.08	1,038.64	969.14	69.49	14.946		
7,000.00	6,476.50	6,908.10	6,677.35	43.59	36.06	170.61	-1,497.80	-250.78	1,059.32	989.04	70.28	15.072		
7,100.00	6,567.77	6,972.81	6,727.38	44.25	36.31	168.61	-1,511.31	-289.49	1,083.50	1,012.63	70.87	15.288		
7,200.00	6,658.64	7,031.53	6,769.26	44.91	36.52	147.55	-1,522.68	-329.01	1,110.85	1,039.61	71.24	15.593		
7,300.00	6,747.14	7,089.25	6,806.83	45.52	36.72	128.29	-1,532.92	-371.60	1,139.13	1,067.72	71.41	15.953		
7,400.00	6,831.10	7,150.00	6,842.16	46.07	36.92	113.85	-1,542.61	-420.03	1,167.03	1,095.56	71.46	16.331		
7,500.00	6,908.46	7,200.00	6,867.79	46.54	37.07	103.47	-1,549.69	-462.36	1,193.39	1,122.23	71.17	16.769		
7,600.00	6,977.30	7,258.97	6,893.76	46.95	37.26	95.71	-1,556.93	-514.78	1,217.27	1,146.25	71.03	17.138		
7,700.00	7,035.93	7,314.87	6,913.95	47.30	37.44	90.06	-1,562.64	-566.57	1,237.87	1,166.99	70.88	17.465		
7,800.00	7,082.92	7,370.57	6,929.62	47.59	37.64	86.01	-1,567.16	-619.82	1,254.55	1,183.65	70.90	17.694		
7,900.00	7,117.09	7,426.15	6,940.71	47.84	37.87	83.28	-1,570.48	-674.16	1,266.83	1,195.62	71.21	17.790		
8,000.00	7,137.62	7,481.65	6,947.18	48.06	38.16	81.71	-1,572.57	-729.22	1,274.35	1,202.47	71.88	17.728		
8,100.00	7,143.99	7,540.17	6,948.98	48.28	38.54	81.22	-1,573.46	-787.69	1,276.91	1,203.89	73.02	17.486		
8,200.00	7,143.45	7,640.17	6,948.60	48.53	39.41	81.22	-1,574.06	-887.69	1,276.88	1,201.53	75.35	16.946		
8,300.00	7,142.91	7,740.17	6,948.22	48.89	40.56	81.23	-1,574.66	-987.69	1,276.84	1,198.84	78.00	16.369		
8,400.00	7,142.37	7,840.17	6,947.84	49.40	41.95	81.24	-1,575.26	-1,087.68	1,276.81	1,195.84	80.96	15.770		
8,500.00	7,141.83	7,940.17	6,947.46	50.12	43.52	81.24	-1,575.85	-1,187.68	1,276.77	1,192.57	84.20	15.163		
8,600.00	7,141.29	8,040.17	6,947.08	51.08	45.25	81.25	-1,576.45	-1,287.68	1,276.74	1,189.05	87.69	14.560		
8,700.00	7,140.75	8,140.17	6,946.70	52.30	47.11	81.26	-1,577.05	-1,387.68	1,276.70	1,185.31	91.39	13.970		
8,800.00	7,140.21	8,240.17	6,946.32	53.75	49.07	81.26	-1,577.65	-1,487.67	1,276.67	1,181.38	95.29	13.398		
8,900.00	7,139.67	8,340.17	6,945.94	55.40	51.13	81.27	-1,578.25	-1,587.67	1,276.63	1,177.28	99.35	12.849		
9,000.00	7,139.12	8,440.17	6,945.56	57.20	53.26	81.28	-1,578.85	-1,687.67	1,276.60	1,173.03	103.57	12.326		
9,100.00	7,138.58	8,540.17	6,945.18	59.13	55.46	81.29	-1,579.45	-1,787.67	1,276.56	1,168.64	107.92	11.829		
9,200.00	7,138.04	8,640.17	6,944.80	61.15	57.72	81.29	-1,580.05	-1,887.66	1,276.53	1,164.14	112.39	11.358		
9,300.00	7,137.50	8,740.17	6,944.43	63.26	60.04	81.30	-1,580.64	-1,987.66	1,276.49	1,159.54	116.96	10.914		
9,400.00	7,136.96	8,840.17	6,944.05	65.44	62.40	81.31	-1,581.24	-2,087.66	1,276.46	1,154.84	121.62	10.496		
9,500.00	7,136.42	8,940.17	6,943.67	67.68	64.80	81.31	-1,581.84	-2,187.65	1,276.42	1,150.06	126.36	10.101		
9,600.00	7,135.88	9,040.17	6,943.29	69.97	67.24	81.32	-1,582.44	-2,287.65	1,276.39	1,145.21	131.18	9.730		
9,700.00	7,135.34	9,140.17	6,942.91	72.31	69.71	81.33	-1,583.04	-2,387.65	1,276.35	1,140.29	136.06	9.381		
9,800.00	7,134.80	9,240.17	6,942.53	74.69	72.21	81.34	-1,583.64	-2,487.65	1,276.32	1,135.31	141.00	9.052		
9,900.00	7,134.26	9,340.17	6,942.15	77.10	74.74	81.34	-1,584.24	-2,587.64	1,276.28	1,130.28	146.00	8.742		
10,000.00	7,133.71	9,440.17	6,941.77	79.54	77.29	81.35	-1,584.83	-2,687.64	1,276.25	1,125.21	151.04	8.450		
10,100.00	7,133.17	9,540.17	6,941.39	82.02	79.86	81.36	-1,585.43	-2,787.64	1,276.21	1,120.09	156.12	8.174		
10,200.00	7,132.63	9,640.17	6,941.01	84.52	82.45	81.36	-1,586.03	-2,887.64	1,276.18	1,114.93	161.25	7.914		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,132.09	9,740.17	6,940.63	87.04	85.05	81.37	-1,586.63	-2,987.63	1,276.14	1,109.74	166.41	7.669		
10,400.00	7,131.55	9,840.17	6,940.25	89.58	87.68	81.38	-1,587.23	-3,087.63	1,276.11	1,104.51	171.60	7.437		
10,500.00	7,131.01	9,940.17	6,939.87	92.15	90.32	81.39	-1,587.83	-3,187.63	1,276.07	1,099.25	176.82	7.217		
10,600.00	7,130.47	10,040.17	6,939.49	94.73	92.97	81.39	-1,588.43	-3,287.63	1,276.04	1,093.97	182.06	7.009		
10,700.00	7,129.93	10,140.17	6,939.11	97.33	95.63	81.40	-1,589.02	-3,387.62	1,276.00	1,088.67	187.34	6.811		
10,800.00	7,129.39	10,240.17	6,938.74	99.94	98.30	81.41	-1,589.62	-3,487.62	1,275.97	1,083.34	192.63	6.624		
10,900.00	7,128.84	10,340.17	6,938.36	102.56	100.99	81.41	-1,590.22	-3,587.62	1,275.93	1,077.99	197.95	6.446		
11,000.00	7,128.30	10,440.17	6,937.98	105.20	103.68	81.42	-1,590.82	-3,687.62	1,275.90	1,072.62	203.28	6.277		
11,100.00	7,127.76	10,540.17	6,937.60	107.85	106.38	81.43	-1,591.42	-3,787.61	1,275.86	1,067.23	208.63	6.115		
11,200.00	7,127.22	10,640.17	6,937.22	110.51	109.09	81.44	-1,592.02	-3,887.61	1,275.83	1,061.83	214.00	5.962		
11,300.00	7,126.68	10,740.17	6,936.84	113.18	111.81	81.44	-1,592.62	-3,987.61	1,275.79	1,056.41	219.39	5.815		
11,400.00	7,126.14	10,840.17	6,936.46	115.86	114.54	81.45	-1,593.22	-4,087.60	1,275.76	1,050.98	224.78	5.675		
11,500.00	7,125.60	10,940.17	6,936.08	118.55	117.27	81.46	-1,593.81	-4,187.60	1,275.72	1,045.53	230.20	5.542		
11,600.00	7,125.06	11,040.17	6,935.70	121.25	120.01	81.46	-1,594.41	-4,287.60	1,275.69	1,040.07	235.62	5.414		
11,700.00	7,124.52	11,140.17	6,935.32	123.95	122.75	81.47	-1,595.01	-4,387.60	1,275.66	1,034.60	241.05	5.292		
11,800.00	7,123.97	11,240.17	6,934.94	126.66	125.50	81.48	-1,595.61	-4,487.59	1,275.62	1,029.12	246.50	5.175		
11,900.00	7,123.43	11,340.17	6,934.56	129.38	128.25	81.49	-1,596.21	-4,587.59	1,275.59	1,023.63	251.96	5.063		
12,000.00	7,122.89	11,440.17	6,934.18	132.10	131.01	81.49	-1,596.81	-4,687.59	1,275.55	1,018.13	257.42	4.955		
12,100.00	7,122.35	11,540.17	6,933.80	134.83	133.77	81.50	-1,597.41	-4,787.59	1,275.52	1,012.62	262.89	4.852		
12,200.00	7,121.81	11,640.17	6,933.42	137.56	136.53	81.51	-1,598.00	-4,887.58	1,275.48	1,007.11	268.38	4.753		
12,300.00	7,121.27	11,740.17	6,933.05	140.30	139.30	81.51	-1,598.60	-4,987.58	1,275.45	1,001.58	273.87	4.657		
12,400.00	7,120.73	11,840.17	6,932.67	143.05	142.08	81.52	-1,599.20	-5,087.58	1,275.41	996.05	279.36	4.565		
12,500.00	7,120.19	11,940.17	6,932.29	145.80	144.85	81.53	-1,599.80	-5,187.58	1,275.38	990.51	284.87	4.477		
12,600.00	7,119.65	12,040.17	6,931.91	148.55	147.63	81.53	-1,600.40	-5,287.57	1,275.35	984.97	290.38	4.392		
12,700.00	7,119.10	12,140.17	6,931.53	151.30	150.41	81.54	-1,601.00	-5,387.57	1,275.31	979.41	295.90	4.310		
12,800.00	7,118.56	12,240.17	6,931.15	154.07	153.20	81.55	-1,601.60	-5,487.57	1,275.28	973.86	301.42	4.231		
12,900.00	7,118.02	12,340.17	6,930.77	156.83	155.99	81.56	-1,602.20	-5,587.57	1,275.24	968.29	306.95	4.155		
13,000.00	7,117.48	12,440.17	6,930.39	159.60	158.78	81.56	-1,602.79	-5,687.56	1,275.21	962.72	312.48	4.081		
13,100.00	7,116.94	12,540.17	6,930.01	162.37	161.57	81.57	-1,603.39	-5,787.56	1,275.17	957.15	318.02	4.010		
13,200.00	7,116.40	12,640.17	6,929.63	165.14	164.37	81.58	-1,603.99	-5,887.56	1,275.14	951.57	323.57	3.941		
13,300.00	7,115.86	12,740.17	6,929.25	167.92	167.16	81.58	-1,604.59	-5,987.55	1,275.10	945.99	329.11	3.874		
13,400.00	7,115.32	12,840.17	6,928.87	170.70	169.96	81.59	-1,605.19	-6,087.55	1,275.07	940.40	334.67	3.810		
13,500.00	7,114.78	12,940.17	6,928.49	173.48	172.76	81.60	-1,605.79	-6,187.55	1,275.04	934.81	340.22	3.748		
13,600.00	7,114.24	13,040.17	6,928.11	176.26	175.57	81.61	-1,606.39	-6,287.55	1,275.00	929.22	345.78	3.687		
13,700.00	7,113.69	13,140.17	6,927.73	179.05	178.37	81.61	-1,606.98	-6,387.54	1,274.97	923.62	351.35	3.629		
13,800.00	7,113.15	13,240.17	6,927.36	181.84	181.18	81.62	-1,607.58	-6,487.54	1,274.93	918.02	356.92	3.572		
13,900.00	7,112.61	13,340.17	6,926.98	184.63	183.99	81.63	-1,608.18	-6,587.54	1,274.90	912.41	362.49	3.517		
14,000.00	7,112.07	13,440.17	6,926.60	187.42	186.80	81.63	-1,608.78	-6,687.54	1,274.87	906.80	368.06	3.464		
14,100.00	7,111.53	13,540.17	6,926.22	190.22	189.61	81.64	-1,609.38	-6,787.53	1,274.83	901.19	373.64	3.412		
14,200.00	7,110.99	13,640.17	6,925.84	193.01	192.42	81.65	-1,609.98	-6,887.53	1,274.80	895.58	379.22	3.362		
14,300.00	7,110.45	13,740.17	6,925.46	195.81	195.23	81.66	-1,610.58	-6,987.53	1,274.76	889.96	384.80	3.313		
14,400.00	7,109.91	13,840.17	6,925.08	198.61	198.05	81.66	-1,611.17	-7,087.53	1,274.73	884.34	390.39	3.265		
14,500.00	7,109.37	13,940.17	6,924.70	201.42	200.87	81.67	-1,611.77	-7,187.52	1,274.69	878.72	395.98	3.219		
14,600.00	7,108.82	14,040.17	6,924.32	204.22	203.68	81.68	-1,612.37	-7,287.52	1,274.66	873.09	401.57	3.174		
14,700.00	7,108.28	14,140.16	6,923.94	207.03	206.50	81.68	-1,612.97	-7,387.52	1,274.63	867.46	407.17	3.130		
14,800.00	7,107.74	14,240.16	6,923.56	209.83	209.32	81.69	-1,613.57	-7,487.51	1,274.59	861.83	412.76	3.088		
14,900.00	7,107.20	14,340.16	6,923.18	212.64	212.14	81.70	-1,614.17	-7,587.51	1,274.56	856.20	418.36	3.047		
15,000.00	7,106.66	14,440.16	6,922.80	215.45	214.96	81.71	-1,614.77	-7,687.51	1,274.53	850.56	423.96	3.006		
15,100.00	7,106.12	14,540.16	6,922.42	218.26	217.79	81.71	-1,615.37	-7,787.51	1,274.49	844.93	429.56	2.967		
15,200.00	7,105.58	14,640.16	6,922.04	221.07	220.61	81.72	-1,615.96	-7,887.50	1,274.46	839.29	435.17	2.929		
15,300.00	7,105.04	14,740.16	6,921.67	223.89	223.44	81.73	-1,616.56	-7,987.50	1,274.42	833.65	440.78	2.891		
15,400.00	7,104.50	14,840.16	6,921.29	226.70	226.26	81.73	-1,617.16	-8,087.50	1,274.39	828.00	446.39	2.855		

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



Anticollision Report



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

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
15,476.71	7,104.08	14,916.87	6,921.00	228.86	228.43	81.74	-1,617.62	-8,164.20	1,274.36	823.67	450.69	2.828	
15,491.56	7,104.00	14,915.55	6,921.00	229.28	228.39	81.74	-1,617.61	-8,162.88	1,274.46	823.63	450.83	2.827 SF	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.50	159.93	1.39	159.94					
100.00	100.00	101.00	100.00	3.28	3.28	0.50	159.93	1.39	159.94	153.37	6.57	24.345		
200.00	200.00	201.06	200.06	3.34	3.34	0.50	159.93	1.39	159.94	153.26	6.67	23.961		
300.00	299.98	306.92	305.90	3.44	3.45	177.31	157.95	1.14	159.81	152.91	6.90	23.160		
400.00	399.84	412.78	411.58	3.59	3.61	177.15	152.10	0.38	159.50	152.26	7.24	22.027		
500.00	499.45	518.61	516.96	3.79	3.83	176.88	142.38	-0.87	159.01	151.32	7.69	20.672		
600.00	598.70	624.42	621.87	4.03	4.10	176.50	128.81	-2.62	158.35	150.12	8.23	19.236		
700.00	697.47	730.18	726.16	4.31	4.41	176.01	111.41	-4.87	157.53	148.68	8.84	17.811		
723.28	720.38	753.31	748.90	4.39	4.48	175.90	107.21	-5.41	157.43	148.45	8.98	17.531 CC, ES		
800.00	795.62	830.02	824.31	4.64	4.74	175.55	93.28	-7.21	158.46	149.01	9.44	16.778		
900.00	893.06	929.91	922.51	5.00	5.10	175.19	75.14	-9.55	162.87	152.77	10.11	16.116		
1,000.00	989.64	1,029.59	1,020.51	5.40	5.47	174.94	57.04	-11.88	170.77	159.95	10.82	15.790		
1,100.00	1,085.27	1,128.94	1,118.18	5.83	5.87	174.81	39.00	-14.21	182.12	170.56	11.56	15.749		
1,200.00	1,179.82	1,227.83	1,215.40	6.29	6.28	174.79	21.05	-16.52	196.93	184.58	12.35	15.949		
1,300.00	1,273.17	1,326.15	1,312.06	6.79	6.69	174.84	3.19	-18.83	215.16	202.00	13.16	16.349		
1,400.00	1,365.21	1,423.78	1,408.03	7.33	7.11	174.95	-14.54	-21.11	236.79	222.80	14.00	16.916		
1,500.00	1,456.49	1,520.97	1,503.58	7.89	7.54	175.10	-32.18	-23.39	260.32	245.46	14.85	17.526		
1,600.00	1,547.76	1,618.16	1,599.13	8.46	7.97	175.24	-49.83	-25.67	283.85	268.12	15.72	18.054		
1,700.00	1,639.04	1,715.35	1,694.67	9.05	8.41	175.35	-67.48	-27.94	307.38	290.77	16.61	18.510		
1,800.00	1,730.31	1,812.54	1,790.22	9.65	8.85	175.45	-85.13	-30.22	330.91	313.41	17.50	18.906		
1,900.00	1,821.58	1,909.73	1,885.77	10.26	9.30	175.53	-102.78	-32.50	354.44	336.03	18.41	19.252		
2,000.00	1,912.85	2,006.92	1,981.31	10.87	9.75	175.61	-120.43	-34.77	377.98	358.65	19.33	19.555		
2,100.00	2,004.13	2,104.11	2,076.86	11.49	10.20	175.67	-138.08	-37.05	401.51	381.26	20.25	19.823		
2,200.00	2,095.40	2,201.30	2,172.41	12.11	10.66	175.73	-155.73	-39.33	425.04	403.86	21.19	20.061		
2,300.00	2,186.67	2,301.51	2,267.96	12.74	11.13	175.78	-173.37	-41.60	448.58	426.44	22.14	20.261		
2,400.00	2,277.95	2,395.68	2,363.50	13.38	11.58	175.83	-191.02	-43.88	472.12	449.04	23.07	20.463		
2,500.00	2,369.22	2,507.13	2,459.05	14.01	12.11	175.87	-208.67	-46.16	495.65	471.57	24.09	20.579		
2,600.00	2,460.49	2,590.06	2,554.60	14.65	12.50	175.91	-226.32	-48.43	519.19	494.21	24.98	20.788		
2,700.00	2,551.77	2,687.25	2,650.15	15.29	12.96	175.95	-243.97	-50.71	542.72	516.79	25.93	20.928		
2,800.00	2,643.04	2,784.44	2,745.69	15.93	13.43	175.98	-261.62	-52.98	566.26	539.36	26.89	21.055		
2,900.00	2,734.31	2,881.63	2,841.24	16.58	13.90	176.01	-279.27	-55.26	589.79	561.94	27.86	21.171		
3,000.00	2,825.58	2,978.82	2,936.79	17.23	14.36	176.03	-296.92	-57.54	613.33	584.51	28.83	21.278		
3,100.00	2,916.86	3,076.01	3,032.34	17.87	14.83	176.06	-314.56	-59.81	636.87	607.07	29.79	21.375		
3,200.00	3,008.13	3,173.20	3,127.88	18.52	15.30	176.08	-332.21	-62.09	660.40	629.64	30.77	21.465		
3,300.00	3,099.40	3,270.39	3,223.43	19.17	15.77	176.11	-349.86	-64.37	683.94	652.20	31.74	21.549		
3,400.00	3,190.68	3,367.58	3,318.98	19.83	16.24	176.13	-367.51	-66.64	707.48	674.76	32.71	21.626		
3,500.00	3,281.95	3,464.77	3,414.53	20.48	16.71	176.15	-385.16	-68.92	731.01	697.32	33.69	21.697		
3,600.00	3,373.22	3,561.96	3,510.07	21.13	17.19	176.16	-402.81	-71.20	754.55	719.88	34.67	21.764		
3,700.00	3,464.49	3,659.15	3,605.62	21.79	17.66	176.18	-420.46	-73.47	778.09	742.44	35.65	21.826		
3,800.00	3,555.77	3,756.34	3,701.17	22.44	18.13	176.20	-438.10	-75.75	801.63	764.99	36.63	21.884		
3,900.00	3,647.04	3,853.53	3,796.71	23.10	18.60	176.21	-455.75	-78.03	825.16	787.55	37.61	21.938		
4,000.00	3,738.31	3,950.72	3,892.26	23.75	19.08	176.23	-473.40	-80.30	848.70	810.10	38.60	21.988		
4,100.00	3,829.59	4,047.92	3,987.81	24.41	19.55	176.24	-491.05	-82.58	872.24	832.66	39.58	22.036		
4,200.00	3,920.86	4,145.11	4,083.36	25.07	20.03	176.25	-508.70	-84.86	895.77	855.21	40.57	22.081		
4,300.00	4,012.13	4,242.30	4,178.90	25.73	20.50	176.26	-526.35	-87.13	919.31	877.76	41.55	22.123		
4,400.00	4,103.41	4,339.49	4,274.45	26.38	20.98	176.27	-544.00	-89.41	942.85	900.31	42.54	22.163		
4,500.00	4,194.68	4,436.68	4,370.00	27.04	21.45	176.29	-561.65	-91.69	966.39	922.86	43.53	22.201		
4,600.00	4,285.95	4,533.87	4,465.55	27.70	21.93	176.30	-579.29	-93.96	989.92	945.41	44.52	22.237		
4,700.00	4,377.22	4,631.06	4,561.09	28.36	22.40	176.31	-596.94	-96.24	1,013.46	967.95	45.51	22.270		
4,800.00	4,468.50	4,728.25	4,656.64	29.02	22.88	176.32	-614.59	-98.51	1,037.00	990.50	46.50	22.302		
4,900.00	4,559.77	4,825.44	4,752.19	29.68	23.36	176.32	-632.24	-100.79	1,060.54	1,013.05	47.49	22.333		
5,000.00	4,651.04	4,922.63	4,847.74	30.34	23.83	176.33	-649.89	-103.07	1,084.07	1,035.60	48.48	22.362		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	5,019.82	4,943.28	31.00	24.31	176.34	-667.54	-105.34	1,107.61	1,058.14	49.47	22.389		
5,200.00	4,833.59	5,117.01	5,038.83	31.66	24.79	176.35	-685.19	-107.62	1,131.15	1,080.69	50.46	22.415		
5,300.00	4,924.86	5,214.20	5,134.38	32.32	25.27	176.36	-702.84	-109.90	1,154.69	1,103.23	51.46	22.440		
5,400.00	5,016.13	5,311.39	5,229.93	32.99	25.74	176.36	-720.48	-112.17	1,178.22	1,125.78	52.45	22.464		
5,500.00	5,107.41	5,408.58	5,325.47	33.65	26.22	176.37	-738.13	-114.45	1,201.76	1,148.32	53.44	22.487		
5,600.00	5,198.68	5,505.77	5,421.02	34.31	26.70	176.38	-755.78	-116.73	1,225.30	1,170.86	54.44	22.509		
5,700.00	5,289.95	5,602.96	5,516.57	34.97	27.18	176.38	-773.43	-119.00	1,248.84	1,193.41	55.43	22.530		
5,800.00	5,381.23	5,700.15	5,612.11	35.63	27.65	176.39	-791.08	-121.28	1,272.38	1,215.95	56.43	22.550		
5,900.00	5,472.50	5,802.66	5,707.66	36.30	28.16	176.40	-808.73	-123.56	1,295.91	1,238.47	57.44	22.559		
6,000.00	5,563.77	5,905.47	5,803.21	36.96	28.66	176.40	-826.38	-125.83	1,319.45	1,260.98	58.47	22.568		
6,100.00	5,655.05	6,008.28	5,898.76	37.62	29.17	176.41	-844.02	-128.11	1,342.99	1,283.50	59.49	22.576		
6,200.00	5,746.32	6,088.91	5,994.30	38.28	29.57	176.41	-861.67	-130.39	1,366.53	1,306.12	60.41	22.622		
6,300.00	5,837.59	6,186.10	6,089.85	38.95	30.05	176.42	-879.32	-132.66	1,390.06	1,328.66	61.40	22.638		
6,400.00	5,928.86	6,283.29	6,185.40	39.61	30.52	176.42	-896.97	-134.94	1,413.60	1,351.20	62.40	22.654		
6,500.00	6,020.14	6,380.48	6,280.95	40.27	31.00	176.43	-914.62	-137.22	1,437.14	1,373.74	63.40	22.669		
6,600.00	6,111.41	6,477.67	6,376.49	40.94	31.48	176.43	-932.27	-139.49	1,460.68	1,396.28	64.39	22.683		
6,700.00	6,202.68	6,574.86	6,472.04	41.60	31.96	176.44	-949.92	-141.77	1,484.22	1,418.82	65.39	22.697		
6,800.00	6,293.96	6,672.93	6,568.39	42.26	32.44	176.39	-967.73	-145.30	1,507.74	1,441.34	66.40	22.708		
6,900.00	6,385.23	6,770.41	6,662.86	42.93	32.91	175.88	-985.41	-161.03	1,531.22	1,463.81	67.40	22.717		
7,000.00	6,476.50	6,861.92	6,748.38	43.59	33.33	174.91	-1,001.64	-188.97	1,554.98	1,486.63	68.35	22.750		
7,100.00	6,567.77	6,944.64	6,821.57	44.25	33.68	173.65	-1,015.73	-224.74	1,579.69	1,510.49	69.20	22.827		
7,200.00	6,658.64	7,020.24	6,883.93	44.91	33.97	153.27	-1,027.90	-265.62	1,605.54	1,535.58	69.96	22.950		
7,300.00	6,747.14	7,093.28	6,939.22	45.52	34.24	134.68	-1,038.87	-312.00	1,631.48	1,560.84	70.64	23.097		
7,400.00	6,831.10	7,164.43	6,987.70	46.07	34.48	120.91	-1,048.66	-363.10	1,656.58	1,585.33	71.24	23.252		
7,500.00	6,908.46	7,234.19	7,029.49	46.54	34.71	110.90	-1,057.28	-418.25	1,680.02	1,608.22	71.80	23.398		
7,600.00	6,977.30	7,300.00	7,063.23	46.95	34.94	103.60	-1,064.44	-474.26	1,701.05	1,628.74	72.31	23.524		
7,700.00	7,035.93	7,370.82	7,092.98	47.30	35.21	98.21	-1,070.98	-538.15	1,719.04	1,646.06	72.98	23.556		
7,800.00	7,082.92	7,438.16	7,114.61	47.59	35.53	94.38	-1,076.03	-601.69	1,733.45	1,659.72	73.73	23.509		
7,900.00	7,117.09	7,505.07	7,129.45	47.84	35.96	91.79	-1,079.85	-666.79	1,743.88	1,669.17	74.70	23.344		
8,000.00	7,137.62	7,571.67	7,137.46	48.06	36.50	90.30	-1,082.43	-732.83	1,750.03	1,674.09	75.94	23.045		
8,100.00	7,143.99	7,647.24	7,138.85	48.28	37.26	89.83	-1,083.95	-808.35	1,751.65	1,674.04	77.61	22.570		
8,200.00	7,143.45	7,747.24	7,138.31	48.53	38.47	89.83	-1,085.52	-908.33	1,750.66	1,670.63	80.03	21.874		
8,300.00	7,142.91	7,847.23	7,137.76	48.89	39.87	89.83	-1,087.09	-1,008.31	1,749.68	1,666.91	82.78	21.138		
8,400.00	7,142.37	7,947.23	7,137.22	49.40	41.44	89.83	-1,088.66	-1,108.30	1,748.70	1,662.89	85.81	20.379		
8,500.00	7,141.83	8,047.22	7,136.68	50.12	43.15	89.83	-1,090.23	-1,208.28	1,747.72	1,658.61	89.11	19.614		
8,600.00	7,141.29	8,147.22	7,136.14	51.08	44.99	89.83	-1,091.80	-1,308.26	1,746.74	1,654.10	92.64	18.856		
8,700.00	7,140.75	8,247.22	7,135.60	52.30	46.93	89.83	-1,093.37	-1,408.24	1,745.75	1,649.38	96.38	18.114		
8,800.00	7,140.21	8,347.21	7,135.06	53.75	48.96	89.83	-1,094.94	-1,508.22	1,744.77	1,644.47	100.30	17.395		
8,900.00	7,139.67	8,447.21	7,134.51	55.40	51.07	89.83	-1,096.51	-1,608.20	1,743.79	1,639.39	104.39	16.704		
9,000.00	7,139.12	8,547.20	7,133.97	57.20	53.26	89.83	-1,098.08	-1,708.18	1,742.81	1,634.18	108.63	16.043		
9,100.00	7,138.58	8,647.20	7,133.43	59.13	55.50	89.83	-1,099.65	-1,808.16	1,741.82	1,628.83	113.00	15.415		
9,200.00	7,138.04	8,747.19	7,132.89	61.15	57.80	89.83	-1,101.22	-1,908.15	1,740.84	1,623.36	117.48	14.818		
9,300.00	7,137.50	8,847.19	7,132.35	63.26	60.15	89.83	-1,102.79	-2,008.13	1,739.86	1,617.80	122.06	14.254		
9,400.00	7,136.96	8,947.18	7,131.80	65.44	62.54	89.83	-1,104.36	-2,108.11	1,738.88	1,612.14	126.74	13.720		
9,500.00	7,136.42	9,047.18	7,131.26	67.68	64.97	89.83	-1,105.93	-2,208.09	1,737.90	1,606.40	131.50	13.216		
9,600.00	7,135.88	9,147.17	7,130.72	69.97	67.44	89.83	-1,107.50	-2,308.07	1,736.91	1,600.58	136.33	12.741		
9,700.00	7,135.34	9,247.17	7,130.18	72.31	69.93	89.83	-1,109.07	-2,408.05	1,735.93	1,594.71	141.23	12.292		
9,800.00	7,134.80	9,347.16	7,129.64	74.69	72.45	89.83	-1,110.64	-2,508.03	1,734.95	1,588.77	146.18	11.868		
9,900.00	7,134.26	9,447.16	7,129.09	77.10	74.99	89.83	-1,112.21	-2,608.02	1,733.97	1,582.77	151.19	11.469		
10,000.00	7,133.71	9,547.15	7,128.55	79.54	77.56	89.83	-1,113.78	-2,708.00	1,732.99	1,576.74	156.25	11.091		
10,100.00	7,133.17	9,647.15	7,128.01	82.02	80.14	89.83	-1,115.35	-2,807.98	1,732.00	1,570.65	161.35	10.734		
10,200.00	7,132.63	9,747.14	7,127.47	84.52	82.75	89.83	-1,116.92	-2,907.96	1,731.02	1,564.53	166.49	10.397		

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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,132.09	9,847.14	7,126.93	87.04	85.37	89.83	-1,118.49	-3,007.94	1,730.04	1,558.37	171.67	10.078		
10,400.00	7,131.55	9,947.13	7,126.38	89.58	88.00	89.83	-1,120.06	-3,107.92	1,729.06	1,552.18	176.88	9.775		
10,500.00	7,131.01	10,047.13	7,125.84	92.15	90.65	89.83	-1,121.63	-3,207.90	1,728.07	1,545.95	182.12	9.489		
10,600.00	7,130.47	10,147.12	7,125.30	94.73	93.31	89.83	-1,123.20	-3,307.89	1,727.09	1,539.70	187.39	9.217		
10,700.00	7,129.93	10,247.12	7,124.76	97.33	95.98	89.83	-1,124.77	-3,407.87	1,726.11	1,533.43	192.68	8.958		
10,800.00	7,129.39	10,347.11	7,124.22	99.94	98.66	89.83	-1,126.34	-3,507.85	1,725.13	1,527.13	198.00	8.713		
10,900.00	7,128.84	10,447.11	7,123.67	102.56	101.35	89.83	-1,127.91	-3,607.83	1,724.15	1,520.81	203.34	8.479		
11,000.00	7,128.30	10,547.10	7,123.13	105.20	104.05	89.83	-1,129.48	-3,707.81	1,723.16	1,514.47	208.70	8.257		
11,100.00	7,127.76	10,647.10	7,122.59	107.85	106.76	89.83	-1,131.05	-3,807.79	1,722.18	1,508.11	214.07	8.045		
11,200.00	7,127.22	10,747.09	7,122.05	110.51	109.48	89.83	-1,132.62	-3,907.77	1,721.20	1,501.73	219.47	7.843		
11,300.00	7,126.68	10,847.09	7,121.51	113.18	112.20	89.83	-1,134.19	-4,007.76	1,720.22	1,495.34	224.88	7.650		
11,400.00	7,126.14	10,947.08	7,120.96	115.86	114.93	89.83	-1,135.76	-4,107.74	1,719.24	1,488.93	230.30	7.465		
11,500.00	7,125.60	11,047.08	7,120.42	118.55	117.66	89.83	-1,137.33	-4,207.72	1,718.25	1,482.51	235.74	7.289		
11,600.00	7,125.06	11,147.08	7,119.88	121.25	120.40	89.83	-1,138.90	-4,307.70	1,717.27	1,476.08	241.19	7.120		
11,700.00	7,124.52	11,247.07	7,119.34	123.95	123.15	89.83	-1,140.47	-4,407.68	1,716.29	1,469.64	246.65	6.958		
11,800.00	7,123.97	11,347.07	7,118.80	126.66	125.90	89.83	-1,142.04	-4,507.66	1,715.31	1,463.18	252.13	6.803		
11,900.00	7,123.43	11,447.06	7,118.26	129.38	128.65	89.83	-1,143.61	-4,607.64	1,714.32	1,456.71	257.61	6.655		
12,000.00	7,122.89	11,547.06	7,117.71	132.10	131.41	89.83	-1,145.18	-4,707.63	1,713.34	1,450.24	263.11	6.512		
12,100.00	7,122.35	11,647.05	7,117.17	134.83	134.18	89.83	-1,146.75	-4,807.61	1,712.36	1,443.75	268.61	6.375		
12,200.00	7,121.81	11,747.05	7,116.63	137.56	136.95	89.83	-1,148.32	-4,907.59	1,711.38	1,437.26	274.12	6.243		
12,300.00	7,121.27	11,847.04	7,116.09	140.30	139.72	89.83	-1,149.89	-5,007.57	1,710.40	1,430.76	279.64	6.116		
12,400.00	7,120.73	11,947.04	7,115.55	143.05	142.49	89.83	-1,151.46	-5,107.55	1,709.41	1,424.25	285.17	5.994		
12,500.00	7,120.19	12,047.03	7,115.00	145.80	145.27	89.83	-1,153.03	-5,207.53	1,708.43	1,417.73	290.70	5.877		
12,600.00	7,119.65	12,147.03	7,114.46	148.55	148.05	89.83	-1,154.60	-5,307.51	1,707.45	1,411.21	296.24	5.764		
12,700.00	7,119.10	12,247.02	7,113.92	151.30	150.83	89.83	-1,156.17	-5,407.49	1,706.47	1,404.68	301.79	5.654		
12,800.00	7,118.56	12,347.02	7,113.38	154.07	153.62	89.83	-1,157.74	-5,507.48	1,705.48	1,398.14	307.35	5.549		
12,900.00	7,118.02	12,447.01	7,112.84	156.83	156.41	89.83	-1,159.31	-5,607.46	1,704.50	1,391.60	312.91	5.447		
13,000.00	7,117.48	12,547.01	7,112.29	159.60	159.20	89.83	-1,160.88	-5,707.44	1,703.52	1,385.05	318.47	5.349		
13,100.00	7,116.94	12,647.00	7,111.75	162.37	161.99	89.83	-1,162.45	-5,807.42	1,702.54	1,378.50	324.04	5.254		
13,200.00	7,116.40	12,747.00	7,111.21	165.14	164.78	89.83	-1,164.02	-5,907.40	1,701.56	1,371.94	329.62	5.162		
13,300.00	7,115.86	12,846.99	7,110.67	167.92	167.58	89.83	-1,165.59	-6,007.38	1,700.57	1,365.38	335.20	5.073		
13,400.00	7,115.32	12,946.99	7,110.13	170.70	170.38	89.83	-1,167.16	-6,107.36	1,699.59	1,358.81	340.78	4.987		
13,500.00	7,114.78	13,046.98	7,109.58	173.48	173.18	89.83	-1,168.73	-6,207.35	1,698.61	1,352.24	346.37	4.904		
13,600.00	7,114.24	13,146.98	7,109.04	176.26	175.98	89.83	-1,170.30	-6,307.33	1,697.63	1,345.66	351.96	4.823		
13,700.00	7,113.69	13,246.97	7,108.50	179.05	178.79	89.83	-1,171.87	-6,407.31	1,696.65	1,339.09	357.56	4.745		
13,800.00	7,113.15	13,346.97	7,107.96	181.84	181.59	89.83	-1,173.44	-6,507.29	1,695.66	1,332.50	363.16	4.669		
13,900.00	7,112.61	13,446.96	7,107.42	184.63	184.40	89.83	-1,175.01	-6,607.27	1,694.68	1,325.92	368.76	4.596		
14,000.00	7,112.07	13,546.96	7,106.87	187.42	187.21	89.83	-1,176.58	-6,707.25	1,693.70	1,319.33	374.37	4.524		
14,100.00	7,111.53	13,646.95	7,106.33	190.22	190.02	89.83	-1,178.15	-6,807.23	1,692.72	1,312.74	379.98	4.455		
14,200.00	7,110.99	13,746.95	7,105.79	193.01	192.83	89.83	-1,179.72	-6,907.22	1,691.73	1,306.14	385.59	4.387		
14,300.00	7,110.45	13,846.95	7,105.25	195.81	195.65	89.83	-1,181.29	-7,007.20	1,690.75	1,299.54	391.21	4.322		
14,400.00	7,109.91	13,946.94	7,104.71	198.61	198.46	89.83	-1,182.86	-7,107.18	1,689.77	1,292.94	396.83	4.258		
14,500.00	7,109.37	14,046.94	7,104.16	201.42	201.28	89.83	-1,184.43	-7,207.16	1,688.79	1,286.34	402.45	4.196		
14,600.00	7,108.82	14,146.93	7,103.62	204.22	204.09	89.83	-1,186.00	-7,307.14	1,687.81	1,279.73	408.08	4.136		
14,700.00	7,108.28	14,246.93	7,103.08	207.03	206.91	89.83	-1,187.57	-7,407.12	1,686.82	1,273.12	413.70	4.077		
14,800.00	7,107.74	14,346.92	7,102.54	209.83	209.73	89.83	-1,189.14	-7,507.10	1,685.84	1,266.51	419.33	4.020		
14,900.00	7,107.20	14,446.92	7,102.00	212.64	212.55	89.83	-1,190.71	-7,607.09	1,684.86	1,259.90	424.96	3.965		
15,000.00	7,106.66	14,546.91	7,101.46	215.45	215.37	89.83	-1,192.28	-7,707.07	1,683.88	1,253.28	430.60	3.911		
15,100.00	7,106.12	14,646.91	7,100.91	218.26	218.19	89.83	-1,193.85	-7,807.05	1,682.90	1,246.66	436.23	3.858		
15,200.00	7,105.58	14,746.90	7,100.37	221.07	221.01	89.83	-1,195.42	-7,907.03	1,681.91	1,240.04	441.87	3.806		
15,300.00	7,105.04	14,846.90	7,099.83	223.89	223.83	89.83	-1,196.99	-8,007.01	1,680.93	1,233.42	447.51	3.756		
15,400.00	7,104.50	14,946.89	7,099.29	226.70	226.66	89.83	-1,198.56	-8,106.99	1,679.95	1,226.80	453.15	3.707		

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



Anticollision Report



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

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,470.33	7,104.12	15,000.73	7,099.00	228.68	228.18	89.83	-1,199.41	-8,160.82	1,679.34	1,222.82	456.52	3.679	
15,491.56	7,104.00	15,000.73	7,099.00	229.28	228.18	89.83	-1,199.41	-8,160.82	1,679.47	1,222.59	456.88	3.676 SF	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.80	20.04	0.28	20.04					
100.00	100.00	100.00	100.00	3.28	3.28	0.80	20.04	0.28	20.04	13.47	6.57	3.050		
200.00	200.00	200.00	200.00	3.34	3.34	0.80	20.04	0.28	20.04	13.36	6.67	3.002		
300.00	299.98	300.70	300.68	3.44	3.44	177.64	18.27	0.17	20.03	13.14	6.89	2.906		
400.00	399.84	401.41	401.24	3.59	3.59	177.56	12.97	-0.14	19.99	12.77	7.22	2.770		
500.00	499.45	502.11	501.55	3.79	3.80	177.43	4.15	-0.67	19.93	12.28	7.65	2.606		
600.00	598.70	602.81	601.48	4.03	4.04	177.25	-8.18	-1.40	19.85	11.68	8.17	2.431		
700.00	697.47	703.50	700.91	4.31	4.32	177.01	-24.02	-2.35	19.74	10.99	8.76	2.255		
800.00	795.62	804.19	799.72	4.64	4.65	176.72	-43.33	-3.50	19.61	10.21	9.40	2.086		
900.00	893.06	904.88	897.78	5.00	5.02	176.37	-66.09	-4.85	19.46	9.36	10.10	1.927		
1,000.00	989.64	1,005.55	994.98	5.40	5.42	175.96	-92.28	-6.41	19.29	8.45	10.84	1.779		
1,100.00	1,085.27	1,106.23	1,091.19	5.83	5.86	175.49	-121.85	-8.18	19.10	7.48	11.62	1.644		
1,200.00	1,179.82	1,206.89	1,186.29	6.29	6.33	174.95	-154.79	-10.14	18.88	6.46	12.42	1.520		
1,300.00	1,273.17	1,307.55	1,280.16	6.79	6.83	174.35	-191.03	-12.30	18.65	5.39	13.26	1.407	Level 3	
1,339.44	1,309.63	1,347.20	1,316.78	7.00	7.04	174.10	-206.20	-13.20	18.56	4.96	13.59	1.365	Level 3, CC	
1,400.00	1,365.21	1,407.75	1,372.61	7.33	7.36	173.95	-229.62	-14.60	19.20	5.07	14.13	1.359	Level 3	
1,500.00	1,456.49	1,507.73	1,464.77	7.89	7.91	174.10	-268.29	-16.90	21.49	6.46	15.03	1.430	Level 3	
1,600.00	1,547.76	1,607.70	1,556.93	8.46	8.48	174.22	-306.97	-19.21	23.79	7.83	15.97	1.490	Level 3	
1,700.00	1,639.04	1,707.67	1,649.09	9.05	9.05	174.32	-345.64	-21.51	26.09	9.17	16.92	1.542		
1,800.00	1,730.31	1,807.65	1,741.26	9.65	9.64	174.40	-384.31	-23.81	28.40	10.50	17.89	1.587		
1,900.00	1,821.58	1,907.62	1,834.42	10.26	10.23	174.48	-422.99	-26.12	30.70	11.81	18.89	1.626		
2,000.00	1,912.85	2,007.59	1,925.58	10.87	10.83	174.54	-461.66	-28.42	33.00	13.11	19.89	1.659		
2,100.00	2,004.13	2,107.57	2,017.74	11.49	11.43	174.59	-500.33	-30.73	35.30	14.40	20.90	1.689		
2,200.00	2,095.40	2,207.54	2,109.90	12.11	12.04	174.64	-539.00	-33.03	37.60	15.67	21.93	1.715		
2,300.00	2,186.67	2,307.51	2,202.06	12.74	12.65	174.68	-577.68	-35.34	39.91	16.94	22.96	1.738		
2,400.00	2,277.95	2,407.49	2,294.23	13.38	13.27	174.71	-616.35	-37.64	42.21	18.20	24.01	1.758		
2,500.00	2,369.22	2,507.46	2,386.39	14.01	13.89	174.75	-655.02	-39.94	44.51	19.46	25.05	1.777		
2,600.00	2,460.49	2,607.43	2,478.55	14.65	14.51	174.78	-693.70	-42.25	46.81	20.70	26.11	1.793		
2,700.00	2,551.77	2,707.41	2,570.71	15.29	15.13	174.80	-732.37	-44.55	49.11	21.95	27.17	1.808		
2,800.00	2,643.04	2,807.38	2,662.87	15.93	15.75	174.83	-771.04	-46.86	51.42	23.19	28.23	1.821		
2,900.00	2,734.31	2,907.35	2,755.04	16.58	16.38	174.85	-809.71	-49.16	53.72	24.42	29.30	1.834		
3,000.00	2,825.58	3,007.33	2,847.20	17.23	17.01	174.87	-848.39	-51.46	56.02	25.65	30.37	1.845		
3,100.00	2,916.86	3,107.30	2,939.36	17.87	17.64	174.89	-887.06	-53.77	58.32	26.88	31.44	1.855		
3,200.00	3,008.13	3,207.27	3,031.52	18.52	18.27	174.91	-925.73	-56.07	60.63	28.10	32.52	1.864		
3,300.00	3,099.40	3,307.25	3,123.68	19.17	18.90	174.92	-964.41	-58.38	62.93	29.33	33.60	1.873		
3,400.00	3,190.68	3,407.22	3,215.84	19.83	19.53	174.94	-1,003.08	-60.68	65.23	30.54	34.68	1.881		
3,500.00	3,281.95	3,507.20	3,308.01	20.48	20.17	174.95	-1,041.75	-62.99	67.53	31.76	35.77	1.888		
3,600.00	3,373.22	3,607.17	3,400.17	21.13	20.80	174.97	-1,080.42	-65.29	69.83	32.98	36.86	1.895		
3,700.00	3,464.49	3,707.14	3,492.33	21.79	21.44	174.98	-1,119.10	-67.59	72.14	34.19	37.95	1.901		
3,800.00	3,555.77	3,807.12	3,584.49	22.44	22.07	174.99	-1,157.77	-69.90	74.44	35.40	39.04	1.907		
3,900.00	3,647.04	3,907.09	3,676.65	23.10	22.71	175.00	-1,196.44	-72.20	76.74	36.61	40.13	1.912		
4,000.00	3,738.31	4,007.06	3,768.82	23.75	23.35	175.01	-1,235.12	-74.51	79.04	37.82	41.22	1.918		
4,100.00	3,829.59	4,107.04	3,860.98	24.41	23.99	175.02	-1,273.79	-76.81	81.34	39.03	42.32	1.922		
4,200.00	3,920.86	4,207.01	3,953.14	25.07	24.62	175.03	-1,312.46	-79.12	83.65	40.24	43.41	1.927		
4,300.00	4,012.13	4,306.98	4,045.30	25.73	25.26	175.04	-1,351.13	-81.42	85.95	41.44	44.51	1.931		
4,400.00	4,103.41	4,406.96	4,137.46	26.38	25.90	175.05	-1,389.81	-83.72	88.25	42.64	45.61	1.935		
4,500.00	4,194.68	4,506.93	4,229.62	27.04	26.54	175.05	-1,428.48	-86.03	90.55	43.85	46.70	1.939		
4,600.00	4,285.95	4,606.90	4,321.79	27.70	27.18	175.06	-1,467.15	-88.33	92.86	45.05	47.80	1.942		
4,700.00	4,377.22	4,706.88	4,413.95	28.36	27.82	175.07	-1,505.83	-90.64	95.16	46.25	48.91	1.946		
4,800.00	4,468.50	4,806.85	4,506.11	29.02	28.46	175.08	-1,544.50	-92.94	97.46	47.45	50.01	1.949		
4,900.00	4,559.77	4,906.82	4,598.27	29.68	29.10	175.08	-1,583.17	-95.25	99.76	48.65	51.11	1.952		
5,000.00	4,651.04	5,006.80	4,690.43	30.34	29.74	175.09	-1,621.84	-97.55	102.06	49.85	52.21	1.955		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	5,106.77	4,782.60	31.00	30.39	175.09	-1,660.52	-99.85	104.37	51.05	53.32	1.958		
5,200.00	4,833.59	5,206.74	4,874.76	31.66	31.03	175.10	-1,699.19	-102.16	106.67	52.25	54.42	1.960		
5,300.00	4,924.86	5,306.72	4,966.92	32.32	31.67	175.10	-1,737.86	-104.46	108.97	53.45	55.52	1.963		
5,400.00	5,016.13	5,406.69	5,059.08	32.99	32.31	175.11	-1,776.54	-106.77	111.27	54.64	56.63	1.965		
5,500.00	5,107.41	5,506.67	5,151.24	33.65	32.95	175.11	-1,815.21	-109.07	113.57	55.84	57.73	1.967		
5,600.00	5,198.68	5,606.64	5,243.40	34.31	33.60	175.12	-1,853.88	-111.37	115.88	57.04	58.84	1.969		
5,700.00	5,289.95	5,706.61	5,335.57	34.97	34.24	175.12	-1,892.55	-113.68	118.18	58.23	59.95	1.971		
5,800.00	5,381.23	5,806.59	5,427.73	35.63	34.88	175.13	-1,931.23	-115.98	120.48	59.43	61.05	1.973		
5,900.00	5,472.50	5,906.56	5,519.89	36.30	35.52	175.13	-1,969.90	-118.29	122.78	60.62	62.16	1.975		
6,000.00	5,563.77	6,006.53	5,612.05	36.96	36.17	175.14	-2,008.57	-120.59	125.09	61.82	63.27	1.977		
6,100.00	5,655.05	6,106.51	5,704.21	37.62	36.81	175.14	-2,047.25	-122.90	127.39	63.01	64.38	1.979		
6,200.00	5,746.32	6,206.48	5,796.38	38.28	37.45	175.14	-2,085.92	-125.20	129.69	64.20	65.49	1.980		
6,300.00	5,837.59	6,306.45	5,888.54	38.95	38.10	175.15	-2,124.59	-127.50	131.99	65.40	66.60	1.982		
6,400.00	5,928.86	6,406.43	5,980.70	39.61	38.74	175.15	-2,163.26	-129.81	134.29	66.59	67.70	1.984		
6,500.00	6,020.14	6,506.40	6,072.86	40.27	39.38	175.15	-2,201.94	-132.11	136.60	67.78	68.81	1.985		
6,600.00	6,111.41	6,606.37	6,165.02	40.94	40.03	175.16	-2,240.61	-134.42	138.90	68.97	69.92	1.986		
6,700.00	6,202.68	6,706.35	6,257.18	41.60	40.67	175.16	-2,279.28	-136.72	141.20	70.17	71.03	1.988		
6,800.00	6,293.96	6,806.32	6,349.35	42.26	41.32	175.16	-2,317.96	-139.03	143.50	71.36	72.14	1.989		
6,900.00	6,385.23	6,906.29	6,441.51	42.93	41.96	175.17	-2,356.63	-141.33	145.81	72.55	73.25	1.990		
7,000.00	6,476.50	7,005.97	6,533.34	43.59	42.60	174.70	-2,395.17	-144.84	148.15	73.76	74.39	1.991		
7,100.00	6,567.77	7,103.22	6,621.73	44.25	43.21	169.64	-2,432.36	-160.44	151.57	75.72	75.85	1.998		
7,200.00	6,658.64	7,196.21	6,703.24	44.91	43.74	144.68	-2,466.75	-188.85	158.20	80.63	77.57	2.039		
7,300.00	6,747.14	7,286.50	6,777.88	45.52	44.19	122.58	-2,498.34	-228.46	167.14	88.48	78.66	2.125		
7,400.00	6,831.10	7,374.50	6,844.92	46.07	44.59	106.20	-2,526.82	-277.72	177.32	98.70	78.62	2.256		
7,500.00	6,908.46	7,460.59	6,903.81	46.54	44.93	94.35	-2,551.94	-335.18	187.80	110.41	77.39	2.427		
7,600.00	6,977.30	7,545.11	6,954.14	46.95	45.22	85.80	-2,573.51	-399.48	197.80	122.58	75.21	2.630		
7,700.00	7,035.93	7,628.37	6,995.59	47.30	45.48	79.65	-2,591.40	-469.36	206.69	134.18	72.51	2.851		
7,800.00	7,082.92	7,710.65	7,027.94	47.59	45.70	75.34	-2,605.51	-543.62	214.03	144.26	69.77	3.068		
7,900.00	7,117.09	7,792.22	7,051.03	47.84	45.90	72.50	-2,615.75	-621.12	219.47	151.96	67.51	3.251		
8,000.00	7,137.62	7,873.32	7,064.73	48.06	46.09	70.90	-2,622.08	-700.76	222.79	156.60	66.19	3.366		
8,100.00	7,143.99	7,954.68	7,068.99	48.28	46.29	70.42	-2,624.45	-781.91	223.87	157.66	66.21	3.381		
8,200.00	7,143.45	8,054.68	7,068.69	48.53	46.60	70.48	-2,625.05	-881.91	223.78	155.41	68.37	3.273		
8,300.00	7,142.91	8,154.68	7,068.39	48.89	47.04	70.54	-2,625.64	-981.91	223.69	152.81	70.87	3.156		
8,400.00	7,142.37	8,254.68	7,068.10	49.40	47.67	70.60	-2,626.24	-1,081.91	223.60	149.90	73.70	3.034		
8,500.00	7,141.83	8,354.68	7,067.80	50.12	48.54	70.66	-2,626.84	-1,181.90	223.51	146.70	76.81	2.910		
8,600.00	7,141.29	8,454.68	7,067.50	51.08	49.68	70.71	-2,627.44	-1,281.90	223.42	143.25	80.17	2.787		
8,700.00	7,140.75	8,554.68	7,067.20	52.30	51.06	70.77	-2,628.04	-1,381.90	223.33	139.57	83.76	2.666		
8,800.00	7,140.21	8,654.68	7,066.91	53.75	52.65	70.83	-2,628.63	-1,481.90	223.24	135.69	87.54	2.550		
8,900.00	7,139.67	8,754.68	7,066.61	55.40	54.41	70.89	-2,629.23	-1,581.89	223.15	131.65	91.50	2.439		
9,000.00	7,139.12	8,854.68	7,066.31	57.20	56.29	70.95	-2,629.83	-1,681.89	223.06	127.45	95.61	2.333		
9,100.00	7,138.58	8,954.68	7,066.01	59.13	58.28	71.01	-2,630.43	-1,781.89	222.97	123.12	99.85	2.233		
9,200.00	7,138.04	9,054.68	7,065.72	61.15	60.36	71.06	-2,631.03	-1,881.89	222.88	118.66	104.22	2.139		
9,300.00	7,137.50	9,154.68	7,065.42	63.26	62.52	71.12	-2,631.62	-1,981.88	222.79	114.11	108.68	2.050		
9,400.00	7,136.96	9,254.68	7,065.12	65.44	64.74	71.18	-2,632.22	-2,081.88	222.70	109.46	113.24	1.967		
9,500.00	7,136.42	9,354.68	7,064.82	67.68	67.01	71.24	-2,632.82	-2,181.88	222.62	104.73	117.88	1.888		
9,600.00	7,135.88	9,454.68	7,064.53	69.97	69.34	71.30	-2,633.42	-2,281.88	222.53	99.93	122.60	1.815		
9,700.00	7,135.34	9,554.68	7,064.23	72.31	71.70	71.36	-2,634.02	-2,381.87	222.44	95.06	127.38	1.746		
9,800.00	7,134.80	9,654.68	7,063.93	74.69	74.10	71.42	-2,634.61	-2,481.87	222.35	90.13	132.22	1.682		
9,900.00	7,134.26	9,754.68	7,063.63	77.10	76.54	71.47	-2,635.21	-2,581.87	222.27	85.15	137.11	1.621		
10,000.00	7,133.71	9,854.68	7,063.34	79.54	79.01	71.53	-2,635.81	-2,681.87	222.18	80.13	142.05	1.564		
10,100.00	7,133.17	9,954.68	7,063.04	82.02	81.50	71.59	-2,636.41	-2,781.86	222.09	75.06	147.04	1.510		
10,200.00	7,132.63	10,054.68	7,062.74	84.52	84.02	71.65	-2,637.00	-2,881.86	222.01	69.95	152.06	1.460	Level 3	

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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,132.09	10,154.68	7,062.44	87.04	86.56	71.71	-2,637.60	-2,981.86	221.92	64.80	157.12	1.412	Level 3	
10,400.00	7,131.55	10,254.68	7,062.14	89.58	89.12	71.77	-2,638.20	-3,081.86	221.84	59.62	162.21	1.368	Level 3	
10,500.00	7,131.01	10,354.68	7,061.85	92.15	91.70	71.83	-2,638.80	-3,181.85	221.75	54.42	167.33	1.325	Level 3	
10,600.00	7,130.47	10,454.68	7,061.55	94.73	94.29	71.89	-2,639.40	-3,281.85	221.67	49.18	172.48	1.285	Level 3	
10,700.00	7,129.93	10,554.67	7,061.25	97.33	96.91	71.94	-2,639.99	-3,381.85	221.58	43.92	177.66	1.247	Level 2	
10,800.00	7,129.39	10,654.67	7,060.95	99.94	99.53	72.00	-2,640.59	-3,481.85	221.50	38.63	182.86	1.211	Level 2	
10,900.00	7,128.84	10,754.67	7,060.66	102.56	102.17	72.06	-2,641.19	-3,581.84	221.41	33.33	188.08	1.177	Level 2	
11,000.00	7,128.30	10,854.67	7,060.36	105.20	104.82	72.12	-2,641.79	-3,681.84	221.33	28.00	193.32	1.145	Level 2	
11,100.00	7,127.76	10,954.67	7,060.06	107.85	107.48	72.18	-2,642.39	-3,781.84	221.24	22.66	198.59	1.114	Level 2	
11,200.00	7,127.22	11,054.67	7,059.76	110.51	110.15	72.24	-2,642.98	-3,881.84	221.16	17.29	203.87	1.085	Level 2	
11,300.00	7,126.68	11,154.67	7,059.47	113.18	112.83	72.30	-2,643.58	-3,981.83	221.07	11.91	209.16	1.057	Level 2	
11,400.00	7,126.14	11,254.67	7,059.17	115.86	115.52	72.36	-2,644.18	-4,081.83	220.99	6.52	214.47	1.030	Level 2	
11,500.00	7,125.60	11,354.67	7,058.87	118.55	118.21	72.42	-2,644.78	-4,181.83	220.91	1.11	219.80	1.005	Level 2	
11,600.00	7,125.06	11,454.67	7,058.57	121.25	120.92	72.48	-2,645.38	-4,281.83	220.83	-4.32	225.14	0.981	Level 1	
11,700.00	7,124.52	11,554.67	7,058.28	123.95	123.63	72.54	-2,645.97	-4,381.82	220.74	-9.75	230.50	0.958	Level 1	
11,800.00	7,123.97	11,654.67	7,057.98	126.66	126.35	72.60	-2,646.57	-4,481.82	220.66	-15.20	235.86	0.936	Level 1	
11,900.00	7,123.43	11,754.67	7,057.68	129.38	129.07	72.66	-2,647.17	-4,581.82	220.58	-20.66	241.24	0.914	Level 1	
12,000.00	7,122.89	11,854.67	7,057.38	132.10	131.80	72.72	-2,647.77	-4,681.82	220.50	-26.14	246.63	0.894	Level 1	
12,100.00	7,122.35	11,954.67	7,057.09	134.83	134.54	72.78	-2,648.37	-4,781.81	220.41	-31.62	252.03	0.875	Level 1	
12,200.00	7,121.81	12,054.67	7,056.79	137.56	137.28	72.84	-2,648.96	-4,881.81	220.33	-37.11	257.44	0.856	Level 1	
12,300.00	7,121.27	12,154.67	7,056.49	140.30	140.02	72.90	-2,649.56	-4,981.81	220.25	-42.61	262.86	0.838	Level 1	
12,400.00	7,120.73	12,254.67	7,056.19	143.05	142.77	72.96	-2,650.16	-5,081.81	220.17	-48.12	268.29	0.821	Level 1	
12,500.00	7,120.19	12,354.67	7,055.90	145.80	145.53	73.02	-2,650.76	-5,181.80	220.09	-53.64	273.73	0.804	Level 1	
12,600.00	7,119.65	12,454.67	7,055.60	148.55	148.29	73.08	-2,651.36	-5,281.80	220.01	-59.17	279.18	0.788	Level 1	
12,700.00	7,119.10	12,554.67	7,055.30	151.30	151.05	73.14	-2,651.95	-5,381.80	219.93	-64.71	284.64	0.773	Level 1	
12,800.00	7,118.56	12,654.67	7,055.00	154.07	153.81	73.20	-2,652.55	-5,481.80	219.85	-70.25	290.10	0.758	Level 1	
12,900.00	7,118.02	12,754.67	7,054.70	156.83	156.58	73.26	-2,653.15	-5,581.79	219.77	-75.80	295.57	0.744	Level 1	
13,000.00	7,117.48	12,854.67	7,054.41	159.60	159.36	73.32	-2,653.75	-5,681.79	219.69	-81.36	301.05	0.730	Level 1	
13,100.00	7,116.94	12,954.67	7,054.11	162.37	162.13	73.38	-2,654.34	-5,781.79	219.61	-86.93	306.54	0.716	Level 1	
13,200.00	7,116.40	13,054.67	7,053.81	165.14	164.91	73.44	-2,654.94	-5,881.79	219.53	-92.50	312.03	0.704	Level 1	
13,300.00	7,115.86	13,154.67	7,053.51	167.92	167.69	73.50	-2,655.54	-5,981.78	219.45	-98.08	317.53	0.691	Level 1	
13,400.00	7,115.32	13,254.67	7,053.22	170.70	170.47	73.56	-2,656.14	-6,081.78	219.37	-103.66	323.04	0.679	Level 1	
13,500.00	7,114.78	13,354.67	7,052.92	173.48	173.26	73.62	-2,656.74	-6,181.78	219.29	-109.25	328.55	0.667	Level 1	
13,600.00	7,114.24	13,454.67	7,052.62	176.26	176.05	73.68	-2,657.33	-6,281.78	219.22	-114.85	334.07	0.656	Level 1	
13,700.00	7,113.69	13,554.67	7,052.32	179.05	178.84	73.74	-2,657.93	-6,381.77	219.14	-120.45	339.59	0.645	Level 1	
13,800.00	7,113.15	13,654.67	7,052.03	181.84	181.63	73.80	-2,658.53	-6,481.77	219.06	-126.06	345.12	0.635	Level 1	
13,900.00	7,112.61	13,754.67	7,051.73	184.63	184.42	73.86	-2,659.13	-6,581.77	218.98	-131.67	350.66	0.624	Level 1	
14,000.00	7,112.07	13,854.67	7,051.43	187.42	187.22	73.92	-2,659.73	-6,681.77	218.91	-137.29	356.20	0.615	Level 1	
14,100.00	7,111.53	13,954.66	7,051.13	190.22	190.02	73.98	-2,660.32	-6,781.76	218.83	-142.92	361.75	0.605	Level 1	
14,200.00	7,110.99	14,054.66	7,050.84	193.01	192.82	74.04	-2,660.92	-6,881.76	218.75	-148.55	367.30	0.596	Level 1	
14,300.00	7,110.45	14,154.66	7,050.54	195.81	195.62	74.10	-2,661.52	-6,981.76	218.68	-154.18	372.85	0.586	Level 1	
14,400.00	7,109.91	14,254.66	7,050.24	198.61	198.43	74.16	-2,662.12	-7,081.76	218.60	-159.82	378.42	0.578	Level 1	
14,500.00	7,109.37	14,354.66	7,049.94	201.42	201.23	74.22	-2,662.72	-7,181.75	218.52	-165.46	383.98	0.569	Level 1	
14,600.00	7,108.82	14,454.66	7,049.65	204.22	204.04	74.28	-2,663.31	-7,281.75	218.45	-171.11	389.55	0.561	Level 1	
14,700.00	7,108.28	14,554.66	7,049.35	207.03	206.84	74.34	-2,663.91	-7,381.75	218.37	-176.76	395.13	0.553	Level 1	
14,800.00	7,107.74	14,654.66	7,049.05	209.83	209.65	74.40	-2,664.51	-7,481.75	218.30	-182.41	400.71	0.545	Level 1	
14,900.00	7,107.20	14,754.66	7,048.75	212.64	212.47	74.46	-2,665.11	-7,581.74	218.22	-188.07	406.30	0.537	Level 1	
15,000.00	7,106.66	14,854.66	7,048.46	215.45	215.28	74.53	-2,665.71	-7,681.74	218.15	-193.74	411.88	0.530	Level 1	
15,100.00	7,106.12	14,954.66	7,048.16	218.26	218.09	74.59	-2,666.30	-7,781.74	218.07	-199.40	417.48	0.522	Level 1	
15,200.00	7,105.58	15,054.66	7,047.86	221.07	220.90	74.65	-2,666.90	-7,881.74	218.00	-205.08	423.08	0.515	Level 1	
15,300.00	7,105.04	15,154.66	7,047.56	223.89	223.72	74.71	-2,667.50	-7,981.73	217.93	-210.75	428.68	0.508	Level 1	
15,400.00	7,104.50	15,254.66	7,047.27	226.70	226.54	74.77	-2,668.10	-8,081.73	217.85	-216.43	434.28	0.502	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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design	HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1											Offset Site Error:	0.00 ft
Survey Program:	0-MWD+IFR1											Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	15,346.22	7,046.99	229.28	229.12	74.83	-2,668.64	-8,173.29	217.78	-221.63	439.42	0.496	Level 1, ES, SF



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.50	379.97	3.34	379.99					
100.00	100.00	102.00	100.00	3.28	3.29	0.50	379.97	3.34	379.99	373.42	6.57	57.838		
200.00	200.00	202.00	200.00	3.34	3.34	0.50	379.97	3.34	379.99	373.31	6.68	56.921	CC, ES	
300.00	299.98	301.98	299.98	3.44	3.45	177.38	379.97	3.34	381.73	374.84	6.89	55.423		
400.00	399.84	401.84	399.84	3.59	3.61	177.41	379.97	3.34	386.96	379.76	7.20	53.753		
500.00	499.45	501.45	499.45	3.79	3.81	177.46	379.97	3.34	395.67	388.07	7.60	52.050		
600.00	598.70	599.43	587.42	4.03	4.02	177.42	381.21	2.70	409.23	401.17	8.06	50.766		
700.00	697.47	679.57	677.46	4.31	4.26	177.23	384.85	0.82	428.78	420.20	8.59	49.941		
800.00	795.62	776.73	774.48	4.64	4.54	177.01	389.39	-1.54	452.40	443.23	9.17	49.315		
900.00	893.06	873.00	870.62	5.00	4.85	176.83	393.90	-3.88	479.40	469.59	9.81	48.892		
1,000.00	989.64	968.28	965.77	5.40	5.16	176.68	398.36	-6.19	509.73	499.26	10.47	48.677		
1,100.00	1,085.27	1,062.44	1,059.80	5.83	5.49	176.56	402.77	-8.47	543.37	532.20	11.17	48.655		
1,200.00	1,179.82	1,155.38	1,152.61	6.29	5.82	176.47	407.12	-10.72	580.27	568.39	11.89	48.816		
1,300.00	1,273.17	1,246.97	1,244.08	6.79	6.16	176.40	411.41	-12.94	620.39	607.76	12.62	49.141		
1,400.00	1,365.21	1,337.12	1,334.09	7.33	6.50	176.34	415.63	-15.13	663.67	650.29	13.38	49.615		
1,500.00	1,456.49	1,426.41	1,423.26	7.89	6.84	176.36	419.81	-17.29	708.69	694.55	14.14	50.132		
1,600.00	1,547.76	1,515.70	1,512.43	8.46	7.19	176.37	423.99	-19.46	753.71	738.81	14.90	50.571		
1,700.00	1,639.04	1,604.99	1,601.59	9.05	7.54	176.38	428.17	-21.62	798.74	783.05	15.69	50.919		
1,800.00	1,730.31	1,705.72	1,690.76	9.65	7.94	176.39	432.36	-23.79	843.76	827.24	16.53	51.053		
1,900.00	1,821.58	1,783.57	1,779.92	10.26	8.26	176.40	436.54	-25.95	888.79	871.50	17.29	51.414		
2,000.00	1,912.85	1,872.86	1,869.09	10.87	8.62	176.41	440.72	-28.12	933.81	915.71	18.10	51.588		
2,100.00	2,004.13	1,962.15	1,958.26	11.49	8.98	176.42	444.90	-30.29	978.84	959.92	18.92	51.724		
2,200.00	2,095.40	2,051.44	2,047.42	12.11	9.35	176.43	449.08	-32.45	1,023.87	1,004.11	19.75	51.831		
2,300.00	2,186.67	2,140.73	2,136.59	12.74	9.72	176.44	453.26	-34.62	1,068.89	1,048.30	20.59	51.913		
2,400.00	2,277.95	2,230.02	2,225.75	13.38	10.09	176.44	457.44	-36.78	1,113.92	1,092.48	21.43	51.976		
2,500.00	2,369.22	2,319.31	2,314.92	14.01	10.47	176.45	461.62	-38.95	1,158.94	1,136.66	22.28	52.023		
2,600.00	2,460.49	2,408.60	2,404.09	14.65	10.84	176.45	465.80	-41.11	1,203.97	1,180.84	23.13	52.057		
2,700.00	2,551.77	2,502.11	2,493.25	15.29	11.24	176.46	469.98	-43.28	1,248.99	1,224.99	24.00	52.042		
2,800.00	2,643.04	2,587.18	2,582.42	15.93	11.59	176.46	474.16	-45.44	1,294.02	1,269.18	24.84	52.095		
2,900.00	2,734.31	2,676.47	2,671.58	16.58	11.97	176.47	478.34	-47.61	1,339.04	1,313.34	25.70	52.102		
3,000.00	2,825.58	2,765.76	2,760.75	17.23	12.35	176.47	482.52	-49.77	1,384.07	1,357.50	26.56	52.104		
3,100.00	2,916.86	2,855.05	2,849.91	17.87	12.73	176.47	486.70	-51.94	1,429.09	1,401.66	27.43	52.100		
3,200.00	3,008.13	2,944.34	2,939.08	18.52	13.11	176.48	490.89	-54.10	1,474.12	1,445.82	28.30	52.093		
3,300.00	3,099.40	3,033.63	3,028.25	19.17	13.50	176.48	495.07	-56.27	1,519.14	1,489.98	29.17	52.082		
3,400.00	3,190.68	3,122.92	3,117.41	19.83	13.88	176.48	499.25	-58.43	1,564.17	1,534.13	30.04	52.069		
3,500.00	3,281.95	3,212.21	3,206.58	20.48	14.26	176.49	503.43	-60.60	1,609.19	1,578.28	30.91	52.054		
3,600.00	3,373.22	3,301.50	3,295.74	21.13	14.64	176.49	507.61	-62.76	1,654.22	1,622.43	31.79	52.036		
3,700.00	3,464.49	3,409.21	3,384.91	21.79	15.11	176.49	511.79	-64.93	1,699.25	1,666.50	32.75	51.892		
3,800.00	3,555.77	3,480.08	3,474.08	22.44	15.41	176.50	515.97	-67.09	1,744.27	1,710.73	33.54	51.998		
3,900.00	3,647.04	3,569.37	3,563.24	23.10	15.80	176.50	520.15	-69.26	1,789.30	1,754.87	34.42	51.977		
4,000.00	3,738.31	3,658.66	3,652.41	23.75	16.18	176.50	524.33	-71.42	1,834.32	1,799.02	35.31	51.956		
4,100.00	3,829.59	3,747.95	3,741.57	24.41	16.57	176.50	528.51	-73.59	1,879.35	1,843.16	36.19	51.934		
4,200.00	3,920.86	3,837.24	3,830.74	25.07	16.96	176.50	532.69	-75.75	1,924.37	1,887.30	37.07	51.912		
4,300.00	4,012.13	3,926.53	3,919.90	25.73	17.34	176.51	536.87	-77.92	1,969.40	1,931.44	37.95	51.889		
4,400.00	4,103.41	4,015.82	4,009.07	26.38	17.73	176.51	541.05	-80.08	2,014.42	1,975.59	38.84	51.867		
4,500.00	4,194.68	4,105.11	4,098.24	27.04	18.12	176.51	545.23	-82.25	2,059.45	2,019.72	39.72	51.844		
4,600.00	4,285.95	4,205.60	4,187.40	27.70	18.55	176.51	549.42	-84.41	2,104.47	2,063.82	40.66	51.759		
4,700.00	4,377.22	4,283.69	4,276.57	28.36	18.89	176.51	553.60	-86.58	2,149.50	2,108.00	41.50	51.798		
4,800.00	4,468.50	4,372.98	4,365.73	29.02	19.28	176.52	557.78	-88.74	2,194.53	2,152.14	42.39	51.776		
4,900.00	4,559.77	4,462.27	4,454.90	29.68	19.67	176.52	561.96	-90.91	2,239.55	2,196.28	43.27	51.753		
5,000.00	4,651.04	4,551.56	4,544.06	30.34	20.06	176.52	566.14	-93.07	2,284.58	2,240.41	44.16	51.731		
5,100.00	4,742.32	4,640.85	4,633.23	31.00	20.45	176.52	570.32	-95.24	2,329.60	2,284.55	45.05	51.709		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,730.14	4,722.40	31.66	20.84	176.52	574.50	-97.40	2,374.63	2,328.68	45.94	51.687		
5,300.00	4,924.86	4,819.43	4,811.56	32.32	21.23	176.52	578.68	-99.57	2,419.65	2,372.82	46.83	51.665		
5,400.00	5,016.13	4,908.72	4,900.73	32.99	21.62	176.52	582.86	-101.73	2,464.68	2,416.95	47.72	51.643		
5,500.00	5,107.41	5,001.99	4,989.89	33.65	22.02	176.52	587.04	-103.90	2,509.70	2,461.07	48.63	51.604		
5,600.00	5,198.68	5,087.30	5,079.06	34.31	22.40	176.53	591.22	-106.06	2,554.73	2,505.22	49.51	51.601		
5,700.00	5,289.95	5,176.59	5,168.23	34.97	22.79	176.53	595.40	-108.23	2,599.75	2,549.35	50.40	51.580		
5,800.00	5,381.23	5,265.88	5,257.39	35.63	23.18	176.53	599.58	-110.40	2,644.78	2,593.48	51.30	51.560		
5,900.00	5,472.50	5,355.17	5,346.56	36.30	23.57	176.53	603.76	-112.56	2,689.81	2,637.62	52.19	51.540		
6,000.00	5,563.77	5,444.46	5,435.72	36.96	23.96	176.53	607.95	-114.73	2,734.83	2,681.75	53.08	51.520		
6,100.00	5,655.05	5,533.75	5,524.89	37.62	24.35	176.53	612.13	-116.89	2,779.86	2,725.88	53.98	51.500		
6,200.00	5,746.32	5,623.04	5,614.05	38.28	24.74	176.53	616.31	-119.06	2,824.88	2,770.01	54.87	51.481		
6,300.00	5,837.59	5,712.33	5,703.22	38.95	25.13	176.53	620.49	-121.22	2,869.91	2,814.14	55.77	51.461		
6,400.00	5,928.86	5,801.62	5,792.39	39.61	25.52	176.53	624.67	-123.39	2,914.93	2,858.27	56.66	51.443		
6,500.00	6,020.14	5,909.09	5,881.55	40.27	25.99	176.53	628.85	-125.55	2,959.96	2,902.32	57.64	51.353		
6,600.00	6,111.41	5,980.20	5,970.72	40.94	26.30	176.54	633.03	-127.72	3,004.98	2,946.53	58.46	51.406		
6,700.00	6,202.68	6,069.49	6,059.88	41.60	26.69	176.54	637.21	-129.88	3,050.01	2,990.66	59.35	51.387		
6,800.00	6,293.96	6,158.78	6,149.05	42.26	27.08	176.54	641.39	-132.05	3,095.03	3,034.78	60.25	51.370		
6,900.00	6,385.23	6,248.07	6,238.22	42.93	27.47	176.54	645.57	-134.21	3,140.06	3,078.91	61.15	51.352		
7,000.00	6,476.50	6,337.36	6,327.38	43.59	27.86	176.54	649.75	-136.38	3,185.08	3,123.04	62.05	51.335		
7,100.00	6,567.77	6,426.65	6,416.55	44.25	28.26	176.54	653.93	-138.54	3,230.11	3,167.17	62.94	51.317		
7,200.00	6,658.64	6,518.79	6,508.32	44.91	28.66	155.60	658.21	-144.64	3,274.96	3,211.09	63.87	51.277		
7,300.00	6,747.14	6,612.91	6,600.23	45.52	29.07	136.25	662.40	-164.11	3,318.70	3,253.90	64.80	51.215		
7,400.00	6,831.10	6,709.05	6,690.09	46.07	29.50	121.78	666.41	-197.76	3,360.26	3,294.54	65.72	51.127		
7,500.00	6,908.46	6,807.95	6,776.19	46.54	29.95	111.18	670.13	-246.09	3,398.62	3,331.97	66.65	50.990		
7,600.00	6,977.30	6,910.19	6,856.23	46.95	30.46	103.38	673.47	-309.44	3,432.83	3,365.20	67.63	50.759		
7,700.00	7,035.93	7,016.04	6,927.33	47.30	31.06	97.65	676.30	-387.64	3,462.04	3,393.30	68.74	50.368		
7,800.00	7,082.92	7,125.39	6,986.15	47.59	31.82	93.54	678.45	-479.63	3,485.50	3,415.43	70.07	49.745		
7,900.00	7,117.09	7,237.62	7,029.29	47.84	32.79	90.77	679.78	-583.08	3,502.61	3,430.89	71.72	48.840		
8,000.00	7,137.62	7,351.69	7,053.88	48.06	33.99	89.15	680.19	-694.30	3,512.92	3,439.20	73.72	47.651		
8,100.00	7,143.99	7,463.45	7,058.67	48.28	35.35	88.61	679.67	-805.84	3,516.17	3,440.15	76.02	46.253		
8,200.00	7,143.45	7,563.45	7,056.92	48.53	36.75	88.59	678.92	-905.82	3,516.03	3,437.53	78.51	44.785		
8,300.00	7,142.91	7,663.44	7,055.17	48.89	38.30	88.57	678.17	-1,005.79	3,515.90	3,434.59	81.31	43.241		
8,400.00	7,142.37	7,763.43	7,053.42	49.40	39.99	88.55	677.41	-1,105.77	3,515.77	3,431.36	84.40	41.654		
8,500.00	7,141.83	7,863.42	7,051.67	50.12	41.81	88.53	676.66	-1,205.74	3,515.63	3,427.87	87.76	40.060		
8,600.00	7,141.29	7,963.42	7,049.92	51.08	43.75	88.51	675.91	-1,305.72	3,515.50	3,424.15	91.35	38.485		
8,700.00	7,140.75	8,063.41	7,048.17	52.30	45.77	88.49	675.16	-1,405.69	3,515.36	3,420.22	95.14	36.948		
8,800.00	7,140.21	8,163.40	7,046.42	53.75	47.89	88.47	674.40	-1,505.67	3,515.23	3,416.11	99.12	35.464		
8,900.00	7,139.67	8,263.39	7,044.67	55.40	50.07	88.45	673.65	-1,605.64	3,515.10	3,411.84	103.26	34.041		
9,000.00	7,139.12	8,363.39	7,042.92	57.20	52.33	88.43	672.90	-1,705.61	3,514.97	3,407.42	107.54	32.684		
9,100.00	7,138.58	8,463.38	7,041.17	59.13	54.64	88.41	672.15	-1,805.59	3,514.84	3,402.88	111.95	31.395		
9,200.00	7,138.04	8,563.37	7,039.42	61.15	56.99	88.39	671.39	-1,905.56	3,514.71	3,398.23	116.48	30.175		
9,300.00	7,137.50	8,663.36	7,037.67	63.26	59.40	88.37	670.64	-2,005.54	3,514.57	3,393.48	121.10	29.022		
9,400.00	7,136.96	8,763.36	7,035.92	65.44	61.84	88.35	669.89	-2,105.51	3,514.44	3,388.63	125.81	27.934		
9,500.00	7,136.42	8,863.35	7,034.17	67.68	64.31	88.33	669.13	-2,205.49	3,514.31	3,383.71	130.60	26.909		
9,600.00	7,135.88	8,963.34	7,032.43	69.97	66.82	88.31	668.38	-2,305.46	3,514.19	3,378.72	135.46	25.942		
9,700.00	7,135.34	9,063.33	7,030.68	72.31	69.35	88.29	667.63	-2,405.44	3,514.06	3,373.67	140.39	25.031		
9,800.00	7,134.80	9,163.33	7,028.93	74.69	71.91	88.27	666.88	-2,505.41	3,513.93	3,368.56	145.37	24.172		
9,900.00	7,134.26	9,263.32	7,027.18	77.10	74.49	88.25	666.12	-2,605.38	3,513.80	3,363.39	150.41	23.362		
10,000.00	7,133.71	9,363.31	7,025.43	79.54	77.09	88.23	665.37	-2,705.36	3,513.67	3,358.18	155.49	22.598		
10,100.00	7,133.17	9,463.31	7,023.68	82.02	79.71	88.21	664.62	-2,805.33	3,513.55	3,352.93	160.61	21.876		
10,200.00	7,132.63	9,563.30	7,021.93	84.52	82.34	88.19	663.87	-2,905.31	3,513.42	3,347.65	165.77	21.194		
10,300.00	7,132.09	9,663.29	7,020.18	87.04	84.99	88.17	663.11	-3,005.28	3,513.29	3,342.32	170.97	20.549		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,131.55	9,763.28	7,018.43	89.58	87.65	88.16	662.36	-3,105.26	3,513.17	3,336.97	176.20	19.939		
10,500.00	7,131.01	9,863.28	7,016.68	92.15	90.32	88.14	661.61	-3,205.23	3,513.04	3,331.59	181.45	19.361		
10,600.00	7,130.47	9,963.27	7,014.93	94.73	93.01	88.12	660.86	-3,305.20	3,512.91	3,326.18	186.74	18.812		
10,700.00	7,129.93	10,063.26	7,013.18	97.33	95.70	88.10	660.10	-3,405.18	3,512.79	3,320.75	192.04	18.292		
10,800.00	7,129.39	10,163.25	7,011.43	99.94	98.40	88.08	659.35	-3,505.15	3,512.67	3,315.29	197.37	17.797		
10,900.00	7,128.84	10,263.25	7,009.68	102.56	101.11	88.06	658.60	-3,605.13	3,512.54	3,309.82	202.72	17.327		
11,000.00	7,128.30	10,363.24	7,007.93	105.20	103.83	88.04	657.85	-3,705.10	3,512.42	3,304.33	208.09	16.879		
11,100.00	7,127.76	10,463.23	7,006.18	107.85	106.56	88.02	657.09	-3,805.08	3,512.30	3,298.82	213.48	16.453		
11,200.00	7,127.22	10,563.22	7,004.43	110.51	109.29	88.00	656.34	-3,905.05	3,512.17	3,293.29	218.88	16.046		
11,300.00	7,126.68	10,663.22	7,002.69	113.18	112.03	87.98	655.59	-4,005.03	3,512.05	3,287.75	224.30	15.658		
11,400.00	7,126.14	10,763.21	7,000.94	115.86	114.78	87.96	654.84	-4,105.00	3,511.93	3,282.20	229.73	15.287		
11,500.00	7,125.60	10,863.20	6,999.19	118.55	117.53	87.94	654.08	-4,204.97	3,511.81	3,276.63	235.18	14.933		
11,600.00	7,125.06	10,963.19	6,997.44	121.25	120.29	87.92	653.33	-4,304.95	3,511.69	3,271.05	240.63	14.593		
11,700.00	7,124.52	11,063.19	6,995.69	123.95	123.05	87.90	652.58	-4,404.92	3,511.57	3,265.46	246.10	14.269		
11,800.00	7,123.97	11,163.18	6,993.94	126.66	125.81	87.88	651.83	-4,504.90	3,511.45	3,259.86	251.58	13.957		
11,900.00	7,123.43	11,263.17	6,992.19	129.38	128.58	87.86	651.07	-4,604.87	3,511.33	3,254.25	257.07	13.659		
12,000.00	7,122.89	11,363.16	6,990.44	132.10	131.35	87.84	650.32	-4,704.85	3,511.21	3,248.64	262.57	13.372		
12,100.00	7,122.35	11,463.16	6,988.69	134.83	134.13	87.82	649.57	-4,804.82	3,511.09	3,243.01	268.08	13.097		
12,200.00	7,121.81	11,563.15	6,986.94	137.56	136.91	87.80	648.82	-4,904.80	3,510.97	3,237.38	273.59	12.833		
12,300.00	7,121.27	11,663.14	6,985.19	140.30	139.69	87.78	648.06	-5,004.77	3,510.85	3,231.74	279.11	12.579		
12,400.00	7,120.73	11,763.13	6,983.44	143.05	142.48	87.76	647.31	-5,104.74	3,510.73	3,226.09	284.64	12.334		
12,500.00	7,120.19	11,863.13	6,981.69	145.80	145.26	87.74	646.56	-5,204.72	3,510.62	3,220.44	290.18	12.098		
12,600.00	7,119.65	11,963.12	6,979.94	148.55	148.06	87.72	645.80	-5,304.69	3,510.50	3,214.78	295.72	11.871		
12,700.00	7,119.10	12,063.11	6,978.19	151.30	150.85	87.70	645.05	-5,404.67	3,510.38	3,209.11	301.27	11.652		
12,800.00	7,118.56	12,163.10	6,976.44	154.07	153.65	87.68	644.30	-5,504.64	3,510.27	3,203.44	306.83	11.441		
12,900.00	7,118.02	12,263.10	6,974.69	156.83	156.44	87.66	643.55	-5,604.62	3,510.15	3,197.77	312.39	11.237		
13,000.00	7,117.48	12,363.09	6,972.95	159.60	159.24	87.64	642.79	-5,704.59	3,510.04	3,192.09	317.95	11.040		
13,100.00	7,116.94	12,463.08	6,971.20	162.37	162.05	87.62	642.04	-5,804.57	3,509.92	3,186.40	323.52	10.849		
13,200.00	7,116.40	12,563.07	6,969.45	165.14	164.85	87.60	641.29	-5,904.54	3,509.81	3,180.71	329.09	10.665		
13,300.00	7,115.86	12,663.07	6,967.70	167.92	167.66	87.58	640.54	-6,004.51	3,509.69	3,175.02	334.67	10.487		
13,400.00	7,115.32	12,763.06	6,965.95	170.70	170.46	87.56	639.78	-6,104.49	3,509.58	3,169.33	340.26	10.315		
13,500.00	7,114.78	12,863.05	6,964.20	173.48	173.27	87.54	639.03	-6,204.46	3,509.47	3,163.63	345.84	10.148		
13,600.00	7,114.24	12,963.04	6,962.45	176.26	176.08	87.52	638.28	-6,304.44	3,509.35	3,157.92	351.43	9.986		
13,700.00	7,113.69	13,063.04	6,960.70	179.05	178.90	87.50	637.53	-6,404.41	3,509.24	3,152.22	357.03	9.829		
13,800.00	7,113.15	13,163.03	6,958.95	181.84	181.71	87.48	636.77	-6,504.39	3,509.13	3,146.51	362.62	9.677		
13,900.00	7,112.61	13,263.02	6,957.20	184.63	184.53	87.46	636.02	-6,604.36	3,509.02	3,140.80	368.22	9.530		
14,000.00	7,112.07	13,363.02	6,955.45	187.42	187.34	87.44	635.27	-6,704.34	3,508.91	3,135.08	373.83	9.386		
14,100.00	7,111.53	13,463.01	6,953.70	190.22	190.16	87.42	634.52	-6,804.31	3,508.80	3,129.37	379.43	9.248		
14,200.00	7,110.99	13,563.00	6,951.95	193.01	192.98	87.40	633.76	-6,904.28	3,508.69	3,123.65	385.04	9.113		
14,300.00	7,110.45	13,662.99	6,950.20	195.81	195.80	87.38	633.01	-7,004.26	3,508.58	3,117.93	390.65	8.981		
14,400.00	7,109.91	13,762.99	6,948.45	198.61	198.62	87.36	632.26	-7,104.23	3,508.47	3,112.20	396.26	8.854		
14,500.00	7,109.37	13,862.98	6,946.70	201.42	201.44	87.34	631.51	-7,204.21	3,508.36	3,106.48	401.88	8.730		
14,600.00	7,108.82	13,962.97	6,944.95	204.22	204.27	87.32	630.75	-7,304.18	3,508.25	3,100.75	407.50	8.609		
14,700.00	7,108.28	14,062.96	6,943.21	207.03	207.09	87.30	630.00	-7,404.16	3,508.14	3,095.02	413.12	8.492		
14,800.00	7,107.74	14,162.96	6,941.46	209.83	209.92	87.28	629.25	-7,504.13	3,508.04	3,089.29	418.74	8.378		
14,900.00	7,107.20	14,262.95	6,939.71	212.64	212.74	87.26	628.50	-7,604.11	3,507.93	3,083.56	424.37	8.266		
15,000.00	7,106.66	14,362.94	6,937.96	215.45	215.57	87.24	627.74	-7,704.08	3,507.82	3,077.83	429.99	8.158		
15,100.00	7,106.12	14,462.93	6,936.21	218.26	218.40	87.22	626.99	-7,804.05	3,507.72	3,072.09	435.62	8.052		
15,200.00	7,105.58	14,562.93	6,934.46	221.07	221.22	87.20	626.24	-7,904.03	3,507.61	3,066.36	441.25	7.949		
15,300.00	7,105.04	14,662.92	6,932.71	223.89	224.05	87.18	625.48	-8,004.00	3,507.51	3,060.62	446.88	7.849		
15,400.00	7,104.50	14,762.91	6,930.96	226.70	226.88	87.16	624.73	-8,103.98	3,507.40	3,054.88	452.52	7.751		
15,458.51	7,104.18	14,817.75	6,930.00	228.35	228.43	87.15	624.32	-8,158.80	3,507.34	3,051.64	455.70	7.697		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)		
15,491.56	7,104.00	14,817.75	6,930.00	229.28	228.43	87.15	624.32	-8,158.80	3,507.50	3,050.96	456.54	7.683 SF	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.53	179.97	1.67	179.97					
100.00	100.00	101.00	100.00	3.28	3.28	0.53	179.97	1.67	179.97	173.40	6.57	27.395		
200.00	200.00	201.07	200.07	3.34	3.34	0.53	179.97	1.67	179.97	173.30	6.67	26.963		
300.00	299.98	307.71	306.68	3.44	3.45	177.34	177.96	1.39	179.84	172.93	6.90	26.058		
400.00	399.84	414.33	413.13	3.59	3.62	177.17	172.03	0.55	179.50	172.25	7.25	24.773		
500.00	499.45	520.93	519.26	3.79	3.85	176.89	162.19	-0.84	178.96	171.26	7.70	23.245		
600.00	598.70	627.50	624.92	4.03	4.14	176.49	148.44	-2.78	178.22	169.98	8.24	21.624		
667.64	665.57	702.13	694.39	4.22	4.38	176.18	137.35	-4.35	177.74	169.10	8.65	20.557	CC, ES	
700.00	697.47	730.23	726.31	4.31	4.48	176.03	132.10	-5.09	177.93	169.11	8.82	20.172		
800.00	795.62	830.17	824.90	4.64	4.86	175.65	115.86	-7.39	180.80	171.38	9.42	19.189		
900.00	893.06	929.96	923.34	5.00	5.27	175.35	99.66	-9.68	187.16	177.07	10.09	18.554		
1,000.00	989.64	1,029.47	1,021.50	5.40	5.71	175.16	83.50	-11.96	196.99	186.19	10.80	18.245		
1,100.00	1,085.27	1,128.58	1,119.26	5.83	6.16	175.06	67.40	-14.23	210.27	198.73	11.55	18.212		
1,200.00	1,179.82	1,227.17	1,216.51	6.29	6.63	175.04	51.39	-16.50	226.99	214.67	12.33	18.414		
1,300.00	1,273.17	1,325.11	1,313.13	6.79	7.10	175.09	35.48	-18.74	247.13	234.00	13.14	18.812		
1,400.00	1,365.21	1,422.30	1,409.00	7.33	7.58	175.18	19.70	-20.97	270.67	256.70	13.97	19.375		
1,500.00	1,456.49	1,519.01	1,504.41	7.89	8.07	175.32	3.99	-23.19	296.08	281.26	14.82	19.980		
1,600.00	1,547.76	1,615.72	1,599.81	8.46	8.57	175.44	-11.72	-25.41	321.50	305.82	15.68	20.503		
1,700.00	1,639.04	1,712.44	1,695.21	9.05	9.06	175.54	-27.43	-27.63	346.92	330.36	16.56	20.952		
1,800.00	1,730.31	1,809.15	1,790.62	9.65	9.57	175.63	-43.13	-29.85	372.34	354.89	17.45	21.340		
1,900.00	1,821.58	1,905.87	1,886.02	10.26	10.08	175.71	-58.84	-32.07	397.76	379.41	18.35	21.678		
2,000.00	1,912.85	2,002.58	1,981.43	10.87	10.59	175.77	-74.55	-34.29	423.18	403.92	19.26	21.973		
2,100.00	2,004.13	2,099.29	2,076.83	11.49	11.10	175.83	-90.26	-36.51	448.60	428.42	20.18	22.233		
2,200.00	2,095.40	2,196.01	2,172.23	12.11	11.62	175.89	-105.96	-38.72	474.02	452.92	21.10	22.462		
2,300.00	2,186.67	2,307.28	2,267.64	12.74	12.22	175.94	-121.67	-40.94	499.44	477.35	22.10	22.601		
2,400.00	2,277.95	2,389.43	2,363.04	13.38	12.66	175.98	-137.38	-43.16	524.87	501.90	22.97	22.849		
2,500.00	2,369.22	2,486.15	2,458.44	14.01	13.18	176.02	-153.09	-45.38	550.29	526.38	23.91	23.012		
2,600.00	2,460.49	2,582.86	2,553.85	14.65	13.71	176.06	-168.79	-47.60	575.71	550.85	24.86	23.159		
2,700.00	2,551.77	2,679.57	2,649.25	15.29	14.24	176.09	-184.50	-49.82	601.14	575.33	25.81	23.292		
2,800.00	2,643.04	2,776.29	2,744.66	15.93	14.76	176.12	-200.21	-52.04	626.56	599.80	26.76	23.412		
2,900.00	2,734.31	2,873.00	2,840.06	16.58	15.29	176.15	-215.92	-54.26	651.99	624.27	27.72	23.522		
3,000.00	2,825.58	2,969.72	2,935.46	17.23	15.82	176.17	-231.62	-56.48	677.41	648.73	28.68	23.622		
3,100.00	2,916.86	3,066.43	3,030.87	17.87	16.35	176.20	-247.33	-58.70	702.83	673.20	29.64	23.714		
3,200.00	3,008.13	3,163.14	3,126.27	18.52	16.88	176.22	-263.04	-60.91	728.26	697.66	30.60	23.798		
3,300.00	3,099.40	3,259.86	3,221.67	19.17	17.41	176.24	-278.75	-63.13	753.68	722.12	31.57	23.876		
3,400.00	3,190.68	3,356.57	3,317.08	19.83	17.95	176.26	-294.45	-65.35	779.11	746.57	32.53	23.948		
3,500.00	3,281.95	3,453.28	3,412.48	20.48	18.48	176.28	-310.16	-67.57	804.53	771.03	33.50	24.014		
3,600.00	3,373.22	3,550.00	3,507.89	21.13	19.01	176.29	-325.87	-69.79	829.96	795.48	34.47	24.076		
3,700.00	3,464.49	3,646.71	3,603.29	21.79	19.55	176.31	-341.58	-72.01	855.38	819.94	35.44	24.133		
3,800.00	3,555.77	3,743.43	3,698.69	22.44	20.08	176.33	-357.28	-74.23	880.81	844.39	36.42	24.187		
3,900.00	3,647.04	3,840.14	3,794.10	23.10	20.62	176.34	-372.99	-76.45	906.23	868.84	37.39	24.236		
4,000.00	3,738.31	3,936.85	3,889.50	23.75	21.15	176.35	-388.70	-78.67	931.65	893.29	38.37	24.283		
4,100.00	3,829.59	4,033.57	3,984.91	24.41	21.69	176.37	-404.41	-80.89	957.08	917.74	39.34	24.327		
4,200.00	3,920.86	4,130.28	4,080.31	25.07	22.22	176.38	-420.11	-83.10	982.50	942.18	40.32	24.368		
4,300.00	4,012.13	4,226.99	4,175.71	25.73	22.76	176.39	-435.82	-85.32	1,007.93	966.63	41.30	24.406		
4,400.00	4,103.41	4,323.71	4,271.12	26.38	23.29	176.40	-451.53	-87.54	1,033.35	991.08	42.28	24.443		
4,500.00	4,194.68	4,420.42	4,366.52	27.04	23.83	176.41	-467.24	-89.76	1,058.78	1,015.52	43.26	24.477		
4,600.00	4,285.95	4,517.13	4,461.92	27.70	24.37	176.42	-482.94	-91.98	1,084.20	1,039.97	44.24	24.509		
4,700.00	4,377.22	4,613.85	4,557.33	28.36	24.91	176.43	-498.65	-94.20	1,109.63	1,064.41	45.22	24.540		
4,800.00	4,468.50	4,710.56	4,652.73	29.02	25.44	176.44	-514.36	-96.42	1,135.05	1,088.86	46.20	24.569		
4,900.00	4,559.77	4,807.28	4,748.14	29.68	25.98	176.45	-530.07	-98.64	1,160.48	1,113.30	47.18	24.596		
5,000.00	4,651.04	4,903.99	4,843.54	30.34	26.52	176.46	-545.77	-100.86	1,185.90	1,137.74	48.16	24.622		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	5,000.70	4,938.94	31.00	27.06	176.47	-561.48	-103.08	1,211.33	1,162.18	49.15	24.647		
5,200.00	4,833.59	5,102.58	5,034.35	31.66	27.63	176.47	-577.19	-105.30	1,236.76	1,186.60	50.16	24.658		
5,300.00	4,924.86	5,194.13	5,129.75	32.32	28.13	176.48	-592.90	-107.51	1,262.18	1,211.06	51.12	24.692		
5,400.00	5,016.13	5,309.16	5,225.15	32.99	28.78	176.49	-608.60	-109.73	1,287.61	1,235.42	52.19	24.674		
5,500.00	5,107.41	5,387.56	5,320.56	33.65	29.21	176.49	-624.31	-111.95	1,313.03	1,259.94	53.09	24.734		
5,600.00	5,198.68	5,484.27	5,415.96	34.31	29.75	176.50	-640.02	-114.17	1,338.46	1,284.38	54.07	24.753		
5,700.00	5,289.95	5,580.99	5,511.37	34.97	30.29	176.51	-655.73	-116.39	1,363.88	1,308.82	55.06	24.772		
5,800.00	5,381.23	5,677.70	5,606.77	35.63	30.83	176.51	-671.43	-118.61	1,389.31	1,333.26	56.04	24.790		
5,900.00	5,472.50	5,774.41	5,702.17	36.30	31.37	176.52	-687.14	-120.83	1,414.73	1,357.70	57.03	24.806		
6,000.00	5,563.77	5,871.13	5,797.58	36.96	31.91	176.52	-702.85	-123.05	1,440.16	1,382.14	58.02	24.823		
6,100.00	5,655.05	5,967.84	5,892.98	37.62	32.45	176.53	-718.56	-125.27	1,465.58	1,406.58	59.01	24.838		
6,200.00	5,746.32	6,064.55	5,988.39	38.28	32.99	176.54	-734.26	-127.49	1,491.01	1,431.02	59.99	24.853		
6,300.00	5,837.59	6,161.27	6,083.79	38.95	33.53	176.54	-749.97	-129.70	1,516.43	1,455.45	60.98	24.867		
6,400.00	5,928.86	6,257.98	6,179.19	39.61	34.07	176.54	-765.68	-131.92	1,541.86	1,479.89	61.97	24.881		
6,500.00	6,020.14	6,354.69	6,274.60	40.27	34.61	176.55	-781.39	-134.14	1,567.28	1,504.33	62.96	24.894		
6,600.00	6,111.41	6,451.41	6,370.00	40.94	35.15	176.55	-797.09	-136.36	1,592.71	1,528.76	63.95	24.907		
6,700.00	6,202.68	6,548.12	6,465.40	41.60	35.69	176.56	-812.80	-138.58	1,618.14	1,553.20	64.94	24.919		
6,800.00	6,293.96	6,644.84	6,560.81	42.26	36.23	176.56	-828.51	-140.80	1,643.56	1,577.64	65.92	24.931		
6,900.00	6,385.23	6,741.71	6,656.35	42.93	36.77	176.55	-844.24	-143.50	1,668.98	1,602.07	66.92	24.941		
7,000.00	6,476.50	6,837.68	6,750.06	43.59	37.31	176.17	-859.74	-156.62	1,694.42	1,626.49	67.93	24.944		
7,100.00	6,567.77	6,928.48	6,835.97	44.25	37.82	175.37	-874.05	-182.04	1,720.12	1,651.20	68.93	24.956		
7,200.00	6,658.64	7,013.54	6,912.43	44.91	38.29	155.30	-886.86	-216.85	1,746.30	1,676.42	69.89	24.988		
7,300.00	6,747.14	7,095.91	6,981.48	45.52	38.74	136.98	-898.51	-260.12	1,772.25	1,701.43	70.82	25.025		
7,400.00	6,831.10	7,176.28	7,042.98	46.07	39.19	123.45	-908.96	-310.71	1,797.18	1,725.45	71.73	25.055		
7,500.00	6,908.46	7,255.14	7,096.74	46.54	39.64	113.65	-918.19	-367.59	1,820.38	1,747.74	72.64	25.062		
7,600.00	6,977.30	7,332.88	7,142.55	46.95	40.11	106.49	-926.14	-429.85	1,841.19	1,767.60	73.59	25.020		
7,700.00	7,035.93	7,409.81	7,180.16	47.30	40.62	101.27	-932.77	-496.57	1,859.03	1,784.38	74.64	24.905		
7,800.00	7,082.92	7,486.15	7,209.37	47.59	41.19	97.52	-938.05	-566.85	1,873.43	1,797.55	75.88	24.691		
7,900.00	7,117.09	7,562.08	7,229.98	47.84	41.85	95.00	-941.93	-639.78	1,884.01	1,806.67	77.34	24.361		
8,000.00	7,137.62	7,637.74	7,241.85	48.06	42.61	93.53	-944.38	-714.41	1,890.49	1,811.42	79.07	23.910		
8,100.00	7,143.99	7,715.89	7,244.95	48.28	43.52	93.06	-945.42	-792.46	1,892.69	1,811.55	81.13	23.328		
8,200.00	7,143.45	7,815.89	7,244.42	48.53	44.88	93.06	-946.00	-892.45	1,892.69	1,808.63	84.06	22.515		
8,300.00	7,142.91	7,915.89	7,243.89	48.89	46.48	93.06	-946.58	-992.45	1,892.70	1,805.37	87.32	21.674		
8,400.00	7,142.37	8,015.89	7,243.36	49.40	48.29	93.06	-947.17	-1,092.45	1,892.70	1,801.82	90.89	20.825		
8,500.00	7,141.83	8,115.89	7,242.83	50.12	50.30	93.06	-947.75	-1,192.44	1,892.71	1,797.99	94.71	19.983		
8,600.00	7,141.29	8,215.89	7,242.30	51.08	52.46	93.06	-948.34	-1,292.44	1,892.71	1,793.93	98.78	19.161		
8,700.00	7,140.75	8,315.89	7,241.77	52.30	54.76	93.06	-948.92	-1,392.44	1,892.71	1,789.66	103.05	18.367		
8,800.00	7,140.21	8,415.89	7,241.24	53.75	57.18	93.06	-949.51	-1,492.43	1,892.72	1,785.21	107.51	17.606		
8,900.00	7,139.67	8,515.89	7,240.72	55.40	59.69	93.06	-950.09	-1,592.43	1,892.72	1,780.60	112.12	16.881		
9,000.00	7,139.12	8,615.89	7,240.19	57.20	62.30	93.06	-950.67	-1,692.43	1,892.73	1,775.85	116.88	16.194		
9,100.00	7,138.58	8,715.89	7,239.66	59.13	64.97	93.06	-951.26	-1,792.42	1,892.73	1,770.96	121.77	15.544		
9,200.00	7,138.04	8,815.89	7,239.13	61.15	67.71	93.06	-951.84	-1,892.42	1,892.74	1,765.97	126.76	14.931		
9,300.00	7,137.50	8,915.89	7,238.60	63.26	70.51	93.06	-952.43	-1,992.42	1,892.74	1,760.88	131.86	14.354		
9,400.00	7,136.96	9,015.89	7,238.07	65.44	73.35	93.06	-953.01	-2,092.41	1,892.74	1,755.70	137.05	13.811		
9,500.00	7,136.42	9,115.89	7,237.54	67.68	76.24	93.06	-953.60	-2,192.41	1,892.75	1,750.44	142.31	13.300		
9,600.00	7,135.88	9,215.89	7,237.01	69.97	79.16	93.06	-954.18	-2,292.41	1,892.75	1,745.11	147.64	12.820		
9,700.00	7,135.34	9,315.89	7,236.49	72.31	82.12	93.06	-954.77	-2,392.41	1,892.76	1,739.71	153.04	12.368		
9,800.00	7,134.80	9,415.89	7,235.96	74.69	85.10	93.06	-955.35	-2,492.40	1,892.76	1,734.26	158.50	11.942		
9,900.00	7,134.26	9,515.89	7,235.43	77.10	88.11	93.06	-955.93	-2,592.40	1,892.77	1,728.76	164.00	11.541		
10,000.00	7,133.71	9,615.89	7,234.90	79.54	91.15	93.06	-956.52	-2,692.40	1,892.77	1,723.21	169.56	11.163		
10,100.00	7,133.17	9,715.89	7,234.37	82.02	94.20	93.06	-957.10	-2,792.39	1,892.77	1,717.62	175.15	10.807		
10,200.00	7,132.63	9,815.89	7,233.84	84.52	97.28	93.07	-957.69	-2,892.39	1,892.78	1,712.00	180.78	10.470		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,132.09	9,915.89	7,233.31	87.04	100.37	93.07	-958.27	-2,992.39	1,892.78	1,706.33	186.45	10.152		
10,400.00	7,131.55	10,015.89	7,232.78	89.58	103.48	93.07	-958.86	-3,092.38	1,892.79	1,700.64	192.15	9.851		
10,500.00	7,131.01	10,115.89	7,232.26	92.15	106.60	93.07	-959.44	-3,192.38	1,892.79	1,694.92	197.87	9.566		
10,600.00	7,130.47	10,215.89	7,231.73	94.73	109.73	93.07	-960.02	-3,292.38	1,892.79	1,689.17	203.63	9.295		
10,700.00	7,129.93	10,315.89	7,231.20	97.33	112.88	93.07	-960.61	-3,392.37	1,892.80	1,683.39	209.41	9.039		
10,800.00	7,129.39	10,415.89	7,230.67	99.94	116.04	93.07	-961.19	-3,492.37	1,892.80	1,677.60	215.21	8.795		
10,900.00	7,128.84	10,515.89	7,230.14	102.56	119.20	93.07	-961.78	-3,592.37	1,892.81	1,671.78	221.03	8.564		
11,000.00	7,128.30	10,615.89	7,229.61	105.20	122.38	93.07	-962.36	-3,692.37	1,892.81	1,665.94	226.87	8.343		
11,100.00	7,127.76	10,715.89	7,229.08	107.85	125.56	93.07	-962.95	-3,792.36	1,892.82	1,660.09	232.73	8.133		
11,200.00	7,127.22	10,815.89	7,228.56	110.51	128.75	93.07	-963.53	-3,892.36	1,892.82	1,654.22	238.60	7.933		
11,300.00	7,126.68	10,915.89	7,228.03	113.18	131.95	93.07	-964.11	-3,992.36	1,892.82	1,648.33	244.49	7.742		
11,400.00	7,126.14	11,015.89	7,227.50	115.86	135.16	93.07	-964.70	-4,092.35	1,892.83	1,642.43	250.40	7.559		
11,500.00	7,125.60	11,115.89	7,226.97	118.55	138.37	93.07	-965.28	-4,192.35	1,892.83	1,636.52	256.31	7.385		
11,600.00	7,125.06	11,215.89	7,226.44	121.25	141.59	93.07	-965.87	-4,292.35	1,892.84	1,630.59	262.24	7.218		
11,700.00	7,124.52	11,315.89	7,225.91	123.95	144.81	93.07	-966.45	-4,392.34	1,892.84	1,624.66	268.18	7.058		
11,800.00	7,123.97	11,415.89	7,225.38	126.66	148.04	93.07	-967.04	-4,492.34	1,892.85	1,618.71	274.14	6.905		
11,900.00	7,123.43	11,515.89	7,224.85	129.38	151.27	93.07	-967.62	-4,592.34	1,892.85	1,612.75	280.10	6.758		
12,000.00	7,122.89	11,615.89	7,224.33	132.10	154.51	93.07	-968.21	-4,692.33	1,892.85	1,606.79	286.07	6.617		
12,100.00	7,122.35	11,715.89	7,223.80	134.83	157.75	93.07	-968.79	-4,792.33	1,892.86	1,600.81	292.05	6.481		
12,200.00	7,121.81	11,815.89	7,223.27	137.56	160.99	93.07	-969.37	-4,892.33	1,892.86	1,594.83	298.04	6.351		
12,300.00	7,121.27	11,915.89	7,222.74	140.30	164.24	93.07	-969.96	-4,992.32	1,892.87	1,588.84	304.03	6.226		
12,400.00	7,120.73	12,015.89	7,222.21	143.05	167.49	93.07	-970.54	-5,092.32	1,892.87	1,582.84	310.03	6.105		
12,500.00	7,120.19	12,115.89	7,221.68	145.80	170.75	93.07	-971.13	-5,192.32	1,892.88	1,576.83	316.04	5.989		
12,600.00	7,119.65	12,215.89	7,221.15	148.55	174.01	93.07	-971.71	-5,292.32	1,892.88	1,570.82	322.06	5.877		
12,700.00	7,119.10	12,315.89	7,220.62	151.30	177.27	93.07	-972.30	-5,392.31	1,892.88	1,564.80	328.08	5.770		
12,800.00	7,118.56	12,415.89	7,220.10	154.07	180.53	93.07	-972.88	-5,492.31	1,892.89	1,558.78	334.11	5.665		
12,900.00	7,118.02	12,515.89	7,219.57	156.83	183.80	93.08	-973.46	-5,592.31	1,892.89	1,552.75	340.15	5.565		
13,000.00	7,117.48	12,615.89	7,219.04	159.60	187.06	93.08	-974.05	-5,692.30	1,892.90	1,546.71	346.19	5.468		
13,100.00	7,116.94	12,715.89	7,218.51	162.37	190.33	93.08	-974.63	-5,792.30	1,892.90	1,540.67	352.23	5.374		
13,200.00	7,116.40	12,815.89	7,217.98	165.14	193.61	93.08	-975.22	-5,892.30	1,892.90	1,534.62	358.28	5.283		
13,300.00	7,115.86	12,915.89	7,217.45	167.92	196.88	93.08	-975.80	-5,992.29	1,892.91	1,528.58	364.33	5.196		
13,400.00	7,115.32	13,015.89	7,216.92	170.70	200.16	93.08	-976.39	-6,092.29	1,892.91	1,522.52	370.39	5.111		
13,500.00	7,114.78	13,115.89	7,216.39	173.48	203.44	93.08	-976.97	-6,192.29	1,892.92	1,516.46	376.45	5.028		
13,600.00	7,114.24	13,215.89	7,215.87	176.26	206.72	93.08	-977.56	-6,292.28	1,892.92	1,510.40	382.52	4.949		
13,700.00	7,113.69	13,315.89	7,215.34	179.05	210.00	93.08	-978.14	-6,392.28	1,892.93	1,504.34	388.59	4.871		
13,800.00	7,113.15	13,415.89	7,214.81	181.84	213.28	93.08	-978.72	-6,492.28	1,892.93	1,498.27	394.66	4.796		
13,900.00	7,112.61	13,515.89	7,214.28	184.63	216.57	93.08	-979.31	-6,592.28	1,892.93	1,492.20	400.74	4.724		
14,000.00	7,112.07	13,615.89	7,213.75	187.42	219.86	93.08	-979.89	-6,692.27	1,892.94	1,486.12	406.82	4.653		
14,100.00	7,111.53	13,715.89	7,213.22	190.22	223.15	93.08	-980.48	-6,792.27	1,892.94	1,480.04	412.90	4.584		
14,200.00	7,110.99	13,815.89	7,212.69	193.01	226.43	93.08	-981.06	-6,892.27	1,892.95	1,473.96	418.99	4.518		
14,300.00	7,110.45	13,915.89	7,212.16	195.81	229.73	93.08	-981.65	-6,992.26	1,892.95	1,467.88	425.08	4.453		
14,400.00	7,109.91	14,015.89	7,211.64	198.61	233.02	93.08	-982.23	-7,092.26	1,892.96	1,461.79	431.17	4.390		
14,500.00	7,109.37	14,115.89	7,211.11	201.42	236.31	93.08	-982.81	-7,192.26	1,892.96	1,455.70	437.26	4.329		
14,600.00	7,108.82	14,215.89	7,210.58	204.22	239.61	93.08	-983.40	-7,292.25	1,892.96	1,449.61	443.36	4.270		
14,700.00	7,108.28	14,315.89	7,210.05	207.03	242.90	93.08	-983.98	-7,392.25	1,892.97	1,443.51	449.46	4.212		
14,800.00	7,107.74	14,415.89	7,209.52	209.83	246.20	93.08	-984.57	-7,492.25	1,892.97	1,437.42	455.56	4.155		
14,900.00	7,107.20	14,515.89	7,208.99	212.64	249.49	93.08	-985.15	-7,592.24	1,892.98	1,431.32	461.66	4.100		
15,000.00	7,106.66	14,615.89	7,208.46	215.45	252.79	93.08	-985.74	-7,692.24	1,892.98	1,425.22	467.76	4.047		
15,100.00	7,106.12	14,715.89	7,207.94	218.26	256.09	93.08	-986.32	-7,792.24	1,892.99	1,419.11	473.87	3.995		
15,200.00	7,105.58	14,815.89	7,207.41	221.07	259.39	93.08	-986.91	-7,892.23	1,892.99	1,413.01	479.98	3.944		
15,300.00	7,105.04	14,915.89	7,206.88	223.89	262.69	93.08	-987.49	-7,992.23	1,892.99	1,406.90	486.09	3.894		
15,400.00	7,104.50	15,015.89	7,206.35	226.70	265.99	93.08	-988.07	-8,092.23	1,893.00	1,400.79	492.21	3.846		

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



Anticollision Report



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

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	3.28 ft
HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M - OH - PLAN #1													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.03	7,104.50	15,015.92	7,206.35	226.70	266.00	93.08	-988.07	-8,092.26	1,893.00	1,400.79	492.21	3.846	
15,491.56	7,104.00	15,081.89	7,206.00	229.28	268.17	93.08	-988.46	-8,158.22	1,893.17	1,396.56	496.61	3.812 SF	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M2 - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.48	299.82	2.50	299.83					
100.00	100.00	102.00	100.00	3.28	3.29	0.48	299.82	2.50	299.83	293.26	6.57	45.638		
200.00	200.00	202.00	200.00	3.34	3.34	0.48	299.82	2.50	299.83	293.16	6.68	44.914	CC, ES	
300.00	299.98	301.98	299.98	3.44	3.45	177.36	299.82	2.50	301.58	294.69	6.89	43.785		
400.00	399.84	401.84	399.84	3.59	3.61	177.40	299.82	2.50	306.80	299.61	7.20	42.618		
500.00	499.45	501.62	499.62	3.79	3.81	177.46	299.82	2.50	315.51	307.91	7.60	41.504		
600.00	598.70	612.98	610.95	4.03	4.07	177.44	297.71	1.81	325.79	317.69	8.10	40.201		
700.00	697.47	724.77	722.54	4.31	4.36	177.23	291.45	-0.24	335.85	327.17	8.68	38.677		
800.00	795.62	824.09	821.56	4.64	4.64	176.97	284.04	-2.67	347.52	338.25	9.28	37.463		
900.00	893.06	922.93	920.09	5.00	4.95	176.76	276.68	-5.09	362.65	352.74	9.92	36.562		
1,000.00	989.64	1,021.18	1,018.04	5.40	5.27	176.59	269.35	-7.49	381.22	370.62	10.60	35.955		
1,100.00	1,085.27	1,118.73	1,115.28	5.83	5.61	176.46	262.08	-9.88	403.21	391.88	11.32	35.612		
1,200.00	1,179.82	1,215.45	1,211.71	6.29	5.96	176.36	254.87	-12.25	428.57	416.50	12.07	35.506		
1,300.00	1,273.17	1,311.23	1,307.19	6.79	6.32	176.30	247.73	-14.59	457.30	444.45	12.84	35.606		
1,400.00	1,365.21	1,405.95	1,401.62	7.33	6.68	176.26	240.67	-16.91	489.34	475.70	13.64	35.886		
1,500.00	1,456.49	1,500.04	1,495.42	7.89	7.05	176.28	233.65	-19.21	523.21	508.76	14.44	36.229		
1,600.00	1,547.76	1,605.87	1,589.22	8.46	7.47	176.30	226.64	-21.51	557.08	541.78	15.30	36.400		
1,700.00	1,639.04	1,688.22	1,683.02	9.05	7.80	176.31	219.62	-23.81	590.96	574.87	16.09	36.729		
1,800.00	1,730.31	1,782.31	1,776.82	9.65	8.18	176.32	212.61	-26.11	624.83	607.90	16.93	36.898		
1,900.00	1,821.58	1,876.39	1,870.61	10.26	8.57	176.34	205.59	-28.41	658.71	640.92	17.79	37.029		
2,000.00	1,912.85	1,970.48	1,964.41	10.87	8.96	176.35	198.58	-30.71	692.58	673.93	18.65	37.128		
2,100.00	2,004.13	2,064.57	2,058.21	11.49	9.35	176.36	191.56	-33.02	726.46	706.93	19.53	37.204		
2,200.00	2,095.40	2,158.66	2,152.01	12.11	9.75	176.37	184.55	-35.32	760.33	739.92	20.41	37.259		
2,300.00	2,186.67	2,252.74	2,245.80	12.74	10.15	176.37	177.53	-37.62	794.21	772.91	21.29	37.300		
2,400.00	2,277.95	2,346.83	2,339.60	13.38	10.55	176.38	170.52	-39.92	828.08	805.90	22.18	37.328		
2,500.00	2,369.22	2,440.92	2,433.40	14.01	10.95	176.39	163.51	-42.22	861.96	838.88	23.08	37.346		
2,600.00	2,460.49	2,535.01	2,527.20	14.65	11.35	176.39	156.49	-44.52	895.83	871.85	23.98	37.356		
2,700.00	2,551.77	2,629.10	2,620.99	15.29	11.76	176.40	149.48	-46.82	929.71	904.82	24.89	37.360		
2,800.00	2,643.04	2,723.18	2,714.79	15.93	12.17	176.41	142.46	-49.12	963.58	937.79	25.79	37.358		
2,900.00	2,734.31	2,817.27	2,808.59	16.58	12.57	176.41	135.45	-51.43	997.46	970.75	26.70	37.352		
3,000.00	2,825.58	2,911.36	2,902.39	17.23	12.98	176.42	128.43	-53.73	1,031.33	1,003.71	27.62	37.343		
3,100.00	2,916.86	3,005.45	2,996.18	17.87	13.39	176.42	121.42	-56.03	1,065.21	1,036.67	28.53	37.331		
3,200.00	3,008.13	3,100.47	3,089.98	18.52	13.81	176.42	114.40	-58.33	1,099.08	1,069.62	29.46	37.313		
3,300.00	3,099.40	3,206.38	3,183.78	19.17	14.27	176.43	107.39	-60.63	1,132.96	1,102.53	30.43	37.235		
3,400.00	3,190.68	3,287.71	3,277.58	19.83	14.63	176.43	100.38	-62.93	1,166.83	1,135.54	31.29	37.285		
3,500.00	3,281.95	3,381.80	3,371.37	20.48	15.04	176.44	93.36	-65.23	1,200.71	1,168.49	32.22	37.267		
3,600.00	3,373.22	3,475.88	3,465.17	21.13	15.46	176.44	86.35	-67.54	1,234.58	1,201.44	33.14	37.249		
3,700.00	3,464.49	3,569.97	3,558.97	21.79	15.87	176.44	79.33	-69.84	1,268.46	1,234.39	34.07	37.230		
3,800.00	3,555.77	3,664.06	3,652.77	22.44	16.29	176.44	72.32	-72.14	1,302.33	1,267.33	35.00	37.210		
3,900.00	3,647.04	3,758.15	3,746.56	23.10	16.70	176.45	65.30	-74.44	1,336.21	1,300.28	35.93	37.190		
4,000.00	3,738.31	3,852.23	3,840.36	23.75	17.12	176.45	58.29	-76.74	1,370.08	1,333.22	36.86	37.170		
4,100.00	3,829.59	3,946.32	3,934.16	24.41	17.54	176.45	51.27	-79.04	1,403.96	1,366.17	37.79	37.150		
4,200.00	3,920.86	4,040.41	4,027.96	25.07	17.95	176.46	44.26	-81.34	1,437.83	1,399.11	38.72	37.130		
4,300.00	4,012.13	4,134.50	4,121.75	25.73	18.37	176.46	37.25	-83.65	1,471.71	1,432.05	39.66	37.110		
4,400.00	4,103.41	4,228.58	4,215.55	26.38	18.79	176.46	30.23	-85.95	1,505.58	1,464.99	40.59	37.090		
4,500.00	4,194.68	4,322.67	4,309.35	27.04	19.21	176.46	23.22	-88.25	1,539.46	1,497.93	41.53	37.071		
4,600.00	4,285.95	4,416.76	4,403.15	27.70	19.62	176.46	16.20	-90.55	1,573.33	1,530.87	42.46	37.051		
4,700.00	4,377.22	4,510.85	4,496.94	28.36	20.04	176.47	9.19	-92.85	1,607.21	1,563.81	43.40	37.032		
4,800.00	4,468.50	4,604.93	4,590.74	29.02	20.46	176.47	2.17	-95.15	1,641.08	1,596.75	44.34	37.013		
4,900.00	4,559.77	4,700.98	4,684.54	29.68	20.89	176.47	-4.84	-97.45	1,674.96	1,629.67	45.28	36.988		
5,000.00	4,651.04	4,806.89	4,778.34	30.34	21.36	176.47	-11.86	-99.75	1,708.83	1,662.56	46.27	36.928		
5,100.00	4,742.32	4,887.20	4,872.13	31.00	21.72	176.47	-18.87	-102.06	1,742.71	1,695.55	47.15	36.958		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M2 - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,981.28	4,965.93	31.66	22.14	176.47	-25.89	-104.36	1,776.58	1,728.49	48.09	36.940		
5,300.00	4,924.86	5,075.37	5,059.73	32.32	22.56	176.48	-32.90	-106.66	1,810.46	1,761.42	49.03	36.923		
5,400.00	5,016.13	5,169.46	5,153.53	32.99	22.98	176.48	-39.91	-108.96	1,844.33	1,794.36	49.97	36.906		
5,500.00	5,107.41	5,263.55	5,247.32	33.65	23.40	176.48	-46.93	-111.26	1,878.21	1,827.29	50.92	36.889		
5,600.00	5,198.68	5,357.64	5,341.12	34.31	23.82	176.48	-53.94	-113.56	1,912.08	1,860.23	51.86	36.872		
5,700.00	5,289.95	5,451.72	5,434.92	34.97	24.24	176.48	-60.96	-115.86	1,945.96	1,893.16	52.80	36.856		
5,800.00	5,381.23	5,545.81	5,528.72	35.63	24.66	176.48	-67.97	-118.17	1,979.83	1,926.09	53.74	36.840		
5,900.00	5,472.50	5,639.90	5,622.51	36.30	25.08	176.48	-74.99	-120.47	2,013.71	1,959.02	54.68	36.824		
6,000.00	5,563.77	5,733.99	5,716.31	36.96	25.50	176.49	-82.00	-122.77	2,047.58	1,991.96	55.63	36.809		
6,100.00	5,655.05	5,828.07	5,810.11	37.62	25.93	176.49	-89.02	-125.07	2,081.46	2,024.89	56.57	36.794		
6,200.00	5,746.32	5,922.16	5,903.91	38.28	26.35	176.49	-96.03	-127.37	2,115.33	2,057.82	57.51	36.779		
6,300.00	5,837.59	6,016.25	5,997.70	38.95	26.77	176.49	-103.04	-129.67	2,149.21	2,090.75	58.46	36.764		
6,400.00	5,928.86	6,110.34	6,091.50	39.61	27.19	176.49	-110.06	-131.97	2,183.08	2,123.68	59.40	36.750		
6,500.00	6,020.14	6,204.42	6,185.30	40.27	27.61	176.49	-117.07	-134.28	2,216.96	2,156.61	60.35	36.736		
6,600.00	6,111.41	6,301.49	6,279.10	40.94	28.05	176.49	-124.09	-136.58	2,250.84	2,189.53	61.31	36.714		
6,700.00	6,202.68	6,407.40	6,372.89	41.60	28.52	176.49	-131.10	-138.88	2,284.71	2,222.41	62.30	36.670		
6,800.00	6,293.96	6,486.69	6,466.69	42.26	28.88	176.49	-138.12	-141.18	2,318.59	2,255.40	63.18	36.695		
6,900.00	6,385.23	6,580.77	6,560.49	42.93	29.30	176.49	-145.13	-143.48	2,352.46	2,288.33	64.13	36.682		
7,000.00	6,476.50	6,675.46	6,654.85	43.59	29.72	176.47	-152.19	-146.65	2,386.33	2,321.25	65.08	36.666		
7,100.00	6,567.77	6,769.73	6,747.71	44.25	30.14	176.18	-159.23	-160.74	2,420.18	2,354.15	66.03	36.654		
7,200.00	6,658.64	6,860.53	6,834.24	44.91	30.53	155.88	-165.90	-187.17	2,453.98	2,387.05	66.93	36.666		
7,300.00	6,747.14	6,949.57	6,914.61	45.52	30.90	137.25	-172.20	-224.81	2,487.01	2,419.23	67.78	36.691		
7,400.00	6,831.10	7,037.47	6,988.04	46.07	31.24	123.43	-178.07	-272.63	2,518.43	2,449.83	68.60	36.711		
7,500.00	6,908.46	7,124.68	7,053.72	46.54	31.57	113.37	-183.43	-329.65	2,547.41	2,478.00	69.41	36.702		
7,600.00	6,977.30	7,211.54	7,110.80	46.95	31.94	106.00	-188.22	-394.85	2,573.23	2,502.98	70.25	36.629		
7,700.00	7,035.93	7,298.27	7,158.44	47.30	32.40	100.60	-192.36	-467.13	2,595.24	2,524.05	71.20	36.451		
7,800.00	7,082.92	7,384.98	7,195.83	47.59	33.01	96.72	-195.78	-545.21	2,612.90	2,540.57	72.33	36.123		
7,900.00	7,117.09	7,471.70	7,222.31	47.84	33.77	94.11	-198.42	-627.68	2,625.77	2,552.06	73.71	35.621		
8,000.00	7,137.62	7,558.38	7,237.37	48.06	34.66	92.60	-200.24	-712.96	2,633.54	2,558.18	75.37	34.943		
8,100.00	7,143.99	7,647.43	7,240.93	48.28	35.71	92.11	-201.22	-801.86	2,636.02	2,558.68	77.33	34.086		
8,200.00	7,143.45	7,747.43	7,240.53	48.53	37.06	92.11	-202.01	-901.86	2,635.83	2,556.03	79.80	33.032		
8,300.00	7,142.91	7,847.43	7,240.14	48.89	38.57	92.11	-202.79	-1,001.86	2,635.64	2,553.07	82.57	31.921		
8,400.00	7,142.37	7,947.43	7,239.75	49.40	40.22	92.12	-203.57	-1,101.85	2,635.45	2,549.82	85.63	30.776		
8,500.00	7,141.83	8,047.43	7,239.35	50.12	42.00	92.12	-204.35	-1,201.85	2,635.26	2,546.31	88.96	29.624		
8,600.00	7,141.29	8,147.42	7,238.96	51.08	43.90	92.12	-205.14	-1,301.84	2,635.07	2,542.56	92.51	28.483		
8,700.00	7,140.75	8,247.42	7,238.57	52.30	45.89	92.13	-205.92	-1,401.84	2,634.88	2,538.61	96.28	27.367		
8,800.00	7,140.21	8,347.42	7,238.17	53.75	47.98	92.13	-206.70	-1,501.84	2,634.70	2,534.47	100.23	26.288		
8,900.00	7,139.67	8,447.42	7,237.78	55.40	50.14	92.13	-207.48	-1,601.83	2,634.51	2,530.17	104.34	25.250		
9,000.00	7,139.12	8,547.42	7,237.39	57.20	52.37	92.14	-208.26	-1,701.83	2,634.32	2,525.73	108.59	24.259		
9,100.00	7,138.58	8,647.42	7,236.99	59.13	54.65	92.14	-209.05	-1,801.82	2,634.13	2,521.16	112.97	23.316		
9,200.00	7,138.04	8,747.42	7,236.60	61.15	56.99	92.15	-209.83	-1,901.82	2,633.94	2,516.47	117.47	22.422		
9,300.00	7,137.50	8,847.42	7,236.21	63.26	59.38	92.15	-210.61	-2,001.81	2,633.75	2,511.68	122.07	21.576		
9,400.00	7,136.96	8,947.42	7,235.81	65.44	61.80	92.15	-211.39	-2,101.81	2,633.56	2,506.81	126.76	20.776		
9,500.00	7,136.42	9,047.42	7,235.42	67.68	64.26	92.16	-212.18	-2,201.81	2,633.38	2,501.85	131.53	20.022		
9,600.00	7,135.88	9,147.42	7,235.03	69.97	66.75	92.16	-212.96	-2,301.80	2,633.19	2,496.82	136.37	19.309		
9,700.00	7,135.34	9,247.42	7,234.63	72.31	69.27	92.16	-213.74	-2,401.80	2,633.00	2,491.72	141.27	18.638		
9,800.00	7,134.80	9,347.42	7,234.24	74.69	71.82	92.17	-214.52	-2,501.79	2,632.81	2,486.57	146.24	18.004		
9,900.00	7,134.26	9,447.42	7,233.85	77.10	74.39	92.17	-215.30	-2,601.79	2,632.62	2,481.37	151.26	17.405		
10,000.00	7,133.71	9,547.42	7,233.45	79.54	76.98	92.17	-216.09	-2,701.79	2,632.43	2,476.11	156.32	16.840		
10,100.00	7,133.17	9,647.42	7,233.06	82.02	79.58	92.18	-216.87	-2,801.78	2,632.24	2,470.82	161.43	16.306		
10,200.00	7,132.63	9,747.42	7,232.67	84.52	82.21	92.18	-217.65	-2,901.78	2,632.06	2,465.48	166.57	15.801		
10,300.00	7,132.09	9,847.42	7,232.27	87.04	84.85	92.18	-218.43	-3,001.77	2,631.87	2,460.11	171.76	15.323		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,131.55	9,947.42	7,231.88	89.58	87.50	92.19	-219.22	-3,101.77	2,631.68	2,454.71	176.97	14.871		
10,500.00	7,131.01	10,047.42	7,231.49	92.15	90.17	92.19	-220.00	-3,201.76	2,631.49	2,449.27	182.22	14.442		
10,600.00	7,130.47	10,147.42	7,231.10	94.73	92.84	92.19	-220.78	-3,301.76	2,631.30	2,443.81	187.49	14.034		
10,700.00	7,129.93	10,247.42	7,230.70	97.33	95.53	92.20	-221.56	-3,401.76	2,631.11	2,438.33	192.79	13.648		
10,800.00	7,129.39	10,347.42	7,230.31	99.94	98.23	92.20	-222.34	-3,501.75	2,630.92	2,432.82	198.11	13.280		
10,900.00	7,128.84	10,447.42	7,229.92	102.56	100.93	92.20	-223.13	-3,601.75	2,630.74	2,427.29	203.45	12.931		
11,000.00	7,128.30	10,547.42	7,229.52	105.20	103.65	92.21	-223.91	-3,701.74	2,630.55	2,421.74	208.81	12.598		
11,100.00	7,127.76	10,647.42	7,229.13	107.85	106.37	92.21	-224.69	-3,801.74	2,630.36	2,416.17	214.19	12.281		
11,200.00	7,127.22	10,747.42	7,228.74	110.51	109.10	92.21	-225.47	-3,901.74	2,630.17	2,410.59	219.58	11.978		
11,300.00	7,126.68	10,847.42	7,228.34	113.18	111.83	92.22	-226.26	-4,001.73	2,629.98	2,404.99	225.00	11.689		
11,400.00	7,126.14	10,947.42	7,227.95	115.86	114.57	92.22	-227.04	-4,101.73	2,629.79	2,399.37	230.42	11.413		
11,500.00	7,125.60	11,047.42	7,227.56	118.55	117.32	92.22	-227.82	-4,201.72	2,629.61	2,393.74	235.86	11.149		
11,600.00	7,125.06	11,147.42	7,227.16	121.25	120.07	92.23	-228.60	-4,301.72	2,629.42	2,388.10	241.31	10.896		
11,700.00	7,124.52	11,247.42	7,226.77	123.95	122.83	92.23	-229.38	-4,401.72	2,629.23	2,382.45	246.78	10.654		
11,800.00	7,123.97	11,347.42	7,226.38	126.66	125.59	92.23	-230.17	-4,501.71	2,629.04	2,376.79	252.25	10.422		
11,900.00	7,123.43	11,447.41	7,225.98	129.38	128.36	92.24	-230.95	-4,601.71	2,628.85	2,371.11	257.74	10.200		
12,000.00	7,122.89	11,547.41	7,225.59	132.10	131.13	92.24	-231.73	-4,701.70	2,628.66	2,365.43	263.23	9.986		
12,100.00	7,122.35	11,647.41	7,225.20	134.83	133.90	92.24	-232.51	-4,801.70	2,628.48	2,359.74	268.74	9.781		
12,200.00	7,121.81	11,747.41	7,224.80	137.56	136.68	92.25	-233.30	-4,901.69	2,628.29	2,354.04	274.25	9.584		
12,300.00	7,121.27	11,847.41	7,224.41	140.30	139.46	92.25	-234.08	-5,001.69	2,628.10	2,348.33	279.77	9.394		
12,400.00	7,120.73	11,947.41	7,224.02	143.05	142.24	92.25	-234.86	-5,101.69	2,627.91	2,342.61	285.30	9.211		
12,500.00	7,120.19	12,047.41	7,223.62	145.80	145.03	92.26	-235.64	-5,201.68	2,627.72	2,336.89	290.83	9.035		
12,600.00	7,119.65	12,147.41	7,223.23	148.55	147.82	92.26	-236.42	-5,301.68	2,627.53	2,331.16	296.37	8.866		
12,700.00	7,119.10	12,247.41	7,222.84	151.30	150.61	92.26	-237.21	-5,401.67	2,627.35	2,325.42	301.92	8.702		
12,800.00	7,118.56	12,347.41	7,222.44	154.07	153.40	92.27	-237.99	-5,501.67	2,627.16	2,319.68	307.47	8.544		
12,900.00	7,118.02	12,447.41	7,222.05	156.83	156.20	92.27	-238.77	-5,601.67	2,626.97	2,313.93	313.03	8.392		
13,000.00	7,117.48	12,547.41	7,221.66	159.60	159.00	92.27	-239.55	-5,701.66	2,626.78	2,308.18	318.60	8.245		
13,100.00	7,116.94	12,647.41	7,221.26	162.37	161.80	92.28	-240.34	-5,801.66	2,626.59	2,302.42	324.17	8.103		
13,200.00	7,116.40	12,747.41	7,220.87	165.14	164.60	92.28	-241.12	-5,901.65	2,626.40	2,296.66	329.74	7.965		
13,300.00	7,115.86	12,847.41	7,220.48	167.92	167.40	92.28	-241.90	-6,001.65	2,626.22	2,290.89	335.32	7.832		
13,400.00	7,115.32	12,947.41	7,220.08	170.70	170.21	92.29	-242.68	-6,101.65	2,626.03	2,285.12	340.91	7.703		
13,500.00	7,114.78	13,047.41	7,219.69	173.48	173.02	92.29	-243.46	-6,201.64	2,625.84	2,279.34	346.50	7.578		
13,600.00	7,114.24	13,147.41	7,219.30	176.26	175.83	92.29	-244.25	-6,301.64	2,625.65	2,273.56	352.09	7.457		
13,700.00	7,113.69	13,247.41	7,218.90	179.05	178.64	92.30	-245.03	-6,401.63	2,625.46	2,267.78	357.68	7.340		
13,800.00	7,113.15	13,347.41	7,218.51	181.84	181.45	92.30	-245.81	-6,501.63	2,625.27	2,261.99	363.28	7.227		
13,900.00	7,112.61	13,447.41	7,218.12	184.63	184.26	92.30	-246.59	-6,601.62	2,625.09	2,256.20	368.89	7.116		
14,000.00	7,112.07	13,547.41	7,217.72	187.42	187.08	92.31	-247.38	-6,701.62	2,624.90	2,250.41	374.49	7.009		
14,100.00	7,111.53	13,647.41	7,217.33	190.22	189.90	92.31	-248.16	-6,801.62	2,624.71	2,244.61	380.10	6.905		
14,200.00	7,110.99	13,747.41	7,216.94	193.01	192.71	92.31	-248.94	-6,901.61	2,624.52	2,238.81	385.71	6.804		
14,300.00	7,110.45	13,847.41	7,216.54	195.81	195.53	92.32	-249.72	-7,001.61	2,624.33	2,233.01	391.33	6.706		
14,400.00	7,109.91	13,947.41	7,216.15	198.61	198.35	92.32	-250.50	-7,101.60	2,624.15	2,227.20	396.95	6.611		
14,500.00	7,109.37	14,047.41	7,215.76	201.42	201.17	92.32	-251.29	-7,201.60	2,623.96	2,221.39	402.57	6.518		
14,600.00	7,108.82	14,147.41	7,215.36	204.22	204.00	92.33	-252.07	-7,301.60	2,623.77	2,215.58	408.19	6.428		
14,700.00	7,108.28	14,247.41	7,214.97	207.03	206.82	92.33	-252.85	-7,401.59	2,623.58	2,209.77	413.81	6.340		
14,800.00	7,107.74	14,347.41	7,214.58	209.83	209.64	92.33	-253.63	-7,501.59	2,623.39	2,203.95	419.44	6.254		
14,900.00	7,107.20	14,447.41	7,214.18	212.64	212.47	92.34	-254.42	-7,601.58	2,623.20	2,198.13	425.07	6.171		
15,000.00	7,106.66	14,547.41	7,213.79	215.45	215.29	92.34	-255.20	-7,701.58	2,623.02	2,192.31	430.70	6.090		
15,100.00	7,106.12	14,647.41	7,213.40	218.26	218.12	92.34	-255.98	-7,801.57	2,622.83	2,186.49	436.34	6.011		
15,200.00	7,105.58	14,747.41	7,213.00	221.07	220.95	92.35	-256.76	-7,901.57	2,622.64	2,180.67	441.97	5.934		
15,300.00	7,105.04	14,847.40	7,212.61	223.89	223.78	92.35	-257.54	-8,001.57	2,622.45	2,174.84	447.61	5.859		
15,400.00	7,104.50	14,947.40	7,212.22	226.70	226.61	92.35	-258.33	-8,101.56	2,622.26	2,169.01	453.25	5.785		
15,465.05	7,104.14	15,012.46	7,211.96	228.53	228.45	92.36	-258.84	-8,166.61	2,622.14	2,165.22	456.92	5.739		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	15,002.44	7,212.00	229.28	228.16	92.36	-258.76	-8,156.59	2,622.35	2,165.15	457.19	5.736 SF	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.48	200.00	1.67	200.01					
100.00	100.00	101.00	100.00	3.28	3.28	0.48	200.00	1.67	200.01	193.44	6.57	30.445		
200.00	200.00	201.00	200.00	3.34	3.34	0.48	200.00	1.67	200.01	193.34	6.67	29.965 CC, ES		
300.00	299.98	301.05	300.05	3.44	3.45	177.37	200.00	1.67	201.75	194.87	6.89	29.298		
400.00	399.84	408.53	407.50	3.59	3.61	177.34	197.98	1.32	205.10	197.89	7.21	28.443		
500.00	499.45	516.14	514.93	3.79	3.82	177.19	191.97	0.27	208.22	200.58	7.64	27.247		
600.00	598.70	623.86	622.17	4.03	4.08	176.90	181.99	-1.46	211.13	202.96	8.17	25.846		
700.00	697.47	729.86	727.26	4.31	4.38	176.51	168.38	-3.82	213.93	205.17	8.76	24.426		
800.00	795.62	829.71	826.11	4.64	4.68	176.15	154.46	-6.24	219.12	209.76	9.36	23.406		
900.00	893.06	929.32	924.72	5.00	5.02	175.87	140.58	-8.65	227.79	217.78	10.01	22.746		
1,000.00	989.64	1,028.57	1,022.97	5.40	5.38	175.66	126.74	-11.05	239.93	229.21	10.72	22.391		
1,100.00	1,085.27	1,127.35	1,120.75	5.83	5.75	175.53	112.97	-13.44	255.52	244.06	11.45	22.307		
1,200.00	1,179.82	1,225.52	1,217.93	6.29	6.13	175.47	99.29	-15.82	274.53	262.31	12.23	22.456		
1,300.00	1,273.17	1,322.97	1,314.40	6.79	6.52	175.46	85.70	-18.17	296.95	283.93	13.02	22.802		
1,400.00	1,365.21	1,419.58	1,410.04	7.33	6.91	175.48	72.24	-20.51	322.74	308.90	13.84	23.313		
1,500.00	1,456.49	1,515.67	1,505.17	7.89	7.31	175.57	58.84	-22.84	350.40	335.72	14.68	23.869		
1,600.00	1,547.76	1,611.77	1,600.30	8.46	7.72	175.64	45.44	-25.16	378.07	362.54	15.53	24.347		
1,700.00	1,639.04	1,707.86	1,695.43	9.05	8.13	175.70	32.05	-27.49	405.74	389.35	16.39	24.752		
1,800.00	1,730.31	1,803.96	1,790.56	9.65	8.55	175.76	18.65	-29.82	433.40	416.14	17.27	25.098		
1,900.00	1,821.58	1,900.05	1,885.69	10.26	8.97	175.81	5.26	-32.14	461.07	442.92	18.16	25.396		
2,000.00	1,912.85	2,003.85	1,980.81	10.87	9.43	175.85	-8.14	-34.47	488.74	469.66	19.08	25.609		
2,100.00	2,004.13	2,107.75	2,075.94	11.49	9.89	175.89	-21.53	-36.79	516.41	496.39	20.02	25.790		
2,200.00	2,095.40	2,188.34	2,171.07	12.11	10.25	175.93	-34.93	-39.12	544.08	523.21	20.87	26.071		
2,300.00	2,186.67	2,284.44	2,266.20	12.74	10.68	175.96	-48.32	-41.44	571.75	549.96	21.79	26.242		
2,400.00	2,277.95	2,380.53	2,361.33	13.38	11.11	175.99	-61.72	-43.77	599.41	576.70	22.71	26.393		
2,500.00	2,369.22	2,476.63	2,456.46	14.01	11.55	176.01	-75.11	-46.09	627.08	603.44	23.64	26.527		
2,600.00	2,460.49	2,572.72	2,551.59	14.65	11.99	176.03	-88.51	-48.42	654.75	630.18	24.57	26.646		
2,700.00	2,551.77	2,668.82	2,646.72	15.29	12.42	176.06	-101.90	-50.75	682.42	656.91	25.51	26.753		
2,800.00	2,643.04	2,764.92	2,741.85	15.93	12.86	176.08	-115.30	-53.07	710.09	683.64	26.45	26.849		
2,900.00	2,734.31	2,861.01	2,836.98	16.58	13.30	176.10	-128.70	-55.40	737.76	710.37	27.39	26.935		
3,000.00	2,825.58	2,957.11	2,932.10	17.23	13.75	176.11	-142.09	-57.72	765.43	737.09	28.34	27.013		
3,100.00	2,916.86	3,053.20	3,027.23	17.87	14.19	176.13	-155.49	-60.05	793.10	763.81	29.28	27.083		
3,200.00	3,008.13	3,149.30	3,122.36	18.52	14.63	176.14	-168.88	-62.37	820.77	790.53	30.23	27.148		
3,300.00	3,099.40	3,245.39	3,217.49	19.17	15.08	176.16	-182.28	-64.70	848.44	817.25	31.19	27.206		
3,400.00	3,190.68	3,341.49	3,312.62	19.83	15.52	176.17	-195.67	-67.02	876.11	843.97	32.14	27.260		
3,500.00	3,281.95	3,437.58	3,407.75	20.48	15.97	176.18	-209.07	-69.35	903.78	870.68	33.09	27.309		
3,600.00	3,373.22	3,533.68	3,502.88	21.13	16.41	176.19	-222.46	-71.68	931.45	897.39	34.05	27.354		
3,700.00	3,464.49	3,629.78	3,598.01	21.79	16.86	176.21	-235.86	-74.00	959.11	924.10	35.01	27.395		
3,800.00	3,555.77	3,725.87	3,693.14	22.44	17.31	176.22	-249.25	-76.33	986.78	950.81	35.97	27.434		
3,900.00	3,647.04	3,821.97	3,788.27	23.10	17.75	176.23	-262.65	-78.65	1,014.45	977.52	36.93	27.469		
4,000.00	3,738.31	3,918.06	3,883.39	23.75	18.20	176.23	-276.04	-80.98	1,042.12	1,004.23	37.89	27.502		
4,100.00	3,829.59	4,014.16	3,978.52	24.41	18.65	176.24	-289.44	-83.30	1,069.79	1,030.94	38.86	27.532		
4,200.00	3,920.86	4,110.25	4,073.65	25.07	19.10	176.25	-302.84	-85.63	1,097.46	1,057.64	39.82	27.561		
4,300.00	4,012.13	4,206.35	4,168.78	25.73	19.55	176.26	-316.23	-87.96	1,125.13	1,084.35	40.78	27.587		
4,400.00	4,103.41	4,302.44	4,263.91	26.38	20.00	176.27	-329.63	-90.28	1,152.80	1,111.05	41.75	27.612		
4,500.00	4,194.68	4,401.46	4,359.04	27.04	20.46	176.27	-343.02	-92.61	1,180.47	1,137.74	42.73	27.626		
4,600.00	4,285.95	4,505.36	4,454.17	27.70	20.95	176.28	-356.42	-94.93	1,208.14	1,164.41	43.73	27.626		
4,700.00	4,377.22	4,609.27	4,549.30	28.36	21.44	176.29	-369.81	-97.26	1,235.81	1,191.08	44.74	27.625		
4,800.00	4,468.50	4,686.83	4,644.43	29.02	21.80	176.29	-383.21	-99.58	1,263.48	1,217.86	45.62	27.695		
4,900.00	4,559.77	4,782.92	4,739.55	29.68	22.25	176.30	-396.60	-101.91	1,291.15	1,244.56	46.59	27.713		
5,000.00	4,651.04	4,879.02	4,834.68	30.34	22.70	176.31	-410.00	-104.23	1,318.82	1,271.26	47.56	27.730		
5,100.00	4,742.32	4,975.11	4,929.81	31.00	23.15	176.31	-423.39	-106.56	1,346.49	1,297.96	48.53	27.746		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	5,071.21	5,024.94	31.66	23.60	176.32	-436.79	-108.89	1,374.16	1,324.66	49.50	27.760		
5,300.00	4,924.86	5,167.31	5,120.07	32.32	24.06	176.32	-450.19	-111.21	1,401.83	1,351.36	50.47	27.774		
5,400.00	5,016.13	5,263.40	5,215.20	32.99	24.51	176.33	-463.58	-113.54	1,429.50	1,378.06	51.44	27.788		
5,500.00	5,107.41	5,359.50	5,310.33	33.65	24.96	176.33	-476.98	-115.86	1,457.17	1,404.75	52.42	27.800		
5,600.00	5,198.68	5,455.59	5,405.46	34.31	25.41	176.34	-490.37	-118.19	1,484.84	1,431.45	53.39	27.812		
5,700.00	5,289.95	5,551.69	5,500.59	34.97	25.87	176.34	-503.77	-120.51	1,512.51	1,458.15	54.36	27.823		
5,800.00	5,381.23	5,647.78	5,595.72	35.63	26.32	176.34	-517.16	-122.84	1,540.18	1,484.85	55.33	27.834		
5,900.00	5,472.50	5,743.88	5,690.84	36.30	26.77	176.35	-530.56	-125.16	1,567.85	1,511.54	56.31	27.844		
6,000.00	5,563.77	5,839.97	5,785.97	36.96	27.22	176.35	-543.95	-127.49	1,595.52	1,538.24	57.28	27.854		
6,100.00	5,655.05	5,936.07	5,881.10	37.62	27.68	176.36	-557.35	-129.82	1,623.19	1,564.93	58.26	27.863		
6,200.00	5,746.32	6,032.17	5,976.23	38.28	28.13	176.36	-570.74	-132.14	1,650.86	1,591.63	59.23	27.872		
6,300.00	5,837.59	6,128.26	6,071.36	38.95	28.58	176.36	-584.14	-134.47	1,678.53	1,618.32	60.21	27.880		
6,400.00	5,928.86	6,224.36	6,166.49	39.61	29.03	176.37	-597.53	-136.79	1,706.20	1,645.02	61.18	27.888		
6,500.00	6,020.14	6,320.45	6,261.62	40.27	29.49	176.37	-610.93	-139.12	1,733.87	1,671.71	62.16	27.895		
6,600.00	6,111.41	6,416.55	6,356.75	40.94	29.94	176.37	-624.33	-141.44	1,761.54	1,698.41	63.13	27.902		
6,700.00	6,202.68	6,512.66	6,451.89	41.60	30.39	176.38	-637.72	-143.77	1,789.21	1,725.10	64.11	27.909		
6,800.00	6,293.96	6,608.52	6,546.22	42.26	30.84	176.13	-651.07	-153.63	1,816.88	1,751.79	65.09	27.915		
6,900.00	6,385.23	6,700.17	6,634.04	42.93	31.26	175.47	-663.62	-176.32	1,844.72	1,778.70	66.02	27.943		
7,000.00	6,476.50	6,784.45	6,711.18	43.59	31.61	174.53	-674.74	-208.23	1,873.16	1,806.30	66.87	28.013		
7,100.00	6,567.77	6,859.66	6,775.96	44.25	31.91	173.43	-684.17	-245.18	1,902.77	1,835.15	67.62	28.140		
7,200.00	6,658.64	6,928.31	6,830.94	44.91	32.17	152.80	-692.25	-285.42	1,933.56	1,865.28	68.28	28.319		
7,300.00	6,747.14	6,995.18	6,880.07	45.52	32.41	133.91	-699.54	-330.16	1,964.30	1,895.42	68.88	28.517		
7,400.00	6,831.10	7,060.82	6,923.50	46.07	32.64	119.85	-706.07	-378.90	1,993.95	1,924.52	69.43	28.718		
7,500.00	6,908.46	7,125.61	6,961.27	46.54	32.87	109.59	-711.83	-431.18	2,021.60	1,951.65	69.95	28.899		
7,600.00	6,977.30	7,189.79	6,993.31	46.95	33.13	102.05	-716.82	-486.54	2,046.42	1,975.93	70.49	29.032		
7,700.00	7,035.93	7,250.00	7,018.20	47.30	33.44	96.53	-720.79	-541.19	2,067.69	1,996.64	71.05	29.103		
7,800.00	7,082.92	7,317.06	7,039.76	47.59	33.89	92.54	-724.37	-604.56	2,084.83	2,012.96	71.87	29.009		
7,900.00	7,117.09	7,380.36	7,053.96	47.84	34.43	89.86	-726.90	-666.17	2,097.38	2,024.53	72.85	28.792		
8,000.00	7,137.62	7,443.54	7,062.01	48.06	35.05	88.32	-728.58	-728.79	2,105.02	2,030.93	74.08	28.414		
8,100.00	7,143.99	7,512.47	7,063.93	48.28	35.83	87.82	-729.45	-797.66	2,107.52	2,031.82	75.69	27.842		
8,200.00	7,143.45	7,612.47	7,063.54	48.53	37.13	87.83	-730.26	-897.65	2,107.29	2,029.16	78.12	26.974		
8,300.00	7,142.91	7,712.47	7,063.15	48.89	38.60	87.83	-731.07	-997.65	2,107.06	2,026.18	80.88	26.051		
8,400.00	7,142.37	7,812.47	7,062.76	49.40	40.22	87.83	-731.88	-1,097.64	2,106.83	2,022.89	83.94	25.099		
8,500.00	7,141.83	7,912.47	7,062.36	50.12	41.98	87.84	-732.69	-1,197.64	2,106.60	2,019.34	87.26	24.141		
8,600.00	7,141.29	8,012.47	7,061.97	51.08	43.86	87.84	-733.51	-1,297.64	2,106.37	2,015.55	90.82	23.192		
8,700.00	7,140.75	8,112.47	7,061.58	52.30	45.84	87.85	-734.32	-1,397.63	2,106.14	2,011.54	94.60	22.264		
8,800.00	7,140.21	8,212.47	7,061.18	53.75	47.92	87.85	-735.13	-1,497.63	2,105.91	2,007.36	98.55	21.368		
8,900.00	7,139.67	8,312.47	7,060.79	55.40	50.06	87.85	-735.94	-1,597.62	2,105.68	2,003.00	102.68	20.508		
9,000.00	7,139.12	8,412.47	7,060.40	57.20	52.28	87.86	-736.75	-1,697.62	2,105.45	1,998.51	106.95	19.687		
9,100.00	7,138.58	8,512.47	7,060.00	59.13	54.56	87.86	-737.56	-1,797.61	2,105.22	1,993.88	111.34	18.907		
9,200.00	7,138.04	8,612.47	7,059.61	61.15	56.89	87.87	-738.38	-1,897.61	2,105.00	1,989.14	115.86	18.169		
9,300.00	7,137.50	8,712.47	7,059.22	63.26	59.27	87.87	-739.19	-1,997.60	2,104.77	1,984.29	120.47	17.471		
9,400.00	7,136.96	8,812.47	7,058.82	65.44	61.69	87.87	-740.00	-2,097.60	2,104.54	1,979.36	125.18	16.813		
9,500.00	7,136.42	8,912.47	7,058.43	67.68	64.14	87.88	-740.81	-2,197.60	2,104.31	1,974.35	129.96	16.192		
9,600.00	7,135.88	9,012.47	7,058.04	69.97	66.63	87.88	-741.62	-2,297.59	2,104.08	1,969.26	134.82	15.607		
9,700.00	7,135.34	9,112.46	7,057.64	72.31	69.14	87.88	-742.43	-2,397.59	2,103.85	1,964.11	139.74	15.055		
9,800.00	7,134.80	9,212.46	7,057.25	74.69	71.69	87.89	-743.25	-2,497.58	2,103.62	1,958.90	144.72	14.536		
9,900.00	7,134.26	9,312.46	7,056.86	77.10	74.25	87.89	-744.06	-2,597.58	2,103.39	1,953.64	149.76	14.045		
10,000.00	7,133.71	9,412.46	7,056.46	79.54	76.83	87.89	-744.87	-2,697.57	2,103.16	1,948.33	154.84	13.583		
10,100.00	7,133.17	9,512.46	7,056.07	82.02	79.44	87.90	-745.68	-2,797.57	2,102.93	1,942.97	159.96	13.147		
10,200.00	7,132.63	9,612.46	7,055.68	84.52	82.06	87.90	-746.49	-2,897.56	2,102.70	1,937.58	165.12	12.734		
10,300.00	7,132.09	9,712.46	7,055.29	87.04	84.70	87.91	-747.30	-2,997.56	2,102.48	1,932.16	170.32	12.344		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,131.55	9,812.46	7,054.89	89.58	87.35	87.91	-748.12	-3,097.56	2,102.25	1,926.70	175.55	11.975		
10,500.00	7,131.01	9,912.46	7,054.50	92.15	90.01	87.91	-748.93	-3,197.55	2,102.02	1,921.21	180.80	11.626		
10,600.00	7,130.47	10,012.46	7,054.11	94.73	92.68	87.92	-749.74	-3,297.55	2,101.79	1,915.70	186.09	11.294		
10,700.00	7,129.93	10,112.46	7,053.71	97.33	95.37	87.92	-750.55	-3,397.54	2,101.56	1,910.16	191.40	10.980		
10,800.00	7,129.39	10,212.46	7,053.32	99.94	98.06	87.93	-751.36	-3,497.54	2,101.33	1,904.60	196.73	10.681		
10,900.00	7,128.84	10,312.46	7,052.93	102.56	100.77	87.93	-752.17	-3,597.53	2,101.10	1,899.02	202.09	10.397		
11,000.00	7,128.30	10,412.46	7,052.53	105.20	103.48	87.93	-752.99	-3,697.53	2,100.87	1,893.41	207.46	10.127		
11,100.00	7,127.76	10,512.46	7,052.14	107.85	106.20	87.94	-753.80	-3,797.52	2,100.64	1,887.79	212.85	9.869		
11,200.00	7,127.22	10,612.46	7,051.75	110.51	108.93	87.94	-754.61	-3,897.52	2,100.41	1,882.16	218.26	9.624		
11,300.00	7,126.68	10,712.46	7,051.35	113.18	111.66	87.95	-755.42	-3,997.52	2,100.19	1,876.51	223.68	9.389		
11,400.00	7,126.14	10,812.46	7,050.96	115.86	114.40	87.95	-756.23	-4,097.51	2,099.96	1,870.84	229.12	9.165		
11,500.00	7,125.60	10,912.46	7,050.57	118.55	117.15	87.95	-757.05	-4,197.51	2,099.73	1,865.16	234.57	8.952		
11,600.00	7,125.06	11,012.46	7,050.17	121.25	119.90	87.96	-757.86	-4,297.50	2,099.50	1,859.47	240.03	8.747		
11,700.00	7,124.52	11,112.46	7,049.78	123.95	122.65	87.96	-758.67	-4,397.50	2,099.27	1,853.77	245.50	8.551		
11,800.00	7,123.97	11,212.46	7,049.39	126.66	125.41	87.96	-759.48	-4,497.49	2,099.04	1,848.05	250.99	8.363		
11,900.00	7,123.43	11,312.46	7,048.99	129.38	128.18	87.97	-760.29	-4,597.49	2,098.81	1,842.33	256.48	8.183		
12,000.00	7,122.89	11,412.46	7,048.60	132.10	130.95	87.97	-761.10	-4,697.48	2,098.58	1,836.60	261.99	8.010		
12,100.00	7,122.35	11,512.46	7,048.21	134.83	133.72	87.98	-761.92	-4,797.48	2,098.35	1,830.85	267.50	7.844		
12,200.00	7,121.81	11,612.46	7,047.82	137.56	136.49	87.98	-762.73	-4,897.48	2,098.12	1,825.10	273.02	7.685		
12,300.00	7,121.27	11,712.46	7,047.42	140.30	139.27	87.98	-763.54	-4,997.47	2,097.90	1,819.35	278.55	7.531		
12,400.00	7,120.73	11,812.46	7,047.03	143.05	142.06	87.99	-764.35	-5,097.47	2,097.67	1,813.58	284.09	7.384		
12,500.00	7,120.19	11,912.45	7,046.64	145.80	144.84	87.99	-765.16	-5,197.46	2,097.44	1,807.81	289.63	7.242		
12,600.00	7,119.65	12,012.45	7,046.24	148.55	147.63	87.99	-765.97	-5,297.46	2,097.21	1,802.03	295.18	7.105		
12,700.00	7,119.10	12,112.45	7,045.85	151.30	150.42	88.00	-766.79	-5,397.45	2,096.98	1,796.24	300.74	6.973		
12,800.00	7,118.56	12,212.45	7,045.46	154.07	153.21	88.00	-767.60	-5,497.45	2,096.75	1,790.45	306.30	6.845		
12,900.00	7,118.02	12,312.45	7,045.06	156.83	156.01	88.01	-768.41	-5,597.45	2,096.52	1,784.66	311.87	6.722		
13,000.00	7,117.48	12,412.45	7,044.67	159.60	158.81	88.01	-769.22	-5,697.44	2,096.29	1,778.85	317.44	6.604		
13,100.00	7,116.94	12,512.45	7,044.28	162.37	161.61	88.01	-770.03	-5,797.44	2,096.07	1,773.05	323.02	6.489		
13,200.00	7,116.40	12,612.45	7,043.88	165.14	164.41	88.02	-770.84	-5,897.43	2,095.84	1,767.24	328.60	6.378		
13,300.00	7,115.86	12,712.45	7,043.49	167.92	167.21	88.02	-771.66	-5,997.43	2,095.61	1,761.42	334.19	6.271		
13,400.00	7,115.32	12,812.45	7,043.10	170.70	170.02	88.03	-772.47	-6,097.42	2,095.38	1,755.60	339.78	6.167		
13,500.00	7,114.78	12,912.45	7,042.70	173.48	172.83	88.03	-773.28	-6,197.42	2,095.15	1,749.77	345.38	6.066		
13,600.00	7,114.24	13,012.45	7,042.31	176.26	175.63	88.03	-774.09	-6,297.41	2,094.92	1,743.95	350.98	5.969		
13,700.00	7,113.69	13,112.45	7,041.92	179.05	178.44	88.04	-774.90	-6,397.41	2,094.69	1,738.11	356.58	5.874		
13,800.00	7,113.15	13,212.45	7,041.52	181.84	181.26	88.04	-775.72	-6,497.41	2,094.46	1,732.28	362.19	5.783		
13,900.00	7,112.61	13,312.45	7,041.13	184.63	184.07	88.04	-776.53	-6,597.40	2,094.24	1,726.44	367.80	5.694		
14,000.00	7,112.07	13,412.45	7,040.74	187.42	186.88	88.05	-777.34	-6,697.40	2,094.01	1,720.60	373.41	5.608		
14,100.00	7,111.53	13,512.45	7,040.34	190.22	189.70	88.05	-778.15	-6,797.39	2,093.78	1,714.75	379.03	5.524		
14,200.00	7,110.99	13,612.45	7,039.95	193.01	192.52	88.06	-778.96	-6,897.39	2,093.55	1,708.90	384.65	5.443		
14,300.00	7,110.45	13,712.45	7,039.56	195.81	195.34	88.06	-779.77	-6,997.38	2,093.32	1,703.05	390.27	5.364		
14,400.00	7,109.91	13,812.45	7,039.17	198.61	198.16	88.06	-780.59	-7,097.38	2,093.09	1,697.20	395.89	5.287		
14,500.00	7,109.37	13,912.45	7,038.77	201.42	200.98	88.07	-781.40	-7,197.37	2,092.86	1,691.34	401.52	5.212		
14,600.00	7,108.82	14,012.45	7,038.38	204.22	203.80	88.07	-782.21	-7,297.37	2,092.63	1,685.48	407.15	5.140		
14,700.00	7,108.28	14,112.45	7,037.99	207.03	206.62	88.08	-783.02	-7,397.37	2,092.41	1,679.62	412.78	5.069		
14,800.00	7,107.74	14,212.45	7,037.59	209.83	209.45	88.08	-783.83	-7,497.36	2,092.18	1,673.76	418.42	5.000		
14,900.00	7,107.20	14,312.45	7,037.20	212.64	212.27	88.08	-784.64	-7,597.36	2,091.95	1,667.89	424.06	4.933		
15,000.00	7,106.66	14,412.45	7,036.81	215.45	215.10	88.09	-785.46	-7,697.35	2,091.72	1,662.03	429.69	4.868		
15,100.00	7,106.12	14,512.45	7,036.41	218.26	217.92	88.09	-786.27	-7,797.35	2,091.49	1,656.16	435.34	4.804		
15,200.00	7,105.58	14,612.45	7,036.02	221.07	220.75	88.09	-787.08	-7,897.34	2,091.26	1,650.28	440.98	4.742		
15,300.00	7,105.04	14,712.44	7,035.63	223.89	223.58	88.10	-787.89	-7,997.34	2,091.03	1,644.41	446.62	4.682		
15,400.00	7,104.50	14,812.44	7,035.23	226.70	226.41	88.10	-788.70	-8,097.33	2,090.81	1,638.54	452.27	4.623		
15,466.51	7,104.14	14,878.96	7,034.97	228.57	228.29	88.10	-789.24	-8,163.84	2,090.65	1,634.63	456.03	4.584		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	14,871.88	7,035.00	229.28	228.09	88.10	-789.19	-8,156.77	2,090.84	1,634.55	456.29	4.582 SF	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.51	280.15	2.50	280.17					
100.00	100.00	102.00	100.00	3.28	3.29	0.51	280.15	2.50	280.17	273.60	6.57	42.644		
200.00	200.00	202.00	200.00	3.34	3.34	0.51	280.15	2.50	280.17	273.49	6.68	41.968 CC, ES		
300.00	299.98	301.98	299.98	3.44	3.45	177.39	280.15	2.50	281.91	275.02	6.89	40.930		
400.00	399.84	401.84	399.84	3.59	3.61	177.44	280.15	2.50	287.14	279.94	7.20	39.886		
500.00	499.45	501.45	499.45	3.79	3.81	177.50	280.15	2.50	295.84	288.24	7.60	38.918		
600.00	598.70	603.13	601.13	4.03	4.05	177.59	280.06	2.48	307.94	299.85	8.09	38.086		
700.00	697.47	714.19	712.14	4.31	4.33	177.59	277.09	1.79	320.92	312.27	8.65	37.111		
800.00	795.62	825.84	823.54	4.64	4.65	177.46	269.89	0.10	333.59	324.30	9.29	35.920		
900.00	893.06	933.37	930.49	5.00	4.98	177.23	259.17	-2.40	346.18	336.21	9.97	34.733		
1,000.00	989.64	1,032.18	1,028.70	5.40	5.31	177.03	248.50	-4.89	361.43	350.78	10.65	33.928		
1,100.00	1,085.27	1,130.41	1,126.33	5.83	5.65	176.86	237.90	-7.37	380.12	368.75	11.37	33.419		
1,200.00	1,179.82	1,227.93	1,223.24	6.29	6.01	176.74	227.37	-9.83	402.23	390.10	12.13	33.162		
1,300.00	1,273.17	1,324.62	1,319.34	6.79	6.37	176.64	216.93	-12.27	427.72	414.81	12.91	33.131		
1,400.00	1,365.21	1,420.36	1,414.49	7.33	6.74	176.58	206.59	-14.69	456.57	442.85	13.71	33.295		
1,500.00	1,456.49	1,515.54	1,509.08	7.89	7.12	176.56	196.32	-17.09	487.26	472.73	14.53	33.535		
1,600.00	1,547.76	1,610.71	1,603.66	8.46	7.51	176.55	186.04	-19.49	517.96	502.60	15.36	33.723		
1,700.00	1,639.04	1,705.88	1,698.24	9.05	7.90	176.55	175.77	-21.89	548.66	532.46	16.20	33.859		
1,800.00	1,730.31	1,801.05	1,792.83	9.65	8.29	176.54	165.50	-24.29	579.36	562.30	17.06	33.956		
1,900.00	1,821.58	1,903.78	1,887.41	10.26	8.72	176.53	155.22	-26.69	610.06	592.10	17.96	33.964		
2,000.00	1,912.85	2,008.61	1,982.00	10.87	9.17	176.52	144.95	-29.09	640.76	621.88	18.88	33.937		
2,100.00	2,004.13	2,086.56	2,076.58	11.49	9.50	176.52	134.67	-31.49	671.46	651.77	19.70	34.090		
2,200.00	2,095.40	2,181.73	2,171.17	12.11	9.91	176.51	124.40	-33.89	702.16	681.57	20.59	34.100		
2,300.00	2,186.67	2,276.90	2,265.75	12.74	10.32	176.51	114.12	-36.29	732.86	711.37	21.49	34.099		
2,400.00	2,277.95	2,372.07	2,360.33	13.38	10.73	176.50	103.85	-38.69	763.56	741.17	22.40	34.090		
2,500.00	2,369.22	2,467.24	2,454.92	14.01	11.15	176.50	93.58	-41.10	794.26	770.96	23.31	34.075		
2,600.00	2,460.49	2,562.41	2,549.50	14.65	11.57	176.50	83.30	-43.50	824.97	800.74	24.23	34.054		
2,700.00	2,551.77	2,657.59	2,644.09	15.29	11.99	176.49	73.03	-45.90	855.67	830.52	25.14	34.030		
2,800.00	2,643.04	2,752.76	2,738.67	15.93	12.41	176.49	62.75	-48.30	886.37	860.30	26.07	34.003		
2,900.00	2,734.31	2,847.93	2,833.25	16.58	12.83	176.49	52.48	-50.70	917.07	890.07	26.99	33.974		
3,000.00	2,825.58	2,943.10	2,927.84	17.23	13.25	176.48	42.20	-53.10	947.77	919.85	27.92	33.943		
3,100.00	2,916.86	3,038.27	3,022.42	17.87	13.68	176.48	31.93	-55.50	978.47	949.61	28.85	33.912		
3,200.00	3,008.13	3,133.44	3,117.01	18.52	14.10	176.48	21.65	-57.90	1,009.17	979.38	29.79	33.880		
3,300.00	3,099.40	3,228.61	3,211.59	19.17	14.53	176.48	11.38	-60.30	1,039.87	1,009.15	30.72	33.847		
3,400.00	3,190.68	3,323.78	3,306.17	19.83	14.96	176.47	1.11	-62.70	1,070.57	1,038.91	31.66	33.815		
3,500.00	3,281.95	3,418.95	3,400.76	20.48	15.38	176.47	-9.17	-65.10	1,101.27	1,068.67	32.60	33.782		
3,600.00	3,373.22	3,514.12	3,495.34	21.13	15.81	176.47	-19.44	-67.51	1,131.97	1,098.43	33.54	33.750		
3,700.00	3,464.49	3,609.29	3,589.93	21.79	16.24	176.47	-29.72	-69.91	1,162.67	1,128.19	34.48	33.718		
3,800.00	3,555.77	3,704.46	3,684.51	22.44	16.67	176.47	-39.99	-72.31	1,193.37	1,157.95	35.43	33.686		
3,900.00	3,647.04	3,800.37	3,779.09	23.10	17.11	176.46	-50.27	-74.71	1,224.07	1,187.70	36.37	33.652		
4,000.00	3,738.31	3,894.81	3,873.68	23.75	17.53	176.46	-60.54	-77.11	1,254.77	1,217.46	37.32	33.625		
4,100.00	3,829.59	3,989.98	3,968.26	24.41	17.96	176.46	-70.81	-79.51	1,285.47	1,247.21	38.26	33.595		
4,200.00	3,920.86	4,085.15	4,062.85	25.07	18.40	176.46	-81.09	-81.91	1,316.17	1,276.96	39.21	33.566		
4,300.00	4,012.13	4,180.32	4,157.43	25.73	18.83	176.46	-91.36	-84.31	1,346.87	1,306.71	40.16	33.537		
4,400.00	4,103.41	4,275.49	4,252.02	26.38	19.26	176.46	-101.64	-86.71	1,377.57	1,336.46	41.11	33.509		
4,500.00	4,194.68	4,370.66	4,346.60	27.04	19.69	176.46	-111.91	-89.11	1,408.28	1,366.21	42.06	33.481		
4,600.00	4,285.95	4,465.83	4,441.18	27.70	20.13	176.45	-122.19	-91.51	1,438.98	1,395.96	43.01	33.454		
4,700.00	4,377.22	4,561.00	4,535.77	28.36	20.56	176.45	-132.46	-93.91	1,469.68	1,425.71	43.97	33.428		
4,800.00	4,468.50	4,656.17	4,630.35	29.02	20.99	176.45	-142.74	-96.32	1,500.38	1,455.46	44.92	33.403		
4,900.00	4,559.77	4,751.34	4,724.94	29.68	21.43	176.45	-153.01	-98.72	1,531.08	1,485.21	45.87	33.378		
5,000.00	4,651.04	4,846.51	4,819.52	30.34	21.86	176.45	-163.28	-101.12	1,561.78	1,514.95	46.83	33.353		
5,100.00	4,742.32	4,941.68	4,914.10	31.00	22.29	176.45	-173.56	-103.52	1,592.48	1,544.70	47.78	33.329		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	5,036.85	5,008.69	31.66	22.73	176.45	-183.83	-105.92	1,623.18	1,574.44	48.74	33.306		
5,300.00	4,924.86	5,132.03	5,103.27	32.32	23.16	176.45	-194.11	-108.32	1,653.88	1,604.19	49.69	33.283		
5,400.00	5,016.13	5,227.20	5,197.86	32.99	23.60	176.45	-204.38	-110.72	1,684.58	1,633.93	50.65	33.261		
5,500.00	5,107.41	5,322.37	5,292.44	33.65	24.03	176.45	-214.66	-113.12	1,715.28	1,663.68	51.60	33.240		
5,600.00	5,198.68	5,417.54	5,387.02	34.31	24.47	176.44	-224.93	-115.52	1,745.98	1,693.42	52.56	33.218		
5,700.00	5,289.95	5,512.71	5,481.61	34.97	24.90	176.44	-235.20	-117.92	1,776.68	1,723.16	53.52	33.198		
5,800.00	5,381.23	5,607.88	5,576.19	35.63	25.34	176.44	-245.48	-120.32	1,807.38	1,752.91	54.48	33.178		
5,900.00	5,472.50	5,703.05	5,670.78	36.30	25.78	176.44	-255.75	-122.73	1,838.08	1,782.65	55.43	33.158		
6,000.00	5,563.77	5,801.78	5,765.36	36.96	26.23	176.44	-266.03	-125.13	1,868.78	1,812.37	56.41	33.129		
6,100.00	5,655.05	5,906.61	5,859.94	37.62	26.71	176.44	-276.30	-127.53	1,899.48	1,842.07	57.41	33.086		
6,200.00	5,746.32	5,988.56	5,954.53	38.28	27.08	176.44	-286.58	-129.93	1,930.18	1,871.87	58.31	33.102		
6,300.00	5,837.59	6,083.73	6,049.11	38.95	27.52	176.44	-296.85	-132.33	1,960.89	1,901.61	59.27	33.084		
6,400.00	5,928.86	6,178.90	6,143.70	39.61	27.96	176.44	-307.12	-134.73	1,991.59	1,931.36	60.23	33.066		
6,500.00	6,020.14	6,274.08	6,238.28	40.27	28.39	176.44	-317.40	-137.13	2,022.29	1,961.10	61.19	33.049		
6,600.00	6,111.41	6,369.25	6,332.87	40.94	28.83	176.44	-327.67	-139.53	2,052.99	1,990.84	62.15	33.032		
6,700.00	6,202.68	6,464.42	6,427.45	41.60	29.27	176.44	-337.95	-141.93	2,083.69	2,020.58	63.11	33.016		
6,800.00	6,293.96	6,559.69	6,522.14	42.26	29.70	176.43	-348.23	-144.41	2,114.39	2,050.31	64.07	32.999		
6,900.00	6,385.23	6,655.00	6,616.17	42.93	30.14	176.19	-358.52	-155.35	2,145.08	2,080.04	65.04	32.982		
7,000.00	6,476.50	6,745.84	6,703.32	43.59	30.54	175.61	-368.16	-178.80	2,175.90	2,109.95	65.95	32.993		
7,100.00	6,567.77	6,829.20	6,779.62	44.25	30.89	174.79	-376.70	-211.09	2,207.25	2,140.46	66.79	33.050		
7,200.00	6,658.64	6,906.15	6,845.79	44.91	31.19	154.26	-384.19	-249.57	2,239.20	2,171.65	67.55	33.151		
7,300.00	6,747.14	6,980.83	6,905.12	45.52	31.47	135.45	-390.99	-294.33	2,270.79	2,202.53	68.26	33.267		
7,400.00	6,831.10	7,053.93	6,957.76	46.07	31.74	121.47	-397.11	-344.62	2,301.08	2,232.15	68.93	33.382		
7,500.00	6,908.46	7,125.91	7,003.66	46.54	32.02	111.26	-402.55	-399.75	2,329.20	2,259.60	69.59	33.469		
7,600.00	6,977.30	7,197.13	7,042.70	46.95	32.34	103.77	-407.27	-459.09	2,354.36	2,284.08	70.28	33.501		
7,700.00	7,035.93	7,267.83	7,074.69	47.30	32.76	98.28	-411.25	-521.96	2,375.88	2,304.82	71.06	33.435		
7,800.00	7,082.92	7,338.17	7,099.45	47.59	33.28	94.34	-414.48	-587.69	2,393.20	2,321.21	71.99	33.243		
7,900.00	7,117.09	7,408.28	7,116.80	47.84	33.92	91.68	-416.92	-655.54	2,405.87	2,332.73	73.14	32.894		
8,000.00	7,137.62	7,478.23	7,126.62	48.06	34.66	90.14	-418.56	-724.74	2,413.56	2,339.02	74.55	32.377		
8,100.00	7,143.99	7,553.16	7,128.92	48.28	35.54	89.64	-419.42	-799.59	2,416.07	2,339.79	76.29	31.671		
8,200.00	7,143.45	7,653.16	7,128.49	48.53	36.88	89.65	-420.20	-899.59	2,415.88	2,337.13	78.75	30.679		
8,300.00	7,142.91	7,753.16	7,128.06	48.89	38.38	89.65	-420.98	-999.58	2,415.69	2,334.17	81.52	29.633		
8,400.00	7,142.37	7,853.16	7,127.62	49.40	40.03	89.65	-421.75	-1,099.58	2,415.50	2,330.91	84.59	28.555		
8,500.00	7,141.83	7,953.16	7,127.19	50.12	41.81	89.65	-422.53	-1,199.58	2,415.31	2,327.39	87.92	27.471		
8,600.00	7,141.29	8,053.16	7,126.75	51.08	43.71	89.66	-423.31	-1,299.57	2,415.12	2,323.63	91.49	26.397		
8,700.00	7,140.75	8,153.16	7,126.32	52.30	45.71	89.66	-424.09	-1,399.57	2,414.93	2,319.66	95.27	25.348		
8,800.00	7,140.21	8,253.16	7,125.89	53.75	47.79	89.66	-424.86	-1,499.56	2,414.74	2,315.51	99.23	24.334		
8,900.00	7,139.67	8,353.16	7,125.45	55.40	49.95	89.66	-425.64	-1,599.56	2,414.55	2,311.19	103.36	23.361		
9,000.00	7,139.12	8,453.16	7,125.02	57.20	52.18	89.67	-426.42	-1,699.56	2,414.36	2,306.73	107.63	22.432		
9,100.00	7,138.58	8,553.16	7,124.58	59.13	54.47	89.67	-427.20	-1,799.55	2,414.17	2,302.14	112.03	21.550		
9,200.00	7,138.04	8,653.16	7,124.15	61.15	56.81	89.67	-427.97	-1,899.55	2,413.98	2,297.44	116.54	20.714		
9,300.00	7,137.50	8,753.15	7,123.72	63.26	59.20	89.67	-428.75	-1,999.54	2,413.79	2,292.64	121.16	19.923		
9,400.00	7,136.96	8,853.15	7,123.28	65.44	61.63	89.68	-429.53	-2,099.54	2,413.60	2,287.74	125.86	19.177		
9,500.00	7,136.42	8,953.15	7,122.85	67.68	64.09	89.68	-430.31	-2,199.53	2,413.41	2,282.77	130.64	18.473		
9,600.00	7,135.88	9,053.15	7,122.41	69.97	66.58	89.68	-431.08	-2,299.53	2,413.22	2,277.72	135.50	17.809		
9,700.00	7,135.34	9,153.15	7,121.98	72.31	69.10	89.68	-431.86	-2,399.53	2,413.03	2,272.61	140.42	17.184		
9,800.00	7,134.80	9,253.15	7,121.55	74.69	71.65	89.69	-432.64	-2,499.52	2,412.84	2,267.44	145.40	16.594		
9,900.00	7,134.26	9,353.15	7,121.11	77.10	74.22	89.69	-433.41	-2,599.52	2,412.65	2,262.22	150.44	16.038		
10,000.00	7,133.71	9,453.15	7,120.68	79.54	76.81	89.69	-434.19	-2,699.51	2,412.46	2,256.95	155.51	15.513		
10,100.00	7,133.17	9,553.15	7,120.24	82.02	79.42	89.69	-434.97	-2,799.51	2,412.27	2,251.63	160.64	15.017		
10,200.00	7,132.63	9,653.15	7,119.81	84.52	82.05	89.70	-435.75	-2,899.51	2,412.08	2,246.28	165.80	14.548		
10,300.00	7,132.09	9,753.15	7,119.38	87.04	84.69	89.70	-436.52	-2,999.50	2,411.89	2,240.90	170.99	14.105		

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



Anticollision Report



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Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,131.55	9,853.15	7,118.94	89.58	87.34	89.70	-437.30	-3,099.50	2,411.70	2,235.48	176.22	13.686		
10,500.00	7,131.01	9,953.15	7,118.51	92.15	90.01	89.70	-438.08	-3,199.49	2,411.51	2,230.03	181.48	13.288		
10,600.00	7,130.47	10,053.15	7,118.07	94.73	92.69	89.71	-438.86	-3,299.49	2,411.32	2,224.56	186.76	12.911		
10,700.00	7,129.93	10,153.15	7,117.64	97.33	95.38	89.71	-439.63	-3,399.48	2,411.13	2,219.06	192.07	12.553		
10,800.00	7,129.39	10,253.15	7,117.21	99.94	98.08	89.71	-440.41	-3,499.48	2,410.94	2,213.54	197.41	12.213		
10,900.00	7,128.84	10,353.15	7,116.77	102.56	100.78	89.71	-441.19	-3,599.48	2,410.75	2,207.99	202.76	11.890		
11,000.00	7,128.30	10,453.15	7,116.34	105.20	103.50	89.72	-441.97	-3,699.47	2,410.56	2,202.43	208.13	11.582		
11,100.00	7,127.76	10,553.15	7,115.91	107.85	106.22	89.72	-442.74	-3,799.47	2,410.37	2,196.85	213.52	11.289		
11,200.00	7,127.22	10,653.15	7,115.47	110.51	108.95	89.72	-443.52	-3,899.46	2,410.18	2,191.25	218.93	11.009		
11,300.00	7,126.68	10,753.15	7,115.04	113.18	111.69	89.72	-444.30	-3,999.46	2,409.99	2,185.64	224.35	10.742		
11,400.00	7,126.14	10,853.15	7,114.60	115.86	114.43	89.73	-445.08	-4,099.45	2,409.80	2,180.01	229.79	10.487		
11,500.00	7,125.60	10,953.15	7,114.17	118.55	117.18	89.73	-445.85	-4,199.45	2,409.61	2,174.37	235.24	10.243		
11,600.00	7,125.06	11,053.15	7,113.74	121.25	119.93	89.73	-446.63	-4,299.45	2,409.42	2,168.72	240.70	10.010		
11,700.00	7,124.52	11,153.15	7,113.30	123.95	122.69	89.73	-447.41	-4,399.44	2,409.23	2,163.06	246.17	9.787		
11,800.00	7,123.97	11,253.15	7,112.87	126.66	125.45	89.74	-448.18	-4,499.44	2,409.04	2,157.38	251.66	9.573		
11,900.00	7,123.43	11,353.15	7,112.43	129.38	128.22	89.74	-448.96	-4,599.43	2,408.85	2,151.70	257.15	9.367		
12,000.00	7,122.89	11,453.15	7,112.00	132.10	130.99	89.74	-449.74	-4,699.43	2,408.66	2,146.00	262.66	9.170		
12,100.00	7,122.35	11,553.15	7,111.57	134.83	133.76	89.74	-450.52	-4,799.43	2,408.47	2,140.30	268.17	8.981		
12,200.00	7,121.81	11,653.15	7,111.13	137.56	136.54	89.75	-451.29	-4,899.42	2,408.28	2,134.59	273.69	8.799		
12,300.00	7,121.27	11,753.15	7,110.70	140.30	139.32	89.75	-452.07	-4,999.42	2,408.09	2,128.87	279.22	8.624		
12,400.00	7,120.73	11,853.15	7,110.26	143.05	142.10	89.75	-452.85	-5,099.41	2,407.90	2,123.14	284.76	8.456		
12,500.00	7,120.19	11,953.15	7,109.83	145.80	144.89	89.75	-453.63	-5,199.41	2,407.71	2,117.41	290.30	8.294		
12,600.00	7,119.65	12,053.15	7,109.40	148.55	147.68	89.76	-454.40	-5,299.40	2,407.52	2,111.67	295.85	8.138		
12,700.00	7,119.10	12,153.15	7,108.96	151.30	150.47	89.76	-455.18	-5,399.40	2,407.33	2,105.92	301.41	7.987		
12,800.00	7,118.56	12,253.15	7,108.53	154.07	153.27	89.76	-455.96	-5,499.40	2,407.14	2,100.17	306.97	7.842		
12,900.00	7,118.02	12,353.15	7,108.09	156.83	156.06	89.76	-456.74	-5,599.39	2,406.95	2,094.41	312.54	7.701		
13,000.00	7,117.48	12,453.15	7,107.66	159.60	158.86	89.77	-457.51	-5,699.39	2,406.76	2,088.65	318.11	7.566		
13,100.00	7,116.94	12,553.15	7,107.23	162.37	161.66	89.77	-458.29	-5,799.38	2,406.57	2,082.88	323.69	7.435		
13,200.00	7,116.40	12,653.15	7,106.79	165.14	164.47	89.77	-459.07	-5,899.38	2,406.38	2,077.11	329.28	7.308		
13,300.00	7,115.86	12,753.15	7,106.36	167.92	167.27	89.77	-459.85	-5,999.37	2,406.19	2,071.33	334.86	7.186		
13,400.00	7,115.32	12,853.15	7,105.93	170.70	170.08	89.78	-460.62	-6,099.37	2,406.00	2,065.55	340.46	7.067		
13,500.00	7,114.78	12,953.15	7,105.49	173.48	172.89	89.78	-461.40	-6,199.37	2,405.81	2,059.76	346.05	6.952		
13,600.00	7,114.24	13,053.14	7,105.06	176.26	175.70	89.78	-462.18	-6,299.36	2,405.62	2,053.97	351.65	6.841		
13,700.00	7,113.69	13,153.14	7,104.62	179.05	178.51	89.78	-462.95	-6,399.36	2,405.43	2,048.18	357.26	6.733		
13,800.00	7,113.15	13,253.14	7,104.19	181.84	181.32	89.79	-463.73	-6,499.35	2,405.24	2,042.38	362.86	6.628		
13,900.00	7,112.61	13,353.14	7,103.76	184.63	184.14	89.79	-464.51	-6,599.35	2,405.05	2,036.58	368.48	6.527		
14,000.00	7,112.07	13,453.14	7,103.32	187.42	186.95	89.79	-465.29	-6,699.35	2,404.86	2,030.78	374.09	6.429		
14,100.00	7,111.53	13,553.14	7,102.89	190.22	189.77	89.79	-466.06	-6,799.34	2,404.67	2,024.97	379.71	6.333		
14,200.00	7,110.99	13,653.14	7,102.45	193.01	192.59	89.80	-466.84	-6,899.34	2,404.48	2,019.16	385.33	6.240		
14,300.00	7,110.45	13,753.14	7,102.02	195.81	195.41	89.80	-467.62	-6,999.33	2,404.30	2,013.35	390.95	6.150		
14,400.00	7,109.91	13,853.14	7,101.59	198.61	198.23	89.80	-468.40	-7,099.33	2,404.11	2,007.53	396.58	6.062		
14,500.00	7,109.37	13,953.14	7,101.15	201.42	201.05	89.80	-469.17	-7,199.32	2,403.92	2,001.71	402.20	5.977		
14,600.00	7,108.82	14,053.14	7,100.72	204.22	203.87	89.81	-469.95	-7,299.32	2,403.73	1,995.89	407.83	5.894		
14,700.00	7,108.28	14,153.14	7,100.28	207.03	206.69	89.81	-470.73	-7,399.32	2,403.54	1,990.07	413.47	5.813		
14,800.00	7,107.74	14,253.14	7,099.85	209.83	209.52	89.81	-471.51	-7,499.31	2,403.35	1,984.24	419.10	5.735		
14,900.00	7,107.20	14,353.14	7,099.42	212.64	212.34	89.81	-472.28	-7,599.31	2,403.16	1,978.42	424.74	5.658		
15,000.00	7,106.66	14,453.14	7,098.98	215.45	215.17	89.82	-473.06	-7,699.30	2,402.97	1,972.59	430.38	5.583		
15,100.00	7,106.12	14,553.14	7,098.55	218.26	218.00	89.82	-473.84	-7,799.30	2,402.78	1,966.76	436.02	5.511		
15,200.00	7,105.58	14,653.14	7,098.11	221.07	220.83	89.82	-474.62	-7,899.30	2,402.59	1,960.92	441.66	5.440		
15,300.00	7,105.04	14,753.14	7,097.68	223.89	223.65	89.83	-475.39	-7,999.29	2,402.40	1,955.09	447.31	5.371		
15,400.00	7,104.50	14,853.14	7,097.25	226.70	226.48	89.83	-476.17	-8,099.29	2,402.21	1,949.25	452.96	5.303		
15,466.30	7,104.14	14,919.44	7,096.96	228.57	228.36	89.83	-476.69	-8,165.59	2,402.08	1,945.38	456.70	5.260		

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



Anticollision Report



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

Offset Design	HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16C-M - OH - PLAN #1											Offset Site Error:	0.00 ft
Survey Program:	0-MWD+IFR1											Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	14,909.96	7,097.00	229.28	228.09	89.83	-476.61	-8,156.11	2,402.28	1,945.35	456.93	5.257 SF	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	1.00	0.00	3.28	3.28	0.60	80.15	0.83	80.16					
100.00	100.00	101.00	100.00	3.28	3.28	0.60	80.15	0.83	80.16	73.59	6.57	12.201		
200.00	200.00	201.03	200.03	3.34	3.34	0.60	80.15	0.83	80.16	73.48	6.67	12.009		
300.00	299.98	303.90	302.88	3.44	3.44	177.43	78.27	0.69	80.07	73.18	6.90	11.612		
400.00	399.84	406.76	405.59	3.59	3.60	177.34	72.71	0.26	79.89	72.66	7.23	11.051		
500.00	499.45	509.62	508.02	3.79	3.81	177.18	63.48	-0.44	79.62	71.95	7.67	10.382		
600.00	598.70	612.46	610.04	4.03	4.07	176.96	50.60	-1.43	79.25	71.05	8.20	9.669		
700.00	697.47	715.29	711.52	4.31	4.36	176.68	34.07	-2.70	78.79	69.99	8.80	8.957		
800.00	795.62	818.10	812.31	4.64	4.70	176.33	13.93	-4.25	78.24	68.78	9.46	8.274		
900.00	893.06	920.88	912.29	5.00	5.08	175.92	-9.81	-6.07	77.60	67.44	10.16	7.636		
1,000.00	989.64	1,023.63	1,011.33	5.40	5.50	175.43	-37.09	-8.16	76.88	65.96	10.91	7.045		
1,092.16	1,077.81	1,117.66	1,101.08	5.79	5.91	174.93	-65.05	-10.31	76.23	64.61	11.63	6.557 CC		
1,100.00	1,085.27	1,125.50	1,108.54	5.83	5.94	174.89	-67.45	-10.49	76.24	64.56	11.69	6.524 ES		
1,200.00	1,179.82	1,225.47	1,203.68	6.29	6.41	174.53	-98.06	-12.84	78.26	65.78	12.48	6.271		
1,300.00	1,273.17	1,325.32	1,298.70	6.79	6.89	174.41	-128.63	-15.18	83.74	70.43	13.31	6.290		
1,400.00	1,365.21	1,424.91	1,393.49	7.33	7.38	174.52	-159.12	-17.52	92.69	78.51	14.18	6.536		
1,500.00	1,456.49	1,524.32	1,488.09	7.89	7.88	174.72	-189.55	-19.86	103.57	88.49	15.08	6.869		
1,600.00	1,547.76	1,623.72	1,582.69	8.46	8.40	174.89	-219.98	-22.19	114.45	98.46	15.99	7.157		
1,700.00	1,639.04	1,723.13	1,677.30	9.05	8.92	175.03	-250.41	-24.53	125.33	108.40	16.93	7.405		
1,800.00	1,730.31	1,822.53	1,771.90	9.65	9.45	175.14	-280.85	-26.86	136.21	118.34	17.88	7.620		
1,900.00	1,821.58	1,921.94	1,866.51	10.26	9.98	175.24	-311.28	-29.20	147.10	128.26	18.84	7.808		
2,000.00	1,912.85	2,021.35	1,961.11	10.87	10.51	175.32	-341.71	-31.54	157.98	138.17	19.81	7.974		
2,100.00	2,004.13	2,120.75	2,055.71	11.49	11.06	175.40	-372.15	-33.87	168.86	148.07	20.80	8.120		
2,200.00	2,095.40	2,220.16	2,150.32	12.11	11.60	175.46	-402.58	-36.21	179.74	157.96	21.79	8.250		
2,300.00	2,186.67	2,319.56	2,244.92	12.74	12.15	175.52	-433.01	-38.54	190.63	167.84	22.79	8.366		
2,400.00	2,277.95	2,418.97	2,339.53	13.38	12.70	175.57	-463.44	-40.88	201.51	177.72	23.79	8.470		
2,500.00	2,369.22	2,518.37	2,434.13	14.01	13.25	175.61	-493.88	-43.21	212.40	187.59	24.80	8.563		
2,600.00	2,460.49	2,617.78	2,528.73	14.65	13.80	175.66	-524.31	-45.55	223.28	197.46	25.82	8.648		
2,700.00	2,551.77	2,717.19	2,623.34	15.29	14.36	175.69	-554.74	-47.88	234.16	207.32	26.84	8.724		
2,800.00	2,643.04	2,816.59	2,717.94	15.93	14.91	175.73	-585.18	-50.22	245.05	217.18	27.86	8.794		
2,900.00	2,734.31	2,916.00	2,812.54	16.58	15.47	175.76	-615.61	-52.55	255.93	227.04	28.89	8.858		
3,000.00	2,825.58	3,015.40	2,907.15	17.23	16.03	175.79	-646.04	-54.89	266.82	236.89	29.92	8.917		
3,100.00	2,916.86	3,114.81	3,001.75	17.87	16.59	175.81	-676.47	-57.22	277.70	246.74	30.96	8.970		
3,200.00	3,008.13	3,214.22	3,096.36	18.52	17.15	175.84	-706.91	-59.56	288.59	256.59	31.99	9.020		
3,300.00	3,099.40	3,313.62	3,190.96	19.17	17.72	175.86	-737.34	-61.89	299.47	266.44	33.03	9.066		
3,400.00	3,190.68	3,413.03	3,285.56	19.83	18.28	175.88	-767.77	-64.23	310.36	276.28	34.07	9.108		
3,500.00	3,281.95	3,512.43	3,380.17	20.48	18.84	175.90	-798.21	-66.56	321.24	286.12	35.12	9.148		
3,600.00	3,373.22	3,611.84	3,474.77	21.13	19.41	175.92	-828.64	-68.90	332.12	295.96	36.16	9.185		
3,700.00	3,464.49	3,711.24	3,569.38	21.79	19.97	175.94	-859.07	-71.23	343.01	305.80	37.21	9.219		
3,800.00	3,555.77	3,810.65	3,663.98	22.44	20.54	175.95	-889.50	-73.57	353.89	315.64	38.25	9.251		
3,900.00	3,647.04	3,910.06	3,758.58	23.10	21.11	175.97	-919.94	-75.90	364.78	325.48	39.30	9.281		
4,000.00	3,738.31	4,009.46	3,853.19	23.75	21.67	175.98	-950.37	-78.24	375.66	335.31	40.35	9.309		
4,100.00	3,829.59	4,108.87	3,947.79	24.41	22.24	176.00	-980.80	-80.57	386.55	345.14	41.40	9.336		
4,200.00	3,920.86	4,208.27	4,042.40	25.07	22.81	176.01	-1,011.24	-82.91	397.43	354.98	42.46	9.361		
4,300.00	4,012.13	4,307.68	4,137.00	25.73	23.38	176.02	-1,041.67	-85.24	408.32	364.81	43.51	9.384		
4,400.00	4,103.41	4,407.08	4,231.60	26.38	23.95	176.03	-1,072.10	-87.58	419.20	374.64	44.56	9.407		
4,500.00	4,194.68	4,506.49	4,326.21	27.04	24.52	176.04	-1,102.53	-89.91	430.09	384.47	45.62	9.428		
4,600.00	4,285.95	4,605.90	4,420.81	27.70	25.08	176.05	-1,132.97	-92.25	440.97	394.30	46.68	9.448		
4,700.00	4,377.22	4,705.30	4,515.42	28.36	25.65	176.06	-1,163.40	-94.58	451.86	404.13	47.73	9.467		
4,800.00	4,468.50	4,804.71	4,610.02	29.02	26.22	176.07	-1,193.83	-96.92	462.74	413.95	48.79	9.485		
4,900.00	4,559.77	4,904.11	4,704.62	29.68	26.79	176.08	-1,224.27	-99.25	473.63	423.78	49.85	9.502		
5,000.00	4,651.04	5,003.52	4,799.23	30.34	27.36	176.09	-1,254.70	-101.59	484.51	433.61	50.91	9.518		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	5,102.93	4,893.83	31.00	27.93	176.10	-1,285.13	-103.92	495.40	443.43	51.96	9.533		
5,200.00	4,833.59	5,202.33	4,988.43	31.66	28.50	176.11	-1,315.56	-106.26	506.28	453.26	53.02	9.548		
5,300.00	4,924.86	5,301.74	5,083.04	32.32	29.08	176.11	-1,346.00	-108.59	517.17	463.08	54.08	9.562		
5,400.00	5,016.13	5,401.14	5,177.64	32.99	29.65	176.12	-1,376.43	-110.93	528.05	472.91	55.14	9.576		
5,500.00	5,107.41	5,500.55	5,272.25	33.65	30.22	176.13	-1,406.86	-113.26	538.94	482.73	56.21	9.589		
5,600.00	5,198.68	5,599.95	5,366.85	34.31	30.79	176.13	-1,437.30	-115.60	549.82	492.56	57.27	9.601		
5,700.00	5,289.95	5,700.64	5,461.45	34.97	31.37	176.14	-1,467.73	-117.93	560.71	502.37	58.34	9.612		
5,800.00	5,381.23	5,801.23	5,556.06	35.63	31.95	176.15	-1,498.16	-120.27	571.59	512.19	59.40	9.622		
5,900.00	5,472.50	5,901.83	5,650.66	36.30	32.53	176.15	-1,528.59	-122.60	582.48	522.01	60.47	9.632		
6,000.00	5,563.77	5,997.58	5,745.27	36.96	33.08	176.16	-1,559.03	-124.94	593.36	531.85	61.52	9.646		
6,100.00	5,655.05	6,103.02	5,839.87	37.62	33.68	176.16	-1,589.46	-127.27	604.25	541.64	62.61	9.651		
6,200.00	5,746.32	6,203.61	5,934.47	38.28	34.26	176.17	-1,619.89	-129.61	615.13	551.45	63.68	9.660		
6,300.00	5,837.59	6,304.21	6,029.08	38.95	34.84	176.17	-1,650.33	-131.94	626.02	561.27	64.75	9.668		
6,400.00	5,928.86	6,404.80	6,123.68	39.61	35.42	176.18	-1,680.76	-134.28	636.90	571.08	65.82	9.676		
6,500.00	6,020.14	6,505.39	6,218.29	40.27	36.00	176.18	-1,711.19	-136.62	647.79	580.90	66.89	9.684		
6,600.00	6,111.41	6,605.99	6,312.89	40.94	36.58	176.19	-1,741.62	-138.95	658.67	590.71	67.96	9.692		
6,700.00	6,202.68	6,706.58	6,407.49	41.60	37.16	176.19	-1,772.06	-141.29	669.56	600.52	69.03	9.699		
6,800.00	6,293.96	6,792.68	6,501.95	42.26	37.65	176.17	-1,802.45	-143.91	680.45	610.41	70.03	9.716		
6,900.00	6,385.23	6,890.07	6,593.77	42.93	38.20	175.31	-1,832.06	-156.55	691.49	620.37	71.11	9.724		
7,000.00	6,476.50	6,982.27	6,678.01	43.59	38.69	173.41	-1,859.34	-181.93	703.37	631.19	72.18	9.744		
7,100.00	6,567.77	7,066.23	6,759.94	44.25	39.09	170.85	-1,883.05	-215.96	717.44	644.25	73.19	9.803		
7,200.00	6,658.64	7,143.17	6,813.49	44.91	39.43	149.88	-1,903.47	-255.75	734.28	660.26	74.02	9.920		
7,300.00	6,747.14	7,217.28	6,868.99	45.52	39.72	130.91	-1,921.66	-301.31	752.45	677.85	74.60	10.087		
7,400.00	6,831.10	7,289.23	6,917.67	46.07	39.98	116.86	-1,937.70	-351.74	770.92	696.03	74.89	10.294		
7,500.00	6,908.46	7,359.50	6,959.69	46.54	40.21	106.65	-1,951.63	-406.27	788.77	713.83	74.94	10.526		
7,600.00	6,977.30	7,428.48	6,995.11	46.95	40.42	99.19	-1,963.47	-464.22	805.20	730.36	74.83	10.760		
7,700.00	7,035.93	7,500.00	7,025.31	47.30	40.63	93.70	-1,973.67	-528.21	819.54	744.74	74.80	10.956		
7,800.00	7,082.92	7,563.73	7,046.31	47.59	40.81	89.85	-1,980.88	-587.91	831.23	756.52	74.71	11.127		
7,900.00	7,117.09	7,630.46	7,062.08	47.84	41.01	87.24	-1,986.45	-652.48	839.88	764.89	74.98	11.201		
8,000.00	7,137.62	7,700.00	7,071.58	48.06	41.25	85.73	-1,990.04	-721.24	845.20	769.48	75.72	11.162		
8,100.00	7,143.99	7,765.12	7,073.98	48.28	41.52	85.26	-1,991.31	-786.28	846.98	770.17	76.81	11.027		
8,200.00	7,143.45	7,865.12	7,073.65	48.53	42.09	85.27	-1,991.98	-886.28	846.88	767.78	79.11	10.706		
8,300.00	7,142.91	7,965.12	7,073.33	48.89	42.92	85.29	-1,992.64	-986.28	846.79	765.07	81.72	10.362		
8,400.00	7,142.37	8,065.12	7,073.00	49.40	44.03	85.30	-1,993.31	-1,086.27	846.69	762.05	84.64	10.004		
8,500.00	7,141.83	8,165.12	7,072.68	50.12	45.40	85.31	-1,993.98	-1,186.27	846.59	758.76	87.83	9.639		
8,600.00	7,141.29	8,265.12	7,072.35	51.08	46.96	85.33	-1,994.65	-1,286.27	846.50	755.23	91.27	9.275		
8,700.00	7,140.75	8,365.12	7,072.03	52.30	48.68	85.34	-1,995.31	-1,386.27	846.40	751.48	94.92	8.917		
8,800.00	7,140.21	8,465.12	7,071.70	53.75	50.53	85.36	-1,995.98	-1,486.26	846.30	747.53	98.77	8.568		
8,900.00	7,139.67	8,565.12	7,071.38	55.40	52.49	85.37	-1,996.65	-1,586.26	846.21	743.41	102.80	8.232		
9,000.00	7,139.12	8,665.12	7,071.05	57.20	54.54	85.39	-1,997.32	-1,686.26	846.11	739.14	106.97	7.910		
9,100.00	7,138.58	8,765.12	7,070.73	59.13	56.67	85.40	-1,997.98	-1,786.25	846.01	734.73	111.29	7.602		
9,200.00	7,138.04	8,865.12	7,070.40	61.15	58.87	85.41	-1,998.65	-1,886.25	845.92	730.20	115.72	7.310		
9,300.00	7,137.50	8,965.12	7,070.08	63.26	61.12	85.43	-1,999.32	-1,986.25	845.82	725.56	120.26	7.033		
9,400.00	7,136.96	9,065.12	7,069.75	65.44	63.43	85.44	-1,999.99	-2,086.24	845.72	720.83	124.90	6.771		
9,500.00	7,136.42	9,165.12	7,069.43	67.68	65.78	85.46	-2,000.65	-2,186.24	845.63	716.01	129.62	6.524		
9,600.00	7,135.88	9,265.12	7,069.10	69.97	68.17	85.47	-2,001.32	-2,286.24	845.53	711.11	134.42	6.290		
9,700.00	7,135.34	9,365.12	7,068.78	72.31	70.60	85.48	-2,001.99	-2,386.24	845.43	706.15	139.29	6.070		
9,800.00	7,134.80	9,465.12	7,068.45	74.69	73.06	85.50	-2,002.66	-2,486.23	845.34	701.12	144.22	5.862		
9,900.00	7,134.26	9,565.12	7,068.13	77.10	75.55	85.51	-2,003.32	-2,586.23	845.24	696.04	149.20	5.665		
10,000.00	7,133.71	9,665.12	7,067.80	79.54	78.07	85.53	-2,003.99	-2,686.23	845.15	690.91	154.24	5.480		
10,100.00	7,133.17	9,765.12	7,067.48	82.02	80.60	85.54	-2,004.66	-2,786.22	845.05	685.73	159.32	5.304		
10,200.00	7,132.63	9,865.12	7,067.16	84.52	83.16	85.56	-2,005.33	-2,886.22	844.95	680.51	164.44	5.138		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,132.09	9,965.12	7,066.83	87.04	85.74	85.57	-2,005.99	-2,986.22	844.86	675.26	169.60	4.981		
10,400.00	7,131.55	10,065.12	7,066.51	89.58	88.34	85.58	-2,006.66	-3,086.21	844.76	669.97	174.80	4.833		
10,500.00	7,131.01	10,165.12	7,066.18	92.15	90.95	85.60	-2,007.33	-3,186.21	844.67	664.64	180.02	4.692		
10,600.00	7,130.47	10,265.12	7,065.86	94.73	93.58	85.61	-2,008.00	-3,286.21	844.57	659.29	185.28	4.558		
10,700.00	7,129.93	10,365.12	7,065.53	97.33	96.22	85.63	-2,008.66	-3,386.21	844.47	653.92	190.56	4.432		
10,800.00	7,129.39	10,465.12	7,065.21	99.94	98.87	85.64	-2,009.33	-3,486.20	844.38	648.52	195.86	4.311		
10,900.00	7,128.84	10,565.12	7,064.88	102.56	101.54	85.66	-2,010.00	-3,586.20	844.28	643.09	201.19	4.196		
11,000.00	7,128.30	10,665.12	7,064.56	105.20	104.21	85.67	-2,010.67	-3,686.20	844.19	637.65	206.54	4.087		
11,100.00	7,127.76	10,765.12	7,064.23	107.85	106.90	85.68	-2,011.33	-3,786.19	844.09	632.19	211.90	3.983		
11,200.00	7,127.22	10,865.12	7,063.91	110.51	109.59	85.70	-2,012.00	-3,886.19	844.00	626.71	217.29	3.884		
11,300.00	7,126.68	10,965.12	7,063.58	113.18	112.29	85.71	-2,012.67	-3,986.19	843.90	621.21	222.69	3.790		
11,400.00	7,126.14	11,065.12	7,063.26	115.86	115.00	85.73	-2,013.34	-4,086.18	843.80	615.70	228.11	3.699		
11,500.00	7,125.60	11,165.12	7,062.93	118.55	117.72	85.74	-2,014.00	-4,186.18	843.71	610.17	233.54	3.613		
11,600.00	7,125.06	11,265.12	7,062.61	121.25	120.44	85.75	-2,014.67	-4,286.18	843.61	604.63	238.98	3.530		
11,700.00	7,124.52	11,365.11	7,062.28	123.95	123.17	85.77	-2,015.34	-4,386.17	843.52	599.08	244.44	3.451		
11,800.00	7,123.97	11,465.11	7,061.96	126.66	125.90	85.78	-2,016.01	-4,486.17	843.42	593.52	249.91	3.375		
11,900.00	7,123.43	11,565.11	7,061.63	129.38	128.64	85.80	-2,016.67	-4,586.17	843.33	587.94	255.38	3.302		
12,000.00	7,122.89	11,665.11	7,061.31	132.10	131.39	85.81	-2,017.34	-4,686.17	843.23	582.36	260.87	3.232		
12,100.00	7,122.35	11,765.11	7,060.98	134.83	134.14	85.83	-2,018.01	-4,786.16	843.14	576.77	266.37	3.165		
12,200.00	7,121.81	11,865.11	7,060.66	137.56	136.89	85.84	-2,018.68	-4,886.16	843.04	571.16	271.88	3.101		
12,300.00	7,121.27	11,965.11	7,060.33	140.30	139.65	85.85	-2,019.34	-4,986.16	842.95	565.55	277.40	3.039		
12,400.00	7,120.73	12,065.11	7,060.01	143.05	142.41	85.87	-2,020.01	-5,086.15	842.85	559.93	282.92	2.979		
12,500.00	7,120.19	12,165.11	7,059.68	145.80	145.18	85.88	-2,020.68	-5,186.15	842.76	554.31	288.45	2.922		
12,600.00	7,119.65	12,265.11	7,059.36	148.55	147.95	85.90	-2,021.35	-5,286.15	842.66	548.67	293.99	2.866		
12,700.00	7,119.10	12,365.11	7,059.03	151.30	150.72	85.91	-2,022.01	-5,386.14	842.57	543.03	299.53	2.813		
12,800.00	7,118.56	12,465.11	7,058.71	154.07	153.50	85.93	-2,022.68	-5,486.14	842.47	537.39	305.09	2.761		
12,900.00	7,118.02	12,565.11	7,058.38	156.83	156.28	85.94	-2,023.35	-5,586.14	842.38	531.74	310.64	2.712		
13,000.00	7,117.48	12,665.11	7,058.06	159.60	159.06	85.95	-2,024.02	-5,686.14	842.28	526.08	316.21	2.664		
13,100.00	7,116.94	12,765.11	7,057.73	162.37	161.85	85.97	-2,024.68	-5,786.13	842.19	520.41	321.77	2.617		
13,200.00	7,116.40	12,865.11	7,057.41	165.14	164.63	85.98	-2,025.35	-5,886.13	842.10	514.75	327.35	2.572		
13,300.00	7,115.86	12,965.11	7,057.08	167.92	167.42	86.00	-2,026.02	-5,986.13	842.00	509.07	332.93	2.529		
13,400.00	7,115.32	13,065.11	7,056.76	170.70	170.22	86.01	-2,026.69	-6,086.12	841.91	503.40	338.51	2.487		
13,500.00	7,114.78	13,165.11	7,056.43	173.48	173.01	86.03	-2,027.35	-6,186.12	841.81	497.71	344.10	2.446		
13,600.00	7,114.24	13,265.11	7,056.11	176.26	175.81	86.04	-2,028.02	-6,286.12	841.72	492.03	349.69	2.407		
13,700.00	7,113.69	13,365.11	7,055.78	179.05	178.60	86.05	-2,028.69	-6,386.11	841.62	486.34	355.29	2.369		
13,800.00	7,113.15	13,465.11	7,055.46	181.84	181.41	86.07	-2,029.36	-6,486.11	841.53	480.64	360.89	2.332		
13,900.00	7,112.61	13,565.11	7,055.13	184.63	184.21	86.08	-2,030.02	-6,586.11	841.43	474.94	366.49	2.296		
14,000.00	7,112.07	13,665.11	7,054.81	187.42	187.01	86.10	-2,030.69	-6,686.11	841.34	469.24	372.10	2.261		
14,100.00	7,111.53	13,765.11	7,054.48	190.22	189.82	86.11	-2,031.36	-6,786.10	841.25	463.54	377.71	2.227		
14,200.00	7,110.99	13,865.11	7,054.16	193.01	192.62	86.13	-2,032.03	-6,886.10	841.15	457.83	383.32	2.194		
14,300.00	7,110.45	13,965.11	7,053.83	195.81	195.43	86.14	-2,032.69	-6,986.10	841.06	452.12	388.94	2.162		
14,400.00	7,109.91	14,065.11	7,053.51	198.61	198.24	86.15	-2,033.36	-7,086.09	840.96	446.41	394.56	2.131		
14,500.00	7,109.37	14,165.11	7,053.18	201.42	201.05	86.17	-2,034.03	-7,186.09	840.87	440.69	400.18	2.101		
14,600.00	7,108.82	14,265.11	7,052.86	204.22	203.87	86.18	-2,034.70	-7,286.09	840.78	434.97	405.81	2.072		
14,700.00	7,108.28	14,365.11	7,052.53	207.03	206.68	86.20	-2,035.36	-7,386.08	840.68	429.25	411.44	2.043		
14,800.00	7,107.74	14,465.11	7,052.21	209.83	209.49	86.21	-2,036.03	-7,486.08	840.59	423.52	417.07	2.015		
14,900.00	7,107.20	14,565.11	7,051.88	212.64	212.31	86.23	-2,036.70	-7,586.08	840.50	417.80	422.70	1.988		
15,000.00	7,106.66	14,665.11	7,051.56	215.45	215.13	86.24	-2,037.37	-7,686.08	840.40	412.07	428.34	1.962		
15,100.00	7,106.12	14,765.11	7,051.23	218.26	217.95	86.26	-2,038.03	-7,786.07	840.31	406.34	433.97	1.936		
15,200.00	7,105.58	14,865.11	7,050.91	221.07	220.77	86.27	-2,038.70	-7,886.07	840.22	400.60	439.61	1.911		
15,300.00	7,105.04	14,965.11	7,050.59	223.89	223.59	86.28	-2,039.37	-7,986.07	840.12	394.87	445.26	1.887		
15,400.00	7,104.50	15,065.11	7,050.26	226.70	226.41	86.30	-2,040.04	-8,086.06	840.03	389.13	450.90	1.863		

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



Anticollision Report



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

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,482.27	7,104.05	15,147.37	7,049.99	229.02	228.73	86.31	-2,040.58	-8,168.33	839.95	384.41	455.54	1.844 SF	
15,491.56	7,104.00	15,145.13	7,050.00	229.28	228.67	86.31	-2,040.57	-8,166.08	840.02	384.54	455.48	1.844	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.49	420.04	3.62	420.06					
100.00	100.00	102.00	100.00	3.28	3.29	0.49	420.04	3.62	420.06	413.49	6.57	63.937		
200.00	200.00	202.00	200.00	3.34	3.34	0.49	420.04	3.62	420.06	413.38	6.68	62.923 CC, ES		
300.00	299.98	301.98	299.98	3.44	3.45	177.37	420.04	3.62	421.80	414.91	6.89	61.240		
400.00	399.84	401.84	399.84	3.59	3.61	177.40	420.04	3.62	427.03	419.83	7.20	59.318		
500.00	499.45	501.45	499.45	3.79	3.81	177.44	420.04	3.62	435.73	428.13	7.60	57.320		
600.00	598.70	600.70	598.70	4.03	4.05	177.50	420.04	3.62	447.91	439.83	8.08	55.416		
700.00	697.47	695.95	683.94	4.31	4.28	177.52	421.29	3.32	464.98	456.39	8.60	54.088		
800.00	795.62	769.69	767.59	4.64	4.52	177.47	424.93	2.45	488.28	479.12	9.16	53.321		
900.00	893.06	851.37	849.05	5.00	4.78	177.37	430.76	1.05	517.63	507.89	9.75	53.106		
1,000.00	989.64	936.80	927.33	5.40	5.07	177.22	438.51	-0.81	552.87	542.49	10.37	53.294		
1,100.00	1,085.27	1,021.78	1,018.43	5.83	5.36	177.04	448.87	-3.29	592.67	581.65	11.02	53.779		
1,200.00	1,179.82	1,112.07	1,108.11	6.29	5.67	176.90	459.06	-5.73	635.64	623.93	11.71	54.288		
1,300.00	1,273.17	1,200.80	1,196.24	6.79	6.00	176.77	469.08	-8.13	681.74	669.32	12.42	54.906		
1,400.00	1,365.21	1,287.88	1,282.73	7.33	6.32	176.67	478.92	-10.49	730.90	717.76	13.14	55.637		
1,500.00	1,456.49	1,373.99	1,368.25	7.89	6.66	176.64	488.64	-12.82	781.74	767.87	13.86	56.384		
1,600.00	1,547.76	1,460.10	1,453.78	8.46	6.99	176.61	498.37	-15.15	832.58	817.98	14.60	57.026		
1,700.00	1,639.04	1,546.21	1,539.31	9.05	7.33	176.59	508.09	-17.48	883.43	868.08	15.35	57.550		
1,800.00	1,730.31	1,632.31	1,624.83	9.65	7.68	176.57	517.81	-19.80	934.27	918.16	16.11	57.978		
1,900.00	1,821.58	1,718.42	1,710.36	10.26	8.03	176.56	527.54	-22.13	985.12	968.23	16.89	58.327		
2,000.00	1,912.85	1,804.53	1,795.89	10.87	8.39	176.54	537.26	-24.46	1,035.96	1,018.29	17.67	58.614		
2,100.00	2,004.13	1,909.36	1,881.41	11.49	8.82	176.53	546.99	-26.79	1,086.81	1,068.26	18.55	58.602		
2,200.00	2,095.40	1,976.75	1,966.94	12.11	9.10	176.52	556.71	-29.12	1,137.65	1,118.38	19.27	59.041		
2,300.00	2,186.67	2,062.86	2,052.46	12.74	9.47	176.51	566.44	-31.45	1,188.50	1,168.42	20.08	59.199		
2,400.00	2,277.95	2,148.97	2,137.99	13.38	9.83	176.50	576.16	-33.78	1,239.34	1,218.45	20.89	59.328		
2,500.00	2,369.22	2,235.08	2,223.52	14.01	10.20	176.49	585.89	-36.11	1,290.19	1,268.48	21.71	59.433		
2,600.00	2,460.49	2,321.18	2,309.04	14.65	10.57	176.48	595.61	-38.44	1,341.03	1,318.50	22.53	59.518		
2,700.00	2,551.77	2,407.29	2,394.57	15.29	10.94	176.47	605.33	-40.77	1,391.88	1,368.52	23.36	59.587		
2,800.00	2,643.04	2,506.60	2,480.10	15.93	11.36	176.46	615.06	-43.10	1,442.72	1,418.48	24.25	59.503		
2,900.00	2,734.31	2,579.51	2,565.62	16.58	11.68	176.46	624.78	-45.43	1,493.57	1,468.55	25.02	59.686		
3,000.00	2,825.58	2,665.62	2,651.15	17.23	12.05	176.45	634.51	-47.76	1,544.42	1,518.55	25.86	59.720		
3,100.00	2,916.86	2,751.73	2,736.67	17.87	12.43	176.44	644.23	-50.09	1,595.26	1,568.56	26.70	59.746		
3,200.00	3,008.13	2,837.84	2,822.20	18.52	12.80	176.44	653.96	-52.42	1,646.11	1,618.56	27.54	59.765		
3,300.00	3,099.40	2,923.95	2,907.73	19.17	13.18	176.43	663.68	-54.74	1,696.95	1,668.56	28.39	59.778		
3,400.00	3,190.68	3,010.05	2,993.25	19.83	13.56	176.43	673.41	-57.07	1,747.80	1,718.56	29.23	59.786		
3,500.00	3,281.95	3,103.84	3,078.78	20.48	13.97	176.42	683.13	-59.40	1,798.64	1,768.53	30.12	59.723		
3,600.00	3,373.22	3,182.27	3,164.30	21.13	14.31	176.42	692.85	-61.73	1,849.49	1,818.56	30.93	59.790		
3,700.00	3,464.49	3,268.38	3,249.83	21.79	14.69	176.41	702.58	-64.06	1,900.33	1,868.55	31.78	59.787		
3,800.00	3,555.77	3,354.49	3,335.36	22.44	15.07	176.41	712.30	-66.39	1,951.18	1,918.54	32.64	59.782		
3,900.00	3,647.04	3,440.60	3,420.88	23.10	15.45	176.41	722.03	-68.72	2,002.03	1,968.53	33.49	59.775		
4,000.00	3,738.31	3,526.71	3,506.41	23.75	15.83	176.40	731.75	-71.05	2,052.87	2,018.52	34.35	59.765		
4,100.00	3,829.59	3,612.82	3,591.94	24.41	16.21	176.40	741.48	-73.38	2,103.72	2,068.51	35.21	59.754		
4,200.00	3,920.86	3,698.92	3,677.46	25.07	16.59	176.39	751.20	-75.71	2,154.56	2,118.50	36.06	59.742		
4,300.00	4,012.13	3,785.03	3,762.99	25.73	16.98	176.39	760.93	-78.04	2,205.41	2,168.48	36.92	59.729		
4,400.00	4,103.41	3,871.14	3,848.51	26.38	17.36	176.39	770.65	-80.37	2,256.25	2,218.47	37.78	59.715		
4,500.00	4,194.68	3,957.25	3,934.04	27.04	17.74	176.39	780.37	-82.70	2,307.10	2,268.45	38.65	59.700		
4,600.00	4,285.95	4,043.36	4,019.57	27.70	18.12	176.38	790.10	-85.03	2,357.94	2,318.44	39.51	59.684		
4,700.00	4,377.22	4,129.47	4,105.09	28.36	18.51	176.38	799.82	-87.36	2,408.79	2,368.42	40.37	59.667		
4,800.00	4,468.50	4,215.58	4,190.62	29.02	18.89	176.38	809.55	-89.68	2,459.64	2,418.40	41.23	59.651		
4,900.00	4,559.77	4,301.69	4,276.15	29.68	19.27	176.38	819.27	-92.01	2,510.48	2,468.38	42.10	59.634		
5,000.00	4,651.04	4,387.79	4,361.67	30.34	19.66	176.37	829.00	-94.34	2,561.33	2,518.36	42.96	59.616		
5,100.00	4,742.32	4,473.90	4,447.20	31.00	20.04	176.37	838.72	-96.67	2,612.17	2,568.34	43.83	59.599		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,560.01	4,532.72	31.66	20.43	176.37	848.44	-99.00	2,663.02	2,618.32	44.70	59.581		
5,300.00	4,924.86	4,646.12	4,618.25	32.32	20.81	176.37	858.17	-101.33	2,713.86	2,668.30	45.56	59.563		
5,400.00	5,016.13	4,732.23	4,703.78	32.99	21.19	176.36	867.89	-103.66	2,764.71	2,718.28	46.43	59.545		
5,500.00	5,107.41	4,818.34	4,789.30	33.65	21.58	176.36	877.62	-105.99	2,815.55	2,768.26	47.30	59.527		
5,600.00	5,198.68	4,904.45	4,874.83	34.31	21.96	176.36	887.34	-108.32	2,866.40	2,818.23	48.17	59.509		
5,700.00	5,289.95	5,009.44	4,960.35	34.97	22.43	176.36	897.07	-110.65	2,917.25	2,868.12	49.12	59.389		
5,800.00	5,381.23	5,076.66	5,045.88	35.63	22.74	176.36	906.79	-112.98	2,968.09	2,918.18	49.91	59.472		
5,900.00	5,472.50	5,162.77	5,131.41	36.30	23.12	176.36	916.52	-115.31	3,018.94	2,968.16	50.78	59.454		
6,000.00	5,563.77	5,248.88	5,216.93	36.96	23.51	176.35	926.24	-117.64	3,069.78	3,018.13	51.65	59.436		
6,100.00	5,655.05	5,334.99	5,302.46	37.62	23.89	176.35	935.96	-119.97	3,120.63	3,068.11	52.52	59.418		
6,200.00	5,746.32	5,421.10	5,387.99	38.28	24.28	176.35	945.69	-122.30	3,171.47	3,118.08	53.39	59.401		
6,300.00	5,837.59	5,507.21	5,473.51	38.95	24.66	176.35	955.41	-124.62	3,222.32	3,168.06	54.26	59.383		
6,400.00	5,928.86	5,606.68	5,559.04	39.61	25.11	176.35	965.14	-126.95	3,273.17	3,217.97	55.20	59.301		
6,500.00	6,020.14	5,679.43	5,644.56	40.27	25.44	176.35	974.86	-129.28	3,324.01	3,268.00	56.01	59.348		
6,600.00	6,111.41	5,765.53	5,730.09	40.94	25.82	176.35	984.59	-131.61	3,374.86	3,317.97	56.88	59.330		
6,700.00	6,202.68	5,851.64	5,815.62	41.60	26.21	176.34	994.31	-133.94	3,425.70	3,367.95	57.76	59.313		
6,800.00	6,293.96	5,937.75	5,901.14	42.26	26.60	176.34	1,004.04	-136.27	3,476.55	3,417.92	58.63	59.295		
6,900.00	6,385.23	6,023.86	5,986.67	42.93	26.98	176.34	1,013.76	-138.60	3,527.39	3,467.89	59.51	59.278		
7,000.00	6,476.50	6,109.97	6,072.19	43.59	27.37	176.34	1,023.48	-140.93	3,578.24	3,517.86	60.38	59.261		
7,100.00	6,567.77	6,203.92	6,157.72	44.25	27.79	176.34	1,033.21	-143.26	3,629.08	3,567.79	61.29	59.210		
7,200.00	6,658.64	6,281.96	6,243.02	44.91	28.14	154.77	1,042.91	-145.58	3,679.75	3,617.62	62.13	59.227		
7,300.00	6,747.14	6,366.02	6,326.51	45.52	28.52	134.94	1,052.40	-147.86	3,729.32	3,666.34	62.97	59.219		
7,400.00	6,831.10	6,457.52	6,417.00	46.07	28.93	120.19	1,062.65	-155.97	3,776.70	3,712.83	63.87	59.128		
7,500.00	6,908.46	6,556.58	6,512.56	46.54	29.38	109.41	1,073.37	-179.32	3,820.75	3,755.92	64.83	58.936		
7,600.00	6,977.30	6,665.03	6,611.68	46.95	29.85	101.54	1,084.36	-221.62	3,860.39	3,794.52	65.87	58.606		
7,700.00	7,035.93	6,785.43	6,711.58	47.30	30.39	95.84	1,095.27	-287.59	3,894.60	3,827.54	67.06	58.073		
7,800.00	7,082.92	6,919.86	6,806.34	47.59	31.09	91.83	1,105.40	-382.06	3,922.38	3,853.86	68.52	57.242		
7,900.00	7,117.09	7,068.79	6,885.75	47.84	32.13	89.19	1,113.56	-507.38	3,942.83	3,872.41	70.41	55.995		
8,000.00	7,137.62	7,229.48	6,936.57	48.06	33.66	87.68	1,118.28	-659.30	3,955.16	3,882.27	72.88	54.268		
8,100.00	7,143.99	7,380.47	6,948.93	48.28	35.45	87.18	1,118.63	-809.47	3,958.92	3,883.25	75.67	52.318		
8,200.00	7,143.45	7,480.47	6,948.63	48.53	36.84	87.18	1,117.90	-909.46	3,958.76	3,880.60	78.16	50.651		
8,300.00	7,142.91	7,580.47	6,948.34	48.89	38.39	87.18	1,117.16	-1,009.46	3,958.60	3,877.64	80.96	48.895		
8,400.00	7,142.37	7,680.47	6,948.04	49.40	40.08	87.19	1,116.42	-1,109.46	3,958.44	3,874.38	84.06	47.091		
8,500.00	7,141.83	7,780.47	6,947.74	50.12	41.89	87.19	1,115.68	-1,209.45	3,958.27	3,870.85	87.42	45.279		
8,600.00	7,141.29	7,880.47	6,947.44	51.08	43.82	87.19	1,114.94	-1,309.45	3,958.11	3,867.10	91.01	43.489		
8,700.00	7,140.75	7,980.47	6,947.14	52.30	45.84	87.20	1,114.21	-1,409.45	3,957.95	3,863.14	94.81	41.744		
8,800.00	7,140.21	8,080.47	6,946.84	53.75	47.95	87.20	1,113.47	-1,509.44	3,957.79	3,858.99	98.80	40.059		
8,900.00	7,139.67	8,180.47	6,946.55	55.40	50.13	87.20	1,112.73	-1,609.44	3,957.63	3,854.68	102.94	38.444		
9,000.00	7,139.12	8,280.47	6,946.25	57.20	52.38	87.21	1,111.99	-1,709.44	3,957.47	3,850.23	107.23	36.905		
9,100.00	7,138.58	8,380.47	6,945.95	59.13	54.69	87.21	1,111.26	-1,809.43	3,957.30	3,845.65	111.65	35.443		
9,200.00	7,138.04	8,480.47	6,945.65	61.15	57.04	87.21	1,110.52	-1,909.43	3,957.14	3,840.96	116.18	34.060		
9,300.00	7,137.50	8,580.46	6,945.35	63.26	59.44	87.22	1,109.78	-2,009.42	3,956.98	3,836.17	120.81	32.754		
9,400.00	7,136.96	8,680.46	6,945.05	65.44	61.88	87.22	1,109.04	-2,109.42	3,956.82	3,831.29	125.53	31.521		
9,500.00	7,136.42	8,780.46	6,944.76	67.68	64.35	87.22	1,108.30	-2,209.42	3,956.66	3,826.33	130.33	30.360		
9,600.00	7,135.88	8,880.46	6,944.46	69.97	66.86	87.23	1,107.57	-2,309.41	3,956.50	3,821.30	135.19	29.265		
9,700.00	7,135.34	8,980.46	6,944.16	72.31	69.39	87.23	1,106.83	-2,409.41	3,956.34	3,816.21	140.13	28.234		
9,800.00	7,134.80	9,080.46	6,943.86	74.69	71.94	87.23	1,106.09	-2,509.41	3,956.17	3,811.06	145.11	27.262		
9,900.00	7,134.26	9,180.46	6,943.56	77.10	74.52	87.24	1,105.35	-2,609.40	3,956.01	3,805.86	150.16	26.346		
10,000.00	7,133.71	9,280.46	6,943.26	79.54	77.12	87.24	1,104.62	-2,709.40	3,955.85	3,800.61	155.24	25.482		
10,100.00	7,133.17	9,380.46	6,942.97	82.02	79.73	87.24	1,103.88	-2,809.40	3,955.69	3,795.32	160.37	24.666		
10,200.00	7,132.63	9,480.46	6,942.67	84.52	82.36	87.25	1,103.14	-2,909.39	3,955.53	3,789.99	165.54	23.895		
10,300.00	7,132.09	9,580.46	6,942.37	87.04	85.01	87.25	1,102.40	-3,009.39	3,955.37	3,784.63	170.74	23.166		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,131.55	9,680.46	6,942.07	89.58	87.67	87.25	1,101.66	-3,109.39	3,955.21	3,779.23	175.97	22.476		
10,500.00	7,131.01	9,780.46	6,941.77	92.15	90.34	87.26	1,100.93	-3,209.38	3,955.05	3,773.81	181.24	21.823		
10,600.00	7,130.47	9,880.46	6,941.47	94.73	93.02	87.26	1,100.19	-3,309.38	3,954.88	3,768.36	186.53	21.203		
10,700.00	7,129.93	9,980.46	6,941.18	97.33	95.72	87.26	1,099.45	-3,409.37	3,954.72	3,762.88	191.84	20.615		
10,800.00	7,129.39	10,080.46	6,940.88	99.94	98.42	87.27	1,098.71	-3,509.37	3,954.56	3,757.39	197.18	20.056		
10,900.00	7,128.84	10,180.46	6,940.58	102.56	101.13	87.27	1,097.98	-3,609.37	3,954.40	3,751.87	202.53	19.525		
11,000.00	7,128.30	10,280.46	6,940.28	105.20	103.85	87.28	1,097.24	-3,709.36	3,954.24	3,746.33	207.91	19.019		
11,100.00	7,127.76	10,380.46	6,939.98	107.85	106.58	87.28	1,096.50	-3,809.36	3,954.08	3,740.78	213.30	18.538		
11,200.00	7,127.22	10,480.46	6,939.68	110.51	109.31	87.28	1,095.76	-3,909.36	3,953.92	3,735.21	218.71	18.078		
11,300.00	7,126.68	10,580.46	6,939.39	113.18	112.05	87.29	1,095.02	-4,009.35	3,953.76	3,729.62	224.13	17.640		
11,400.00	7,126.14	10,680.46	6,939.09	115.86	114.79	87.29	1,094.29	-4,109.35	3,953.59	3,724.02	229.57	17.222		
11,500.00	7,125.60	10,780.46	6,938.79	118.55	117.54	87.29	1,093.55	-4,209.35	3,953.43	3,718.41	235.02	16.822		
11,600.00	7,125.06	10,880.46	6,938.49	121.25	120.30	87.30	1,092.81	-4,309.34	3,953.27	3,712.79	240.49	16.439		
11,700.00	7,124.52	10,980.46	6,938.19	123.95	123.06	87.30	1,092.07	-4,409.34	3,953.11	3,707.15	245.96	16.072		
11,800.00	7,123.97	11,080.45	6,937.89	126.66	125.82	87.30	1,091.34	-4,509.34	3,952.95	3,701.50	251.45	15.721		
11,900.00	7,123.43	11,180.45	6,937.59	129.38	128.59	87.31	1,090.60	-4,609.33	3,952.79	3,695.85	256.94	15.384		
12,000.00	7,122.89	11,280.45	6,937.30	132.10	131.36	87.31	1,089.86	-4,709.33	3,952.63	3,690.18	262.45	15.061		
12,100.00	7,122.35	11,380.45	6,937.00	134.83	134.14	87.31	1,089.12	-4,809.32	3,952.47	3,684.51	267.96	14.750		
12,200.00	7,121.81	11,480.45	6,936.70	137.56	136.92	87.32	1,088.38	-4,909.32	3,952.31	3,678.82	273.48	14.452		
12,300.00	7,121.27	11,580.45	6,936.40	140.30	139.70	87.32	1,087.65	-5,009.32	3,952.14	3,673.13	279.01	14.165		
12,400.00	7,120.73	11,680.45	6,936.10	143.05	142.49	87.32	1,086.91	-5,109.31	3,951.98	3,667.44	284.55	13.889		
12,500.00	7,120.19	11,780.45	6,935.80	145.80	145.28	87.33	1,086.17	-5,209.31	3,951.82	3,661.73	290.09	13.623		
12,600.00	7,119.65	11,880.45	6,935.51	148.55	148.07	87.33	1,085.43	-5,309.31	3,951.66	3,656.02	295.64	13.366		
12,700.00	7,119.10	11,980.45	6,935.21	151.30	150.86	87.33	1,084.70	-5,409.30	3,951.50	3,650.30	301.20	13.119		
12,800.00	7,118.56	12,080.45	6,934.91	154.07	153.66	87.34	1,083.96	-5,509.30	3,951.34	3,644.58	306.76	12.881		
12,900.00	7,118.02	12,180.45	6,934.61	156.83	156.45	87.34	1,083.22	-5,609.30	3,951.18	3,638.85	312.33	12.651		
13,000.00	7,117.48	12,280.45	6,934.31	159.60	159.25	87.34	1,082.48	-5,709.29	3,951.02	3,633.12	317.90	12.428		
13,100.00	7,116.94	12,380.45	6,934.01	162.37	162.06	87.35	1,081.74	-5,809.29	3,950.86	3,627.38	323.48	12.214		
13,200.00	7,116.40	12,480.45	6,933.72	165.14	164.86	87.35	1,081.01	-5,909.29	3,950.70	3,621.64	329.06	12.006		
13,300.00	7,115.86	12,580.45	6,933.42	167.92	167.67	87.35	1,080.27	-6,009.28	3,950.54	3,615.89	334.65	11.805		
13,400.00	7,115.32	12,680.45	6,933.12	170.70	170.48	87.36	1,079.53	-6,109.28	3,950.37	3,610.14	340.24	11.611		
13,500.00	7,114.78	12,780.45	6,932.82	173.48	173.29	87.36	1,078.79	-6,209.27	3,950.21	3,604.38	345.83	11.422		
13,600.00	7,114.24	12,880.45	6,932.52	176.26	176.10	87.36	1,078.06	-6,309.27	3,950.05	3,598.62	351.43	11.240		
13,700.00	7,113.69	12,980.45	6,932.22	179.05	178.91	87.37	1,077.32	-6,409.27	3,949.89	3,592.86	357.03	11.063		
13,800.00	7,113.15	13,080.45	6,931.93	181.84	181.72	87.37	1,076.58	-6,509.26	3,949.73	3,587.09	362.64	10.892		
13,900.00	7,112.61	13,180.45	6,931.63	184.63	184.54	87.37	1,075.84	-6,609.26	3,949.57	3,581.32	368.25	10.725		
14,000.00	7,112.07	13,280.45	6,931.33	187.42	187.35	87.38	1,075.10	-6,709.26	3,949.41	3,575.55	373.86	10.564		
14,100.00	7,111.53	13,380.45	6,931.03	190.22	190.17	87.38	1,074.37	-6,809.25	3,949.25	3,569.77	379.48	10.407		
14,200.00	7,110.99	13,480.44	6,930.73	193.01	192.99	87.38	1,073.63	-6,909.25	3,949.09	3,563.99	385.10	10.255		
14,300.00	7,110.45	13,580.44	6,930.43	195.81	195.81	87.39	1,072.89	-7,009.25	3,948.93	3,558.21	390.72	10.107		
14,400.00	7,109.91	13,680.44	6,930.14	198.61	198.63	87.39	1,072.15	-7,109.24	3,948.77	3,552.42	396.34	9.963		
14,500.00	7,109.37	13,780.44	6,929.84	201.42	201.46	87.39	1,071.42	-7,209.24	3,948.61	3,546.64	401.97	9.823		
14,600.00	7,108.82	13,880.44	6,929.54	204.22	204.28	87.40	1,070.68	-7,309.24	3,948.45	3,540.85	407.60	9.687		
14,700.00	7,108.28	13,980.44	6,929.24	207.03	207.10	87.40	1,069.94	-7,409.23	3,948.28	3,535.06	413.23	9.555		
14,800.00	7,107.74	14,080.44	6,928.94	209.83	209.93	87.40	1,069.20	-7,509.23	3,948.12	3,529.26	418.86	9.426		
14,900.00	7,107.20	14,180.44	6,928.64	212.64	212.76	87.41	1,068.47	-7,609.22	3,947.96	3,523.46	424.50	9.300		
15,000.00	7,106.66	14,280.44	6,928.35	215.45	215.58	87.41	1,067.73	-7,709.22	3,947.80	3,517.67	430.14	9.178		
15,100.00	7,106.12	14,380.44	6,928.05	218.26	218.41	87.42	1,066.99	-7,809.22	3,947.64	3,511.87	435.78	9.059		
15,200.00	7,105.58	14,480.44	6,927.75	221.07	221.24	87.42	1,066.25	-7,909.21	3,947.48	3,506.06	441.42	8.943		
15,300.00	7,105.04	14,580.44	6,927.45	223.89	224.07	87.42	1,065.51	-8,009.21	3,947.32	3,500.26	447.06	8.829		
15,400.00	7,104.50	14,680.44	6,927.15	226.70	226.90	87.43	1,064.78	-8,109.21	3,947.16	3,494.45	452.71	8.719		
15,458.02	7,104.18	14,732.12	6,927.00	228.33	228.36	87.43	1,064.39	-8,160.89	3,947.07	3,491.28	455.79	8.660		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)		
15,491.56	7,104.00	14,732.12	6,927.00	229.28	228.36	87.43	1,064.39	-8,160.89	3,947.21	3,490.54	456.67	8.643 SF	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.47	440.08	3.62	440.10					
100.00	100.00	102.00	100.00	3.28	3.29	0.47	440.08	3.62	440.10	433.53	6.57	66.988		
200.00	200.00	202.00	200.00	3.34	3.34	0.47	440.08	3.62	440.10	433.42	6.68	65.926	CC, ES	
300.00	299.98	301.98	299.98	3.44	3.45	177.35	440.08	3.62	441.84	434.96	6.89	64.150		
400.00	399.84	401.84	399.84	3.59	3.61	177.37	440.08	3.62	447.07	439.87	7.20	62.103		
500.00	499.45	501.45	499.45	3.79	3.81	177.41	440.08	3.62	455.78	448.18	7.60	59.957		
600.00	598.70	600.70	598.70	4.03	4.05	177.47	440.08	3.62	467.95	459.87	8.08	57.896		
700.00	697.47	699.47	697.47	4.31	4.33	177.50	441.34	3.41	485.04	476.44	8.60	56.432		
800.00	795.62	797.62	795.62	4.64	4.66	177.49	444.96	2.83	508.36	499.21	9.15	55.538		
900.00	893.06	895.06	893.06	5.00	5.02	177.44	450.79	1.89	537.77	528.03	9.74	55.207		
1,000.00	989.64	991.64	989.64	5.40	5.42	177.36	458.59	0.64	573.08	562.73	10.34	55.397		
1,100.00	1,085.27	1,087.27	1,085.27	5.83	5.85	177.25	468.11	-0.90	614.06	603.11	10.95	56.058		
1,200.00	1,179.82	1,181.82	1,179.82	6.29	6.31	177.12	479.45	-2.72	660.45	648.88	11.57	57.080		
1,300.00	1,273.17	1,275.17	1,273.17	6.79	6.81	176.99	493.26	-4.95	710.68	698.43	12.25	58.024		
1,400.00	1,365.21	1,367.21	1,365.21	7.33	7.35	176.88	506.78	-7.13	763.89	750.95	12.95	59.010		
1,500.00	1,456.49	1,458.49	1,456.49	7.89	7.91	176.84	520.13	-9.28	818.74	805.10	13.65	59.998		
1,600.00	1,547.76	1,549.76	1,547.76	8.46	8.48	176.82	533.49	-11.43	873.60	859.24	14.36	60.856		
1,700.00	1,639.04	1,641.04	1,639.04	9.05	9.07	176.79	546.84	-13.58	928.45	913.37	15.08	61.567		
1,800.00	1,730.31	1,732.31	1,730.31	9.65	9.67	176.77	560.20	-15.73	983.30	967.48	15.82	62.158		
1,900.00	1,821.58	1,823.58	1,821.58	10.26	10.28	176.75	573.55	-17.88	1,038.16	1,021.59	16.57	62.650		
2,000.00	1,912.85	1,914.85	1,912.85	10.87	10.89	176.73	586.90	-20.03	1,093.01	1,075.68	17.33	63.062		
2,100.00	2,004.13	2,006.13	2,004.13	11.49	11.51	176.72	600.26	-22.18	1,147.86	1,129.76	18.10	63.407		
2,200.00	2,095.40	2,097.40	2,095.40	12.11	12.13	176.70	613.61	-24.33	1,202.72	1,183.83	18.88	63.696		
2,300.00	2,186.67	2,188.67	2,186.67	12.74	12.76	176.69	626.97	-26.49	1,257.57	1,237.90	19.67	63.940		
2,400.00	2,277.95	2,279.95	2,277.95	13.38	13.40	176.68	640.32	-28.64	1,312.42	1,291.96	20.46	64.145		
2,500.00	2,369.22	2,371.22	2,369.22	14.01	14.03	176.67	653.68	-30.79	1,367.28	1,346.02	21.26	64.318		
2,600.00	2,460.49	2,462.49	2,460.49	14.65	14.67	176.66	667.03	-32.94	1,422.13	1,400.07	22.06	64.464		
2,700.00	2,551.77	2,553.77	2,551.77	15.29	15.31	176.65	680.39	-35.09	1,476.98	1,454.12	22.87	64.588		
2,800.00	2,643.04	2,645.04	2,643.04	15.93	15.95	176.64	693.74	-37.24	1,531.84	1,508.16	23.68	64.692		
2,900.00	2,734.31	2,736.31	2,734.31	16.58	16.60	176.63	707.09	-39.39	1,586.69	1,562.20	24.49	64.780		
3,000.00	2,825.58	2,827.58	2,825.58	17.23	17.25	176.62	720.45	-41.54	1,641.55	1,616.23	25.31	64.854		
3,100.00	2,916.86	2,918.86	2,916.86	17.87	17.89	176.62	733.80	-43.69	1,696.40	1,670.27	26.13	64.916		
3,200.00	3,008.13	3,010.13	3,008.13	18.52	18.54	176.61	747.16	-45.84	1,751.25	1,724.30	26.96	64.968		
3,300.00	3,099.40	3,101.40	3,099.40	19.17	19.19	176.60	760.51	-48.00	1,806.11	1,778.33	27.78	65.011		
3,400.00	3,190.68	3,192.68	3,190.68	19.83	19.85	176.60	773.87	-50.15	1,860.96	1,832.35	28.61	65.046		
3,500.00	3,281.95	3,283.95	3,281.95	20.48	20.50	176.59	787.22	-52.30	1,915.82	1,886.38	29.44	65.075		
3,600.00	3,373.22	3,375.22	3,373.22	21.13	21.15	176.59	800.57	-54.45	1,970.67	1,940.40	30.27	65.099		
3,700.00	3,464.49	3,466.49	3,464.49	21.79	21.81	176.58	813.93	-56.60	2,025.52	1,994.42	31.11	65.117		
3,800.00	3,555.77	3,557.77	3,555.77	22.44	22.46	176.58	827.28	-58.75	2,080.38	2,048.44	31.94	65.131		
3,900.00	3,647.04	3,649.04	3,647.04	23.10	23.12	176.57	840.64	-60.90	2,135.23	2,102.45	32.78	65.142		
4,000.00	3,738.31	3,740.31	3,738.31	23.75	23.77	176.57	853.99	-63.05	2,190.08	2,156.47	33.62	65.149		
4,100.00	3,829.59	3,831.59	3,829.59	24.41	24.43	176.56	867.35	-65.20	2,244.94	2,210.48	34.46	65.153		
4,200.00	3,920.86	3,922.86	3,920.86	25.07	25.09	176.56	880.70	-67.35	2,299.79	2,264.41	35.38	65.005		
4,300.00	4,012.13	4,014.13	4,012.13	25.73	25.75	176.56	894.06	-69.50	2,354.65	2,318.51	36.14	65.155		
4,400.00	4,103.41	4,105.41	4,103.41	26.38	26.40	176.55	907.41	-71.66	2,409.50	2,372.52	36.98	65.153		
4,500.00	4,194.68	4,196.68	4,194.68	27.04	27.06	176.55	920.76	-73.81	2,464.35	2,426.53	37.83	65.150		
4,600.00	4,285.95	4,287.95	4,285.95	27.70	27.72	176.55	934.12	-75.96	2,519.21	2,480.54	38.67	65.145		
4,700.00	4,377.22	4,379.22	4,377.22	28.36	28.38	176.54	947.47	-78.11	2,574.06	2,534.55	39.52	65.138		
4,800.00	4,468.50	4,470.50	4,468.50	29.02	29.04	176.54	960.83	-80.26	2,628.92	2,588.49	40.43	65.023		
4,900.00	4,559.77	4,561.77	4,559.77	29.68	29.70	176.54	974.18	-82.41	2,683.77	2,642.56	41.21	65.122		
5,000.00	4,651.04	4,653.04	4,651.04	30.34	30.36	176.53	987.54	-84.56	2,738.62	2,696.56	42.06	65.113		
5,100.00	4,742.32	4,744.32	4,742.32	31.00	31.02	176.53	1,000.89	-86.71	2,793.48	2,750.57	42.91	65.103		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,427.08	4,378.75	31.66	20.24	176.53	1,014.24	-88.86	2,848.33	2,804.57	43.76	65.092		
5,300.00	4,924.86	4,510.69	4,461.27	32.32	20.63	176.53	1,027.60	-91.01	2,903.19	2,858.58	44.61	65.081		
5,400.00	5,016.13	4,605.69	4,543.78	32.99	21.07	176.52	1,040.95	-93.17	2,958.04	2,912.53	45.51	64.995		
5,500.00	5,107.41	4,677.92	4,626.29	33.65	21.40	176.52	1,054.31	-95.32	3,012.89	2,966.58	46.31	65.057		
5,600.00	5,198.68	4,761.53	4,708.80	34.31	21.78	176.52	1,067.66	-97.47	3,067.75	3,020.58	47.16	65.044		
5,700.00	5,289.95	4,845.14	4,791.31	34.97	22.17	176.52	1,081.02	-99.62	3,122.60	3,074.59	48.02	65.031		
5,800.00	5,381.23	4,928.76	4,873.82	35.63	22.56	176.52	1,094.37	-101.77	3,177.46	3,128.59	48.87	65.018		
5,900.00	5,472.50	5,012.37	4,956.33	36.30	22.94	176.51	1,107.73	-103.92	3,232.31	3,182.59	49.72	65.004		
6,000.00	5,563.77	5,095.98	5,038.84	36.96	23.33	176.51	1,121.08	-106.07	3,287.16	3,236.59	50.58	64.990		
6,100.00	5,655.05	5,179.59	5,121.35	37.62	23.72	176.51	1,134.43	-108.22	3,342.02	3,290.58	51.43	64.976		
6,200.00	5,746.32	5,263.20	5,203.86	38.28	24.10	176.51	1,147.79	-110.37	3,396.87	3,344.58	52.29	64.962		
6,300.00	5,837.59	5,346.82	5,286.38	38.95	24.49	176.51	1,161.14	-112.52	3,451.73	3,398.58	53.15	64.948		
6,400.00	5,928.86	5,430.43	5,368.89	39.61	24.88	176.51	1,174.50	-114.68	3,506.58	3,452.58	54.00	64.933		
6,500.00	6,020.14	5,514.04	5,451.40	40.27	25.27	176.50	1,187.85	-116.83	3,561.43	3,506.57	54.86	64.918		
6,600.00	6,111.41	5,602.35	5,533.91	40.94	25.68	176.50	1,201.21	-118.98	3,616.29	3,560.55	55.74	64.879		
6,700.00	6,202.68	5,681.27	5,616.42	41.60	26.04	176.50	1,214.56	-121.13	3,671.14	3,614.57	56.58	64.889		
6,800.00	6,293.96	5,764.88	5,698.93	42.26	26.43	176.50	1,227.91	-123.28	3,726.00	3,668.56	57.43	64.874		
6,900.00	6,385.23	5,848.49	5,781.44	42.93	26.82	176.50	1,241.27	-125.43	3,780.85	3,722.56	58.29	64.859		
7,000.00	6,476.50	5,932.10	5,863.95	43.59	27.21	176.50	1,254.62	-127.58	3,835.70	3,776.55	59.15	64.844		
7,100.00	6,567.77	6,015.72	5,946.46	44.25	27.59	176.50	1,267.98	-129.73	3,890.56	3,830.55	60.01	64.829		
7,200.00	6,658.64	6,100.90	6,028.75	44.91	27.99	154.40	1,281.30	-131.88	3,945.24	3,884.36	60.88	64.805		
7,300.00	6,747.14	6,180.71	6,109.28	45.52	28.36	134.00	1,294.33	-133.98	3,998.76	3,937.06	61.70	64.811		
7,400.00	6,831.10	6,258.52	6,186.07	46.07	28.72	118.74	1,306.76	-135.98	4,050.04	3,987.57	62.47	64.829		
7,500.00	6,908.46	6,330.62	6,257.22	46.54	29.06	107.52	1,318.27	-137.83	4,098.19	4,035.01	63.18	64.868		
7,600.00	6,977.30	6,395.23	6,320.98	46.95	29.36	99.22	1,328.59	-139.50	4,142.50	4,078.68	63.82	64.905		
7,700.00	7,035.93	6,450.77	6,375.79	47.30	29.61	93.00	1,337.46	-140.92	4,182.40	4,117.96	64.44	64.907		
7,800.00	7,082.92	6,495.87	6,420.29	47.59	29.82	88.35	1,344.67	-142.08	4,217.42	4,152.36	65.05	64.829		
7,900.00	7,117.09	6,529.42	6,453.40	47.84	29.98	84.91	1,350.02	-142.95	4,247.17	4,181.46	65.72	64.628		
8,000.00	7,137.62	6,550.58	6,474.28	48.06	30.08	82.49	1,353.40	-143.49	4,271.34	4,204.88	66.45	64.276		
8,100.00	7,143.99	7,731.94	7,138.39	48.28	38.45	89.93	1,434.84	-928.71	4,272.78	4,193.42	79.36	53.842		
8,200.00	7,143.45	7,831.90	7,137.96	48.53	39.96	89.94	1,431.38	-1,028.61	4,269.91	4,187.92	81.99	52.079		
8,300.00	7,142.91	7,931.86	7,137.52	48.89	41.61	89.94	1,427.93	-1,128.50	4,267.03	4,182.12	84.92	50.248		
8,400.00	7,142.37	8,031.81	7,137.09	49.40	43.39	89.94	1,424.47	-1,228.40	4,264.16	4,176.04	88.12	48.390		
8,500.00	7,141.83	8,131.77	7,136.65	50.12	45.27	89.94	1,421.01	-1,328.30	4,261.29	4,169.73	91.56	46.539		
8,600.00	7,141.29	8,231.73	7,136.22	51.08	47.25	89.94	1,417.55	-1,428.20	4,258.42	4,163.19	95.22	44.720		
8,700.00	7,140.75	8,331.69	7,135.79	52.30	49.32	89.94	1,414.09	-1,528.10	4,255.54	4,156.47	99.07	42.953		
8,800.00	7,140.21	8,431.65	7,135.35	53.75	51.46	89.94	1,410.63	-1,627.99	4,252.67	4,149.57	103.10	41.249		
8,900.00	7,139.67	8,531.61	7,134.92	55.40	53.67	89.94	1,407.17	-1,727.89	4,249.80	4,142.53	107.27	39.617		
9,000.00	7,139.12	8,631.57	7,134.49	57.20	55.93	89.95	1,403.71	-1,827.79	4,246.92	4,135.34	111.58	38.061		
9,100.00	7,138.58	8,731.52	7,134.05	59.13	58.25	89.95	1,400.25	-1,927.69	4,244.05	4,128.04	116.01	36.583		
9,200.00	7,138.04	8,831.48	7,133.62	61.15	60.61	89.95	1,396.80	-2,027.58	4,241.18	4,120.63	120.55	35.182		
9,300.00	7,137.50	8,931.44	7,133.19	63.26	63.01	89.95	1,393.34	-2,127.48	4,238.31	4,113.13	125.18	33.858		
9,400.00	7,136.96	9,031.40	7,132.75	65.44	65.44	89.95	1,389.88	-2,227.38	4,235.43	4,105.54	129.90	32.606		
9,500.00	7,136.42	9,131.36	7,132.32	67.68	67.91	89.95	1,386.42	-2,327.28	4,232.56	4,097.87	134.69	31.424		
9,600.00	7,135.88	9,231.32	7,131.89	69.97	70.41	89.95	1,382.96	-2,427.18	4,229.69	4,090.13	139.55	30.309		
9,700.00	7,135.34	9,331.28	7,131.45	72.31	72.93	89.96	1,379.50	-2,527.07	4,226.82	4,082.34	144.48	29.256		
9,800.00	7,134.80	9,431.24	7,131.02	74.69	75.48	89.96	1,376.04	-2,626.97	4,223.94	4,074.49	149.46	28.262		
9,900.00	7,134.26	9,531.19	7,130.58	77.10	78.05	89.96	1,372.58	-2,726.87	4,221.07	4,066.58	154.49	27.323		
10,000.00	7,133.71	9,631.15	7,130.15	79.54	80.63	89.96	1,369.12	-2,826.77	4,218.20	4,058.63	159.56	26.436		
10,100.00	7,133.17	9,731.11	7,129.72	82.02	83.24	89.96	1,365.67	-2,926.67	4,215.32	4,050.65	164.68	25.597		
10,200.00	7,132.63	9,831.07	7,129.28	84.52	85.86	89.96	1,362.21	-3,026.56	4,212.45	4,042.62	169.83	24.804		
10,300.00	7,132.09	9,931.03	7,128.85	87.04	88.49	89.96	1,358.75	-3,126.46	4,209.58	4,034.56	175.02	24.052		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,131.55	10,030.99	7,128.42	89.58	91.14	89.97	1,355.29	-3,226.36	4,206.71	4,026.47	180.24	23.339		
10,500.00	7,131.01	10,130.95	7,127.98	92.15	93.79	89.97	1,351.83	-3,326.26	4,203.83	4,018.34	185.49	22.664		
10,600.00	7,130.47	10,230.90	7,127.55	94.73	96.46	89.97	1,348.37	-3,426.15	4,200.96	4,010.20	190.76	22.022		
10,700.00	7,129.93	10,330.86	7,127.12	97.33	99.14	89.97	1,344.91	-3,526.05	4,198.09	4,002.03	196.06	21.412		
10,800.00	7,129.39	10,430.82	7,126.68	99.94	101.83	89.97	1,341.45	-3,625.95	4,195.21	3,993.83	201.38	20.832		
10,900.00	7,128.84	10,530.78	7,126.25	102.56	104.52	89.97	1,337.99	-3,725.85	4,192.34	3,985.62	206.72	20.280		
11,000.00	7,128.30	10,630.74	7,125.81	105.20	107.23	89.97	1,334.53	-3,825.75	4,189.47	3,977.39	212.08	19.754		
11,100.00	7,127.76	10,730.70	7,125.38	107.85	109.94	89.98	1,331.08	-3,925.64	4,186.60	3,969.13	217.46	19.252		
11,200.00	7,127.22	10,830.66	7,124.95	110.51	112.66	89.98	1,327.62	-4,025.54	4,183.72	3,960.87	222.86	18.773		
11,300.00	7,126.68	10,930.62	7,124.51	113.18	115.38	89.98	1,324.16	-4,125.44	4,180.85	3,952.59	228.26	18.316		
11,400.00	7,126.14	11,030.57	7,124.08	115.86	118.11	89.98	1,320.70	-4,225.34	4,177.98	3,944.29	233.69	17.878		
11,500.00	7,125.60	11,130.53	7,123.65	118.55	120.85	89.98	1,317.24	-4,325.24	4,175.11	3,935.98	239.12	17.460		
11,600.00	7,125.06	11,230.49	7,123.21	121.25	123.59	89.98	1,313.78	-4,425.13	4,172.23	3,927.66	244.57	17.059		
11,700.00	7,124.52	11,330.45	7,122.78	123.95	126.33	89.99	1,310.32	-4,525.03	4,169.36	3,919.33	250.03	16.675		
11,800.00	7,123.97	11,430.41	7,122.35	126.66	129.08	89.99	1,306.86	-4,624.93	4,166.49	3,910.98	255.50	16.307		
11,900.00	7,123.43	11,530.37	7,121.91	129.38	131.83	89.99	1,303.40	-4,724.83	4,163.61	3,902.63	260.99	15.953		
12,000.00	7,122.89	11,630.33	7,121.48	132.10	134.59	89.99	1,299.95	-4,824.72	4,160.74	3,894.27	266.48	15.614		
12,100.00	7,122.35	11,730.28	7,121.05	134.83	137.35	89.99	1,296.49	-4,924.62	4,157.87	3,885.89	271.98	15.288		
12,200.00	7,121.81	11,830.24	7,120.61	137.56	140.12	89.99	1,293.03	-5,024.52	4,155.00	3,877.51	277.48	14.974		
12,300.00	7,121.27	11,930.20	7,120.18	140.30	142.89	89.99	1,289.57	-5,124.42	4,152.12	3,869.12	283.00	14.672		
12,400.00	7,120.73	12,030.16	7,119.74	143.05	145.66	90.00	1,286.11	-5,224.32	4,149.25	3,860.73	288.52	14.381		
12,500.00	7,120.19	12,130.12	7,119.31	145.80	148.43	90.00	1,282.65	-5,324.21	4,146.38	3,852.33	294.05	14.101		
12,600.00	7,119.65	12,230.08	7,118.88	148.55	151.21	90.00	1,279.19	-5,424.11	4,143.51	3,843.92	299.59	13.831		
12,700.00	7,119.10	12,330.04	7,118.44	151.30	153.99	90.00	1,275.73	-5,524.01	4,140.63	3,835.50	305.13	13.570		
12,800.00	7,118.56	12,430.00	7,118.01	154.07	156.77	90.00	1,272.27	-5,623.91	4,137.76	3,827.08	310.68	13.318		
12,900.00	7,118.02	12,529.95	7,117.58	156.83	159.55	90.00	1,268.81	-5,723.81	4,134.89	3,818.65	316.23	13.075		
13,000.00	7,117.48	12,629.91	7,117.14	159.60	162.34	90.00	1,265.36	-5,823.70	4,132.01	3,810.22	321.79	12.841		
13,100.00	7,116.94	12,729.87	7,116.71	162.37	165.13	90.01	1,261.90	-5,923.60	4,129.14	3,801.78	327.36	12.614		
13,200.00	7,116.40	12,829.83	7,116.28	165.14	167.92	90.01	1,258.44	-6,023.50	4,126.27	3,793.34	332.93	12.394		
13,300.00	7,115.86	12,929.79	7,115.84	167.92	170.71	90.01	1,254.98	-6,123.40	4,123.40	3,784.90	338.50	12.181		
13,400.00	7,115.32	13,029.75	7,115.41	170.70	173.50	90.01	1,251.52	-6,223.29	4,120.52	3,776.45	344.08	11.976		
13,500.00	7,114.78	13,129.71	7,114.97	173.48	176.30	90.01	1,248.06	-6,323.19	4,117.65	3,767.99	349.66	11.776		
13,600.00	7,114.24	13,229.67	7,114.54	176.26	179.10	90.01	1,244.60	-6,423.09	4,114.78	3,759.53	355.25	11.583		
13,700.00	7,113.69	13,329.62	7,114.11	179.05	181.90	90.01	1,241.14	-6,522.99	4,111.91	3,751.07	360.84	11.396		
13,800.00	7,113.15	13,429.58	7,113.67	181.84	184.70	90.02	1,237.68	-6,622.89	4,109.03	3,742.60	366.43	11.214		
13,900.00	7,112.61	13,529.54	7,113.24	184.63	187.50	90.02	1,234.23	-6,722.78	4,106.16	3,734.13	372.03	11.037		
14,000.00	7,112.07	13,629.50	7,112.81	187.42	190.30	90.02	1,230.77	-6,822.68	4,103.29	3,725.66	377.63	10.866		
14,100.00	7,111.53	13,729.46	7,112.37	190.22	193.11	90.02	1,227.31	-6,922.58	4,100.41	3,717.19	383.23	10.700		
14,200.00	7,110.99	13,829.42	7,111.94	193.01	195.91	90.02	1,223.85	-7,022.48	4,097.54	3,708.71	388.83	10.538		
14,300.00	7,110.45	13,929.38	7,111.51	195.81	198.72	90.02	1,220.39	-7,122.38	4,094.67	3,700.23	394.44	10.381		
14,400.00	7,109.91	14,029.33	7,111.07	198.61	201.53	90.03	1,216.93	-7,222.27	4,091.80	3,691.74	400.06	10.228		
14,500.00	7,109.37	14,129.29	7,110.64	201.42	204.34	90.03	1,213.47	-7,322.17	4,088.92	3,683.25	405.67	10.079		
14,600.00	7,108.82	14,229.25	7,110.21	204.22	207.15	90.03	1,210.01	-7,422.07	4,086.05	3,674.76	411.29	9.935		
14,700.00	7,108.28	14,329.21	7,109.77	207.03	209.96	90.03	1,206.55	-7,521.97	4,083.18	3,666.27	416.91	9.794		
14,800.00	7,107.74	14,429.17	7,109.34	209.83	212.77	90.03	1,203.09	-7,621.87	4,080.31	3,657.78	422.53	9.657		
14,900.00	7,107.20	14,529.13	7,108.90	212.64	215.58	90.03	1,199.64	-7,721.76	4,077.43	3,649.28	428.15	9.523		
15,000.00	7,106.66	14,629.09	7,108.47	215.45	218.40	90.03	1,196.18	-7,821.66	4,074.56	3,640.78	433.78	9.393		
15,100.00	7,106.12	14,729.05	7,108.04	218.26	221.21	90.04	1,192.72	-7,921.56	4,071.69	3,632.28	439.40	9.266		
15,200.00	7,105.58	14,829.00	7,107.60	221.07	224.03	90.04	1,189.26	-8,021.46	4,068.82	3,623.78	445.03	9.143		
15,300.00	7,105.04	14,928.96	7,107.17	223.89	226.84	90.04	1,185.80	-8,121.35	4,065.94	3,615.28	450.67	9.022		
15,400.00	7,104.50	14,969.16	7,107.00	226.70	227.97	90.04	1,184.41	-8,161.53	4,063.51	3,608.91	454.59	8.939		
15,456.98	7,104.19	14,969.16	7,107.00	228.30	227.97	90.04	1,184.41	-8,161.53	4,063.11	3,607.02	456.09	8.909		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	14,969.16	7,107.00	229.28	227.97	90.04	1,184.41	-8,161.53	4,063.26	3,606.30	456.96	8.892 SF	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.50	319.86	2.78	319.88					
100.00	100.00	102.00	100.00	3.28	3.29	0.50	319.86	2.78	319.88	313.31	6.57	48.688		
200.00	200.00	202.00	200.00	3.34	3.34	0.50	319.86	2.78	319.88	313.20	6.68	47.917	CC, ES	
300.00	299.98	301.98	299.98	3.44	3.45	177.38	319.86	2.78	321.62	314.73	6.89	46.695		
400.00	399.84	402.02	400.02	3.59	3.61	177.41	319.86	2.78	326.85	319.65	7.20	45.401		
500.00	499.45	511.78	509.75	3.79	3.82	177.25	318.15	1.43	333.99	326.37	7.62	43.846		
600.00	598.70	611.64	609.53	4.03	4.05	176.93	315.00	-1.04	343.01	334.93	8.09	42.416		
700.00	697.47	710.84	708.65	4.31	4.31	176.65	311.87	-3.51	355.51	346.89	8.62	41.224		
800.00	795.62	809.55	807.28	4.64	4.60	176.42	308.76	-5.96	371.46	362.24	9.22	40.297		
900.00	893.06	907.64	905.29	5.00	4.90	176.23	305.67	-8.39	390.85	380.99	9.86	39.641		
1,000.00	989.64	1,005.00	1,002.57	5.40	5.22	176.09	302.60	-10.81	413.64	403.10	10.54	39.243		
1,100.00	1,085.27	1,101.51	1,099.00	5.83	5.56	175.99	299.55	-13.20	439.81	428.55	11.25	39.081		
1,200.00	1,179.82	1,202.95	1,194.47	6.29	5.92	175.92	296.54	-15.57	469.32	457.30	12.01	39.061		
1,300.00	1,273.17	1,308.50	1,288.85	6.79	6.31	175.87	293.56	-17.92	502.14	489.32	12.82	39.173		
1,400.00	1,365.21	1,384.76	1,382.03	7.33	6.60	175.85	290.62	-20.23	538.23	524.69	13.53	39.767		
1,500.00	1,456.49	1,477.30	1,474.50	7.89	6.95	175.89	287.70	-22.53	576.12	561.79	14.32	40.218		
1,600.00	1,547.76	1,569.84	1,566.96	8.46	7.32	175.93	284.78	-24.82	614.01	598.89	15.12	40.597		
1,700.00	1,639.04	1,662.39	1,659.43	9.05	7.68	175.96	281.86	-27.12	651.90	635.97	15.94	40.900		
1,800.00	1,730.31	1,754.93	1,751.90	9.65	8.05	175.99	278.95	-29.42	689.80	673.03	16.77	41.143		
1,900.00	1,821.58	1,847.47	1,844.36	10.26	8.43	176.02	276.03	-31.71	727.69	710.09	17.60	41.337		
2,000.00	1,912.85	1,940.01	1,936.83	10.87	8.80	176.04	273.11	-34.01	765.59	747.14	18.45	41.493		
2,100.00	2,004.13	2,032.55	2,029.30	11.49	9.18	176.07	270.19	-36.31	803.48	784.18	19.31	41.619		
2,200.00	2,095.40	2,125.09	2,121.76	12.11	9.57	176.09	267.27	-38.60	841.38	821.21	20.17	41.719		
2,300.00	2,186.67	2,217.63	2,214.23	12.74	9.95	176.10	264.35	-40.90	879.27	858.24	21.04	41.799		
2,400.00	2,277.95	2,310.18	2,306.70	13.38	10.34	176.12	261.43	-43.20	917.17	895.26	21.91	41.862		
2,500.00	2,369.22	2,402.72	2,399.17	14.01	10.73	176.14	258.52	-45.49	955.06	932.27	22.79	41.912		
2,600.00	2,460.49	2,495.26	2,491.63	14.65	11.12	176.15	255.60	-47.79	992.96	969.29	23.67	41.951		
2,700.00	2,551.77	2,587.80	2,584.10	15.29	11.51	176.16	252.68	-50.09	1,030.85	1,006.30	24.56	41.980		
2,800.00	2,643.04	2,680.34	2,676.57	15.93	11.90	176.18	249.76	-52.38	1,068.75	1,043.30	25.45	42.002		
2,900.00	2,734.31	2,772.88	2,769.03	16.58	12.30	176.19	246.84	-54.68	1,106.64	1,080.30	26.34	42.017		
3,000.00	2,825.58	2,865.42	2,861.50	17.23	12.69	176.20	243.92	-56.98	1,144.54	1,117.30	27.23	42.028		
3,100.00	2,916.86	2,957.97	2,953.97	17.87	13.09	176.21	241.00	-59.27	1,182.43	1,154.30	28.13	42.034		
3,200.00	3,008.13	3,050.51	3,046.43	18.52	13.48	176.22	238.09	-61.57	1,220.33	1,191.30	29.03	42.036		
3,300.00	3,099.40	3,143.05	3,138.90	19.17	13.88	176.23	235.17	-63.87	1,258.22	1,228.29	29.93	42.036		
3,400.00	3,190.68	3,235.59	3,231.37	19.83	14.28	176.23	232.25	-66.16	1,296.12	1,265.28	30.84	42.033		
3,500.00	3,281.95	3,328.13	3,323.83	20.48	14.68	176.24	229.33	-68.46	1,334.01	1,302.27	31.74	42.027		
3,600.00	3,373.22	3,420.67	3,416.30	21.13	15.08	176.25	226.41	-70.76	1,371.91	1,339.26	32.65	42.021		
3,700.00	3,464.49	3,513.21	3,508.77	21.79	15.48	176.26	223.49	-73.06	1,409.80	1,376.25	33.56	42.012		
3,800.00	3,555.77	3,605.76	3,601.23	22.44	15.88	176.26	220.57	-75.35	1,447.70	1,413.23	34.47	42.003		
3,900.00	3,647.04	3,701.70	3,693.70	23.10	16.29	176.27	217.66	-77.65	1,485.59	1,450.20	35.39	41.975		
4,000.00	3,738.31	3,809.16	3,786.17	23.75	16.76	176.28	214.74	-79.95	1,523.49	1,487.12	36.37	41.890		
4,100.00	3,829.59	3,883.38	3,878.64	24.41	17.08	176.28	211.82	-82.24	1,561.39	1,524.18	37.20	41.969		
4,200.00	3,920.86	3,975.92	3,971.10	25.07	17.48	176.29	208.90	-84.54	1,599.28	1,561.16	38.12	41.957		
4,300.00	4,012.13	4,068.46	4,063.57	25.73	17.89	176.29	205.98	-86.84	1,637.18	1,598.14	39.03	41.944		
4,400.00	4,103.41	4,161.00	4,156.04	26.38	18.29	176.30	203.06	-89.13	1,675.07	1,635.12	39.95	41.931		
4,500.00	4,194.68	4,253.55	4,248.50	27.04	18.69	176.30	200.14	-91.43	1,712.97	1,672.10	40.86	41.918		
4,600.00	4,285.95	4,346.09	4,340.97	27.70	19.09	176.31	197.23	-93.73	1,750.86	1,709.08	41.78	41.904		
4,700.00	4,377.22	4,438.63	4,433.44	28.36	19.50	176.31	194.31	-96.02	1,788.76	1,746.06	42.70	41.891		
4,800.00	4,468.50	4,531.17	4,525.90	29.02	19.90	176.32	191.39	-98.32	1,826.65	1,783.03	43.62	41.877		
4,900.00	4,559.77	4,623.71	4,618.37	29.68	20.31	176.32	188.47	-100.62	1,864.55	1,820.01	44.54	41.864		
5,000.00	4,651.04	4,716.25	4,710.84	30.34	20.71	176.32	185.55	-102.91	1,902.44	1,856.99	45.46	41.850		
5,100.00	4,742.32	4,808.79	4,803.30	31.00	21.12	176.33	182.63	-105.21	1,940.34	1,893.96	46.38	41.836		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,901.34	4,895.77	31.66	21.52	176.33	179.71	-107.51	1,978.24	1,930.93	47.30	41.823		
5,300.00	4,924.86	5,006.12	4,988.24	32.32	21.98	176.33	176.80	-109.80	2,016.13	1,967.86	48.28	41.763		
5,400.00	5,016.13	5,086.42	5,080.70	32.99	22.33	176.34	173.88	-112.10	2,054.03	2,004.88	49.14	41.796		
5,500.00	5,107.41	5,178.96	5,173.17	33.65	22.74	176.34	170.96	-114.40	2,091.92	2,041.85	50.07	41.782		
5,600.00	5,198.68	5,271.50	5,265.64	34.31	23.14	176.34	168.04	-116.69	2,129.82	2,078.83	50.99	41.769		
5,700.00	5,289.95	5,364.04	5,358.11	34.97	23.55	176.35	165.12	-118.99	2,167.71	2,115.80	51.91	41.756		
5,800.00	5,381.23	5,456.58	5,450.57	35.63	23.95	176.35	162.20	-121.29	2,205.61	2,152.77	52.84	41.743		
5,900.00	5,472.50	5,549.13	5,543.04	36.30	24.36	176.35	159.28	-123.58	2,243.50	2,189.74	53.76	41.730		
6,000.00	5,563.77	5,641.67	5,635.51	36.96	24.77	176.35	156.37	-125.88	2,281.40	2,226.71	54.69	41.717		
6,100.00	5,655.05	5,734.21	5,727.97	37.62	25.17	176.36	153.45	-128.18	2,319.30	2,263.68	55.61	41.705		
6,200.00	5,746.32	5,826.75	5,820.44	38.28	25.58	176.36	150.53	-130.47	2,357.19	2,300.65	56.54	41.692		
6,300.00	5,837.59	5,919.29	5,912.91	38.95	25.99	176.36	147.61	-132.77	2,395.09	2,337.62	57.46	41.680		
6,400.00	5,928.86	6,011.83	6,005.37	39.61	26.39	176.36	144.69	-135.07	2,432.98	2,374.59	58.39	41.668		
6,500.00	6,020.14	6,104.37	6,097.84	40.27	26.80	176.37	141.77	-137.36	2,470.88	2,411.56	59.32	41.656		
6,600.00	6,111.41	6,196.92	6,190.31	40.94	27.21	176.37	138.86	-139.66	2,508.77	2,448.53	60.24	41.644		
6,700.00	6,202.68	6,289.46	6,282.77	41.60	27.61	176.37	135.94	-141.96	2,546.67	2,485.50	61.17	41.633		
6,800.00	6,293.96	6,382.00	6,375.24	42.26	28.02	176.37	133.02	-144.25	2,584.56	2,522.47	62.10	41.621		
6,900.00	6,385.23	6,474.79	6,467.93	42.93	28.43	176.36	130.09	-147.23	2,622.46	2,559.43	63.03	41.608		
7,000.00	6,476.50	6,566.76	6,558.83	43.59	28.83	176.11	127.15	-160.34	2,660.35	2,596.41	63.95	41.601		
7,100.00	6,567.77	6,653.95	6,642.42	44.25	29.21	175.60	124.38	-184.75	2,698.40	2,633.58	64.82	41.630		
7,200.00	6,658.64	6,736.07	6,717.41	44.91	29.56	154.74	121.82	-217.98	2,736.61	2,670.98	65.63	41.698		
7,300.00	6,747.14	6,816.31	6,785.97	45.52	29.90	135.53	119.41	-259.50	2,774.06	2,707.66	66.40	41.777		
7,400.00	6,831.10	6,895.38	6,847.88	46.07	30.24	121.20	117.17	-308.54	2,809.75	2,742.60	67.14	41.848		
7,500.00	6,908.46	6,973.78	6,902.82	46.54	30.62	110.70	115.10	-364.37	2,842.72	2,774.84	67.88	41.878		
7,600.00	6,977.30	7,051.88	6,950.31	46.95	31.06	102.97	113.23	-426.29	2,872.14	2,803.48	68.66	41.833		
7,700.00	7,035.93	7,129.91	6,989.84	47.30	31.60	97.29	111.57	-493.48	2,897.25	2,827.70	69.55	41.659		
7,800.00	7,082.92	7,207.99	7,020.87	47.59	32.24	93.20	110.16	-565.06	2,917.44	2,846.83	70.61	41.320		
7,900.00	7,117.09	7,286.16	7,042.94	47.84	32.99	90.45	109.01	-640.00	2,932.20	2,860.30	71.90	40.781		
8,000.00	7,137.62	7,364.40	7,055.68	48.06	33.85	88.86	108.14	-717.13	2,941.20	2,867.73	73.46	40.036		
8,100.00	7,143.99	7,445.51	7,058.94	48.28	34.84	88.34	107.54	-798.13	2,944.19	2,868.86	75.33	39.082		
8,200.00	7,143.45	7,545.51	7,058.50	48.53	36.22	88.35	106.94	-898.13	2,944.18	2,866.36	77.82	37.835		
8,300.00	7,142.91	7,645.51	7,058.07	48.89	37.76	88.35	106.34	-998.12	2,944.16	2,863.55	80.61	36.523		
8,400.00	7,142.37	7,745.51	7,057.64	49.40	39.44	88.35	105.74	-1,098.12	2,944.15	2,860.45	83.71	35.173		
8,500.00	7,141.83	7,845.51	7,057.20	50.12	41.26	88.35	105.14	-1,198.12	2,944.14	2,857.07	87.06	33.816		
8,600.00	7,141.29	7,945.51	7,056.77	51.08	43.19	88.35	104.54	-1,298.12	2,944.12	2,853.47	90.66	32.476		
8,700.00	7,140.75	8,045.51	7,056.33	52.30	45.21	88.36	103.95	-1,398.11	2,944.11	2,849.65	94.46	31.169		
8,800.00	7,140.21	8,145.51	7,055.90	53.75	47.33	88.36	103.35	-1,498.11	2,944.09	2,845.65	98.44	29.907		
8,900.00	7,139.67	8,245.51	7,055.47	55.40	49.52	88.36	102.75	-1,598.11	2,944.08	2,841.49	102.59	28.697		
9,000.00	7,139.12	8,345.51	7,055.03	57.20	51.77	88.36	102.15	-1,698.10	2,944.07	2,837.18	106.88	27.545		
9,100.00	7,138.58	8,445.51	7,054.60	59.13	54.08	88.37	101.55	-1,798.10	2,944.05	2,832.75	111.30	26.451		
9,200.00	7,138.04	8,545.51	7,054.16	61.15	56.44	88.37	100.95	-1,898.10	2,944.04	2,828.20	115.84	25.416		
9,300.00	7,137.50	8,645.51	7,053.73	63.26	58.85	88.37	100.35	-1,998.10	2,944.03	2,823.56	120.47	24.438		
9,400.00	7,136.96	8,745.51	7,053.30	65.44	61.29	88.37	99.75	-2,098.09	2,944.01	2,818.82	125.19	23.516		
9,500.00	7,136.42	8,845.51	7,052.86	67.68	63.77	88.37	99.15	-2,198.09	2,944.00	2,814.00	129.99	22.647		
9,600.00	7,135.88	8,945.51	7,052.43	69.97	66.28	88.38	98.56	-2,298.09	2,943.98	2,809.12	134.87	21.829		
9,700.00	7,135.34	9,045.51	7,051.99	72.31	68.82	88.38	97.96	-2,398.08	2,943.97	2,804.17	139.80	21.058		
9,800.00	7,134.80	9,145.51	7,051.56	74.69	71.38	88.38	97.36	-2,498.08	2,943.96	2,799.16	144.79	20.332		
9,900.00	7,134.26	9,245.51	7,051.13	77.10	73.96	88.38	96.76	-2,598.08	2,943.94	2,794.10	149.84	19.647		
10,000.00	7,133.71	9,345.51	7,050.69	79.54	76.57	88.38	96.16	-2,698.08	2,943.93	2,789.00	154.93	19.002		
10,100.00	7,133.17	9,445.51	7,050.26	82.02	79.19	88.39	95.56	-2,798.07	2,943.91	2,783.85	160.06	18.392		
10,200.00	7,132.63	9,545.51	7,049.82	84.52	81.82	88.39	94.96	-2,898.07	2,943.90	2,778.66	165.24	17.816		
10,300.00	7,132.09	9,645.51	7,049.39	87.04	84.47	88.39	94.36	-2,998.07	2,943.89	2,773.44	170.44	17.272		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,131.55	9,745.51	7,048.96	89.58	87.14	88.39	93.77	-3,098.07	2,943.87	2,768.19	175.68	16.757		
10,500.00	7,131.01	9,845.51	7,048.52	92.15	89.81	88.39	93.17	-3,198.06	2,943.86	2,762.91	180.95	16.269		
10,600.00	7,130.47	9,945.51	7,048.09	94.73	92.50	88.40	92.57	-3,298.06	2,943.85	2,757.60	186.24	15.807		
10,700.00	7,129.93	10,045.51	7,047.65	97.33	95.20	88.40	91.97	-3,398.06	2,943.83	2,752.27	191.56	15.368		
10,800.00	7,129.39	10,145.51	7,047.22	99.94	97.90	88.40	91.37	-3,498.05	2,943.82	2,746.92	196.90	14.951		
10,900.00	7,128.84	10,245.51	7,046.79	102.56	100.62	88.40	90.77	-3,598.05	2,943.80	2,741.54	202.26	14.555		
11,000.00	7,128.30	10,345.51	7,046.35	105.20	103.34	88.40	90.17	-3,698.05	2,943.79	2,736.15	207.64	14.177		
11,100.00	7,127.76	10,445.51	7,045.92	107.85	106.07	88.41	89.57	-3,798.05	2,943.78	2,730.74	213.04	13.818		
11,200.00	7,127.22	10,545.51	7,045.48	110.51	108.81	88.41	88.98	-3,898.04	2,943.76	2,725.31	218.45	13.476		
11,300.00	7,126.68	10,645.51	7,045.05	113.18	111.55	88.41	88.38	-3,998.04	2,943.75	2,719.87	223.88	13.149		
11,400.00	7,126.14	10,745.51	7,044.62	115.86	114.30	88.41	87.78	-4,098.04	2,943.73	2,714.42	229.32	12.837		
11,500.00	7,125.60	10,845.51	7,044.18	118.55	117.05	88.42	87.18	-4,198.03	2,943.72	2,708.95	234.77	12.538		
11,600.00	7,125.06	10,945.51	7,043.75	121.25	119.81	88.42	86.58	-4,298.03	2,943.71	2,703.46	240.24	12.253		
11,700.00	7,124.52	11,045.51	7,043.31	123.95	122.57	88.42	85.98	-4,398.03	2,943.69	2,697.97	245.72	11.980		
11,800.00	7,123.97	11,145.51	7,042.88	126.66	125.34	88.42	85.38	-4,498.03	2,943.68	2,692.47	251.21	11.718		
11,900.00	7,123.43	11,245.51	7,042.45	129.38	128.11	88.42	84.78	-4,598.02	2,943.67	2,686.96	256.71	11.467		
12,000.00	7,122.89	11,345.51	7,042.01	132.10	130.89	88.43	84.19	-4,698.02	2,943.65	2,681.43	262.22	11.226		
12,100.00	7,122.35	11,445.51	7,041.58	134.83	133.66	88.43	83.59	-4,798.02	2,943.64	2,675.90	267.74	10.995		
12,200.00	7,121.81	11,545.51	7,041.14	137.56	136.45	88.43	82.99	-4,898.02	2,943.62	2,670.36	273.26	10.772		
12,300.00	7,121.27	11,645.51	7,040.71	140.30	139.23	88.43	82.39	-4,998.01	2,943.61	2,664.82	278.79	10.558		
12,400.00	7,120.73	11,745.51	7,040.28	143.05	142.02	88.43	81.79	-5,098.01	2,943.60	2,659.26	284.34	10.353		
12,500.00	7,120.19	11,845.51	7,039.84	145.80	144.81	88.44	81.19	-5,198.01	2,943.58	2,653.70	289.88	10.154		
12,600.00	7,119.65	11,945.51	7,039.41	148.55	147.60	88.44	80.59	-5,298.00	2,943.57	2,648.13	295.44	9.963		
12,700.00	7,119.10	12,045.51	7,038.97	151.30	150.40	88.44	79.99	-5,398.00	2,943.56	2,642.56	301.00	9.779		
12,800.00	7,118.56	12,145.51	7,038.54	154.07	153.20	88.44	79.40	-5,498.00	2,943.54	2,636.98	306.56	9.602		
12,900.00	7,118.02	12,245.51	7,038.11	156.83	156.00	88.44	78.80	-5,598.00	2,943.53	2,631.39	312.13	9.430		
13,000.00	7,117.48	12,345.51	7,037.67	159.60	158.80	88.45	78.20	-5,697.99	2,943.51	2,625.80	317.71	9.265		
13,100.00	7,116.94	12,445.51	7,037.24	162.37	161.61	88.45	77.60	-5,797.99	2,943.50	2,620.21	323.29	9.105		
13,200.00	7,116.40	12,545.51	7,036.80	165.14	164.41	88.45	77.00	-5,897.99	2,943.49	2,614.61	328.88	8.950		
13,300.00	7,115.86	12,645.51	7,036.37	167.92	167.22	88.45	76.40	-5,997.98	2,943.47	2,609.01	334.47	8.800		
13,400.00	7,115.32	12,745.51	7,035.94	170.70	170.03	88.45	75.80	-6,097.98	2,943.46	2,603.40	340.06	8.656		
13,500.00	7,114.78	12,845.51	7,035.50	173.48	172.84	88.46	75.20	-6,197.98	2,943.45	2,597.79	345.66	8.515		
13,600.00	7,114.24	12,945.51	7,035.07	176.26	175.65	88.46	74.61	-6,297.98	2,943.43	2,592.17	351.26	8.380		
13,700.00	7,113.69	13,045.51	7,034.63	179.05	178.47	88.46	74.01	-6,397.97	2,943.42	2,586.55	356.87	8.248		
13,800.00	7,113.15	13,145.51	7,034.20	181.84	181.28	88.46	73.41	-6,497.97	2,943.40	2,580.93	362.48	8.120		
13,900.00	7,112.61	13,245.51	7,033.77	184.63	184.10	88.47	72.81	-6,597.97	2,943.39	2,575.30	368.09	7.996		
14,000.00	7,112.07	13,345.51	7,033.33	187.42	186.92	88.47	72.21	-6,697.97	2,943.38	2,569.67	373.71	7.876		
14,100.00	7,111.53	13,445.51	7,032.90	190.22	189.74	88.47	71.61	-6,797.96	2,943.36	2,564.04	379.33	7.759		
14,200.00	7,110.99	13,545.51	7,032.46	193.01	192.56	88.47	71.01	-6,897.96	2,943.35	2,558.40	384.95	7.646		
14,300.00	7,110.45	13,645.51	7,032.03	195.81	195.38	88.47	70.41	-6,997.96	2,943.34	2,552.76	390.57	7.536		
14,400.00	7,109.91	13,745.51	7,031.60	198.61	198.20	88.48	69.82	-7,097.95	2,943.32	2,547.12	396.20	7.429		
14,500.00	7,109.37	13,845.51	7,031.16	201.42	201.03	88.48	69.22	-7,197.95	2,943.31	2,541.48	401.83	7.325		
14,600.00	7,108.82	13,945.51	7,030.73	204.22	203.85	88.48	68.62	-7,297.95	2,943.30	2,535.83	407.46	7.223		
14,700.00	7,108.28	14,045.51	7,030.29	207.03	206.68	88.48	68.02	-7,397.95	2,943.28	2,530.18	413.10	7.125		
14,800.00	7,107.74	14,145.51	7,029.86	209.83	209.51	88.48	67.42	-7,497.94	2,943.27	2,524.53	418.73	7.029		
14,900.00	7,107.20	14,245.51	7,029.43	212.64	212.33	88.49	66.82	-7,597.94	2,943.25	2,518.88	424.37	6.936		
15,000.00	7,106.66	14,345.51	7,028.99	215.45	215.16	88.49	66.22	-7,697.94	2,943.24	2,513.23	430.01	6.845		
15,100.00	7,106.12	14,445.51	7,028.56	218.26	217.99	88.49	65.62	-7,797.93	2,943.23	2,507.57	435.66	6.756		
15,200.00	7,105.58	14,545.51	7,028.12	221.07	220.82	88.49	65.02	-7,897.93	2,943.21	2,501.91	441.30	6.669		
15,300.00	7,105.04	14,645.51	7,027.69	223.89	223.65	88.49	64.43	-7,997.93	2,943.20	2,496.25	446.95	6.585		
15,400.00	7,104.50	14,745.51	7,027.26	226.70	226.48	88.50	63.83	-8,097.93	2,943.19	2,490.59	452.60	6.503		
15,467.82	7,104.13	14,813.32	7,026.96	228.61	228.40	88.50	63.42	-8,165.74	2,943.18	2,486.75	456.43	6.448		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	14,805.04	7,027.00	229.28	228.17	88.50	63.47	-8,157.46	2,943.35	2,486.62	456.73	6.444 SF	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	0.47	339.90	2.78	339.91					
100.00	100.00	102.00	100.00	3.28	3.29	0.47	339.90	2.78	339.91	333.34	6.57	51.737		
200.00	200.00	202.00	200.00	3.34	3.34	0.47	339.90	2.78	339.91	333.23	6.68	50.917	CC, ES	
300.00	299.98	301.98	299.98	3.44	3.45	177.35	339.90	2.78	341.65	334.76	6.89	49.604		
400.00	399.84	401.84	399.84	3.59	3.61	177.38	339.90	2.78	346.88	339.68	7.20	48.185		
500.00	499.45	501.45	499.45	3.79	3.81	177.44	339.90	2.78	355.59	347.98	7.60	46.777		
600.00	598.70	600.79	598.77	4.03	4.04	177.26	339.90	1.16	367.74	359.67	8.08	45.538		
700.00	697.47	700.46	697.49	4.31	4.30	176.98	339.90	-1.31	383.36	374.74	8.61	44.500		
800.00	795.62	802.31	795.61	4.64	4.60	176.75	339.90	-3.76	402.41	393.19	9.22	43.654		
900.00	893.06	904.87	893.02	5.00	4.92	176.56	339.90	-6.20	424.87	415.00	9.87	43.032		
1,000.00	989.64	1,008.28	989.58	5.40	5.26	176.40	339.90	-8.61	450.72	440.14	10.57	42.627		
1,100.00	1,085.27	1,087.35	1,085.19	5.83	5.53	176.29	339.90	-11.00	479.91	468.69	11.22	42.759		
1,200.00	1,179.82	1,181.92	1,179.72	6.29	5.87	176.20	339.90	-13.36	512.42	500.47	11.95	42.863		
1,300.00	1,273.17	1,275.29	1,273.06	6.79	6.21	176.14	339.90	-15.70	548.20	535.50	12.71	43.142		
1,400.00	1,365.21	1,367.36	1,365.10	7.33	6.56	176.09	339.90	-18.00	587.22	573.74	13.47	43.579		
1,500.00	1,456.49	1,458.66	1,456.38	7.89	6.91	176.12	339.90	-20.28	628.01	613.75	14.25	44.062		
1,600.00	1,547.76	1,549.96	1,547.65	8.46	7.26	176.14	339.90	-22.56	668.80	653.76	15.04	44.470		
1,700.00	1,639.04	1,641.26	1,638.92	9.05	7.62	176.16	339.90	-24.84	709.60	693.76	15.84	44.796		
1,800.00	1,730.31	1,732.56	1,730.19	9.65	7.98	176.18	339.90	-27.12	750.39	733.74	16.65	45.057		
1,900.00	1,821.58	1,823.86	1,821.46	10.26	8.35	176.19	339.90	-29.40	791.19	773.71	17.48	45.266		
2,000.00	1,912.85	1,915.16	1,912.74	10.87	8.72	176.21	339.90	-31.68	831.98	813.67	18.31	45.433		
2,100.00	2,004.13	2,006.46	2,004.01	11.49	9.09	176.22	339.90	-33.97	872.78	853.62	19.15	45.566		
2,200.00	2,095.40	2,102.24	2,095.28	12.11	9.48	176.23	339.90	-36.25	913.57	893.55	20.02	45.630		
2,300.00	2,186.67	2,189.06	2,186.55	12.74	9.84	176.25	339.90	-38.53	954.37	933.51	20.86	45.757		
2,400.00	2,277.95	2,280.36	2,277.82	13.38	10.22	176.26	339.90	-40.81	995.16	973.44	21.72	45.823		
2,500.00	2,369.22	2,371.66	2,369.09	14.01	10.60	176.27	339.90	-43.09	1,035.96	1,013.37	22.58	45.875		
2,600.00	2,460.49	2,462.96	2,460.37	14.65	10.98	176.27	339.90	-45.37	1,076.75	1,053.30	23.45	45.914		
2,700.00	2,551.77	2,554.26	2,551.64	15.29	11.37	176.28	339.90	-47.65	1,117.55	1,093.22	24.32	45.944		
2,800.00	2,643.04	2,645.57	2,642.91	15.93	11.75	176.29	339.90	-49.94	1,158.34	1,133.14	25.20	45.965		
2,900.00	2,734.31	2,736.87	2,734.18	16.58	12.14	176.30	339.90	-52.22	1,199.14	1,173.06	26.08	45.980		
3,000.00	2,825.58	2,828.17	2,825.45	17.23	12.53	176.30	339.90	-54.50	1,239.93	1,212.97	26.96	45.989		
3,100.00	2,916.86	2,919.47	2,916.73	17.87	12.91	176.31	339.90	-56.78	1,280.73	1,252.88	27.85	45.993		
3,200.00	3,008.13	3,010.77	3,008.00	18.52	13.30	176.31	339.90	-59.06	1,321.52	1,292.79	28.73	45.993		
3,300.00	3,099.40	3,102.07	3,099.27	19.17	13.69	176.32	339.90	-61.34	1,362.32	1,332.70	29.62	45.991		
3,400.00	3,190.68	3,206.63	3,190.54	19.83	14.14	176.33	339.90	-63.62	1,403.11	1,372.54	30.57	45.900		
3,500.00	3,281.95	3,284.67	3,281.81	20.48	14.47	176.33	339.90	-65.90	1,443.91	1,412.50	31.40	45.978		
3,600.00	3,373.22	3,375.97	3,373.08	21.13	14.86	176.33	339.90	-68.19	1,484.70	1,452.41	32.30	45.968		
3,700.00	3,464.49	3,467.27	3,464.36	21.79	15.26	176.34	339.90	-70.47	1,525.50	1,492.31	33.19	45.957		
3,800.00	3,555.77	3,558.57	3,555.63	22.44	15.65	176.34	339.90	-72.75	1,566.29	1,532.20	34.09	45.945		
3,900.00	3,647.04	3,649.87	3,646.90	23.10	16.04	176.35	339.90	-75.03	1,607.09	1,572.10	34.99	45.932		
4,000.00	3,738.31	3,741.17	3,738.17	23.75	16.43	176.35	339.90	-77.31	1,647.88	1,612.00	35.89	45.918		
4,100.00	3,829.59	3,832.47	3,829.44	24.41	16.83	176.35	339.90	-79.59	1,688.68	1,651.89	36.79	45.904		
4,200.00	3,920.86	3,923.77	3,920.71	25.07	17.22	176.36	339.90	-81.87	1,729.48	1,691.79	37.69	45.889		
4,300.00	4,012.13	4,015.07	4,011.99	25.73	17.62	176.36	339.90	-84.16	1,770.27	1,731.68	38.59	45.873		
4,400.00	4,103.41	4,106.37	4,103.26	26.38	18.01	176.36	339.90	-86.44	1,811.07	1,771.57	39.49	45.857		
4,500.00	4,194.68	4,202.33	4,194.53	27.04	18.43	176.37	339.90	-88.72	1,851.86	1,811.44	40.42	45.818		
4,600.00	4,285.95	4,288.97	4,285.80	27.70	18.80	176.37	339.90	-91.00	1,892.66	1,851.35	41.30	45.825		
4,700.00	4,377.22	4,380.27	4,377.07	28.36	19.20	176.37	339.90	-93.28	1,933.45	1,891.24	42.21	45.809		
4,800.00	4,468.50	4,471.57	4,468.35	29.02	19.59	176.37	339.90	-95.56	1,974.25	1,931.13	43.11	45.793		
4,900.00	4,559.77	4,562.87	4,559.62	29.68	19.99	176.38	339.90	-97.84	2,015.04	1,971.02	44.02	45.776		
5,000.00	4,651.04	4,654.17	4,650.89	30.34	20.39	176.38	339.90	-100.12	2,055.84	2,010.91	44.93	45.760		
5,100.00	4,742.32	4,745.47	4,742.16	31.00	20.78	176.38	339.90	-102.41	2,096.63	2,050.80	45.83	45.744		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,836.77	4,833.43	31.66	21.18	176.38	339.90	-104.69	2,137.43	2,090.69	46.74	45.728		
5,300.00	4,924.86	4,928.07	4,924.70	32.32	21.58	176.39	339.90	-106.97	2,178.22	2,130.57	47.65	45.712		
5,400.00	5,016.13	5,019.37	5,015.98	32.99	21.97	176.39	339.90	-109.25	2,219.02	2,170.46	48.56	45.696		
5,500.00	5,107.41	5,110.67	5,107.25	33.65	22.37	176.39	339.90	-111.53	2,259.81	2,210.34	49.47	45.680		
5,600.00	5,198.68	5,201.97	5,198.52	34.31	22.77	176.39	339.90	-113.81	2,300.61	2,250.23	50.38	45.664		
5,700.00	5,289.95	5,306.73	5,289.79	34.97	23.22	176.39	339.90	-116.09	2,341.40	2,290.05	51.35	45.597		
5,800.00	5,381.23	5,384.57	5,381.06	35.63	23.56	176.39	339.90	-118.38	2,382.20	2,330.00	52.20	45.634		
5,900.00	5,472.50	5,475.87	5,472.33	36.30	23.96	176.40	339.90	-120.66	2,423.00	2,369.88	53.11	45.619		
6,000.00	5,563.77	5,567.17	5,563.61	36.96	24.36	176.40	339.90	-122.94	2,463.79	2,409.76	54.03	45.604		
6,100.00	5,655.05	5,658.47	5,654.88	37.62	24.76	176.40	339.90	-125.22	2,504.59	2,449.65	54.94	45.589		
6,200.00	5,746.32	5,749.77	5,746.15	38.28	25.16	176.40	339.90	-127.50	2,545.38	2,489.53	55.85	45.574		
6,300.00	5,837.59	5,841.07	5,837.42	38.95	25.55	176.40	339.90	-129.78	2,586.18	2,529.41	56.76	45.560		
6,400.00	5,928.86	5,932.37	5,928.69	39.61	25.95	176.40	339.90	-132.06	2,626.97	2,569.29	57.68	45.546		
6,500.00	6,020.14	6,023.67	6,019.96	40.27	26.35	176.41	339.90	-134.34	2,667.77	2,609.18	58.59	45.532		
6,600.00	6,111.41	6,114.97	6,111.24	40.94	26.75	176.41	339.90	-136.63	2,708.56	2,649.06	59.51	45.518		
6,700.00	6,202.68	6,206.28	6,202.51	41.60	27.15	176.41	339.90	-138.91	2,749.36	2,688.94	60.42	45.504		
6,800.00	6,293.96	6,302.43	6,293.78	42.26	27.57	176.41	339.90	-141.19	2,790.15	2,728.80	61.36	45.475		
6,900.00	6,385.23	6,388.88	6,385.05	42.93	27.95	176.41	339.90	-143.47	2,830.95	2,768.70	62.25	45.477		
7,000.00	6,476.50	6,480.18	6,476.32	43.59	28.35	176.41	339.90	-145.75	2,871.74	2,808.58	63.17	45.464		
7,100.00	6,567.77	6,576.29	6,572.22	44.25	28.77	176.34	339.83	-151.38	2,912.49	2,848.36	64.13	45.417		
7,200.00	6,658.64	6,673.68	6,667.53	44.91	29.20	155.61	339.50	-170.92	2,952.89	2,887.78	65.10	45.356		
7,300.00	6,747.14	6,770.42	6,758.16	45.52	29.64	136.51	338.89	-204.47	2,992.10	2,926.05	66.06	45.295		
7,400.00	6,831.10	6,867.11	6,842.63	46.07	30.08	122.27	338.01	-251.34	3,029.16	2,962.17	66.98	45.221		
7,500.00	6,908.46	6,964.20	6,919.32	46.54	30.55	111.85	336.89	-310.71	3,063.12	2,995.21	67.91	45.107		
7,600.00	6,977.30	7,061.93	6,986.51	46.95	31.09	104.19	335.53	-381.53	3,093.14	3,024.26	68.88	44.906		
7,700.00	7,035.93	7,160.33	7,042.42	47.30	31.73	98.56	333.98	-462.37	3,118.48	3,048.51	69.98	44.564		
7,800.00	7,082.92	7,259.22	7,085.39	47.59	32.52	94.52	332.26	-551.31	3,138.52	3,067.24	71.28	44.029		
7,900.00	7,117.09	7,358.25	7,114.11	47.84	33.48	91.79	330.43	-645.96	3,152.76	3,079.90	72.86	43.273		
8,000.00	7,137.62	7,456.93	7,127.79	48.06	34.58	90.21	328.52	-743.57	3,160.85	3,086.14	74.72	42.304		
8,100.00	7,143.99	7,556.07	7,128.79	48.28	35.85	89.73	326.59	-842.67	3,162.60	3,085.70	76.90	41.126		
8,200.00	7,143.45	7,656.06	7,128.42	48.53	37.28	89.73	324.63	-942.64	3,161.23	3,081.80	79.43	39.797		
8,300.00	7,142.91	7,756.05	7,128.06	48.89	38.87	89.73	322.67	-1,042.61	3,159.86	3,077.58	82.28	38.402		
8,400.00	7,142.37	7,856.04	7,127.69	49.40	40.59	89.74	320.72	-1,142.58	3,158.50	3,073.07	85.42	36.976		
8,500.00	7,141.83	7,956.03	7,127.33	50.12	42.44	89.74	318.76	-1,242.55	3,157.13	3,068.31	88.81	35.548		
8,600.00	7,141.29	8,056.02	7,126.96	51.08	44.39	89.74	316.81	-1,342.52	3,155.76	3,063.33	92.43	34.141		
8,700.00	7,140.75	8,156.01	7,126.59	52.30	46.44	89.75	314.85	-1,442.49	3,154.39	3,058.14	96.25	32.771		
8,800.00	7,140.21	8,256.00	7,126.23	53.75	48.57	89.75	312.90	-1,542.46	3,153.02	3,052.77	100.26	31.450		
8,900.00	7,139.67	8,355.99	7,125.86	55.40	50.77	89.75	310.94	-1,642.43	3,151.65	3,047.24	104.41	30.184		
9,000.00	7,139.12	8,455.99	7,125.50	57.20	53.03	89.76	308.99	-1,742.40	3,150.28	3,041.57	108.71	28.978		
9,100.00	7,138.58	8,555.98	7,125.13	59.13	55.35	89.76	307.03	-1,842.37	3,148.92	3,035.78	113.14	27.833		
9,200.00	7,138.04	8,655.97	7,124.76	61.15	57.72	89.76	305.08	-1,942.35	3,147.55	3,029.88	117.67	26.749		
9,300.00	7,137.50	8,755.96	7,124.40	63.26	60.12	89.77	303.12	-2,042.32	3,146.18	3,023.88	122.30	25.724		
9,400.00	7,136.96	8,855.95	7,124.03	65.44	62.57	89.77	301.17	-2,142.29	3,144.81	3,017.79	127.02	24.758		
9,500.00	7,136.42	8,955.94	7,123.66	67.68	65.05	89.77	299.21	-2,242.26	3,143.44	3,011.62	131.82	23.846		
9,600.00	7,135.88	9,055.93	7,123.30	69.97	67.56	89.77	297.25	-2,342.23	3,142.07	3,005.38	136.69	22.987		
9,700.00	7,135.34	9,155.92	7,122.93	72.31	70.09	89.78	295.30	-2,442.20	3,140.71	2,999.08	141.62	22.177		
9,800.00	7,134.80	9,255.91	7,122.57	74.69	72.65	89.78	293.34	-2,542.17	3,139.34	2,992.73	146.61	21.413		
9,900.00	7,134.26	9,355.90	7,122.20	77.10	75.23	89.78	291.39	-2,642.14	3,137.97	2,986.32	151.65	20.692		
10,000.00	7,133.71	9,455.89	7,121.83	79.54	77.83	89.79	289.43	-2,742.11	3,136.60	2,979.87	156.73	20.012		
10,100.00	7,133.17	9,555.88	7,121.47	82.02	80.45	89.79	287.48	-2,842.08	3,135.23	2,973.37	161.86	19.370		
10,200.00	7,132.63	9,655.87	7,121.10	84.52	83.08	89.79	285.52	-2,942.05	3,133.86	2,966.84	167.03	18.763		
10,300.00	7,132.09	9,755.86	7,120.74	87.04	85.72	89.80	283.57	-3,042.02	3,132.50	2,960.27	172.22	18.188		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,131.55	9,855.85	7,120.37	89.58	88.38	89.80	281.61	-3,141.99	3,131.13	2,953.67	177.46	17.645		
10,500.00	7,131.01	9,955.84	7,120.00	92.15	91.05	89.80	279.66	-3,241.96	3,129.76	2,947.04	182.71	17.129		
10,600.00	7,130.47	10,055.83	7,119.64	94.73	93.74	89.81	277.70	-3,341.94	3,128.39	2,940.39	188.00	16.640		
10,700.00	7,129.93	10,155.82	7,119.27	97.33	96.43	89.81	275.75	-3,441.91	3,127.02	2,933.71	193.31	16.176		
10,800.00	7,129.39	10,255.81	7,118.91	99.94	99.13	89.81	273.79	-3,541.88	3,125.65	2,927.01	198.64	15.735		
10,900.00	7,128.84	10,355.80	7,118.54	102.56	101.84	89.82	271.83	-3,641.85	3,124.29	2,920.29	204.00	15.315		
11,000.00	7,128.30	10,455.80	7,118.17	105.20	104.55	89.82	269.88	-3,741.82	3,122.92	2,913.55	209.37	14.916		
11,100.00	7,127.76	10,555.79	7,117.81	107.85	107.28	89.82	267.92	-3,841.79	3,121.55	2,906.79	214.76	14.535		
11,200.00	7,127.22	10,655.78	7,117.44	110.51	110.01	89.82	265.97	-3,941.76	3,120.18	2,900.02	220.17	14.172		
11,300.00	7,126.68	10,755.77	7,117.07	113.18	112.75	89.83	264.01	-4,041.73	3,118.81	2,893.23	225.59	13.825		
11,400.00	7,126.14	10,855.76	7,116.71	115.86	115.49	89.83	262.06	-4,141.70	3,117.44	2,886.42	231.02	13.494		
11,500.00	7,125.60	10,955.75	7,116.34	118.55	118.24	89.83	260.10	-4,241.67	3,116.08	2,879.61	236.47	13.177		
11,600.00	7,125.06	11,055.74	7,115.98	121.25	120.99	89.84	258.15	-4,341.64	3,114.71	2,872.78	241.93	12.874		
11,700.00	7,124.52	11,155.73	7,115.61	123.95	123.75	89.84	256.19	-4,441.61	3,113.34	2,865.94	247.40	12.584		
11,800.00	7,123.97	11,255.72	7,115.24	126.66	126.51	89.84	254.24	-4,541.58	3,111.97	2,859.09	252.88	12.306		
11,900.00	7,123.43	11,355.71	7,114.88	129.38	129.27	89.85	252.28	-4,641.55	3,110.60	2,852.23	258.38	12.039		
12,000.00	7,122.89	11,455.70	7,114.51	132.10	132.04	89.85	250.33	-4,741.53	3,109.24	2,845.36	263.88	11.783		
12,100.00	7,122.35	11,555.69	7,114.15	134.83	134.81	89.85	248.37	-4,841.50	3,107.87	2,838.48	269.39	11.537		
12,200.00	7,121.81	11,655.68	7,113.78	137.56	137.59	89.86	246.42	-4,941.47	3,106.50	2,831.59	274.91	11.300		
12,300.00	7,121.27	11,755.67	7,113.41	140.30	140.37	89.86	244.46	-5,041.44	3,105.13	2,824.70	280.44	11.073		
12,400.00	7,120.73	11,855.66	7,113.05	143.05	143.15	89.86	242.50	-5,141.41	3,103.76	2,817.79	285.97	10.853		
12,500.00	7,120.19	11,955.65	7,112.68	145.80	145.94	89.87	240.55	-5,241.38	3,102.39	2,810.88	291.51	10.642		
12,600.00	7,119.65	12,055.64	7,112.31	148.55	148.72	89.87	238.59	-5,341.35	3,101.03	2,803.97	297.06	10.439		
12,700.00	7,119.10	12,155.63	7,111.95	151.30	151.51	89.87	236.64	-5,441.32	3,099.66	2,797.05	302.61	10.243		
12,800.00	7,118.56	12,255.62	7,111.58	154.07	154.31	89.88	234.68	-5,541.29	3,098.29	2,790.12	308.17	10.054		
12,900.00	7,118.02	12,355.61	7,111.22	156.83	157.10	89.88	232.73	-5,641.26	3,096.92	2,783.19	313.74	9.871		
13,000.00	7,117.48	12,455.61	7,110.85	159.60	159.90	89.88	230.77	-5,741.23	3,095.55	2,776.25	319.31	9.695		
13,100.00	7,116.94	12,555.60	7,110.48	162.37	162.70	89.88	228.82	-5,841.20	3,094.19	2,769.31	324.88	9.524		
13,200.00	7,116.40	12,655.59	7,110.12	165.14	165.50	89.89	226.86	-5,941.17	3,092.82	2,762.36	330.46	9.359		
13,300.00	7,115.86	12,755.58	7,109.75	167.92	168.30	89.89	224.91	-6,041.14	3,091.45	2,755.41	336.05	9.200		
13,400.00	7,115.32	12,855.57	7,109.39	170.70	171.10	89.89	222.95	-6,141.12	3,090.08	2,748.45	341.63	9.045		
13,500.00	7,114.78	12,955.56	7,109.02	173.48	173.91	89.90	221.00	-6,241.09	3,088.71	2,741.49	347.23	8.895		
13,600.00	7,114.24	13,055.55	7,108.65	176.26	176.72	89.90	219.04	-6,341.06	3,087.35	2,734.52	352.82	8.750		
13,700.00	7,113.69	13,155.54	7,108.29	179.05	179.52	89.90	217.08	-6,441.03	3,085.98	2,727.56	358.42	8.610		
13,800.00	7,113.15	13,255.53	7,107.92	181.84	182.33	89.91	215.13	-6,541.00	3,084.61	2,720.58	364.03	8.474		
13,900.00	7,112.61	13,355.52	7,107.55	184.63	185.15	89.91	213.17	-6,640.97	3,083.24	2,713.61	369.63	8.341		
14,000.00	7,112.07	13,455.51	7,107.19	187.42	187.96	89.91	211.22	-6,740.94	3,081.87	2,706.63	375.24	8.213		
14,100.00	7,111.53	13,555.50	7,106.82	190.22	190.77	89.92	209.26	-6,840.91	3,080.51	2,699.65	380.86	8.088		
14,200.00	7,110.99	13,655.49	7,106.46	193.01	193.59	89.92	207.31	-6,940.88	3,079.14	2,692.67	386.47	7.967		
14,300.00	7,110.45	13,755.48	7,106.09	195.81	196.40	89.92	205.35	-7,040.85	3,077.77	2,685.68	392.09	7.850		
14,400.00	7,109.91	13,855.47	7,105.72	198.61	199.22	89.93	203.40	-7,140.82	3,076.40	2,678.69	397.71	7.735		
14,500.00	7,109.37	13,955.46	7,105.36	201.42	202.04	89.93	201.44	-7,240.79	3,075.03	2,671.70	403.34	7.624		
14,600.00	7,108.82	14,055.45	7,104.99	204.22	204.86	89.93	199.49	-7,340.76	3,073.67	2,664.70	408.96	7.516		
14,700.00	7,108.28	14,155.44	7,104.63	207.03	207.68	89.94	197.53	-7,440.73	3,072.30	2,657.71	414.59	7.410		
14,800.00	7,107.74	14,255.43	7,104.26	209.83	210.50	89.94	195.58	-7,540.70	3,070.93	2,650.71	420.22	7.308		
14,900.00	7,107.20	14,355.42	7,103.89	212.64	213.32	89.94	193.62	-7,640.68	3,069.56	2,643.70	425.86	7.208		
15,000.00	7,106.66	14,455.41	7,103.53	215.45	216.15	89.95	191.66	-7,740.65	3,068.20	2,636.70	431.49	7.111		
15,100.00	7,106.12	14,555.41	7,103.16	218.26	218.97	89.95	189.71	-7,840.62	3,066.83	2,629.70	437.13	7.016		
15,200.00	7,105.58	14,655.40	7,102.79	221.07	221.79	89.95	187.75	-7,940.59	3,065.46	2,622.69	442.77	6.923		
15,300.00	7,105.04	14,755.39	7,102.43	223.89	224.62	89.96	185.80	-8,040.56	3,064.09	2,615.68	448.41	6.833		
15,400.00	7,104.50	14,855.38	7,102.06	226.70	227.44	89.96	183.84	-8,140.53	3,062.72	2,608.67	454.05	6.745		
15,458.92	7,104.18	14,872.41	7,102.00	228.36	227.93	89.96	183.51	-8,157.56	3,062.20	2,606.13	456.07	6.714		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	14,872.41	7,102.00	229.28	227.93	89.96	183.51	-8,157.56	3,062.38	2,605.54	456.84	6.703 SF	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 41-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	59.00	3.28	3.28	-113.64	-3,935.77	-8,992.09	9,815.88					
100.00	100.00	41.00	100.00	3.28	3.36	-113.64	-3,935.77	-8,992.09	9,815.70	9,809.06	6.64	1,477.847		
200.00	200.00	141.00	200.00	3.34	4.57	-113.64	-3,935.77	-8,992.09	9,815.70	9,807.80	7.90	1,241.980		
300.00	299.98	240.98	299.98	3.44	7.43	63.25	-3,935.77	-8,992.09	9,814.91	9,804.04	10.87	902.960		
400.00	399.84	340.84	399.84	3.59	10.67	63.32	-3,935.77	-8,992.09	9,812.56	9,798.30	14.26	688.171		
500.00	499.45	440.45	499.45	3.79	14.02	63.44	-3,935.77	-8,992.09	9,808.64	9,790.83	17.81	550.828		
600.00	598.70	539.70	598.70	4.03	17.41	63.60	-3,935.77	-8,992.09	9,803.17	9,781.74	21.44	457.297		
700.00	697.47	638.47	697.47	4.31	20.80	63.80	-3,935.77	-8,992.09	9,796.17	9,771.06	25.12	390.027		
800.00	795.62	736.62	795.62	4.64	24.19	64.06	-3,935.77	-8,992.09	9,787.66	9,758.83	28.83	339.528		
900.00	893.06	834.06	893.06	5.00	27.57	64.35	-3,935.77	-8,992.09	9,777.66	9,745.11	32.56	300.327		
1,000.00	989.64	930.64	989.64	5.40	30.92	64.69	-3,935.77	-8,992.09	9,766.21	9,729.92	36.30	269.069		
1,100.00	1,085.27	1,026.27	1,085.27	5.83	34.24	65.08	-3,935.77	-8,992.09	9,753.34	9,713.31	40.04	243.598		
1,200.00	1,179.82	1,120.82	1,179.82	6.29	37.53	65.51	-3,935.77	-8,992.09	9,739.10	9,695.32	43.78	222.465		
1,300.00	1,273.17	1,214.17	1,273.17	6.79	40.77	65.98	-3,935.77	-8,992.09	9,723.52	9,676.01	47.51	204.667		
1,400.00	1,365.21	1,306.21	1,365.21	7.33	43.98	66.49	-3,935.77	-8,992.09	9,706.65	9,655.43	51.23	189.482		
1,500.00	1,456.49	1,402.51	1,456.49	7.89	47.33	66.71	-3,935.77	-8,992.09	9,689.16	9,634.04	55.12	175.791		
1,600.00	1,547.76	1,488.76	1,547.76	8.46	50.33	66.92	-3,935.77	-8,992.09	9,671.80	9,613.13	58.67	164.839		
1,700.00	1,639.04	1,580.04	1,639.04	9.05	53.51	67.12	-3,935.77	-8,992.09	9,654.59	9,592.17	62.42	154.673		
1,800.00	1,730.31	1,671.31	1,730.31	9.65	56.69	67.33	-3,935.77	-8,992.09	9,637.51	9,571.34	66.18	145.634		
1,900.00	1,821.58	1,762.58	1,821.58	10.26	59.88	67.54	-3,935.77	-8,992.09	9,620.58	9,550.64	69.94	137.549		
2,000.00	1,912.85	1,853.85	1,912.85	10.87	63.06	67.75	-3,935.77	-8,992.09	9,603.80	9,530.08	73.72	130.278		
2,100.00	2,004.13	1,945.13	2,004.13	11.49	66.24	67.96	-3,935.77	-8,992.09	9,587.16	9,509.66	77.50	123.705		
2,200.00	2,095.40	2,036.40	2,095.40	12.11	69.42	68.17	-3,935.77	-8,992.09	9,570.66	9,489.37	81.29	117.737		
2,300.00	2,186.67	2,127.67	2,186.67	12.74	72.61	68.38	-3,935.77	-8,992.09	9,554.31	9,469.23	85.08	112.296		
2,400.00	2,277.95	2,218.95	2,277.95	13.38	75.79	68.59	-3,935.77	-8,992.09	9,538.11	9,449.23	88.88	107.314		
2,500.00	2,369.22	2,310.22	2,369.22	14.01	78.97	68.80	-3,935.77	-8,992.09	9,522.06	9,429.37	92.68	102.738		
2,600.00	2,460.49	2,401.49	2,460.49	14.65	82.16	69.01	-3,935.77	-8,992.09	9,506.15	9,409.66	96.49	98.520		
2,700.00	2,551.77	2,507.23	2,551.77	15.29	85.84	69.22	-3,935.77	-8,992.09	9,490.39	9,389.59	100.80	94.147		
2,800.00	2,643.04	2,584.04	2,643.04	15.93	88.52	69.44	-3,935.77	-8,992.09	9,474.79	9,370.68	104.11	91.006		
2,900.00	2,734.31	2,675.31	2,734.31	16.58	91.71	69.65	-3,935.77	-8,992.09	9,459.33	9,351.40	107.93	87.645		
3,000.00	2,825.58	2,766.58	2,825.58	17.23	94.89	69.87	-3,935.77	-8,992.09	9,444.03	9,332.28	111.75	84.513		
3,100.00	2,916.86	2,857.86	2,916.86	17.87	98.08	70.08	-3,935.77	-8,992.09	9,428.87	9,313.31	115.57	81.588		
3,200.00	3,008.13	2,949.13	3,008.13	18.52	101.26	70.30	-3,935.77	-8,992.09	9,413.87	9,294.49	119.39	78.850		
3,300.00	3,099.40	3,040.40	3,099.40	19.17	104.45	70.51	-3,935.77	-8,992.09	9,399.03	9,275.81	123.21	76.282		
3,400.00	3,190.68	3,131.68	3,190.68	19.83	107.63	70.73	-3,935.77	-8,992.09	9,384.34	9,257.30	127.04	73.868		
3,500.00	3,281.95	3,222.95	3,281.95	20.48	110.82	70.95	-3,935.77	-8,992.09	9,369.80	9,238.93	130.87	71.596		
3,600.00	3,373.22	3,314.22	3,373.22	21.13	114.00	71.17	-3,935.77	-8,992.09	9,355.42	9,220.72	134.70	69.454		
3,700.00	3,464.49	3,405.49	3,464.49	21.79	117.19	71.38	-3,935.77	-8,992.09	9,341.20	9,202.66	138.53	67.430		
3,800.00	3,555.77	3,503.23	3,555.77	22.44	120.60	71.60	-3,935.77	-8,992.09	9,327.13	9,184.54	142.59	65.412		
3,900.00	3,647.04	3,588.04	3,647.04	23.10	123.56	71.82	-3,935.77	-8,992.09	9,313.22	9,167.02	146.20	63.702		
4,000.00	3,738.31	3,679.31	3,738.31	23.75	126.74	72.04	-3,935.77	-8,992.09	9,299.47	9,149.44	150.04	61.981		
4,100.00	3,829.59	3,770.59	3,829.59	24.41	129.93	72.26	-3,935.77	-8,992.09	9,285.88	9,132.01	153.87	60.347		
4,200.00	3,920.86	3,861.86	3,920.86	25.07	133.11	72.49	-3,935.77	-8,992.09	9,272.45	9,114.74	157.71	58.793		
4,300.00	4,012.13	3,953.13	4,012.13	25.73	136.30	72.71	-3,935.77	-8,992.09	9,259.18	9,097.63	161.55	57.314		
4,400.00	4,103.41	4,044.41	4,103.41	26.38	139.48	72.93	-3,935.77	-8,992.09	9,246.07	9,080.68	165.39	55.904		
4,500.00	4,194.68	4,135.68	4,194.68	27.04	142.67	73.15	-3,935.77	-8,992.09	9,233.13	9,063.89	169.24	54.558		
4,600.00	4,285.95	4,226.95	4,285.95	27.70	145.85	73.38	-3,935.77	-8,992.09	9,220.34	9,047.27	173.08	53.273		
4,700.00	4,377.22	4,318.22	4,377.22	28.36	149.04	73.60	-3,935.77	-8,992.09	9,207.73	9,030.80	176.92	52.044		
4,800.00	4,468.50	4,409.50	4,468.50	29.02	152.23	73.83	-3,935.77	-8,992.09	9,195.27	9,014.50	180.77	50.868		
4,900.00	4,559.77	4,500.77	4,559.77	29.68	155.41	74.05	-3,935.77	-8,992.09	9,182.98	8,998.37	184.61	49.742		
5,000.00	4,651.04	4,607.96	4,651.04	30.34	159.15	74.28	-3,935.77	-8,992.09	9,170.85	8,981.84	189.02	48.519		
5,100.00	4,742.32	4,683.32	4,742.32	31.00	161.78	74.50	-3,935.77	-8,992.09	9,158.90	8,966.59	192.31	47.626		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	4,833.59	4,774.59	4,833.59	31.66	164.97	74.73	-3,935.77	-8,992.09	9,147.10	8,950.95	196.16	46.632		
5,300.00	4,924.86	4,865.86	4,924.86	32.32	168.15	74.96	-3,935.77	-8,992.09	9,135.48	8,935.48	200.00	45.676		
5,400.00	5,016.13	4,957.13	5,016.13	32.99	171.34	75.18	-3,935.77	-8,992.09	9,124.02	8,920.17	203.85	44.758		
5,500.00	5,107.41	5,048.41	5,107.41	33.65	174.53	75.41	-3,935.77	-8,992.09	9,112.74	8,905.03	207.71	43.873		
5,600.00	5,198.68	5,139.68	5,198.68	34.31	177.71	75.64	-3,935.77	-8,992.09	9,101.62	8,890.06	211.56	43.022		
5,700.00	5,289.95	5,230.95	5,289.95	34.97	180.90	75.87	-3,935.77	-8,992.09	9,090.67	8,875.26	215.41	42.202		
5,800.00	5,381.23	5,322.23	5,381.23	35.63	184.08	76.10	-3,935.77	-8,992.09	9,079.89	8,860.63	219.26	41.411		
5,900.00	5,472.50	5,413.50	5,472.50	36.30	187.27	76.33	-3,935.77	-8,992.09	9,069.29	8,846.17	223.11	40.649		
6,000.00	5,563.77	5,504.77	5,563.77	36.96	190.45	76.56	-3,935.77	-8,992.09	9,058.85	8,831.89	226.97	39.912		
6,100.00	5,655.05	5,603.96	5,655.05	37.62	193.92	76.79	-3,935.77	-8,992.09	9,048.59	8,817.49	231.10	39.155		
6,200.00	5,746.32	5,687.32	5,746.32	38.28	196.83	77.02	-3,935.77	-8,992.09	9,038.50	8,803.83	234.68	38.515		
6,300.00	5,837.59	5,778.59	5,837.59	38.95	200.01	77.25	-3,935.77	-8,992.09	9,028.59	8,790.05	238.53	37.851		
6,400.00	5,928.86	5,869.86	5,928.86	39.61	203.20	77.49	-3,935.77	-8,992.09	9,018.85	8,776.46	242.39	37.208		
6,500.00	6,020.14	5,961.14	6,020.14	40.27	206.38	77.72	-3,935.77	-8,992.09	9,009.28	8,763.04	246.24	36.587		
6,600.00	6,111.41	6,052.41	6,111.41	40.94	209.57	77.95	-3,935.77	-8,992.09	8,999.89	8,749.79	250.10	35.985		
6,700.00	6,202.68	6,143.68	6,202.68	41.60	212.76	78.19	-3,935.77	-8,992.09	8,990.67	8,736.72	253.96	35.402		
6,800.00	6,293.96	6,234.96	6,293.96	42.26	215.94	78.42	-3,935.77	-8,992.09	8,981.64	8,723.82	257.82	34.837		
6,900.00	6,385.23	6,326.23	6,385.23	42.93	219.13	78.65	-3,935.77	-8,992.09	8,972.77	8,711.10	261.67	34.290		
7,000.00	6,476.50	6,417.50	6,476.50	43.59	222.31	78.89	-3,935.77	-8,992.09	8,964.09	8,698.56	265.53	33.759		
7,100.00	6,567.77	6,508.77	6,567.77	44.25	225.50	79.12	-3,935.77	-8,992.09	8,955.58	8,686.19	269.39	33.244		
7,200.00	6,658.64	6,600.36	6,658.64	44.91	228.70	79.35	-3,935.77	-8,992.09	8,947.13	8,673.88	273.25	32.722		
7,300.00	6,747.14	6,688.14	6,747.14	45.52	231.76	79.58	-3,935.77	-8,992.09	8,938.75	8,661.57	277.11	32.200		
7,400.00	6,831.10	6,772.10	6,831.10	46.07	234.69	79.81	-3,935.77	-8,992.09	8,930.42	8,649.26	280.97	31.678		
7,500.00	6,908.46	6,849.46	6,908.46	46.54	237.39	79.99	-3,935.77	-8,992.09	8,922.14	8,637.00	284.82	31.156		
7,600.00	6,977.30	6,918.30	6,977.30	46.95	239.80	80.17	-3,935.77	-8,992.09	8,913.91	8,624.79	288.67	30.634		
7,700.00	7,035.93	6,976.93	7,035.93	47.30	241.84	80.35	-3,935.77	-8,992.09	8,905.74	8,612.62	292.52	30.112		
7,800.00	7,082.92	7,023.92	7,082.92	47.59	243.48	80.53	-3,935.77	-8,992.09	8,897.62	8,600.50	296.37	29.590		
7,900.00	7,117.09	7,058.09	7,117.09	47.84	244.68	80.71	-3,935.77	-8,992.09	8,889.54	8,588.42	299.22	29.068		
8,000.00	7,137.62	7,078.62	7,137.62	48.06	245.39	80.89	-3,935.77	-8,992.09	8,881.50	8,576.38	302.07	28.546		
8,100.00	7,143.99	7,084.99	7,143.99	48.28	245.61	81.07	-3,935.77	-8,992.09	8,873.51	8,564.39	304.92	28.024		
8,200.00	7,143.45	7,084.45	7,143.45	48.53	245.60	81.25	-3,935.77	-8,992.09	8,865.56	8,552.44	307.77	27.502		
8,300.00	7,142.91	7,083.91	7,142.91	48.89	245.58	81.43	-3,935.77	-8,992.09	8,857.64	8,540.52	310.62	26.980		
8,400.00	7,142.37	7,083.37	7,142.37	49.40	245.56	81.61	-3,935.77	-8,992.09	8,849.76	8,528.64	313.47	26.458		
8,500.00	7,141.83	7,082.83	7,141.83	50.12	245.54	81.79	-3,935.77	-8,992.09	8,841.91	8,516.79	316.32	25.936		
8,600.00	7,141.29	7,082.29	7,141.29	51.08	245.52	81.97	-3,935.77	-8,992.09	8,834.09	8,504.96	319.17	25.414		
8,700.00	7,140.75	7,081.75	7,140.75	52.30	245.50	82.15	-3,935.77	-8,992.09	8,826.30	8,493.16	322.02	24.892		
8,800.00	7,140.21	7,081.21	7,140.21	53.75	245.48	82.33	-3,935.77	-8,992.09	8,818.54	8,481.39	324.87	24.370		
8,900.00	7,139.67	7,080.67	7,139.67	55.40	245.46	82.51	-3,935.77	-8,992.09	8,810.81	8,469.64	327.72	23.848		
9,000.00	7,139.12	7,080.12	7,139.12	57.20	245.44	82.69	-3,935.77	-8,992.09	8,803.11	8,457.91	330.57	23.326		
9,100.00	7,138.58	7,079.58	7,138.58	59.13	245.43	82.87	-3,935.77	-8,992.09	8,795.44	8,446.19	333.42	22.804		
9,200.00	7,138.04	7,079.04	7,138.04	61.15	245.41	83.05	-3,935.77	-8,992.09	8,787.80	8,434.48	336.27	22.282		
9,300.00	7,137.50	7,078.50	7,137.50	63.26	245.39	83.23	-3,935.77	-8,992.09	8,780.19	8,422.79	339.12	21.760		
9,400.00	7,136.96	7,077.96	7,136.96	65.44	245.37	83.41	-3,935.77	-8,992.09	8,772.60	8,411.11	341.97	21.238		
9,500.00	7,136.42	7,077.42	7,136.42	67.68	245.35	83.59	-3,935.77	-8,992.09	8,765.04	8,400.44	344.82	20.716		
9,600.00	7,135.88	7,076.88	7,135.88	69.97	245.33	83.77	-3,935.77	-8,992.09	8,757.50	8,389.78	347.67	20.194		
9,700.00	7,135.34	7,076.34	7,135.34	72.31	245.31	83.95	-3,935.77	-8,992.09	8,750.00	8,379.13	350.52	19.672		
9,800.00	7,134.80	7,075.80	7,134.80	74.69	245.29	84.13	-3,935.77	-8,992.09	8,742.52	8,368.48	353.37	19.150		
9,900.00	7,134.26	7,075.26	7,134.26	77.10	245.27	84.31	-3,935.77	-8,992.09	8,735.06	8,357.84	356.22	18.628		
10,000.00	7,133.71	7,074.71	7,133.71	79.54	245.26	84.49	-3,935.77	-8,992.09	8,727.62	8,347.21	359.07	18.106		
10,100.00	7,133.17	7,074.17	7,133.17	82.02	245.24	84.67	-3,935.77	-8,992.09	8,720.20	8,336.58	361.92	17.584		
10,200.00	7,132.63	7,073.63	7,132.63	84.52	245.22	84.85	-3,935.77	-8,992.09	8,712.80	8,325.96	364.77	17.062		
10,300.00	7,132.09	7,073.09	7,132.09	87.04	245.20	85.03	-3,935.77	-8,992.09	8,705.42	8,315.34	367.62	16.540		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 41-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,131.55	7,072.55	7,131.55	89.58	245.18	-91.74	-3,935.77	-8,992.09	6,010.37	5,718.15	292.23	20.568		
10,500.00	7,131.01	7,072.01	7,131.01	92.15	245.16	-91.71	-3,935.77	-8,992.09	5,911.95	5,619.63	292.31	20.225		
10,600.00	7,130.47	7,071.47	7,130.47	94.73	245.14	-91.68	-3,935.77	-8,992.09	5,813.57	5,521.16	292.41	19.882		
10,700.00	7,129.93	7,070.93	7,129.93	97.33	245.12	-91.65	-3,935.77	-8,992.09	5,715.25	5,422.72	292.53	19.538		
10,800.00	7,129.39	7,070.39	7,129.39	99.94	245.10	-91.63	-3,935.77	-8,992.09	5,616.99	5,324.33	292.66	19.193		
10,900.00	7,128.84	7,069.84	7,128.84	102.56	245.09	-91.60	-3,935.77	-8,992.09	5,518.79	5,225.98	292.82	18.847		
11,000.00	7,128.30	7,069.30	7,128.30	105.20	245.07	-91.57	-3,935.77	-8,992.09	5,420.66	5,127.67	292.99	18.501		
11,100.00	7,127.76	7,068.76	7,127.76	107.85	245.05	-91.54	-3,935.77	-8,992.09	5,322.60	5,029.41	293.19	18.154		
11,200.00	7,127.22	7,068.22	7,127.22	110.51	245.03	-91.51	-3,935.77	-8,992.09	5,224.61	4,931.20	293.41	17.806		
11,300.00	7,126.68	7,067.68	7,126.68	113.18	245.01	-91.48	-3,935.77	-8,992.09	5,126.70	4,833.04	293.66	17.458		
11,400.00	7,126.14	7,067.14	7,126.14	115.86	244.99	-91.45	-3,935.77	-8,992.09	5,028.88	4,734.93	293.94	17.108		
11,500.00	7,125.60	7,066.60	7,125.60	118.55	244.97	-91.42	-3,935.77	-8,992.09	4,931.13	4,636.88	294.26	16.758		
11,600.00	7,125.06	7,066.06	7,125.06	121.25	244.95	-91.39	-3,935.77	-8,992.09	4,833.49	4,538.88	294.60	16.407		
11,700.00	7,124.52	7,065.52	7,124.52	123.95	244.93	-91.36	-3,935.77	-8,992.09	4,735.93	4,440.95	294.99	16.055		
11,800.00	7,123.97	7,064.97	7,123.97	126.66	244.92	-91.33	-3,935.77	-8,992.09	4,638.49	4,343.08	295.41	15.702		
11,900.00	7,123.43	7,064.43	7,123.43	129.38	244.90	-91.30	-3,935.77	-8,992.09	4,541.15	4,245.27	295.88	15.348		
12,000.00	7,122.89	7,063.89	7,122.89	132.10	244.88	-91.27	-3,935.77	-8,992.09	4,443.94	4,147.54	296.40	14.993		
12,100.00	7,122.35	7,063.35	7,122.35	134.83	244.86	-91.24	-3,935.77	-8,992.09	4,346.84	4,049.88	296.96	14.638		
12,200.00	7,121.81	7,062.81	7,121.81	137.56	244.84	-91.21	-3,935.77	-8,992.09	4,249.89	3,952.30	297.59	14.281		
12,300.00	7,121.27	7,062.27	7,121.27	140.30	244.82	-91.18	-3,935.77	-8,992.09	4,153.08	3,854.80	298.28	13.924		
12,400.00	7,120.73	7,061.73	7,120.73	143.05	244.80	-91.15	-3,935.77	-8,992.09	4,056.42	3,757.39	299.03	13.565		
12,500.00	7,120.19	7,061.19	7,120.19	145.80	244.78	-91.12	-3,935.77	-8,992.09	3,959.93	3,660.08	299.85	13.206		
12,600.00	7,119.65	7,060.65	7,119.65	148.55	244.76	-91.10	-3,935.77	-8,992.09	3,863.61	3,562.86	300.75	12.846		
12,700.00	7,119.10	7,060.10	7,119.10	151.30	244.75	-91.07	-3,935.77	-8,992.09	3,767.49	3,465.75	301.74	12.486		
12,800.00	7,118.56	7,059.56	7,118.56	154.07	244.73	-91.04	-3,935.77	-8,992.09	3,671.58	3,368.76	302.82	12.125		
12,900.00	7,118.02	7,059.02	7,118.02	156.83	244.71	-91.01	-3,935.77	-8,992.09	3,575.89	3,271.89	303.99	11.763		
13,000.00	7,117.48	7,058.48	7,117.48	159.60	244.69	-90.98	-3,935.77	-8,992.09	3,480.44	3,175.16	305.28	11.401		
13,100.00	7,116.94	7,057.94	7,116.94	162.37	244.67	-90.95	-3,935.77	-8,992.09	3,385.25	3,078.57	306.68	11.038		
13,200.00	7,116.40	7,057.40	7,116.40	165.14	244.65	-90.92	-3,935.77	-8,992.09	3,290.35	2,982.14	308.21	10.676		
13,300.00	7,115.86	7,056.86	7,115.86	167.92	244.63	-90.89	-3,935.77	-8,992.09	3,195.77	2,885.88	309.88	10.313		
13,400.00	7,115.32	7,056.32	7,115.32	170.70	244.61	-90.86	-3,935.77	-8,992.09	3,101.52	2,789.81	311.70	9.950		
13,500.00	7,114.78	7,055.78	7,114.78	173.48	244.59	-90.83	-3,935.77	-8,992.09	3,007.64	2,693.95	313.69	9.588		
13,600.00	7,114.24	7,055.24	7,114.24	176.26	244.58	-90.80	-3,935.77	-8,992.09	2,914.17	2,598.31	315.85	9.226		
13,700.00	7,113.69	7,054.69	7,113.69	179.05	244.56	-90.77	-3,935.77	-8,992.09	2,821.14	2,502.93	318.21	8.866		
13,800.00	7,113.15	7,054.15	7,113.15	181.84	244.54	-90.74	-3,935.77	-8,992.09	2,728.62	2,407.83	320.78	8.506		
13,900.00	7,112.61	7,053.61	7,112.61	184.63	244.52	-90.71	-3,935.77	-8,992.09	2,636.63	2,313.04	323.59	8.148		
14,000.00	7,112.07	7,053.07	7,112.07	187.42	244.50	-90.68	-3,935.77	-8,992.09	2,545.25	2,218.61	326.64	7.792		
14,100.00	7,111.53	7,052.53	7,111.53	190.22	244.48	-90.65	-3,935.77	-8,992.09	2,454.54	2,124.57	329.97	7.439		
14,200.00	7,110.99	7,051.99	7,110.99	193.01	244.46	-90.62	-3,935.77	-8,992.09	2,364.59	2,030.98	333.61	7.088		
14,300.00	7,110.45	7,051.45	7,110.45	195.81	244.44	-90.59	-3,935.77	-8,992.09	2,275.47	1,937.90	337.57	6.741		
14,400.00	7,109.91	7,050.91	7,109.91	198.61	244.42	-90.57	-3,935.77	-8,992.09	2,187.29	1,845.40	341.89	6.398		
14,500.00	7,109.37	7,050.37	7,109.37	201.42	244.41	-90.54	-3,935.77	-8,992.09	2,100.17	1,753.57	346.60	6.059		
14,600.00	7,108.82	7,049.82	7,108.82	204.22	244.39	-90.51	-3,935.77	-8,992.09	2,014.25	1,662.50	351.74	5.727		
14,700.00	7,108.28	7,049.28	7,108.28	207.03	244.37	-90.48	-3,935.77	-8,992.09	1,929.68	1,572.34	357.34	5.400		
14,800.00	7,107.74	7,048.74	7,107.74	209.83	244.35	-90.45	-3,935.77	-8,992.09	1,846.66	1,483.21	363.44	5.081		
14,900.00	7,107.20	7,048.20	7,107.20	212.64	244.33	-90.42	-3,935.77	-8,992.09	1,765.39	1,395.31	370.08	4.770		
15,000.00	7,106.66	7,047.66	7,106.66	215.45	244.31	-90.39	-3,935.77	-8,992.09	1,686.15	1,308.85	377.29	4.469		
15,100.00	7,106.12	7,047.12	7,106.12	218.26	244.29	-90.36	-3,935.77	-8,992.09	1,609.21	1,224.11	385.10	4.179		
15,200.00	7,105.58	7,046.58	7,105.58	221.07	244.27	-90.33	-3,935.77	-8,992.09	1,534.94	1,141.41	393.53	3.900		
15,300.00	7,105.04	7,046.04	7,105.04	223.89	244.25	-90.30	-3,935.77	-8,992.09	1,463.73	1,061.15	402.58	3.636		
15,400.00	7,104.50	7,045.50	7,104.50	226.70	244.24	-90.27	-3,935.77	-8,992.09	1,396.06	983.83	412.23	3.387		
15,491.56	7,104.00	7,045.00	7,104.00	229.28	244.22	-90.24	-3,935.77	-8,992.09	1,337.66	916.12	421.54	3.173	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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
0.00	0.00	685.98	717.70	3.28	4.37	-106.29	-2,610.22	-8,932.51	9,333.71				
100.00	100.00	724.00	755.32	3.28	4.49	-106.32	-2,613.97	-8,928.50	9,326.33	9,318.58	7.75	1,203.762	
200.00	200.00	724.00	755.32	3.34	4.49	-106.32	-2,613.97	-8,928.50	9,319.83	9,312.05	7.79	1,196.646	
300.00	299.98	724.00	755.32	3.44	4.49	70.66	-2,613.97	-8,928.50	9,313.83	9,305.95	7.88	1,181.660	
400.00	399.84	770.73	801.49	3.59	4.65	70.75	-2,619.60	-8,924.09	9,306.97	9,298.80	8.18	1,138.082	
500.00	499.45	818.00	848.05	3.79	4.81	70.86	-2,626.98	-8,920.53	9,300.59	9,292.06	8.53	1,090.005	
600.00	598.70	818.00	848.05	4.03	4.81	71.00	-2,626.98	-8,920.53	9,293.35	9,284.58	8.77	1,059.617	
700.00	697.47	818.00	848.05	4.31	4.81	71.14	-2,626.98	-8,920.53	9,286.05	9,277.00	9.05	1,025.951	
800.00	795.62	818.00	848.05	4.64	4.81	71.27	-2,626.98	-8,920.53	9,278.69	9,269.32	9.37	990.086	
900.00	893.06	818.00	848.05	5.00	4.81	71.42	-2,626.98	-8,920.53	9,271.29	9,261.56	9.73	952.915	
1,000.00	989.64	861.53	890.81	5.40	4.97	71.58	-2,634.78	-8,918.20	9,263.17	9,252.89	10.28	901.111	
1,100.00	1,085.27	912.00	940.33	5.83	5.15	71.76	-2,644.41	-8,916.82	9,255.60	9,244.71	10.89	849.555	
1,200.00	1,179.82	912.00	940.33	6.29	5.15	71.92	-2,644.41	-8,916.82	9,247.11	9,235.76	11.35	814.437	
1,300.00	1,273.17	912.00	940.33	6.79	5.15	72.09	-2,644.41	-8,916.82	9,238.61	9,226.77	11.85	779.866	
1,400.00	1,365.21	912.00	940.33	7.33	5.15	72.25	-2,644.41	-8,916.82	9,230.12	9,217.75	12.37	746.017	
1,500.00	1,456.49	912.00	940.33	7.89	5.15	72.26	-2,644.41	-8,916.82	9,222.11	9,209.19	12.92	713.639	
1,600.00	1,547.76	912.00	940.33	8.46	5.15	72.26	-2,644.41	-8,916.82	9,215.18	9,201.69	13.49	683.162	
1,700.00	1,639.04	963.04	990.39	9.05	5.34	72.32	-2,654.40	-8,917.04	9,208.34	9,194.08	14.26	645.601	
1,800.00	1,730.31	1,006.00	1,032.51	9.65	5.50	72.38	-2,662.66	-8,918.60	9,203.28	9,188.26	15.02	612.735	
1,900.00	1,821.58	1,006.00	1,032.51	10.26	5.50	72.38	-2,662.66	-8,918.60	9,198.60	9,182.98	15.62	589.036	
2,000.00	1,912.85	1,006.00	1,032.51	10.87	5.50	72.38	-2,662.66	-8,918.60	9,195.00	9,178.78	16.22	566.918	
2,100.00	2,004.13	1,006.00	1,032.51	11.49	5.50	72.38	-2,662.66	-8,918.60	9,192.50	9,175.67	16.83	546.281	
2,200.00	2,095.40	1,006.00	1,032.51	12.11	5.50	72.38	-2,662.66	-8,918.60	9,191.08	9,173.64	17.44	527.024	
2,300.00	2,186.67	1,058.95	1,084.43	12.74	5.69	72.46	-2,672.41	-8,922.09	9,189.92	9,171.66	18.26	503.219	
2,328.45	2,212.64	1,064.07	1,089.45	12.92	5.71	72.47	-2,673.31	-8,922.51	9,189.86	9,171.40	18.46	497.874	
2,400.00	2,277.95	1,101.00	1,125.68	13.38	5.85	72.53	-2,679.62	-8,925.97	9,190.19	9,171.14	19.05	482.472	
2,500.00	2,369.22	1,101.00	1,125.68	14.01	5.85	72.53	-2,679.62	-8,925.97	9,191.03	9,171.37	19.67	467.326	
2,600.00	2,460.49	1,101.00	1,125.68	14.65	5.85	72.53	-2,679.62	-8,925.97	9,192.96	9,172.67	20.29	453.139	
2,700.00	2,551.77	1,101.00	1,125.68	15.29	5.85	72.53	-2,679.62	-8,925.97	9,195.98	9,175.07	20.91	439.839	
2,800.00	2,643.04	1,149.66	1,173.26	15.93	6.04	72.60	-2,688.14	-8,931.48	9,199.40	9,177.67	21.73	423.356	
2,900.00	2,734.31	1,197.00	1,219.30	16.58	6.23	72.68	-2,697.25	-8,937.72	9,204.22	9,181.67	22.55	408.163	
3,000.00	2,825.58	1,197.00	1,219.30	17.23	6.23	72.68	-2,697.25	-8,937.72	9,209.48	9,186.31	23.17	397.476	
3,100.00	2,916.86	1,197.00	1,219.30	17.87	6.23	72.68	-2,697.25	-8,937.72	9,215.82	9,192.04	23.79	387.415	
3,200.00	3,008.13	1,197.00	1,219.30	18.52	6.23	72.68	-2,697.25	-8,937.72	9,223.25	9,198.84	24.40	377.936	
3,300.00	3,099.40	1,247.02	1,267.65	19.17	6.44	72.75	-2,707.68	-8,945.18	9,231.11	9,205.86	25.25	365.598	
3,400.00	3,190.68	1,292.00	1,310.86	19.83	6.64	72.81	-2,717.70	-8,952.61	9,240.20	9,214.13	26.07	354.379	
3,500.00	3,281.95	1,292.00	1,310.86	20.48	6.64	72.81	-2,717.70	-8,952.61	9,249.85	9,223.17	26.69	346.629	
3,600.00	3,373.22	1,292.00	1,310.86	21.13	6.64	72.81	-2,717.70	-8,952.61	9,260.57	9,233.28	27.29	339.303	
3,700.00	3,464.49	1,329.67	1,346.84	21.79	6.83	72.86	-2,726.57	-8,959.35	9,272.00	9,243.91	28.09	330.130	
3,800.00	3,555.77	1,350.40	1,366.56	22.44	6.93	72.88	-2,731.63	-8,963.25	9,284.35	9,255.55	28.80	322.394	
3,900.00	3,647.04	1,387.00	1,401.23	23.10	7.12	72.93	-2,740.88	-8,970.50	9,297.60	9,268.01	29.59	314.204	
4,000.00	3,738.31	1,408.79	1,421.80	23.75	7.24	72.95	-2,746.53	-8,974.93	9,311.54	9,281.23	30.31	307.193	
4,100.00	3,829.59	1,481.00	1,489.84	24.41	7.66	73.03	-2,765.81	-8,989.53	9,325.87	9,294.56	31.31	297.825	
4,200.00	3,920.86	1,532.38	1,538.05	25.07	7.98	73.09	-2,780.18	-8,999.97	9,340.63	9,308.41	32.22	289.877	
4,300.00	4,012.13	1,697.01	1,691.33	25.73	9.13	73.23	-2,830.47	-9,032.77	9,355.68	9,321.79	33.88	276.104	
4,400.00	4,103.41	1,760.00	1,749.48	26.38	9.60	73.27	-2,851.54	-9,044.67	9,370.27	9,335.35	34.92	268.341	
4,500.00	4,194.68	2,480.23	2,397.69	27.04	16.11	73.35	-3,148.17	-9,140.82	9,378.40	9,336.71	41.70	224.929	
4,600.00	4,285.95	2,513.00	2,427.24	27.70	16.42	73.36	-3,161.93	-9,144.33	9,386.98	9,344.37	42.61	220.301	
4,700.00	4,377.22	2,551.31	2,461.77	28.36	16.78	73.36	-3,177.92	-9,148.71	9,396.24	9,352.67	43.57	215.650	
4,800.00	4,468.50	2,608.00	2,512.91	29.02	17.33	73.36	-3,201.36	-9,155.69	9,406.16	9,361.46	44.70	210.429	
4,900.00	4,559.77	2,637.62	2,539.63	29.68	17.61	73.37	-3,213.57	-9,159.52	9,416.62	9,371.04	45.58	206.595	
5,000.00	4,651.04	2,703.00	2,598.44	30.34	18.24	73.37	-3,240.76	-9,168.24	9,427.67	9,380.88	46.79	201.497	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	4,742.32	2,703.00	2,598.44	31.00	18.24	73.37	-3,240.76	-9,168.24	9,439.32	9,391.93	47.39	199.190		
5,200.00	4,833.59	2,755.07	2,645.01	31.66	18.77	73.37	-3,262.86	-9,175.56	9,451.54	9,403.06	48.48	194.949		
5,300.00	4,924.86	2,798.00	2,683.12	32.32	19.20	73.37	-3,281.56	-9,181.96	9,464.60	9,415.11	49.49	191.258		
5,400.00	5,016.13	3,069.07	2,922.92	32.99	21.99	73.35	-3,401.80	-9,220.64	9,478.06	9,425.30	52.75	179.672		
5,500.00	5,107.41	3,118.01	2,967.03	33.65	22.48	73.36	-3,421.86	-9,227.52	9,489.74	9,435.92	53.82	176.326		
5,600.00	5,198.68	3,386.97	3,207.06	34.31	25.22	73.35	-3,537.80	-9,263.18	9,501.73	9,444.69	57.04	166.580		
5,700.00	5,289.95	3,493.03	3,301.80	34.97	26.30	73.35	-3,583.80	-9,275.68	9,511.77	9,453.08	58.69	162.078		
5,800.00	5,381.23	3,550.00	3,352.63	35.63	26.88	73.34	-3,608.60	-9,282.53	9,522.10	9,462.25	59.85	159.092		
5,900.00	5,472.50	3,778.59	3,557.98	36.30	29.18	73.35	-3,704.96	-9,310.53	9,532.63	9,469.96	62.67	152.109		
6,000.00	5,563.77	3,831.00	3,605.48	36.96	29.69	73.36	-3,726.16	-9,316.94	9,542.24	9,478.46	63.77	149.630		
6,100.00	5,655.05	3,862.18	3,633.67	37.62	30.00	73.36	-3,738.87	-9,320.92	9,552.40	9,487.72	64.68	147.696		
6,200.00	5,746.32	3,925.00	3,690.33	38.28	30.62	73.37	-3,764.76	-9,329.09	9,563.05	9,497.17	65.88	145.158		
6,300.00	5,837.59	3,925.00	3,690.33	38.95	30.62	73.37	-3,764.76	-9,329.09	9,574.39	9,507.92	66.48	144.027		
6,400.00	5,928.86	3,971.94	3,732.29	39.61	31.12	73.37	-3,784.82	-9,335.48	9,586.29	9,518.75	67.54	141.930		
6,500.00	6,020.14	4,020.00	3,774.58	40.27	31.62	73.37	-3,806.55	-9,342.41	9,599.19	9,530.57	68.62	139.897		
6,600.00	6,111.41	4,023.66	3,777.78	40.94	31.66	73.36	-3,808.25	-9,342.95	9,612.62	9,543.39	69.23	138.843		
6,700.00	6,202.68	4,554.62	4,239.93	41.60	37.52	73.19	-4,061.06	-9,407.47	9,623.72	9,548.21	75.51	127.452		
6,800.00	6,293.96	4,588.00	4,269.61	42.26	37.86	73.19	-4,075.85	-9,411.28	9,633.56	9,557.11	76.45	126.008		
6,900.00	6,385.23	6,760.08	6,347.12	42.93	51.82	75.67	-4,560.32	-9,542.16	9,630.78	9,540.58	90.20	106.775		
7,000.00	6,476.50	6,811.28	6,398.32	43.59	51.96	75.78	-4,561.02	-9,542.35	9,620.48	9,529.38	91.10	105.605		
7,100.00	6,567.77	6,866.97	6,454.00	44.25	52.11	75.91	-4,561.92	-9,542.72	9,610.69	9,518.68	92.01	104.455		
7,200.00	6,658.64	6,922.58	6,509.60	44.91	52.27	58.82	-4,562.96	-9,543.28	9,595.32	9,502.42	92.90	103.288		
7,300.00	6,747.14	6,977.04	6,564.04	45.52	52.42	43.28	-4,564.12	-9,544.01	9,565.51	9,471.79	93.72	102.067		
7,400.00	6,831.10	7,037.00	6,623.97	46.07	52.59	31.95	-4,565.56	-9,545.01	9,521.83	9,427.37	94.46	100.801		
7,500.00	6,908.46	7,104.82	6,691.76	46.54	52.78	23.57	-4,567.19	-9,546.27	9,465.15	9,370.01	95.13	99.495		
7,600.00	6,977.30	7,177.27	6,764.18	46.95	52.99	16.76	-4,568.73	-9,547.65	9,396.63	9,300.91	95.72	98.170		
7,700.00	7,035.93	7,239.29	6,826.18	47.30	53.17	10.20	-4,569.87	-9,548.85	9,317.94	9,221.76	96.18	96.881		
7,800.00	7,082.92	7,289.43	6,876.30	47.59	53.31	2.21	-4,570.69	-9,549.84	9,231.00	9,134.49	96.51	95.646		
7,900.00	7,117.09	7,326.50	6,913.35	47.84	53.42	-10.80	-4,571.22	-9,550.58	9,137.94	9,041.22	96.71	94.485		
8,000.00	7,137.62	7,349.62	6,936.47	48.06	53.49	-38.50	-4,571.53	-9,551.05	9,041.06	8,944.27	96.79	93.413		
8,100.00	7,143.99	7,353.19	6,940.04	48.28	53.49	-84.69	-4,571.58	-9,551.13	8,942.78	8,846.05	96.72	92.456		
8,200.00	7,143.45	7,354.56	6,941.41	48.53	53.50	-84.74	-4,571.60	-9,551.15	8,844.60	8,747.97	96.63	91.530		
8,300.00	7,142.91	7,355.94	6,942.79	48.89	53.50	-84.79	-4,571.62	-9,551.18	8,746.47	8,649.93	96.54	90.597		
8,400.00	7,142.37	7,357.32	6,944.17	49.40	53.50	-84.83	-4,571.63	-9,551.21	8,648.38	8,551.92	96.46	89.657		
8,500.00	7,141.83	7,358.71	6,945.55	50.12	53.51	-84.88	-4,571.65	-9,551.24	8,550.33	8,453.95	96.39	88.710		
8,600.00	7,141.29	7,360.10	6,946.95	51.08	53.51	-84.93	-4,571.67	-9,551.27	8,452.33	8,356.02	96.32	87.756		
8,700.00	7,140.75	7,361.49	6,948.34	52.30	53.52	-84.97	-4,571.69	-9,551.30	8,354.38	8,258.13	96.26	86.794		
8,800.00	7,140.21	7,362.90	6,949.74	53.75	53.52	-85.02	-4,571.71	-9,551.33	8,256.48	8,160.27	96.20	85.824		
8,900.00	7,139.67	7,364.30	6,951.15	55.40	53.52	-85.07	-4,571.72	-9,551.36	8,158.62	8,062.46	96.16	84.846		
9,000.00	7,139.12	7,365.71	6,952.56	57.20	53.53	-85.12	-4,571.74	-9,551.39	8,060.82	7,964.70	96.12	83.860		
9,100.00	7,138.58	7,367.13	6,953.98	59.13	53.53	-85.17	-4,571.76	-9,551.42	7,963.07	7,866.97	96.10	82.865		
9,200.00	7,138.04	7,368.55	6,955.40	61.15	53.54	-85.21	-4,571.78	-9,551.45	7,865.38	7,769.30	96.08	81.860		
9,300.00	7,137.50	7,369.98	6,956.82	63.26	53.54	-85.26	-4,571.79	-9,551.48	7,767.75	7,671.67	96.08	80.847		
9,400.00	7,136.96	7,371.41	6,958.26	65.44	53.54	-85.31	-4,571.81	-9,551.51	7,670.18	7,574.09	96.09	79.823		
9,500.00	7,136.42	7,372.85	6,959.69	67.68	53.55	-85.36	-4,571.83	-9,551.54	7,572.67	7,476.55	96.11	78.790		
9,600.00	7,135.88	7,374.29	6,961.14	69.97	53.55	-85.41	-4,571.85	-9,551.57	7,475.22	7,379.07	96.15	77.746		
9,700.00	7,135.34	7,375.74	6,962.58	72.31	53.56	-85.46	-4,571.86	-9,551.60	7,377.85	7,281.65	96.20	76.692		
9,800.00	7,134.80	7,377.19	6,964.04	74.69	53.56	-85.51	-4,571.88	-9,551.63	7,280.54	7,184.27	96.27	75.627		
9,900.00	7,134.26	7,378.65	6,965.49	77.10	53.56	-85.55	-4,571.90	-9,551.66	7,183.31	7,086.96	96.36	74.550		
10,000.00	7,133.71	7,380.12	6,966.96	79.54	53.57	-85.60	-4,571.92	-9,551.69	7,086.16	6,989.70	96.46	73.463		
10,100.00	7,133.17	7,381.59	6,968.43	82.02	53.57	-85.65	-4,571.94	-9,551.72	6,989.08	6,892.50	96.58	72.363		
10,200.00	7,132.63	7,383.06	6,969.90	84.52	53.58	-85.70	-4,571.95	-9,551.75	6,892.09	6,795.36	96.73	71.252		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,132.09	7,384.54	6,971.38	87.04	53.58	-85.75	-4,571.97	-9,551.78	6,795.19	6,698.29	96.90	70.129		
10,400.00	7,131.55	7,386.03	6,972.87	89.58	53.58	-85.80	-4,571.99	-9,551.82	6,698.38	6,601.29	97.09	68.993		
10,500.00	7,131.01	7,387.52	6,974.36	92.15	53.59	-85.85	-4,572.01	-9,551.85	6,601.66	6,504.35	97.30	67.845		
10,600.00	7,130.47	7,389.02	6,975.86	94.73	53.59	-85.91	-4,572.02	-9,551.88	6,505.04	6,407.49	97.55	66.685		
10,700.00	7,129.93	7,390.52	6,977.36	97.33	53.60	-85.96	-4,572.04	-9,551.91	6,408.52	6,310.70	97.82	65.513		
10,800.00	7,129.39	7,392.03	6,978.87	99.94	53.60	-86.01	-4,572.06	-9,551.95	6,312.11	6,213.99	98.12	64.327		
10,900.00	7,128.84	7,393.54	6,980.38	102.56	53.60	-86.06	-4,572.08	-9,551.98	6,215.82	6,117.36	98.46	63.130		
11,000.00	7,128.30	7,395.07	6,981.90	105.20	53.61	-86.11	-4,572.09	-9,552.01	6,119.64	6,020.81	98.83	61.920		
11,100.00	7,127.76	7,396.59	6,983.43	107.85	53.61	-86.16	-4,572.11	-9,552.04	6,023.59	5,924.35	99.24	60.698		
11,200.00	7,127.22	7,398.12	6,984.96	110.51	53.62	-86.21	-4,572.13	-9,552.08	5,927.66	5,827.98	99.68	59.465		
11,300.00	7,126.68	7,399.66	6,986.50	113.18	53.62	-86.27	-4,572.15	-9,552.11	5,831.88	5,731.71	100.17	58.219		
11,400.00	7,126.14	7,401.20	6,988.04	115.86	53.62	-86.32	-4,572.16	-9,552.14	5,736.24	5,635.53	100.70	56.963		
11,500.00	7,125.60	7,402.75	6,989.59	118.55	53.63	-86.37	-4,572.18	-9,552.18	5,640.74	5,539.47	101.28	55.696		
11,600.00	7,125.06	7,404.31	6,991.14	121.25	53.63	-86.42	-4,572.20	-9,552.21	5,545.41	5,443.51	101.90	54.419		
11,700.00	7,124.52	7,405.87	6,992.70	123.95	53.64	-86.48	-4,572.22	-9,552.24	5,450.24	5,347.67	102.58	53.133		
11,800.00	7,123.97	7,407.44	6,994.27	126.66	53.64	-86.53	-4,572.24	-9,552.28	5,355.25	5,251.95	103.31	51.838		
11,900.00	7,123.43	7,409.01	6,995.84	129.38	53.65	-86.58	-4,572.25	-9,552.31	5,260.45	5,156.35	104.09	50.536		
12,000.00	7,122.89	7,410.59	6,997.42	132.10	53.65	-86.64	-4,572.27	-9,552.35	5,165.84	5,060.89	104.94	49.226		
12,100.00	7,122.35	7,412.17	6,999.01	134.83	53.65	-86.69	-4,572.29	-9,552.38	5,071.43	4,965.58	105.85	47.911		
12,200.00	7,121.81	7,413.77	7,000.60	137.56	53.66	-86.74	-4,572.31	-9,552.42	4,977.25	4,870.42	106.83	46.591		
12,300.00	7,121.27	7,415.36	7,002.20	140.30	53.66	-86.80	-4,572.32	-9,552.45	4,883.29	4,775.41	107.88	45.268		
12,400.00	7,120.73	7,416.97	7,003.80	143.05	53.67	-86.85	-4,572.34	-9,552.49	4,789.58	4,680.58	109.00	43.942		
12,500.00	7,120.19	7,418.58	7,005.41	145.80	53.67	-86.91	-4,572.36	-9,552.52	4,696.13	4,585.93	110.20	42.616		
12,600.00	7,119.65	7,420.19	7,007.02	148.55	53.68	-86.96	-4,572.37	-9,552.56	4,602.95	4,491.47	111.48	41.290		
12,700.00	7,119.10	7,421.82	7,008.65	151.30	53.68	-87.02	-4,572.39	-9,552.59	4,510.06	4,397.21	112.85	39.966		
12,800.00	7,118.56	7,423.45	7,010.28	154.07	53.69	-87.07	-4,572.41	-9,552.63	4,417.49	4,303.18	114.31	38.646		
12,900.00	7,118.02	7,425.08	7,011.91	156.83	53.69	-87.13	-4,572.43	-9,552.67	4,325.24	4,209.38	115.86	37.331		
13,000.00	7,117.48	7,426.72	7,013.55	159.60	53.69	-87.18	-4,572.44	-9,552.70	4,233.34	4,115.82	117.52	36.022		
13,100.00	7,116.94	7,428.37	7,015.20	162.37	53.70	-87.24	-4,572.46	-9,552.74	4,141.82	4,022.54	119.28	34.723		
13,200.00	7,116.40	7,430.03	7,016.85	165.14	53.70	-87.30	-4,572.48	-9,552.78	4,050.70	3,929.55	121.16	33.433		
13,300.00	7,115.86	7,431.69	7,018.51	167.92	53.71	-87.35	-4,572.50	-9,552.81	3,960.01	3,836.86	123.15	32.156		
13,400.00	7,115.32	7,433.36	7,020.18	170.70	53.71	-87.41	-4,572.51	-9,552.85	3,869.78	3,744.51	125.27	30.892		
13,500.00	7,114.78	7,435.03	7,021.86	173.48	53.72	-87.47	-4,572.53	-9,552.89	3,780.04	3,652.52	127.51	29.644		
13,600.00	7,114.24	7,436.71	7,023.54	176.26	53.72	-87.52	-4,572.55	-9,552.93	3,690.82	3,560.92	129.90	28.413		
13,700.00	7,113.69	7,438.40	7,025.22	179.05	53.73	-87.58	-4,572.57	-9,552.96	3,602.17	3,469.74	132.43	27.201		
13,800.00	7,113.15	7,440.09	7,026.92	181.84	53.73	-87.64	-4,572.58	-9,553.00	3,514.13	3,379.01	135.11	26.009		
13,900.00	7,112.61	7,441.80	7,028.62	184.63	53.74	-87.69	-4,572.60	-9,553.04	3,426.74	3,288.78	137.95	24.840		
14,000.00	7,112.07	7,443.50	7,030.33	187.42	53.74	-87.75	-4,572.62	-9,553.08	3,340.06	3,199.09	140.97	23.694		
14,100.00	7,111.53	7,445.22	7,032.04	190.22	53.75	-87.81	-4,572.63	-9,553.12	3,254.14	3,109.98	144.16	22.573		
14,200.00	7,110.99	7,446.94	7,033.76	193.01	53.75	-87.87	-4,572.65	-9,553.16	3,169.05	3,021.51	147.54	21.480		
14,300.00	7,110.45	7,448.67	7,035.49	195.81	53.75	-87.93	-4,572.67	-9,553.19	3,084.85	2,933.74	151.11	20.415		
14,400.00	7,109.91	7,450.41	7,037.23	198.61	53.76	-87.99	-4,572.69	-9,553.23	3,001.62	2,846.73	154.89	19.379		
14,500.00	7,109.37	7,452.15	7,038.97	201.42	53.76	-88.05	-4,572.70	-9,553.27	2,919.45	2,760.56	158.89	18.374		
14,600.00	7,108.82	7,453.90	7,040.72	204.22	53.77	-88.11	-4,572.72	-9,553.31	2,838.41	2,675.30	163.11	17.402		
14,700.00	7,108.28	7,455.66	7,042.48	207.03	53.77	-88.17	-4,572.74	-9,553.35	2,758.62	2,591.06	167.57	16.463		
14,800.00	7,107.74	7,457.42	7,044.24	209.83	53.78	-88.23	-4,572.75	-9,553.39	2,680.19	2,507.92	172.27	15.558		
14,900.00	7,107.20	7,459.19	7,046.01	212.64	53.78	-88.29	-4,572.77	-9,553.43	2,603.23	2,426.01	177.22	14.689		
15,000.00	7,106.66	7,460.97	7,047.79	215.45	53.79	-88.35	-4,572.79	-9,553.47	2,527.88	2,345.45	182.43	13.857		
15,100.00	7,106.12	7,462.76	7,049.57	218.26	53.79	-88.41	-4,572.80	-9,553.51	2,454.30	2,266.39	187.91	13.061		
15,200.00	7,105.58	7,464.55	7,051.37	221.07	53.80	-88.47	-4,572.82	-9,553.56	2,382.64	2,188.99	193.65	12.304		
15,300.00	7,105.04	7,466.35	7,053.17	223.89	53.80	-88.53	-4,572.84	-9,553.60	2,313.08	2,113.42	199.66	11.585		
15,400.00	7,104.50	7,468.16	7,054.97	226.70	53.81	-88.59	-4,572.85	-9,553.64	2,245.82	2,039.89	205.93	10.906		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)		
15,491.56	7,104.00	7,469.82	7,056.64	229.28	53.81	-88.65	-4,572.87	-9,553.68	2,186.43	1,974.54	211.89	10.318	CC, ES, SF



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 1 21-2(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	62.00	3.28	3.28	-128.17	-3,862.97	-4,913.87	6,250.79					
100.00	100.00	47.97	109.97	3.28	3.28	-128.17	-3,862.81	-4,913.94	6,250.46	6,243.89	6.57	951.876		
200.00	200.00	175.87	237.86	3.34	3.33	-128.15	-3,861.06	-4,914.70	6,250.08	6,243.42	6.66	937.822		
300.00	299.98	273.67	335.63	3.44	3.42	48.77	-3,859.17	-4,915.39	6,248.29	6,241.43	6.86	910.295		
400.00	399.84	371.69	433.64	3.59	3.57	48.88	-3,857.60	-4,915.96	6,244.31	6,237.15	7.16	872.411		
500.00	499.45	475.11	537.05	3.79	3.76	49.05	-3,856.14	-4,916.35	6,238.01	6,230.45	7.55	826.089		
600.00	598.70	591.80	653.72	4.03	4.03	49.29	-3,854.57	-4,916.51	6,229.28	6,221.22	8.06	772.811		
700.00	697.47	681.53	743.45	4.31	4.26	49.57	-3,853.42	-4,916.46	6,218.21	6,209.63	8.57	725.159		
800.00	795.62	780.62	842.53	4.64	4.54	49.91	-3,852.38	-4,916.36	6,205.01	6,195.84	9.17	676.448		
900.00	893.06	868.80	930.71	5.00	4.81	50.30	-3,851.45	-4,916.28	6,189.66	6,179.87	9.79	632.242		
1,000.00	989.64	958.47	1,020.38	5.40	5.10	50.75	-3,850.60	-4,916.33	6,172.33	6,161.87	10.46	590.297		
1,100.00	1,085.27	1,059.04	1,120.94	5.83	5.43	51.28	-3,849.63	-4,916.43	6,152.93	6,141.73	11.20	549.353		
1,200.00	1,179.82	1,151.18	1,213.08	6.29	5.75	51.86	-3,848.68	-4,916.44	6,131.39	6,119.43	11.96	512.862		
1,300.00	1,273.17	1,232.68	1,294.57	6.79	6.04	52.47	-3,847.86	-4,916.59	6,108.01	6,095.30	12.71	480.621		
1,400.00	1,365.21	1,312.79	1,374.68	7.33	6.34	53.13	-3,847.27	-4,916.78	6,082.89	6,069.40	13.49	450.912		
1,500.00	1,456.49	1,395.36	1,457.24	7.89	6.64	53.42	-3,846.88	-4,916.98	6,056.96	6,042.66	14.30	423.423		
1,600.00	1,547.76	1,496.66	1,558.54	8.46	7.02	53.75	-3,846.44	-4,917.18	6,031.19	6,015.98	15.21	396.643		
1,700.00	1,639.04	1,585.11	1,647.00	9.05	7.36	54.04	-3,846.10	-4,917.26	6,005.52	5,989.44	16.08	373.515		
1,800.00	1,730.31	1,680.19	1,742.08	9.65	7.73	54.35	-3,845.84	-4,917.26	5,980.03	5,963.04	16.99	351.950		
1,900.00	1,821.58	1,768.51	1,830.40	10.26	8.07	54.65	-3,845.51	-4,917.29	5,954.68	5,936.79	17.89	332.807		
2,000.00	1,912.85	1,844.76	1,906.64	10.87	8.37	54.90	-3,845.37	-4,917.33	5,929.63	5,910.87	18.76	316.084		
2,100.00	2,004.13	1,917.68	1,979.56	11.49	8.66	55.15	-3,845.40	-4,917.56	5,905.06	5,885.44	19.62	300.909		
2,200.00	2,095.40	1,999.12	2,061.00	12.11	8.98	55.42	-3,845.50	-4,917.98	5,880.88	5,860.35	20.53	286.473		
2,300.00	2,186.67	2,087.59	2,149.47	12.74	9.33	55.72	-3,845.71	-4,918.49	5,856.97	5,835.50	21.47	272.830		
2,400.00	2,277.95	2,177.49	2,239.37	13.38	9.69	56.03	-3,845.96	-4,919.03	5,833.29	5,810.87	22.42	260.191		
2,500.00	2,369.22	2,262.49	2,324.37	14.01	10.03	56.33	-3,846.11	-4,919.64	5,809.84	5,786.48	23.36	248.713		
2,600.00	2,460.49	2,351.50	2,413.38	14.65	10.39	56.64	-3,846.28	-4,920.40	5,786.69	5,762.36	24.32	237.927		
2,700.00	2,551.77	2,441.48	2,503.35	15.29	10.76	56.95	-3,846.42	-4,921.17	5,763.72	5,738.43	25.29	227.885		
2,800.00	2,643.04	2,526.75	2,588.62	15.93	11.11	57.25	-3,846.61	-4,921.95	5,741.02	5,714.76	26.25	218.698		
2,900.00	2,734.31	2,609.51	2,671.37	16.58	11.45	57.55	-3,846.69	-4,922.89	5,718.63	5,691.42	27.21	210.204		
3,000.00	2,825.58	2,687.43	2,749.28	17.23	11.77	57.83	-3,846.79	-4,923.94	5,696.63	5,668.48	28.15	202.397		
3,100.00	2,916.86	2,770.79	2,832.64	17.87	12.11	58.13	-3,847.02	-4,925.18	5,675.01	5,645.90	29.11	194.942		
3,200.00	3,008.13	2,856.81	2,918.65	18.52	12.46	58.45	-3,847.39	-4,926.50	5,653.71	5,623.62	30.09	187.889		
3,300.00	3,099.40	2,942.45	3,004.27	19.17	12.82	58.76	-3,847.97	-4,927.78	5,632.70	5,601.62	31.07	181.277		
3,400.00	3,190.68	3,032.73	3,094.54	19.83	13.19	59.09	-3,848.57	-4,929.24	5,611.99	5,579.91	32.08	174.964		
3,500.00	3,281.95	3,188.39	3,250.18	20.48	13.84	59.67	-3,849.39	-4,931.14	5,591.23	5,557.90	33.32	167.781		
3,600.00	3,373.22	3,275.03	3,336.82	21.13	14.20	59.99	-3,849.56	-4,931.58	5,569.85	5,535.53	34.32	162.290		
3,700.00	3,464.49	3,374.72	3,436.51	21.79	14.61	60.36	-3,849.68	-4,932.23	5,548.78	5,513.41	35.37	156.890		
3,800.00	3,555.77	3,466.57	3,528.36	22.44	15.00	60.71	-3,849.72	-4,932.70	5,527.77	5,491.38	36.39	151.911		
3,900.00	3,647.04	3,543.62	3,605.40	23.10	15.32	61.00	-3,849.91	-4,933.11	5,507.09	5,469.74	37.36	147.415		
4,000.00	3,738.31	3,614.99	3,676.77	23.75	15.62	61.28	-3,850.07	-4,933.79	5,486.96	5,448.65	38.31	143.228		
4,100.00	3,829.59	3,687.92	3,749.70	24.41	15.92	61.56	-3,850.22	-4,934.77	5,467.37	5,428.10	39.27	139.229		
4,200.00	3,920.86	3,769.31	3,831.08	25.07	16.26	61.87	-3,850.44	-4,936.09	5,448.27	5,408.01	40.26	135.318		
4,300.00	4,012.13	3,854.81	3,916.56	25.73	16.62	62.21	-3,850.82	-4,937.54	5,429.53	5,388.26	41.27	131.549		
4,400.00	4,103.41	3,931.93	3,993.67	26.38	16.95	62.51	-3,851.40	-4,938.83	5,411.15	5,368.89	42.26	128.055		
4,500.00	4,194.68	4,000.01	4,061.73	27.04	17.23	62.78	-3,852.17	-4,940.17	5,393.38	5,350.17	43.21	124.827		
4,600.00	4,285.95	4,071.76	4,133.45	27.70	17.53	63.05	-3,853.29	-4,941.76	5,376.22	5,332.05	44.17	121.709		
4,700.00	4,377.22	4,142.69	4,204.35	28.36	17.83	63.33	-3,854.75	-4,943.44	5,359.62	5,314.48	45.14	118.742		
4,800.00	4,468.50	4,222.23	4,283.84	29.02	18.17	63.63	-3,856.67	-4,945.56	5,343.63	5,297.49	46.14	115.825		
4,900.00	4,559.77	4,339.52	4,401.07	29.68	18.67	64.09	-3,859.17	-4,948.51	5,327.63	5,280.35	47.28	112.682		
5,000.00	4,651.04	4,438.14	4,499.65	30.34	19.08	64.48	-3,860.75	-4,950.94	5,311.64	5,263.28	48.36	109.845		
5,100.00	4,742.32	4,552.17	4,613.63	31.00	19.56	64.94	-3,862.08	-4,953.77	5,295.77	5,246.28	49.49	107.004		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 1 21-2(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,682.32	4,743.75	31.66	20.11	65.47	-3,863.24	-4,956.13	5,279.45	5,228.77	50.69	104.157		
5,300.00	4,924.86	4,805.98	4,867.40	32.32	20.64	65.98	-3,863.99	-4,957.69	5,262.84	5,210.98	51.86	101.484		
5,400.00	5,016.13	4,891.62	4,953.04	32.99	21.00	66.33	-3,864.54	-4,958.55	5,246.27	5,193.38	52.89	99.185		
5,500.00	5,107.41	4,986.18	5,047.58	33.65	21.40	66.72	-3,864.99	-4,959.57	5,229.97	5,176.01	53.96	96.919		
5,600.00	5,198.68	5,087.10	5,148.50	34.31	21.82	67.15	-3,865.17	-4,960.65	5,213.83	5,158.77	55.06	94.700		
5,700.00	5,289.95	5,174.17	5,235.57	34.97	22.19	67.52	-3,865.03	-4,961.62	5,197.88	5,141.78	56.10	92.651		
5,800.00	5,381.23	5,268.66	5,330.05	35.63	22.59	67.93	-3,864.57	-4,962.85	5,182.26	5,125.09	57.18	90.638		
5,900.00	5,472.50	5,351.87	5,413.25	36.30	22.95	68.29	-3,864.15	-4,963.91	5,166.89	5,108.68	58.21	88.763		
6,000.00	5,563.77	5,447.30	5,508.67	36.96	23.35	68.70	-3,863.97	-4,965.21	5,151.99	5,092.70	59.29	86.895		
6,100.00	5,655.05	5,544.29	5,605.66	37.62	23.76	69.13	-3,863.56	-4,966.29	5,137.07	5,076.69	60.38	85.083		
6,200.00	5,746.32	5,619.94	5,681.30	38.28	24.09	69.46	-3,863.65	-4,967.14	5,122.63	5,061.24	61.39	83.446		
6,300.00	5,837.59	5,695.89	5,757.25	38.95	24.41	69.79	-3,863.87	-4,968.21	5,108.75	5,046.34	62.40	81.869		
6,400.00	5,928.86	5,790.29	5,851.63	39.61	24.81	70.20	-3,864.23	-4,969.64	5,095.27	5,031.79	63.48	80.262		
6,500.00	6,020.14	5,861.87	5,923.20	40.27	25.11	70.51	-3,864.55	-4,970.80	5,082.20	5,017.72	64.48	78.817		
6,600.00	6,111.41	5,939.10	6,000.42	40.94	25.44	70.85	-3,864.70	-4,972.45	5,069.80	5,004.30	65.50	77.400		
6,700.00	6,202.68	6,035.00	6,096.29	41.60	25.85	71.28	-3,864.76	-4,974.64	5,057.78	4,991.19	66.59	75.951		
6,800.00	6,293.96	6,129.16	6,190.43	42.26	26.25	71.70	-3,864.96	-4,976.51	5,045.84	4,978.17	67.68	74.557		
6,900.00	6,385.23	6,200.01	6,261.26	42.93	26.55	72.02	-3,864.90	-4,978.23	5,034.51	4,965.83	68.68	73.308		
7,000.00	6,476.50	6,281.16	6,342.38	43.59	26.90	72.39	-3,864.97	-4,980.41	5,023.76	4,954.05	69.71	72.063		
7,100.00	6,567.77	6,370.62	6,431.81	44.25	27.28	72.79	-3,865.36	-4,982.81	5,013.40	4,942.61	70.78	70.827		
7,200.00	6,658.64	6,459.82	6,520.97	44.91	27.66	73.19	-3,865.39	-4,985.32	4,997.37	4,925.53	71.84	69.566		
7,300.00	6,747.14	6,551.76	6,612.88	45.52	28.05	73.59	-3,865.55	-4,987.89	4,986.90	4,894.06	72.84	68.193		
7,400.00	6,831.10	6,628.67	6,689.75	46.07	28.38	73.99	-3,866.07	-4,989.90	4,922.49	4,848.79	73.69	66.797		
7,500.00	6,908.46	6,684.72	6,745.78	46.54	28.62	74.39	-3,866.33	-4,991.63	4,865.49	4,791.11	74.38	65.411		
7,600.00	6,977.30	6,734.58	6,795.60	46.95	28.83	74.79	-3,866.40	-4,993.44	4,797.22	4,722.26	74.96	63.997		
7,700.00	7,035.93	6,777.66	6,838.65	47.30	29.01	75.19	-3,866.34	-4,995.21	4,719.19	4,643.77	75.42	62.572		
7,800.00	7,082.92	6,813.99	6,874.93	47.59	29.17	75.59	-3,866.23	-4,996.86	4,633.17	4,557.41	75.76	61.155		
7,900.00	7,117.09	6,842.63	6,903.54	47.84	29.29	75.99	-3,866.17	-4,998.23	4,541.14	4,465.16	75.98	59.769		
8,000.00	7,137.62	6,861.52	6,922.42	48.06	29.37	76.39	-3,866.16	-4,999.16	4,445.30	4,369.23	76.07	58.436		
8,100.00	7,143.99	6,870.05	6,930.93	48.28	29.41	76.79	-3,866.16	-4,999.58	4,348.04	4,271.99	76.05	57.175		
8,200.00	7,143.45	6,873.45	6,934.33	48.53	29.42	77.19	-3,866.16	-4,999.76	4,250.91	4,174.93	75.98	55.950		
8,300.00	7,142.91	6,876.88	6,937.76	48.89	29.44	77.59	-3,866.16	-4,999.93	4,153.92	4,078.00	75.92	54.717		
8,400.00	7,142.37	6,880.35	6,941.22	49.40	29.45	77.99	-3,866.17	-5,000.11	4,057.07	3,981.20	75.87	53.476		
8,500.00	7,141.83	6,883.85	6,944.71	50.12	29.47	78.39	-3,866.17	-5,000.29	3,960.37	3,884.54	75.83	52.227		
8,600.00	7,141.29	6,887.38	6,948.24	51.08	29.48	78.79	-3,866.18	-5,000.47	3,863.84	3,788.03	75.81	50.968		
8,700.00	7,140.75	6,890.95	6,951.81	52.30	29.50	79.19	-3,866.18	-5,000.65	3,767.48	3,691.67	75.81	49.700		
8,800.00	7,140.21	6,894.56	6,955.41	53.75	29.51	79.59	-3,866.19	-5,000.84	3,671.31	3,595.49	75.82	48.420		
8,900.00	7,139.67	6,900.01	6,960.86	55.40	29.53	79.99	-3,866.20	-5,001.12	3,575.35	3,499.48	75.87	47.127		
9,000.00	7,139.12	6,900.01	6,960.86	57.20	29.53	80.39	-3,866.20	-5,001.12	3,479.61	3,403.69	75.93	45.829		
9,100.00	7,138.58	6,900.01	6,960.86	59.13	29.53	80.79	-3,866.20	-5,001.12	3,384.12	3,308.10	76.02	44.518		
9,200.00	7,138.04	6,908.26	6,969.09	61.15	29.57	81.19	-3,866.22	-5,001.56	3,288.88	3,212.72	76.17	43.181		
9,300.00	7,137.50	6,911.64	6,972.46	63.26	29.58	81.59	-3,866.23	-5,001.74	3,193.94	3,117.59	76.35	41.835		
9,400.00	7,136.96	6,915.07	6,975.89	65.44	29.60	81.99	-3,866.24	-5,001.92	3,099.30	3,022.72	76.58	40.474		
9,500.00	7,136.42	6,918.56	6,979.37	67.68	29.61	82.39	-3,866.25	-5,002.11	3,005.01	2,928.14	76.86	39.095		
9,600.00	7,135.88	6,922.10	6,982.91	69.97	29.63	82.79	-3,866.27	-5,002.30	2,911.09	2,833.87	77.22	37.700		
9,700.00	7,135.34	6,925.70	6,986.50	72.31	29.64	83.19	-3,866.28	-5,002.50	2,817.58	2,739.93	77.65	36.286		
9,800.00	7,134.80	6,929.35	6,990.15	74.69	29.66	83.59	-3,866.30	-5,002.70	2,724.53	2,646.36	78.17	34.854		
9,900.00	7,134.26	6,933.07	6,993.86	77.10	29.68	83.99	-3,866.31	-5,002.91	2,631.99	2,553.19	78.79	33.404		
10,000.00	7,133.71	6,936.84	6,997.63	79.54	29.69	84.39	-3,866.33	-5,003.12	2,539.99	2,460.46	79.53	31.937		
10,100.00	7,133.17	6,940.68	7,001.46	82.02	29.71	84.79	-3,866.35	-5,003.34	2,448.62	2,368.22	80.40	30.454		
10,200.00	7,132.63	6,944.58	7,005.36	84.52	29.72	85.19	-3,866.38	-5,003.56	2,357.95	2,276.52	81.43	28.957		
10,300.00	7,132.09	6,948.55	7,009.32	87.04	29.74	85.59	-3,866.40	-5,003.78	2,268.04	2,185.41	82.63	27.448		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,131.55	6,952.58	7,013.34	89.58	29.76	-83.89	-3,866.42	-5,004.02	2,179.01	2,094.98	84.03	25.932		
10,500.00	7,131.01	6,956.68	7,017.44	92.15	29.78	-84.12	-3,866.45	-5,004.26	2,090.96	2,005.31	85.65	24.412		
10,600.00	7,130.47	6,960.85	7,021.60	94.73	29.79	-84.35	-3,866.48	-5,004.50	2,004.02	1,916.49	87.53	22.896		
10,700.00	7,129.93	6,965.10	7,025.84	97.33	29.81	-84.59	-3,866.51	-5,004.75	1,918.34	1,828.65	89.69	21.389		
10,800.00	7,129.39	6,969.41	7,030.15	99.94	29.83	-84.84	-3,866.54	-5,005.01	1,834.10	1,741.93	92.17	19.900		
10,900.00	7,128.84	6,973.81	7,034.53	102.56	29.85	-85.08	-3,866.58	-5,005.27	1,751.50	1,656.50	95.00	18.437		
11,000.00	7,128.30	6,978.28	7,038.99	105.20	29.87	-85.34	-3,866.62	-5,005.54	1,670.79	1,572.58	98.21	17.012		
11,100.00	7,127.76	6,982.83	7,043.54	107.85	29.89	-85.59	-3,866.66	-5,005.82	1,592.26	1,490.40	101.85	15.633		
11,200.00	7,127.22	6,987.46	7,048.16	110.51	29.91	-85.86	-3,866.70	-5,006.10	1,516.24	1,410.29	105.95	14.311		
11,300.00	7,126.68	6,992.18	7,052.87	113.18	29.93	-86.12	-3,866.74	-5,006.40	1,443.13	1,332.61	110.52	13.058		
11,400.00	7,126.14	6,996.99	7,057.67	115.86	29.95	-86.39	-3,866.79	-5,006.70	1,373.39	1,257.81	115.58	11.883		
11,500.00	7,125.60	7,002.08	7,062.75	118.55	29.97	-86.68	-3,866.85	-5,007.02	1,307.57	1,186.44	121.13	10.795		
11,600.00	7,125.06	7,007.54	7,068.20	121.25	29.99	-86.99	-3,866.90	-5,007.36	1,246.27	1,119.15	127.12	9.804		
11,700.00	7,124.52	7,013.00	7,073.65	123.95	30.02	-87.30	-3,866.96	-5,007.71	1,190.21	1,056.70	133.51	8.915		
11,800.00	7,123.97	7,018.47	7,079.11	126.66	30.04	-87.61	-3,867.02	-5,008.05	1,140.15	999.98	140.17	8.134		
11,900.00	7,123.43	7,023.94	7,084.57	129.38	30.06	-87.92	-3,867.09	-5,008.40	1,096.91	949.99	146.92	7.466		
12,000.00	7,122.89	7,029.42	7,090.03	132.10	30.09	-88.23	-3,867.15	-5,008.74	1,061.33	907.79	153.54	6.912		
12,100.00	7,122.35	7,034.90	7,095.51	134.83	30.11	-88.54	-3,867.22	-5,009.09	1,034.21	874.44	159.76	6.473		
12,200.00	7,121.81	7,040.39	7,100.98	137.56	30.13	-88.86	-3,867.29	-5,009.44	1,016.20	850.91	165.29	6.148		
12,300.00	7,121.27	7,045.89	7,106.47	140.30	30.16	-89.17	-3,867.36	-5,009.79	1,007.81	837.96	169.86	5.933		
12,335.16	7,121.08	7,047.82	7,108.39	141.27	30.17	-89.28	-3,867.38	-5,009.91	1,007.20	836.01	171.19	5.883 CC, ES		
12,400.00	7,120.73	7,051.38	7,111.95	143.05	30.18	-89.48	-3,867.43	-5,010.13	1,009.28	836.02	173.26	5.825		
12,500.00	7,120.19	7,056.89	7,117.44	145.80	30.20	-89.79	-3,867.50	-5,010.48	1,020.56	845.15	175.41	5.818 SF		
12,600.00	7,119.65	7,062.40	7,122.94	148.55	30.23	-90.11	-3,867.57	-5,010.83	1,041.33	865.02	176.32	5.906		
12,700.00	7,119.10	7,067.91	7,128.45	151.30	30.25	-90.42	-3,867.65	-5,011.18	1,071.05	894.96	176.09	6.082		
12,800.00	7,118.56	7,073.43	7,133.95	154.07	30.27	-90.73	-3,867.73	-5,011.53	1,108.99	934.07	174.92	6.340		
12,900.00	7,118.02	7,078.96	7,139.47	156.83	30.30	-91.05	-3,867.81	-5,011.88	1,154.33	981.33	173.00	6.672		
13,000.00	7,117.48	7,084.49	7,144.98	159.60	30.32	-91.36	-3,867.89	-5,012.23	1,206.26	1,035.69	170.56	7.072		
13,100.00	7,116.94	7,090.02	7,150.51	162.37	30.35	-91.67	-3,867.98	-5,012.58	1,263.95	1,096.17	167.78	7.533		
13,200.00	7,116.40	7,095.56	7,156.04	165.14	30.37	-91.99	-3,868.06	-5,012.94	1,326.66	1,161.85	164.81	8.050		
13,300.00	7,115.86	7,101.16	7,161.62	167.92	30.39	-92.30	-3,868.15	-5,013.29	1,393.70	1,231.94	161.76	8.616		
13,400.00	7,115.32	7,106.98	7,167.43	170.70	30.42	-92.63	-3,868.24	-5,013.66	1,464.48	1,305.76	158.73	9.226		
13,500.00	7,114.78	7,112.81	7,173.24	173.48	30.44	-92.96	-3,868.33	-5,014.03	1,538.49	1,382.73	155.76	9.877		
13,600.00	7,114.24	7,118.63	7,179.05	176.26	30.47	-93.29	-3,868.42	-5,014.40	1,615.28	1,462.37	152.91	10.564		
13,700.00	7,113.69	7,124.45	7,184.86	179.05	30.49	-93.62	-3,868.52	-5,014.77	1,694.48	1,544.29	150.19	11.282		
13,800.00	7,113.15	7,130.27	7,190.67	181.84	30.52	-93.95	-3,868.61	-5,015.14	1,775.75	1,628.14	147.61	12.030		
13,900.00	7,112.61	7,136.09	7,196.48	184.63	30.54	-94.28	-3,868.70	-5,015.51	1,858.84	1,713.65	145.19	12.803		
14,000.00	7,112.07	7,141.91	7,202.29	187.42	30.57	-94.61	-3,868.79	-5,015.88	1,943.50	1,800.58	142.91	13.599		
14,100.00	7,111.53	7,147.73	7,208.09	190.22	30.59	-94.93	-3,868.88	-5,016.25	2,029.54	1,888.76	140.78	14.416		
14,200.00	7,110.99	7,153.55	7,213.90	193.01	30.62	-95.26	-3,868.97	-5,016.62	2,116.79	1,978.00	138.79	15.252		
14,300.00	7,110.45	7,159.37	7,219.71	195.81	30.64	-95.59	-3,869.07	-5,016.99	2,205.11	2,068.18	136.93	16.104		
14,400.00	7,109.91	7,165.19	7,225.51	198.61	30.67	-95.91	-3,869.16	-5,017.36	2,294.37	2,159.18	135.19	16.972		
14,500.00	7,109.37	7,171.01	7,231.32	201.42	30.69	-96.24	-3,869.25	-5,017.73	2,384.47	2,250.91	133.56	17.853		
14,600.00	7,108.82	7,176.83	7,237.13	204.22	30.72	-96.56	-3,869.34	-5,018.10	2,475.32	2,343.27	132.05	18.746		
14,700.00	7,108.28	7,182.64	7,242.93	207.03	30.74	-96.89	-3,869.43	-5,018.47	2,566.83	2,436.21	130.63	19.650		
14,800.00	7,107.74	7,188.46	7,248.74	209.83	30.77	-97.21	-3,869.52	-5,018.84	2,658.95	2,529.64	129.30	20.564		
14,900.00	7,107.20	7,194.28	7,254.54	212.64	30.79	-97.54	-3,869.62	-5,019.21	2,751.60	2,623.54	128.06	21.486		
15,000.00	7,106.66	7,200.10	7,260.35	215.45	30.82	-97.86	-3,869.71	-5,019.58	2,844.74	2,717.83	126.90	22.417		
15,100.00	7,106.12	7,205.91	7,266.15	218.26	30.84	-98.18	-3,869.80	-5,019.95	2,938.32	2,812.50	125.82	23.354		
15,200.00	7,105.58	7,211.73	7,271.95	221.07	30.87	-98.50	-3,869.89	-5,020.32	3,032.29	2,907.50	124.80	24.298		
15,300.00	7,105.04	7,217.55	7,277.76	223.89	30.89	-98.82	-3,869.98	-5,020.69	3,126.63	3,002.79	123.84	25.248		
15,400.00	7,104.50	7,223.36	7,283.56	226.70	30.92	-99.14	-3,870.07	-5,021.05	3,221.30	3,098.36	122.94	26.202		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)		
15,491.56	7,104.00	7,228.69	7,288.87	229.28	30.94	-99.44	-3,870.16	-5,021.39	3,308.25	3,186.09	122.16	27.081	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	25.00	71.00	3.28	3.28	-146.61	-4,993.26	-3,290.81	5,980.56					
100.00	100.00	90.99	136.99	3.28	3.28	-146.61	-4,993.10	-3,290.67	5,980.05	5,973.48	6.57	910.469		
200.00	200.00	191.84	237.84	3.34	3.33	-146.61	-4,992.35	-3,290.49	5,979.32	5,972.66	6.67	897.060		
300.00	299.98	263.79	309.78	3.44	3.39	30.28	-4,991.84	-3,290.70	5,977.40	5,970.56	6.83	874.701		
400.00	399.84	354.98	400.98	3.59	3.51	30.36	-4,991.75	-3,290.82	5,972.86	5,965.76	7.11	840.577		
500.00	499.45	1,481.00	1,513.68	3.79	7.55	32.04	-4,851.48	-3,321.65	5,953.27	5,942.01	11.25	529.044		
600.00	598.70	1,539.12	1,570.26	4.03	7.86	32.46	-4,838.36	-3,323.79	5,926.42	5,914.67	11.75	504.476		
700.00	697.47	1,616.16	1,645.32	4.31	8.28	32.98	-4,821.23	-3,326.88	5,897.28	5,884.90	12.38	476.441		
800.00	795.62	1,681.81	1,709.23	4.64	8.64	33.53	-4,806.56	-3,329.93	5,865.69	5,852.70	12.99	451.512		
900.00	893.06	1,789.10	1,813.77	5.00	9.24	34.26	-4,783.02	-3,335.12	5,831.93	5,818.08	13.85	421.117		
1,000.00	989.64	1,877.33	1,899.63	5.40	9.74	35.00	-4,763.14	-3,339.43	5,795.13	5,780.48	14.65	395.699		
1,100.00	1,085.27	1,963.88	1,983.84	5.83	10.24	35.81	-4,743.64	-3,343.66	5,755.84	5,740.38	15.46	372.243		
1,200.00	1,179.82	2,048.64	2,066.32	6.29	10.74	36.69	-4,724.54	-3,347.80	5,714.15	5,697.85	16.30	350.607		
1,300.00	1,273.17	2,131.51	2,146.96	6.79	11.23	37.64	-4,705.86	-3,351.85	5,670.12	5,652.97	17.15	330.640		
1,400.00	1,365.21	2,212.39	2,225.66	7.33	11.71	38.67	-4,687.64	-3,355.80	5,623.85	5,605.83	18.01	312.192		
1,500.00	1,456.49	2,292.12	2,303.24	7.89	12.19	39.10	-4,669.67	-3,359.70	5,576.47	5,557.58	18.89	295.203		
1,600.00	1,547.76	2,371.85	2,380.82	8.46	12.67	39.50	-4,651.71	-3,363.59	5,529.35	5,509.57	19.78	279.541		
1,700.00	1,639.04	2,451.58	2,458.41	9.05	13.15	39.90	-4,633.74	-3,367.49	5,482.48	5,461.79	20.69	265.000		
1,800.00	1,730.31	2,531.31	2,535.99	9.65	13.63	40.31	-4,615.77	-3,371.38	5,435.88	5,414.27	21.61	251.500		
1,900.00	1,821.58	2,611.04	2,613.57	10.26	14.12	40.73	-4,597.81	-3,375.28	5,389.56	5,367.00	22.55	238.959		
2,000.00	1,912.85	2,690.77	2,691.15	10.87	14.61	41.15	-4,579.84	-3,379.18	5,343.51	5,320.00	23.51	227.298		
2,100.00	2,004.13	2,770.50	2,768.73	11.49	15.10	41.58	-4,561.87	-3,383.07	5,297.75	5,273.27	24.48	216.445		
2,200.00	2,095.40	2,850.23	2,846.31	12.11	15.59	42.01	-4,543.91	-3,386.97	5,252.29	5,226.83	25.46	206.331		
2,300.00	2,186.67	2,929.96	2,923.90	12.74	16.08	42.45	-4,525.94	-3,390.86	5,207.13	5,180.68	26.45	196.892		
2,400.00	2,277.95	3,009.69	3,001.48	13.38	16.57	42.89	-4,507.98	-3,394.76	5,162.28	5,134.83	27.45	188.073		
2,500.00	2,369.22	3,089.42	3,079.06	14.01	17.06	43.35	-4,490.01	-3,398.66	5,117.74	5,089.28	28.46	179.821		
2,600.00	2,460.49	3,169.15	3,156.64	14.65	17.56	43.80	-4,472.04	-3,402.55	5,073.54	5,044.06	29.48	172.088		
2,700.00	2,551.77	3,255.13	3,234.22	15.29	18.09	44.27	-4,454.08	-3,406.45	5,029.67	4,999.12	30.55	164.639		
2,800.00	2,643.04	3,328.61	3,311.80	15.93	18.55	44.74	-4,436.11	-3,410.35	4,986.15	4,954.59	31.55	158.016		
2,900.00	2,734.31	3,408.34	3,389.38	16.58	19.05	45.22	-4,418.14	-3,414.24	4,942.98	4,910.37	32.60	151.602		
3,000.00	2,825.58	3,488.07	3,466.97	17.23	19.54	45.70	-4,400.18	-3,418.14	4,900.17	4,866.51	33.66	145.561		
3,100.00	2,916.86	3,567.80	3,544.55	17.87	20.04	46.19	-4,382.21	-3,422.03	4,857.74	4,823.00	34.73	139.864		
3,200.00	3,008.13	3,656.49	3,622.13	18.52	20.60	46.69	-4,364.25	-3,425.93	4,815.68	4,779.82	35.86	134.288		
3,300.00	3,099.40	3,727.26	3,699.71	19.17	21.04	47.19	-4,346.28	-3,429.83	4,774.03	4,737.13	36.89	129.400		
3,400.00	3,190.68	3,806.99	3,777.29	19.83	21.54	47.70	-4,328.31	-3,433.72	4,732.77	4,694.78	37.99	124.589		
3,500.00	3,281.95	10,704.46	7,243.70	20.48	120.34	-20.09	-3,512.09	17.30	4,636.85	4,557.60	79.25	58.507		
3,600.00	3,373.22	10,691.57	7,243.77	21.13	119.93	-19.74	-3,512.10	13.33	4,537.74	4,458.44	79.30	57.224		
3,700.00	3,464.49	10,687.59	7,243.84	21.79	119.81	-19.38	-3,512.11	9.35	4,438.66	4,359.13	79.52	55.815		
3,800.00	3,555.77	10,683.62	7,243.91	22.44	119.68	-19.02	-3,512.13	5.38	4,339.62	4,259.85	79.77	54.401		
3,900.00	3,647.04	10,679.64	7,243.98	23.10	119.55	-18.66	-3,512.14	1.41	4,240.62	4,160.58	80.04	52.982		
4,000.00	3,738.31	10,675.67	7,244.05	23.75	119.43	-18.29	-3,512.15	-2.57	4,141.66	4,061.33	80.33	51.558		
4,100.00	3,829.59	10,671.69	7,244.12	24.41	119.30	-17.93	-3,512.17	-6.54	4,042.75	3,962.11	80.64	50.131		
4,200.00	3,920.86	10,667.72	7,244.19	25.07	119.18	-17.56	-3,512.18	-10.52	3,943.90	3,862.91	80.98	48.700		
4,300.00	4,012.13	10,663.74	7,244.26	25.73	119.05	-17.20	-3,512.19	-14.49	3,845.09	3,763.75	81.35	47.267		
4,400.00	4,103.41	10,659.77	7,244.33	26.38	118.92	-16.83	-3,512.21	-18.47	3,746.35	3,664.61	81.74	45.832		
4,500.00	4,194.68	10,655.79	7,244.40	27.04	118.80	-16.46	-3,512.22	-22.44	3,647.67	3,565.51	82.16	44.395		
4,600.00	4,285.95	10,651.81	7,244.47	27.70	118.67	-16.09	-3,512.23	-26.42	3,549.06	3,466.44	82.62	42.957		
4,700.00	4,377.22	10,656.20	7,244.54	28.36	118.81	-15.72	-3,512.25	-30.39	3,450.53	3,367.26	83.27	41.440		
4,800.00	4,468.50	10,643.86	7,244.61	29.02	118.42	-15.35	-3,512.26	-34.37	3,352.08	3,268.45	83.63	40.083		
4,900.00	4,559.77	10,639.89	7,244.68	29.68	118.30	-14.98	-3,512.27	-38.34	3,253.72	3,169.53	84.19	38.648		
5,000.00	4,651.04	10,635.91	7,244.75	30.34	118.17	-14.60	-3,512.29	-42.31	3,155.45	3,070.66	84.79	37.215		
5,100.00	4,742.32	10,631.94	7,244.82	31.00	118.04	-14.23	-3,512.30	-46.29	3,057.30	2,971.86	85.44	35.785		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	10,627.96	7,244.89	31.66	117.92	-13.85	-3,512.31	-50.26	2,959.26	2,873.13	86.13	34.359		
5,300.00	4,924.86	10,623.99	7,244.96	32.32	117.79	-13.47	-3,512.32	-54.24	2,861.35	2,774.48	86.87	32.937		
5,400.00	5,016.13	10,620.01	7,245.03	32.99	117.67	-13.10	-3,512.34	-58.21	2,763.58	2,675.91	87.67	31.521		
5,500.00	5,107.41	10,616.04	7,245.10	33.65	117.54	-12.72	-3,512.35	-62.19	2,665.98	2,577.45	88.53	30.112		
5,600.00	5,198.68	10,612.06	7,245.17	34.31	117.42	-12.34	-3,512.36	-66.16	2,568.55	2,479.09	89.46	28.711		
5,700.00	5,289.95	10,608.09	7,245.24	34.97	117.29	-11.96	-3,512.38	-70.14	2,471.33	2,380.86	90.47	27.318		
5,800.00	5,381.23	10,604.11	7,245.31	35.63	117.16	-11.57	-3,512.39	-74.11	2,374.32	2,282.77	91.55	25.935		
5,900.00	5,472.50	10,600.14	7,245.38	36.30	117.04	-11.19	-3,512.40	-78.09	2,277.57	2,184.85	92.72	24.563		
6,000.00	5,563.77	10,596.16	7,245.45	36.96	116.91	-10.81	-3,512.42	-82.06	2,181.11	2,087.11	94.00	23.203		
6,100.00	5,655.05	10,592.19	7,245.52	37.62	116.79	-10.42	-3,512.43	-86.03	2,084.97	1,989.58	95.39	21.858		
6,200.00	5,746.32	10,588.21	7,245.59	38.28	116.66	-10.04	-3,512.44	-90.01	1,989.20	1,892.30	96.90	20.528		
6,300.00	5,837.59	10,584.24	7,245.66	38.95	116.54	-9.65	-3,512.46	-93.98	1,893.87	1,795.31	98.56	19.216		
6,400.00	5,928.86	10,580.26	7,245.73	39.61	116.41	-9.27	-3,512.47	-97.96	1,799.03	1,698.66	100.37	17.924		
6,500.00	6,020.14	10,576.29	7,245.80	40.27	116.29	-8.88	-3,512.48	-101.93	1,704.77	1,602.40	102.36	16.654		
6,600.00	6,111.41	10,572.31	7,245.87	40.94	116.16	-8.49	-3,512.50	-105.91	1,611.19	1,506.63	104.56	15.409		
6,700.00	6,202.68	10,568.34	7,245.94	41.60	116.04	-8.11	-3,512.51	-109.88	1,518.42	1,411.43	106.99	14.192		
6,800.00	6,293.96	10,564.36	7,246.01	42.26	115.91	-7.72	-3,512.52	-113.86	1,426.62	1,316.94	109.69	13.006		
6,900.00	6,385.23	10,560.39	7,246.08	42.93	115.78	-7.33	-3,512.54	-117.83	1,335.99	1,223.31	112.68	11.857		
7,000.00	6,476.50	10,556.41	7,246.15	43.59	115.66	-6.94	-3,512.55	-121.80	1,246.77	1,130.77	116.00	10.748		
7,100.00	6,567.77	10,552.44	7,246.22	44.25	115.53	-6.55	-3,512.56	-125.78	1,159.30	1,039.62	119.69	9.686		
7,200.00	6,658.64	10,548.25	7,246.40	44.91	115.21	-35.18	-3,512.60	-135.96	1,074.42	950.85	123.58	8.694		
7,300.00	6,747.14	10,516.74	7,246.85	45.52	114.41	-59.50	-3,512.68	-161.47	994.41	867.13	127.28	7.813		
7,400.00	6,831.10	10,476.43	7,247.56	46.07	113.14	-75.79	-3,512.82	-201.77	921.49	790.90	130.59	7.056		
7,500.00	6,908.46	10,422.32	7,248.51	46.54	111.44	-86.13	-3,513.00	-255.88	857.49	724.21	133.28	6.434		
7,600.00	6,977.30	10,352.74	7,249.56	46.95	109.25	-92.28	-3,513.23	-325.44	803.61	668.59	135.02	5.952		
7,700.00	7,035.93	10,274.56	7,249.62	47.30	106.81	-95.82	-3,513.49	-403.62	760.16	624.17	135.99	5.590		
7,800.00	7,082.92	10,189.04	7,249.62	47.59	104.14	-97.67	-3,513.78	-489.14	727.45	591.36	136.10	5.345		
7,900.00	7,117.09	10,096.50	7,249.62	47.84	101.27	-98.47	-3,514.09	-581.68	704.94	569.58	135.36	5.208		
8,000.00	7,137.62	9,999.21	7,249.62	48.06	98.26	-98.75	-3,514.41	-678.97	691.84	557.89	133.95	5.165 SF		
8,100.00	7,143.99	9,900.43	7,249.62	48.28	95.22	-98.84	-3,514.74	-778.61	687.54	555.47	132.06	5.206 ES		
8,200.00	7,143.45	9,800.42	7,249.62	48.53	92.16	-98.89	-3,515.08	-878.61	687.37	557.31	130.06	5.285		
8,300.00	7,142.91	9,700.42	7,249.62	48.89	89.13	-98.93	-3,515.41	-978.60	687.20	558.96	128.24	5.359		
8,400.00	7,142.37	9,600.42	7,249.62	49.40	86.11	-98.98	-3,515.75	-1,078.60	687.03	560.44	126.60	5.427		
8,500.00	7,141.83	9,500.42	7,249.62	50.12	83.12	-99.03	-3,516.08	-1,178.60	686.87	561.75	125.12	5.490		
8,600.00	7,141.29	9,400.42	7,249.62	51.08	80.16	-99.08	-3,516.41	-1,278.60	686.70	562.91	123.79	5.547		
8,700.00	7,140.75	9,300.41	7,249.62	52.30	77.22	-99.13	-3,516.75	-1,378.59	686.54	563.94	122.60	5.600		
8,800.00	7,140.21	9,200.41	7,249.62	53.75	74.33	-99.17	-3,517.08	-1,478.59	686.37	564.83	121.54	5.647		
8,900.00	7,139.67	9,100.41	7,249.62	55.40	71.47	-99.22	-3,517.42	-1,578.59	686.21	565.60	120.61	5.690		
9,000.00	7,139.12	9,000.41	7,249.62	57.20	68.65	-99.27	-3,517.75	-1,678.59	686.04	566.26	119.79	5.727		
9,100.00	7,138.58	8,900.41	7,249.62	59.13	65.89	-99.32	-3,518.08	-1,778.58	685.88	566.80	119.09	5.760		
9,200.00	7,138.04	8,800.41	7,249.62	61.15	63.19	-99.37	-3,518.42	-1,878.58	685.72	567.22	118.49	5.787		
9,300.00	7,137.50	8,700.40	7,249.62	63.26	60.55	-99.41	-3,518.75	-1,978.58	685.56	567.54	118.01	5.809		
9,400.00	7,136.96	8,600.40	7,249.62	65.44	58.00	-99.46	-3,519.09	-2,078.58	685.39	567.74	117.65	5.826		
9,500.00	7,136.42	8,500.40	7,249.62	67.68	55.55	-99.51	-3,519.42	-2,178.58	685.23	567.83	117.40	5.837		
9,600.00	7,135.88	8,399.60	7,249.62	69.97	53.19	-99.56	-3,519.75	-2,278.57	685.07	567.81	117.26	5.842		
9,700.00	7,135.34	8,300.40	7,249.62	72.31	51.01	-99.61	-3,520.09	-2,378.57	684.91	567.62	117.29	5.840		
9,800.00	7,134.80	8,200.40	7,249.62	74.69	48.99	-99.65	-3,520.42	-2,478.57	684.75	567.31	117.44	5.831		
9,900.00	7,134.26	8,100.39	7,249.62	77.10	47.21	-99.70	-3,520.76	-2,578.57	684.59	566.84	117.75	5.814		
10,000.00	7,133.71	8,000.39	7,249.62	79.54	45.73	-99.75	-3,521.09	-2,678.56	684.43	566.20	118.24	5.789		
10,100.00	7,133.17	7,900.39	7,249.62	82.02	44.60	-99.80	-3,521.42	-2,778.56	684.28	565.36	118.91	5.754		
10,200.00	7,132.63	7,800.39	7,249.62	84.52	43.83	-99.85	-3,521.76	-2,878.56	684.12	564.32	119.80	5.710		
10,280.65	7,132.20	7,720.04	7,249.37	86.55	43.42	-99.86	-3,522.08	-2,958.13	684.01	563.28	120.73	5.666 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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,132.09	7,701.80	7,248.61	87.04	43.35	-99.81	-3,522.32	-2,976.35	684.02	563.00	121.02	5.652		
10,400.00	7,131.55	7,609.03	7,236.92	89.58	43.05	-98.85	-3,525.33	-3,068.25	684.71	561.75	122.96	5.568		
10,500.00	7,131.01	7,521.32	7,214.01	92.15	42.85	-96.93	-3,530.92	-3,152.66	687.05	561.53	125.52	5.474		
10,600.00	7,130.47	7,441.24	7,183.41	94.73	42.69	-94.37	-3,538.26	-3,226.24	692.38	563.99	128.39	5.393		
10,700.00	7,129.93	7,370.01	7,148.81	97.33	42.54	-91.51	-3,546.49	-3,287.92	702.25	571.07	131.18	5.353		
10,800.00	7,129.39	7,307.72	7,113.22	99.94	42.41	-88.62	-3,554.90	-3,338.30	718.12	584.60	133.52	5.379		
10,900.00	7,128.84	7,252.01	7,077.46	102.56	42.27	-85.79	-3,563.33	-3,380.15	741.03	605.83	135.20	5.481		
11,000.00	7,128.30	7,207.24	7,046.22	105.20	42.16	-83.38	-3,570.68	-3,411.35	771.50	635.36	136.14	5.667		
11,100.00	7,127.76	7,167.09	7,016.44	107.85	42.03	-81.15	-3,577.66	-3,437.36	809.60	673.20	136.40	5.935		
11,200.00	7,127.22	7,132.35	6,989.43	110.51	41.92	-79.18	-3,583.99	-3,458.27	854.97	718.90	136.07	6.283		
11,300.00	7,126.68	7,100.00	6,963.32	113.18	41.82	-77.33	-3,590.10	-3,476.35	907.03	771.74	135.29	6.704		
11,400.00	7,126.14	7,075.82	6,943.23	115.86	41.73	-75.95	-3,594.80	-3,488.96	965.06	830.86	134.20	7.191		
11,500.00	7,125.60	7,052.01	6,923.01	118.55	41.65	-74.59	-3,599.53	-3,500.60	1,028.32	895.42	132.90	7.737		
11,600.00	7,125.06	7,032.28	6,905.93	121.25	41.57	-73.47	-3,603.51	-3,509.66	1,096.11	964.61	131.50	8.335		
11,700.00	7,124.52	7,010.76	6,887.02	123.95	41.48	-72.25	-3,607.93	-3,518.91	1,167.81	1,037.75	130.06	8.979		
11,800.00	7,123.97	7,000.00	6,877.45	126.66	41.44	-71.65	-3,610.16	-3,523.29	1,242.81	1,114.21	128.61	9.664		
11,900.00	7,123.43	6,983.51	6,862.64	129.38	41.37	-70.73	-3,613.61	-3,529.67	1,320.67	1,193.46	127.21	10.382		
12,000.00	7,122.89	6,970.46	6,850.81	132.10	41.31	-70.01	-3,616.37	-3,534.45	1,400.97	1,275.11	125.85	11.132		
12,100.00	7,122.35	6,952.01	6,833.94	134.83	41.23	-69.00	-3,620.30	-3,540.77	1,483.40	1,358.81	124.59	11.906		
12,200.00	7,121.81	6,952.01	6,833.94	137.56	41.23	-69.00	-3,620.30	-3,540.77	1,567.57	1,444.23	123.34	12.710		
12,300.00	7,121.27	6,952.01	6,833.94	140.30	41.23	-69.00	-3,620.30	-3,540.77	1,653.49	1,531.34	122.15	13.536		
12,400.00	7,120.73	6,929.21	6,812.83	143.05	41.12	-67.77	-3,625.22	-3,547.89	1,740.40	1,619.26	121.15	14.366		
12,500.00	7,120.19	6,920.99	6,805.17	145.80	41.08	-67.33	-3,627.00	-3,550.26	1,828.68	1,708.53	120.15	15.220		
12,600.00	7,119.65	6,900.00	6,785.47	148.55	40.98	-66.23	-3,631.59	-3,555.86	1,918.17	1,798.91	119.27	16.083		
12,700.00	7,119.10	6,900.00	6,785.47	151.30	40.98	-66.23	-3,631.59	-3,555.86	2,008.25	1,889.88	118.38	16.965		
12,800.00	7,118.56	6,900.00	6,785.47	154.07	40.98	-66.23	-3,631.59	-3,555.86	2,099.23	1,981.69	117.54	17.859		
12,900.00	7,118.02	6,900.00	6,785.47	156.83	40.98	-66.23	-3,631.59	-3,555.86	2,191.00	2,074.23	116.77	18.764		
13,000.00	7,117.48	6,900.00	6,785.47	159.60	40.98	-66.23	-3,631.59	-3,555.86	2,283.46	2,167.41	116.04	19.678		
13,100.00	7,116.94	6,900.00	6,785.47	162.37	40.98	-66.23	-3,631.59	-3,555.86	2,376.53	2,261.16	115.37	20.599		
13,200.00	7,116.40	6,878.19	6,764.82	165.14	40.87	-65.11	-3,636.39	-3,560.97	2,469.68	2,354.86	114.82	21.509		
13,300.00	7,115.86	6,873.60	6,760.46	167.92	40.85	-64.87	-3,637.40	-3,561.95	2,563.57	2,449.32	114.25	22.439		
13,400.00	7,115.32	6,852.01	6,739.83	170.70	40.74	-63.79	-3,642.20	-3,566.13	2,658.14	2,544.38	113.77	23.365		
13,500.00	7,114.78	6,852.01	6,739.83	173.48	40.74	-63.79	-3,642.20	-3,566.13	2,752.69	2,639.44	113.25	24.306		
13,600.00	7,114.24	6,852.01	6,739.83	176.26	40.74	-63.79	-3,642.20	-3,566.13	2,847.61	2,734.84	112.77	25.251		
13,700.00	7,113.69	6,852.01	6,739.83	179.05	40.74	-63.79	-3,642.20	-3,566.13	2,942.87	2,830.55	112.32	26.201		
13,800.00	7,113.15	6,852.01	6,739.83	181.84	40.74	-63.79	-3,642.20	-3,566.13	3,038.43	2,926.53	111.90	27.154		
13,900.00	7,112.61	6,852.01	6,739.83	184.63	40.74	-63.79	-3,642.20	-3,566.13	3,134.27	3,022.77	111.50	28.110		
14,000.00	7,112.07	6,852.01	6,739.83	187.42	40.74	-63.79	-3,642.20	-3,566.13	3,230.36	3,119.23	111.13	29.069		
14,100.00	7,111.53	6,852.01	6,739.83	190.22	40.74	-63.79	-3,642.20	-3,566.13	3,326.68	3,215.90	110.78	30.030		
14,200.00	7,110.99	6,852.01	6,739.83	193.01	40.74	-63.79	-3,642.20	-3,566.13	3,423.21	3,312.76	110.45	30.993		
14,300.00	7,110.45	6,852.01	6,739.83	195.81	40.74	-63.79	-3,642.20	-3,566.13	3,519.94	3,409.79	110.14	31.958		
14,400.00	7,109.91	6,852.01	6,739.83	198.61	40.74	-63.79	-3,642.20	-3,566.13	3,616.84	3,506.99	109.85	32.925		
14,500.00	7,109.37	6,852.01	6,739.83	201.42	40.74	-63.79	-3,642.20	-3,566.13	3,713.91	3,604.33	109.58	33.893		
14,600.00	7,108.82	6,852.01	6,739.83	204.22	40.74	-63.79	-3,642.20	-3,566.13	3,811.13	3,701.81	109.32	34.863		
14,700.00	7,108.28	6,852.01	6,739.83	207.03	40.74	-63.79	-3,642.20	-3,566.13	3,908.49	3,799.41	109.07	35.833		
14,800.00	7,107.74	6,828.37	6,717.09	209.83	40.61	-62.64	-3,647.48	-3,569.89	4,005.47	3,896.58	108.89	36.783		
14,900.00	7,107.20	6,826.37	6,715.16	212.64	40.60	-62.54	-3,647.93	-3,570.17	4,103.00	3,994.32	108.68	37.753		
15,000.00	7,106.66	6,824.46	6,713.31	215.45	40.59	-62.45	-3,648.36	-3,570.43	4,200.63	4,092.15	108.48	38.723		
15,100.00	7,106.12	6,822.62	6,711.54	218.26	40.58	-62.36	-3,648.77	-3,570.68	4,298.37	4,190.08	108.29	39.694		
15,200.00	7,105.58	6,800.00	6,689.65	221.07	40.45	-61.29	-3,653.85	-3,573.25	4,396.59	4,288.45	108.14	40.656		
15,300.00	7,105.04	6,800.00	6,689.65	223.89	40.45	-61.29	-3,653.85	-3,573.25	4,494.45	4,386.48	107.97	41.628		
15,400.00	7,104.50	6,800.00	6,689.65	226.70	40.45	-61.29	-3,653.85	-3,573.25	4,592.40	4,484.60	107.80	42.600		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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)			
15,491.56	7,104.00	6,800.00	6,689.65	229.28	40.45	-61.29	-3,653.85	-3,573.25	4,682.16	4,574.50	107.66	43.490		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
0.00	0.00	25.00	71.00	3.28	3.28	-146.51	-4,973.22	-3,290.80	5,963.84					
100.00	100.00	1,163.95	1,195.22	3.28	6.54	-145.49	-4,826.92	-3,319.04	5,959.42	5,949.65	9.78	609.584		
200.00	200.00	1,255.43	1,283.33	3.34	7.07	-145.31	-4,803.02	-3,324.85	5,941.15	5,930.88	10.27	578.414		
300.00	299.98	1,391.63	1,414.60	3.44	7.88	32.05	-4,767.52	-3,332.48	5,921.13	5,910.06	11.08	534.509		
400.00	399.84	1,468.95	1,489.25	3.59	8.35	32.46	-4,747.70	-3,336.11	5,898.17	5,886.56	11.62	507.678		
500.00	499.45	1,576.02	1,592.72	3.79	9.01	33.00	-4,720.51	-3,340.45	5,872.28	5,859.91	12.37	474.755		
600.00	598.70	1,632.49	1,647.39	4.03	9.35	33.46	-4,706.52	-3,342.57	5,844.01	5,831.13	12.88	453.577		
700.00	697.47	1,732.14	1,743.94	4.31	9.96	34.08	-4,682.17	-3,346.36	5,813.34	5,799.67	13.67	425.113		
800.00	795.62	1,871.83	1,878.73	4.64	10.86	34.92	-4,646.01	-3,352.65	5,779.18	5,764.44	14.74	391.973		
900.00	893.06	1,959.94	1,963.66	5.00	11.43	35.68	-4,622.95	-3,356.74	5,742.47	5,726.92	15.56	369.096		
1,000.00	989.64	2,046.35	2,046.97	5.40	12.00	36.51	-4,600.34	-3,360.76	5,703.31	5,686.91	16.39	347.901		
1,100.00	1,085.27	2,139.04	2,128.54	5.83	12.61	37.40	-4,578.19	-3,364.69	5,661.76	5,644.46	17.29	327.397		
1,200.00	1,179.82	2,213.69	2,208.28	6.29	13.11	38.37	-4,556.54	-3,368.53	5,617.91	5,599.79	18.12	310.104		
1,300.00	1,273.17	2,294.41	2,286.10	6.79	13.64	39.40	-4,535.41	-3,372.28	5,571.84	5,552.84	19.00	293.260		
1,400.00	1,365.21	2,373.04	2,361.89	7.33	14.17	40.52	-4,514.83	-3,375.93	5,523.66	5,503.76	19.90	277.628		
1,500.00	1,456.49	2,450.45	2,436.53	7.89	14.69	40.99	-4,494.57	-3,379.52	5,474.46	5,453.66	20.80	263.159		
1,600.00	1,547.76	2,527.87	2,511.16	8.46	15.20	41.42	-4,474.31	-3,383.12	5,425.55	5,403.82	21.72	249.749		
1,700.00	1,639.04	2,605.28	2,585.79	9.05	15.72	41.85	-4,454.04	-3,386.71	5,376.94	5,354.27	22.66	237.239		
1,800.00	1,730.31	2,682.70	2,660.42	9.65	16.25	42.29	-4,433.78	-3,390.31	5,328.64	5,305.01	23.62	225.572		
1,900.00	1,821.58	2,760.11	2,735.05	10.26	16.77	42.74	-4,413.52	-3,393.90	5,280.65	5,256.05	24.60	214.687		
2,000.00	1,912.85	2,837.53	2,809.68	10.87	17.29	43.20	-4,393.26	-3,397.50	5,232.99	5,207.40	25.59	204.524		
2,100.00	2,004.13	2,914.94	2,884.31	11.49	17.82	43.66	-4,372.99	-3,401.09	5,185.67	5,159.08	26.59	195.028		
2,200.00	2,095.40	2,992.36	2,958.94	12.11	18.34	44.13	-4,352.73	-3,404.69	5,138.68	5,111.08	27.61	186.146		
2,300.00	2,186.67	3,069.77	3,033.57	12.74	18.87	44.60	-4,332.47	-3,408.28	5,092.06	5,063.42	28.63	177.830		
2,400.00	2,277.95	3,147.19	3,108.20	13.38	19.39	45.08	-4,312.21	-3,411.88	5,045.79	5,016.12	29.68	170.034		
2,500.00	2,369.22	3,224.61	3,182.83	14.01	19.92	45.57	-4,291.94	-3,415.47	4,999.90	4,969.17	30.73	162.718		
2,600.00	2,460.49	3,302.02	3,257.46	14.65	20.45	46.06	-4,271.68	-3,419.07	4,954.39	4,922.60	31.79	155.843		
2,700.00	2,551.77	3,379.44	3,332.09	15.29	20.98	46.56	-4,251.42	-3,422.66	4,909.28	4,876.42	32.87	149.376		
2,800.00	2,643.04	3,456.85	3,406.72	15.93	21.50	47.07	-4,231.16	-3,426.26	4,864.57	4,830.62	33.95	143.285		
2,900.00	2,734.31	3,534.27	3,481.35	16.58	22.03	47.59	-4,210.89	-3,429.86	4,820.28	4,785.24	35.05	137.543		
3,000.00	2,825.58	3,611.68	3,555.97	17.23	22.56	48.11	-4,190.63	-3,433.45	4,776.42	4,740.27	36.15	132.122		
3,100.00	2,916.86	3,689.10	3,630.60	17.87	23.09	48.64	-4,170.37	-3,437.05	4,733.00	4,695.73	37.27	127.001		
3,200.00	3,008.13	3,766.51	3,707.95	18.52	23.62	49.17	-4,149.10	-3,440.64	4,689.64	4,651.46	38.40	122.000		
3,300.00	3,099.40	3,843.92	3,789.40	19.17	24.15	49.70	-4,127.83	-3,444.23	4,645.56	4,607.38	39.53	117.000		
3,400.00	3,190.68	3,921.33	3,870.85	19.83	24.68	50.23	-4,106.56	-3,447.82	4,601.48	4,563.30	40.66	112.000		
3,500.00	3,281.95	4,000.00	3,951.30	20.48	25.21	50.76	-4,085.29	-3,451.41	4,557.40	4,519.22	41.79	107.000		
3,600.00	3,373.22	4,078.67	4,032.75	21.13	25.74	51.29	-4,064.02	-3,455.00	4,513.32	4,475.14	42.92	102.000		
3,700.00	3,464.49	4,157.34	4,114.20	21.79	26.27	51.82	-4,042.75	-3,458.59	4,469.24	4,431.06	44.05	97.000		
3,800.00	3,555.77	4,236.01	4,191.07	22.44	26.80	52.35	-4,021.48	-3,462.18	4,425.16	4,386.98	45.18	92.000		
3,900.00	3,647.04	4,314.68	4,267.94	23.10	27.33	52.88	-4,000.21	-3,465.77	4,381.08	4,342.90	46.31	87.000		
4,000.00	3,738.31	4,393.35	4,344.81	23.75	27.86	53.41	-3,978.94	-3,469.36	4,336.99	4,298.82	47.44	82.000		
4,100.00	3,829.59	4,472.02	4,421.48	24.41	28.39	53.94	-3,957.67	-3,472.95	4,292.91	4,254.74	48.57	77.000		
4,200.00	3,920.86	4,550.69	4,500.15	25.07	28.92	54.47	-3,936.40	-3,476.54	4,248.83	4,210.66	49.70	72.000		
4,300.00	4,012.13	4,629.36	4,577.02	25.73	29.45	55.00	-3,915.13	-3,480.13	4,204.75	4,166.58	50.83	67.000		
4,400.00	4,103.41	4,708.03	4,653.89	26.38	29.98	55.53	-3,893.86	-3,483.72	4,160.67	4,122.50	51.96	62.000		
4,500.00	4,194.68	4,786.70	4,730.76	27.04	30.51	56.06	-3,872.59	-3,487.31	4,116.59	4,078.42	53.09	57.000		
4,600.00	4,285.95	4,865.37	4,807.63	27.70	31.04	56.59	-3,851.32	-3,490.90	4,072.51	4,034.34	54.22	52.000		
4,700.00	4,377.22	4,944.04	4,888.90	28.36	31.57	57.12	-3,830.05	-3,494.49	4,028.43	4,000.26	55.35	47.000		
4,800.00	4,468.50	5,022.71	4,969.17	29.02	32.10	57.65	-3,808.78	-3,498.08	3,984.35	3,956.18	56.48	42.000		
4,900.00	4,559.77	5,101.38	5,047.84	29.68	32.63	58.18	-3,787.51	-3,501.67	3,940.27	3,912.10	57.61	37.000		
5,000.00	4,651.04	5,180.05	5,125.11	30.34	33.16	58.71	-3,766.24	-3,505.26	3,896.19	3,868.02	58.74	32.000		
5,100.00	4,742.32	5,258.72	5,202.38	31.00	33.69	59.24	-3,744.97	-3,508.85	3,852.11	3,823.94	59.87	27.000		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
5,200.00	4,833.59	10,440.96	7,075.91	31.66	116.50	-10.24	-3,249.04	-104.24	2,671.13	2,589.57	81.56	32.751	
5,300.00	4,924.86	10,438.92	7,075.91	32.32	116.44	-9.96	-3,249.04	-106.28	2,572.39	2,490.16	82.23	31.284	
5,400.00	5,016.13	10,436.88	7,075.91	32.99	116.38	-9.68	-3,249.03	-108.32	2,473.74	2,390.79	82.95	29.823	
5,500.00	5,107.41	10,435.21	7,075.91	33.65	116.32	-9.40	-3,249.03	-110.36	2,375.20	2,291.46	83.74	28.364	
5,600.00	5,198.68	10,437.25	7,075.90	34.31	116.39	-9.12	-3,249.02	-112.40	2,276.79	2,192.12	84.67	26.890	
5,700.00	5,289.95	10,439.29	7,075.90	34.97	116.45	-8.84	-3,249.02	-114.45	2,178.52	2,092.84	85.68	25.426	
5,800.00	5,381.23	10,441.33	7,075.90	35.63	116.52	-8.55	-3,249.01	-116.49	2,080.41	1,993.63	86.78	23.974	
5,900.00	5,472.50	10,426.67	7,075.90	36.30	116.05	-8.27	-3,249.01	-118.53	1,982.49	1,894.84	87.65	22.619	
6,000.00	5,563.77	10,424.63	7,075.90	36.96	115.99	-7.99	-3,249.00	-120.57	1,884.79	1,795.91	88.87	21.208	
6,100.00	5,655.05	10,422.58	7,075.89	37.62	115.93	-7.71	-3,249.00	-122.61	1,787.34	1,697.11	90.23	19.809	
6,200.00	5,746.32	10,420.54	7,075.89	38.28	115.86	-7.42	-3,248.99	-124.66	1,690.18	1,598.45	91.73	18.426	
6,300.00	5,837.59	10,418.50	7,075.89	38.95	115.80	-7.14	-3,248.99	-126.70	1,593.37	1,499.97	93.40	17.059	
6,400.00	5,928.86	10,416.46	7,075.89	39.61	115.73	-6.86	-3,248.98	-128.74	1,496.98	1,401.71	95.28	15.712	
6,500.00	6,020.14	10,414.42	7,075.89	40.27	115.67	-6.57	-3,248.98	-130.78	1,401.10	1,303.71	97.39	14.387	
6,600.00	6,111.41	10,412.37	7,075.88	40.94	115.60	-6.29	-3,248.97	-132.82	1,305.82	1,206.05	99.77	13.088	
6,700.00	6,202.68	10,410.33	7,075.88	41.60	115.54	-6.00	-3,248.97	-134.87	1,211.31	1,108.82	102.49	11.819	
6,800.00	6,293.96	10,408.29	7,075.88	42.26	115.48	-5.72	-3,248.96	-136.91	1,117.75	1,012.15	105.60	10.585	
6,900.00	6,385.23	10,406.25	7,075.88	42.93	115.41	-5.43	-3,248.96	-138.95	1,025.39	916.22	109.18	9.392	
7,000.00	6,476.50	10,404.21	7,075.88	43.59	115.35	-5.15	-3,248.95	-140.99	934.61	821.30	113.32	8.248	
7,100.00	6,567.77	10,402.16	7,075.87	44.25	115.28	-4.86	-3,248.95	-143.03	845.91	727.79	118.12	7.162	
7,200.00	6,658.64	10,393.90	7,075.87	44.91	115.02	-33.76	-3,248.93	-151.29	760.33	636.87	123.46	6.158	
7,300.00	6,747.14	10,370.26	7,075.84	45.52	114.28	-57.41	-3,248.87	-174.94	680.49	551.55	128.94	5.278	
7,400.00	6,831.10	10,338.32	7,075.80	46.07	113.28	-72.27	-3,248.77	-213.47	609.21	474.85	134.36	4.534	
7,500.00	6,908.46	10,279.25	7,075.75	46.54	111.43	-80.59	-3,248.64	-265.95	548.90	410.30	138.59	3.960	
7,600.00	6,977.30	10,214.12	7,075.69	46.95	109.40	-84.39	-3,248.48	-331.07	501.08	359.53	141.55	3.540	
7,700.00	7,035.93	10,137.95	7,075.61	47.30	107.02	-85.15	-3,248.29	-407.25	466.00	323.43	142.57	3.269	
7,800.00	7,082.92	10,052.60	7,075.53	47.59	104.37	-84.12	-3,248.08	-492.59	442.46	300.74	141.71	3.122	
7,900.00	7,117.09	9,960.19	7,075.43	47.84	101.52	-82.41	-3,247.85	-585.01	428.16	288.58	139.58	3.067 SF	
8,000.00	7,137.62	9,862.98	7,075.34	48.06	98.53	-81.00	-3,247.61	-682.22	420.55	283.51	137.04	3.069	
8,100.00	7,143.99	9,763.37	7,075.24	48.28	95.48	-80.53	-3,247.37	-781.83	417.69	282.94	134.75	3.100	
8,200.00	7,143.45	9,663.37	7,075.14	48.53	92.45	-80.57	-3,247.12	-881.82	416.79	284.00	132.79	3.139	
8,300.00	7,142.91	9,563.38	7,075.04	48.89	89.43	-80.61	-3,246.87	-981.82	415.90	284.90	131.00	3.175	
8,400.00	7,142.37	9,463.38	7,074.94	49.40	86.44	-80.65	-3,246.62	-1,081.81	415.00	285.64	129.36	3.208	
8,500.00	7,141.83	9,363.39	7,074.84	50.12	83.48	-80.69	-3,246.38	-1,181.81	414.11	286.23	127.87	3.238	
8,600.00	7,141.29	9,263.39	7,074.74	51.08	80.55	-80.73	-3,246.13	-1,281.80	413.21	286.69	126.52	3.266	
8,700.00	7,140.75	9,163.88	7,074.25	52.30	77.66	-80.72	-3,245.88	-1,381.31	412.38	287.06	125.32	3.291	
8,800.00	7,140.21	9,063.88	7,073.42	53.75	74.80	-80.66	-3,245.64	-1,481.31	411.60	287.40	124.20	3.314	
8,900.00	7,139.67	8,963.88	7,072.59	55.40	71.99	-80.61	-3,245.39	-1,581.30	410.82	287.63	123.19	3.335	
9,000.00	7,139.12	8,863.89	7,071.76	57.20	69.23	-80.55	-3,245.14	-1,681.29	410.05	287.75	122.30	3.353	
9,100.00	7,138.58	8,763.89	7,070.94	59.13	66.53	-80.49	-3,244.90	-1,781.28	409.27	287.76	121.51	3.368	
9,200.00	7,138.04	8,663.90	7,070.11	61.15	63.90	-80.43	-3,244.65	-1,881.28	408.49	287.66	120.84	3.380	
9,300.00	7,137.50	8,563.90	7,069.28	63.26	61.36	-80.37	-3,244.40	-1,981.27	407.72	287.44	120.27	3.390	
9,400.00	7,136.96	8,463.90	7,068.46	65.44	58.92	-80.31	-3,244.15	-2,081.26	406.94	287.12	119.82	3.396	
9,500.00	7,136.42	8,363.91	7,067.63	67.68	56.61	-80.25	-3,243.91	-2,181.25	406.17	286.68	119.49	3.399	
9,600.00	7,135.88	8,263.91	7,066.80	69.97	54.46	-80.19	-3,243.66	-2,281.25	405.39	286.11	119.28	3.399	
9,700.00	7,135.34	8,163.92	7,065.97	72.31	52.50	-80.13	-3,243.41	-2,381.24	404.62	285.41	119.21	3.394	
9,800.00	7,134.80	8,063.92	7,065.15	74.69	50.80	-80.07	-3,243.17	-2,481.23	403.85	284.56	119.28	3.386	
9,900.00	7,134.26	7,963.92	7,064.32	77.10	49.40	-80.01	-3,242.92	-2,581.22	403.07	283.55	119.52	3.372	
10,000.00	7,133.71	7,863.93	7,063.49	79.54	48.32	-79.95	-3,242.67	-2,681.21	402.30	282.35	119.95	3.354	
10,100.00	7,133.17	7,763.93	7,062.66	82.02	47.54	-79.89	-3,242.42	-2,781.21	401.53	280.95	120.58	3.330	
10,200.00	7,132.63	7,663.94	7,061.84	84.52	47.02	-79.83	-3,242.18	-2,881.20	400.76	279.32	121.44	3.300	
10,273.38	7,132.23	7,593.64	7,061.16	86.37	46.77	-79.77	-3,242.03	-2,951.49	400.25	277.89	122.36	3.271 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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,132.09	7,572.70	7,060.29	87.04	46.70	-79.66	-3,242.17	-2,972.41	400.44	277.54	122.89	3.258 ES		
10,400.00	7,131.55	7,495.03	7,051.29	89.58	46.50	-78.51	-3,244.24	-3,049.48	404.63	279.97	124.66	3.246		
10,500.00	7,131.01	7,420.53	7,034.21	92.15	46.34	-76.33	-3,248.53	-3,121.83	414.84	288.86	125.98	3.293		
10,600.00	7,130.47	7,350.00	7,010.63	94.73	46.19	-73.46	-3,254.62	-3,187.98	432.01	305.33	126.68	3.410		
10,700.00	7,129.93	7,287.11	6,983.77	97.33	46.05	-70.37	-3,261.64	-3,244.38	457.02	330.21	126.81	3.604		
10,800.00	7,129.39	7,229.61	6,954.63	99.94	45.93	-67.25	-3,269.31	-3,293.32	490.37	364.11	126.26	3.884		
10,900.00	7,128.84	7,178.31	6,925.12	102.56	45.80	-64.34	-3,277.12	-3,334.54	531.99	406.69	125.30	4.246		
11,000.00	7,128.30	7,132.82	6,896.35	105.20	45.67	-61.72	-3,284.77	-3,368.93	581.35	457.30	124.06	4.686		
11,100.00	7,127.76	7,100.00	6,874.16	107.85	45.57	-59.84	-3,290.67	-3,392.38	637.74	514.92	122.82	5.192		
11,200.00	7,127.22	7,050.00	6,838.20	110.51	45.42	-57.03	-3,300.27	-3,425.74	700.08	578.95	121.13	5.780		
11,300.00	7,126.68	7,025.58	6,819.74	113.18	45.33	-55.70	-3,305.21	-3,440.95	767.49	647.64	119.85	6.404		
11,400.00	7,126.14	7,000.00	6,799.83	115.86	45.24	-54.34	-3,310.54	-3,456.08	839.31	720.78	118.52	7.081		
11,500.00	7,125.60	6,972.83	6,778.04	118.55	45.13	-52.93	-3,316.38	-3,471.24	914.75	797.51	117.23	7.803		
11,600.00	7,125.06	6,950.00	6,759.27	121.25	45.05	-51.79	-3,321.41	-3,483.21	993.25	877.20	116.05	8.559		
11,700.00	7,124.52	6,935.01	6,746.73	123.95	44.98	-51.06	-3,324.78	-3,490.70	1,074.33	959.35	114.98	9.344		
11,800.00	7,123.97	6,912.88	6,727.91	126.66	44.89	-50.01	-3,329.84	-3,501.18	1,157.54	1,043.57	113.97	10.157		
11,900.00	7,123.43	6,900.00	6,716.80	129.38	44.83	-49.41	-3,332.82	-3,506.97	1,242.62	1,129.56	113.06	10.991		
12,000.00	7,122.89	6,882.07	6,701.15	132.10	44.75	-48.60	-3,337.03	-3,514.63	1,329.24	1,217.02	112.22	11.844		
12,100.00	7,122.35	6,868.74	6,689.38	134.83	44.69	-48.02	-3,340.20	-3,520.04	1,417.22	1,305.76	111.46	12.715		
12,200.00	7,121.81	6,850.00	6,672.66	137.56	44.60	-47.21	-3,344.70	-3,527.20	1,506.41	1,395.64	110.77	13.599		
12,300.00	7,121.27	6,850.00	6,672.66	140.30	44.60	-47.21	-3,344.70	-3,527.20	1,596.53	1,486.40	110.13	14.497		
12,400.00	7,120.73	6,835.01	6,659.14	143.05	44.53	-46.59	-3,348.34	-3,532.56	1,687.53	1,577.98	109.55	15.404		
12,500.00	7,120.19	6,835.01	6,659.14	145.80	44.53	-46.59	-3,348.34	-3,532.56	1,779.42	1,670.42	109.00	16.325		
12,600.00	7,119.65	6,817.04	6,642.79	148.55	44.44	-45.86	-3,352.75	-3,538.54	1,871.80	1,763.27	108.53	17.247		
12,700.00	7,119.10	6,800.00	6,627.13	151.30	44.35	-45.20	-3,356.97	-3,543.78	1,964.95	1,856.86	108.09	18.178		
12,800.00	7,118.56	6,800.00	6,627.13	154.07	44.35	-45.20	-3,356.97	-3,543.78	2,058.47	1,950.80	107.66	19.119		
12,900.00	7,118.02	6,800.00	6,627.13	156.83	44.35	-45.20	-3,356.97	-3,543.78	2,152.57	2,045.30	107.27	20.067		
13,000.00	7,117.48	6,800.00	6,627.13	159.60	44.35	-45.20	-3,356.97	-3,543.78	2,247.18	2,140.28	106.90	21.022		
13,100.00	7,116.94	6,800.00	6,627.13	162.37	44.35	-45.20	-3,356.97	-3,543.78	2,342.24	2,235.68	106.56	21.981		
13,200.00	7,116.40	6,776.16	6,605.01	165.14	44.22	-44.30	-3,362.94	-3,550.37	2,437.13	2,330.84	106.30	22.928		
13,300.00	7,115.86	6,770.81	6,600.01	167.92	44.19	-44.10	-3,364.29	-3,551.73	2,532.67	2,426.65	106.02	23.890		
13,400.00	7,115.32	6,750.56	6,581.01	170.70	44.08	-43.38	-3,369.42	-3,556.49	2,628.70	2,522.92	105.79	24.849		
13,500.00	7,114.78	6,750.56	6,581.01	173.48	44.08	-43.38	-3,369.42	-3,556.49	2,724.65	2,619.12	105.54	25.817		
13,600.00	7,114.24	6,750.56	6,581.01	176.26	44.08	-43.38	-3,369.42	-3,556.49	2,820.89	2,715.58	105.30	26.788		
13,700.00	7,113.69	6,750.56	6,581.01	179.05	44.08	-43.38	-3,369.42	-3,556.49	2,917.37	2,812.29	105.09	27.762		
13,800.00	7,113.15	6,750.56	6,581.01	181.84	44.08	-43.38	-3,369.42	-3,556.49	3,014.09	2,909.20	104.88	28.737		
13,900.00	7,112.61	6,750.56	6,581.01	184.63	44.08	-43.38	-3,369.42	-3,556.49	3,111.01	3,006.31	104.70	29.714		
14,000.00	7,112.07	6,735.01	6,566.33	187.42	44.00	-42.84	-3,373.39	-3,559.71	3,208.06	3,103.51	104.55	30.685		
14,100.00	7,111.53	6,735.01	6,566.33	190.22	44.00	-42.84	-3,373.39	-3,559.71	3,305.25	3,200.86	104.39	31.663		
14,200.00	7,110.99	6,735.01	6,566.33	193.01	44.00	-42.84	-3,373.39	-3,559.71	3,402.60	3,298.36	104.24	32.643		
14,300.00	7,110.45	6,735.01	6,566.33	195.81	44.00	-42.84	-3,373.39	-3,559.71	3,500.09	3,396.00	104.10	33.624		
14,400.00	7,109.91	6,735.01	6,566.33	198.61	44.00	-42.84	-3,373.39	-3,559.71	3,597.73	3,493.76	103.97	34.605		
14,500.00	7,109.37	6,735.01	6,566.33	201.42	44.00	-42.84	-3,373.39	-3,559.71	3,695.49	3,591.65	103.84	35.587		
14,600.00	7,108.82	6,735.01	6,566.33	204.22	44.00	-42.84	-3,373.39	-3,559.71	3,793.37	3,689.64	103.73	36.569		
14,700.00	7,108.28	6,720.04	6,552.12	207.03	43.91	-42.34	-3,377.23	-3,562.46	3,891.15	3,787.50	103.65	37.542		
14,800.00	7,107.74	6,717.57	6,549.77	209.83	43.89	-42.25	-3,377.87	-3,562.89	3,989.16	3,885.61	103.55	38.523		
14,900.00	7,107.20	6,715.20	6,547.52	212.64	43.88	-42.18	-3,378.48	-3,563.28	4,087.26	3,983.80	103.46	39.504		
15,000.00	7,106.66	6,700.00	6,533.02	215.45	43.79	-41.69	-3,382.40	-3,565.61	4,185.59	4,082.20	103.40	40.481		
15,100.00	7,106.12	6,700.00	6,533.02	218.26	43.79	-41.69	-3,382.40	-3,565.61	4,283.80	4,180.48	103.32	41.462		
15,200.00	7,105.58	6,700.00	6,533.02	221.07	43.79	-41.69	-3,382.40	-3,565.61	4,382.09	4,278.84	103.25	42.443		
15,300.00	7,105.04	6,700.00	6,533.02	223.89	43.79	-41.69	-3,382.40	-3,565.61	4,480.46	4,377.28	103.18	43.423		
15,400.00	7,104.50	6,700.00	6,533.02	226.70	43.79	-41.69	-3,382.40	-3,565.61	4,578.89	4,475.77	103.12	44.403		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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)					
15,491.56	7,104.00	6,700.00	6,533.02	229.28	43.79	-41.69	-3,382.40	-3,565.61	4,669.08	4,566.01	103.07	45.301				



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER FARM 1-21(PA_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	64.00	3.28	3.28	-122.82	-4,090.69	-6,342.13	7,547.21					
100.00	100.00	36.00	100.00	3.28	3.34	-122.82	-4,090.69	-6,342.13	7,546.94	7,540.32	6.62	1,139.269		
200.00	200.00	136.00	200.00	3.34	4.45	-122.82	-4,090.69	-6,342.13	7,546.94	7,539.16	7.78	969.596		
300.00	299.98	235.98	299.98	3.44	7.27	54.07	-4,090.69	-6,342.13	7,545.92	7,535.20	10.71	704.331		
400.00	399.84	335.84	399.84	3.59	10.50	54.15	-4,090.69	-6,342.13	7,542.85	7,528.75	14.09	535.201		
500.00	499.45	435.45	499.45	3.79	13.85	54.29	-4,090.69	-6,342.13	7,537.74	7,520.10	17.64	427.350		
600.00	598.70	534.70	598.70	4.03	17.24	54.48	-4,090.69	-6,342.13	7,530.61	7,509.34	21.27	354.105		
700.00	697.47	633.47	697.47	4.31	20.63	54.73	-4,090.69	-6,342.13	7,521.47	7,496.53	24.94	301.533		
800.00	795.62	731.62	795.62	4.64	24.02	55.03	-4,090.69	-6,342.13	7,510.36	7,481.70	28.65	262.125		
900.00	893.06	829.06	893.06	5.00	27.39	55.38	-4,090.69	-6,342.13	7,497.29	7,464.92	32.38	231.560		
1,000.00	989.64	925.64	989.64	5.40	30.74	55.79	-4,090.69	-6,342.13	7,482.32	7,446.21	36.11	207.203		
1,100.00	1,085.27	1,021.27	1,085.27	5.83	34.07	56.26	-4,090.69	-6,342.13	7,465.48	7,425.63	39.85	187.359		
1,200.00	1,179.82	1,115.82	1,179.82	6.29	37.35	56.77	-4,090.69	-6,342.13	7,446.81	7,403.24	43.58	170.895		
1,300.00	1,273.17	1,209.17	1,273.17	6.79	40.60	57.34	-4,090.69	-6,342.13	7,426.38	7,379.08	47.29	157.025		
1,400.00	1,365.21	1,301.21	1,365.21	7.33	43.80	57.97	-4,090.69	-6,342.13	7,404.23	7,353.23	51.00	145.186		
1,500.00	1,456.49	1,407.51	1,456.49	7.89	47.50	58.24	-4,090.69	-6,342.13	7,381.23	7,326.01	55.22	133.669		
1,600.00	1,547.76	1,483.76	1,547.76	8.46	50.16	58.50	-4,090.69	-6,342.13	7,358.37	7,299.96	58.41	125.977		
1,700.00	1,639.04	1,575.04	1,639.04	9.05	53.34	58.75	-4,090.69	-6,342.13	7,335.68	7,273.54	62.14	118.054		
1,800.00	1,730.31	1,666.31	1,730.31	9.65	56.52	59.01	-4,090.69	-6,342.13	7,313.14	7,247.26	65.88	111.011		
1,900.00	1,821.58	1,757.58	1,821.58	10.26	59.70	59.27	-4,090.69	-6,342.13	7,290.76	7,221.13	69.63	104.711		
2,000.00	1,912.85	1,848.85	1,912.85	10.87	62.88	59.53	-4,090.69	-6,342.13	7,268.54	7,195.15	73.39	99.046		
2,100.00	2,004.13	1,940.13	2,004.13	11.49	66.07	59.79	-4,090.69	-6,342.13	7,246.48	7,169.33	77.15	93.925		
2,200.00	2,095.40	2,031.40	2,095.40	12.11	69.25	60.05	-4,090.69	-6,342.13	7,224.59	7,143.66	80.92	89.276		
2,300.00	2,186.67	2,122.67	2,186.67	12.74	72.43	60.31	-4,090.69	-6,342.13	7,202.86	7,118.16	84.70	85.037		
2,400.00	2,277.95	2,213.95	2,277.95	13.38	75.61	60.58	-4,090.69	-6,342.13	7,181.30	7,092.81	88.49	81.157		
2,500.00	2,369.22	2,305.22	2,369.22	14.01	78.80	60.84	-4,090.69	-6,342.13	7,159.91	7,067.63	92.27	77.594		
2,600.00	2,460.49	2,403.51	2,460.49	14.65	82.23	61.11	-4,090.69	-6,342.13	7,138.68	7,042.37	96.31	74.121		
2,700.00	2,551.77	2,487.77	2,551.77	15.29	85.17	61.38	-4,090.69	-6,342.13	7,117.63	7,017.77	99.86	71.274		
2,800.00	2,643.04	2,579.04	2,643.04	15.93	88.35	61.65	-4,090.69	-6,342.13	7,096.75	6,993.09	103.66	68.459		
2,900.00	2,734.31	2,670.31	2,734.31	16.58	91.53	61.92	-4,090.69	-6,342.13	7,076.05	6,968.58	107.47	65.844		
3,000.00	2,825.58	2,761.58	2,825.58	17.23	94.72	62.19	-4,090.69	-6,342.13	7,055.52	6,944.24	111.27	63.407		
3,100.00	2,916.86	2,852.86	2,916.86	17.87	97.90	62.47	-4,090.69	-6,342.13	7,035.16	6,920.08	115.08	61.131		
3,200.00	3,008.13	2,944.13	3,008.13	18.52	101.09	62.74	-4,090.69	-6,342.13	7,014.99	6,896.10	118.89	59.002		
3,300.00	3,099.40	3,035.40	3,099.40	19.17	104.27	63.02	-4,090.69	-6,342.13	6,995.00	6,872.29	122.71	57.005		
3,400.00	3,190.68	3,126.68	3,190.68	19.83	107.46	63.30	-4,090.69	-6,342.13	6,975.19	6,848.66	126.53	55.128		
3,500.00	3,281.95	3,217.95	3,281.95	20.48	110.64	63.58	-4,090.69	-6,342.13	6,955.56	6,825.22	130.35	53.362		
3,600.00	3,373.22	3,309.22	3,373.22	21.13	113.83	63.86	-4,090.69	-6,342.13	6,936.12	6,801.95	134.17	51.697		
3,700.00	3,464.49	3,400.49	3,464.49	21.79	117.01	64.14	-4,090.69	-6,342.13	6,916.87	6,778.87	137.99	50.125		
3,800.00	3,555.77	3,508.23	3,555.77	22.44	120.77	64.43	-4,090.69	-6,342.13	6,897.80	6,755.41	142.39	48.442		
3,900.00	3,647.04	3,583.04	3,647.04	23.10	123.38	64.71	-4,090.69	-6,342.13	6,878.92	6,733.28	145.64	47.231		
4,000.00	3,738.31	3,674.31	3,738.31	23.75	126.57	65.00	-4,090.69	-6,342.13	6,860.24	6,710.76	149.47	45.896		
4,100.00	3,829.59	3,765.59	3,829.59	24.41	129.75	65.29	-4,090.69	-6,342.13	6,841.74	6,688.44	153.31	44.628		
4,200.00	3,920.86	3,856.86	3,920.86	25.07	132.94	65.58	-4,090.69	-6,342.13	6,823.45	6,666.31	157.14	43.423		
4,300.00	4,012.13	3,948.13	4,012.13	25.73	136.12	65.87	-4,090.69	-6,342.13	6,805.34	6,644.37	160.97	42.276		
4,400.00	4,103.41	4,039.41	4,103.41	26.38	139.31	66.16	-4,090.69	-6,342.13	6,787.44	6,622.63	164.81	41.183		
4,500.00	4,194.68	4,130.68	4,194.68	27.04	142.49	66.45	-4,090.69	-6,342.13	6,769.73	6,601.09	168.65	40.141		
4,600.00	4,285.95	4,221.95	4,285.95	27.70	145.68	66.75	-4,090.69	-6,342.13	6,752.23	6,579.74	172.49	39.146		
4,700.00	4,377.22	4,313.22	4,377.22	28.36	148.87	67.04	-4,090.69	-6,342.13	6,734.93	6,558.60	176.33	38.195		
4,800.00	4,468.50	4,404.50	4,468.50	29.02	152.05	67.34	-4,090.69	-6,342.13	6,717.83	6,537.66	180.17	37.286		
4,900.00	4,559.77	4,504.23	4,559.77	29.68	155.53	67.64	-4,090.69	-6,342.13	6,700.94	6,516.63	184.31	36.357		
5,000.00	4,651.04	4,587.04	4,651.04	30.34	158.42	67.94	-4,090.69	-6,342.13	6,684.25	6,496.39	187.86	35.581		
5,100.00	4,742.32	4,678.32	4,742.32	31.00	161.61	68.24	-4,090.69	-6,342.13	6,667.77	6,476.07	191.71	34.781		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	4,833.59	4,769.59	4,833.59	31.66	164.79	68.54	-4,090.69	-6,342.13	6,651.51	6,455.95	195.55	34.014		
5,300.00	4,924.86	4,860.86	4,924.86	32.32	167.98	68.84	-4,090.69	-6,342.13	6,635.45	6,436.05	199.40	33.276		
5,400.00	5,016.13	4,952.13	5,016.13	32.99	171.17	69.15	-4,090.69	-6,342.13	6,619.61	6,416.36	203.25	32.568		
5,500.00	5,107.41	5,043.41	5,107.41	33.65	174.35	69.45	-4,090.69	-6,342.13	6,603.98	6,396.88	207.11	31.887		
5,600.00	5,198.68	5,134.68	5,198.68	34.31	177.54	69.76	-4,090.69	-6,342.13	6,588.57	6,377.61	210.96	31.232		
5,700.00	5,289.95	5,225.95	5,289.95	34.97	180.72	70.07	-4,090.69	-6,342.13	6,573.38	6,358.57	214.81	30.600		
5,800.00	5,381.23	5,317.23	5,381.23	35.63	183.91	70.38	-4,090.69	-6,342.13	6,558.41	6,339.74	218.67	29.993		
5,900.00	5,472.50	5,408.50	5,472.50	36.30	187.09	70.69	-4,090.69	-6,342.13	6,543.65	6,321.13	222.52	29.406		
6,000.00	5,563.77	5,500.23	5,563.77	36.96	190.30	71.00	-4,090.69	-6,342.13	6,529.12	6,302.72	226.40	28.839		
6,100.00	5,655.05	5,608.96	5,655.05	37.62	194.09	71.32	-4,090.69	-6,342.13	6,514.82	6,283.95	230.86	28.219		
6,200.00	5,746.32	5,682.32	5,746.32	38.28	196.65	71.63	-4,090.69	-6,342.13	6,500.73	6,266.64	234.10	27.769		
6,300.00	5,837.59	5,773.59	5,837.59	38.95	199.84	71.95	-4,090.69	-6,342.13	6,486.88	6,248.92	237.96	27.261		
6,400.00	5,928.86	5,864.86	5,928.86	39.61	203.02	72.26	-4,090.69	-6,342.13	6,473.25	6,231.43	241.82	26.769		
6,500.00	6,020.14	5,956.14	6,020.14	40.27	206.21	72.58	-4,090.69	-6,342.13	6,459.86	6,214.17	245.68	26.294		
6,600.00	6,111.41	6,047.41	6,111.41	40.94	209.40	72.90	-4,090.69	-6,342.13	6,446.69	6,197.15	249.54	25.834		
6,700.00	6,202.68	6,138.68	6,202.68	41.60	212.58	73.22	-4,090.69	-6,342.13	6,433.76	6,180.35	253.41	25.389		
6,800.00	6,293.96	6,229.96	6,293.96	42.26	215.77	73.54	-4,090.69	-6,342.13	6,421.06	6,163.79	257.27	24.958		
6,900.00	6,385.23	6,321.23	6,385.23	42.93	218.95	73.86	-4,090.69	-6,342.13	6,408.59	6,147.46	261.14	24.541		
7,000.00	6,476.50	6,412.50	6,476.50	43.59	222.14	74.19	-4,090.69	-6,342.13	6,396.37	6,131.36	265.00	24.137		
7,100.00	6,567.77	6,503.77	6,567.77	44.25	225.33	74.51	-4,090.69	-6,342.13	6,384.38	6,115.51	268.87	23.745		
7,200.00	6,658.64	6,605.36	6,658.64	44.91	228.87	75.54	-4,090.69	-6,342.13	6,366.61	6,093.53	273.08	23.314		
7,300.00	6,747.14	6,683.14	6,747.14	45.52	231.59	42.06	-4,090.69	-6,342.13	6,334.30	6,057.90	276.40	22.918		
7,400.00	6,831.10	6,767.10	6,831.10	46.07	234.52	30.72	-4,090.69	-6,342.13	6,288.07	6,008.23	279.85	22.470		
7,500.00	6,908.46	6,844.46	6,908.46	46.54	237.22	22.22	-4,090.69	-6,342.13	6,229.00	5,946.02	282.98	22.012		
7,600.00	6,977.30	6,913.30	6,977.30	46.95	239.62	15.13	-4,090.69	-6,342.13	6,158.48	5,872.75	285.73	21.554		
7,700.00	7,035.93	6,971.93	7,035.93	47.30	241.67	8.04	-4,090.69	-6,342.13	6,078.19	5,790.16	288.03	21.102		
7,800.00	7,082.92	7,018.92	7,082.92	47.59	243.31	-1.02	-4,090.69	-6,342.13	5,990.08	5,700.23	289.84	20.667		
7,900.00	7,117.09	7,053.09	7,117.09	47.84	244.50	-16.40	-4,090.69	-6,342.13	5,896.30	5,605.18	291.12	20.254		
8,000.00	7,137.62	7,073.62	7,137.62	48.06	245.22	-48.14	-4,090.69	-6,342.13	5,799.19	5,507.35	291.83	19.871		
8,100.00	7,143.99	7,079.99	7,143.99	48.28	245.44	-91.41	-4,090.69	-6,342.13	5,701.17	5,409.18	291.99	19.525		
8,200.00	7,143.45	7,079.45	7,143.45	48.53	245.42	-91.39	-4,090.69	-6,342.13	5,603.54	5,311.65	291.89	19.198		
8,300.00	7,142.91	7,078.91	7,142.91	48.89	245.40	-91.36	-4,090.69	-6,342.13	5,505.99	5,214.20	291.79	18.870		
8,400.00	7,142.37	7,078.37	7,142.37	49.40	245.38	-91.34	-4,090.69	-6,342.13	5,408.54	5,116.84	291.70	18.541		
8,500.00	7,141.83	7,077.83	7,141.83	50.12	245.36	-91.31	-4,090.69	-6,342.13	5,311.17	5,019.55	291.62	18.213		
8,600.00	7,141.29	7,077.29	7,141.29	51.08	245.35	-91.29	-4,090.69	-6,342.13	5,213.91	4,922.36	291.55	17.883		
8,700.00	7,140.75	7,076.75	7,140.75	52.30	245.33	-91.26	-4,090.69	-6,342.13	5,116.75	4,825.26	291.50	17.553		
8,800.00	7,140.21	7,076.21	7,140.21	53.75	245.31	-91.23	-4,090.69	-6,342.13	5,019.71	4,728.25	291.46	17.223		
8,900.00	7,139.67	7,075.67	7,139.67	55.40	245.29	-91.21	-4,090.69	-6,342.13	4,922.78	4,631.35	291.43	16.892		
9,000.00	7,139.12	7,075.12	7,139.12	57.20	245.27	-91.18	-4,090.69	-6,342.13	4,825.98	4,534.56	291.42	16.560		
9,100.00	7,138.58	7,074.58	7,138.58	59.13	245.25	-91.16	-4,090.69	-6,342.13	4,729.31	4,437.88	291.43	16.228		
9,200.00	7,138.04	7,074.04	7,138.04	61.15	245.23	-91.13	-4,090.69	-6,342.13	4,632.78	4,341.32	291.47	15.895		
9,300.00	7,137.50	7,073.50	7,137.50	63.26	245.21	-91.11	-4,090.69	-6,342.13	4,536.41	4,244.88	291.53	15.561		
9,400.00	7,136.96	7,072.96	7,136.96	65.44	245.19	-91.08	-4,090.69	-6,342.13	4,440.19	4,148.58	291.61	15.226		
9,500.00	7,136.42	7,072.42	7,136.42	67.68	245.18	-91.06	-4,090.69	-6,342.13	4,344.15	4,052.41	291.73	14.891		
9,600.00	7,135.88	7,071.88	7,135.88	69.97	245.16	-91.03	-4,090.69	-6,342.13	4,248.28	3,956.40	291.88	14.555		
9,700.00	7,135.34	7,071.34	7,135.34	72.31	245.14	-91.01	-4,090.69	-6,342.13	4,152.61	3,860.54	292.07	14.218		
9,800.00	7,134.80	7,070.80	7,134.80	74.69	245.12	-90.98	-4,090.69	-6,342.13	4,057.15	3,764.85	292.31	13.880		
9,900.00	7,134.26	7,070.26	7,134.26	77.10	245.10	-90.96	-4,090.69	-6,342.13	3,961.92	3,669.33	292.59	13.541		
10,000.00	7,133.71	7,069.71	7,133.71	79.54	245.08	-90.93	-4,090.69	-6,342.13	3,866.92	3,574.00	292.92	13.201		
10,100.00	7,133.17	7,069.17	7,133.17	82.02	245.06	-90.90	-4,090.69	-6,342.13	3,772.19	3,478.87	293.32	12.860		
10,200.00	7,132.63	7,068.63	7,132.63	84.52	245.04	-90.88	-4,090.69	-6,342.13	3,677.73	3,383.95	293.78	12.519		
10,300.00	7,132.09	7,068.09	7,132.09	87.04	245.02	-90.85	-4,090.69	-6,342.13	3,583.57	3,289.26	294.31	12.176		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,131.55	7,067.55	7,131.55	89.58	245.01	-90.83	-4,090.69	-6,342.13	3,489.74	3,194.82	294.92	11.833		
10,500.00	7,131.01	7,067.01	7,131.01	92.15	244.99	-90.80	-4,090.69	-6,342.13	3,396.26	3,100.64	295.62	11.489		
10,600.00	7,130.47	7,066.47	7,130.47	94.73	244.97	-90.78	-4,090.69	-6,342.13	3,303.16	3,006.74	296.42	11.144		
10,700.00	7,129.93	7,065.93	7,129.93	97.33	244.95	-90.75	-4,090.69	-6,342.13	3,210.48	2,913.15	297.32	10.798		
10,800.00	7,129.39	7,065.39	7,129.39	99.94	244.93	-90.73	-4,090.69	-6,342.13	3,118.25	2,819.90	298.35	10.452		
10,900.00	7,128.84	7,064.84	7,128.84	102.56	244.91	-90.70	-4,090.69	-6,342.13	3,026.51	2,727.00	299.50	10.105		
11,000.00	7,128.30	7,064.30	7,128.30	105.20	244.89	-90.68	-4,090.69	-6,342.13	2,935.31	2,634.51	300.80	9.758		
11,100.00	7,127.76	7,063.76	7,127.76	107.85	244.87	-90.65	-4,090.69	-6,342.13	2,844.70	2,542.45	302.26	9.411		
11,200.00	7,127.22	7,063.22	7,127.22	110.51	244.85	-90.63	-4,090.69	-6,342.13	2,754.75	2,450.86	303.89	9.065		
11,300.00	7,126.68	7,062.68	7,126.68	113.18	244.84	-90.60	-4,090.69	-6,342.13	2,665.51	2,359.81	305.70	8.719		
11,400.00	7,126.14	7,062.14	7,126.14	115.86	244.82	-90.58	-4,090.69	-6,342.13	2,577.06	2,269.34	307.72	8.375		
11,500.00	7,125.60	7,061.60	7,125.60	118.55	244.80	-90.55	-4,090.69	-6,342.13	2,489.48	2,179.52	309.96	8.032		
11,600.00	7,125.06	7,061.06	7,125.06	121.25	244.78	-90.52	-4,090.69	-6,342.13	2,402.87	2,090.43	312.44	7.691		
11,700.00	7,124.52	7,060.52	7,124.52	123.95	244.76	-90.50	-4,090.69	-6,342.13	2,317.34	2,002.16	315.19	7.352		
11,800.00	7,123.97	7,059.97	7,123.97	126.66	244.74	-90.47	-4,090.69	-6,342.13	2,233.02	1,914.80	318.21	7.017		
11,900.00	7,123.43	7,059.43	7,123.43	129.38	244.72	-90.45	-4,090.69	-6,342.13	2,150.04	1,828.49	321.54	6.687		
12,000.00	7,122.89	7,058.89	7,122.89	132.10	244.70	-90.42	-4,090.69	-6,342.13	2,068.56	1,743.36	325.20	6.361		
12,100.00	7,122.35	7,058.35	7,122.35	134.83	244.68	-90.40	-4,090.69	-6,342.13	1,988.78	1,659.58	329.20	6.041		
12,200.00	7,121.81	7,057.81	7,121.81	137.56	244.67	-90.37	-4,090.69	-6,342.13	1,910.89	1,577.33	333.57	5.729		
12,300.00	7,121.27	7,057.27	7,121.27	140.30	244.65	-90.35	-4,090.69	-6,342.13	1,835.16	1,496.84	338.32	5.424		
12,400.00	7,120.73	7,056.73	7,120.73	143.05	244.63	-90.32	-4,090.69	-6,342.13	1,761.84	1,418.38	343.47	5.130		
12,500.00	7,120.19	7,056.19	7,120.19	145.80	244.61	-90.30	-4,090.69	-6,342.13	1,691.26	1,342.25	349.01	4.846		
12,600.00	7,119.65	7,055.65	7,119.65	148.55	244.59	-90.27	-4,090.69	-6,342.13	1,623.78	1,268.82	354.95	4.575		
12,700.00	7,119.10	7,055.10	7,119.10	151.30	244.57	-90.25	-4,090.69	-6,342.13	1,559.79	1,198.52	361.27	4.317		
12,800.00	7,118.56	7,054.56	7,118.56	154.07	244.55	-90.22	-4,090.69	-6,342.13	1,499.74	1,131.81	367.93	4.076		
12,900.00	7,118.02	7,054.02	7,118.02	156.83	244.53	-90.19	-4,090.69	-6,342.13	1,444.13	1,069.27	374.86	3.852		
13,000.00	7,117.48	7,053.48	7,117.48	159.60	244.51	-90.17	-4,090.69	-6,342.13	1,393.48	1,011.50	381.97	3.648		
13,100.00	7,116.94	7,052.94	7,116.94	162.37	244.50	-90.14	-4,090.69	-6,342.13	1,348.35	959.21	389.15	3.465		
13,200.00	7,116.40	7,052.40	7,116.40	165.14	244.48	-90.12	-4,090.69	-6,342.13	1,309.33	913.10	396.22	3.305		
13,300.00	7,115.86	7,051.86	7,115.86	167.92	244.46	-90.09	-4,090.69	-6,342.13	1,276.96	873.94	403.02	3.168		
13,400.00	7,115.32	7,051.32	7,115.32	170.70	244.44	-90.07	-4,090.69	-6,342.13	1,251.76	842.43	409.32	3.058		
13,500.00	7,114.78	7,050.78	7,114.78	173.48	244.42	-90.04	-4,090.69	-6,342.13	1,234.17	819.23	414.94	2.974		
13,600.00	7,114.24	7,050.24	7,114.24	176.26	244.40	-90.02	-4,090.69	-6,342.13	1,224.52	804.86	419.66	2.918		
13,668.62	7,113.86	7,049.86	7,113.86	178.17	244.39	-90.00	-4,090.69	-6,342.13	1,222.60	800.28	422.32	2.895 CC		
13,700.00	7,113.69	7,049.69	7,113.69	179.05	244.38	-89.99	-4,090.69	-6,342.13	1,223.00	799.63	423.37	2.889 ES		
13,800.00	7,113.15	7,049.15	7,113.15	181.84	244.36	-89.97	-4,090.69	-6,342.13	1,229.64	803.68	425.95	2.887 SF		
13,900.00	7,112.61	7,048.61	7,112.61	184.63	244.34	-89.94	-4,090.69	-6,342.13	1,244.30	816.89	427.41	2.911		
14,000.00	7,112.07	7,048.07	7,112.07	187.42	244.33	-89.92	-4,090.69	-6,342.13	1,266.71	838.94	427.77	2.961		
14,100.00	7,111.53	7,047.53	7,111.53	190.22	244.31	-89.89	-4,090.69	-6,342.13	1,296.47	869.31	427.16	3.035		
14,200.00	7,110.99	7,046.99	7,110.99	193.01	244.29	-89.87	-4,090.69	-6,342.13	1,333.08	907.38	425.70	3.132		
14,300.00	7,110.45	7,046.45	7,110.45	195.81	244.27	-89.84	-4,090.69	-6,342.13	1,376.00	952.45	423.55	3.249		
14,400.00	7,109.91	7,045.91	7,109.91	198.61	244.25	-89.81	-4,090.69	-6,342.13	1,424.66	1,003.79	420.87	3.385		
14,500.00	7,109.37	7,045.37	7,109.37	201.42	244.23	-89.79	-4,090.69	-6,342.13	1,478.49	1,060.68	417.81	3.539		
14,600.00	7,108.82	7,044.82	7,108.82	204.22	244.21	-89.76	-4,090.69	-6,342.13	1,536.94	1,122.45	414.49	3.708		
14,700.00	7,108.28	7,044.28	7,108.28	207.03	244.19	-89.74	-4,090.69	-6,342.13	1,599.52	1,188.49	411.03	3.891		
14,800.00	7,107.74	7,043.74	7,107.74	209.83	244.17	-89.71	-4,090.69	-6,342.13	1,665.75	1,258.25	407.51	4.088		
14,900.00	7,107.20	7,043.20	7,107.20	212.64	244.16	-89.69	-4,090.69	-6,342.13	1,735.22	1,331.23	403.99	4.295		
15,000.00	7,106.66	7,042.66	7,106.66	215.45	244.14	-89.66	-4,090.69	-6,342.13	1,807.56	1,407.03	400.53	4.513		
15,100.00	7,106.12	7,042.12	7,106.12	218.26	244.12	-89.64	-4,090.69	-6,342.13	1,882.43	1,485.28	397.15	4.740		
15,200.00	7,105.58	7,041.58	7,105.58	221.07	244.10	-89.61	-4,090.69	-6,342.13	1,959.54	1,565.65	393.89	4.975		
15,300.00	7,105.04	7,041.04	7,105.04	223.89	244.08	-89.59	-4,090.69	-6,342.13	2,038.65	1,647.89	390.75	5.217		
15,400.00	7,104.50	7,040.50	7,104.50	226.70	244.06	-89.56	-4,090.69	-6,342.13	2,119.52	1,731.76	387.76	5.466		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 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	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)		
15,491.56	7,104.00	7,040.00	7,104.00	229.28	244.04	-89.54	-4,090.69	-6,342.13	2,194.94	1,809.81	385.13	5.699	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	17.00	3.28	3.28	-66.92	2,708.34	-6,354.56	6,907.67					
100.00	100.00	83.00	100.00	3.28	3.59	-66.92	2,708.34	-6,354.56	6,907.65	6,900.78	6.87	1,005.418		
200.00	200.00	183.00	200.00	3.34	5.68	-66.92	2,708.34	-6,354.56	6,907.65	6,898.62	9.02	765.665		
300.00	299.98	282.98	299.98	3.44	8.77	109.95	2,708.34	-6,354.56	6,908.24	6,896.03	12.21	565.823		
400.00	399.84	382.84	399.84	3.59	12.07	109.96	2,708.34	-6,354.56	6,910.03	6,894.37	15.66	441.191		
500.00	499.45	482.45	499.45	3.79	15.45	109.97	2,708.34	-6,354.56	6,913.02	6,893.78	19.24	359.379		
600.00	598.70	581.70	598.70	4.03	18.85	109.99	2,708.34	-6,354.56	6,917.21	6,894.33	22.88	302.338		
700.00	697.47	680.47	697.47	4.31	22.25	110.00	2,708.34	-6,354.56	6,922.62	6,896.05	26.57	260.577		
800.00	795.62	778.62	795.62	4.64	25.65	110.03	2,708.34	-6,354.56	6,929.26	6,898.97	30.28	228.817		
900.00	893.06	876.06	893.06	5.00	29.02	110.05	2,708.34	-6,354.56	6,937.14	6,903.12	34.02	203.927		
1,000.00	989.64	972.64	989.64	5.40	32.38	110.07	2,708.34	-6,354.56	6,946.29	6,908.53	37.76	183.947		
1,100.00	1,085.27	1,068.27	1,085.27	5.83	35.70	110.09	2,708.34	-6,354.56	6,956.73	6,915.22	41.51	167.591		
1,200.00	1,179.82	1,162.82	1,179.82	6.29	38.99	110.11	2,708.34	-6,354.56	6,968.49	6,923.23	45.25	153.983		
1,300.00	1,273.17	1,256.17	1,273.17	6.79	42.23	110.12	2,708.34	-6,354.56	6,981.57	6,932.58	48.99	142.507		
1,400.00	1,365.21	1,348.21	1,365.21	7.33	45.44	110.13	2,708.34	-6,354.56	6,996.03	6,943.31	52.71	132.715		
1,500.00	1,456.49	1,439.49	1,456.49	7.89	48.62	110.40	2,708.34	-6,354.56	7,011.34	6,954.90	56.43	124.240		
1,600.00	1,547.76	1,530.76	1,547.76	8.46	51.80	110.69	2,708.34	-6,354.56	7,026.85	6,966.69	60.17	116.788		
1,700.00	1,639.04	1,622.04	1,639.04	9.05	54.98	110.97	2,708.34	-6,354.56	7,042.57	6,978.66	63.91	110.189		
1,800.00	1,730.31	1,713.31	1,730.31	9.65	58.16	111.26	2,708.34	-6,354.56	7,058.50	6,990.83	67.67	104.308		
1,900.00	1,821.58	1,804.58	1,821.58	10.26	61.34	111.55	2,708.34	-6,354.56	7,074.62	7,003.19	71.43	99.038		
2,000.00	1,912.85	1,904.15	1,912.85	10.87	64.81	111.83	2,708.34	-6,354.56	7,090.94	7,015.45	75.49	93.930		
2,100.00	2,004.13	1,987.13	2,004.13	11.49	67.70	112.11	2,708.34	-6,354.56	7,107.46	7,028.48	78.98	89.993		
2,200.00	2,095.40	2,078.40	2,095.40	12.11	70.89	112.39	2,708.34	-6,354.56	7,124.17	7,041.41	82.76	86.085		
2,300.00	2,186.67	2,169.67	2,186.67	12.74	74.07	112.68	2,708.34	-6,354.56	7,141.08	7,054.54	86.54	82.518		
2,400.00	2,277.95	2,260.95	2,277.95	13.38	77.25	112.96	2,708.34	-6,354.56	7,158.18	7,067.85	90.33	79.249		
2,500.00	2,369.22	2,352.22	2,369.22	14.01	80.44	113.23	2,708.34	-6,354.56	7,175.47	7,081.36	94.11	76.243		
2,600.00	2,460.49	2,443.49	2,460.49	14.65	83.62	113.51	2,708.34	-6,354.56	7,192.96	7,095.05	97.90	73.470		
2,700.00	2,551.77	2,534.77	2,551.77	15.29	86.81	113.79	2,708.34	-6,354.56	7,210.63	7,108.94	101.69	70.905		
2,800.00	2,643.04	2,626.04	2,643.04	15.93	89.99	114.06	2,708.34	-6,354.56	7,228.49	7,123.01	105.49	68.525		
2,900.00	2,734.31	2,717.31	2,734.31	16.58	93.17	114.34	2,708.34	-6,354.56	7,246.54	7,137.26	109.28	66.312		
3,000.00	2,825.58	2,808.58	2,825.58	17.23	96.36	114.61	2,708.34	-6,354.56	7,264.77	7,151.70	113.07	64.248		
3,100.00	2,916.86	2,900.14	2,916.86	17.87	99.55	114.88	2,708.34	-6,354.56	7,283.19	7,166.31	116.88	62.314		
3,200.00	3,008.13	3,008.87	3,008.13	18.52	103.35	115.15	2,708.34	-6,354.56	7,301.78	7,180.50	121.28	60.205		
3,300.00	3,099.40	3,082.40	3,099.40	19.17	105.91	115.42	2,708.34	-6,354.56	7,320.56	7,196.11	124.46	58.820		
3,400.00	3,190.68	3,173.68	3,190.68	19.83	109.10	115.69	2,708.34	-6,354.56	7,339.52	7,211.27	128.25	57.227		
3,500.00	3,281.95	3,264.95	3,281.95	20.48	112.28	115.95	2,708.34	-6,354.56	7,358.66	7,226.61	132.05	55.728		
3,600.00	3,373.22	3,356.22	3,373.22	21.13	115.47	116.22	2,708.34	-6,354.56	7,377.97	7,242.13	135.84	54.313		
3,700.00	3,464.49	3,447.49	3,464.49	21.79	118.65	116.48	2,708.34	-6,354.56	7,397.46	7,257.82	139.64	52.977		
3,800.00	3,555.77	3,538.77	3,555.77	22.44	121.84	116.75	2,708.34	-6,354.56	7,417.12	7,273.69	143.43	51.713		
3,900.00	3,647.04	3,630.04	3,647.04	23.10	125.02	117.01	2,708.34	-6,354.56	7,436.95	7,289.73	147.22	50.515		
4,000.00	3,738.31	3,721.31	3,738.31	23.75	128.21	117.27	2,708.34	-6,354.56	7,456.96	7,305.94	151.02	49.378		
4,100.00	3,829.59	3,812.59	3,829.59	24.41	131.39	117.53	2,708.34	-6,354.56	7,477.13	7,322.33	154.81	48.299		
4,200.00	3,920.86	3,903.86	3,920.86	25.07	134.58	117.79	2,708.34	-6,354.56	7,497.48	7,338.88	158.60	47.273		
4,300.00	4,012.13	4,004.87	4,012.13	25.73	138.10	118.04	2,708.34	-6,354.56	7,517.99	7,355.26	162.73	46.199		
4,400.00	4,103.41	4,086.41	4,103.41	26.38	140.95	118.30	2,708.34	-6,354.56	7,538.66	7,372.48	166.18	45.364		
4,500.00	4,194.68	4,177.68	4,194.68	27.04	144.13	118.55	2,708.34	-6,354.56	7,559.50	7,389.53	169.97	44.475		
4,600.00	4,285.95	4,268.95	4,285.95	27.70	147.32	118.81	2,708.34	-6,354.56	7,580.51	7,406.75	173.76	43.626		
4,700.00	4,377.22	4,360.22	4,377.22	28.36	150.51	119.06	2,708.34	-6,354.56	7,601.67	7,424.12	177.55	42.814		
4,800.00	4,468.50	4,451.50	4,468.50	29.02	153.69	119.31	2,708.34	-6,354.56	7,623.00	7,441.66	181.34	42.037		
4,900.00	4,559.77	4,542.77	4,559.77	29.68	156.88	119.56	2,708.34	-6,354.56	7,644.48	7,459.36	185.13	41.293		
5,000.00	4,651.04	4,634.04	4,651.04	30.34	160.06	119.81	2,708.34	-6,354.56	7,666.12	7,477.21	188.91	40.580		
5,100.00	4,742.32	4,725.32	4,742.32	31.00	163.25	120.05	2,708.34	-6,354.56	7,687.92	7,495.22	192.70	39.896		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,816.59	4,833.59	31.66	166.43	120.30	2,708.34	-6,354.56	7,709.87	7,513.39	196.48	39.240		
5,300.00	4,924.86	4,907.86	4,924.86	32.32	169.62	120.54	2,708.34	-6,354.56	7,731.98	7,531.71	200.27	38.609		
5,400.00	5,016.13	5,000.87	5,016.13	32.99	172.87	120.79	2,708.34	-6,354.56	7,754.24	7,550.13	204.11	37.991		
5,500.00	5,107.41	5,109.59	5,107.41	33.65	176.66	121.03	2,708.34	-6,354.56	7,776.65	7,568.15	208.50	37.298		
5,600.00	5,198.68	5,181.68	5,198.68	34.31	179.18	121.27	2,708.34	-6,354.56	7,799.21	7,587.59	211.61	36.856		
5,700.00	5,289.95	5,272.95	5,289.95	34.97	182.36	121.51	2,708.34	-6,354.56	7,821.91	7,606.52	215.39	36.315		
5,800.00	5,381.23	5,364.23	5,381.23	35.63	185.55	121.75	2,708.34	-6,354.56	7,844.77	7,625.59	219.17	35.793		
5,900.00	5,472.50	5,455.50	5,472.50	36.30	188.73	121.99	2,708.34	-6,354.56	7,867.77	7,644.82	222.95	35.289		
6,000.00	5,563.77	5,546.77	5,563.77	36.96	191.92	122.22	2,708.34	-6,354.56	7,890.91	7,664.18	226.73	34.803		
6,100.00	5,655.05	5,638.05	5,655.05	37.62	195.11	122.46	2,708.34	-6,354.56	7,914.20	7,683.69	230.51	34.334		
6,200.00	5,746.32	5,729.32	5,746.32	38.28	198.29	122.69	2,708.34	-6,354.56	7,937.63	7,703.35	234.28	33.881		
6,300.00	5,837.59	5,820.59	5,837.59	38.95	201.48	122.92	2,708.34	-6,354.56	7,961.20	7,723.14	238.06	33.442		
6,400.00	5,928.86	5,911.86	5,928.86	39.61	204.66	123.16	2,708.34	-6,354.56	7,984.91	7,743.08	241.83	33.019		
6,500.00	6,020.14	6,003.14	6,020.14	40.27	207.85	123.39	2,708.34	-6,354.56	8,008.76	7,763.15	245.60	32.608		
6,600.00	6,111.41	6,105.59	6,111.41	40.94	211.43	123.61	2,708.34	-6,354.56	8,032.74	7,782.98	249.77	32.161		
6,700.00	6,202.68	6,185.68	6,202.68	41.60	214.22	123.84	2,708.34	-6,354.56	8,056.86	7,803.72	253.15	31.827		
6,800.00	6,293.96	6,276.96	6,293.96	42.26	217.41	124.07	2,708.34	-6,354.56	8,081.12	7,824.20	256.92	31.454		
6,900.00	6,385.23	6,368.23	6,385.23	42.93	220.59	124.29	2,708.34	-6,354.56	8,105.51	7,844.82	260.69	31.093		
7,000.00	6,476.50	6,459.50	6,476.50	43.59	223.78	124.52	2,708.34	-6,354.56	8,130.03	7,865.57	264.46	30.742		
7,100.00	6,567.77	6,550.77	6,567.77	44.25	226.97	124.74	2,708.34	-6,354.56	8,154.68	7,886.46	268.23	30.402		
7,200.00	6,658.64	6,641.64	6,658.64	44.91	230.14	125.04	2,708.34	-6,354.56	8,174.66	7,902.67	271.98	30.056		
7,300.00	6,747.14	6,730.14	6,747.14	45.52	233.23	91.78	2,708.34	-6,354.56	8,182.56	7,906.92	275.65	29.685		
7,400.00	6,831.10	6,814.10	6,831.10	46.07	236.16	81.77	2,708.34	-6,354.56	8,178.29	7,899.17	279.11	29.301		
7,500.00	6,908.46	6,908.54	6,908.46	46.54	239.45	75.88	2,708.34	-6,354.56	8,162.08	7,879.18	282.90	28.852		
7,600.00	6,977.30	6,960.30	6,977.30	46.95	241.26	73.05	2,708.34	-6,354.56	8,134.49	7,849.33	285.16	28.526		
7,700.00	7,035.93	7,018.93	7,035.93	47.30	243.31	72.60	2,708.34	-6,354.56	8,096.32	7,808.65	287.66	28.145		
7,800.00	7,082.92	7,065.92	7,082.92	47.59	244.95	74.20	2,708.34	-6,354.56	8,048.60	7,758.82	289.78	27.775		
7,900.00	7,117.09	7,100.09	7,117.09	47.84	246.14	77.71	2,708.34	-6,354.56	7,992.56	7,701.07	291.49	27.419		
8,000.00	7,137.62	7,120.62	7,137.62	48.06	246.86	83.14	2,708.34	-6,354.56	7,929.60	7,636.80	292.79	27.083		
8,100.00	7,143.99	7,126.99	7,143.99	48.28	247.08	90.31	2,708.34	-6,354.56	7,861.22	7,567.56	293.66	26.770		
8,200.00	7,143.45	7,126.45	7,143.45	48.53	247.06	90.30	2,708.34	-6,354.56	7,791.06	7,496.70	294.35	26.469		
8,300.00	7,142.91	7,125.91	7,142.91	48.89	247.04	90.30	2,708.34	-6,354.56	7,721.55	7,426.42	295.14	26.163		
8,400.00	7,142.37	7,125.37	7,142.37	49.40	247.02	90.29	2,708.34	-6,354.56	7,652.72	7,356.71	296.02	25.852		
8,500.00	7,141.83	7,124.83	7,141.83	50.12	247.00	90.29	2,708.34	-6,354.56	7,584.59	7,287.60	296.99	25.538		
8,600.00	7,141.29	7,124.29	7,141.29	51.08	246.99	90.28	2,708.34	-6,354.56	7,517.17	7,219.11	298.06	25.220		
8,700.00	7,140.75	7,123.75	7,140.75	52.30	246.97	90.27	2,708.34	-6,354.56	7,450.48	7,151.26	299.22	24.900		
8,800.00	7,140.21	7,123.21	7,140.21	53.75	246.95	90.27	2,708.34	-6,354.56	7,384.54	7,084.07	300.47	24.577		
8,900.00	7,139.67	7,122.67	7,139.67	55.40	246.93	90.26	2,708.34	-6,354.56	7,319.37	7,017.56	301.81	24.251		
9,000.00	7,139.12	7,122.12	7,139.12	57.20	246.91	90.26	2,708.34	-6,354.56	7,255.00	6,951.76	303.24	23.925		
9,100.00	7,138.58	7,121.58	7,138.58	59.13	246.89	90.25	2,708.34	-6,354.56	7,191.44	6,886.69	304.76	23.597		
9,200.00	7,138.04	7,121.04	7,138.04	61.15	246.87	90.25	2,708.34	-6,354.56	7,128.72	6,822.37	306.36	23.269		
9,300.00	7,137.50	7,120.50	7,137.50	63.26	246.85	90.24	2,708.34	-6,354.56	7,066.86	6,758.82	308.04	22.942		
9,400.00	7,136.96	7,119.96	7,136.96	65.44	246.83	90.24	2,708.34	-6,354.56	7,005.88	6,696.08	309.80	22.614		
9,500.00	7,136.42	7,119.42	7,136.42	67.68	246.82	90.23	2,708.34	-6,354.56	6,945.80	6,634.16	311.64	22.288		
9,600.00	7,135.88	7,118.88	7,135.88	69.97	246.80	90.22	2,708.34	-6,354.56	6,886.65	6,573.09	313.56	21.963		
9,700.00	7,135.34	7,118.34	7,135.34	72.31	246.78	90.22	2,708.34	-6,354.56	6,828.45	6,512.90	315.54	21.640		
9,800.00	7,134.80	7,117.80	7,134.80	74.69	246.76	90.21	2,708.34	-6,354.56	6,771.23	6,453.62	317.60	21.320		
9,900.00	7,134.26	7,117.26	7,134.26	77.10	246.74	90.21	2,708.34	-6,354.56	6,715.01	6,395.27	319.73	21.002		
10,000.00	7,133.71	7,116.71	7,133.71	79.54	246.72	90.20	2,708.34	-6,354.56	6,659.82	6,337.89	321.93	20.687		
10,100.00	7,133.17	7,116.17	7,133.17	82.02	246.70	90.20	2,708.34	-6,354.56	6,605.68	6,281.49	324.19	20.376		
10,200.00	7,132.63	7,115.63	7,132.63	84.52	246.68	90.19	2,708.34	-6,354.56	6,552.61	6,226.11	326.51	20.069		
10,300.00	7,132.09	7,115.09	7,132.09	87.04	246.66	90.19	2,708.34	-6,354.56	6,500.66	6,171.77	328.89	19.765		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,131.55	7,114.55	7,131.55	89.58	246.65	90.18	2,708.34	-6,354.56	6,449.83	6,118.51	331.33	19.467		
10,500.00	7,131.01	7,114.01	7,131.01	92.15	246.63	90.17	2,708.34	-6,354.56	6,400.17	6,066.35	333.82	19.173		
10,600.00	7,130.47	7,113.47	7,130.47	94.73	246.61	90.17	2,708.34	-6,354.56	6,351.69	6,015.33	336.36	18.883		
10,700.00	7,129.93	7,112.93	7,129.93	97.33	246.59	90.16	2,708.34	-6,354.56	6,304.42	5,965.47	338.96	18.599		
10,800.00	7,129.39	7,112.39	7,129.39	99.94	246.57	90.16	2,708.34	-6,354.56	6,258.40	5,916.80	341.60	18.321		
10,900.00	7,128.84	7,111.84	7,128.84	102.56	246.55	90.15	2,708.34	-6,354.56	6,213.64	5,869.36	344.29	18.048		
11,000.00	7,128.30	7,111.30	7,128.30	105.20	246.53	90.15	2,708.34	-6,354.56	6,170.18	5,823.17	347.01	17.781		
11,100.00	7,127.76	7,110.76	7,127.76	107.85	246.51	90.14	2,708.34	-6,354.56	6,128.05	5,778.27	349.78	17.520		
11,200.00	7,127.22	7,110.22	7,127.22	110.51	246.49	90.14	2,708.34	-6,354.56	6,087.26	5,734.68	352.58	17.265		
11,300.00	7,126.68	7,109.68	7,126.68	113.18	246.48	90.13	2,708.34	-6,354.56	6,047.86	5,692.44	355.42	17.016		
11,400.00	7,126.14	7,109.14	7,126.14	115.86	246.46	90.12	2,708.34	-6,354.56	6,009.86	5,651.57	358.29	16.774		
11,500.00	7,125.60	7,108.60	7,125.60	118.55	246.44	90.12	2,708.34	-6,354.56	5,973.29	5,612.11	361.18	16.538		
11,600.00	7,125.06	7,108.06	7,125.06	121.25	246.42	90.11	2,708.34	-6,354.56	5,938.18	5,574.08	364.10	16.309		
11,700.00	7,124.52	7,107.52	7,124.52	123.95	246.40	90.11	2,708.34	-6,354.56	5,904.55	5,537.52	367.04	16.087		
11,800.00	7,123.97	7,106.97	7,123.97	126.66	246.38	90.10	2,708.34	-6,354.56	5,872.44	5,502.45	369.99	15.872		
11,900.00	7,123.43	7,106.43	7,123.43	129.38	246.36	90.10	2,708.34	-6,354.56	5,841.86	5,468.90	372.96	15.663		
12,000.00	7,122.89	7,105.89	7,122.89	132.10	246.34	90.09	2,708.34	-6,354.56	5,812.84	5,436.90	375.95	15.462		
12,100.00	7,122.35	7,105.35	7,122.35	134.83	246.32	90.09	2,708.34	-6,354.56	5,785.41	5,406.47	378.93	15.268		
12,200.00	7,121.81	7,104.81	7,121.81	137.56	246.31	90.08	2,708.34	-6,354.56	5,759.58	5,377.65	381.93	15.080		
12,300.00	7,121.27	7,104.27	7,121.27	140.30	246.29	90.07	2,708.34	-6,354.56	5,735.37	5,350.46	384.92	14.900		
12,400.00	7,120.73	7,103.73	7,120.73	143.05	246.27	90.07	2,708.34	-6,354.56	5,712.82	5,324.91	387.91	14.727		
12,500.00	7,120.19	7,103.19	7,120.19	145.80	246.25	90.06	2,708.34	-6,354.56	5,691.93	5,301.05	390.89	14.562		
12,600.00	7,119.65	7,102.65	7,119.65	148.55	246.23	90.06	2,708.34	-6,354.56	5,672.73	5,278.88	393.86	14.403		
12,700.00	7,119.10	7,102.10	7,119.10	151.30	246.21	90.05	2,708.34	-6,354.56	5,655.24	5,258.42	396.81	14.252		
12,800.00	7,118.56	7,101.56	7,118.56	154.07	246.19	90.05	2,708.34	-6,354.56	5,639.46	5,239.71	399.75	14.108		
12,900.00	7,118.02	7,101.02	7,118.02	156.83	246.17	90.04	2,708.34	-6,354.56	5,625.41	5,222.75	402.66	13.971		
13,000.00	7,117.48	7,100.48	7,117.48	159.60	246.15	90.04	2,708.34	-6,354.56	5,613.11	5,207.57	405.55	13.841		
13,100.00	7,116.94	7,100.06	7,116.94	162.37	246.14	90.03	2,708.34	-6,354.56	5,602.58	5,194.17	408.41	13.718		
13,200.00	7,116.40	7,100.60	7,116.40	165.14	246.16	90.02	2,708.34	-6,354.56	5,593.80	5,182.53	411.27	13.601		
13,300.00	7,115.86	7,101.14	7,115.86	167.92	246.18	90.02	2,708.34	-6,354.56	5,586.81	5,172.71	414.09	13.492		
13,400.00	7,115.32	7,101.68	7,115.32	170.70	246.20	90.01	2,708.34	-6,354.56	5,581.60	5,164.72	416.88	13.389		
13,500.00	7,114.78	7,102.22	7,114.78	173.48	246.22	90.01	2,708.34	-6,354.56	5,578.17	5,158.55	419.62	13.293		
13,600.00	7,114.24	7,102.77	7,114.24	176.26	246.23	90.00	2,708.34	-6,354.56	5,576.54	5,154.22	422.31	13.205		
13,641.08	7,114.01	7,102.99	7,114.01	177.41	246.24	90.00	2,708.34	-6,354.56	5,576.39	5,152.98	423.41	13.170 CC		
13,700.00	7,113.69	7,103.31	7,113.69	179.05	246.25	90.00	2,708.34	-6,354.56	5,576.70	5,151.74	424.96	13.123		
13,800.00	7,113.15	7,103.85	7,113.15	181.84	246.27	89.99	2,708.34	-6,354.56	5,578.65	5,151.10	427.55	13.048 ES		
13,900.00	7,112.61	7,104.39	7,112.61	184.63	246.29	89.99	2,708.34	-6,354.56	5,582.39	5,152.30	430.09	12.980		
14,000.00	7,112.07	7,104.93	7,112.07	187.42	246.31	89.98	2,708.34	-6,354.56	5,587.93	5,155.35	432.57	12.918		
14,100.00	7,111.53	7,105.47	7,111.53	190.22	246.33	89.97	2,708.34	-6,354.56	5,595.24	5,160.25	434.99	12.863		
14,200.00	7,110.99	7,106.01	7,110.99	193.01	246.35	89.97	2,708.34	-6,354.56	5,604.33	5,166.97	437.35	12.814		
14,300.00	7,110.45	7,106.55	7,110.45	195.81	246.37	89.96	2,708.34	-6,354.56	5,615.18	5,175.53	439.65	12.772		
14,400.00	7,109.91	7,107.09	7,109.91	198.61	246.39	89.96	2,708.34	-6,354.56	5,627.79	5,185.91	441.88	12.736		
14,500.00	7,109.37	7,107.63	7,109.37	201.42	246.40	89.95	2,708.34	-6,354.56	5,642.15	5,198.10	444.05	12.706		
14,600.00	7,108.82	7,108.18	7,108.82	204.22	246.42	89.95	2,708.34	-6,354.56	5,658.23	5,212.09	446.15	12.682		
14,700.00	7,108.28	7,108.72	7,108.28	207.03	246.44	89.94	2,708.34	-6,354.56	5,676.04	5,227.86	448.18	12.665		
14,800.00	7,107.74	7,109.26	7,107.74	209.83	246.46	89.94	2,708.34	-6,354.56	5,695.54	5,245.40	450.14	12.653		
14,900.00	7,107.20	7,109.80	7,107.20	212.64	246.48	89.93	2,708.34	-6,354.56	5,716.72	5,264.70	452.03	12.647 SF		
15,000.00	7,106.66	7,089.66	7,106.66	215.45	245.78	89.92	2,708.34	-6,354.56	5,739.57	5,286.45	453.13	12.667		
15,100.00	7,106.12	7,089.12	7,106.12	218.26	245.76	89.92	2,708.34	-6,354.56	5,764.07	5,309.23	454.84	12.673		
15,200.00	7,105.58	7,088.58	7,105.58	221.07	245.74	89.91	2,708.34	-6,354.56	5,790.19	5,333.71	456.48	12.684		
15,300.00	7,105.04	7,088.04	7,105.04	223.89	245.72	89.91	2,708.34	-6,354.56	5,817.91	5,359.85	458.05	12.701		
15,400.00	7,104.50	7,087.50	7,104.50	226.70	245.70	89.90	2,708.34	-6,354.56	5,847.21	5,387.65	459.56	12.724		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)						
15,491.56	7,104.00	7,087.00	7,104.00	229.28	245.68	89.90	2,708.34	-6,354.56	5,875.40	5,414.52	460.87	12.748					



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 14-9(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	14.00	3.28	3.28	-71.39	2,643.19	-7,850.82	8,283.84					
100.00	100.00	86.00	100.00	3.28	3.61	-71.39	2,643.19	-7,850.82	8,283.83	8,276.94	6.89	1,201.967		
200.00	200.00	186.00	200.00	3.34	5.77	-71.39	2,643.19	-7,850.82	8,283.83	8,274.73	9.11	909.550		
300.00	299.98	285.98	299.98	3.44	8.87	105.48	2,643.19	-7,850.82	8,284.30	8,271.99	12.31	673.172		
400.00	399.84	385.84	399.84	3.59	12.17	105.48	2,643.19	-7,850.82	8,285.70	8,269.93	15.76	525.647		
500.00	499.45	485.45	499.45	3.79	15.55	105.50	2,643.19	-7,850.82	8,288.03	8,268.70	19.34	428.587		
600.00	598.70	584.70	598.70	4.03	18.95	105.51	2,643.19	-7,850.82	8,291.31	8,268.33	22.98	360.776		
700.00	697.47	683.47	697.47	4.31	22.36	105.54	2,643.19	-7,850.82	8,295.55	8,268.88	26.67	311.043		
800.00	795.62	781.62	795.62	4.64	25.75	105.56	2,643.19	-7,850.82	8,300.75	8,270.37	30.39	273.163		
900.00	893.06	879.06	893.06	5.00	29.13	105.59	2,643.19	-7,850.82	8,306.94	8,272.82	34.12	243.435		
1,000.00	989.64	975.64	989.64	5.40	32.48	105.61	2,643.19	-7,850.82	8,314.13	8,276.26	37.87	219.541		
1,100.00	1,085.27	1,071.27	1,085.27	5.83	35.80	105.64	2,643.19	-7,850.82	8,322.34	8,280.72	41.62	199.955		
1,200.00	1,179.82	1,165.82	1,179.82	6.29	39.09	105.67	2,643.19	-7,850.82	8,331.59	8,286.22	45.37	183.640		
1,300.00	1,273.17	1,259.17	1,273.17	6.79	42.34	105.69	2,643.19	-7,850.82	8,341.91	8,292.80	49.11	169.861		
1,400.00	1,365.21	1,351.21	1,365.21	7.33	45.54	105.71	2,643.19	-7,850.82	8,353.32	8,300.48	52.84	158.089		
1,500.00	1,456.49	1,442.49	1,456.49	7.89	48.72	105.94	2,643.19	-7,850.82	8,365.43	8,308.87	56.57	147.889		
1,600.00	1,547.76	1,533.76	1,547.76	8.46	51.90	106.19	2,643.19	-7,850.82	8,377.72	8,317.42	60.31	138.917		
1,700.00	1,639.04	1,625.04	1,639.04	9.05	55.08	106.44	2,643.19	-7,850.82	8,390.20	8,326.14	64.06	130.970		
1,800.00	1,730.31	1,716.31	1,730.31	9.65	58.26	106.68	2,643.19	-7,850.82	8,402.85	8,335.03	67.83	123.888		
1,900.00	1,821.58	1,807.58	1,821.58	10.26	61.44	106.93	2,643.19	-7,850.82	8,415.69	8,344.09	71.60	117.539		
2,000.00	1,912.85	1,901.15	1,912.85	10.87	64.71	107.17	2,643.19	-7,850.82	8,428.70	8,353.24	75.46	111.701		
2,100.00	2,004.13	2,009.87	2,004.13	11.49	68.50	107.42	2,643.19	-7,850.82	8,441.89	8,362.04	79.85	105.720		
2,200.00	2,095.40	2,081.40	2,095.40	12.11	70.99	107.66	2,643.19	-7,850.82	8,455.26	8,372.31	82.95	101.929		
2,300.00	2,186.67	2,172.67	2,186.67	12.74	74.18	107.90	2,643.19	-7,850.82	8,468.80	8,382.06	86.75	97.629		
2,400.00	2,277.95	2,263.95	2,277.95	13.38	77.36	108.14	2,643.19	-7,850.82	8,482.52	8,391.98	90.54	93.687		
2,500.00	2,369.22	2,355.22	2,369.22	14.01	80.54	108.38	2,643.19	-7,850.82	8,496.41	8,402.07	94.34	90.062		
2,600.00	2,460.49	2,446.49	2,460.49	14.65	83.73	108.63	2,643.19	-7,850.82	8,510.48	8,412.34	98.14	86.717		
2,700.00	2,551.77	2,537.77	2,551.77	15.29	86.91	108.87	2,643.19	-7,850.82	8,524.72	8,422.77	101.94	83.622		
2,800.00	2,643.04	2,629.04	2,643.04	15.93	90.09	109.10	2,643.19	-7,850.82	8,539.13	8,433.38	105.75	80.750		
2,900.00	2,734.31	2,720.31	2,734.31	16.58	93.28	109.34	2,643.19	-7,850.82	8,553.71	8,444.16	109.55	78.079		
3,000.00	2,825.58	2,811.58	2,825.58	17.23	96.46	109.58	2,643.19	-7,850.82	8,568.46	8,455.10	113.36	75.587		
3,100.00	2,916.86	2,902.86	2,916.86	17.87	99.65	109.82	2,643.19	-7,850.82	8,583.38	8,466.21	117.17	73.259		
3,200.00	3,008.13	3,005.87	3,008.13	18.52	103.24	110.05	2,643.19	-7,850.82	8,598.47	8,477.09	121.38	70.838		
3,300.00	3,099.40	3,085.40	3,099.40	19.17	106.02	110.29	2,643.19	-7,850.82	8,613.72	8,488.94	124.78	69.031		
3,400.00	3,190.68	3,176.68	3,190.68	19.83	109.20	110.53	2,643.19	-7,850.82	8,629.15	8,500.56	128.59	67.106		
3,500.00	3,281.95	3,267.95	3,281.95	20.48	112.39	110.76	2,643.19	-7,850.82	8,644.73	8,512.34	132.40	65.294		
3,600.00	3,373.22	3,359.22	3,373.22	21.13	115.57	110.99	2,643.19	-7,850.82	8,660.49	8,524.28	136.21	63.584		
3,700.00	3,464.49	3,450.49	3,464.49	21.79	118.76	111.23	2,643.19	-7,850.82	8,676.40	8,536.39	140.01	61.968		
3,800.00	3,555.77	3,541.77	3,555.77	22.44	121.94	111.46	2,643.19	-7,850.82	8,692.48	8,548.66	143.82	60.439		
3,900.00	3,647.04	3,633.04	3,647.04	23.10	125.13	111.69	2,643.19	-7,850.82	8,708.72	8,561.09	147.63	58.990		
4,000.00	3,738.31	3,724.31	3,738.31	23.75	128.31	111.92	2,643.19	-7,850.82	8,725.13	8,573.69	151.44	57.615		
4,100.00	3,829.59	3,815.59	3,829.59	24.41	131.50	112.15	2,643.19	-7,850.82	8,741.69	8,586.44	155.25	56.309		
4,200.00	3,920.86	3,906.86	3,920.86	25.07	134.68	112.38	2,643.19	-7,850.82	8,758.41	8,599.36	159.05	55.066		
4,300.00	4,012.13	4,001.87	4,012.13	25.73	138.00	112.61	2,643.19	-7,850.82	8,775.29	8,612.30	162.99	53.839		
4,400.00	4,103.41	4,089.41	4,103.41	26.38	141.05	112.84	2,643.19	-7,850.82	8,792.33	8,625.66	166.67	52.754		
4,500.00	4,194.68	4,180.68	4,194.68	27.04	144.24	113.06	2,643.19	-7,850.82	8,809.52	8,639.05	170.47	51.677		
4,600.00	4,285.95	4,271.95	4,285.95	27.70	147.43	113.29	2,643.19	-7,850.82	8,826.87	8,652.60	174.28	50.648		
4,700.00	4,377.22	4,363.22	4,377.22	28.36	150.61	113.51	2,643.19	-7,850.82	8,844.38	8,666.30	178.08	49.664		
4,800.00	4,468.50	4,454.50	4,468.50	29.02	153.80	113.74	2,643.19	-7,850.82	8,862.04	8,680.15	181.89	48.723		
4,900.00	4,559.77	4,545.77	4,559.77	29.68	156.98	113.96	2,643.19	-7,850.82	8,879.85	8,694.16	185.69	47.821		
5,000.00	4,651.04	4,637.04	4,651.04	30.34	160.17	114.19	2,643.19	-7,850.82	8,897.81	8,708.32	189.49	46.956		
5,100.00	4,742.32	4,728.32	4,742.32	31.00	163.35	114.41	2,643.19	-7,850.82	8,915.93	8,722.63	193.30	46.126		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 14-9(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,819.59	4,833.59	31.66	166.54	114.63	2,643.19	-7,850.82	8,934.19	8,737.09	197.10	45.329		
5,300.00	4,924.86	4,910.86	4,924.86	32.32	169.72	114.85	2,643.19	-7,850.82	8,952.60	8,751.70	200.90	44.563		
5,400.00	5,016.13	5,002.13	5,016.13	32.99	172.91	115.07	2,643.19	-7,850.82	8,971.17	8,766.47	204.70	43.826		
5,500.00	5,107.41	5,106.59	5,107.41	33.65	176.56	115.29	2,643.19	-7,850.82	8,989.87	8,780.91	208.96	43.022		
5,600.00	5,198.68	5,184.68	5,198.68	34.31	179.28	115.51	2,643.19	-7,850.82	9,008.73	8,796.43	212.30	42.434		
5,700.00	5,289.95	5,275.95	5,289.95	34.97	182.47	115.73	2,643.19	-7,850.82	9,027.73	8,811.63	216.10	41.776		
5,800.00	5,381.23	5,367.23	5,381.23	35.63	185.65	115.94	2,643.19	-7,850.82	9,046.88	8,826.98	219.89	41.142		
5,900.00	5,472.50	5,458.50	5,472.50	36.30	188.84	116.16	2,643.19	-7,850.82	9,066.17	8,842.47	223.69	40.530		
6,000.00	5,563.77	5,549.77	5,563.77	36.96	192.03	116.37	2,643.19	-7,850.82	9,085.60	8,858.11	227.49	39.939		
6,100.00	5,655.05	5,641.05	5,655.05	37.62	195.21	116.59	2,643.19	-7,850.82	9,105.17	8,873.89	231.28	39.368		
6,200.00	5,746.32	5,732.32	5,746.32	38.28	198.40	116.80	2,643.19	-7,850.82	9,124.89	8,889.81	235.08	38.817		
6,300.00	5,837.59	5,823.59	5,837.59	38.95	201.58	117.02	2,643.19	-7,850.82	9,144.74	8,905.87	238.87	38.283		
6,400.00	5,928.86	5,914.86	5,928.86	39.61	204.77	117.23	2,643.19	-7,850.82	9,164.74	8,922.07	242.66	37.767		
6,500.00	6,020.14	6,006.14	6,020.14	40.27	207.96	117.44	2,643.19	-7,850.82	9,184.87	8,938.41	246.46	37.268		
6,600.00	6,111.41	6,102.59	6,111.41	40.94	211.32	117.65	2,643.19	-7,850.82	9,205.14	8,954.71	250.43	36.758		
6,700.00	6,202.68	6,188.68	6,202.68	41.60	214.33	117.86	2,643.19	-7,850.82	9,225.54	8,971.51	254.04	36.316		
6,800.00	6,293.96	6,279.96	6,293.96	42.26	217.51	118.07	2,643.19	-7,850.82	9,246.09	8,988.26	257.83	35.861		
6,900.00	6,385.23	6,371.23	6,385.23	42.93	220.70	118.27	2,643.19	-7,850.82	9,266.76	9,005.15	261.62	35.421		
7,000.00	6,476.50	6,462.50	6,476.50	43.59	223.88	118.48	2,643.19	-7,850.82	9,287.57	9,022.17	265.41	34.994		
7,100.00	6,567.77	6,553.77	6,567.77	44.25	227.07	118.69	2,643.19	-7,850.82	9,308.51	9,039.32	269.19	34.579		
7,200.00	6,658.64	6,644.64	6,658.64	44.91	230.24	101.29	2,643.19	-7,850.82	9,324.38	9,051.41	272.97	34.159		
7,300.00	6,747.14	6,733.14	6,747.14	45.52	233.33	86.29	2,643.19	-7,850.82	9,327.21	9,050.56	276.65	33.715		
7,400.00	6,831.10	6,817.10	6,831.10	46.07	236.26	76.50	2,643.19	-7,850.82	9,316.98	9,036.85	280.13	33.260		
7,500.00	6,908.46	6,905.54	6,908.46	46.54	239.35	70.81	2,643.19	-7,850.82	9,294.04	9,010.33	283.71	32.759		
7,600.00	6,977.30	6,963.30	6,977.30	46.95	241.37	68.20	2,643.19	-7,850.82	9,259.06	8,972.87	286.19	32.353		
7,700.00	7,035.93	7,021.93	7,035.93	47.30	243.41	68.07	2,643.19	-7,850.82	9,212.97	8,924.28	288.69	31.913		
7,800.00	7,082.92	7,068.92	7,082.92	47.59	245.05	70.17	2,643.19	-7,850.82	9,156.96	8,866.17	290.78	31.490		
7,900.00	7,117.09	7,103.09	7,117.09	47.84	246.25	74.52	2,643.19	-7,850.82	9,092.42	8,799.96	292.46	31.089		
8,000.00	7,137.62	7,123.62	7,137.62	48.06	246.96	81.27	2,643.19	-7,850.82	9,020.93	8,727.24	293.70	30.715		
8,100.00	7,143.99	7,129.99	7,143.99	48.28	247.18	90.40	2,643.19	-7,850.82	8,944.21	8,649.74	294.47	30.374		
8,200.00	7,143.45	7,129.45	7,143.45	48.53	247.17	90.39	2,643.19	-7,850.82	8,865.74	8,570.69	295.05	30.048		
8,300.00	7,142.91	7,128.91	7,142.91	48.89	247.15	90.38	2,643.19	-7,850.82	8,787.71	8,492.01	295.70	29.718		
8,400.00	7,142.37	7,128.37	7,142.37	49.40	247.13	90.38	2,643.19	-7,850.82	8,710.13	8,413.70	296.42	29.384		
8,500.00	7,141.83	7,127.83	7,141.83	50.12	247.11	90.37	2,643.19	-7,850.82	8,633.01	8,335.78	297.22	29.046		
8,600.00	7,141.29	7,127.29	7,141.29	51.08	247.09	90.37	2,643.19	-7,850.82	8,556.36	8,258.26	298.10	28.703		
8,700.00	7,140.75	7,126.75	7,140.75	52.30	247.07	90.36	2,643.19	-7,850.82	8,480.20	8,181.16	299.05	28.358		
8,800.00	7,140.21	7,126.21	7,140.21	53.75	247.05	90.36	2,643.19	-7,850.82	8,404.54	8,104.47	300.07	28.009		
8,900.00	7,139.67	7,125.67	7,139.67	55.40	247.03	90.35	2,643.19	-7,850.82	8,329.39	8,028.23	301.17	27.657		
9,000.00	7,139.12	7,125.12	7,139.12	57.20	247.01	90.34	2,643.19	-7,850.82	8,254.77	7,952.44	302.34	27.303		
9,100.00	7,138.58	7,124.58	7,138.58	59.13	247.00	90.34	2,643.19	-7,850.82	8,180.70	7,877.11	303.58	26.947		
9,200.00	7,138.04	7,124.04	7,138.04	61.15	246.98	90.33	2,643.19	-7,850.82	8,107.17	7,802.27	304.90	26.589		
9,300.00	7,137.50	7,123.50	7,137.50	63.26	246.96	90.33	2,643.19	-7,850.82	8,034.23	7,727.93	306.29	26.231		
9,400.00	7,136.96	7,122.96	7,136.96	65.44	246.94	90.32	2,643.19	-7,850.82	7,961.86	7,654.11	307.75	25.871		
9,500.00	7,136.42	7,122.42	7,136.42	67.68	246.92	90.32	2,643.19	-7,850.82	7,890.11	7,580.82	309.29	25.511		
9,600.00	7,135.88	7,121.88	7,135.88	69.97	246.90	90.31	2,643.19	-7,850.82	7,818.97	7,508.08	310.89	25.150		
9,700.00	7,135.34	7,121.34	7,135.34	72.31	246.88	90.31	2,643.19	-7,850.82	7,748.47	7,435.90	312.56	24.790		
9,800.00	7,134.80	7,120.80	7,134.80	74.69	246.86	90.30	2,643.19	-7,850.82	7,678.62	7,364.32	314.30	24.431		
9,900.00	7,134.26	7,120.26	7,134.26	77.10	246.84	90.29	2,643.19	-7,850.82	7,609.45	7,293.34	316.11	24.072		
10,000.00	7,133.71	7,119.71	7,133.71	79.54	246.83	90.29	2,643.19	-7,850.82	7,540.97	7,222.99	317.98	23.715		
10,100.00	7,133.17	7,119.17	7,133.17	82.02	246.81	90.28	2,643.19	-7,850.82	7,473.20	7,153.28	319.92	23.360		
10,200.00	7,132.63	7,118.63	7,132.63	84.52	246.79	90.28	2,643.19	-7,850.82	7,406.16	7,084.24	321.92	23.006		
10,300.00	7,132.09	7,118.09	7,132.09	87.04	246.77	90.27	2,643.19	-7,850.82	7,339.87	7,015.88	323.99	22.655		

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

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 14-9(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,131.55	7,117.55	7,131.55	89.58	246.75	90.27	2,643.19	-7,850.82	7,274.35	6,948.23	326.11	22.306		
10,500.00	7,131.01	7,117.01	7,131.01	92.15	246.73	90.26	2,643.19	-7,850.82	7,209.62	6,881.32	328.30	21.960		
10,600.00	7,130.47	7,116.47	7,130.47	94.73	246.71	90.25	2,643.19	-7,850.82	7,145.71	6,815.15	330.55	21.618		
10,700.00	7,129.93	7,115.93	7,129.93	97.33	246.69	90.25	2,643.19	-7,850.82	7,082.63	6,749.77	332.86	21.278		
10,800.00	7,129.39	7,115.39	7,129.39	99.94	246.67	90.24	2,643.19	-7,850.82	7,020.40	6,685.18	335.22	20.942		
10,900.00	7,128.84	7,114.84	7,128.84	102.56	246.66	90.24	2,643.19	-7,850.82	6,959.06	6,621.42	337.65	20.610		
11,000.00	7,128.30	7,114.30	7,128.30	105.20	246.64	90.23	2,643.19	-7,850.82	6,898.63	6,558.50	340.13	20.283		
11,100.00	7,127.76	7,113.76	7,127.76	107.85	246.62	90.23	2,643.19	-7,850.82	6,839.12	6,496.46	342.66	19.959		
11,200.00	7,127.22	7,113.22	7,127.22	110.51	246.60	90.22	2,643.19	-7,850.82	6,780.56	6,435.32	345.25	19.640		
11,300.00	7,126.68	7,112.68	7,126.68	113.18	246.58	90.22	2,643.19	-7,850.82	6,722.98	6,375.10	347.88	19.325		
11,400.00	7,126.14	7,112.14	7,126.14	115.86	246.56	90.21	2,643.19	-7,850.82	6,666.41	6,315.83	350.57	19.016		
11,500.00	7,125.60	7,111.60	7,125.60	118.55	246.54	90.20	2,643.19	-7,850.82	6,610.86	6,257.55	353.31	18.711		
11,600.00	7,125.06	7,111.06	7,125.06	121.25	246.52	90.20	2,643.19	-7,850.82	6,556.36	6,200.27	356.10	18.412		
11,700.00	7,124.52	7,110.52	7,124.52	123.95	246.50	90.19	2,643.19	-7,850.82	6,502.95	6,144.02	358.93	18.118		
11,800.00	7,123.97	7,109.97	7,123.97	126.66	246.49	90.19	2,643.19	-7,850.82	6,450.65	6,088.84	361.81	17.829		
11,900.00	7,123.43	7,109.43	7,123.43	129.38	246.47	90.18	2,643.19	-7,850.82	6,399.48	6,034.75	364.73	17.546		
12,000.00	7,122.89	7,108.89	7,122.89	132.10	246.45	90.18	2,643.19	-7,850.82	6,349.47	5,981.79	367.69	17.269		
12,100.00	7,122.35	7,108.35	7,122.35	134.83	246.43	90.17	2,643.19	-7,850.82	6,300.66	5,929.97	370.69	16.997		
12,200.00	7,121.81	7,107.81	7,121.81	137.56	246.41	90.16	2,643.19	-7,850.82	6,253.06	5,879.34	373.72	16.732		
12,300.00	7,121.27	7,107.27	7,121.27	140.30	246.39	90.16	2,643.19	-7,850.82	6,206.71	5,829.92	376.79	16.472		
12,400.00	7,120.73	7,106.73	7,120.73	143.05	246.37	90.15	2,643.19	-7,850.82	6,161.63	5,781.74	379.90	16.219		
12,500.00	7,120.19	7,106.19	7,120.19	145.80	246.35	90.15	2,643.19	-7,850.82	6,117.86	5,734.83	383.03	15.972		
12,600.00	7,119.65	7,105.65	7,119.65	148.55	246.33	90.14	2,643.19	-7,850.82	6,075.41	5,689.23	386.19	15.732		
12,700.00	7,119.10	7,105.10	7,119.10	151.30	246.32	90.14	2,643.19	-7,850.82	6,034.33	5,644.96	389.37	15.498		
12,800.00	7,118.56	7,104.56	7,118.56	154.07	246.30	90.13	2,643.19	-7,850.82	5,994.63	5,602.06	392.57	15.270		
12,900.00	7,118.02	7,104.02	7,118.02	156.83	246.28	90.13	2,643.19	-7,850.82	5,956.35	5,560.55	395.80	15.049		
13,000.00	7,117.48	7,103.48	7,117.48	159.60	246.26	90.12	2,643.19	-7,850.82	5,919.51	5,520.47	399.04	14.835		
13,100.00	7,116.94	7,102.94	7,116.94	162.37	246.24	90.11	2,643.19	-7,850.82	5,884.13	5,481.85	402.29	14.627		
13,200.00	7,116.40	7,102.40	7,116.40	165.14	246.22	90.11	2,643.19	-7,850.82	5,850.26	5,444.71	405.54	14.426		
13,300.00	7,115.86	7,101.86	7,115.86	167.92	246.20	90.10	2,643.19	-7,850.82	5,817.90	5,409.09	408.81	14.231		
13,400.00	7,115.32	7,101.32	7,115.32	170.70	246.18	90.10	2,643.19	-7,850.82	5,787.09	5,375.02	412.07	14.044		
13,500.00	7,114.78	7,100.78	7,114.78	173.48	246.16	90.09	2,643.19	-7,850.82	5,757.85	5,342.52	415.33	13.863		
13,600.00	7,114.24	7,100.24	7,114.24	176.26	246.15	90.09	2,643.19	-7,850.82	5,730.21	5,311.62	418.59	13.689		
13,700.00	7,113.69	7,100.31	7,113.69	179.05	246.15	90.08	2,643.19	-7,850.82	5,704.19	5,282.34	421.86	13.522		
13,800.00	7,113.15	7,100.85	7,113.15	181.84	246.17	90.08	2,643.19	-7,850.82	5,679.81	5,254.69	425.13	13.360		
13,900.00	7,112.61	7,101.39	7,112.61	184.63	246.19	90.07	2,643.19	-7,850.82	5,657.10	5,228.72	428.38	13.206		
14,000.00	7,112.07	7,101.93	7,112.07	187.42	246.21	90.06	2,643.19	-7,850.82	5,636.06	5,204.46	431.61	13.058		
14,100.00	7,111.53	7,102.47	7,111.53	190.22	246.22	90.06	2,643.19	-7,850.82	5,616.73	5,181.92	434.81	12.918		
14,200.00	7,110.99	7,103.01	7,110.99	193.01	246.24	90.05	2,643.19	-7,850.82	5,599.12	5,161.14	437.98	12.784		
14,300.00	7,110.45	7,103.55	7,110.45	195.81	246.26	90.05	2,643.19	-7,850.82	5,583.24	5,142.12	441.12	12.657		
14,400.00	7,109.91	7,104.09	7,109.91	198.61	246.28	90.04	2,643.19	-7,850.82	5,569.12	5,124.90	444.22	12.537		
14,500.00	7,109.37	7,104.63	7,109.37	201.42	246.30	90.04	2,643.19	-7,850.82	5,556.75	5,109.48	447.28	12.423		
14,600.00	7,108.82	7,105.18	7,108.82	204.22	246.32	90.03	2,643.19	-7,850.82	5,546.17	5,095.88	450.29	12.317		
14,700.00	7,108.28	7,105.72	7,108.28	207.03	246.34	90.02	2,643.19	-7,850.82	5,537.37	5,084.11	453.25	12.217		
14,800.00	7,107.74	7,106.26	7,107.74	209.83	246.36	90.02	2,643.19	-7,850.82	5,530.36	5,074.20	456.16	12.124		
14,900.00	7,107.20	7,106.80	7,107.20	212.64	246.38	90.01	2,643.19	-7,850.82	5,525.16	5,066.14	459.02	12.037		
15,000.00	7,106.66	7,107.34	7,106.66	215.45	246.39	90.01	2,643.19	-7,850.82	5,521.76	5,059.95	461.81	11.957		
15,100.00	7,106.12	7,107.88	7,106.12	218.26	246.41	90.00	2,643.19	-7,850.82	5,520.17	5,055.63	464.54	11.883		
15,137.72	7,105.91	7,108.09	7,105.91	219.32	246.42	90.00	2,643.19	-7,850.82	5,520.04	5,054.49	465.55	11.857 CC		
15,200.00	7,105.58	7,108.42	7,105.58	221.07	246.43	90.00	2,643.19	-7,850.82	5,520.39	5,053.19	467.20	11.816		
15,300.00	7,105.04	7,108.96	7,105.04	223.89	246.45	89.99	2,643.19	-7,850.82	5,522.43	5,052.63	469.80	11.755 ES		
15,400.00	7,104.50	7,109.50	7,104.50	226.70	246.47	89.99	2,643.19	-7,850.82	5,526.27	5,053.95	472.32	11.700		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)		
15,491.56	7,104.00	7,110.00	7,104.00	229.28	246.49	89.98	2,643.19	-7,850.82	5,531.37	5,056.81	474.57	11.656 SF	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 1(TA_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	3.00	0.00	3.28	3.28	-52.74	2,758.79	-3,626.28	4,556.41				
100.00	100.00	103.00	100.00	3.28	3.77	-52.74	2,758.79	-3,626.28	4,556.41	4,549.36	7.05	646.248	
200.00	200.00	203.00	200.00	3.34	6.27	-52.74	2,758.79	-3,626.28	4,556.41	4,546.80	9.60	474.380	CC
300.00	299.98	302.98	299.98	3.44	9.42	124.13	2,758.79	-3,626.28	4,557.39	4,544.53	12.86	354.371	
400.00	399.84	402.84	399.84	3.59	12.75	124.14	2,758.79	-3,626.28	4,560.33	4,543.99	16.34	279.152	ES
500.00	499.45	502.45	499.45	3.79	16.13	124.15	2,758.79	-3,626.28	4,565.23	4,545.31	19.92	229.175	
600.00	598.70	601.70	598.70	4.03	19.54	124.16	2,758.79	-3,626.28	4,572.11	4,548.54	23.57	193.995	
700.00	697.47	700.47	697.47	4.31	22.94	124.17	2,758.79	-3,626.28	4,580.97	4,553.71	27.26	168.065	
800.00	795.62	801.38	795.62	4.64	26.43	124.18	2,758.79	-3,626.28	4,591.82	4,560.76	31.07	147.800	
900.00	893.06	903.94	893.06	5.00	29.99	124.20	2,758.79	-3,626.28	4,604.69	4,569.71	34.98	131.650	
1,000.00	989.64	1,007.36	989.64	5.40	33.58	124.21	2,758.79	-3,626.28	4,619.59	4,580.63	38.95	118.598	
1,100.00	1,085.27	1,088.27	1,085.27	5.83	36.39	124.21	2,758.79	-3,626.28	4,636.53	4,594.35	42.18	109.929	
1,200.00	1,179.82	1,182.82	1,179.82	6.29	39.68	124.21	2,758.79	-3,626.28	4,655.54	4,609.63	45.91	101.411	
1,300.00	1,273.17	1,276.17	1,273.17	6.79	42.93	124.20	2,758.79	-3,626.28	4,676.64	4,627.01	49.62	94.240	
1,400.00	1,365.21	1,368.21	1,365.21	7.33	46.14	124.18	2,758.79	-3,626.28	4,699.84	4,646.52	53.32	88.137	
1,500.00	1,456.49	1,459.49	1,456.49	7.89	49.31	124.55	2,758.79	-3,626.28	4,724.33	4,667.31	57.01	82.862	
1,600.00	1,547.76	1,550.76	1,547.76	8.46	52.49	124.93	2,758.79	-3,626.28	4,749.04	4,688.33	60.72	78.217	
1,700.00	1,639.04	1,642.04	1,639.04	9.05	55.67	125.31	2,758.79	-3,626.28	4,773.98	4,709.55	64.43	74.097	
1,800.00	1,730.31	1,733.31	1,730.31	9.65	58.86	125.68	2,758.79	-3,626.28	4,799.14	4,730.99	68.15	70.420	
1,900.00	1,821.58	1,824.58	1,821.58	10.26	62.04	126.06	2,758.79	-3,626.28	4,824.51	4,752.63	71.88	67.120	
2,000.00	1,912.85	1,915.85	1,912.85	10.87	65.22	126.42	2,758.79	-3,626.28	4,850.09	4,774.48	75.61	64.144	
2,100.00	2,004.13	2,007.13	2,004.13	11.49	68.40	126.79	2,758.79	-3,626.28	4,875.88	4,796.53	79.35	61.448	
2,200.00	2,095.40	2,101.60	2,095.40	12.11	71.70	127.15	2,758.79	-3,626.28	4,901.87	4,818.67	83.20	58.914	
2,300.00	2,186.67	2,189.67	2,186.67	12.74	74.77	127.51	2,758.79	-3,626.28	4,928.07	4,841.23	86.84	56.751	
2,400.00	2,277.95	2,280.95	2,277.95	13.38	77.95	127.86	2,758.79	-3,626.28	4,954.46	4,863.88	90.58	54.696	
2,500.00	2,369.22	2,372.22	2,369.22	14.01	81.14	128.21	2,758.79	-3,626.28	4,981.05	4,886.72	94.33	52.804	
2,600.00	2,460.49	2,463.49	2,460.49	14.65	84.32	128.56	2,758.79	-3,626.28	5,007.84	4,909.76	98.08	51.059	
2,700.00	2,551.77	2,554.77	2,551.77	15.29	87.50	128.91	2,758.79	-3,626.28	5,034.81	4,932.98	101.83	49.443	
2,800.00	2,643.04	2,646.04	2,643.04	15.93	90.69	129.25	2,758.79	-3,626.28	5,061.96	4,956.38	105.58	47.944	
2,900.00	2,734.31	2,737.31	2,734.31	16.58	93.87	129.59	2,758.79	-3,626.28	5,089.30	4,979.97	109.33	46.549	
3,000.00	2,825.58	2,828.58	2,825.58	17.23	97.06	129.92	2,758.79	-3,626.28	5,116.82	5,003.74	113.08	45.248	
3,100.00	2,916.86	2,919.86	2,916.86	17.87	100.24	130.25	2,758.79	-3,626.28	5,144.52	5,027.69	116.84	44.032	
3,200.00	3,008.13	3,011.13	3,008.13	18.52	103.43	130.58	2,758.79	-3,626.28	5,172.39	5,051.81	120.59	42.893	
3,300.00	3,099.40	3,102.40	3,099.40	19.17	106.61	130.91	2,758.79	-3,626.28	5,200.44	5,076.10	124.34	41.825	
3,400.00	3,190.68	3,206.32	3,190.68	19.83	110.24	131.23	2,758.79	-3,626.28	5,228.65	5,100.12	128.53	40.680	
3,500.00	3,281.95	3,284.95	3,281.95	20.48	112.98	131.55	2,758.79	-3,626.28	5,257.03	5,125.19	131.84	39.874	
3,600.00	3,373.22	3,376.22	3,373.22	21.13	116.16	131.86	2,758.79	-3,626.28	5,285.57	5,149.98	135.59	38.982	
3,700.00	3,464.49	3,467.49	3,464.49	21.79	119.35	132.18	2,758.79	-3,626.28	5,314.27	5,174.93	139.34	38.139	
3,800.00	3,555.77	3,558.77	3,555.77	22.44	122.54	132.49	2,758.79	-3,626.28	5,343.13	5,200.05	143.09	37.341	
3,900.00	3,647.04	3,650.04	3,647.04	23.10	125.72	132.79	2,758.79	-3,626.28	5,372.15	5,225.31	146.84	36.586	
4,000.00	3,738.31	3,741.31	3,738.31	23.75	128.91	133.10	2,758.79	-3,626.28	5,401.32	5,250.74	150.59	35.869	
4,100.00	3,829.59	3,832.59	3,829.59	24.41	132.09	133.40	2,758.79	-3,626.28	5,430.64	5,276.31	154.33	35.188	
4,200.00	3,920.86	3,923.86	3,920.86	25.07	135.28	133.69	2,758.79	-3,626.28	5,460.11	5,302.03	158.08	34.540	
4,300.00	4,012.13	4,015.13	4,012.13	25.73	138.46	133.99	2,758.79	-3,626.28	5,489.73	5,327.90	161.82	33.924	
4,400.00	4,103.41	4,106.41	4,103.41	26.38	141.65	134.28	2,758.79	-3,626.28	5,519.48	5,353.91	165.57	33.336	
4,500.00	4,194.68	4,202.32	4,194.68	27.04	144.99	134.57	2,758.79	-3,626.28	5,549.38	5,379.91	169.48	32.744	
4,600.00	4,285.95	4,288.95	4,285.95	27.70	148.02	134.86	2,758.79	-3,626.28	5,579.42	5,406.36	173.06	32.240	
4,700.00	4,377.22	4,380.22	4,377.22	28.36	151.20	135.14	2,758.79	-3,626.28	5,609.60	5,432.80	176.80	31.728	
4,800.00	4,468.50	4,471.50	4,468.50	29.02	154.39	135.42	2,758.79	-3,626.28	5,639.91	5,459.37	180.54	31.239	
4,900.00	4,559.77	4,562.77	4,559.77	29.68	157.58	135.70	2,758.79	-3,626.28	5,670.35	5,486.07	184.28	30.770	
5,000.00	4,651.04	4,654.04	4,651.04	30.34	160.76	135.97	2,758.79	-3,626.28	5,700.92	5,512.90	188.02	30.320	
5,100.00	4,742.32	4,745.32	4,742.32	31.00	163.95	136.24	2,758.79	-3,626.28	5,731.62	5,539.86	191.76	29.889	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	4,833.59	4,836.59	4,833.59	31.66	167.13	136.51	2,758.79	-3,626.28	5,762.45	5,566.95	195.50	29.475		
5,300.00	4,924.86	4,927.86	4,924.86	32.32	170.32	136.78	2,758.79	-3,626.28	5,793.40	5,594.16	199.24	29.078		
5,400.00	5,016.13	5,019.13	5,016.13	32.99	173.50	137.04	2,758.79	-3,626.28	5,824.47	5,621.50	202.98	28.695		
5,500.00	5,107.41	5,110.41	5,107.41	33.65	176.69	137.31	2,758.79	-3,626.28	5,855.67	5,648.95	206.71	28.327		
5,600.00	5,198.68	5,201.68	5,198.68	34.31	179.88	137.57	2,758.79	-3,626.28	5,886.98	5,676.53	210.45	27.973		
5,700.00	5,289.95	5,307.05	5,289.95	34.97	183.55	137.82	2,758.79	-3,626.28	5,918.40	5,703.73	214.68	27.569		
5,800.00	5,381.23	5,384.23	5,381.23	35.63	186.25	138.08	2,758.79	-3,626.28	5,949.95	5,732.03	217.92	27.304		
5,900.00	5,472.50	5,475.50	5,472.50	36.30	189.43	138.33	2,758.79	-3,626.28	5,981.60	5,759.95	221.65	26.986		
6,000.00	5,563.77	5,566.77	5,563.77	36.96	192.62	138.58	2,758.79	-3,626.28	6,013.37	5,787.98	225.38	26.680		
6,100.00	5,655.05	5,658.05	5,655.05	37.62	195.80	138.82	2,758.79	-3,626.28	6,045.24	5,816.13	229.12	26.385		
6,200.00	5,746.32	5,749.32	5,746.32	38.28	198.99	139.07	2,758.79	-3,626.28	6,077.23	5,844.38	232.85	26.099		
6,300.00	5,837.59	5,840.59	5,837.59	38.95	202.18	139.31	2,758.79	-3,626.28	6,109.31	5,872.73	236.58	25.824		
6,400.00	5,928.86	5,931.86	5,928.86	39.61	205.36	139.55	2,758.79	-3,626.28	6,141.51	5,901.20	240.31	25.557		
6,500.00	6,020.14	6,023.14	6,020.14	40.27	208.55	139.79	2,758.79	-3,626.28	6,173.80	5,929.76	244.04	25.298		
6,600.00	6,111.41	6,114.41	6,111.41	40.94	211.73	140.02	2,758.79	-3,626.28	6,206.20	5,958.43	247.77	25.048		
6,700.00	6,202.68	6,205.68	6,202.68	41.60	214.92	140.26	2,758.79	-3,626.28	6,238.69	5,987.20	251.50	24.806		
6,800.00	6,293.96	6,303.04	6,293.96	42.26	218.32	140.49	2,758.79	-3,626.28	6,271.29	6,015.85	255.44	24.551		
6,900.00	6,385.23	6,388.23	6,385.23	42.93	221.29	140.71	2,758.79	-3,626.28	6,303.98	6,045.02	258.95	24.344		
7,000.00	6,476.50	6,479.50	6,476.50	43.59	224.48	140.94	2,758.79	-3,626.28	6,336.76	6,074.08	262.68	24.124		
7,100.00	6,567.77	6,570.77	6,567.77	44.25	227.66	141.16	2,758.79	-3,626.28	6,369.64	6,103.23	266.40	23.910		
7,200.00	6,658.64	6,661.64	6,658.64	44.91	230.84	122.49	2,758.79	-3,626.28	6,399.11	6,129.00	270.12	23.690		
7,300.00	6,747.14	6,750.14	6,747.14	45.52	233.93	106.23	2,758.79	-3,626.28	6,419.66	6,145.92	273.74	23.452		
7,400.00	6,831.10	6,834.10	6,831.10	46.07	236.86	95.27	2,758.79	-3,626.28	6,430.95	6,153.78	277.17	23.202		
7,500.00	6,908.46	6,911.46	6,908.46	46.54	239.56	88.41	2,758.79	-3,626.28	6,432.97	6,152.65	280.32	22.949		
7,600.00	6,977.30	6,980.30	6,977.30	46.95	241.96	84.51	2,758.79	-3,626.28	6,425.94	6,142.79	283.16	22.694		
7,700.00	7,035.93	7,038.93	7,035.93	47.30	244.01	82.77	2,758.79	-3,626.28	6,410.32	6,124.67	285.65	22.441		
7,800.00	7,082.92	7,085.92	7,082.92	47.59	245.65	82.71	2,758.79	-3,626.28	6,386.72	6,098.94	287.79	22.193		
7,900.00	7,117.09	7,120.09	7,117.09	47.84	246.84	84.05	2,758.79	-3,626.28	6,355.91	6,066.35	289.57	21.950		
8,000.00	7,137.62	7,140.62	7,137.62	48.06	247.56	86.59	2,758.79	-3,626.28	6,318.77	6,027.78	290.99	21.715		
8,100.00	7,143.99	7,146.99	7,143.99	48.28	247.78	90.16	2,758.79	-3,626.28	6,276.23	5,984.20	292.02	21.492		
8,200.00	7,143.45	7,146.45	7,143.45	48.53	247.76	90.15	2,758.79	-3,626.28	6,232.06	5,939.12	292.94	21.274		
8,300.00	7,142.91	7,145.91	7,142.91	48.89	247.74	90.14	2,758.79	-3,626.28	6,189.19	5,895.19	294.00	21.052		
8,400.00	7,142.37	7,145.37	7,142.37	49.40	247.72	90.14	2,758.79	-3,626.28	6,147.65	5,852.46	295.18	20.826		
8,500.00	7,141.83	7,144.83	7,141.83	50.12	247.70	90.13	2,758.79	-3,626.28	6,107.46	5,810.96	296.50	20.599		
8,600.00	7,141.29	7,144.29	7,141.29	51.08	247.68	90.13	2,758.79	-3,626.28	6,068.66	5,770.72	297.94	20.369		
8,700.00	7,140.75	7,143.75	7,140.75	52.30	247.66	90.12	2,758.79	-3,626.28	6,031.26	5,731.77	299.49	20.139		
8,800.00	7,140.21	7,143.21	7,140.21	53.75	247.65	90.12	2,758.79	-3,626.28	5,995.30	5,694.15	301.15	19.908		
8,900.00	7,139.67	7,142.67	7,139.67	55.40	247.63	90.11	2,758.79	-3,626.28	5,960.80	5,657.89	302.91	19.679		
9,000.00	7,139.12	7,142.12	7,139.12	57.20	247.61	90.11	2,758.79	-3,626.28	5,927.78	5,623.02	304.76	19.451		
9,100.00	7,138.58	7,141.58	7,138.58	59.13	247.59	90.10	2,758.79	-3,626.28	5,896.28	5,589.58	306.70	19.225		
9,200.00	7,138.04	7,141.04	7,138.04	61.15	247.57	90.09	2,758.79	-3,626.28	5,866.31	5,557.59	308.72	19.002		
9,300.00	7,137.50	7,140.50	7,137.50	63.26	247.55	90.09	2,758.79	-3,626.28	5,837.91	5,527.09	310.81	18.783		
9,400.00	7,136.96	7,139.96	7,136.96	65.44	247.53	90.08	2,758.79	-3,626.28	5,811.08	5,498.11	312.97	18.567		
9,500.00	7,136.42	7,139.42	7,136.42	67.68	247.51	90.08	2,758.79	-3,626.28	5,785.86	5,470.67	315.19	18.357		
9,600.00	7,135.88	7,138.88	7,135.88	69.97	247.49	90.07	2,758.79	-3,626.28	5,762.26	5,444.80	317.46	18.151		
9,700.00	7,135.34	7,138.34	7,135.34	72.31	247.48	90.07	2,758.79	-3,626.28	5,740.31	5,420.53	319.78	17.951		
9,800.00	7,134.80	7,137.80	7,134.80	74.69	247.46	90.06	2,758.79	-3,626.28	5,720.02	5,397.88	322.14	17.756		
9,900.00	7,134.26	7,137.26	7,134.26	77.10	247.44	90.06	2,758.79	-3,626.28	5,701.42	5,376.88	324.54	17.568		
10,000.00	7,133.71	7,136.71	7,133.71	79.54	247.42	90.05	2,758.79	-3,626.28	5,684.51	5,357.55	326.96	17.386		
10,100.00	7,133.17	7,136.17	7,133.17	82.02	247.40	90.04	2,758.79	-3,626.28	5,669.32	5,339.90	329.41	17.210		
10,200.00	7,132.63	7,135.63	7,132.63	84.52	247.38	90.04	2,758.79	-3,626.28	5,655.85	5,323.97	331.89	17.042		
10,300.00	7,132.09	7,135.09	7,132.09	87.04	247.36	90.03	2,758.79	-3,626.28	5,644.13	5,309.76	334.37	16.880		

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

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 1(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,131.55	7,134.55	7,131.55	89.58	247.34	90.03	2,758.79	-3,626.28	5,634.15	5,297.28	336.87	16.725		
10,500.00	7,131.01	7,134.01	7,131.01	92.15	247.32	90.02	2,758.79	-3,626.28	5,625.94	5,286.57	339.37	16.577		
10,600.00	7,130.47	7,133.47	7,130.47	94.73	247.31	90.02	2,758.79	-3,626.28	5,619.49	5,277.61	341.88	16.437		
10,700.00	7,129.93	7,132.93	7,129.93	97.33	247.29	90.01	2,758.79	-3,626.28	5,614.82	5,270.44	344.38	16.304		
10,800.00	7,129.39	7,132.39	7,129.39	99.94	247.27	90.01	2,758.79	-3,626.28	5,611.92	5,265.05	346.87	16.179		
10,900.00	7,128.84	7,131.84	7,128.84	102.56	247.25	90.00	2,758.79	-3,626.28	5,610.81	5,261.45	349.36	16.060		
10,912.51	7,128.78	7,131.78	7,128.78	102.89	247.25	90.00	2,758.79	-3,626.28	5,610.80	5,261.13	349.67	16.046		
11,000.00	7,128.30	7,131.30	7,128.30	105.20	247.23	90.00	2,758.79	-3,626.28	5,611.48	5,259.65	351.83	15.950		
11,100.00	7,127.76	7,130.76	7,127.76	107.85	247.21	89.99	2,758.79	-3,626.28	5,613.93	5,259.65	354.28	15.846		
11,200.00	7,127.22	7,130.22	7,127.22	110.51	247.19	89.98	2,758.79	-3,626.28	5,618.16	5,261.45	356.71	15.750		
11,300.00	7,126.68	7,129.68	7,126.68	113.18	247.17	89.98	2,758.79	-3,626.28	5,624.16	5,265.05	359.11	15.661		
11,400.00	7,126.14	7,129.14	7,126.14	115.86	247.15	89.97	2,758.79	-3,626.28	5,631.93	5,270.44	361.49	15.580		
11,500.00	7,125.60	7,128.60	7,125.60	118.55	247.14	89.97	2,758.79	-3,626.28	5,641.47	5,277.63	363.84	15.505		
11,600.00	7,125.06	7,128.06	7,125.06	121.25	247.12	89.96	2,758.79	-3,626.28	5,652.76	5,286.61	366.15	15.438		
11,700.00	7,124.52	7,127.52	7,124.52	123.95	247.10	89.96	2,758.79	-3,626.28	5,665.79	5,297.36	368.43	15.378		
11,800.00	7,123.97	7,126.97	7,123.97	126.66	247.08	89.95	2,758.79	-3,626.28	5,680.55	5,309.88	370.67	15.325		
11,900.00	7,123.43	7,126.43	7,123.43	129.38	247.06	89.95	2,758.79	-3,626.28	5,697.03	5,324.16	372.87	15.279		
12,000.00	7,122.89	7,125.89	7,122.89	132.10	247.04	89.94	2,758.79	-3,626.28	5,715.21	5,340.18	375.03	15.239		
12,100.00	7,122.35	7,125.35	7,122.35	134.83	247.02	89.93	2,758.79	-3,626.28	5,735.08	5,357.94	377.14	15.207		
12,200.00	7,121.81	7,124.81	7,121.81	137.56	247.00	89.93	2,758.79	-3,626.28	5,756.62	5,377.40	379.21	15.180		
12,300.00	7,121.27	7,124.27	7,121.27	140.30	246.99	89.92	2,758.79	-3,626.28	5,779.80	5,398.57	381.23	15.161		
12,400.00	7,120.73	7,123.73	7,120.73	143.05	246.97	89.92	2,758.79	-3,626.28	5,804.62	5,421.41	383.21	15.147		
12,500.00	7,120.19	7,123.19	7,120.19	145.80	246.95	89.91	2,758.79	-3,626.28	5,831.04	5,445.91	385.14	15.140		
12,600.00	7,119.65	7,122.65	7,119.65	148.55	246.93	89.91	2,758.79	-3,626.28	5,859.06	5,472.04	387.02	15.139 SF		
12,700.00	7,119.10	7,122.10	7,119.10	151.30	246.91	89.90	2,758.79	-3,626.28	5,888.64	5,499.79	388.84	15.144		
12,800.00	7,118.56	7,121.56	7,118.56	154.07	246.89	89.90	2,758.79	-3,626.28	5,919.76	5,529.14	390.62	15.155		
12,900.00	7,118.02	7,121.02	7,118.02	156.83	246.87	89.89	2,758.79	-3,626.28	5,952.40	5,560.05	392.35	15.171		
13,000.00	7,117.48	7,120.48	7,117.48	159.60	246.85	89.88	2,758.79	-3,626.28	5,986.53	5,592.50	394.03	15.193		
13,100.00	7,116.94	7,119.94	7,116.94	162.37	246.83	89.88	2,758.79	-3,626.28	6,022.13	5,626.47	395.65	15.221		
13,200.00	7,116.40	7,119.40	7,116.40	165.14	246.82	89.87	2,758.79	-3,626.28	6,059.17	5,661.94	397.23	15.254		
13,300.00	7,115.86	7,118.86	7,115.86	167.92	246.80	89.87	2,758.79	-3,626.28	6,097.62	5,698.86	398.76	15.292		
13,400.00	7,115.32	7,118.32	7,115.32	170.70	246.78	89.86	2,758.79	-3,626.28	6,137.46	5,737.23	400.23	15.335		
13,500.00	7,114.78	7,117.78	7,114.78	173.48	246.76	89.86	2,758.79	-3,626.28	6,178.67	5,777.01	401.66	15.383		
13,600.00	7,114.24	7,117.24	7,114.24	176.26	246.74	89.85	2,758.79	-3,626.28	6,221.21	5,818.17	403.04	15.436		
13,700.00	7,113.69	7,116.69	7,113.69	179.05	246.72	89.85	2,758.79	-3,626.28	6,265.05	5,860.69	404.37	15.494		
13,800.00	7,113.15	7,116.15	7,113.15	181.84	246.70	89.84	2,758.79	-3,626.28	6,310.18	5,904.53	405.65	15.556		
13,900.00	7,112.61	7,115.61	7,112.61	184.63	246.68	89.83	2,758.79	-3,626.28	6,356.56	5,949.68	406.88	15.623		
14,000.00	7,112.07	7,115.07	7,112.07	187.42	246.66	89.83	2,758.79	-3,626.28	6,404.17	5,996.09	408.07	15.694		
14,100.00	7,111.53	7,114.53	7,111.53	190.22	246.65	89.82	2,758.79	-3,626.28	6,452.97	6,043.75	409.22	15.769		
14,200.00	7,110.99	7,113.99	7,110.99	193.01	246.63	89.82	2,758.79	-3,626.28	6,502.95	6,092.63	410.32	15.849		
14,300.00	7,110.45	7,113.45	7,110.45	195.81	246.61	89.81	2,758.79	-3,626.28	6,554.07	6,142.69	411.37	15.932		
14,400.00	7,109.91	7,112.91	7,109.91	198.61	246.59	89.81	2,758.79	-3,626.28	6,606.31	6,193.92	412.39	16.020		
14,500.00	7,109.37	7,112.37	7,109.37	201.42	246.57	89.80	2,758.79	-3,626.28	6,659.64	6,246.27	413.36	16.111		
14,600.00	7,108.82	7,111.82	7,108.82	204.22	246.55	89.80	2,758.79	-3,626.28	6,714.03	6,299.73	414.30	16.206		
14,700.00	7,108.28	7,111.28	7,108.28	207.03	246.53	89.79	2,758.79	-3,626.28	6,769.47	6,354.27	415.19	16.304		
14,800.00	7,107.74	7,110.74	7,107.74	209.83	246.51	89.79	2,758.79	-3,626.28	6,825.92	6,409.87	416.05	16.406		
14,900.00	7,107.20	7,110.20	7,107.20	212.64	246.49	89.78	2,758.79	-3,626.28	6,883.36	6,466.49	416.87	16.512		
15,000.00	7,106.66	7,109.66	7,106.66	215.45	246.48	89.77	2,758.79	-3,626.28	6,941.77	6,524.11	417.66	16.621		
15,100.00	7,106.12	7,109.12	7,106.12	218.26	246.46	89.77	2,758.79	-3,626.28	7,001.11	6,582.70	418.41	16.733		
15,200.00	7,105.58	7,108.58	7,105.58	221.07	246.44	89.76	2,758.79	-3,626.28	7,061.38	6,642.25	419.13	16.848		
15,300.00	7,105.04	7,108.04	7,105.04	223.89	246.42	89.76	2,758.79	-3,626.28	7,122.54	6,702.72	419.81	16.966		
15,400.00	7,104.50	7,107.50	7,104.50	226.70	246.40	89.75	2,758.79	-3,626.28	7,184.57	6,764.10	420.47	17.087		

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



Anticollision Report



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

Offset Design	HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 1(TA_150CC) - OH - OH											Offset Site Error:	0.00 ft
Survey Program:	100-2" Cone@2.448 Sigma											Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	7,107.00	7,104.00	229.28	246.38	89.75	2,758.79	-3,626.28	7,242.11	6,821.07	421.04	17.200	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 34-9(TA_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	37.00	3.28	3.28	-60.58	2,729.85	-4,841.63	5,558.32				
100.00	100.00	63.00	100.00	3.28	3.46	-60.58	2,729.85	-4,841.63	5,558.19	5,551.45	6.74	824.150	
200.00	200.00	163.00	200.00	3.34	5.13	-60.58	2,729.85	-4,841.63	5,558.19	5,549.73	8.47	656.427 CC	
300.00	299.98	262.98	299.98	3.44	8.13	116.28	2,729.85	-4,841.63	5,558.97	5,547.40	11.57	480.634	
400.00	399.84	362.84	399.84	3.59	11.40	116.29	2,729.85	-4,841.63	5,561.29	5,546.29	14.99	370.946	
500.00	499.45	462.45	499.45	3.79	14.77	116.30	2,729.85	-4,841.63	5,565.16	5,546.61	18.55	299.928	
600.00	598.70	561.70	598.70	4.03	18.16	116.32	2,729.85	-4,841.63	5,570.59	5,548.40	22.19	251.014	
700.00	697.47	660.47	697.47	4.31	21.56	116.33	2,729.85	-4,841.63	5,577.60	5,551.73	25.88	215.550	
800.00	795.62	758.62	795.62	4.64	24.95	116.35	2,729.85	-4,841.63	5,586.19	5,556.61	29.59	188.790	
900.00	893.06	856.06	893.06	5.00	28.33	116.37	2,729.85	-4,841.63	5,596.39	5,563.07	33.32	167.955	
1,000.00	989.64	952.64	989.64	5.40	31.68	116.39	2,729.85	-4,841.63	5,608.22	5,571.15	37.06	151.323	
1,100.00	1,085.27	1,048.27	1,085.27	5.83	35.00	116.40	2,729.85	-4,841.63	5,621.68	5,580.88	40.80	137.774	
1,200.00	1,179.82	1,142.82	1,179.82	6.29	38.29	116.41	2,729.85	-4,841.63	5,636.82	5,592.28	44.54	126.551	
1,300.00	1,273.17	1,236.17	1,273.17	6.79	41.54	116.41	2,729.85	-4,841.63	5,653.65	5,605.38	48.27	117.127	
1,400.00	1,365.21	1,328.21	1,365.21	7.33	44.74	116.41	2,729.85	-4,841.63	5,672.21	5,620.23	51.98	109.117	
1,500.00	1,456.49	1,419.49	1,456.49	7.89	47.92	116.73	2,729.85	-4,841.63	5,691.83	5,636.14	55.69	102.206	
1,600.00	1,547.76	1,510.76	1,547.76	8.46	51.10	117.07	2,729.85	-4,841.63	5,711.68	5,652.27	59.41	96.140	
1,700.00	1,639.04	1,602.04	1,639.04	9.05	54.28	117.41	2,729.85	-4,841.63	5,731.75	5,668.61	63.14	90.776	
1,800.00	1,730.31	1,706.69	1,730.31	9.65	57.93	117.75	2,729.85	-4,841.63	5,752.04	5,684.69	67.35	85.406	
1,900.00	1,821.58	1,784.58	1,821.58	10.26	60.64	118.08	2,729.85	-4,841.63	5,772.55	5,701.92	70.63	81.728	
2,000.00	1,912.85	1,875.85	1,912.85	10.87	63.83	118.41	2,729.85	-4,841.63	5,793.28	5,718.89	74.39	77.882	
2,100.00	2,004.13	1,967.13	2,004.13	11.49	67.01	118.74	2,729.85	-4,841.63	5,814.21	5,736.07	78.14	74.403	
2,200.00	2,095.40	2,058.40	2,095.40	12.11	70.19	119.07	2,729.85	-4,841.63	5,835.36	5,753.46	81.91	71.243	
2,300.00	2,186.67	2,149.67	2,186.67	12.74	73.37	119.40	2,729.85	-4,841.63	5,856.72	5,771.05	85.67	68.361	
2,400.00	2,277.95	2,240.95	2,277.95	13.38	76.56	119.72	2,729.85	-4,841.63	5,878.29	5,788.84	89.44	65.722	
2,500.00	2,369.22	2,332.22	2,369.22	14.01	79.74	120.05	2,729.85	-4,841.63	5,900.05	5,806.84	93.21	63.297	
2,600.00	2,460.49	2,423.49	2,460.49	14.65	82.92	120.37	2,729.85	-4,841.63	5,922.02	5,825.04	96.98	61.062	
2,700.00	2,551.77	2,514.77	2,551.77	15.29	86.11	120.68	2,729.85	-4,841.63	5,944.19	5,843.44	100.76	58.995	
2,800.00	2,643.04	2,606.04	2,643.04	15.93	89.29	121.00	2,729.85	-4,841.63	5,966.56	5,862.03	104.53	57.079	
2,900.00	2,734.31	2,702.69	2,734.31	16.58	92.66	121.31	2,729.85	-4,841.63	5,989.12	5,880.63	108.49	55.203	
3,000.00	2,825.58	2,788.58	2,825.58	17.23	95.66	121.63	2,729.85	-4,841.63	6,011.88	5,899.80	112.08	53.639	
3,100.00	2,916.86	2,879.86	2,916.86	17.87	98.84	121.94	2,729.85	-4,841.63	6,034.82	5,918.97	115.85	52.090	
3,200.00	3,008.13	2,971.13	3,008.13	18.52	102.03	122.24	2,729.85	-4,841.63	6,057.96	5,938.33	119.63	50.639	
3,300.00	3,099.40	3,062.40	3,099.40	19.17	105.21	122.55	2,729.85	-4,841.63	6,081.28	5,957.88	123.40	49.279	
3,400.00	3,190.68	3,153.68	3,190.68	19.83	108.40	122.85	2,729.85	-4,841.63	6,104.79	5,977.61	127.18	48.002	
3,500.00	3,281.95	3,244.95	3,281.95	20.48	111.58	123.15	2,729.85	-4,841.63	6,128.47	5,997.52	130.95	46.799	
3,600.00	3,373.22	3,336.22	3,373.22	21.13	114.77	123.45	2,729.85	-4,841.63	6,152.34	6,017.62	134.73	45.665	
3,700.00	3,464.49	3,427.49	3,464.49	21.79	117.95	123.75	2,729.85	-4,841.63	6,176.39	6,037.89	138.50	44.595	
3,800.00	3,555.77	3,518.77	3,555.77	22.44	121.14	124.05	2,729.85	-4,841.63	6,200.61	6,058.34	142.27	43.582	
3,900.00	3,647.04	3,610.04	3,647.04	23.10	124.32	124.34	2,729.85	-4,841.63	6,225.01	6,078.96	146.05	42.624	
4,000.00	3,738.31	3,701.31	3,738.31	23.75	127.51	124.63	2,729.85	-4,841.63	6,249.57	6,099.76	149.82	41.715	
4,100.00	3,829.59	3,807.41	3,829.59	24.41	131.21	124.92	2,729.85	-4,841.63	6,274.31	6,120.21	154.10	40.715	
4,200.00	3,920.86	3,883.86	3,920.86	25.07	133.88	125.21	2,729.85	-4,841.63	6,299.22	6,141.86	157.36	40.031	
4,300.00	4,012.13	3,975.13	4,012.13	25.73	137.07	125.49	2,729.85	-4,841.63	6,324.29	6,163.16	161.13	39.250	
4,400.00	4,103.41	4,066.41	4,103.41	26.38	140.25	125.78	2,729.85	-4,841.63	6,349.52	6,184.63	164.89	38.506	
4,500.00	4,194.68	4,157.68	4,194.68	27.04	143.44	126.06	2,729.85	-4,841.63	6,374.92	6,206.26	168.66	37.797	
4,600.00	4,285.95	4,248.95	4,285.95	27.70	146.62	126.34	2,729.85	-4,841.63	6,400.48	6,228.05	172.43	37.119	
4,700.00	4,377.22	4,340.22	4,377.22	28.36	149.81	126.61	2,729.85	-4,841.63	6,426.19	6,250.00	176.19	36.472	
4,800.00	4,468.50	4,431.50	4,468.50	29.02	152.99	126.89	2,729.85	-4,841.63	6,452.06	6,272.10	179.96	35.853	
4,900.00	4,559.77	4,522.77	4,559.77	29.68	156.18	127.16	2,729.85	-4,841.63	6,478.09	6,294.37	183.72	35.260	
5,000.00	4,651.04	4,614.04	4,651.04	30.34	159.36	127.43	2,729.85	-4,841.63	6,504.27	6,316.78	187.49	34.692	
5,100.00	4,742.32	4,705.32	4,742.32	31.00	162.55	127.70	2,729.85	-4,841.63	6,530.60	6,339.35	191.25	34.147	

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 34-9(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,803.41	4,833.59	31.66	165.97	127.97	2,729.85	-4,841.63	6,557.07	6,361.83	195.25	33.583		
5,300.00	4,924.86	4,887.86	4,924.86	32.32	168.92	128.24	2,729.85	-4,841.63	6,583.70	6,384.93	198.77	33.122		
5,400.00	5,016.13	4,979.13	5,016.13	32.99	172.11	128.50	2,729.85	-4,841.63	6,610.47	6,407.94	202.53	32.639		
5,500.00	5,107.41	5,070.41	5,107.41	33.65	175.29	128.76	2,729.85	-4,841.63	6,637.38	6,431.09	206.29	32.175		
5,600.00	5,198.68	5,161.68	5,198.68	34.31	178.48	129.02	2,729.85	-4,841.63	6,664.44	6,454.39	210.05	31.728		
5,700.00	5,289.95	5,252.95	5,289.95	34.97	181.67	129.28	2,729.85	-4,841.63	6,691.63	6,477.83	213.80	31.298		
5,800.00	5,381.23	5,344.23	5,381.23	35.63	184.85	129.53	2,729.85	-4,841.63	6,718.97	6,501.41	217.56	30.883		
5,900.00	5,472.50	5,435.50	5,472.50	36.30	188.04	129.79	2,729.85	-4,841.63	6,746.44	6,525.12	221.32	30.483		
6,000.00	5,563.77	5,526.77	5,563.77	36.96	191.22	130.04	2,729.85	-4,841.63	6,774.04	6,548.98	225.07	30.098		
6,100.00	5,655.05	5,618.05	5,655.05	37.62	194.41	130.29	2,729.85	-4,841.63	6,801.78	6,572.96	228.82	29.725		
6,200.00	5,746.32	5,709.32	5,746.32	38.28	197.59	130.54	2,729.85	-4,841.63	6,829.65	6,597.08	232.58	29.365		
6,300.00	5,837.59	5,800.59	5,837.59	38.95	200.78	130.79	2,729.85	-4,841.63	6,857.66	6,621.33	236.33	29.018		
6,400.00	5,928.86	5,908.14	5,928.86	39.61	204.53	131.03	2,729.85	-4,841.63	6,885.79	6,645.14	240.65	28.614		
6,500.00	6,020.14	5,983.14	6,020.14	40.27	207.15	131.27	2,729.85	-4,841.63	6,914.04	6,670.21	243.83	28.356		
6,600.00	6,111.41	6,074.41	6,111.41	40.94	210.34	131.52	2,729.85	-4,841.63	6,942.42	6,694.85	247.58	28.041		
6,700.00	6,202.68	6,165.68	6,202.68	41.60	213.52	131.75	2,729.85	-4,841.63	6,970.93	6,719.60	251.33	27.737		
6,800.00	6,293.96	6,256.96	6,293.96	42.26	216.71	131.99	2,729.85	-4,841.63	6,999.56	6,744.48	255.07	27.441		
6,900.00	6,385.23	6,348.23	6,385.23	42.93	219.90	132.23	2,729.85	-4,841.63	7,028.31	6,769.49	258.82	27.155		
7,000.00	6,476.50	6,439.50	6,476.50	43.59	223.08	132.46	2,729.85	-4,841.63	7,057.18	6,794.61	262.57	26.878		
7,100.00	6,567.77	6,530.77	6,567.77	44.25	226.27	132.69	2,729.85	-4,841.63	7,086.16	6,819.85	266.31	26.609		
7,200.00	6,658.64	6,621.64	6,658.64	44.91	229.44	132.92	2,729.85	-4,841.63	7,115.06	6,841.02	270.04	26.333		
7,300.00	6,749.91	6,712.91	6,749.91	45.57	232.63	133.15	2,729.85	-4,841.63	7,144.04	6,861.64	273.69	26.035		
7,400.00	6,841.18	6,804.18	6,841.18	46.23	235.82	133.38	2,729.85	-4,841.63	7,173.18	6,881.21	277.34	25.785		
7,500.00	6,932.45	6,895.45	6,932.45	46.89	239.01	133.61	2,729.85	-4,841.63	7,202.32	6,901.45	281.00	25.535		
7,600.00	7,023.72	7,000.72	7,023.72	47.55	242.20	133.84	2,729.85	-4,841.63	7,231.46	6,921.69	284.65	25.285		
7,700.00	7,115.00	7,100.00	7,115.00	48.21	245.39	134.07	2,729.85	-4,841.63	7,260.60	6,941.93	288.30	25.035		
7,800.00	7,206.27	7,200.00	7,206.27	48.87	248.58	134.30	2,729.85	-4,841.63	7,289.74	6,962.17	291.95	24.785		
7,900.00	7,297.54	7,290.00	7,297.54	49.53	251.77	134.53	2,729.85	-4,841.63	7,318.88	6,982.41	295.60	24.535		
8,000.00	7,388.81	7,380.00	7,388.81	50.19	254.96	134.76	2,729.85	-4,841.63	7,348.02	6,999.65	299.25	24.285		
8,100.00	7,480.08	7,470.00	7,480.08	50.85	258.15	134.99	2,729.85	-4,841.63	7,377.16	7,019.89	302.90	24.035		
8,200.00	7,571.35	7,560.00	7,571.35	51.51	261.34	135.22	2,729.85	-4,841.63	7,406.30	7,039.13	306.55	23.785		
8,300.00	7,662.62	7,650.00	7,662.62	52.17	264.53	135.45	2,729.85	-4,841.63	7,435.44	7,059.37	310.20	23.535		
8,400.00	7,753.89	7,740.00	7,753.89	52.83	267.72	135.68	2,729.85	-4,841.63	7,464.58	7,079.61	313.85	23.285		
8,500.00	7,845.16	7,830.00	7,845.16	53.49	270.91	135.91	2,729.85	-4,841.63	7,493.72	7,099.85	317.50	23.035		
8,600.00	7,936.43	7,920.00	7,936.43	54.15	274.10	136.14	2,729.85	-4,841.63	7,522.86	7,119.09	321.15	22.785		
8,700.00	8,027.70	8,010.00	8,027.70	54.81	277.29	136.37	2,729.85	-4,841.63	7,552.00	7,139.33	324.80	22.535		
8,800.00	8,118.97	8,100.00	8,118.97	55.47	280.48	136.60	2,729.85	-4,841.63	7,581.14	7,159.57	328.45	22.285		
8,900.00	8,210.24	8,190.00	8,210.24	56.13	283.67	136.83	2,729.85	-4,841.63	7,610.28	7,179.81	332.10	22.035		
9,000.00	8,301.51	8,280.00	8,301.51	56.79	286.86	137.06	2,729.85	-4,841.63	7,639.42	7,199.05	335.75	21.785		
9,100.00	8,392.78	8,370.00	8,392.78	57.45	290.05	137.29	2,729.85	-4,841.63	7,668.56	7,219.29	339.40	21.535		
9,200.00	8,484.05	8,460.00	8,484.05	58.11	293.24	137.52	2,729.85	-4,841.63	7,697.70	7,239.53	343.05	21.285		
9,300.00	8,575.32	8,550.00	8,575.32	58.77	296.43	137.75	2,729.85	-4,841.63	7,726.84	7,259.77	346.70	21.035		
9,400.00	8,666.59	8,640.00	8,666.59	59.43	299.62	137.98	2,729.85	-4,841.63	7,755.98	7,279.01	350.35	20.785		
9,500.00	8,757.86	8,730.00	8,757.86	60.09	302.81	138.21	2,729.85	-4,841.63	7,785.12	7,299.25	354.00	20.535		
9,600.00	8,849.13	8,820.00	8,849.13	60.75	306.00	138.44	2,729.85	-4,841.63	7,814.26	7,319.49	357.65	20.285		
9,700.00	8,940.40	8,910.00	8,940.40	61.41	309.19	138.67	2,729.85	-4,841.63	7,843.40	7,339.73	361.30	20.035		
9,800.00	9,031.67	9,000.00	9,031.67	62.07	312.38	138.90	2,729.85	-4,841.63	7,872.54	7,359.97	364.95	19.785		
9,900.00	9,122.94	9,090.00	9,122.94	62.73	315.57	139.13	2,729.85	-4,841.63	7,901.68	7,380.21	368.60	19.535		
10,000.00	9,214.21	9,180.00	9,214.21	63.39	318.76	139.36	2,729.85	-4,841.63	7,930.82	7,400.45	372.25	19.285		
10,100.00	9,305.48	9,270.00	9,305.48	64.05	321.95	139.59	2,729.85	-4,841.63	7,959.96	7,420.69	375.90	19.035		
10,200.00	9,396.75	9,360.00	9,396.75	64.71	325.14	139.82	2,729.85	-4,841.63	7,989.10	7,440.93	379.55	18.785		
10,300.00	9,488.02	9,450.00	9,488.02	65.37	328.33	140.05	2,729.85	-4,841.63	8,018.24	7,461.17	383.20	18.535		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 34-9(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,131.55	7,105.45	7,131.55	89.58	246.33	90.10	2,729.85	-4,841.63	5,850.04	5,515.02	335.02	17.462		
10,500.00	7,131.01	7,105.99	7,131.01	92.15	246.35	90.09	2,729.85	-4,841.63	5,821.29	5,483.62	337.67	17.240		
10,600.00	7,130.47	7,106.53	7,130.47	94.73	246.37	90.08	2,729.85	-4,841.63	5,794.12	5,453.77	340.35	17.024		
10,700.00	7,129.93	7,107.07	7,129.93	97.33	246.38	90.08	2,729.85	-4,841.63	5,768.55	5,425.50	343.05	16.815		
10,800.00	7,129.39	7,107.61	7,129.39	99.94	246.40	90.07	2,729.85	-4,841.63	5,744.61	5,398.84	345.78	16.614		
10,900.00	7,128.84	7,108.16	7,128.84	102.56	246.42	90.07	2,729.85	-4,841.63	5,722.32	5,373.81	348.52	16.419		
11,000.00	7,128.30	7,108.70	7,128.30	105.20	246.44	90.06	2,729.85	-4,841.63	5,701.70	5,350.43	351.27	16.232		
11,100.00	7,127.76	7,109.24	7,127.76	107.85	246.46	90.06	2,729.85	-4,841.63	5,682.76	5,328.74	354.03	16.052		
11,200.00	7,127.22	7,109.78	7,127.22	110.51	246.48	90.05	2,729.85	-4,841.63	5,665.53	5,308.74	356.79	15.879		
11,300.00	7,126.68	7,089.68	7,126.68	113.18	245.78	90.05	2,729.85	-4,841.63	5,650.01	5,291.18	358.83	15.746		
11,400.00	7,126.14	7,089.14	7,126.14	115.86	245.76	90.04	2,729.85	-4,841.63	5,636.22	5,274.67	361.55	15.589		
11,500.00	7,125.60	7,088.60	7,125.60	118.55	245.74	90.03	2,729.85	-4,841.63	5,624.18	5,259.92	364.26	15.440		
11,600.00	7,125.06	7,088.06	7,125.06	121.25	245.72	90.03	2,729.85	-4,841.63	5,613.89	5,246.93	366.96	15.298		
11,700.00	7,124.52	7,087.52	7,124.52	123.95	245.70	90.02	2,729.85	-4,841.63	5,605.37	5,235.72	369.65	15.164		
11,800.00	7,123.97	7,086.97	7,123.97	126.66	245.68	90.02	2,729.85	-4,841.63	5,598.62	5,226.31	372.32	15.037		
11,900.00	7,123.43	7,086.43	7,123.43	129.38	245.66	90.01	2,729.85	-4,841.63	5,593.66	5,218.70	374.96	14.918		
12,000.00	7,122.89	7,085.89	7,122.89	132.10	245.65	90.01	2,729.85	-4,841.63	5,590.47	5,212.90	377.58	14.806		
12,100.00	7,122.35	7,085.35	7,122.35	134.83	245.63	90.00	2,729.85	-4,841.63	5,589.08	5,208.91	380.17	14.702		
12,128.03	7,122.20	7,085.20	7,122.20	135.60	245.62	90.00	2,729.85	-4,841.63	5,589.01	5,208.12	380.89	14.674		
12,200.00	7,121.81	7,084.81	7,121.81	137.56	245.61	90.00	2,729.85	-4,841.63	5,589.47	5,206.75	382.72	14.605		
12,300.00	7,121.27	7,084.27	7,121.27	140.30	245.59	89.99	2,729.85	-4,841.63	5,591.65	5,206.41	385.24	14.515 ES		
12,400.00	7,120.73	7,083.73	7,120.73	143.05	245.57	89.98	2,729.85	-4,841.63	5,595.62	5,207.90	387.72	14.432		
12,500.00	7,120.19	7,083.19	7,120.19	145.80	245.55	89.98	2,729.85	-4,841.63	5,601.37	5,211.20	390.17	14.356		
12,600.00	7,119.65	7,082.65	7,119.65	148.55	245.53	89.97	2,729.85	-4,841.63	5,608.90	5,216.33	392.56	14.288		
12,700.00	7,119.10	7,082.10	7,119.10	151.30	245.51	89.97	2,729.85	-4,841.63	5,618.20	5,223.28	394.92	14.226		
12,800.00	7,118.56	7,081.56	7,118.56	154.07	245.49	89.96	2,729.85	-4,841.63	5,629.26	5,232.04	397.22	14.172		
12,900.00	7,118.02	7,081.02	7,118.02	156.83	245.48	89.96	2,729.85	-4,841.63	5,642.07	5,242.59	399.48	14.124		
13,000.00	7,117.48	7,080.48	7,117.48	159.60	245.46	89.95	2,729.85	-4,841.63	5,656.62	5,254.94	401.68	14.082		
13,100.00	7,116.94	7,079.94	7,116.94	162.37	245.44	89.95	2,729.85	-4,841.63	5,672.89	5,269.06	403.83	14.048		
13,200.00	7,116.40	7,079.40	7,116.40	165.14	245.42	89.94	2,729.85	-4,841.63	5,690.88	5,284.95	405.92	14.020		
13,300.00	7,115.86	7,078.86	7,115.86	167.92	245.40	89.93	2,729.85	-4,841.63	5,710.56	5,302.60	407.96	13.998		
13,400.00	7,115.32	7,078.32	7,115.32	170.70	245.38	89.93	2,729.85	-4,841.63	5,731.92	5,321.97	409.95	13.982		
13,500.00	7,114.78	7,077.78	7,114.78	173.48	245.36	89.92	2,729.85	-4,841.63	5,754.93	5,343.06	411.87	13.973		
13,600.00	7,114.24	7,077.24	7,114.24	176.26	245.34	89.92	2,729.85	-4,841.63	5,779.59	5,365.85	413.74	13.969 SF		
13,700.00	7,113.69	7,076.69	7,113.69	179.05	245.32	89.91	2,729.85	-4,841.63	5,805.86	5,390.32	415.55	13.972		
13,800.00	7,113.15	7,076.15	7,113.15	181.84	245.31	89.91	2,729.85	-4,841.63	5,833.73	5,416.44	417.30	13.980		
13,900.00	7,112.61	7,075.61	7,112.61	184.63	245.29	89.90	2,729.85	-4,841.63	5,863.17	5,444.19	418.99	13.994		
14,000.00	7,112.07	7,075.07	7,112.07	187.42	245.27	89.90	2,729.85	-4,841.63	5,894.16	5,473.55	420.62	14.013		
14,100.00	7,111.53	7,074.53	7,111.53	190.22	245.25	89.89	2,729.85	-4,841.63	5,926.68	5,504.49	422.19	14.038		
14,200.00	7,110.99	7,073.99	7,110.99	193.01	245.23	89.89	2,729.85	-4,841.63	5,960.70	5,537.00	423.70	14.068		
14,300.00	7,110.45	7,073.45	7,110.45	195.81	245.21	89.88	2,729.85	-4,841.63	5,996.19	5,571.03	425.16	14.103		
14,400.00	7,109.91	7,072.91	7,109.91	198.61	245.19	89.87	2,729.85	-4,841.63	6,033.13	5,606.58	426.56	14.144		
14,500.00	7,109.37	7,072.37	7,109.37	201.42	245.17	89.87	2,729.85	-4,841.63	6,071.50	5,643.60	427.90	14.189		
14,600.00	7,108.82	7,071.82	7,108.82	204.22	245.15	89.86	2,729.85	-4,841.63	6,111.26	5,682.07	429.19	14.239		
14,700.00	7,108.28	7,071.28	7,108.28	207.03	245.14	89.86	2,729.85	-4,841.63	6,152.39	5,721.97	430.42	14.294		
14,800.00	7,107.74	7,070.74	7,107.74	209.83	245.12	89.85	2,729.85	-4,841.63	6,194.86	5,763.26	431.60	14.353		
14,900.00	7,107.20	7,070.20	7,107.20	212.64	245.10	89.85	2,729.85	-4,841.63	6,238.64	5,805.92	432.72	14.417		
15,000.00	7,106.66	7,069.66	7,106.66	215.45	245.08	89.84	2,729.85	-4,841.63	6,283.71	5,849.91	433.80	14.485		
15,100.00	7,106.12	7,069.12	7,106.12	218.26	245.06	89.84	2,729.85	-4,841.63	6,330.04	5,895.22	434.82	14.558		
15,200.00	7,105.58	7,068.58	7,105.58	221.07	245.04	89.83	2,729.85	-4,841.63	6,377.60	5,941.81	435.79	14.635		
15,300.00	7,105.04	7,068.04	7,105.04	223.89	245.02	89.82	2,729.85	-4,841.63	6,426.36	5,989.65	436.72	14.715		
15,400.00	7,104.50	7,067.50	7,104.50	226.70	245.00	89.82	2,729.85	-4,841.63	6,476.30	6,038.71	437.59	14.800		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)		
15,491.56	7,104.00	7,067.00	7,104.00	229.28	244.99	89.81	2,729.85	-4,841.63	6,523.04	6,084.68	438.36	14.881	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - MAURICE LEFFLER 1(AB_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	64.00	3.28	3.28	-121.51	-3,891.78	-6,348.75	7,446.93				
100.00	100.00	36.00	100.00	3.28	3.34	-121.51	-3,891.78	-6,348.75	7,446.65	7,440.03	6.62	1,124.129	
200.00	200.00	136.00	200.00	3.34	4.45	-121.51	-3,891.78	-6,348.75	7,446.65	7,438.87	7.78	956.711	
300.00	299.98	235.98	299.98	3.44	7.27	55.39	-3,891.78	-6,348.75	7,445.66	7,434.95	10.71	694.974	
400.00	399.84	335.84	399.84	3.59	10.50	55.47	-3,891.78	-6,348.75	7,442.69	7,428.59	14.09	528.097	
500.00	499.45	435.45	499.45	3.79	13.85	55.60	-3,891.78	-6,348.75	7,437.74	7,420.10	17.64	421.684	
600.00	598.70	534.70	598.70	4.03	17.24	55.80	-3,891.78	-6,348.75	7,430.84	7,409.57	21.27	349.416	
700.00	697.47	633.47	697.47	4.31	20.63	56.04	-3,891.78	-6,348.75	7,422.00	7,397.05	24.94	297.545	
800.00	795.62	731.62	795.62	4.64	24.02	56.34	-3,891.78	-6,348.75	7,411.24	7,382.59	28.65	258.662	
900.00	893.06	829.06	893.06	5.00	27.39	56.70	-3,891.78	-6,348.75	7,398.61	7,366.23	32.38	228.506	
1,000.00	989.64	925.64	989.64	5.40	30.74	57.11	-3,891.78	-6,348.75	7,384.13	7,348.02	36.11	204.474	
1,100.00	1,085.27	1,021.27	1,085.27	5.83	34.07	57.57	-3,891.78	-6,348.75	7,367.85	7,328.00	39.85	184.895	
1,200.00	1,179.82	1,115.82	1,179.82	6.29	37.35	58.09	-3,891.78	-6,348.75	7,349.82	7,306.24	43.58	168.651	
1,300.00	1,273.17	1,209.17	1,273.17	6.79	40.60	58.66	-3,891.78	-6,348.75	7,330.08	7,282.78	47.30	154.968	
1,400.00	1,365.21	1,301.21	1,365.21	7.33	43.80	59.28	-3,891.78	-6,348.75	7,308.70	7,257.69	51.01	143.288	
1,500.00	1,456.49	1,407.51	1,456.49	7.89	47.50	59.56	-3,891.78	-6,348.75	7,286.51	7,231.27	55.23	131.926	
1,600.00	1,547.76	1,483.76	1,547.76	8.46	50.16	59.82	-3,891.78	-6,348.75	7,264.47	7,206.04	58.43	124.337	
1,700.00	1,639.04	1,575.04	1,639.04	9.05	53.34	60.08	-3,891.78	-6,348.75	7,242.60	7,180.44	62.16	116.522	
1,800.00	1,730.31	1,666.31	1,730.31	9.65	56.52	60.34	-3,891.78	-6,348.75	7,220.89	7,154.99	65.90	109.575	
1,900.00	1,821.58	1,757.58	1,821.58	10.26	59.70	60.61	-3,891.78	-6,348.75	7,199.35	7,129.70	69.65	103.362	
2,000.00	1,912.85	1,848.85	1,912.85	10.87	62.88	60.87	-3,891.78	-6,348.75	7,177.97	7,104.56	73.41	97.775	
2,100.00	2,004.13	1,940.13	2,004.13	11.49	66.07	61.14	-3,891.78	-6,348.75	7,156.77	7,079.59	77.18	92.725	
2,200.00	2,095.40	2,031.40	2,095.40	12.11	69.25	61.41	-3,891.78	-6,348.75	7,135.74	7,054.78	80.96	88.141	
2,300.00	2,186.67	2,122.67	2,186.67	12.74	72.43	61.68	-3,891.78	-6,348.75	7,114.88	7,030.14	84.74	83.961	
2,400.00	2,277.95	2,213.95	2,277.95	13.38	75.61	61.95	-3,891.78	-6,348.75	7,094.19	7,005.66	88.53	80.136	
2,500.00	2,369.22	2,305.22	2,369.22	14.01	78.80	62.22	-3,891.78	-6,348.75	7,073.68	6,981.36	92.32	76.623	
2,600.00	2,460.49	2,403.51	2,460.49	14.65	82.23	62.49	-3,891.78	-6,348.75	7,053.34	6,956.99	96.36	73.199	
2,700.00	2,551.77	2,487.77	2,551.77	15.29	85.17	62.77	-3,891.78	-6,348.75	7,033.19	6,933.27	99.91	70.393	
2,800.00	2,643.04	2,579.04	2,643.04	15.93	88.35	63.05	-3,891.78	-6,348.75	7,013.21	6,909.50	103.72	67.619	
2,900.00	2,734.31	2,670.31	2,734.31	16.58	91.53	63.32	-3,891.78	-6,348.75	6,993.42	6,885.89	107.52	65.041	
3,000.00	2,825.58	2,761.58	2,825.58	17.23	94.72	63.60	-3,891.78	-6,348.75	6,973.81	6,862.47	111.33	62.639	
3,100.00	2,916.86	2,852.86	2,916.86	17.87	97.90	63.88	-3,891.78	-6,348.75	6,954.38	6,839.24	115.15	60.397	
3,200.00	3,008.13	2,944.13	3,008.13	18.52	101.09	64.16	-3,891.78	-6,348.75	6,935.14	6,816.18	118.96	58.298	
3,300.00	3,099.40	3,035.40	3,099.40	19.17	104.27	64.45	-3,891.78	-6,348.75	6,916.09	6,793.31	122.78	56.330	
3,400.00	3,190.68	3,126.68	3,190.68	19.83	107.46	64.73	-3,891.78	-6,348.75	6,897.23	6,770.63	126.60	54.481	
3,500.00	3,281.95	3,217.95	3,281.95	20.48	110.64	65.02	-3,891.78	-6,348.75	6,878.55	6,748.13	130.42	52.741	
3,600.00	3,373.22	3,309.22	3,373.22	21.13	113.83	65.31	-3,891.78	-6,348.75	6,860.08	6,725.83	134.24	51.101	
3,700.00	3,464.49	3,400.49	3,464.49	21.79	117.01	65.59	-3,891.78	-6,348.75	6,841.79	6,703.72	138.07	49.553	
3,800.00	3,555.77	3,508.23	3,555.77	22.44	120.77	65.88	-3,891.78	-6,348.75	6,823.70	6,681.23	142.47	47.894	
3,900.00	3,647.04	3,583.04	3,647.04	23.10	123.38	66.18	-3,891.78	-6,348.75	6,805.81	6,660.08	145.73	46.701	
4,000.00	3,738.31	3,674.31	3,738.31	23.75	126.57	66.47	-3,891.78	-6,348.75	6,788.12	6,638.55	149.56	45.386	
4,100.00	3,829.59	3,765.59	3,829.59	24.41	129.75	66.76	-3,891.78	-6,348.75	6,770.62	6,617.23	153.40	44.138	
4,200.00	3,920.86	3,856.86	3,920.86	25.07	132.94	67.06	-3,891.78	-6,348.75	6,753.33	6,596.10	157.23	42.951	
4,300.00	4,012.13	3,948.13	4,012.13	25.73	136.12	67.35	-3,891.78	-6,348.75	6,736.24	6,575.17	161.07	41.822	
4,400.00	4,103.41	4,039.41	4,103.41	26.38	139.31	67.65	-3,891.78	-6,348.75	6,719.36	6,554.45	164.91	40.746	
4,500.00	4,194.68	4,130.68	4,194.68	27.04	142.49	67.95	-3,891.78	-6,348.75	6,702.68	6,533.93	168.75	39.720	
4,600.00	4,285.95	4,221.95	4,285.95	27.70	145.68	68.25	-3,891.78	-6,348.75	6,686.21	6,513.62	172.59	38.740	
4,700.00	4,377.22	4,313.22	4,377.22	28.36	148.87	68.55	-3,891.78	-6,348.75	6,669.96	6,493.52	176.43	37.804	
4,800.00	4,468.50	4,404.50	4,468.50	29.02	152.05	68.85	-3,891.78	-6,348.75	6,653.91	6,473.63	180.28	36.909	
4,900.00	4,559.77	4,495.77	4,559.77	29.68	155.21	69.15	-3,891.78	-6,348.75	6,638.22	6,453.60	184.11	36.051	
5,000.00	4,651.04	4,587.04	4,651.04	30.34	158.37	69.45	-3,891.78	-6,348.75	6,623.83	6,434.55	187.94	35.236	
5,100.00	4,742.32	4,678.32	4,742.32	31.00	161.53	69.75	-3,891.78	-6,348.75	6,610.92	6,420.01	191.77	34.454	

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - MAURICE LEFFLER 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,452.00	4,516.00	31.66	153.71	69.01	-3,891.78	-6,348.75	6,599.51	6,414.99	184.52	35.766		
5,300.00	4,924.86	4,452.00	4,516.00	32.32	153.71	69.01	-3,891.78	-6,348.75	6,589.59	6,404.50	185.08	35.603		
5,400.00	5,016.13	4,452.00	4,516.00	32.99	153.71	69.01	-3,891.78	-6,348.75	6,581.17	6,395.56	185.62	35.456		
5,500.00	5,107.41	4,452.00	4,516.00	33.65	153.71	69.01	-3,891.78	-6,348.75	6,574.27	6,388.16	186.11	35.324		
5,600.00	5,198.68	4,452.00	4,516.00	34.31	153.71	69.01	-3,891.78	-6,348.75	6,568.88	6,382.31	186.57	35.209		
5,700.00	5,289.95	4,452.00	4,516.00	34.97	153.71	69.01	-3,891.78	-6,348.75	6,565.01	6,378.02	186.99	35.108		
5,800.00	5,381.23	4,452.00	4,516.00	35.63	153.71	69.01	-3,891.78	-6,348.75	6,562.66	6,375.29	187.38	35.024		
5,900.00	5,472.50	4,452.00	4,516.00	36.30	153.71	69.01	-3,891.78	-6,348.75	6,561.84	6,374.12	187.72	34.955		
5,904.10	5,476.24	4,452.00	4,516.00	36.32	153.71	69.01	-3,891.78	-6,348.75	6,561.84	6,374.10	187.74	34.952		
6,000.00	5,563.77	4,452.00	4,516.00	36.96	153.71	69.01	-3,891.78	-6,348.75	6,562.54	6,374.51	188.03	34.901		
6,100.00	5,655.05	4,452.00	4,516.00	37.62	153.71	69.01	-3,891.78	-6,348.75	6,564.76	6,376.46	188.30	34.863		
6,200.00	5,746.32	4,452.00	4,516.00	38.28	153.71	69.01	-3,891.78	-6,348.75	6,568.51	6,379.97	188.54	34.840		
6,300.00	5,837.59	4,452.00	4,516.00	38.95	153.71	69.01	-3,891.78	-6,348.75	6,573.77	6,385.04	188.73	34.832		
6,400.00	5,928.86	4,452.00	4,516.00	39.61	153.71	69.01	-3,891.78	-6,348.75	6,580.55	6,391.66	188.89	34.839		
6,500.00	6,020.14	4,452.00	4,516.00	40.27	153.71	69.01	-3,891.78	-6,348.75	6,588.84	6,399.84	189.00	34.861		
6,600.00	6,111.41	4,452.00	4,516.00	40.94	153.71	69.01	-3,891.78	-6,348.75	6,598.64	6,409.55	189.08	34.898		
6,700.00	6,202.68	4,452.00	4,516.00	41.60	153.71	69.01	-3,891.78	-6,348.75	6,609.93	6,420.80	189.13	34.949		
6,800.00	6,293.96	4,452.00	4,516.00	42.26	153.71	69.01	-3,891.78	-6,348.75	6,622.72	6,433.58	189.13	35.016		
6,900.00	6,385.23	4,452.00	4,516.00	42.93	153.71	69.01	-3,891.78	-6,348.75	6,636.98	6,447.88	189.11	35.097		
7,000.00	6,476.50	4,452.00	4,516.00	43.59	153.71	69.01	-3,891.78	-6,348.75	6,652.72	6,463.68	189.04	35.192		
7,100.00	6,567.77	4,452.00	4,516.00	44.25	153.71	69.01	-3,891.78	-6,348.75	6,669.93	6,480.99	188.94	35.302		
7,200.00	6,658.64	4,452.00	4,516.00	44.91	153.71	52.34	-3,891.78	-6,348.75	6,682.70	6,493.92	188.78	35.399		
7,300.00	6,747.14	4,452.00	4,516.00	45.52	153.71	37.21	-3,891.78	-6,348.75	6,682.12	6,493.59	188.53	35.444		
7,400.00	6,831.10	4,452.00	4,516.00	46.07	153.71	26.26	-3,891.78	-6,348.75	6,668.10	6,479.92	188.18	35.435		
7,500.00	6,908.46	4,452.00	4,516.00	46.54	153.71	18.32	-3,891.78	-6,348.75	6,640.90	6,453.14	187.75	35.370		
7,600.00	6,977.30	4,452.00	4,516.00	46.95	153.71	12.18	-3,891.78	-6,348.75	6,601.03	6,413.76	187.27	35.249		
7,700.00	7,035.93	4,452.00	4,516.00	47.30	153.71	6.93	-3,891.78	-6,348.75	6,549.26	6,362.52	186.75	35.070		
7,800.00	7,082.92	4,452.00	4,516.00	47.59	153.71	1.83	-3,891.78	-6,348.75	6,486.60	6,300.40	186.20	34.836		
7,900.00	7,117.09	4,452.00	4,516.00	47.84	153.71	-3.86	-3,891.78	-6,348.75	6,414.29	6,228.63	185.66	34.548		
8,000.00	7,137.62	4,452.00	4,516.00	48.06	153.71	-11.17	-3,891.78	-6,348.75	6,333.82	6,148.67	185.15	34.209		
8,100.00	7,143.99	4,452.00	4,516.00	48.28	153.71	-21.51	-3,891.78	-6,348.75	6,246.89	6,062.20	184.69	33.823		
8,200.00	7,143.45	4,452.00	4,516.00	48.53	153.71	-21.51	-3,891.78	-6,348.75	6,157.59	5,973.34	184.26	33.419		
8,300.00	7,142.91	4,452.00	4,516.00	48.89	153.71	-21.51	-3,891.78	-6,348.75	6,068.64	5,884.82	183.81	33.015		
8,400.00	7,142.37	4,452.00	4,516.00	49.40	153.71	-21.51	-3,891.78	-6,348.75	5,980.03	5,796.66	183.37	32.613		
8,500.00	7,141.83	4,452.00	4,516.00	50.12	153.71	-21.51	-3,891.78	-6,348.75	5,891.78	5,708.87	182.91	32.211		
8,600.00	7,141.29	4,452.00	4,516.00	51.08	153.71	-21.51	-3,891.78	-6,348.75	5,803.92	5,621.47	182.45	31.811		
8,700.00	7,140.75	4,452.00	4,516.00	52.30	153.71	-21.51	-3,891.78	-6,348.75	5,716.45	5,534.47	181.98	31.412		
8,800.00	7,140.21	4,452.00	4,516.00	53.75	153.71	-21.51	-3,891.78	-6,348.75	5,629.41	5,447.90	181.51	31.015		
8,900.00	7,139.67	4,452.00	4,516.00	55.40	153.71	-21.51	-3,891.78	-6,348.75	5,542.80	5,361.77	181.03	30.619		
9,000.00	7,139.12	4,452.00	4,516.00	57.20	153.71	-21.51	-3,891.78	-6,348.75	5,456.64	5,276.10	180.54	30.224		
9,100.00	7,138.58	4,452.00	4,516.00	59.13	153.71	-21.51	-3,891.78	-6,348.75	5,370.97	5,190.93	180.05	29.831		
9,200.00	7,138.04	4,452.00	4,516.00	61.15	153.71	-21.51	-3,891.78	-6,348.75	5,285.80	5,106.26	179.55	29.440		
9,300.00	7,137.50	4,452.00	4,516.00	63.26	153.71	-21.51	-3,891.78	-6,348.75	5,201.16	5,022.12	179.04	29.050		
9,400.00	7,136.96	4,452.00	4,516.00	65.44	153.71	-21.51	-3,891.78	-6,348.75	5,117.07	4,938.54	178.53	28.662		
9,500.00	7,136.42	4,452.00	4,516.00	67.68	153.71	-21.51	-3,891.78	-6,348.75	5,033.57	4,855.56	178.01	28.276		
9,600.00	7,135.88	4,452.00	4,516.00	69.97	153.71	-21.51	-3,891.78	-6,348.75	4,950.68	4,773.19	177.49	27.893		
9,700.00	7,135.34	4,452.00	4,516.00	72.31	153.71	-21.51	-3,891.78	-6,348.75	4,868.43	4,691.47	176.96	27.512		
9,800.00	7,134.80	4,452.00	4,516.00	74.69	153.71	-21.51	-3,891.78	-6,348.75	4,786.85	4,610.43	176.42	27.133		
9,900.00	7,134.26	4,452.00	4,516.00	77.10	153.71	-21.51	-3,891.78	-6,348.75	4,705.99	4,530.11	175.88	26.757		
10,000.00	7,133.71	4,452.00	4,516.00	79.54	153.71	-21.51	-3,891.78	-6,348.75	4,625.87	4,450.54	175.33	26.383		
10,100.00	7,133.17	4,452.00	4,516.00	82.02	153.71	-21.51	-3,891.78	-6,348.75	4,546.55	4,371.77	174.78	26.013		
10,200.00	7,132.63	4,452.00	4,516.00	84.52	153.71	-21.51	-3,891.78	-6,348.75	4,468.05	4,293.83	174.21	25.647		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - MAURICE LEFFLER 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,132.09	4,452.00	4,516.00	87.04	153.71	-21.51	-3,891.78	-6,348.75	4,390.42	4,216.78	173.64	25.284		
10,400.00	7,131.55	4,452.00	4,516.00	89.58	153.71	-21.51	-3,891.78	-6,348.75	4,313.72	4,140.66	173.06	24.926		
10,500.00	7,131.01	4,452.00	4,516.00	92.15	153.71	-21.51	-3,891.78	-6,348.75	4,237.99	4,065.52	172.48	24.572		
10,600.00	7,130.47	4,452.00	4,516.00	94.73	153.71	-21.51	-3,891.78	-6,348.75	4,163.29	3,991.41	171.88	24.222		
10,700.00	7,129.93	4,452.00	4,516.00	97.33	153.71	-21.51	-3,891.78	-6,348.75	4,089.66	3,918.39	171.27	23.879		
10,800.00	7,129.39	4,452.00	4,516.00	99.94	153.71	-21.51	-3,891.78	-6,348.75	4,017.17	3,846.53	170.65	23.541		
10,900.00	7,128.84	4,452.00	4,516.00	102.56	153.71	-21.51	-3,891.78	-6,348.75	3,945.89	3,775.88	170.01	23.210		
11,000.00	7,128.30	4,452.00	4,516.00	105.20	153.71	-21.51	-3,891.78	-6,348.75	3,875.88	3,706.52	169.36	22.885		
11,100.00	7,127.76	4,452.00	4,516.00	107.85	153.71	-21.51	-3,891.78	-6,348.75	3,807.21	3,638.51	168.70	22.568		
11,200.00	7,127.22	4,452.00	4,516.00	110.51	153.71	-21.51	-3,891.78	-6,348.75	3,739.95	3,571.93	168.01	22.260		
11,300.00	7,126.68	4,452.00	4,516.00	113.18	153.71	-21.51	-3,891.78	-6,348.75	3,674.18	3,506.87	167.31	21.961		
11,400.00	7,126.14	4,452.00	4,516.00	115.86	153.71	-21.51	-3,891.78	-6,348.75	3,609.98	3,443.40	166.58	21.671		
11,500.00	7,125.60	4,452.00	4,516.00	118.55	153.71	-21.51	-3,891.78	-6,348.75	3,547.44	3,381.60	165.83	21.392		
11,600.00	7,125.06	4,452.00	4,516.00	121.25	153.71	-21.51	-3,891.78	-6,348.75	3,486.64	3,321.58	165.06	21.124		
11,700.00	7,124.52	4,452.00	4,516.00	123.95	153.71	-21.51	-3,891.78	-6,348.75	3,427.69	3,263.43	164.26	20.867		
11,800.00	7,123.97	4,452.00	4,516.00	126.66	153.71	-21.51	-3,891.78	-6,348.75	3,370.67	3,207.24	163.43	20.624		
11,900.00	7,123.43	4,452.00	4,516.00	129.38	153.71	-21.51	-3,891.78	-6,348.75	3,315.69	3,153.11	162.58	20.394		
12,000.00	7,122.89	4,452.00	4,516.00	132.10	153.71	-21.51	-3,891.78	-6,348.75	3,262.85	3,101.14	161.70	20.178		
12,100.00	7,122.35	4,452.00	4,516.00	134.83	153.71	-21.51	-3,891.78	-6,348.75	3,212.25	3,051.45	160.80	19.976		
12,200.00	7,121.81	4,452.00	4,516.00	137.56	153.71	-21.51	-3,891.78	-6,348.75	3,164.01	3,004.12	159.88	19.790		
12,300.00	7,121.27	4,452.00	4,516.00	140.30	153.71	-21.51	-3,891.78	-6,348.75	3,118.22	2,959.27	158.95	19.618		
12,400.00	7,120.73	4,452.00	4,516.00	143.05	153.71	-21.51	-3,891.78	-6,348.75	3,075.01	2,917.00	158.01	19.461		
12,500.00	7,120.19	4,452.00	4,516.00	145.80	153.71	-21.51	-3,891.78	-6,348.75	3,034.48	2,877.41	157.07	19.319		
12,600.00	7,119.65	4,452.00	4,516.00	148.55	153.71	-21.51	-3,891.78	-6,348.75	2,996.74	2,840.58	156.15	19.191		
12,700.00	7,119.10	4,452.00	4,516.00	151.30	153.71	-21.51	-3,891.78	-6,348.75	2,961.89	2,806.61	155.28	19.075		
12,800.00	7,118.56	4,452.00	4,516.00	154.07	153.71	-21.51	-3,891.78	-6,348.75	2,930.05	2,775.58	154.46	18.969		
12,900.00	7,118.02	4,452.00	4,516.00	156.83	153.71	-21.51	-3,891.78	-6,348.75	2,901.30	2,747.56	153.74	18.872		
13,000.00	7,117.48	4,452.00	4,516.00	159.60	153.71	-21.51	-3,891.78	-6,348.75	2,875.75	2,722.61	153.14	18.778		
13,100.00	7,116.94	4,452.00	4,516.00	162.37	153.71	-21.51	-3,891.78	-6,348.75	2,853.47	2,700.77	152.71	18.686		
13,200.00	7,116.40	4,452.00	4,516.00	165.14	153.71	-21.51	-3,891.78	-6,348.75	2,834.55	2,682.07	152.48	18.590		
13,300.00	7,115.86	4,452.00	4,516.00	167.92	153.71	-21.51	-3,891.78	-6,348.75	2,819.05	2,666.55	152.50	18.486		
13,400.00	7,115.32	4,452.00	4,516.00	170.70	153.71	-21.51	-3,891.78	-6,348.75	2,807.03	2,654.22	152.81	18.369		
13,500.00	7,114.78	4,452.00	4,516.00	173.48	153.71	-21.51	-3,891.78	-6,348.75	2,798.53	2,645.08	153.45	18.237		
13,600.00	7,114.24	4,452.00	4,516.00	176.26	153.71	-21.51	-3,891.78	-6,348.75	2,793.59	2,639.14	154.46	18.087		
13,688.13	7,113.76	4,452.00	4,516.00	178.72	153.71	-21.51	-3,891.78	-6,348.75	2,792.20	2,636.56	155.65	17.939 CC		
13,700.00	7,113.69	4,452.00	4,516.00	179.05	153.71	-21.51	-3,891.78	-6,348.75	2,792.23	2,636.40	155.83	17.919 ES		
13,800.00	7,113.15	4,452.00	4,516.00	181.84	153.71	-21.51	-3,891.78	-6,348.75	2,794.44	2,636.88	157.57	17.735		
13,900.00	7,112.61	4,452.00	4,516.00	184.63	153.71	-21.51	-3,891.78	-6,348.75	2,800.23	2,640.57	159.66	17.539		
14,000.00	7,112.07	4,452.00	4,516.00	187.42	153.71	-21.51	-3,891.78	-6,348.75	2,809.57	2,647.50	162.06	17.336		
14,100.00	7,111.53	4,452.00	4,516.00	190.22	153.71	-21.51	-3,891.78	-6,348.75	2,822.42	2,657.68	164.73	17.133		
14,200.00	7,110.99	4,452.00	4,516.00	193.01	153.71	-21.51	-3,891.78	-6,348.75	2,838.74	2,671.11	167.62	16.935		
14,300.00	7,110.45	4,452.00	4,516.00	195.81	153.71	-21.51	-3,891.78	-6,348.75	2,858.46	2,687.79	170.67	16.748		
14,400.00	7,109.91	4,452.00	4,516.00	198.61	153.71	-21.51	-3,891.78	-6,348.75	2,881.52	2,707.70	173.83	16.577		
14,500.00	7,109.37	4,452.00	4,516.00	201.42	153.71	-21.51	-3,891.78	-6,348.75	2,907.84	2,730.80	177.04	16.425		
14,600.00	7,108.82	4,452.00	4,516.00	204.22	153.71	-21.51	-3,891.78	-6,348.75	2,937.33	2,757.07	180.26	16.295		
14,700.00	7,108.28	4,452.00	4,516.00	207.03	153.71	-21.51	-3,891.78	-6,348.75	2,969.90	2,786.43	183.46	16.188		
14,800.00	7,107.74	4,452.00	4,516.00	209.83	153.71	-21.51	-3,891.78	-6,348.75	3,005.44	2,818.83	186.61	16.106		
14,900.00	7,107.20	4,452.00	4,516.00	212.64	153.71	-21.51	-3,891.78	-6,348.75	3,043.85	2,854.18	189.67	16.048		
15,000.00	7,106.66	4,452.00	4,516.00	215.45	153.71	-21.51	-3,891.78	-6,348.75	3,085.03	2,892.40	192.63	16.015		
15,100.00	7,106.12	4,452.00	4,516.00	218.26	153.71	-21.51	-3,891.78	-6,348.75	3,128.86	2,933.39	195.48	16.006 SF		
15,200.00	7,105.58	4,452.00	4,516.00	221.07	153.71	-21.51	-3,891.78	-6,348.75	3,175.24	2,977.05	198.20	16.021		
15,300.00	7,105.04	4,452.00	4,516.00	223.89	153.71	-21.51	-3,891.78	-6,348.75	3,224.06	3,023.27	200.78	16.057		

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



Anticollision Report



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

Offset Design												Offset Site Error:	0.00 ft
HARVESTERS STATE 7-15 PAD - MAURICE LEFFLER 1(AB_150CC) - OH - OH												Offset Well Error:	3.28 ft
Survey Program: 100-2" Cone@2.448 Sigma													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.00	7,104.50	4,452.00	4,516.00	226.70	153.71	-21.51	-3,891.78	-6,348.75	3,275.20	3,071.96	203.24	16.115	
15,491.56	7,104.00	4,452.00	4,516.00	229.28	153.71	-21.51	-3,891.78	-6,348.75	3,323.97	3,118.61	205.36	16.186	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
0.00	0.00	1,351.96	1,280.56	3.28	7.27	-105.67	-2,472.01	-8,815.13	9,244.30					
100.00	100.00	1,377.00	1,305.28	3.28	7.39	-105.65	-2,469.13	-8,812.38	9,230.79	9,220.63	10.15	909.157		
200.00	200.00	1,433.17	1,360.77	3.34	7.66	-105.62	-2,462.56	-8,806.63	9,217.82	9,207.39	10.43	883.803		
300.00	299.98	1,472.48	1,399.61	3.44	7.85	-105.62	-2,457.67	-8,803.01	9,205.00	9,194.32	10.68	861.494		
400.00	399.84	1,660.00	1,584.91	3.59	8.77	71.95	-2,435.31	-8,785.05	9,190.84	9,179.19	11.66	788.477		
500.00	499.45	1,699.14	1,623.59	3.79	8.96	72.28	-2,431.08	-8,780.88	9,175.33	9,163.32	12.01	764.103		
600.00	598.70	1,717.30	1,641.58	4.03	9.05	72.61	-2,429.18	-8,779.18	9,159.77	9,147.45	12.31	743.912		
700.00	697.47	700.00	1,702.16	4.31	4.60	73.00	-2,422.91	-8,774.14	9,144.13	9,135.48	8.65	1,057.692		
800.00	795.62	1,974.47	1,895.99	4.64	10.32	73.68	-2,399.26	-8,756.84	9,126.53	9,112.47	14.06	649.243		
900.00	893.06	2,289.39	2,206.41	5.00	11.98	74.71	-2,357.18	-8,724.78	9,106.51	9,090.62	15.89	573.120		
1,000.00	989.64	1,000.00	2,391.28	5.40	5.28	75.58	-2,331.14	-8,703.06	9,084.71	9,074.17	10.55	861.499		
1,100.00	1,085.27	2,544.21	2,457.00	5.83	13.38	76.21	-2,322.09	-8,694.69	9,061.32	9,043.42	17.90	506.167		
1,200.00	1,179.82	2,569.40	2,481.81	6.29	13.51	76.74	-2,318.91	-8,691.67	9,037.88	9,019.40	18.47	489.257		
1,300.00	1,273.17	2,748.66	2,658.31	6.79	14.50	77.75	-2,296.28	-8,670.06	9,013.91	8,994.11	19.80	455.203		
1,400.00	1,365.21	2,792.00	2,700.94	7.33	14.74	78.38	-2,290.61	-8,664.68	8,988.97	8,968.44	20.53	437.815		
1,500.00	1,456.49	2,792.00	2,700.94	7.89	14.74	78.41	-2,290.61	-8,664.68	8,964.50	8,943.42	21.08	425.196		
1,600.00	1,547.76	2,792.00	2,700.94	8.46	14.74	78.41	-2,290.61	-8,664.68	8,941.09	8,919.44	21.65	412.908		
1,700.00	1,639.04	2,840.21	2,748.48	9.05	14.99	78.57	-2,284.73	-8,659.28	8,918.03	8,895.57	22.46	397.044		
1,800.00	1,730.31	2,887.00	2,794.81	9.65	15.23	78.72	-2,279.79	-8,654.99	8,896.51	8,873.23	23.27	382.237		
1,900.00	1,821.58	1,900.00	2,811.38	10.26	10.27	78.77	-2,277.94	-8,653.48	8,875.37	8,856.02	19.35	458.735		
2,000.00	1,912.85	3,048.74	2,954.75	10.87	16.07	79.24	-2,261.08	-8,639.98	8,854.34	8,829.09	25.25	350.678		
2,100.00	2,004.13	3,181.92	3,086.25	11.49	16.77	79.68	-2,244.24	-8,627.24	8,833.26	8,806.76	26.50	333.318		
2,200.00	2,095.40	3,238.21	3,141.82	12.11	17.07	79.86	-2,237.19	-8,621.75	8,812.28	8,784.87	27.40	321.601		
2,300.00	2,186.67	2,300.00	3,242.77	12.74	12.16	80.20	-2,224.97	-8,611.68	8,791.57	8,768.00	23.58	372.886		
2,400.00	2,277.95	3,414.06	3,315.52	13.38	18.00	80.44	-2,216.00	-8,604.34	8,771.04	8,741.53	29.51	297.210		
2,500.00	2,369.22	3,497.21	3,397.68	14.01	18.44	80.72	-2,205.97	-8,596.34	8,751.05	8,720.50	30.55	286.421		
2,600.00	2,460.49	3,543.00	3,442.90	14.65	18.69	80.87	-2,200.37	-8,591.84	8,731.27	8,699.85	31.43	277.824		
2,700.00	2,551.77	4,109.00	3,998.00	15.29	21.92	82.86	-2,115.67	-8,525.87	8,709.09	8,674.27	34.82	250.130		
2,800.00	2,643.04	4,519.21	4,396.76	15.93	24.50	84.36	-2,046.85	-8,459.64	8,682.97	8,645.47	37.50	231.567		
2,900.00	2,734.31	4,543.00	4,419.87	16.58	24.65	84.45	-2,043.02	-8,455.47	8,657.02	8,618.71	38.31	225.975		
3,000.00	2,825.58	4,583.00	4,458.81	17.23	24.90	84.59	-2,036.77	-8,448.77	8,631.98	8,592.78	39.20	220.184		
3,100.00	2,916.86	4,583.00	4,458.81	17.87	24.90	84.59	-2,036.77	-8,448.77	8,607.71	8,567.80	39.91	215.678		
3,200.00	3,008.13	4,583.00	4,458.81	18.52	24.90	84.59	-2,036.77	-8,448.77	8,584.54	8,543.92	40.62	211.347		
3,300.00	3,099.40	4,583.00	4,458.81	19.17	24.90	84.59	-2,036.77	-8,448.77	8,562.47	8,521.14	41.33	207.187		
3,400.00	3,190.68	4,634.65	4,509.32	19.83	25.21	84.78	-2,029.33	-8,441.00	8,540.69	8,498.41	42.28	202.017		
3,500.00	3,281.95	4,678.00	4,551.95	20.48	25.46	84.93	-2,023.82	-8,435.41	8,520.51	8,477.31	43.19	197.276		
3,600.00	3,373.22	4,678.00	4,551.95	21.13	25.46	84.93	-2,023.82	-8,435.41	8,500.87	8,456.96	43.90	193.624		
3,700.00	3,464.49	4,678.00	4,551.95	21.79	25.46	84.93	-2,023.82	-8,435.41	8,482.36	8,437.74	44.62	190.117		
3,800.00	3,555.77	4,726.22	4,599.53	22.44	25.72	85.10	-2,018.28	-8,429.82	8,464.68	8,419.14	45.54	185.855		
3,900.00	3,647.04	4,772.00	4,644.77	23.10	25.96	85.25	-2,013.41	-8,424.79	8,447.80	8,401.33	46.46	181.817		
4,000.00	3,738.31	4,811.26	4,683.61	23.75	26.17	85.39	-2,009.48	-8,420.66	8,431.62	8,384.27	47.35	178.077		
4,100.00	3,829.59	4,867.00	4,738.81	24.41	26.45	85.57	-2,004.18	-8,414.99	8,416.11	8,367.81	48.31	174.224		
4,200.00	3,920.86	4,896.26	4,767.81	25.07	26.60	85.67	-2,001.52	-8,412.16	8,401.31	8,352.17	49.15	170.949		
4,300.00	4,012.13	4,929.85	4,801.13	25.73	26.77	85.78	-1,998.58	-8,409.10	8,387.33	8,337.33	50.00	167.737		
4,400.00	4,103.41	4,961.00	4,832.06	26.38	26.92	85.89	-1,995.96	-8,406.44	8,374.18	8,323.33	50.85	164.686		
4,500.00	4,194.68	5,023.15	4,893.81	27.04	27.22	86.09	-1,990.98	-8,401.42	8,361.70	8,309.87	51.83	161.342		
4,600.00	4,285.95	5,056.00	4,926.46	27.70	27.37	86.20	-1,988.45	-8,398.85	8,349.85	8,297.17	52.68	158.512		
4,700.00	4,377.22	5,092.54	4,962.80	28.36	27.54	86.32	-1,985.79	-8,396.22	8,338.81	8,285.27	53.54	155.756		
4,800.00	4,468.50	5,118.20	4,988.35	29.02	27.66	86.40	-1,984.03	-8,394.60	8,328.72	8,274.36	54.35	153.239		
4,900.00	4,559.77	5,150.00	5,020.04	29.68	27.80	86.50	-1,981.98	-8,392.85	8,319.55	8,264.36	55.19	150.746		
5,000.00	4,651.04	5,205.68	5,075.55	30.34	28.04	86.68	-1,978.71	-8,390.07	8,311.13	8,255.01	56.12	148.092		
5,100.00	4,742.32	5,243.00	5,112.77	31.00	28.20	86.80	-1,976.75	-8,388.25	8,303.25	8,246.28	56.98	145.734		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	5,289.44	5,159.12	31.66	28.40	86.94	-1,974.56	-8,386.23	8,296.10	8,238.24	57.86	143.381		
5,300.00	4,924.86	5,336.00	5,205.61	32.32	28.59	87.08	-1,972.65	-8,384.69	8,289.88	8,231.14	58.74	141.118		
5,400.00	5,016.13	5,367.47	5,237.06	32.99	28.71	87.18	-1,971.56	-8,383.84	8,284.41	8,224.86	59.56	139.098		
5,500.00	5,107.41	5,430.00	5,299.54	33.65	28.95	87.37	-1,969.98	-8,382.30	8,279.56	8,219.07	60.50	136.863		
5,600.00	5,198.68	5,485.08	5,354.60	34.31	29.16	87.53	-1,968.86	-8,381.15	8,275.27	8,213.87	61.40	134.779		
5,700.00	5,289.95	5,541.17	5,410.66	34.97	29.37	87.70	-1,967.53	-8,380.21	8,271.58	8,209.27	62.31	132.758		
5,800.00	5,381.23	5,597.10	5,466.57	35.63	29.58	87.86	-1,966.03	-8,379.50	8,268.48	8,205.27	63.21	130.809		
5,900.00	5,472.50	5,652.88	5,522.32	36.30	29.79	88.03	-1,964.36	-8,379.03	8,265.98	8,201.87	64.11	128.928		
6,000.00	5,563.77	5,711.00	5,580.41	36.96	30.01	88.21	-1,962.44	-8,378.78	8,264.08	8,199.06	65.02	127.092		
6,100.00	5,655.05	5,773.21	5,642.59	37.62	30.24	88.40	-1,960.31	-8,378.73	8,262.75	8,196.80	65.95	125.285		
6,200.00	5,746.32	5,838.44	5,707.78	38.28	30.49	88.60	-1,958.15	-8,378.87	8,261.91	8,195.02	66.89	123.515		
6,300.00	5,837.59	5,903.76	5,773.06	38.95	30.73	88.79	-1,956.07	-8,379.21	8,261.57	8,193.75	67.83	121.803		
6,317.30	5,853.39	5,915.07	5,784.37	39.06	30.77	88.83	-1,955.72	-8,379.29	8,261.57	8,193.58	67.99	121.512		
6,400.00	5,928.86	5,969.16	5,838.43	39.61	30.97	88.99	-1,954.08	-8,379.75	8,261.74	8,192.97	68.76	120.146		
6,500.00	6,020.14	6,057.82	5,927.05	40.27	31.30	89.26	-1,951.49	-8,380.67	8,262.32	8,192.52	69.80	118.376		
6,600.00	6,111.41	6,161.72	6,030.91	40.94	31.68	89.57	-1,948.60	-8,381.63	8,263.02	8,192.12	70.89	116.556		
6,700.00	6,202.68	6,265.77	6,134.92	41.60	32.06	89.88	-1,945.87	-8,382.41	8,263.79	8,191.80	71.99	114.792		
6,800.00	6,293.96	6,343.26	6,212.37	42.26	32.36	90.12	-1,943.73	-8,382.97	8,264.76	8,191.78	72.98	113.247		
6,900.00	6,385.23	6,416.80	6,285.87	42.93	32.64	90.34	-1,941.24	-8,383.62	8,266.13	8,192.18	73.95	111.774		
7,000.00	6,476.50	6,489.90	6,358.90	43.59	32.91	90.56	-1,938.33	-8,384.38	8,267.92	8,193.00	74.92	110.350		
7,100.00	6,567.77	6,563.00	6,431.93	44.25	33.19	90.79	-1,934.97	-8,385.25	8,270.13	8,194.24	75.89	108.969		
7,200.00	6,658.64	6,668.14	6,536.91	44.91	33.62	74.19	-1,929.28	-8,386.44	8,266.38	8,189.35	77.03	107.318		
7,300.00	6,747.14	6,770.17	6,638.72	45.52	34.03	59.57	-1,922.73	-8,387.30	8,247.27	8,169.17	78.10	105.593		
7,400.00	6,831.10	6,865.90	6,734.19	46.07	34.42	49.66	-1,915.66	-8,387.84	8,213.23	8,134.15	79.09	103.849		
7,500.00	6,908.46	6,909.05	6,777.21	46.54	34.60	43.20	-1,912.32	-8,388.16	8,165.37	8,085.60	79.77	102.364		
7,600.00	6,977.30	6,955.03	6,823.04	46.95	34.79	39.39	-1,908.68	-8,388.60	8,104.85	8,024.46	80.39	100.816		
7,700.00	7,035.93	6,994.47	6,862.35	47.30	34.96	37.62	-1,905.52	-8,389.06	8,033.07	7,952.14	80.92	99.266		
7,800.00	7,082.92	7,026.44	6,894.21	47.59	35.09	37.86	-1,902.91	-8,389.50	7,951.66	7,870.30	81.36	97.730		
7,900.00	7,117.09	7,050.11	6,917.79	47.84	35.19	40.85	-1,900.97	-8,389.85	7,862.50	7,780.80	81.71	96.229		
8,000.00	7,137.62	7,064.85	6,932.48	48.06	35.25	49.87	-1,899.75	-8,390.09	7,767.68	7,685.73	81.95	94.784		
8,100.00	7,143.99	7,070.23	6,937.84	48.28	35.28	80.45	-1,899.30	-8,390.18	7,669.44	7,587.34	82.10	93.417		
8,200.00	7,143.45	7,070.99	6,938.60	48.53	35.28	80.49	-1,899.24	-8,390.19	7,570.29	7,488.09	82.20	92.095		
8,300.00	7,142.91	7,071.76	6,939.37	48.89	35.28	80.54	-1,899.17	-8,390.21	7,471.17	7,388.86	82.31	90.770		
8,400.00	7,142.37	7,072.53	6,940.14	49.40	35.29	80.58	-1,899.11	-8,390.22	7,372.07	7,289.65	82.42	89.442		
8,500.00	7,141.83	7,073.32	6,940.92	50.12	35.29	80.63	-1,899.04	-8,390.23	7,273.00	7,190.45	82.54	88.111		
8,600.00	7,141.29	7,074.10	6,941.71	51.08	35.29	80.67	-1,898.98	-8,390.25	7,173.95	7,091.28	82.67	86.776		
8,700.00	7,140.75	7,074.90	6,942.50	52.30	35.30	80.72	-1,898.91	-8,390.26	7,074.93	6,992.12	82.81	85.437		
8,800.00	7,140.21	7,075.70	6,943.29	53.75	35.30	80.76	-1,898.85	-8,390.27	6,975.93	6,892.98	82.95	84.095		
8,900.00	7,139.67	7,076.50	6,944.09	55.40	35.30	80.81	-1,898.78	-8,390.29	6,876.97	6,793.86	83.11	82.750		
9,000.00	7,139.12	7,077.31	6,944.90	57.20	35.31	80.86	-1,898.71	-8,390.30	6,778.04	6,694.77	83.27	81.401		
9,100.00	7,138.58	7,078.13	6,945.72	59.13	35.31	80.90	-1,898.64	-8,390.32	6,679.13	6,595.69	83.44	80.048		
9,200.00	7,138.04	7,078.95	6,946.54	61.15	35.31	80.95	-1,898.57	-8,390.33	6,580.26	6,496.64	83.62	78.692		
9,300.00	7,137.50	7,079.78	6,947.36	63.26	35.32	81.00	-1,898.51	-8,390.34	6,481.43	6,397.62	83.81	77.333		
9,400.00	7,136.96	7,080.62	6,948.20	65.44	35.32	81.05	-1,898.44	-8,390.36	6,382.63	6,298.61	84.02	75.969		
9,500.00	7,136.42	7,081.46	6,949.04	67.68	35.32	81.10	-1,898.37	-8,390.37	6,283.87	6,199.64	84.23	74.603		
9,600.00	7,135.88	7,082.31	6,949.88	69.97	35.33	81.14	-1,898.29	-8,390.39	6,185.15	6,100.69	84.46	73.232		
9,700.00	7,135.34	7,083.17	6,950.74	72.31	35.33	81.19	-1,898.22	-8,390.40	6,086.47	6,001.77	84.70	71.859		
9,800.00	7,134.80	7,084.03	6,951.60	74.69	35.33	81.24	-1,898.15	-8,390.42	5,987.83	5,902.87	84.96	70.481		
9,900.00	7,134.26	7,084.90	6,952.46	77.10	35.34	81.29	-1,898.08	-8,390.43	5,889.24	5,804.01	85.23	69.101		
10,000.00	7,133.71	7,085.78	6,953.34	79.54	35.34	81.34	-1,898.00	-8,390.45	5,790.70	5,705.18	85.51	67.716		
10,100.00	7,133.17	7,086.66	6,954.22	82.02	35.35	81.39	-1,897.93	-8,390.46	5,692.20	5,606.39	85.82	66.329		
10,200.00	7,132.63	7,087.55	6,955.11	84.52	35.35	81.45	-1,897.86	-8,390.48	5,593.77	5,507.63	86.14	64.937		

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

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,132.09	7,088.45	6,956.00	87.04	35.35	81.50	-1,897.78	-8,390.50	5,495.38	5,408.90	86.48	63.543		
10,400.00	7,131.55	7,089.36	6,956.90	89.58	35.36	81.55	-1,897.71	-8,390.51	5,397.06	5,310.22	86.85	62.145		
10,500.00	7,131.01	7,090.27	6,957.81	92.15	35.36	81.60	-1,897.63	-8,390.53	5,298.80	5,211.57	87.23	60.745		
10,600.00	7,130.47	7,091.19	6,958.73	94.73	35.36	81.66	-1,897.55	-8,390.54	5,200.61	5,112.97	87.64	59.341		
10,700.00	7,129.93	7,092.11	6,959.65	97.33	35.37	81.71	-1,897.47	-8,390.56	5,102.48	5,014.41	88.07	57.935		
10,800.00	7,129.39	7,093.05	6,960.58	99.94	35.37	81.76	-1,897.40	-8,390.58	5,004.43	4,915.90	88.53	56.525		
10,900.00	7,128.84	7,093.99	6,961.52	102.56	35.38	81.82	-1,897.32	-8,390.59	4,906.46	4,817.44	89.02	55.114		
11,000.00	7,128.30	7,094.94	6,962.47	105.20	35.38	81.87	-1,897.24	-8,390.61	4,808.57	4,719.03	89.55	53.700		
11,100.00	7,127.76	7,095.90	6,963.42	107.85	35.38	81.93	-1,897.16	-8,390.63	4,710.77	4,620.67	90.10	52.284		
11,200.00	7,127.22	7,096.87	6,964.39	110.51	35.39	81.98	-1,897.08	-8,390.65	4,613.07	4,522.37	90.69	50.866		
11,300.00	7,126.68	7,097.84	6,965.36	113.18	35.39	82.04	-1,896.99	-8,390.66	4,515.46	4,424.14	91.32	49.447		
11,400.00	7,126.14	7,098.82	6,966.33	115.86	35.40	82.10	-1,896.91	-8,390.68	4,417.96	4,325.97	91.99	48.027		
11,500.00	7,125.60	7,099.81	6,967.32	118.55	35.40	82.15	-1,896.83	-8,390.70	4,320.58	4,227.87	92.70	46.607		
11,600.00	7,125.06	7,100.81	6,968.32	121.25	35.41	82.21	-1,896.74	-8,390.72	4,223.31	4,129.85	93.47	45.186		
11,700.00	7,124.52	7,101.82	6,969.32	123.95	35.41	82.27	-1,896.66	-8,390.74	4,126.18	4,031.90	94.28	43.766		
11,800.00	7,123.97	7,102.84	6,970.33	126.66	35.41	82.33	-1,896.57	-8,390.76	4,029.19	3,934.04	95.15	42.347		
11,900.00	7,123.43	7,103.86	6,971.35	129.38	35.42	82.39	-1,896.49	-8,390.77	3,932.34	3,836.27	96.08	40.929		
12,000.00	7,122.89	7,104.89	6,972.38	132.10	35.42	82.45	-1,896.40	-8,390.79	3,835.66	3,738.59	97.07	39.514		
12,100.00	7,122.35	7,105.94	6,973.42	134.83	35.43	82.51	-1,896.31	-8,390.81	3,739.16	3,641.02	98.14	38.102		
12,200.00	7,121.81	7,106.99	6,974.47	137.56	35.43	82.57	-1,896.23	-8,390.83	3,642.84	3,543.56	99.28	36.694		
12,300.00	7,121.27	7,108.05	6,975.53	140.30	35.44	82.63	-1,896.14	-8,390.85	3,546.72	3,446.23	100.50	35.291		
12,400.00	7,120.73	7,109.12	6,976.59	143.05	35.44	82.69	-1,896.05	-8,390.87	3,450.83	3,349.02	101.81	33.895		
12,500.00	7,120.19	7,110.20	6,977.67	145.80	35.44	82.75	-1,895.95	-8,390.89	3,355.18	3,251.96	103.22	32.505		
12,600.00	7,119.65	7,111.29	6,978.75	148.55	35.45	82.81	-1,895.86	-8,390.91	3,259.78	3,155.05	104.73	31.124		
12,700.00	7,119.10	7,112.39	6,979.85	151.30	35.45	82.88	-1,895.77	-8,390.93	3,164.67	3,058.31	106.36	29.753		
12,800.00	7,118.56	7,113.49	6,980.95	154.07	35.46	82.94	-1,895.68	-8,390.96	3,069.87	2,961.75	108.12	28.393		
12,900.00	7,118.02	7,114.61	6,982.07	156.83	35.46	83.01	-1,895.58	-8,390.98	2,975.41	2,865.40	110.01	27.047		
13,000.00	7,117.48	7,115.74	6,983.19	159.60	35.47	83.07	-1,895.49	-8,391.00	2,881.32	2,769.27	112.05	25.714		
13,100.00	7,116.94	7,116.88	6,984.32	162.37	35.47	83.14	-1,895.39	-8,391.02	2,787.65	2,673.39	114.25	24.399		
13,200.00	7,116.40	7,118.03	6,985.47	165.14	35.48	83.20	-1,895.29	-8,391.04	2,694.42	2,577.79	116.64	23.101		
13,300.00	7,115.86	7,119.19	6,986.62	167.92	35.48	83.27	-1,895.20	-8,391.07	2,601.71	2,482.49	119.21	21.824		
13,400.00	7,115.32	7,120.36	6,987.79	170.70	35.49	83.34	-1,895.10	-8,391.09	2,509.54	2,387.54	122.00	20.569		
13,500.00	7,114.78	7,121.54	6,988.97	173.48	35.49	83.41	-1,895.00	-8,391.11	2,418.01	2,292.98	125.03	19.339		
13,600.00	7,114.24	7,122.73	6,990.15	176.26	35.50	83.47	-1,894.90	-8,391.13	2,327.16	2,198.85	128.31	18.137		
13,700.00	7,113.69	7,123.93	6,991.35	179.05	35.50	83.54	-1,894.79	-8,391.16	2,237.10	2,105.22	131.88	16.963		
13,800.00	7,113.15	7,125.15	6,992.56	181.84	35.51	83.61	-1,894.69	-8,391.18	2,147.92	2,012.16	135.76	15.822		
13,900.00	7,112.61	7,126.37	6,993.78	184.63	35.51	83.68	-1,894.59	-8,391.21	2,059.73	1,919.76	139.97	14.715		
14,000.00	7,112.07	7,127.61	6,995.01	187.42	35.52	83.76	-1,894.48	-8,391.23	1,972.67	1,828.11	144.56	13.646		
14,100.00	7,111.53	7,128.86	6,996.26	190.22	35.52	83.83	-1,894.38	-8,391.26	1,886.88	1,737.33	149.55	12.617		
14,200.00	7,110.99	7,130.43	6,997.82	193.01	35.53	83.92	-1,894.24	-8,391.29	1,802.57	1,647.58	154.99	11.631		
14,300.00	7,110.45	7,132.04	6,999.42	195.81	35.54	84.01	-1,894.11	-8,391.32	1,719.93	1,559.03	160.90	10.690		
14,400.00	7,109.91	7,133.64	7,001.03	198.61	35.54	84.11	-1,893.97	-8,391.35	1,639.23	1,471.92	167.31	9.797		
14,500.00	7,109.37	7,135.25	7,002.63	201.42	35.55	84.20	-1,893.84	-8,391.38	1,560.76	1,386.50	174.26	8.956		
14,600.00	7,108.82	7,136.86	7,004.23	204.22	35.56	84.29	-1,893.70	-8,391.41	1,484.88	1,303.12	181.76	8.169		
14,700.00	7,108.28	7,138.46	7,005.82	207.03	35.56	84.38	-1,893.57	-8,391.45	1,412.01	1,222.20	189.81	7.439		
14,800.00	7,107.74	7,140.06	7,007.42	209.83	35.57	84.48	-1,893.43	-8,391.48	1,342.63	1,144.26	198.38	6.768		
14,900.00	7,107.20	7,141.67	7,009.02	212.64	35.57	84.57	-1,893.30	-8,391.51	1,277.32	1,069.92	207.40	6.159		
15,000.00	7,106.66	7,143.27	7,010.61	215.45	35.58	84.66	-1,893.17	-8,391.54	1,216.73	999.97	216.76	5.613		
15,100.00	7,106.12	7,144.87	7,012.21	218.26	35.59	84.75	-1,893.03	-8,391.57	1,161.60	935.33	226.27	5.134		
15,200.00	7,105.58	7,146.47	7,013.80	221.07	35.59	84.85	-1,892.90	-8,391.60	1,112.74	877.08	235.66	4.722		
15,300.00	7,105.04	7,148.06	7,015.39	223.89	35.60	84.94	-1,892.77	-8,391.64	1,071.00	826.43	244.57	4.379		
15,400.00	7,104.50	7,149.66	7,016.98	226.70	35.61	85.03	-1,892.64	-8,391.67	1,037.26	784.67	252.60	4.106		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)		
15,491.56	7,104.00	7,151.12	7,018.44	229.28	35.61	85.12	-1,892.52	-8,391.70	1,014.06	755.29	258.77	3.919	CC, ES, SF



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 17-11(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	28.00	3.28	3.28	-80.57	1,517.93	-9,141.68	9,266.89					
100.00	100.00	72.00	100.00	3.28	3.51	-80.57	1,517.93	-9,141.68	9,266.85	9,260.05	6.80	1,363.324		
200.00	200.00	172.00	200.00	3.34	5.38	-80.57	1,517.93	-9,141.68	9,266.85	9,258.13	8.71	1,063.604		
300.00	299.98	271.98	299.98	3.44	8.41	96.30	1,517.93	-9,141.68	9,267.04	9,255.18	11.85	781.752		
400.00	399.84	371.84	399.84	3.59	11.70	96.32	1,517.93	-9,141.68	9,267.61	9,252.32	15.29	606.016		
500.00	499.45	471.45	499.45	3.79	15.07	96.36	1,517.93	-9,141.68	9,268.58	9,249.72	18.86	491.435		
600.00	598.70	570.70	598.70	4.03	18.47	96.40	1,517.93	-9,141.68	9,269.94	9,247.44	22.50	411.991		
700.00	697.47	669.47	697.47	4.31	21.87	96.46	1,517.93	-9,141.68	9,271.72	9,245.53	26.19	354.062		
800.00	795.62	767.62	795.62	4.64	25.27	96.53	1,517.93	-9,141.68	9,273.92	9,244.01	29.90	310.126		
900.00	893.06	865.06	893.06	5.00	28.64	96.62	1,517.93	-9,141.68	9,276.56	9,242.92	33.64	275.755		
1,000.00	989.64	961.64	989.64	5.40	31.99	96.71	1,517.93	-9,141.68	9,279.67	9,242.28	37.39	248.192		
1,100.00	1,085.27	1,057.27	1,085.27	5.83	35.32	96.81	1,517.93	-9,141.68	9,283.26	9,242.12	41.14	225.637		
1,200.00	1,179.82	1,151.82	1,179.82	6.29	38.60	96.91	1,517.93	-9,141.68	9,287.37	9,242.48	44.89	206.869		
1,300.00	1,273.17	1,245.17	1,273.17	6.79	41.85	97.03	1,517.93	-9,141.68	9,292.03	9,243.39	48.64	191.031		
1,400.00	1,365.21	1,337.21	1,365.21	7.33	45.06	97.14	1,517.93	-9,141.68	9,297.26	9,244.88	52.38	177.503		
1,500.00	1,456.49	1,428.49	1,456.49	7.89	48.23	97.37	1,517.93	-9,141.68	9,302.90	9,246.78	56.11	165.788		
1,600.00	1,547.76	1,519.76	1,547.76	8.46	51.41	97.59	1,517.93	-9,141.68	9,308.71	9,248.85	59.87	155.495		
1,700.00	1,639.04	1,611.04	1,639.04	9.05	54.59	97.82	1,517.93	-9,141.68	9,314.71	9,251.08	63.63	146.389		
1,800.00	1,730.31	1,702.31	1,730.31	9.65	57.78	98.05	1,517.93	-9,141.68	9,320.87	9,253.47	67.41	138.281		
1,900.00	1,821.58	1,806.42	1,821.58	10.26	61.40	98.28	1,517.93	-9,141.68	9,327.22	9,255.58	71.64	130.202		
2,000.00	1,912.85	1,884.85	1,912.85	10.87	64.14	98.50	1,517.93	-9,141.68	9,333.73	9,258.75	74.98	124.482		
2,100.00	2,004.13	1,976.13	2,004.13	11.49	67.32	98.73	1,517.93	-9,141.68	9,340.42	9,261.65	78.78	118.567		
2,200.00	2,095.40	2,067.40	2,095.40	12.11	70.50	98.96	1,517.93	-9,141.68	9,347.29	9,264.71	82.58	113.192		
2,300.00	2,186.67	2,158.67	2,186.67	12.74	73.69	99.18	1,517.93	-9,141.68	9,354.33	9,267.94	86.39	108.286		
2,400.00	2,277.95	2,249.95	2,277.95	13.38	76.87	99.41	1,517.93	-9,141.68	9,361.54	9,271.34	90.19	103.792		
2,500.00	2,369.22	2,341.22	2,369.22	14.01	80.05	99.63	1,517.93	-9,141.68	9,368.92	9,274.91	94.01	99.662		
2,600.00	2,460.49	2,432.49	2,460.49	14.65	83.24	99.86	1,517.93	-9,141.68	9,376.48	9,278.66	97.82	95.852		
2,700.00	2,551.77	2,523.77	2,551.77	15.29	86.42	100.08	1,517.93	-9,141.68	9,384.21	9,282.57	101.64	92.328		
2,800.00	2,643.04	2,615.04	2,643.04	15.93	89.61	100.31	1,517.93	-9,141.68	9,392.10	9,286.65	105.46	89.060		
2,900.00	2,734.31	2,706.31	2,734.31	16.58	92.79	100.53	1,517.93	-9,141.68	9,400.17	9,290.90	109.28	86.020		
3,000.00	2,825.58	2,802.42	2,825.58	17.23	96.14	100.76	1,517.93	-9,141.68	9,408.42	9,295.15	113.27	83.063		
3,100.00	2,916.86	2,888.86	2,916.86	17.87	99.16	100.98	1,517.93	-9,141.68	9,416.83	9,299.90	116.92	80.539		
3,200.00	3,008.13	2,980.13	3,008.13	18.52	102.34	101.20	1,517.93	-9,141.68	9,425.41	9,304.66	120.75	78.059		
3,300.00	3,099.40	3,071.40	3,099.40	19.17	105.53	101.43	1,517.93	-9,141.68	9,434.16	9,309.58	124.57	75.733		
3,400.00	3,190.68	3,162.68	3,190.68	19.83	108.71	101.65	1,517.93	-9,141.68	9,443.07	9,314.68	128.40	73.546		
3,500.00	3,281.95	3,253.95	3,281.95	20.48	111.90	101.87	1,517.93	-9,141.68	9,452.16	9,319.94	132.22	71.487		
3,600.00	3,373.22	3,345.22	3,373.22	21.13	115.08	102.09	1,517.93	-9,141.68	9,461.41	9,325.37	136.05	69.545		
3,700.00	3,464.49	3,436.49	3,464.49	21.79	118.27	102.32	1,517.93	-9,141.68	9,470.84	9,330.96	139.87	67.710		
3,800.00	3,555.77	3,527.77	3,555.77	22.44	121.45	102.54	1,517.93	-9,141.68	9,480.42	9,336.72	143.70	65.974		
3,900.00	3,647.04	3,619.04	3,647.04	23.10	124.64	102.76	1,517.93	-9,141.68	9,490.18	9,342.65	147.53	64.328		
4,000.00	3,738.31	3,710.31	3,738.31	23.75	127.82	102.98	1,517.93	-9,141.68	9,500.10	9,348.74	151.35	62.768		
4,100.00	3,829.59	3,801.59	3,829.59	24.41	131.01	103.20	1,517.93	-9,141.68	9,510.18	9,355.00	155.18	61.285		
4,200.00	3,920.86	3,907.14	3,920.86	25.07	134.69	103.42	1,517.93	-9,141.68	9,520.43	9,360.93	159.50	59.687		
4,300.00	4,012.13	3,984.13	4,012.13	25.73	137.38	103.64	1,517.93	-9,141.68	9,530.85	9,368.01	162.83	58.532		
4,400.00	4,103.41	4,075.41	4,103.41	26.38	140.57	103.86	1,517.93	-9,141.68	9,541.42	9,374.77	166.66	57.251		
4,500.00	4,194.68	4,166.68	4,194.68	27.04	143.75	104.07	1,517.93	-9,141.68	9,552.16	9,381.68	170.48	56.029		
4,600.00	4,285.95	4,257.95	4,285.95	27.70	146.94	104.29	1,517.93	-9,141.68	9,563.07	9,388.76	174.31	54.862		
4,700.00	4,377.22	4,349.22	4,377.22	28.36	150.12	104.51	1,517.93	-9,141.68	9,574.13	9,396.00	178.14	53.746		
4,800.00	4,468.50	4,440.50	4,468.50	29.02	153.31	104.73	1,517.93	-9,141.68	9,585.36	9,403.40	181.96	52.678		
4,900.00	4,559.77	4,531.77	4,559.77	29.68	156.49	104.94	1,517.93	-9,141.68	9,596.75	9,410.96	185.79	51.655		
5,000.00	4,651.04	4,623.04	4,651.04	30.34	159.68	105.16	1,517.93	-9,141.68	9,608.29	9,418.68	189.61	50.674		
5,100.00	4,742.32	4,714.32	4,742.32	31.00	162.86	105.38	1,517.93	-9,141.68	9,620.00	9,426.57	193.43	49.733		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	4,833.59	4,805.59	4,833.59	31.66	166.05	105.59	1,517.93	-9,141.68	9,631.87	9,434.61	197.26	48.829		
5,300.00	4,924.86	4,903.14	4,924.86	32.32	169.46	105.81	1,517.93	-9,141.68	9,643.89	9,442.59	201.30	47.908		
5,400.00	5,016.13	4,988.13	5,016.13	32.99	172.42	106.02	1,517.93	-9,141.68	9,656.07	9,451.17	204.90	47.125		
5,500.00	5,107.41	5,079.41	5,107.41	33.65	175.61	106.24	1,517.93	-9,141.68	9,668.41	9,459.69	208.73	46.321		
5,600.00	5,198.68	5,170.68	5,198.68	34.31	178.79	106.45	1,517.93	-9,141.68	9,680.91	9,468.36	212.55	45.547		
5,700.00	5,289.95	5,261.95	5,289.95	34.97	181.98	106.66	1,517.93	-9,141.68	9,693.56	9,477.19	216.37	44.801		
5,800.00	5,381.23	5,353.23	5,381.23	35.63	185.17	106.87	1,517.93	-9,141.68	9,706.37	9,486.18	220.19	44.082		
5,900.00	5,472.50	5,444.50	5,472.50	36.30	188.35	107.09	1,517.93	-9,141.68	9,719.33	9,495.32	224.01	43.388		
6,000.00	5,563.77	5,535.77	5,563.77	36.96	191.54	107.30	1,517.93	-9,141.68	9,732.45	9,504.62	227.83	42.719		
6,100.00	5,655.05	5,627.05	5,655.05	37.62	194.72	107.51	1,517.93	-9,141.68	9,745.72	9,514.07	231.65	42.072		
6,200.00	5,746.32	5,718.32	5,746.32	38.28	197.91	107.72	1,517.93	-9,141.68	9,759.14	9,523.68	235.46	41.446		
6,300.00	5,837.59	5,809.59	5,837.59	38.95	201.09	107.93	1,517.93	-9,141.68	9,772.72	9,533.44	239.28	40.842		
6,400.00	5,928.86	5,900.86	5,928.86	39.61	204.28	108.14	1,517.93	-9,141.68	9,786.45	9,543.35	243.10	40.257		
6,500.00	6,020.14	6,007.86	6,020.14	40.27	208.02	108.35	1,517.93	-9,141.68	9,800.33	9,552.86	247.46	39.603		
6,600.00	6,111.41	6,083.41	6,111.41	40.94	210.65	108.56	1,517.93	-9,141.68	9,814.36	9,563.63	250.73	39.143		
6,700.00	6,202.68	6,174.68	6,202.68	41.60	213.84	108.77	1,517.93	-9,141.68	9,828.54	9,573.99	254.54	38.612		
6,800.00	6,293.96	6,265.96	6,293.96	42.26	217.02	108.97	1,517.93	-9,141.68	9,842.86	9,584.50	258.36	38.098		
6,900.00	6,385.23	6,357.23	6,385.23	42.93	220.21	109.18	1,517.93	-9,141.68	9,857.34	9,595.17	262.17	37.599		
7,000.00	6,476.50	6,448.50	6,476.50	43.59	223.40	109.39	1,517.93	-9,141.68	9,871.97	9,605.98	265.99	37.115		
7,100.00	6,567.77	6,539.77	6,567.77	44.25	226.58	109.59	1,517.93	-9,141.68	9,886.74	9,616.94	269.80	36.645		
7,200.00	6,658.64	6,630.64	6,658.64	44.91	229.75	109.57	1,517.93	-9,141.68	9,895.95	9,622.35	273.59	36.170		
7,300.00	6,747.14	6,719.14	6,747.14	45.52	232.84	109.57	1,517.93	-9,141.68	9,899.99	9,613.70	277.29	35.670		
7,400.00	6,831.10	6,803.10	6,831.10	46.07	235.77	109.57	1,517.93	-9,141.68	9,871.97	9,591.20	280.78	35.160		
7,500.00	6,908.46	6,880.46	6,908.46	46.54	238.47	109.57	1,517.93	-9,141.68	9,839.43	9,555.45	283.98	34.649		
7,600.00	6,977.30	6,949.30	6,977.30	46.95	240.88	109.57	1,517.93	-9,141.68	9,794.20	9,507.36	286.83	34.146		
7,700.00	7,035.93	7,007.93	7,035.93	47.30	242.92	109.57	1,517.93	-9,141.68	9,737.43	9,448.13	289.31	33.658		
7,800.00	7,082.92	7,054.92	7,082.92	47.59	244.56	109.57	1,517.93	-9,141.68	9,670.53	9,379.18	291.35	33.192		
7,900.00	7,117.09	7,089.09	7,117.09	47.84	245.76	109.57	1,517.93	-9,141.68	9,595.13	9,302.18	292.95	32.753		
8,000.00	7,137.62	7,109.62	7,137.62	48.06	246.47	109.57	1,517.93	-9,141.68	9,513.05	9,218.98	294.07	32.350		
8,100.00	7,143.99	7,115.99	7,143.99	48.28	246.70	109.57	1,517.93	-9,141.68	9,426.26	9,131.56	294.69	31.987		
8,200.00	7,143.45	7,115.45	7,143.45	48.53	246.68	109.57	1,517.93	-9,141.68	9,337.95	9,042.86	295.09	31.644		
8,300.00	7,142.91	7,114.91	7,142.91	48.89	246.66	109.57	1,517.93	-9,141.68	9,249.88	8,954.35	295.54	31.299		
8,400.00	7,142.37	7,114.37	7,142.37	49.40	246.64	109.57	1,517.93	-9,141.68	9,162.06	8,866.03	296.03	30.950		
8,500.00	7,141.83	7,113.83	7,141.83	50.12	246.62	109.57	1,517.93	-9,141.68	9,074.49	8,777.93	296.56	30.599		
8,600.00	7,141.29	7,113.29	7,141.29	51.08	246.60	109.57	1,517.93	-9,141.68	8,987.18	8,690.03	297.15	30.245		
8,700.00	7,140.75	7,112.75	7,140.75	52.30	246.58	109.57	1,517.93	-9,141.68	8,900.13	8,602.35	297.78	29.888		
8,800.00	7,140.21	7,112.21	7,140.21	53.75	246.56	109.57	1,517.93	-9,141.68	8,813.36	8,514.89	298.47	29.529		
8,900.00	7,139.67	7,111.67	7,139.67	55.40	246.55	109.57	1,517.93	-9,141.68	8,726.88	8,427.67	299.21	29.167		
9,000.00	7,139.12	7,111.12	7,139.12	57.20	246.53	109.57	1,517.93	-9,141.68	8,640.68	8,340.69	299.99	28.803		
9,100.00	7,138.58	7,110.58	7,138.58	59.13	246.51	109.57	1,517.93	-9,141.68	8,554.79	8,253.95	300.84	28.437		
9,200.00	7,138.04	7,110.04	7,138.04	61.15	246.49	109.57	1,517.93	-9,141.68	8,469.20	8,167.47	301.73	28.069		
9,300.00	7,137.50	7,109.50	7,137.50	63.26	246.47	109.57	1,517.93	-9,141.68	8,383.94	8,081.26	302.68	27.699		
9,400.00	7,136.96	7,108.96	7,136.96	65.44	246.45	109.57	1,517.93	-9,141.68	8,299.00	7,995.31	303.69	27.328		
9,500.00	7,136.42	7,108.42	7,136.42	67.68	246.43	109.57	1,517.93	-9,141.68	8,214.40	7,909.66	304.75	26.955		
9,600.00	7,135.88	7,107.88	7,135.88	69.97	246.41	109.57	1,517.93	-9,141.68	8,130.15	7,824.29	305.86	26.581		
9,700.00	7,135.34	7,107.34	7,135.34	72.31	246.39	109.57	1,517.93	-9,141.68	8,046.27	7,739.23	307.04	26.206		
9,800.00	7,134.80	7,106.80	7,134.80	74.69	246.38	109.57	1,517.93	-9,141.68	7,962.75	7,654.48	308.27	25.831		
9,900.00	7,134.26	7,106.26	7,134.26	77.10	246.36	109.57	1,517.93	-9,141.68	7,879.62	7,570.06	309.56	25.454		
10,000.00	7,133.71	7,105.71	7,133.71	79.54	246.34	109.57	1,517.93	-9,141.68	7,796.89	7,485.98	310.90	25.078		
10,100.00	7,133.17	7,105.17	7,133.17	82.02	246.32	109.57	1,517.93	-9,141.68	7,714.56	7,402.25	312.31	24.702		
10,200.00	7,132.63	7,104.63	7,132.63	84.52	246.30	109.57	1,517.93	-9,141.68	7,632.66	7,318.88	313.77	24.325		
10,300.00	7,132.09	7,104.09	7,132.09	87.04	246.28	109.57	1,517.93	-9,141.68	7,551.19	7,235.89	315.30	23.949		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,131.55	7,103.55	7,131.55	89.58	246.26	90.42	1,517.93	-9,141.68	7,470.17	7,153.29	316.88	23.574		
10,500.00	7,131.01	7,103.01	7,131.01	92.15	246.24	90.42	1,517.93	-9,141.68	7,389.62	7,071.09	318.53	23.199		
10,600.00	7,130.47	7,102.47	7,130.47	94.73	246.22	90.41	1,517.93	-9,141.68	7,309.54	6,989.31	320.23	22.826		
10,700.00	7,129.93	7,101.93	7,129.93	97.33	246.21	90.40	1,517.93	-9,141.68	7,229.97	6,907.97	322.00	22.453		
10,800.00	7,129.39	7,101.39	7,129.39	99.94	246.19	90.40	1,517.93	-9,141.68	7,150.90	6,827.08	323.83	22.083		
10,900.00	7,128.84	7,100.84	7,128.84	102.56	246.17	90.39	1,517.93	-9,141.68	7,072.37	6,746.65	325.72	21.713		
11,000.00	7,128.30	7,100.30	7,128.30	105.20	246.15	90.38	1,517.93	-9,141.68	6,994.38	6,666.72	327.67	21.346		
11,100.00	7,127.76	7,100.24	7,127.76	107.85	246.15	90.38	1,517.93	-9,141.68	6,916.96	6,587.27	329.70	20.980		
11,200.00	7,127.22	7,100.78	7,127.22	110.51	246.17	90.37	1,517.93	-9,141.68	6,840.13	6,508.32	331.81	20.614		
11,300.00	7,126.68	7,101.32	7,126.68	113.18	246.18	90.36	1,517.93	-9,141.68	6,763.90	6,429.91	333.99	20.252		
11,400.00	7,126.14	7,101.86	7,126.14	115.86	246.20	90.35	1,517.93	-9,141.68	6,688.30	6,352.07	336.24	19.892		
11,500.00	7,125.60	7,102.40	7,125.60	118.55	246.22	90.35	1,517.93	-9,141.68	6,613.35	6,274.81	338.54	19.535		
11,600.00	7,125.06	7,102.94	7,125.06	121.25	246.24	90.34	1,517.93	-9,141.68	6,539.06	6,198.15	340.91	19.181		
11,700.00	7,124.52	7,103.48	7,124.52	123.95	246.26	90.33	1,517.93	-9,141.68	6,465.47	6,122.13	343.35	18.831		
11,800.00	7,123.97	7,104.03	7,123.97	126.66	246.28	90.33	1,517.93	-9,141.68	6,392.60	6,046.75	345.85	18.484		
11,900.00	7,123.43	7,104.57	7,123.43	129.38	246.30	90.32	1,517.93	-9,141.68	6,320.47	5,972.06	348.41	18.141		
12,000.00	7,122.89	7,105.11	7,122.89	132.10	246.32	90.31	1,517.93	-9,141.68	6,249.11	5,898.06	351.04	17.801		
12,100.00	7,122.35	7,105.65	7,122.35	134.83	246.34	90.31	1,517.93	-9,141.68	6,178.54	5,824.80	353.74	17.466		
12,200.00	7,121.81	7,106.19	7,121.81	137.56	246.35	90.30	1,517.93	-9,141.68	6,108.79	5,752.29	356.50	17.135		
12,300.00	7,121.27	7,106.73	7,121.27	140.30	246.37	90.29	1,517.93	-9,141.68	6,039.89	5,680.57	359.33	16.809		
12,400.00	7,120.73	7,107.27	7,120.73	143.05	246.39	90.28	1,517.93	-9,141.68	5,971.87	5,609.66	362.22	16.487		
12,500.00	7,120.19	7,107.81	7,120.19	145.80	246.41	90.28	1,517.93	-9,141.68	5,904.77	5,539.60	365.17	16.170		
12,600.00	7,119.65	7,108.35	7,119.65	148.55	246.43	90.27	1,517.93	-9,141.68	5,838.60	5,470.41	368.19	15.858		
12,700.00	7,119.10	7,108.90	7,119.10	151.30	246.45	90.26	1,517.93	-9,141.68	5,773.41	5,402.14	371.27	15.550		
12,800.00	7,118.56	7,109.44	7,118.56	154.07	246.47	90.26	1,517.93	-9,141.68	5,709.22	5,334.81	374.41	15.248		
12,900.00	7,118.02	7,109.98	7,118.02	156.83	246.49	90.25	1,517.93	-9,141.68	5,646.08	5,268.46	377.62	14.952		
13,000.00	7,117.48	7,089.48	7,117.48	159.60	245.77	90.24	1,517.93	-9,141.68	5,584.01	5,203.86	380.15	14.689		
13,100.00	7,116.94	7,088.94	7,116.94	162.37	245.75	90.23	1,517.93	-9,141.68	5,523.06	5,139.62	383.44	14.404		
13,200.00	7,116.40	7,088.40	7,116.40	165.14	245.73	90.23	1,517.93	-9,141.68	5,463.25	5,076.47	386.78	14.125		
13,300.00	7,115.86	7,087.86	7,115.86	167.92	245.71	90.22	1,517.93	-9,141.68	5,404.64	5,014.46	390.18	13.852		
13,400.00	7,115.32	7,087.32	7,115.32	170.70	245.70	90.21	1,517.93	-9,141.68	5,347.25	4,953.62	393.63	13.584		
13,500.00	7,114.78	7,086.78	7,114.78	173.48	245.68	90.21	1,517.93	-9,141.68	5,291.13	4,893.99	397.14	13.323		
13,600.00	7,114.24	7,086.24	7,114.24	176.26	245.66	90.20	1,517.93	-9,141.68	5,236.32	4,835.63	400.69	13.068		
13,700.00	7,113.69	7,085.69	7,113.69	179.05	245.64	90.19	1,517.93	-9,141.68	5,182.86	4,778.57	404.29	12.820		
13,800.00	7,113.15	7,085.15	7,113.15	181.84	245.62	90.19	1,517.93	-9,141.68	5,130.79	4,722.86	407.94	12.577		
13,900.00	7,112.61	7,084.61	7,112.61	184.63	245.60	90.18	1,517.93	-9,141.68	5,080.16	4,668.54	411.62	12.342		
14,000.00	7,112.07	7,084.07	7,112.07	187.42	245.58	90.17	1,517.93	-9,141.68	5,031.00	4,615.67	415.34	12.113		
14,100.00	7,111.53	7,083.53	7,111.53	190.22	245.56	90.16	1,517.93	-9,141.68	4,983.37	4,564.29	419.08	11.891		
14,200.00	7,110.99	7,082.99	7,110.99	193.01	245.54	90.16	1,517.93	-9,141.68	4,937.30	4,514.44	422.86	11.676		
14,300.00	7,110.45	7,082.45	7,110.45	195.81	245.53	90.15	1,517.93	-9,141.68	4,892.84	4,466.19	426.66	11.468		
14,400.00	7,109.91	7,081.91	7,109.91	198.61	245.51	90.14	1,517.93	-9,141.68	4,850.04	4,419.57	430.47	11.267		
14,500.00	7,109.37	7,081.37	7,109.37	201.42	245.49	90.14	1,517.93	-9,141.68	4,808.94	4,374.64	434.30	11.073		
14,600.00	7,108.82	7,080.82	7,108.82	204.22	245.47	90.13	1,517.93	-9,141.68	4,769.57	4,331.45	438.13	10.886		
14,700.00	7,108.28	7,080.28	7,108.28	207.03	245.45	90.12	1,517.93	-9,141.68	4,732.00	4,290.04	441.95	10.707		
14,800.00	7,107.74	7,079.74	7,107.74	209.83	245.43	90.12	1,517.93	-9,141.68	4,696.25	4,250.48	445.78	10.535		
14,900.00	7,107.20	7,079.20	7,107.20	212.64	245.41	90.11	1,517.93	-9,141.68	4,662.38	4,212.79	449.58	10.370		
15,000.00	7,106.66	7,078.66	7,106.66	215.45	245.39	90.10	1,517.93	-9,141.68	4,630.41	4,177.05	453.37	10.213		
15,100.00	7,106.12	7,078.12	7,106.12	218.26	245.37	90.09	1,517.93	-9,141.68	4,600.40	4,143.28	457.12	10.064		
15,200.00	7,105.58	7,077.58	7,105.58	221.07	245.36	90.09	1,517.93	-9,141.68	4,572.38	4,111.54	460.85	9.922		
15,300.00	7,105.04	7,077.04	7,105.04	223.89	245.34	90.08	1,517.93	-9,141.68	4,546.39	4,081.87	464.52	9.787		
15,400.00	7,104.50	7,076.50	7,104.50	226.70	245.32	90.07	1,517.93	-9,141.68	4,522.46	4,054.31	468.15	9.660		
15,491.56	7,104.00	7,076.00	7,104.00	229.28	245.30	90.07	1,517.93	-9,141.68	4,502.38	4,030.97	471.41	9.551	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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MONTERA 10-34 (PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	16.59	1.59	3.28	3.28	2.69	2,564.33	120.42	2,567.16					
100.00	100.00	128.20	113.20	3.28	3.30	2.68	2,564.05	120.03	2,566.89	2,560.31	6.58	389.983		
200.00	200.00	237.72	222.71	3.34	3.38	2.68	2,563.22	119.91	2,566.12	2,559.41	6.71	382.149		
225.54	225.54	263.42	248.42	3.36	3.41	179.54	2,562.99	119.91	2,566.01	2,559.25	6.76	379.336 CC, ES		
300.00	299.98	334.33	319.32	3.44	3.50	179.54	2,562.38	119.87	2,567.00	2,560.06	6.94	369.911		
400.00	399.84	423.80	408.79	3.59	3.65	179.53	2,561.91	119.32	2,571.68	2,564.43	7.24	355.075		
500.00	499.45	512.06	497.05	3.79	3.83	179.52	2,561.84	118.55	2,580.27	2,572.65	7.62	338.432		
600.00	598.70	602.36	587.34	4.03	4.05	179.50	2,562.12	117.68	2,592.72	2,584.64	8.08	320.896		
700.00	697.47	690.54	675.51	4.31	4.28	179.49	2,562.70	117.24	2,608.99	2,600.41	8.59	303.786		
800.00	795.62	811.38	796.36	4.64	4.62	179.49	2,563.26	117.28	2,628.54	2,619.30	9.24	284.398		
900.00	893.06	890.06	875.03	5.00	4.87	179.49	2,563.59	117.43	2,651.43	2,641.61	9.82	270.023		
1,000.00	989.64	1,007.97	992.94	5.40	5.25	179.50	2,563.98	117.77	2,677.66	2,667.10	10.56	253.570		
1,100.00	1,085.27	1,100.86	1,085.83	5.83	5.56	179.51	2,563.93	118.18	2,706.86	2,695.60	11.25	240.565		
1,200.00	1,179.82	1,188.70	1,173.67	6.29	5.87	179.52	2,563.99	118.85	2,739.51	2,727.55	11.95	229.194		
1,300.00	1,273.17	1,296.40	1,281.37	6.79	6.26	179.54	2,563.96	119.59	2,775.35	2,762.60	12.75	217.636		
1,400.00	1,365.21	1,380.99	1,365.96	7.33	6.57	179.54	2,563.80	119.77	2,814.26	2,800.78	13.48	208.716		
1,500.00	1,456.49	1,482.45	1,467.42	7.89	6.95	179.55	2,563.66	119.85	2,854.99	2,840.70	14.30	199.716		
1,600.00	1,547.76	1,584.33	1,569.29	8.46	7.33	179.56	2,563.06	120.12	2,895.32	2,880.20	15.12	191.496		
1,700.00	1,639.04	1,676.59	1,661.55	9.05	7.69	179.57	2,562.34	120.01	2,935.46	2,919.55	15.92	184.407		
1,800.00	1,730.31	1,773.09	1,758.05	9.65	8.06	179.56	2,561.57	119.41	2,975.57	2,958.82	16.75	177.659		
1,900.00	1,821.58	1,856.26	1,841.21	10.26	8.39	179.55	2,560.88	118.68	3,015.63	2,998.11	17.53	172.035		
2,000.00	1,912.85	1,948.21	1,933.16	10.87	8.75	179.54	2,560.44	117.92	3,056.01	3,037.66	18.36	166.467		
2,100.00	2,004.13	2,041.88	2,026.82	11.49	9.12	179.54	2,559.70	117.20	3,096.11	3,076.90	19.20	161.230		
2,200.00	2,095.40	2,121.21	2,106.14	12.11	9.44	179.52	2,559.33	116.21	3,136.49	3,116.50	19.99	156.941		
2,300.00	2,186.67	2,204.55	2,189.48	12.74	9.78	179.51	2,559.20	115.25	3,177.15	3,156.36	20.79	152.816		
2,400.00	2,277.95	2,273.84	2,258.77	13.38	10.06	179.50	2,559.41	114.64	3,218.24	3,196.72	21.53	149.492		
2,500.00	2,369.22	2,348.89	2,333.81	14.01	10.36	179.49	2,560.10	114.02	3,259.89	3,237.60	22.30	146.213		
2,600.00	2,460.49	2,425.28	2,410.19	14.65	10.67	179.48	2,561.13	112.97	3,301.92	3,278.85	23.07	143.115		
2,700.00	2,551.77	2,498.27	2,483.15	15.29	10.97	179.46	2,562.49	111.89	3,344.40	3,320.57	23.83	140.337		
2,800.00	2,643.04	2,574.30	2,559.16	15.93	11.28	179.44	2,564.27	110.74	3,387.31	3,362.71	24.61	137.651		
2,900.00	2,734.31	2,684.56	2,669.36	16.58	11.74	179.42	2,566.91	109.01	3,430.31	3,404.73	25.58	134.121		
3,000.00	2,825.58	2,770.70	2,755.48	17.23	12.09	179.40	2,568.59	107.64	3,472.87	3,446.46	26.41	131.477		
3,100.00	2,916.86	2,870.39	2,855.13	17.87	12.50	179.37	2,570.66	105.65	3,515.53	3,488.20	27.33	128.625		
3,200.00	3,008.13	2,970.58	2,955.28	18.52	12.92	179.33	2,572.35	103.34	3,557.82	3,529.57	28.26	125.917		
3,300.00	3,099.40	3,051.14	3,035.81	19.17	13.25	179.31	2,573.67	101.70	3,600.10	3,571.03	29.07	123.848		
3,400.00	3,190.68	3,136.28	3,120.92	19.83	13.61	179.29	2,575.41	100.07	3,642.72	3,612.81	29.91	121.792		
3,500.00	3,281.95	3,227.12	3,211.73	20.48	13.99	179.27	2,577.08	98.57	3,685.18	3,654.40	30.78	119.710		
3,600.00	3,373.22	3,292.34	3,276.92	21.13	14.26	179.26	2,578.59	97.54	3,728.07	3,696.57	31.51	118.321		
3,700.00	3,464.49	3,359.51	3,344.06	21.79	14.54	179.25	2,580.58	96.56	3,771.55	3,739.31	32.24	116.979		
3,800.00	3,555.77	3,467.04	3,451.53	22.44	14.99	179.24	2,584.09	95.58	3,815.38	3,782.16	33.22	114.850		
3,900.00	3,647.04	3,560.06	3,544.51	23.10	15.38	179.24	2,586.44	95.37	3,858.50	3,824.39	34.11	113.110		
4,000.00	3,738.31	4,000.00	3,659.38	23.75	17.22	179.23	2,589.09	94.58	3,901.41	3,864.91	36.50	106.876		
4,100.00	3,829.59	3,787.43	3,771.83	24.41	16.33	179.23	2,590.80	93.56	3,943.55	3,907.39	36.16	109.067		
4,200.00	3,920.86	3,895.71	3,880.09	25.07	16.78	179.21	2,592.26	91.96	3,985.58	3,948.43	37.15	107.286		
4,300.00	4,012.13	4,022.32	4,006.66	25.73	17.32	179.17	2,593.05	88.86	4,026.89	3,988.63	38.26	105.262		
4,400.00	4,103.41	4,113.18	4,097.48	26.38	17.70	179.14	2,593.25	86.32	4,067.83	4,028.69	39.15	103.917		
4,500.00	4,194.68	4,186.38	4,170.66	27.04	18.01	179.12	2,593.59	84.53	4,109.02	4,069.09	39.93	102.917		
4,600.00	4,285.95	4,270.85	4,255.11	27.70	18.36	179.10	2,594.24	82.92	4,150.50	4,109.72	40.78	101.789		
4,700.00	4,377.22	4,346.17	4,330.42	28.36	18.68	179.09	2,594.94	81.71	4,192.16	4,150.59	41.57	100.852		
4,800.00	4,468.50	4,418.56	4,402.80	29.02	18.98	179.09	2,595.96	81.03	4,234.25	4,191.91	42.34	100.008		
4,900.00	4,559.77	4,502.21	4,486.43	29.68	19.34	179.08	2,597.37	80.17	4,276.59	4,233.40	43.18	99.034		
5,000.00	4,651.04	4,568.36	4,552.56	30.34	19.61	179.08	2,598.73	79.25	4,319.26	4,275.35	43.91	98.361		

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

Offset Design HARVESTERS STATE 7-15 PAD - MONTERA 10-34 (PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	4,675.89	4,660.04	31.00	20.07	179.06	2,601.25	77.40	4,362.21	4,317.30	44.91	97.126		
5,200.00	4,833.59	4,792.05	4,776.17	31.66	20.56	179.03	2,603.14	75.11	4,404.46	4,358.49	45.97	95.810		
5,300.00	4,924.86	4,914.93	4,899.00	32.32	21.08	179.00	2,604.32	72.11	4,446.07	4,399.00	47.07	94.451		
5,400.00	5,016.13	4,984.44	4,968.48	32.99	21.37	178.98	2,604.96	70.17	4,487.67	4,439.84	47.83	93.829		
5,500.00	5,107.41	5,093.75	5,077.74	33.65	21.84	178.95	2,606.11	67.21	4,529.39	4,480.55	48.84	92.731		
5,600.00	5,198.68	5,171.09	5,155.07	34.31	22.17	178.94	2,606.76	65.78	4,570.95	4,521.30	49.65	92.063		
5,700.00	5,289.95	5,249.89	5,233.86	34.97	22.50	178.93	2,607.67	64.83	4,612.81	4,562.34	50.47	91.405		
5,800.00	5,381.23	5,335.55	5,319.50	35.63	22.86	178.93	2,608.83	63.72	4,654.84	4,603.51	51.33	90.691		
5,900.00	5,472.50	5,426.51	5,410.45	36.30	23.25	178.93	2,610.04	63.18	4,696.88	4,644.66	52.22	89.940		
6,000.00	5,563.77	5,510.49	5,494.42	36.96	23.60	178.93	2,611.20	62.93	4,738.98	4,685.91	53.07	89.293		
6,100.00	5,655.05	5,578.91	5,562.84	37.62	23.89	178.94	2,612.36	62.94	4,781.37	4,727.56	53.82	88.848		
6,200.00	5,746.32	5,687.55	5,671.46	38.28	24.35	178.96	2,614.34	63.61	4,823.92	4,769.09	54.83	87.974		
6,300.00	5,837.59	5,827.43	5,811.33	38.95	24.94	178.98	2,615.72	64.54	4,865.68	4,809.62	56.06	86.789		
6,400.00	5,928.86	5,960.16	5,944.05	39.61	25.51	178.99	2,615.99	64.44	4,906.75	4,849.51	57.24	85.719		
6,500.00	6,020.14	6,082.14	6,066.03	40.27	26.02	179.00	2,615.16	63.93	4,946.93	4,888.59	58.35	84.786		
6,600.00	6,111.41	6,180.75	6,164.63	40.94	26.44	179.00	2,614.18	63.41	4,986.86	4,927.56	59.30	84.101		
6,700.00	6,202.68	6,265.43	6,249.31	41.60	26.80	179.00	2,613.33	62.92	5,026.78	4,966.62	60.15	83.564		
6,800.00	6,293.96	6,345.69	6,329.56	42.26	27.14	179.00	2,612.70	62.19	5,066.88	5,005.89	60.98	83.086		
6,900.00	6,385.23	6,419.12	6,402.98	42.93	27.45	179.00	2,612.31	61.25	5,107.21	5,045.45	61.77	82.686		
7,000.00	6,476.50	6,479.80	6,463.66	43.59	27.71	178.99	2,612.32	60.39	5,148.02	5,085.56	62.46	82.240		
7,100.00	6,567.77	6,590.39	6,574.24	44.25	28.18	178.98	2,612.59	58.95	5,189.07	5,125.58	63.50	81.722		
7,200.00	6,658.64	6,693.70	6,677.54	44.91	28.62	158.51	2,612.37	57.56	5,229.80	5,165.31	64.48	81.105		
7,300.00	6,747.14	6,792.89	6,776.71	45.52	29.04	139.71	2,611.98	55.92	5,270.08	5,204.65	65.43	80.550		
7,400.00	6,831.10	6,877.23	6,861.04	46.07	29.40	125.73	2,611.56	54.59	5,309.20	5,242.96	66.25	80.142		
7,500.00	6,908.46	6,952.61	6,936.41	46.54	29.72	115.48	2,611.21	53.50	5,346.61	5,279.62	66.99	79.815		
7,600.00	6,977.30	7,023.47	7,007.27	46.95	30.02	107.87	2,610.89	52.90	5,381.75	5,314.05	67.70	79.496		
7,700.00	7,035.93	7,093.80	7,077.60	47.30	30.32	102.22	2,610.44	52.65	5,414.05	5,345.61	68.44	79.102		
7,800.00	7,082.92	7,209.02	7,192.80	47.59	30.81	98.50	2,608.86	52.55	5,442.92	5,373.34	69.58	78.220		
7,900.00	7,117.09	7,237.97	7,221.76	47.84	30.93	95.14	2,608.31	52.53	5,468.21	5,397.96	70.25	77.836		
8,000.00	7,137.62	7,258.75	7,242.53	48.06	31.02	92.70	2,607.91	52.51	5,489.88	5,418.86	71.02	77.302		
8,100.00	7,143.99	7,265.26	7,249.04	48.28	31.05	91.06	2,607.79	52.51	5,507.59	5,435.74	71.85	76.657		
8,200.00	7,143.45	7,264.79	7,248.57	48.53	31.05	91.05	2,607.79	52.51	5,524.20	5,451.41	72.79	75.896		
8,300.00	7,142.91	7,264.33	7,248.11	48.89	31.05	91.05	2,607.80	52.51	5,542.56	5,468.70	73.86	75.041		
8,400.00	7,142.37	7,263.86	7,247.64	49.40	31.04	91.04	2,607.81	52.51	5,562.65	5,487.60	75.05	74.115		
8,500.00	7,141.83	7,263.40	7,247.18	50.12	31.04	91.04	2,607.82	52.51	5,584.47	5,508.11	76.35	73.138		
8,600.00	7,141.29	7,262.93	7,246.71	51.08	31.04	91.03	2,607.83	52.51	5,607.98	5,530.24	77.75	72.132		
8,700.00	7,140.75	7,262.47	7,246.25	52.30	31.04	91.03	2,607.84	52.51	5,633.18	5,553.96	79.22	71.112		
8,800.00	7,140.21	7,262.00	7,245.78	53.75	31.04	91.02	2,607.85	52.51	5,660.02	5,579.27	80.75	70.093		
8,900.00	7,139.67	7,261.54	7,245.32	55.40	31.03	91.02	2,607.86	52.51	5,688.50	5,606.16	82.34	69.086		
9,000.00	7,139.12	7,261.07	7,244.85	57.20	31.03	91.01	2,607.87	52.51	5,718.59	5,634.61	83.97	68.101		
9,100.00	7,138.58	7,260.61	7,244.39	59.13	31.03	91.01	2,607.87	52.51	5,750.25	5,664.61	85.64	67.146		
9,200.00	7,138.04	7,260.14	7,243.92	61.15	31.03	91.00	2,607.88	52.51	5,783.47	5,696.15	87.33	66.226		
9,300.00	7,137.50	7,259.68	7,243.46	63.26	31.03	91.00	2,607.89	52.51	5,818.23	5,729.19	89.04	65.344		
9,400.00	7,136.96	7,259.21	7,242.99	65.44	31.02	90.99	2,607.90	52.51	5,854.48	5,763.72	90.76	64.505		
9,500.00	7,136.42	7,258.75	7,242.53	67.68	31.02	90.99	2,607.91	52.51	5,892.21	5,799.72	92.49	63.709		
9,600.00	7,135.88	7,258.28	7,242.06	69.97	31.02	90.98	2,607.92	52.51	5,931.38	5,837.17	94.21	62.957		
9,700.00	7,135.34	7,257.82	7,241.60	72.31	31.02	90.98	2,607.93	52.51	5,971.97	5,876.04	95.94	62.250		
9,800.00	7,134.80	7,257.35	7,241.13	74.69	31.02	90.97	2,607.94	52.51	6,013.96	5,916.31	97.65	61.587		
9,900.00	7,134.26	7,256.89	7,240.67	77.10	31.01	90.97	2,607.95	52.51	6,057.30	5,957.94	99.35	60.968		
10,000.00	7,133.71	7,256.42	7,240.20	79.54	31.01	90.96	2,607.95	52.52	6,101.97	6,000.93	101.04	60.392		
10,100.00	7,133.17	7,255.96	7,239.73	82.02	31.01	90.96	2,607.96	52.52	6,147.94	6,045.23	102.71	59.858		
10,200.00	7,132.63	7,255.49	7,239.27	84.52	31.01	90.95	2,607.97	52.52	6,195.19	6,090.83	104.36	59.364		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - MONTERA 10-34 (PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,132.09	7,255.03	7,238.80	87.04	31.01	90.95	2,607.98	52.52	6,243.68	6,137.69	105.99	58.909		
10,400.00	7,131.55	7,254.56	7,238.34	89.58	31.00	90.94	2,607.99	52.52	6,293.39	6,185.79	107.59	58.492		
10,500.00	7,131.01	7,254.10	7,237.87	92.15	31.00	90.94	2,608.00	52.52	6,344.28	6,235.11	109.17	58.112		
10,600.00	7,130.47	7,253.63	7,237.41	94.73	31.00	90.93	2,608.01	52.52	6,396.33	6,285.60	110.73	57.766		
10,700.00	7,129.93	7,253.17	7,236.94	97.33	31.00	90.93	2,608.02	52.52	6,449.52	6,337.26	112.26	57.453		
10,800.00	7,129.39	7,252.70	7,236.48	99.94	31.00	90.92	2,608.03	52.52	6,503.80	6,390.04	113.76	57.172		
10,900.00	7,128.84	7,252.24	7,236.01	102.56	30.99	90.92	2,608.04	52.52	6,559.16	6,443.93	115.23	56.922		
11,000.00	7,128.30	7,251.77	7,235.55	105.20	30.99	90.92	2,608.04	52.52	6,615.57	6,498.90	116.68	56.701		
11,100.00	7,127.76	7,251.31	7,235.08	107.85	30.99	90.91	2,608.05	52.52	6,673.00	6,554.91	118.09	56.507		
11,200.00	7,127.22	7,250.84	7,234.62	110.51	30.99	90.91	2,608.06	52.52	6,731.43	6,611.95	119.48	56.340		
11,300.00	7,126.68	7,250.38	7,234.15	113.18	30.99	90.90	2,608.07	52.52	6,790.82	6,669.99	120.84	56.199		
11,400.00	7,126.14	7,249.91	7,233.69	115.86	30.98	90.90	2,608.08	52.52	6,851.17	6,729.00	122.16	56.081		
11,500.00	7,125.60	7,249.45	7,233.22	118.55	30.98	90.89	2,608.09	52.52	6,912.43	6,788.96	123.46	55.987		
11,600.00	7,125.06	7,248.98	7,232.76	121.25	30.98	90.89	2,608.10	52.52	6,974.58	6,849.85	124.74	55.915		
11,700.00	7,124.52	7,248.52	7,232.29	123.95	30.98	90.88	2,608.11	52.52	7,037.61	6,911.63	125.98	55.863		
11,800.00	7,123.97	7,248.05	7,231.83	126.66	30.98	90.88	2,608.12	52.52	7,101.49	6,974.30	127.19	55.832		
11,900.00	7,123.43	7,247.59	7,231.36	129.38	30.97	90.87	2,608.12	52.52	7,166.19	7,037.81	128.38	55.820 SF		
12,000.00	7,122.89	7,247.12	7,230.90	132.10	30.97	90.87	2,608.13	52.52	7,231.70	7,102.16	129.54	55.826		
12,100.00	7,122.35	7,246.66	7,230.43	134.83	30.97	90.86	2,608.14	52.52	7,297.99	7,167.32	130.67	55.849		
12,200.00	7,121.81	7,246.19	7,229.97	137.56	30.97	90.86	2,608.15	52.52	7,365.04	7,233.26	131.78	55.890		
12,300.00	7,121.27	7,245.72	7,229.50	140.30	30.97	90.85	2,608.16	52.52	7,432.83	7,299.97	132.86	55.946		
12,400.00	7,120.73	7,245.26	7,229.04	143.05	30.96	90.85	2,608.17	52.52	7,501.34	7,367.43	133.91	56.017		
12,500.00	7,120.19	7,244.79	7,228.57	145.80	30.96	90.84	2,608.18	52.52	7,570.56	7,435.62	134.94	56.103		
12,600.00	7,119.65	7,244.33	7,228.11	148.55	30.96	90.84	2,608.19	52.52	7,640.45	7,504.51	135.94	56.203		
12,700.00	7,119.10	7,243.86	7,227.64	151.30	30.96	90.83	2,608.20	52.52	7,711.01	7,574.09	136.92	56.316		
12,800.00	7,118.56	7,243.40	7,227.18	154.07	30.96	90.83	2,608.20	52.52	7,782.21	7,644.33	137.88	56.442		
12,900.00	7,118.02	7,242.93	7,226.71	156.83	30.95	90.82	2,608.21	52.52	7,854.04	7,715.23	138.81	56.580		
13,000.00	7,117.48	7,242.47	7,226.25	159.60	30.95	90.82	2,608.22	52.52	7,926.48	7,786.76	139.72	56.730		
13,100.00	7,116.94	7,242.00	7,225.78	162.37	30.95	90.81	2,608.23	52.52	7,999.52	7,858.91	140.61	56.891		
13,200.00	7,116.40	7,241.54	7,225.32	165.14	30.95	90.81	2,608.24	52.52	8,073.13	7,931.66	141.48	57.063		
13,300.00	7,115.86	7,241.07	7,224.85	167.92	30.95	90.80	2,608.25	52.53	8,147.31	8,004.99	142.32	57.245		
13,400.00	7,115.32	7,240.61	7,224.39	170.70	30.94	90.80	2,608.26	52.53	8,222.03	8,078.88	143.15	57.437		
13,500.00	7,114.78	7,240.14	7,223.92	173.48	30.94	90.79	2,608.27	52.53	8,297.29	8,153.33	143.95	57.639		
13,600.00	7,114.24	7,239.68	7,223.46	176.26	30.94	90.79	2,608.28	52.53	8,373.06	8,228.32	144.74	57.849		
13,700.00	7,113.69	7,239.21	7,222.99	179.05	30.94	90.78	2,608.29	52.53	8,449.34	8,303.83	145.51	58.069		
13,800.00	7,113.15	7,238.75	7,222.53	181.84	30.94	90.78	2,608.29	52.53	8,526.10	8,379.85	146.25	58.296		
13,900.00	7,112.61	7,238.28	7,222.06	184.63	30.93	90.77	2,608.30	52.53	8,603.35	8,456.37	146.98	58.532		
14,000.00	7,112.07	7,237.82	7,221.60	187.42	30.93	90.77	2,608.31	52.53	8,681.06	8,533.36	147.70	58.776		
14,100.00	7,111.53	7,237.35	7,221.13	190.22	30.93	90.76	2,608.32	52.53	8,759.22	8,610.83	148.39	59.027		
14,200.00	7,110.99	7,236.89	7,220.67	193.01	30.93	90.76	2,608.33	52.53	8,837.82	8,688.75	149.07	59.286		
14,300.00	7,110.45	7,236.42	7,220.20	195.81	30.93	90.75	2,608.34	52.53	8,916.85	8,767.12	149.73	59.551		
14,400.00	7,109.91	7,235.96	7,219.74	198.61	30.92	90.75	2,608.35	52.53	8,996.30	8,845.92	150.38	59.823		
14,500.00	7,109.37	7,235.49	7,219.27	201.42	30.92	90.74	2,608.36	52.53	9,076.15	8,925.14	151.01	60.101		
14,600.00	7,108.82	7,235.03	7,218.81	204.22	30.92	90.74	2,608.37	52.53	9,156.40	9,004.77	151.63	60.386		
14,700.00	7,108.28	7,234.56	7,218.34	207.03	30.92	90.73	2,608.37	52.53	9,237.04	9,084.81	152.23	60.677		
14,800.00	7,107.74	7,234.10	7,217.88	209.83	30.92	90.73	2,608.38	52.53	9,318.05	9,165.23	152.82	60.973		
14,900.00	7,107.20	7,233.63	7,217.41	212.64	30.91	90.72	2,608.39	52.53	9,399.43	9,246.03	153.40	61.275		
15,000.00	7,106.66	7,233.17	7,216.95	215.45	30.91	90.72	2,608.40	52.53	9,481.16	9,327.20	153.96	61.582		
15,100.00	7,106.12	7,232.70	7,216.48	218.26	30.91	90.71	2,608.41	52.53	9,563.24	9,408.73	154.51	61.894		
15,200.00	7,105.58	7,232.24	7,216.02	221.07	30.91	90.71	2,608.42	52.53	9,645.66	9,490.61	155.05	62.212		
15,300.00	7,105.04	7,231.77	7,215.55	223.89	30.91	90.70	2,608.43	52.53	9,728.40	9,572.83	155.57	62.534		
15,400.00	7,104.50	7,231.31	7,215.09	226.70	30.90	90.70	2,608.44	52.53	9,811.47	9,655.39	156.08	62.861		

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



Anticollision Report



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

Offset Design	HARVESTERS STATE 7-15 PAD - MONTERA 10-34 (PR_75CC) - OH - OH											Offset Site Error:	0.00 ft
Survey Program:	100-GYRO-NS											Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	7,230.88	7,214.66	229.28	30.90	90.70	2,608.45	52.53	9,887.81	9,731.26	156.54	63.164	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - RUTT-ADAMS HEIRS 2-22 - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	58.00	3.28	3.28	-164.87	-3,859.79	-1,043.47	3,998.77				
100.00	100.00	42.00	100.00	3.28	3.36	-164.87	-3,859.79	-1,043.47	3,998.35	3,991.70	6.65	601.649	
200.00	200.00	142.00	200.00	3.34	4.59	-164.87	-3,859.79	-1,043.47	3,998.35	3,990.42	7.93	504.357	
300.00	299.98	241.98	299.98	3.44	7.46	12.01	-3,859.79	-1,043.47	3,996.64	3,985.74	10.90	366.609	
400.00	399.84	341.84	399.84	3.59	10.70	12.04	-3,859.79	-1,043.47	3,991.52	3,977.23	14.30	279.223	
500.00	499.45	441.45	499.45	3.79	14.05	12.11	-3,859.79	-1,043.47	3,983.00	3,965.15	17.85	223.188	
600.00	598.70	540.70	598.70	4.03	17.44	12.19	-3,859.79	-1,043.47	3,971.08	3,949.61	21.48	184.910	
700.00	697.47	639.47	697.47	4.31	20.84	12.31	-3,859.79	-1,043.47	3,955.79	3,930.64	25.15	157.286	
800.00	795.62	737.62	795.62	4.64	24.23	12.45	-3,859.79	-1,043.47	3,937.13	3,908.28	28.85	136.473	
900.00	893.06	835.06	893.06	5.00	27.60	12.62	-3,859.79	-1,043.47	3,915.15	3,882.59	32.56	120.248	
1,000.00	989.64	931.64	989.64	5.40	30.95	12.81	-3,859.79	-1,043.47	3,889.86	3,853.59	36.27	107.252	
1,100.00	1,085.27	1,027.27	1,085.27	5.83	34.27	13.04	-3,859.79	-1,043.47	3,861.31	3,821.34	39.97	96.607	
1,200.00	1,179.82	1,121.82	1,179.82	6.29	37.56	13.31	-3,859.79	-1,043.47	3,829.52	3,785.87	43.65	87.725	
1,300.00	1,273.17	1,215.17	1,273.17	6.79	40.81	13.61	-3,859.79	-1,043.47	3,794.55	3,747.23	47.32	80.197	
1,400.00	1,365.21	1,307.21	1,365.21	7.33	44.01	13.94	-3,859.79	-1,043.47	3,756.43	3,705.49	50.95	73.732	
1,500.00	1,456.49	1,401.51	1,456.49	7.89	47.30	14.11	-3,859.79	-1,043.47	3,716.61	3,661.94	54.67	67.987	
1,600.00	1,547.76	1,489.76	1,547.76	8.46	50.37	14.26	-3,859.79	-1,043.47	3,676.79	3,618.61	58.18	63.197	
1,700.00	1,639.04	1,581.04	1,639.04	9.05	53.55	14.42	-3,859.79	-1,043.47	3,637.01	3,575.20	61.81	58.841	
1,800.00	1,730.31	1,672.31	1,730.31	9.65	56.73	14.58	-3,859.79	-1,043.47	3,597.24	3,531.79	65.45	54.961	
1,900.00	1,821.58	1,763.58	1,821.58	10.26	59.91	14.74	-3,859.79	-1,043.47	3,557.50	3,488.40	69.10	51.484	
2,000.00	1,912.85	1,854.85	1,912.85	10.87	63.09	14.91	-3,859.79	-1,043.47	3,517.79	3,445.04	72.75	48.351	
2,100.00	2,004.13	1,946.13	2,004.13	11.49	66.28	15.09	-3,859.79	-1,043.47	3,478.10	3,401.69	76.42	45.515	
2,200.00	2,095.40	2,037.40	2,095.40	12.11	69.46	15.26	-3,859.79	-1,043.47	3,438.44	3,358.36	80.08	42.936	
2,300.00	2,186.67	2,128.67	2,186.67	12.74	72.64	15.44	-3,859.79	-1,043.47	3,398.81	3,315.06	83.76	40.580	
2,400.00	2,277.95	2,219.95	2,277.95	13.38	75.82	15.63	-3,859.79	-1,043.47	3,359.21	3,271.78	87.43	38.421	
2,500.00	2,369.22	2,311.22	2,369.22	14.01	79.01	15.81	-3,859.79	-1,043.47	3,319.64	3,228.53	91.11	36.434	
2,600.00	2,460.49	2,402.49	2,460.49	14.65	82.19	16.01	-3,859.79	-1,043.47	3,280.10	3,185.30	94.80	34.601	
2,700.00	2,551.77	2,506.23	2,551.77	15.29	85.81	16.21	-3,859.79	-1,043.47	3,240.59	3,141.67	98.92	32.760	
2,800.00	2,643.04	2,585.04	2,643.04	15.93	88.56	16.41	-3,859.79	-1,043.47	3,201.12	3,098.94	102.17	31.330	
2,900.00	2,734.31	2,676.31	2,734.31	16.58	91.74	16.62	-3,859.79	-1,043.47	3,161.68	3,055.81	105.87	29.865	
3,000.00	2,825.58	2,767.58	2,825.58	17.23	94.93	16.83	-3,859.79	-1,043.47	3,122.28	3,012.72	109.56	28.498	
3,100.00	2,916.86	2,858.86	2,916.86	17.87	98.11	17.05	-3,859.79	-1,043.47	3,082.91	2,969.65	113.26	27.220	
3,200.00	3,008.13	2,950.13	3,008.13	18.52	101.30	17.27	-3,859.79	-1,043.47	3,043.59	2,926.63	116.96	26.022	
3,300.00	3,099.40	3,041.40	3,099.40	19.17	104.48	17.50	-3,859.79	-1,043.47	3,004.31	2,883.64	120.66	24.898	
3,400.00	3,190.68	3,132.68	3,190.68	19.83	107.67	17.74	-3,859.79	-1,043.47	2,965.06	2,840.70	124.37	23.841	
3,500.00	3,281.95	3,223.95	3,281.95	20.48	110.85	17.98	-3,859.79	-1,043.47	2,925.87	2,797.79	128.08	22.845	
3,600.00	3,373.22	3,315.22	3,373.22	21.13	114.04	18.23	-3,859.79	-1,043.47	2,886.72	2,754.93	131.78	21.905	
3,700.00	3,464.49	3,406.49	3,464.49	21.79	117.22	18.48	-3,859.79	-1,043.47	2,847.61	2,712.12	135.50	21.016	
3,800.00	3,555.77	3,502.23	3,555.77	22.44	120.56	18.74	-3,859.79	-1,043.47	2,808.56	2,669.20	139.36	20.153	
3,900.00	3,647.04	3,589.04	3,647.04	23.10	123.59	19.01	-3,859.79	-1,043.47	2,769.56	2,626.63	142.92	19.378	
4,000.00	3,738.31	3,680.31	3,738.31	23.75	126.78	19.29	-3,859.79	-1,043.47	2,730.61	2,583.97	146.64	18.621	
4,100.00	3,829.59	3,771.59	3,829.59	24.41	129.96	19.57	-3,859.79	-1,043.47	2,691.72	2,541.36	150.36	17.902	
4,200.00	3,920.86	3,862.86	3,920.86	25.07	133.15	19.87	-3,859.79	-1,043.47	2,652.89	2,498.81	154.08	17.217	
4,300.00	4,012.13	3,954.13	4,012.13	25.73	136.33	20.17	-3,859.79	-1,043.47	2,614.12	2,456.32	157.81	16.565	
4,400.00	4,103.41	4,045.41	4,103.41	26.38	139.52	20.48	-3,859.79	-1,043.47	2,575.42	2,413.88	161.53	15.944	
4,500.00	4,194.68	4,136.68	4,194.68	27.04	142.70	20.80	-3,859.79	-1,043.47	2,536.78	2,371.52	165.26	15.350	
4,600.00	4,285.95	4,227.95	4,285.95	27.70	145.89	21.13	-3,859.79	-1,043.47	2,498.21	2,329.22	168.99	14.783	
4,700.00	4,377.22	4,319.22	4,377.22	28.36	149.07	21.47	-3,859.79	-1,043.47	2,459.72	2,287.00	172.72	14.241	
4,800.00	4,468.50	4,410.50	4,468.50	29.02	152.26	21.82	-3,859.79	-1,043.47	2,421.30	2,244.85	176.46	13.722	
4,900.00	4,559.77	4,501.77	4,559.77	29.68	155.45	22.18	-3,859.79	-1,043.47	2,382.97	2,202.77	180.20	13.224	
5,000.00	4,651.04	4,606.96	4,651.04	30.34	159.12	22.55	-3,859.79	-1,043.47	2,344.72	2,160.30	184.42	12.714	
5,100.00	4,742.32	4,684.32	4,742.32	31.00	161.82	22.93	-3,859.79	-1,043.47	2,306.56	2,118.88	187.68	12.290	

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - RUTT-ADAMS HEIRS 2-22 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,775.59	4,833.59	31.66	165.00	23.33	-3,859.79	-1,043.47	2,268.49	2,077.07	191.43	11.850		
5,300.00	4,924.86	4,866.86	4,924.86	32.32	168.19	23.74	-3,859.79	-1,043.47	2,230.53	2,035.35	195.18	11.428		
5,400.00	5,016.13	4,958.13	5,016.13	32.99	171.37	24.16	-3,859.79	-1,043.47	2,192.66	1,993.73	198.93	11.022		
5,500.00	5,107.41	5,049.41	5,107.41	33.65	174.56	24.60	-3,859.79	-1,043.47	2,154.91	1,952.22	202.69	10.632		
5,600.00	5,198.68	5,140.68	5,198.68	34.31	177.75	25.05	-3,859.79	-1,043.47	2,117.27	1,910.82	206.45	10.256		
5,700.00	5,289.95	5,231.95	5,289.95	34.97	180.93	25.52	-3,859.79	-1,043.47	2,079.75	1,869.54	210.21	9.894		
5,800.00	5,381.23	5,323.23	5,381.23	35.63	184.12	26.01	-3,859.79	-1,043.47	2,042.37	1,828.39	213.98	9.545		
5,900.00	5,472.50	5,414.50	5,472.50	36.30	187.30	26.51	-3,859.79	-1,043.47	2,005.11	1,787.36	217.75	9.208		
6,000.00	5,563.77	5,505.77	5,563.77	36.96	190.49	27.03	-3,859.79	-1,043.47	1,968.00	1,746.47	221.53	8.884		
6,100.00	5,655.05	5,602.96	5,655.05	37.62	193.88	27.58	-3,859.79	-1,043.47	1,931.04	1,705.52	225.52	8.563		
6,200.00	5,746.32	5,688.32	5,746.32	38.28	196.86	28.14	-3,859.79	-1,043.47	1,894.24	1,665.14	229.10	8.268		
6,300.00	5,837.59	5,779.59	5,837.59	38.95	200.05	28.72	-3,859.79	-1,043.47	1,857.61	1,624.72	232.90	7.976		
6,400.00	5,928.86	5,870.86	5,928.86	39.61	203.23	29.32	-3,859.79	-1,043.47	1,821.16	1,584.47	236.70	7.694		
6,500.00	6,020.14	5,962.14	6,020.14	40.27	206.42	29.95	-3,859.79	-1,043.47	1,784.90	1,544.40	240.50	7.422		
6,600.00	6,111.41	6,053.41	6,111.41	40.94	209.61	30.61	-3,859.79	-1,043.47	1,748.85	1,504.53	244.32	7.158		
6,700.00	6,202.68	6,144.68	6,202.68	41.60	212.79	31.29	-3,859.79	-1,043.47	1,713.01	1,464.87	248.14	6.903		
6,800.00	6,293.96	6,235.96	6,293.96	42.26	215.98	31.99	-3,859.79	-1,043.47	1,677.40	1,425.43	251.97	6.657		
6,900.00	6,385.23	6,327.23	6,385.23	42.93	219.16	32.73	-3,859.79	-1,043.47	1,642.03	1,386.22	255.81	6.419		
7,000.00	6,476.50	6,418.50	6,476.50	43.59	222.35	33.50	-3,859.79	-1,043.47	1,606.92	1,347.27	259.65	6.189		
7,100.00	6,567.77	6,509.77	6,567.77	44.25	225.54	34.30	-3,859.79	-1,043.47	1,572.09	1,308.59	263.51	5.966		
7,200.00	6,658.64	6,600.64	6,658.64	44.91	228.71	35.10	-3,859.79	-1,043.47	1,534.04	1,266.72	267.31	5.739		
7,300.00	6,747.14	6,689.14	6,747.14	45.52	231.80	-3.55	-3,859.79	-1,043.47	1,487.86	1,216.96	270.91	5.492		
7,400.00	6,831.10	6,773.10	6,831.10	46.07	234.73	-19.51	-3,859.79	-1,043.47	1,434.57	1,160.37	274.19	5.232		
7,500.00	6,908.46	6,850.46	6,908.46	46.54	237.43	-33.80	-3,859.79	-1,043.47	1,375.72	1,098.63	277.09	4.965		
7,600.00	6,977.30	6,919.30	6,977.30	46.95	239.83	-47.32	-3,859.79	-1,043.47	1,313.46	1,033.91	279.55	4.698		
7,700.00	7,035.93	6,977.93	7,035.93	47.30	241.88	-60.07	-3,859.79	-1,043.47	1,250.46	968.92	281.54	4.442		
7,800.00	7,082.92	7,024.92	7,082.92	47.59	243.52	-71.36	-3,859.79	-1,043.47	1,189.87	906.80	283.07	4.203		
7,900.00	7,117.09	7,059.09	7,117.09	47.84	244.71	-80.38	-3,859.79	-1,043.47	1,135.21	850.96	284.25	3.994		
8,000.00	7,137.62	7,079.62	7,137.62	48.06	245.43	-86.66	-3,859.79	-1,043.47	1,090.03	804.84	285.19	3.822		
8,100.00	7,143.99	7,085.99	7,143.99	48.28	245.65	-90.08	-3,859.79	-1,043.47	1,057.53	771.50	286.03	3.697		
8,200.00	7,143.45	7,085.45	7,143.45	48.53	245.63	-90.05	-3,859.79	-1,043.47	1,036.66	749.53	287.12	3.610		
8,300.00	7,142.91	7,084.91	7,142.91	48.89	245.61	-90.02	-3,859.79	-1,043.47	1,025.15	736.47	288.68	3.551		
8,368.62	7,142.54	7,084.54	7,142.54	49.23	245.60	-90.00	-3,859.79	-1,043.47	1,022.85	732.87	289.98	3.527 CC		
8,400.00	7,142.37	7,084.37	7,142.37	49.40	245.59	-89.99	-3,859.79	-1,043.47	1,023.33	732.73	290.60	3.521 ES, SF		
8,500.00	7,141.83	7,083.83	7,141.83	50.12	245.57	-89.96	-3,859.79	-1,043.47	1,031.25	738.50	292.75	3.523		
8,600.00	7,141.29	7,083.29	7,141.29	51.08	245.55	-89.93	-3,859.79	-1,043.47	1,048.69	753.73	294.96	3.555		
8,700.00	7,140.75	7,082.75	7,140.75	52.30	245.54	-89.90	-3,859.79	-1,043.47	1,075.19	778.07	297.12	3.619		
8,800.00	7,140.21	7,082.21	7,140.21	53.75	245.52	-89.87	-3,859.79	-1,043.47	1,110.09	810.98	299.11	3.711		
8,900.00	7,139.67	7,081.67	7,139.67	55.40	245.50	-89.84	-3,859.79	-1,043.47	1,152.64	851.75	300.90	3.831		
9,000.00	7,139.12	7,081.12	7,139.12	57.20	245.48	-89.81	-3,859.79	-1,043.47	1,202.02	899.58	302.44	3.974		
9,100.00	7,138.58	7,080.58	7,138.58	59.13	245.46	-89.78	-3,859.79	-1,043.47	1,257.43	953.68	303.75	4.140		
9,200.00	7,138.04	7,080.04	7,138.04	61.15	245.44	-89.75	-3,859.79	-1,043.47	1,318.10	1,013.27	304.83	4.324		
9,300.00	7,137.50	7,079.50	7,137.50	63.26	245.42	-89.72	-3,859.79	-1,043.47	1,383.35	1,077.63	305.73	4.525		
9,400.00	7,136.96	7,078.96	7,136.96	65.44	245.40	-89.69	-3,859.79	-1,043.47	1,452.56	1,146.11	306.45	4.740		
9,500.00	7,136.42	7,078.42	7,136.42	67.68	245.38	-89.66	-3,859.79	-1,043.47	1,525.19	1,218.15	307.04	4.967		
9,600.00	7,135.88	7,077.88	7,135.88	69.97	245.37	-89.63	-3,859.79	-1,043.47	1,600.77	1,293.27	307.50	5.206		
9,700.00	7,135.34	7,077.34	7,135.34	72.31	245.35	-89.60	-3,859.79	-1,043.47	1,678.91	1,371.04	307.87	5.453		
9,800.00	7,134.80	7,076.80	7,134.80	74.69	245.33	-89.57	-3,859.79	-1,043.47	1,759.27	1,451.10	308.17	5.709		
9,900.00	7,134.26	7,076.26	7,134.26	77.10	245.31	-89.54	-3,859.79	-1,043.47	1,841.54	1,533.15	308.39	5.971		
10,000.00	7,133.71	7,075.71	7,133.71	79.54	245.29	-89.51	-3,859.79	-1,043.47	1,925.50	1,616.93	308.57	6.240		
10,100.00	7,133.17	7,075.17	7,133.17	82.02	245.27	-89.48	-3,859.79	-1,043.47	2,010.92	1,702.22	308.70	6.514		
10,200.00	7,132.63	7,074.63	7,132.63	84.52	245.25	-89.44	-3,859.79	-1,043.47	2,097.64	1,788.84	308.80	6.793		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,132.09	7,074.09	7,132.09	87.04	245.23	-89.41	-3,859.79	-1,043.47	2,185.49	1,876.62	308.87	7.076		
10,400.00	7,131.55	7,073.55	7,131.55	89.58	245.21	-89.38	-3,859.79	-1,043.47	2,274.34	1,965.42	308.92	7.362		
10,500.00	7,131.01	7,073.01	7,131.01	92.15	245.20	-89.35	-3,859.79	-1,043.47	2,364.08	2,055.13	308.95	7.652		
10,600.00	7,130.47	7,072.47	7,130.47	94.73	245.18	-89.32	-3,859.79	-1,043.47	2,454.62	2,145.65	308.97	7.945		
10,700.00	7,129.93	7,071.93	7,129.93	97.33	245.16	-89.29	-3,859.79	-1,043.47	2,545.86	2,236.89	308.97	8.240		
10,800.00	7,129.39	7,071.39	7,129.39	99.94	245.14	-89.26	-3,859.79	-1,043.47	2,637.74	2,328.77	308.97	8.537		
10,900.00	7,128.84	7,070.84	7,128.84	102.56	245.12	-89.23	-3,859.79	-1,043.47	2,730.19	2,421.23	308.96	8.837		
11,000.00	7,128.30	7,070.30	7,128.30	105.20	245.10	-89.20	-3,859.79	-1,043.47	2,823.15	2,514.21	308.94	9.138		
11,100.00	7,127.76	7,069.76	7,127.76	107.85	245.08	-89.17	-3,859.79	-1,043.47	2,916.58	2,607.66	308.92	9.441		
11,200.00	7,127.22	7,069.22	7,127.22	110.51	245.06	-89.14	-3,859.79	-1,043.47	3,010.43	2,701.54	308.90	9.746		
11,300.00	7,126.68	7,068.68	7,126.68	113.18	245.04	-89.11	-3,859.79	-1,043.47	3,104.67	2,795.80	308.87	10.052		
11,400.00	7,126.14	7,068.14	7,126.14	115.86	245.03	-89.08	-3,859.79	-1,043.47	3,199.25	2,890.41	308.84	10.359		
11,500.00	7,125.60	7,067.60	7,125.60	118.55	245.01	-89.05	-3,859.79	-1,043.47	3,294.16	2,985.35	308.81	10.667		
11,600.00	7,125.06	7,067.06	7,125.06	121.25	244.99	-89.02	-3,859.79	-1,043.47	3,389.36	3,080.58	308.78	10.977		
11,700.00	7,124.52	7,066.52	7,124.52	123.95	244.97	-88.99	-3,859.79	-1,043.47	3,484.82	3,176.07	308.75	11.287		
11,800.00	7,123.97	7,065.97	7,123.97	126.66	244.95	-88.96	-3,859.79	-1,043.47	3,580.54	3,271.82	308.72	11.598		
11,900.00	7,123.43	7,065.43	7,123.43	129.38	244.93	-88.93	-3,859.79	-1,043.47	3,676.48	3,367.79	308.69	11.910		
12,000.00	7,122.89	7,064.89	7,122.89	132.10	244.91	-88.90	-3,859.79	-1,043.47	3,772.63	3,463.98	308.66	12.223		
12,100.00	7,122.35	7,064.35	7,122.35	134.83	244.89	-88.87	-3,859.79	-1,043.47	3,868.98	3,560.35	308.63	12.536		
12,200.00	7,121.81	7,063.81	7,121.81	137.56	244.87	-88.84	-3,859.79	-1,043.47	3,965.51	3,656.91	308.60	12.850		
12,300.00	7,121.27	7,063.27	7,121.27	140.30	244.86	-88.81	-3,859.79	-1,043.47	4,062.21	3,753.64	308.57	13.165		
12,400.00	7,120.73	7,062.73	7,120.73	143.05	244.84	-88.78	-3,859.79	-1,043.47	4,159.06	3,850.52	308.54	13.480		
12,500.00	7,120.19	7,062.19	7,120.19	145.80	244.82	-88.75	-3,859.79	-1,043.47	4,256.06	3,947.54	308.52	13.795		
12,600.00	7,119.65	7,061.65	7,119.65	148.55	244.80	-88.72	-3,859.79	-1,043.47	4,353.19	4,044.70	308.49	14.111		
12,700.00	7,119.10	7,061.10	7,119.10	151.30	244.78	-88.69	-3,859.79	-1,043.47	4,450.45	4,141.99	308.47	14.428		
12,800.00	7,118.56	7,060.56	7,118.56	154.07	244.76	-88.66	-3,859.79	-1,043.47	4,547.83	4,239.39	308.44	14.744		
12,900.00	7,118.02	7,060.02	7,118.02	156.83	244.74	-88.63	-3,859.79	-1,043.47	4,645.32	4,336.90	308.42	15.062		
13,000.00	7,117.48	7,059.48	7,117.48	159.60	244.72	-88.60	-3,859.79	-1,043.47	4,742.92	4,434.52	308.40	15.379		
13,100.00	7,116.94	7,058.94	7,116.94	162.37	244.70	-88.57	-3,859.79	-1,043.47	4,840.61	4,532.23	308.38	15.697		
13,200.00	7,116.40	7,058.40	7,116.40	165.14	244.69	-88.54	-3,859.79	-1,043.47	4,938.40	4,630.04	308.36	16.015		
13,300.00	7,115.86	7,057.86	7,115.86	167.92	244.67	-88.51	-3,859.79	-1,043.47	5,036.27	4,727.93	308.34	16.333		
13,400.00	7,115.32	7,057.32	7,115.32	170.70	244.65	-88.48	-3,859.79	-1,043.47	5,134.23	4,825.90	308.33	16.652		
13,500.00	7,114.78	7,056.78	7,114.78	173.48	244.63	-88.45	-3,859.79	-1,043.47	5,232.26	4,923.94	308.31	16.971		
13,600.00	7,114.24	7,056.24	7,114.24	176.26	244.61	-88.41	-3,859.79	-1,043.47	5,330.36	5,022.06	308.30	17.290		
13,700.00	7,113.69	7,055.69	7,113.69	179.05	244.59	-88.38	-3,859.79	-1,043.47	5,428.54	5,120.25	308.29	17.609		
13,800.00	7,113.15	7,055.15	7,113.15	181.84	244.57	-88.35	-3,859.79	-1,043.47	5,526.78	5,218.50	308.28	17.928		
13,900.00	7,112.61	7,054.61	7,112.61	184.63	244.55	-88.32	-3,859.79	-1,043.47	5,625.08	5,316.81	308.27	18.247		
14,000.00	7,112.07	7,054.07	7,112.07	187.42	244.53	-88.29	-3,859.79	-1,043.47	5,723.44	5,415.18	308.26	18.567		
14,100.00	7,111.53	7,053.53	7,111.53	190.22	244.52	-88.26	-3,859.79	-1,043.47	5,821.86	5,513.61	308.25	18.887		
14,200.00	7,110.99	7,052.99	7,110.99	193.01	244.50	-88.23	-3,859.79	-1,043.47	5,920.32	5,612.08	308.24	19.207		
14,300.00	7,110.45	7,052.45	7,110.45	195.81	244.48	-88.20	-3,859.79	-1,043.47	6,018.84	5,710.61	308.24	19.527		
14,400.00	7,109.91	7,051.91	7,109.91	198.61	244.46	-88.17	-3,859.79	-1,043.47	6,117.41	5,809.18	308.23	19.847		
14,500.00	7,109.37	7,051.37	7,109.37	201.42	244.44	-88.14	-3,859.79	-1,043.47	6,216.02	5,907.79	308.23	20.167		
14,600.00	7,108.82	7,050.82	7,108.82	204.22	244.42	-88.11	-3,859.79	-1,043.47	6,314.68	6,006.45	308.23	20.487		
14,700.00	7,108.28	7,050.28	7,108.28	207.03	244.40	-88.08	-3,859.79	-1,043.47	6,413.38	6,105.15	308.23	20.807		
14,800.00	7,107.74	7,049.74	7,107.74	209.83	244.38	-88.05	-3,859.79	-1,043.47	6,512.12	6,203.89	308.23	21.128		
14,900.00	7,107.20	7,049.20	7,107.20	212.64	244.36	-88.02	-3,859.79	-1,043.47	6,610.89	6,302.67	308.23	21.448		
15,000.00	7,106.66	7,048.66	7,106.66	215.45	244.35	-87.99	-3,859.79	-1,043.47	6,709.71	6,401.48	308.23	21.768		
15,100.00	7,106.12	7,048.12	7,106.12	218.26	244.33	-87.96	-3,859.79	-1,043.47	6,808.55	6,500.32	308.23	22.089		
15,200.00	7,105.58	7,047.58	7,105.58	221.07	244.31	-87.93	-3,859.79	-1,043.47	6,907.43	6,599.20	308.24	22.409		
15,300.00	7,105.04	7,047.04	7,105.04	223.89	244.29	-87.90	-3,859.79	-1,043.47	7,006.34	6,698.10	308.24	22.730		
15,400.00	7,104.50	7,046.50	7,104.50	226.70	244.27	-87.87	-3,859.79	-1,043.47	7,105.29	6,797.04	308.25	23.051		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)		
15,491.56	7,104.00	7,046.00	7,104.00	229.28	244.25	-87.84	-3,859.79	-1,043.47	7,195.91	6,887.65	308.25	23.344	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	3.00	0.00	3.28	3.28	-37.14	1,530.84	-1,159.50	1,920.39					
100.00	100.00	103.00	100.00	3.28	3.77	-37.14	1,530.84	-1,159.50	1,920.39	1,913.34	7.05	272.375		
200.00	200.00	203.00	200.00	3.34	6.27	-37.14	1,530.84	-1,159.50	1,920.39	1,910.79	9.60	199.937 CC		
300.00	299.98	303.02	299.98	3.44	9.42	139.74	1,530.84	-1,159.50	1,921.72	1,908.86	12.86	149.411 ES		
400.00	399.84	403.16	399.84	3.59	12.76	139.79	1,530.84	-1,159.50	1,925.72	1,909.37	16.35	117.793		
500.00	499.45	503.55	499.45	3.79	16.17	139.87	1,530.84	-1,159.50	1,932.39	1,912.43	19.96	96.816		
600.00	598.70	604.30	598.70	4.03	19.63	139.98	1,530.84	-1,159.50	1,941.75	1,918.09	23.66	82.072		
700.00	697.47	705.53	697.47	4.31	23.12	140.12	1,530.84	-1,159.50	1,953.80	1,926.37	27.43	71.224		
800.00	795.62	807.38	795.62	4.64	26.64	140.28	1,530.84	-1,159.50	1,968.57	1,937.30	31.27	62.952		
900.00	893.06	909.94	893.06	5.00	30.20	140.47	1,530.84	-1,159.50	1,986.08	1,950.91	35.17	56.466		
1,000.00	989.64	986.64	989.64	5.40	32.86	140.67	1,530.84	-1,159.50	2,006.35	1,968.14	38.21	52.510		
1,100.00	1,085.27	1,082.27	1,085.27	5.83	36.19	140.89	1,530.84	-1,159.50	2,029.39	1,987.46	41.93	48.400		
1,200.00	1,179.82	1,176.82	1,179.82	6.29	39.47	141.11	1,530.84	-1,159.50	2,055.24	2,009.61	45.64	45.034		
1,300.00	1,273.17	1,270.17	1,273.17	6.79	42.72	141.34	1,530.84	-1,159.50	2,083.91	2,034.59	49.33	42.247		
1,400.00	1,365.21	1,362.21	1,365.21	7.33	45.93	141.57	1,530.84	-1,159.50	2,115.42	2,062.43	52.99	39.920		
1,500.00	1,456.49	1,453.49	1,456.49	7.89	49.11	142.20	1,530.84	-1,159.50	2,148.63	2,091.99	56.64	37.934		
1,600.00	1,547.76	1,544.76	1,547.76	8.46	52.29	142.84	1,530.84	-1,159.50	2,182.11	2,121.81	60.30	36.190		
1,700.00	1,639.04	1,636.04	1,639.04	9.05	55.47	143.46	1,530.84	-1,159.50	2,215.83	2,151.87	63.96	34.643		
1,800.00	1,730.31	1,727.31	1,730.31	9.65	58.65	144.06	1,530.84	-1,159.50	2,249.79	2,182.15	67.63	33.264		
1,900.00	1,821.58	1,818.58	1,821.58	10.26	61.83	144.64	1,530.84	-1,159.50	2,283.97	2,212.66	71.31	32.028		
2,000.00	1,912.85	1,909.85	1,912.85	10.87	65.01	145.21	1,530.84	-1,159.50	2,318.37	2,243.38	74.99	30.914		
2,100.00	2,004.13	2,001.13	2,004.13	11.49	68.19	145.77	1,530.84	-1,159.50	2,352.98	2,274.30	78.68	29.906		
2,200.00	2,095.40	2,107.60	2,095.40	12.11	71.91	146.30	1,530.84	-1,159.50	2,387.78	2,304.88	82.90	28.803		
2,300.00	2,186.67	2,183.67	2,186.67	12.74	74.56	146.83	1,530.84	-1,159.50	2,422.78	2,336.72	86.06	28.152		
2,400.00	2,277.95	2,274.95	2,277.95	13.38	77.74	147.33	1,530.84	-1,159.50	2,457.95	2,368.20	89.75	27.385		
2,500.00	2,369.22	2,366.22	2,369.22	14.01	80.93	147.83	1,530.84	-1,159.50	2,493.30	2,399.85	93.45	26.681		
2,600.00	2,460.49	2,457.49	2,460.49	14.65	84.11	148.31	1,530.84	-1,159.50	2,528.81	2,431.67	97.15	26.031		
2,700.00	2,551.77	2,548.77	2,551.77	15.29	87.29	148.78	1,530.84	-1,159.50	2,564.49	2,463.64	100.84	25.430		
2,800.00	2,643.04	2,640.04	2,643.04	15.93	90.48	149.23	1,530.84	-1,159.50	2,600.31	2,495.77	104.54	24.873		
2,900.00	2,734.31	2,731.31	2,734.31	16.58	93.66	149.68	1,530.84	-1,159.50	2,636.28	2,528.04	108.24	24.356		
3,000.00	2,825.58	2,822.58	2,825.58	17.23	96.85	150.11	1,530.84	-1,159.50	2,672.39	2,560.45	111.94	23.873		
3,100.00	2,916.86	2,913.86	2,916.86	17.87	100.03	150.53	1,530.84	-1,159.50	2,708.64	2,593.00	115.64	23.423		
3,200.00	3,008.13	3,005.13	3,008.13	18.52	103.22	150.94	1,530.84	-1,159.50	2,745.02	2,625.68	119.34	23.002		
3,300.00	3,099.40	3,103.60	3,099.40	19.17	106.65	151.35	1,530.84	-1,159.50	2,781.52	2,658.23	123.29	22.561		
3,400.00	3,190.68	3,187.68	3,190.68	19.83	109.59	151.74	1,530.84	-1,159.50	2,818.14	2,691.40	126.74	22.236		
3,500.00	3,281.95	3,278.95	3,281.95	20.48	112.77	152.12	1,530.84	-1,159.50	2,854.87	2,724.43	130.44	21.886		
3,600.00	3,373.22	3,370.22	3,373.22	21.13	115.96	152.49	1,530.84	-1,159.50	2,891.72	2,757.58	134.14	21.557		
3,700.00	3,464.49	3,461.49	3,464.49	21.79	119.14	152.85	1,530.84	-1,159.50	2,928.67	2,790.83	137.84	21.247		
3,800.00	3,555.77	3,552.77	3,555.77	22.44	122.33	153.21	1,530.84	-1,159.50	2,965.73	2,824.18	141.54	20.953		
3,900.00	3,647.04	3,644.04	3,647.04	23.10	125.51	153.55	1,530.84	-1,159.50	3,002.88	2,857.64	145.24	20.675		
4,000.00	3,738.31	3,735.31	3,738.31	23.75	128.70	153.89	1,530.84	-1,159.50	3,040.13	2,891.18	148.94	20.411		
4,100.00	3,829.59	3,826.59	3,829.59	24.41	131.88	154.22	1,530.84	-1,159.50	3,077.47	2,924.82	152.65	20.161		
4,200.00	3,920.86	3,917.86	3,920.86	25.07	135.07	154.54	1,530.84	-1,159.50	3,114.90	2,958.55	156.35	19.923		
4,300.00	4,012.13	4,009.13	4,012.13	25.73	138.25	154.85	1,530.84	-1,159.50	3,152.41	2,992.36	160.05	19.697		
4,400.00	4,103.41	4,100.41	4,103.41	26.38	141.44	155.16	1,530.84	-1,159.50	3,190.00	3,026.26	163.75	19.481		
4,500.00	4,194.68	4,208.32	4,194.68	27.04	145.20	155.46	1,530.84	-1,159.50	3,227.68	3,059.65	168.03	19.209		
4,600.00	4,285.95	4,282.95	4,285.95	27.70	147.81	155.76	1,530.84	-1,159.50	3,265.43	3,094.28	171.15	19.080		
4,700.00	4,377.22	4,374.22	4,377.22	28.36	150.99	156.04	1,530.84	-1,159.50	3,303.26	3,128.41	174.85	18.892		
4,800.00	4,468.50	4,465.50	4,468.50	29.02	154.18	156.32	1,530.84	-1,159.50	3,341.15	3,162.60	178.55	18.713		
4,900.00	4,559.77	4,556.77	4,559.77	29.68	157.37	156.60	1,530.84	-1,159.50	3,379.12	3,196.87	182.25	18.541		
5,000.00	4,651.04	4,648.04	4,651.04	30.34	160.55	156.87	1,530.84	-1,159.50	3,417.15	3,231.20	185.95	18.377		
5,100.00	4,742.32	4,739.32	4,742.32	31.00	163.74	157.13	1,530.84	-1,159.50	3,455.25	3,265.60	189.65	18.219		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	4,833.59	4,830.59	4,833.59	31.66	166.92	157.39	1,530.84	-1,159.50	3,493.41	3,300.06	193.35	18.068		
5,300.00	4,924.86	4,921.86	4,924.86	32.32	170.11	157.64	1,530.84	-1,159.50	3,531.63	3,334.57	197.05	17.922		
5,400.00	5,016.13	5,013.13	5,016.13	32.99	173.29	157.88	1,530.84	-1,159.50	3,569.90	3,369.15	200.75	17.783		
5,500.00	5,107.41	5,104.41	5,107.41	33.65	176.48	158.13	1,530.84	-1,159.50	3,608.24	3,403.79	204.45	17.648		
5,600.00	5,198.68	5,204.32	5,198.68	34.31	179.97	158.36	1,530.84	-1,159.50	3,646.63	3,438.17	208.45	17.494		
5,700.00	5,289.95	5,286.95	5,289.95	34.97	182.85	158.59	1,530.84	-1,159.50	3,685.07	3,473.22	211.85	17.395		
5,800.00	5,381.23	5,378.23	5,381.23	35.63	186.04	158.82	1,530.84	-1,159.50	3,723.56	3,508.01	215.55	17.274		
5,900.00	5,472.50	5,469.50	5,472.50	36.30	189.22	159.04	1,530.84	-1,159.50	3,762.11	3,542.85	219.25	17.159		
6,000.00	5,563.77	5,560.77	5,563.77	36.96	192.41	159.26	1,530.84	-1,159.50	3,800.70	3,577.74	222.95	17.047		
6,100.00	5,655.05	5,652.05	5,655.05	37.62	195.60	159.48	1,530.84	-1,159.50	3,839.34	3,612.68	226.65	16.939		
6,200.00	5,746.32	5,743.32	5,746.32	38.28	198.78	159.68	1,530.84	-1,159.50	3,878.02	3,647.67	230.35	16.835		
6,300.00	5,837.59	5,834.59	5,837.59	38.95	201.97	159.89	1,530.84	-1,159.50	3,916.75	3,682.69	234.06	16.734		
6,400.00	5,928.86	5,925.86	5,928.86	39.61	205.15	160.09	1,530.84	-1,159.50	3,955.52	3,717.76	237.76	16.637		
6,500.00	6,020.14	6,017.14	6,020.14	40.27	208.34	160.29	1,530.84	-1,159.50	3,994.33	3,752.88	241.46	16.543		
6,600.00	6,111.41	6,108.41	6,111.41	40.94	211.52	160.48	1,530.84	-1,159.50	4,033.19	3,788.03	245.16	16.451		
6,700.00	6,202.68	6,200.32	6,202.68	41.60	214.73	160.67	1,530.84	-1,159.50	4,072.08	3,823.20	248.88	16.362		
6,800.00	6,293.96	6,309.04	6,293.96	42.26	218.53	160.86	1,530.84	-1,159.50	4,111.01	3,857.82	253.19	16.237		
6,900.00	6,385.23	6,382.23	6,385.23	42.93	221.08	161.04	1,530.84	-1,159.50	4,149.98	3,893.71	256.26	16.194		
7,000.00	6,476.50	6,473.50	6,476.50	43.59	224.27	161.22	1,530.84	-1,159.50	4,188.98	3,929.02	259.96	16.114		
7,100.00	6,567.77	6,564.77	6,567.77	44.25	227.45	161.40	1,530.84	-1,159.50	4,228.02	3,964.35	263.66	16.036		
7,200.00	6,658.64	6,655.64	6,658.64	44.91	230.63	141.60	1,530.84	-1,159.50	4,265.48	3,998.14	267.35	15.955		
7,300.00	6,747.14	6,744.14	6,747.14	45.52	233.72	123.94	1,530.84	-1,159.50	4,298.57	4,027.64	270.93	15.866		
7,400.00	6,831.10	6,828.10	6,831.10	46.07	236.65	111.48	1,530.84	-1,159.50	4,326.76	4,052.44	274.32	15.773		
7,500.00	6,908.46	6,905.46	6,908.46	46.54	239.35	103.01	1,530.84	-1,159.50	4,349.78	4,072.34	277.43	15.679		
7,600.00	6,977.30	6,974.30	6,977.30	46.95	241.75	97.33	1,530.84	-1,159.50	4,367.54	4,087.31	280.23	15.586		
7,700.00	7,035.93	7,032.93	7,035.93	47.30	243.80	93.62	1,530.84	-1,159.50	4,380.11	4,097.43	282.69	15.495		
7,800.00	7,082.92	7,079.92	7,082.92	47.59	245.44	91.31	1,530.84	-1,159.50	4,387.67	4,102.88	284.79	15.406		
7,900.00	7,117.09	7,114.09	7,117.09	47.84	246.63	90.08	1,530.84	-1,159.50	4,390.44	4,103.88	286.56	15.321		
8,000.00	7,137.62	7,134.62	7,137.62	48.06	247.35	89.69	1,530.84	-1,159.50	4,388.68	4,100.69	287.99	15.239		
8,100.00	7,143.99	7,140.99	7,143.99	48.28	247.57	90.03	1,530.84	-1,159.50	4,382.60	4,093.55	289.05	15.162		
8,200.00	7,143.45	7,140.45	7,143.45	48.53	247.55	90.02	1,530.84	-1,159.50	4,375.68	4,085.65	290.03	15.087		
8,300.00	7,142.91	7,139.91	7,142.91	48.89	247.53	90.01	1,530.84	-1,159.50	4,371.04	4,079.89	291.15	15.013		
8,400.00	7,142.37	7,139.37	7,142.37	49.40	247.51	90.00	1,530.84	-1,159.50	4,368.69	4,076.27	292.41	14.940		
8,452.95	7,142.08	7,139.08	7,142.08	49.75	247.50	90.00	1,530.84	-1,159.50	4,368.36	4,075.22	293.14	14.902		
8,500.00	7,141.83	7,138.83	7,141.83	50.12	247.49	90.00	1,530.84	-1,159.50	4,368.62	4,074.82	293.79	14.870		
8,600.00	7,141.29	7,138.29	7,141.29	51.08	247.47	89.99	1,530.84	-1,159.50	4,370.84	4,075.56	295.28	14.802		
8,700.00	7,140.75	7,137.75	7,140.75	52.30	247.46	89.98	1,530.84	-1,159.50	4,375.34	4,078.49	296.86	14.739		
8,800.00	7,140.21	7,137.21	7,140.21	53.75	247.44	89.98	1,530.84	-1,159.50	4,382.13	4,083.62	298.51	14.680		
8,900.00	7,139.67	7,136.67	7,139.67	55.40	247.42	89.97	1,530.84	-1,159.50	4,391.18	4,090.95	300.23	14.626		
9,000.00	7,139.12	7,136.12	7,139.12	57.20	247.40	89.96	1,530.84	-1,159.50	4,402.48	4,100.48	302.00	14.578		
9,100.00	7,138.58	7,135.58	7,138.58	59.13	247.38	89.95	1,530.84	-1,159.50	4,416.02	4,112.21	303.81	14.535		
9,200.00	7,138.04	7,135.04	7,138.04	61.15	247.36	89.95	1,530.84	-1,159.50	4,431.78	4,126.13	305.65	14.499		
9,300.00	7,137.50	7,134.50	7,137.50	63.26	247.34	89.94	1,530.84	-1,159.50	4,449.73	4,142.22	307.51	14.470		
9,400.00	7,136.96	7,133.96	7,136.96	65.44	247.32	89.93	1,530.84	-1,159.50	4,469.84	4,160.46	309.38	14.448		
9,500.00	7,136.42	7,133.42	7,136.42	67.68	247.30	89.93	1,530.84	-1,159.50	4,492.09	4,180.84	311.25	14.432		
9,600.00	7,135.88	7,132.88	7,135.88	69.97	247.29	89.92	1,530.84	-1,159.50	4,516.45	4,203.33	313.12	14.424		
9,700.00	7,135.34	7,132.34	7,135.34	72.31	247.27	89.91	1,530.84	-1,159.50	4,542.87	4,227.90	314.97	14.423 SF		
9,800.00	7,134.80	7,131.80	7,134.80	74.69	247.25	89.90	1,530.84	-1,159.50	4,571.33	4,254.52	316.81	14.429		
9,900.00	7,134.26	7,131.26	7,134.26	77.10	247.23	89.90	1,530.84	-1,159.50	4,601.79	4,283.16	318.63	14.442		
10,000.00	7,133.71	7,130.71	7,133.71	79.54	247.21	89.89	1,530.84	-1,159.50	4,634.21	4,313.79	320.42	14.463		
10,100.00	7,133.17	7,130.17	7,133.17	82.02	247.19	89.88	1,530.84	-1,159.50	4,668.54	4,346.36	322.18	14.490		
10,200.00	7,132.63	7,129.63	7,132.63	84.52	247.17	89.88	1,530.84	-1,159.50	4,704.75	4,380.84	323.91	14.525		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-21(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,132.09	7,129.09	7,132.09	87.04	247.15	89.87	1,530.84	-1,159.50	4,742.79	4,417.19	325.61	14.566		
10,400.00	7,131.55	7,128.55	7,131.55	89.58	247.13	89.86	1,530.84	-1,159.50	4,782.62	4,455.36	327.26	14.614		
10,500.00	7,131.01	7,128.01	7,131.01	92.15	247.12	89.85	1,530.84	-1,159.50	4,824.20	4,495.32	328.88	14.668		
10,600.00	7,130.47	7,127.47	7,130.47	94.73	247.10	89.85	1,530.84	-1,159.50	4,867.47	4,537.01	330.46	14.729		
10,700.00	7,129.93	7,126.93	7,129.93	97.33	247.08	89.84	1,530.84	-1,159.50	4,912.40	4,580.41	331.99	14.797		
10,800.00	7,129.39	7,126.39	7,129.39	99.94	247.06	89.83	1,530.84	-1,159.50	4,958.94	4,625.45	333.48	14.870		
10,900.00	7,128.84	7,125.84	7,128.84	102.56	247.04	89.83	1,530.84	-1,159.50	5,007.04	4,672.11	334.93	14.949		
11,000.00	7,128.30	7,125.30	7,128.30	105.20	247.02	89.82	1,530.84	-1,159.50	5,056.67	4,720.33	336.34	15.034		
11,100.00	7,127.76	7,124.76	7,127.76	107.85	247.00	89.81	1,530.84	-1,159.50	5,107.77	4,770.06	337.70	15.125		
11,200.00	7,127.22	7,124.22	7,127.22	110.51	246.98	89.81	1,530.84	-1,159.50	5,160.30	4,821.28	339.02	15.221		
11,300.00	7,126.68	7,123.68	7,126.68	113.18	246.96	89.80	1,530.84	-1,159.50	5,214.22	4,873.92	340.30	15.323		
11,400.00	7,126.14	7,123.14	7,126.14	115.86	246.95	89.79	1,530.84	-1,159.50	5,269.48	4,927.95	341.53	15.429		
11,500.00	7,125.60	7,122.60	7,125.60	118.55	246.93	89.78	1,530.84	-1,159.50	5,326.05	4,983.33	342.72	15.540		
11,600.00	7,125.06	7,122.06	7,125.06	121.25	246.91	89.78	1,530.84	-1,159.50	5,383.89	5,040.01	343.88	15.656		
11,700.00	7,124.52	7,121.52	7,124.52	123.95	246.89	89.77	1,530.84	-1,159.50	5,442.94	5,097.96	344.99	15.777		
11,800.00	7,123.97	7,120.97	7,123.97	126.66	246.87	89.76	1,530.84	-1,159.50	5,503.18	5,157.12	346.06	15.902		
11,900.00	7,123.43	7,120.43	7,123.43	129.38	246.85	89.76	1,530.84	-1,159.50	5,564.57	5,217.47	347.09	16.032		
12,000.00	7,122.89	7,119.89	7,122.89	132.10	246.83	89.75	1,530.84	-1,159.50	5,627.06	5,278.97	348.09	16.166		
12,100.00	7,122.35	7,119.35	7,122.35	134.83	246.81	89.74	1,530.84	-1,159.50	5,690.62	5,341.57	349.05	16.303		
12,200.00	7,121.81	7,118.81	7,121.81	137.56	246.79	89.73	1,530.84	-1,159.50	5,755.22	5,405.25	349.97	16.445		
12,300.00	7,121.27	7,118.27	7,121.27	140.30	246.78	89.73	1,530.84	-1,159.50	5,820.82	5,469.96	350.86	16.590		
12,400.00	7,120.73	7,117.73	7,120.73	143.05	246.76	89.72	1,530.84	-1,159.50	5,887.39	5,535.67	351.72	16.739		
12,500.00	7,120.19	7,117.19	7,120.19	145.80	246.74	89.71	1,530.84	-1,159.50	5,954.89	5,602.35	352.54	16.891		
12,600.00	7,119.65	7,116.65	7,119.65	148.55	246.72	89.71	1,530.84	-1,159.50	6,023.30	5,669.96	353.34	17.047		
12,700.00	7,119.10	7,116.10	7,119.10	151.30	246.70	89.70	1,530.84	-1,159.50	6,092.58	5,738.48	354.10	17.206		
12,800.00	7,118.56	7,115.56	7,118.56	154.07	246.68	89.69	1,530.84	-1,159.50	6,162.70	5,807.86	354.84	17.368		
12,900.00	7,118.02	7,115.02	7,118.02	156.83	246.66	89.68	1,530.84	-1,159.50	6,233.64	5,878.10	355.54	17.533		
13,000.00	7,117.48	7,114.48	7,117.48	159.60	246.64	89.68	1,530.84	-1,159.50	6,305.37	5,949.14	356.22	17.701		
13,100.00	7,116.94	7,113.94	7,116.94	162.37	246.62	89.67	1,530.84	-1,159.50	6,377.85	6,020.98	356.88	17.871		
13,200.00	7,116.40	7,113.40	7,116.40	165.14	246.61	89.66	1,530.84	-1,159.50	6,451.08	6,093.57	357.50	18.045		
13,300.00	7,115.86	7,112.86	7,115.86	167.92	246.59	89.66	1,530.84	-1,159.50	6,525.01	6,166.90	358.11	18.221		
13,400.00	7,115.32	7,112.32	7,115.32	170.70	246.57	89.65	1,530.84	-1,159.50	6,599.63	6,240.94	358.69	18.399		
13,500.00	7,114.78	7,111.78	7,114.78	173.48	246.55	89.64	1,530.84	-1,159.50	6,674.92	6,315.67	359.25	18.580		
13,600.00	7,114.24	7,111.24	7,114.24	176.26	246.53	89.63	1,530.84	-1,159.50	6,750.85	6,391.06	359.79	18.763		
13,700.00	7,113.69	7,110.69	7,113.69	179.05	246.51	89.63	1,530.84	-1,159.50	6,827.39	6,467.09	360.31	18.949		
13,800.00	7,113.15	7,110.15	7,113.15	181.84	246.49	89.62	1,530.84	-1,159.50	6,904.54	6,543.74	360.80	19.136		
13,900.00	7,112.61	7,109.61	7,112.61	184.63	246.47	89.61	1,530.84	-1,159.50	6,982.27	6,620.98	361.28	19.326		
14,000.00	7,112.07	7,109.07	7,112.07	187.42	246.45	89.61	1,530.84	-1,159.50	7,060.56	6,698.81	361.75	19.518		
14,100.00	7,111.53	7,108.53	7,111.53	190.22	246.44	89.60	1,530.84	-1,159.50	7,139.39	6,777.20	362.19	19.712		
14,200.00	7,110.99	7,107.99	7,110.99	193.01	246.42	89.59	1,530.84	-1,159.50	7,218.74	6,856.12	362.62	19.907		
14,300.00	7,110.45	7,107.45	7,110.45	195.81	246.40	89.59	1,530.84	-1,159.50	7,298.60	6,935.57	363.03	20.105		
14,400.00	7,109.91	7,106.91	7,109.91	198.61	246.38	89.58	1,530.84	-1,159.50	7,378.95	7,015.53	363.42	20.304		
14,500.00	7,109.37	7,106.37	7,109.37	201.42	246.36	89.57	1,530.84	-1,159.50	7,459.78	7,095.98	363.80	20.505		
14,600.00	7,108.82	7,105.82	7,108.82	204.22	246.34	89.56	1,530.84	-1,159.50	7,541.07	7,176.90	364.17	20.707		
14,700.00	7,108.28	7,105.28	7,108.28	207.03	246.32	89.56	1,530.84	-1,159.50	7,622.80	7,258.27	364.53	20.912		
14,800.00	7,107.74	7,104.74	7,107.74	209.83	246.30	89.55	1,530.84	-1,159.50	7,704.96	7,340.10	364.87	21.117		
14,900.00	7,107.20	7,104.20	7,107.20	212.64	246.28	89.54	1,530.84	-1,159.50	7,787.54	7,422.35	365.19	21.324		
15,000.00	7,106.66	7,103.66	7,106.66	215.45	246.27	89.54	1,530.84	-1,159.50	7,870.53	7,505.02	365.51	21.533		
15,100.00	7,106.12	7,103.12	7,106.12	218.26	246.25	89.53	1,530.84	-1,159.50	7,953.90	7,588.09	365.82	21.743		
15,200.00	7,105.58	7,102.58	7,105.58	221.07	246.23	89.52	1,530.84	-1,159.50	8,037.66	7,671.55	366.11	21.954		
15,300.00	7,105.04	7,102.04	7,105.04	223.89	246.21	89.51	1,530.84	-1,159.50	8,121.78	7,755.39	366.39	22.167		
15,400.00	7,104.50	7,101.50	7,104.50	226.70	246.19	89.51	1,530.84	-1,159.50	8,206.26	7,839.59	366.67	22.381		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)		
15,491.56	7,104.00	7,101.00	7,104.00	229.28	246.17	89.50	1,530.84	-1,159.50	8,283.91	7,917.00	366.91	22.577	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-24(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	17.00	3.28	3.28	-78.37	226.62	-1,101.15	1,124.36					
100.00	100.00	83.00	100.00	3.28	3.59	-78.37	226.62	-1,101.15	1,124.23	1,117.36	6.87	163.634		
200.00	200.00	183.00	200.00	3.34	5.68	-78.37	226.62	-1,101.15	1,124.23	1,115.21	9.02	124.613 CC		
300.00	299.98	282.98	299.98	3.44	8.77	98.58	226.62	-1,101.15	1,124.49	1,112.28	12.21	92.103		
400.00	399.84	382.84	399.84	3.59	12.07	98.83	226.62	-1,101.15	1,125.28	1,109.62	15.66	71.849		
500.00	499.45	482.45	499.45	3.79	15.45	99.23	226.62	-1,101.15	1,126.66	1,107.42	19.24	58.572		
600.00	598.70	581.70	598.70	4.03	18.85	99.80	226.62	-1,101.15	1,128.69	1,105.81	22.88	49.334		
700.00	697.47	680.47	697.47	4.31	22.25	100.52	226.62	-1,101.15	1,131.48	1,104.91	26.57	42.591		
800.00	795.62	778.62	795.62	4.64	25.65	101.37	226.62	-1,101.15	1,135.17	1,104.89	30.28	37.484 ES		
900.00	893.06	876.06	893.06	5.00	29.02	102.36	226.62	-1,101.15	1,139.91	1,105.89	34.02	33.506		
1,000.00	989.64	972.64	989.64	5.40	32.38	103.47	226.62	-1,101.15	1,145.89	1,108.13	37.77	30.340		
1,100.00	1,085.27	1,068.27	1,085.27	5.83	35.70	104.68	226.62	-1,101.15	1,153.31	1,111.79	41.52	27.779		
1,200.00	1,179.82	1,162.82	1,179.82	6.29	38.99	105.98	226.62	-1,101.15	1,162.38	1,117.12	45.26	25.680		
1,300.00	1,273.17	1,256.17	1,273.17	6.79	42.23	107.35	226.62	-1,101.15	1,173.33	1,124.33	49.00	23.945		
1,400.00	1,365.21	1,348.21	1,365.21	7.33	45.44	108.78	226.62	-1,101.15	1,186.38	1,133.66	52.72	22.503		
1,500.00	1,456.49	1,439.49	1,456.49	7.89	48.62	110.46	226.62	-1,101.15	1,201.24	1,144.81	56.43	21.286		
1,600.00	1,547.76	1,530.76	1,547.76	8.46	51.80	112.13	226.62	-1,101.15	1,217.29	1,157.14	60.16	20.236		
1,700.00	1,639.04	1,622.04	1,639.04	9.05	54.98	113.76	226.62	-1,101.15	1,234.49	1,170.60	63.88	19.324		
1,800.00	1,730.31	1,713.31	1,730.31	9.65	58.16	115.35	226.62	-1,101.15	1,252.78	1,185.16	67.61	18.528		
1,900.00	1,821.58	1,804.58	1,821.58	10.26	61.34	116.90	226.62	-1,101.15	1,272.12	1,200.77	71.35	17.830		
2,000.00	1,912.85	1,904.15	1,912.85	10.87	64.81	118.41	226.62	-1,101.15	1,292.46	1,217.09	75.37	17.148		
2,100.00	2,004.13	1,987.13	2,004.13	11.49	67.70	119.87	226.62	-1,101.15	1,313.76	1,234.94	78.82	16.669		
2,200.00	2,095.40	2,078.40	2,095.40	12.11	70.89	121.30	226.62	-1,101.15	1,335.97	1,253.42	82.55	16.184		
2,300.00	2,186.67	2,169.67	2,186.67	12.74	74.07	122.68	226.62	-1,101.15	1,359.04	1,272.76	86.28	15.752		
2,400.00	2,277.95	2,260.95	2,277.95	13.38	77.25	124.02	226.62	-1,101.15	1,382.94	1,292.93	90.01	15.365		
2,500.00	2,369.22	2,352.22	2,369.22	14.01	80.44	125.32	226.62	-1,101.15	1,407.62	1,313.88	93.73	15.017		
2,600.00	2,460.49	2,443.49	2,460.49	14.65	83.62	126.58	226.62	-1,101.15	1,433.03	1,335.58	97.46	14.704		
2,700.00	2,551.77	2,534.77	2,551.77	15.29	86.81	127.80	226.62	-1,101.15	1,459.15	1,357.97	101.18	14.422		
2,800.00	2,643.04	2,626.04	2,643.04	15.93	89.99	128.98	226.62	-1,101.15	1,485.93	1,381.04	104.90	14.166		
2,900.00	2,734.31	2,717.31	2,734.31	16.58	93.17	130.12	226.62	-1,101.15	1,513.35	1,404.74	108.61	13.934		
3,000.00	2,825.58	2,808.58	2,825.58	17.23	96.36	131.23	226.62	-1,101.15	1,541.35	1,429.03	112.32	13.723		
3,100.00	2,916.86	2,900.14	2,916.86	17.87	99.55	132.30	226.62	-1,101.15	1,569.93	1,453.88	116.04	13.529		
3,200.00	3,008.13	3,008.87	3,008.13	18.52	103.35	133.33	226.62	-1,101.15	1,599.03	1,478.67	120.36	13.285		
3,300.00	3,099.40	3,082.40	3,099.40	19.17	105.91	134.33	226.62	-1,101.15	1,628.64	1,505.19	123.45	13.193		
3,400.00	3,190.68	3,173.68	3,190.68	19.83	109.10	135.30	226.62	-1,101.15	1,658.73	1,531.58	127.15	13.045		
3,500.00	3,281.95	3,264.95	3,281.95	20.48	112.28	136.23	226.62	-1,101.15	1,689.27	1,558.42	130.85	12.910		
3,600.00	3,373.22	3,356.22	3,373.22	21.13	115.47	137.14	226.62	-1,101.15	1,720.24	1,585.68	134.55	12.785		
3,700.00	3,464.49	3,447.49	3,464.49	21.79	118.65	138.01	226.62	-1,101.15	1,751.61	1,613.36	138.25	12.670		
3,800.00	3,555.77	3,538.77	3,555.77	22.44	121.84	138.86	226.62	-1,101.15	1,783.37	1,641.42	141.95	12.563		
3,900.00	3,647.04	3,630.04	3,647.04	23.10	125.02	139.67	226.62	-1,101.15	1,815.49	1,669.85	145.65	12.465		
4,000.00	3,738.31	3,721.31	3,738.31	23.75	128.21	140.47	226.62	-1,101.15	1,847.96	1,698.62	149.34	12.374		
4,100.00	3,829.59	3,812.59	3,829.59	24.41	131.39	141.23	226.62	-1,101.15	1,880.75	1,727.72	153.03	12.290		
4,200.00	3,920.86	3,903.86	3,920.86	25.07	134.58	141.97	226.62	-1,101.15	1,913.86	1,757.13	156.73	12.211		
4,300.00	4,012.13	4,004.87	4,012.13	25.73	138.10	142.69	226.62	-1,101.15	1,947.26	1,786.50	160.76	12.113		
4,400.00	4,103.41	4,086.41	4,103.41	26.38	140.95	143.39	226.62	-1,101.15	1,980.93	1,816.82	164.11	12.071		
4,500.00	4,194.68	4,177.68	4,194.68	27.04	144.13	144.06	226.62	-1,101.15	2,014.88	1,847.08	167.80	12.007		
4,600.00	4,285.95	4,268.95	4,285.95	27.70	147.32	144.71	226.62	-1,101.15	2,049.07	1,877.58	171.49	11.948		
4,700.00	4,377.22	4,360.22	4,377.22	28.36	150.51	145.34	226.62	-1,101.15	2,083.51	1,908.33	175.18	11.893		
4,800.00	4,468.50	4,451.50	4,468.50	29.02	153.69	145.95	226.62	-1,101.15	2,118.17	1,939.30	178.87	11.842		
4,900.00	4,559.77	4,542.77	4,559.77	29.68	156.88	146.55	226.62	-1,101.15	2,153.06	1,970.50	182.56	11.794		
5,000.00	4,651.04	4,634.04	4,651.04	30.34	160.06	147.12	226.62	-1,101.15	2,188.14	2,001.89	186.25	11.748		
5,100.00	4,742.32	4,725.32	4,742.32	31.00	163.25	147.68	226.62	-1,101.15	2,223.43	2,033.49	189.94	11.706		

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

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-24(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,816.59	4,833.59	31.66	166.43	148.22	226.62	-1,101.15	2,258.90	2,065.28	193.63	11.666		
5,300.00	4,924.86	4,907.86	4,924.86	32.32	169.62	148.75	226.62	-1,101.15	2,294.56	2,097.24	197.31	11.629		
5,400.00	5,016.13	5,000.87	5,016.13	32.99	172.87	149.25	226.62	-1,101.15	2,330.38	2,129.31	201.06	11.590		
5,500.00	5,107.41	5,109.59	5,107.41	33.65	176.66	149.75	226.62	-1,101.15	2,366.36	2,161.00	205.36	11.523		
5,600.00	5,198.68	5,181.68	5,198.68	34.31	179.18	150.23	226.62	-1,101.15	2,402.51	2,194.13	208.38	11.529		
5,700.00	5,289.95	5,272.95	5,289.95	34.97	182.36	150.70	226.62	-1,101.15	2,438.80	2,226.73	212.07	11.500		
5,800.00	5,381.23	5,364.23	5,381.23	35.63	185.55	151.15	226.62	-1,101.15	2,475.23	2,259.47	215.76	11.472		
5,900.00	5,472.50	5,455.50	5,472.50	36.30	188.73	151.59	226.62	-1,101.15	2,511.80	2,292.36	219.44	11.446		
6,000.00	5,563.77	5,546.77	5,563.77	36.96	191.92	152.02	226.62	-1,101.15	2,548.50	2,325.37	223.13	11.421		
6,100.00	5,655.05	5,638.05	5,655.05	37.62	195.11	152.44	226.62	-1,101.15	2,585.32	2,358.50	226.82	11.398		
6,200.00	5,746.32	5,729.32	5,746.32	38.28	198.29	152.84	226.62	-1,101.15	2,622.27	2,391.76	230.51	11.376		
6,300.00	5,837.59	5,820.59	5,837.59	38.95	201.48	153.24	226.62	-1,101.15	2,659.33	2,425.13	234.20	11.355		
6,400.00	5,928.86	5,911.86	5,928.86	39.61	204.66	153.62	226.62	-1,101.15	2,696.49	2,458.61	237.89	11.335		
6,500.00	6,020.14	6,003.14	6,020.14	40.27	207.85	154.00	226.62	-1,101.15	2,733.77	2,492.19	241.58	11.316		
6,600.00	6,111.41	6,105.59	6,111.41	40.94	211.43	154.36	226.62	-1,101.15	2,771.14	2,525.48	245.66	11.281		
6,700.00	6,202.68	6,185.68	6,202.68	41.60	214.22	154.72	226.62	-1,101.15	2,808.61	2,559.66	248.96	11.282		
6,800.00	6,293.96	6,276.96	6,293.96	42.26	217.41	155.06	226.62	-1,101.15	2,846.18	2,593.53	252.65	11.265		
6,900.00	6,385.23	6,368.23	6,385.23	42.93	220.59	155.40	226.62	-1,101.15	2,883.83	2,627.49	256.34	11.250		
7,000.00	6,476.50	6,459.50	6,476.50	43.59	223.78	155.73	226.62	-1,101.15	2,921.57	2,661.54	260.03	11.236		
7,100.00	6,567.77	6,550.77	6,567.77	44.25	226.97	156.05	226.62	-1,101.15	2,959.39	2,695.68	263.72	11.222		
7,200.00	6,658.64	6,641.64	6,658.64	44.91	230.14	136.67	226.62	-1,101.15	2,995.19	2,727.80	267.39	11.202		
7,300.00	6,747.14	6,730.14	6,747.14	45.52	233.23	119.59	226.62	-1,101.15	3,025.50	2,754.55	270.95	11.166		
7,400.00	6,831.10	6,814.10	6,831.10	46.07	236.16	107.79	226.62	-1,101.15	3,050.02	2,775.71	274.30	11.119		
7,500.00	6,908.46	6,908.54	6,908.46	46.54	239.45	100.01	226.62	-1,101.15	3,068.74	2,790.77	277.97	11.040		
7,600.00	6,977.30	6,960.30	6,977.30	46.95	241.26	95.03	226.62	-1,101.15	3,081.88	2,801.76	280.12	11.002		
7,700.00	7,035.93	7,018.93	7,035.93	47.30	243.31	91.96	226.62	-1,101.15	3,089.81	2,807.29	282.53	10.936		
7,800.00	7,082.92	7,065.92	7,082.92	47.59	244.95	90.25	226.62	-1,101.15	3,092.99	2,808.41	284.58	10.869		
7,900.00	7,117.09	7,100.09	7,117.09	47.84	246.14	89.50	226.62	-1,101.15	3,091.90	2,805.61	286.29	10.800		
8,000.00	7,137.62	7,120.62	7,137.62	48.06	246.86	89.48	226.62	-1,101.15	3,087.01	2,799.36	287.66	10.732		
8,100.00	7,143.99	7,126.99	7,143.99	48.28	247.08	90.03	226.62	-1,101.15	3,078.70	2,790.03	288.67	10.665		
8,200.00	7,143.45	7,126.45	7,143.45	48.53	247.06	90.02	226.62	-1,101.15	3,070.50	2,780.91	289.59	10.603		
8,300.00	7,142.91	7,125.91	7,142.91	48.89	247.04	90.01	226.62	-1,101.15	3,065.53	2,774.88	290.65	10.547		
8,400.00	7,142.37	7,125.37	7,142.37	49.40	247.02	90.00	226.62	-1,101.15	3,063.83	2,771.97	291.86	10.498		
8,402.27	7,142.36	7,125.36	7,142.36	49.42	247.02	90.00	226.62	-1,101.15	3,063.83	2,771.94	291.89	10.497		
8,500.00	7,141.83	7,124.83	7,141.83	50.12	247.00	89.99	226.62	-1,101.15	3,065.39	2,772.21	293.17	10.456		
8,600.00	7,141.29	7,124.29	7,141.29	51.08	246.99	89.98	226.62	-1,101.15	3,070.20	2,775.61	294.59	10.422		
8,700.00	7,140.75	7,123.75	7,140.75	52.30	246.97	89.97	226.62	-1,101.15	3,078.26	2,782.18	296.08	10.397		
8,800.00	7,140.21	7,123.21	7,140.21	53.75	246.95	89.96	226.62	-1,101.15	3,089.53	2,791.90	297.63	10.380		
8,900.00	7,139.67	7,122.67	7,139.67	55.40	246.93	89.95	226.62	-1,101.15	3,103.99	2,804.76	299.23	10.373 SF		
9,000.00	7,139.12	7,122.12	7,139.12	57.20	246.91	89.94	226.62	-1,101.15	3,121.59	2,820.73	300.86	10.376		
9,100.00	7,138.58	7,121.58	7,138.58	59.13	246.89	89.93	226.62	-1,101.15	3,142.27	2,839.77	302.50	10.388		
9,200.00	7,138.04	7,121.04	7,138.04	61.15	246.87	89.92	226.62	-1,101.15	3,165.97	2,861.83	304.14	10.410		
9,300.00	7,137.50	7,120.50	7,137.50	63.26	246.85	89.91	226.62	-1,101.15	3,192.64	2,886.87	305.77	10.441		
9,400.00	7,136.96	7,119.96	7,136.96	65.44	246.83	89.90	226.62	-1,101.15	3,222.18	2,914.80	307.38	10.483		
9,500.00	7,136.42	7,119.42	7,136.42	67.68	246.82	89.89	226.62	-1,101.15	3,254.54	2,945.57	308.96	10.534		
9,600.00	7,135.88	7,118.88	7,135.88	69.97	246.80	89.88	226.62	-1,101.15	3,289.61	2,979.10	310.51	10.594		
9,700.00	7,135.34	7,118.34	7,135.34	72.31	246.78	89.87	226.62	-1,101.15	3,327.32	3,015.31	312.01	10.664		
9,800.00	7,134.80	7,117.80	7,134.80	74.69	246.76	89.86	226.62	-1,101.15	3,367.58	3,054.12	313.47	10.743		
9,900.00	7,134.26	7,117.26	7,134.26	77.10	246.74	89.85	226.62	-1,101.15	3,410.30	3,095.43	314.88	10.831		
10,000.00	7,133.71	7,116.71	7,133.71	79.54	246.72	89.84	226.62	-1,101.15	3,455.39	3,139.15	316.23	10.927		
10,100.00	7,133.17	7,116.17	7,133.17	82.02	246.70	89.83	226.62	-1,101.15	3,502.75	3,185.21	317.53	11.031		
10,200.00	7,132.63	7,115.63	7,132.63	84.52	246.68	89.82	226.62	-1,101.15	3,552.29	3,233.51	318.78	11.143		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,132.09	7,115.09	7,132.09	87.04	246.66	89.81	226.62	-1,101.15	3,603.93	3,283.96	319.97	11.263		
10,400.00	7,131.55	7,114.55	7,131.55	89.58	246.65	89.80	226.62	-1,101.15	3,657.57	3,336.46	321.11	11.390		
10,500.00	7,131.01	7,114.01	7,131.01	92.15	246.63	89.79	226.62	-1,101.15	3,713.14	3,390.94	322.19	11.525		
10,600.00	7,130.47	7,113.47	7,130.47	94.73	246.61	89.78	226.62	-1,101.15	3,770.53	3,447.31	323.22	11.666		
10,700.00	7,129.93	7,112.93	7,129.93	97.33	246.59	89.77	226.62	-1,101.15	3,829.68	3,505.48	324.20	11.813		
10,800.00	7,129.39	7,112.39	7,129.39	99.94	246.57	89.76	226.62	-1,101.15	3,890.50	3,565.37	325.12	11.966		
10,900.00	7,128.84	7,111.84	7,128.84	102.56	246.55	89.75	226.62	-1,101.15	3,952.91	3,626.91	326.00	12.125		
11,000.00	7,128.30	7,111.30	7,128.30	105.20	246.53	89.74	226.62	-1,101.15	4,016.84	3,690.01	326.83	12.290		
11,100.00	7,127.76	7,110.76	7,127.76	107.85	246.51	89.73	226.62	-1,101.15	4,082.23	3,754.61	327.62	12.460		
11,200.00	7,127.22	7,110.22	7,127.22	110.51	246.49	89.72	226.62	-1,101.15	4,148.99	3,820.63	328.36	12.636		
11,300.00	7,126.68	7,109.68	7,126.68	113.18	246.48	89.71	226.62	-1,101.15	4,217.06	3,888.00	329.06	12.815		
11,400.00	7,126.14	7,109.14	7,126.14	115.86	246.46	89.70	226.62	-1,101.15	4,286.39	3,956.67	329.72	13.000		
11,500.00	7,125.60	7,108.60	7,125.60	118.55	246.44	89.69	226.62	-1,101.15	4,356.91	4,026.56	330.35	13.189		
11,600.00	7,125.06	7,108.06	7,125.06	121.25	246.42	89.68	226.62	-1,101.15	4,428.57	4,097.63	330.94	13.382		
11,700.00	7,124.52	7,107.52	7,124.52	123.95	246.40	89.67	226.62	-1,101.15	4,501.30	4,169.81	331.50	13.579		
11,800.00	7,123.97	7,106.97	7,123.97	126.66	246.38	89.66	226.62	-1,101.15	4,575.07	4,243.05	332.02	13.779		
11,900.00	7,123.43	7,106.43	7,123.43	129.38	246.36	89.65	226.62	-1,101.15	4,649.82	4,317.30	332.52	13.984		
12,000.00	7,122.89	7,105.89	7,122.89	132.10	246.34	89.64	226.62	-1,101.15	4,725.50	4,392.51	332.98	14.191		
12,100.00	7,122.35	7,105.35	7,122.35	134.83	246.32	89.63	226.62	-1,101.15	4,802.07	4,468.64	333.43	14.402		
12,200.00	7,121.81	7,104.81	7,121.81	137.56	246.31	89.62	226.62	-1,101.15	4,879.48	4,545.64	333.84	14.616		
12,300.00	7,121.27	7,104.27	7,121.27	140.30	246.29	89.61	226.62	-1,101.15	4,957.71	4,623.47	334.23	14.833		
12,400.00	7,120.73	7,103.73	7,120.73	143.05	246.27	89.60	226.62	-1,101.15	5,036.71	4,702.10	334.60	15.053		
12,500.00	7,120.19	7,103.19	7,120.19	145.80	246.25	89.59	226.62	-1,101.15	5,116.44	4,781.48	334.95	15.275		
12,600.00	7,119.65	7,102.65	7,119.65	148.55	246.23	89.58	226.62	-1,101.15	5,196.87	4,861.58	335.28	15.500		
12,700.00	7,119.10	7,102.10	7,119.10	151.30	246.21	89.57	226.62	-1,101.15	5,277.97	4,942.37	335.60	15.727		
12,800.00	7,118.56	7,101.56	7,118.56	154.07	246.19	89.56	226.62	-1,101.15	5,359.71	5,023.82	335.89	15.957		
12,900.00	7,118.02	7,101.02	7,118.02	156.83	246.17	89.54	226.62	-1,101.15	5,442.06	5,105.89	336.17	16.188		
13,000.00	7,117.48	7,100.48	7,117.48	159.60	246.15	89.53	226.62	-1,101.15	5,524.99	5,188.56	336.43	16.422		
13,100.00	7,116.94	7,100.06	7,116.94	162.37	246.14	89.52	226.62	-1,101.15	5,608.48	5,271.80	336.68	16.658		
13,200.00	7,116.40	7,100.60	7,116.40	165.14	246.16	89.51	226.62	-1,101.15	5,692.50	5,355.54	336.96	16.894		
13,300.00	7,115.86	7,101.14	7,115.86	167.92	246.18	89.50	226.62	-1,101.15	5,777.03	5,439.81	337.22	17.132		
13,400.00	7,115.32	7,101.68	7,115.32	170.70	246.20	89.49	226.62	-1,101.15	5,862.05	5,524.58	337.46	17.371		
13,500.00	7,114.78	7,102.22	7,114.78	173.48	246.22	89.48	226.62	-1,101.15	5,947.53	5,609.83	337.70	17.612		
13,600.00	7,114.24	7,102.77	7,114.24	176.26	246.23	89.47	226.62	-1,101.15	6,033.46	5,695.53	337.93	17.854		
13,700.00	7,113.69	7,103.31	7,113.69	179.05	246.25	89.46	226.62	-1,101.15	6,119.82	5,781.67	338.14	18.098		
13,800.00	7,113.15	7,103.85	7,113.15	181.84	246.27	89.45	226.62	-1,101.15	6,206.58	5,868.23	338.35	18.344		
13,900.00	7,112.61	7,104.39	7,112.61	184.63	246.29	89.44	226.62	-1,101.15	6,293.74	5,955.19	338.55	18.590		
14,000.00	7,112.07	7,104.93	7,112.07	187.42	246.31	89.43	226.62	-1,101.15	6,381.28	6,042.54	338.74	18.838		
14,100.00	7,111.53	7,105.47	7,111.53	190.22	246.33	89.42	226.62	-1,101.15	6,469.17	6,130.25	338.92	19.087		
14,200.00	7,110.99	7,106.01	7,110.99	193.01	246.35	89.41	226.62	-1,101.15	6,557.42	6,218.32	339.10	19.338		
14,300.00	7,110.45	7,106.55	7,110.45	195.81	246.37	89.40	226.62	-1,101.15	6,645.99	6,306.73	339.27	19.589		
14,400.00	7,109.91	7,107.09	7,109.91	198.61	246.39	89.39	226.62	-1,101.15	6,734.89	6,395.46	339.43	19.842		
14,500.00	7,109.37	7,107.63	7,109.37	201.42	246.40	89.38	226.62	-1,101.15	6,824.09	6,484.51	339.58	20.095		
14,600.00	7,108.82	7,108.18	7,108.82	204.22	246.42	89.37	226.62	-1,101.15	6,913.59	6,573.86	339.73	20.350		
14,700.00	7,108.28	7,108.72	7,108.28	207.03	246.44	89.36	226.62	-1,101.15	7,003.37	6,663.50	339.88	20.605		
14,800.00	7,107.74	7,109.26	7,107.74	209.83	246.46	89.35	226.62	-1,101.15	7,093.43	6,753.41	340.02	20.862		
14,900.00	7,107.20	7,109.80	7,107.20	212.64	246.48	89.34	226.62	-1,101.15	7,183.75	6,843.60	340.15	21.119		
15,000.00	7,106.66	7,089.66	7,106.66	215.45	245.78	89.33	226.62	-1,101.15	7,274.32	6,934.76	339.56	21.423		
15,100.00	7,106.12	7,089.12	7,106.12	218.26	245.76	89.32	226.62	-1,101.15	7,365.14	7,025.49	339.65	21.684		
15,200.00	7,105.58	7,088.58	7,105.58	221.07	245.74	89.31	226.62	-1,101.15	7,456.19	7,116.45	339.74	21.947		
15,300.00	7,105.04	7,088.04	7,105.04	223.89	245.72	89.30	226.62	-1,101.15	7,547.47	7,207.65	339.82	22.210		
15,400.00	7,104.50	7,087.50	7,104.50	226.70	245.70	89.29	226.62	-1,101.15	7,638.97	7,299.07	339.90	22.474		

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



Anticollision Report



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

Offset Design	HARVESTERS STATE 7-15 PAD - SENA 15-24(PR_75CC) - OH - OH											Offset Site Error:	0.00 ft
Survey Program:	100-2" Cone@2.448 Sigma											Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	7,087.00	7,104.00	229.28	245.68	89.28	226.62	-1,101.15	7,722.93	7,382.96	339.96	22.717	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-25(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	10.00	0.00	3.28	3.28	-58.46	907.89	-1,479.38	1,735.75					
100.00	100.00	110.00	100.00	3.28	3.89	-58.46	907.89	-1,479.38	1,735.75	1,728.58	7.18	241.868		
200.00	200.00	210.00	200.00	3.34	6.48	-58.46	907.89	-1,479.38	1,735.75	1,725.94	9.81	176.856 CC		
300.00	299.98	289.98	299.98	3.44	9.00	118.44	907.89	-1,479.38	1,736.58	1,724.15	12.44	139.638		
400.00	399.84	389.84	399.84	3.59	12.31	118.55	907.89	-1,479.38	1,739.08	1,723.19	15.90	109.390 ES		
500.00	499.45	489.45	499.45	3.79	15.69	118.72	907.89	-1,479.38	1,743.27	1,723.80	19.48	89.510		
600.00	598.70	588.70	598.70	4.03	19.09	118.97	907.89	-1,479.38	1,749.19	1,726.07	23.12	75.655		
700.00	697.47	687.47	697.47	4.31	22.49	119.28	907.89	-1,479.38	1,756.87	1,730.07	26.81	65.535		
800.00	795.62	785.62	795.62	4.64	25.89	119.64	907.89	-1,479.38	1,766.39	1,735.87	30.52	57.870		
900.00	893.06	883.06	893.06	5.00	29.27	120.06	907.89	-1,479.38	1,777.81	1,743.55	34.25	51.899		
1,000.00	989.64	979.64	989.64	5.40	32.62	120.53	907.89	-1,479.38	1,791.20	1,753.21	37.99	47.145		
1,100.00	1,085.27	1,075.27	1,085.27	5.83	35.94	121.03	907.89	-1,479.38	1,806.66	1,764.93	41.73	43.291		
1,200.00	1,179.82	1,169.82	1,179.82	6.29	39.23	121.57	907.89	-1,479.38	1,824.28	1,778.81	45.46	40.125		
1,300.00	1,273.17	1,263.17	1,273.17	6.79	42.48	122.13	907.89	-1,479.38	1,844.13	1,794.95	49.18	37.496		
1,400.00	1,365.21	1,355.21	1,365.21	7.33	45.68	122.71	907.89	-1,479.38	1,866.33	1,813.44	52.88	35.293		
1,500.00	1,456.49	1,446.49	1,456.49	7.89	48.86	123.67	907.89	-1,479.38	1,890.11	1,833.54	56.57	33.412		
1,600.00	1,547.76	1,537.76	1,547.76	8.46	52.04	124.62	907.89	-1,479.38	1,914.48	1,854.22	60.27	31.767		
1,700.00	1,639.04	1,629.04	1,639.04	9.05	55.22	125.56	907.89	-1,479.38	1,939.41	1,875.43	63.97	30.316		
1,800.00	1,730.31	1,720.31	1,730.31	9.65	58.40	126.48	907.89	-1,479.38	1,964.86	1,897.18	67.68	29.030		
1,900.00	1,821.58	1,811.58	1,821.58	10.26	61.58	127.37	907.89	-1,479.38	1,990.83	1,919.43	71.40	27.883		
2,000.00	1,912.85	1,902.85	1,912.85	10.87	64.77	128.24	907.89	-1,479.38	2,017.30	1,942.18	75.12	26.855		
2,100.00	2,004.13	2,005.87	2,004.13	11.49	68.36	129.10	907.89	-1,479.38	2,044.23	1,964.98	79.25	25.795		
2,200.00	2,095.40	2,085.40	2,095.40	12.11	71.13	129.93	907.89	-1,479.38	2,071.62	1,989.06	82.56	25.092		
2,300.00	2,186.67	2,176.67	2,186.67	12.74	74.31	130.74	907.89	-1,479.38	2,099.45	2,013.17	86.29	24.332		
2,400.00	2,277.95	2,267.95	2,277.95	13.38	77.50	131.54	907.89	-1,479.38	2,127.71	2,037.70	90.01	23.639		
2,500.00	2,369.22	2,359.22	2,369.22	14.01	80.68	132.31	907.89	-1,479.38	2,156.36	2,062.63	93.73	23.006		
2,600.00	2,460.49	2,450.49	2,460.49	14.65	83.87	133.07	907.89	-1,479.38	2,185.40	2,087.95	97.45	22.425		
2,700.00	2,551.77	2,541.77	2,551.77	15.29	87.05	133.81	907.89	-1,479.38	2,214.82	2,113.64	101.18	21.891		
2,800.00	2,643.04	2,633.04	2,643.04	15.93	90.23	134.53	907.89	-1,479.38	2,244.59	2,139.69	104.90	21.398		
2,900.00	2,734.31	2,724.31	2,734.31	16.58	93.42	135.23	907.89	-1,479.38	2,274.71	2,166.09	108.62	20.942		
3,000.00	2,825.58	2,815.58	2,825.58	17.23	96.60	135.91	907.89	-1,479.38	2,305.16	2,192.82	112.34	20.520		
3,100.00	2,916.86	2,906.86	2,916.86	17.87	99.79	136.58	907.89	-1,479.38	2,335.93	2,219.87	116.06	20.127		
3,200.00	3,008.13	3,001.87	3,008.13	18.52	103.10	137.24	907.89	-1,479.38	2,367.00	2,247.09	119.91	19.740		
3,300.00	3,099.40	3,089.40	3,099.40	19.17	106.16	137.87	907.89	-1,479.38	2,398.36	2,274.87	123.49	19.421		
3,400.00	3,190.68	3,180.68	3,190.68	19.83	109.34	138.50	907.89	-1,479.38	2,430.01	2,302.80	127.21	19.103		
3,500.00	3,281.95	3,271.95	3,281.95	20.48	112.53	139.10	907.89	-1,479.38	2,461.93	2,331.01	130.92	18.805		
3,600.00	3,373.22	3,363.22	3,373.22	21.13	115.71	139.70	907.89	-1,479.38	2,494.11	2,359.47	134.64	18.525		
3,700.00	3,464.49	3,454.49	3,464.49	21.79	118.90	140.27	907.89	-1,479.38	2,526.54	2,388.19	138.35	18.262		
3,800.00	3,555.77	3,545.77	3,555.77	22.44	122.08	140.84	907.89	-1,479.38	2,559.21	2,417.15	142.06	18.015		
3,900.00	3,647.04	3,637.04	3,647.04	23.10	125.27	141.39	907.89	-1,479.38	2,592.11	2,446.34	145.77	17.782		
4,000.00	3,738.31	3,728.31	3,738.31	23.75	128.45	141.93	907.89	-1,479.38	2,625.24	2,475.76	149.48	17.563		
4,100.00	3,829.59	3,819.59	3,829.59	24.41	131.64	142.45	907.89	-1,479.38	2,658.58	2,505.40	153.19	17.355		
4,200.00	3,920.86	3,910.86	3,920.86	25.07	134.82	142.97	907.89	-1,479.38	2,692.13	2,535.24	156.90	17.159		
4,300.00	4,012.13	4,002.13	4,012.13	25.73	138.01	143.47	907.89	-1,479.38	2,725.88	2,565.28	160.60	16.973		
4,400.00	4,103.41	4,106.59	4,103.41	26.38	141.65	143.96	907.89	-1,479.38	2,759.82	2,595.05	164.77	16.750		
4,500.00	4,194.68	4,184.68	4,194.68	27.04	144.38	144.44	907.89	-1,479.38	2,793.95	2,625.93	168.02	16.629		
4,600.00	4,285.95	4,275.95	4,285.95	27.70	147.56	144.91	907.89	-1,479.38	2,828.25	2,656.53	171.72	16.470		
4,700.00	4,377.22	4,367.22	4,377.22	28.36	150.75	145.36	907.89	-1,479.38	2,862.73	2,687.31	175.42	16.319		
4,800.00	4,468.50	4,458.50	4,468.50	29.02	153.94	145.81	907.89	-1,479.38	2,897.37	2,718.25	179.13	16.175		
4,900.00	4,559.77	4,549.77	4,559.77	29.68	157.12	146.25	907.89	-1,479.38	2,932.18	2,749.34	182.83	16.038		
5,000.00	4,651.04	4,641.04	4,651.04	30.34	160.31	146.68	907.89	-1,479.38	2,967.13	2,780.60	186.53	15.907		
5,100.00	4,742.32	4,732.32	4,742.32	31.00	163.49	147.09	907.89	-1,479.38	3,002.24	2,812.00	190.24	15.782		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,200.00	4,833.59	4,823.59	4,833.59	31.66	166.68	147.50	907.89	-1,479.38	3,037.49	2,843.55	193.94	15.662		
5,300.00	4,924.86	4,914.86	4,924.86	32.32	169.86	147.90	907.89	-1,479.38	3,072.88	2,875.24	197.64	15.548		
5,400.00	5,016.13	5,006.13	5,016.13	32.99	173.05	148.29	907.89	-1,479.38	3,108.40	2,907.06	201.34	15.439		
5,500.00	5,107.41	5,102.59	5,107.41	33.65	176.42	148.67	907.89	-1,479.38	3,144.05	2,938.83	205.22	15.320		
5,600.00	5,198.68	5,188.68	5,198.68	34.31	179.42	149.05	907.89	-1,479.38	3,179.83	2,971.09	208.74	15.233		
5,700.00	5,289.95	5,279.95	5,289.95	34.97	182.61	149.41	907.89	-1,479.38	3,215.73	3,003.29	212.44	15.137		
5,800.00	5,381.23	5,371.23	5,381.23	35.63	185.79	149.77	907.89	-1,479.38	3,251.74	3,035.60	216.14	15.045		
5,900.00	5,472.50	5,462.50	5,472.50	36.30	188.98	150.12	907.89	-1,479.38	3,287.87	3,068.03	219.84	14.956		
6,000.00	5,563.77	5,553.77	5,563.77	36.96	192.17	150.47	907.89	-1,479.38	3,324.11	3,100.57	223.54	14.870		
6,100.00	5,655.05	5,645.05	5,655.05	37.62	195.35	150.80	907.89	-1,479.38	3,360.45	3,133.22	227.24	14.788		
6,200.00	5,746.32	5,736.32	5,746.32	38.28	198.54	151.13	907.89	-1,479.38	3,396.90	3,165.96	230.94	14.709		
6,300.00	5,837.59	5,827.59	5,837.59	38.95	201.72	151.46	907.89	-1,479.38	3,433.45	3,198.81	234.64	14.633		
6,400.00	5,928.86	5,918.86	5,928.86	39.61	204.91	151.77	907.89	-1,479.38	3,470.09	3,231.76	238.33	14.560		
6,500.00	6,020.14	6,010.14	6,020.14	40.27	208.09	152.08	907.89	-1,479.38	3,506.82	3,264.79	242.03	14.489		
6,600.00	6,111.41	6,101.41	6,111.41	40.94	211.28	152.39	907.89	-1,479.38	3,543.65	3,297.92	245.73	14.421		
6,700.00	6,202.68	6,207.32	6,202.68	41.60	214.98	152.68	907.89	-1,479.38	3,580.56	3,330.62	249.94	14.326		
6,800.00	6,293.96	6,283.96	6,293.96	42.26	217.65	152.98	907.89	-1,479.38	3,617.56	3,364.43	253.13	14.292		
6,900.00	6,385.23	6,375.23	6,385.23	42.93	220.84	153.26	907.89	-1,479.38	3,654.64	3,397.82	256.82	14.230		
7,000.00	6,476.50	6,466.50	6,476.50	43.59	224.02	153.54	907.89	-1,479.38	3,691.80	3,431.28	260.52	14.171		
7,100.00	6,567.77	6,557.77	6,567.77	44.25	227.21	153.82	907.89	-1,479.38	3,729.04	3,464.82	264.22	14.113		
7,200.00	6,658.64	6,648.64	6,658.64	44.91	230.38	134.49	907.89	-1,479.38	3,764.02	3,496.12	267.90	14.050		
7,300.00	6,747.14	6,737.14	6,747.14	45.52	233.47	117.47	907.89	-1,479.38	3,792.95	3,521.47	271.48	13.971		
7,400.00	6,831.10	6,821.10	6,831.10	46.07	236.40	105.72	907.89	-1,479.38	3,815.46	3,540.60	274.85	13.882		
7,500.00	6,908.46	6,901.54	6,908.46	46.54	239.21	98.01	907.89	-1,479.38	3,831.47	3,553.41	278.06	13.779		
7,600.00	6,977.30	6,967.30	6,977.30	46.95	241.51	93.14	907.89	-1,479.38	3,841.12	3,560.40	280.72	13.683		
7,700.00	7,035.93	7,025.93	7,035.93	47.30	243.55	90.26	907.89	-1,479.38	3,844.74	3,561.58	283.15	13.578		
7,800.00	7,082.92	7,072.92	7,082.92	47.59	245.19	88.81	907.89	-1,479.38	3,842.73	3,557.49	285.24	13.472		
7,900.00	7,117.09	7,107.09	7,117.09	47.84	246.39	88.43	907.89	-1,479.38	3,835.59	3,548.61	286.98	13.365		
8,000.00	7,137.62	7,127.62	7,137.62	48.06	247.10	88.90	907.89	-1,479.38	3,823.82	3,535.44	288.38	13.260		
8,100.00	7,143.99	7,133.99	7,143.99	48.28	247.32	90.06	907.89	-1,479.38	3,807.88	3,518.46	289.42	13.157		
8,200.00	7,143.45	7,133.45	7,143.45	48.53	247.31	90.05	907.89	-1,479.38	3,791.39	3,501.03	290.37	13.057		
8,300.00	7,142.91	7,132.91	7,142.91	48.89	247.29	90.04	907.89	-1,479.38	3,777.48	3,486.01	291.47	12.960		
8,400.00	7,142.37	7,132.37	7,142.37	49.40	247.27	90.03	907.89	-1,479.38	3,766.18	3,473.46	292.71	12.866		
8,500.00	7,141.83	7,131.83	7,141.83	50.12	247.25	90.02	907.89	-1,479.38	3,757.50	3,463.41	294.08	12.777		
8,600.00	7,141.29	7,131.29	7,141.29	51.08	247.23	90.01	907.89	-1,479.38	3,751.46	3,455.90	295.56	12.693		
8,700.00	7,140.75	7,130.75	7,140.75	52.30	247.21	90.01	907.89	-1,479.38	3,748.09	3,450.94	297.15	12.614		
8,776.49	7,140.33	7,130.33	7,140.33	53.40	247.20	90.00	907.89	-1,479.38	3,747.31	3,448.89	298.42	12.557		
8,800.00	7,140.21	7,130.21	7,140.21	53.75	247.19	90.00	907.89	-1,479.38	3,747.38	3,448.57	298.81	12.541		
8,900.00	7,139.67	7,129.67	7,139.67	55.40	247.17	89.99	907.89	-1,479.38	3,749.34	3,448.80	300.54	12.475		
9,000.00	7,139.12	7,129.12	7,139.12	57.20	247.15	89.98	907.89	-1,479.38	3,753.97	3,451.64	302.33	12.417		
9,100.00	7,138.58	7,128.58	7,138.58	59.13	247.14	89.97	907.89	-1,479.38	3,761.25	3,457.09	304.16	12.366		
9,200.00	7,138.04	7,128.04	7,138.04	61.15	247.12	89.96	907.89	-1,479.38	3,771.17	3,465.15	306.02	12.323		
9,300.00	7,137.50	7,127.50	7,137.50	63.26	247.10	89.96	907.89	-1,479.38	3,783.70	3,475.80	307.89	12.289		
9,400.00	7,136.96	7,126.96	7,136.96	65.44	247.08	89.95	907.89	-1,479.38	3,798.83	3,489.05	309.78	12.263		
9,500.00	7,136.42	7,126.42	7,136.42	67.68	247.06	89.94	907.89	-1,479.38	3,816.51	3,504.86	311.66	12.246		
9,600.00	7,135.88	7,125.88	7,135.88	69.97	247.04	89.93	907.89	-1,479.38	3,836.73	3,523.20	313.53	12.237 SF		
9,700.00	7,135.34	7,125.34	7,135.34	72.31	247.02	89.92	907.89	-1,479.38	3,859.43	3,544.05	315.38	12.237		
9,800.00	7,134.80	7,124.80	7,134.80	74.69	247.00	89.92	907.89	-1,479.38	3,884.57	3,567.36	317.21	12.246		
9,900.00	7,134.26	7,124.26	7,134.26	77.10	246.98	89.91	907.89	-1,479.38	3,912.10	3,593.10	319.00	12.264		
10,000.00	7,133.71	7,123.71	7,133.71	79.54	246.97	89.90	907.89	-1,479.38	3,941.99	3,621.23	320.76	12.290		
10,100.00	7,133.17	7,123.17	7,133.17	82.02	246.95	89.89	907.89	-1,479.38	3,974.16	3,651.68	322.48	12.324		
10,200.00	7,132.63	7,122.63	7,132.63	84.52	246.93	89.88	907.89	-1,479.38	4,008.57	3,684.42	324.15	12.366		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-25(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,132.09	7,122.09	7,132.09	87.04	246.91	89.87	907.89	-1,479.38	4,045.16	3,719.38	325.78	12.417		
10,400.00	7,131.55	7,121.55	7,131.55	89.58	246.89	89.87	907.89	-1,479.38	4,083.87	3,756.52	327.36	12.475		
10,500.00	7,131.01	7,121.01	7,131.01	92.15	246.87	89.86	907.89	-1,479.38	4,124.65	3,795.76	328.88	12.541		
10,600.00	7,130.47	7,120.47	7,130.47	94.73	246.85	89.85	907.89	-1,479.38	4,167.42	3,837.06	330.36	12.615		
10,700.00	7,129.93	7,119.93	7,129.93	97.33	246.83	89.84	907.89	-1,479.38	4,212.14	3,880.36	331.78	12.695		
10,800.00	7,129.39	7,119.39	7,129.39	99.94	246.81	89.83	907.89	-1,479.38	4,258.73	3,925.58	333.15	12.783		
10,900.00	7,128.84	7,118.84	7,128.84	102.56	246.80	89.82	907.89	-1,479.38	4,307.14	3,972.67	334.47	12.878		
11,000.00	7,128.30	7,118.30	7,128.30	105.20	246.78	89.82	907.89	-1,479.38	4,357.31	4,021.58	335.73	12.979		
11,100.00	7,127.76	7,117.76	7,127.76	107.85	246.76	89.81	907.89	-1,479.38	4,409.18	4,072.23	336.94	13.086		
11,200.00	7,127.22	7,117.22	7,127.22	110.51	246.74	89.80	907.89	-1,479.38	4,462.68	4,124.58	338.10	13.199		
11,300.00	7,126.68	7,116.68	7,126.68	113.18	246.72	89.79	907.89	-1,479.38	4,517.77	4,178.55	339.22	13.318		
11,400.00	7,126.14	7,116.14	7,126.14	115.86	246.70	89.78	907.89	-1,479.38	4,574.38	4,234.10	340.28	13.443		
11,500.00	7,125.60	7,115.60	7,125.60	118.55	246.68	89.77	907.89	-1,479.38	4,632.45	4,291.16	341.29	13.573		
11,600.00	7,125.06	7,115.06	7,125.06	121.25	246.66	89.77	907.89	-1,479.38	4,691.94	4,349.68	342.26	13.709		
11,700.00	7,124.52	7,114.52	7,124.52	123.95	246.64	89.76	907.89	-1,479.38	4,752.79	4,409.61	343.18	13.849		
11,800.00	7,123.97	7,113.97	7,123.97	126.66	246.63	89.75	907.89	-1,479.38	4,814.94	4,470.88	344.06	13.995		
11,900.00	7,123.43	7,113.43	7,123.43	129.38	246.61	89.74	907.89	-1,479.38	4,878.35	4,533.46	344.90	14.144		
12,000.00	7,122.89	7,112.89	7,122.89	132.10	246.59	89.73	907.89	-1,479.38	4,942.98	4,597.28	345.69	14.299		
12,100.00	7,122.35	7,112.35	7,122.35	134.83	246.57	89.73	907.89	-1,479.38	5,008.76	4,662.31	346.45	14.457		
12,200.00	7,121.81	7,111.81	7,121.81	137.56	246.55	89.72	907.89	-1,479.38	5,075.67	4,728.49	347.17	14.620		
12,300.00	7,121.27	7,111.27	7,121.27	140.30	246.53	89.71	907.89	-1,479.38	5,143.64	4,795.78	347.86	14.787		
12,400.00	7,120.73	7,110.73	7,120.73	143.05	246.51	89.70	907.89	-1,479.38	5,212.65	4,864.14	348.51	14.957		
12,500.00	7,120.19	7,110.19	7,120.19	145.80	246.49	89.69	907.89	-1,479.38	5,282.65	4,933.52	349.13	15.131		
12,600.00	7,119.65	7,109.65	7,119.65	148.55	246.47	89.68	907.89	-1,479.38	5,353.61	5,003.89	349.72	15.308		
12,700.00	7,119.10	7,109.10	7,119.10	151.30	246.46	89.68	907.89	-1,479.38	5,425.48	5,075.20	350.28	15.489		
12,800.00	7,118.56	7,108.56	7,118.56	154.07	246.44	89.67	907.89	-1,479.38	5,498.22	5,147.41	350.81	15.673		
12,900.00	7,118.02	7,108.02	7,118.02	156.83	246.42	89.66	907.89	-1,479.38	5,571.82	5,220.50	351.32	15.860		
13,000.00	7,117.48	7,107.48	7,117.48	159.60	246.40	89.65	907.89	-1,479.38	5,646.22	5,294.43	351.79	16.050		
13,100.00	7,116.94	7,106.94	7,116.94	162.37	246.38	89.64	907.89	-1,479.38	5,721.41	5,369.16	352.25	16.242		
13,200.00	7,116.40	7,106.40	7,116.40	165.14	246.36	89.63	907.89	-1,479.38	5,797.34	5,444.66	352.68	16.438		
13,300.00	7,115.86	7,105.86	7,115.86	167.92	246.34	89.63	907.89	-1,479.38	5,874.00	5,520.91	353.09	16.636		
13,400.00	7,115.32	7,105.32	7,115.32	170.70	246.32	89.62	907.89	-1,479.38	5,951.35	5,597.86	353.48	16.836		
13,500.00	7,114.78	7,104.78	7,114.78	173.48	246.30	89.61	907.89	-1,479.38	6,029.36	5,675.51	353.85	17.039		
13,600.00	7,114.24	7,104.24	7,114.24	176.26	246.29	89.60	907.89	-1,479.38	6,108.02	5,753.81	354.20	17.244		
13,700.00	7,113.69	7,103.69	7,113.69	179.05	246.27	89.59	907.89	-1,479.38	6,187.29	5,832.75	354.54	17.452		
13,800.00	7,113.15	7,103.15	7,113.15	181.84	246.25	89.58	907.89	-1,479.38	6,267.15	5,912.30	354.85	17.661		
13,900.00	7,112.61	7,102.61	7,112.61	184.63	246.23	89.58	907.89	-1,479.38	6,347.59	5,992.43	355.15	17.873		
14,000.00	7,112.07	7,102.07	7,112.07	187.42	246.21	89.57	907.89	-1,479.38	6,428.57	6,073.13	355.44	18.086		
14,100.00	7,111.53	7,101.53	7,111.53	190.22	246.19	89.56	907.89	-1,479.38	6,510.09	6,154.37	355.71	18.302		
14,200.00	7,110.99	7,100.99	7,110.99	193.01	246.17	89.55	907.89	-1,479.38	6,592.11	6,236.14	355.97	18.519		
14,300.00	7,110.45	7,100.45	7,110.45	195.81	246.15	89.54	907.89	-1,479.38	6,674.62	6,318.41	356.22	18.738		
14,400.00	7,109.91	7,100.09	7,109.91	198.61	246.14	89.53	907.89	-1,479.38	6,757.61	6,401.15	356.45	18.958		
14,500.00	7,109.37	7,100.63	7,109.37	201.42	246.16	89.53	907.89	-1,479.38	6,841.05	6,484.33	356.71	19.178		
14,600.00	7,108.82	7,101.18	7,108.82	204.22	246.18	89.52	907.89	-1,479.38	6,924.92	6,567.96	356.96	19.400		
14,700.00	7,108.28	7,101.72	7,108.28	207.03	246.20	89.51	907.89	-1,479.38	7,009.22	6,652.02	357.20	19.623		
14,800.00	7,107.74	7,102.26	7,107.74	209.83	246.22	89.50	907.89	-1,479.38	7,093.93	6,736.51	357.43	19.847		
14,900.00	7,107.20	7,102.80	7,107.20	212.64	246.24	89.49	907.89	-1,479.38	7,179.04	6,821.39	357.65	20.073		
15,000.00	7,106.66	7,103.34	7,106.66	215.45	246.25	89.49	907.89	-1,479.38	7,264.52	6,906.66	357.86	20.300		
15,100.00	7,106.12	7,103.88	7,106.12	218.26	246.27	89.48	907.89	-1,479.38	7,350.37	6,992.31	358.06	20.528		
15,200.00	7,105.58	7,104.42	7,105.58	221.07	246.29	89.47	907.89	-1,479.38	7,436.57	7,078.32	358.25	20.758		
15,300.00	7,105.04	7,104.96	7,105.04	223.89	246.31	89.46	907.89	-1,479.38	7,523.11	7,164.67	358.44	20.989		
15,400.00	7,104.50	7,105.50	7,104.50	226.70	246.33	89.45	907.89	-1,479.38	7,609.99	7,251.37	358.62	21.220		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)		
15,491.56	7,104.00	7,106.00	7,104.00	229.28	246.35	89.44	907.89	-1,479.38	7,689.81	7,331.03	358.78	21.433	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - STATE 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	47.00	3.28	3.28	-74.15	1,415.83	-4,987.35	5,184.64					
100.00	100.00	53.00	100.00	3.28	3.41	-74.15	1,415.83	-4,987.35	5,184.42	5,177.73	6.69	774.640		
200.00	200.00	153.00	200.00	3.34	4.87	-74.15	1,415.83	-4,987.35	5,184.42	5,176.22	8.20	631.936		
300.00	299.98	252.98	299.98	3.44	7.81	102.73	1,415.83	-4,987.35	5,184.81	5,173.56	11.25	460.967		
400.00	399.84	352.84	399.84	3.59	11.07	102.76	1,415.83	-4,987.35	5,185.96	5,171.31	14.66	353.805		
500.00	499.45	452.45	499.45	3.79	14.43	102.82	1,415.83	-4,987.35	5,187.90	5,169.69	18.21	284.833		
600.00	598.70	551.70	598.70	4.03	17.82	102.89	1,415.83	-4,987.35	5,190.63	5,168.78	21.85	237.577		
700.00	697.47	650.47	697.47	4.31	21.22	102.99	1,415.83	-4,987.35	5,194.18	5,168.65	25.53	203.444		
800.00	795.62	748.62	795.62	4.64	24.61	103.11	1,415.83	-4,987.35	5,198.56	5,169.32	29.25	177.755		
900.00	893.06	846.06	893.06	5.00	27.98	103.24	1,415.83	-4,987.35	5,203.82	5,170.84	32.98	157.786		
1,000.00	989.64	942.64	989.64	5.40	31.33	103.39	1,415.83	-4,987.35	5,209.97	5,173.25	36.73	141.860		
1,100.00	1,085.27	1,038.27	1,085.27	5.83	34.66	103.55	1,415.83	-4,987.35	5,217.08	5,176.60	40.48	128.892		
1,200.00	1,179.82	1,132.82	1,179.82	6.29	37.94	103.72	1,415.83	-4,987.35	5,225.17	5,180.94	44.23	118.149		
1,300.00	1,273.17	1,226.17	1,273.17	6.79	41.19	103.90	1,415.83	-4,987.35	5,234.29	5,186.33	47.97	109.124		
1,400.00	1,365.21	1,318.21	1,365.21	7.33	44.39	104.08	1,415.83	-4,987.35	5,244.50	5,192.81	51.70	101.447		
1,500.00	1,456.49	1,409.49	1,456.49	7.89	47.57	104.47	1,415.83	-4,987.35	5,255.47	5,200.04	55.42	94.823		
1,600.00	1,547.76	1,500.76	1,547.76	8.46	50.75	104.86	1,415.83	-4,987.35	5,266.73	5,207.56	59.17	89.015		
1,700.00	1,639.04	1,607.96	1,639.04	9.05	54.49	105.26	1,415.83	-4,987.35	5,278.28	5,214.80	63.48	83.153		
1,800.00	1,730.31	1,683.31	1,730.31	9.65	57.11	105.65	1,415.83	-4,987.35	5,290.12	5,223.44	66.69	79.328		
1,900.00	1,821.58	1,774.58	1,821.58	10.26	60.29	106.04	1,415.83	-4,987.35	5,302.26	5,231.80	70.46	75.253		
2,000.00	1,912.85	1,865.85	1,912.85	10.87	63.48	106.43	1,415.83	-4,987.35	5,314.67	5,240.44	74.24	71.590		
2,100.00	2,004.13	1,957.13	2,004.13	11.49	66.66	106.82	1,415.83	-4,987.35	5,327.38	5,249.35	78.02	68.281		
2,200.00	2,095.40	2,048.40	2,095.40	12.11	69.84	107.20	1,415.83	-4,987.35	5,340.36	5,258.55	81.81	65.278		
2,300.00	2,186.67	2,139.67	2,186.67	12.74	73.02	107.59	1,415.83	-4,987.35	5,353.63	5,268.03	85.60	62.542		
2,400.00	2,277.95	2,230.95	2,277.95	13.38	76.21	107.97	1,415.83	-4,987.35	5,367.17	5,277.77	89.39	60.040		
2,500.00	2,369.22	2,322.22	2,369.22	14.01	79.39	108.35	1,415.83	-4,987.35	5,380.99	5,287.80	93.19	57.742		
2,600.00	2,460.49	2,413.49	2,460.49	14.65	82.57	108.73	1,415.83	-4,987.35	5,395.08	5,298.09	96.99	55.627		
2,700.00	2,551.77	2,504.77	2,551.77	15.29	85.76	109.11	1,415.83	-4,987.35	5,409.45	5,308.66	100.79	53.673		
2,800.00	2,643.04	2,603.96	2,643.04	15.93	89.22	109.49	1,415.83	-4,987.35	5,424.08	5,319.22	104.86	51.726		
2,900.00	2,734.31	2,687.31	2,734.31	16.58	92.13	109.86	1,415.83	-4,987.35	5,438.98	5,330.60	108.39	50.182		
3,000.00	2,825.58	2,778.58	2,825.58	17.23	95.31	110.23	1,415.83	-4,987.35	5,454.15	5,341.97	112.19	48.617		
3,100.00	2,916.86	2,869.86	2,916.86	17.87	98.50	110.61	1,415.83	-4,987.35	5,469.58	5,353.60	115.99	47.157		
3,200.00	3,008.13	2,961.13	3,008.13	18.52	101.68	110.97	1,415.83	-4,987.35	5,485.27	5,365.49	119.79	45.792		
3,300.00	3,099.40	3,052.40	3,099.40	19.17	104.87	111.34	1,415.83	-4,987.35	5,501.22	5,377.64	123.59	44.513		
3,400.00	3,190.68	3,143.68	3,190.68	19.83	108.05	111.71	1,415.83	-4,987.35	5,517.43	5,390.04	127.39	43.312		
3,500.00	3,281.95	3,234.95	3,281.95	20.48	111.24	112.07	1,415.83	-4,987.35	5,533.89	5,402.70	131.19	42.183		
3,600.00	3,373.22	3,326.22	3,373.22	21.13	114.42	112.43	1,415.83	-4,987.35	5,550.60	5,415.62	134.99	41.120		
3,700.00	3,464.49	3,417.49	3,464.49	21.79	117.61	112.79	1,415.83	-4,987.35	5,567.57	5,428.78	138.79	40.116		
3,800.00	3,555.77	3,508.77	3,555.77	22.44	120.79	113.15	1,415.83	-4,987.35	5,584.78	5,442.19	142.58	39.168		
3,900.00	3,647.04	3,600.04	3,647.04	23.10	123.98	113.51	1,415.83	-4,987.35	5,602.23	5,455.85	146.38	38.272		
4,000.00	3,738.31	3,708.69	3,738.31	23.75	127.77	113.86	1,415.83	-4,987.35	5,619.93	5,469.15	150.78	37.272		
4,100.00	3,829.59	3,782.59	3,829.59	24.41	130.35	114.21	1,415.83	-4,987.35	5,637.87	5,483.90	153.97	36.616		
4,200.00	3,920.86	3,873.86	3,920.86	25.07	133.53	114.57	1,415.83	-4,987.35	5,656.05	5,498.28	157.77	35.851		
4,300.00	4,012.13	3,965.13	4,012.13	25.73	136.72	114.91	1,415.83	-4,987.35	5,674.46	5,512.90	161.56	35.123		
4,400.00	4,103.41	4,056.41	4,103.41	26.38	139.90	115.26	1,415.83	-4,987.35	5,693.10	5,527.75	165.35	34.430		
4,500.00	4,194.68	4,147.68	4,194.68	27.04	143.09	115.60	1,415.83	-4,987.35	5,711.98	5,542.84	169.14	33.770		
4,600.00	4,285.95	4,238.95	4,285.95	27.70	146.27	115.95	1,415.83	-4,987.35	5,731.09	5,558.15	172.94	33.140		
4,700.00	4,377.22	4,330.22	4,377.22	28.36	149.46	116.29	1,415.83	-4,987.35	5,750.42	5,573.70	176.72	32.539		
4,800.00	4,468.50	4,421.50	4,468.50	29.02	152.64	116.63	1,415.83	-4,987.35	5,769.98	5,589.47	180.51	31.964		
4,900.00	4,559.77	4,512.77	4,559.77	29.68	155.83	116.96	1,415.83	-4,987.35	5,789.76	5,605.46	184.30	31.415		
5,000.00	4,651.04	4,604.04	4,651.04	30.34	159.02	117.30	1,415.83	-4,987.35	5,809.76	5,621.67	188.09	30.889		
5,100.00	4,742.32	4,704.68	4,742.32	31.00	162.53	117.63	1,415.83	-4,987.35	5,829.98	5,637.78	192.20	30.333		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - STATE 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,786.59	4,833.59	31.66	165.39	117.96	1,415.83	-4,987.35	5,850.41	5,654.76	195.65	29.902		
5,300.00	4,924.86	4,877.86	4,924.86	32.32	168.57	118.29	1,415.83	-4,987.35	5,871.06	5,671.62	199.44	29.438		
5,400.00	5,016.13	4,969.13	5,016.13	32.99	171.76	118.62	1,415.83	-4,987.35	5,891.92	5,688.70	203.22	28.993		
5,500.00	5,107.41	5,060.41	5,107.41	33.65	174.94	118.94	1,415.83	-4,987.35	5,912.98	5,705.99	207.00	28.566		
5,600.00	5,198.68	5,151.68	5,198.68	34.31	178.13	119.26	1,415.83	-4,987.35	5,934.26	5,723.48	210.78	28.154		
5,700.00	5,289.95	5,242.95	5,289.95	34.97	181.32	119.58	1,415.83	-4,987.35	5,955.73	5,741.18	214.55	27.759		
5,800.00	5,381.23	5,334.23	5,381.23	35.63	184.50	119.90	1,415.83	-4,987.35	5,977.41	5,759.08	218.33	27.378		
5,900.00	5,472.50	5,425.50	5,472.50	36.30	187.69	120.22	1,415.83	-4,987.35	5,999.29	5,777.19	222.10	27.011		
6,000.00	5,563.77	5,516.77	5,563.77	36.96	190.87	120.53	1,415.83	-4,987.35	6,021.37	5,795.49	225.88	26.658		
6,100.00	5,655.05	5,608.05	5,655.05	37.62	194.06	120.85	1,415.83	-4,987.35	6,043.64	5,813.99	229.65	26.317		
6,200.00	5,746.32	5,700.68	5,746.32	38.28	197.29	121.16	1,415.83	-4,987.35	6,066.11	5,832.64	233.47	25.982		
6,300.00	5,837.59	5,809.41	5,837.59	38.95	201.09	121.46	1,415.83	-4,987.35	6,088.76	5,850.91	237.85	25.599		
6,400.00	5,928.86	5,881.86	5,928.86	39.61	203.62	121.77	1,415.83	-4,987.35	6,111.61	5,870.65	240.96	25.364		
6,500.00	6,020.14	5,973.14	6,020.14	40.27	206.80	122.08	1,415.83	-4,987.35	6,134.64	5,889.91	244.73	25.067		
6,600.00	6,111.41	6,064.41	6,111.41	40.94	209.99	122.38	1,415.83	-4,987.35	6,157.86	5,909.37	248.49	24.781		
6,700.00	6,202.68	6,155.68	6,202.68	41.60	213.18	122.68	1,415.83	-4,987.35	6,181.26	5,929.00	252.26	24.504		
6,800.00	6,293.96	6,246.96	6,293.96	42.26	216.36	122.98	1,415.83	-4,987.35	6,204.84	5,948.82	256.02	24.235		
6,900.00	6,385.23	6,338.23	6,385.23	42.93	219.55	123.27	1,415.83	-4,987.35	6,228.60	5,968.82	259.79	23.976		
7,000.00	6,476.50	6,429.50	6,476.50	43.59	222.73	123.57	1,415.83	-4,987.35	6,252.54	5,988.99	263.55	23.724		
7,100.00	6,567.77	6,520.77	6,567.77	44.25	225.92	123.86	1,415.83	-4,987.35	6,276.65	6,009.34	267.31	23.481		
7,200.00	6,658.64	6,611.64	6,658.64	44.91	229.09	124.16	1,415.83	-4,987.35	6,299.07	6,025.02	271.06	23.228		
7,300.00	6,747.14	6,700.14	6,747.14	45.52	232.18	91.15	1,415.83	-4,987.35	6,303.36	6,028.65	274.71	22.946		
7,400.00	6,831.10	6,784.10	6,831.10	46.07	235.11	81.26	1,415.83	-4,987.35	6,298.44	6,020.29	278.16	22.644		
7,500.00	6,908.46	6,861.46	6,908.46	46.54	237.81	75.50	1,415.83	-4,987.35	6,281.64	6,000.32	281.33	22.329		
7,600.00	6,977.30	6,930.30	6,977.30	46.95	240.21	72.79	1,415.83	-4,987.35	6,253.56	5,969.39	284.17	22.007		
7,700.00	7,035.93	6,988.93	7,035.93	47.30	242.26	72.47	1,415.83	-4,987.35	6,215.04	5,928.40	286.64	21.682		
7,800.00	7,082.92	7,035.92	7,082.92	47.59	243.90	74.17	1,415.83	-4,987.35	6,167.16	5,878.42	288.74	21.359		
7,900.00	7,117.09	7,070.09	7,117.09	47.84	245.09	77.77	1,415.83	-4,987.35	6,111.17	5,820.74	290.43	21.042		
8,000.00	7,137.62	7,109.38	7,137.62	48.06	246.47	83.20	1,415.83	-4,987.35	6,048.47	5,756.11	292.36	20.688		
8,100.00	7,143.99	7,103.01	7,143.99	48.28	246.24	90.30	1,415.83	-4,987.35	5,980.57	5,687.80	292.77	20.427		
8,200.00	7,143.45	7,103.55	7,143.45	48.53	246.26	90.30	1,415.83	-4,987.35	5,911.08	5,617.59	293.49	20.141		
8,300.00	7,142.91	7,104.09	7,142.91	48.89	246.28	90.29	1,415.83	-4,987.35	5,842.49	5,548.17	294.31	19.851		
8,400.00	7,142.37	7,104.63	7,142.37	49.40	246.30	90.28	1,415.83	-4,987.35	5,774.80	5,479.57	295.24	19.560		
8,500.00	7,141.83	7,105.17	7,141.83	50.12	246.32	90.27	1,415.83	-4,987.35	5,708.07	5,411.81	296.27	19.267		
8,600.00	7,141.29	7,105.71	7,141.29	51.08	246.34	90.27	1,415.83	-4,987.35	5,642.32	5,344.93	297.40	18.972		
8,700.00	7,140.75	7,106.25	7,140.75	52.30	246.36	90.26	1,415.83	-4,987.35	5,577.59	5,278.96	298.63	18.677		
8,800.00	7,140.21	7,106.79	7,140.21	53.75	246.37	90.25	1,415.83	-4,987.35	5,513.92	5,213.94	299.97	18.381		
8,900.00	7,139.67	7,107.33	7,139.67	55.40	246.39	90.25	1,415.83	-4,987.35	5,451.33	5,149.92	301.41	18.086		
9,000.00	7,139.12	7,107.88	7,139.12	57.20	246.41	90.24	1,415.83	-4,987.35	5,389.87	5,086.92	302.96	17.791		
9,100.00	7,138.58	7,108.42	7,138.58	59.13	246.43	90.23	1,415.83	-4,987.35	5,329.58	5,024.98	304.60	17.497		
9,200.00	7,138.04	7,108.96	7,138.04	61.15	246.45	90.22	1,415.83	-4,987.35	5,270.50	4,964.16	306.34	17.205		
9,300.00	7,137.50	7,109.50	7,137.50	63.26	246.47	90.22	1,415.83	-4,987.35	5,212.67	4,904.49	308.17	16.915		
9,400.00	7,136.96	7,089.96	7,136.96	65.44	245.79	90.21	1,415.83	-4,987.35	5,156.13	4,846.73	309.40	16.665		
9,500.00	7,136.42	7,089.42	7,136.42	67.68	245.77	90.20	1,415.83	-4,987.35	5,100.92	4,789.54	311.38	16.382		
9,600.00	7,135.88	7,088.88	7,135.88	69.97	245.75	90.19	1,415.83	-4,987.35	5,047.09	4,733.64	313.44	16.102		
9,700.00	7,135.34	7,088.34	7,135.34	72.31	245.73	90.19	1,415.83	-4,987.35	4,994.68	4,679.08	315.59	15.826		
9,800.00	7,134.80	7,087.80	7,134.80	74.69	245.71	90.18	1,415.83	-4,987.35	4,943.74	4,625.91	317.82	15.555		
9,900.00	7,134.26	7,087.26	7,134.26	77.10	245.69	90.17	1,415.83	-4,987.35	4,894.31	4,574.18	320.12	15.289		
10,000.00	7,133.71	7,086.71	7,133.71	79.54	245.67	90.17	1,415.83	-4,987.35	4,846.44	4,523.94	322.50	15.028		
10,100.00	7,133.17	7,086.17	7,133.17	82.02	245.66	90.16	1,415.83	-4,987.35	4,800.17	4,475.23	324.95	14.772		
10,200.00	7,132.63	7,085.63	7,132.63	84.52	245.64	90.15	1,415.83	-4,987.35	4,755.56	4,428.11	327.46	14.523		
10,300.00	7,132.09	7,085.09	7,132.09	87.04	245.62	90.14	1,415.83	-4,987.35	4,712.65	4,382.63	330.02	14.280		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - STATE 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,131.55	7,084.55	7,131.55	89.58	245.60	90.14	1,415.83	-4,987.35	4,671.49	4,338.85	332.65	14.043		
10,500.00	7,131.01	7,084.01	7,131.01	92.15	245.58	90.13	1,415.83	-4,987.35	4,632.12	4,296.80	335.32	13.814		
10,600.00	7,130.47	7,083.47	7,130.47	94.73	245.56	90.12	1,415.83	-4,987.35	4,594.59	4,256.56	338.03	13.592		
10,700.00	7,129.93	7,082.93	7,129.93	97.33	245.54	90.11	1,415.83	-4,987.35	4,558.95	4,218.16	340.79	13.378		
10,800.00	7,129.39	7,082.39	7,129.39	99.94	245.52	90.11	1,415.83	-4,987.35	4,525.23	4,181.65	343.58	13.171		
10,900.00	7,128.84	7,081.84	7,128.84	102.56	245.50	90.10	1,415.83	-4,987.35	4,493.49	4,147.09	346.39	12.972		
11,000.00	7,128.30	7,081.30	7,128.30	105.20	245.49	90.09	1,415.83	-4,987.35	4,463.76	4,114.53	349.23	12.782		
11,100.00	7,127.76	7,080.76	7,127.76	107.85	245.47	90.09	1,415.83	-4,987.35	4,436.08	4,084.00	352.08	12.600		
11,200.00	7,127.22	7,080.22	7,127.22	110.51	245.45	90.08	1,415.83	-4,987.35	4,410.50	4,055.56	354.94	12.426		
11,300.00	7,126.68	7,079.68	7,126.68	113.18	245.43	90.07	1,415.83	-4,987.35	4,387.06	4,029.25	357.81	12.261		
11,400.00	7,126.14	7,079.14	7,126.14	115.86	245.41	90.06	1,415.83	-4,987.35	4,365.77	4,005.10	360.67	12.105		
11,500.00	7,125.60	7,078.60	7,125.60	118.55	245.39	90.06	1,415.83	-4,987.35	4,346.69	3,983.17	363.52	11.957		
11,600.00	7,125.06	7,078.06	7,125.06	121.25	245.37	90.05	1,415.83	-4,987.35	4,329.83	3,963.47	366.35	11.819		
11,700.00	7,124.52	7,077.52	7,124.52	123.95	245.35	90.04	1,415.83	-4,987.35	4,315.22	3,946.05	369.16	11.689		
11,800.00	7,123.97	7,076.97	7,123.97	126.66	245.33	90.03	1,415.83	-4,987.35	4,302.88	3,930.94	371.94	11.569		
11,900.00	7,123.43	7,076.43	7,123.43	129.38	245.32	90.03	1,415.83	-4,987.35	4,292.85	3,918.16	374.69	11.457		
12,000.00	7,122.89	7,075.89	7,122.89	132.10	245.30	90.02	1,415.83	-4,987.35	4,285.12	3,907.73	377.39	11.355		
12,100.00	7,122.35	7,075.35	7,122.35	134.83	245.28	90.01	1,415.83	-4,987.35	4,279.71	3,899.67	380.04	11.261		
12,200.00	7,121.81	7,074.81	7,121.81	137.56	245.26	90.01	1,415.83	-4,987.35	4,276.64	3,894.00	382.64	11.177		
12,281.47	7,121.37	7,074.37	7,121.37	139.80	245.24	90.00	1,415.83	-4,987.35	4,275.86	3,891.15	384.72	11.114 CC		
12,300.00	7,121.27	7,074.27	7,121.27	140.30	245.24	90.00	1,415.83	-4,987.35	4,275.90	3,890.72	385.18	11.101		
12,400.00	7,120.73	7,073.73	7,120.73	143.05	245.22	89.99	1,415.83	-4,987.35	4,277.51	3,889.84	387.66	11.034 ES		
12,500.00	7,120.19	7,073.19	7,120.19	145.80	245.20	89.98	1,415.83	-4,987.35	4,281.44	3,891.37	390.07	10.976		
12,600.00	7,119.65	7,072.65	7,119.65	148.55	245.18	89.98	1,415.83	-4,987.35	4,287.71	3,895.31	392.41	10.927		
12,700.00	7,119.10	7,072.10	7,119.10	151.30	245.16	89.97	1,415.83	-4,987.35	4,296.30	3,901.63	394.67	10.886		
12,800.00	7,118.56	7,071.56	7,118.56	154.07	245.15	89.96	1,415.83	-4,987.35	4,307.19	3,910.34	396.85	10.854		
12,900.00	7,118.02	7,071.02	7,118.02	156.83	245.13	89.96	1,415.83	-4,987.35	4,320.37	3,921.43	398.94	10.830		
13,000.00	7,117.48	7,070.48	7,117.48	159.60	245.11	89.95	1,415.83	-4,987.35	4,335.81	3,934.86	400.96	10.814		
13,100.00	7,116.94	7,069.94	7,116.94	162.37	245.09	89.94	1,415.83	-4,987.35	4,353.50	3,950.62	402.88	10.806 SF		
13,200.00	7,116.40	7,069.40	7,116.40	165.14	245.07	89.93	1,415.83	-4,987.35	4,373.41	3,968.69	404.72	10.806		
13,300.00	7,115.86	7,068.86	7,115.86	167.92	245.05	89.93	1,415.83	-4,987.35	4,395.50	3,989.03	406.47	10.814		
13,400.00	7,115.32	7,068.32	7,115.32	170.70	245.03	89.92	1,415.83	-4,987.35	4,419.74	4,011.61	408.13	10.829		
13,500.00	7,114.78	7,067.78	7,114.78	173.48	245.01	89.91	1,415.83	-4,987.35	4,446.10	4,036.40	409.70	10.852		
13,600.00	7,114.24	7,067.24	7,114.24	176.26	244.99	89.90	1,415.83	-4,987.35	4,474.54	4,063.36	411.18	10.882		
13,700.00	7,113.69	7,066.69	7,113.69	179.05	244.98	89.90	1,415.83	-4,987.35	4,505.02	4,092.44	412.58	10.919		
13,800.00	7,113.15	7,066.15	7,113.15	181.84	244.96	89.89	1,415.83	-4,987.35	4,537.50	4,123.61	413.88	10.963		
13,900.00	7,112.61	7,065.61	7,112.61	184.63	244.94	89.88	1,415.83	-4,987.35	4,571.93	4,156.83	415.10	11.014		
14,000.00	7,112.07	7,065.07	7,112.07	187.42	244.92	89.88	1,415.83	-4,987.35	4,608.28	4,192.04	416.24	11.071		
14,100.00	7,111.53	7,064.53	7,111.53	190.22	244.90	89.87	1,415.83	-4,987.35	4,646.50	4,229.20	417.30	11.135		
14,200.00	7,110.99	7,063.99	7,110.99	193.01	244.88	89.86	1,415.83	-4,987.35	4,686.54	4,268.27	418.28	11.204		
14,300.00	7,110.45	7,063.45	7,110.45	195.81	244.86	89.85	1,415.83	-4,987.35	4,728.36	4,309.18	419.18	11.280		
14,400.00	7,109.91	7,062.91	7,109.91	198.61	244.84	89.85	1,415.83	-4,987.35	4,771.90	4,351.90	420.00	11.362		
14,500.00	7,109.37	7,062.37	7,109.37	201.42	244.82	89.84	1,415.83	-4,987.35	4,817.13	4,396.38	420.75	11.449		
14,600.00	7,108.82	7,061.82	7,108.82	204.22	244.81	89.83	1,415.83	-4,987.35	4,863.99	4,442.56	421.44	11.541		
14,700.00	7,108.28	7,061.28	7,108.28	207.03	244.79	89.82	1,415.83	-4,987.35	4,912.45	4,490.39	422.06	11.639		
14,800.00	7,107.74	7,060.74	7,107.74	209.83	244.77	89.82	1,415.83	-4,987.35	4,962.44	4,539.83	422.61	11.742		
14,900.00	7,107.20	7,060.20	7,107.20	212.64	244.75	89.81	1,415.83	-4,987.35	5,013.93	4,590.83	423.10	11.850		
15,000.00	7,106.66	7,059.66	7,106.66	215.45	244.73	89.80	1,415.83	-4,987.35	5,066.87	4,643.33	423.54	11.963		
15,100.00	7,106.12	7,059.12	7,106.12	218.26	244.71	89.80	1,415.83	-4,987.35	5,121.22	4,697.30	423.92	12.081		
15,200.00	7,105.58	7,058.58	7,105.58	221.07	244.69	89.79	1,415.83	-4,987.35	5,176.93	4,752.68	424.25	12.202		
15,300.00	7,105.04	7,058.04	7,105.04	223.89	244.67	89.78	1,415.83	-4,987.35	5,233.95	4,809.42	424.53	12.329		
15,400.00	7,104.50	7,057.50	7,104.50	226.70	244.65	89.77	1,415.83	-4,987.35	5,292.26	4,867.49	424.77	12.459		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	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)		
15,491.56	7,104.00	7,057.00	7,104.00	229.28	244.64	89.77	1,415.83	-4,987.35	5,346.72	4,921.78	424.94	12.582	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	45.00	3.28	3.28	-74.32	1,436.62	-5,117.23	5,315.26					
100.00	100.00	55.00	100.00	3.28	3.42	-74.32	1,436.62	-5,117.23	5,315.07	5,308.36	6.70	793.018		
200.00	200.00	155.00	200.00	3.34	4.92	-74.32	1,436.62	-5,117.23	5,315.07	5,306.81	8.26	643.795		
300.00	299.98	254.98	299.98	3.44	7.87	102.56	1,436.62	-5,117.23	5,315.45	5,304.14	11.31	469.933		
400.00	399.84	354.84	399.84	3.59	11.14	102.59	1,436.62	-5,117.23	5,316.59	5,301.86	14.72	361.074		
500.00	499.45	454.45	499.45	3.79	14.50	102.65	1,436.62	-5,117.23	5,318.50	5,300.22	18.28	290.917		
600.00	598.70	553.70	598.70	4.03	17.89	102.72	1,436.62	-5,117.23	5,321.19	5,299.28	21.92	242.790		
700.00	697.47	652.47	697.47	4.31	21.29	102.81	1,436.62	-5,117.23	5,324.69	5,299.09	25.60	207.994		
800.00	795.62	750.62	795.62	4.64	24.68	102.93	1,436.62	-5,117.23	5,329.02	5,299.70	29.31	181.785		
900.00	893.06	848.06	893.06	5.00	28.05	103.05	1,436.62	-5,117.23	5,334.20	5,301.15	33.05	161.400		
1,000.00	989.64	944.64	989.64	5.40	31.40	103.20	1,436.62	-5,117.23	5,340.28	5,303.48	36.80	145.133		
1,100.00	1,085.27	1,040.27	1,085.27	5.83	34.73	103.35	1,436.62	-5,117.23	5,347.28	5,306.73	40.55	131.881		
1,200.00	1,179.82	1,134.82	1,179.82	6.29	38.01	103.52	1,436.62	-5,117.23	5,355.26	5,310.96	44.29	120.900		
1,300.00	1,273.17	1,228.17	1,273.17	6.79	41.26	103.69	1,436.62	-5,117.23	5,364.25	5,316.22	48.04	111.670		
1,400.00	1,365.21	1,320.21	1,365.21	7.33	44.46	103.87	1,436.62	-5,117.23	5,374.32	5,322.55	51.77	103.817		
1,500.00	1,456.49	1,411.49	1,456.49	7.89	47.64	104.25	1,436.62	-5,117.23	5,385.12	5,329.62	55.49	97.038		
1,600.00	1,547.76	1,502.76	1,547.76	8.46	50.82	104.63	1,436.62	-5,117.23	5,396.21	5,336.97	59.24	91.094		
1,700.00	1,639.04	1,605.96	1,639.04	9.05	54.42	105.02	1,436.62	-5,117.23	5,407.59	5,344.18	63.41	85.281		
1,800.00	1,730.31	1,685.31	1,730.31	9.65	57.18	105.40	1,436.62	-5,117.23	5,419.26	5,352.50	66.76	81.177		
1,900.00	1,821.58	1,776.58	1,821.58	10.26	60.36	105.78	1,436.62	-5,117.23	5,431.20	5,360.67	70.53	77.004		
2,000.00	1,912.85	1,867.85	1,912.85	10.87	63.55	106.16	1,436.62	-5,117.23	5,443.43	5,369.12	74.31	73.252		
2,100.00	2,004.13	1,959.13	2,004.13	11.49	66.73	106.54	1,436.62	-5,117.23	5,455.93	5,377.84	78.09	69.863		
2,200.00	2,095.40	2,050.40	2,095.40	12.11	69.91	106.92	1,436.62	-5,117.23	5,468.71	5,386.83	81.88	66.787		
2,300.00	2,186.67	2,141.67	2,186.67	12.74	73.09	107.30	1,436.62	-5,117.23	5,481.77	5,396.09	85.68	63.983		
2,400.00	2,277.95	2,232.95	2,277.95	13.38	76.28	107.67	1,436.62	-5,117.23	5,495.10	5,405.63	89.47	61.419		
2,500.00	2,369.22	2,324.22	2,369.22	14.01	79.46	108.04	1,436.62	-5,117.23	5,508.70	5,415.43	93.27	59.064		
2,600.00	2,460.49	2,415.49	2,460.49	14.65	82.64	108.42	1,436.62	-5,117.23	5,522.57	5,425.50	97.06	56.896		
2,700.00	2,551.77	2,506.77	2,551.77	15.29	85.83	108.79	1,436.62	-5,117.23	5,536.70	5,435.84	100.86	54.893		
2,800.00	2,643.04	2,601.96	2,643.04	15.93	89.15	109.15	1,436.62	-5,117.23	5,551.10	5,446.30	104.80	52.968		
2,900.00	2,734.31	2,689.31	2,734.31	16.58	92.20	109.52	1,436.62	-5,117.23	5,565.76	5,457.30	108.47	51.314		
3,000.00	2,825.58	2,780.58	2,825.58	17.23	95.38	109.89	1,436.62	-5,117.23	5,580.69	5,468.42	112.27	49.709		
3,100.00	2,916.86	2,871.86	2,916.86	17.87	98.57	110.25	1,436.62	-5,117.23	5,595.87	5,479.80	116.07	48.212		
3,200.00	3,008.13	2,963.13	3,008.13	18.52	101.75	110.61	1,436.62	-5,117.23	5,611.31	5,491.44	119.87	46.811		
3,300.00	3,099.40	3,054.40	3,099.40	19.17	104.94	110.97	1,436.62	-5,117.23	5,627.00	5,503.33	123.67	45.499		
3,400.00	3,190.68	3,145.68	3,190.68	19.83	108.12	111.33	1,436.62	-5,117.23	5,642.94	5,515.47	127.47	44.267		
3,500.00	3,281.95	3,236.95	3,281.95	20.48	111.30	111.69	1,436.62	-5,117.23	5,659.14	5,527.86	131.27	43.109		
3,600.00	3,373.22	3,328.22	3,373.22	21.13	114.49	112.04	1,436.62	-5,117.23	5,675.58	5,540.50	135.08	42.018		
3,700.00	3,464.49	3,419.49	3,464.49	21.79	117.68	112.39	1,436.62	-5,117.23	5,692.27	5,553.39	138.88	40.988		
3,800.00	3,555.77	3,510.77	3,555.77	22.44	120.86	112.74	1,436.62	-5,117.23	5,709.20	5,566.53	142.67	40.015		
3,900.00	3,647.04	3,602.04	3,647.04	23.10	124.05	113.09	1,436.62	-5,117.23	5,726.37	5,579.90	146.47	39.095		
4,000.00	3,738.31	3,706.69	3,738.31	23.75	127.70	113.44	1,436.62	-5,117.23	5,743.79	5,593.05	150.74	38.104		
4,100.00	3,829.59	3,784.59	3,829.59	24.41	130.42	113.79	1,436.62	-5,117.23	5,761.44	5,607.37	154.07	37.395		
4,200.00	3,920.86	3,875.86	3,920.86	25.07	133.60	114.13	1,436.62	-5,117.23	5,779.32	5,621.46	157.86	36.609		
4,300.00	4,012.13	3,967.13	4,012.13	25.73	136.79	114.47	1,436.62	-5,117.23	5,797.44	5,635.78	161.66	35.862		
4,400.00	4,103.41	4,058.41	4,103.41	26.38	139.97	114.81	1,436.62	-5,117.23	5,815.79	5,650.33	165.45	35.151		
4,500.00	4,194.68	4,149.68	4,194.68	27.04	143.16	115.15	1,436.62	-5,117.23	5,834.36	5,665.11	169.25	34.472		
4,600.00	4,285.95	4,240.95	4,285.95	27.70	146.34	115.49	1,436.62	-5,117.23	5,853.16	5,680.13	173.04	33.826		
4,700.00	4,377.22	4,332.22	4,377.22	28.36	149.53	115.82	1,436.62	-5,117.23	5,872.19	5,695.36	176.83	33.208		
4,800.00	4,468.50	4,423.50	4,468.50	29.02	152.71	116.16	1,436.62	-5,117.23	5,891.44	5,710.82	180.62	32.618		
4,900.00	4,559.77	4,514.77	4,559.77	29.68	155.90	116.49	1,436.62	-5,117.23	5,910.91	5,726.50	184.41	32.053		
5,000.00	4,651.04	4,606.04	4,651.04	30.34	159.09	116.82	1,436.62	-5,117.23	5,930.59	5,742.40	188.20	31.513		
5,100.00	4,742.32	4,702.68	4,742.32	31.00	162.46	117.14	1,436.62	-5,117.23	5,950.49	5,758.32	192.17	30.965		

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

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 16-1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,788.59	4,833.59	31.66	165.46	117.47	1,436.62	-5,117.23	5,970.61	5,774.84	195.77	30.498		
5,300.00	4,924.86	4,879.86	4,924.86	32.32	168.64	117.79	1,436.62	-5,117.23	5,990.93	5,791.38	199.55	30.022		
5,400.00	5,016.13	4,971.13	5,016.13	32.99	171.83	118.11	1,436.62	-5,117.23	6,011.47	5,808.13	203.34	29.564		
5,500.00	5,107.41	5,062.41	5,107.41	33.65	175.01	118.43	1,436.62	-5,117.23	6,032.21	5,825.09	207.12	29.125		
5,600.00	5,198.68	5,153.68	5,198.68	34.31	178.20	118.75	1,436.62	-5,117.23	6,053.16	5,842.26	210.90	28.702		
5,700.00	5,289.95	5,244.95	5,289.95	34.97	181.39	119.06	1,436.62	-5,117.23	6,074.31	5,859.63	214.68	28.295		
5,800.00	5,381.23	5,336.23	5,381.23	35.63	184.57	119.38	1,436.62	-5,117.23	6,095.65	5,877.20	218.46	27.903		
5,900.00	5,472.50	5,427.50	5,472.50	36.30	187.76	119.69	1,436.62	-5,117.23	6,117.20	5,894.97	222.23	27.526		
6,000.00	5,563.77	5,518.77	5,563.77	36.96	190.94	120.00	1,436.62	-5,117.23	6,138.95	5,912.94	226.01	27.162		
6,100.00	5,655.05	5,610.05	5,655.05	37.62	194.13	120.31	1,436.62	-5,117.23	6,160.88	5,931.10	229.78	26.812		
6,200.00	5,746.32	5,701.32	5,746.32	38.28	197.32	120.61	1,436.62	-5,117.23	6,183.01	5,949.46	233.56	26.473		
6,300.00	5,837.59	5,807.41	5,837.59	38.95	201.02	120.92	1,436.62	-5,117.23	6,205.33	5,967.49	237.85	26.090		
6,400.00	5,928.86	5,898.86	5,928.86	39.61	203.69	121.22	1,436.62	-5,117.23	6,227.84	5,986.74	241.10	25.831		
6,500.00	6,020.14	5,975.14	6,020.14	40.27	206.87	121.52	1,436.62	-5,117.23	6,250.54	6,005.67	244.87	25.526		
6,600.00	6,111.41	6,066.41	6,111.41	40.94	210.06	121.82	1,436.62	-5,117.23	6,273.41	6,024.78	248.64	25.231		
6,700.00	6,202.68	6,157.68	6,202.68	41.60	213.24	122.12	1,436.62	-5,117.23	6,296.47	6,044.07	252.41	24.946		
6,800.00	6,293.96	6,248.96	6,293.96	42.26	216.43	122.41	1,436.62	-5,117.23	6,319.71	6,063.54	256.17	24.670		
6,900.00	6,385.23	6,340.23	6,385.23	42.93	219.62	122.70	1,436.62	-5,117.23	6,343.13	6,083.20	259.94	24.403		
7,000.00	6,476.50	6,431.50	6,476.50	43.59	222.80	122.99	1,436.62	-5,117.23	6,366.73	6,103.03	263.70	24.144		
7,100.00	6,567.77	6,522.77	6,567.77	44.25	225.99	123.28	1,436.62	-5,117.23	6,390.50	6,123.03	267.46	23.893		
7,200.00	6,658.64	6,613.64	6,658.64	44.91	229.16	123.57	1,436.62	-5,117.23	6,409.53	6,138.32	271.21	23.633		
7,300.00	6,747.14	6,702.14	6,747.14	45.52	232.25	123.86	1,436.62	-5,117.23	6,428.56	6,153.57	274.97	23.373		
7,400.00	6,831.10	6,786.10	6,831.10	46.07	235.18	124.15	1,436.62	-5,117.23	6,447.59	6,168.82	278.72	23.113		
7,500.00	6,908.46	6,863.46	6,908.46	46.54	237.88	124.44	1,436.62	-5,117.23	6,466.62	6,184.07	282.47	22.853		
7,600.00	6,977.30	6,932.30	6,977.30	46.95	240.28	124.73	1,436.62	-5,117.23	6,485.65	6,200.32	286.22	22.593		
7,700.00	7,035.93	7,009.07	7,035.93	47.30	242.96	125.02	1,436.62	-5,117.23	6,504.68	6,216.57	289.97	22.333		
7,800.00	7,082.92	7,037.92	7,082.92	47.59	243.97	125.31	1,436.62	-5,117.23	6,523.71	6,232.80	293.72	22.073		
7,900.00	7,117.09	7,072.09	7,117.09	47.84	245.16	125.60	1,436.62	-5,117.23	6,542.74	6,249.03	297.47	21.813		
8,000.00	7,137.62	7,107.38	7,137.62	48.06	246.40	125.89	1,436.62	-5,117.23	6,561.77	6,265.26	301.22	21.553		
8,100.00	7,143.99	7,101.01	7,143.99	48.28	246.17	126.18	1,436.62	-5,117.23	6,580.80	6,281.49	304.97	21.293		
8,200.00	7,143.45	7,101.55	7,143.45	48.53	246.19	126.47	1,436.62	-5,117.23	6,600.83	6,297.72	308.72	21.033		
8,300.00	7,142.91	7,102.09	7,142.91	48.89	246.21	126.76	1,436.62	-5,117.23	6,620.86	6,313.95	312.47	20.773		
8,400.00	7,142.37	7,102.63	7,142.37	49.40	246.23	127.05	1,436.62	-5,117.23	6,640.89	6,330.18	316.22	20.513		
8,500.00	7,141.83	7,103.17	7,141.83	50.12	246.25	127.34	1,436.62	-5,117.23	6,660.92	6,346.41	319.97	20.253		
8,600.00	7,141.29	7,103.71	7,141.29	51.08	246.27	127.63	1,436.62	-5,117.23	6,680.95	6,362.64	323.72	20.000		
8,700.00	7,140.75	7,104.25	7,140.75	52.30	246.29	127.92	1,436.62	-5,117.23	6,700.98	6,378.87	327.47	19.740		
8,800.00	7,140.21	7,104.79	7,140.21	53.75	246.31	128.21	1,436.62	-5,117.23	6,720.99	6,395.10	331.22	19.480		
8,900.00	7,139.67	7,105.33	7,139.67	55.40	246.32	128.50	1,436.62	-5,117.23	6,740.99	6,411.33	334.97	19.220		
9,000.00	7,139.12	7,105.88	7,139.12	57.20	246.34	128.79	1,436.62	-5,117.23	6,760.99	6,427.56	338.72	18.960		
9,100.00	7,138.58	7,106.42	7,138.58	59.13	246.36	129.08	1,436.62	-5,117.23	6,780.99	6,443.79	342.47	18.700		
9,200.00	7,138.04	7,106.96	7,138.04	61.15	246.38	129.37	1,436.62	-5,117.23	6,800.99	6,460.02	346.22	18.440		
9,300.00	7,137.50	7,107.50	7,137.50	63.26	246.40	129.66	1,436.62	-5,117.23	6,820.99	6,476.25	350.00	18.180		
9,400.00	7,136.96	7,108.04	7,136.96	65.44	246.42	129.95	1,436.62	-5,117.23	6,840.99	6,492.48	353.75	17.920		
9,500.00	7,136.42	7,108.58	7,136.42	67.68	246.44	130.24	1,436.62	-5,117.23	6,860.99	6,508.71	357.50	17.660		
9,600.00	7,135.88	7,109.12	7,135.88	69.97	246.46	130.53	1,436.62	-5,117.23	6,880.99	6,524.94	361.25	17.400		
9,700.00	7,135.34	7,109.66	7,135.34	72.31	246.48	130.82	1,436.62	-5,117.23	6,900.99	6,541.17	365.00	17.140		
9,800.00	7,134.80	7,089.80	7,134.80	74.69	245.78	131.11	1,436.62	-5,117.23	6,920.99	6,557.40	368.75	16.880		
9,900.00	7,134.26	7,089.26	7,134.26	77.10	245.76	131.40	1,436.62	-5,117.23	6,940.99	6,573.63	372.50	16.620		
10,000.00	7,133.71	7,088.71	7,133.71	79.54	245.74	131.69	1,436.62	-5,117.23	6,960.99	6,589.86	376.25	16.360		
10,100.00	7,133.17	7,088.17	7,133.17	82.02	245.72	131.98	1,436.62	-5,117.23	6,980.99	6,606.09	380.00	16.100		
10,200.00	7,132.63	7,087.63	7,132.63	84.52	245.71	132.27	1,436.62	-5,117.23	7,000.99	6,622.32	383.75	15.840		
10,300.00	7,132.09	7,087.09	7,132.09	87.04	245.69	132.56	1,436.62	-5,117.23	7,020.99	6,638.55	387.50	15.580		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 16-1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,131.55	7,086.55	7,131.55	89.58	245.67	90.15	1,436.62	-5,117.23	4,744.75	4,412.47	332.29	14.279		
10,500.00	7,131.01	7,086.01	7,131.01	92.15	245.65	90.14	1,436.62	-5,117.23	4,703.24	4,368.29	334.95	14.042		
10,600.00	7,130.47	7,085.47	7,130.47	94.73	245.63	90.13	1,436.62	-5,117.23	4,663.50	4,325.84	337.66	13.811		
10,700.00	7,129.93	7,084.93	7,129.93	97.33	245.61	90.12	1,436.62	-5,117.23	4,625.58	4,285.17	340.41	13.588		
10,800.00	7,129.39	7,084.39	7,129.39	99.94	245.59	90.12	1,436.62	-5,117.23	4,589.53	4,246.33	343.20	13.373		
10,900.00	7,128.84	7,083.84	7,128.84	102.56	245.57	90.11	1,436.62	-5,117.23	4,555.38	4,209.36	346.02	13.165		
11,000.00	7,128.30	7,083.30	7,128.30	105.20	245.56	90.10	1,436.62	-5,117.23	4,523.19	4,174.33	348.87	12.965		
11,100.00	7,127.76	7,082.76	7,127.76	107.85	245.54	90.09	1,436.62	-5,117.23	4,493.00	4,141.26	351.74	12.774		
11,200.00	7,127.22	7,082.22	7,127.22	110.51	245.52	90.09	1,436.62	-5,117.23	4,464.84	4,110.22	354.62	12.591		
11,300.00	7,126.68	7,081.68	7,126.68	113.18	245.50	90.08	1,436.62	-5,117.23	4,438.76	4,081.25	357.51	12.416		
11,400.00	7,126.14	7,081.14	7,126.14	115.86	245.48	90.07	1,436.62	-5,117.23	4,414.78	4,054.38	360.40	12.250		
11,500.00	7,125.60	7,080.60	7,125.60	118.55	245.46	90.07	1,436.62	-5,117.23	4,392.96	4,029.67	363.29	12.092		
11,600.00	7,125.06	7,080.06	7,125.06	121.25	245.44	90.06	1,436.62	-5,117.23	4,373.31	4,007.14	366.17	11.943		
11,700.00	7,124.52	7,079.52	7,124.52	123.95	245.42	90.05	1,436.62	-5,117.23	4,355.87	3,986.84	369.03	11.803		
11,800.00	7,123.97	7,078.97	7,123.97	126.66	245.40	90.04	1,436.62	-5,117.23	4,340.66	3,968.79	371.87	11.673		
11,900.00	7,123.43	7,078.43	7,123.43	129.38	245.39	90.04	1,436.62	-5,117.23	4,327.72	3,953.04	374.68	11.551		
12,000.00	7,122.89	7,077.89	7,122.89	132.10	245.37	90.03	1,436.62	-5,117.23	4,317.05	3,939.60	377.45	11.437		
12,100.00	7,122.35	7,077.35	7,122.35	134.83	245.35	90.02	1,436.62	-5,117.23	4,308.67	3,928.49	380.18	11.333		
12,200.00	7,121.81	7,076.81	7,121.81	137.56	245.33	90.02	1,436.62	-5,117.23	4,302.60	3,919.75	382.86	11.238		
12,300.00	7,121.27	7,076.27	7,121.27	140.30	245.31	90.01	1,436.62	-5,117.23	4,298.85	3,913.37	385.48	11.152		
12,400.00	7,120.73	7,075.73	7,120.73	143.05	245.29	90.00	1,436.62	-5,117.23	4,297.43	3,909.38	388.05	11.074		
12,411.23	7,120.67	7,075.67	7,120.67	143.36	245.29	90.00	1,436.62	-5,117.23	4,297.42	3,909.08	388.33	11.066 CC		
12,500.00	7,120.19	7,075.19	7,120.19	145.80	245.27	89.99	1,436.62	-5,117.23	4,298.33	3,907.78	390.55	11.006 ES		
12,600.00	7,119.65	7,074.65	7,119.65	148.55	245.25	89.99	1,436.62	-5,117.23	4,301.56	3,908.57	392.99	10.946		
12,700.00	7,119.10	7,074.10	7,119.10	151.30	245.23	89.98	1,436.62	-5,117.23	4,307.11	3,911.76	395.35	10.895		
12,800.00	7,118.56	7,073.56	7,118.56	154.07	245.22	89.97	1,436.62	-5,117.23	4,314.96	3,917.34	397.63	10.852		
12,900.00	7,118.02	7,073.02	7,118.02	156.83	245.20	89.96	1,436.62	-5,117.23	4,325.12	3,925.29	399.83	10.817		
13,000.00	7,117.48	7,072.48	7,117.48	159.60	245.18	89.96	1,436.62	-5,117.23	4,337.56	3,935.61	401.95	10.791		
13,100.00	7,116.94	7,071.94	7,116.94	162.37	245.16	89.95	1,436.62	-5,117.23	4,352.26	3,948.27	403.99	10.773		
13,200.00	7,116.40	7,071.40	7,116.40	165.14	245.14	89.94	1,436.62	-5,117.23	4,369.20	3,963.27	405.94	10.763		
13,300.00	7,115.86	7,070.86	7,115.86	167.92	245.12	89.94	1,436.62	-5,117.23	4,388.36	3,980.56	407.79	10.761 SF		
13,400.00	7,115.32	7,070.32	7,115.32	170.70	245.10	89.93	1,436.62	-5,117.23	4,409.70	4,000.13	409.56	10.767		
13,500.00	7,114.78	7,069.78	7,114.78	173.48	245.08	89.92	1,436.62	-5,117.23	4,433.19	4,021.95	411.24	10.780		
13,600.00	7,114.24	7,069.24	7,114.24	176.26	245.06	89.91	1,436.62	-5,117.23	4,458.80	4,045.97	412.83	10.801		
13,700.00	7,113.69	7,068.69	7,113.69	179.05	245.05	89.91	1,436.62	-5,117.23	4,486.50	4,072.17	414.33	10.828		
13,800.00	7,113.15	7,068.15	7,113.15	181.84	245.03	89.90	1,436.62	-5,117.23	4,516.24	4,100.50	415.74	10.863		
13,900.00	7,112.61	7,067.61	7,112.61	184.63	245.01	89.89	1,436.62	-5,117.23	4,547.98	4,130.92	417.06	10.905		
14,000.00	7,112.07	7,067.07	7,112.07	187.42	244.99	89.89	1,436.62	-5,117.23	4,581.69	4,163.40	418.29	10.953		
14,100.00	7,111.53	7,066.53	7,111.53	190.22	244.97	89.88	1,436.62	-5,117.23	4,617.32	4,197.88	419.44	11.008		
14,200.00	7,110.99	7,065.99	7,110.99	193.01	244.95	89.87	1,436.62	-5,117.23	4,654.82	4,234.31	420.51	11.069		
14,300.00	7,110.45	7,065.45	7,110.45	195.81	244.93	89.86	1,436.62	-5,117.23	4,694.16	4,272.66	421.50	11.137		
14,400.00	7,109.91	7,064.91	7,109.91	198.61	244.91	89.86	1,436.62	-5,117.23	4,735.28	4,312.88	422.40	11.210		
14,500.00	7,109.37	7,064.37	7,109.37	201.42	244.89	89.85	1,436.62	-5,117.23	4,778.14	4,354.90	423.24	11.290		
14,600.00	7,108.82	7,063.82	7,108.82	204.22	244.88	89.84	1,436.62	-5,117.23	4,822.69	4,398.70	424.00	11.374		
14,700.00	7,108.28	7,063.28	7,108.28	207.03	244.86	89.83	1,436.62	-5,117.23	4,868.89	4,444.21	424.68	11.465		
14,800.00	7,107.74	7,062.74	7,107.74	209.83	244.84	89.83	1,436.62	-5,117.23	4,916.69	4,491.39	425.30	11.560		
14,900.00	7,107.20	7,062.20	7,107.20	212.64	244.82	89.82	1,436.62	-5,117.23	4,966.04	4,540.18	425.86	11.661		
15,000.00	7,106.66	7,061.66	7,106.66	215.45	244.80	89.81	1,436.62	-5,117.23	5,016.90	4,590.55	426.35	11.767		
15,100.00	7,106.12	7,061.12	7,106.12	218.26	244.78	89.81	1,436.62	-5,117.23	5,069.23	4,642.44	426.79	11.878		
15,200.00	7,105.58	7,060.58	7,105.58	221.07	244.76	89.80	1,436.62	-5,117.23	5,122.97	4,695.80	427.17	11.993		
15,300.00	7,105.04	7,060.04	7,105.04	223.89	244.74	89.79	1,436.62	-5,117.23	5,178.08	4,750.59	427.49	12.113		
15,400.00	7,104.50	7,059.50	7,104.50	226.70	244.72	89.78	1,436.62	-5,117.23	5,234.53	4,806.76	427.77	12.237		

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



Anticollision Report



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

Offset Design	HARVESTERS STATE 7-15 PAD - STATE BEATRICE 16-1(AB_150CC) - OH - OH											Offset Site Error:	0.00 ft
Survey Program:	100-2" Cone@2.448 Sigma											Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	7,059.00	7,104.00	229.28	244.71	89.78	1,436.62	-5,117.23	5,287.34	4,859.36	427.98	12.354	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.00	0.00	0.00	52.00	3.28	3.28	-90.41	-35.21	-4,914.49	4,914.90					
100.00	100.00	48.00	100.00	3.28	3.39	-90.41	-35.21	-4,914.49	4,914.62	4,907.95	6.67	736.820		
200.00	200.00	148.00	200.00	3.34	4.74	-90.41	-35.21	-4,914.49	4,914.62	4,906.54	8.08	608.506		
300.00	299.98	247.98	299.98	3.44	7.65	86.48	-35.21	-4,914.49	4,914.51	4,903.42	11.09	443.165		
400.00	399.84	347.84	399.84	3.59	10.90	86.55	-35.21	-4,914.49	4,914.19	4,899.70	14.49	339.122		
500.00	499.45	447.45	499.45	3.79	14.26	86.66	-35.21	-4,914.49	4,913.67	4,895.63	18.04	272.323		
600.00	598.70	546.70	598.70	4.03	17.65	86.81	-35.21	-4,914.49	4,912.98	4,891.30	21.68	226.652		
700.00	697.47	645.47	697.47	4.31	21.04	87.01	-35.21	-4,914.49	4,912.12	4,886.76	25.36	193.706		
800.00	795.62	743.62	795.62	4.64	24.44	87.25	-35.21	-4,914.49	4,911.15	4,882.07	29.07	168.924		
900.00	893.06	841.06	893.06	5.00	27.81	87.52	-35.21	-4,914.49	4,910.09	4,877.29	32.81	149.659		
1,000.00	989.64	937.64	989.64	5.40	31.16	87.84	-35.21	-4,914.49	4,909.01	4,872.45	36.56	134.286		
1,100.00	1,085.27	1,033.27	1,085.27	5.83	34.48	88.18	-35.21	-4,914.49	4,907.95	4,867.64	40.31	121.756		
1,200.00	1,179.82	1,127.82	1,179.82	6.29	37.77	88.56	-35.21	-4,914.49	4,906.97	4,862.91	44.06	111.364		
1,300.00	1,273.17	1,221.17	1,273.17	6.79	41.02	88.97	-35.21	-4,914.49	4,906.14	4,858.33	47.81	102.617		
1,400.00	1,365.21	1,313.21	1,365.21	7.33	44.22	89.40	-35.21	-4,914.49	4,905.54	4,853.99	51.55	95.163		
1,500.00	1,456.49	1,404.49	1,456.49	7.89	47.40	89.84	-35.21	-4,914.49	4,905.24	4,849.96	55.29	88.725		
1,537.47	1,490.69	1,438.69	1,490.69	8.10	48.59	90.00	-35.21	-4,914.49	4,905.22	4,848.53	56.69	86.524		
1,600.00	1,547.76	1,504.24	1,547.76	8.46	50.87	90.27	-35.21	-4,914.49	4,905.29	4,845.95	59.34	82.669		
1,700.00	1,639.04	1,587.04	1,639.04	9.05	53.76	90.71	-35.21	-4,914.49	4,905.67	4,842.86	62.81	78.104		
1,800.00	1,730.31	1,678.31	1,730.31	9.65	56.94	91.14	-35.21	-4,914.49	4,906.39	4,839.80	66.59	73.683		
1,900.00	1,821.58	1,769.58	1,821.58	10.26	60.12	91.58	-35.21	-4,914.49	4,907.45	4,837.08	70.38	69.732		
2,000.00	1,912.85	1,860.85	1,912.85	10.87	63.30	92.01	-35.21	-4,914.49	4,908.86	4,834.69	74.17	66.183		
2,100.00	2,004.13	1,952.13	2,004.13	11.49	66.48	92.45	-35.21	-4,914.49	4,910.60	4,832.63	77.97	62.979		
2,200.00	2,095.40	2,043.40	2,095.40	12.11	69.67	92.88	-35.21	-4,914.49	4,912.68	4,830.90	81.78	60.073		
2,300.00	2,186.67	2,134.67	2,186.67	12.74	72.85	93.32	-35.21	-4,914.49	4,915.10	4,829.51	85.59	57.427		
2,400.00	2,277.95	2,225.95	2,277.95	13.38	76.03	93.75	-35.21	-4,914.49	4,917.86	4,828.46	89.40	55.008		
2,500.00	2,369.22	2,317.22	2,369.22	14.01	79.22	94.19	-35.21	-4,914.49	4,920.96	4,827.74	93.22	52.789		
2,600.00	2,460.49	2,408.49	2,460.49	14.65	82.40	94.62	-35.21	-4,914.49	4,924.39	4,827.35	97.04	50.747		
2,700.00	2,551.77	2,500.23	2,551.77	15.29	85.60	95.05	-35.21	-4,914.49	4,928.16	4,827.29	100.88	48.854		
2,800.00	2,643.04	2,608.96	2,643.04	15.93	89.39	95.48	-35.21	-4,914.49	4,932.27	4,826.96	105.31	46.837		
2,900.00	2,734.31	2,682.31	2,734.31	16.58	91.95	95.91	-35.21	-4,914.49	4,936.71	4,828.20	108.50	45.498		
3,000.00	2,825.58	2,773.58	2,825.58	17.23	95.14	96.34	-35.21	-4,914.49	4,941.48	4,829.15	112.33	43.991		
3,100.00	2,916.86	2,864.86	2,916.86	17.87	98.32	96.77	-35.21	-4,914.49	4,946.59	4,830.43	116.16	42.586		
3,200.00	3,008.13	2,956.13	3,008.13	18.52	101.51	97.20	-35.21	-4,914.49	4,952.03	4,832.04	119.98	41.273		
3,300.00	3,099.40	3,047.40	3,099.40	19.17	104.69	97.63	-35.21	-4,914.49	4,957.79	4,833.99	123.81	40.044		
3,400.00	3,190.68	3,138.68	3,190.68	19.83	107.88	98.06	-35.21	-4,914.49	4,963.89	4,836.26	127.63	38.891		
3,500.00	3,281.95	3,229.95	3,281.95	20.48	111.06	98.49	-35.21	-4,914.49	4,970.32	4,838.86	131.46	37.808		
3,600.00	3,373.22	3,321.22	3,373.22	21.13	114.25	98.91	-35.21	-4,914.49	4,977.08	4,841.79	135.29	36.789		
3,700.00	3,464.49	3,412.49	3,464.49	21.79	117.43	99.34	-35.21	-4,914.49	4,984.16	4,845.04	139.11	35.828		
3,800.00	3,555.77	3,503.77	3,555.77	22.44	120.62	99.76	-35.21	-4,914.49	4,991.56	4,848.62	142.94	34.921		
3,900.00	3,647.04	3,604.96	3,647.04	23.10	124.15	100.18	-35.21	-4,914.49	4,999.29	4,852.18	147.11	33.983		
4,000.00	3,738.31	3,686.31	3,738.31	23.75	126.99	100.60	-35.21	-4,914.49	5,007.34	4,856.75	150.59	33.251		
4,100.00	3,829.59	3,777.59	3,829.59	24.41	130.17	101.02	-35.21	-4,914.49	5,015.71	4,861.29	154.42	32.482		
4,200.00	3,920.86	3,868.86	3,920.86	25.07	133.36	101.44	-35.21	-4,914.49	5,024.39	4,866.15	158.24	31.752		
4,300.00	4,012.13	3,960.13	4,012.13	25.73	136.54	101.86	-35.21	-4,914.49	5,033.40	4,871.33	162.06	31.058		
4,400.00	4,103.41	4,051.41	4,103.41	26.38	139.73	102.28	-35.21	-4,914.49	5,042.71	4,876.83	165.88	30.399		
4,500.00	4,194.68	4,142.68	4,194.68	27.04	142.91	102.69	-35.21	-4,914.49	5,052.35	4,882.64	169.71	29.771		
4,600.00	4,285.95	4,233.95	4,285.95	27.70	146.10	103.11	-35.21	-4,914.49	5,062.29	4,888.77	173.53	29.173		
4,700.00	4,377.22	4,325.22	4,377.22	28.36	149.28	103.52	-35.21	-4,914.49	5,072.54	4,895.20	177.34	28.603		
4,800.00	4,468.50	4,416.50	4,468.50	29.02	152.47	103.93	-35.21	-4,914.49	5,083.10	4,901.94	181.16	28.058		
4,900.00	4,559.77	4,507.77	4,559.77	29.68	155.66	104.34	-35.21	-4,914.49	5,093.97	4,908.99	184.98	27.538		
5,000.00	4,651.04	4,600.96	4,651.04	30.34	158.91	104.75	-35.21	-4,914.49	5,105.14	4,916.28	188.86	27.031		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 32-16(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	4,709.68	4,742.32	31.00	162.70	105.15	-35.21	-4,914.49	5,116.61	4,923.33	193.28	26.472		
5,200.00	4,833.59	4,781.59	4,833.59	31.66	165.21	105.56	-35.21	-4,914.49	5,128.38	4,931.96	196.42	26.109		
5,300.00	4,924.86	4,872.86	4,924.86	32.32	168.40	105.96	-35.21	-4,914.49	5,140.45	4,940.22	200.23	25.672		
5,400.00	5,016.13	4,964.13	5,016.13	32.99	171.58	106.36	-35.21	-4,914.49	5,152.82	4,948.78	204.04	25.253		
5,500.00	5,107.41	5,055.41	5,107.41	33.65	174.77	106.76	-35.21	-4,914.49	5,165.48	4,957.63	207.85	24.852		
5,600.00	5,198.68	5,146.68	5,198.68	34.31	177.96	107.16	-35.21	-4,914.49	5,178.43	4,966.77	211.66	24.466		
5,700.00	5,289.95	5,237.95	5,289.95	34.97	181.14	107.56	-35.21	-4,914.49	5,191.67	4,976.20	215.47	24.095		
5,800.00	5,381.23	5,329.23	5,381.23	35.63	184.33	107.95	-35.21	-4,914.49	5,205.20	4,985.92	219.27	23.739		
5,900.00	5,472.50	5,420.50	5,472.50	36.30	187.51	108.35	-35.21	-4,914.49	5,219.01	4,995.93	223.07	23.396		
6,000.00	5,563.77	5,511.77	5,563.77	36.96	190.70	108.74	-35.21	-4,914.49	5,233.10	5,006.23	226.88	23.066		
6,100.00	5,655.05	5,603.05	5,655.05	37.62	193.88	109.13	-35.21	-4,914.49	5,247.48	5,016.80	230.68	22.748		
6,200.00	5,746.32	5,705.68	5,746.32	38.28	197.47	109.52	-35.21	-4,914.49	5,262.13	5,027.26	234.87	22.404		
6,300.00	5,837.59	5,785.59	5,837.59	38.95	200.26	109.90	-35.21	-4,914.49	5,277.06	5,038.78	238.27	22.147		
6,400.00	5,928.86	5,876.86	5,928.86	39.61	203.44	110.29	-35.21	-4,914.49	5,292.26	5,050.19	242.07	21.863		
6,500.00	6,020.14	5,968.14	6,020.14	40.27	206.63	110.67	-35.21	-4,914.49	5,307.73	5,061.87	245.86	21.588		
6,600.00	6,111.41	6,059.41	6,111.41	40.94	209.81	111.05	-35.21	-4,914.49	5,323.47	5,073.82	249.66	21.323		
6,700.00	6,202.68	6,150.68	6,202.68	41.60	213.00	111.43	-35.21	-4,914.49	5,339.48	5,086.03	253.45	21.068		
6,800.00	6,293.96	6,241.96	6,293.96	42.26	216.19	111.81	-35.21	-4,914.49	5,355.75	5,098.51	257.24	20.820		
6,900.00	6,385.23	6,333.23	6,385.23	42.93	219.37	112.18	-35.21	-4,914.49	5,372.28	5,111.26	261.02	20.582		
7,000.00	6,476.50	6,424.50	6,476.50	43.59	222.56	112.55	-35.21	-4,914.49	5,389.07	5,124.26	264.81	20.351		
7,100.00	6,567.77	6,515.77	6,567.77	44.25	225.74	112.92	-35.21	-4,914.49	5,406.12	5,137.53	268.59	20.127		
7,200.00	6,658.64	6,606.64	6,658.64	44.91	228.92	95.94	-35.21	-4,914.49	5,417.89	5,145.53	272.36	19.892		
7,300.00	6,747.14	6,704.86	6,747.14	45.52	232.34	81.34	-35.21	-4,914.49	5,416.04	5,139.67	276.37	19.597		
7,400.00	6,831.10	6,779.10	6,831.10	46.07	234.94	71.89	-35.21	-4,914.49	5,400.68	5,121.20	279.48	19.324		
7,500.00	6,908.46	6,856.46	6,908.46	46.54	237.64	66.54	-35.21	-4,914.49	5,372.35	5,089.70	282.65	19.007		
7,600.00	6,977.30	6,925.30	6,977.30	46.95	240.04	64.27	-35.21	-4,914.49	5,331.86	5,046.38	285.49	18.676		
7,700.00	7,035.93	6,983.93	7,035.93	47.30	242.09	64.53	-35.21	-4,914.49	5,280.32	4,992.38	287.94	18.338		
7,800.00	7,082.92	7,030.92	7,082.92	47.59	243.73	67.15	-35.21	-4,914.49	5,219.04	4,929.06	289.98	17.998		
7,900.00	7,117.09	7,065.09	7,117.09	47.84	244.92	72.21	-35.21	-4,914.49	5,149.55	4,857.96	291.59	17.660		
8,000.00	7,137.62	7,085.62	7,137.62	48.06	245.64	79.99	-35.21	-4,914.49	5,073.53	4,780.78	292.75	17.331		
8,100.00	7,143.99	7,108.01	7,143.99	48.28	246.42	90.45	-35.21	-4,914.49	4,992.76	4,698.76	294.00	16.982		
8,200.00	7,143.45	7,108.55	7,143.45	48.53	246.44	90.44	-35.21	-4,914.49	4,910.63	4,616.09	294.54	16.672		
8,300.00	7,142.91	7,109.09	7,142.91	48.89	246.46	90.43	-35.21	-4,914.49	4,829.17	4,534.02	295.15	16.362		
8,400.00	7,142.37	7,109.63	7,142.37	49.40	246.47	90.42	-35.21	-4,914.49	4,748.42	4,452.58	295.83	16.051		
8,500.00	7,141.83	7,089.83	7,141.83	50.12	245.78	90.41	-35.21	-4,914.49	4,668.41	4,372.52	295.89	15.777		
8,600.00	7,141.29	7,089.29	7,141.29	51.08	245.76	90.40	-35.21	-4,914.49	4,589.19	4,292.48	296.71	15.467		
8,700.00	7,140.75	7,088.75	7,140.75	52.30	245.75	90.39	-35.21	-4,914.49	4,510.79	4,213.17	297.62	15.156		
8,800.00	7,140.21	7,088.21	7,140.21	53.75	245.73	90.38	-35.21	-4,914.49	4,433.27	4,134.65	298.62	14.846		
8,900.00	7,139.67	7,087.67	7,139.67	55.40	245.71	90.36	-35.21	-4,914.49	4,356.66	4,056.94	299.72	14.536		
9,000.00	7,139.12	7,087.12	7,139.12	57.20	245.69	90.35	-35.21	-4,914.49	4,281.01	3,980.10	300.91	14.227		
9,100.00	7,138.58	7,086.58	7,138.58	59.13	245.67	90.34	-35.21	-4,914.49	4,206.38	3,904.17	302.21	13.919		
9,200.00	7,138.04	7,086.04	7,138.04	61.15	245.65	90.33	-35.21	-4,914.49	4,132.82	3,829.21	303.62	13.612		
9,300.00	7,137.50	7,085.50	7,137.50	63.26	245.63	90.32	-35.21	-4,914.49	4,060.39	3,755.27	305.13	13.307		
9,400.00	7,136.96	7,084.96	7,136.96	65.44	245.61	90.31	-35.21	-4,914.49	3,989.16	3,682.41	306.75	13.005		
9,500.00	7,136.42	7,084.42	7,136.42	67.68	245.59	90.30	-35.21	-4,914.49	3,919.18	3,610.71	308.48	12.705		
9,600.00	7,135.88	7,083.88	7,135.88	69.97	245.58	90.29	-35.21	-4,914.49	3,850.53	3,540.21	310.32	12.408		
9,700.00	7,135.34	7,083.34	7,135.34	72.31	245.56	90.28	-35.21	-4,914.49	3,783.27	3,471.01	312.27	12.116		
9,800.00	7,134.80	7,082.80	7,134.80	74.69	245.54	90.27	-35.21	-4,914.49	3,717.49	3,403.16	314.33	11.827		
9,900.00	7,134.26	7,082.26	7,134.26	77.10	245.52	90.25	-35.21	-4,914.49	3,653.26	3,336.76	316.50	11.543		
10,000.00	7,133.71	7,081.71	7,133.71	79.54	245.50	90.24	-35.21	-4,914.49	3,590.67	3,271.89	318.78	11.264		
10,100.00	7,133.17	7,081.17	7,133.17	82.02	245.48	90.23	-35.21	-4,914.49	3,529.80	3,208.63	321.17	10.990		
10,200.00	7,132.63	7,080.63	7,132.63	84.52	245.46	90.22	-35.21	-4,914.49	3,470.75	3,147.08	323.67	10.723		

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

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 32-16(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,300.00	7,132.09	7,080.09	7,132.09	87.04	245.44	90.21	-35.21	-4,914.49	3,413.60	3,087.34	326.26	10.463	
10,400.00	7,131.55	7,079.55	7,131.55	89.58	245.42	90.20	-35.21	-4,914.49	3,358.46	3,029.51	328.95	10.210	
10,500.00	7,131.01	7,079.01	7,131.01	92.15	245.41	90.19	-35.21	-4,914.49	3,305.42	2,973.69	331.73	9.964	
10,600.00	7,130.47	7,078.47	7,130.47	94.73	245.39	90.18	-35.21	-4,914.49	3,254.60	2,920.00	334.59	9.727	
10,700.00	7,129.93	7,077.93	7,129.93	97.33	245.37	90.17	-35.21	-4,914.49	3,206.09	2,868.55	337.53	9.499	
10,800.00	7,129.39	7,077.39	7,129.39	99.94	245.35	90.16	-35.21	-4,914.49	3,159.99	2,819.45	340.54	9.279	
10,900.00	7,128.84	7,076.84	7,128.84	102.56	245.33	90.14	-35.21	-4,914.49	3,116.43	2,772.82	343.61	9.070	
11,000.00	7,128.30	7,076.30	7,128.30	105.20	245.31	90.13	-35.21	-4,914.49	3,075.50	2,728.79	346.72	8.870	
11,100.00	7,127.76	7,075.76	7,127.76	107.85	245.29	90.12	-35.21	-4,914.49	3,037.32	2,687.46	349.86	8.681	
11,200.00	7,127.22	7,075.22	7,127.22	110.51	245.27	90.11	-35.21	-4,914.49	3,001.98	2,648.95	353.03	8.504	
11,300.00	7,126.68	7,074.68	7,126.68	113.18	245.25	90.10	-35.21	-4,914.49	2,969.59	2,613.39	356.20	8.337	
11,400.00	7,126.14	7,074.14	7,126.14	115.86	245.24	90.09	-35.21	-4,914.49	2,940.24	2,580.88	359.36	8.182	
11,500.00	7,125.60	7,073.60	7,125.60	118.55	245.22	90.08	-35.21	-4,914.49	2,914.04	2,551.54	362.50	8.039	
11,600.00	7,125.06	7,073.06	7,125.06	121.25	245.20	90.07	-35.21	-4,914.49	2,891.05	2,525.46	365.59	7.908	
11,700.00	7,124.52	7,072.52	7,124.52	123.95	245.18	90.06	-35.21	-4,914.49	2,871.37	2,502.74	368.63	7.789	
11,800.00	7,123.97	7,071.97	7,123.97	126.66	245.16	90.05	-35.21	-4,914.49	2,855.05	2,483.47	371.59	7.683	
11,900.00	7,123.43	7,071.43	7,123.43	129.38	245.14	90.03	-35.21	-4,914.49	2,842.17	2,467.71	374.46	7.590	
12,000.00	7,122.89	7,070.89	7,122.89	132.10	245.12	90.02	-35.21	-4,914.49	2,832.75	2,455.53	377.22	7.509	
12,100.00	7,122.35	7,070.35	7,122.35	134.83	245.10	90.01	-35.21	-4,914.49	2,826.85	2,446.98	379.87	7.442	
12,200.00	7,121.81	7,069.81	7,121.81	137.56	245.08	90.00	-35.21	-4,914.49	2,824.47	2,442.10	382.37	7.387	
12,217.14	7,121.72	7,069.72	7,121.72	138.03	245.08	90.00	-35.21	-4,914.49	2,824.42	2,441.63	382.79	7.379 CC	
12,300.00	7,121.27	7,069.27	7,121.27	140.30	245.07	89.99	-35.21	-4,914.49	2,825.63	2,440.90	384.74	7.344 ES	
12,400.00	7,120.73	7,068.73	7,120.73	143.05	245.05	89.98	-35.21	-4,914.49	2,830.33	2,443.39	386.94	7.315	
12,500.00	7,120.19	7,068.19	7,120.19	145.80	245.03	89.97	-35.21	-4,914.49	2,838.55	2,449.56	388.99	7.297	
12,600.00	7,119.65	7,067.65	7,119.65	148.55	245.01	89.96	-35.21	-4,914.49	2,850.25	2,459.38	390.86	7.292 SF	
12,700.00	7,119.10	7,067.10	7,119.10	151.30	244.99	89.95	-35.21	-4,914.49	2,865.39	2,472.83	392.57	7.299	
12,800.00	7,118.56	7,066.56	7,118.56	154.07	244.97	89.94	-35.21	-4,914.49	2,883.93	2,489.84	394.09	7.318	
12,900.00	7,118.02	7,066.02	7,118.02	156.83	244.95	89.93	-35.21	-4,914.49	2,905.79	2,510.34	395.45	7.348	
13,000.00	7,117.48	7,065.48	7,117.48	159.60	244.93	89.91	-35.21	-4,914.49	2,930.90	2,534.27	396.63	7.389	
13,100.00	7,116.94	7,064.94	7,116.94	162.37	244.91	89.90	-35.21	-4,914.49	2,959.18	2,561.53	397.65	7.442	
13,200.00	7,116.40	7,064.40	7,116.40	165.14	244.90	89.89	-35.21	-4,914.49	2,990.54	2,592.03	398.50	7.504	
13,300.00	7,115.86	7,063.86	7,115.86	167.92	244.88	89.88	-35.21	-4,914.49	3,024.88	2,625.68	399.20	7.577	
13,400.00	7,115.32	7,063.32	7,115.32	170.70	244.86	89.87	-35.21	-4,914.49	3,062.10	2,662.35	399.75	7.660	
13,500.00	7,114.78	7,062.78	7,114.78	173.48	244.84	89.86	-35.21	-4,914.49	3,102.10	2,701.93	400.16	7.752	
13,600.00	7,114.24	7,062.24	7,114.24	176.26	244.82	89.85	-35.21	-4,914.49	3,144.77	2,744.32	400.44	7.853	
13,700.00	7,113.69	7,061.69	7,113.69	179.05	244.80	89.84	-35.21	-4,914.49	3,190.01	2,789.40	400.60	7.963	
13,800.00	7,113.15	7,061.15	7,113.15	181.84	244.78	89.83	-35.21	-4,914.49	3,237.70	2,837.05	400.65	8.081	
13,900.00	7,112.61	7,060.61	7,112.61	184.63	244.76	89.82	-35.21	-4,914.49	3,287.74	2,887.15	400.60	8.207	
14,000.00	7,112.07	7,060.07	7,112.07	187.42	244.74	89.80	-35.21	-4,914.49	3,340.03	2,939.58	400.45	8.341	
14,100.00	7,111.53	7,059.53	7,111.53	190.22	244.73	89.79	-35.21	-4,914.49	3,394.46	2,994.25	400.22	8.482	
14,200.00	7,110.99	7,058.99	7,110.99	193.01	244.71	89.78	-35.21	-4,914.49	3,450.93	3,051.03	399.91	8.629	
14,300.00	7,110.45	7,058.45	7,110.45	195.81	244.69	89.77	-35.21	-4,914.49	3,509.35	3,109.81	399.53	8.784	
14,400.00	7,109.91	7,057.91	7,109.91	198.61	244.67	89.76	-35.21	-4,914.49	3,569.60	3,170.51	399.10	8.944	
14,500.00	7,109.37	7,057.37	7,109.37	201.42	244.65	89.75	-35.21	-4,914.49	3,631.61	3,233.00	398.61	9.111	
14,600.00	7,108.82	7,056.82	7,108.82	204.22	244.63	89.74	-35.21	-4,914.49	3,695.29	3,297.22	398.08	9.283	
14,700.00	7,108.28	7,056.28	7,108.28	207.03	244.61	89.73	-35.21	-4,914.49	3,760.55	3,363.05	397.50	9.460	
14,800.00	7,107.74	7,055.74	7,107.74	209.83	244.59	89.72	-35.21	-4,914.49	3,827.31	3,430.41	396.90	9.643	
14,900.00	7,107.20	7,055.20	7,107.20	212.64	244.57	89.71	-35.21	-4,914.49	3,895.49	3,499.23	396.26	9.831	
15,000.00	7,106.66	7,054.66	7,106.66	215.45	244.56	89.69	-35.21	-4,914.49	3,965.02	3,569.42	395.60	10.023	
15,100.00	7,106.12	7,054.12	7,106.12	218.26	244.54	89.68	-35.21	-4,914.49	4,035.83	3,640.91	394.92	10.219	
15,200.00	7,105.58	7,053.58	7,105.58	221.07	244.52	89.67	-35.21	-4,914.49	4,107.86	3,713.63	394.23	10.420	
15,300.00	7,105.04	7,053.04	7,105.04	223.89	244.50	89.66	-35.21	-4,914.49	4,181.04	3,787.51	393.52	10.625	

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



Anticollision Report



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

Offset Design												Offset Site Error:	0.00 ft
HARVESTERS STATE 7-15 PAD - STATE BEATRICE 32-16(PR_75CC) - OH - OH												Offset Well Error:	3.28 ft
Survey Program: 100-2" Cone@2.448 Sigma													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,400.00	7,104.50	7,052.50	7,104.50	226.70	244.48	89.65	-35.21	-4,914.49	4,255.31	3,862.50	392.81	10.833	
15,491.56	7,104.00	7,052.00	7,104.00	229.28	244.46	89.64	-35.21	-4,914.49	4,324.22	3,932.07	392.15	11.027	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	55.00	3.28	3.28	-109.72	-2,742.76	-7,652.25	8,129.13					
100.00	100.00	45.00	100.00	3.28	3.37	-109.72	-2,742.76	-7,652.25	8,128.94	8,122.28	6.66	1,221.027		
200.00	200.00	145.00	200.00	3.34	4.66	-109.72	-2,742.76	-7,652.25	8,128.94	8,120.94	8.00	1,015.928		
300.00	299.98	244.98	299.98	3.44	7.56	67.17	-2,742.76	-7,652.25	8,128.26	8,117.27	11.00	739.255		
400.00	399.84	344.84	399.84	3.59	10.80	67.24	-2,742.76	-7,652.25	8,126.23	8,111.84	14.39	564.649		
500.00	499.45	444.45	499.45	3.79	14.16	67.36	-2,742.76	-7,652.25	8,122.86	8,104.92	17.94	452.715		
600.00	598.70	543.70	598.70	4.03	17.54	67.53	-2,742.76	-7,652.25	8,118.15	8,096.58	21.57	376.291		
700.00	697.47	642.47	697.47	4.31	20.94	67.74	-2,742.76	-7,652.25	8,112.14	8,086.88	25.25	321.213		
800.00	795.62	740.62	795.62	4.64	24.33	68.00	-2,742.76	-7,652.25	8,104.83	8,075.87	28.97	279.800		
900.00	893.06	838.06	893.06	5.00	27.71	68.30	-2,742.76	-7,652.25	8,096.27	8,063.57	32.70	247.609		
1,000.00	989.64	934.64	989.64	5.40	31.06	68.65	-2,742.76	-7,652.25	8,086.49	8,050.05	36.44	221.914		
1,100.00	1,085.27	1,030.27	1,085.27	5.83	34.38	69.04	-2,742.76	-7,652.25	8,075.52	8,035.34	40.19	200.958		
1,200.00	1,179.82	1,124.82	1,179.82	6.29	37.66	69.48	-2,742.76	-7,652.25	8,063.42	8,019.49	43.93	183.558		
1,300.00	1,273.17	1,218.17	1,273.17	6.79	40.91	69.95	-2,742.76	-7,652.25	8,050.22	8,002.56	47.66	168.894		
1,400.00	1,365.21	1,310.21	1,365.21	7.33	44.12	70.47	-2,742.76	-7,652.25	8,036.00	7,984.61	51.39	156.376		
1,500.00	1,456.49	1,401.49	1,456.49	7.89	47.29	70.73	-2,742.76	-7,652.25	8,021.30	7,966.18	55.11	145.548		
1,600.00	1,547.76	1,507.24	1,547.76	8.46	50.98	70.99	-2,742.76	-7,652.25	8,006.78	7,947.42	59.35	134.898		
1,700.00	1,639.04	1,584.04	1,639.04	9.05	53.65	71.24	-2,742.76	-7,652.25	7,992.44	7,929.84	62.60	127.668		
1,800.00	1,730.31	1,675.31	1,730.31	9.65	56.83	71.50	-2,742.76	-7,652.25	7,978.29	7,911.92	66.37	120.213		
1,900.00	1,821.58	1,766.58	1,821.58	10.26	60.02	71.76	-2,742.76	-7,652.25	7,964.32	7,894.17	70.14	113.544		
2,000.00	1,912.85	1,857.85	1,912.85	10.87	63.20	72.02	-2,742.76	-7,652.25	7,950.53	7,876.61	73.93	107.548		
2,100.00	2,004.13	1,949.13	2,004.13	11.49	66.38	72.27	-2,742.76	-7,652.25	7,936.93	7,859.22	77.72	102.128		
2,200.00	2,095.40	2,040.40	2,095.40	12.11	69.56	72.53	-2,742.76	-7,652.25	7,923.52	7,842.01	81.51	97.207		
2,300.00	2,186.67	2,131.67	2,186.67	12.74	72.75	72.79	-2,742.76	-7,652.25	7,910.30	7,824.99	85.31	92.720		
2,400.00	2,277.95	2,222.95	2,277.95	13.38	75.93	73.05	-2,742.76	-7,652.25	7,897.27	7,808.15	89.12	88.613		
2,500.00	2,369.22	2,314.22	2,369.22	14.01	79.11	73.31	-2,742.76	-7,652.25	7,884.43	7,791.50	92.93	84.842		
2,600.00	2,460.49	2,405.49	2,460.49	14.65	82.30	73.58	-2,742.76	-7,652.25	7,871.78	7,775.03	96.75	81.366		
2,700.00	2,551.77	2,503.23	2,551.77	15.29	85.71	73.84	-2,742.76	-7,652.25	7,859.32	7,758.53	100.79	77.978		
2,800.00	2,643.04	2,588.04	2,643.04	15.93	88.66	74.10	-2,742.76	-7,652.25	7,847.05	7,742.67	104.38	75.175		
2,900.00	2,734.31	2,679.31	2,734.31	16.58	91.85	74.37	-2,742.76	-7,652.25	7,834.98	7,726.77	108.21	72.407		
3,000.00	2,825.58	2,770.58	2,825.58	17.23	95.03	74.63	-2,742.76	-7,652.25	7,823.10	7,711.07	112.03	69.828		
3,100.00	2,916.86	2,861.86	2,916.86	17.87	98.22	74.90	-2,742.76	-7,652.25	7,811.42	7,695.56	115.86	67.420		
3,200.00	3,008.13	2,953.13	3,008.13	18.52	101.40	75.16	-2,742.76	-7,652.25	7,799.93	7,680.24	119.69	65.166		
3,300.00	3,099.40	3,044.40	3,099.40	19.17	104.59	75.43	-2,742.76	-7,652.25	7,788.64	7,665.12	123.53	63.053		
3,400.00	3,190.68	3,135.68	3,190.68	19.83	107.77	75.70	-2,742.76	-7,652.25	7,777.55	7,650.19	127.36	61.068		
3,500.00	3,281.95	3,226.95	3,281.95	20.48	110.96	75.97	-2,742.76	-7,652.25	7,766.66	7,635.47	131.20	59.199		
3,600.00	3,373.22	3,318.22	3,373.22	21.13	114.14	76.24	-2,742.76	-7,652.25	7,755.97	7,620.94	135.03	57.437		
3,700.00	3,464.49	3,409.49	3,464.49	21.79	117.33	76.50	-2,742.76	-7,652.25	7,745.48	7,606.61	138.87	55.774		
3,800.00	3,555.77	3,500.77	3,555.77	22.44	120.51	76.77	-2,742.76	-7,652.25	7,735.19	7,592.48	142.71	54.201		
3,900.00	3,647.04	3,607.96	3,647.04	23.10	124.25	77.05	-2,742.76	-7,652.25	7,725.11	7,578.00	147.11	52.512		
4,000.00	3,738.31	3,683.31	3,738.31	23.75	126.88	77.32	-2,742.76	-7,652.25	7,715.22	7,564.83	150.40	51.299		
4,100.00	3,829.59	3,774.59	3,829.59	24.41	130.07	77.59	-2,742.76	-7,652.25	7,705.54	7,551.30	154.24	49.958		
4,200.00	3,920.86	3,865.86	3,920.86	25.07	133.25	77.86	-2,742.76	-7,652.25	7,696.07	7,537.98	158.09	48.683		
4,300.00	4,012.13	3,957.13	4,012.13	25.73	136.44	78.13	-2,742.76	-7,652.25	7,686.80	7,524.87	161.93	47.469		
4,400.00	4,103.41	4,048.41	4,103.41	26.38	139.62	78.41	-2,742.76	-7,652.25	7,677.74	7,511.96	165.78	46.313		
4,500.00	4,194.68	4,139.68	4,194.68	27.04	142.81	78.68	-2,742.76	-7,652.25	7,668.88	7,499.26	169.63	45.210		
4,600.00	4,285.95	4,230.95	4,285.95	27.70	145.99	78.96	-2,742.76	-7,652.25	7,660.23	7,486.76	173.48	44.157		
4,700.00	4,377.22	4,322.22	4,377.22	28.36	149.18	79.23	-2,742.76	-7,652.25	7,651.80	7,474.47	177.33	43.151		
4,800.00	4,468.50	4,413.50	4,468.50	29.02	152.37	79.51	-2,742.76	-7,652.25	7,643.56	7,462.39	181.18	42.189		
4,900.00	4,559.77	4,504.77	4,559.77	29.68	155.55	79.78	-2,742.76	-7,652.25	7,635.54	7,450.52	185.03	41.267		
5,000.00	4,651.04	4,603.96	4,651.04	30.34	159.01	80.06	-2,742.76	-7,652.25	7,627.73	7,438.58	189.15	40.325		
5,100.00	4,742.32	4,687.32	4,742.32	31.00	161.92	80.34	-2,742.76	-7,652.25	7,620.13	7,427.40	192.73	39.538		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-1(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	4,833.59	4,778.59	4,833.59	31.66	165.11	80.61	-2,742.76	-7,652.25	7,612.75	7,416.16	196.58	38.725		
5,300.00	4,924.86	4,869.86	4,924.86	32.32	168.29	80.89	-2,742.76	-7,652.25	7,605.57	7,405.13	200.44	37.945		
5,400.00	5,016.13	4,961.13	5,016.13	32.99	171.48	81.17	-2,742.76	-7,652.25	7,598.61	7,394.32	204.29	37.195		
5,500.00	5,107.41	5,052.41	5,107.41	33.65	174.67	81.45	-2,742.76	-7,652.25	7,591.86	7,383.72	208.14	36.474		
5,600.00	5,198.68	5,143.68	5,198.68	34.31	177.85	81.73	-2,742.76	-7,652.25	7,585.32	7,373.33	212.00	35.780		
5,700.00	5,289.95	5,234.95	5,289.95	34.97	181.04	82.01	-2,742.76	-7,652.25	7,579.00	7,363.15	215.85	35.112		
5,800.00	5,381.23	5,326.23	5,381.23	35.63	184.22	82.29	-2,742.76	-7,652.25	7,572.90	7,353.19	219.71	34.468		
5,900.00	5,472.50	5,417.50	5,472.50	36.30	187.41	82.57	-2,742.76	-7,652.25	7,567.01	7,343.45	223.56	33.847		
6,000.00	5,563.77	5,508.77	5,563.77	36.96	190.59	82.85	-2,742.76	-7,652.25	7,561.34	7,333.92	227.42	33.248		
6,100.00	5,655.05	5,600.05	5,655.05	37.62	193.78	83.13	-2,742.76	-7,652.25	7,555.88	7,324.60	231.28	32.671		
6,200.00	5,746.32	5,708.68	5,746.32	38.28	197.57	83.41	-2,742.76	-7,652.25	7,550.64	7,314.90	235.74	32.030		
6,300.00	5,837.59	5,782.59	5,837.59	38.95	200.15	83.69	-2,742.76	-7,652.25	7,545.62	7,306.63	238.99	31.573		
6,400.00	5,928.86	5,873.86	5,928.86	39.61	203.34	83.97	-2,742.76	-7,652.25	7,540.81	7,297.97	242.84	31.052		
6,500.00	6,020.14	5,965.14	6,020.14	40.27	206.52	84.26	-2,742.76	-7,652.25	7,536.23	7,289.53	246.70	30.548		
6,600.00	6,111.41	6,056.41	6,111.41	40.94	209.71	84.54	-2,742.76	-7,652.25	7,531.86	7,281.31	250.56	30.061		
6,700.00	6,202.68	6,147.68	6,202.68	41.60	212.90	84.82	-2,742.76	-7,652.25	7,527.71	7,273.30	254.41	29.589		
6,800.00	6,293.96	6,238.96	6,293.96	42.26	216.08	85.10	-2,742.76	-7,652.25	7,523.79	7,265.52	258.27	29.132		
6,900.00	6,385.23	6,330.23	6,385.23	42.93	219.27	85.39	-2,742.76	-7,652.25	7,520.08	7,257.95	262.13	28.689		
7,000.00	6,476.50	6,421.50	6,476.50	43.59	222.45	85.67	-2,742.76	-7,652.25	7,516.59	7,250.61	265.98	28.260		
7,100.00	6,567.77	6,512.77	6,567.77	44.25	225.64	85.95	-2,742.76	-7,652.25	7,513.32	7,243.49	269.84	27.844		
7,200.00	6,658.64	6,603.64	6,658.64	44.91	228.81	86.23	-2,742.76	-7,652.25	7,504.06	7,230.39	273.67	27.420		
7,300.00	6,747.14	6,707.86	6,747.14	45.52	232.45	86.51	-2,742.76	-7,652.25	7,499.65	7,221.73	277.92	26.913		
7,400.00	6,831.10	6,776.10	6,831.10	46.07	234.83	86.79	-2,742.76	-7,652.25	7,440.59	7,159.74	280.84	26.494		
7,500.00	6,908.46	6,853.46	6,908.46	46.54	237.53	87.07	-2,742.76	-7,652.25	7,387.78	7,103.78	284.01	26.013		
7,600.00	6,977.30	6,922.30	6,977.30	46.95	239.93	87.35	-2,742.76	-7,652.25	7,322.51	7,035.70	286.80	25.532		
7,700.00	7,035.93	6,980.93	7,035.93	47.30	241.98	87.63	-2,742.76	-7,652.25	7,246.31	6,957.14	289.17	25.059		
7,800.00	7,082.92	7,027.92	7,082.92	47.59	243.62	87.91	-2,742.76	-7,652.25	7,161.02	6,869.97	291.05	24.604		
7,900.00	7,117.09	7,062.09	7,117.09	47.84	244.81	88.19	-2,742.76	-7,652.25	7,068.70	6,776.27	292.42	24.173		
8,000.00	7,137.62	7,082.62	7,137.62	48.06	245.53	88.47	-2,742.76	-7,652.25	6,971.57	6,678.32	293.25	23.774		
8,100.00	7,143.99	7,088.99	7,143.99	48.28	245.75	88.75	-2,742.76	-7,652.25	6,872.00	6,578.48	293.52	23.413		
8,200.00	7,143.45	7,088.45	7,143.45	48.53	245.73	89.00	-2,742.76	-7,652.25	6,772.02	6,478.50	293.52	23.072		
8,300.00	7,142.91	7,087.91	7,142.91	48.89	245.72	89.26	-2,742.76	-7,652.25	6,672.04	6,378.53	293.52	22.731		
8,400.00	7,142.37	7,087.37	7,142.37	49.40	245.70	89.52	-2,742.76	-7,652.25	6,572.06	6,278.55	293.52	22.391		
8,500.00	7,141.83	7,086.83	7,141.83	50.12	245.68	89.78	-2,742.76	-7,652.25	6,472.09	6,178.57	293.52	22.050		
8,600.00	7,141.29	7,086.29	7,141.29	51.08	245.66	90.04	-2,742.76	-7,652.25	6,372.11	6,078.58	293.52	21.709		
8,700.00	7,140.75	7,085.75	7,140.75	52.30	245.64	90.30	-2,742.76	-7,652.25	6,272.13	5,978.60	293.53	21.368		
8,800.00	7,140.21	7,085.21	7,140.21	53.75	245.62	90.56	-2,742.76	-7,652.25	6,172.16	5,878.62	293.54	21.027		
8,900.00	7,139.67	7,084.67	7,139.67	55.40	245.60	90.87	-2,742.76	-7,652.25	6,072.18	5,778.64	293.54	20.686		
9,000.00	7,139.12	7,084.12	7,139.12	57.20	245.58	91.65	-2,742.76	-7,652.25	5,972.21	5,678.66	293.55	20.345		
9,100.00	7,138.58	7,083.58	7,138.58	59.13	245.56	93.43	-2,742.76	-7,652.25	5,872.23	5,578.67	293.56	20.003		
9,200.00	7,138.04	7,083.04	7,138.04	61.15	245.55	103.21	-2,742.76	-7,652.25	5,772.26	5,478.69	293.57	19.662		
9,300.00	7,137.50	7,082.50	7,137.50	63.26	245.53	102.99	-2,742.76	-7,652.25	5,672.29	5,378.70	293.59	19.321		
9,400.00	7,136.96	7,081.96	7,136.96	65.44	245.51	102.77	-2,742.76	-7,652.25	5,572.32	5,278.72	293.60	18.979		
9,500.00	7,136.42	7,081.42	7,136.42	67.68	245.49	102.55	-2,742.76	-7,652.25	5,472.35	5,178.73	293.62	18.638		
9,600.00	7,135.88	7,080.88	7,135.88	69.97	245.47	102.32	-2,742.76	-7,652.25	5,372.38	5,078.74	293.64	18.296		
9,700.00	7,135.34	7,080.34	7,135.34	72.31	245.45	102.10	-2,742.76	-7,652.25	5,272.41	4,978.76	293.66	17.954		
9,800.00	7,134.80	7,079.80	7,134.80	74.69	245.43	101.88	-2,742.76	-7,652.25	5,172.45	4,878.77	293.68	17.613		
9,900.00	7,134.26	7,079.26	7,134.26	77.10	245.41	101.65	-2,742.76	-7,652.25	5,072.48	4,778.78	293.70	17.271		
10,000.00	7,133.71	7,078.71	7,133.71	79.54	245.39	101.43	-2,742.76	-7,652.25	4,972.52	4,678.79	293.73	16.929		
10,100.00	7,133.17	7,078.17	7,133.17	82.02	245.38	101.21	-2,742.76	-7,652.25	4,872.56	4,578.80	293.75	16.587		
10,200.00	7,132.63	7,077.63	7,132.63	84.52	245.36	100.98	-2,742.76	-7,652.25	4,772.60	4,478.81	293.78	16.245		
10,300.00	7,132.09	7,077.09	7,132.09	87.04	245.34	100.76	-2,742.76	-7,652.25	4,672.64	4,378.82	293.82	15.903		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,131.55	7,076.55	7,131.55	89.58	245.32	100.53	-2,742.76	-7,652.25	4,572.68	4,278.83	293.85	15.561		
10,500.00	7,131.01	7,076.01	7,131.01	92.15	245.30	100.31	-2,742.76	-7,652.25	4,472.73	4,178.84	293.89	15.219		
10,600.00	7,130.47	7,075.47	7,130.47	94.73	245.28	100.08	-2,742.76	-7,652.25	4,372.77	4,078.85	293.92	14.877		
10,700.00	7,129.93	7,074.93	7,129.93	97.33	245.26	99.86	-2,742.76	-7,652.25	4,272.82	3,978.86	293.97	14.535		
10,800.00	7,129.39	7,074.39	7,129.39	99.94	245.24	99.63	-2,742.76	-7,652.25	4,172.87	3,878.86	294.01	14.193		
10,900.00	7,128.84	7,073.84	7,128.84	102.56	245.22	99.40	-2,742.76	-7,652.25	4,072.93	3,778.87	294.06	13.851		
11,000.00	7,128.30	7,073.30	7,128.30	105.20	245.21	99.18	-2,742.76	-7,652.25	3,972.98	3,678.87	294.11	13.509		
11,100.00	7,127.76	7,072.76	7,127.76	107.85	245.19	98.95	-2,742.76	-7,652.25	3,873.04	3,578.88	294.16	13.166		
11,200.00	7,127.22	7,072.22	7,127.22	110.51	245.17	98.72	-2,742.76	-7,652.25	3,773.10	3,478.88	294.22	12.824		
11,300.00	7,126.68	7,071.68	7,126.68	113.18	245.15	98.49	-2,742.76	-7,652.25	3,673.17	3,378.89	294.28	12.482		
11,400.00	7,126.14	7,071.14	7,126.14	115.86	245.13	98.26	-2,742.76	-7,652.25	3,573.24	3,278.89	294.35	12.139		
11,500.00	7,125.60	7,070.60	7,125.60	118.55	245.11	98.04	-2,742.76	-7,652.25	3,473.31	3,178.89	294.42	11.797		
11,600.00	7,125.06	7,070.06	7,125.06	121.25	245.09	97.81	-2,742.76	-7,652.25	3,373.39	3,078.89	294.50	11.455		
11,700.00	7,124.52	7,069.52	7,124.52	123.95	245.07	97.58	-2,742.76	-7,652.25	3,273.47	2,978.89	294.58	11.112		
11,800.00	7,123.97	7,068.97	7,123.97	126.66	245.05	97.35	-2,742.76	-7,652.25	3,173.56	2,878.89	294.67	10.770		
11,900.00	7,123.43	7,068.43	7,123.43	129.38	245.04	97.12	-2,742.76	-7,652.25	3,073.65	2,778.89	294.76	10.428		
12,000.00	7,122.89	7,067.89	7,122.89	132.10	245.02	96.89	-2,742.76	-7,652.25	2,973.75	2,678.88	294.87	10.085		
12,100.00	7,122.35	7,067.35	7,122.35	134.83	245.00	96.66	-2,742.76	-7,652.25	2,873.85	2,578.87	294.98	9.743		
12,200.00	7,121.81	7,066.81	7,121.81	137.56	244.98	96.43	-2,742.76	-7,652.25	2,773.96	2,478.87	295.10	9.400		
12,300.00	7,121.27	7,066.27	7,121.27	140.30	244.96	96.20	-2,742.76	-7,652.25	2,674.08	2,378.85	295.23	9.058		
12,400.00	7,120.73	7,065.73	7,120.73	143.05	244.94	95.97	-2,742.76	-7,652.25	2,574.21	2,278.84	295.37	8.715		
12,500.00	7,120.19	7,065.19	7,120.19	145.80	244.92	95.74	-2,742.76	-7,652.25	2,474.35	2,178.82	295.53	8.373		
12,600.00	7,119.65	7,064.65	7,119.65	148.55	244.90	95.51	-2,742.76	-7,652.25	2,374.51	2,078.80	295.71	8.030		
12,700.00	7,119.10	7,064.10	7,119.10	151.30	244.88	95.28	-2,742.76	-7,652.25	2,274.67	1,978.77	295.90	7.687		
12,800.00	7,118.56	7,063.56	7,118.56	154.07	244.87	95.05	-2,742.76	-7,652.25	2,174.85	1,878.74	296.11	7.345		
12,900.00	7,118.02	7,063.02	7,118.02	156.83	244.85	94.81	-2,742.76	-7,652.25	2,075.05	1,778.70	296.35	7.002		
13,000.00	7,117.48	7,062.48	7,117.48	159.60	244.83	94.58	-2,742.76	-7,652.25	1,975.27	1,678.65	296.62	6.659		
13,100.00	7,116.94	7,061.94	7,116.94	162.37	244.81	94.35	-2,742.76	-7,652.25	1,875.51	1,578.58	296.93	6.316		
13,200.00	7,116.40	7,061.40	7,116.40	165.14	244.79	94.12	-2,742.76	-7,652.25	1,775.78	1,478.50	297.27	5.974		
13,300.00	7,115.86	7,060.86	7,115.86	167.92	244.77	93.89	-2,742.76	-7,652.25	1,676.07	1,378.40	297.67	5.631		
13,400.00	7,115.32	7,060.32	7,115.32	170.70	244.75	93.66	-2,742.76	-7,652.25	1,576.41	1,278.28	298.14	5.288		
13,500.00	7,114.78	7,059.78	7,114.78	173.48	244.73	93.42	-2,742.76	-7,652.25	1,476.79	1,178.12	298.68	4.944		
13,600.00	7,114.24	7,059.24	7,114.24	176.26	244.71	93.19	-2,742.76	-7,652.25	1,377.23	1,077.91	299.32	4.601		
13,700.00	7,113.69	7,058.69	7,113.69	179.05	244.70	92.96	-2,742.76	-7,652.25	1,277.74	977.65	300.09	4.258		
13,800.00	7,113.15	7,058.15	7,113.15	181.84	244.68	92.73	-2,742.76	-7,652.25	1,178.33	877.30	301.03	3.914		
13,900.00	7,112.61	7,057.61	7,112.61	184.63	244.66	92.49	-2,742.76	-7,652.25	1,079.03	776.84	302.19	3.571		
14,000.00	7,112.07	7,057.07	7,112.07	187.42	244.64	92.26	-2,742.76	-7,652.25	979.87	676.22	303.65	3.227		
14,100.00	7,111.53	7,056.53	7,111.53	190.22	244.62	92.03	-2,742.76	-7,652.25	880.90	575.37	305.53	2.883		
14,200.00	7,110.99	7,055.99	7,110.99	193.01	244.60	91.80	-2,742.76	-7,652.25	782.19	474.17	308.02	2.539		
14,300.00	7,110.45	7,055.45	7,110.45	195.81	244.58	91.56	-2,742.76	-7,652.25	683.86	372.44	311.42	2.196		
14,400.00	7,109.91	7,054.91	7,109.91	198.61	244.56	91.33	-2,742.76	-7,652.25	586.10	269.87	316.22	1.853		
14,500.00	7,109.37	7,054.37	7,109.37	201.42	244.54	91.10	-2,742.76	-7,652.25	489.24	165.91	323.33	1.513		
14,600.00	7,108.82	7,053.82	7,108.82	204.22	244.53	90.86	-2,742.76	-7,652.25	393.94	59.51	334.43	1.178 Level 2		
14,700.00	7,108.28	7,053.28	7,108.28	207.03	244.51	90.63	-2,742.76	-7,652.25	301.71	-51.25	352.96	0.855 Level 1		
14,800.00	7,107.74	7,052.74	7,107.74	209.83	244.49	90.40	-2,742.76	-7,652.25	216.49	-169.21	385.70	0.561 Level 1		
14,900.00	7,107.20	7,052.20	7,107.20	212.64	244.47	90.17	-2,742.76	-7,652.25	150.69	-286.87	437.56	0.344 Level 1		
14,970.80	7,106.82	7,051.82	7,106.82	214.63	244.46	90.00	-2,742.76	-7,652.25	133.02	-325.88	458.89	0.290 Level 1, CC, ES, SF		
15,000.00	7,106.66	7,051.66	7,106.66	215.45	244.45	89.93	-2,742.76	-7,652.25	136.18	-316.88	453.06	0.301 Level 1		
15,100.00	7,106.12	7,051.12	7,106.12	218.26	244.43	89.70	-2,742.76	-7,652.25	185.42	-213.07	398.50	0.465 Level 1		
15,200.00	7,105.58	7,050.58	7,105.58	221.07	244.41	89.47	-2,742.76	-7,652.25	264.99	-91.00	355.99	0.744 Level 1		
15,300.00	7,105.04	7,050.04	7,105.04	223.89	244.39	89.23	-2,742.76	-7,652.25	355.04	22.40	332.64	1.067 Level 2		
15,400.00	7,104.50	7,049.50	7,104.50	226.70	244.37	89.00	-2,742.76	-7,652.25	449.32	129.84	319.48	1.406 Level 3		

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



Anticollision Report



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

Offset Design	HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-1(SI_75CC) - OH - OH											Offset Site Error:	0.00 ft
Survey Program:	100-2" Cone@2.448 Sigma											Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	7,049.00	7,104.00	229.28	244.36	88.79	-2,742.76	-7,652.25	537.46	225.33	312.13	1.722	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	42.00	3.28	3.28	-100.87	-1,250.89	-6,516.64	6,635.74				
100.00	100.00	58.00	100.00	3.28	3.43	-100.87	-1,250.89	-6,516.64	6,635.61	6,628.89	6.72	987.822	
200.00	200.00	158.00	200.00	3.34	5.00	-100.87	-1,250.89	-6,516.64	6,635.61	6,627.27	8.33	796.174	
300.00	299.98	257.98	299.98	3.44	7.97	76.02	-1,250.89	-6,516.64	6,635.18	6,623.78	11.41	581.706	
400.00	399.84	357.84	399.84	3.59	11.24	76.09	-1,250.89	-6,516.64	6,633.92	6,619.10	14.82	447.496	
500.00	499.45	457.45	499.45	3.79	14.60	76.20	-1,250.89	-6,516.64	6,631.83	6,613.44	18.38	360.742	
600.00	598.70	556.70	598.70	4.03	17.99	76.36	-1,250.89	-6,516.64	6,628.92	6,606.90	22.02	301.045	
700.00	697.47	655.47	697.47	4.31	21.39	76.56	-1,250.89	-6,516.64	6,625.21	6,599.51	25.70	257.757	
800.00	795.62	753.62	795.62	4.64	24.78	76.81	-1,250.89	-6,516.64	6,620.74	6,591.32	29.42	225.057	
900.00	893.06	851.06	893.06	5.00	28.16	77.10	-1,250.89	-6,516.64	6,615.54	6,582.38	33.15	199.547	
1,000.00	989.64	947.64	989.64	5.40	31.51	77.42	-1,250.89	-6,516.64	6,609.64	6,572.74	36.90	179.128	
1,100.00	1,085.27	1,043.27	1,085.27	5.83	34.83	77.79	-1,250.89	-6,516.64	6,603.09	6,562.44	40.65	162.438	
1,200.00	1,179.82	1,137.82	1,179.82	6.29	38.12	78.19	-1,250.89	-6,516.64	6,595.94	6,551.54	44.40	148.558	
1,300.00	1,273.17	1,231.17	1,273.17	6.79	41.36	78.63	-1,250.89	-6,516.64	6,588.25	6,540.11	48.14	136.845	
1,400.00	1,365.21	1,323.21	1,365.21	7.33	44.57	79.10	-1,250.89	-6,516.64	6,580.08	6,528.20	51.88	126.837	
1,500.00	1,456.49	1,414.49	1,456.49	7.89	47.75	79.43	-1,250.89	-6,516.64	6,571.77	6,516.16	55.61	118.173	
1,600.00	1,547.76	1,505.76	1,547.76	8.46	50.93	79.75	-1,250.89	-6,516.64	6,563.71	6,504.35	59.36	110.570	
1,700.00	1,639.04	1,602.96	1,639.04	9.05	54.31	80.07	-1,250.89	-6,516.64	6,555.89	6,492.55	63.33	103.514	
1,800.00	1,730.31	1,688.31	1,730.31	9.65	57.29	80.39	-1,250.89	-6,516.64	6,548.31	6,481.41	66.90	97.877	
1,900.00	1,821.58	1,779.58	1,821.58	10.26	60.47	80.71	-1,250.89	-6,516.64	6,540.99	6,470.30	70.69	92.532	
2,000.00	1,912.85	1,870.85	1,912.85	10.87	63.65	81.04	-1,250.89	-6,516.64	6,533.91	6,459.42	74.48	87.724	
2,100.00	2,004.13	1,962.13	2,004.13	11.49	66.83	81.36	-1,250.89	-6,516.64	6,527.07	6,448.79	78.28	83.377	
2,200.00	2,095.40	2,053.40	2,095.40	12.11	70.02	81.69	-1,250.89	-6,516.64	6,520.49	6,438.40	82.09	79.431	
2,300.00	2,186.67	2,144.67	2,186.67	12.74	73.20	82.01	-1,250.89	-6,516.64	6,514.16	6,428.26	85.90	75.833	
2,400.00	2,277.95	2,235.95	2,277.95	13.38	76.38	82.34	-1,250.89	-6,516.64	6,508.07	6,418.36	89.72	72.540	
2,500.00	2,369.22	2,327.22	2,369.22	14.01	79.57	82.66	-1,250.89	-6,516.64	6,502.24	6,408.71	93.54	69.515	
2,600.00	2,460.49	2,418.49	2,460.49	14.65	82.75	82.99	-1,250.89	-6,516.64	6,496.66	6,399.30	97.36	66.728	
2,700.00	2,551.77	2,509.77	2,551.77	15.29	85.93	83.32	-1,250.89	-6,516.64	6,491.33	6,390.15	101.19	64.153	
2,800.00	2,643.04	2,601.04	2,643.04	15.93	89.12	83.65	-1,250.89	-6,516.64	6,486.26	6,381.24	105.01	61.765	
2,900.00	2,734.31	2,707.69	2,734.31	16.58	92.84	83.97	-1,250.89	-6,516.64	6,481.44	6,372.05	109.38	59.255	
3,000.00	2,825.58	2,783.58	2,825.58	17.23	95.49	84.30	-1,250.89	-6,516.64	6,476.87	6,364.19	112.68	57.481	
3,100.00	2,916.86	2,874.86	2,916.86	17.87	98.67	84.63	-1,250.89	-6,516.64	6,472.56	6,356.04	116.51	55.552	
3,200.00	3,008.13	2,966.13	3,008.13	18.52	101.86	84.96	-1,250.89	-6,516.64	6,468.50	6,348.15	120.35	53.748	
3,300.00	3,099.40	3,057.40	3,099.40	19.17	105.04	85.29	-1,250.89	-6,516.64	6,464.70	6,340.51	124.19	52.056	
3,400.00	3,190.68	3,148.68	3,190.68	19.83	108.22	85.62	-1,250.89	-6,516.64	6,461.15	6,333.12	128.03	50.468	
3,500.00	3,281.95	3,239.95	3,281.95	20.48	111.41	85.95	-1,250.89	-6,516.64	6,457.86	6,326.00	131.87	48.973	
3,600.00	3,373.22	3,331.22	3,373.22	21.13	114.59	86.28	-1,250.89	-6,516.64	6,454.83	6,319.12	135.71	47.565	
3,700.00	3,464.49	3,422.49	3,464.49	21.79	117.78	86.61	-1,250.89	-6,516.64	6,452.05	6,312.50	139.55	46.235	
3,800.00	3,555.77	3,513.77	3,555.77	22.44	120.96	86.94	-1,250.89	-6,516.64	6,449.54	6,306.14	143.39	44.979	
3,900.00	3,647.04	3,605.04	3,647.04	23.10	124.15	87.27	-1,250.89	-6,516.64	6,447.28	6,300.04	147.23	43.789	
4,000.00	3,738.31	3,703.69	3,738.31	23.75	127.59	87.60	-1,250.89	-6,516.64	6,445.27	6,293.94	151.34	42.589	
4,100.00	3,829.59	3,787.59	3,829.59	24.41	130.52	87.93	-1,250.89	-6,516.64	6,443.53	6,288.61	154.92	41.592	
4,200.00	3,920.86	3,878.86	3,920.86	25.07	133.71	88.27	-1,250.89	-6,516.64	6,442.05	6,283.28	158.77	40.575	
4,300.00	4,012.13	3,970.13	4,012.13	25.73	136.89	88.60	-1,250.89	-6,516.64	6,440.82	6,278.21	162.61	39.608	
4,400.00	4,103.41	4,061.41	4,103.41	26.38	140.08	88.93	-1,250.89	-6,516.64	6,439.86	6,273.40	166.46	38.688	
4,500.00	4,194.68	4,152.68	4,194.68	27.04	143.26	89.26	-1,250.89	-6,516.64	6,439.15	6,268.84	170.30	37.810	
4,600.00	4,285.95	4,243.95	4,285.95	27.70	146.45	89.59	-1,250.89	-6,516.64	6,438.70	6,264.55	174.15	36.972	
4,700.00	4,377.22	4,335.22	4,377.22	28.36	149.63	89.92	-1,250.89	-6,516.64	6,438.51	6,260.52	177.99	36.172	
4,722.89	4,398.11	4,356.11	4,398.11	28.51	150.36	90.00	-1,250.89	-6,516.64	6,438.50	6,259.63	178.87	35.994	
4,800.00	4,468.50	4,426.50	4,468.50	29.02	152.82	90.26	-1,250.89	-6,516.64	6,438.58	6,256.74	181.84	35.408	
4,900.00	4,559.77	4,517.77	4,559.77	29.68	156.00	90.59	-1,250.89	-6,516.64	6,438.91	6,253.22	185.69	34.676	
5,000.00	4,651.04	4,609.04	4,651.04	30.34	159.19	90.92	-1,250.89	-6,516.64	6,439.50	6,249.97	189.53	33.976	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	4,742.32	4,700.32	4,742.32	31.00	162.38	91.25	-1,250.89	-6,516.64	6,440.35	6,246.97	193.38	33.305		
5,200.00	4,833.59	4,808.41	4,833.59	31.66	166.15	91.58	-1,250.89	-6,516.64	6,441.45	6,243.65	197.81	32.564		
5,300.00	4,924.86	4,882.86	4,924.86	32.32	168.75	91.91	-1,250.89	-6,516.64	6,442.82	6,241.75	201.07	32.043		
5,400.00	5,016.13	4,974.13	5,016.13	32.99	171.93	92.25	-1,250.89	-6,516.64	6,444.44	6,239.53	204.91	31.450		
5,500.00	5,107.41	5,065.41	5,107.41	33.65	175.12	92.58	-1,250.89	-6,516.64	6,446.33	6,237.57	208.76	30.880		
5,600.00	5,198.68	5,156.68	5,198.68	34.31	178.30	92.91	-1,250.89	-6,516.64	6,448.47	6,235.87	212.60	30.332		
5,700.00	5,289.95	5,247.95	5,289.95	34.97	181.49	93.24	-1,250.89	-6,516.64	6,450.87	6,234.43	216.44	29.804		
5,800.00	5,381.23	5,339.23	5,381.23	35.63	184.68	93.57	-1,250.89	-6,516.64	6,453.53	6,233.24	220.29	29.296		
5,900.00	5,472.50	5,430.50	5,472.50	36.30	187.86	93.90	-1,250.89	-6,516.64	6,456.44	6,232.31	224.13	28.807		
6,000.00	5,563.77	5,521.77	5,563.77	36.96	191.05	94.23	-1,250.89	-6,516.64	6,459.61	6,231.64	227.97	28.335		
6,100.00	5,655.05	5,613.05	5,655.05	37.62	194.23	94.56	-1,250.89	-6,516.64	6,463.04	6,231.23	231.81	27.881		
6,200.00	5,746.32	5,704.32	5,746.32	38.28	197.42	94.89	-1,250.89	-6,516.64	6,466.73	6,231.07	235.65	27.442		
6,300.00	5,837.59	5,804.41	5,837.59	38.95	200.91	95.22	-1,250.89	-6,516.64	6,470.67	6,230.87	239.80	26.984		
6,400.00	5,928.86	5,886.86	5,928.86	39.61	203.79	95.55	-1,250.89	-6,516.64	6,474.86	6,231.53	243.33	26.609		
6,500.00	6,020.14	5,978.14	6,020.14	40.27	206.98	95.88	-1,250.89	-6,516.64	6,479.31	6,232.14	247.17	26.214		
6,600.00	6,111.41	6,069.41	6,111.41	40.94	210.16	96.20	-1,250.89	-6,516.64	6,484.02	6,233.01	251.01	25.832		
6,700.00	6,202.68	6,160.68	6,202.68	41.60	213.35	96.53	-1,250.89	-6,516.64	6,488.98	6,234.13	254.84	25.463		
6,800.00	6,293.96	6,251.96	6,293.96	42.26	216.54	96.86	-1,250.89	-6,516.64	6,494.19	6,235.51	258.68	25.105		
6,900.00	6,385.23	6,343.23	6,385.23	42.93	219.72	97.19	-1,250.89	-6,516.64	6,499.66	6,237.14	262.52	24.759		
7,000.00	6,476.50	6,434.50	6,476.50	43.59	222.91	97.51	-1,250.89	-6,516.64	6,505.37	6,239.02	266.35	24.424		
7,100.00	6,567.77	6,525.77	6,567.77	44.25	226.09	97.84	-1,250.89	-6,516.64	6,511.34	6,241.16	270.18	24.100		
7,200.00	6,658.64	6,616.64	6,658.64	44.91	229.27	81.21	-1,250.89	-6,516.64	6,511.45	6,237.46	274.00	23.765		
7,300.00	6,747.14	6,705.14	6,747.14	45.52	232.35	66.73	-1,250.89	-6,516.64	6,496.61	6,218.92	277.69	23.395		
7,400.00	6,831.10	6,789.10	6,831.10	46.07	235.29	57.14	-1,250.89	-6,516.64	6,467.14	6,185.97	281.17	23.001		
7,500.00	6,908.46	6,866.46	6,908.46	46.54	237.99	51.42	-1,250.89	-6,516.64	6,423.78	6,139.42	284.36	22.590		
7,600.00	6,977.30	6,935.30	6,977.30	46.95	240.39	48.63	-1,250.89	-6,516.64	6,367.59	6,080.41	287.19	22.172		
7,700.00	7,035.93	7,006.07	7,035.93	47.30	242.86	48.33	-1,250.89	-6,516.64	6,299.96	6,009.93	290.03	21.722		
7,800.00	7,082.92	7,040.92	7,082.92	47.59	244.08	50.67	-1,250.89	-6,516.64	6,222.51	5,930.93	291.58	21.341		
7,900.00	7,117.09	7,075.09	7,117.09	47.84	245.27	56.63	-1,250.89	-6,516.64	6,137.08	5,844.02	293.06	20.941		
8,000.00	7,137.62	7,104.38	7,137.62	48.06	246.29	68.72	-1,250.89	-6,516.64	6,045.72	5,751.37	294.34	20.540		
8,100.00	7,143.99	7,101.99	7,143.99	48.28	246.21	91.10	-1,250.89	-6,516.64	5,950.59	5,656.10	294.49	20.207		
8,200.00	7,143.45	7,101.45	7,143.45	48.53	246.19	91.08	-1,250.89	-6,516.64	5,854.42	5,559.74	294.68	19.867		
8,300.00	7,142.91	7,100.91	7,142.91	48.89	246.17	91.06	-1,250.89	-6,516.64	5,758.39	5,463.49	294.90	19.527		
8,400.00	7,142.37	7,100.37	7,142.37	49.40	246.15	91.04	-1,250.89	-6,516.64	5,662.49	5,367.34	295.14	19.186		
8,500.00	7,141.83	7,100.17	7,141.83	50.12	246.14	91.02	-1,250.89	-6,516.64	5,566.73	5,271.31	295.42	18.843		
8,600.00	7,141.29	7,100.71	7,141.29	51.08	246.16	91.00	-1,250.89	-6,516.64	5,471.13	5,175.38	295.75	18.499		
8,700.00	7,140.75	7,101.25	7,140.75	52.30	246.18	90.98	-1,250.89	-6,516.64	5,375.69	5,079.57	296.11	18.154		
8,800.00	7,140.21	7,101.79	7,140.21	53.75	246.20	90.96	-1,250.89	-6,516.64	5,280.41	4,983.91	296.50	17.809		
8,900.00	7,139.67	7,102.33	7,139.67	55.40	246.22	90.94	-1,250.89	-6,516.64	5,185.31	4,888.39	296.92	17.463		
9,000.00	7,139.12	7,102.88	7,139.12	57.20	246.24	90.92	-1,250.89	-6,516.64	5,090.41	4,793.03	297.38	17.118		
9,100.00	7,138.58	7,103.42	7,138.58	59.13	246.26	90.91	-1,250.89	-6,516.64	4,995.69	4,697.82	297.87	16.771		
9,200.00	7,138.04	7,103.96	7,138.04	61.15	246.28	90.89	-1,250.89	-6,516.64	4,901.19	4,602.79	298.41	16.424		
9,300.00	7,137.50	7,104.50	7,137.50	63.26	246.29	90.87	-1,250.89	-6,516.64	4,806.92	4,507.93	298.98	16.077		
9,400.00	7,136.96	7,105.04	7,136.96	65.44	246.31	90.85	-1,250.89	-6,516.64	4,712.88	4,413.27	299.61	15.730		
9,500.00	7,136.42	7,105.58	7,136.42	67.68	246.33	90.83	-1,250.89	-6,516.64	4,619.08	4,318.81	300.28	15.383		
9,600.00	7,135.88	7,106.12	7,135.88	69.97	246.35	90.81	-1,250.89	-6,516.64	4,525.56	4,224.56	301.00	15.035		
9,700.00	7,135.34	7,106.66	7,135.34	72.31	246.37	90.79	-1,250.89	-6,516.64	4,432.31	4,130.54	301.78	14.687		
9,800.00	7,134.80	7,107.20	7,134.80	74.69	246.39	90.77	-1,250.89	-6,516.64	4,339.37	4,036.76	302.62	14.340		
9,900.00	7,134.26	7,107.75	7,134.26	77.10	246.41	90.75	-1,250.89	-6,516.64	4,246.75	3,943.23	303.52	13.992		
10,000.00	7,133.71	7,108.29	7,133.71	79.54	246.43	90.73	-1,250.89	-6,516.64	4,154.47	3,849.98	304.49	13.644		
10,100.00	7,133.17	7,108.83	7,133.17	82.02	246.45	90.71	-1,250.89	-6,516.64	4,062.56	3,757.03	305.53	13.297		
10,200.00	7,132.63	7,109.37	7,132.63	84.52	246.46	90.69	-1,250.89	-6,516.64	3,971.03	3,664.39	306.65	12.950		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,300.00	7,132.09	7,109.91	7,132.09	87.04	246.48	90.68	-1,250.89	-6,516.64	3,879.93	3,572.08	307.85	12.603	
10,400.00	7,131.55	7,089.55	7,131.55	89.58	245.77	90.66	-1,250.89	-6,516.64	3,789.27	3,480.86	308.40	12.287	
10,500.00	7,131.01	7,089.01	7,131.01	92.15	245.75	90.64	-1,250.89	-6,516.64	3,699.09	3,389.35	309.75	11.942	
10,600.00	7,130.47	7,088.47	7,130.47	94.73	245.74	90.62	-1,250.89	-6,516.64	3,609.44	3,298.24	311.19	11.599	
10,700.00	7,129.93	7,087.93	7,129.93	97.33	245.72	90.60	-1,250.89	-6,516.64	3,520.34	3,207.59	312.74	11.256	
10,800.00	7,129.39	7,087.39	7,129.39	99.94	245.70	90.58	-1,250.89	-6,516.64	3,431.84	3,117.43	314.41	10.915	
10,900.00	7,128.84	7,086.84	7,128.84	102.56	245.68	90.56	-1,250.89	-6,516.64	3,343.98	3,027.80	316.19	10.576	
11,000.00	7,128.30	7,086.30	7,128.30	105.20	245.66	90.54	-1,250.89	-6,516.64	3,256.83	2,938.73	318.10	10.238	
11,100.00	7,127.76	7,085.76	7,127.76	107.85	245.64	90.52	-1,250.89	-6,516.64	3,170.44	2,850.30	320.14	9.903	
11,200.00	7,127.22	7,085.22	7,127.22	110.51	245.62	90.50	-1,250.89	-6,516.64	3,084.87	2,762.54	322.33	9.570	
11,300.00	7,126.68	7,084.68	7,126.68	113.18	245.60	90.48	-1,250.89	-6,516.64	3,000.19	2,675.52	324.68	9.241	
11,400.00	7,126.14	7,084.14	7,126.14	115.86	245.58	90.46	-1,250.89	-6,516.64	2,916.48	2,589.31	327.18	8.914	
11,500.00	7,125.60	7,083.60	7,125.60	118.55	245.57	90.45	-1,250.89	-6,516.64	2,833.83	2,503.99	329.85	8.591	
11,600.00	7,125.06	7,083.06	7,125.06	121.25	245.55	90.43	-1,250.89	-6,516.64	2,752.33	2,419.64	332.70	8.273	
11,700.00	7,124.52	7,082.52	7,124.52	123.95	245.53	90.41	-1,250.89	-6,516.64	2,672.09	2,336.36	335.73	7.959	
11,800.00	7,123.97	7,081.97	7,123.97	126.66	245.51	90.39	-1,250.89	-6,516.64	2,593.22	2,254.26	338.96	7.651	
11,900.00	7,123.43	7,081.43	7,123.43	129.38	245.49	90.37	-1,250.89	-6,516.64	2,515.85	2,173.46	342.39	7.348	
12,000.00	7,122.89	7,080.89	7,122.89	132.10	245.47	90.35	-1,250.89	-6,516.64	2,440.13	2,094.11	346.02	7.052	
12,100.00	7,122.35	7,080.35	7,122.35	134.83	245.45	90.33	-1,250.89	-6,516.64	2,366.21	2,016.34	349.87	6.763	
12,200.00	7,121.81	7,079.81	7,121.81	137.56	245.43	90.31	-1,250.89	-6,516.64	2,294.27	1,940.34	353.93	6.482	
12,300.00	7,121.27	7,079.27	7,121.27	140.30	245.41	90.29	-1,250.89	-6,516.64	2,224.50	1,866.30	358.21	6.210	
12,400.00	7,120.73	7,078.73	7,120.73	143.05	245.40	90.27	-1,250.89	-6,516.64	2,157.11	1,794.43	362.69	5.948	
12,500.00	7,120.19	7,078.19	7,120.19	145.80	245.38	90.25	-1,250.89	-6,516.64	2,092.33	1,724.97	367.36	5.696	
12,600.00	7,119.65	7,077.65	7,119.65	148.55	245.36	90.23	-1,250.89	-6,516.64	2,030.41	1,658.19	372.22	5.455	
12,700.00	7,119.10	7,077.10	7,119.10	151.30	245.34	90.22	-1,250.89	-6,516.64	1,971.63	1,594.39	377.24	5.226	
12,800.00	7,118.56	7,076.56	7,118.56	154.07	245.32	90.20	-1,250.89	-6,516.64	1,916.25	1,533.88	382.38	5.011	
12,900.00	7,118.02	7,076.02	7,118.02	156.83	245.30	90.18	-1,250.89	-6,516.64	1,864.60	1,477.01	387.60	4.811	
13,000.00	7,117.48	7,075.48	7,117.48	159.60	245.28	90.16	-1,250.89	-6,516.64	1,816.99	1,424.14	392.85	4.625	
13,100.00	7,116.94	7,074.94	7,116.94	162.37	245.26	90.14	-1,250.89	-6,516.64	1,773.75	1,375.68	398.07	4.456	
13,200.00	7,116.40	7,074.40	7,116.40	165.14	245.24	90.12	-1,250.89	-6,516.64	1,735.20	1,332.02	403.18	4.304	
13,300.00	7,115.86	7,073.86	7,115.86	167.92	245.23	90.10	-1,250.89	-6,516.64	1,701.65	1,293.55	408.10	4.170	
13,400.00	7,115.32	7,073.32	7,115.32	170.70	245.21	90.08	-1,250.89	-6,516.64	1,673.42	1,260.68	412.75	4.054	
13,500.00	7,114.78	7,072.78	7,114.78	173.48	245.19	90.06	-1,250.89	-6,516.64	1,650.77	1,233.75	417.02	3.958	
13,600.00	7,114.24	7,072.24	7,114.24	176.26	245.17	90.04	-1,250.89	-6,516.64	1,633.94	1,213.09	420.85	3.882	
13,700.00	7,113.69	7,071.69	7,113.69	179.05	245.15	90.02	-1,250.89	-6,516.64	1,623.11	1,198.96	424.15	3.827	
13,800.00	7,113.15	7,071.15	7,113.15	181.84	245.13	90.01	-1,250.89	-6,516.64	1,618.39	1,191.54	426.86	3.791	
13,826.43	7,113.01	7,071.01	7,113.01	182.58	245.13	90.00	-1,250.89	-6,516.64	1,618.18	1,190.71	427.47	3.786 CC, ES	
13,900.00	7,112.61	7,070.61	7,112.61	184.63	245.11	89.99	-1,250.89	-6,516.64	1,619.85	1,190.92	428.93	3.777 SF	
14,000.00	7,112.07	7,070.07	7,112.07	187.42	245.09	89.97	-1,250.89	-6,516.64	1,627.46	1,197.12	430.34	3.782	
14,100.00	7,111.53	7,069.53	7,111.53	190.22	245.07	89.95	-1,250.89	-6,516.64	1,641.14	1,210.04	431.10	3.807	
14,200.00	7,110.99	7,068.99	7,110.99	193.01	245.06	89.93	-1,250.89	-6,516.64	1,660.74	1,229.52	431.22	3.851	
14,300.00	7,110.45	7,068.45	7,110.45	195.81	245.04	89.91	-1,250.89	-6,516.64	1,686.05	1,255.29	430.76	3.914	
14,400.00	7,109.91	7,067.91	7,109.91	198.61	245.02	89.89	-1,250.89	-6,516.64	1,716.82	1,287.07	429.76	3.995	
14,500.00	7,109.37	7,067.37	7,109.37	201.42	245.00	89.87	-1,250.89	-6,516.64	1,752.77	1,324.48	428.29	4.092	
14,600.00	7,108.82	7,066.82	7,108.82	204.22	244.98	89.85	-1,250.89	-6,516.64	1,793.57	1,367.15	426.42	4.206	
14,700.00	7,108.28	7,066.28	7,108.28	207.03	244.96	89.83	-1,250.89	-6,516.64	1,838.92	1,414.69	424.23	4.335	
14,800.00	7,107.74	7,065.74	7,107.74	209.83	244.94	89.81	-1,250.89	-6,516.64	1,888.47	1,466.69	421.78	4.477	
14,900.00	7,107.20	7,065.20	7,107.20	212.64	244.92	89.79	-1,250.89	-6,516.64	1,941.91	1,522.78	419.14	4.633	
15,000.00	7,106.66	7,064.66	7,106.66	215.45	244.90	89.78	-1,250.89	-6,516.64	1,998.93	1,582.58	416.36	4.801	
15,100.00	7,106.12	7,064.12	7,106.12	218.26	244.89	89.76	-1,250.89	-6,516.64	2,059.23	1,645.75	413.49	4.980	
15,200.00	7,105.58	7,063.58	7,105.58	221.07	244.87	89.74	-1,250.89	-6,516.64	2,122.53	1,711.96	410.57	5.170	
15,300.00	7,105.04	7,063.04	7,105.04	223.89	244.85	89.72	-1,250.89	-6,516.64	2,188.57	1,780.93	407.65	5.369	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,400.00	7,104.50	7,062.50	7,104.50	226.70	244.83	89.70	-1,250.89	-6,516.64	2,257.11	1,852.38	404.74	5.577	
15,491.56	7,104.00	7,062.00	7,104.00	229.28	244.81	89.68	-1,250.89	-6,516.64	2,321.87	1,919.77	402.11	5.774	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-3(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	37.00	3.28	3.28	-90.86	-114.30	-7,655.33	7,656.27					
100.00	100.00	100.00	125.32	3.28	3.29	-90.85	-114.01	-7,655.04	7,655.93	7,649.36	6.57	1,164.958		
200.00	200.00	181.52	218.51	3.34	3.33	-90.85	-113.41	-7,654.65	7,655.51	7,648.84	6.67	1,148.516		
300.00	299.98	255.37	292.37	3.44	3.40	86.03	-112.96	-7,654.60	7,655.32	7,648.48	6.84	1,119.891		
400.00	399.84	331.35	368.34	3.59	3.49	86.07	-112.76	-7,654.81	7,655.22	7,648.14	7.08	1,080.785		
500.00	499.45	413.62	450.61	3.79	3.63	86.12	-112.83	-7,655.26	7,655.18	7,647.76	7.42	1,032.119		
600.00	598.70	521.86	558.85	4.03	3.85	86.22	-113.10	-7,655.86	7,654.91	7,647.03	7.88	971.334		
700.00	697.47	612.78	649.77	4.31	4.07	86.33	-113.78	-7,656.37	7,654.46	7,646.08	8.38	913.064		
800.00	795.62	699.91	736.89	4.64	4.30	86.46	-114.65	-7,656.97	7,653.95	7,645.01	8.94	856.240		
900.00	893.06	799.87	836.84	5.00	4.59	86.63	-115.67	-7,657.71	7,653.33	7,643.74	9.59	798.142		
1,000.00	989.64	901.12	938.08	5.40	4.90	86.84	-116.66	-7,658.42	7,652.53	7,642.23	10.30	743.038		
1,100.00	1,085.27	1,001.18	1,038.14	5.83	5.23	87.07	-117.51	-7,659.07	7,651.58	7,640.53	11.06	692.021		
1,200.00	1,179.82	1,095.98	1,132.94	6.29	5.55	87.32	-118.06	-7,659.66	7,650.55	7,638.70	11.84	645.912		
1,300.00	1,273.17	1,186.48	1,223.44	6.79	5.87	87.58	-118.40	-7,660.23	7,649.51	7,636.85	12.66	604.160		
1,400.00	1,365.21	1,288.87	1,325.82	7.33	6.24	87.90	-118.69	-7,660.84	7,648.48	7,634.92	13.56	563.871		
1,500.00	1,456.49	1,375.40	1,412.35	7.89	6.56	88.16	-118.90	-7,661.31	7,647.53	7,633.09	14.44	529.550		
1,600.00	1,547.76	1,465.42	1,502.37	8.46	6.89	88.43	-119.25	-7,661.85	7,646.85	7,631.50	15.35	498.044		
1,700.00	1,639.04	1,552.70	1,589.64	9.05	7.22	88.70	-119.58	-7,662.39	7,646.40	7,630.13	16.27	469.883		
1,800.00	1,730.31	1,642.73	1,679.67	9.65	7.57	88.97	-119.85	-7,663.01	7,646.23	7,629.01	17.22	444.104		
1,853.04	1,778.72	1,694.36	1,731.30	9.97	7.77	89.13	-119.92	-7,663.34	7,646.21	7,628.47	17.74	431.051		
1,900.00	1,821.58	1,736.82	1,773.76	10.26	7.94	89.26	-119.95	-7,663.61	7,646.23	7,628.04	18.19	420.366		
2,000.00	1,912.85	1,828.13	1,865.06	10.87	8.29	89.54	-120.08	-7,664.20	7,646.46	7,627.30	19.16	399.057		
2,100.00	2,004.13	1,920.63	1,957.56	11.49	8.66	89.82	-120.29	-7,664.76	7,646.87	7,626.72	20.15	379.561		
2,200.00	2,095.40	2,005.84	2,042.77	12.11	9.00	90.08	-120.48	-7,665.34	7,647.55	7,626.44	21.11	362.267		
2,300.00	2,186.67	2,133.78	2,170.71	12.74	9.51	90.47	-120.52	-7,665.86	7,648.20	7,625.95	22.25	343.710		
2,400.00	2,277.95	2,238.46	2,275.39	13.38	9.93	90.79	-120.95	-7,666.04	7,648.85	7,625.54	23.31	328.200		
2,500.00	2,369.22	2,339.38	2,376.31	14.01	10.34	91.09	-121.58	-7,666.01	7,649.50	7,625.15	24.35	314.173		
2,600.00	2,460.49	2,426.49	2,463.42	14.65	10.69	91.36	-122.03	-7,666.00	7,650.40	7,625.06	25.34	301.923		
2,700.00	2,551.77	2,525.99	2,562.91	15.29	11.10	91.66	-122.43	-7,665.97	7,651.50	7,625.12	26.38	290.011		
2,800.00	2,643.04	2,643.75	2,680.68	15.93	11.58	92.02	-122.71	-7,665.59	7,652.56	7,625.06	27.51	278.223		
2,900.00	2,734.31	2,739.68	2,776.60	16.58	11.97	92.31	-122.66	-7,665.05	7,653.65	7,625.11	28.54	268.166		
3,000.00	2,825.58	2,800.01	2,836.93	17.23	12.22	92.50	-122.47	-7,664.72	7,655.04	7,625.61	29.43	260.085		
3,100.00	2,916.86	2,861.05	2,897.97	17.87	12.47	92.68	-122.10	-7,664.61	7,657.01	7,626.68	30.33	252.458		
3,200.00	3,008.13	2,900.01	2,936.93	18.52	12.63	92.81	-121.76	-7,664.76	7,659.76	7,628.62	31.14	246.016		
3,300.00	3,099.40	2,963.76	3,000.67	19.17	12.89	93.00	-121.07	-7,665.32	7,663.17	7,631.13	32.05	239.138		
3,400.00	3,190.68	3,025.93	3,062.84	19.83	13.15	93.20	-120.32	-7,666.19	7,667.25	7,634.30	32.95	232.703		
3,500.00	3,281.95	3,100.01	3,136.89	20.48	13.46	93.43	-119.31	-7,667.36	7,671.75	7,637.85	33.90	226.283		
3,600.00	3,373.22	3,153.27	3,190.14	21.13	13.68	93.60	-118.49	-7,668.38	7,676.81	7,642.04	34.77	220.794		
3,700.00	3,464.49	3,200.01	3,236.86	21.79	13.87	93.74	-117.71	-7,669.51	7,682.59	7,646.98	35.61	215.767		
3,800.00	3,555.77	3,270.09	3,306.90	22.44	14.17	93.96	-116.44	-7,671.50	7,688.96	7,652.42	36.54	210.406		
3,900.00	3,647.04	3,346.84	3,383.60	23.10	14.49	94.21	-114.87	-7,673.88	7,695.82	7,658.31	37.51	205.166		
4,000.00	3,738.31	3,443.69	3,480.37	23.75	14.89	94.51	-112.46	-7,676.86	7,702.96	7,664.40	38.57	199.735		
4,100.00	3,829.59	3,562.01	3,598.60	24.41	15.39	94.89	-109.20	-7,680.15	7,710.11	7,670.39	39.72	194.125		
4,200.00	3,920.86	3,666.41	3,702.94	25.07	15.83	95.22	-106.61	-7,682.77	7,717.20	7,676.39	40.81	189.111		
4,300.00	4,012.13	3,764.24	3,800.71	25.73	16.24	95.53	-104.52	-7,685.17	7,724.43	7,682.56	41.87	184.488		
4,400.00	4,103.41	3,860.88	3,897.30	26.38	16.65	95.83	-102.67	-7,687.49	7,731.81	7,688.88	42.93	180.119		
4,500.00	4,194.68	3,962.02	3,998.41	27.04	17.07	96.15	-100.99	-7,689.87	7,739.33	7,695.32	44.00	175.881		
4,600.00	4,285.95	4,066.67	4,103.02	27.70	17.51	96.47	-99.56	-7,692.21	7,746.91	7,701.82	45.10	171.787		
4,700.00	4,377.22	4,161.59	4,197.91	28.36	17.91	96.76	-98.13	-7,694.18	7,754.60	7,708.45	46.15	168.046		
4,800.00	4,468.50	4,258.94	4,295.23	29.02	18.32	97.06	-96.97	-7,696.22	7,762.47	7,715.26	47.21	164.437		
4,900.00	4,559.77	4,363.05	4,399.31	29.68	18.76	97.37	-96.00	-7,698.31	7,770.43	7,722.14	48.30	160.888		
5,000.00	4,651.04	4,470.36	4,506.61	30.34	19.21	97.70	-95.40	-7,700.33	7,778.44	7,729.03	49.40	157.450		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	4,742.32	4,612.08	4,648.31	31.00	19.81	98.12	-94.85	-7,702.45	7,786.27	7,735.61	50.66	153.694	
5,200.00	4,833.59	4,700.46	4,736.68	31.66	20.19	98.38	-94.59	-7,703.50	7,794.02	7,742.34	51.68	150.808	
5,300.00	4,924.86	4,787.29	4,823.51	32.32	20.55	98.64	-94.32	-7,704.58	7,802.02	7,749.32	52.70	148.058	
5,400.00	5,016.13	4,887.76	4,923.96	32.99	20.98	98.94	-94.01	-7,705.79	7,810.20	7,756.43	53.77	145.251	
5,500.00	5,107.41	4,978.39	5,014.59	33.65	21.36	99.21	-93.66	-7,706.80	7,818.53	7,763.73	54.80	142.673	
5,600.00	5,198.68	5,077.78	5,113.97	34.31	21.78	99.51	-93.22	-7,707.87	7,827.04	7,771.17	55.87	140.095	
5,700.00	5,289.95	5,170.80	5,206.99	34.97	22.18	99.78	-92.82	-7,708.79	7,835.67	7,778.77	56.91	137.686	
5,800.00	5,381.23	5,266.08	5,302.26	35.63	22.58	100.07	-92.53	-7,709.74	7,844.50	7,786.54	57.96	135.344	
5,900.00	5,472.50	5,300.00	5,421.12	36.30	25.26	100.42	-92.03	-7,710.53	7,853.24	7,791.94	61.30	128.113	
6,000.00	5,563.77	5,317.87	5,554.04	36.96	23.64	100.81	-91.10	-7,710.66	7,861.73	7,801.40	60.33	130.311	
6,100.00	5,655.05	5,583.64	5,619.82	37.62	23.92	101.01	-90.77	-7,710.81	7,870.53	7,809.28	61.25	128.505	
6,200.00	5,746.32	5,672.35	5,708.52	38.28	24.30	101.27	-90.52	-7,711.19	7,879.67	7,817.40	62.27	126.550	
6,300.00	5,837.59	5,756.33	5,792.50	38.95	24.65	101.52	-90.23	-7,711.55	7,889.03	7,825.77	63.26	124.705	
6,400.00	5,928.86	5,840.24	5,876.41	39.61	25.01	101.76	-89.90	-7,712.00	7,898.71	7,834.45	64.26	122.924	
6,500.00	6,020.14	5,923.78	5,959.94	40.27	25.36	102.01	-89.53	-7,712.50	7,908.64	7,843.39	65.25	121.206	
6,600.00	6,111.41	5,996.59	6,032.76	40.94	25.67	102.22	-89.31	-7,713.10	7,918.95	7,852.75	66.19	119.636	
6,700.00	6,202.68	6,106.96	6,143.12	41.60	26.14	102.54	-89.13	-7,714.06	7,929.46	7,862.15	67.31	117.810	
6,800.00	6,293.96	6,168.31	6,204.47	42.26	26.40	102.72	-89.06	-7,714.66	7,940.23	7,872.04	68.19	116.435	
6,900.00	6,385.23	6,249.97	6,286.12	42.93	26.75	102.95	-89.04	-7,715.72	7,951.46	7,882.29	69.17	114.947	
7,000.00	6,476.50	6,344.14	6,380.28	43.59	27.15	103.22	-89.23	-7,716.98	7,962.86	7,892.65	70.21	113.410	
7,100.00	6,567.77	6,452.63	6,488.76	44.25	27.61	103.53	-89.51	-7,718.40	7,974.42	7,903.10	71.32	111.817	
7,200.00	6,658.64	6,565.68	6,601.81	44.91	28.10	86.77	-90.05	-7,719.54	7,979.87	7,907.43	72.44	110.159	
7,300.00	6,747.14	6,662.28	6,698.40	45.52	28.51	72.23	-90.67	-7,720.42	7,970.54	7,897.08	73.46	108.502	
7,400.00	6,831.10	6,740.53	6,776.64	46.07	28.84	62.63	-91.60	-7,721.24	7,946.71	7,872.37	74.34	106.894	
7,500.00	6,908.46	6,804.30	6,840.39	46.54	29.11	56.96	-92.49	-7,722.08	7,909.17	7,834.07	75.10	105.317	
7,600.00	6,977.30	6,862.48	6,898.56	46.95	29.36	54.29	-93.26	-7,722.93	7,858.85	7,783.06	75.78	103.704	
7,700.00	7,035.93	6,900.01	6,936.09	47.30	29.52	54.07	-93.69	-7,723.50	7,796.96	7,720.63	76.33	102.148	
7,800.00	7,082.92	6,940.22	6,976.29	47.59	29.69	56.48	-94.09	-7,724.18	7,725.00	7,648.14	76.87	100.499	
7,900.00	7,117.09	6,963.15	6,999.22	47.84	29.79	61.97	-94.30	-7,724.62	7,644.68	7,567.38	77.30	98.891	
8,000.00	7,137.62	6,977.57	7,013.63	48.06	29.85	71.99	-94.43	-7,724.91	7,557.86	7,480.17	77.69	97.283	
8,100.00	7,143.99	6,983.01	7,019.08	48.28	29.87	88.20	-94.47	-7,725.03	7,466.55	7,388.53	78.02	95.699	
8,200.00	7,143.45	6,984.04	7,020.10	48.53	29.88	88.22	-94.48	-7,725.05	7,373.85	7,295.51	78.34	94.131	
8,300.00	7,142.91	6,985.07	7,021.13	48.89	29.88	88.24	-94.49	-7,725.07	7,281.34	7,202.66	78.68	92.539	
8,400.00	7,142.37	6,986.11	7,022.17	49.40	29.89	88.26	-94.50	-7,725.09	7,189.04	7,109.97	79.07	90.924	
8,500.00	7,141.83	6,987.16	7,023.22	50.12	29.89	88.28	-94.51	-7,725.11	7,096.94	7,017.45	79.48	89.287	
8,600.00	7,141.29	6,988.22	7,024.27	51.08	29.89	88.31	-94.51	-7,725.14	7,005.06	6,925.12	79.94	87.627	
8,700.00	7,140.75	6,989.28	7,025.34	52.30	29.90	88.33	-94.52	-7,725.16	6,913.40	6,832.96	80.44	85.947	
8,800.00	7,140.21	7,000.01	7,036.07	53.75	29.94	88.55	-94.61	-7,725.40	6,821.99	6,740.96	81.02	84.197	
8,900.00	7,139.67	7,000.01	7,036.07	55.40	29.94	88.55	-94.61	-7,725.40	6,730.81	6,649.21	81.60	82.486	
9,000.00	7,139.12	7,000.01	7,036.07	57.20	29.94	88.55	-94.61	-7,725.40	6,639.88	6,557.66	82.22	80.757	
9,100.00	7,138.58	7,000.01	7,036.07	59.13	29.94	88.55	-94.61	-7,725.40	6,549.22	6,466.33	82.89	79.013	
9,200.00	7,138.04	7,000.01	7,036.07	61.15	29.94	88.55	-94.61	-7,725.40	6,458.83	6,375.23	83.60	77.256	
9,300.00	7,137.50	7,000.01	7,036.07	63.26	29.94	88.55	-94.61	-7,725.40	6,368.73	6,284.36	84.37	75.486	
9,400.00	7,136.96	7,000.01	7,036.07	65.44	29.94	88.55	-94.61	-7,725.40	6,278.93	6,193.75	85.19	73.707	
9,500.00	7,136.42	7,000.01	7,036.07	67.68	29.94	88.55	-94.61	-7,725.40	6,189.45	6,103.39	86.06	71.920	
9,600.00	7,135.88	7,000.01	7,036.07	69.97	29.94	88.55	-94.61	-7,725.40	6,100.29	6,013.30	86.99	70.127	
9,700.00	7,135.34	7,000.64	7,036.70	72.31	29.95	88.56	-94.61	-7,725.41	6,011.47	5,923.49	87.98	68.328	
9,800.00	7,134.80	7,002.11	7,038.17	74.69	29.95	88.59	-94.62	-7,725.44	5,923.01	5,833.97	89.03	66.525	
9,900.00	7,134.26	7,003.58	7,039.64	77.10	29.96	88.62	-94.63	-7,725.48	5,834.91	5,744.76	90.15	64.723	
10,000.00	7,133.71	7,005.06	7,041.11	79.54	29.97	88.65	-94.64	-7,725.51	5,747.21	5,655.88	91.33	62.925	
10,100.00	7,133.17	7,006.53	7,042.59	82.02	29.97	88.68	-94.65	-7,725.54	5,659.92	5,567.34	92.58	61.134	
10,200.00	7,132.63	7,008.01	7,044.07	84.52	29.98	88.71	-94.67	-7,725.58	5,573.05	5,479.15	93.90	59.352	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,132.09	7,009.49	7,045.54	87.04	29.98	88.74	-94.68	-7,725.61	5,486.63	5,391.35	95.29	57.581		
10,400.00	7,131.55	7,010.97	7,047.03	89.58	29.99	88.77	-94.69	-7,725.64	5,400.68	5,303.93	96.75	55.823		
10,500.00	7,131.01	7,012.45	7,048.51	92.15	30.00	88.81	-94.70	-7,725.67	5,315.22	5,216.94	98.28	54.081		
10,600.00	7,130.47	7,013.94	7,049.99	94.73	30.00	88.84	-94.71	-7,725.71	5,230.27	5,130.38	99.89	52.358		
10,700.00	7,129.93	7,015.42	7,051.48	97.33	30.01	88.87	-94.72	-7,725.74	5,145.87	5,044.28	101.59	50.655		
10,800.00	7,129.39	7,016.91	7,052.96	99.94	30.02	88.90	-94.73	-7,725.78	5,062.03	4,958.67	103.36	48.975		
10,900.00	7,128.84	7,018.40	7,054.45	102.56	30.02	88.93	-94.74	-7,725.81	4,978.79	4,873.57	105.22	47.319		
11,000.00	7,128.30	7,019.89	7,055.94	105.20	30.03	88.96	-94.75	-7,725.84	4,896.17	4,789.01	107.16	45.689		
11,100.00	7,127.76	7,021.38	7,057.43	107.85	30.04	88.99	-94.76	-7,725.88	4,814.22	4,705.02	109.20	44.088		
11,200.00	7,127.22	7,022.88	7,058.93	110.51	30.04	89.02	-94.77	-7,725.91	4,732.95	4,621.63	111.32	42.517		
11,300.00	7,126.68	7,024.37	7,060.42	113.18	30.05	89.05	-94.78	-7,725.94	4,652.42	4,538.88	113.54	40.977		
11,400.00	7,126.14	7,025.87	7,061.92	115.86	30.05	89.08	-94.79	-7,725.98	4,572.66	4,456.81	115.85	39.471		
11,500.00	7,125.60	7,027.37	7,063.42	118.55	30.06	89.11	-94.80	-7,726.01	4,493.70	4,375.44	118.26	37.999		
11,600.00	7,125.06	7,028.87	7,064.92	121.25	30.07	89.14	-94.81	-7,726.04	4,415.60	4,294.83	120.77	36.563		
11,700.00	7,124.52	7,030.37	7,066.42	123.95	30.07	89.17	-94.82	-7,726.08	4,338.39	4,215.01	123.38	35.163		
11,800.00	7,123.97	7,031.88	7,067.92	126.66	30.08	89.21	-94.83	-7,726.11	4,262.13	4,136.04	126.09	33.802		
11,900.00	7,123.43	7,033.38	7,069.43	129.38	30.09	89.24	-94.84	-7,726.15	4,186.87	4,057.96	128.91	32.479		
12,000.00	7,122.89	7,034.89	7,070.94	132.10	30.09	89.27	-94.85	-7,726.18	4,112.67	3,980.83	131.84	31.195		
12,100.00	7,122.35	7,036.40	7,072.45	134.83	30.10	89.30	-94.85	-7,726.21	4,039.57	3,904.71	134.87	29.952		
12,200.00	7,121.81	7,037.91	7,073.96	137.56	30.11	89.33	-94.86	-7,726.25	3,967.65	3,829.64	138.01	28.749		
12,300.00	7,121.27	7,039.42	7,075.47	140.30	30.11	89.36	-94.87	-7,726.28	3,896.97	3,755.71	141.26	27.588		
12,400.00	7,120.73	7,040.94	7,076.98	143.05	30.12	89.39	-94.88	-7,726.32	3,827.60	3,682.98	144.62	26.467		
12,500.00	7,120.19	7,042.45	7,078.50	145.80	30.13	89.42	-94.89	-7,726.35	3,759.60	3,611.52	148.08	25.389		
12,600.00	7,119.65	7,043.97	7,080.01	148.55	30.13	89.45	-94.90	-7,726.39	3,693.06	3,541.41	151.65	24.352		
12,700.00	7,119.10	7,045.49	7,081.53	151.30	30.14	89.49	-94.91	-7,726.42	3,628.06	3,472.73	155.33	23.358		
12,800.00	7,118.56	7,047.01	7,083.05	154.07	30.14	89.52	-94.92	-7,726.45	3,564.67	3,405.57	159.10	22.405		
12,900.00	7,118.02	7,048.53	7,084.57	156.83	30.15	89.55	-94.92	-7,726.49	3,502.99	3,340.02	162.98	21.494		
13,000.00	7,117.48	7,050.06	7,086.10	159.60	30.16	89.58	-94.93	-7,726.52	3,443.12	3,276.17	166.94	20.625		
13,100.00	7,116.94	7,051.58	7,087.62	162.37	30.16	89.61	-94.94	-7,726.56	3,385.13	3,214.14	170.99	19.797		
13,200.00	7,116.40	7,053.11	7,089.15	165.14	30.17	89.64	-94.95	-7,726.59	3,329.14	3,154.02	175.12	19.010		
13,300.00	7,115.86	7,054.64	7,090.68	167.92	30.18	89.67	-94.96	-7,726.63	3,275.25	3,095.92	179.32	18.264		
13,400.00	7,115.32	7,056.17	7,092.21	170.70	30.18	89.71	-94.97	-7,726.66	3,223.55	3,039.97	183.58	17.559		
13,500.00	7,114.78	7,057.70	7,093.74	173.48	30.19	89.74	-94.97	-7,726.70	3,174.17	2,986.28	187.89	16.894		
13,600.00	7,114.24	7,059.24	7,095.28	176.26	30.20	89.77	-94.98	-7,726.73	3,127.20	2,934.98	192.22	16.269		
13,700.00	7,113.69	7,060.77	7,096.81	179.05	30.20	89.80	-94.99	-7,726.77	3,082.76	2,886.19	196.58	15.682		
13,800.00	7,113.15	7,062.31	7,098.35	181.84	30.21	89.83	-95.00	-7,726.80	3,040.97	2,840.03	200.94	15.134		
13,900.00	7,112.61	7,063.85	7,099.89	184.63	30.22	89.86	-95.00	-7,726.84	3,001.92	2,796.64	205.27	14.624		
14,000.00	7,112.07	7,065.39	7,101.43	187.42	30.22	89.90	-95.01	-7,726.87	2,965.73	2,756.15	209.57	14.151		
14,100.00	7,111.53	7,066.93	7,102.97	190.22	30.23	89.93	-95.02	-7,726.91	2,932.50	2,718.69	213.81	13.715		
14,200.00	7,110.99	7,068.48	7,104.52	193.01	30.24	89.96	-95.03	-7,726.94	2,902.34	2,684.37	217.97	13.315		
14,300.00	7,110.45	7,070.02	7,106.06	195.81	30.24	89.99	-95.03	-7,726.98	2,875.34	2,653.31	222.03	12.950		
14,400.00	7,109.91	7,071.57	7,107.61	198.61	30.25	90.02	-95.04	-7,727.01	2,851.59	2,625.64	225.95	12.620		
14,500.00	7,109.37	7,073.12	7,109.16	201.42	30.26	90.05	-95.05	-7,727.05	2,831.18	2,601.45	229.73	12.324		
14,600.00	7,108.82	7,074.67	7,110.71	204.22	30.26	90.09	-95.05	-7,727.08	2,814.17	2,580.84	233.33	12.061		
14,700.00	7,108.28	7,076.23	7,112.26	207.03	30.27	90.12	-95.06	-7,727.12	2,800.63	2,563.89	236.74	11.830		
14,800.00	7,107.74	7,077.78	7,113.82	209.83	30.28	90.15	-95.07	-7,727.16	2,790.61	2,550.68	239.93	11.631		
14,900.00	7,107.20	7,079.34	7,115.37	212.64	30.28	90.18	-95.07	-7,727.19	2,784.15	2,541.26	242.89	11.462		
15,000.00	7,106.66	7,080.90	7,116.93	215.45	30.29	90.21	-95.08	-7,727.23	2,781.27	2,535.66	245.61	11.324		
15,030.17	7,106.50	7,081.37	7,117.40	216.30	30.29	90.22	-95.08	-7,727.24	2,781.11	2,534.73	246.38	11.288 CC		
15,100.00	7,106.12	7,082.46	7,118.49	218.26	30.30	90.25	-95.09	-7,727.26	2,781.98	2,533.92	248.06	11.215 ES		
15,200.00	7,105.58	7,084.02	7,120.05	221.07	30.30	90.28	-95.09	-7,727.30	2,786.29	2,536.04	250.25	11.134		
15,300.00	7,105.04	7,085.58	7,121.62	223.89	30.31	90.31	-95.10	-7,727.33	2,794.16	2,542.01	252.15	11.081		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-3(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,400.00	7,104.50	7,087.15	7,123.18	226.70	30.32	90.34	-95.10	-7,727.37	2,805.58	2,551.80	253.78	11.055	
15,491.56	7,104.00	7,088.58	7,124.62	229.28	30.32	90.37	-95.11	-7,727.40	2,819.11	2,564.08	255.03	11.054 SF	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - STOCKOVER 16-1(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	60.00	3.28	3.28	-108.68	-1,205.23	-3,565.12	3,763.81					
100.00	100.00	40.00	100.00	3.28	3.35	-108.68	-1,205.23	-3,565.12	3,763.33	3,756.69	6.64	566.919		
200.00	200.00	140.00	200.00	3.34	4.54	-108.68	-1,205.23	-3,565.12	3,763.33	3,755.45	7.88	477.637		
300.00	299.98	239.98	299.98	3.44	7.40	68.22	-1,205.23	-3,565.12	3,762.68	3,751.84	10.84	347.164		
400.00	399.84	339.84	399.84	3.59	10.64	68.33	-1,205.23	-3,565.12	3,760.74	3,746.51	14.23	264.368		
500.00	499.45	439.45	499.45	3.79	13.99	68.52	-1,205.23	-3,565.12	3,757.52	3,739.75	17.77	211.421		
600.00	598.70	538.70	598.70	4.03	17.37	68.77	-1,205.23	-3,565.12	3,753.06	3,731.65	21.40	175.355		
700.00	697.47	637.47	697.47	4.31	20.77	69.10	-1,205.23	-3,565.12	3,747.37	3,722.29	25.08	149.403		
800.00	795.62	735.62	795.62	4.64	24.16	69.50	-1,205.23	-3,565.12	3,740.52	3,711.72	28.79	129.906		
900.00	893.06	833.06	893.06	5.00	27.53	69.96	-1,205.23	-3,565.12	3,732.54	3,700.02	32.53	114.758		
1,000.00	989.64	929.64	989.64	5.40	30.88	70.50	-1,205.23	-3,565.12	3,723.52	3,687.25	36.27	102.667		
1,100.00	1,085.27	1,025.27	1,085.27	5.83	34.20	71.10	-1,205.23	-3,565.12	3,713.51	3,673.50	40.01	92.803		
1,200.00	1,179.82	1,119.82	1,179.82	6.29	37.49	71.76	-1,205.23	-3,565.12	3,702.61	3,658.85	43.76	84.611		
1,300.00	1,273.17	1,213.17	1,273.17	6.79	40.74	72.48	-1,205.23	-3,565.12	3,690.90	3,643.40	47.50	77.704		
1,400.00	1,365.21	1,305.21	1,365.21	7.33	43.94	73.26	-1,205.23	-3,565.12	3,678.49	3,627.27	51.23	71.806		
1,500.00	1,456.49	1,403.51	1,456.49	7.89	47.36	73.83	-1,205.23	-3,565.12	3,665.92	3,610.72	55.20	66.410		
1,600.00	1,547.76	1,487.76	1,547.76	8.46	50.30	74.40	-1,205.23	-3,565.12	3,653.76	3,595.06	58.70	62.242		
1,700.00	1,639.04	1,579.04	1,639.04	9.05	53.48	74.97	-1,205.23	-3,565.12	3,642.02	3,579.55	62.46	58.306		
1,800.00	1,730.31	1,670.31	1,730.31	9.65	56.66	75.54	-1,205.23	-3,565.12	3,630.69	3,564.46	66.24	54.814		
1,900.00	1,821.58	1,761.58	1,821.58	10.26	59.84	76.11	-1,205.23	-3,565.12	3,619.80	3,549.78	70.02	51.696		
2,000.00	1,912.85	1,852.85	1,912.85	10.87	63.02	76.69	-1,205.23	-3,565.12	3,609.33	3,535.52	73.81	48.898		
2,100.00	2,004.13	1,944.13	2,004.13	11.49	66.21	77.27	-1,205.23	-3,565.12	3,599.30	3,521.69	77.61	46.375		
2,200.00	2,095.40	2,035.40	2,095.40	12.11	69.39	77.85	-1,205.23	-3,565.12	3,589.70	3,508.28	81.42	44.089		
2,300.00	2,186.67	2,126.67	2,186.67	12.74	72.57	78.44	-1,205.23	-3,565.12	3,580.55	3,495.32	85.23	42.009		
2,400.00	2,277.95	2,217.95	2,277.95	13.38	75.75	79.03	-1,205.23	-3,565.12	3,571.84	3,482.79	89.05	40.111		
2,500.00	2,369.22	2,309.22	2,369.22	14.01	78.94	79.62	-1,205.23	-3,565.12	3,563.57	3,470.70	92.87	38.371		
2,600.00	2,460.49	2,400.49	2,460.49	14.65	82.12	80.21	-1,205.23	-3,565.12	3,555.76	3,459.06	96.70	36.772		
2,700.00	2,551.77	2,508.23	2,551.77	15.29	85.88	80.81	-1,205.23	-3,565.12	3,548.40	3,447.30	101.10	35.098		
2,800.00	2,643.04	2,583.04	2,643.04	15.93	88.49	81.40	-1,205.23	-3,565.12	3,541.49	3,437.14	104.36	33.936		
2,900.00	2,734.31	2,674.31	2,734.31	16.58	91.67	82.00	-1,205.23	-3,565.12	3,535.05	3,426.85	108.19	32.674		
3,000.00	2,825.58	2,765.58	2,825.58	17.23	94.86	82.60	-1,205.23	-3,565.12	3,529.06	3,417.03	112.03	31.502		
3,100.00	2,916.86	2,856.86	2,916.86	17.87	98.04	83.21	-1,205.23	-3,565.12	3,523.54	3,407.67	115.87	30.410		
3,200.00	3,008.13	2,948.13	3,008.13	18.52	101.23	83.81	-1,205.23	-3,565.12	3,518.49	3,398.78	119.71	29.393		
3,300.00	3,099.40	3,039.40	3,099.40	19.17	104.41	84.41	-1,205.23	-3,565.12	3,513.90	3,390.35	123.55	28.442		
3,400.00	3,190.68	3,130.68	3,190.68	19.83	107.60	85.02	-1,205.23	-3,565.12	3,509.78	3,382.39	127.39	27.551		
3,500.00	3,281.95	3,221.95	3,281.95	20.48	110.78	85.63	-1,205.23	-3,565.12	3,506.13	3,374.90	131.23	26.717		
3,600.00	3,373.22	3,313.22	3,373.22	21.13	113.97	86.24	-1,205.23	-3,565.12	3,502.96	3,367.88	135.08	25.933		
3,700.00	3,464.49	3,404.49	3,464.49	21.79	117.15	86.85	-1,205.23	-3,565.12	3,500.26	3,361.34	138.92	25.196		
3,800.00	3,555.77	3,504.23	3,555.77	22.44	120.63	87.46	-1,205.23	-3,565.12	3,498.03	3,354.97	143.06	24.451		
3,900.00	3,647.04	3,587.04	3,647.04	23.10	123.52	88.07	-1,205.23	-3,565.12	3,496.29	3,349.67	146.61	23.847		
4,000.00	3,738.31	3,678.31	3,738.31	23.75	126.71	88.68	-1,205.23	-3,565.12	3,495.01	3,344.56	150.46	23.229		
4,100.00	3,829.59	3,769.59	3,829.59	24.41	129.89	89.29	-1,205.23	-3,565.12	3,494.22	3,339.92	154.30	22.645		
4,200.00	3,920.86	3,860.86	3,920.86	25.07	133.08	89.90	-1,205.23	-3,565.12	3,493.90	3,335.76	158.15	22.093		
4,216.35	3,935.78	3,875.78	3,935.78	25.18	133.60	90.00	-1,205.23	-3,565.12	3,493.90	3,335.12	158.77	22.005		
4,300.00	4,012.13	3,952.13	4,012.13	25.73	136.26	90.51	-1,205.23	-3,565.12	3,494.06	3,332.07	161.99	21.570		
4,400.00	4,103.41	4,043.41	4,103.41	26.38	139.45	91.12	-1,205.23	-3,565.12	3,494.70	3,328.87	165.83	21.074		
4,500.00	4,194.68	4,134.68	4,194.68	27.04	142.63	91.73	-1,205.23	-3,565.12	3,495.82	3,326.14	169.67	20.603		
4,600.00	4,285.95	4,225.95	4,285.95	27.70	145.82	92.34	-1,205.23	-3,565.12	3,497.41	3,323.90	173.51	20.156		
4,700.00	4,377.22	4,317.22	4,377.22	28.36	149.01	92.96	-1,205.23	-3,565.12	3,499.48	3,322.13	177.35	19.732		
4,800.00	4,468.50	4,408.50	4,468.50	29.02	152.19	93.56	-1,205.23	-3,565.12	3,502.02	3,320.83	181.19	19.328		
4,900.00	4,559.77	4,500.23	4,559.77	29.68	155.39	94.17	-1,205.23	-3,565.12	3,505.04	3,320.00	185.05	18.941		
5,000.00	4,651.04	4,608.96	4,651.04	30.34	159.19	94.78	-1,205.23	-3,565.12	3,508.54	3,319.04	189.49	18.516		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - STOCKOVER 16-1(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	4,742.32	4,682.32	4,742.32	31.00	161.75	95.39	-1,205.23	-3,565.12	3,512.50	3,319.80	192.70	18.228		
5,200.00	4,833.59	4,773.59	4,833.59	31.66	164.93	95.99	-1,205.23	-3,565.12	3,516.93	3,320.40	196.53	17.895		
5,300.00	4,924.86	4,864.86	4,924.86	32.32	168.12	96.60	-1,205.23	-3,565.12	3,521.84	3,321.47	200.36	17.577		
5,400.00	5,016.13	4,956.13	5,016.13	32.99	171.30	97.20	-1,205.23	-3,565.12	3,527.21	3,323.01	204.19	17.274		
5,500.00	5,107.41	5,047.41	5,107.41	33.65	174.49	97.80	-1,205.23	-3,565.12	3,533.04	3,325.02	208.02	16.984		
5,600.00	5,198.68	5,138.68	5,198.68	34.31	177.68	98.40	-1,205.23	-3,565.12	3,539.33	3,327.49	211.84	16.707		
5,700.00	5,289.95	5,229.95	5,289.95	34.97	180.86	99.00	-1,205.23	-3,565.12	3,546.09	3,330.42	215.67	16.443		
5,800.00	5,381.23	5,321.23	5,381.23	35.63	184.05	99.59	-1,205.23	-3,565.12	3,553.30	3,333.82	219.49	16.189		
5,900.00	5,472.50	5,412.50	5,472.50	36.30	187.23	100.19	-1,205.23	-3,565.12	3,560.97	3,337.66	223.30	15.947		
6,000.00	5,563.77	5,503.77	5,563.77	36.96	190.42	100.78	-1,205.23	-3,565.12	3,569.09	3,341.97	227.12	15.715		
6,100.00	5,655.05	5,604.96	5,655.05	37.62	193.95	101.37	-1,205.23	-3,565.12	3,577.65	3,346.37	231.28	15.469		
6,200.00	5,746.32	5,686.32	5,746.32	38.28	196.79	101.95	-1,205.23	-3,565.12	3,586.66	3,351.92	234.74	15.279		
6,300.00	5,837.59	5,777.59	5,837.59	38.95	199.98	102.54	-1,205.23	-3,565.12	3,596.11	3,357.56	238.55	15.075		
6,400.00	5,928.86	5,868.86	5,928.86	39.61	203.16	103.12	-1,205.23	-3,565.12	3,606.00	3,363.65	242.36	14.879		
6,500.00	6,020.14	5,960.14	6,020.14	40.27	206.35	103.70	-1,205.23	-3,565.12	3,616.33	3,370.17	246.16	14.691		
6,600.00	6,111.41	6,051.41	6,111.41	40.94	209.54	104.27	-1,205.23	-3,565.12	3,627.08	3,377.12	249.96	14.511		
6,700.00	6,202.68	6,142.68	6,202.68	41.60	212.72	104.85	-1,205.23	-3,565.12	3,638.27	3,384.51	253.76	14.338		
6,800.00	6,293.96	6,233.96	6,293.96	42.26	215.91	105.42	-1,205.23	-3,565.12	3,649.87	3,392.32	257.55	14.171		
6,900.00	6,385.23	6,325.23	6,385.23	42.93	219.09	105.98	-1,205.23	-3,565.12	3,661.90	3,400.55	261.35	14.012		
7,000.00	6,476.50	6,416.50	6,476.50	43.59	222.28	106.55	-1,205.23	-3,565.12	3,674.34	3,409.20	265.14	13.858		
7,100.00	6,567.77	6,507.77	6,567.77	44.25	225.47	107.11	-1,205.23	-3,565.12	3,687.19	3,418.27	268.92	13.711		
7,200.00	6,658.64	6,601.36	6,658.64	44.91	228.73	90.53	-1,205.23	-3,565.12	3,694.65	3,421.86	272.78	13.544		
7,300.00	6,747.14	6,687.14	6,747.14	45.52	231.73	76.27	-1,205.23	-3,565.12	3,688.04	3,411.70	276.35	13.346		
7,400.00	6,831.10	6,771.10	6,831.10	46.07	234.66	67.10	-1,205.23	-3,565.12	3,667.63	3,387.85	279.79	13.109		
7,500.00	6,908.46	6,848.46	6,908.46	46.54	237.36	62.00	-1,205.23	-3,565.12	3,634.07	3,351.13	282.94	12.844		
7,600.00	6,977.30	6,917.30	6,977.30	46.95	239.76	60.00	-1,205.23	-3,565.12	3,588.32	3,302.58	285.74	12.558		
7,700.00	7,035.93	6,975.93	7,035.93	47.30	241.81	60.59	-1,205.23	-3,565.12	3,531.59	3,243.43	288.16	12.256		
7,800.00	7,082.92	7,022.92	7,082.92	47.59	243.45	63.68	-1,205.23	-3,565.12	3,465.34	3,175.18	290.15	11.943		
7,900.00	7,117.09	7,057.09	7,117.09	47.84	244.64	69.48	-1,205.23	-3,565.12	3,391.19	3,099.48	291.71	11.625		
8,000.00	7,137.62	7,077.62	7,137.62	48.06	245.36	78.42	-1,205.23	-3,565.12	3,310.91	3,018.11	292.80	11.308		
8,100.00	7,143.99	7,083.99	7,143.99	48.28	245.58	90.52	-1,205.23	-3,565.12	3,226.36	2,932.93	293.42	10.996		
8,200.00	7,143.45	7,083.45	7,143.45	48.53	245.56	90.50	-1,205.23	-3,565.12	3,140.77	2,846.93	293.84	10.689		
8,300.00	7,142.91	7,082.91	7,142.91	48.89	245.54	90.48	-1,205.23	-3,565.12	3,056.07	2,761.73	294.34	10.383		
8,400.00	7,142.37	7,082.37	7,142.37	49.40	245.52	90.47	-1,205.23	-3,565.12	2,972.31	2,677.39	294.92	10.078		
8,500.00	7,141.83	7,081.83	7,141.83	50.12	245.50	90.45	-1,205.23	-3,565.12	2,889.59	2,594.00	295.59	9.776		
8,600.00	7,141.29	7,081.29	7,141.29	51.08	245.48	90.43	-1,205.23	-3,565.12	2,807.99	2,511.63	296.36	9.475		
8,700.00	7,140.75	7,080.75	7,140.75	52.30	245.47	90.41	-1,205.23	-3,565.12	2,727.61	2,430.37	297.24	9.176		
8,800.00	7,140.21	7,080.21	7,140.21	53.75	245.45	90.39	-1,205.23	-3,565.12	2,648.58	2,350.34	298.24	8.881		
8,900.00	7,139.67	7,079.67	7,139.67	55.40	245.43	90.37	-1,205.23	-3,565.12	2,571.00	2,271.63	299.37	8.588		
9,000.00	7,139.12	7,079.12	7,139.12	57.20	245.41	90.35	-1,205.23	-3,565.12	2,495.02	2,194.38	300.64	8.299		
9,100.00	7,138.58	7,078.58	7,138.58	59.13	245.39	90.33	-1,205.23	-3,565.12	2,420.79	2,118.74	302.05	8.015		
9,200.00	7,138.04	7,078.04	7,138.04	61.15	245.37	90.32	-1,205.23	-3,565.12	2,348.47	2,044.85	303.62	7.735		
9,300.00	7,137.50	7,077.50	7,137.50	63.26	245.35	90.30	-1,205.23	-3,565.12	2,278.24	1,972.89	305.35	7.461		
9,400.00	7,136.96	7,076.96	7,136.96	65.44	245.33	90.28	-1,205.23	-3,565.12	2,210.31	1,903.05	307.25	7.194		
9,500.00	7,136.42	7,076.42	7,136.42	67.68	245.31	90.26	-1,205.23	-3,565.12	2,144.88	1,835.56	309.32	6.934		
9,600.00	7,135.88	7,075.88	7,135.88	69.97	245.30	90.24	-1,205.23	-3,565.12	2,082.21	1,770.65	311.56	6.683		
9,700.00	7,135.34	7,075.34	7,135.34	72.31	245.28	90.22	-1,205.23	-3,565.12	2,022.54	1,708.57	313.97	6.442		
9,800.00	7,134.80	7,074.80	7,134.80	74.69	245.26	90.20	-1,205.23	-3,565.12	1,966.15	1,649.62	316.54	6.211		
9,900.00	7,134.26	7,074.26	7,134.26	77.10	245.24	90.18	-1,205.23	-3,565.12	1,913.33	1,594.09	319.24	5.993		
10,000.00	7,133.71	7,073.71	7,133.71	79.54	245.22	90.16	-1,205.23	-3,565.12	1,864.38	1,542.30	322.08	5.789		
10,100.00	7,133.17	7,073.17	7,133.17	82.02	245.20	90.15	-1,205.23	-3,565.12	1,819.61	1,494.60	325.01	5.599		
10,200.00	7,132.63	7,072.63	7,132.63	84.52	245.18	90.13	-1,205.23	-3,565.12	1,779.34	1,451.34	328.00	5.425		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,132.09	7,072.09	7,132.09	87.04	245.16	90.11	-1,205.23	-3,565.12	1,743.89	1,412.86	331.03	5.268		
10,400.00	7,131.55	7,071.55	7,131.55	89.58	245.14	90.09	-1,205.23	-3,565.12	1,713.54	1,379.51	334.03	5.130		
10,500.00	7,131.01	7,071.01	7,131.01	92.15	245.13	90.07	-1,205.23	-3,565.12	1,688.57	1,351.62	336.96	5.011		
10,600.00	7,130.47	7,070.47	7,130.47	94.73	245.11	90.05	-1,205.23	-3,565.12	1,669.24	1,329.47	339.77	4.913		
10,700.00	7,129.93	7,069.93	7,129.93	97.33	245.09	90.03	-1,205.23	-3,565.12	1,655.73	1,313.32	342.41	4.836		
10,800.00	7,129.39	7,069.39	7,129.39	99.94	245.07	90.01	-1,205.23	-3,565.12	1,648.18	1,303.35	344.83	4.780		
10,874.65	7,128.98	7,068.98	7,128.98	101.90	245.06	90.00	-1,205.23	-3,565.12	1,646.49	1,300.01	346.47	4.752 CC		
10,900.00	7,128.84	7,068.84	7,128.84	102.56	245.05	90.00	-1,205.23	-3,565.12	1,646.68	1,299.69	347.00	4.746 ES		
11,000.00	7,128.30	7,068.30	7,128.30	105.20	245.03	89.98	-1,205.23	-3,565.12	1,651.25	1,302.38	348.87	4.733 SF		
11,100.00	7,127.76	7,067.76	7,127.76	107.85	245.01	89.96	-1,205.23	-3,565.12	1,661.84	1,311.40	350.43	4.742		
11,200.00	7,127.22	7,067.22	7,127.22	110.51	244.99	89.94	-1,205.23	-3,565.12	1,678.33	1,326.64	351.68	4.772		
11,300.00	7,126.68	7,066.68	7,126.68	113.18	244.97	89.92	-1,205.23	-3,565.12	1,700.54	1,347.93	352.61	4.823		
11,400.00	7,126.14	7,066.14	7,126.14	115.86	244.96	89.90	-1,205.23	-3,565.12	1,728.27	1,375.03	353.24	4.893		
11,500.00	7,125.60	7,065.60	7,125.60	118.55	244.94	89.88	-1,205.23	-3,565.12	1,761.24	1,407.66	353.58	4.981		
11,600.00	7,125.06	7,065.06	7,125.06	121.25	244.92	89.86	-1,205.23	-3,565.12	1,799.18	1,445.51	353.67	5.087		
11,700.00	7,124.52	7,064.52	7,124.52	123.95	244.90	89.84	-1,205.23	-3,565.12	1,841.77	1,488.24	353.52	5.210		
11,800.00	7,123.97	7,063.97	7,123.97	126.66	244.88	89.83	-1,205.23	-3,565.12	1,888.70	1,535.51	353.19	5.348		
11,900.00	7,123.43	7,063.43	7,123.43	129.38	244.86	89.81	-1,205.23	-3,565.12	1,939.65	1,586.97	352.68	5.500		
12,000.00	7,122.89	7,062.89	7,122.89	132.10	244.84	89.79	-1,205.23	-3,565.12	1,994.32	1,642.27	352.05	5.665		
12,100.00	7,122.35	7,062.35	7,122.35	134.83	244.82	89.77	-1,205.23	-3,565.12	2,052.41	1,701.10	351.30	5.842		
12,200.00	7,121.81	7,061.81	7,121.81	137.56	244.80	89.75	-1,205.23	-3,565.12	2,113.63	1,763.16	350.47	6.031		
12,300.00	7,121.27	7,061.27	7,121.27	140.30	244.79	89.73	-1,205.23	-3,565.12	2,177.73	1,828.15	349.58	6.230		
12,400.00	7,120.73	7,060.73	7,120.73	143.05	244.77	89.71	-1,205.23	-3,565.12	2,244.45	1,895.80	348.65	6.438		
12,500.00	7,120.19	7,060.19	7,120.19	145.80	244.75	89.69	-1,205.23	-3,565.12	2,313.57	1,965.89	347.69	6.654		
12,600.00	7,119.65	7,059.65	7,119.65	148.55	244.73	89.68	-1,205.23	-3,565.12	2,384.88	2,038.18	346.71	6.879		
12,700.00	7,119.10	7,059.10	7,119.10	151.30	244.71	89.66	-1,205.23	-3,565.12	2,458.20	2,112.47	345.73	7.110		
12,800.00	7,118.56	7,058.56	7,118.56	154.07	244.69	89.64	-1,205.23	-3,565.12	2,533.34	2,188.59	344.75	7.348		
12,900.00	7,118.02	7,058.02	7,118.02	156.83	244.67	89.62	-1,205.23	-3,565.12	2,610.14	2,266.36	343.78	7.592		
13,000.00	7,117.48	7,057.48	7,117.48	159.60	244.65	89.60	-1,205.23	-3,565.12	2,688.48	2,345.65	342.83	7.842		
13,100.00	7,116.94	7,056.94	7,116.94	162.37	244.63	89.58	-1,205.23	-3,565.12	2,768.21	2,426.31	341.90	8.097		
13,200.00	7,116.40	7,056.40	7,116.40	165.14	244.62	89.56	-1,205.23	-3,565.12	2,849.22	2,508.22	340.99	8.356		
13,300.00	7,115.86	7,055.86	7,115.86	167.92	244.60	89.54	-1,205.23	-3,565.12	2,931.40	2,591.29	340.11	8.619		
13,400.00	7,115.32	7,055.32	7,115.32	170.70	244.58	89.52	-1,205.23	-3,565.12	3,014.65	2,675.40	339.25	8.886		
13,500.00	7,114.78	7,054.78	7,114.78	173.48	244.56	89.51	-1,205.23	-3,565.12	3,098.90	2,760.48	338.42	9.157		
13,600.00	7,114.24	7,054.24	7,114.24	176.26	244.54	89.49	-1,205.23	-3,565.12	3,184.06	2,846.44	337.62	9.431		
13,700.00	7,113.69	7,053.69	7,113.69	179.05	244.52	89.47	-1,205.23	-3,565.12	3,270.06	2,933.22	336.84	9.708		
13,800.00	7,113.15	7,053.15	7,113.15	181.84	244.50	89.45	-1,205.23	-3,565.12	3,356.84	3,020.74	336.10	9.988		
13,900.00	7,112.61	7,052.61	7,112.61	184.63	244.48	89.43	-1,205.23	-3,565.12	3,444.33	3,108.95	335.38	10.270		
14,000.00	7,112.07	7,052.07	7,112.07	187.42	244.46	89.41	-1,205.23	-3,565.12	3,532.49	3,197.80	334.69	10.555		
14,100.00	7,111.53	7,051.53	7,111.53	190.22	244.45	89.39	-1,205.23	-3,565.12	3,621.26	3,287.24	334.02	10.841		
14,200.00	7,110.99	7,050.99	7,110.99	193.01	244.43	89.37	-1,205.23	-3,565.12	3,710.60	3,377.23	333.38	11.130		
14,300.00	7,110.45	7,050.45	7,110.45	195.81	244.41	89.36	-1,205.23	-3,565.12	3,800.48	3,467.72	332.76	11.421		
14,400.00	7,109.91	7,049.91	7,109.91	198.61	244.39	89.34	-1,205.23	-3,565.12	3,890.84	3,558.68	332.17	11.714		
14,500.00	7,109.37	7,049.37	7,109.37	201.42	244.37	89.32	-1,205.23	-3,565.12	3,981.67	3,650.08	331.59	12.008		
14,600.00	7,108.82	7,048.82	7,108.82	204.22	244.35	89.30	-1,205.23	-3,565.12	4,072.93	3,741.88	331.05	12.303		
14,700.00	7,108.28	7,048.28	7,108.28	207.03	244.33	89.28	-1,205.23	-3,565.12	4,164.59	3,834.07	330.52	12.600		
14,800.00	7,107.74	7,047.74	7,107.74	209.83	244.31	89.26	-1,205.23	-3,565.12	4,256.63	3,926.61	330.01	12.898		
14,900.00	7,107.20	7,047.20	7,107.20	212.64	244.29	89.24	-1,205.23	-3,565.12	4,349.01	4,019.49	329.52	13.198		
15,000.00	7,106.66	7,046.66	7,106.66	215.45	244.28	89.22	-1,205.23	-3,565.12	4,441.73	4,112.67	329.05	13.498		
15,100.00	7,106.12	7,046.12	7,106.12	218.26	244.26	89.20	-1,205.23	-3,565.12	4,534.75	4,206.15	328.60	13.800		
15,200.00	7,105.58	7,045.58	7,105.58	221.07	244.24	89.19	-1,205.23	-3,565.12	4,628.07	4,299.90	328.17	14.103		
15,300.00	7,105.04	7,045.04	7,105.04	223.89	244.22	89.17	-1,205.23	-3,565.12	4,721.66	4,393.91	327.75	14.406		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
15,400.00	7,104.50	7,044.50	7,104.50	226.70	244.20	89.15	-1,205.23	-3,565.12	4,815.51	4,488.16	327.35	14.711	
15,491.56	7,104.00	7,044.00	7,104.00	229.28	244.18	89.13	-1,205.23	-3,565.12	4,901.65	4,574.66	326.99	14.990	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-07D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	57.44	3.28	3.28	-89.96	6.30	-9,142.03	9,142.21					
100.00	100.00	184.99	208.97	3.28	3.34	-89.95	7.75	-9,140.46	9,141.12	9,134.49	6.62	1,380.424		
200.00	200.00	289.98	313.95	3.34	3.45	-89.95	8.27	-9,139.13	9,139.84	9,133.05	6.79	1,346.423		
300.00	299.98	370.50	394.47	3.44	3.58	86.95	8.44	-9,138.21	9,138.61	9,131.60	7.02	1,302.662		
400.00	399.84	465.59	489.55	3.59	3.76	87.01	8.67	-9,137.26	9,137.33	9,129.98	7.35	1,243.238		
500.00	499.45	548.69	572.65	3.79	3.95	87.08	8.89	-9,136.50	9,135.97	9,128.23	7.74	1,180.796		
600.00	598.70	625.18	649.13	4.03	4.15	87.17	8.77	-9,135.97	9,134.66	9,126.48	8.17	1,117.469		
700.00	697.47	738.28	762.23	4.31	4.47	87.31	8.62	-9,135.41	9,133.40	9,124.63	8.78	1,040.632		
800.00	795.62	846.07	870.02	4.64	4.80	87.47	8.76	-9,134.58	9,131.74	9,122.31	9.43	968.000		
900.00	893.06	927.16	951.11	5.00	5.06	87.62	8.90	-9,133.98	9,130.00	9,119.94	10.06	907.639		
1,000.00	989.64	984.00	1,007.95	5.40	5.26	87.74	8.84	-9,133.66	9,128.40	9,117.75	10.65	857.319		
1,100.00	1,085.27	984.00	1,007.95	5.83	5.26	87.76	8.84	-9,133.66	9,127.54	9,116.46	11.08	823.788		
1,200.00	1,179.82	1,044.78	1,068.73	6.29	5.46	87.89	8.83	-9,133.89	9,126.92	9,115.17	11.75	776.982		
1,206.76	1,186.17	1,046.57	1,070.51	6.33	5.46	87.89	8.83	-9,133.91	9,126.92	9,115.13	11.79	774.387		
1,300.00	1,273.17	1,112.00	1,135.93	6.79	5.68	88.04	9.07	-9,135.33	9,127.55	9,115.08	12.47	731.773		
1,400.00	1,365.21	1,112.00	1,135.93	7.33	5.68	88.02	9.07	-9,135.33	9,128.27	9,115.27	13.01	701.771		
1,500.00	1,456.49	1,112.00	1,135.93	7.89	5.68	88.02	9.07	-9,135.33	9,130.03	9,116.46	13.57	673.025		
1,600.00	1,547.76	1,112.00	1,135.93	8.46	5.68	88.02	9.07	-9,135.33	9,132.88	9,118.74	14.14	645.920		
1,700.00	1,639.04	1,166.92	1,190.81	9.05	5.87	88.16	9.34	-9,137.52	9,136.16	9,121.25	14.91	612.834		
1,800.00	1,730.31	1,189.77	1,213.62	9.65	5.94	88.22	9.43	-9,138.73	9,140.53	9,124.95	15.58	586.702		
1,900.00	1,821.58	1,241.00	1,264.74	10.26	6.12	88.35	9.59	-9,142.05	9,145.95	9,129.59	16.36	559.161		
2,000.00	1,912.85	1,241.00	1,264.74	10.87	6.12	88.35	9.59	-9,142.05	9,151.88	9,134.92	16.96	539.536		
2,100.00	2,004.13	1,241.00	1,264.74	11.49	6.12	88.35	9.59	-9,142.05	9,158.90	9,141.33	17.57	521.218		
2,200.00	2,095.40	1,241.00	1,264.74	12.11	6.12	88.35	9.59	-9,142.05	9,167.00	9,148.82	18.18	504.119		
2,300.00	2,186.67	1,300.16	1,323.69	12.74	6.33	88.50	9.73	-9,147.00	9,175.38	9,156.37	19.01	482.642		
2,400.00	2,277.95	1,321.57	1,345.00	13.38	6.41	88.56	9.79	-9,149.09	9,184.95	9,165.25	19.70	466.149		
2,500.00	2,369.22	1,369.00	1,392.14	14.01	6.58	88.68	9.91	-9,154.31	9,195.55	9,175.06	20.49	448.691		
2,600.00	2,460.49	1,369.00	1,392.14	14.65	6.58	88.68	9.91	-9,154.31	9,206.70	9,185.59	21.11	436.132		
2,700.00	2,551.77	1,369.00	1,392.14	15.29	6.58	88.68	9.91	-9,154.31	9,218.93	9,197.20	21.72	424.357		
2,800.00	2,643.04	1,369.00	1,392.14	15.93	6.58	88.68	9.91	-9,154.31	9,232.22	9,209.88	22.34	413.306		
2,900.00	2,734.31	1,436.41	1,458.99	16.58	6.83	88.85	9.83	-9,162.99	9,245.65	9,222.45	23.21	398.382		
3,000.00	2,825.58	1,498.00	1,519.90	17.23	7.07	89.00	9.34	-9,172.12	9,260.57	9,236.51	24.06	384.864		
3,100.00	2,916.86	1,498.00	1,519.90	17.87	7.07	89.00	9.34	-9,172.12	9,275.77	9,251.10	24.67	375.985		
3,200.00	3,008.13	1,498.00	1,519.90	18.52	7.07	89.00	9.34	-9,172.12	9,292.02	9,266.75	25.28	367.619		
3,300.00	3,099.40	1,498.00	1,519.90	19.17	7.07	89.00	9.34	-9,172.12	9,309.32	9,283.44	25.88	359.732		
3,400.00	3,190.68	1,552.44	1,573.57	19.83	7.29	89.13	8.69	-9,181.21	9,327.01	9,300.30	26.70	349.293		
3,500.00	3,281.95	1,574.47	1,595.24	20.48	7.39	89.18	8.40	-9,185.17	9,345.75	9,318.35	27.39	341.194		
3,600.00	3,373.22	1,626.00	1,645.80	21.13	7.60	89.31	7.66	-9,195.06	9,365.49	9,337.29	28.20	332.066		
3,700.00	3,464.49	1,626.00	1,645.80	21.79	7.60	89.31	7.66	-9,195.06	9,385.68	9,356.89	28.79	325.963		
3,800.00	3,555.77	1,626.00	1,645.80	22.44	7.60	89.31	7.66	-9,195.06	9,406.89	9,377.51	29.38	320.189		
3,900.00	3,647.04	1,626.00	1,645.80	23.10	7.60	89.31	7.66	-9,195.06	9,429.11	9,399.15	29.96	314.724		
4,000.00	3,738.31	1,681.43	1,699.99	23.75	7.86	89.44	6.74	-9,206.72	9,451.64	9,420.85	30.79	307.017		
4,100.00	3,829.59	1,702.25	1,720.27	24.41	7.95	89.48	6.34	-9,211.38	9,475.24	9,443.78	31.45	301.251		
4,200.00	3,920.86	1,754.00	1,770.54	25.07	8.19	89.60	5.25	-9,223.64	9,499.85	9,467.59	32.26	294.478		
4,300.00	4,012.13	1,754.00	1,770.54	25.73	8.19	89.60	5.25	-9,223.64	9,524.84	9,492.02	32.82	290.173		
4,400.00	4,103.41	1,754.00	1,770.54	26.38	8.19	89.60	5.25	-9,223.64	9,550.82	9,517.43	33.38	286.089		
4,500.00	4,194.68	1,754.00	1,770.54	27.04	8.19	89.60	5.25	-9,223.64	9,577.77	9,543.83	33.94	282.215		
4,600.00	4,285.95	1,816.86	1,831.32	27.70	8.52	89.75	3.95	-9,239.60	9,604.94	9,570.15	34.79	276.062		
4,700.00	4,377.22	1,883.00	1,894.99	28.36	8.86	89.90	2.85	-9,257.47	9,633.43	9,597.76	35.67	270.091		
4,800.00	4,468.50	1,883.00	1,894.99	29.02	8.86	89.90	2.85	-9,257.47	9,662.06	9,625.85	36.21	266.842		
4,900.00	4,559.77	1,883.00	1,894.99	29.68	8.86	89.90	2.85	-9,257.47	9,691.64	9,654.89	36.74	263.757		
5,000.00	4,651.04	1,921.86	1,932.26	30.34	9.08	89.98	2.27	-9,268.46	9,721.91	9,684.44	37.48	259.413		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,100.00	4,742.32	1,950.92	1,960.07	31.00	9.25	90.05	1.82	-9,276.88	9,752.87	9,714.72	38.16	255.610		
5,200.00	4,833.59	2,011.00	2,017.39	31.66	9.60	90.18	0.83	-9,294.84	9,784.65	9,745.65	39.00	250.904		
5,300.00	4,924.86	2,011.00	2,017.39	32.32	9.60	90.18	0.83	-9,294.84	9,816.77	9,777.26	39.51	248.436		
5,400.00	5,016.13	2,048.29	2,052.87	32.99	9.83	90.26	0.20	-9,306.30	9,849.66	9,809.42	40.23	244.822		
5,500.00	5,107.41	2,088.59	2,091.15	33.65	10.08	90.35	-0.47	-9,318.87	9,883.08	9,842.12	40.96	241.260		
5,600.00	5,198.68	5,600.00	2,190.27	34.31	34.11	90.58	-2.05	-9,351.73	9,916.92	9,858.06	58.86	168.479		
5,700.00	5,289.95	2,433.85	2,419.79	34.97	12.38	91.11	-5.48	-9,424.54	9,949.39	9,905.41	43.97	226.254		
5,800.00	5,381.23	2,474.84	2,458.89	35.63	12.66	91.19	-6.10	-9,436.82	9,982.08	9,937.35	44.73	223.184		
8,100.00	7,143.99	7,069.50	6,919.40	48.28	39.85	86.53	-34.50	-10,304.22	9,929.22	9,848.68	80.54	123.286		
8,200.00	7,143.45	7,071.66	6,921.55	48.53	39.86	86.57	-34.55	-10,304.29	9,833.51	9,752.72	80.79	121.715		
8,300.00	7,142.91	7,073.81	6,923.70	48.89	39.87	86.62	-34.59	-10,304.35	9,737.88	9,656.81	81.06	120.125		
8,400.00	7,142.37	7,075.96	6,925.85	49.40	39.88	86.66	-34.64	-10,304.41	9,642.34	9,560.98	81.36	118.517		
8,500.00	7,141.83	7,078.09	6,927.98	50.12	39.89	86.70	-34.68	-10,304.48	9,546.89	9,465.22	81.67	116.891		
8,600.00	7,141.29	7,080.23	6,930.11	51.08	39.89	86.75	-34.72	-10,304.54	9,451.53	9,369.52	82.01	115.247		
8,700.00	7,140.75	7,082.35	6,932.24	52.30	39.90	86.79	-34.76	-10,304.60	9,356.28	9,273.90	82.37	113.586		
8,800.00	7,140.21	7,084.47	6,934.36	53.75	39.91	86.83	-34.80	-10,304.66	9,261.12	9,178.36	82.76	111.908		
8,900.00	7,139.67	7,086.59	6,936.47	55.40	39.92	86.87	-34.85	-10,304.73	9,166.06	9,082.89	83.17	110.214		
9,000.00	7,139.12	7,088.69	6,938.58	57.20	39.92	86.91	-34.89	-10,304.79	9,071.11	8,987.51	83.60	108.504		
9,100.00	7,138.58	7,090.80	6,940.68	59.13	39.93	86.96	-34.93	-10,304.85	8,976.26	8,892.20	84.06	106.780		
9,200.00	7,138.04	7,092.89	6,942.77	61.15	39.94	87.00	-34.97	-10,304.91	8,881.53	8,796.98	84.55	105.042		
9,300.00	7,137.50	7,094.98	6,944.86	63.26	39.95	87.04	-35.00	-10,304.97	8,786.92	8,701.85	85.07	103.291		
9,400.00	7,136.96	7,097.07	6,946.94	65.44	39.95	87.08	-35.04	-10,305.04	8,692.43	8,606.81	85.62	101.528		
9,500.00	7,136.42	7,099.14	6,949.02	67.68	39.96	87.12	-35.08	-10,305.10	8,598.06	8,511.87	86.19	99.754		
9,600.00	7,135.88	7,101.22	6,951.09	69.97	39.97	87.16	-35.12	-10,305.16	8,503.82	8,417.02	86.80	97.969		
9,700.00	7,135.34	7,103.28	6,953.16	72.31	39.98	87.21	-35.15	-10,305.22	8,409.71	8,322.27	87.44	96.176		
9,800.00	7,134.80	7,105.34	6,955.22	74.69	39.98	87.25	-35.19	-10,305.28	8,315.74	8,227.62	88.11	94.375		
9,900.00	7,134.26	7,107.40	6,957.27	77.10	39.99	87.29	-35.22	-10,305.34	8,221.90	8,133.08	88.82	92.567		
10,000.00	7,133.71	7,109.45	6,959.32	79.54	40.00	87.33	-35.26	-10,305.40	8,128.22	8,038.66	89.56	90.753		
10,100.00	7,133.17	7,111.49	6,961.36	82.02	40.01	87.37	-35.29	-10,305.46	8,034.69	7,944.34	90.34	88.935		
10,200.00	7,132.63	7,113.53	6,963.40	84.52	40.01	87.41	-35.33	-10,305.52	7,941.31	7,850.15	91.16	87.114		
10,300.00	7,132.09	7,115.56	6,965.43	87.04	40.02	87.45	-35.36	-10,305.57	7,848.10	7,756.09	92.01	85.292		
10,400.00	7,131.55	7,117.59	6,967.45	89.58	40.03	87.49	-35.39	-10,305.63	7,755.06	7,662.15	92.91	83.469		
10,500.00	7,131.01	7,119.61	6,969.47	92.15	40.04	87.53	-35.43	-10,305.69	7,662.19	7,568.34	93.84	81.648		
10,600.00	7,130.47	7,121.62	6,971.49	94.73	40.04	87.57	-35.46	-10,305.75	7,569.50	7,474.68	94.82	79.829		
10,700.00	7,129.93	7,123.63	6,973.49	97.33	40.05	87.61	-35.49	-10,305.81	7,477.00	7,381.15	95.84	78.014		
10,800.00	7,129.39	7,125.64	6,975.50	99.94	40.06	87.65	-35.52	-10,305.87	7,384.69	7,287.78	96.91	76.204		
10,900.00	7,128.84	7,127.63	6,977.49	102.56	40.06	87.69	-35.55	-10,305.92	7,292.59	7,194.57	98.02	74.401		
11,000.00	7,128.30	7,129.63	6,979.49	105.20	40.07	87.73	-35.58	-10,305.98	7,200.69	7,101.52	99.18	72.605		
11,100.00	7,127.76	7,131.61	6,981.47	107.85	40.08	87.77	-35.61	-10,306.04	7,109.02	7,008.64	100.38	70.819		
11,200.00	7,127.22	7,133.60	6,983.45	110.51	40.09	87.81	-35.64	-10,306.10	7,017.57	6,915.93	101.64	69.044		
11,300.00	7,126.68	7,135.57	6,985.43	113.18	40.09	87.85	-35.67	-10,306.15	6,926.36	6,823.41	102.95	67.281		
11,400.00	7,126.14	7,137.54	6,987.40	115.86	40.10	87.89	-35.70	-10,306.21	6,835.39	6,731.08	104.31	65.532		
11,500.00	7,125.60	7,139.51	6,989.36	118.55	40.11	87.93	-35.72	-10,306.26	6,744.67	6,638.95	105.72	63.797		
11,600.00	7,125.06	7,141.47	6,991.32	121.25	40.11	87.97	-35.75	-10,306.32	6,654.23	6,547.04	107.19	62.078		
11,700.00	7,124.52	7,143.42	6,993.28	123.95	40.12	88.01	-35.78	-10,306.38	6,564.06	6,455.34	108.72	60.375		
11,800.00	7,123.97	7,145.37	6,995.22	126.66	40.13	88.05	-35.80	-10,306.43	6,474.17	6,363.87	110.31	58.692		
11,900.00	7,123.43	7,147.49	6,997.34	129.38	40.14	88.09	-35.83	-10,306.49	6,384.59	6,272.63	111.96	57.027		
12,000.00	7,122.89	7,150.48	7,000.33	132.10	40.15	88.15	-35.87	-10,306.55	6,295.32	6,181.65	113.67	55.381		
12,100.00	7,122.35	7,153.42	7,003.27	134.83	40.16	88.21	-35.91	-10,306.61	6,206.38	6,090.92	115.45	53.756		
12,200.00	7,121.81	7,156.31	7,006.16	137.56	40.17	88.27	-35.95	-10,306.67	6,117.77	6,000.47	117.30	52.154		
12,300.00	7,121.27	7,159.17	7,009.01	140.30	40.18	88.32	-35.98	-10,306.73	6,029.53	5,910.31	119.22	50.576		
12,400.00	7,120.73	7,161.98	7,011.83	143.05	40.19	88.38	-36.02	-10,306.79	5,941.65	5,820.44	121.20	49.022		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
12,500.00	7,120.19	7,164.76	7,014.60	145.80	40.20	88.44	-36.05	-10,306.98	5,854.16	5,730.90	123.26	47.493	
12,600.00	7,119.65	7,167.49	7,017.33	148.55	40.21	88.49	-36.09	-10,307.05	5,767.08	5,641.68	125.40	45.991	
12,700.00	7,119.10	7,170.18	7,020.02	151.30	40.22	88.55	-36.12	-10,307.12	5,680.42	5,552.81	127.61	44.515	
12,800.00	7,118.56	7,172.84	7,022.68	154.07	40.23	88.60	-36.15	-10,307.20	5,594.20	5,464.30	129.90	43.066	
12,900.00	7,118.02	7,175.46	7,025.29	156.83	40.24	88.65	-36.18	-10,307.27	5,508.45	5,376.18	132.27	41.645	
13,000.00	7,117.48	7,178.04	7,027.87	159.60	40.25	88.70	-36.22	-10,307.34	5,423.19	5,288.46	134.73	40.253	
13,100.00	7,116.94	7,180.58	7,030.42	162.37	40.26	88.75	-36.25	-10,307.40	5,338.44	5,201.17	137.27	38.890	
13,200.00	7,116.40	7,183.09	7,032.93	165.14	40.26	88.80	-36.28	-10,307.47	5,254.22	5,114.32	139.90	37.556	
13,300.00	7,115.86	7,185.57	7,035.40	167.92	40.27	88.85	-36.31	-10,307.54	5,170.57	5,027.94	142.63	36.252	
13,400.00	7,115.32	7,188.01	7,037.84	170.70	40.28	88.90	-36.33	-10,307.60	5,087.50	4,942.05	145.45	34.978	
13,500.00	7,114.78	7,190.42	7,040.25	173.48	40.29	88.95	-36.36	-10,307.66	5,005.05	4,856.69	148.36	33.735	
13,600.00	7,114.24	7,192.80	7,042.63	176.26	40.30	89.00	-36.39	-10,307.72	4,923.25	4,771.87	151.38	32.523	
13,700.00	7,113.69	7,195.15	7,044.98	179.05	40.31	89.05	-36.42	-10,307.78	4,842.14	4,687.64	154.50	31.342	
13,800.00	7,113.15	7,197.46	7,047.29	181.84	40.32	89.09	-36.44	-10,307.84	4,761.74	4,604.02	157.72	30.191	
13,900.00	7,112.61	7,199.75	7,049.57	184.63	40.32	89.14	-36.47	-10,307.90	4,682.09	4,521.05	161.05	29.073	
14,000.00	7,112.07	7,202.00	7,051.83	187.42	40.33	89.18	-36.49	-10,307.96	4,603.24	4,438.76	164.49	27.986	
14,100.00	7,111.53	7,204.23	7,054.05	190.22	40.34	89.23	-36.52	-10,308.02	4,525.23	4,357.19	168.04	26.930	
14,200.00	7,110.99	7,206.42	7,056.25	193.01	40.35	89.27	-36.54	-10,308.07	4,448.09	4,276.39	171.70	25.906	
14,300.00	7,110.45	7,208.59	7,058.42	195.81	40.36	89.32	-36.57	-10,308.13	4,371.88	4,196.40	175.48	24.914	
14,400.00	7,109.91	7,210.73	7,060.56	198.61	40.36	89.36	-36.59	-10,308.18	4,296.64	4,117.26	179.38	23.953	
14,500.00	7,109.37	7,212.85	7,062.67	201.42	40.37	89.40	-36.61	-10,308.23	4,222.43	4,039.04	183.39	23.024	
14,600.00	7,108.82	7,214.93	7,064.76	204.22	40.38	89.44	-36.64	-10,308.28	4,149.30	3,961.78	187.52	22.127	
14,700.00	7,108.28	7,217.00	7,066.82	207.03	40.39	89.48	-36.66	-10,308.33	4,077.31	3,885.53	191.78	21.261	
14,800.00	7,107.74	7,219.03	7,068.85	209.83	40.39	89.52	-36.68	-10,308.38	4,006.53	3,810.38	196.15	20.426	
14,900.00	7,107.20	7,221.04	7,070.86	212.64	40.40	89.57	-36.70	-10,308.43	3,937.01	3,736.36	200.64	19.622	
15,000.00	7,106.66	7,223.03	7,072.85	215.45	40.41	89.60	-36.72	-10,308.48	3,868.82	3,663.57	205.25	18.849	
15,100.00	7,106.12	7,224.99	7,074.81	218.26	40.41	89.64	-36.74	-10,308.53	3,802.04	3,592.07	209.97	18.107	
15,200.00	7,105.58	7,226.93	7,076.75	221.07	40.42	89.68	-36.76	-10,308.57	3,736.75	3,521.94	214.80	17.396	
15,300.00	7,105.04	7,228.84	7,078.66	223.89	40.43	89.72	-36.78	-10,308.62	3,673.01	3,453.27	219.74	16.715	
15,400.00	7,104.50	7,230.74	7,080.55	226.70	40.44	89.76	-36.80	-10,308.66	3,610.92	3,386.13	224.79	16.064	
15,491.56	7,104.00	7,232.45	7,082.26	229.28	40.44	89.79	-36.82	-10,308.70	3,555.58	3,326.10	229.48	15.494 CC, ES, SF	



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-08(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	37.00	3.28	3.28	-89.62	60.71	-9,145.00	9,145.28				
100.00	100.00	63.00	100.00	3.28	3.46	-89.62	60.71	-9,145.00	9,145.20	9,138.46	6.74	1,356.019	
200.00	200.00	163.00	200.00	3.34	5.13	-89.62	60.71	-9,145.00	9,145.20	9,136.73	8.47	1,080.056	
300.00	299.98	262.98	299.98	3.44	8.13	87.26	60.71	-9,145.00	9,145.12	9,133.55	11.57	790.706	
400.00	399.84	362.84	399.84	3.59	11.40	87.30	60.71	-9,145.00	9,144.87	9,129.88	14.99	610.008	
500.00	499.45	462.45	499.45	3.79	14.77	87.36	60.71	-9,145.00	9,144.46	9,125.91	18.55	492.866	
600.00	598.70	561.70	598.70	4.03	18.16	87.45	60.71	-9,145.00	9,143.91	9,121.71	22.19	412.053	
700.00	697.47	660.47	697.47	4.31	21.56	87.56	60.71	-9,145.00	9,143.21	9,117.34	25.88	353.347	
800.00	795.62	758.62	795.62	4.64	24.95	87.69	60.71	-9,145.00	9,142.41	9,112.82	29.59	308.947	
900.00	893.06	856.06	893.06	5.00	28.33	87.85	60.71	-9,145.00	9,141.51	9,108.18	33.33	274.283	
1,000.00	989.64	952.64	989.64	5.40	31.68	88.02	60.71	-9,145.00	9,140.54	9,103.47	37.08	246.527	
1,100.00	1,085.27	1,048.27	1,085.27	5.83	35.00	88.22	60.71	-9,145.00	9,139.54	9,098.71	40.83	223.838	
1,200.00	1,179.82	1,142.82	1,179.82	6.29	38.29	88.43	60.71	-9,145.00	9,138.53	9,093.95	44.58	204.972	
1,300.00	1,273.17	1,236.17	1,273.17	6.79	41.54	88.66	60.71	-9,145.00	9,137.56	9,089.22	48.33	189.058	
1,400.00	1,365.21	1,328.21	1,365.21	7.33	44.74	88.90	60.71	-9,145.00	9,136.65	9,084.58	52.07	175.467	
1,500.00	1,456.49	1,419.49	1,456.49	7.89	47.92	89.14	60.71	-9,145.00	9,135.89	9,080.08	55.81	163.701	
1,600.00	1,547.76	1,510.76	1,547.76	8.46	51.10	89.37	60.71	-9,145.00	9,135.31	9,075.74	59.56	153.371	
1,700.00	1,639.04	1,602.04	1,639.04	9.05	54.28	89.60	60.71	-9,145.00	9,134.90	9,071.57	63.33	144.239	
1,800.00	1,730.31	1,706.69	1,730.31	9.65	57.93	89.84	60.71	-9,145.00	9,134.69	9,067.11	67.58	135.173	
1,869.11	1,793.39	1,756.39	1,793.39	10.07	59.66	90.00	60.71	-9,145.00	9,134.64	9,064.91	69.73	131.002	
1,900.00	1,821.58	1,784.58	1,821.58	10.26	60.64	90.07	60.71	-9,145.00	9,134.65	9,063.75	70.90	128.840	
2,000.00	1,912.85	1,875.85	1,912.85	10.87	63.83	90.31	60.71	-9,145.00	9,134.80	9,060.10	74.70	122.294	
2,100.00	2,004.13	1,967.13	2,004.13	11.49	67.01	90.54	60.71	-9,145.00	9,135.13	9,056.63	78.50	116.375	
2,200.00	2,095.40	2,058.40	2,095.40	12.11	70.19	90.77	60.71	-9,145.00	9,135.64	9,053.34	82.30	110.998	
2,300.00	2,186.67	2,149.67	2,186.67	12.74	73.37	91.01	60.71	-9,145.00	9,136.34	9,050.22	86.12	106.093	
2,400.00	2,277.95	2,240.95	2,277.95	13.38	76.56	91.24	60.71	-9,145.00	9,137.22	9,047.29	89.93	101.601	
2,500.00	2,369.22	2,332.22	2,369.22	14.01	79.74	91.48	60.71	-9,145.00	9,138.28	9,044.53	93.75	97.474	
2,600.00	2,460.49	2,423.49	2,460.49	14.65	82.92	91.71	60.71	-9,145.00	9,139.52	9,041.95	97.57	93.669	
2,700.00	2,551.77	2,514.77	2,551.77	15.29	86.11	91.94	60.71	-9,145.00	9,140.95	9,039.55	101.40	90.150	
2,800.00	2,643.04	2,606.04	2,643.04	15.93	89.29	92.18	60.71	-9,145.00	9,142.56	9,037.33	105.22	86.887	
2,900.00	2,734.31	2,702.69	2,734.31	16.58	92.66	92.41	60.71	-9,145.00	9,144.35	9,035.11	109.24	83.709	
3,000.00	2,825.58	2,788.58	2,825.58	17.23	95.66	92.64	60.71	-9,145.00	9,146.32	9,033.44	112.88	81.026	
3,100.00	2,916.86	2,879.86	2,916.86	17.87	98.84	92.88	60.71	-9,145.00	9,148.48	9,031.76	116.71	78.384	
3,200.00	3,008.13	2,971.13	3,008.13	18.52	102.03	93.11	60.71	-9,145.00	9,150.81	9,030.27	120.55	75.912	
3,300.00	3,099.40	3,062.40	3,099.40	19.17	105.21	93.34	60.71	-9,145.00	9,153.33	9,028.95	124.38	73.592	
3,400.00	3,190.68	3,153.68	3,190.68	19.83	108.40	93.58	60.71	-9,145.00	9,156.03	9,027.82	128.21	71.412	
3,500.00	3,281.95	3,244.95	3,281.95	20.48	111.58	93.81	60.71	-9,145.00	9,158.91	9,026.87	132.05	69.360	
3,600.00	3,373.22	3,336.22	3,373.22	21.13	114.77	94.04	60.71	-9,145.00	9,161.98	9,026.09	135.88	67.425	
3,700.00	3,464.49	3,427.49	3,464.49	21.79	117.95	94.27	60.71	-9,145.00	9,165.22	9,025.50	139.72	65.597	
3,800.00	3,555.77	3,518.77	3,555.77	22.44	121.14	94.51	60.71	-9,145.00	9,168.65	9,025.09	143.56	63.867	
3,900.00	3,647.04	3,610.04	3,647.04	23.10	124.32	94.74	60.71	-9,145.00	9,172.25	9,024.86	147.40	62.229	
4,000.00	3,738.31	3,701.31	3,738.31	23.75	127.51	94.97	60.71	-9,145.00	9,176.04	9,024.80	151.23	60.675	
4,100.00	3,829.59	3,807.41	3,829.59	24.41	131.21	95.20	60.71	-9,145.00	9,180.00	9,024.42	155.59	59.002	
4,200.00	3,920.86	3,883.86	3,920.86	25.07	133.88	95.44	60.71	-9,145.00	9,184.15	9,025.24	158.91	57.795	
4,300.00	4,012.13	3,975.13	4,012.13	25.73	137.07	95.67	60.71	-9,145.00	9,188.48	9,025.73	162.75	56.459	
4,400.00	4,103.41	4,066.41	4,103.41	26.38	140.25	95.90	60.71	-9,145.00	9,192.98	9,026.40	166.59	55.185	
4,500.00	4,194.68	4,157.68	4,194.68	27.04	143.44	96.13	60.71	-9,145.00	9,197.67	9,027.24	170.42	53.969	
4,600.00	4,285.95	4,248.95	4,285.95	27.70	146.62	96.36	60.71	-9,145.00	9,202.53	9,028.27	174.26	52.809	
4,700.00	4,377.22	4,340.22	4,377.22	28.36	149.81	96.59	60.71	-9,145.00	9,207.58	9,029.47	178.10	51.699	
4,800.00	4,468.50	4,431.50	4,468.50	29.02	152.99	96.82	60.71	-9,145.00	9,212.80	9,030.86	181.94	50.637	
4,900.00	4,559.77	4,522.77	4,559.77	29.68	156.18	97.05	60.71	-9,145.00	9,218.20	9,032.42	185.78	49.620	
5,000.00	4,651.04	4,614.04	4,651.04	30.34	159.36	97.28	60.71	-9,145.00	9,223.77	9,034.16	189.61	48.645	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	4,742.32	4,705.32	4,742.32	31.00	162.55	97.51	60.71	-9,145.00	9,229.53	9,036.08	193.45	47.710		
5,200.00	4,833.59	4,803.41	4,833.59	31.66	165.97	97.74	60.71	-9,145.00	9,235.46	9,037.93	197.53	46.755		
5,300.00	4,924.86	4,887.86	4,924.86	32.32	168.92	97.97	60.71	-9,145.00	9,241.57	9,040.44	201.13	45.949		
5,400.00	5,016.13	4,979.13	5,016.13	32.99	172.11	98.20	60.71	-9,145.00	9,247.85	9,042.89	204.96	45.119		
5,500.00	5,107.41	5,070.41	5,107.41	33.65	175.29	98.43	60.71	-9,145.00	9,254.31	9,045.51	208.80	44.321		
5,600.00	5,198.68	5,161.68	5,198.68	34.31	178.48	98.66	60.71	-9,145.00	9,260.95	9,048.32	212.64	43.553		
5,700.00	5,289.95	5,252.95	5,289.95	34.97	181.67	98.89	60.71	-9,145.00	9,267.76	9,051.29	216.47	42.813		
5,800.00	5,381.23	5,344.23	5,381.23	35.63	184.85	99.12	60.71	-9,145.00	9,274.75	9,054.44	220.31	42.099		
5,900.00	5,472.50	5,435.50	5,472.50	36.30	188.04	99.34	60.71	-9,145.00	9,281.91	9,057.77	224.14	41.411		
6,000.00	5,563.77	5,526.77	5,563.77	36.96	191.22	99.57	60.71	-9,145.00	9,289.25	9,061.27	227.98	40.746		
6,100.00	5,655.05	5,618.05	5,655.05	37.62	194.41	99.80	60.71	-9,145.00	9,296.76	9,064.95	231.81	40.105		
6,200.00	5,746.32	5,709.32	5,746.32	38.28	197.59	100.03	60.71	-9,145.00	9,304.44	9,068.80	235.65	39.485		
6,300.00	5,837.59	5,800.59	5,837.59	38.95	200.78	100.25	60.71	-9,145.00	9,312.30	9,072.82	239.48	38.886		
6,400.00	5,928.86	5,908.14	5,928.86	39.61	204.53	100.48	60.71	-9,145.00	9,320.33	9,076.45	243.88	38.217		
6,500.00	6,020.14	5,983.14	6,020.14	40.27	207.15	100.71	60.71	-9,145.00	9,328.53	9,081.38	247.14	37.745		
6,600.00	6,111.41	6,074.41	6,111.41	40.94	210.34	100.93	60.71	-9,145.00	9,336.90	9,085.92	250.98	37.202		
6,700.00	6,202.68	6,165.68	6,202.68	41.60	213.52	101.16	60.71	-9,145.00	9,345.44	9,090.64	254.81	36.677		
6,800.00	6,293.96	6,256.96	6,293.96	42.26	216.71	101.38	60.71	-9,145.00	9,354.16	9,095.52	258.64	36.167		
6,900.00	6,385.23	6,348.23	6,385.23	42.93	219.90	101.61	60.71	-9,145.00	9,363.04	9,100.57	262.47	35.673		
7,000.00	6,476.50	6,439.50	6,476.50	43.59	223.08	101.83	60.71	-9,145.00	9,372.10	9,105.80	266.30	35.194		
7,100.00	6,567.77	6,530.77	6,567.77	44.25	226.27	102.05	60.71	-9,145.00	9,381.32	9,111.19	270.13	34.729		
7,200.00	6,658.64	6,621.64	6,658.64	44.91	229.44	85.26	60.71	-9,145.00	9,384.71	9,110.78	273.94	34.259		
7,300.00	6,747.14	6,710.14	6,747.14	45.52	232.53	70.67	60.71	-9,145.00	9,373.30	9,095.66	277.64	33.761		
7,400.00	6,831.10	6,805.90	6,831.10	46.07	235.87	61.06	60.71	-9,145.00	9,347.32	9,065.79	281.53	33.201		
7,500.00	6,908.46	6,871.46	6,908.46	46.54	238.16	55.39	60.71	-9,145.00	9,307.44	9,023.13	284.32	32.736		
7,600.00	6,977.30	6,940.30	6,977.30	46.95	240.56	52.71	60.71	-9,145.00	9,254.67	8,967.51	287.16	32.228		
7,700.00	7,035.93	7,001.07	7,035.93	47.30	242.68	52.59	60.71	-9,145.00	9,190.29	8,900.61	289.67	31.726		
7,800.00	7,082.92	7,045.92	7,082.92	47.59	244.25	55.11	60.71	-9,145.00	9,115.88	8,824.28	291.60	31.262		
7,900.00	7,117.09	7,080.09	7,117.09	47.84	245.44	61.06	60.71	-9,145.00	9,033.23	8,740.11	293.12	30.817		
8,000.00	7,137.62	7,100.62	7,137.62	48.06	246.16	72.22	60.71	-9,145.00	8,944.33	8,650.19	294.14	30.408		
8,100.00	7,143.99	7,106.99	7,143.99	48.28	246.38	90.88	60.71	-9,145.00	8,851.32	8,556.68	294.64	30.041		
8,200.00	7,143.45	7,106.45	7,143.45	48.53	246.36	90.87	60.71	-9,145.00	8,757.08	8,462.19	294.90	29.695		
8,300.00	7,142.91	7,105.91	7,142.91	48.89	246.34	90.86	60.71	-9,145.00	8,662.98	8,367.80	295.18	29.348		
8,400.00	7,142.37	7,105.37	7,142.37	49.40	246.33	90.85	60.71	-9,145.00	8,569.00	8,273.52	295.48	29.000		
8,500.00	7,141.83	7,104.83	7,141.83	50.12	246.31	90.84	60.71	-9,145.00	8,475.17	8,179.35	295.82	28.650		
8,600.00	7,141.29	7,104.29	7,141.29	51.08	246.29	90.83	60.71	-9,145.00	8,381.47	8,085.29	296.18	28.298		
8,700.00	7,140.75	7,103.75	7,140.75	52.30	246.27	90.82	60.71	-9,145.00	8,287.92	7,991.35	296.58	27.945		
8,800.00	7,140.21	7,103.21	7,140.21	53.75	246.25	90.80	60.71	-9,145.00	8,194.53	7,897.53	297.00	27.591		
8,900.00	7,139.67	7,102.67	7,139.67	55.40	246.23	90.79	60.71	-9,145.00	8,101.29	7,803.83	297.46	27.235		
9,000.00	7,139.12	7,102.12	7,139.12	57.20	246.21	90.78	60.71	-9,145.00	8,008.22	7,710.27	297.95	26.877		
9,100.00	7,138.58	7,101.58	7,138.58	59.13	246.19	90.77	60.71	-9,145.00	7,915.31	7,616.83	298.48	26.519		
9,200.00	7,138.04	7,101.04	7,138.04	61.15	246.17	90.76	60.71	-9,145.00	7,822.58	7,523.54	299.04	26.159		
9,300.00	7,137.50	7,100.50	7,137.50	63.26	246.16	90.75	60.71	-9,145.00	7,730.04	7,430.39	299.64	25.797		
9,400.00	7,136.96	7,100.04	7,136.96	65.44	246.14	90.74	60.71	-9,145.00	7,637.68	7,337.39	300.29	25.435		
9,500.00	7,136.42	7,100.58	7,136.42	67.68	246.16	90.73	60.71	-9,145.00	7,545.51	7,244.51	301.00	25.068		
9,600.00	7,135.88	7,101.12	7,135.88	69.97	246.18	90.72	60.71	-9,145.00	7,453.55	7,151.78	301.76	24.700		
9,700.00	7,135.34	7,101.66	7,135.34	72.31	246.20	90.71	60.71	-9,145.00	7,361.79	7,059.23	302.56	24.332		
9,800.00	7,134.80	7,102.20	7,134.80	74.69	246.21	90.70	60.71	-9,145.00	7,270.25	6,966.85	303.41	23.962		
9,900.00	7,134.26	7,102.75	7,134.26	77.10	246.23	90.69	60.71	-9,145.00	7,178.94	6,874.65	304.30	23.592		
10,000.00	7,133.71	7,103.29	7,133.71	79.54	246.25	90.68	60.71	-9,145.00	7,087.87	6,782.63	305.23	23.221		
10,100.00	7,133.17	7,103.83	7,133.17	82.02	246.27	90.67	60.71	-9,145.00	6,997.03	6,690.82	306.22	22.850		
10,200.00	7,132.63	7,104.37	7,132.63	84.52	246.29	90.66	60.71	-9,145.00	6,906.45	6,599.20	307.25	22.478		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,132.09	7,104.91	7,132.09	87.04	246.31	90.65	60.71	-9,145.00	6,816.14	6,507.80	308.33	22.106		
10,400.00	7,131.55	7,105.45	7,131.55	89.58	246.33	90.64	60.71	-9,145.00	6,726.09	6,416.62	309.47	21.734		
10,500.00	7,131.01	7,105.99	7,131.01	92.15	246.35	90.63	60.71	-9,145.00	6,636.33	6,325.67	310.66	21.362		
10,600.00	7,130.47	7,106.53	7,130.47	94.73	246.37	90.62	60.71	-9,145.00	6,546.87	6,234.97	311.91	20.990		
10,700.00	7,129.93	7,107.07	7,129.93	97.33	246.38	90.60	60.71	-9,145.00	6,457.72	6,144.51	313.21	20.618		
10,800.00	7,129.39	7,107.61	7,129.39	99.94	246.40	90.59	60.71	-9,145.00	6,368.89	6,054.32	314.57	20.246		
10,900.00	7,128.84	7,108.16	7,128.84	102.56	246.42	90.58	60.71	-9,145.00	6,280.40	5,964.41	315.99	19.875		
11,000.00	7,128.30	7,108.70	7,128.30	105.20	246.44	90.57	60.71	-9,145.00	6,192.26	5,874.78	317.47	19.505		
11,100.00	7,127.76	7,109.24	7,127.76	107.85	246.46	90.56	60.71	-9,145.00	6,104.48	5,785.46	319.02	19.135		
11,200.00	7,127.22	7,109.78	7,127.22	110.51	246.48	90.55	60.71	-9,145.00	6,017.08	5,696.45	320.63	18.766		
11,300.00	7,126.68	7,089.68	7,126.68	113.18	245.78	90.54	60.71	-9,145.00	5,930.08	5,608.50	321.59	18.440		
11,400.00	7,126.14	7,089.14	7,126.14	115.86	245.76	90.53	60.71	-9,145.00	5,843.50	5,520.20	323.30	18.075		
11,500.00	7,125.60	7,088.60	7,125.60	118.55	245.74	90.52	60.71	-9,145.00	5,757.35	5,432.28	325.08	17.711		
11,600.00	7,125.06	7,088.06	7,125.06	121.25	245.72	90.51	60.71	-9,145.00	5,671.66	5,344.73	326.93	17.348		
11,700.00	7,124.52	7,087.52	7,124.52	123.95	245.70	90.50	60.71	-9,145.00	5,586.44	5,257.59	328.85	16.988		
11,800.00	7,123.97	7,086.97	7,123.97	126.66	245.68	90.49	60.71	-9,145.00	5,501.72	5,170.86	330.86	16.629		
11,900.00	7,123.43	7,086.43	7,123.43	129.38	245.66	90.48	60.71	-9,145.00	5,417.52	5,084.58	332.94	16.272		
12,000.00	7,122.89	7,085.89	7,122.89	132.10	245.65	90.47	60.71	-9,145.00	5,333.87	4,998.77	335.10	15.917		
12,100.00	7,122.35	7,085.35	7,122.35	134.83	245.63	90.46	60.71	-9,145.00	5,250.79	4,913.44	337.35	15.565		
12,200.00	7,121.81	7,084.81	7,121.81	137.56	245.61	90.45	60.71	-9,145.00	5,168.31	4,828.63	339.68	15.215		
12,300.00	7,121.27	7,084.27	7,121.27	140.30	245.59	90.44	60.71	-9,145.00	5,086.45	4,744.36	342.09	14.869		
12,400.00	7,120.73	7,083.73	7,120.73	143.05	245.57	90.43	60.71	-9,145.00	5,005.26	4,660.66	344.60	14.525		
12,500.00	7,120.19	7,083.19	7,120.19	145.80	245.55	90.42	60.71	-9,145.00	4,924.76	4,577.56	347.20	14.184		
12,600.00	7,119.65	7,082.65	7,119.65	148.55	245.53	90.40	60.71	-9,145.00	4,844.98	4,495.09	349.89	13.847		
12,700.00	7,119.10	7,082.10	7,119.10	151.30	245.51	90.39	60.71	-9,145.00	4,765.97	4,413.29	352.67	13.514		
12,800.00	7,118.56	7,081.56	7,118.56	154.07	245.49	90.38	60.71	-9,145.00	4,687.75	4,332.20	355.55	13.184		
12,900.00	7,118.02	7,081.02	7,118.02	156.83	245.48	90.37	60.71	-9,145.00	4,610.39	4,251.85	358.53	12.859		
13,000.00	7,117.48	7,080.48	7,117.48	159.60	245.46	90.36	60.71	-9,145.00	4,533.90	4,172.28	361.62	12.538		
13,100.00	7,116.94	7,079.94	7,116.94	162.37	245.44	90.35	60.71	-9,145.00	4,458.35	4,093.55	364.80	12.221		
13,200.00	7,116.40	7,079.40	7,116.40	165.14	245.42	90.34	60.71	-9,145.00	4,383.77	4,015.69	368.08	11.910		
13,300.00	7,115.86	7,078.86	7,115.86	167.92	245.40	90.33	60.71	-9,145.00	4,310.23	3,938.75	371.47	11.603		
13,400.00	7,115.32	7,078.32	7,115.32	170.70	245.38	90.32	60.71	-9,145.00	4,237.77	3,862.80	374.97	11.302		
13,500.00	7,114.78	7,077.78	7,114.78	173.48	245.36	90.31	60.71	-9,145.00	4,166.45	3,787.88	378.57	11.006		
13,600.00	7,114.24	7,077.24	7,114.24	176.26	245.34	90.30	60.71	-9,145.00	4,096.33	3,714.05	382.28	10.716		
13,700.00	7,113.69	7,076.69	7,113.69	179.05	245.32	90.29	60.71	-9,145.00	4,027.47	3,641.38	386.08	10.432		
13,800.00	7,113.15	7,076.15	7,113.15	181.84	245.31	90.28	60.71	-9,145.00	3,959.93	3,569.94	390.00	10.154		
13,900.00	7,112.61	7,075.61	7,112.61	184.63	245.29	90.27	60.71	-9,145.00	3,893.80	3,499.79	394.01	9.882		
14,000.00	7,112.07	7,075.07	7,112.07	187.42	245.27	90.26	60.71	-9,145.00	3,829.14	3,431.01	398.13	9.618		
14,100.00	7,111.53	7,074.53	7,111.53	190.22	245.25	90.25	60.71	-9,145.00	3,766.02	3,363.68	402.33	9.360		
14,200.00	7,110.99	7,073.99	7,110.99	193.01	245.23	90.24	60.71	-9,145.00	3,704.52	3,297.89	406.63	9.110		
14,300.00	7,110.45	7,073.45	7,110.45	195.81	245.21	90.23	60.71	-9,145.00	3,644.73	3,233.72	411.02	8.868		
14,400.00	7,109.91	7,072.91	7,109.91	198.61	245.19	90.22	60.71	-9,145.00	3,586.74	3,171.25	415.48	8.633		
14,500.00	7,109.37	7,072.37	7,109.37	201.42	245.17	90.20	60.71	-9,145.00	3,530.62	3,110.60	420.02	8.406		
14,600.00	7,108.82	7,071.82	7,108.82	204.22	245.15	90.19	60.71	-9,145.00	3,476.47	3,051.86	424.61	8.187		
14,700.00	7,108.28	7,071.28	7,108.28	207.03	245.14	90.18	60.71	-9,145.00	3,424.39	2,995.13	429.26	7.977		
14,800.00	7,107.74	7,070.74	7,107.74	209.83	245.12	90.17	60.71	-9,145.00	3,374.47	2,940.52	433.95	7.776		
14,900.00	7,107.20	7,070.20	7,107.20	212.64	245.10	90.16	60.71	-9,145.00	3,326.81	2,888.14	438.66	7.584		
15,000.00	7,106.66	7,069.66	7,106.66	215.45	245.08	90.15	60.71	-9,145.00	3,281.50	2,838.11	443.39	7.401		
15,100.00	7,106.12	7,069.12	7,106.12	218.26	245.06	90.14	60.71	-9,145.00	3,238.65	2,790.54	448.11	7.227		
15,200.00	7,105.58	7,068.58	7,105.58	221.07	245.04	90.13	60.71	-9,145.00	3,198.35	2,745.54	452.81	7.063		
15,300.00	7,105.04	7,068.04	7,105.04	223.89	245.02	90.12	60.71	-9,145.00	3,160.70	2,703.24	457.46	6.909		
15,400.00	7,104.50	7,067.50	7,104.50	226.70	245.00	90.11	60.71	-9,145.00	3,125.80	2,663.75	462.05	6.765		

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 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
15,491.56	7,104.00	7,067.00	7,104.00	229.28	244.99	90.10	60.71	-9,145.00	3,096.33	2,630.15	466.18	6.642	CC, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 34N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4819.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4819.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 34N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	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		
0.00	0.00	0.00	24.00	3.28	3.28	-89.80	31.57	-9,142.23	9,142.32					
100.00	100.00	112.35	136.35	3.28	3.29	-89.80	31.28	-9,141.86	9,141.99	9,135.41	6.58	1,389.841		
200.00	200.00	186.25	210.25	3.34	3.34	-89.80	31.37	-9,141.68	9,141.74	9,135.06	6.67	1,369.983		
300.00	299.98	261.38	285.38	3.44	3.41	87.07	31.42	-9,141.70	9,141.67	9,134.83	6.85	1,335.046		
400.00	399.84	348.36	372.36	3.59	3.53	87.10	31.33	-9,141.90	9,141.64	9,134.52	7.12	1,284.815		
500.00	499.45	436.55	460.55	3.79	3.68	87.15	31.20	-9,142.22	9,141.56	9,134.09	7.47	1,223.803		
600.00	598.70	617.10	641.10	4.03	4.10	87.30	30.68	-9,142.49	9,141.25	9,133.12	8.12	1,125.134		
700.00	697.47	679.63	703.63	4.31	4.26	87.38	30.37	-9,142.32	9,140.24	9,131.67	8.58	1,065.774		
800.00	795.62	727.00	750.99	4.64	4.40	87.44	30.14	-9,142.36	9,139.52	9,130.49	9.03	1,011.730		
847.78	842.28	727.00	750.99	4.81	4.40	87.45	30.14	-9,142.36	9,139.41	9,130.21	9.20	993.015		
900.00	893.06	727.00	750.99	5.00	4.40	87.44	30.14	-9,142.36	9,139.54	9,130.14	9.40	972.709		
1,000.00	989.64	796.57	820.55	5.40	4.60	87.55	30.23	-9,143.09	9,139.67	9,129.67	10.00	914.163		
1,100.00	1,085.27	856.00	879.96	5.83	4.78	87.64	30.98	-9,144.59	9,140.83	9,130.21	10.61	861.315		
1,200.00	1,179.82	856.00	879.96	6.29	4.78	87.61	30.98	-9,144.59	9,142.32	9,131.25	11.08	825.170		
1,300.00	1,273.17	856.00	879.96	6.79	4.78	87.56	30.98	-9,144.59	9,144.77	9,133.19	11.58	789.741		
1,400.00	1,365.21	901.47	925.39	7.33	4.93	87.62	31.94	-9,146.39	9,147.70	9,135.44	12.26	746.351		
1,500.00	1,456.49	923.36	947.24	7.89	5.00	87.67	32.52	-9,147.51	9,151.54	9,138.66	12.88	710.272		
1,600.00	1,547.76	984.00	1,007.72	8.46	5.20	87.84	34.49	-9,151.44	9,156.60	9,142.94	13.66	670.462		
1,700.00	1,639.04	984.00	1,007.72	9.05	5.20	87.84	34.49	-9,151.44	9,161.92	9,147.67	14.24	643.338		
1,800.00	1,730.31	984.00	1,007.72	9.65	5.20	87.84	34.49	-9,151.44	9,168.32	9,153.49	14.83	618.068		
1,900.00	1,821.58	984.00	1,007.72	10.26	5.20	87.84	34.49	-9,151.44	9,175.81	9,160.38	15.43	594.560		
2,000.00	1,912.85	1,036.38	1,059.87	10.87	5.38	87.98	36.84	-9,155.76	9,183.82	9,167.61	16.22	566.288		
2,100.00	2,004.13	1,059.78	1,083.13	11.49	5.46	88.05	38.14	-9,157.94	9,192.86	9,175.95	16.91	543.713		
2,200.00	2,095.40	1,112.00	1,134.95	12.11	5.65	88.20	41.64	-9,163.37	9,202.92	9,185.21	17.70	519.809		
2,300.00	2,186.67	1,112.00	1,134.95	12.74	5.65	88.20	41.64	-9,163.37	9,213.49	9,195.18	18.32	503.011		
2,400.00	2,277.95	1,112.00	1,134.95	13.38	5.65	88.20	41.64	-9,163.37	9,225.14	9,206.21	18.93	487.340		
2,500.00	2,369.22	1,168.77	1,191.15	14.01	5.87	88.37	46.29	-9,169.94	9,237.38	9,217.63	19.76	467.590		
2,600.00	2,460.49	1,200.97	1,222.96	14.65	5.99	88.47	49.30	-9,173.90	9,250.48	9,229.98	20.49	451.429		
2,700.00	2,551.77	1,241.00	1,262.44	15.29	6.15	88.59	53.41	-9,179.04	9,264.34	9,243.08	21.26	435.768		
2,800.00	2,643.04	1,276.69	1,297.58	15.93	6.30	88.70	57.51	-9,183.77	9,278.90	9,256.89	22.02	421.460		
2,900.00	2,734.31	1,323.81	1,343.86	16.58	6.50	88.86	63.71	-9,190.08	9,294.10	9,271.28	22.82	407.273		
3,000.00	2,825.58	1,369.00	1,388.11	17.23	6.70	89.01	70.49	-9,196.22	9,309.93	9,286.31	23.62	394.191		
3,100.00	2,916.86	1,369.00	1,388.11	17.87	6.70	89.01	70.49	-9,196.22	9,326.60	9,302.37	24.22	385.013		
3,200.00	3,008.13	1,433.60	1,451.16	18.52	7.00	89.23	81.28	-9,205.33	9,343.73	9,318.62	25.12	372.017		
3,300.00	3,099.40	1,498.00	1,513.73	19.17	7.31	89.45	93.06	-9,214.96	9,361.93	9,335.92	26.01	359.938		
3,400.00	3,190.68	1,498.00	1,513.73	19.83	7.31	89.45	93.06	-9,214.96	9,380.58	9,353.97	26.61	352.538		
3,500.00	3,281.95	1,498.00	1,513.73	20.48	7.31	89.45	93.06	-9,214.96	9,400.25	9,373.05	27.20	345.552		
3,600.00	3,373.22	1,556.01	1,569.87	21.13	7.61	89.66	104.42	-9,224.15	9,420.47	9,392.39	28.08	335.512		
3,700.00	3,464.49	1,585.55	1,598.38	21.79	7.76	89.76	110.42	-9,229.03	9,441.56	9,412.75	28.81	327.703		
3,800.00	3,555.77	1,626.00	1,637.33	22.44	7.98	89.90	118.86	-9,235.92	9,463.43	9,433.83	29.60	319.752		
3,900.00	3,647.04	1,626.00	1,637.33	23.10	7.98	89.90	118.86	-9,235.92	9,486.07	9,455.89	30.18	314.356		
4,000.00	3,738.31	1,674.62	1,683.99	23.75	8.26	90.08	129.52	-9,244.49	9,509.38	9,478.37	31.01	306.649		
4,100.00	3,829.59	1,704.11	1,712.18	24.41	8.43	90.19	136.32	-9,249.81	9,533.48	9,501.74	31.74	300.361		
4,200.00	3,920.86	1,754.00	1,759.70	25.07	8.72	90.37	148.40	-9,259.05	9,558.39	9,525.81	32.58	293.416		
4,300.00	4,012.13	1,754.00	1,759.70	25.73	8.72	90.37	148.40	-9,259.05	9,583.93	9,550.80	33.14	289.207		
4,400.00	4,103.41	1,754.00	1,759.70	26.38	8.72	90.37	148.40	-9,259.05	9,610.45	9,576.76	33.70	285.214		
4,500.00	4,194.68	1,800.13	1,803.41	27.04	9.02	90.55	160.11	-9,267.97	9,637.51	9,603.00	34.52	279.217		
4,600.00	4,285.95	1,820.14	1,822.31	27.70	9.15	90.62	165.31	-9,272.01	9,665.51	9,630.33	35.18	274.742		
4,700.00	4,377.22	1,883.00	1,881.40	28.36	9.56	90.86	182.11	-9,285.32	9,694.66	9,658.57	36.09	268.607		
4,800.00	4,468.50	1,883.00	1,881.40	29.02	9.56	90.86	182.11	-9,285.32	9,723.99	9,687.36	36.63	265.470		
4,900.00	4,559.77	1,883.00	1,881.40	29.68	9.56	90.86	182.11	-9,285.32	9,754.24	9,717.08	37.16	262.491		
5,000.00	4,651.04	2,041.47	2,029.91	30.34	10.68	91.47	225.91	-9,319.07	9,784.88	9,746.20	38.68	252.951		

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



Anticollision Report



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

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I17-17D(PR_75CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 78-MWD													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,100.00	4,742.32	2,158.03	2,139.50	31.00	11.53	91.90	257.34	-9,343.33	9,815.34	9,775.38	39.96	245.646		
5,200.00	4,833.59	2,217.08	2,195.15	31.66	11.97	92.12	272.73	-9,355.73	9,846.08	9,805.21	40.86	240.960		
5,300.00	4,924.86	2,311.86	2,284.61	32.32	12.67	92.47	296.71	-9,375.86	9,877.18	9,835.19	42.00	235.191		
5,400.00	5,016.13	5,400.00	2,368.15	32.99	36.49	92.78	318.31	-9,394.44	9,908.26	9,848.01	60.25	164.460		
5,500.00	5,107.41	2,455.84	2,420.87	33.65	13.75	92.98	331.99	-9,406.18	9,939.73	9,895.77	43.97	226.072		
5,600.00	5,198.68	2,494.30	2,457.16	34.31	14.04	93.12	341.73	-9,414.38	9,971.86	9,927.13	44.73	222.947		
7,900.00	7,117.09	7,440.03	7,283.90	47.84	39.38	65.59	860.21	-9,862.60	9,983.84	9,902.59	81.25	122.880		
8,000.00	7,137.62	7,467.90	7,311.77	48.06	39.47	76.58	859.78	-9,862.26	9,896.88	9,815.22	81.66	121.192		
8,100.00	7,143.99	7,475.20	7,319.07	48.28	39.49	93.42	859.67	-9,862.16	9,805.80	9,723.82	81.99	119.600		
8,200.00	7,143.45	7,472.59	7,316.46	48.53	39.48	93.38	859.71	-9,862.20	9,713.50	9,631.22	82.28	118.053		
8,300.00	7,142.91	7,470.02	7,313.89	48.89	39.48	93.34	859.75	-9,862.23	9,621.35	9,538.75	82.61	116.474		
8,400.00	7,142.37	7,467.47	7,311.34	49.40	39.47	93.30	859.79	-9,862.26	9,529.36	9,446.40	82.96	114.864		
8,500.00	7,141.83	7,464.95	7,308.82	50.12	39.46	93.27	859.83	-9,862.30	9,437.53	9,354.18	83.35	113.225		
8,600.00	7,141.29	7,462.46	7,306.33	51.08	39.45	93.23	859.86	-9,862.33	9,345.87	9,262.10	83.78	111.557		
8,700.00	7,140.75	7,459.99	7,303.86	52.30	39.44	93.19	859.90	-9,862.36	9,254.38	9,170.15	84.24	109.861		
8,800.00	7,140.21	7,457.55	7,301.42	53.75	39.44	93.15	859.94	-9,862.39	9,163.07	9,078.34	84.73	108.140		
8,900.00	7,139.67	7,455.13	7,299.00	55.40	39.43	93.12	859.98	-9,862.42	9,071.94	8,986.68	85.27	106.394		
9,000.00	7,139.12	7,452.74	7,296.61	57.20	39.42	93.08	860.01	-9,862.45	8,981.00	8,895.16	85.84	104.625		
9,100.00	7,138.58	7,450.37	7,294.25	59.13	39.41	93.04	860.05	-9,862.48	8,890.26	8,803.81	86.45	102.835		
9,200.00	7,138.04	7,448.03	7,291.91	61.15	39.41	93.01	860.09	-9,862.51	8,799.71	8,712.61	87.10	101.026		
9,300.00	7,137.50	7,445.72	7,289.59	63.26	39.40	92.97	860.12	-9,862.53	8,709.37	8,621.58	87.80	99.199		
9,400.00	7,136.96	7,443.42	7,287.30	65.44	39.39	92.94	860.16	-9,862.56	8,619.24	8,530.71	88.53	97.358		
9,500.00	7,136.42	7,441.15	7,285.03	67.68	39.38	92.90	860.19	-9,862.59	8,529.34	8,440.03	89.31	95.503		
9,600.00	7,135.88	7,438.90	7,282.78	69.97	39.38	92.87	860.23	-9,862.62	8,439.66	8,349.53	90.13	93.637		
9,700.00	7,135.34	7,436.68	7,280.55	72.31	39.37	92.83	860.26	-9,862.64	8,350.21	8,259.21	91.00	91.762		
9,800.00	7,134.80	7,434.48	7,278.35	74.69	39.36	92.80	860.30	-9,862.67	8,261.01	8,169.09	91.91	89.881		
9,900.00	7,134.26	7,432.30	7,276.17	77.10	39.36	92.77	860.33	-9,862.69	8,172.05	8,079.18	92.87	87.995		
10,000.00	7,133.71	7,430.14	7,274.01	79.54	39.35	92.73	860.37	-9,862.72	8,083.35	7,989.48	93.88	86.107		
10,100.00	7,133.17	7,428.00	7,271.88	82.02	39.34	92.70	860.40	-9,862.74	7,994.92	7,899.99	94.93	84.219		
10,200.00	7,132.63	7,425.88	7,269.76	84.52	39.34	92.67	860.43	-9,862.76	7,906.76	7,810.73	96.03	82.334		
10,300.00	7,132.09	7,423.79	7,267.67	87.04	39.33	92.64	860.47	-9,862.79	7,818.89	7,721.71	97.19	80.452		
10,400.00	7,131.55	7,421.71	7,265.59	89.58	39.32	92.61	860.50	-9,862.81	7,731.31	7,632.92	98.39	78.578		
10,500.00	7,131.01	7,419.66	7,263.53	92.15	39.32	92.57	860.53	-9,862.83	7,644.04	7,544.40	99.65	76.712		
10,600.00	7,130.47	7,417.62	7,261.50	94.73	39.31	92.54	860.56	-9,862.86	7,557.08	7,456.13	100.95	74.856		
10,700.00	7,129.93	7,415.60	7,259.48	97.33	39.30	92.51	860.60	-9,862.88	7,470.45	7,368.13	102.32	73.013		
10,800.00	7,129.39	7,413.61	7,257.49	99.94	39.30	92.48	860.63	-9,862.90	7,384.16	7,280.42	103.73	71.184		
10,900.00	7,128.84	7,411.63	7,255.51	102.56	39.29	92.45	860.66	-9,862.92	7,298.21	7,193.01	105.21	69.371		
11,000.00	7,128.30	7,409.67	7,253.55	105.20	39.28	92.42	860.69	-9,862.94	7,212.63	7,105.89	106.73	67.576		
11,100.00	7,127.76	7,407.73	7,251.61	107.85	39.28	92.39	860.72	-9,862.96	7,127.42	7,019.10	108.32	65.800		
11,200.00	7,127.22	7,405.81	7,249.69	110.51	39.27	92.36	860.75	-9,862.98	7,042.60	6,932.64	109.96	64.046		
11,300.00	7,126.68	7,404.00	7,247.88	113.18	39.27	92.34	860.78	-9,863.00	6,958.18	6,846.52	111.67	62.313		
11,400.00	7,126.14	7,404.00	7,247.88	115.86	39.27	92.34	860.78	-9,863.00	6,874.18	6,760.75	113.44	60.599		
11,500.00	7,125.60	7,401.41	7,245.29	118.55	39.26	92.30	860.83	-9,863.03	6,790.62	6,675.36	115.26	58.916		
11,600.00	7,125.06	7,400.13	7,244.02	121.25	39.25	92.28	860.85	-9,863.04	6,707.50	6,590.35	117.15	57.256		
11,700.00	7,124.52	7,398.85	7,242.73	123.95	39.25	92.26	860.87	-9,863.06	6,624.85	6,505.75	119.10	55.623		
11,800.00	7,123.97	7,397.56	7,241.44	126.66	39.25	92.24	860.89	-9,863.07	6,542.68	6,421.56	121.12	54.018		
11,900.00	7,123.43	7,396.26	7,240.14	129.38	39.24	92.22	860.91	-9,863.08	6,461.02	6,337.82	123.20	52.442		
12,000.00	7,122.89	7,394.94	7,238.83	132.10	39.24	92.20	860.93	-9,863.10	6,379.88	6,254.52	125.35	50.895		
12,100.00	7,122.35	7,393.62	7,237.51	134.83	39.23	92.18	860.95	-9,863.11	6,299.28	6,171.71	127.57	49.378		
12,200.00	7,121.81	7,392.29	7,236.18	137.56	39.23	92.16	860.97	-9,863.13	6,219.24	6,089.38	129.86	47.892		
12,300.00	7,121.27	7,390.96	7,234.84	140.30	39.23	92.14	860.99	-9,863.14	6,139.79	6,007.57	132.22	46.437		
12,400.00	7,120.73	7,389.61	7,233.49	143.05	39.22	92.12	861.02	-9,863.16	6,060.95	5,926.30	134.65	45.014		

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

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I17-17D(PR_75CC) - OH - OH											Offset Site Error: 0.00 ft		
Survey Program: 78-MWD											Offset Well Error: 3.28 ft		
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
12,500.00	7,120.19	7,388.25	7,232.14	145.80	39.22	92.09	861.04	-9,863.17	5,982.73	5,845.59	137.15	43.623	
12,600.00	7,119.65	7,386.88	7,230.77	148.55	39.21	92.07	861.06	-9,863.19	5,905.18	5,765.46	139.72	42.264	
12,700.00	7,119.10	7,385.51	7,229.39	151.30	39.21	92.05	861.08	-9,863.20	5,828.31	5,685.94	142.37	40.937	
12,800.00	7,118.56	7,384.12	7,228.01	154.07	39.20	92.03	861.10	-9,863.22	5,752.15	5,607.05	145.10	39.643	
12,900.00	7,118.02	7,382.72	7,226.61	156.83	39.20	92.01	861.13	-9,863.23	5,676.73	5,528.83	147.90	38.382	
13,000.00	7,117.48	7,381.32	7,225.20	159.60	39.20	91.99	861.15	-9,863.25	5,602.08	5,451.30	150.78	37.154	
13,100.00	7,116.94	7,379.90	7,223.79	162.37	39.19	91.97	861.17	-9,863.26	5,528.22	5,374.49	153.74	35.959	
13,200.00	7,116.40	7,378.47	7,222.36	165.14	39.19	91.95	861.20	-9,863.28	5,455.21	5,298.43	156.77	34.797	
13,300.00	7,115.86	7,377.04	7,220.92	167.92	39.18	91.92	861.22	-9,863.30	5,383.06	5,223.16	159.89	33.667	
13,400.00	7,115.32	7,375.59	7,219.48	170.70	39.18	91.90	861.24	-9,863.31	5,311.81	5,148.72	163.09	32.570	
13,500.00	7,114.78	7,374.13	7,218.02	173.48	39.17	91.88	861.27	-9,863.33	5,241.50	5,075.13	166.36	31.506	
13,600.00	7,114.24	7,372.66	7,216.55	176.26	39.17	91.86	861.29	-9,863.35	5,172.16	5,002.44	169.72	30.474	
13,700.00	7,113.69	7,371.18	7,215.07	179.05	39.16	91.83	861.31	-9,863.37	5,103.85	4,930.69	173.16	29.475	
13,800.00	7,113.15	7,369.69	7,213.58	181.84	39.16	91.81	861.34	-9,863.38	5,036.59	4,859.91	176.68	28.507	
13,900.00	7,112.61	7,368.19	7,212.08	184.63	39.15	91.79	861.36	-9,863.40	4,970.43	4,790.16	180.27	27.571	
14,000.00	7,112.07	7,366.68	7,210.57	187.42	39.15	91.77	861.39	-9,863.42	4,905.42	4,721.47	183.95	26.667	
14,100.00	7,111.53	7,365.15	7,209.04	190.22	39.15	91.74	861.41	-9,863.44	4,841.61	4,653.90	187.70	25.794	
14,200.00	7,110.99	7,363.62	7,207.51	193.01	39.14	91.72	861.44	-9,863.46	4,779.03	4,587.49	191.53	24.951	
14,300.00	7,110.45	7,362.07	7,205.96	195.81	39.14	91.70	861.46	-9,863.47	4,717.74	4,522.30	195.44	24.139	
14,400.00	7,109.91	7,360.51	7,204.40	198.61	39.13	91.67	861.49	-9,863.49	4,657.79	4,458.38	199.41	23.358	
14,500.00	7,109.37	7,358.94	7,202.83	201.42	39.13	91.65	861.51	-9,863.51	4,599.24	4,395.78	203.46	22.606	
14,600.00	7,108.82	7,357.36	7,201.25	204.22	39.12	91.62	861.54	-9,863.53	4,542.13	4,334.56	207.57	21.883	
14,700.00	7,108.28	7,355.77	7,199.66	207.03	39.12	91.60	861.56	-9,863.55	4,486.52	4,274.78	211.74	21.189	
14,800.00	7,107.74	7,354.16	7,198.05	209.83	39.11	91.57	861.59	-9,863.57	4,432.47	4,216.50	215.96	20.524	
14,900.00	7,107.20	7,352.54	7,196.43	212.64	39.11	91.55	861.62	-9,863.59	4,380.03	4,159.79	220.24	19.887	
15,000.00	7,106.66	7,350.91	7,194.80	215.45	39.10	91.52	861.64	-9,863.61	4,329.27	4,104.70	224.57	19.278	
15,100.00	7,106.12	7,349.26	7,193.16	218.26	39.10	91.50	861.67	-9,863.63	4,280.25	4,051.31	228.93	18.696	
15,200.00	7,105.58	7,347.61	7,191.50	221.07	39.09	91.47	861.70	-9,863.66	4,233.01	3,999.68	233.33	18.142	
15,300.00	7,105.04	7,345.94	7,189.83	223.89	39.08	91.45	861.72	-9,863.68	4,187.64	3,949.88	237.76	17.613	
15,400.00	7,104.50	7,344.25	7,188.15	226.70	39.08	91.42	861.75	-9,863.70	4,144.18	3,901.98	242.20	17.111	
15,491.56	7,104.00	7,342.70	7,186.60	229.28	39.07	91.40	861.77	-9,863.72	4,106.12	3,859.85	246.27	16.673 CC, ES, SF	

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

Reference Depths are relative to KB @ 4819.00ft

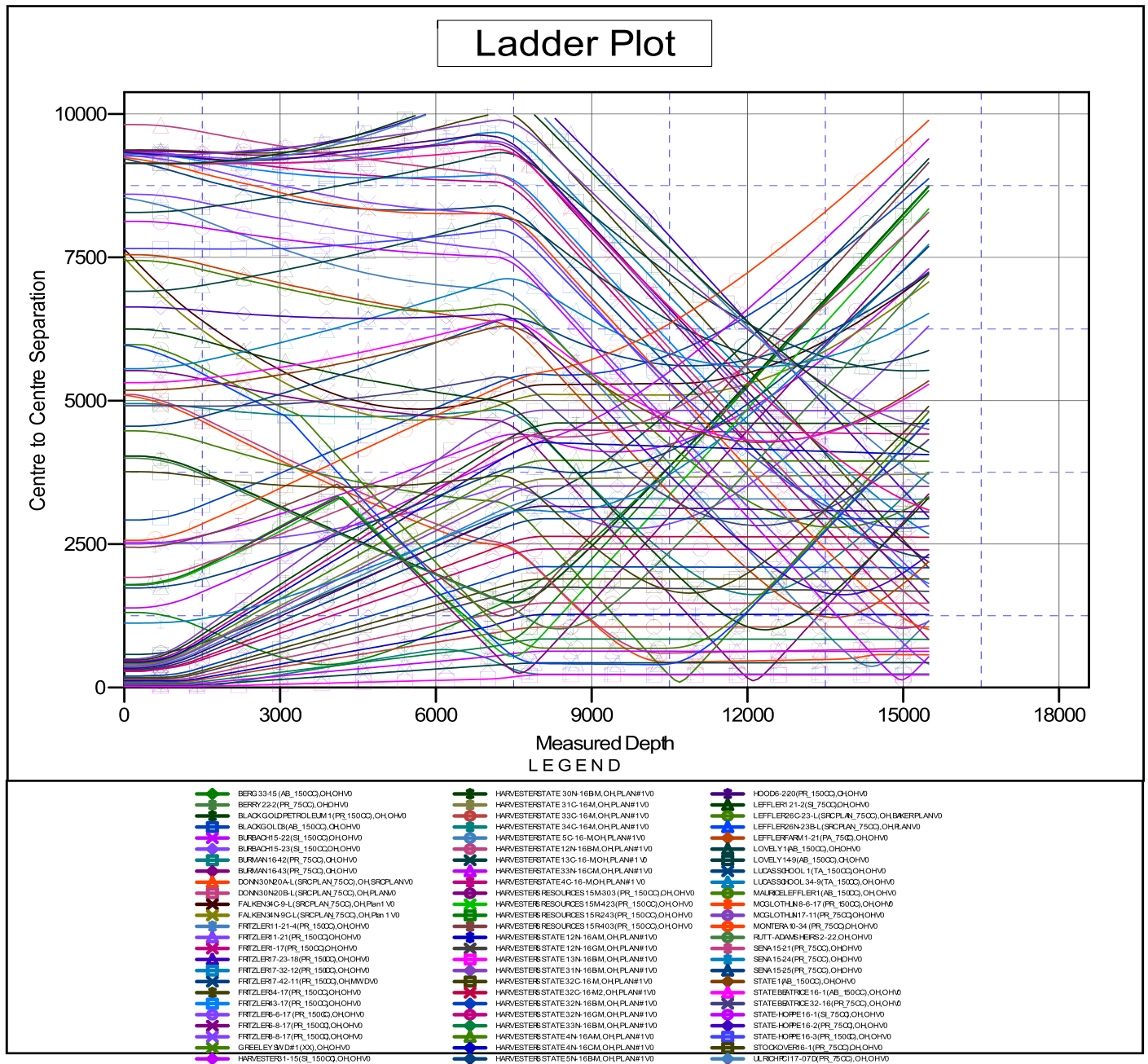
Offset Depths are relative to Offset Datum

Central Meridian is -105.5000000

Coordinates are relative to: HARVESTERS STATE 34N-16C-M

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.48°



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

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

Reference Depths are relative to KB @ 4819.00ft

Offset Depths are relative to Offset Datum

Central Meridian is -105.5000000

Coordinates are relative to: HARVESTERS STATE 34N-16C-M

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.48°

