



SRC ENERGY

**SECTION 15, T6N, R66W
HARVESTERS STATE 7-15 PAD
HARVESTERS STATE 5N-16C-M**

**OH
PLAN #1**

Anticollision Report

03 October, 2017





Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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	14,872.04	PLAN #1 (OH)	MWD+IFR1	OWSG MWD + IFR1

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
HARVESTERS STATE 7-15 PAD						
BERG 33-15 (AB_150CC) - OH - OH	100.00	58.72	1,637.91	1,631.34	249.410	CC
BERG 33-15 (AB_150CC) - OH - OH	6,000.00	5,958.35	1,667.89	1,616.18	32.257	ES
BERG 33-15 (AB_150CC) - OH - OH	6,900.00	6,814.28	1,717.59	1,658.27	28.955	SF
BERRY 22-2(PR_75CC) - OH - OH	6,522.43	6,485.37	4,373.27	4,317.04	77.769	CC
BERRY 22-2(PR_75CC) - OH - OH	6,600.00	6,563.14	4,373.70	4,316.80	76.858	ES
BERRY 22-2(PR_75CC) - OH - OH	10,200.00	7,042.02	5,830.46	5,724.78	55.171	SF
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	0.00	20.22	4,373.40			
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	6,600.00	6,659.40	4,390.68	4,333.38	76.632	ES
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	10,200.00	7,349.11	5,840.24	5,733.10	54.513	SF
BLACKGOLD 3(AB_150CC) - OH - OH	7,869.81	7,136.23	2,288.64	2,217.30	32.079	CC
BLACKGOLD 3(AB_150CC) - OH - OH	7,900.00	7,136.43	2,288.84	2,216.96	31.842	ES
BLACKGOLD 3(AB_150CC) - OH - OH	8,900.00	7,142.94	2,509.80	2,419.87	27.906	SF
BURBACH 15-22(SI_150CC) - OH - OH	8,858.36	7,105.02	964.03	655.09	3.120	CC
BURBACH 15-22(SI_150CC) - OH - OH	8,900.00	7,104.87	964.93	655.02	3.114	ES, SF
BURBACH 15-23(SI_150CC) - OH - OH	9,254.41	7,088.57	361.80	43.45	1.136	Level 2, CC, ES, SF
BURMAN 16-42(PR_75CC) - OH - OH	11,538.39	7,069.21	1,486.44	1,107.04	3.918	CC
BURMAN 16-42(PR_75CC) - OH - OH	11,600.00	7,068.98	1,487.71	1,106.72	3.905	ES
BURMAN 16-42(PR_75CC) - OH - OH	11,700.00	7,068.62	1,495.20	1,112.09	3.903	SF
BURMAN 16-43(PR_75CC) - OH - OH	11,573.59	7,066.08	2,986.97	2,606.70	7.855	CC
BURMAN 16-43(PR_75CC) - OH - OH	11,700.00	7,065.62	2,989.64	2,606.00	7.793	ES
BURMAN 16-43(PR_75CC) - OH - OH	12,000.00	7,064.52	3,017.25	2,626.57	7.723	SF
DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN	9,933.06	7,329.63	3,532.99	3,407.15	28.076	CC
DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN	14,872.41	12,344.84	3,607.71	3,199.24	8.832	ES, SF
DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN	9,922.53	7,430.60	3,727.54	3,601.70	29.621	CC
DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN	14,872.41	12,365.36	3,747.49	3,341.04	9.220	ES, SF
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	7,301.98	16,401.43	2,118.08	1,820.41	7.116	CC
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	10,000.00	19,095.86	2,174.62	1,741.29	5.018	ES
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	10,100.00	19,118.26	2,178.16	1,741.77	4.991	SF
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	7,265.70	16,307.65	1,945.95	1,648.61	6.544	CC
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	10,000.00	19,018.34	1,970.89	1,537.05	4.543	ES
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	10,100.00	19,018.34	1,974.53	1,538.48	4.528	SF
FRITZLER 11-21-4(PR_150CC) - OH - OH	13,850.22	7,202.22	3,443.76	3,210.86	14.786	CC
FRITZLER 11-21-4(PR_150CC) - OH - OH	13,900.00	7,204.46	3,444.12	3,209.77	14.696	ES
FRITZLER 11-21-4(PR_150CC) - OH - OH	14,600.00	7,237.05	3,524.32	3,274.22	14.092	SF
FRITZLER 11-21(PR_150CC) - OH - OH	14,455.14	7,037.53	4,103.17	3,643.08	8.918	CC
FRITZLER 11-21(PR_150CC) - OH - OH	14,600.00	7,037.00	4,105.73	3,641.70	8.848	ES
FRITZLER 11-21(PR_150CC) - OH - OH	14,872.41	7,036.00	4,124.34	3,653.64	8.762	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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 1-17(PR_150CC) - OH - OH	14,872.41	7,051.00	2,890.57	2,428.24	6.252	CC, ES, SF
FRITZLER 17-23-18(PR_150CC) - OH - OH	14,872.41	7,332.88	3,584.44	3,396.53	19.075	CC, ES, SF
FRITZLER 17-32-12(PR_150CC) - OH - OH	14,872.41	7,475.48	1,686.85	1,523.30	10.314	CC, ES, SF
FRITZLER 17-42-11(PR_150CC) - OH - MWD	14,872.41	7,454.86	813.61	554.81	3.144	CC, ES, SF
FRITZLER 34-17(PR_150CC) - OH - OH	14,872.41	7,094.47	3,529.13	3,309.56	16.073	CC, ES, SF
FRITZLER 43-17(PR_150CC) - OH - OH	14,872.41	7,257.08	1,669.08	1,438.36	7.234	CC, ES, SF
FRITZLER 6-6-17 (PR_150CC) - OH - OH	14,872.41	7,110.52	2,616.61	2,395.59	11.838	CC, ES, SF
FRITZLER 6-8-17(PR_150CC) - OH - OH	14,872.41	7,186.46	3,688.03	3,447.68	15.344	CC, ES, SF
FRITZLER 8-8-17(PR_150CC) - OH - OH	14,872.41	7,088.85	3,431.20	3,170.77	13.175	CC, ES, SF
GREELEY SWD #1(XX) - OH - OH	10,145.36	7,056.31	3,222.84	2,882.08	9.458	CC
GREELEY SWD #1(XX) - OH - OH	10,200.00	7,056.11	3,223.31	2,881.09	9.419	ES
GREELEY SWD #1(XX) - OH - OH	10,800.00	7,053.91	3,288.66	2,932.25	9.227	SF
HARVESTER 31-15(SI_150CC) - OH - OH	0.00	0.00	1,075.78			
HARVESTER 31-15(SI_150CC) - OH - OH	400.00	382.86	1,076.38	1,069.20	149.928	ES
HARVESTER 31-15(SI_150CC) - OH - OH	6,700.00	6,705.62	1,156.40	1,098.53	19.981	SF
HARVESTER 32-15(SI_150CC) - OH - OH	460.31	439.35	527.33	519.93	71.206	CC
HARVESTER 32-15(SI_150CC) - OH - OH	500.00	478.26	527.36	519.79	69.668	ES
HARVESTER 32-15(SI_150CC) - OH - OH	6,600.00	6,578.48	659.24	602.29	11.576	SF
HARVESTER STATE 30C-16-M - OH - PLAN #1	200.00	201.00	159.93	153.26	23.960	CC, ES
HARVESTER STATE 30C-16-M - OH - PLAN #1	14,872.41	15,216.01	1,763.53	1,308.34	3.874	SF
HARVESTER STATE 30N-16B-M - OH - PLAN #1	300.00	301.00	140.26	133.37	20.354	CC, ES
HARVESTER STATE 30N-16B-M - OH - PLAN #1	14,872.41	14,942.37	1,540.87	1,084.22	3.374	SF
HARVESTER STATE 31C-16-M - OH - PLAN #1	500.00	500.00	60.11	52.50	7.897	CC
HARVESTER STATE 31C-16-M - OH - PLAN #1	600.00	599.98	60.15	52.06	7.439	ES
HARVESTER STATE 31C-16-M - OH - PLAN #1	14,872.41	14,999.96	670.21	221.09	1.492	Level 3, SF
HARVESTER STATE 33C-16-M - OH - PLAN #1	200.00	199.00	239.73	233.06	35.924	CC, ES
HARVESTER STATE 33C-16-M - OH - PLAN #1	14,872.41	15,239.55	2,013.48	1,558.26	4.423	SF
HARVESTER STATE 34C-16-M - OH - PLAN #1	200.00	198.00	359.94	353.27	53.945	CC, ES
HARVESTER STATE 34C-16-M - OH - PLAN #1	14,872.41	15,758.57	3,274.90	2,819.07	7.184	SF
HARVESTER STATE 5C-16-M - OH - PLAN #1	500.00	500.00	20.03	12.42	2.632	CC
HARVESTER STATE 5C-16-M - OH - PLAN #1	14,872.41	14,987.93	249.19	-157.36	0.613	Level 1, ES, SF
HARVESTER STATE 12N-16B-M - OH - PLAN #1	200.00	199.00	200.02	193.35	29.973	CC, ES
HARVESTER STATE 12N-16B-M - OH - PLAN #1	14,872.41	14,965.66	1,592.91	1,137.21	3.496	SF
HARVESTER STATE 13C-16-M - OH - PLAN #1	200.00	198.00	299.84	293.17	44.937	CC, ES
HARVESTER STATE 13C-16-M - OH - PLAN #1	14,872.41	15,410.18	2,644.32	2,188.88	5.806	SF
HARVESTER STATE 33N-16C-M - OH - PLAN #1	200.00	198.00	279.80	273.13	41.934	CC, ES
HARVESTER STATE 33N-16C-M - OH - PLAN #1	14,872.41	15,249.68	2,430.90	1,974.94	5.331	SF
HARVESTER STATE 4C-16-M - OH - PLAN #1	500.00	501.00	120.23	114.48	20.942	CC, ES
HARVESTER STATE 4C-16-M - OH - PLAN #1	14,872.41	15,116.21	1,360.46	906.22	2.995	SF
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	7,050.08	8,576.44	302.46	247.61	5.514	CC
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	7,100.00	8,576.74	308.47	246.05	4.942	ES
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	7,200.00	8,577.52	352.82	280.87	4.904	SF
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	6,920.24	8,705.65	573.90	510.57	9.062	CC, ES
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	7,100.00	8,714.66	624.60	551.01	8.488	SF
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	6,765.42	8,411.73	930.33	863.52	13.926	CC, ES
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	6,900.00	8,408.64	953.81	883.15	13.498	SF
HARVESTERS RESOURCES 15R-403(PR_150CC) - OH	6,755.65	8,681.98	1,267.11	1,195.00	17.573	CC, ES
HARVESTERS RESOURCES 15R-403(PR_150CC) - OH	6,900.00	8,681.40	1,291.36	1,216.60	17.273	SF
HARVESTERS STATE 12N-16A-M - OH - PLAN #1	200.00	199.00	220.05	213.38	32.975	CC, ES
HARVESTERS STATE 12N-16A-M - OH - PLAN #1	14,872.41	14,898.76	1,810.12	1,355.91	3.985	SF
HARVESTERS STATE 12N-16C-M - OH - PLAN #1	200.00	199.00	179.97	173.30	26.969	CC, ES
HARVESTERS STATE 12N-16C-M - OH - PLAN #1	14,872.41	14,975.74	1,382.70	927.35	3.037	SF
HARVESTERS STATE 13N-16B-M - OH - PLAN #1	200.00	198.00	319.87	313.20	47.939	CC, ES

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Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
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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 13N-16B-M - OH - PLAN #1	14,872.41	15,313.27	2,852.54	2,396.52	6.255	SF
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	500.00	500.00	40.08	32.47	5.266	CC, ES
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	14,872.41	14,816.81	473.18	43.67	1.102	Level 2, SF
HARVESTERS STATE 32C-16-M - OH - PLAN #1	200.00	199.00	159.93	153.26	23.966	CC, ES
HARVESTERS STATE 32C-16-M - OH - PLAN #1	14,872.41	15,074.92	1,176.55	683.05	2.384	SF
HARVESTERS STATE 32C-16-M2 - OH - PLAN #1	500.00	500.00	40.07	32.46	5.265	CC
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	14,872.41	15,000.38	455.74	11.84	1.027	Level 2, ES, SF
HARVESTERS STATE 32N-16B-M - OH - PLAN #1	300.00	299.00	139.90	133.01	20.309	CC, ES
HARVESTERS STATE 32N-16B-M - OH - PLAN #1	14,872.41	14,864.51	974.97	520.02	2.143	SF
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	547.18	547.18	59.74	51.92	7.633	CC
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	600.00	599.59	59.82	51.74	7.402	ES
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	14,872.41	14,906.26	660.13	204.26	1.448	Level 3, SF
HARVESTERS STATE 33N-16B-M - OH - PLAN #1	200.00	199.00	259.75	253.08	38.925	CC, ES
HARVESTERS STATE 33N-16B-M - OH - PLAN #1	14,872.41	15,121.59	2,224.58	1,768.75	4.880	SF
HARVESTERS STATE 34N-16C-M - OH - PLAN #1	200.00	198.00	339.91	333.24	50.942	CC, ES
HARVESTERS STATE 34N-16C-M - OH - PLAN #1	14,872.41	15,458.93	3,062.20	2,606.13	6.714	SF
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	500.00	500.00	80.15	72.54	10.529	CC
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	600.00	599.98	80.18	72.09	9.917	ES
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	14,872.41	14,732.12	898.11	448.87	1.999	SF
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	500.00	500.00	100.19	92.58	13.162	CC
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	600.00	599.98	100.22	92.13	12.395	ES
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	14,872.41	14,969.16	1,000.92	545.09	2.196	SF
HARVESTERS STATE 5N-16B-M - OH - PLAN #1	400.00	400.00	20.03	12.83	2.780	CC
HARVESTERS STATE 5N-16B-M - OH - PLAN #1	14,872.41	14,804.10	141.54	-253.24	0.359	Level 1, ES, SF
HOOD 41-20(PR_150CC) - OH - OH	14,872.41	7,043.00	4,202.96	3,736.24	9.005	CC, ES, SF
HOOD 6-2-20(PR_150CC) - OH - OH	14,872.41	7,435.09	4,957.15	4,705.38	19.690	CC, ES, SF
LEFFLER 1 21-2(SI_75CC) - OH - OH	11,802.45	7,012.29	4,111.49	3,939.87	23.957	CC
LEFFLER 1 21-2(SI_75CC) - OH - OH	11,900.00	7,017.05	4,112.64	3,938.32	23.593	ES
LEFFLER 1 21-2(SI_75CC) - OH - OH	13,200.00	7,080.99	4,341.86	4,140.02	21.512	SF
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	9,780.73	7,685.20	3,808.55	3,685.00	30.826	CC
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	9,900.00	7,630.63	3,809.56	3,683.48	30.216	ES
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	11,900.00	7,100.00	4,198.41	4,031.87	25.210	SF
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	9,778.08	7,550.00	3,526.88	3,403.75	28.645	CC
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	9,900.00	7,500.00	3,528.28	3,402.50	28.049	ES
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	11,700.00	7,035.01	3,883.40	3,721.29	23.955	SF
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,140.90	7,044.34	4,308.89	3,885.58	10.179	CC
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,300.00	7,043.76	4,311.82	3,884.18	10.083	ES
LEFFLER FARM 1-21(PA_75CC) - OH - OH	14,000.00	7,041.19	4,393.69	3,950.12	9.905	SF
LOVELY 1(AB_150CC) - OH - OH	13,020.37	7,108.22	2,489.09	2,066.93	5.896	CC
LOVELY 1(AB_150CC) - OH - OH	13,100.00	7,108.51	2,490.36	2,066.05	5.869	ES
LOVELY 1(AB_150CC) - OH - OH	13,300.00	7,109.24	2,504.74	2,075.81	5.840	SF
LOVELY 14-9(AB_150CC) - OH - OH	14,517.63	7,089.30	2,453.21	1,989.55	5.291	CC
LOVELY 14-9(AB_150CC) - OH - OH	14,600.00	7,089.00	2,454.60	1,988.74	5.269	ES
LOVELY 14-9(AB_150CC) - OH - OH	14,800.00	7,088.27	2,469.41	1,999.26	5.252	SF
LUCAS SCHOOL 1(TA_150CC) - OH - OH	10,291.61	7,121.77	2,486.17	2,139.18	7.165	CC
LUCAS SCHOOL 1(TA_150CC) - OH - OH	10,400.00	7,121.38	2,488.54	2,138.71	7.114	ES
LUCAS SCHOOL 1(TA_150CC) - OH - OH	10,700.00	7,120.28	2,519.49	2,162.79	7.063	SF
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	11,507.30	7,077.32	2,481.01	2,102.19	6.549	CC
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	11,600.00	7,076.98	2,482.74	2,101.46	6.511	ES
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	11,800.00	7,076.25	2,498.22	2,112.24	6.472	SF
MAURICE LEFFLER 1(AB_150CC) - OH - OH	13,153.13	4,452.00	4,859.14	4,574.33	17.061	CC
MAURICE LEFFLER 1(AB_150CC) - OH - OH	13,300.00	4,452.00	4,861.36	4,573.05	16.862	ES
MAURICE LEFFLER 1(AB_150CC) - OH - OH	14,500.00	4,452.00	5,042.35	4,729.67	16.126	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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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						
MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH	14,872.41	7,348.14	2,079.10	1,819.78	8.018	CC, ES, SF
MCGLOTHLIN 17-11(PR_75CC) - OH - OH	14,872.41	7,074.00	1,658.06	1,225.69	3.835	CC, ES, SF
MONTERA 10-34 (PR_75CC) - OH - OH	2,168.17	2,184.57	2,224.62	2,205.17	114.383	CC
MONTERA 10-34 (PR_75CC) - OH - OH	2,300.00	2,295.17	2,225.20	2,204.76	108.863	ES
MONTERA 10-34 (PR_75CC) - OH - OH	7,700.00	7,185.27	2,511.00	2,443.65	37.280	SF
RUTT-ADAMS HEIRS 2-22 - OH - OH	7,838.71	7,069.76	4,181.65	3,896.28	14.654	CC
RUTT-ADAMS HEIRS 2-22 - OH - OH	7,900.00	7,069.53	4,182.09	3,895.65	14.600	ES
RUTT-ADAMS HEIRS 2-22 - OH - OH	9,100.00	7,065.14	4,367.72	4,056.41	14.030	SF
SENA 15-21(PR_75CC) - OH - OH	7,849.30	7,124.72	1,210.22	922.75	4.210	CC, ES
SENA 15-21(PR_75CC) - OH - OH	7,900.00	7,124.53	1,211.28	922.94	4.201	SF
SENA 15-24(PR_75CC) - OH - OH	7,816.46	7,110.84	94.89	-191.51	0.331	Level 1, CC, ES, SF
SENA 15-25(PR_75CC) - OH - OH	8,181.30	7,116.50	593.65	299.97	2.021	CC
SENA 15-25(PR_75CC) - OH - OH	8,200.00	7,116.43	593.94	299.89	2.020	ES, SF
STATE 1(AB_150CC) - OH - OH	11,678.69	7,066.69	1,170.09	786.88	3.053	CC
STATE 1(AB_150CC) - OH - OH	11,700.00	7,066.62	1,170.28	786.51	3.049	ES
STATE 1(AB_150CC) - OH - OH	11,800.00	7,066.25	1,176.36	790.52	3.049	SF
STATE BEATRICE 16-1(AB_150CC) - OH - OH	11,808.14	7,068.22	1,193.41	806.56	3.085	CC, ES
STATE BEATRICE 16-1(AB_150CC) - OH - OH	11,900.00	7,067.88	1,196.94	807.95	3.077	SF
STATE BEATRICE 32-16(PR_75CC) - OH - OH	11,634.22	7,061.86	282.10	-99.70	0.739	Level 1, CC, ES, SF
STATE-HOPPE 16-1(SI_75CC) - OH - OH	14,424.42	7,048.64	2,935.59	2,475.97	6.387	CC
STATE-HOPPE 16-1(SI_75CC) - OH - OH	14,500.00	7,048.36	2,936.56	2,474.89	6.361	ES
STATE-HOPPE 16-1(SI_75CC) - OH - OH	14,800.00	7,047.27	2,959.52	2,491.12	6.318	SF
STATE-HOPPE 16-2(PR_75CC) - OH - OH	13,259.84	7,065.91	1,466.22	1,038.81	3.431	CC
STATE-HOPPE 16-2(PR_75CC) - OH - OH	13,300.00	7,065.76	1,466.77	1,038.30	3.423	ES
STATE-HOPPE 16-2(PR_75CC) - OH - OH	13,400.00	7,065.39	1,472.90	1,042.39	3.421	SF
STATE-HOPPE 16-3(PR_150CC) - OH - OH	14,447.27	7,066.29	286.90	40.82	1.166	Level 2, CC, ES, SF
STOCKOVER 16-1(PR_75CC) - OH - OH	10,307.97	7,058.71	1,478.28	1,133.04	4.282	CC, ES
STOCKOVER 16-1(PR_75CC) - OH - OH	10,400.00	7,058.38	1,481.14	1,133.60	4.262	SF
ULRICH PC I 17-07D(PR_75CC) - OH - OH	14,872.41	7,194.19	2,162.20	2,090.96	30.351	CC, ES, SF
ULRICH PC I 17-08(PR_75CC) - OH - OH	14,872.41	7,065.00	995.05	708.37	3.471	CC, ES, SF
ULRICH PC I17-17D(PR_75CC) - OH - OH	14,872.41	7,294.77	1,837.31	1,710.29	14.465	CC, ES, SF

Offset Design												Offset Site Error:	0.00 ft
HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH												Offset Well Error:	3.28 ft
Survey Program: 100-GYRO-NS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	38.00	3.28	3.28	167.66	-1,600.03	349.92	1,638.29				
100.00	100.00	58.72	96.72	3.28	3.28	167.66	-1,600.09	349.93	1,637.91	1,631.34	6.57	249.410	CC
200.00	200.00	156.87	194.87	3.34	3.31	167.67	-1,600.40	349.90	1,638.21	1,631.57	6.65	246.386	
300.00	300.00	259.43	297.43	3.44	3.40	167.68	-1,600.72	349.70	1,638.47	1,631.63	6.85	239.348	
400.00	400.00	360.43	398.43	3.60	3.54	167.68	-1,600.83	349.62	1,638.56	1,631.42	7.14	229.401	
500.00	500.00	460.11	498.11	3.81	3.72	167.68	-1,600.94	349.64	1,638.68	1,631.15	7.53	217.704	
600.00	599.98	556.11	594.10	4.04	3.93	-102.37	-1,601.09	349.78	1,639.21	1,631.24	7.97	205.636	
700.00	699.95	652.65	690.64	4.30	4.18	-102.45	-1,601.58	349.88	1,640.25	1,631.78	8.48	193.519	
800.00	799.92	754.90	792.90	4.59	4.46	-102.53	-1,602.17	349.72	1,641.33	1,632.28	9.05	181.371	
900.00	899.89	858.26	896.25	4.90	4.77	-102.59	-1,602.62	349.17	1,642.18	1,632.51	9.67	169.787	
1,000.00	999.86	960.19	998.18	5.23	5.10	-102.66	-1,602.90	348.64	1,642.89	1,632.56	10.33	159.083	
1,100.00	1,099.83	1,058.06	1,096.04	5.58	5.42	-102.72	-1,603.18	347.96	1,643.56	1,632.56	11.00	149.423	
1,200.00	1,199.80	1,156.33	1,194.31	5.94	5.77	-102.78	-1,603.63	347.39	1,644.43	1,632.73	11.70	140.579	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
1,300.00	1,299.77	1,256.36	1,294.34	6.30	6.12	-102.84	-1,604.12	346.71	1,645.31	1,632.89	12.42	132.444		
1,400.00	1,399.73	1,358.20	1,396.18	6.68	6.50	-102.89	-1,604.62	345.88	1,646.17	1,633.00	13.17	124.979		
1,500.00	1,499.70	1,462.25	1,500.22	7.07	6.88	-102.95	-1,604.91	345.08	1,646.82	1,632.88	13.94	118.110		
1,600.00	1,599.67	1,564.80	1,602.77	7.46	7.27	-103.01	-1,604.96	344.30	1,647.26	1,632.53	14.72	111.896		
1,700.00	1,699.64	1,663.03	1,700.99	7.85	7.65	-103.06	-1,605.03	343.23	1,647.65	1,632.16	15.49	106.344		
1,800.00	1,799.61	1,760.05	1,798.01	8.25	8.03	-103.11	-1,605.26	342.32	1,648.23	1,631.96	16.27	101.303		
1,900.00	1,899.58	1,859.56	1,897.51	8.66	8.42	-103.16	-1,605.62	341.36	1,648.93	1,631.87	17.06	96.631		
2,000.00	1,999.55	1,957.93	1,995.88	9.06	8.81	-103.20	-1,606.00	340.35	1,649.65	1,631.79	17.86	92.363		
2,100.00	2,099.52	2,056.87	2,094.81	9.47	9.21	-103.24	-1,606.57	339.18	1,650.50	1,631.84	18.66	88.428		
2,200.00	2,199.48	2,156.24	2,194.18	9.89	9.60	-103.29	-1,607.09	338.18	1,651.36	1,631.88	19.48	84.789		
2,300.00	2,299.45	2,254.58	2,292.51	10.30	10.00	-103.34	-1,607.62	337.53	1,652.31	1,632.02	20.29	81.445		
2,400.00	2,399.42	2,358.07	2,395.99	10.72	10.42	-103.40	-1,608.24	336.64	1,653.27	1,632.15	21.12	78.266		
2,500.00	2,499.39	2,461.89	2,499.81	11.14	10.85	-103.45	-1,608.53	335.64	1,653.89	1,631.93	21.96	75.298		
2,600.00	2,599.36	2,563.40	2,601.32	11.56	11.26	-103.51	-1,608.62	334.96	1,654.41	1,631.61	22.80	72.565		
2,700.00	2,699.33	2,661.04	2,698.95	11.98	11.66	-103.57	-1,608.65	334.44	1,654.90	1,631.28	23.62	70.063		
2,800.00	2,799.30	2,758.82	2,796.73	12.41	12.07	-103.64	-1,608.89	333.93	1,655.61	1,631.16	24.44	67.729		
2,900.00	2,899.27	2,859.69	2,897.60	12.83	12.48	-103.70	-1,609.17	333.41	1,656.34	1,631.06	25.28	65.509		
3,000.00	2,999.23	2,958.41	2,996.32	13.26	12.89	-103.77	-1,609.38	332.99	1,657.04	1,630.92	26.12	63.447		
3,100.00	3,099.20	3,055.34	3,093.25	13.68	13.29	-103.83	-1,609.76	332.52	1,657.91	1,630.96	26.94	61.532		
3,200.00	3,199.17	3,156.43	3,194.33	14.11	13.72	-103.90	-1,610.27	332.05	1,658.88	1,631.09	27.79	59.692		
3,300.00	3,299.14	3,263.42	3,301.33	14.54	14.16	-103.98	-1,610.45	331.83	1,659.60	1,630.94	28.66	57.900		
3,400.00	3,399.11	3,371.18	3,409.08	14.97	14.61	-104.05	-1,610.19	331.17	1,659.83	1,630.29	29.54	56.191		
3,461.03	3,460.12	3,432.32	3,470.22	15.23	14.86	-104.09	-1,609.87	330.79	1,659.79	1,629.74	30.06	55.225		
3,500.00	3,499.08	3,469.19	3,507.09	15.40	15.02	-104.11	-1,609.73	330.52	1,659.82	1,629.44	30.38	54.643		
3,600.00	3,599.05	3,563.98	3,601.88	15.83	15.41	-104.17	-1,609.60	329.78	1,660.10	1,628.90	31.20	53.207		
3,700.00	3,699.02	3,655.53	3,693.42	16.26	15.80	-104.22	-1,609.81	329.11	1,660.76	1,628.75	32.01	51.878		
3,800.00	3,798.98	3,749.64	3,787.53	16.69	16.19	-104.26	-1,610.58	328.33	1,661.96	1,629.12	32.84	50.612		
3,900.00	3,898.95	3,852.18	3,890.06	17.12	16.62	-104.32	-1,611.49	327.53	1,663.25	1,629.55	33.70	49.356		
4,000.00	3,998.92	3,955.60	3,993.48	17.55	17.06	-104.37	-1,612.09	326.82	1,664.25	1,629.69	34.56	48.149		
4,100.00	4,098.89	4,056.05	4,093.92	17.98	17.48	-104.43	-1,612.60	326.05	1,665.18	1,629.77	35.42	47.014		
4,200.00	4,198.86	4,158.02	4,195.89	18.42	17.91	-104.48	-1,613.09	325.25	1,666.07	1,629.79	36.28	45.923		
4,300.00	4,298.83	4,272.76	4,310.63	18.85	18.40	-104.55	-1,613.12	324.48	1,666.57	1,629.38	37.19	44.807		
4,400.00	4,398.80	4,374.04	4,411.89	19.28	18.82	-104.61	-1,612.42	323.59	1,666.31	1,628.26	38.05	43.790		
4,500.00	4,498.77	4,474.23	4,512.09	19.72	19.24	-104.67	-1,611.86	322.74	1,666.19	1,627.28	38.91	42.825		
4,600.00	4,598.73	4,588.42	4,626.26	20.15	19.73	-104.73	-1,610.84	321.49	1,665.69	1,625.87	39.82	41.833		
4,700.00	4,698.70	4,681.42	4,719.25	20.58	20.12	-104.80	-1,609.52	320.94	1,664.81	1,624.16	40.65	40.960		
4,800.00	4,798.67	4,783.67	4,821.49	21.02	20.55	-104.90	-1,608.25	320.82	1,664.22	1,622.71	41.51	40.093		
4,878.73	4,877.37	4,850.27	4,888.09	21.36	20.83	-104.93	-1,607.69	320.01	1,663.86	1,621.72	42.13	39.489		
4,900.00	4,898.64	4,867.18	4,905.00	21.45	20.90	-104.94	-1,607.66	319.79	1,663.89	1,621.59	42.30	39.337		
5,000.00	4,998.61	4,954.30	4,992.11	21.89	21.27	-104.97	-1,608.02	318.83	1,664.63	1,621.53	43.10	38.622		
5,100.00	5,098.58	5,066.08	5,103.89	22.32	21.74	-105.07	-1,608.33	318.94	1,665.60	1,621.59	44.01	37.847		
5,200.00	5,198.55	5,180.74	5,218.54	22.76	22.22	-105.19	-1,607.18	319.35	1,665.37	1,620.44	44.93	37.069		
5,300.00	5,298.52	5,281.37	5,319.15	23.20	22.64	-105.31	-1,605.65	320.16	1,664.76	1,618.97	45.79	36.359		
5,384.94	5,383.43	5,356.71	5,394.48	23.57	22.96	-105.41	-1,604.62	320.99	1,664.46	1,617.99	46.48	35.813		
5,400.00	5,398.49	5,369.63	5,407.40	23.63	23.01	-105.43	-1,604.49	321.17	1,664.47	1,617.88	46.60	35.721		
5,500.00	5,498.45	5,457.79	5,495.55	24.07	23.38	-105.55	-1,604.02	322.37	1,664.99	1,617.58	47.41	35.122		
5,600.00	5,598.42	5,560.83	5,598.59	24.50	23.81	-105.66	-1,604.09	323.16	1,665.93	1,617.66	48.28	34.507		
5,700.00	5,698.39	5,663.35	5,701.10	24.94	24.24	-105.78	-1,603.58	324.16	1,666.39	1,617.25	49.15	33.906		
5,800.00	5,798.36	5,765.86	5,803.60	25.38	24.68	-105.91	-1,603.08	325.32	1,666.91	1,616.90	50.02	33.326		
5,900.00	5,898.33	5,864.36	5,902.10	25.81	25.09	-105.99	-1,602.69	325.41	1,667.25	1,616.38	50.87	32.774		
6,000.00	5,998.30	5,958.35	5,996.09	26.25	25.49	-106.10	-1,602.41	326.20	1,667.89	1,616.18	51.71	32.257 ES		
6,100.00	6,098.27	6,048.83	6,086.55	26.69	25.87	-106.24	-1,602.25	327.97	1,668.96	1,616.44	52.52	31.775		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
6,200.00	6,198.24	6,148.78	6,186.48	27.12	26.29	-106.38	-1,602.62	329.92	1,670.57	1,617.19	53.38	31.293		
6,300.00	6,298.20	6,255.93	6,293.62	27.56	26.74	-106.51	-1,602.61	331.39	1,671.65	1,617.37	54.28	30.798		
6,400.00	6,398.17	6,350.35	6,388.02	28.00	27.14	-106.66	-1,602.41	333.28	1,672.73	1,617.62	55.11	30.350		
6,500.00	6,498.14	6,435.39	6,473.04	28.43	27.50	-106.77	-1,602.79	334.82	1,674.42	1,618.51	55.91	29.951		
6,600.00	6,597.68	6,520.41	6,558.03	28.88	27.86	-105.75	-1,604.17	336.50	1,678.88	1,622.19	56.70	29.612		
6,700.00	6,694.68	6,639.44	6,677.04	29.32	28.37	-105.88	-1,606.06	337.56	1,687.42	1,629.75	57.67	29.262		
6,800.00	6,786.74	6,770.43	6,767.18	29.77	28.92	-105.88	-1,606.61	337.32	1,699.53	1,640.86	58.67	28.967		
6,900.00	6,871.61	6,814.28	6,851.87	30.24	29.11	-105.74	-1,607.54	337.59	1,717.59	1,658.27	59.32	28.955 SF		
7,000.00	6,947.19	6,889.65	6,927.24	30.74	29.43	-105.20	-1,608.38	337.83	1,741.59	1,681.47	60.12	28.967		
7,100.00	7,011.62	6,953.85	6,991.43	31.32	29.70	-104.03	-1,609.09	338.04	1,772.03	1,711.10	60.93	29.083		
7,200.00	7,063.31	7,005.28	7,042.86	32.03	29.92	-101.99	-1,609.66	338.21	1,809.11	1,747.37	61.74	29.300		
7,300.00	7,101.00	7,042.68	7,080.26	32.89	30.08	-98.89	-1,610.07	338.33	1,852.65	1,790.09	62.57	29.611		
7,400.00	7,123.74	7,065.13	7,102.71	33.93	30.18	-94.57	-1,610.32	338.40	1,902.04	1,838.66	63.37	30.013		
7,500.00	7,131.00	7,072.08	7,109.66	35.10	30.21	-89.10	-1,610.40	338.43	1,956.17	1,892.04	64.13	30.501		
7,600.00	7,130.63	7,071.41	7,108.99	36.44	30.20	-89.08	-1,610.39	338.42	2,013.92	1,949.03	64.88	31.039		
7,700.00	7,130.26	7,070.75	7,108.32	37.94	30.20	-89.06	-1,610.38	338.42	2,074.88	2,009.21	65.66	31.600		
7,800.00	7,129.90	7,070.08	7,107.66	39.59	30.20	-89.03	-1,610.37	338.42	2,138.77	2,072.33	66.45	32.187		
7,900.00	7,129.53	7,069.41	7,106.99	41.37	30.20	-89.01	-1,610.37	338.42	2,205.36	2,138.13	67.23	32.802		
8,000.00	7,129.17	7,068.74	7,106.32	43.27	30.19	-88.99	-1,610.36	338.41	2,274.39	2,206.39	68.00	33.446		
8,100.00	7,128.80	7,068.07	7,105.65	45.27	30.19	-88.96	-1,610.35	338.41	2,345.66	2,276.91	68.75	34.120		
8,200.00	7,128.43	7,067.40	7,104.98	47.36	30.19	-88.94	-1,610.34	338.41	2,418.96	2,349.49	69.47	34.821		
8,300.00	7,128.07	7,066.73	7,104.31	49.52	30.18	-88.91	-1,610.34	338.41	2,494.11	2,423.95	70.16	35.549		
8,400.00	7,127.70	7,066.07	7,103.65	51.75	30.18	-88.89	-1,610.33	338.41	2,570.96	2,500.14	70.82	36.304		
8,500.00	7,127.33	7,065.40	7,102.98	54.04	30.18	-88.87	-1,610.32	338.40	2,649.36	2,577.91	71.45	37.082		
8,600.00	7,126.97	7,064.73	7,102.31	56.38	30.18	-88.84	-1,610.31	338.40	2,729.16	2,657.12	72.04	37.883		
8,700.00	7,126.60	7,064.06	7,101.64	58.77	30.17	-88.82	-1,610.31	338.40	2,810.26	2,737.66	72.61	38.706		
8,800.00	7,126.24	7,063.39	7,100.97	61.19	30.17	-88.80	-1,610.30	338.40	2,892.54	2,819.40	73.14	39.548		
8,900.00	7,125.87	7,062.72	7,100.30	63.65	30.17	-88.77	-1,610.29	338.40	2,975.91	2,902.27	73.65	40.408		
9,000.00	7,125.50	7,062.06	7,099.64	66.15	30.16	-88.75	-1,610.29	338.39	3,060.28	2,986.15	74.13	41.285		
9,100.00	7,125.14	7,061.39	7,098.97	68.67	30.16	-88.73	-1,610.28	338.39	3,145.56	3,070.98	74.58	42.178		
9,200.00	7,124.77	7,060.72	7,098.30	71.21	30.16	-88.70	-1,610.27	338.39	3,231.68	3,156.67	75.01	43.085		
9,300.00	7,124.41	7,060.05	7,097.63	73.78	30.16	-88.68	-1,610.26	338.39	3,318.58	3,243.17	75.41	44.005		
9,400.00	7,124.04	7,059.38	7,096.96	76.37	30.15	-88.65	-1,610.26	338.38	3,406.21	3,330.41	75.80	44.938		
9,500.00	7,123.67	7,058.71	7,096.29	78.98	30.15	-88.63	-1,610.25	338.38	3,494.49	3,418.33	76.16	45.881		
9,600.00	7,123.31	7,058.05	7,095.63	81.60	30.15	-88.61	-1,610.24	338.38	3,583.39	3,506.88	76.51	46.835		
9,700.00	7,122.94	7,057.38	7,094.96	84.24	30.14	-88.58	-1,610.23	338.38	3,672.86	3,596.03	76.84	47.799		
9,800.00	7,122.57	7,056.71	7,094.29	86.90	30.14	-88.56	-1,610.23	338.38	3,762.87	3,685.71	77.15	48.772		
9,900.00	7,122.21	7,056.04	7,093.62	89.56	30.14	-88.54	-1,610.22	338.37	3,853.36	3,775.91	77.45	49.752		
10,000.00	7,121.84	7,055.37	7,092.95	92.24	30.14	-88.51	-1,610.21	338.37	3,944.32	3,866.58	77.74	50.740		
10,100.00	7,121.48	7,054.70	7,092.28	94.92	30.13	-88.49	-1,610.20	338.37	4,035.70	3,957.69	78.01	51.735		
10,200.00	7,121.11	7,054.04	7,091.62	97.62	30.13	-88.47	-1,610.20	338.37	4,127.48	4,049.21	78.27	52.737		
10,300.00	7,120.74	7,053.37	7,090.95	100.32	30.13	-88.44	-1,610.19	338.36	4,219.63	4,141.12	78.51	53.744		
10,400.00	7,120.38	7,052.70	7,090.28	103.04	30.12	-88.42	-1,610.18	338.36	4,312.14	4,233.39	78.75	54.757		
10,500.00	7,120.01	7,052.03	7,089.61	105.76	30.12	-88.39	-1,610.17	338.36	4,404.97	4,325.99	78.98	55.774		
10,600.00	7,119.64	7,051.36	7,088.94	108.48	30.12	-88.37	-1,610.17	338.36	4,498.11	4,418.91	79.20	56.797		
10,700.00	7,119.28	7,050.69	7,088.27	111.22	30.12	-88.35	-1,610.16	338.36	4,591.54	4,512.13	79.41	57.823		
10,800.00	7,118.91	7,050.03	7,087.61	113.96	30.11	-88.32	-1,610.15	338.35	4,685.24	4,605.63	79.61	58.853		
10,900.00	7,118.55	7,049.36	7,086.94	116.70	30.11	-88.30	-1,610.14	338.35	4,779.19	4,699.39	79.80	59.887		
11,000.00	7,118.18	7,048.69	7,086.27	119.45	30.11	-88.28	-1,610.14	338.35	4,873.39	4,793.39	79.99	60.925		
11,100.00	7,117.81	7,048.02	7,085.60	122.21	30.10	-88.25	-1,610.13	338.35	4,967.81	4,887.64	80.17	61.965		
11,200.00	7,117.45	7,047.35	7,084.93	124.97	30.10	-88.23	-1,610.12	338.35	5,062.44	4,982.10	80.35	63.008		
11,300.00	7,117.08	7,046.68	7,084.26	127.73	30.10	-88.21	-1,610.11	338.34	5,157.28	5,076.77	80.52	64.054		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
11,400.00	7,116.72	7,046.01	7,083.60	130.50	30.10	-88.18	-1,610.11	338.34	5,252.31	5,171.63	80.68	65.101	
11,500.00	7,116.35	7,045.35	7,082.93	133.27	30.09	-88.16	-1,610.10	338.34	5,347.52	5,266.68	80.84	66.151	
11,600.00	7,115.98	7,044.68	7,082.26	136.04	30.09	-88.13	-1,610.09	338.34	5,442.90	5,361.91	80.99	67.203	
11,700.00	7,115.62	7,044.01	7,081.59	138.82	30.09	-88.11	-1,610.09	338.33	5,538.45	5,457.31	81.14	68.257	
11,800.00	7,115.25	7,043.34	7,080.92	141.60	30.08	-88.09	-1,610.08	338.33	5,634.15	5,552.86	81.29	69.312	
11,900.00	7,114.88	7,042.67	7,080.25	144.39	30.08	-88.06	-1,610.07	338.33	5,729.99	5,648.57	81.43	70.368	
12,000.00	7,114.52	7,042.00	7,079.58	147.17	30.08	-88.04	-1,610.06	338.33	5,825.98	5,744.41	81.57	71.426	
12,100.00	7,114.15	7,041.34	7,078.92	149.96	30.08	-88.02	-1,610.06	338.33	5,922.10	5,840.40	81.70	72.485	
12,200.00	7,113.79	7,040.67	7,078.25	152.75	30.07	-87.99	-1,610.05	338.32	6,018.34	5,936.51	81.83	73.544	
12,300.00	7,113.42	7,040.00	7,077.58	155.55	30.07	-87.97	-1,610.04	338.32	6,114.71	6,032.75	81.96	74.605	
12,400.00	7,113.05	7,039.33	7,076.91	158.34	30.07	-87.95	-1,610.03	338.32	6,211.19	6,129.10	82.09	75.666	
12,500.00	7,112.69	7,038.66	7,076.24	161.14	30.06	-87.92	-1,610.03	338.32	6,307.78	6,225.57	82.21	76.728	
12,600.00	7,112.32	7,037.99	7,075.57	163.94	30.06	-87.90	-1,610.02	338.32	6,404.48	6,322.14	82.33	77.790	
12,700.00	7,111.96	7,037.33	7,074.91	166.74	30.06	-87.87	-1,610.01	338.31	6,501.27	6,418.82	82.45	78.852	
12,800.00	7,111.59	7,036.66	7,074.24	169.54	30.06	-87.85	-1,610.00	338.31	6,598.16	6,515.60	82.56	79.915	
12,900.00	7,111.22	7,035.99	7,073.57	172.35	30.05	-87.83	-1,610.00	338.31	6,695.14	6,612.46	82.68	80.978	
13,000.00	7,110.86	7,035.32	7,072.90	175.16	30.05	-87.80	-1,609.99	338.31	6,792.21	6,709.42	82.79	82.041	
13,100.00	7,110.49	7,034.65	7,072.23	177.96	30.05	-87.78	-1,609.98	338.30	6,889.36	6,806.46	82.90	83.104	
13,200.00	7,110.12	7,033.98	7,071.56	180.77	30.05	-87.76	-1,609.97	338.30	6,986.60	6,903.59	83.01	84.167	
13,300.00	7,109.76	7,033.32	7,070.90	183.58	30.04	-87.73	-1,609.97	338.30	7,083.91	7,000.79	83.12	85.229	
13,400.00	7,109.39	7,032.65	7,070.23	186.40	30.04	-87.71	-1,609.96	338.30	7,181.29	7,098.07	83.22	86.292	
13,500.00	7,109.03	7,031.98	7,069.56	189.21	30.04	-87.69	-1,609.95	338.30	7,278.74	7,195.42	83.33	87.354	
13,600.00	7,108.66	7,031.31	7,068.89	192.03	30.03	-87.66	-1,609.94	338.29	7,376.27	7,292.84	83.43	88.415	
13,700.00	7,108.29	7,030.64	7,068.22	194.84	30.03	-87.64	-1,609.94	338.29	7,473.86	7,390.33	83.53	89.476	
13,800.00	7,107.93	7,029.97	7,067.55	197.66	30.03	-87.61	-1,609.93	338.29	7,571.51	7,487.88	83.63	90.537	
13,900.00	7,107.56	7,029.31	7,066.89	200.48	30.03	-87.59	-1,609.92	338.29	7,669.22	7,585.49	83.73	91.597	
14,000.00	7,107.19	7,028.64	7,066.22	203.30	30.02	-87.57	-1,609.92	338.28	7,766.99	7,683.16	83.83	92.656	
14,100.00	7,106.83	7,027.97	7,065.55	206.12	30.02	-87.54	-1,609.91	338.28	7,864.81	7,780.89	83.92	93.715	
14,200.00	7,106.46	7,027.30	7,064.88	208.94	30.02	-87.52	-1,609.90	338.28	7,962.69	7,878.68	84.02	94.773	
14,300.00	7,106.10	7,026.63	7,064.21	211.76	30.01	-87.50	-1,609.89	338.28	8,060.63	7,976.51	84.11	95.830	
14,400.00	7,105.73	7,025.96	7,063.54	214.58	30.01	-87.47	-1,609.89	338.28	8,158.61	8,074.40	84.21	96.886	
14,500.00	7,105.36	7,025.29	7,062.88	217.40	30.01	-87.45	-1,609.88	338.27	8,256.64	8,172.34	84.30	97.941	
14,600.00	7,105.00	7,024.63	7,062.21	220.23	30.01	-87.43	-1,609.87	338.27	8,354.71	8,270.32	84.40	98.995	
14,700.00	7,104.63	7,023.96	7,061.54	223.05	30.00	-87.40	-1,609.86	338.27	8,452.84	8,368.35	84.49	100.048	
14,800.00	7,104.27	7,023.29	7,060.87	225.88	30.00	-87.38	-1,609.86	338.27	8,551.00	8,466.42	84.58	101.100	
14,872.41	7,104.00	7,022.81	7,060.39	227.93	30.00	-87.36	-1,609.85	338.27	8,622.11	8,537.46	84.65	101.862	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	70.00	3.28	3.28	172.83	-4,339.24	545.52	4,373.95					
100.00	100.00	29.33	99.33	3.28	3.28	172.83	-4,339.24	545.51	4,373.40	4,366.83	6.57	666.138		
200.00	200.00	124.79	194.79	3.34	3.30	172.84	-4,339.31	545.30	4,373.44	4,366.81	6.63	659.383		
300.00	300.00	214.94	284.94	3.44	3.36	172.84	-4,339.56	545.03	4,373.68	4,366.88	6.80	643.177		
400.00	400.00	309.68	379.67	3.60	3.46	172.84	-4,339.97	544.94	4,374.10	4,367.03	7.07	618.967		
500.00	500.00	412.35	482.35	3.81	3.63	172.84	-4,340.41	544.98	4,374.52	4,367.09	7.43	588.392		
600.00	599.98	510.89	580.88	4.04	3.83	-97.17	-4,340.83	544.99	4,375.15	4,367.28	7.87	556.084		
700.00	699.95	614.30	684.30	4.30	4.08	-97.20	-4,341.28	544.74	4,375.86	4,367.49	8.38	522.433		
800.00	799.92	718.16	788.15	4.59	4.36	-97.22	-4,341.64	544.24	4,376.46	4,367.52	8.94	489.341		
900.00	899.89	811.10	881.09	4.90	4.63	-97.24	-4,342.07	543.53	4,377.14	4,367.61	9.53	459.461		
1,000.00	999.86	911.36	981.34	5.23	4.94	-97.26	-4,342.61	542.46	4,377.85	4,367.68	10.17	430.501		
1,100.00	1,099.83	992.58	1,062.55	5.58	5.21	-97.27	-4,343.28	541.32	4,378.81	4,368.03	10.78	406.180		
1,200.00	1,199.80	1,081.59	1,151.54	5.94	5.51	-97.28	-4,344.35	539.83	4,380.11	4,368.67	11.44	382.845		
1,300.00	1,299.77	1,177.46	1,247.39	6.30	5.84	-97.29	-4,345.70	538.13	4,381.59	4,369.44	12.15	360.752		
1,400.00	1,399.73	1,286.77	1,356.66	6.68	6.24	-97.29	-4,347.20	536.03	4,383.03	4,370.11	12.92	339.307		
1,500.00	1,499.70	1,393.66	1,463.53	7.07	6.63	-97.30	-4,348.45	533.77	4,384.24	4,370.54	13.70	320.078		
1,600.00	1,599.67	1,492.88	1,562.72	7.46	7.01	-97.30	-4,349.54	531.73	4,385.39	4,370.92	14.46	303.246		
1,700.00	1,699.64	1,584.88	1,654.69	7.85	7.36	-97.31	-4,350.63	529.95	4,386.63	4,371.42	15.21	288.437		
1,800.00	1,799.61	1,707.23	1,777.01	8.25	7.83	-97.31	-4,351.94	527.64	4,387.78	4,371.70	16.08	272.842		
1,900.00	1,899.58	1,790.73	1,860.50	8.66	8.16	-97.32	-4,352.74	526.18	4,388.83	4,372.02	16.81	261.058		
2,000.00	1,999.55	1,885.08	1,954.84	9.06	8.53	-97.33	-4,353.86	524.66	4,390.11	4,372.52	17.59	249.572		
2,100.00	2,099.52	1,977.75	2,047.48	9.47	8.90	-97.34	-4,355.09	523.04	4,391.53	4,373.16	18.37	239.079		
2,200.00	2,199.48	2,067.73	2,137.43	9.89	9.26	-97.34	-4,356.48	521.36	4,393.14	4,374.00	19.14	229.518		
2,300.00	2,299.45	2,165.33	2,235.00	10.30	9.65	-97.35	-4,358.17	519.49	4,394.93	4,374.99	19.95	220.316		
2,400.00	2,399.42	2,308.09	2,377.72	10.72	10.23	-97.35	-4,360.08	516.83	4,396.39	4,375.45	20.94	209.912		
2,500.00	2,499.39	2,486.87	2,556.48	11.14	10.96	-97.38	-4,359.83	514.12	4,396.42	4,374.34	22.08	199.069		
2,600.00	2,599.36	2,594.93	2,664.51	11.56	11.40	-97.39	-4,358.45	512.51	4,395.28	4,372.34	22.94	191.567		
2,700.00	2,699.33	2,695.95	2,765.52	11.98	11.81	-97.41	-4,357.14	510.89	4,394.11	4,370.33	23.78	184.798		
2,800.00	2,799.30	2,790.07	2,859.61	12.41	12.20	-97.42	-4,355.98	509.25	4,392.99	4,368.40	24.59	178.671		
2,900.00	2,899.27	2,888.77	2,958.29	12.83	12.61	-97.43	-4,354.87	507.46	4,391.96	4,366.54	25.42	172.796		
3,000.00	2,999.23	2,981.73	3,051.23	13.26	12.99	-97.44	-4,353.90	505.71	4,391.01	4,364.78	26.23	167.430		
3,100.00	3,099.20	3,086.68	3,156.15	13.68	13.43	-97.45	-4,352.89	503.63	4,390.12	4,363.04	27.09	162.083		
3,200.00	3,199.17	3,195.59	3,265.04	14.11	13.88	-97.46	-4,351.64	501.45	4,389.05	4,361.08	27.96	156.958		
3,300.00	3,299.14	3,281.63	3,351.05	14.54	14.24	-97.46	-4,350.68	499.79	4,388.02	4,359.27	28.75	152.631		
3,400.00	3,399.11	3,368.48	3,437.88	14.97	14.61	-97.47	-4,350.02	497.98	4,387.32	4,357.78	29.54	148.522		
3,500.00	3,499.08	3,459.38	3,528.76	15.40	14.99	-97.47	-4,349.61	495.78	4,386.87	4,356.53	30.35	144.549		
3,600.00	3,599.05	3,551.79	3,621.13	15.83	15.37	-97.47	-4,349.38	493.31	4,386.61	4,355.44	31.16	140.755		
3,700.00	3,699.02	3,647.95	3,717.26	16.26	15.78	-97.47	-4,349.26	490.95	4,386.50	4,354.50	32.00	137.088		
3,798.76	3,797.75	3,742.72	3,812.01	16.68	16.17	-97.48	-4,349.13	489.07	4,386.42	4,353.60	32.82	133.652		
3,800.00	3,798.98	3,743.84	3,813.13	16.69	16.18	-97.48	-4,349.13	489.05	4,386.42	4,353.59	32.83	133.612		
3,900.00	3,898.95	3,839.82	3,909.09	17.12	16.58	-97.48	-4,349.16	487.03	4,386.51	4,352.85	33.66	130.307		
4,000.00	3,998.92	3,943.49	4,012.75	17.55	17.02	-97.49	-4,349.12	485.17	4,386.56	4,352.03	34.53	127.039		
4,100.00	4,098.89	4,045.17	4,114.41	17.98	17.45	-97.50	-4,348.99	483.51	4,386.54	4,351.15	35.39	123.958		
4,200.00	4,198.86	4,151.27	4,220.50	18.42	17.89	-97.52	-4,348.70	482.47	4,386.48	4,350.21	36.26	120.958		
4,300.00	4,298.83	4,270.18	4,339.41	18.85	18.39	-97.57	-4,347.82	482.95	4,386.13	4,348.93	37.20	117.922		
4,400.00	4,398.80	4,413.89	4,483.10	19.28	18.99	-97.63	-4,345.60	484.01	4,385.02	4,346.80	38.23	114.710		
4,500.00	4,498.77	4,507.32	4,576.51	19.72	19.38	-97.68	-4,343.73	484.78	4,383.48	4,344.43	39.05	112.241		
4,600.00	4,598.73	4,580.39	4,649.57	20.15	19.68	-97.71	-4,342.58	485.32	4,382.35	4,342.55	39.80	110.114		
4,700.00	4,698.70	4,649.05	4,718.22	20.58	19.97	-97.74	-4,341.96	485.65	4,381.87	4,341.35	40.52	108.133		
4,714.48	4,713.18	4,658.76	4,727.93	20.65	20.01	-97.74	-4,341.92	485.70	4,381.86	4,341.24	40.63	107.857		
4,800.00	4,798.67	4,724.26	4,793.43	21.02	20.29	-97.77	-4,341.86	486.02	4,382.12	4,340.84	41.27	106.172		
4,900.00	4,898.64	4,824.84	4,894.01	21.45	20.71	-97.81	-4,341.90	486.55	4,382.56	4,340.43	42.13	104.020		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
5,000.00	4,998.61	4,923.88	4,993.04	21.89	21.12	-97.84	-4,341.98	486.83	4,383.02	4,340.04	42.98	101.969	
5,100.00	5,098.58	5,024.50	5,093.66	22.32	21.54	-97.88	-4,342.06	487.19	4,383.49	4,339.65	43.84	99.981	
5,200.00	5,198.55	5,132.68	5,201.84	22.76	22.00	-97.92	-4,342.02	487.83	4,383.88	4,339.14	44.74	97.996	
5,300.00	5,298.52	5,266.52	5,335.68	23.20	22.56	-97.98	-4,341.39	488.79	4,383.89	4,338.15	45.73	95.855	
5,400.00	5,398.49	5,422.70	5,491.82	23.63	23.22	-98.06	-4,338.89	490.95	4,382.91	4,336.08	46.82	93.606	
5,500.00	5,498.45	5,558.48	5,627.46	24.07	23.79	-98.17	-4,334.07	495.10	4,379.97	4,332.15	47.83	91.581	
5,600.00	5,598.42	5,623.05	5,691.97	24.50	24.07	-98.22	-4,332.17	496.82	4,377.79	4,329.25	48.54	90.181	
5,700.00	5,698.39	5,688.50	5,757.39	24.94	24.35	-98.26	-4,330.83	498.13	4,376.41	4,327.14	49.26	88.837	
5,800.00	5,798.36	5,762.26	5,831.14	25.38	24.66	-98.29	-4,329.93	499.05	4,375.73	4,325.72	50.01	87.490	
5,900.00	5,898.33	5,846.33	5,915.21	25.81	25.01	-98.33	-4,329.44	499.48	4,375.58	4,324.77	50.81	86.122	
6,000.00	5,998.30	5,951.90	6,020.78	26.25	25.46	-98.37	-4,329.01	499.73	4,375.58	4,323.89	51.69	84.650	
6,100.00	6,098.27	6,056.28	6,125.15	26.69	25.90	-98.40	-4,328.34	499.67	4,375.29	4,322.72	52.57	83.230	
6,200.00	6,198.24	6,162.31	6,231.18	27.12	26.35	-98.43	-4,327.71	499.48	4,375.05	4,321.59	53.45	81.846	
6,300.00	6,298.20	6,276.86	6,345.72	27.56	26.84	-98.47	-4,326.67	499.21	4,374.48	4,320.11	54.38	80.449	
6,400.00	6,398.17	6,370.32	6,439.18	28.00	27.23	-98.50	-4,325.70	498.96	4,373.79	4,318.58	55.21	79.222	
6,500.00	6,498.14	6,463.83	6,532.69	28.43	27.63	-98.53	-4,324.95	498.70	4,373.32	4,317.27	56.04	78.034	
6,522.43	6,520.55	6,485.37	6,554.23	28.53	27.72	-97.92	-4,324.80	498.57	4,373.27	4,317.04	56.23	77.769 CC	
6,600.00	6,597.68	6,563.14	6,632.00	28.88	28.05	-97.64	-4,324.26	498.10	4,373.70	4,316.80	56.91	76.858 ES	
6,700.00	6,694.68	6,673.79	6,742.64	29.32	28.52	-97.70	-4,323.28	497.95	4,376.07	4,318.25	57.82	75.680	
6,800.00	6,786.74	6,774.47	6,843.31	29.77	28.95	-97.79	-4,322.00	498.16	4,380.43	4,321.73	58.70	74.620	
6,900.00	6,871.61	6,858.97	6,927.81	30.24	29.31	-97.73	-4,320.93	497.91	4,387.30	4,327.77	59.53	73.699	
7,000.00	6,947.19	6,934.02	7,002.85	30.74	29.63	-97.49	-4,319.98	497.81	4,397.07	4,336.72	60.36	72.852	
7,100.00	7,011.62	6,998.75	7,067.57	31.32	29.90	-96.97	-4,319.04	498.33	4,409.98	4,348.77	61.21	72.044	
7,200.00	7,063.31	7,033.22	7,102.03	32.03	30.05	-95.87	-4,318.55	498.81	4,426.30	4,364.25	62.05	71.333	
7,300.00	7,101.00	7,057.65	7,126.46	32.89	30.15	-94.36	-4,318.28	499.18	4,446.09	4,383.10	62.98	70.592	
7,400.00	7,123.74	7,071.91	7,140.72	33.93	30.22	-92.42	-4,318.15	499.40	4,469.03	4,405.02	64.01	69.819	
7,500.00	7,131.00	7,075.71	7,144.52	35.10	30.23	-90.12	-4,318.12	499.46	4,494.68	4,429.58	65.10	69.040	
7,600.00	7,130.63	7,074.40	7,143.21	36.44	30.23	-90.10	-4,318.13	499.44	4,522.50	4,456.21	66.29	68.220	
7,700.00	7,130.26	7,073.09	7,141.90	37.94	30.22	-90.09	-4,318.14	499.42	4,552.35	4,484.74	67.61	67.333	
7,800.00	7,129.90	7,071.79	7,140.60	39.59	30.21	-90.07	-4,318.15	499.40	4,584.19	4,515.16	69.03	66.408	
7,900.00	7,129.53	7,070.49	7,139.30	41.37	30.21	-90.05	-4,318.16	499.38	4,617.97	4,547.43	70.53	65.471	
8,000.00	7,129.17	7,069.20	7,138.01	43.27	30.20	-90.03	-4,318.17	499.35	4,653.65	4,581.55	72.10	64.541	
8,100.00	7,128.80	7,067.91	7,136.72	45.27	30.20	-90.02	-4,318.18	499.33	4,691.20	4,617.48	73.72	63.634	
8,200.00	7,128.43	7,066.63	7,135.44	47.36	30.19	-90.00	-4,318.20	499.31	4,730.56	4,655.19	75.37	62.761	
8,300.00	7,128.07	7,065.36	7,134.16	49.52	30.19	-89.98	-4,318.21	499.30	4,771.69	4,694.65	77.05	61.931	
8,400.00	7,127.70	7,064.08	7,132.89	51.75	30.18	-89.97	-4,318.22	499.28	4,814.55	4,735.82	78.74	61.148	
8,500.00	7,127.33	7,062.82	7,131.62	54.04	30.18	-89.95	-4,318.23	499.26	4,859.09	4,778.66	80.43	60.417	
8,600.00	7,126.97	7,061.56	7,130.36	56.38	30.17	-89.93	-4,318.24	499.24	4,905.26	4,823.15	82.11	59.738	
8,700.00	7,126.60	7,060.30	7,129.11	58.77	30.17	-89.92	-4,318.25	499.22	4,953.02	4,869.23	83.79	59.113	
8,800.00	7,126.24	7,059.05	7,127.85	61.19	30.16	-89.90	-4,318.27	499.20	5,002.32	4,916.87	85.45	58.541	
8,900.00	7,125.87	7,057.80	7,126.61	63.65	30.16	-89.88	-4,318.28	499.18	5,053.12	4,966.03	87.09	58.022	
9,000.00	7,125.50	7,056.56	7,125.37	66.15	30.15	-89.87	-4,318.29	499.16	5,105.38	5,016.67	88.71	57.553	
9,100.00	7,125.14	7,055.32	7,124.13	68.67	30.14	-89.85	-4,318.30	499.14	5,159.04	5,068.74	90.30	57.133	
9,200.00	7,124.77	7,054.09	7,122.90	71.21	30.14	-89.83	-4,318.31	499.12	5,214.07	5,122.21	91.86	56.760	
9,300.00	7,124.41	7,052.86	7,121.67	73.78	30.13	-89.82	-4,318.33	499.10	5,270.42	5,177.02	93.39	56.432	
9,400.00	7,124.04	7,051.64	7,120.45	76.37	30.13	-89.80	-4,318.34	499.09	5,328.05	5,233.15	94.89	56.147	
9,500.00	7,123.67	7,050.42	7,119.23	78.98	30.12	-89.79	-4,318.35	499.07	5,386.92	5,290.56	96.36	55.903	
9,600.00	7,123.31	7,049.21	7,118.02	81.60	30.12	-89.77	-4,318.37	499.05	5,446.99	5,349.19	97.80	55.697	
9,700.00	7,122.94	7,048.00	7,116.81	84.24	30.11	-89.75	-4,318.38	499.03	5,508.22	5,409.02	99.20	55.529	
9,800.00	7,122.57	7,046.79	7,115.60	86.90	30.11	-89.74	-4,318.39	499.01	5,570.57	5,470.01	100.56	55.395	
9,900.00	7,122.21	7,045.59	7,114.40	89.56	30.10	-89.72	-4,318.40	499.00	5,634.00	5,532.11	101.89	55.293	
10,000.00	7,121.84	7,044.40	7,113.21	92.24	30.10	-89.71	-4,318.42	498.98	5,698.49	5,595.30	103.19	55.224	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,100.00	7,121.48	7,043.21	7,112.02	94.92	30.09	-89.69	-4,318.43	498.96	5,763.99	5,659.53	104.45	55.183		
10,200.00	7,121.11	7,042.02	7,110.83	97.62	30.09	-89.67	-4,318.44	498.94	5,830.46	5,724.78	105.68	55.171 SF		
10,300.00	7,120.74	7,040.84	7,109.65	100.32	30.08	-89.66	-4,318.46	498.92	5,897.89	5,791.01	106.88	55.184		
10,400.00	7,120.38	7,039.66	7,108.48	103.04	30.08	-89.64	-4,318.47	498.91	5,966.22	5,858.18	108.04	55.223		
10,500.00	7,120.01	7,038.49	7,107.30	105.76	30.07	-89.63	-4,318.49	498.89	6,035.44	5,926.27	109.17	55.285		
10,600.00	7,119.64	7,037.32	7,106.14	108.48	30.07	-89.61	-4,318.50	498.87	6,105.51	5,995.25	110.27	55.370		
10,700.00	7,119.28	7,036.16	7,104.97	111.22	30.06	-89.60	-4,318.51	498.86	6,176.41	6,065.08	111.33	55.476		
10,800.00	7,118.91	7,035.00	7,103.81	113.96	30.06	-89.58	-4,318.53	498.84	6,248.10	6,135.73	112.37	55.602		
10,900.00	7,118.55	7,033.85	7,102.66	116.70	30.05	-89.57	-4,318.54	498.82	6,320.56	6,207.18	113.38	55.747		
11,000.00	7,118.18	7,032.70	7,101.51	119.45	30.05	-89.55	-4,318.56	498.81	6,393.77	6,279.41	114.36	55.910		
11,100.00	7,117.81	7,031.55	7,100.36	122.21	30.04	-89.54	-4,318.57	498.79	6,467.69	6,352.38	115.31	56.089		
11,200.00	7,117.45	7,030.41	7,099.22	124.97	30.04	-89.52	-4,318.58	498.77	6,542.30	6,426.06	116.23	56.286		
11,300.00	7,117.08	7,029.27	7,098.08	127.73	30.03	-89.51	-4,318.60	498.76	6,617.58	6,500.45	117.13	56.497		
11,400.00	7,116.72	7,028.14	7,096.95	130.50	30.03	-89.49	-4,318.61	498.74	6,693.51	6,575.51	118.00	56.723		
11,500.00	7,116.35	7,027.01	7,095.82	133.27	30.02	-89.48	-4,318.63	498.72	6,770.07	6,651.22	118.85	56.963		
11,600.00	7,115.98	7,025.88	7,094.70	136.04	30.02	-89.46	-4,318.64	498.71	6,847.23	6,727.55	119.67	57.217		
11,700.00	7,115.62	7,024.76	7,093.58	138.82	30.02	-89.45	-4,318.66	498.69	6,924.97	6,804.50	120.47	57.483		
11,800.00	7,115.25	7,023.65	7,092.46	141.60	30.01	-89.43	-4,318.67	498.68	7,003.28	6,882.03	121.25	57.760		
11,900.00	7,114.88	7,022.53	7,091.35	144.39	30.01	-89.42	-4,318.69	498.66	7,082.13	6,960.13	122.00	58.050		
12,000.00	7,114.52	7,021.43	7,090.24	147.17	30.00	-89.40	-4,318.70	498.65	7,161.51	7,038.78	122.73	58.350		
12,100.00	7,114.15	7,020.32	7,089.14	149.96	30.00	-89.39	-4,318.72	498.63	7,241.41	7,117.96	123.45	58.660		
12,200.00	7,113.79	7,019.22	7,088.04	152.75	29.99	-89.37	-4,318.73	498.61	7,321.79	7,197.65	124.14	58.980		
12,300.00	7,113.42	7,018.12	7,086.94	155.55	29.99	-89.36	-4,318.75	498.60	7,402.65	7,277.84	124.81	59.310		
12,400.00	7,113.05	7,017.03	7,085.85	158.34	29.98	-89.34	-4,318.76	498.58	7,483.98	7,358.51	125.47	59.649		
12,500.00	7,112.69	7,015.94	7,084.76	161.14	29.98	-89.33	-4,318.78	498.57	7,565.75	7,439.65	126.10	59.996		
12,600.00	7,112.32	7,014.86	7,083.68	163.94	29.97	-89.32	-4,318.79	498.55	7,647.96	7,521.24	126.72	60.352		
12,700.00	7,111.96	7,013.78	7,082.60	166.74	29.97	-89.30	-4,318.81	498.54	7,730.59	7,603.26	127.32	60.715		
12,800.00	7,111.59	7,000.01	7,068.83	169.54	29.91	-89.12	-4,319.02	498.35	7,813.63	7,685.78	127.86	61.113		
12,900.00	7,111.22	7,000.01	7,068.83	172.35	29.91	-89.12	-4,319.02	498.35	7,897.06	7,768.62	128.43	61.489		
13,000.00	7,110.86	7,000.01	7,068.83	175.16	29.91	-89.12	-4,319.02	498.35	7,980.86	7,851.87	128.99	61.872		
13,100.00	7,110.49	7,000.01	7,068.83	177.96	29.91	-89.12	-4,319.02	498.35	8,065.03	7,935.49	129.54	62.261		
13,200.00	7,110.12	7,000.01	7,068.83	180.77	29.91	-89.12	-4,319.02	498.35	8,149.56	8,019.49	130.07	62.657		
13,300.00	7,109.76	7,000.01	7,068.83	183.58	29.91	-89.12	-4,319.02	498.35	8,234.43	8,103.85	130.58	63.059		
13,400.00	7,109.39	7,000.01	7,068.83	186.40	29.91	-89.12	-4,319.02	498.35	8,319.65	8,188.56	131.09	63.466		
13,500.00	7,109.03	7,000.01	7,068.83	189.21	29.91	-89.12	-4,319.02	498.35	8,405.18	8,273.61	131.58	63.880		
13,600.00	7,108.66	7,000.01	7,068.83	192.03	29.91	-89.12	-4,319.02	498.35	8,491.04	8,358.98	132.06	64.298		
13,700.00	7,108.29	7,000.01	7,068.83	194.84	29.91	-89.12	-4,319.02	498.35	8,577.20	8,444.68	132.52	64.722		
13,800.00	7,107.93	7,000.01	7,068.83	197.66	29.91	-89.12	-4,319.02	498.35	8,663.66	8,530.68	132.98	65.151		
13,900.00	7,107.56	7,000.01	7,068.83	200.48	29.91	-89.12	-4,319.02	498.35	8,750.40	8,616.98	133.42	65.584		
14,000.00	7,107.19	7,000.01	7,068.83	203.30	29.91	-89.12	-4,319.02	498.35	8,837.43	8,703.57	133.86	66.022		
14,100.00	7,106.83	7,000.01	7,068.83	206.12	29.91	-89.12	-4,319.02	498.35	8,924.73	8,790.45	134.28	66.465		
14,200.00	7,106.46	7,000.01	7,068.83	208.94	29.91	-89.12	-4,319.02	498.35	9,012.29	8,877.60	134.69	66.911		
14,300.00	7,106.10	7,000.01	7,068.83	211.76	29.91	-89.12	-4,319.02	498.35	9,100.11	8,965.02	135.09	67.362		
14,400.00	7,105.73	7,000.01	7,068.83	214.58	29.91	-89.12	-4,319.02	498.35	9,188.18	9,052.69	135.49	67.816		
14,500.00	7,105.36	7,000.01	7,068.83	217.40	29.91	-89.12	-4,319.02	498.35	9,276.49	9,140.62	135.87	68.274		
14,600.00	7,105.00	7,000.01	7,068.83	220.23	29.91	-89.12	-4,319.02	498.35	9,365.03	9,228.78	136.25	68.736		
14,700.00	7,104.63	7,000.01	7,068.83	223.05	29.91	-89.12	-4,319.02	498.35	9,453.80	9,317.19	136.61	69.201		
14,800.00	7,104.27	7,000.01	7,068.83	225.88	29.91	-89.12	-4,319.02	498.35	9,542.80	9,405.83	136.97	69.670		
14,872.41	7,104.00	7,000.01	7,068.83	227.93	29.91	-89.12	-4,319.02	498.35	9,607.38	9,470.15	137.23	70.011		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	20.22	-1.78	3.28	3.28	172.83	-4,339.24	545.52	4,373.40				
100.00	100.00	112.92	90.92	3.28	3.29	172.84	-4,339.38	545.42	4,373.53	4,366.95	6.58	665.096	
200.00	200.00	211.76	189.76	3.34	3.35	172.84	-4,339.62	545.30	4,373.76	4,367.07	6.69	653.824	
300.00	300.00	318.20	296.20	3.44	3.48	172.84	-4,339.81	545.10	4,373.91	4,366.99	6.92	632.049	
400.00	400.00	418.41	396.41	3.60	3.64	172.85	-4,339.94	544.75	4,374.00	4,366.76	7.24	603.920	
500.00	500.00	520.83	498.83	3.81	3.85	172.85	-4,340.02	544.44	4,374.04	4,366.39	7.66	571.386	
600.00	599.98	619.03	597.03	4.04	4.09	-97.16	-4,340.13	544.08	4,374.30	4,366.18	8.12	538.472	
700.00	699.95	720.81	698.80	4.30	4.36	-97.19	-4,340.20	543.78	4,374.64	4,365.98	8.66	505.240	
800.00	799.92	817.28	795.28	4.59	4.65	-97.22	-4,340.30	543.58	4,375.03	4,365.80	9.23	474.023	
900.00	899.89	918.50	896.50	4.90	4.96	-97.25	-4,340.43	543.25	4,375.43	4,365.57	9.86	443.903	
1,000.00	999.86	1,017.17	995.16	5.23	5.29	-97.28	-4,340.56	542.97	4,375.85	4,365.34	10.51	416.335	
1,100.00	1,099.83	1,119.62	1,097.62	5.58	5.64	-97.31	-4,340.67	542.68	4,376.23	4,365.02	11.21	390.546	
1,200.00	1,199.80	1,214.30	1,192.30	5.94	5.98	-97.33	-4,340.81	542.33	4,376.65	4,364.76	11.90	367.884	
1,300.00	1,299.77	1,306.15	1,284.14	6.30	6.31	-97.36	-4,341.11	541.93	4,377.24	4,364.65	12.60	347.487	
1,400.00	1,399.73	1,408.95	1,386.94	6.68	6.69	-97.38	-4,341.52	541.43	4,377.89	4,364.54	13.35	327.854	
1,500.00	1,499.70	1,515.69	1,493.67	7.07	7.09	-97.41	-4,341.82	540.77	4,378.42	4,364.28	14.14	309.679	
1,600.00	1,599.67	1,613.96	1,591.95	7.46	7.47	-97.43	-4,342.07	540.11	4,378.90	4,363.99	14.90	293.811	
1,700.00	1,699.64	1,712.82	1,690.80	7.85	7.85	-97.45	-4,342.33	539.48	4,379.40	4,363.72	15.68	279.277	
1,800.00	1,799.61	1,807.90	1,785.88	8.25	8.22	-97.48	-4,342.66	538.82	4,379.99	4,363.53	16.45	266.222	
1,900.00	1,899.58	1,902.00	1,879.97	8.66	8.60	-97.50	-4,343.13	538.04	4,380.69	4,363.47	17.23	254.295	
2,000.00	1,999.55	2,000.98	1,978.95	9.06	8.99	-97.51	-4,343.73	536.98	4,381.48	4,363.45	18.03	243.049	
2,100.00	2,099.52	2,112.47	2,090.43	9.47	9.44	-97.53	-4,344.29	535.64	4,382.15	4,363.26	18.88	232.064	
2,200.00	2,199.48	2,218.63	2,196.58	9.89	9.87	-97.55	-4,344.64	534.23	4,382.64	4,362.91	19.72	222.207	
2,300.00	2,299.45	2,332.64	2,310.58	10.30	10.33	-97.56	-4,344.72	532.73	4,382.86	4,362.26	20.60	212.769	
2,400.00	2,399.42	2,438.28	2,416.21	10.72	10.76	-97.58	-4,344.52	531.43	4,382.84	4,361.39	21.44	204.376	
2,500.00	2,499.39	2,538.92	2,516.85	11.14	11.17	-97.60	-4,344.28	530.42	4,382.79	4,360.52	22.27	196.770	
2,600.00	2,599.36	2,641.20	2,619.12	11.56	11.59	-97.62	-4,343.94	529.55	4,382.69	4,359.57	23.11	189.629	
2,700.00	2,699.33	2,737.70	2,715.61	11.98	11.99	-97.64	-4,343.63	528.72	4,382.58	4,358.65	23.93	183.147	
2,720.84	2,720.16	2,756.82	2,734.74	12.07	12.07	-97.65	-4,343.58	528.55	4,382.58	4,358.48	24.10	181.880	
2,800.00	2,799.30	2,834.10	2,812.01	12.41	12.39	-97.67	-4,343.45	527.93	4,382.62	4,357.87	24.75	177.084	
2,872.17	2,871.44	2,910.74	2,888.66	12.71	12.70	-97.68	-4,343.26	527.37	4,382.62	4,357.25	25.37	172.744	
2,900.00	2,899.27	2,931.62	2,909.54	12.83	12.79	-97.69	-4,343.22	527.24	4,382.63	4,357.06	25.58	171.364	
3,000.00	2,999.23	3,016.50	2,994.41	13.26	13.14	-97.71	-4,343.24	526.80	4,382.92	4,356.57	26.35	166.329	
3,100.00	3,099.20	3,109.68	3,087.59	13.68	13.53	-97.73	-4,343.49	526.35	4,383.46	4,356.29	27.16	161.377	
3,200.00	3,199.17	3,212.36	3,190.27	14.11	13.96	-97.76	-4,343.79	525.80	4,384.00	4,355.99	28.02	156.482	
3,300.00	3,299.14	3,299.69	3,277.59	14.54	14.32	-97.78	-4,344.16	525.30	4,384.69	4,355.88	28.81	152.212	
3,400.00	3,399.11	3,390.43	3,368.33	14.97	14.70	-97.80	-4,344.79	524.72	4,385.62	4,356.01	29.61	148.100	
3,500.00	3,499.08	3,546.63	3,524.52	15.40	15.35	-97.84	-4,344.96	523.97	4,385.99	4,355.30	30.69	142.898	
3,600.00	3,599.05	3,667.64	3,645.53	15.83	15.86	-97.88	-4,343.92	523.84	4,385.46	4,353.83	31.63	138.664	
3,700.00	3,699.02	3,780.83	3,758.71	16.26	16.33	-97.92	-4,342.57	523.57	4,384.59	4,352.06	32.53	134.792	
3,800.00	3,798.98	3,871.85	3,849.72	16.69	16.71	-97.95	-4,341.40	523.38	4,383.63	4,350.29	33.34	131.479	
3,900.00	3,898.95	3,961.41	3,939.28	17.12	17.08	-97.97	-4,340.52	523.04	4,382.95	4,348.81	34.15	128.352	
4,000.00	3,998.92	4,053.94	4,031.81	17.55	17.47	-98.00	-4,339.80	522.62	4,382.47	4,347.50	34.97	125.328	
4,100.00	4,098.89	4,140.84	4,118.70	17.98	17.84	-98.02	-4,339.31	522.09	4,382.18	4,346.42	35.77	122.526	
4,123.40	4,122.29	4,159.65	4,137.52	18.08	17.92	-98.03	-4,339.25	521.98	4,382.17	4,346.22	35.95	121.911	
4,200.00	4,198.86	4,227.41	4,205.28	18.42	18.20	-98.04	-4,339.17	521.58	4,382.28	4,345.72	36.56	119.860	
4,300.00	4,298.83	4,328.18	4,306.04	18.85	18.63	-98.07	-4,339.07	521.00	4,382.45	4,345.04	37.42	117.121	
4,400.00	4,398.80	4,423.79	4,401.65	19.28	19.03	-98.09	-4,339.05	520.52	4,382.71	4,344.45	38.25	114.570	
4,500.00	4,498.77	4,526.08	4,503.94	19.72	19.46	-98.12	-4,339.02	520.07	4,382.97	4,343.85	39.12	112.046	
4,600.00	4,598.73	4,625.83	4,603.69	20.15	19.88	-98.15	-4,338.94	519.60	4,383.18	4,343.21	39.97	109.657	
4,700.00	4,698.70	4,716.14	4,694.00	20.58	20.27	-98.17	-4,339.00	519.12	4,383.53	4,342.74	40.79	107.476	
4,800.00	4,798.67	4,805.57	4,783.42	21.02	20.64	-98.20	-4,339.24	518.95	4,384.12	4,342.52	41.60	105.395	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
4,900.00	4,898.64	4,906.35	4,884.21	21.45	21.07	-98.23	-4,339.58	518.99	4,384.81	4,342.36	42.46	103.277		
5,000.00	4,998.61	5,006.23	4,984.09	21.89	21.49	-98.26	-4,339.91	519.02	4,385.50	4,342.19	43.31	101.251		
5,100.00	5,098.58	5,101.59	5,079.44	22.32	21.89	-98.29	-4,340.28	519.05	4,386.25	4,342.10	44.15	99.348		
5,200.00	5,198.55	5,199.47	5,177.32	22.76	22.30	-98.32	-4,340.72	519.13	4,387.07	4,342.07	45.00	97.492		
5,300.00	5,298.52	5,305.65	5,283.50	23.20	22.75	-98.36	-4,341.17	519.12	4,387.85	4,341.96	45.88	95.629		
5,400.00	5,398.49	5,406.62	5,384.47	23.63	23.18	-98.39	-4,341.52	519.04	4,388.55	4,341.80	46.75	93.879		
5,500.00	5,498.45	5,500.40	5,478.25	24.07	23.58	-98.42	-4,341.91	518.98	4,389.31	4,341.73	47.58	92.253		
5,600.00	5,598.42	5,652.35	5,630.19	24.50	24.22	-98.47	-4,341.37	519.28	4,389.26	4,340.60	48.66	90.207		
5,700.00	5,698.39	5,741.84	5,719.68	24.94	24.59	-98.50	-4,340.73	519.45	4,388.95	4,339.48	49.47	88.714		
5,722.77	5,721.15	5,759.54	5,737.38	25.04	24.67	-98.51	-4,340.65	519.46	4,388.94	4,339.29	49.65	88.403		
5,800.00	5,798.36	5,822.97	5,800.82	25.38	24.94	-98.53	-4,340.54	519.43	4,389.08	4,338.83	50.25	87.340		
5,900.00	5,898.33	5,916.36	5,894.20	25.81	25.33	-98.56	-4,340.59	519.33	4,389.49	4,338.41	51.08	85.927		
6,000.00	5,998.30	6,019.49	5,997.33	26.25	25.77	-98.58	-4,340.68	519.00	4,389.90	4,337.95	51.96	84.490		
6,100.00	6,098.27	6,114.91	6,092.75	26.69	26.18	-98.61	-4,340.83	518.55	4,390.36	4,337.56	52.80	83.153		
6,200.00	6,198.24	6,220.39	6,198.23	27.12	26.63	-98.64	-4,341.03	517.96	4,390.84	4,337.16	53.68	81.793		
6,300.00	6,298.20	6,343.16	6,321.00	27.56	27.15	-98.66	-4,340.81	516.99	4,390.91	4,336.27	54.64	80.361		
6,400.00	6,398.17	6,448.42	6,426.25	28.00	27.60	-98.68	-4,340.32	515.90	4,390.67	4,335.15	55.52	79.079		
6,500.00	6,498.14	6,554.91	6,532.73	28.43	28.05	-98.71	-4,339.77	514.81	4,390.39	4,333.97	56.41	77.828		
6,528.21	6,526.32	6,587.72	6,565.54	28.56	28.19	-98.04	-4,339.55	514.40	4,390.33	4,333.65	56.67	77.466		
6,600.00	6,597.68	6,659.40	6,637.21	28.88	28.49	-97.82	-4,339.04	513.42	4,390.68	4,333.38	57.30	76.632 ES		
6,700.00	6,694.68	6,754.08	6,731.88	29.32	28.90	-97.79	-4,338.42	512.04	4,393.12	4,334.98	58.15	75.554		
6,800.00	6,786.74	6,854.83	6,832.61	29.77	29.33	-97.83	-4,337.84	510.07	4,397.89	4,338.86	59.03	74.508		
6,900.00	6,871.61	6,955.13	6,932.87	30.24	29.75	-97.84	-4,337.07	507.30	4,404.91	4,344.99	59.92	73.516		
7,000.00	6,947.19	7,043.17	7,020.86	30.74	30.13	-97.68	-4,336.21	504.57	4,414.55	4,353.76	60.80	72.611		
7,100.00	7,011.62	7,117.72	7,095.35	31.32	30.45	-97.26	-4,335.42	501.75	4,427.15	4,365.45	61.70	71.759		
7,200.00	7,063.31	7,172.76	7,150.34	32.03	30.68	-96.42	-4,334.82	499.55	4,443.01	4,380.38	62.62	70.948		
7,300.00	7,101.00	7,214.08	7,191.63	32.89	30.86	-95.15	-4,334.37	497.91	4,462.22	4,398.59	63.63	70.127		
7,400.00	7,123.74	7,240.67	7,218.19	33.93	30.97	-93.42	-4,334.08	496.84	4,484.68	4,419.96	64.71	69.302		
7,500.00	7,131.00	7,251.87	7,229.38	35.10	31.02	-91.24	-4,333.96	496.40	4,510.03	4,444.19	65.84	68.501		
7,600.00	7,130.63	7,255.47	7,232.98	36.44	31.04	-91.29	-4,333.92	496.25	4,537.69	4,470.64	67.05	67.674		
7,700.00	7,130.26	7,259.07	7,236.58	37.94	31.05	-91.33	-4,333.88	496.11	4,567.37	4,498.98	68.39	66.782		
7,800.00	7,129.90	7,262.67	7,240.18	39.59	31.07	-91.38	-4,333.84	495.97	4,599.03	4,529.20	69.84	65.854		
7,900.00	7,129.53	7,266.27	7,243.78	41.37	31.08	-91.43	-4,333.80	495.82	4,632.63	4,561.27	71.36	64.915		
8,000.00	7,129.17	7,269.87	7,247.38	43.27	31.10	-91.48	-4,333.76	495.68	4,668.13	4,595.17	72.96	63.983		
8,100.00	7,128.80	7,273.48	7,250.97	45.27	31.11	-91.52	-4,333.72	495.54	4,705.48	4,630.88	74.60	63.075		
8,200.00	7,128.43	7,277.08	7,254.57	47.36	31.13	-91.57	-4,333.68	495.39	4,744.65	4,668.37	76.28	62.202		
8,300.00	7,128.07	7,280.68	7,258.17	49.52	31.14	-91.62	-4,333.64	495.25	4,785.58	4,707.60	77.98	61.370		
8,400.00	7,127.70	7,284.28	7,261.77	51.75	31.16	-91.67	-4,333.60	495.10	4,828.23	4,748.54	79.69	60.586		
8,500.00	7,127.33	7,287.88	7,265.37	54.04	31.17	-91.71	-4,333.57	494.96	4,872.56	4,791.15	81.41	59.853		
8,600.00	7,126.97	7,291.48	7,268.97	56.38	31.19	-91.76	-4,333.53	494.82	4,918.52	4,835.40	83.12	59.173		
8,700.00	7,126.60	7,295.09	7,272.57	58.77	31.21	-91.81	-4,333.49	494.67	4,966.07	4,881.24	84.82	58.545		
8,800.00	7,126.24	7,298.69	7,276.17	61.19	31.22	-91.86	-4,333.45	494.53	5,015.16	4,928.64	86.51	57.971		
8,900.00	7,125.87	7,302.29	7,279.76	63.65	31.24	-91.90	-4,333.41	494.39	5,065.74	4,977.56	88.18	57.448		
9,000.00	7,125.50	7,305.89	7,283.36	66.15	31.25	-91.95	-4,333.37	494.24	5,117.77	5,027.95	89.82	56.975		
9,100.00	7,125.14	7,309.49	7,286.96	68.67	31.27	-92.00	-4,333.33	494.10	5,171.22	5,079.77	91.44	56.551		
9,200.00	7,124.77	7,313.10	7,290.56	71.21	31.28	-92.05	-4,333.29	493.95	5,226.02	5,132.99	93.03	56.173		
9,300.00	7,124.41	7,316.70	7,294.16	73.78	31.30	-92.09	-4,333.25	493.81	5,282.15	5,187.56	94.59	55.840		
9,400.00	7,124.04	7,320.30	7,297.76	76.37	31.31	-92.14	-4,333.21	493.67	5,339.56	5,243.44	96.12	55.549		
9,500.00	7,123.67	7,323.90	7,301.36	78.98	31.33	-92.19	-4,333.17	493.52	5,398.21	5,300.60	97.62	55.299		
9,600.00	7,123.31	7,327.50	7,304.95	81.60	31.34	-92.23	-4,333.13	493.38	5,458.06	5,358.98	99.08	55.087		
9,700.00	7,122.94	7,331.10	7,308.55	84.24	31.36	-92.28	-4,333.10	493.24	5,519.07	5,418.56	100.51	54.911		
9,800.00	7,122.57	7,334.71	7,312.15	86.90	31.38	-92.33	-4,333.06	493.09	5,581.21	5,479.30	101.90	54.770		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
9,900.00	7,122.21	7,338.31	7,315.75	89.56	31.39	-92.38	-4,333.02	492.95	5,644.43	5,541.16	103.26	54.661		
10,000.00	7,121.84	7,341.91	7,319.35	92.24	31.41	-92.42	-4,332.98	492.81	5,708.69	5,604.11	104.59	54.583		
10,100.00	7,121.48	7,345.51	7,322.95	94.92	31.42	-92.47	-4,332.94	492.66	5,773.98	5,668.10	105.88	54.534		
10,200.00	7,121.11	7,349.11	7,326.55	97.62	31.44	-92.52	-4,332.90	492.52	5,840.24	5,733.10	107.14	54.513 SF		
10,300.00	7,120.74	7,352.71	7,330.15	100.32	31.45	-92.57	-4,332.86	492.37	5,907.45	5,799.09	108.36	54.518		
10,400.00	7,120.38	7,356.32	7,333.74	103.04	31.47	-92.61	-4,332.82	492.23	5,975.57	5,866.02	109.55	54.547		
10,500.00	7,120.01	7,359.92	7,337.34	105.76	31.48	-92.66	-4,332.78	492.09	6,044.58	5,933.88	110.71	54.600		
10,600.00	7,119.64	7,363.52	7,340.94	108.48	31.50	-92.71	-4,332.74	491.94	6,114.45	6,002.61	111.83	54.674		
10,700.00	7,119.28	7,367.12	7,344.54	111.22	31.51	-92.76	-4,332.70	491.80	6,185.14	6,072.21	112.93	54.770		
10,800.00	7,118.91	7,370.72	7,348.14	113.96	31.53	-92.80	-4,332.66	491.66	6,256.63	6,142.63	114.00	54.885		
10,900.00	7,118.55	7,374.32	7,351.74	116.70	31.54	-92.85	-4,332.63	491.51	6,328.88	6,213.85	115.03	55.019		
11,000.00	7,118.18	7,377.93	7,355.34	119.45	31.56	-92.90	-4,332.59	491.37	6,401.89	6,285.85	116.04	55.171		
11,100.00	7,117.81	7,381.53	7,358.93	122.21	31.58	-92.95	-4,332.55	491.22	6,475.61	6,358.59	117.02	55.340		
11,200.00	7,117.45	7,385.13	7,362.53	124.97	31.59	-92.99	-4,332.51	491.08	6,550.03	6,432.06	117.97	55.524		
11,300.00	7,117.08	7,388.73	7,366.13	127.73	31.61	-93.04	-4,332.47	490.94	6,625.11	6,506.22	118.89	55.724		
11,400.00	7,116.72	7,392.33	7,369.73	130.50	31.62	-93.09	-4,332.43	490.79	6,700.85	6,581.06	119.79	55.938		
11,500.00	7,116.35	7,395.94	7,373.33	133.27	31.64	-93.14	-4,332.39	490.65	6,777.22	6,656.55	120.66	56.166		
11,600.00	7,115.98	7,399.54	7,376.93	136.04	31.65	-93.18	-4,332.35	490.51	6,854.19	6,732.67	121.51	56.406		
11,700.00	7,115.62	7,403.14	7,380.53	138.82	31.67	-93.23	-4,332.31	490.36	6,931.75	6,809.41	122.34	56.660		
11,800.00	7,115.25	7,406.74	7,384.13	141.60	31.68	-93.28	-4,332.27	490.22	7,009.87	6,886.73	123.14	56.925		
11,900.00	7,114.88	7,410.34	7,387.72	144.39	31.70	-93.32	-4,332.23	490.08	7,088.54	6,964.62	123.92	57.201		
12,000.00	7,114.52	7,413.94	7,391.32	147.17	31.71	-93.37	-4,332.19	489.93	7,167.74	7,043.06	124.68	57.487		
12,100.00	7,114.15	7,417.55	7,394.92	149.96	31.73	-93.42	-4,332.16	489.79	7,247.46	7,122.03	125.42	57.784		
12,200.00	7,113.79	7,421.15	7,398.52	152.75	31.75	-93.47	-4,332.12	489.64	7,327.67	7,201.53	126.14	58.091		
12,300.00	7,113.42	7,424.75	7,402.12	155.55	31.76	-93.51	-4,332.08	489.50	7,408.36	7,281.52	126.84	58.407		
12,400.00	7,113.05	7,428.35	7,405.72	158.34	31.78	-93.56	-4,332.04	489.36	7,489.51	7,361.99	127.52	58.731		
12,500.00	7,112.69	7,400.00	7,377.39	161.14	31.65	-93.19	-4,332.35	490.49	7,571.18	7,443.14	128.04	59.129		
12,600.00	7,112.32	7,400.00	7,377.39	163.94	31.65	-93.19	-4,332.35	490.49	7,653.23	7,524.56	128.67	59.478		
12,700.00	7,111.96	7,400.00	7,377.39	166.74	31.65	-93.19	-4,332.35	490.49	7,735.71	7,606.42	129.29	59.834		
12,800.00	7,111.59	7,400.00	7,377.39	169.54	31.65	-93.19	-4,332.35	490.49	7,818.59	7,688.71	129.88	60.198		
12,900.00	7,111.22	7,400.00	7,377.39	172.35	31.65	-93.19	-4,332.35	490.49	7,901.87	7,771.41	130.46	60.569		
13,000.00	7,110.86	7,400.00	7,377.39	175.16	31.65	-93.19	-4,332.35	490.49	7,985.54	7,854.51	131.03	60.947		
13,100.00	7,110.49	7,400.00	7,377.39	177.96	31.65	-93.19	-4,332.35	490.49	8,069.57	7,938.00	131.57	61.331		
13,200.00	7,110.12	7,400.00	7,377.39	180.77	31.65	-93.19	-4,332.35	490.49	8,153.97	8,021.86	132.11	61.721		
13,300.00	7,109.76	7,400.00	7,377.39	183.58	31.65	-93.19	-4,332.35	490.49	8,238.72	8,106.08	132.63	62.117		
13,400.00	7,109.39	7,400.00	7,377.39	186.40	31.65	-93.19	-4,332.35	490.49	8,323.80	8,190.66	133.14	62.519		
13,500.00	7,109.03	7,400.00	7,377.39	189.21	31.65	-93.19	-4,332.35	490.49	8,409.21	8,275.58	133.63	62.927		
13,600.00	7,108.66	7,400.00	7,377.39	192.03	31.65	-93.19	-4,332.35	490.49	8,494.94	8,360.83	134.12	63.340		
13,700.00	7,108.29	7,400.00	7,377.39	194.84	31.65	-93.19	-4,332.35	490.49	8,580.98	8,446.40	134.59	63.758		
13,800.00	7,107.93	7,400.00	7,377.39	197.66	31.65	-93.19	-4,332.35	490.49	8,667.32	8,532.28	135.05	64.180		
13,900.00	7,107.56	7,400.00	7,377.39	200.48	31.65	-93.19	-4,332.35	490.49	8,753.95	8,618.46	135.49	64.608		
14,000.00	7,107.19	7,400.00	7,377.39	203.30	31.65	-93.19	-4,332.35	490.49	8,840.87	8,704.93	135.93	65.040		
14,100.00	7,106.83	7,400.00	7,377.39	206.12	31.65	-93.19	-4,332.35	490.49	8,928.05	8,791.70	136.36	65.476		
14,200.00	7,106.46	7,400.00	7,377.39	208.94	31.65	-93.19	-4,332.35	490.49	9,015.50	8,878.73	136.77	65.916		
14,300.00	7,106.10	7,400.00	7,377.39	211.76	31.65	-93.19	-4,332.35	490.49	9,103.22	8,966.04	137.18	66.360		
14,400.00	7,105.73	7,400.00	7,377.39	214.58	31.65	-93.19	-4,332.35	490.49	9,191.18	9,053.60	137.58	66.808		
14,500.00	7,105.36	7,400.00	7,377.39	217.40	31.65	-93.19	-4,332.35	490.49	9,279.38	9,141.42	137.96	67.260		
14,600.00	7,105.00	7,400.00	7,377.39	220.23	31.65	-93.19	-4,332.35	490.49	9,367.83	9,229.48	138.34	67.716		
14,700.00	7,104.63	7,400.00	7,377.39	223.05	31.65	-93.19	-4,332.35	490.49	9,456.50	9,317.79	138.71	68.174		
14,800.00	7,104.27	7,400.00	7,377.39	225.88	31.65	-93.19	-4,332.35	490.49	9,545.40	9,406.32	139.07	68.636		
14,872.41	7,104.00	7,400.00	7,377.39	227.93	31.65	-93.19	-4,332.35	490.49	9,609.90	9,470.57	139.33	68.973		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	22.82	-0.18	3.28	3.28	-26.26	2,342.87	-1,155.84	2,612.47					
100.00	100.00	120.87	97.87	3.28	3.29	-26.26	2,342.80	-1,156.04	2,612.50	2,605.92	6.58	397.114		
200.00	200.00	218.87	195.87	3.34	3.36	-26.26	2,342.96	-1,156.13	2,612.68	2,605.99	6.70	390.208		
300.00	300.00	328.28	305.28	3.44	3.49	-26.26	2,342.96	-1,155.78	2,612.53	2,605.59	6.93	376.770		
342.14	342.14	365.15	342.14	3.51	3.55	-26.26	2,342.96	-1,155.68	2,612.48	2,605.43	7.05	370.474		
400.00	400.00	420.01	397.01	3.60	3.64	-26.25	2,343.04	-1,155.66	2,612.55	2,605.30	7.24	360.614		
500.00	500.00	528.15	505.15	3.81	3.86	-26.25	2,342.98	-1,155.59	2,612.47	2,604.80	7.67	340.588		
600.00	599.98	634.92	611.91	4.04	4.12	63.80	2,342.82	-1,155.32	2,611.52	2,603.35	8.16	319.910		
700.00	699.95	740.70	717.69	4.30	4.41	63.85	2,342.26	-1,154.72	2,609.68	2,600.96	8.71	299.476		
800.00	799.92	838.78	815.78	4.59	4.70	63.91	2,341.96	-1,154.23	2,608.08	2,598.78	9.29	280.608		
900.00	899.89	946.12	923.11	4.90	5.04	63.97	2,341.31	-1,153.41	2,606.09	2,596.14	9.95	262.028		
1,000.00	999.86	1,038.87	1,015.85	5.23	5.35	64.02	2,340.82	-1,152.83	2,604.24	2,593.66	10.58	246.056		
1,100.00	1,099.83	1,135.72	1,112.70	5.58	5.69	64.08	2,340.52	-1,152.32	2,602.64	2,591.38	11.26	231.083		
1,200.00	1,199.80	1,238.38	1,215.36	5.94	6.05	64.14	2,340.13	-1,151.80	2,600.99	2,589.00	11.99	217.015		
1,300.00	1,299.77	1,336.59	1,313.57	6.30	6.41	64.19	2,339.70	-1,151.35	2,599.31	2,586.60	12.71	204.487		
1,400.00	1,399.73	1,433.47	1,410.45	6.68	6.77	64.25	2,339.54	-1,150.70	2,597.77	2,584.33	13.45	193.169		
1,500.00	1,499.70	1,536.93	1,513.90	7.07	7.16	64.31	2,339.31	-1,150.10	2,596.24	2,582.02	14.22	182.534		
1,600.00	1,599.67	1,639.81	1,616.78	7.46	7.56	64.36	2,338.72	-1,149.75	2,594.50	2,579.49	15.01	172.871		
1,700.00	1,699.64	1,733.95	1,710.92	7.85	7.92	64.40	2,338.03	-1,149.97	2,592.85	2,577.08	15.77	164.423		
1,800.00	1,799.61	1,834.54	1,811.51	8.25	8.31	64.44	2,337.55	-1,150.22	2,591.45	2,574.88	16.56	156.455		
1,900.00	1,899.58	1,941.22	1,918.18	8.66	8.73	64.48	2,336.59	-1,150.37	2,589.61	2,572.22	17.39	148.921		
2,000.00	1,999.55	2,034.07	2,011.03	9.06	9.10	64.51	2,335.82	-1,150.87	2,588.02	2,569.85	18.17	142.460		
2,100.00	2,099.52	2,139.40	2,116.36	9.47	9.52	64.55	2,335.01	-1,151.32	2,586.43	2,567.43	19.00	136.136		
2,200.00	2,199.48	2,242.17	2,219.11	9.89	9.94	64.58	2,334.00	-1,151.57	2,584.57	2,564.74	19.83	130.361		
2,300.00	2,299.45	2,338.84	2,315.79	10.30	10.33	64.61	2,333.10	-1,151.98	2,582.84	2,562.21	20.63	125.177		
2,400.00	2,399.42	2,438.82	2,415.75	10.72	10.74	64.64	2,332.04	-1,152.69	2,581.11	2,559.66	21.46	120.290		
2,500.00	2,499.39	2,535.91	2,512.83	11.14	11.13	64.66	2,331.00	-1,153.58	2,579.47	2,557.19	22.27	115.810		
2,600.00	2,599.36	2,631.31	2,608.22	11.56	11.52	64.68	2,330.08	-1,154.51	2,577.94	2,554.86	23.08	111.673		
2,700.00	2,699.33	2,722.77	2,699.68	11.98	11.90	64.71	2,329.51	-1,155.29	2,576.69	2,552.80	23.88	107.892		
2,800.00	2,799.30	2,813.89	2,790.80	12.41	12.27	64.73	2,329.28	-1,156.19	2,575.81	2,551.13	24.68	104.369		
2,900.00	2,899.27	2,916.86	2,893.76	12.83	12.70	64.76	2,329.08	-1,157.25	2,575.00	2,549.47	25.53	100.870		
3,000.00	2,999.23	3,015.19	2,992.08	13.26	13.10	64.78	2,328.69	-1,158.65	2,574.18	2,547.82	26.36	97.657		
3,100.00	3,099.20	3,114.10	3,090.98	13.68	13.51	64.79	2,328.27	-1,160.19	2,573.40	2,546.20	27.20	94.627		
3,200.00	3,199.17	3,207.06	3,183.92	14.11	13.90	64.80	2,327.95	-1,161.86	2,572.79	2,544.79	28.01	91.859		
3,300.00	3,299.14	3,301.30	3,278.14	14.54	14.29	64.80	2,327.69	-1,163.98	2,572.44	2,543.61	28.83	89.235		
3,400.00	3,399.11	3,399.86	3,376.67	14.97	14.71	64.80	2,327.46	-1,166.42	2,572.22	2,542.55	29.67	86.703		
3,500.00	3,499.08	3,506.69	3,483.46	15.40	15.15	64.80	2,327.15	-1,168.95	2,571.89	2,541.35	30.54	84.207		
3,600.00	3,599.05	3,601.73	3,578.48	15.83	15.55	64.81	2,326.92	-1,171.06	2,571.56	2,540.19	31.37	81.978		
3,700.00	3,699.02	3,735.64	3,712.36	16.26	16.11	64.80	2,325.57	-1,174.05	2,570.50	2,538.14	32.36	79.435		
3,800.00	3,798.98	3,843.28	3,819.96	16.69	16.56	64.79	2,323.68	-1,176.27	2,568.72	2,535.48	33.24	77.274		
3,900.00	3,898.95	3,943.72	3,920.36	17.12	16.99	64.78	2,321.80	-1,178.28	2,566.81	2,532.72	34.10	75.283		
4,000.00	3,998.92	4,043.63	4,020.22	17.55	17.41	64.77	2,319.89	-1,180.41	2,564.93	2,529.98	34.95	73.393		
4,100.00	4,098.89	4,145.35	4,121.90	17.98	17.83	64.76	2,317.88	-1,182.61	2,563.00	2,527.19	35.81	71.575		
4,200.00	4,198.86	4,247.18	4,223.69	18.42	18.26	64.75	2,315.82	-1,184.76	2,561.00	2,524.33	36.67	69.838		
4,300.00	4,298.83	4,347.69	4,324.15	18.85	18.69	64.74	2,313.74	-1,186.83	2,558.94	2,521.41	37.53	68.189		
4,400.00	4,398.80	4,447.42	4,423.84	19.28	19.11	64.73	2,311.68	-1,188.90	2,556.90	2,518.52	38.38	66.617		
4,500.00	4,498.77	4,548.51	4,524.89	19.72	19.54	64.71	2,309.51	-1,191.13	2,554.83	2,515.59	39.24	65.104		
4,600.00	4,598.73	4,648.10	4,624.42	20.15	19.96	64.70	2,307.34	-1,193.33	2,552.73	2,512.64	40.10	63.663		
4,700.00	4,698.70	4,754.72	4,730.99	20.58	20.41	64.68	2,304.99	-1,195.68	2,550.62	2,509.64	40.98	62.239		
4,800.00	4,798.67	4,862.92	4,839.13	21.02	20.87	64.66	2,302.15	-1,197.91	2,548.06	2,506.19	41.87	60.854		
4,900.00	4,898.64	4,960.83	4,936.98	21.45	21.28	64.65	2,299.51	-1,199.87	2,545.41	2,502.69	42.72	59.581		
5,000.00	4,998.61	5,057.15	5,033.26	21.89	21.69	64.64	2,297.10	-1,201.74	2,542.91	2,499.35	43.57	58.370		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	5,098.58	5,152.21	5,128.28	22.32	22.09	64.63	2,294.93	-1,203.46	2,540.56	2,496.15	44.40	57.214		
5,200.00	5,198.55	5,246.75	5,222.78	22.76	22.49	64.62	2,293.02	-1,205.19	2,538.44	2,493.19	45.24	56.108		
5,300.00	5,298.52	5,341.75	5,317.76	23.20	22.90	64.62	2,291.35	-1,206.78	2,536.50	2,490.42	46.08	55.045		
5,400.00	5,398.49	5,438.00	5,413.99	23.63	23.30	64.64	2,290.12	-1,207.90	2,534.77	2,487.85	46.92	54.019		
5,500.00	5,498.45	5,535.35	5,511.33	24.07	23.72	64.65	2,288.96	-1,209.00	2,533.11	2,485.34	47.77	53.025		
5,600.00	5,598.42	5,627.58	5,603.55	24.50	24.11	64.67	2,288.03	-1,210.16	2,531.67	2,483.07	48.60	52.093		
5,700.00	5,698.39	5,725.87	5,701.83	24.94	24.53	64.69	2,287.58	-1,211.05	2,530.57	2,481.12	49.45	51.173		
5,800.00	5,798.36	5,844.88	5,820.84	25.38	25.03	64.75	2,286.75	-1,210.99	2,528.82	2,478.43	50.39	50.186		
5,900.00	5,898.33	5,948.91	5,924.86	25.81	25.47	64.80	2,285.80	-1,210.73	2,526.83	2,475.56	51.27	49.289		
6,000.00	5,998.30	6,100.57	6,076.49	26.25	26.12	64.90	2,283.74	-1,208.66	2,524.09	2,471.77	52.32	48.242		
6,100.00	6,098.27	6,207.54	6,183.40	26.69	26.57	64.98	2,281.17	-1,206.17	2,519.87	2,466.66	53.21	47.359		
6,200.00	6,198.24	6,352.87	6,328.56	27.12	27.19	65.10	2,275.84	-1,201.54	2,513.97	2,459.75	54.22	46.367		
6,300.00	6,298.20	6,430.32	6,405.91	27.56	27.52	65.15	2,272.48	-1,199.66	2,508.01	2,453.00	55.01	45.594		
6,400.00	6,398.17	6,500.00	6,475.55	28.00	27.82	65.18	2,270.25	-1,198.83	2,503.47	2,447.70	55.77	44.893		
6,500.00	6,498.14	6,560.54	6,536.08	28.43	28.08	65.20	2,269.01	-1,198.60	2,500.29	2,443.81	56.48	44.268		
6,600.00	6,597.68	6,640.51	6,616.04	28.88	28.42	66.64	2,268.12	-1,198.64	2,495.81	2,438.54	57.27	43.581		
6,700.00	6,694.68	6,729.01	6,704.54	29.32	28.79	68.00	2,267.42	-1,198.94	2,485.76	2,427.66	58.09	42.789		
6,800.00	6,786.74	6,809.59	6,785.11	29.77	29.14	69.98	2,266.97	-1,199.54	2,470.61	2,411.72	58.89	41.955		
6,900.00	6,871.61	6,873.98	6,849.49	30.24	29.41	72.40	2,267.00	-1,200.30	2,451.52	2,391.90	59.62	41.119		
7,000.00	6,947.19	6,944.47	6,919.97	30.74	29.71	75.40	2,267.44	-1,201.35	2,429.57	2,369.16	60.41	40.217		
7,100.00	7,011.62	7,012.54	6,988.04	31.32	30.00	78.80	2,267.86	-1,202.27	2,405.55	2,344.28	61.27	39.262		
7,200.00	7,063.31	7,063.96	7,039.46	32.03	30.22	82.11	2,268.18	-1,202.93	2,381.01	2,318.84	62.17	38.296		
7,300.00	7,101.00	7,101.84	7,077.33	32.89	30.38	85.14	2,268.44	-1,203.41	2,357.46	2,294.28	63.18	37.312		
7,400.00	7,123.74	7,125.44	7,100.93	33.93	30.48	87.67	2,268.61	-1,203.69	2,336.22	2,271.91	64.31	36.329		
7,500.00	7,131.00	7,133.66	7,109.15	35.10	30.51	89.49	2,268.67	-1,203.79	2,318.32	2,252.79	65.53	35.379		
7,600.00	7,130.63	7,134.36	7,109.85	36.44	30.51	89.50	2,268.67	-1,203.79	2,304.49	2,237.60	66.89	34.453		
7,700.00	7,130.26	7,135.06	7,110.55	37.94	30.52	89.52	2,268.68	-1,203.80	2,294.93	2,226.51	68.42	33.541		
7,800.00	7,129.90	7,135.75	7,111.24	39.59	30.52	89.54	2,268.68	-1,203.81	2,289.70	2,219.61	70.10	32.666		
7,869.81	7,129.64	7,136.23	7,111.72	40.84	30.52	89.55	2,268.69	-1,203.81	2,288.64	2,217.30	71.34	32.079 CC		
7,900.00	7,129.53	7,136.43	7,111.92	41.37	30.52	89.56	2,268.69	-1,203.82	2,288.84	2,216.96	71.88	31.842 ES		
8,000.00	7,129.17	7,137.11	7,112.60	43.27	30.52	89.57	2,268.69	-1,203.82	2,292.34	2,218.60	73.74	31.086		
8,100.00	7,128.80	7,137.78	7,113.27	45.27	30.53	89.59	2,268.70	-1,203.83	2,300.19	2,224.53	75.65	30.405		
8,200.00	7,128.43	7,138.45	7,113.94	47.36	30.53	89.61	2,268.70	-1,203.84	2,312.33	2,234.75	77.58	29.806		
8,300.00	7,128.07	7,139.11	7,114.60	49.52	30.53	89.62	2,268.71	-1,203.85	2,328.72	2,249.22	79.50	29.291		
8,400.00	7,127.70	7,139.76	7,115.25	51.75	30.54	89.64	2,268.71	-1,203.85	2,349.25	2,267.85	81.40	28.861		
8,500.00	7,127.33	7,140.41	7,115.90	54.04	30.54	89.66	2,268.72	-1,203.86	2,373.81	2,290.57	83.25	28.515		
8,600.00	7,126.97	7,141.05	7,116.54	56.38	30.54	89.67	2,268.72	-1,203.87	2,402.30	2,317.26	85.04	28.250		
8,700.00	7,126.60	7,141.68	7,117.17	58.77	30.54	89.69	2,268.73	-1,203.88	2,434.55	2,347.80	86.75	28.063		
8,800.00	7,126.24	7,142.31	7,117.80	61.19	30.55	89.70	2,268.73	-1,203.88	2,470.44	2,382.05	88.39	27.950		
8,900.00	7,125.87	7,142.94	7,118.42	63.65	30.55	89.72	2,268.74	-1,203.89	2,509.80	2,419.87	89.94	27.906 SF		
9,000.00	7,125.50	7,143.55	7,119.04	66.15	30.55	89.73	2,268.74	-1,203.89	2,552.48	2,461.08	91.40	27.927		
9,100.00	7,125.14	7,144.17	7,119.65	68.67	30.55	89.75	2,268.75	-1,203.90	2,598.30	2,505.53	92.77	28.008		
9,200.00	7,124.77	7,144.77	7,120.26	71.21	30.56	89.77	2,268.75	-1,203.91	2,647.11	2,553.06	94.05	28.146		
9,300.00	7,124.41	7,145.37	7,120.86	73.78	30.56	89.78	2,268.76	-1,203.91	2,698.75	2,603.51	95.24	28.337		
9,400.00	7,124.04	7,145.97	7,121.46	76.37	30.56	89.80	2,268.76	-1,203.92	2,753.04	2,656.70	96.34	28.576		
9,500.00	7,123.67	7,146.56	7,122.05	78.98	30.56	89.81	2,268.77	-1,203.92	2,809.85	2,712.49	97.36	28.859		
9,600.00	7,123.31	7,147.14	7,122.63	81.60	30.57	89.82	2,268.77	-1,203.93	2,869.02	2,770.72	98.31	29.185		
9,700.00	7,122.94	7,147.72	7,123.21	84.24	30.57	89.84	2,268.78	-1,203.94	2,930.41	2,831.24	99.17	29.548		
9,800.00	7,122.57	7,148.30	7,123.79	86.90	30.57	89.85	2,268.78	-1,203.94	2,993.88	2,893.91	99.97	29.947		
9,900.00	7,122.21	7,148.87	7,124.36	89.56	30.57	89.87	2,268.78	-1,203.95	3,059.31	2,958.60	100.70	30.379		
10,000.00	7,121.84	7,149.44	7,124.92	92.24	30.58	89.88	2,268.79	-1,203.95	3,126.56	3,025.19	101.38	30.841		
10,100.00	7,121.48	7,150.00	7,125.48	94.92	30.58	89.90	2,268.79	-1,203.96	3,195.53	3,093.54	101.99	31.331		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,200.00	7,121.11	7,150.55	7,126.04	97.62	30.58	89.91	2,268.80	-1,203.97	3,266.10	3,163.55	102.56	31.847		
10,300.00	7,120.74	7,151.10	7,126.59	100.32	30.58	89.92	2,268.80	-1,203.97	3,338.18	3,235.11	103.07	32.387		
10,400.00	7,120.38	7,151.65	7,127.13	103.04	30.59	89.94	2,268.81	-1,203.98	3,411.67	3,308.12	103.54	32.950		
10,500.00	7,120.01	7,152.19	7,127.68	105.76	30.59	89.95	2,268.81	-1,203.98	3,486.47	3,382.50	103.97	33.533		
10,600.00	7,119.64	7,152.72	7,128.21	108.48	30.59	89.96	2,268.81	-1,203.99	3,562.51	3,458.15	104.37	34.135		
10,700.00	7,119.28	7,153.26	7,128.74	111.22	30.59	89.98	2,268.82	-1,203.99	3,639.71	3,534.99	104.73	34.755		
10,800.00	7,118.91	7,153.78	7,129.27	113.96	30.60	89.99	2,268.82	-1,204.00	3,718.00	3,612.95	105.05	35.391		
10,900.00	7,118.55	7,154.31	7,129.79	116.70	30.60	90.00	2,268.83	-1,204.00	3,797.31	3,691.95	105.35	36.043		
11,000.00	7,118.18	7,154.83	7,130.31	119.45	30.60	90.02	2,268.83	-1,204.01	3,877.57	3,771.94	105.63	36.709		
11,100.00	7,117.81	7,155.34	7,130.83	122.21	30.60	90.03	2,268.84	-1,204.01	3,958.73	3,852.85	105.88	37.389		
11,200.00	7,117.45	7,155.85	7,131.34	124.97	30.60	90.04	2,268.84	-1,204.02	4,040.74	3,934.63	106.11	38.081		
11,300.00	7,117.08	7,156.36	7,131.84	127.73	30.61	90.06	2,268.84	-1,204.02	4,123.54	4,017.22	106.32	38.785		
11,400.00	7,116.72	7,156.86	7,132.35	130.50	30.61	90.07	2,268.85	-1,204.03	4,207.09	4,100.58	106.51	39.499		
11,500.00	7,116.35	7,157.36	7,132.84	133.27	30.61	90.08	2,268.85	-1,204.03	4,291.34	4,184.66	106.69	40.224		
11,600.00	7,115.98	7,157.85	7,133.34	136.04	30.61	90.09	2,268.86	-1,204.04	4,376.26	4,269.41	106.85	40.958		
11,700.00	7,115.62	7,158.34	7,133.83	138.82	30.61	90.10	2,268.86	-1,204.04	4,461.80	4,354.80	106.99	41.701		
11,800.00	7,115.25	7,158.83	7,134.31	141.60	30.62	90.12	2,268.86	-1,204.05	4,547.93	4,440.80	107.13	42.452		
11,900.00	7,114.88	7,159.31	7,134.80	144.39	30.62	90.13	2,268.87	-1,204.05	4,634.61	4,527.36	107.25	43.212		
12,000.00	7,114.52	7,159.79	7,135.27	147.17	30.62	90.14	2,268.87	-1,204.06	4,721.83	4,614.46	107.37	43.978		
12,100.00	7,114.15	7,160.26	7,135.75	149.96	30.62	90.15	2,268.87	-1,204.06	4,809.54	4,702.07	107.47	44.751		
12,200.00	7,113.79	7,160.73	7,136.22	152.75	30.62	90.16	2,268.88	-1,204.07	4,897.72	4,790.15	107.57	45.531		
12,300.00	7,113.42	7,161.20	7,136.69	155.55	30.63	90.18	2,268.88	-1,204.07	4,986.35	4,878.69	107.66	46.317		
12,400.00	7,113.05	7,161.66	7,137.15	158.34	30.63	90.19	2,268.89	-1,204.08	5,075.40	4,967.66	107.74	47.108		
12,500.00	7,112.69	7,162.12	7,137.61	161.14	30.63	90.20	2,268.89	-1,204.08	5,164.85	5,057.04	107.81	47.905		
12,600.00	7,112.32	7,162.58	7,138.06	163.94	30.63	90.21	2,268.89	-1,204.08	5,254.68	5,146.80	107.88	48.707		
12,700.00	7,111.96	7,163.03	7,138.52	166.74	30.63	90.22	2,268.90	-1,204.09	5,344.88	5,236.93	107.95	49.513		
12,800.00	7,111.59	7,163.48	7,138.97	169.54	30.64	90.23	2,268.90	-1,204.09	5,435.41	5,327.40	108.01	50.324		
12,900.00	7,111.22	7,163.93	7,139.41	172.35	30.64	90.24	2,268.90	-1,204.10	5,526.27	5,418.21	108.06	51.139		
13,000.00	7,110.86	7,164.37	7,139.85	175.16	30.64	90.26	2,268.91	-1,204.10	5,617.45	5,509.33	108.12	51.957		
13,100.00	7,110.49	7,164.81	7,140.29	177.96	30.64	90.27	2,268.91	-1,204.11	5,708.92	5,600.75	108.16	52.780		
13,200.00	7,110.12	7,165.24	7,140.73	180.77	30.64	90.28	2,268.92	-1,204.11	5,800.67	5,692.46	108.21	53.606		
13,300.00	7,109.76	7,165.67	7,141.16	183.58	30.65	90.29	2,268.92	-1,204.11	5,892.68	5,784.43	108.25	54.435		
13,400.00	7,109.39	7,166.10	7,141.59	186.40	30.65	90.30	2,268.92	-1,204.12	5,984.96	5,876.67	108.29	55.267		
13,500.00	7,109.03	7,166.53	7,142.01	189.21	30.65	90.31	2,268.93	-1,204.12	6,077.48	5,969.15	108.33	56.102		
13,600.00	7,108.66	7,166.95	7,142.44	192.03	30.65	90.32	2,268.93	-1,204.13	6,170.23	6,061.86	108.37	56.939		
13,700.00	7,108.29	7,167.37	7,142.86	194.84	30.65	90.33	2,268.93	-1,204.13	6,263.20	6,154.80	108.40	57.779		
13,800.00	7,107.93	7,167.79	7,143.27	197.66	30.65	90.34	2,268.94	-1,204.13	6,356.39	6,247.96	108.43	58.622		
13,900.00	7,107.56	7,168.20	7,143.68	200.48	30.66	90.35	2,268.94	-1,204.14	6,449.78	6,341.32	108.46	59.466		
14,000.00	7,107.19	7,168.61	7,144.09	203.30	30.66	90.36	2,268.94	-1,204.14	6,543.37	6,434.88	108.49	60.313		
14,100.00	7,106.83	7,169.02	7,144.50	206.12	30.66	90.37	2,268.95	-1,204.14	6,637.15	6,528.63	108.52	61.162		
14,200.00	7,106.46	7,169.42	7,144.90	208.94	30.66	90.38	2,268.95	-1,204.15	6,731.10	6,622.55	108.55	62.012		
14,300.00	7,106.10	7,169.82	7,145.31	211.76	30.66	90.39	2,268.95	-1,204.15	6,825.23	6,716.65	108.57	62.864		
14,400.00	7,105.73	7,170.22	7,145.70	214.58	30.67	90.40	2,268.96	-1,204.16	6,919.52	6,810.92	108.60	63.718		
14,500.00	7,105.36	7,170.61	7,146.10	217.40	30.67	90.41	2,268.96	-1,204.16	7,013.96	6,905.34	108.62	64.573		
14,600.00	7,105.00	7,171.01	7,146.49	220.23	30.67	90.42	2,268.96	-1,204.16	7,108.56	6,999.92	108.65	65.429		
14,700.00	7,104.63	7,171.40	7,146.88	223.05	30.67	90.43	2,268.97	-1,204.17	7,203.31	7,094.64	108.67	66.286		
14,800.00	7,104.27	7,171.78	7,147.27	225.88	30.67	90.44	2,268.97	-1,204.17	7,298.20	7,189.50	108.69	67.145		
14,872.41	7,104.00	7,172.06	7,147.55	227.93	30.67	90.45	2,268.97	-1,204.17	7,366.99	7,258.28	108.71	67.768		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	21.00	3.28	3.28	-66.88	925.07	-2,166.34	2,355.67					
100.00	100.00	79.00	100.00	3.28	3.56	-66.88	925.07	-2,166.34	2,355.58	2,348.74	6.84	344.243		
200.00	200.00	179.00	200.00	3.34	5.57	-66.88	925.07	-2,166.34	2,355.58	2,346.67	8.91	264.426		
300.00	300.00	279.00	300.00	3.44	8.64	-66.88	925.07	-2,166.34	2,355.58	2,343.49	12.09	194.901		
400.00	400.00	379.00	400.00	3.60	11.94	-66.88	925.07	-2,166.34	2,355.58	2,340.03	15.55	151.505		
500.00	500.00	479.00	500.00	3.81	15.33	-66.88	925.07	-2,166.34	2,355.58	2,336.44	19.14	123.088		
600.00	599.98	578.98	599.98	4.04	18.76	23.15	925.07	-2,166.34	2,354.10	2,331.31	22.80	103.271		
700.00	699.95	678.95	699.95	4.30	22.20	23.17	925.07	-2,166.34	2,351.81	2,325.31	26.50	88.744		
800.00	799.92	778.92	799.92	4.59	25.66	23.19	925.07	-2,166.34	2,349.51	2,319.26	30.25	77.679		
900.00	899.89	878.89	899.89	4.90	29.12	23.22	925.07	-2,166.34	2,347.21	2,313.19	34.02	68.991		
1,000.00	999.86	978.86	999.86	5.23	32.59	23.24	925.07	-2,166.34	2,344.92	2,307.09	37.82	61.999		
1,100.00	1,099.83	1,078.83	1,099.83	5.58	36.07	23.27	925.07	-2,166.34	2,342.62	2,300.98	41.64	56.258		
1,200.00	1,199.80	1,178.80	1,199.80	5.94	39.54	23.29	925.07	-2,166.34	2,340.33	2,294.85	45.47	51.464		
1,300.00	1,299.77	1,278.77	1,299.77	6.30	43.02	23.31	925.07	-2,166.34	2,338.03	2,288.71	49.32	47.404		
1,400.00	1,399.73	1,378.73	1,399.73	6.68	46.50	23.34	925.07	-2,166.34	2,335.74	2,282.56	53.18	43.923		
1,500.00	1,499.70	1,478.70	1,499.70	7.07	49.98	23.36	925.07	-2,166.34	2,333.44	2,276.40	57.04	40.906		
1,600.00	1,599.67	1,578.67	1,599.67	7.46	53.47	23.39	925.07	-2,166.34	2,331.15	2,270.23	60.92	38.268		
1,700.00	1,699.64	1,678.64	1,699.64	7.85	56.95	23.41	925.07	-2,166.34	2,328.85	2,264.06	64.80	35.941		
1,800.00	1,799.61	1,778.61	1,799.61	8.25	60.43	23.44	925.07	-2,166.34	2,326.56	2,257.88	68.68	33.875		
1,900.00	1,899.58	1,878.58	1,899.58	8.66	63.92	23.46	925.07	-2,166.34	2,324.27	2,251.70	72.57	32.028		
2,000.00	1,999.55	1,978.55	1,999.55	9.06	67.41	23.48	925.07	-2,166.34	2,321.98	2,245.52	76.46	30.368		
2,100.00	2,099.52	2,078.52	2,099.52	9.47	70.89	23.51	925.07	-2,166.34	2,319.69	2,239.33	80.36	28.867		
2,200.00	2,199.48	2,178.48	2,199.48	9.89	74.38	23.53	925.07	-2,166.34	2,317.39	2,233.14	84.26	27.504		
2,300.00	2,299.45	2,278.45	2,299.45	10.30	77.86	23.56	925.07	-2,166.34	2,315.10	2,226.95	88.16	26.261		
2,400.00	2,399.42	2,378.42	2,399.42	10.72	81.35	23.58	925.07	-2,166.34	2,312.81	2,220.75	92.06	25.122		
2,500.00	2,499.39	2,478.39	2,499.39	11.14	84.84	23.61	925.07	-2,166.34	2,310.52	2,214.56	95.97	24.076		
2,600.00	2,599.36	2,578.36	2,599.36	11.56	88.33	23.63	925.07	-2,166.34	2,308.23	2,208.36	99.88	23.111		
2,700.00	2,699.33	2,678.33	2,699.33	11.98	91.81	23.66	925.07	-2,166.34	2,305.94	2,202.16	103.78	22.219		
2,800.00	2,799.30	2,778.30	2,799.30	12.41	95.30	23.68	925.07	-2,166.34	2,303.66	2,195.96	107.70	21.391		
2,900.00	2,899.27	2,878.27	2,899.27	12.83	98.79	23.71	925.07	-2,166.34	2,301.37	2,189.76	111.61	20.620		
3,000.00	2,999.23	2,978.23	2,999.23	13.26	102.28	23.73	925.07	-2,166.34	2,299.08	2,183.56	115.52	19.902		
3,100.00	3,099.20	3,078.20	3,099.20	13.68	105.77	23.76	925.07	-2,166.34	2,296.79	2,177.36	119.43	19.231		
3,200.00	3,199.17	3,178.17	3,199.17	14.11	109.25	23.78	925.07	-2,166.34	2,294.51	2,171.16	123.35	18.602		
3,300.00	3,299.14	3,278.14	3,299.14	14.54	112.74	23.81	925.07	-2,166.34	2,292.22	2,164.95	127.27	18.011		
3,400.00	3,399.11	3,378.11	3,399.11	14.97	116.23	23.83	925.07	-2,166.34	2,289.93	2,158.75	131.18	17.456		
3,500.00	3,499.08	3,478.08	3,499.08	15.40	119.72	23.86	925.07	-2,166.34	2,287.65	2,152.55	135.10	16.933		
3,600.00	3,599.05	3,578.05	3,599.05	15.83	123.21	23.88	925.07	-2,166.34	2,285.36	2,146.35	139.02	16.439		
3,700.00	3,699.02	3,678.02	3,699.02	16.26	126.70	23.91	925.07	-2,166.34	2,283.08	2,140.14	142.94	15.973		
3,800.00	3,798.98	3,777.98	3,798.98	16.69	130.19	23.93	925.07	-2,166.34	2,280.79	2,133.94	146.86	15.531		
3,900.00	3,898.95	3,877.95	3,898.95	17.12	133.67	23.96	925.07	-2,166.34	2,278.51	2,127.74	150.78	15.112		
4,000.00	3,998.92	3,977.92	3,998.92	17.55	137.16	23.99	925.07	-2,166.34	2,276.23	2,121.53	154.70	14.714		
4,100.00	4,098.89	4,077.89	4,098.89	17.98	140.65	24.01	925.07	-2,166.34	2,273.94	2,115.33	158.62	14.336		
4,200.00	4,198.86	4,177.86	4,198.86	18.42	144.14	24.04	925.07	-2,166.34	2,271.66	2,109.12	162.54	13.976		
4,300.00	4,298.83	4,277.83	4,298.83	18.85	147.63	24.06	925.07	-2,166.34	2,269.38	2,102.92	166.46	13.633		
4,400.00	4,398.80	4,377.80	4,398.80	19.28	151.12	24.09	925.07	-2,166.34	2,267.10	2,096.72	170.38	13.306		
4,500.00	4,498.77	4,477.77	4,498.77	19.72	154.61	24.11	925.07	-2,166.34	2,264.82	2,090.51	174.30	12.993		
4,600.00	4,598.73	4,577.73	4,598.73	20.15	158.10	24.14	925.07	-2,166.34	2,262.54	2,084.31	178.23	12.695		
4,700.00	4,698.70	4,677.70	4,698.70	20.58	161.59	24.17	925.07	-2,166.34	2,260.26	2,078.11	182.15	12.409		
4,800.00	4,798.67	4,777.67	4,798.67	21.02	165.08	24.19	925.07	-2,166.34	2,257.98	2,071.90	186.07	12.135		
4,900.00	4,898.64	4,877.64	4,898.64	21.45	168.57	24.22	925.07	-2,166.34	2,255.70	2,065.70	190.00	11.872		
5,000.00	4,998.61	4,977.61	4,998.61	21.89	172.05	24.24	925.07	-2,166.34	2,253.42	2,059.50	193.92	11.620		
5,100.00	5,098.58	5,077.58	5,098.58	22.32	175.54	24.27	925.07	-2,166.34	2,251.14	2,053.30	197.84	11.378		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	5,198.55	5,177.55	5,198.55	22.76	179.03	24.30	925.07	-2,166.34	2,248.86	2,047.10	201.77	11.146	
5,300.00	5,298.52	5,277.52	5,298.52	23.20	182.52	24.32	925.07	-2,166.34	2,246.59	2,040.89	205.69	10.922	
5,400.00	5,398.49	5,377.49	5,398.49	23.63	186.01	24.35	925.07	-2,166.34	2,244.31	2,034.69	209.62	10.707	
5,500.00	5,498.45	5,477.45	5,498.45	24.07	189.50	24.38	925.07	-2,166.34	2,242.03	2,028.49	213.54	10.499	
5,600.00	5,598.42	5,577.42	5,598.42	24.50	192.99	24.40	925.07	-2,166.34	2,239.76	2,022.29	217.47	10.299	
5,700.00	5,698.39	5,677.39	5,698.39	24.94	196.48	24.43	925.07	-2,166.34	2,237.48	2,016.09	221.39	10.106	
5,800.00	5,798.36	5,777.36	5,798.36	25.38	199.97	24.45	925.07	-2,166.34	2,235.21	2,009.89	225.32	9.920	
5,900.00	5,898.33	5,877.33	5,898.33	25.81	203.46	24.48	925.07	-2,166.34	2,232.93	2,003.69	229.24	9.740	
6,000.00	5,998.30	5,977.30	5,998.30	26.25	206.95	24.51	925.07	-2,166.34	2,230.66	1,997.49	233.17	9.567	
6,100.00	6,098.27	6,077.27	6,098.27	26.69	210.44	24.53	925.07	-2,166.34	2,228.39	1,991.29	237.10	9.399	
6,200.00	6,198.24	6,177.24	6,198.24	27.12	213.93	24.56	925.07	-2,166.34	2,226.11	1,985.09	241.02	9.236	
6,300.00	6,298.20	6,277.20	6,298.20	27.56	217.42	24.59	925.07	-2,166.34	2,223.84	1,978.89	244.95	9.079	
6,400.00	6,398.17	6,377.17	6,398.17	28.00	220.91	24.61	925.07	-2,166.34	2,221.57	1,972.69	248.87	8.927	
6,500.00	6,498.14	6,477.14	6,498.14	28.43	224.40	24.64	925.07	-2,166.34	2,219.30	1,966.50	252.80	8.779	
6,600.00	6,597.68	6,576.68	6,597.68	28.88	227.87	25.98	925.07	-2,166.34	2,217.03	1,960.31	256.71	8.615	
6,700.00	6,697.65	6,676.65	6,697.65	29.32	231.36	27.23	925.07	-2,166.34	2,214.76	1,954.12	260.62	8.466	
6,800.00	6,797.62	6,776.62	6,797.62	29.77	234.85	28.48	925.07	-2,166.34	2,212.49	1,947.93	264.53	8.317	
6,900.00	6,897.59	6,876.59	6,897.59	30.21	238.34	29.73	925.07	-2,166.34	2,210.22	1,941.74	268.44	8.168	
7,000.00	6,997.56	6,976.56	6,997.56	30.66	241.83	30.98	925.07	-2,166.34	2,207.95	1,935.55	272.35	8.019	
7,100.00	7,097.53	7,076.53	7,097.53	31.10	245.32	32.23	925.07	-2,166.34	2,205.68	1,929.36	276.26	7.870	
7,200.00	7,197.50	7,176.50	7,197.50	31.55	248.81	33.48	925.07	-2,166.34	2,203.41	1,923.17	280.17	7.721	
7,300.00	7,297.47	7,276.47	7,297.47	32.00	252.30	34.73	925.07	-2,166.34	2,201.14	1,916.98	284.08	7.572	
7,400.00	7,397.44	7,376.44	7,397.44	32.44	255.79	35.98	925.07	-2,166.34	2,198.87	1,910.79	287.99	7.423	
7,500.00	7,497.41	7,476.41	7,497.41	32.89	259.28	37.23	925.07	-2,166.34	2,196.60	1,904.60	291.90	7.274	
7,600.00	7,597.38	7,576.38	7,597.38	33.33	262.77	38.48	925.07	-2,166.34	2,194.33	1,898.41	295.81	7.125	
7,700.00	7,697.35	7,676.35	7,697.35	33.78	266.26	39.73	925.07	-2,166.34	2,192.06	1,892.22	299.72	6.976	
7,800.00	7,797.32	7,776.32	7,797.32	34.22	269.75	40.98	925.07	-2,166.34	2,189.79	1,886.03	303.63	6.827	
7,900.00	7,897.29	7,876.29	7,897.29	34.67	273.24	42.23	925.07	-2,166.34	2,187.52	1,879.84	307.54	6.678	
8,000.00	7,997.26	7,976.26	7,997.26	35.11	276.73	43.48	925.07	-2,166.34	2,185.25	1,873.65	311.45	6.529	
8,100.00	8,097.23	8,076.23	8,097.23	35.56	280.22	44.73	925.07	-2,166.34	2,182.98	1,867.46	315.36	6.380	
8,200.00	8,197.20	8,176.20	8,197.20	36.00	283.71	45.98	925.07	-2,166.34	2,180.71	1,861.27	319.27	6.231	
8,300.00	8,297.17	8,276.17	8,297.17	36.45	287.20	47.23	925.07	-2,166.34	2,178.44	1,855.08	323.18	6.082	
8,400.00	8,397.14	8,376.14	8,397.14	36.89	290.69	48.48	925.07	-2,166.34	2,176.17	1,848.89	327.09	5.933	
8,500.00	8,497.11	8,476.11	8,497.11	37.34	294.18	49.73	925.07	-2,166.34	2,173.90	1,842.70	331.00	5.784	
8,600.00	8,597.08	8,576.08	8,597.08	37.78	297.67	50.98	925.07	-2,166.34	2,171.63	1,836.51	334.91	5.635	
8,700.00	8,697.05	8,676.05	8,697.05	38.23	301.16	52.23	925.07	-2,166.34	2,169.36	1,830.32	338.82	5.486	
8,800.00	8,797.02	8,776.02	8,797.02	38.67	304.65	53.48	925.07	-2,166.34	2,167.09	1,824.13	342.73	5.337	
8,900.00	8,897.00	8,876.00	8,897.00	39.12	308.14	54.73	925.07	-2,166.34	2,164.82	1,817.94	346.64	5.188	
9,000.00	8,997.00	8,976.00	8,997.00	39.56	311.63	55.98	925.07	-2,166.34	2,162.55	1,811.75	350.55	5.039	
9,100.00	9,097.00	9,076.00	9,097.00	40.01	315.12	57.23	925.07	-2,166.34	2,160.28	1,805.56	354.46	4.890	
9,200.00	9,197.00	9,176.00	9,197.00	40.45	318.61	58.48	925.07	-2,166.34	2,158.01	1,799.37	358.37	4.741	
9,300.00	9,297.00	9,276.00	9,297.00	40.90	322.10	59.73	925.07	-2,166.34	2,155.74	1,793.18	362.28	4.592	
9,400.00	9,397.00	9,376.00	9,397.00	41.34	325.59	60.98	925.07	-2,166.34	2,153.47	1,786.99	366.19	4.443	
9,500.00	9,497.00	9,476.00	9,497.00	41.79	329.08	62.23	925.07	-2,166.34	2,151.20	1,780.80	370.10	4.294	
9,600.00	9,597.00	9,576.00	9,597.00	42.23	332.57	63.48	925.07	-2,166.34	2,148.93	1,774.61	374.01	4.145	
9,700.00	9,697.00	9,676.00	9,697.00	42.68	336.06	64.73	925.07	-2,166.34	2,146.66	1,768.42	377.92	4.000	
9,800.00	9,797.00	9,776.00	9,797.00	43.12	339.55	65.98	925.07	-2,166.34	2,144.39	1,762.23	381.83	3.851	
9,900.00	9,897.00	9,876.00	9,897.00	43.57	343.04	67.23	925.07	-2,166.34	2,142.12	1,756.04	385.74	3.702	
10,000.00	9,997.00	9,976.00	9,997.00	44.01	346.53	68.48	925.07	-2,166.34	2,139.85	1,749.85	389.65	3.553	
10,100.00	10,097.00	10,076.00	10,097.00	44.46	350.02	69.73	925.07	-2,166.34	2,137.58	1,743.66	393.56	3.404	
10,200.00	10,197.00	10,176.00	10,197.00	44.90	353.51	70.98	925.07	-2,166.34	2,135.31	1,737.47	397.47	3.255	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.74	7,100.26	7,120.74	100.32	246.15	89.69	925.07	-2,166.34	1,734.26	1,426.50	307.76	5.635		
10,400.00	7,120.38	7,100.62	7,120.38	103.04	246.16	89.66	925.07	-2,166.34	1,818.23	1,511.24	306.99	5.923		
10,500.00	7,120.01	7,100.99	7,120.01	105.76	246.17	89.64	925.07	-2,166.34	1,903.76	1,597.49	306.27	6.216		
10,600.00	7,119.64	7,101.36	7,119.64	108.48	246.19	89.62	925.07	-2,166.34	1,990.63	1,685.05	305.58	6.514		
10,700.00	7,119.28	7,101.72	7,119.28	111.22	246.20	89.60	925.07	-2,166.34	2,078.69	1,773.75	304.94	6.817		
10,800.00	7,118.91	7,102.09	7,118.91	113.96	246.21	89.58	925.07	-2,166.34	2,167.78	1,863.45	304.33	7.123		
10,900.00	7,118.55	7,102.45	7,118.55	116.70	246.22	89.56	925.07	-2,166.34	2,257.78	1,954.02	303.77	7.433		
11,000.00	7,118.18	7,102.82	7,118.18	119.45	246.24	89.53	925.07	-2,166.34	2,348.60	2,045.36	303.24	7.745		
11,100.00	7,117.81	7,103.19	7,117.81	122.21	246.25	89.51	925.07	-2,166.34	2,440.13	2,137.39	302.74	8.060		
11,200.00	7,117.45	7,103.55	7,117.45	124.97	246.26	89.49	925.07	-2,166.34	2,532.30	2,230.02	302.28	8.377		
11,300.00	7,117.08	7,103.92	7,117.08	127.73	246.27	89.47	925.07	-2,166.34	2,625.05	2,323.20	301.85	8.697		
11,400.00	7,116.72	7,104.29	7,116.72	130.50	246.29	89.45	925.07	-2,166.34	2,718.31	2,416.86	301.45	9.018		
11,500.00	7,116.35	7,104.65	7,116.35	133.27	246.30	89.43	925.07	-2,166.34	2,812.03	2,510.96	301.07	9.340		
11,600.00	7,115.98	7,105.02	7,115.98	136.04	246.31	89.40	925.07	-2,166.34	2,906.17	2,605.45	300.72	9.664		
11,700.00	7,115.62	7,105.38	7,115.62	138.82	246.33	89.38	925.07	-2,166.34	3,000.69	2,700.30	300.39	9.989		
11,800.00	7,115.25	7,105.75	7,115.25	141.60	246.34	89.36	925.07	-2,166.34	3,095.56	2,795.48	300.08	10.316		
11,900.00	7,114.88	7,106.12	7,114.88	144.39	246.35	89.34	925.07	-2,166.34	3,190.74	2,890.94	299.79	10.643		
12,000.00	7,114.52	7,106.48	7,114.52	147.17	246.36	89.32	925.07	-2,166.34	3,286.20	2,986.67	299.53	10.971		
12,100.00	7,114.15	7,106.85	7,114.15	149.96	246.38	89.29	925.07	-2,166.34	3,381.93	3,082.65	299.27	11.300		
12,200.00	7,113.79	7,107.21	7,113.79	152.75	246.39	89.27	925.07	-2,166.34	3,477.89	3,178.85	299.04	11.630		
12,300.00	7,113.42	7,107.58	7,113.42	155.55	246.40	89.25	925.07	-2,166.34	3,574.08	3,275.26	298.82	11.961		
12,400.00	7,113.05	7,107.95	7,113.05	158.34	246.42	89.23	925.07	-2,166.34	3,670.47	3,371.86	298.62	12.292		
12,500.00	7,112.69	7,108.31	7,112.69	161.14	246.43	89.21	925.07	-2,166.34	3,767.05	3,468.63	298.42	12.623		
12,600.00	7,112.32	7,108.68	7,112.32	163.94	246.44	89.19	925.07	-2,166.34	3,863.81	3,565.56	298.24	12.955		
12,700.00	7,111.96	7,109.05	7,111.96	166.74	246.45	89.16	925.07	-2,166.34	3,960.72	3,662.65	298.08	13.288		
12,800.00	7,111.59	7,109.41	7,111.59	169.54	246.47	89.14	925.07	-2,166.34	4,057.79	3,759.87	297.92	13.620		
12,900.00	7,111.22	7,109.78	7,111.22	172.35	246.48	89.12	925.07	-2,166.34	4,154.99	3,857.22	297.77	13.953		
13,000.00	7,110.86	7,089.86	7,110.86	175.16	245.78	89.10	925.07	-2,166.34	4,252.33	3,955.40	296.93	14.321		
13,100.00	7,110.49	7,089.49	7,110.49	177.96	245.77	89.08	925.07	-2,166.34	4,349.78	4,053.00	296.78	14.657		
13,200.00	7,110.12	7,089.12	7,110.12	180.77	245.76	89.06	925.07	-2,166.34	4,447.35	4,150.71	296.63	14.993		
13,300.00	7,109.76	7,088.76	7,109.76	183.58	245.75	89.03	925.07	-2,166.34	4,545.02	4,248.52	296.50	15.329		
13,400.00	7,109.39	7,088.39	7,109.39	186.40	245.73	89.01	925.07	-2,166.34	4,642.80	4,346.42	296.37	15.665		
13,500.00	7,109.03	7,088.03	7,109.03	189.21	245.72	88.99	925.07	-2,166.34	4,740.66	4,444.41	296.25	16.002		
13,600.00	7,108.66	7,087.66	7,108.66	192.03	245.71	88.97	925.07	-2,166.34	4,838.61	4,542.47	296.14	16.339		
13,700.00	7,108.29	7,087.29	7,108.29	194.84	245.69	88.95	925.07	-2,166.34	4,936.65	4,640.61	296.03	16.676		
13,800.00	7,107.93	7,086.93	7,107.93	197.66	245.68	88.92	925.07	-2,166.34	5,034.76	4,738.83	295.93	17.013		
13,900.00	7,107.56	7,086.56	7,107.56	200.48	245.67	88.90	925.07	-2,166.34	5,132.95	4,837.10	295.84	17.350		
14,000.00	7,107.19	7,086.19	7,107.19	203.30	245.66	88.88	925.07	-2,166.34	5,231.20	4,935.45	295.75	17.688		
14,100.00	7,106.83	7,085.83	7,106.83	206.12	245.64	88.86	925.07	-2,166.34	5,329.52	5,033.85	295.67	18.025		
14,200.00	7,106.46	7,085.46	7,106.46	208.94	245.63	88.84	925.07	-2,166.34	5,427.90	5,132.30	295.59	18.363		
14,300.00	7,106.10	7,085.10	7,106.10	211.76	245.62	88.82	925.07	-2,166.34	5,526.34	5,230.81	295.52	18.700		
14,400.00	7,105.73	7,084.73	7,105.73	214.58	245.60	88.79	925.07	-2,166.34	5,624.83	5,329.37	295.45	19.038		
14,500.00	7,105.36	7,084.36	7,105.36	217.40	245.59	88.77	925.07	-2,166.34	5,723.37	5,427.98	295.39	19.376		
14,600.00	7,105.00	7,084.00	7,105.00	220.23	245.58	88.75	925.07	-2,166.34	5,821.97	5,526.63	295.33	19.713		
14,700.00	7,104.63	7,083.63	7,104.63	223.05	245.57	88.73	925.07	-2,166.34	5,920.61	5,625.33	295.28	20.051		
14,800.00	7,104.27	7,083.27	7,104.27	225.88	245.55	88.71	925.07	-2,166.34	6,019.30	5,724.07	295.23	20.388		
14,872.41	7,104.00	7,083.00	7,104.00	227.93	245.54	88.69	925.07	-2,166.34	6,090.78	5,795.59	295.20	20.633		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	36.00	3.28	3.28	-99.14	-408.26	-2,536.38	2,569.28					
100.00	100.00	64.00	100.00	3.28	3.47	-99.14	-408.26	-2,536.38	2,569.03	2,562.28	6.75	380.611		
200.00	200.00	164.00	200.00	3.34	5.16	-99.14	-408.26	-2,536.38	2,569.03	2,560.53	8.49	302.444		
300.00	300.00	264.00	300.00	3.44	8.16	-99.14	-408.26	-2,536.38	2,569.03	2,557.42	11.60	221.392		
400.00	400.00	364.00	400.00	3.60	11.44	-99.14	-408.26	-2,536.38	2,569.03	2,553.98	15.05	170.753		
500.00	500.00	464.00	500.00	3.81	14.82	-99.14	-408.26	-2,536.38	2,569.03	2,550.40	18.63	137.925		
600.00	599.98	563.98	599.98	4.04	18.24	-9.15	-408.26	-2,536.38	2,567.44	2,545.16	22.28	115.235		
700.00	699.95	663.95	699.95	4.30	21.68	-9.16	-408.26	-2,536.38	2,564.98	2,538.99	25.98	98.717		
800.00	799.92	763.92	799.92	4.59	25.14	-9.17	-408.26	-2,536.38	2,562.51	2,532.78	29.73	86.202		
900.00	899.89	863.89	899.89	4.90	28.60	-9.18	-408.26	-2,536.38	2,560.04	2,526.54	33.50	76.417		
1,000.00	999.86	963.86	999.86	5.23	32.07	-9.19	-408.26	-2,536.38	2,557.58	2,520.28	37.30	68.569		
1,100.00	1,099.83	1,063.83	1,099.83	5.58	35.54	-9.20	-408.26	-2,536.38	2,555.11	2,513.99	41.12	62.142		
1,200.00	1,199.80	1,163.80	1,199.80	5.94	39.02	-9.21	-408.26	-2,536.38	2,552.64	2,507.69	44.95	56.788		
1,300.00	1,299.77	1,263.77	1,299.77	6.30	42.50	-9.21	-408.26	-2,536.38	2,550.18	2,501.38	48.80	52.262		
1,400.00	1,399.73	1,363.73	1,399.73	6.68	45.98	-9.22	-408.26	-2,536.38	2,547.71	2,495.06	52.65	48.388		
1,500.00	1,499.70	1,463.70	1,499.70	7.07	49.46	-9.23	-408.26	-2,536.38	2,545.24	2,488.73	56.52	45.035		
1,600.00	1,599.67	1,563.67	1,599.67	7.46	52.94	-9.24	-408.26	-2,536.38	2,542.78	2,482.39	60.39	42.107		
1,700.00	1,699.64	1,663.64	1,699.64	7.85	56.43	-9.25	-408.26	-2,536.38	2,540.31	2,476.04	64.27	39.527		
1,800.00	1,799.61	1,763.61	1,799.61	8.25	59.91	-9.26	-408.26	-2,536.38	2,537.85	2,469.69	68.15	37.239		
1,900.00	1,899.58	1,863.58	1,899.58	8.66	63.40	-9.27	-408.26	-2,536.38	2,535.38	2,463.34	72.04	35.195		
2,000.00	1,999.55	1,963.55	1,999.55	9.06	66.88	-9.28	-408.26	-2,536.38	2,532.91	2,456.98	75.93	33.358		
2,100.00	2,099.52	2,063.52	2,099.52	9.47	70.37	-9.29	-408.26	-2,536.38	2,530.45	2,450.62	79.83	31.700		
2,200.00	2,199.48	2,163.48	2,199.48	9.89	73.85	-9.30	-408.26	-2,536.38	2,527.98	2,444.26	83.72	30.194		
2,300.00	2,299.45	2,263.45	2,299.45	10.30	77.34	-9.31	-408.26	-2,536.38	2,525.52	2,437.89	87.62	28.822		
2,400.00	2,399.42	2,363.42	2,399.42	10.72	80.83	-9.31	-408.26	-2,536.38	2,523.05	2,431.52	91.53	27.566		
2,500.00	2,499.39	2,463.39	2,499.39	11.14	84.32	-9.32	-408.26	-2,536.38	2,520.58	2,425.15	95.43	26.412		
2,600.00	2,599.36	2,563.36	2,599.36	11.56	87.80	-9.33	-408.26	-2,536.38	2,518.12	2,418.78	99.34	25.349		
2,700.00	2,699.33	2,663.33	2,699.33	11.98	91.29	-9.34	-408.26	-2,536.38	2,515.65	2,412.41	103.25	24.365		
2,800.00	2,799.30	2,763.30	2,799.30	12.41	94.78	-9.35	-408.26	-2,536.38	2,513.19	2,406.03	107.16	23.453		
2,900.00	2,899.27	2,863.27	2,899.27	12.83	98.27	-9.36	-408.26	-2,536.38	2,510.72	2,399.65	111.07	22.605		
3,000.00	2,999.23	2,963.23	2,999.23	13.26	101.75	-9.37	-408.26	-2,536.38	2,508.26	2,393.28	114.98	21.815		
3,100.00	3,099.20	3,063.20	3,099.20	13.68	105.24	-9.38	-408.26	-2,536.38	2,505.79	2,386.90	118.89	21.076		
3,200.00	3,199.17	3,163.17	3,199.17	14.11	108.73	-9.39	-408.26	-2,536.38	2,503.33	2,380.52	122.81	20.384		
3,300.00	3,299.14	3,263.14	3,299.14	14.54	112.22	-9.40	-408.26	-2,536.38	2,500.86	2,374.14	126.72	19.735		
3,400.00	3,399.11	3,363.11	3,399.11	14.97	115.71	-9.41	-408.26	-2,536.38	2,498.40	2,367.76	130.64	19.124		
3,500.00	3,499.08	3,463.08	3,499.08	15.40	119.20	-9.42	-408.26	-2,536.38	2,495.93	2,361.37	134.56	18.549		
3,600.00	3,599.05	3,563.05	3,599.05	15.83	122.68	-9.43	-408.26	-2,536.38	2,493.47	2,354.99	138.47	18.007		
3,700.00	3,699.02	3,663.02	3,699.02	16.26	126.17	-9.44	-408.26	-2,536.38	2,491.00	2,348.61	142.39	17.494		
3,800.00	3,798.98	3,762.98	3,798.98	16.69	129.66	-9.45	-408.26	-2,536.38	2,488.54	2,342.23	146.31	17.009		
3,900.00	3,898.95	3,862.95	3,898.95	17.12	133.15	-9.45	-408.26	-2,536.38	2,486.07	2,335.84	150.23	16.549		
4,000.00	3,998.92	3,962.92	3,998.92	17.55	136.64	-9.46	-408.26	-2,536.38	2,483.61	2,329.46	154.15	16.112		
4,100.00	4,098.89	4,062.89	4,098.89	17.98	140.13	-9.47	-408.26	-2,536.38	2,481.14	2,323.07	158.07	15.697		
4,200.00	4,198.86	4,162.86	4,198.86	18.42	143.62	-9.48	-408.26	-2,536.38	2,478.68	2,316.69	161.99	15.302		
4,300.00	4,298.83	4,262.83	4,298.83	18.85	147.11	-9.49	-408.26	-2,536.38	2,476.21	2,310.30	165.91	14.925		
4,400.00	4,398.80	4,362.80	4,398.80	19.28	150.60	-9.50	-408.26	-2,536.38	2,473.75	2,303.92	169.83	14.566		
4,500.00	4,498.77	4,462.77	4,498.77	19.72	154.08	-9.51	-408.26	-2,536.38	2,471.28	2,297.53	173.75	14.223		
4,600.00	4,598.73	4,562.73	4,598.73	20.15	157.57	-9.52	-408.26	-2,536.38	2,468.82	2,291.14	177.67	13.895		
4,700.00	4,698.70	4,662.70	4,698.70	20.58	161.06	-9.53	-408.26	-2,536.38	2,466.35	2,284.76	181.60	13.582		
4,800.00	4,798.67	4,762.67	4,798.67	21.02	164.55	-9.54	-408.26	-2,536.38	2,463.89	2,278.37	185.52	13.281		
4,900.00	4,898.64	4,862.64	4,898.64	21.45	168.04	-9.55	-408.26	-2,536.38	2,461.43	2,271.99	189.44	12.993		
5,000.00	4,998.61	4,962.61	4,998.61	21.89	171.53	-9.56	-408.26	-2,536.38	2,458.96	2,265.60	193.36	12.717		
5,100.00	5,098.58	5,062.58	5,098.58	22.32	175.02	-9.57	-408.26	-2,536.38	2,456.50	2,259.21	197.29	12.451		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	5,198.55	5,162.55	5,198.55	22.76	178.51	-9.58	-408.26	-2,536.38	2,454.03	2,252.82	201.21	12.196	
5,300.00	5,298.52	5,262.52	5,298.52	23.20	182.00	-9.59	-408.26	-2,536.38	2,451.57	2,246.44	205.13	11.951	
5,400.00	5,398.49	5,362.49	5,398.49	23.63	185.49	-9.60	-408.26	-2,536.38	2,449.11	2,240.05	209.06	11.715	
5,500.00	5,498.45	5,462.45	5,498.45	24.07	188.98	-9.61	-408.26	-2,536.38	2,446.64	2,233.66	212.98	11.488	
5,600.00	5,598.42	5,562.42	5,598.42	24.50	192.47	-9.62	-408.26	-2,536.38	2,444.18	2,227.27	216.91	11.268	
5,700.00	5,698.39	5,662.39	5,698.39	24.94	195.96	-9.63	-408.26	-2,536.38	2,441.72	2,220.89	220.83	11.057	
5,800.00	5,798.36	5,762.36	5,798.36	25.38	199.45	-9.64	-408.26	-2,536.38	2,439.25	2,214.50	224.76	10.853	
5,900.00	5,898.33	5,862.33	5,898.33	25.81	202.94	-9.65	-408.26	-2,536.38	2,436.79	2,208.11	228.68	10.656	
6,000.00	5,998.30	5,962.30	5,998.30	26.25	206.42	-9.66	-408.26	-2,536.38	2,434.33	2,201.72	232.60	10.466	
6,100.00	6,098.27	6,062.27	6,098.27	26.69	209.91	-9.67	-408.26	-2,536.38	2,431.86	2,195.33	236.53	10.281	
6,200.00	6,198.24	6,162.24	6,198.24	27.12	213.40	-9.68	-408.26	-2,536.38	2,429.40	2,188.94	240.45	10.103	
6,300.00	6,298.20	6,262.20	6,298.20	27.56	216.89	-9.69	-408.26	-2,536.38	2,426.94	2,182.56	244.38	9.931	
6,400.00	6,398.17	6,362.17	6,398.17	28.00	220.38	-9.70	-408.26	-2,536.38	2,424.47	2,176.17	248.30	9.764	
6,500.00	6,498.14	6,462.14	6,498.14	28.43	223.87	-9.71	-408.26	-2,536.38	2,422.01	2,169.78	252.23	9.602	
6,600.00	6,597.68	6,561.68	6,597.68	28.88	227.35	-9.90	-408.26	-2,536.38	2,413.57	2,157.43	256.14	9.423	
6,700.00	6,694.68	6,658.68	6,694.68	29.32	230.73	-9.25	-408.26	-2,536.38	2,389.96	2,130.00	259.96	9.194	
6,800.00	6,786.74	6,750.74	6,786.74	29.77	233.95	-10.00	-408.26	-2,536.38	2,351.65	2,088.07	263.58	8.922	
6,900.00	6,871.61	6,835.61	6,871.61	30.24	236.91	-11.23	-408.26	-2,536.38	2,299.60	2,032.69	266.91	8.616	
7,000.00	6,947.19	6,911.19	6,947.19	30.74	239.55	-13.17	-408.26	-2,536.38	2,235.11	1,965.26	269.86	8.283	
7,100.00	7,011.62	6,975.62	7,011.62	31.32	241.80	-16.28	-408.26	-2,536.38	2,159.82	1,887.45	272.37	7.930	
7,200.00	7,063.31	7,027.31	7,063.31	32.03	243.60	-21.56	-408.26	-2,536.38	2,075.60	1,801.22	274.38	7.565	
7,300.00	7,101.00	7,065.00	7,101.00	32.89	244.92	-31.45	-408.26	-2,536.38	1,984.57	1,708.72	275.84	7.195	
7,400.00	7,123.74	7,087.74	7,123.74	33.93	245.71	-52.35	-408.26	-2,536.38	1,889.01	1,612.26	276.75	6.826	
7,500.00	7,131.00	7,105.00	7,131.00	35.10	246.31	-91.02	-408.26	-2,536.38	1,791.32	1,513.88	277.44	6.457	
7,600.00	7,130.63	7,105.37	7,130.63	36.44	246.33	-90.96	-408.26	-2,536.38	1,693.50	1,415.95	277.55	6.102	
7,700.00	7,130.26	7,105.74	7,130.26	37.94	246.34	-90.90	-408.26	-2,536.38	1,595.96	1,318.26	277.69	5.747	
7,800.00	7,129.90	7,106.10	7,129.90	39.59	246.35	-90.84	-408.26	-2,536.38	1,498.73	1,220.85	277.89	5.393	
7,900.00	7,129.53	7,106.47	7,129.53	41.37	246.36	-90.79	-408.26	-2,536.38	1,401.90	1,123.76	278.14	5.040	
8,000.00	7,129.17	7,106.84	7,129.17	43.27	246.38	-90.73	-408.26	-2,536.38	1,305.54	1,027.07	278.47	4.688	
8,100.00	7,128.80	7,107.20	7,128.80	45.27	246.39	-90.67	-408.26	-2,536.38	1,209.78	930.86	278.91	4.337	
8,200.00	7,128.43	7,107.57	7,128.43	47.36	246.40	-90.61	-408.26	-2,536.38	1,114.75	835.25	279.51	3.988	
8,300.00	7,128.07	7,107.93	7,128.07	49.52	246.41	-90.55	-408.26	-2,536.38	1,020.68	740.37	280.31	3.641	
8,400.00	7,127.70	7,108.30	7,127.70	51.75	246.43	-90.50	-408.26	-2,536.38	927.86	646.46	281.40	3.297	
8,500.00	7,127.33	7,108.67	7,127.33	54.04	246.44	-90.44	-408.26	-2,536.38	836.68	553.79	282.89	2.958	
8,600.00	7,126.97	7,109.03	7,126.97	56.38	246.45	-90.38	-408.26	-2,536.38	747.77	462.83	284.94	2.624	
8,700.00	7,126.60	7,109.40	7,126.60	58.77	246.47	-90.32	-408.26	-2,536.38	662.02	374.25	287.77	2.301	
8,800.00	7,126.24	7,109.76	7,126.24	61.19	246.48	-90.26	-408.26	-2,536.38	580.85	289.20	291.66	1.992	
8,900.00	7,125.87	7,089.87	7,125.87	63.65	245.78	-90.21	-408.26	-2,536.38	506.47	210.31	296.16	1.710	
9,000.00	7,125.50	7,089.50	7,125.50	66.15	245.77	-90.15	-408.26	-2,536.38	442.30	139.57	302.72	1.461 Level 3	
9,100.00	7,125.14	7,089.14	7,125.14	68.67	245.76	-90.09	-408.26	-2,536.38	393.38	83.32	310.05	1.269 Level 3	
9,200.00	7,124.77	7,088.77	7,124.77	71.21	245.75	-90.03	-408.26	-2,536.38	365.87	49.57	316.30	1.157 Level 2	
9,254.41	7,124.57	7,088.57	7,124.57	72.61	245.74	-90.00	-408.26	-2,536.38	361.80	43.45	318.35	1.136 Level 2, CC, ES, SF	
9,300.00	7,124.41	7,088.41	7,124.41	73.78	245.73	-89.97	-408.26	-2,536.38	364.66	45.61	319.06	1.143 Level 2	
9,400.00	7,124.04	7,088.04	7,124.04	76.37	245.72	-89.92	-408.26	-2,536.38	389.99	72.42	317.57	1.228 Level 2	
9,500.00	7,123.67	7,087.67	7,123.67	78.98	245.71	-89.86	-408.26	-2,536.38	437.28	123.83	313.45	1.395 Level 3	
9,600.00	7,123.31	7,087.31	7,123.31	81.60	245.69	-89.80	-408.26	-2,536.38	500.33	191.69	308.64	1.621	
9,700.00	7,122.94	7,086.94	7,122.94	84.24	245.68	-89.74	-408.26	-2,536.38	573.97	269.77	304.20	1.887	
9,800.00	7,122.57	7,086.57	7,122.57	86.90	245.67	-89.68	-408.26	-2,536.38	654.64	354.17	300.47	2.179	
9,900.00	7,122.21	7,086.21	7,122.21	89.56	245.66	-89.63	-408.26	-2,536.38	740.05	442.62	297.44	2.488	
10,000.00	7,121.84	7,085.84	7,121.84	92.24	245.64	-89.57	-408.26	-2,536.38	828.73	533.74	294.99	2.809	
10,100.00	7,121.48	7,085.48	7,121.48	94.92	245.63	-89.51	-408.26	-2,536.38	919.73	626.72	293.01	3.139	
10,200.00	7,121.11	7,085.11	7,121.11	97.62	245.62	-89.45	-408.26	-2,536.38	1,012.43	721.03	291.40	3.474	

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-23(SI_150CC - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,120.74	7,084.74	7,120.74	100.32	245.61	-89.39	-408.26	-2,536.38	1,106.41	816.32	290.08	3.814		
10,400.00	7,120.38	7,084.38	7,120.38	103.04	245.59	-89.34	-408.26	-2,536.38	1,201.35	912.36	288.99	4.157		
10,500.00	7,120.01	7,084.01	7,120.01	105.76	245.58	-89.28	-408.26	-2,536.38	1,297.06	1,008.98	288.07	4.503		
10,600.00	7,119.64	7,083.64	7,119.64	108.48	245.57	-89.22	-408.26	-2,536.38	1,393.37	1,106.07	287.30	4.850		
10,700.00	7,119.28	7,083.28	7,119.28	111.22	245.55	-89.16	-408.26	-2,536.38	1,490.16	1,203.52	286.65	5.199		
10,800.00	7,118.91	7,082.91	7,118.91	113.96	245.54	-89.10	-408.26	-2,536.38	1,587.36	1,301.27	286.08	5.549		
10,900.00	7,118.55	7,082.55	7,118.55	116.70	245.53	-89.05	-408.26	-2,536.38	1,684.88	1,399.28	285.60	5.899		
11,000.00	7,118.18	7,082.18	7,118.18	119.45	245.52	-88.99	-408.26	-2,536.38	1,782.67	1,497.50	285.18	6.251		
11,100.00	7,117.81	7,081.81	7,117.81	122.21	245.50	-88.93	-408.26	-2,536.38	1,880.70	1,595.89	284.81	6.603		
11,200.00	7,117.45	7,081.45	7,117.45	124.97	245.49	-88.87	-408.26	-2,536.38	1,978.93	1,694.44	284.49	6.956		
11,300.00	7,117.08	7,081.08	7,117.08	127.73	245.48	-88.81	-408.26	-2,536.38	2,077.32	1,793.11	284.21	7.309		
11,400.00	7,116.72	7,080.72	7,116.72	130.50	245.46	-88.76	-408.26	-2,536.38	2,175.86	1,891.90	283.96	7.663		
11,500.00	7,116.35	7,080.35	7,116.35	133.27	245.45	-88.70	-408.26	-2,536.38	2,274.53	1,990.79	283.74	8.016		
11,600.00	7,115.98	7,079.98	7,115.98	136.04	245.44	-88.64	-408.26	-2,536.38	2,373.31	2,089.76	283.55	8.370		
11,700.00	7,115.62	7,079.62	7,115.62	138.82	245.43	-88.58	-408.26	-2,536.38	2,472.19	2,188.81	283.38	8.724		
11,800.00	7,115.25	7,079.25	7,115.25	141.60	245.41	-88.52	-408.26	-2,536.38	2,571.15	2,287.93	283.22	9.078		
11,900.00	7,114.88	7,078.88	7,114.88	144.39	245.40	-88.47	-408.26	-2,536.38	2,670.19	2,387.10	283.09	9.432		
12,000.00	7,114.52	7,078.52	7,114.52	147.17	245.39	-88.41	-408.26	-2,536.38	2,769.30	2,486.33	282.97	9.787		
12,100.00	7,114.15	7,078.15	7,114.15	149.96	245.38	-88.35	-408.26	-2,536.38	2,868.47	2,585.61	282.86	10.141		
12,200.00	7,113.79	7,077.79	7,113.79	152.75	245.36	-88.29	-408.26	-2,536.38	2,967.70	2,684.93	282.77	10.495		
12,300.00	7,113.42	7,077.42	7,113.42	155.55	245.35	-88.23	-408.26	-2,536.38	3,066.98	2,784.29	282.69	10.849		
12,400.00	7,113.05	7,077.05	7,113.05	158.34	245.34	-88.18	-408.26	-2,536.38	3,166.30	2,883.69	282.61	11.204		
12,500.00	7,112.69	7,076.69	7,112.69	161.14	245.32	-88.12	-408.26	-2,536.38	3,265.67	2,983.12	282.55	11.558		
12,600.00	7,112.32	7,076.32	7,112.32	163.94	245.31	-88.06	-408.26	-2,536.38	3,365.07	3,082.58	282.49	11.912		
12,700.00	7,111.96	7,075.96	7,111.96	166.74	245.30	-88.00	-408.26	-2,536.38	3,464.51	3,182.06	282.45	12.266		
12,800.00	7,111.59	7,075.59	7,111.59	169.54	245.29	-87.94	-408.26	-2,536.38	3,563.97	3,281.57	282.41	12.620		
12,900.00	7,111.22	7,075.22	7,111.22	172.35	245.27	-87.89	-408.26	-2,536.38	3,663.47	3,381.10	282.37	12.974		
13,000.00	7,110.86	7,074.86	7,110.86	175.16	245.26	-87.83	-408.26	-2,536.38	3,762.99	3,480.65	282.34	13.328		
13,100.00	7,110.49	7,074.49	7,110.49	177.96	245.25	-87.77	-408.26	-2,536.38	3,862.54	3,580.22	282.32	13.681		
13,200.00	7,110.12	7,074.12	7,110.12	180.77	245.23	-87.71	-408.26	-2,536.38	3,962.11	3,679.81	282.30	14.035		
13,300.00	7,109.76	7,073.76	7,109.76	183.58	245.22	-87.66	-408.26	-2,536.38	4,061.70	3,779.41	282.29	14.388		
13,400.00	7,109.39	7,073.39	7,109.39	186.40	245.21	-87.60	-408.26	-2,536.38	4,161.32	3,879.03	282.28	14.742		
13,500.00	7,109.03	7,073.03	7,109.03	189.21	245.20	-87.54	-408.26	-2,536.38	4,260.95	3,978.67	282.28	15.095		
13,600.00	7,108.66	7,072.66	7,108.66	192.03	245.18	-87.48	-408.26	-2,536.38	4,360.59	4,078.31	282.28	15.448		
13,700.00	7,108.29	7,072.29	7,108.29	194.84	245.17	-87.42	-408.26	-2,536.38	4,460.25	4,177.97	282.28	15.801		
13,800.00	7,107.93	7,071.93	7,107.93	197.66	245.16	-87.37	-408.26	-2,536.38	4,559.93	4,277.64	282.29	16.153		
13,900.00	7,107.56	7,071.56	7,107.56	200.48	245.15	-87.31	-408.26	-2,536.38	4,659.62	4,377.32	282.30	16.506		
14,000.00	7,107.19	7,071.19	7,107.19	203.30	245.13	-87.25	-408.26	-2,536.38	4,759.33	4,477.01	282.31	16.858		
14,100.00	7,106.83	7,070.83	7,106.83	206.12	245.12	-87.19	-408.26	-2,536.38	4,859.04	4,576.71	282.33	17.211		
14,200.00	7,106.46	7,070.46	7,106.46	208.94	245.11	-87.13	-408.26	-2,536.38	4,958.77	4,676.42	282.35	17.563		
14,300.00	7,106.10	7,070.10	7,106.10	211.76	245.09	-87.08	-408.26	-2,536.38	5,058.51	4,776.14	282.37	17.914		
14,400.00	7,105.73	7,069.73	7,105.73	214.58	245.08	-87.02	-408.26	-2,536.38	5,158.26	4,875.86	282.39	18.266		
14,500.00	7,105.36	7,069.36	7,105.36	217.40	245.07	-86.96	-408.26	-2,536.38	5,258.01	4,975.59	282.42	18.618		
14,600.00	7,105.00	7,069.00	7,105.00	220.23	245.06	-86.90	-408.26	-2,536.38	5,357.78	5,075.33	282.45	18.969		
14,700.00	7,104.63	7,068.63	7,104.63	223.05	245.04	-86.85	-408.26	-2,536.38	5,457.55	5,175.07	282.48	19.320		
14,800.00	7,104.27	7,068.27	7,104.27	225.88	245.03	-86.79	-408.26	-2,536.38	5,557.34	5,274.82	282.52	19.671		
14,872.41	7,104.00	7,068.00	7,104.00	227.93	245.02	-86.75	-408.26	-2,536.38	5,629.60	5,347.05	282.54	19.925		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	47.00	3.28	3.28	-108.20	-1,577.34	-4,797.91	5,050.76				
100.00	100.00	53.00	100.00	3.28	3.41	-108.20	-1,577.34	-4,797.91	5,050.54	5,043.84	6.69	754.635	
200.00	200.00	153.00	200.00	3.34	4.87	-108.20	-1,577.34	-4,797.91	5,050.54	5,042.33	8.20	615.617	
300.00	300.00	253.00	300.00	3.44	7.81	-108.20	-1,577.34	-4,797.91	5,050.54	5,039.28	11.25	448.781	
400.00	400.00	353.00	400.00	3.60	11.07	-108.20	-1,577.34	-4,797.91	5,050.54	5,035.86	14.68	344.090	
500.00	500.00	453.00	500.00	3.81	14.45	-108.20	-1,577.34	-4,797.91	5,050.54	5,032.28	18.25	276.711	
600.00	599.98	552.98	599.98	4.04	17.86	-18.21	-1,577.34	-4,797.91	5,049.01	5,027.11	21.90	230.523	
700.00	699.95	652.95	699.95	4.30	21.30	-18.22	-1,577.34	-4,797.91	5,046.64	5,021.04	25.60	197.106	
800.00	799.92	752.92	799.92	4.59	24.76	-18.23	-1,577.34	-4,797.91	5,044.27	5,014.92	29.35	171.889	
900.00	899.89	852.89	899.89	4.90	28.22	-18.24	-1,577.34	-4,797.91	5,041.89	5,008.77	33.12	152.233	
1,000.00	999.86	952.86	999.86	5.23	31.69	-18.25	-1,577.34	-4,797.91	5,039.52	5,002.60	36.92	136.508	
1,100.00	1,099.83	1,052.83	1,099.83	5.58	35.16	-18.25	-1,577.34	-4,797.91	5,037.15	4,996.41	40.73	123.657	
1,200.00	1,199.80	1,152.80	1,199.80	5.94	38.64	-18.26	-1,577.34	-4,797.91	5,034.77	4,990.21	44.57	112.970	
1,300.00	1,299.77	1,252.77	1,299.77	6.30	42.12	-18.27	-1,577.34	-4,797.91	5,032.40	4,983.99	48.41	103.947	
1,400.00	1,399.73	1,352.73	1,399.73	6.68	45.60	-18.28	-1,577.34	-4,797.91	5,030.03	4,977.76	52.27	96.234	
1,500.00	1,499.70	1,452.70	1,499.70	7.07	49.08	-18.29	-1,577.34	-4,797.91	5,027.65	4,971.52	56.13	89.566	
1,600.00	1,599.67	1,552.67	1,599.67	7.46	52.56	-18.30	-1,577.34	-4,797.91	5,025.28	4,965.28	60.01	83.747	
1,700.00	1,699.64	1,652.64	1,699.64	7.85	56.04	-18.31	-1,577.34	-4,797.91	5,022.91	4,959.03	63.88	78.626	
1,800.00	1,799.61	1,752.61	1,799.61	8.25	59.53	-18.32	-1,577.34	-4,797.91	5,020.54	4,952.77	67.77	74.086	
1,900.00	1,899.58	1,852.58	1,899.58	8.66	63.01	-18.33	-1,577.34	-4,797.91	5,018.17	4,946.51	71.65	70.033	
2,000.00	1,999.55	1,952.55	1,999.55	9.06	66.50	-18.33	-1,577.34	-4,797.91	5,015.79	4,940.25	75.55	66.394	
2,100.00	2,099.52	2,052.52	2,099.52	9.47	69.98	-18.34	-1,577.34	-4,797.91	5,013.42	4,933.98	79.44	63.109	
2,200.00	2,199.48	2,152.48	2,199.48	9.89	73.47	-18.35	-1,577.34	-4,797.91	5,011.05	4,927.71	83.34	60.129	
2,300.00	2,299.45	2,252.45	2,299.45	10.30	76.96	-18.36	-1,577.34	-4,797.91	5,008.68	4,921.44	87.24	57.413	
2,400.00	2,399.42	2,352.42	2,399.42	10.72	80.44	-18.37	-1,577.34	-4,797.91	5,006.31	4,915.16	91.14	54.929	
2,500.00	2,499.39	2,452.39	2,499.39	11.14	83.93	-18.38	-1,577.34	-4,797.91	5,003.94	4,908.89	95.05	52.647	
2,600.00	2,599.36	2,552.36	2,599.36	11.56	87.42	-18.39	-1,577.34	-4,797.91	5,001.56	4,902.61	98.95	50.545	
2,700.00	2,699.33	2,652.33	2,699.33	11.98	90.91	-18.40	-1,577.34	-4,797.91	4,999.19	4,896.33	102.86	48.601	
2,800.00	2,799.30	2,752.30	2,799.30	12.41	94.39	-18.41	-1,577.34	-4,797.91	4,996.82	4,890.05	106.77	46.799	
2,900.00	2,899.27	2,852.27	2,899.27	12.83	97.88	-18.42	-1,577.34	-4,797.91	4,994.45	4,883.77	110.68	45.124	
3,000.00	2,999.23	2,952.23	2,999.23	13.26	101.37	-18.42	-1,577.34	-4,797.91	4,992.08	4,877.49	114.59	43.563	
3,100.00	3,099.20	3,052.20	3,099.20	13.68	104.86	-18.43	-1,577.34	-4,797.91	4,989.71	4,871.20	118.51	42.105	
3,200.00	3,199.17	3,152.17	3,199.17	14.11	108.35	-18.44	-1,577.34	-4,797.91	4,987.34	4,864.92	122.42	40.739	
3,300.00	3,299.14	3,252.14	3,299.14	14.54	111.84	-18.45	-1,577.34	-4,797.91	4,984.97	4,858.63	126.34	39.458	
3,400.00	3,399.11	3,352.11	3,399.11	14.97	115.32	-18.46	-1,577.34	-4,797.91	4,982.60	4,852.35	130.25	38.253	
3,500.00	3,499.08	3,452.08	3,499.08	15.40	118.81	-18.47	-1,577.34	-4,797.91	4,980.23	4,846.06	134.17	37.119	
3,600.00	3,599.05	3,552.05	3,599.05	15.83	122.30	-18.48	-1,577.34	-4,797.91	4,977.86	4,839.77	138.09	36.049	
3,700.00	3,699.02	3,652.02	3,699.02	16.26	125.79	-18.49	-1,577.34	-4,797.91	4,975.49	4,833.48	142.00	35.038	
3,800.00	3,798.98	3,751.98	3,798.98	16.69	129.28	-18.50	-1,577.34	-4,797.91	4,973.12	4,827.20	145.92	34.081	
3,900.00	3,898.95	3,851.95	3,898.95	17.12	132.77	-18.51	-1,577.34	-4,797.91	4,970.75	4,820.91	149.84	33.173	
4,000.00	3,998.92	3,951.92	3,998.92	17.55	136.26	-18.52	-1,577.34	-4,797.91	4,968.38	4,814.62	153.76	32.312	
4,100.00	4,098.89	4,051.89	4,098.89	17.98	139.74	-18.52	-1,577.34	-4,797.91	4,966.01	4,808.33	157.68	31.494	
4,200.00	4,198.86	4,151.86	4,198.86	18.42	143.23	-18.53	-1,577.34	-4,797.91	4,963.64	4,802.04	161.60	30.715	
4,300.00	4,298.83	4,251.83	4,298.83	18.85	146.72	-18.54	-1,577.34	-4,797.91	4,961.27	4,795.75	165.52	29.974	
4,400.00	4,398.80	4,351.80	4,398.80	19.28	150.21	-18.55	-1,577.34	-4,797.91	4,958.90	4,789.46	169.44	29.266	
4,500.00	4,498.77	4,451.77	4,498.77	19.72	153.70	-18.56	-1,577.34	-4,797.91	4,956.53	4,783.17	173.36	28.590	
4,600.00	4,598.73	4,551.73	4,598.73	20.15	157.19	-18.57	-1,577.34	-4,797.91	4,954.17	4,776.88	177.29	27.945	
4,700.00	4,698.70	4,651.70	4,698.70	20.58	160.68	-18.58	-1,577.34	-4,797.91	4,951.80	4,770.59	181.21	27.327	
4,800.00	4,798.67	4,751.67	4,798.67	21.02	164.17	-18.59	-1,577.34	-4,797.91	4,949.43	4,764.30	185.13	26.735	
4,900.00	4,898.64	4,851.64	4,898.64	21.45	167.66	-18.60	-1,577.34	-4,797.91	4,947.06	4,758.01	189.05	26.168	
5,000.00	4,998.61	4,951.61	4,998.61	21.89	171.15	-18.61	-1,577.34	-4,797.91	4,944.69	4,751.72	192.98	25.623	
5,100.00	5,098.58	5,051.58	5,098.58	22.32	174.64	-18.62	-1,577.34	-4,797.91	4,942.32	4,745.42	196.90	25.101	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-42(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,151.55	5,198.55	22.76	178.13	-18.63	-1,577.34	-4,797.91	4,939.96	4,739.13	200.82	24.599		
5,300.00	5,298.52	5,251.52	5,298.52	23.20	181.61	-18.64	-1,577.34	-4,797.91	4,937.59	4,732.84	204.75	24.116		
5,400.00	5,398.49	5,351.49	5,398.49	23.63	185.10	-18.64	-1,577.34	-4,797.91	4,935.22	4,726.55	208.67	23.651		
5,500.00	5,498.45	5,451.45	5,498.45	24.07	188.59	-18.65	-1,577.34	-4,797.91	4,932.85	4,720.26	212.59	23.203		
5,600.00	5,598.42	5,551.42	5,598.42	24.50	192.08	-18.66	-1,577.34	-4,797.91	4,930.48	4,713.97	216.52	22.772		
5,700.00	5,698.39	5,651.39	5,698.39	24.94	195.57	-18.67	-1,577.34	-4,797.91	4,928.12	4,707.68	220.44	22.356		
5,800.00	5,798.36	5,751.36	5,798.36	25.38	199.06	-18.68	-1,577.34	-4,797.91	4,925.75	4,701.38	224.37	21.954		
5,900.00	5,898.33	5,851.33	5,898.33	25.81	202.55	-18.69	-1,577.34	-4,797.91	4,923.38	4,695.09	228.29	21.566		
6,000.00	5,998.30	5,951.30	5,998.30	26.25	206.04	-18.70	-1,577.34	-4,797.91	4,921.02	4,688.80	232.21	21.192		
6,100.00	6,098.27	6,051.27	6,098.27	26.69	209.53	-18.71	-1,577.34	-4,797.91	4,918.65	4,682.51	236.14	20.829		
6,200.00	6,198.24	6,151.24	6,198.24	27.12	213.02	-18.72	-1,577.34	-4,797.91	4,916.28	4,676.22	240.06	20.479		
6,300.00	6,298.20	6,251.20	6,298.20	27.56	216.51	-18.73	-1,577.34	-4,797.91	4,913.92	4,669.93	243.99	20.140		
6,400.00	6,398.17	6,351.17	6,398.17	28.00	220.00	-18.74	-1,577.34	-4,797.91	4,911.55	4,663.64	247.91	19.811		
6,500.00	6,498.14	6,451.14	6,498.14	28.43	223.49	-18.75	-1,577.34	-4,797.91	4,909.18	4,657.34	251.84	19.493		
6,600.00	6,597.68	6,550.68	6,597.68	28.88	226.96	-18.05	-1,577.34	-4,797.91	4,901.06	4,645.31	255.75	19.163		
6,700.00	6,694.68	6,647.68	6,694.68	29.32	230.35	-18.71	-1,577.34	-4,797.91	4,878.31	4,618.74	259.57	18.794		
6,800.00	6,786.74	6,739.74	6,786.74	29.77	233.56	-20.02	-1,577.34	-4,797.91	4,841.41	4,578.22	263.19	18.395		
6,900.00	6,871.61	6,824.61	6,871.61	30.24	236.52	-22.10	-1,577.34	-4,797.91	4,791.30	4,524.78	266.52	17.977		
7,000.00	6,947.19	6,900.19	6,947.19	30.74	239.16	-25.26	-1,577.34	-4,797.91	4,729.25	4,459.77	269.48	17.549		
7,100.00	7,011.62	6,964.62	7,011.62	31.32	241.41	-30.04	-1,577.34	-4,797.91	4,656.85	4,384.83	272.01	17.120		
7,200.00	7,063.31	7,016.31	7,063.31	32.03	243.22	-37.45	-1,577.34	-4,797.91	4,575.93	4,301.86	274.06	16.697		
7,300.00	7,101.00	7,054.00	7,101.00	32.89	244.53	-49.17	-1,577.34	-4,797.91	4,488.53	4,212.95	275.59	16.287		
7,400.00	7,123.74	7,076.74	7,123.74	33.93	245.33	-67.26	-1,577.34	-4,797.91	4,396.87	4,120.30	276.57	15.898		
7,500.00	7,131.00	7,084.00	7,131.00	35.10	245.58	-90.57	-1,577.34	-4,797.91	4,303.24	4,026.22	277.02	15.534		
7,600.00	7,130.63	7,083.63	7,130.63	36.44	245.57	-90.56	-1,577.34	-4,797.91	4,209.53	3,932.31	277.22	15.185		
7,700.00	7,130.26	7,083.26	7,130.26	37.94	245.55	-90.54	-1,577.34	-4,797.91	4,116.13	3,838.65	277.48	14.834		
7,800.00	7,129.90	7,082.90	7,129.90	39.59	245.54	-90.53	-1,577.34	-4,797.91	4,023.04	3,745.25	277.79	14.482		
7,900.00	7,129.53	7,082.53	7,129.53	41.37	245.53	-90.51	-1,577.34	-4,797.91	3,930.29	3,652.12	278.17	14.129		
8,000.00	7,129.17	7,082.17	7,129.17	43.27	245.52	-90.50	-1,577.34	-4,797.91	3,837.90	3,559.29	278.61	13.775		
8,100.00	7,128.80	7,081.80	7,128.80	45.27	245.50	-90.49	-1,577.34	-4,797.91	3,745.91	3,466.78	279.12	13.420		
8,200.00	7,128.43	7,081.43	7,128.43	47.36	245.49	-90.47	-1,577.34	-4,797.91	3,654.33	3,374.61	279.72	13.064		
8,300.00	7,128.07	7,081.07	7,128.07	49.52	245.48	-90.46	-1,577.34	-4,797.91	3,563.21	3,282.81	280.40	12.707		
8,400.00	7,127.70	7,080.70	7,127.70	51.75	245.46	-90.44	-1,577.34	-4,797.91	3,472.58	3,191.40	281.18	12.350		
8,500.00	7,127.33	7,080.33	7,127.33	54.04	245.45	-90.43	-1,577.34	-4,797.91	3,382.48	3,100.42	282.06	11.992		
8,600.00	7,126.97	7,079.97	7,126.97	56.38	245.44	-90.41	-1,577.34	-4,797.91	3,292.94	3,009.90	283.05	11.634		
8,700.00	7,126.60	7,079.60	7,126.60	58.77	245.43	-90.40	-1,577.34	-4,797.91	3,204.03	2,919.88	284.15	11.276		
8,800.00	7,126.24	7,079.24	7,126.24	61.19	245.41	-90.39	-1,577.34	-4,797.91	3,115.79	2,830.40	285.39	10.918		
8,900.00	7,125.87	7,078.87	7,125.87	63.65	245.40	-90.37	-1,577.34	-4,797.91	3,028.28	2,741.53	286.75	10.561		
9,000.00	7,125.50	7,078.50	7,125.50	66.15	245.39	-90.36	-1,577.34	-4,797.91	2,941.57	2,653.31	288.26	10.205		
9,100.00	7,125.14	7,078.14	7,125.14	68.67	245.37	-90.34	-1,577.34	-4,797.91	2,855.72	2,565.80	289.92	9.850		
9,200.00	7,124.77	7,077.77	7,124.77	71.21	245.36	-90.33	-1,577.34	-4,797.91	2,770.82	2,479.09	291.73	9.498		
9,300.00	7,124.41	7,077.41	7,124.41	73.78	245.35	-90.32	-1,577.34	-4,797.91	2,686.97	2,393.24	293.72	9.148		
9,400.00	7,124.04	7,077.04	7,124.04	76.37	245.34	-90.30	-1,577.34	-4,797.91	2,604.25	2,308.36	295.89	8.801		
9,500.00	7,123.67	7,076.67	7,123.67	78.98	245.32	-90.29	-1,577.34	-4,797.91	2,522.79	2,224.53	298.25	8.459		
9,600.00	7,123.31	7,076.31	7,123.31	81.60	245.31	-90.27	-1,577.34	-4,797.91	2,442.70	2,141.89	300.81	8.120		
9,700.00	7,122.94	7,075.94	7,122.94	84.24	245.30	-90.26	-1,577.34	-4,797.91	2,364.13	2,060.56	303.57	7.788		
9,800.00	7,122.57	7,075.57	7,122.57	86.90	245.29	-90.25	-1,577.34	-4,797.91	2,287.23	1,980.68	306.56	7.461		
9,900.00	7,122.21	7,075.21	7,122.21	89.56	245.27	-90.23	-1,577.34	-4,797.91	2,212.19	1,902.43	309.76	7.142		
10,000.00	7,121.84	7,074.84	7,121.84	92.24	245.26	-90.22	-1,577.34	-4,797.91	2,139.18	1,825.99	313.19	6.830		
10,100.00	7,121.48	7,074.48	7,121.48	94.92	245.25	-90.20	-1,577.34	-4,797.91	2,068.43	1,751.58	316.86	6.528		
10,200.00	7,121.11	7,074.11	7,121.11	97.62	245.23	-90.19	-1,577.34	-4,797.91	2,000.19	1,679.43	320.75	6.236		
10,300.00	7,120.74	7,073.74	7,120.74	100.32	245.22	-90.17	-1,577.34	-4,797.91	1,934.70	1,609.83	324.87	5.955		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-42(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,120.38	7,073.38	7,120.38	103.04	245.21	-90.16	-1,577.34	-4,797.91	1,872.27	1,543.06	329.21	5.687		
10,500.00	7,120.01	7,073.01	7,120.01	105.76	245.20	-90.15	-1,577.34	-4,797.91	1,813.21	1,479.47	333.74	5.433		
10,600.00	7,119.64	7,072.64	7,119.64	108.48	245.18	-90.13	-1,577.34	-4,797.91	1,757.85	1,419.42	338.43	5.194		
10,700.00	7,119.28	7,072.28	7,119.28	111.22	245.17	-90.12	-1,577.34	-4,797.91	1,706.57	1,363.31	343.26	4.972		
10,800.00	7,118.91	7,071.91	7,118.91	113.96	245.16	-90.10	-1,577.34	-4,797.91	1,659.73	1,311.56	348.17	4.767		
10,900.00	7,118.55	7,071.55	7,118.55	116.70	245.14	-90.09	-1,577.34	-4,797.91	1,617.72	1,264.64	353.09	4.582		
11,000.00	7,118.18	7,071.18	7,118.18	119.45	245.13	-90.08	-1,577.34	-4,797.91	1,580.93	1,222.98	357.95	4.417		
11,100.00	7,117.81	7,070.81	7,117.81	122.21	245.12	-90.06	-1,577.34	-4,797.91	1,549.73	1,187.07	362.67	4.273		
11,200.00	7,117.45	7,070.45	7,117.45	124.97	245.11	-90.05	-1,577.34	-4,797.91	1,524.47	1,157.32	367.15	4.152		
11,300.00	7,117.08	7,070.08	7,117.08	127.73	245.09	-90.03	-1,577.34	-4,797.91	1,505.43	1,134.13	371.30	4.054		
11,400.00	7,116.72	7,069.72	7,116.72	130.50	245.08	-90.02	-1,577.34	-4,797.91	1,492.86	1,117.82	375.04	3.980		
11,500.00	7,116.35	7,069.35	7,116.35	133.27	245.07	-90.01	-1,577.34	-4,797.91	1,486.93	1,108.64	378.29	3.931		
11,538.39	7,116.21	7,069.21	7,116.21	134.33	245.06	-90.00	-1,577.34	-4,797.91	1,486.44	1,107.04	379.40	3.918 CC		
11,600.00	7,115.98	7,068.98	7,115.98	136.04	245.06	-89.99	-1,577.34	-4,797.91	1,487.71	1,106.72	380.99	3.905 ES		
11,700.00	7,115.62	7,068.62	7,115.62	138.82	245.04	-89.98	-1,577.34	-4,797.91	1,495.20	1,112.09	383.10	3.903 SF		
11,800.00	7,115.25	7,068.25	7,115.25	141.60	245.03	-89.96	-1,577.34	-4,797.91	1,509.28	1,124.67	384.61	3.924		
11,900.00	7,114.88	7,067.88	7,114.88	144.39	245.02	-89.95	-1,577.34	-4,797.91	1,529.79	1,144.25	385.54	3.968		
12,000.00	7,114.52	7,067.52	7,114.52	147.17	245.00	-89.93	-1,577.34	-4,797.91	1,556.46	1,170.56	385.90	4.033		
12,100.00	7,114.15	7,067.15	7,114.15	149.96	244.99	-89.92	-1,577.34	-4,797.91	1,588.99	1,203.23	385.77	4.119		
12,200.00	7,113.79	7,066.79	7,113.79	152.75	244.98	-89.91	-1,577.34	-4,797.91	1,627.03	1,241.84	385.19	4.224		
12,300.00	7,113.42	7,066.42	7,113.42	155.55	244.97	-89.89	-1,577.34	-4,797.91	1,670.19	1,285.96	384.23	4.347		
12,400.00	7,113.05	7,066.05	7,113.05	158.34	244.95	-89.88	-1,577.34	-4,797.91	1,718.10	1,335.14	382.96	4.486		
12,500.00	7,112.69	7,065.69	7,112.69	161.14	244.94	-89.86	-1,577.34	-4,797.91	1,770.36	1,388.92	381.44	4.641		
12,600.00	7,112.32	7,065.32	7,112.32	163.94	244.93	-89.85	-1,577.34	-4,797.91	1,826.61	1,446.88	379.73	4.810		
12,700.00	7,111.96	7,064.96	7,111.96	166.74	244.91	-89.84	-1,577.34	-4,797.91	1,886.48	1,508.59	377.89	4.992		
12,800.00	7,111.59	7,064.59	7,111.59	169.54	244.90	-89.82	-1,577.34	-4,797.91	1,949.65	1,573.70	375.95	5.186		
12,900.00	7,111.22	7,064.22	7,111.22	172.35	244.89	-89.81	-1,577.34	-4,797.91	2,015.80	1,641.84	373.97	5.390		
13,000.00	7,110.86	7,063.86	7,110.86	175.16	244.88	-89.79	-1,577.34	-4,797.91	2,084.65	1,712.70	371.95	5.605		
13,100.00	7,110.49	7,063.49	7,110.49	177.96	244.86	-89.78	-1,577.34	-4,797.91	2,155.94	1,786.01	369.94	5.828		
13,200.00	7,110.12	7,063.12	7,110.12	180.77	244.85	-89.77	-1,577.34	-4,797.91	2,229.44	1,861.50	367.95	6.059		
13,300.00	7,109.76	7,062.76	7,109.76	183.58	244.84	-89.75	-1,577.34	-4,797.91	2,304.94	1,938.95	365.99	6.298		
13,400.00	7,109.39	7,062.39	7,109.39	186.40	244.83	-89.74	-1,577.34	-4,797.91	2,382.24	2,018.17	364.07	6.543		
13,500.00	7,109.03	7,062.03	7,109.03	189.21	244.81	-89.72	-1,577.34	-4,797.91	2,461.17	2,098.97	362.21	6.795		
13,600.00	7,108.66	7,061.66	7,108.66	192.03	244.80	-89.71	-1,577.34	-4,797.91	2,541.59	2,181.19	360.40	7.052		
13,700.00	7,108.29	7,061.29	7,108.29	194.84	244.79	-89.69	-1,577.34	-4,797.91	2,623.36	2,264.70	358.66	7.314		
13,800.00	7,107.93	7,060.93	7,107.93	197.66	244.77	-89.68	-1,577.34	-4,797.91	2,706.35	2,349.37	356.98	7.581		
13,900.00	7,107.56	7,060.56	7,107.56	200.48	244.76	-89.67	-1,577.34	-4,797.91	2,790.45	2,435.10	355.36	7.852		
14,000.00	7,107.19	7,060.19	7,107.19	203.30	244.75	-89.65	-1,577.34	-4,797.91	2,875.58	2,521.77	353.81	8.128		
14,100.00	7,106.83	7,059.83	7,106.83	206.12	244.74	-89.64	-1,577.34	-4,797.91	2,961.63	2,609.32	352.31	8.406		
14,200.00	7,106.46	7,059.46	7,106.46	208.94	244.72	-89.62	-1,577.34	-4,797.91	3,048.54	2,697.65	350.89	8.688		
14,300.00	7,106.10	7,059.10	7,106.10	211.76	244.71	-89.61	-1,577.34	-4,797.91	3,136.22	2,786.71	349.52	8.973		
14,400.00	7,105.73	7,058.73	7,105.73	214.58	244.70	-89.60	-1,577.34	-4,797.91	3,224.63	2,876.42	348.20	9.261		
14,500.00	7,105.36	7,058.36	7,105.36	217.40	244.68	-89.58	-1,577.34	-4,797.91	3,313.69	2,966.74	346.95	9.551		
14,600.00	7,105.00	7,058.00	7,105.00	220.23	244.67	-89.57	-1,577.34	-4,797.91	3,403.36	3,057.61	345.74	9.844		
14,700.00	7,104.63	7,057.63	7,104.63	223.05	244.66	-89.55	-1,577.34	-4,797.91	3,493.59	3,149.00	344.59	10.138		
14,800.00	7,104.27	7,057.27	7,104.27	225.88	244.65	-89.54	-1,577.34	-4,797.91	3,584.34	3,240.85	343.49	10.435		
14,872.41	7,104.00	7,057.00	7,104.00	227.93	244.64	-89.53	-1,577.34	-4,797.91	3,650.35	3,307.63	342.72	10.651		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	50.00	3.28	3.28	-122.65	-3,078.27	-4,803.76	5,705.65				
100.00	100.00	50.00	100.00	3.28	3.39	-122.65	-3,078.27	-4,803.76	5,705.43	5,698.75	6.68	854.253	
200.00	200.00	150.00	200.00	3.34	4.79	-122.65	-3,078.27	-4,803.76	5,705.43	5,697.30	8.13	702.019	
300.00	300.00	250.00	300.00	3.44	7.71	-122.65	-3,078.27	-4,803.76	5,705.43	5,694.27	11.16	511.286	
400.00	400.00	350.00	400.00	3.60	10.97	-122.65	-3,078.27	-4,803.76	5,705.43	5,690.85	14.58	391.374	
500.00	500.00	450.00	500.00	3.81	14.34	-122.65	-3,078.27	-4,803.76	5,705.43	5,687.28	18.15	314.348	
600.00	599.98	549.98	599.98	4.04	17.76	-32.67	-3,078.27	-4,803.76	5,704.08	5,682.28	21.80	261.662	
700.00	699.95	649.95	699.95	4.30	21.20	-32.68	-3,078.27	-4,803.76	5,701.97	5,676.47	25.50	223.604	
800.00	799.92	749.92	799.92	4.59	24.65	-32.70	-3,078.27	-4,803.76	5,699.87	5,670.63	29.24	194.918	
900.00	899.89	849.89	899.89	4.90	28.12	-32.71	-3,078.27	-4,803.76	5,697.77	5,664.75	33.02	172.577	
1,000.00	999.86	949.86	999.86	5.23	31.58	-32.72	-3,078.27	-4,803.76	5,695.67	5,658.85	36.81	154.716	
1,100.00	1,099.83	1,049.83	1,099.83	5.58	35.06	-32.74	-3,078.27	-4,803.76	5,693.56	5,652.93	40.63	140.129	
1,200.00	1,199.80	1,149.80	1,199.80	5.94	38.53	-32.75	-3,078.27	-4,803.76	5,691.46	5,647.00	44.46	128.003	
1,300.00	1,299.77	1,249.77	1,299.77	6.30	42.01	-32.76	-3,078.27	-4,803.76	5,689.36	5,641.05	48.31	117.770	
1,400.00	1,399.73	1,349.73	1,399.73	6.68	45.49	-32.78	-3,078.27	-4,803.76	5,687.26	5,635.09	52.16	109.025	
1,500.00	1,499.70	1,449.70	1,499.70	7.07	48.97	-32.79	-3,078.27	-4,803.76	5,685.16	5,629.13	56.03	101.468	
1,600.00	1,599.67	1,549.67	1,599.67	7.46	52.46	-32.80	-3,078.27	-4,803.76	5,683.06	5,623.16	59.90	94.874	
1,700.00	1,699.64	1,649.64	1,699.64	7.85	55.94	-32.82	-3,078.27	-4,803.76	5,680.96	5,617.18	63.78	89.072	
1,800.00	1,799.61	1,749.61	1,799.61	8.25	59.42	-32.83	-3,078.27	-4,803.76	5,678.86	5,611.19	67.66	83.929	
1,900.00	1,899.58	1,849.58	1,899.58	8.66	62.91	-32.85	-3,078.27	-4,803.76	5,676.76	5,605.21	71.55	79.340	
2,000.00	1,999.55	1,949.55	1,999.55	9.06	66.39	-32.86	-3,078.27	-4,803.76	5,674.66	5,599.22	75.44	75.219	
2,100.00	2,099.52	2,049.52	2,099.52	9.47	69.88	-32.87	-3,078.27	-4,803.76	5,672.56	5,593.22	79.34	71.500	
2,200.00	2,199.48	2,149.48	2,199.48	9.89	73.37	-32.89	-3,078.27	-4,803.76	5,670.46	5,587.23	83.23	68.126	
2,300.00	2,299.45	2,249.45	2,299.45	10.30	76.85	-32.90	-3,078.27	-4,803.76	5,668.36	5,581.23	87.13	65.053	
2,400.00	2,399.42	2,349.42	2,399.42	10.72	80.34	-32.91	-3,078.27	-4,803.76	5,666.26	5,575.23	91.04	62.241	
2,500.00	2,499.39	2,449.39	2,499.39	11.14	83.83	-32.93	-3,078.27	-4,803.76	5,664.17	5,569.22	94.94	59.659	
2,600.00	2,599.36	2,549.36	2,599.36	11.56	87.31	-32.94	-3,078.27	-4,803.76	5,662.07	5,563.22	98.85	57.280	
2,700.00	2,699.33	2,649.33	2,699.33	11.98	90.80	-32.96	-3,078.27	-4,803.76	5,659.97	5,557.22	102.76	55.081	
2,800.00	2,799.30	2,749.30	2,799.30	12.41	94.29	-32.97	-3,078.27	-4,803.76	5,657.88	5,551.21	106.67	53.043	
2,900.00	2,899.27	2,849.27	2,899.27	12.83	97.78	-32.98	-3,078.27	-4,803.76	5,655.78	5,545.20	110.58	51.148	
3,000.00	2,999.23	2,949.23	2,999.23	13.26	101.27	-33.00	-3,078.27	-4,803.76	5,653.68	5,539.19	114.49	49.382	
3,100.00	3,099.20	3,049.20	3,099.20	13.68	104.75	-33.01	-3,078.27	-4,803.76	5,651.59	5,533.18	118.40	47.732	
3,200.00	3,199.17	3,149.17	3,199.17	14.11	108.24	-33.02	-3,078.27	-4,803.76	5,649.49	5,527.18	122.32	46.187	
3,300.00	3,299.14	3,249.14	3,299.14	14.54	111.73	-33.04	-3,078.27	-4,803.76	5,647.40	5,521.17	126.23	44.738	
3,400.00	3,399.11	3,349.11	3,399.11	14.97	115.22	-33.05	-3,078.27	-4,803.76	5,645.30	5,515.16	130.15	43.376	
3,500.00	3,499.08	3,449.08	3,499.08	15.40	118.71	-33.07	-3,078.27	-4,803.76	5,643.21	5,509.14	134.06	42.093	
3,600.00	3,599.05	3,549.05	3,599.05	15.83	122.20	-33.08	-3,078.27	-4,803.76	5,641.11	5,503.13	137.98	40.883	
3,700.00	3,699.02	3,649.02	3,699.02	16.26	125.68	-33.09	-3,078.27	-4,803.76	5,639.02	5,497.12	141.90	39.740	
3,800.00	3,798.98	3,748.98	3,798.98	16.69	129.17	-33.11	-3,078.27	-4,803.76	5,636.93	5,491.11	145.82	38.658	
3,900.00	3,898.95	3,848.95	3,898.95	17.12	132.66	-33.12	-3,078.27	-4,803.76	5,634.83	5,485.10	149.74	37.632	
4,000.00	3,998.92	3,948.92	3,998.92	17.55	136.15	-33.14	-3,078.27	-4,803.76	5,632.74	5,479.09	153.66	36.658	
4,100.00	4,098.89	4,048.89	4,098.89	17.98	139.64	-33.15	-3,078.27	-4,803.76	5,630.65	5,473.07	157.58	35.733	
4,200.00	4,198.86	4,148.86	4,198.86	18.42	143.13	-33.16	-3,078.27	-4,803.76	5,628.56	5,467.06	161.50	34.853	
4,300.00	4,298.83	4,248.83	4,298.83	18.85	146.62	-33.18	-3,078.27	-4,803.76	5,626.46	5,461.05	165.42	34.014	
4,400.00	4,398.80	4,348.80	4,398.80	19.28	150.11	-33.19	-3,078.27	-4,803.76	5,624.37	5,455.04	169.34	33.214	
4,500.00	4,498.77	4,448.77	4,498.77	19.72	153.60	-33.20	-3,078.27	-4,803.76	5,622.28	5,449.02	173.26	32.450	
4,600.00	4,598.73	4,548.73	4,598.73	20.15	157.09	-33.22	-3,078.27	-4,803.76	5,620.19	5,443.01	177.18	31.720	
4,700.00	4,698.70	4,648.70	4,698.70	20.58	160.57	-33.23	-3,078.27	-4,803.76	5,618.10	5,437.00	181.10	31.022	
4,800.00	4,798.67	4,748.67	4,798.67	21.02	164.06	-33.25	-3,078.27	-4,803.76	5,616.01	5,430.99	185.02	30.353	
4,900.00	4,898.64	4,848.64	4,898.64	21.45	167.55	-33.26	-3,078.27	-4,803.76	5,613.92	5,424.97	188.95	29.712	
5,000.00	4,998.61	4,948.61	4,998.61	21.89	171.04	-33.27	-3,078.27	-4,803.76	5,611.83	5,418.96	192.87	29.097	
5,100.00	5,098.58	5,048.58	5,098.58	22.32	174.53	-33.29	-3,078.27	-4,803.76	5,609.74	5,412.95	196.79	28.506	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURMAN 16-43(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,148.55	5,198.55	22.76	178.02	-33.30	-3,078.27	-4,803.76	5,607.65	5,406.94	200.72	27.938		
5,300.00	5,298.52	5,248.52	5,298.52	23.20	181.51	-33.32	-3,078.27	-4,803.76	5,605.57	5,400.93	204.64	27.392		
5,400.00	5,398.49	5,348.49	5,398.49	23.63	185.00	-33.33	-3,078.27	-4,803.76	5,603.48	5,394.91	208.56	26.867		
5,500.00	5,498.45	5,448.45	5,498.45	24.07	188.49	-33.34	-3,078.27	-4,803.76	5,601.39	5,388.90	212.49	26.361		
5,600.00	5,598.42	5,548.42	5,598.42	24.50	191.98	-33.36	-3,078.27	-4,803.76	5,599.30	5,382.89	216.41	25.874		
5,700.00	5,698.39	5,648.39	5,698.39	24.94	195.47	-33.37	-3,078.27	-4,803.76	5,597.22	5,376.88	220.33	25.403		
5,800.00	5,798.36	5,748.36	5,798.36	25.38	198.96	-33.39	-3,078.27	-4,803.76	5,595.13	5,370.87	224.26	24.949		
5,900.00	5,898.33	5,848.33	5,898.33	25.81	202.45	-33.40	-3,078.27	-4,803.76	5,593.04	5,364.86	228.18	24.511		
6,000.00	5,998.30	5,948.30	5,998.30	26.25	205.94	-33.42	-3,078.27	-4,803.76	5,590.96	5,358.85	232.11	24.088		
6,100.00	6,098.27	6,048.27	6,098.27	26.69	209.43	-33.43	-3,078.27	-4,803.76	5,588.87	5,352.84	236.03	23.678		
6,200.00	6,198.24	6,148.24	6,198.24	27.12	212.92	-33.44	-3,078.27	-4,803.76	5,586.79	5,346.83	239.96	23.282		
6,300.00	6,298.20	6,248.20	6,298.20	27.56	216.40	-33.46	-3,078.27	-4,803.76	5,584.70	5,340.82	243.88	22.899		
6,400.00	6,398.17	6,348.17	6,398.17	28.00	219.89	-33.47	-3,078.27	-4,803.76	5,582.62	5,334.81	247.81	22.528		
6,500.00	6,498.14	6,448.14	6,498.14	28.43	223.38	-33.49	-3,078.27	-4,803.76	5,580.53	5,328.80	251.73	22.168		
6,600.00	6,597.68	6,547.68	6,597.68	28.88	226.86	-32.92	-3,078.27	-4,803.76	5,573.34	5,317.70	255.64	21.801		
6,700.00	6,694.68	6,644.68	6,694.68	29.32	230.24	-33.99	-3,078.27	-4,803.76	5,553.21	5,293.75	259.46	21.403		
6,800.00	6,786.74	6,736.74	6,786.74	29.77	233.46	-35.97	-3,078.27	-4,803.76	5,520.59	5,257.50	263.09	20.984		
6,900.00	6,871.61	6,821.61	6,871.61	30.24	236.42	-38.97	-3,078.27	-4,803.76	5,476.37	5,209.93	266.44	20.554		
7,000.00	6,947.19	6,902.81	6,947.19	30.74	239.25	-43.23	-3,078.27	-4,803.76	5,421.75	5,152.12	269.63	20.108		
7,100.00	7,011.62	6,961.62	7,011.62	31.32	241.31	-49.05	-3,078.27	-4,803.76	5,358.22	5,086.18	272.04	19.697		
7,200.00	7,063.31	7,013.31	7,063.31	32.03	243.11	-56.77	-3,078.27	-4,803.76	5,287.48	5,013.29	274.19	19.284		
7,300.00	7,101.00	7,051.00	7,101.00	32.89	244.43	-66.56	-3,078.27	-4,803.76	5,211.41	4,935.52	275.89	18.889		
7,400.00	7,123.74	7,073.74	7,123.74	33.93	245.22	-78.12	-3,078.27	-4,803.76	5,132.01	4,854.90	277.11	18.520		
7,500.00	7,131.00	7,081.00	7,131.00	35.10	245.47	-90.29	-3,078.27	-4,803.76	5,051.33	4,773.47	277.86	18.180		
7,600.00	7,130.63	7,080.63	7,130.63	36.44	245.46	-90.28	-3,078.27	-4,803.76	4,971.04	4,692.61	278.42	17.854		
7,700.00	7,130.26	7,080.26	7,130.26	37.94	245.45	-90.27	-3,078.27	-4,803.76	4,891.47	4,612.37	279.10	17.526		
7,800.00	7,129.90	7,079.90	7,129.90	39.59	245.44	-90.27	-3,078.27	-4,803.76	4,812.67	4,532.76	279.91	17.194		
7,900.00	7,129.53	7,079.53	7,129.53	41.37	245.42	-90.26	-3,078.27	-4,803.76	4,734.67	4,453.83	280.83	16.859		
8,000.00	7,129.17	7,079.17	7,129.17	43.27	245.41	-90.25	-3,078.27	-4,803.76	4,657.51	4,375.62	281.88	16.523		
8,100.00	7,128.80	7,078.80	7,128.80	45.27	245.40	-90.24	-3,078.27	-4,803.76	4,581.23	4,298.17	283.06	16.185		
8,200.00	7,128.43	7,078.43	7,128.43	47.36	245.38	-90.24	-3,078.27	-4,803.76	4,505.88	4,221.51	284.37	15.845		
8,300.00	7,128.07	7,078.07	7,128.07	49.52	245.37	-90.23	-3,078.27	-4,803.76	4,431.51	4,145.71	285.80	15.506		
8,400.00	7,127.70	7,077.70	7,127.70	51.75	245.36	-90.22	-3,078.27	-4,803.76	4,358.16	4,070.80	287.36	15.166		
8,500.00	7,127.33	7,077.33	7,127.33	54.04	245.35	-90.22	-3,078.27	-4,803.76	4,285.89	3,996.84	289.04	14.828		
8,600.00	7,126.97	7,076.97	7,126.97	56.38	245.33	-90.21	-3,078.27	-4,803.76	4,214.75	3,923.90	290.85	14.491		
8,700.00	7,126.60	7,076.60	7,126.60	58.77	245.32	-90.20	-3,078.27	-4,803.76	4,144.80	3,852.02	292.79	14.156		
8,800.00	7,126.24	7,076.24	7,126.24	61.19	245.31	-90.19	-3,078.27	-4,803.76	4,076.11	3,781.27	294.84	13.825		
8,900.00	7,125.87	7,075.87	7,125.87	63.65	245.30	-90.19	-3,078.27	-4,803.76	4,008.74	3,711.72	297.02	13.497		
9,000.00	7,125.50	7,075.50	7,125.50	66.15	245.28	-90.18	-3,078.27	-4,803.76	3,942.75	3,643.43	299.32	13.173		
9,100.00	7,125.14	7,075.14	7,125.14	68.67	245.27	-90.17	-3,078.27	-4,803.76	3,878.22	3,576.49	301.73	12.853		
9,200.00	7,124.77	7,074.77	7,124.77	71.21	245.26	-90.17	-3,078.27	-4,803.76	3,815.21	3,510.96	304.25	12.540		
9,300.00	7,124.41	7,074.41	7,124.41	73.78	245.24	-90.16	-3,078.27	-4,803.76	3,753.82	3,446.93	306.88	12.232		
9,400.00	7,124.04	7,074.04	7,124.04	76.37	245.23	-90.15	-3,078.27	-4,803.76	3,694.11	3,384.48	309.62	11.931		
9,500.00	7,123.67	7,073.67	7,123.67	78.98	245.22	-90.15	-3,078.27	-4,803.76	3,636.17	3,323.70	312.47	11.637		
9,600.00	7,123.31	7,073.31	7,123.31	81.60	245.21	-90.14	-3,078.27	-4,803.76	3,580.08	3,264.68	315.41	11.351		
9,700.00	7,122.94	7,072.94	7,122.94	84.24	245.19	-90.13	-3,078.27	-4,803.76	3,525.94	3,207.50	318.44	11.073		
9,800.00	7,122.57	7,072.57	7,122.57	86.90	245.18	-90.12	-3,078.27	-4,803.76	3,473.84	3,152.28	321.56	10.803		
9,900.00	7,122.21	7,072.21	7,122.21	89.56	245.17	-90.12	-3,078.27	-4,803.76	3,423.87	3,099.10	324.76	10.543		
10,000.00	7,121.84	7,071.84	7,121.84	92.24	245.15	-90.11	-3,078.27	-4,803.76	3,376.11	3,048.08	328.03	10.292		
10,100.00	7,121.48	7,071.48	7,121.48	94.92	245.14	-90.10	-3,078.27	-4,803.76	3,330.68	2,999.31	331.37	10.051		
10,200.00	7,121.11	7,071.11	7,121.11	97.62	245.13	-90.10	-3,078.27	-4,803.76	3,287.66	2,952.90	334.76	9.821		
10,300.00	7,120.74	7,070.74	7,120.74	100.32	245.12	-90.09	-3,078.27	-4,803.76	3,247.15	2,908.95	338.20	9.601		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	7,070.38	7,120.38	103.04	245.10	-90.08	-3,078.27	-4,803.76	3,209.25	2,867.58	341.67	9.393		
10,500.00	7,120.01	7,070.01	7,120.01	105.76	245.09	-90.08	-3,078.27	-4,803.76	3,174.05	2,828.88	345.17	9.196		
10,600.00	7,119.64	7,069.64	7,119.64	108.48	245.08	-90.07	-3,078.27	-4,803.76	3,141.63	2,792.96	348.67	9.010		
10,700.00	7,119.28	7,069.28	7,119.28	111.22	245.07	-90.06	-3,078.27	-4,803.76	3,112.09	2,759.93	352.16	8.837		
10,800.00	7,118.91	7,068.91	7,118.91	113.96	245.05	-90.05	-3,078.27	-4,803.76	3,085.52	2,729.88	355.64	8.676		
10,900.00	7,118.55	7,068.55	7,118.55	116.70	245.04	-90.05	-3,078.27	-4,803.76	3,061.98	2,702.89	359.08	8.527		
11,000.00	7,118.18	7,068.18	7,118.18	119.45	245.03	-90.04	-3,078.27	-4,803.76	3,041.54	2,679.07	362.48	8.391		
11,100.00	7,117.81	7,067.81	7,117.81	122.21	245.01	-90.03	-3,078.27	-4,803.76	3,024.28	2,658.47	365.81	8.267		
11,200.00	7,117.45	7,067.45	7,117.45	124.97	245.00	-90.03	-3,078.27	-4,803.76	3,010.24	2,641.18	369.06	8.157		
11,300.00	7,117.08	7,067.08	7,117.08	127.73	244.99	-90.02	-3,078.27	-4,803.76	2,999.47	2,627.26	372.21	8.058		
11,400.00	7,116.72	7,066.72	7,116.72	130.50	244.98	-90.01	-3,078.27	-4,803.76	2,992.01	2,616.74	375.26	7.973		
11,500.00	7,116.35	7,066.35	7,116.35	133.27	244.96	-90.01	-3,078.27	-4,803.76	2,987.88	2,609.68	378.19	7.900		
11,573.59	7,116.08	7,066.08	7,116.08	135.31	244.95	-90.00	-3,078.27	-4,803.76	2,986.97	2,606.70	380.26	7.855 CC		
11,600.00	7,115.98	7,065.98	7,115.98	136.04	244.95	-90.00	-3,078.27	-4,803.76	2,987.09	2,606.10	380.99	7.840		
11,700.00	7,115.62	7,065.62	7,115.62	138.82	244.94	-89.99	-3,078.27	-4,803.76	2,989.64	2,606.00	383.64	7.793 ES		
11,800.00	7,115.25	7,065.25	7,115.25	141.60	244.92	-89.98	-3,078.27	-4,803.76	2,995.54	2,609.39	386.15	7.757		
11,900.00	7,114.88	7,064.88	7,114.88	144.39	244.91	-89.98	-3,078.27	-4,803.76	3,004.75	2,616.26	388.49	7.734		
12,000.00	7,114.52	7,064.52	7,114.52	147.17	244.90	-89.97	-3,078.27	-4,803.76	3,017.25	2,626.57	390.68	7.723 SF		
12,100.00	7,114.15	7,064.15	7,114.15	149.96	244.89	-89.96	-3,078.27	-4,803.76	3,033.00	2,640.31	392.69	7.724		
12,200.00	7,113.79	7,063.79	7,113.79	152.75	244.87	-89.96	-3,078.27	-4,803.76	3,051.94	2,657.41	394.54	7.736		
12,300.00	7,113.42	7,063.42	7,113.42	155.55	244.86	-89.95	-3,078.27	-4,803.76	3,074.03	2,677.81	396.21	7.759		
12,400.00	7,113.05	7,063.05	7,113.05	158.34	244.85	-89.94	-3,078.27	-4,803.76	3,099.18	2,701.46	397.72	7.792		
12,500.00	7,112.69	7,062.69	7,112.69	161.14	244.84	-89.93	-3,078.27	-4,803.76	3,127.33	2,728.26	399.07	7.837		
12,600.00	7,112.32	7,062.32	7,112.32	163.94	244.82	-89.93	-3,078.27	-4,803.76	3,158.40	2,758.15	400.25	7.891		
12,700.00	7,111.96	7,061.96	7,111.96	166.74	244.81	-89.92	-3,078.27	-4,803.76	3,192.30	2,791.02	401.28	7.955		
12,800.00	7,111.59	7,061.59	7,111.59	169.54	244.80	-89.91	-3,078.27	-4,803.76	3,228.94	2,826.78	402.16	8.029		
12,900.00	7,111.22	7,061.22	7,111.22	172.35	244.78	-89.91	-3,078.27	-4,803.76	3,268.23	2,865.33	402.90	8.112		
13,000.00	7,110.86	7,060.86	7,110.86	175.16	244.77	-89.90	-3,078.27	-4,803.76	3,310.07	2,906.58	403.50	8.203		
13,100.00	7,110.49	7,060.49	7,110.49	177.96	244.76	-89.89	-3,078.27	-4,803.76	3,354.38	2,950.41	403.97	8.303		
13,200.00	7,110.12	7,060.12	7,110.12	180.77	244.75	-89.89	-3,078.27	-4,803.76	3,401.05	2,996.72	404.33	8.412		
13,300.00	7,109.76	7,059.76	7,109.76	183.58	244.73	-89.88	-3,078.27	-4,803.76	3,449.99	3,045.41	404.58	8.527		
13,400.00	7,109.39	7,059.39	7,109.39	186.40	244.72	-89.87	-3,078.27	-4,803.76	3,501.10	3,096.37	404.73	8.651		
13,500.00	7,109.03	7,059.03	7,109.03	189.21	244.71	-89.86	-3,078.27	-4,803.76	3,554.29	3,149.51	404.78	8.781		
13,600.00	7,108.66	7,058.66	7,108.66	192.03	244.69	-89.86	-3,078.27	-4,803.76	3,609.47	3,204.72	404.75	8.918		
13,700.00	7,108.29	7,058.29	7,108.29	194.84	244.68	-89.85	-3,078.27	-4,803.76	3,666.54	3,261.91	404.64	9.061		
13,800.00	7,107.93	7,057.93	7,107.93	197.66	244.67	-89.84	-3,078.27	-4,803.76	3,725.43	3,320.97	404.45	9.211		
13,900.00	7,107.56	7,057.56	7,107.56	200.48	244.66	-89.84	-3,078.27	-4,803.76	3,786.04	3,381.83	404.21	9.367		
14,000.00	7,107.19	7,057.19	7,107.19	203.30	244.64	-89.83	-3,078.27	-4,803.76	3,848.29	3,444.39	403.91	9.528		
14,100.00	7,106.83	7,056.83	7,106.83	206.12	244.63	-89.82	-3,078.27	-4,803.76	3,912.11	3,508.56	403.56	9.694		
14,200.00	7,106.46	7,056.46	7,106.46	208.94	244.62	-89.82	-3,078.27	-4,803.76	3,977.42	3,574.27	403.16	9.866		
14,300.00	7,106.10	7,056.10	7,106.10	211.76	244.61	-89.81	-3,078.27	-4,803.76	4,044.15	3,641.43	402.72	10.042		
14,400.00	7,105.73	7,055.73	7,105.73	214.58	244.59	-89.80	-3,078.27	-4,803.76	4,112.23	3,709.98	402.25	10.223		
14,500.00	7,105.36	7,055.36	7,105.36	217.40	244.58	-89.79	-3,078.27	-4,803.76	4,181.59	3,779.85	401.75	10.408		
14,600.00	7,105.00	7,055.00	7,105.00	220.23	244.57	-89.79	-3,078.27	-4,803.76	4,252.18	3,850.95	401.22	10.598		
14,700.00	7,104.63	7,054.63	7,104.63	223.05	244.55	-89.78	-3,078.27	-4,803.76	4,323.92	3,923.25	400.67	10.792		
14,800.00	7,104.27	7,054.27	7,104.27	225.88	244.54	-89.77	-3,078.27	-4,803.76	4,396.77	3,996.66	400.10	10.989		
14,872.41	7,104.00	7,054.00	7,104.00	227.93	244.53	-89.77	-3,078.27	-4,803.76	4,450.17	4,050.49	399.68	11.134		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	68.00	3.28	3.28	-142.43	-4,249.39	-3,268.41	5,361.38					
100.00	100.00	913.92	951.54	3.28	5.20	-142.63	-4,199.75	-3,207.84	5,352.88	5,344.37	8.51	629.187		
200.00	200.00	1,012.57	1,048.87	3.34	5.62	-142.67	-4,189.54	-3,195.37	5,336.97	5,328.07	8.90	599.721		
300.00	300.00	1,111.23	1,146.20	3.44	6.06	-142.71	-4,179.33	-3,182.91	5,321.06	5,311.71	9.36	568.553		
400.00	400.00	1,209.89	1,243.53	3.60	6.52	-142.75	-4,169.11	-3,170.45	5,305.16	5,295.28	9.88	536.936		
500.00	500.00	1,308.54	1,340.86	3.81	6.98	-142.79	-4,158.90	-3,157.98	5,289.26	5,278.81	10.46	505.864		
600.00	599.98	1,406.98	1,437.98	4.04	7.46	-53.04	-4,148.70	-3,145.54	5,272.41	5,261.34	11.07	476.102		
700.00	699.95	1,505.29	1,534.97	4.30	7.94	-53.10	-4,138.53	-3,133.12	5,255.04	5,243.31	11.72	448.279		
800.00	799.92	1,603.60	1,631.96	4.59	8.43	-53.16	-4,128.35	-3,120.70	5,237.67	5,225.26	12.41	422.215		
900.00	899.89	1,701.91	1,728.95	4.90	8.93	-53.23	-4,118.17	-3,108.28	5,220.30	5,207.19	13.12	398.003		
1,000.00	999.86	1,800.22	1,825.94	5.23	9.43	-53.29	-4,107.99	-3,095.86	5,202.95	5,189.10	13.85	375.635		
1,100.00	1,099.83	1,901.47	1,922.93	5.58	9.95	-53.36	-4,097.81	-3,083.44	5,185.60	5,170.98	14.62	354.727		
1,200.00	1,199.80	1,996.85	2,019.92	5.94	10.44	-53.42	-4,087.63	-3,071.02	5,168.25	5,152.88	15.38	336.094		
1,300.00	1,299.77	2,095.16	2,116.91	6.30	10.95	-53.49	-4,077.45	-3,058.60	5,150.92	5,134.75	16.16	318.684		
1,400.00	1,399.73	2,193.47	2,213.90	6.68	11.47	-53.56	-4,067.27	-3,046.18	5,133.59	5,116.63	16.96	302.674		
1,500.00	1,499.70	2,291.78	2,310.89	7.07	11.99	-53.62	-4,057.10	-3,033.76	5,116.26	5,098.50	17.77	287.937		
1,600.00	1,599.67	2,390.09	2,407.88	7.46	12.50	-53.69	-4,046.92	-3,021.34	5,098.95	5,080.36	18.59	274.352		
1,700.00	1,699.64	2,488.40	2,504.87	7.85	13.02	-53.76	-4,036.74	-3,008.92	5,081.64	5,062.23	19.41	261.809		
1,800.00	1,799.61	2,586.71	2,601.86	8.25	13.55	-53.83	-4,026.56	-2,996.50	5,064.34	5,044.09	20.24	250.206		
1,900.00	1,899.58	2,685.02	2,698.85	8.66	14.07	-53.90	-4,016.38	-2,984.08	5,047.04	5,025.96	21.08	239.453		
2,000.00	1,999.55	2,783.33	2,795.84	9.06	14.59	-53.97	-4,006.20	-2,971.66	5,029.75	5,007.83	21.92	229.469		
2,100.00	2,099.52	2,881.64	2,892.83	9.47	15.12	-54.04	-3,996.02	-2,959.24	5,012.47	4,989.70	22.77	220.179		
2,200.00	2,199.48	2,979.95	2,989.82	9.89	15.65	-54.11	-3,985.84	-2,946.82	4,995.20	4,971.58	23.62	211.521		
2,300.00	2,299.45	3,078.26	3,086.81	10.30	16.17	-54.18	-3,975.67	-2,934.40	4,977.93	4,953.46	24.47	203.435		
2,400.00	2,399.42	3,176.57	3,183.80	10.72	16.70	-54.25	-3,965.49	-2,921.98	4,960.67	4,935.34	25.33	195.869		
2,500.00	2,499.39	3,274.88	3,280.79	11.14	17.23	-54.32	-3,955.31	-2,909.56	4,943.42	4,917.23	26.19	188.779		
2,600.00	2,599.36	3,373.19	3,377.78	11.56	17.76	-54.39	-3,945.13	-2,897.14	4,926.18	4,899.13	27.05	182.122		
2,700.00	2,699.33	3,471.50	3,474.77	11.98	18.29	-54.47	-3,934.95	-2,884.72	4,908.94	4,881.03	27.91	175.862		
2,800.00	2,799.30	3,569.81	3,571.76	12.41	18.82	-54.54	-3,924.77	-2,872.30	4,891.71	4,862.93	28.78	169.966		
2,900.00	2,899.27	3,668.12	3,668.75	12.83	19.35	-54.61	-3,914.59	-2,859.88	4,874.49	4,844.84	29.65	164.404		
3,000.00	2,999.23	3,766.43	3,765.74	13.26	19.89	-54.69	-3,904.41	-2,847.46	4,857.27	4,826.76	30.52	159.149		
3,100.00	3,099.20	3,864.74	3,862.73	13.68	20.42	-54.76	-3,894.24	-2,835.04	4,840.07	4,808.68	31.39	154.178		
3,200.00	3,199.17	3,963.05	3,959.72	14.11	20.95	-54.84	-3,884.06	-2,822.62	4,822.88	4,790.61	32.27	149.469		
3,300.00	3,299.14	4,061.36	4,056.71	14.54	21.49	-54.91	-3,873.88	-2,810.20	4,805.69	4,772.54	33.14	145.002		
3,400.00	3,399.11	4,159.68	4,153.70	14.97	22.02	-54.99	-3,863.70	-2,797.78	4,788.51	4,754.49	34.02	140.760		
3,500.00	3,499.08	4,257.99	4,250.69	15.40	22.55	-55.07	-3,853.52	-2,785.36	4,771.33	4,736.44	34.90	136.727		
3,600.00	3,599.05	4,356.30	4,347.68	15.83	23.09	-55.14	-3,843.34	-2,772.94	4,754.17	4,718.40	35.78	132.887		
3,700.00	3,699.02	4,454.61	4,444.67	16.26	23.62	-55.22	-3,833.16	-2,760.52	4,737.02	4,700.36	36.66	129.228		
3,800.00	3,798.98	4,552.92	4,541.66	16.69	24.16	-55.30	-3,822.99	-2,748.09	4,719.87	4,682.33	37.54	125.737		
3,900.00	3,898.95	4,651.23	4,638.65	17.12	24.69	-55.38	-3,812.81	-2,735.67	4,702.73	4,664.31	38.42	122.403		
4,000.00	3,998.92	4,749.54	4,735.64	17.55	25.23	-55.46	-3,802.63	-2,723.25	4,685.60	4,646.30	39.30	119.217		
4,100.00	4,098.89	4,847.85	4,832.63	17.98	25.76	-55.54	-3,792.45	-2,710.83	4,668.48	4,628.30	40.19	116.168		
4,200.00	4,198.86	4,946.16	4,929.62	18.42	26.30	-55.62	-3,782.27	-2,698.41	4,651.37	4,610.30	41.07	113.248		
4,300.00	4,298.83	5,044.47	5,026.61	18.85	26.83	-55.70	-3,772.09	-2,685.99	4,634.27	4,592.31	41.96	110.450		
4,400.00	4,398.80	5,142.78	5,123.60	19.28	27.37	-55.78	-3,761.91	-2,673.57	4,617.18	4,574.34	42.84	107.765		
4,500.00	4,498.77	5,241.09	5,220.59	19.72	27.90	-55.87	-3,751.73	-2,661.15	4,600.10	4,556.36	43.73	105.188		
4,600.00	4,598.73	5,339.40	5,317.58	20.15	28.44	-55.95	-3,741.56	-2,648.73	4,583.02	4,538.40	44.62	102.712		
4,700.00	4,698.70	5,437.71	5,414.57	20.58	28.98	-56.03	-3,731.38	-2,636.31	4,565.96	4,520.45	45.51	100.331		
4,800.00	4,798.67	5,536.02	5,511.56	21.02	29.51	-56.12	-3,721.20	-2,623.89	4,548.90	4,502.51	46.40	98.040		
4,900.00	4,898.64	5,634.33	5,608.55	21.45	30.05	-56.20	-3,711.02	-2,611.47	4,531.86	4,484.57	47.29	95.835		
5,000.00	4,998.61	5,732.64	5,705.54	21.89	30.59	-56.29	-3,700.84	-2,599.05	4,514.83	4,466.65	48.18	93.710		
5,100.00	5,098.58	5,830.95	5,802.53	22.32	31.12	-56.38	-3,690.66	-2,586.63	4,497.80	4,448.73	49.07	91.660		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,198.55	5,929.26	5,899.52	22.76	31.66	-56.46	-3,680.48	-2,574.21	4,480.79	4,430.82	49.96	89.684		
5,300.00	5,298.52	6,027.57	5,996.51	23.20	32.20	-56.55	-3,670.30	-2,561.79	4,463.78	4,412.93	50.85	87.775		
5,400.00	5,398.49	6,125.88	6,093.50	23.63	32.74	-56.64	-3,660.13	-2,549.37	4,446.79	4,395.04	51.75	85.932		
5,500.00	5,498.45	6,225.83	6,190.49	24.07	33.28	-56.73	-3,649.95	-2,536.95	4,429.80	4,377.15	52.65	84.139		
5,600.00	5,598.42	6,260.38	6,226.19	24.50	33.47	-56.76	-3,646.20	-2,532.38	4,413.27	4,359.97	53.30	82.798		
5,700.00	5,698.39	6,300.00	6,265.41	24.94	33.68	-56.79	-3,642.11	-2,528.60	4,398.23	4,344.27	53.96	81.509		
5,800.00	5,798.36	6,313.26	6,278.59	25.38	33.74	-56.79	-3,640.75	-2,527.88	4,384.99	4,330.49	54.50	80.455		
5,900.00	5,898.33	6,325.01	6,290.27	25.81	33.79	-56.79	-3,639.55	-2,527.48	4,373.62	4,318.60	55.02	79.492		
6,000.00	5,998.30	6,350.00	6,315.12	26.25	33.90	-56.78	-3,637.01	-2,527.34	4,363.96	4,308.40	55.57	78.535		
6,100.00	6,098.27	6,374.28	6,339.26	26.69	33.99	-56.76	-3,634.57	-2,528.14	4,356.15	4,300.06	56.09	77.665		
6,200.00	6,198.24	6,400.00	6,364.79	27.12	34.08	-56.72	-3,632.01	-2,530.00	4,350.17	4,293.57	56.60	76.857		
6,300.00	6,298.20	6,414.86	6,379.50	27.56	34.12	-56.70	-3,630.54	-2,531.55	4,346.00	4,288.95	57.05	76.184		
6,400.00	6,398.17	6,435.01	6,399.37	28.00	34.18	-56.66	-3,628.58	-2,534.20	4,343.67	4,286.18	57.49	75.555		
6,475.64	6,473.79	6,450.00	6,414.10	28.33	34.23	-56.63	-3,627.13	-2,536.57	4,343.14	4,285.33	57.81	75.126		
6,500.00	6,498.14	6,450.00	6,414.10	28.43	34.23	-56.63	-3,627.13	-2,536.57	4,343.21	4,285.32	57.89	75.023		
6,600.00	6,597.68	6,474.96	6,438.49	28.88	34.29	-55.79	-3,624.75	-2,541.31	4,341.14	4,282.82	58.32	74.441		
6,700.00	6,694.68	6,500.00	6,462.76	29.32	34.34	-56.37	-3,622.40	-2,547.01	4,332.15	4,273.42	58.74	73.757		
6,800.00	6,786.74	6,514.92	6,477.11	29.77	34.37	-57.57	-3,621.02	-2,550.87	4,316.31	4,257.21	59.10	73.033		
6,900.00	6,871.61	6,534.44	6,495.74	30.24	34.41	-59.36	-3,619.25	-2,556.42	4,294.00	4,234.51	59.49	72.183		
7,000.00	6,947.19	6,550.00	6,510.46	30.74	34.44	-61.72	-3,617.86	-2,561.25	4,265.72	4,205.83	59.89	71.229		
7,100.00	7,011.62	6,571.32	6,530.43	31.32	34.47	-64.70	-3,615.99	-2,568.46	4,232.08	4,171.70	60.38	70.093		
7,200.00	7,063.31	6,600.00	6,556.91	32.03	34.51	-68.33	-3,613.53	-2,579.21	4,193.98	4,132.97	61.02	68.734		
7,300.00	7,101.00	6,600.00	6,556.91	32.89	34.51	-72.24	-3,613.53	-2,579.21	4,152.12	4,090.43	61.69	67.308		
7,400.00	7,123.74	6,625.01	6,579.58	33.93	34.53	-76.82	-3,611.45	-2,589.55	4,107.77	4,045.12	62.65	65.566		
7,500.00	7,131.00	6,625.01	6,579.58	35.10	34.53	-81.31	-3,611.45	-2,589.55	4,061.92	3,998.22	63.70	63.769		
7,600.00	7,130.63	6,638.56	6,591.70	36.44	34.54	-81.50	-3,610.35	-2,595.52	4,016.71	3,951.72	64.99	61.809		
7,700.00	7,130.26	6,650.00	6,601.82	37.94	34.55	-81.66	-3,609.44	-2,600.77	3,973.39	3,906.94	66.46	59.791		
7,800.00	7,129.90	6,650.00	6,601.82	39.59	34.55	-81.66	-3,609.44	-2,600.77	3,932.07	3,864.01	68.06	57.770		
7,900.00	7,129.53	6,674.45	6,623.14	41.37	34.57	-81.99	-3,607.54	-2,612.58	3,892.59	3,822.67	69.92	55.669		
8,000.00	7,129.17	6,700.00	6,644.92	43.27	34.58	-82.33	-3,605.62	-2,625.80	3,855.27	3,783.34	71.93	53.596		
8,100.00	7,128.80	6,700.00	6,644.92	45.27	34.58	-82.33	-3,605.62	-2,625.80	3,819.88	3,745.87	74.01	51.614		
8,200.00	7,128.43	6,725.01	6,665.72	47.36	34.59	-82.65	-3,603.81	-2,639.57	3,786.65	3,710.38	76.28	49.644		
8,300.00	7,128.07	6,736.55	6,675.12	49.52	34.59	-82.80	-3,603.00	-2,646.20	3,755.53	3,676.90	78.62	47.766		
8,400.00	7,127.70	6,750.00	6,685.94	51.75	34.59	-82.97	-3,602.08	-2,654.14	3,726.57	3,645.50	81.07	45.966		
8,500.00	7,127.33	6,775.79	6,706.20	54.04	34.59	-83.29	-3,600.37	-2,670.01	3,699.74	3,616.11	83.64	44.237		
8,600.00	7,126.97	6,800.00	6,724.63	56.38	34.59	-83.58	-3,598.85	-2,685.63	3,675.10	3,588.83	86.26	42.603		
8,700.00	7,126.60	6,825.01	6,743.03	58.77	34.59	-83.87	-3,597.36	-2,702.50	3,652.61	3,563.65	88.96	41.061		
8,800.00	7,126.24	6,850.00	6,760.75	61.19	34.59	-84.16	-3,595.95	-2,720.07	3,632.25	3,540.55	91.70	39.610		
8,900.00	7,125.87	6,877.04	6,779.13	63.65	34.58	-84.45	-3,594.53	-2,739.84	3,614.01	3,519.52	94.50	38.245		
9,000.00	7,125.50	6,908.19	6,799.25	66.15	34.58	-84.77	-3,593.02	-2,763.57	3,597.85	3,500.52	97.33	36.966		
9,100.00	7,125.14	6,942.05	6,819.78	68.67	34.57	-85.10	-3,591.54	-2,790.44	3,583.70	3,483.49	100.20	35.765		
9,200.00	7,124.77	6,978.77	6,840.41	71.21	34.58	-85.43	-3,590.12	-2,820.78	3,571.49	3,468.38	103.12	34.636		
9,300.00	7,124.41	7,018.45	6,860.71	73.78	34.59	-85.75	-3,588.83	-2,854.85	3,561.15	3,455.10	106.06	33.578		
9,400.00	7,124.04	7,061.11	6,880.14	76.37	34.63	-86.07	-3,587.72	-2,892.80	3,552.59	3,443.55	109.04	32.579		
9,500.00	7,123.67	7,106.68	6,898.05	78.98	34.70	-86.36	-3,586.85	-2,934.68	3,545.71	3,433.63	112.07	31.638		
9,600.00	7,123.31	7,150.00	6,912.27	81.60	34.81	-86.59	-3,586.33	-2,975.59	3,540.40	3,425.28	115.12	30.753		
9,700.00	7,122.94	7,205.59	6,926.42	84.24	35.02	-86.82	-3,586.11	-3,029.33	3,536.57	3,418.27	118.30	29.895		
9,800.00	7,122.57	7,250.00	6,934.34	86.90	35.27	-86.95	-3,586.30	-3,073.02	3,534.16	3,412.73	121.43	29.105		
9,900.00	7,122.21	7,311.73	6,940.27	89.56	35.74	-87.05	-3,587.10	-3,134.44	3,533.06	3,408.31	124.75	28.321		
9,933.06	7,122.09	7,329.63	6,940.88	90.45	35.89	-87.06	-3,587.44	-3,152.32	3,532.99	3,407.15	125.83	28.076 CC		
10,000.00	7,121.84	7,383.42	6,940.85	92.24	36.44	-87.06	-3,588.68	-3,206.09	3,533.18	3,404.93	128.25	27.548		
10,100.00	7,121.48	7,483.41	6,940.43	94.92	37.73	-87.06	-3,591.00	-3,306.06	3,533.55	3,401.27	132.29	26.711		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
10,200.00	7,121.11	7,583.41	6,940.01	97.62	39.30	-87.06	-3,593.33	-3,406.03	3,533.93	3,397.36	136.56	25.878		
10,300.00	7,120.74	7,683.41	6,939.60	100.32	41.11	-87.06	-3,595.65	-3,506.01	3,534.30	3,393.24	141.06	25.055		
10,400.00	7,120.38	7,783.41	6,939.18	103.04	43.10	-87.06	-3,597.98	-3,605.98	3,534.67	3,388.93	145.74	24.253		
10,500.00	7,120.01	7,883.41	6,938.76	105.76	45.26	-87.06	-3,600.30	-3,705.95	3,535.04	3,384.45	150.59	23.474		
10,600.00	7,119.64	7,983.41	6,938.35	108.48	47.55	-87.06	-3,602.63	-3,805.92	3,535.41	3,379.82	155.59	22.723		
10,700.00	7,119.28	8,083.41	6,937.93	111.22	49.96	-87.06	-3,604.95	-3,905.89	3,535.79	3,375.08	160.71	22.001		
10,800.00	7,118.91	8,183.41	6,937.51	113.96	52.46	-87.06	-3,607.28	-4,005.86	3,536.16	3,370.22	165.94	21.310		
10,900.00	7,118.55	8,283.41	6,937.09	116.70	55.06	-87.06	-3,609.60	-4,105.83	3,536.53	3,365.27	171.26	20.650		
11,000.00	7,118.18	8,383.41	6,936.68	119.45	57.72	-87.06	-3,611.93	-4,205.81	3,536.90	3,360.24	176.67	20.020		
11,100.00	7,117.81	8,483.41	6,936.26	122.21	60.45	-87.06	-3,614.25	-4,305.78	3,537.27	3,355.13	182.14	19.421		
11,200.00	7,117.45	8,583.41	6,935.84	124.97	63.24	-87.06	-3,616.58	-4,405.75	3,537.65	3,349.97	187.68	18.850		
11,300.00	7,117.08	8,683.41	6,935.43	127.73	66.08	-87.06	-3,618.90	-4,505.72	3,538.02	3,344.75	193.27	18.306		
11,400.00	7,116.72	8,783.41	6,935.01	130.50	68.96	-87.06	-3,621.23	-4,605.69	3,538.39	3,339.48	198.91	17.789		
11,500.00	7,116.35	8,883.40	6,934.59	133.27	71.88	-87.06	-3,623.55	-4,705.66	3,538.76	3,334.17	204.59	17.297		
11,600.00	7,115.98	8,983.40	6,934.17	136.04	74.83	-87.05	-3,625.88	-4,805.63	3,539.13	3,328.82	210.31	16.828		
11,700.00	7,115.62	9,083.40	6,933.76	138.82	77.81	-87.05	-3,628.20	-4,905.61	3,539.51	3,323.44	216.07	16.382		
11,800.00	7,115.25	9,183.40	6,933.34	141.60	80.82	-87.05	-3,630.53	-5,005.58	3,539.88	3,318.03	221.85	15.956		
11,900.00	7,114.88	9,283.40	6,932.92	144.39	83.85	-87.05	-3,632.85	-5,105.55	3,540.25	3,312.59	227.66	15.551		
12,000.00	7,114.52	9,383.40	6,932.51	147.17	86.91	-87.05	-3,635.18	-5,205.52	3,540.62	3,307.13	233.49	15.164		
12,100.00	7,114.15	9,483.40	6,932.09	149.96	89.98	-87.05	-3,637.51	-5,305.49	3,540.99	3,301.64	239.35	14.794		
12,200.00	7,113.79	9,583.40	6,931.67	152.75	93.07	-87.05	-3,639.83	-5,405.46	3,541.36	3,296.14	245.23	14.441		
12,300.00	7,113.42	9,683.40	6,931.25	155.55	96.17	-87.05	-3,642.16	-5,505.43	3,541.74	3,290.62	251.12	14.104		
12,400.00	7,113.05	9,783.40	6,930.84	158.34	99.29	-87.05	-3,644.48	-5,605.41	3,542.11	3,285.08	257.03	13.781		
12,500.00	7,112.69	9,883.40	6,930.42	161.14	102.43	-87.05	-3,646.81	-5,705.38	3,542.48	3,279.52	262.96	13.472		
12,600.00	7,112.32	9,983.40	6,930.00	163.94	105.57	-87.05	-3,649.13	-5,805.35	3,542.85	3,273.96	268.90	13.176		
12,700.00	7,111.96	10,083.40	6,929.59	166.74	108.73	-87.05	-3,651.46	-5,905.32	3,543.22	3,268.38	274.85	12.892		
12,800.00	7,111.59	10,183.40	6,929.17	169.54	111.89	-87.05	-3,653.78	-6,005.29	3,543.60	3,262.79	280.81	12.619		
12,900.00	7,111.22	10,283.40	6,928.75	172.35	115.07	-87.05	-3,656.11	-6,105.26	3,543.97	3,257.18	286.78	12.358		
13,000.00	7,110.86	10,383.39	6,928.33	175.16	118.25	-87.05	-3,658.43	-6,205.23	3,544.34	3,251.57	292.77	12.106		
13,100.00	7,110.49	10,470.20	6,927.97	177.96	121.02	-87.05	-3,660.45	-6,292.02	3,544.74	3,246.42	298.32	11.882		
13,200.00	7,110.12	10,509.85	6,927.81	180.77	122.28	-87.05	-3,661.78	-6,331.65	3,546.26	3,244.03	302.23	11.734		
13,300.00	7,109.76	10,580.74	6,927.51	183.58	124.54	-87.05	-3,665.42	-6,402.44	3,549.34	3,242.15	307.19	11.554		
13,400.00	7,109.39	10,680.69	6,927.09	186.40	127.73	-87.05	-3,670.64	-6,502.25	3,552.60	3,239.42	313.19	11.343		
13,500.00	7,109.03	10,725.53	6,926.91	189.21	129.16	-87.05	-3,672.98	-6,547.03	3,556.30	3,239.13	317.17	11.213		
13,600.00	7,108.66	10,800.00	6,926.60	192.03	131.53	-87.05	-3,678.32	-6,621.30	3,561.50	3,239.29	322.21	11.053		
13,700.00	7,108.29	10,814.53	6,926.54	194.84	131.99	-87.05	-3,679.69	-6,635.77	3,568.33	3,243.46	324.87	10.984		
13,800.00	7,107.93	10,849.26	6,926.39	197.66	133.08	-87.06	-3,683.44	-6,670.29	3,577.15	3,248.95	328.20	10.899		
13,900.00	7,107.56	10,900.00	6,926.18	200.48	134.68	-87.06	-3,690.03	-6,720.60	3,587.88	3,255.78	332.10	10.804		
14,000.00	7,107.19	10,925.02	6,926.07	203.30	135.46	-87.06	-3,693.77	-6,745.34	3,600.20	3,265.41	334.80	10.753		
14,100.00	7,106.83	10,952.62	6,925.96	206.12	136.32	-87.07	-3,698.27	-6,772.57	3,614.38	3,276.92	337.46	10.710		
14,200.00	7,106.46	11,672.56	6,922.95	208.94	159.26	-87.10	-3,759.50	-7,487.78	3,620.91	3,253.35	367.56	9.851		
14,300.00	7,106.10	11,772.54	6,922.53	211.76	162.52	-87.10	-3,759.48	-7,587.76	3,618.95	3,245.31	373.64	9.686		
14,400.00	7,105.73	11,872.52	6,922.12	214.58	165.78	-87.09	-3,759.47	-7,687.74	3,616.99	3,237.27	379.71	9.526		
14,500.00	7,105.36	11,972.51	6,921.70	217.40	169.05	-87.09	-3,759.46	-7,787.72	3,615.02	3,229.23	385.79	9.370		
14,600.00	7,105.00	12,072.49	6,921.28	220.23	172.32	-87.09	-3,759.44	-7,887.70	3,613.06	3,221.18	391.88	9.220		
14,700.00	7,104.63	12,172.47	6,920.87	223.05	175.59	-87.09	-3,759.43	-7,987.68	3,611.09	3,213.13	397.96	9.074		
14,800.00	7,104.27	12,272.45	6,920.45	225.88	178.86	-87.08	-3,759.42	-8,087.66	3,609.13	3,205.08	404.05	8.932		
14,872.41	7,104.00	12,344.84	6,920.15	227.93	181.23	-87.08	-3,759.41	-8,160.05	3,607.71	3,199.24	408.46	8.832 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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	68.00	3.28	0.00	-142.56	-4,269.43	-3,268.41	5,377.28					
100.00	100.00	57.00	100.00	3.28	0.07	-142.56	-4,269.43	-3,268.41	5,376.85	5,373.50	3.36	1,602.621		
200.00	200.00	89.48	934.09	3.34	3.81	-142.79	-4,240.32	-3,220.17	5,374.82	5,367.62	7.21	745.972		
300.00	300.00	993.40	1,031.94	3.44	4.31	-142.84	-4,232.82	-3,207.74	5,361.17	5,353.42	7.75	691.687		
400.00	400.00	1,092.32	1,129.78	3.60	4.82	-142.90	-4,225.32	-3,195.32	5,347.52	5,339.17	8.35	640.522		
500.00	500.00	1,191.24	1,227.63	3.81	5.33	-142.96	-4,217.82	-3,182.89	5,333.87	5,324.88	8.99	593.136		
600.00	599.98	1,289.94	1,325.26	4.04	5.84	-53.20	-4,210.33	-3,170.48	5,319.28	5,309.61	9.67	549.978		
700.00	699.95	1,388.51	1,422.77	4.30	6.36	-53.28	-4,202.86	-3,158.10	5,304.17	5,293.79	10.38	511.198		
800.00	799.92	1,487.08	1,520.27	4.59	6.87	-53.36	-4,195.38	-3,145.71	5,289.06	5,277.95	11.11	476.107		
900.00	899.89	1,585.65	1,617.78	4.90	7.39	-53.44	-4,187.91	-3,133.33	5,273.97	5,262.10	11.87	444.461		
1,000.00	999.86	1,684.22	1,715.28	5.23	7.90	-53.53	-4,180.44	-3,120.94	5,258.89	5,246.24	12.64	415.956		
1,100.00	1,099.83	1,782.80	1,812.79	5.58	8.42	-53.61	-4,172.96	-3,108.56	5,243.81	5,230.38	13.44	390.271		
1,200.00	1,199.80	1,881.37	1,910.29	5.94	8.94	-53.69	-4,165.49	-3,096.17	5,228.75	5,214.51	14.24	367.096		
1,300.00	1,299.77	1,979.94	2,007.80	6.30	9.46	-53.77	-4,158.01	-3,083.79	5,213.70	5,198.64	15.06	346.143		
1,400.00	1,399.73	2,078.51	2,105.30	6.68	9.98	-53.86	-4,150.54	-3,071.40	5,198.66	5,182.77	15.89	327.151		
1,500.00	1,499.70	2,177.09	2,202.81	7.07	10.50	-53.94	-4,143.06	-3,059.02	5,183.64	5,166.91	16.73	309.889		
1,600.00	1,599.67	2,275.66	2,300.31	7.46	11.02	-54.03	-4,135.59	-3,046.63	5,168.62	5,151.05	17.57	294.156		
1,700.00	1,699.64	2,374.23	2,397.82	7.85	11.54	-54.11	-4,128.11	-3,034.24	5,153.61	5,135.19	18.42	279.773		
1,800.00	1,799.61	2,472.80	2,495.32	8.25	12.06	-54.20	-4,120.64	-3,021.86	5,138.62	5,119.34	19.28	266.587		
1,900.00	1,899.58	2,571.38	2,592.83	8.66	12.58	-54.29	-4,113.16	-3,009.47	5,123.64	5,103.50	20.13	254.465		
2,000.00	1,999.55	2,669.95	2,690.33	9.06	13.10	-54.37	-4,105.69	-2,997.09	5,108.66	5,087.67	21.00	243.290		
2,100.00	2,099.52	2,768.52	2,787.84	9.47	13.62	-54.46	-4,098.22	-2,984.70	5,093.70	5,071.84	21.87	232.961		
2,200.00	2,199.48	2,867.09	2,885.34	9.89	14.14	-54.55	-4,090.74	-2,972.32	5,078.76	5,056.02	22.73	223.390		
2,300.00	2,299.45	2,965.67	2,982.85	10.30	14.66	-54.64	-4,083.27	-2,959.93	5,063.82	5,040.21	23.61	214.500		
2,400.00	2,399.42	3,064.24	3,080.35	10.72	15.18	-54.73	-4,075.79	-2,947.55	5,048.90	5,024.41	24.48	206.224		
2,500.00	2,499.39	3,162.81	3,177.86	11.14	15.71	-54.82	-4,068.32	-2,935.16	5,033.98	5,008.62	25.36	198.502		
2,600.00	2,599.36	3,261.38	3,275.36	11.56	16.23	-54.91	-4,060.84	-2,922.77	5,019.08	4,992.84	26.24	191.282		
2,700.00	2,699.33	3,359.96	3,372.87	11.98	16.75	-55.00	-4,053.37	-2,910.39	5,004.20	4,977.08	27.12	184.519		
2,800.00	2,799.30	3,458.53	3,470.37	12.41	17.27	-55.09	-4,045.89	-2,898.00	4,989.32	4,961.32	28.00	178.171		
2,900.00	2,899.27	3,557.10	3,567.88	12.83	17.79	-55.18	-4,038.42	-2,885.62	4,974.46	4,945.57	28.89	172.202		
3,000.00	2,999.23	3,655.67	3,665.38	13.26	18.31	-55.27	-4,030.95	-2,873.23	4,959.61	4,929.83	29.77	166.581		
3,100.00	3,099.20	3,754.25	3,762.89	13.68	18.84	-55.36	-4,023.47	-2,860.85	4,944.77	4,914.11	30.66	161.278		
3,200.00	3,199.17	3,852.82	3,860.40	14.11	19.36	-55.46	-4,016.00	-2,848.46	4,929.95	4,898.40	31.55	156.268		
3,300.00	3,299.14	3,951.39	3,957.90	14.54	19.88	-55.55	-4,008.52	-2,836.08	4,915.13	4,882.70	32.44	151.527		
3,400.00	3,399.11	4,049.96	4,055.41	14.97	20.40	-55.65	-4,001.05	-2,823.69	4,900.34	4,867.01	33.33	147.035		
3,500.00	3,499.08	4,148.54	4,152.91	15.40	20.92	-55.74	-3,993.57	-2,811.31	4,885.55	4,851.33	34.22	142.773		
3,600.00	3,599.05	4,247.11	4,250.42	15.83	21.45	-55.84	-3,986.10	-2,798.92	4,870.78	4,835.67	35.11	138.724		
3,700.00	3,699.02	4,345.68	4,347.92	16.26	21.97	-55.93	-3,978.62	-2,786.53	4,856.02	4,820.01	36.00	134.873		
3,800.00	3,798.98	4,444.25	4,445.43	16.69	22.49	-56.03	-3,971.15	-2,774.15	4,841.27	4,804.38	36.90	131.205		
3,900.00	3,898.95	4,542.83	4,542.93	17.12	23.01	-56.13	-3,963.68	-2,761.76	4,826.54	4,788.75	37.79	127.709		
4,000.00	3,998.92	4,641.40	4,640.44	17.55	23.54	-56.22	-3,956.20	-2,749.38	4,811.83	4,773.14	38.69	124.373		
4,100.00	4,098.89	4,739.97	4,737.94	17.98	24.06	-56.32	-3,948.73	-2,736.99	4,797.12	4,757.54	39.59	121.185		
4,200.00	4,198.86	4,838.54	4,835.45	18.42	24.58	-56.42	-3,941.25	-2,724.61	4,782.43	4,741.95	40.48	118.137		
4,300.00	4,298.83	4,937.11	4,932.95	18.85	25.10	-56.52	-3,933.78	-2,712.22	4,767.76	4,726.38	41.38	115.220		
4,400.00	4,398.80	5,035.69	5,030.46	19.28	25.62	-56.62	-3,926.30	-2,699.84	4,753.10	4,710.82	42.28	112.425		
4,500.00	4,498.77	5,134.26	5,127.96	19.72	26.15	-56.72	-3,918.83	-2,687.45	4,738.45	4,695.27	43.18	109.745		
4,600.00	4,598.73	5,232.83	5,225.47	20.15	26.67	-56.83	-3,911.35	-2,675.06	4,723.82	4,679.74	44.08	107.173		
4,700.00	4,698.70	5,331.40	5,322.97	20.58	27.19	-56.93	-3,903.88	-2,662.68	4,709.20	4,664.22	44.98	104.703		
4,800.00	4,798.67	5,429.98	5,420.48	21.02	27.71	-57.03	-3,896.40	-2,650.29	4,694.60	4,648.72	45.88	102.329		
4,900.00	4,898.64	5,528.55	5,517.98	21.45	28.24	-57.13	-3,888.93	-2,637.91	4,680.01	4,633.23	46.78	100.046		
5,000.00	4,998.61	5,627.12	5,615.49	21.89	28.76	-57.24	-3,881.46	-2,625.52	4,665.44	4,617.76	47.68	97.848		
5,100.00	5,098.58	5,725.69	5,712.99	22.32	29.28	-57.34	-3,873.98	-2,613.14	4,650.88	4,602.30	48.58	95.731		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,825.76	5,810.50	22.76	29.81	-57.45	-3,866.51	-2,600.75	4,636.34	4,586.85	49.49	93.677		
5,300.00	5,298.52	5,927.18	5,908.00	23.20	30.35	-57.55	-3,859.03	-2,588.37	4,621.81	4,571.40	50.41	91.685		
5,400.00	5,398.49	6,028.61	6,005.51	23.63	30.89	-57.66	-3,851.56	-2,575.98	4,607.30	4,555.98	51.33	89.763		
5,500.00	5,498.45	6,130.04	6,103.01	24.07	31.43	-57.77	-3,844.08	-2,563.59	4,592.81	4,540.56	52.25	87.908		
5,600.00	5,598.42	6,231.47	6,200.52	24.50	31.96	-57.88	-3,836.61	-2,551.21	4,578.33	4,525.17	53.16	86.117		
5,700.00	5,698.39	6,317.13	6,298.02	24.94	32.42	-57.99	-3,829.13	-2,538.82	4,563.87	4,509.86	54.01	84.503		
5,800.00	5,798.36	6,374.99	6,355.26	25.38	32.72	-58.05	-3,824.75	-2,531.55	4,549.60	4,494.85	54.75	83.092		
5,900.00	5,898.33	6,400.00	6,380.05	25.81	32.85	-58.07	-3,822.86	-2,528.90	4,536.70	4,481.35	55.36	81.955		
6,000.00	5,998.30	6,425.01	6,404.94	26.25	32.97	-58.08	-3,820.98	-2,527.22	4,525.56	4,469.62	55.94	80.901		
6,100.00	6,098.27	6,450.00	6,429.85	26.69	33.08	-58.09	-3,819.13	-2,526.53	4,516.18	4,459.67	56.50	79.929		
6,200.00	6,198.24	6,450.00	6,429.85	27.12	33.08	-58.09	-3,819.13	-2,526.53	4,508.62	4,451.67	56.95	79.169		
6,300.00	6,298.20	6,500.00	6,479.68	27.56	33.26	-58.06	-3,815.50	-2,528.08	4,502.74	4,445.17	57.57	78.219		
6,400.00	6,398.17	6,500.00	6,479.68	28.00	33.26	-58.06	-3,815.50	-2,528.08	4,498.49	4,440.52	57.97	77.597		
6,500.00	6,498.14	6,525.01	6,504.52	28.43	33.34	-58.03	-3,813.72	-2,530.33	4,496.12	4,437.66	58.45	76.920		
6,600.00	6,597.68	6,550.00	6,529.24	28.88	33.41	-57.34	-3,811.97	-2,533.55	4,492.23	4,433.32	58.92	76.248		
6,700.00	6,694.68	6,550.00	6,529.24	29.32	33.41	-58.05	-3,811.97	-2,533.55	4,481.82	4,422.55	59.27	75.613		
6,800.00	6,786.74	6,600.00	6,578.23	29.77	33.53	-59.45	-3,808.57	-2,542.90	4,464.75	4,404.93	59.82	74.636		
6,900.00	6,871.61	6,600.00	6,578.23	30.24	33.53	-61.30	-3,808.57	-2,542.90	4,441.52	4,381.35	60.17	73.813		
7,000.00	6,947.19	6,625.01	6,602.42	30.74	33.58	-63.81	-3,806.93	-2,549.01	4,412.79	4,352.13	60.65	72.756		
7,100.00	7,011.62	6,650.00	6,626.34	31.32	33.63	-66.89	-3,805.33	-2,556.07	4,379.21	4,318.01	61.20	71.559		
7,200.00	7,063.31	6,650.00	6,626.34	32.03	33.63	-70.30	-3,805.33	-2,556.07	4,341.51	4,279.75	61.76	70.299		
7,300.00	7,101.00	6,672.63	6,647.74	32.89	33.66	-74.35	-3,803.92	-2,563.26	4,300.63	4,238.07	62.56	68.744		
7,400.00	7,123.74	6,700.00	6,673.28	33.93	33.70	-78.85	-3,802.26	-2,572.98	4,257.77	4,194.21	63.56	66.989		
7,500.00	7,131.00	6,700.00	6,673.28	35.10	33.70	-83.15	-3,802.26	-2,572.98	4,213.69	4,149.05	64.64	65.189		
7,600.00	7,130.63	6,700.00	6,673.28	36.44	33.70	-83.15	-3,802.26	-2,572.98	4,170.53	4,104.63	65.90	63.284		
7,700.00	7,130.26	6,714.04	6,686.20	37.94	33.72	-83.34	-3,801.43	-2,578.39	4,129.26	4,061.86	67.40	61.264		
7,800.00	7,129.90	6,725.01	6,696.23	39.59	33.73	-83.49	-3,800.80	-2,582.81	4,089.93	4,020.86	69.07	59.217		
7,900.00	7,129.53	6,735.89	6,706.08	41.37	33.74	-83.64	-3,800.18	-2,587.37	4,052.57	3,981.68	70.89	57.164		
8,000.00	7,129.17	6,750.00	6,718.75	43.27	33.75	-83.83	-3,799.38	-2,593.53	4,017.23	3,944.36	72.88	55.122		
8,100.00	7,128.80	6,750.00	6,718.75	45.27	33.75	-83.83	-3,799.38	-2,593.53	3,984.01	3,909.04	74.96	53.146		
8,200.00	7,128.43	6,776.03	6,741.76	47.36	33.77	-84.18	-3,797.97	-2,605.63	3,952.76	3,875.53	77.23	51.182		
8,300.00	7,128.07	6,800.00	6,762.49	49.52	33.79	-84.49	-3,796.72	-2,617.59	3,923.71	3,844.11	79.59	49.297		
8,400.00	7,127.70	6,809.22	6,770.34	51.75	33.80	-84.61	-3,796.25	-2,622.40	3,896.74	3,814.72	82.02	47.509		
8,500.00	7,127.33	6,825.01	6,783.63	54.04	33.81	-84.81	-3,795.47	-2,630.90	3,871.95	3,787.41	84.54	45.801		
8,600.00	7,126.97	6,850.00	6,804.21	56.38	33.82	-85.12	-3,794.28	-2,645.02	3,849.31	3,762.17	87.14	44.174		
8,700.00	7,126.60	6,872.27	6,822.07	58.77	33.83	-85.39	-3,793.27	-2,658.27	3,828.82	3,739.03	89.79	42.641		
8,800.00	7,126.24	6,900.00	6,843.66	61.19	33.84	-85.72	-3,792.08	-2,675.63	3,810.46	3,717.97	92.50	41.196		
8,900.00	7,125.87	6,925.01	6,862.47	63.65	33.84	-86.00	-3,791.07	-2,692.09	3,794.20	3,698.97	95.23	39.842		
9,000.00	7,125.50	6,950.00	6,880.60	66.15	33.85	-86.28	-3,790.13	-2,709.25	3,780.00	3,682.00	98.00	38.572		
9,100.00	7,125.14	7,000.00	6,914.80	68.67	33.88	-86.80	-3,788.45	-2,745.67	3,767.76	3,666.94	100.82	37.370		
9,200.00	7,124.77	7,030.73	6,934.37	71.21	33.90	-87.10	-3,787.56	-2,769.34	3,757.41	3,653.76	103.64	36.253		
9,300.00	7,124.41	7,073.39	6,959.60	73.78	33.95	-87.49	-3,786.49	-2,803.72	3,748.86	3,642.35	106.51	35.197		
9,400.00	7,124.04	7,120.40	6,984.68	76.37	34.02	-87.87	-3,785.56	-2,843.46	3,741.98	3,632.57	109.41	34.201		
9,500.00	7,123.67	7,171.87	7,008.70	78.98	34.15	-88.24	-3,784.84	-2,888.96	3,736.63	3,624.25	112.38	33.251		
9,600.00	7,123.31	7,225.01	7,029.58	81.60	34.33	-88.57	-3,784.43	-2,937.81	3,732.65	3,617.26	115.39	32.349		
9,700.00	7,122.94	7,287.47	7,048.83	84.24	34.65	-88.87	-3,784.39	-2,997.20	3,729.90	3,611.37	118.53	31.468		
9,800.00	7,122.57	7,350.00	7,062.19	86.90	35.08	-89.07	-3,784.82	-3,058.25	3,728.24	3,606.49	121.75	30.623		
9,900.00	7,122.21	7,415.73	7,069.73	89.56	35.65	-89.19	-3,785.77	-3,123.51	3,727.57	3,602.49	125.08	29.802		
9,922.53	7,122.13	7,430.60	7,070.50	90.16	35.79	-89.21	-3,786.06	-3,138.37	3,727.54	3,601.70	125.84	29.621 CC		
10,000.00	7,121.84	7,493.01	7,070.81	92.24	36.46	-89.21	-3,787.48	-3,200.74	3,727.77	3,599.14	128.62	28.982		
10,100.00	7,121.48	7,593.01	7,070.21	94.92	37.78	-89.21	-3,789.83	-3,300.71	3,728.17	3,595.52	132.65	28.106		
10,200.00	7,121.11	7,693.00	7,069.61	97.62	39.35	-89.21	-3,792.19	-3,400.68	3,728.58	3,591.66	136.92	27.233		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,120.74	7,793.00	7,069.00	100.32	41.14	-89.20	-3,794.55	-3,500.65	3,728.98	3,587.58	141.40	26.371		
10,400.00	7,120.38	7,893.00	7,068.40	103.04	43.11	-89.20	-3,796.90	-3,600.62	3,729.38	3,583.30	146.08	25.529		
10,500.00	7,120.01	7,993.00	7,067.80	105.76	45.25	-89.20	-3,799.26	-3,700.59	3,729.79	3,578.86	150.93	24.713		
10,600.00	7,119.64	8,093.00	7,067.20	108.48	47.52	-89.19	-3,801.62	-3,800.56	3,730.19	3,574.28	155.92	23.924		
10,700.00	7,119.28	8,193.00	7,066.60	111.22	49.91	-89.19	-3,803.97	-3,900.53	3,730.60	3,569.56	161.03	23.167		
10,800.00	7,118.91	8,293.00	7,065.99	113.96	52.41	-89.19	-3,806.33	-4,000.50	3,731.00	3,564.74	166.26	22.441		
10,900.00	7,118.55	8,393.00	7,065.39	116.70	54.99	-89.18	-3,808.69	-4,100.47	3,731.41	3,559.83	171.58	21.747		
11,000.00	7,118.18	8,493.00	7,064.79	119.45	57.65	-89.18	-3,811.04	-4,200.44	3,731.81	3,554.83	176.98	21.086		
11,100.00	7,117.81	8,592.99	7,064.19	122.21	60.37	-89.18	-3,813.40	-4,300.41	3,732.22	3,549.76	182.46	20.455		
11,200.00	7,117.45	8,692.99	7,063.58	124.97	63.15	-89.17	-3,815.76	-4,400.38	3,732.62	3,544.63	187.99	19.855		
11,300.00	7,117.08	8,792.99	7,062.98	127.73	65.98	-89.17	-3,818.11	-4,500.35	3,733.02	3,539.44	193.58	19.284		
11,400.00	7,116.72	8,892.99	7,062.38	130.50	68.85	-89.17	-3,820.47	-4,600.31	3,733.43	3,534.21	199.22	18.740		
11,500.00	7,116.35	8,992.99	7,061.78	133.27	71.77	-89.16	-3,822.83	-4,700.28	3,733.83	3,528.93	204.91	18.222		
11,600.00	7,115.98	9,092.99	7,061.18	136.04	74.72	-89.16	-3,825.18	-4,800.25	3,734.24	3,523.61	210.63	17.729		
11,700.00	7,115.62	9,192.99	7,060.57	138.82	77.69	-89.15	-3,827.54	-4,900.22	3,734.64	3,518.26	216.38	17.259		
11,800.00	7,115.25	9,292.99	7,059.97	141.60	80.70	-89.15	-3,829.90	-5,000.19	3,735.05	3,512.88	222.17	16.812		
11,900.00	7,114.88	9,392.99	7,059.37	144.39	83.73	-89.15	-3,832.25	-5,100.16	3,735.45	3,507.47	227.98	16.385		
12,000.00	7,114.52	9,492.99	7,058.77	147.17	86.78	-89.14	-3,834.61	-5,200.13	3,735.86	3,502.04	233.82	15.978		
12,100.00	7,114.15	9,592.98	7,058.17	149.96	89.85	-89.14	-3,836.97	-5,300.10	3,736.26	3,496.58	239.68	15.589		
12,200.00	7,113.79	9,692.98	7,057.56	152.75	92.94	-89.14	-3,839.32	-5,400.07	3,736.67	3,491.11	245.56	15.217		
12,300.00	7,113.42	9,792.98	7,056.96	155.55	96.04	-89.13	-3,841.68	-5,500.04	3,737.07	3,485.62	251.46	14.862		
12,400.00	7,113.05	9,892.98	7,056.36	158.34	99.16	-89.13	-3,844.04	-5,600.01	3,737.48	3,480.11	257.37	14.522		
12,500.00	7,112.69	9,992.98	7,055.76	161.14	102.29	-89.13	-3,846.39	-5,699.98	3,737.88	3,474.58	263.30	14.196		
12,600.00	7,112.32	10,092.98	7,055.16	163.94	105.44	-89.12	-3,848.75	-5,799.95	3,738.29	3,469.04	269.24	13.885		
12,700.00	7,111.96	10,192.98	7,054.55	166.74	108.59	-89.12	-3,851.11	-5,899.92	3,738.69	3,463.49	275.20	13.585		
12,800.00	7,111.59	10,292.98	7,053.95	169.54	111.76	-89.12	-3,853.46	-5,999.89	3,739.10	3,457.93	281.16	13.299		
12,900.00	7,111.22	10,392.98	7,053.35	172.35	114.93	-89.11	-3,855.82	-6,099.85	3,739.50	3,452.36	287.14	13.023		
13,000.00	7,110.86	10,492.97	7,052.75	175.16	118.11	-89.11	-3,858.18	-6,199.82	3,739.91	3,446.77	293.13	12.758		
13,100.00	7,110.49	10,592.97	7,052.14	177.96	121.30	-89.11	-3,860.53	-6,299.79	3,740.31	3,441.18	299.13	12.504		
13,200.00	7,110.12	10,692.97	7,051.54	180.77	124.50	-89.10	-3,862.89	-6,399.76	3,740.71	3,435.58	305.14	12.259		
13,300.00	7,109.76	10,792.97	7,050.94	183.58	127.70	-89.10	-3,865.25	-6,499.73	3,741.12	3,429.97	311.15	12.024		
13,400.00	7,109.39	10,892.97	7,050.34	186.40	130.91	-89.09	-3,867.60	-6,599.70	3,741.52	3,424.35	317.17	11.797		
13,500.00	7,109.03	10,992.97	7,049.74	189.21	134.13	-89.09	-3,869.96	-6,699.67	3,741.93	3,418.73	323.20	11.578		
13,600.00	7,108.66	11,092.97	7,049.13	192.03	137.35	-89.09	-3,872.32	-6,799.64	3,742.33	3,413.10	329.23	11.367		
13,700.00	7,108.29	11,192.97	7,048.53	194.84	140.57	-89.08	-3,874.67	-6,899.61	3,742.74	3,407.46	335.28	11.163		
13,800.00	7,107.93	11,292.97	7,047.93	197.66	143.80	-89.08	-3,877.03	-6,999.58	3,743.14	3,401.82	341.32	10.967		
13,900.00	7,107.56	11,392.96	7,047.33	200.48	147.04	-89.08	-3,879.39	-7,099.55	3,743.55	3,396.17	347.37	10.777		
14,000.00	7,107.19	11,492.96	7,046.73	203.30	150.28	-89.07	-3,881.74	-7,199.52	3,743.95	3,390.52	353.43	10.593		
14,100.00	7,106.83	11,592.96	7,046.12	206.12	153.52	-89.07	-3,884.10	-7,299.49	3,744.36	3,384.87	359.49	10.416		
14,200.00	7,106.46	11,692.96	7,045.52	208.94	156.76	-89.07	-3,886.46	-7,399.46	3,744.76	3,379.20	365.56	10.244		
14,300.00	7,106.10	11,792.96	7,044.92	211.76	160.01	-89.06	-3,888.81	-7,499.43	3,745.17	3,373.54	371.63	10.078		
14,400.00	7,105.73	11,892.96	7,044.32	214.58	163.27	-89.06	-3,891.17	-7,599.39	3,745.57	3,367.87	377.70	9.917		
14,500.00	7,105.36	11,992.96	7,043.71	217.40	166.52	-89.06	-3,893.53	-7,699.36	3,745.98	3,362.20	383.78	9.761		
14,600.00	7,105.00	12,092.96	7,043.11	220.23	169.78	-89.05	-3,895.88	-7,799.33	3,746.38	3,356.52	389.86	9.609		
14,700.00	7,104.63	12,192.96	7,042.51	223.05	173.04	-89.05	-3,898.24	-7,899.30	3,746.79	3,350.84	395.95	9.463		
14,800.00	7,104.27	12,292.95	7,041.91	225.88	176.30	-89.05	-3,900.60	-7,999.27	3,747.19	3,345.16	402.04	9.321		
14,872.41	7,104.00	12,365.36	7,041.47	227.93	178.67	-89.04	-3,902.30	-8,071.66	3,747.49	3,341.04	406.45	9.220 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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	15,789.69	7,243.40	3.28	247.79	0.58	2,103.71	21.47	7,542.74					
100.00	100.00	15,789.93	7,243.40	3.28	247.79	0.58	2,103.71	21.23	7,446.76	7,328.87	117.89	63.166		
200.00	200.00	15,809.89	7,243.40	3.34	248.36	0.57	2,103.71	20.99	7,350.89	7,232.34	118.55	62.006		
300.00	300.00	15,809.64	7,243.40	3.44	248.35	0.56	2,103.71	20.74	7,255.13	7,136.14	118.99	60.973		
400.00	400.00	15,809.40	7,243.40	3.60	248.35	0.56	2,103.71	20.50	7,159.48	7,040.03	119.45	59.938		
500.00	500.00	15,809.15	7,243.40	3.81	248.34	0.55	2,103.71	20.25	7,063.96	6,944.03	119.93	58.899		
600.00	599.98	15,807.31	7,243.41	4.04	248.29	95.05	2,103.71	18.40	6,968.58	6,848.16	120.42	57.869		
700.00	699.95	15,804.56	7,243.42	4.30	248.21	94.98	2,103.72	15.66	6,873.35	6,752.43	120.92	56.840		
800.00	799.92	15,801.82	7,243.42	4.59	248.13	94.90	2,103.72	12.92	6,778.25	6,656.80	121.45	55.809		
900.00	899.89	15,800.99	7,243.43	4.90	248.11	94.83	2,103.73	10.18	6,683.30	6,561.26	122.04	54.765		
1,000.00	999.86	15,803.73	7,243.44	5.23	248.18	94.76	2,103.73	7.43	6,588.50	6,465.80	122.70	53.698		
1,100.00	1,099.83	15,806.47	7,243.44	5.58	248.26	94.68	2,103.74	4.69	6,493.85	6,370.46	123.39	52.630		
1,200.00	1,199.80	15,809.22	7,243.45	5.94	248.34	94.61	2,103.74	1.95	6,399.36	6,275.25	124.11	51.561		
1,300.00	1,299.77	15,811.96	7,243.46	6.30	248.42	94.53	2,103.75	-0.80	6,305.04	6,180.17	124.88	50.491		
1,400.00	1,399.73	15,814.70	7,243.46	6.68	248.50	94.46	2,103.75	-3.54	6,210.90	6,085.22	125.68	49.420		
1,500.00	1,499.70	15,817.44	7,243.47	7.07	248.57	94.39	2,103.76	-6.28	6,116.94	5,990.42	126.52	48.349		
1,600.00	1,599.67	15,820.19	7,243.48	7.46	248.65	94.31	2,103.76	-9.02	6,023.18	5,895.78	127.40	47.278		
1,700.00	1,699.64	15,822.93	7,243.48	7.85	248.73	94.24	2,103.77	-11.77	5,929.61	5,801.29	128.33	46.208		
1,800.00	1,799.61	15,825.67	7,243.49	8.25	248.81	94.16	2,103.77	-14.51	5,836.26	5,706.96	129.30	45.138		
1,900.00	1,899.58	15,828.42	7,243.50	8.66	248.88	94.09	2,103.78	-17.25	5,743.14	5,612.81	130.32	44.069		
2,000.00	1,999.55	15,831.16	7,243.50	9.06	248.96	94.01	2,103.78	-20.00	5,650.24	5,518.85	131.40	43.001		
2,100.00	2,099.52	15,833.90	7,243.51	9.47	249.04	93.94	2,103.79	-22.74	5,557.59	5,425.07	132.52	41.936		
2,200.00	2,199.48	15,836.65	7,243.52	9.89	249.12	93.87	2,103.79	-25.48	5,465.20	5,331.49	133.71	40.874		
2,300.00	2,299.45	15,839.39	7,243.52	10.30	249.19	93.79	2,103.80	-28.23	5,373.08	5,238.13	134.95	39.815		
2,400.00	2,399.42	15,842.13	7,243.53	10.72	249.27	93.72	2,103.80	-30.97	5,281.25	5,144.99	136.26	38.760		
2,500.00	2,499.39	15,844.87	7,243.54	11.14	249.35	93.64	2,103.80	-33.71	5,189.72	5,052.09	137.62	37.710		
2,600.00	2,599.36	15,847.62	7,243.54	11.56	249.43	93.57	2,103.81	-36.45	5,098.50	4,959.44	139.06	36.665		
2,700.00	2,699.33	15,850.36	7,243.55	11.98	249.50	93.49	2,103.81	-39.20	5,007.61	4,867.05	140.56	35.626		
2,800.00	2,799.30	15,853.10	7,243.56	12.41	249.58	93.42	2,103.82	-41.94	4,917.08	4,774.95	142.14	34.594		
2,900.00	2,899.27	15,855.85	7,243.56	12.83	249.66	93.34	2,103.82	-44.68	4,826.92	4,683.14	143.79	33.570		
3,000.00	2,999.23	15,858.59	7,243.57	13.26	249.74	93.27	2,103.83	-47.43	4,737.16	4,591.65	145.51	32.555		
3,100.00	3,099.20	15,861.33	7,243.58	13.68	249.81	93.20	2,103.83	-50.17	4,647.81	4,500.49	147.32	31.549		
3,200.00	3,199.17	15,864.07	7,243.58	14.11	249.89	93.12	2,103.84	-52.91	4,558.90	4,409.69	149.21	30.553		
3,300.00	3,299.14	15,866.82	7,243.59	14.54	249.97	93.05	2,103.84	-55.66	4,470.46	4,319.27	151.19	29.569		
3,400.00	3,399.11	15,869.56	7,243.60	14.97	250.05	92.97	2,103.85	-58.40	4,382.51	4,229.26	153.26	28.596		
3,500.00	3,499.08	15,872.30	7,243.60	15.40	250.12	92.90	2,103.85	-61.14	4,295.09	4,139.68	155.42	27.636		
3,600.00	3,599.05	15,875.05	7,243.61	15.83	250.20	92.82	2,103.86	-63.88	4,208.23	4,050.56	157.68	26.689		
3,700.00	3,699.02	15,877.79	7,243.62	16.26	250.28	92.75	2,103.86	-66.63	4,121.96	3,961.93	160.03	25.757		
3,800.00	3,798.98	15,880.53	7,243.62	16.69	250.36	92.67	2,103.87	-69.37	4,036.33	3,873.83	162.49	24.840		
3,900.00	3,898.95	15,883.28	7,243.63	17.12	250.43	92.60	2,103.87	-72.11	3,951.37	3,786.30	165.06	23.939		
4,000.00	3,998.92	15,886.02	7,243.64	17.55	250.51	92.52	2,103.88	-74.86	3,867.12	3,699.38	167.74	23.054		
4,100.00	4,098.89	15,888.76	7,243.64	17.98	250.59	92.45	2,103.88	-77.60	3,783.64	3,613.10	170.54	22.187		
4,200.00	4,198.86	15,908.56	7,243.65	18.42	251.15	92.38	2,103.89	-80.34	3,700.98	3,527.22	173.75	21.300		
4,300.00	4,298.83	15,905.82	7,243.66	18.85	251.07	92.30	2,103.89	-83.08	3,619.19	3,442.49	176.69	20.483		
4,400.00	4,398.80	15,903.07	7,243.66	19.28	250.99	92.23	2,103.90	-85.83	3,538.33	3,358.58	179.75	19.684		
4,500.00	4,498.77	15,900.33	7,243.67	19.72	250.92	92.15	2,103.90	-88.57	3,458.47	3,275.53	182.94	18.905		
4,600.00	4,598.73	15,902.48	7,243.68	20.15	250.98	92.08	2,103.91	-91.31	3,379.68	3,193.34	186.34	18.137		
4,700.00	4,698.70	15,905.22	7,243.68	20.58	251.06	92.00	2,103.91	-94.06	3,302.04	3,112.15	189.89	17.389		
4,800.00	4,798.67	15,907.96	7,243.69	21.02	251.13	91.93	2,103.92	-96.80	3,225.63	3,032.06	193.57	16.664		
4,900.00	4,898.64	15,910.71	7,243.70	21.45	251.21	91.85	2,103.92	-99.54	3,150.53	2,953.15	197.38	15.962		
5,000.00	4,998.61	15,913.45	7,243.70	21.89	251.29	91.78	2,103.93	-102.29	3,076.86	2,875.53	201.33	15.283		
5,100.00	5,098.58	15,916.19	7,243.71	22.32	251.37	91.70	2,103.93	-105.03	3,004.70	2,799.30	205.40	14.629		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	15,918.93	7,243.72	22.76	251.44	91.63	2,103.94	-107.77	2,934.17	2,724.57	209.60	13.999		
5,300.00	5,298.52	15,921.68	7,243.72	23.20	251.52	91.56	2,103.94	-110.51	2,865.39	2,651.48	213.91	13.395		
5,400.00	5,398.49	15,924.42	7,243.73	23.63	251.60	91.48	2,103.95	-113.26	2,798.50	2,580.17	218.33	12.818		
5,500.00	5,498.45	15,927.16	7,243.74	24.07	251.68	91.41	2,103.95	-116.00	2,733.62	2,510.77	222.85	12.266		
5,600.00	5,598.42	15,929.91	7,243.74	24.50	251.75	91.33	2,103.96	-118.74	2,670.91	2,443.46	227.46	11.743		
5,700.00	5,698.39	15,932.65	7,243.75	24.94	251.83	91.26	2,103.96	-121.49	2,610.53	2,378.41	232.12	11.246		
5,800.00	5,798.36	15,935.39	7,243.76	25.38	251.91	91.18	2,103.97	-124.23	2,552.63	2,315.80	236.82	10.779		
5,900.00	5,898.33	15,938.13	7,243.76	25.81	251.99	91.11	2,103.97	-126.97	2,497.39	2,255.85	241.54	10.339		
6,000.00	5,998.30	15,940.88	7,243.77	26.25	252.06	91.03	2,103.98	-129.71	2,444.99	2,198.75	246.24	9.929		
6,100.00	6,098.27	15,943.62	7,243.78	26.69	252.14	90.96	2,103.98	-132.46	2,395.62	2,144.74	250.88	9.549		
6,200.00	6,198.24	15,946.36	7,243.78	27.12	252.22	90.88	2,103.99	-135.20	2,349.46	2,094.04	255.42	9.198		
6,300.00	6,298.20	15,949.11	7,243.79	27.56	252.30	90.81	2,103.99	-137.94	2,306.72	2,046.90	259.82	8.878		
6,400.00	6,398.17	15,951.85	7,243.80	28.00	252.37	90.73	2,104.00	-140.69	2,267.58	2,003.56	264.02	8.589		
6,500.00	6,498.14	15,954.59	7,243.80	28.43	252.45	90.66	2,104.00	-143.43	2,232.23	1,964.25	267.98	8.330		
6,600.00	6,597.68	15,963.38	7,243.83	28.88	252.70	90.93	2,104.02	-152.21	2,201.12	1,929.32	271.79	8.098		
6,700.00	6,694.68	15,987.50	7,243.88	29.32	253.38	95.80	2,104.06	-176.34	2,175.08	1,899.47	275.62	7.892		
6,800.00	6,786.74	16,026.49	7,243.98	29.77	254.49	96.75	2,104.13	-215.33	2,154.47	1,875.09	279.38	7.712		
6,900.00	6,871.61	16,079.38	7,244.11	30.24	255.98	96.95	2,104.23	-268.22	2,139.15	1,856.11	283.04	7.558		
7,000.00	6,947.19	16,144.88	7,244.27	30.74	257.84	96.57	2,104.34	-333.72	2,128.66	1,842.03	286.63	7.427		
7,100.00	7,011.62	16,221.36	7,244.46	31.32	260.00	95.83	2,104.48	-410.20	2,122.24	1,832.04	290.20	7.313		
7,200.00	7,063.31	16,306.95	7,244.67	32.03	262.42	94.94	2,104.63	-495.79	2,119.00	1,825.17	293.83	7.212		
7,300.00	7,101.00	16,400.53	7,244.89	32.89	265.07	94.08	2,104.80	-588.38	2,118.08	1,820.46	297.62	7.117		
7,301.98	7,101.59	16,401.43	7,244.90	32.91	265.10	94.07	2,104.80	-590.26	2,118.08	1,820.41	297.67	7.116 CC		
7,400.00	7,123.74	16,503.22	7,245.13	33.93	267.98	93.43	2,104.98	-685.68	2,118.73	1,817.05	301.68	7.023		
7,500.00	7,131.00	16,603.59	7,245.37	35.10	270.83	93.09	2,105.15	-785.31	2,120.46	1,814.72	305.74	6.936		
7,600.00	7,130.63	16,703.62	7,245.62	36.44	273.66	93.10	2,105.33	-885.28	2,122.62	1,812.73	309.90	6.849		
7,700.00	7,130.26	16,803.64	7,245.86	37.94	276.50	93.11	2,105.51	-985.26	2,124.79	1,810.57	314.22	6.762		
7,800.00	7,129.90	16,903.67	7,246.11	39.59	279.33	93.13	2,105.69	-1,085.23	2,126.95	1,808.25	318.70	6.674		
7,900.00	7,129.53	17,003.69	7,246.35	41.37	282.17	93.14	2,105.87	-1,185.21	2,129.12	1,805.81	323.31	6.585		
8,000.00	7,129.17	17,103.72	7,246.59	43.27	285.00	93.15	2,106.05	-1,285.18	2,131.28	1,803.25	328.04	6.497		
8,100.00	7,128.80	17,203.74	7,246.84	45.27	287.84	93.17	2,106.23	-1,385.16	2,133.45	1,800.59	332.86	6.409		
8,200.00	7,128.43	17,303.77	7,247.08	47.36	290.68	93.18	2,106.41	-1,485.13	2,135.62	1,797.84	337.77	6.323		
8,300.00	7,128.07	17,403.79	7,247.33	49.52	293.52	93.19	2,106.59	-1,585.11	2,137.78	1,795.02	342.76	6.237		
8,400.00	7,127.70	17,503.82	7,247.57	51.75	296.35	93.21	2,106.77	-1,685.08	2,139.95	1,792.13	347.82	6.152		
8,500.00	7,127.33	17,603.84	7,247.82	54.04	299.19	93.22	2,106.95	-1,785.06	2,142.11	1,789.18	352.94	6.069		
8,600.00	7,126.97	17,703.87	7,248.06	56.38	302.03	93.23	2,107.13	-1,885.03	2,144.28	1,786.18	358.10	5.988		
8,700.00	7,126.60	17,803.89	7,248.30	58.77	304.87	93.25	2,107.31	-1,985.01	2,146.45	1,783.13	363.32	5.908		
8,800.00	7,126.24	17,903.92	7,248.55	61.19	307.71	93.26	2,107.49	-2,084.98	2,148.61	1,780.04	368.57	5.830		
8,900.00	7,125.87	18,003.94	7,248.79	63.65	310.55	93.27	2,107.67	-2,184.96	2,150.78	1,776.92	373.86	5.753		
9,000.00	7,125.50	18,103.97	7,249.04	66.15	313.39	93.29	2,107.85	-2,284.93	2,152.94	1,773.76	379.18	5.678		
9,100.00	7,125.14	18,203.99	7,249.28	68.67	316.23	93.30	2,108.02	-2,384.91	2,155.11	1,770.58	384.53	5.605		
9,200.00	7,124.77	18,304.02	7,249.53	71.21	319.08	93.31	2,108.20	-2,484.88	2,157.28	1,767.37	389.91	5.533		
9,300.00	7,124.41	18,404.04	7,249.77	73.78	321.92	93.32	2,108.38	-2,584.86	2,159.44	1,764.14	395.30	5.463		
9,400.00	7,124.04	18,504.07	7,250.01	76.37	324.76	93.34	2,108.56	-2,684.83	2,161.61	1,760.89	400.72	5.394		
9,500.00	7,123.67	18,604.09	7,250.26	78.98	327.60	93.35	2,108.74	-2,784.81	2,163.78	1,757.62	406.16	5.327		
9,600.00	7,123.31	18,704.12	7,250.50	81.60	330.45	93.36	2,108.92	-2,884.78	2,165.95	1,754.34	411.61	5.262		
9,700.00	7,122.94	18,804.14	7,250.75	84.24	333.29	93.38	2,109.10	-2,984.76	2,168.11	1,751.03	417.08	5.198		
9,800.00	7,122.57	18,904.17	7,250.99	86.90	336.13	93.39	2,109.28	-3,084.73	2,170.28	1,747.72	422.56	5.136		
9,900.00	7,122.21	19,004.19	7,251.24	89.56	338.98	93.40	2,109.46	-3,184.71	2,172.45	1,744.39	428.05	5.075		
10,000.00	7,121.84	19,095.86	7,251.48	92.24	341.58	93.41	2,109.64	-3,284.68	2,174.62	1,741.29	433.32	5.018 ES		
10,100.00	7,121.48	19,118.26	7,251.53	94.92	342.22	93.42	2,109.68	-3,307.08	2,178.16	1,741.77	436.40	4.991 SF		
10,200.00	7,121.11	19,118.26	7,251.53	97.62	342.22	93.42	2,109.68	-3,307.08	2,186.17	1,748.19	437.98	4.991		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.74	19,118.26	7,251.53	100.32	342.22	93.42	2,109.68	-3,307.08	2,198.70	1,760.02	438.69	5.012		
10,400.00	7,120.38	19,118.26	7,251.53	103.04	342.22	93.42	2,109.68	-3,307.08	2,215.68	1,777.14	438.54	5.052		
10,500.00	7,120.01	19,118.26	7,251.53	105.76	342.22	93.42	2,109.68	-3,307.08	2,237.01	1,799.43	437.58	5.112		
10,600.00	7,119.64	19,118.26	7,251.53	108.48	342.22	93.42	2,109.68	-3,307.08	2,262.55	1,826.70	435.85	5.191		
10,700.00	7,119.28	19,118.26	7,251.53	111.22	342.22	93.42	2,109.68	-3,307.08	2,292.18	1,858.76	433.42	5.289		
10,800.00	7,118.91	19,118.26	7,251.53	113.96	342.22	93.42	2,109.68	-3,307.08	2,325.73	1,895.38	430.35	5.404		
10,900.00	7,118.55	19,118.26	7,251.53	116.70	342.22	93.42	2,109.68	-3,307.08	2,363.05	1,936.33	426.72	5.538		
11,000.00	7,118.18	19,118.26	7,251.53	119.45	342.22	93.42	2,109.68	-3,307.08	2,403.94	1,981.35	422.59	5.689		
11,100.00	7,117.81	19,118.26	7,251.53	122.21	342.22	93.42	2,109.68	-3,307.08	2,448.24	2,030.20	418.04	5.856		
11,200.00	7,117.45	19,118.26	7,251.53	124.97	342.22	93.42	2,109.68	-3,307.08	2,495.76	2,082.62	413.15	6.041		
11,300.00	7,117.08	19,118.26	7,251.53	127.73	342.22	93.42	2,109.68	-3,307.08	2,546.33	2,138.36	407.97	6.242		
11,400.00	7,116.72	19,118.26	7,251.53	130.50	342.22	93.42	2,109.68	-3,307.08	2,599.76	2,197.19	402.56	6.458		
11,500.00	7,116.35	19,118.26	7,251.53	133.27	342.22	93.42	2,109.68	-3,307.08	2,655.88	2,258.88	396.99	6.690		
11,600.00	7,115.98	19,118.26	7,251.53	136.04	342.22	93.42	2,109.68	-3,307.08	2,714.52	2,323.21	391.31	6.937		
11,700.00	7,115.62	19,118.26	7,251.53	138.82	342.22	93.42	2,109.68	-3,307.08	2,775.53	2,389.98	385.55	7.199		
11,800.00	7,115.25	19,118.26	7,251.53	141.60	342.22	93.42	2,109.68	-3,307.08	2,838.75	2,458.99	379.77	7.475		
11,900.00	7,114.88	19,118.26	7,251.53	144.39	342.22	93.42	2,109.68	-3,307.08	2,904.04	2,530.07	373.98	7.765		
12,000.00	7,114.52	19,118.26	7,251.53	147.17	342.22	93.42	2,109.68	-3,307.08	2,971.27	2,603.04	368.22	8.069		
12,100.00	7,114.15	19,118.26	7,251.53	149.96	342.22	93.42	2,109.68	-3,307.08	3,040.29	2,677.77	362.52	8.387		
12,200.00	7,113.79	19,118.26	7,251.53	152.75	342.22	93.42	2,109.68	-3,307.08	3,111.00	2,754.11	356.89	8.717		
12,300.00	7,113.42	19,118.26	7,251.53	155.55	342.22	93.42	2,109.68	-3,307.08	3,183.28	2,831.93	351.35	9.060		
12,400.00	7,113.05	19,118.26	7,251.53	158.34	342.22	93.42	2,109.68	-3,307.08	3,257.03	2,911.11	345.91	9.416		
12,500.00	7,112.69	19,118.26	7,251.53	161.14	342.22	93.42	2,109.68	-3,307.08	3,332.14	2,991.55	340.59	9.783		
12,600.00	7,112.32	19,118.26	7,251.53	163.94	342.22	93.42	2,109.68	-3,307.08	3,408.54	3,073.15	335.39	10.163		
12,700.00	7,111.96	19,118.26	7,251.53	166.74	342.22	93.42	2,109.68	-3,307.08	3,486.12	3,155.82	330.31	10.554		
12,800.00	7,111.59	19,118.26	7,251.53	169.54	342.22	93.42	2,109.68	-3,307.08	3,564.83	3,239.47	325.36	10.957		
12,900.00	7,111.22	19,118.26	7,251.53	172.35	342.22	93.42	2,109.68	-3,307.08	3,644.58	3,324.04	320.54	11.370		
13,000.00	7,110.86	19,118.26	7,251.53	175.16	342.22	93.42	2,109.68	-3,307.08	3,725.31	3,409.44	315.86	11.794		
13,100.00	7,110.49	19,118.26	7,251.53	177.96	342.22	93.42	2,109.68	-3,307.08	3,806.95	3,495.64	311.31	12.229		
13,200.00	7,110.12	19,118.26	7,251.53	180.77	342.22	93.42	2,109.68	-3,307.08	3,889.45	3,582.55	306.90	12.673		
13,300.00	7,109.76	19,118.26	7,251.53	183.58	342.22	93.42	2,109.68	-3,307.08	3,972.75	3,670.14	302.61	13.128		
13,400.00	7,109.39	19,118.26	7,251.53	186.40	342.22	93.42	2,109.68	-3,307.08	4,056.81	3,758.35	298.46	13.593		
13,500.00	7,109.03	19,118.26	7,251.53	189.21	342.22	93.42	2,109.68	-3,307.08	4,141.58	3,847.15	294.43	14.067		
13,600.00	7,108.66	19,118.26	7,251.53	192.03	342.22	93.42	2,109.68	-3,307.08	4,227.01	3,936.49	290.52	14.550		
13,700.00	7,108.29	19,118.26	7,251.53	194.84	342.22	93.42	2,109.68	-3,307.08	4,313.07	4,026.33	286.74	15.042		
13,800.00	7,107.93	19,118.26	7,251.53	197.66	342.22	93.42	2,109.68	-3,307.08	4,399.72	4,116.64	283.07	15.543		
13,900.00	7,107.56	19,118.26	7,251.53	200.48	342.22	93.42	2,109.68	-3,307.08	4,486.92	4,207.40	279.52	16.052		
14,000.00	7,107.19	19,118.26	7,251.53	203.30	342.22	93.42	2,109.68	-3,307.08	4,574.65	4,298.57	276.08	16.570		
14,100.00	7,106.83	19,118.26	7,251.53	206.12	342.22	93.42	2,109.68	-3,307.08	4,662.87	4,390.12	272.75	17.096		
14,200.00	7,106.46	19,118.26	7,251.53	208.94	342.22	93.42	2,109.68	-3,307.08	4,751.56	4,482.04	269.52	17.630		
14,300.00	7,106.10	19,118.26	7,251.53	211.76	342.22	93.42	2,109.68	-3,307.08	4,840.69	4,574.29	266.39	18.171		
14,400.00	7,105.73	19,118.26	7,251.53	214.58	342.22	93.42	2,109.68	-3,307.08	4,930.23	4,666.87	263.36	18.720		
14,500.00	7,105.36	19,118.26	7,251.53	217.40	342.22	93.42	2,109.68	-3,307.08	5,020.17	4,759.75	260.43	19.277		
14,600.00	7,105.00	19,118.26	7,251.53	220.23	342.22	93.42	2,109.68	-3,307.08	5,110.49	4,852.91	257.58	19.840		
14,700.00	7,104.63	19,118.26	7,251.53	223.05	342.22	93.42	2,109.68	-3,307.08	5,201.16	4,946.33	254.82	20.411		
14,800.00	7,104.27	19,118.26	7,251.53	225.88	342.22	93.42	2,109.68	-3,307.08	5,292.16	5,040.01	252.15	20.988		
14,872.41	7,104.00	19,118.26	7,251.53	227.93	342.22	93.42	2,109.68	-3,307.08	5,358.26	5,107.99	250.27	21.410		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	15,714.91	7,135.45	3.28	247.99	-0.07	1,943.45	-2.48	7,395.38					
100.00	100.00	15,715.15	7,135.45	3.28	248.00	-0.08	1,943.45	-2.73	7,298.94	7,182.91	116.03	62.906		
200.00	200.00	15,715.40	7,135.45	3.34	248.00	-0.09	1,943.44	-2.97	7,202.60	7,086.19	116.41	61.871		
300.00	300.00	15,715.64	7,135.45	3.44	248.01	-0.09	1,943.44	-3.21	7,106.36	6,989.54	116.82	60.832		
400.00	400.00	15,715.89	7,135.45	3.60	248.02	-0.10	1,943.44	-3.46	7,010.22	6,892.98	117.25	59.791		
500.00	500.00	15,716.13	7,135.45	3.81	248.03	-0.11	1,943.44	-3.70	6,914.20	6,796.50	117.70	58.746		
600.00	599.98	15,717.98	7,135.45	4.04	248.08	94.69	1,943.42	-5.55	6,818.30	6,700.11	118.19	57.690		
700.00	699.95	15,720.72	7,135.46	4.30	248.15	94.61	1,943.39	-8.29	6,722.54	6,603.82	118.72	56.626		
800.00	799.92	15,723.46	7,135.47	4.59	248.23	94.53	1,943.36	-11.04	6,626.90	6,507.63	119.27	55.560		
900.00	899.89	15,726.21	7,135.47	4.90	248.31	94.45	1,943.33	-13.78	6,531.39	6,411.53	119.86	54.492		
1,000.00	999.86	15,728.95	7,135.48	5.23	248.39	94.37	1,943.31	-16.52	6,436.02	6,315.54	120.47	53.423		
1,100.00	1,099.83	15,731.69	7,135.49	5.58	248.46	94.29	1,943.28	-19.26	6,340.78	6,219.67	121.12	52.352		
1,200.00	1,199.80	15,734.44	7,135.49	5.94	248.54	94.21	1,943.25	-22.01	6,245.70	6,123.90	121.80	51.279		
1,300.00	1,299.77	15,737.18	7,135.50	6.30	248.62	94.13	1,943.22	-24.75	6,150.77	6,028.26	122.51	50.205		
1,400.00	1,399.73	15,739.92	7,135.51	6.68	248.70	94.05	1,943.19	-27.49	6,056.00	5,932.73	123.27	49.129		
1,500.00	1,499.70	15,742.66	7,135.51	7.07	248.77	93.96	1,943.16	-30.24	5,961.40	5,837.34	124.06	48.053		
1,600.00	1,599.67	15,745.41	7,135.52	7.46	248.85	93.88	1,943.14	-32.98	5,866.98	5,742.09	124.89	46.977		
1,700.00	1,699.64	15,748.15	7,135.53	7.85	248.93	93.80	1,943.11	-35.72	5,772.75	5,646.98	125.77	45.900		
1,800.00	1,799.61	15,750.89	7,135.54	8.25	249.01	93.72	1,943.08	-38.46	5,678.71	5,552.02	126.69	44.824		
1,900.00	1,899.58	15,753.64	7,135.54	8.66	249.08	93.64	1,943.05	-41.21	5,584.87	5,457.21	127.66	43.748		
2,000.00	1,999.55	15,756.38	7,135.55	9.06	249.16	93.56	1,943.02	-43.95	5,491.26	5,362.57	128.68	42.673		
2,100.00	2,099.52	15,759.12	7,135.56	9.47	249.24	93.48	1,943.00	-46.69	5,397.87	5,268.11	129.76	41.599		
2,200.00	2,199.48	15,761.86	7,135.56	9.89	249.32	93.40	1,942.97	-49.43	5,304.72	5,173.83	130.89	40.528		
2,300.00	2,299.45	15,764.61	7,135.57	10.30	249.39	93.32	1,942.94	-52.18	5,211.82	5,079.74	132.08	39.459		
2,400.00	2,399.42	15,767.35	7,135.58	10.72	249.47	93.24	1,942.91	-54.92	5,119.19	4,985.86	133.34	38.393		
2,500.00	2,499.39	15,770.09	7,135.58	11.14	249.55	93.16	1,942.88	-57.66	5,026.84	4,892.19	134.65	37.331		
2,600.00	2,599.36	15,772.84	7,135.59	11.56	249.63	93.08	1,942.86	-60.40	4,934.79	4,798.75	136.04	36.274		
2,700.00	2,699.33	15,775.58	7,135.60	11.98	249.70	93.00	1,942.83	-63.15	4,843.05	4,705.55	137.50	35.223		
2,800.00	2,799.30	15,778.32	7,135.60	12.41	249.78	92.92	1,942.80	-65.89	4,751.64	4,612.61	139.03	34.177		
2,900.00	2,899.27	15,781.06	7,135.61	12.83	249.86	92.84	1,942.77	-68.63	4,660.59	4,519.95	140.64	33.139		
3,000.00	2,999.23	15,783.81	7,135.62	13.26	249.94	92.76	1,942.74	-71.38	4,569.90	4,427.58	142.33	32.109		
3,100.00	3,099.20	15,786.55	7,135.62	13.68	250.01	92.68	1,942.72	-74.12	4,479.61	4,335.51	144.10	31.087		
3,200.00	3,199.17	15,789.29	7,135.63	14.11	250.09	92.60	1,942.69	-76.86	4,389.74	4,243.78	145.96	30.075		
3,300.00	3,299.14	15,808.03	7,135.64	14.54	250.62	92.52	1,942.66	-79.60	4,300.32	4,152.16	148.15	29.026		
3,400.00	3,399.11	15,805.29	7,135.64	14.97	250.54	92.43	1,942.63	-82.35	4,211.37	4,061.25	150.12	28.054		
3,500.00	3,499.08	15,802.54	7,135.65	15.40	250.47	92.35	1,942.60	-85.09	4,122.92	3,970.74	152.18	27.092		
3,600.00	3,599.05	15,800.26	7,135.66	15.83	250.40	92.27	1,942.57	-87.83	4,035.01	3,880.66	154.35	26.142		
3,700.00	3,699.02	15,803.01	7,135.66	16.26	250.48	92.19	1,942.55	-90.57	3,947.68	3,790.97	156.71	25.191		
3,800.00	3,798.98	15,805.75	7,135.67	16.69	250.56	92.11	1,942.52	-93.32	3,860.96	3,701.78	159.18	24.256		
3,900.00	3,898.95	15,808.49	7,135.68	17.12	250.63	92.03	1,942.49	-96.06	3,774.89	3,613.13	161.76	23.336		
4,000.00	3,998.92	15,811.24	7,135.68	17.55	250.71	91.95	1,942.46	-98.80	3,689.52	3,525.05	164.47	22.433		
4,100.00	4,098.89	15,813.98	7,135.69	17.98	250.79	91.87	1,942.43	-101.54	3,604.91	3,437.60	167.30	21.547		
4,200.00	4,198.86	15,816.72	7,135.70	18.42	250.87	91.79	1,942.41	-104.29	3,521.09	3,350.83	170.26	20.680		
4,300.00	4,298.83	15,819.46	7,135.70	18.85	250.94	91.71	1,942.38	-107.03	3,438.15	3,264.78	173.36	19.832		
4,400.00	4,398.80	15,822.21	7,135.71	19.28	251.02	91.63	1,942.35	-109.77	3,356.13	3,179.52	176.60	19.004		
4,500.00	4,498.77	15,824.95	7,135.72	19.72	251.10	91.55	1,942.32	-112.52	3,275.10	3,095.12	179.98	18.197		
4,600.00	4,598.73	15,827.69	7,135.72	20.15	251.18	91.47	1,942.29	-115.26	3,195.15	3,011.64	183.51	17.411		
4,700.00	4,698.70	15,830.44	7,135.73	20.58	251.25	91.38	1,942.27	-118.00	3,116.36	2,929.16	187.19	16.648		
4,800.00	4,798.67	15,833.18	7,135.74	21.02	251.33	91.30	1,942.24	-120.74	3,038.81	2,847.78	191.03	15.908		
4,900.00	4,898.64	15,835.92	7,135.74	21.45	251.41	91.22	1,942.21	-123.49	2,962.60	2,767.59	195.01	15.192		
5,000.00	4,998.61	15,838.66	7,135.75	21.89	251.49	91.14	1,942.18	-126.23	2,887.84	2,688.69	199.15	14.501		
5,100.00	5,098.58	15,841.41	7,135.76	22.32	251.56	91.06	1,942.15	-128.97	2,814.65	2,611.21	203.45	13.835		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	15,844.15	7,135.76	22.76	251.64	90.98	1,942.12	-131.71	2,743.15	2,535.27	207.88	13.196		
5,300.00	5,298.52	15,846.89	7,135.77	23.20	251.72	90.90	1,942.10	-134.46	2,673.48	2,461.01	212.46	12.583		
5,400.00	5,398.49	15,849.63	7,135.78	23.63	251.80	90.82	1,942.07	-137.20	2,605.77	2,388.60	217.18	11.998		
5,500.00	5,498.45	15,852.38	7,135.78	24.07	251.87	90.74	1,942.04	-139.94	2,540.20	2,318.20	222.00	11.442		
5,600.00	5,598.42	15,855.12	7,135.79	24.50	251.95	90.66	1,942.01	-142.69	2,476.93	2,250.00	226.93	10.915		
5,700.00	5,698.39	15,857.86	7,135.80	24.94	252.03	90.58	1,941.98	-145.43	2,416.13	2,184.20	231.93	10.417		
5,800.00	5,798.36	15,860.61	7,135.80	25.38	252.11	90.50	1,941.96	-148.17	2,358.01	2,121.03	236.99	9.950		
5,900.00	5,898.33	15,863.35	7,135.81	25.81	252.18	90.41	1,941.93	-150.91	2,302.77	2,060.71	242.05	9.513		
6,000.00	5,998.30	15,866.09	7,135.82	26.25	252.26	90.33	1,941.90	-153.66	2,250.60	2,003.51	247.09	9.108		
6,100.00	6,098.27	15,868.83	7,135.82	26.69	252.34	90.25	1,941.87	-156.40	2,201.75	1,949.69	252.06	8.735		
6,200.00	6,198.24	15,871.58	7,135.83	27.12	252.42	90.17	1,941.84	-159.14	2,156.42	1,899.53	256.89	8.394		
6,300.00	6,298.20	15,874.32	7,135.84	27.56	252.49	90.09	1,941.82	-161.88	2,114.85	1,853.31	261.54	8.086		
6,400.00	6,398.17	15,877.06	7,135.84	28.00	252.57	90.01	1,941.79	-164.63	2,077.26	1,811.33	265.94	7.811		
6,500.00	6,498.14	15,879.81	7,135.85	28.43	252.65	89.93	1,941.76	-167.37	2,043.88	1,773.86	270.02	7.569		
6,600.00	6,597.68	15,882.59	7,135.87	28.88	252.90	92.97	1,941.67	-176.15	2,015.08	1,741.22	273.86	7.358		
6,700.00	6,694.68	15,912.72	7,135.93	29.32	253.58	94.54	1,941.42	-200.28	1,991.55	1,713.93	277.62	7.174		
6,800.00	6,786.74	15,951.72	7,136.03	29.77	254.68	95.17	1,941.02	-239.27	1,973.52	1,692.30	281.22	7.018		
6,900.00	6,871.61	16,004.62	7,136.16	30.24	256.18	95.02	1,940.48	-292.17	1,960.74	1,676.09	284.65	6.888		
7,000.00	6,947.19	16,070.13	7,136.32	30.74	258.03	94.32	1,939.81	-357.68	1,952.57	1,664.61	287.96	6.781		
7,100.00	7,011.62	16,146.62	7,136.50	31.32	260.19	93.29	1,939.03	-434.17	1,948.07	1,656.84	291.24	6.689		
7,200.00	7,063.31	16,232.23	7,136.71	32.03	262.61	92.17	1,938.15	-519.77	1,946.22	1,651.63	294.60	6.606		
7,265.70	7,089.71	16,307.65	7,136.86	32.60	264.75	91.48	1,937.53	-579.96	1,945.95	1,648.61	297.35	6.544 CC		
7,300.00	7,101.00	16,324.83	7,136.94	32.89	265.23	91.17	1,937.20	-612.37	1,946.01	1,647.87	298.14	6.527		
7,400.00	7,123.74	16,422.16	7,137.18	33.93	267.99	90.47	1,936.20	-709.69	1,946.62	1,644.71	301.91	6.448		
7,500.00	7,131.00	16,521.80	7,137.42	35.10	270.80	90.19	1,935.18	-809.33	1,947.51	1,641.61	305.90	6.367		
7,600.00	7,130.63	16,621.80	7,137.66	36.44	273.63	90.20	1,934.16	-909.32	1,948.44	1,638.38	310.06	6.284		
7,700.00	7,130.26	16,721.79	7,137.91	37.94	276.47	90.22	1,933.13	-1,009.31	1,949.37	1,634.97	314.40	6.200		
7,800.00	7,129.90	16,821.79	7,138.15	39.59	279.30	90.24	1,932.11	-1,109.30	1,950.31	1,631.42	318.88	6.116		
7,900.00	7,129.53	16,921.78	7,138.40	41.37	282.13	90.26	1,931.08	-1,209.28	1,951.24	1,627.74	323.50	6.032		
8,000.00	7,129.17	17,021.77	7,138.64	43.27	284.96	90.28	1,930.06	-1,309.27	1,952.17	1,623.94	328.23	5.948		
8,100.00	7,128.80	17,121.77	7,138.88	45.27	287.79	90.29	1,929.03	-1,409.26	1,953.11	1,620.04	333.06	5.864		
8,200.00	7,128.43	17,221.76	7,139.13	47.36	290.63	90.31	1,928.01	-1,509.25	1,954.04	1,616.06	337.98	5.781		
8,300.00	7,128.07	17,321.75	7,139.37	49.52	293.46	90.33	1,926.98	-1,609.24	1,954.98	1,612.00	342.98	5.700		
8,400.00	7,127.70	17,421.75	7,139.62	51.75	296.29	90.35	1,925.96	-1,709.23	1,955.91	1,607.86	348.05	5.620		
8,500.00	7,127.33	17,521.74	7,139.86	54.04	299.13	90.36	1,924.93	-1,809.21	1,956.85	1,603.68	353.17	5.541		
8,600.00	7,126.97	17,621.74	7,140.11	56.38	301.96	90.38	1,923.91	-1,909.20	1,957.78	1,599.43	358.35	5.463		
8,700.00	7,126.60	17,721.73	7,140.35	58.77	304.80	90.40	1,922.88	-2,009.19	1,958.72	1,595.15	363.57	5.387		
8,800.00	7,126.24	17,821.72	7,140.60	61.19	307.63	90.42	1,921.86	-2,109.18	1,959.65	1,590.82	368.83	5.313		
8,900.00	7,125.87	17,921.72	7,140.84	63.65	310.47	90.44	1,920.83	-2,209.17	1,960.59	1,586.46	374.13	5.240		
9,000.00	7,125.50	18,021.71	7,141.08	66.15	313.31	90.45	1,919.81	-2,309.16	1,961.52	1,582.06	379.46	5.169		
9,100.00	7,125.14	18,121.70	7,141.33	68.67	316.14	90.47	1,918.79	-2,409.14	1,962.46	1,577.64	384.82	5.100		
9,200.00	7,124.77	18,221.70	7,141.57	71.21	318.98	90.49	1,917.76	-2,509.13	1,963.39	1,573.19	390.20	5.032		
9,300.00	7,124.41	18,321.69	7,141.82	73.78	321.82	90.51	1,916.74	-2,609.12	1,964.33	1,568.72	395.61	4.965		
9,400.00	7,124.04	18,421.69	7,142.06	76.37	324.66	90.52	1,915.71	-2,709.11	1,965.27	1,564.23	401.03	4.901		
9,500.00	7,123.67	18,521.68	7,142.31	78.98	327.49	90.54	1,914.69	-2,809.10	1,966.20	1,559.72	406.48	4.837		
9,600.00	7,123.31	18,621.67	7,142.55	81.60	330.33	90.56	1,913.66	-2,909.08	1,967.14	1,555.20	411.94	4.775		
9,700.00	7,122.94	18,721.67	7,142.79	84.24	333.17	90.58	1,912.64	-3,009.07	1,968.08	1,550.66	417.42	4.715		
9,800.00	7,122.57	18,821.66	7,143.04	86.90	336.01	90.59	1,911.61	-3,109.06	1,969.01	1,546.10	422.91	4.656		
9,900.00	7,122.21	18,921.66	7,143.28	89.56	338.85	90.61	1,910.59	-3,209.05	1,969.95	1,541.54	428.41	4.598		
10,000.00	7,121.84	19,018.34	7,143.52	92.24	341.60	90.63	1,909.60	-3,305.73	1,970.89	1,537.05	433.84	4.543 ES		
10,100.00	7,121.48	19,018.34	7,143.52	94.92	341.60	90.63	1,909.60	-3,305.73	1,974.53	1,538.48	436.05	4.528 SF		
10,200.00	7,121.11	19,018.34	7,143.52	97.62	341.60	90.63	1,909.60	-3,305.73	1,983.21	1,546.03	437.18	4.536		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.74	19,018.34	7,143.52	100.32	341.60	90.63	1,909.60	-3,305.73	1,996.87	1,559.61	437.26	4.567		
10,400.00	7,120.38	19,018.34	7,143.52	103.04	341.60	90.63	1,909.60	-3,305.73	2,015.40	1,579.08	436.32	4.619		
10,500.00	7,120.01	19,018.34	7,143.52	105.76	341.60	90.63	1,909.60	-3,305.73	2,038.68	1,604.25	434.43	4.693		
10,600.00	7,119.64	19,018.34	7,143.52	108.48	341.60	90.63	1,909.60	-3,305.73	2,066.53	1,634.88	431.65	4.787		
10,700.00	7,119.28	19,018.34	7,143.52	111.22	341.60	90.63	1,909.60	-3,305.73	2,098.79	1,670.70	428.09	4.903		
10,800.00	7,118.91	19,018.34	7,143.52	113.96	341.60	90.63	1,909.60	-3,305.73	2,135.25	1,711.42	423.83	5.038		
10,900.00	7,118.55	19,018.34	7,143.52	116.70	341.60	90.63	1,909.60	-3,305.73	2,175.69	1,756.71	418.98	5.193		
11,000.00	7,118.18	19,018.34	7,143.52	119.45	341.60	90.63	1,909.60	-3,305.73	2,219.91	1,806.28	413.62	5.367		
11,100.00	7,117.81	19,018.34	7,143.52	122.21	341.60	90.63	1,909.60	-3,305.73	2,267.67	1,859.80	407.87	5.560		
11,200.00	7,117.45	19,018.34	7,143.52	124.97	341.60	90.63	1,909.60	-3,305.73	2,318.77	1,916.97	401.80	5.771		
11,300.00	7,117.08	19,018.34	7,143.52	127.73	341.60	90.63	1,909.60	-3,305.73	2,372.99	1,977.49	395.50	6.000		
11,400.00	7,116.72	19,018.34	7,143.52	130.50	341.60	90.63	1,909.60	-3,305.73	2,430.11	2,041.07	389.03	6.247		
11,500.00	7,116.35	19,018.34	7,143.52	133.27	341.60	90.63	1,909.60	-3,305.73	2,489.94	2,107.46	382.47	6.510		
11,600.00	7,115.98	19,018.34	7,143.52	136.04	341.60	90.63	1,909.60	-3,305.73	2,552.28	2,176.41	375.87	6.790		
11,700.00	7,115.62	19,018.34	7,143.52	138.82	341.60	90.63	1,909.60	-3,305.73	2,616.96	2,247.69	369.27	7.087		
11,800.00	7,115.25	19,018.34	7,143.52	141.60	341.60	90.63	1,909.60	-3,305.73	2,683.81	2,321.10	362.71	7.399		
11,900.00	7,114.88	19,018.34	7,143.52	144.39	341.60	90.63	1,909.60	-3,305.73	2,752.67	2,396.44	356.23	7.727		
12,000.00	7,114.52	19,018.34	7,143.52	147.17	341.60	90.63	1,909.60	-3,305.73	2,823.40	2,473.54	349.86	8.070		
12,100.00	7,114.15	19,018.34	7,143.52	149.96	341.60	90.63	1,909.60	-3,305.73	2,895.85	2,552.24	343.60	8.428		
12,200.00	7,113.79	19,018.34	7,143.52	152.75	341.60	90.63	1,909.60	-3,305.73	2,969.90	2,632.41	337.49	8.800		
12,300.00	7,113.42	19,018.34	7,143.52	155.55	341.60	90.63	1,909.60	-3,305.73	3,045.43	2,713.91	331.52	9.186		
12,400.00	7,113.05	19,018.34	7,143.52	158.34	341.60	90.63	1,909.60	-3,305.73	3,122.34	2,796.62	325.72	9.586		
12,500.00	7,112.69	19,018.34	7,143.52	161.14	341.60	90.63	1,909.60	-3,305.73	3,200.52	2,880.45	320.08	9.999		
12,600.00	7,112.32	19,018.34	7,143.52	163.94	341.60	90.63	1,909.60	-3,305.73	3,279.90	2,965.29	314.61	10.425		
12,700.00	7,111.96	19,018.34	7,143.52	166.74	341.60	90.63	1,909.60	-3,305.73	3,360.37	3,051.06	309.30	10.864		
12,800.00	7,111.59	19,018.34	7,143.52	169.54	341.60	90.63	1,909.60	-3,305.73	3,441.86	3,137.69	304.17	11.316		
12,900.00	7,111.22	19,018.34	7,143.52	172.35	341.60	90.63	1,909.60	-3,305.73	3,524.31	3,225.11	299.21	11.779		
13,000.00	7,110.86	19,018.34	7,143.52	175.16	341.60	90.63	1,909.60	-3,305.73	3,607.65	3,313.24	294.41	12.254		
13,100.00	7,110.49	19,018.34	7,143.52	177.96	341.60	90.63	1,909.60	-3,305.73	3,691.82	3,402.04	289.77	12.740		
13,200.00	7,110.12	19,018.34	7,143.52	180.77	341.60	90.63	1,909.60	-3,305.73	3,776.75	3,491.46	285.30	13.238		
13,300.00	7,109.76	19,018.34	7,143.52	183.58	341.60	90.63	1,909.60	-3,305.73	3,862.41	3,581.44	280.97	13.747		
13,400.00	7,109.39	19,018.34	7,143.52	186.40	341.60	90.63	1,909.60	-3,305.73	3,948.74	3,671.94	276.80	14.266		
13,500.00	7,109.03	19,018.34	7,143.52	189.21	341.60	90.63	1,909.60	-3,305.73	4,035.71	3,762.93	272.77	14.795		
13,600.00	7,108.66	19,018.34	7,143.52	192.03	341.60	90.63	1,909.60	-3,305.73	4,123.26	3,854.37	268.89	15.334		
13,700.00	7,108.29	19,018.34	7,143.52	194.84	341.60	90.63	1,909.60	-3,305.73	4,211.37	3,946.23	265.14	15.884		
13,800.00	7,107.93	19,018.34	7,143.52	197.66	341.60	90.63	1,909.60	-3,305.73	4,300.00	4,038.48	261.52	16.442		
13,900.00	7,107.56	19,018.34	7,143.52	200.48	341.60	90.63	1,909.60	-3,305.73	4,389.12	4,131.09	258.02	17.010		
14,000.00	7,107.19	19,018.34	7,143.52	203.30	341.60	90.63	1,909.60	-3,305.73	4,478.70	4,224.04	254.65	17.588		
14,100.00	7,106.83	19,018.34	7,143.52	206.12	341.60	90.63	1,909.60	-3,305.73	4,568.71	4,317.31	251.40	18.173		
14,200.00	7,106.46	19,018.34	7,143.52	208.94	341.60	90.63	1,909.60	-3,305.73	4,659.12	4,410.87	248.25	18.768		
14,300.00	7,106.10	19,018.34	7,143.52	211.76	341.60	90.63	1,909.60	-3,305.73	4,749.93	4,504.71	245.21	19.370		
14,400.00	7,105.73	19,018.34	7,143.52	214.58	341.60	90.63	1,909.60	-3,305.73	4,841.09	4,598.81	242.28	19.981		
14,500.00	7,105.36	19,018.34	7,143.52	217.40	341.60	90.63	1,909.60	-3,305.73	4,932.60	4,693.15	239.45	20.600		
14,600.00	7,105.00	19,018.34	7,143.52	220.23	341.60	90.63	1,909.60	-3,305.73	5,024.43	4,787.72	236.71	21.226		
14,700.00	7,104.63	19,018.34	7,143.52	223.05	341.60	90.63	1,909.60	-3,305.73	5,116.56	4,882.50	234.06	21.860		
14,800.00	7,104.27	19,018.34	7,143.52	225.88	341.60	90.63	1,909.60	-3,305.73	5,208.99	4,977.49	231.50	22.501		
14,872.41	7,104.00	19,018.34	7,143.52	227.93	341.60	90.63	1,909.60	-3,305.73	5,276.09	5,046.39	229.70	22.970		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1,502.76	1,551.10	3.28	8.08	-118.57	-4,095.21	-7,519.43	8,701.63					
100.00	100.00	1,584.00	1,631.02	3.28	8.51	-118.54	-4,084.22	-7,509.88	8,684.65	8,673.56	11.09	783.400		
200.00	200.00	1,584.00	1,631.02	3.34	8.51	-118.54	-4,084.22	-7,509.88	8,667.58	8,656.48	11.10	780.547		
300.00	300.00	1,670.45	1,716.14	3.44	8.96	-118.50	-4,072.33	-7,500.54	8,651.44	8,639.88	11.57	747.973		
400.00	400.00	1,727.45	1,772.23	3.60	9.25	-118.47	-4,064.26	-7,494.45	8,635.28	8,623.33	11.95	722.708		
500.00	500.00	1,784.54	1,828.50	3.81	9.55	-118.45	-4,056.66	-7,488.46	8,619.66	8,607.28	12.38	696.415		
600.00	599.98	1,884.04	1,926.63	4.04	10.06	-28.53	-4,044.16	-7,477.74	8,602.78	8,589.74	13.03	660.033		
700.00	699.95	1,939.21	1,981.05	4.30	10.35	-28.51	-4,037.12	-7,472.04	8,585.44	8,571.92	13.52	635.224		
800.00	799.92	2,248.83	2,286.12	4.59	11.99	-28.41	-3,997.87	-7,436.78	8,567.34	8,552.17	15.18	564.498		
900.00	899.89	2,481.75	2,514.88	4.90	13.29	-28.34	-3,967.09	-7,405.62	8,547.19	8,530.66	16.53	517.214		
1,000.00	999.86	2,537.96	2,570.03	5.23	13.61	-28.33	-3,959.63	-7,397.73	8,526.37	8,509.29	17.09	498.941		
1,100.00	1,099.83	2,871.64	2,896.72	5.58	15.55	-28.23	-3,912.15	-7,349.41	8,505.32	8,486.37	18.95	448.893		
1,200.00	1,199.80	2,917.89	2,941.86	5.94	15.83	-28.21	-3,905.00	-7,342.32	8,482.34	8,462.83	19.50	434.938		
1,300.00	1,299.77	2,964.30	2,987.22	6.30	16.11	-28.19	-3,898.10	-7,335.37	8,459.94	8,439.87	20.07	421.482		
1,400.00	1,399.73	1,400.00	3,118.81	6.68	7.14	-28.16	-3,879.20	-7,314.80	8,437.67	8,424.30	13.37	631.225		
1,500.00	1,499.70	3,163.33	3,181.86	7.07	17.30	-28.14	-3,870.40	-7,304.40	8,415.02	8,393.30	21.72	387.391		
1,600.00	1,599.67	3,200.00	3,217.79	7.46	17.52	-28.13	-3,865.62	-7,298.83	8,393.26	8,370.98	22.27	376.819		
1,700.00	1,699.64	3,333.09	3,348.16	7.85	18.30	-28.10	-3,848.15	-7,278.56	8,371.42	8,348.16	23.26	359.833		
1,800.00	1,799.61	3,391.00	3,404.90	8.25	18.64	-28.09	-3,840.56	-7,269.83	8,349.79	8,325.87	23.93	348.997		
1,900.00	1,899.58	3,391.00	3,404.90	8.66	18.64	-28.09	-3,840.56	-7,269.83	8,328.98	8,304.65	24.33	342.307		
2,000.00	1,999.55	3,442.72	3,455.67	9.06	18.93	-28.08	-3,833.83	-7,262.65	8,308.70	8,283.73	24.97	332.691		
2,100.00	2,099.52	3,486.00	3,498.27	9.47	19.18	-28.06	-3,828.20	-7,257.42	8,289.51	8,263.93	25.58	324.022		
2,200.00	2,199.48	2,200.00	3,569.47	9.89	12.09	-28.04	-3,818.55	-7,249.00	8,270.73	8,250.66	20.08	411.946		
2,300.00	2,299.45	3,581.00	3,591.77	10.30	19.70	-28.03	-3,815.52	-7,246.36	8,252.34	8,225.49	26.85	307.345		
2,400.00	2,399.42	3,638.38	3,648.25	10.72	20.02	-28.00	-3,807.53	-7,240.16	8,234.34	8,206.81	27.53	299.056		
2,500.00	2,499.39	4,088.54	4,089.61	11.14	22.61	-27.75	-3,735.31	-7,189.98	8,214.24	8,184.21	30.03	273.551		
2,600.00	2,599.36	2,600.00	4,209.94	11.56	13.88	-27.72	-3,718.76	-7,171.95	8,192.86	8,169.36	23.49	348.729		
2,700.00	2,699.33	4,286.95	4,283.96	11.98	23.79	-27.70	-3,708.65	-7,160.29	8,170.89	8,139.11	31.78	257.116		
2,800.00	2,799.30	4,343.00	4,338.99	12.41	24.11	-27.68	-3,701.43	-7,152.46	8,150.01	8,117.55	32.47	251.019		
2,900.00	2,899.27	4,343.00	4,338.99	12.83	24.11	-27.68	-3,701.43	-7,152.46	8,129.54	8,096.63	32.91	246.998		
3,000.00	2,999.23	4,448.03	4,442.22	13.26	24.71	-27.65	-3,687.67	-7,138.85	8,109.81	8,075.99	33.82	239.797		
3,100.00	3,099.20	4,487.61	4,481.13	13.68	24.94	-27.64	-3,682.36	-7,133.89	8,090.23	8,055.79	34.44	234.898		
3,200.00	3,199.17	4,534.00	4,526.77	14.11	25.20	-27.62	-3,676.24	-7,128.33	8,071.29	8,036.20	35.09	229.989		
3,300.00	3,299.14	4,600.54	4,592.32	14.54	25.57	-27.60	-3,667.95	-7,120.48	8,052.86	8,017.03	35.83	224.733		
3,400.00	3,399.11	4,629.00	4,620.39	14.97	25.72	-27.59	-3,664.65	-7,117.07	8,034.94	7,998.54	36.41	220.703		
3,500.00	3,499.08	4,674.82	4,665.62	15.40	25.97	-27.58	-3,659.59	-7,111.85	8,017.72	7,980.67	37.05	216.392		
3,600.00	3,599.05	4,724.00	4,714.28	15.83	26.23	-27.57	-3,654.41	-7,106.89	8,001.49	7,963.78	37.71	212.171		
3,700.00	3,699.02	4,781.73	4,771.44	16.26	26.52	-27.55	-3,648.64	-7,101.27	7,985.86	7,947.46	38.41	207.924		
3,800.00	3,798.98	4,847.94	4,837.01	16.69	26.86	-27.54	-3,642.36	-7,094.50	7,970.30	7,931.16	39.14	203.644		
3,900.00	3,898.95	4,884.36	4,873.12	17.12	27.04	-27.53	-3,639.05	-7,091.04	7,955.47	7,915.73	39.74	200.186		
4,000.00	3,998.92	4,915.00	4,903.51	17.55	27.19	-27.53	-3,636.35	-7,088.33	7,941.42	7,901.10	40.32	196.977		
4,100.00	4,098.89	4,971.74	4,959.85	17.98	27.46	-27.52	-3,631.47	-7,083.69	7,928.04	7,887.03	41.00	193.354		
4,200.00	4,198.86	5,020.71	5,008.51	18.42	27.70	-27.51	-3,627.35	-7,080.02	7,915.29	7,873.63	41.66	190.020		
4,300.00	4,298.83	5,104.00	5,091.34	18.85	28.09	-27.49	-3,620.54	-7,074.47	7,903.32	7,860.87	42.46	186.151		
4,400.00	4,398.80	5,104.00	5,091.34	19.28	28.09	-27.49	-3,620.54	-7,074.47	7,891.72	7,848.82	42.89	183.982		
4,500.00	4,498.77	5,154.62	5,141.72	19.72	28.31	-27.48	-3,616.70	-7,071.52	7,880.94	7,837.40	43.55	180.981		
4,600.00	4,598.73	5,193.56	5,180.52	20.15	28.48	-27.47	-3,614.06	-7,069.49	7,870.96	7,826.81	44.15	178.294		
4,700.00	4,698.70	5,232.56	5,219.40	20.58	28.65	-27.46	-3,611.69	-7,067.64	7,861.74	7,817.00	44.74	175.703		
4,800.00	4,798.67	5,294.00	5,280.71	21.02	28.92	-27.46	-3,608.50	-7,065.13	7,853.37	7,807.93	45.44	172.828		
4,900.00	4,898.64	5,294.00	5,280.71	21.45	28.92	-27.46	-3,608.50	-7,065.13	7,845.66	7,799.79	45.86	171.070		
5,000.00	4,998.61	5,380.35	5,366.93	21.89	29.26	-27.45	-3,604.76	-7,062.15	7,838.42	7,791.77	46.66	168.007		
5,100.00	5,098.58	5,440.90	5,427.41	22.32	29.50	-27.45	-3,602.47	-7,060.31	7,831.76	7,784.42	47.34	165.450		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21-4(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 172-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,501.49	5,487.94	22.76	29.74	-27.44	-3,600.44	-7,058.66	7,825.60	7,777.58	48.02	162.979		
5,300.00	5,298.52	5,579.00	5,565.40	23.20	30.05	-27.44	-3,598.25	-7,056.85	7,819.96	7,771.19	48.77	160.346		
5,400.00	5,398.49	5,623.36	5,609.74	23.63	30.22	-27.44	-3,597.17	-7,055.97	7,814.77	7,765.40	49.37	158.282		
5,500.00	5,498.45	5,684.87	5,671.22	24.07	30.44	-27.44	-3,595.86	-7,054.95	7,810.09	7,760.05	50.05	156.050		
5,600.00	5,598.42	5,746.40	5,732.73	24.50	30.67	-27.44	-3,594.76	-7,054.16	7,805.91	7,755.19	50.72	153.891		
5,700.00	5,698.39	5,807.95	5,794.28	24.94	30.90	-27.44	-3,593.86	-7,053.60	7,802.22	7,750.82	51.40	151.801		
5,800.00	5,798.36	5,864.00	5,850.32	25.38	31.11	-27.45	-3,593.22	-7,053.30	7,799.02	7,746.98	52.05	149.848		
5,900.00	5,898.33	5,945.38	5,931.70	25.81	31.39	-27.45	-3,592.45	-7,053.15	7,796.21	7,743.41	52.80	147.662		
6,000.00	5,998.30	6,020.08	6,006.40	26.25	31.65	-27.45	-3,591.78	-7,053.27	7,793.73	7,740.21	53.52	145.625		
6,100.00	6,098.27	6,094.79	6,081.10	26.69	31.91	-27.45	-3,591.14	-7,053.65	7,791.57	7,737.33	54.24	143.649		
6,200.00	6,198.24	6,179.27	6,165.58	27.12	32.21	-27.45	-3,590.46	-7,054.36	7,789.72	7,734.71	55.00	141.621		
6,300.00	6,298.20	6,293.43	6,279.73	27.56	32.61	-27.45	-3,589.40	-7,055.33	7,787.83	7,731.93	55.90	139.324		
6,400.00	6,398.17	6,407.59	6,393.88	28.00	33.01	-27.45	-3,588.15	-7,056.17	7,785.76	7,728.97	56.79	137.098		
6,500.00	6,498.14	6,502.79	6,489.07	28.43	33.35	-27.45	-3,586.97	-7,056.84	7,783.59	7,725.99	57.60	135.122		
6,600.00	6,597.68	6,591.09	6,577.36	28.88	33.67	-26.80	-3,585.81	-7,057.63	7,776.15	7,717.76	58.39	133.176		
6,700.00	6,694.68	6,677.33	6,663.58	29.32	33.98	-27.67	-3,584.63	-7,058.57	7,755.08	7,695.93	59.16	131.090		
6,800.00	6,786.74	6,723.00	6,709.25	29.77	34.14	-29.25	-3,583.98	-7,059.13	7,720.92	7,661.20	59.72	129.276		
6,900.00	6,871.61	6,807.08	6,793.31	30.24	34.43	-31.80	-3,582.90	-7,060.41	7,674.46	7,614.03	60.43	127.002		
7,000.00	6,947.19	6,858.16	6,844.38	30.74	34.61	-35.45	-3,582.35	-7,061.39	7,617.07	7,556.12	60.96	124.962		
7,100.00	7,011.62	6,902.22	6,888.43	31.32	34.77	-40.66	-3,581.94	-7,062.35	7,550.05	7,488.62	61.43	122.911		
7,200.00	7,063.31	6,938.17	6,924.36	32.03	34.89	-48.04	-3,581.66	-7,063.21	7,475.02	7,413.17	61.85	120.859		
7,300.00	7,101.00	6,965.06	6,951.24	32.89	34.99	-58.32	-3,581.48	-7,063.91	7,393.80	7,331.57	62.23	118.810		
7,400.00	7,123.74	6,982.15	6,968.33	33.93	35.04	-71.94	-3,581.37	-7,064.37	7,308.38	7,245.79	62.59	116.771		
7,500.00	7,131.00	7,010.00	6,996.17	35.10	35.14	-88.14	-3,581.22	-7,065.17	7,220.90	7,157.88	63.02	114.586		
7,600.00	7,130.63	7,010.00	6,996.17	36.44	35.14	-88.14	-3,581.22	-7,065.17	7,133.19	7,069.81	63.38	112.549		
7,700.00	7,130.26	7,010.00	6,996.17	37.94	35.14	-88.14	-3,581.22	-7,065.17	7,045.81	6,982.00	63.81	110.412		
7,800.00	7,129.90	7,010.00	6,996.17	39.59	35.14	-88.14	-3,581.22	-7,065.17	6,958.77	6,894.44	64.32	108.181		
7,900.00	7,129.53	7,010.00	6,996.17	41.37	35.14	-88.14	-3,581.22	-7,065.17	6,872.08	6,807.17	64.91	105.864		
8,000.00	7,129.17	7,010.00	6,996.17	43.27	35.14	-88.14	-3,581.22	-7,065.17	6,785.76	6,720.18	65.58	103.469		
8,100.00	7,128.80	7,010.00	6,996.17	45.27	35.14	-88.14	-3,581.22	-7,065.17	6,699.82	6,633.49	66.33	101.004		
8,200.00	7,128.43	7,010.00	6,996.17	47.36	35.14	-88.14	-3,581.22	-7,065.17	6,614.27	6,547.11	67.16	98.480		
8,300.00	7,128.07	7,010.00	6,996.17	49.52	35.14	-88.14	-3,581.22	-7,065.17	6,529.14	6,461.06	68.08	95.906		
8,400.00	7,127.70	7,010.00	6,996.17	51.75	35.14	-88.14	-3,581.22	-7,065.17	6,444.43	6,375.35	69.08	93.294		
8,500.00	7,127.33	7,010.00	6,996.17	54.04	35.14	-88.14	-3,581.22	-7,065.17	6,360.17	6,290.01	70.16	90.653		
8,600.00	7,126.97	7,010.00	6,996.17	56.38	35.14	-88.14	-3,581.22	-7,065.17	6,276.36	6,205.04	71.33	87.995		
8,700.00	7,126.60	7,010.00	6,996.17	58.77	35.14	-88.14	-3,581.22	-7,065.17	6,193.04	6,120.47	72.58	85.330		
8,800.00	7,126.24	7,012.49	6,998.65	61.19	35.15	-88.19	-3,581.21	-7,065.24	6,110.22	6,036.30	73.92	82.655		
8,900.00	7,125.87	7,015.63	7,001.79	63.65	35.16	-88.24	-3,581.19	-7,065.33	6,027.92	5,952.56	75.36	79.989		
9,000.00	7,125.50	7,018.79	7,004.95	66.15	35.17	-88.29	-3,581.17	-7,065.43	5,946.16	5,869.28	76.88	77.344		
9,100.00	7,125.14	7,021.97	7,008.13	68.67	35.18	-88.34	-3,581.15	-7,065.52	5,864.96	5,786.48	78.48	74.728		
9,200.00	7,124.77	7,025.18	7,011.34	71.21	35.20	-88.40	-3,581.13	-7,065.61	5,784.36	5,704.18	80.17	72.147		
9,300.00	7,124.41	7,028.40	7,014.56	73.78	35.21	-88.45	-3,581.11	-7,065.71	5,704.36	5,622.41	81.95	69.608		
9,400.00	7,124.04	7,031.65	7,017.81	76.37	35.22	-88.50	-3,581.09	-7,065.81	5,625.00	5,541.19	83.81	67.115		
9,500.00	7,123.67	7,034.92	7,021.07	78.98	35.23	-88.56	-3,581.07	-7,065.91	5,546.31	5,460.55	85.76	64.674		
9,600.00	7,123.31	7,038.21	7,024.36	81.60	35.24	-88.61	-3,581.04	-7,066.00	5,468.32	5,380.52	87.79	62.288		
9,700.00	7,122.94	7,041.53	7,027.68	84.24	35.25	-88.67	-3,581.02	-7,066.10	5,391.04	5,301.13	89.91	59.961		
9,800.00	7,122.57	7,044.86	7,031.01	86.90	35.26	-88.72	-3,580.99	-7,066.20	5,314.53	5,222.41	92.11	57.695		
9,900.00	7,122.21	7,048.22	7,034.37	89.56	35.28	-88.78	-3,580.96	-7,066.31	5,238.80	5,144.40	94.41	55.492		
10,000.00	7,121.84	7,051.60	7,037.75	92.24	35.29	-88.84	-3,580.93	-7,066.41	5,163.90	5,067.12	96.79	53.354		
10,100.00	7,121.48	7,055.01	7,041.15	94.92	35.30	-88.89	-3,580.90	-7,066.51	5,089.86	4,990.61	99.25	51.281		
10,200.00	7,121.11	7,058.44	7,044.58	97.62	35.31	-88.95	-3,580.87	-7,066.62	5,016.72	4,914.91	101.81	49.276		
10,300.00	7,120.74	7,061.89	7,048.03	100.32	35.32	-89.01	-3,580.84	-7,066.72	4,944.52	4,840.07	104.45	47.338		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	7,065.37	7,051.51	103.04	35.34	-89.06	-3,580.80	-7,066.83	4,873.30	4,766.11	107.18	45.467		
10,500.00	7,120.01	7,068.87	7,055.01	105.76	35.35	-89.12	-3,580.77	-7,066.94	4,803.10	4,693.09	110.00	43.663		
10,600.00	7,119.64	7,072.40	7,058.53	108.48	35.36	-89.18	-3,580.73	-7,067.05	4,733.97	4,621.06	112.91	41.926		
10,700.00	7,119.28	7,075.95	7,062.08	111.22	35.37	-89.24	-3,580.69	-7,067.16	4,665.96	4,550.05	115.91	40.256		
10,800.00	7,118.91	7,079.52	7,065.66	113.96	35.39	-89.30	-3,580.65	-7,067.27	4,599.11	4,480.12	118.99	38.650		
10,900.00	7,118.55	7,083.13	7,069.26	116.70	35.40	-89.36	-3,580.61	-7,067.38	4,533.49	4,411.32	122.16	37.110		
11,000.00	7,118.18	7,086.75	7,072.88	119.45	35.41	-89.42	-3,580.57	-7,067.50	4,469.13	4,343.71	125.42	35.633		
11,100.00	7,117.81	7,090.41	7,076.53	122.21	35.43	-89.48	-3,580.52	-7,067.61	4,406.10	4,277.34	128.77	34.218		
11,200.00	7,117.45	7,094.09	7,080.21	124.97	35.44	-89.54	-3,580.48	-7,067.73	4,344.46	4,212.27	132.19	32.865		
11,300.00	7,117.08	7,097.79	7,083.91	127.73	35.45	-89.60	-3,580.43	-7,067.85	4,284.27	4,148.57	135.70	31.571		
11,400.00	7,116.72	7,101.52	7,087.64	130.50	35.46	-89.67	-3,580.38	-7,067.96	4,225.58	4,086.29	139.29	30.337		
11,500.00	7,116.35	7,105.28	7,091.40	133.27	35.48	-89.73	-3,580.33	-7,068.08	4,168.46	4,025.51	142.95	29.160		
11,600.00	7,115.98	7,109.07	7,095.18	136.04	35.49	-89.79	-3,580.28	-7,068.21	4,112.97	3,966.29	146.69	28.039		
11,700.00	7,115.62	7,112.89	7,099.00	138.82	35.50	-89.85	-3,580.22	-7,068.33	4,059.19	3,908.70	150.49	26.973		
11,800.00	7,115.25	7,116.73	7,102.84	141.60	35.52	-89.92	-3,580.17	-7,068.45	4,007.18	3,852.83	154.36	25.961		
11,900.00	7,114.88	7,120.60	7,106.71	144.39	35.53	-89.98	-3,580.11	-7,068.58	3,957.01	3,798.73	158.28	25.000		
12,000.00	7,114.52	7,124.50	7,110.60	147.17	35.55	-90.05	-3,580.05	-7,068.70	3,908.76	3,746.50	162.26	24.090		
12,100.00	7,114.15	7,128.43	7,114.53	149.96	35.56	-90.11	-3,579.99	-7,068.83	3,862.48	3,696.21	166.28	23.229		
12,200.00	7,113.79	7,132.38	7,118.48	152.75	35.57	-90.18	-3,579.92	-7,068.96	3,818.27	3,647.93	170.33	22.416		
12,300.00	7,113.42	7,136.37	7,122.47	155.55	35.59	-90.24	-3,579.86	-7,069.09	3,776.18	3,601.76	174.42	21.650		
12,400.00	7,113.05	7,140.39	7,126.48	158.34	35.60	-90.31	-3,579.79	-7,069.23	3,736.29	3,557.77	178.52	20.929		
12,500.00	7,112.69	7,144.43	7,130.53	161.14	35.62	-90.38	-3,579.72	-7,069.36	3,698.67	3,516.04	182.64	20.251		
12,600.00	7,112.32	7,148.51	7,134.60	163.94	35.63	-90.45	-3,579.65	-7,069.49	3,663.40	3,476.65	186.75	19.617		
12,700.00	7,111.96	7,152.62	7,138.71	166.74	35.64	-90.52	-3,579.57	-7,069.63	3,630.53	3,439.68	190.85	19.023		
12,800.00	7,111.59	7,156.76	7,142.84	169.54	35.66	-90.58	-3,579.50	-7,069.77	3,600.14	3,405.22	194.92	18.470		
12,900.00	7,111.22	7,160.93	7,147.01	172.35	35.67	-90.65	-3,579.42	-7,069.91	3,572.28	3,373.33	198.95	17.955		
13,000.00	7,110.86	7,165.13	7,151.21	175.16	35.69	-90.72	-3,579.34	-7,070.05	3,547.03	3,344.09	202.93	17.479		
13,100.00	7,110.49	7,169.37	7,155.44	177.96	35.70	-90.79	-3,579.26	-7,070.19	3,524.42	3,317.57	206.85	17.038		
13,200.00	7,110.12	7,173.64	7,159.71	180.77	35.72	-90.86	-3,579.17	-7,070.34	3,504.53	3,293.83	210.69	16.633		
13,300.00	7,109.76	7,177.94	7,164.01	183.58	35.73	-90.94	-3,579.09	-7,070.48	3,487.38	3,272.94	214.44	16.263		
13,400.00	7,109.39	7,182.27	7,168.34	186.40	35.75	-91.01	-3,579.00	-7,070.63	3,473.03	3,254.94	218.09	15.925		
13,500.00	7,109.03	7,186.64	7,172.70	189.21	35.76	-91.08	-3,578.90	-7,070.78	3,461.50	3,239.88	221.62	15.619		
13,600.00	7,108.66	7,191.05	7,177.10	192.03	35.78	-91.15	-3,578.81	-7,070.93	3,452.83	3,227.81	225.02	15.344		
13,700.00	7,108.29	7,195.48	7,181.53	194.84	35.79	-91.23	-3,578.71	-7,071.09	3,447.03	3,218.75	228.28	15.100		
13,800.00	7,107.93	7,199.96	7,186.00	197.66	35.81	-91.30	-3,578.61	-7,071.24	3,444.13	3,212.73	231.40	14.884		
13,850.22	7,107.74	7,202.22	7,188.26	199.07	35.82	-91.34	-3,578.56	-7,071.32	3,443.76	3,210.86	232.90	14.786 CC		
13,900.00	7,107.56	7,204.46	7,190.51	200.48	35.83	-91.38	-3,578.51	-7,071.40	3,444.12	3,209.77	234.35	14.696 ES		
14,000.00	7,107.19	7,209.01	7,195.05	203.30	35.84	-91.45	-3,578.41	-7,071.56	3,447.01	3,209.87	237.14	14.536		
14,100.00	7,106.83	7,213.59	7,199.62	206.12	35.86	-91.53	-3,578.30	-7,071.72	3,452.79	3,213.04	239.75	14.401		
14,200.00	7,106.46	7,218.21	7,204.24	208.94	35.87	-91.61	-3,578.19	-7,071.88	3,461.45	3,219.26	242.19	14.292		
14,300.00	7,106.10	7,222.86	7,208.89	211.76	35.89	-91.68	-3,578.07	-7,072.04	3,472.97	3,228.52	244.44	14.208		
14,400.00	7,105.73	7,227.55	7,213.57	214.58	35.91	-91.76	-3,577.96	-7,072.21	3,487.31	3,240.79	246.52	14.146		
14,500.00	7,105.36	7,232.28	7,218.30	217.40	35.92	-91.84	-3,577.84	-7,072.38	3,504.44	3,256.04	248.40	14.108		
14,600.00	7,105.00	7,237.05	7,223.06	220.23	35.94	-91.92	-3,577.72	-7,072.55	3,524.32	3,274.22	250.10	14.092 SF		
14,700.00	7,104.63	7,241.86	7,227.87	223.05	35.96	-92.00	-3,577.59	-7,072.72	3,546.91	3,295.29	251.62	14.096		
14,800.00	7,104.27	7,246.70	7,232.71	225.88	35.98	-92.08	-3,577.46	-7,072.90	3,572.15	3,319.20	252.95	14.122		
14,872.41	7,104.00	7,250.24	7,236.24	227.93	35.99	-92.14	-3,577.37	-7,073.02	3,592.05	3,338.24	253.81	14.152		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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)			
0.00	0.00	0.00	68.00	3.28	3.28	-119.02	-4,250.62	-7,662.91	8,763.13					
100.00	100.00	32.00	100.00	3.28	3.33	-119.02	-4,250.62	-7,662.91	8,762.87	8,756.26	6.61	1,325.310		
200.00	200.00	132.00	200.00	3.34	4.35	-119.02	-4,250.62	-7,662.91	8,762.87	8,755.18	7.69	1,139.436		
300.00	300.00	232.00	300.00	3.44	7.15	-119.02	-4,250.62	-7,662.91	8,762.87	8,752.27	10.60	827.059		
400.00	400.00	332.00	400.00	3.60	10.38	-119.02	-4,250.62	-7,662.91	8,762.87	8,748.89	13.98	626.815		
500.00	500.00	432.00	500.00	3.81	13.73	-119.02	-4,250.62	-7,662.91	8,762.87	8,745.33	17.54	499.620		
600.00	599.98	531.98	599.98	4.04	17.14	-29.03	-4,250.62	-7,662.91	8,761.47	8,740.28	21.18	413.622		
700.00	699.95	631.95	699.95	4.30	20.58	-29.04	-4,250.62	-7,662.91	8,759.28	8,734.40	24.88	352.066		
800.00	799.92	731.92	799.92	4.59	24.03	-29.05	-4,250.62	-7,662.91	8,757.10	8,728.48	28.62	305.981		
900.00	899.89	831.89	899.89	4.90	27.49	-29.05	-4,250.62	-7,662.91	8,754.91	8,722.52	32.39	270.282		
1,000.00	999.86	931.86	999.86	5.23	30.96	-29.06	-4,250.62	-7,662.91	8,752.73	8,716.54	36.19	241.864		
1,100.00	1,099.83	1,031.83	1,099.83	5.58	34.43	-29.07	-4,250.62	-7,662.91	8,750.54	8,710.54	40.01	218.736		
1,200.00	1,199.80	1,131.80	1,199.80	5.94	37.91	-29.08	-4,250.62	-7,662.91	8,748.36	8,704.52	43.84	199.564		
1,300.00	1,299.77	1,231.77	1,299.77	6.30	41.39	-29.09	-4,250.62	-7,662.91	8,746.18	8,698.49	47.68	183.426		
1,400.00	1,399.73	1,331.73	1,399.73	6.68	44.87	-29.09	-4,250.62	-7,662.91	8,743.99	8,692.45	51.54	169.662		
1,500.00	1,499.70	1,431.70	1,499.70	7.07	48.35	-29.10	-4,250.62	-7,662.91	8,741.81	8,686.41	55.40	157.788		
1,600.00	1,599.67	1,531.67	1,599.67	7.46	51.83	-29.11	-4,250.62	-7,662.91	8,739.63	8,680.35	59.27	147.445		
1,700.00	1,699.64	1,631.64	1,699.64	7.85	55.31	-29.12	-4,250.62	-7,662.91	8,737.44	8,674.29	63.15	138.357		
1,800.00	1,799.61	1,731.61	1,799.61	8.25	58.80	-29.13	-4,250.62	-7,662.91	8,735.26	8,668.23	67.03	130.310		
1,900.00	1,899.58	1,831.58	1,899.58	8.66	62.28	-29.13	-4,250.62	-7,662.91	8,733.08	8,662.15	70.92	123.136		
2,000.00	1,999.55	1,931.55	1,999.55	9.06	65.77	-29.14	-4,250.62	-7,662.91	8,730.89	8,656.08	74.81	116.702		
2,100.00	2,099.52	2,031.52	2,099.52	9.47	69.25	-29.15	-4,250.62	-7,662.91	8,728.71	8,650.00	78.71	110.899		
2,200.00	2,199.48	2,131.48	2,199.48	9.89	72.74	-29.16	-4,250.62	-7,662.91	8,726.53	8,643.92	82.61	105.640		
2,300.00	2,299.45	2,231.45	2,299.45	10.30	76.23	-29.17	-4,250.62	-7,662.91	8,724.35	8,637.84	86.51	100.852		
2,400.00	2,399.42	2,331.42	2,399.42	10.72	79.71	-29.17	-4,250.62	-7,662.91	8,722.17	8,631.76	90.41	96.474		
2,500.00	2,499.39	2,431.39	2,499.39	11.14	83.20	-29.18	-4,250.62	-7,662.91	8,719.98	8,625.67	94.31	92.457		
2,600.00	2,599.36	2,531.36	2,599.36	11.56	86.69	-29.19	-4,250.62	-7,662.91	8,717.80	8,619.58	98.22	88.757		
2,700.00	2,699.33	2,631.33	2,699.33	11.98	90.17	-29.20	-4,250.62	-7,662.91	8,715.62	8,613.49	102.13	85.340		
2,800.00	2,799.30	2,731.30	2,799.30	12.41	93.66	-29.21	-4,250.62	-7,662.91	8,713.44	8,607.40	106.04	82.173		
2,900.00	2,899.27	2,831.27	2,899.27	12.83	97.15	-29.21	-4,250.62	-7,662.91	8,711.26	8,601.31	109.95	79.230		
3,000.00	2,999.23	2,931.23	2,999.23	13.26	100.64	-29.22	-4,250.62	-7,662.91	8,709.08	8,595.22	113.86	76.489		
3,100.00	3,099.20	3,031.20	3,099.20	13.68	104.13	-29.23	-4,250.62	-7,662.91	8,706.90	8,589.12	117.77	73.929		
3,200.00	3,199.17	3,131.17	3,199.17	14.11	107.61	-29.24	-4,250.62	-7,662.91	8,704.72	8,583.03	121.69	71.533		
3,300.00	3,299.14	3,231.14	3,299.14	14.54	111.10	-29.25	-4,250.62	-7,662.91	8,702.53	8,576.93	125.60	69.286		
3,400.00	3,399.11	3,331.11	3,399.11	14.97	114.59	-29.25	-4,250.62	-7,662.91	8,700.35	8,570.84	129.52	67.174		
3,500.00	3,499.08	3,431.08	3,499.08	15.40	118.08	-29.26	-4,250.62	-7,662.91	8,698.17	8,564.74	133.44	65.186		
3,600.00	3,599.05	3,531.05	3,599.05	15.83	121.57	-29.27	-4,250.62	-7,662.91	8,695.99	8,558.64	137.35	63.312		
3,700.00	3,699.02	3,631.02	3,699.02	16.26	125.06	-29.28	-4,250.62	-7,662.91	8,693.81	8,552.54	141.27	61.540		
3,800.00	3,798.98	3,730.98	3,798.98	16.69	128.55	-29.29	-4,250.62	-7,662.91	8,691.64	8,546.45	145.19	59.864		
3,900.00	3,898.95	3,830.95	3,898.95	17.12	132.03	-29.29	-4,250.62	-7,662.91	8,689.46	8,540.35	149.11	58.277		
4,000.00	3,998.92	3,930.92	3,998.92	17.55	135.52	-29.30	-4,250.62	-7,662.91	8,687.28	8,534.25	153.03	56.770		
4,100.00	4,098.89	4,030.89	4,098.89	17.98	139.01	-29.31	-4,250.62	-7,662.91	8,685.10	8,528.15	156.95	55.338		
4,200.00	4,198.86	4,130.86	4,198.86	18.42	142.50	-29.32	-4,250.62	-7,662.91	8,682.92	8,522.05	160.87	53.976		
4,300.00	4,298.83	4,230.83	4,298.83	18.85	145.99	-29.33	-4,250.62	-7,662.91	8,680.74	8,515.95	164.79	52.678		
4,400.00	4,398.80	4,330.80	4,398.80	19.28	149.48	-29.33	-4,250.62	-7,662.91	8,678.56	8,509.85	168.71	51.441		
4,500.00	4,498.77	4,430.77	4,498.77	19.72	152.97	-29.34	-4,250.62	-7,662.91	8,676.38	8,503.75	172.63	50.260		
4,600.00	4,598.73	4,530.73	4,598.73	20.15	156.46	-29.35	-4,250.62	-7,662.91	8,674.20	8,497.65	176.55	49.131		
4,700.00	4,698.70	4,630.70	4,698.70	20.58	159.95	-29.36	-4,250.62	-7,662.91	8,672.03	8,491.55	180.47	48.052		
4,800.00	4,798.67	4,730.67	4,798.67	21.02	163.44	-29.37	-4,250.62	-7,662.91	8,669.85	8,485.45	184.40	47.018		
4,900.00	4,898.64	4,830.64	4,898.64	21.45	166.92	-29.37	-4,250.62	-7,662.91	8,667.67	8,479.35	188.32	46.027		
5,000.00	4,998.61	4,930.61	4,998.61	21.89	170.41	-29.38	-4,250.62	-7,662.91	8,665.49	8,473.25	192.24	45.076		
5,100.00	5,098.58	5,030.58	5,098.58	22.32	173.90	-29.39	-4,250.62	-7,662.91	8,663.32	8,467.15	196.16	44.164		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,130.55	5,198.55	22.76	177.39	-29.40	-4,250.62	-7,662.91	8,661.14	8,461.05	200.09	43.287		
5,300.00	5,298.52	5,230.52	5,298.52	23.20	180.88	-29.41	-4,250.62	-7,662.91	8,658.96	8,454.95	204.01	42.444		
5,400.00	5,398.49	5,330.49	5,398.49	23.63	184.37	-29.41	-4,250.62	-7,662.91	8,656.79	8,448.85	207.93	41.632		
5,500.00	5,498.45	5,430.45	5,498.45	24.07	187.86	-29.42	-4,250.62	-7,662.91	8,654.61	8,442.75	211.86	40.851		
5,600.00	5,598.42	5,530.42	5,598.42	24.50	191.35	-29.43	-4,250.62	-7,662.91	8,652.43	8,436.65	215.78	40.098		
5,700.00	5,698.39	5,630.39	5,698.39	24.94	194.84	-29.44	-4,250.62	-7,662.91	8,650.26	8,430.55	219.71	39.372		
5,800.00	5,798.36	5,730.36	5,798.36	25.38	198.33	-29.45	-4,250.62	-7,662.91	8,648.08	8,424.45	223.63	38.671		
5,900.00	5,898.33	5,830.33	5,898.33	25.81	201.82	-29.46	-4,250.62	-7,662.91	8,645.90	8,418.35	227.55	37.995		
6,000.00	5,998.30	5,930.30	5,998.30	26.25	205.31	-29.46	-4,250.62	-7,662.91	8,643.73	8,412.25	231.48	37.341		
6,100.00	6,098.27	6,030.27	6,098.27	26.69	208.80	-29.47	-4,250.62	-7,662.91	8,641.55	8,406.15	235.40	36.709		
6,200.00	6,198.24	6,130.24	6,198.24	27.12	212.29	-29.48	-4,250.62	-7,662.91	8,639.38	8,400.05	239.33	36.098		
6,300.00	6,298.20	6,230.20	6,298.20	27.56	215.78	-29.49	-4,250.62	-7,662.91	8,637.20	8,393.95	243.25	35.507		
6,400.00	6,398.17	6,330.17	6,398.17	28.00	219.27	-29.50	-4,250.62	-7,662.91	8,635.03	8,387.85	247.18	34.934		
6,500.00	6,498.14	6,430.14	6,498.14	28.43	222.76	-29.50	-4,250.62	-7,662.91	8,632.85	8,381.75	251.10	34.380		
6,600.00	6,597.68	6,529.68	6,597.68	28.88	226.23	-28.90	-4,250.62	-7,662.91	8,625.36	8,370.35	255.02	33.823		
6,700.00	6,694.68	6,626.68	6,694.68	29.32	229.62	-29.84	-4,250.62	-7,662.91	8,604.37	8,345.54	258.83	33.243		
6,800.00	6,786.74	6,718.74	6,786.74	29.77	232.83	-31.60	-4,250.62	-7,662.91	8,570.34	8,307.88	262.46	32.654		
6,900.00	6,871.61	6,803.61	6,871.61	30.24	235.79	-34.32	-4,250.62	-7,662.91	8,524.13	8,258.33	265.80	32.070		
7,000.00	6,947.19	6,879.19	6,947.19	30.74	238.43	-38.27	-4,250.62	-7,662.91	8,466.94	8,198.16	268.79	31.501		
7,100.00	7,011.62	6,943.62	7,011.62	31.32	240.68	-43.86	-4,250.62	-7,662.91	8,400.26	8,128.90	271.36	30.956		
7,200.00	7,063.31	7,004.69	7,063.31	32.03	242.81	-51.63	-4,250.62	-7,662.91	8,325.79	8,051.98	273.80	30.408		
7,300.00	7,101.00	7,033.00	7,101.00	32.89	243.80	-62.14	-4,250.62	-7,662.91	8,245.42	7,970.31	275.11	29.972		
7,400.00	7,123.74	7,055.74	7,123.74	33.93	244.59	-75.48	-4,250.62	-7,662.91	8,161.20	7,884.96	276.24	29.544		
7,500.00	7,131.00	7,063.00	7,131.00	35.10	244.85	-90.36	-4,250.62	-7,662.91	8,075.23	7,798.38	276.85	29.168		
7,600.00	7,130.63	7,062.63	7,130.63	36.44	244.83	-90.35	-4,250.62	-7,662.91	7,989.26	7,712.00	277.26	28.815		
7,700.00	7,130.26	7,062.26	7,130.26	37.94	244.82	-90.35	-4,250.62	-7,662.91	7,903.62	7,625.88	277.74	28.456		
7,800.00	7,129.90	7,061.90	7,129.90	39.59	244.81	-90.34	-4,250.62	-7,662.91	7,818.33	7,540.02	278.31	28.092		
7,900.00	7,129.53	7,061.53	7,129.53	41.37	244.80	-90.34	-4,250.62	-7,662.91	7,733.39	7,454.42	278.96	27.722		
8,000.00	7,129.17	7,061.17	7,129.17	43.27	244.78	-90.33	-4,250.62	-7,662.91	7,648.81	7,369.11	279.69	27.347		
8,100.00	7,128.80	7,060.80	7,128.80	45.27	244.77	-90.32	-4,250.62	-7,662.91	7,564.60	7,284.10	280.51	26.967		
8,200.00	7,128.43	7,060.43	7,128.43	47.36	244.76	-90.32	-4,250.62	-7,662.91	7,480.79	7,199.38	281.41	26.584		
8,300.00	7,128.07	7,060.07	7,128.07	49.52	244.74	-90.31	-4,250.62	-7,662.91	7,397.38	7,114.99	282.39	26.196		
8,400.00	7,127.70	7,059.70	7,127.70	51.75	244.73	-90.31	-4,250.62	-7,662.91	7,314.38	7,030.93	283.45	25.805		
8,500.00	7,127.33	7,059.33	7,127.33	54.04	244.72	-90.30	-4,250.62	-7,662.91	7,231.82	6,947.22	284.60	25.411		
8,600.00	7,126.97	7,058.97	7,126.97	56.38	244.71	-90.30	-4,250.62	-7,662.91	7,149.70	6,863.87	285.82	25.014		
8,700.00	7,126.60	7,058.60	7,126.60	58.77	244.69	-90.29	-4,250.62	-7,662.91	7,068.04	6,780.91	287.13	24.616		
8,800.00	7,126.24	7,058.24	7,126.24	61.19	244.68	-90.29	-4,250.62	-7,662.91	6,986.86	6,698.34	288.52	24.216		
8,900.00	7,125.87	7,057.87	7,125.87	63.65	244.67	-90.28	-4,250.62	-7,662.91	6,906.17	6,616.18	289.99	23.816		
9,000.00	7,125.50	7,057.50	7,125.50	66.15	244.65	-90.28	-4,250.62	-7,662.91	6,825.99	6,534.46	291.53	23.414		
9,100.00	7,125.14	7,057.14	7,125.14	68.67	244.64	-90.27	-4,250.62	-7,662.91	6,746.34	6,453.19	293.15	23.013		
9,200.00	7,124.77	7,056.77	7,124.77	71.21	244.63	-90.27	-4,250.62	-7,662.91	6,667.24	6,372.39	294.85	22.612		
9,300.00	7,124.41	7,056.41	7,124.41	73.78	244.62	-90.26	-4,250.62	-7,662.91	6,588.71	6,292.09	296.62	22.212		
9,400.00	7,124.04	7,056.04	7,124.04	76.37	244.60	-90.26	-4,250.62	-7,662.91	6,510.77	6,212.30	298.47	21.814		
9,500.00	7,123.67	7,055.67	7,123.67	78.98	244.59	-90.25	-4,250.62	-7,662.91	6,433.43	6,133.04	300.40	21.417		
9,600.00	7,123.31	7,055.31	7,123.31	81.60	244.58	-90.25	-4,250.62	-7,662.91	6,356.73	6,054.34	302.39	21.021		
9,700.00	7,122.94	7,054.94	7,122.94	84.24	244.56	-90.24	-4,250.62	-7,662.91	6,280.69	5,976.22	304.47	20.628		
9,800.00	7,122.57	7,054.57	7,122.57	86.90	244.55	-90.24	-4,250.62	-7,662.91	6,205.32	5,898.71	306.61	20.238		
9,900.00	7,122.21	7,054.21	7,122.21	89.56	244.54	-90.23	-4,250.62	-7,662.91	6,130.66	5,821.83	308.83	19.851		
10,000.00	7,121.84	7,053.84	7,121.84	92.24	244.53	-90.23	-4,250.62	-7,662.91	6,056.73	5,745.61	311.13	19.467		
10,100.00	7,121.48	7,053.48	7,121.48	94.92	244.51	-90.22	-4,250.62	-7,662.91	5,983.56	5,670.07	313.49	19.087		
10,200.00	7,121.11	7,053.11	7,121.11	97.62	244.50	-90.22	-4,250.62	-7,662.91	5,911.17	5,595.24	315.93	18.710		
10,300.00	7,120.74	7,052.74	7,120.74	100.32	244.49	-90.21	-4,250.62	-7,662.91	5,839.60	5,521.16	318.44	18.338		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	7,052.38	7,120.38	103.04	244.48	-90.21	-4,250.62	-7,662.91	5,768.88	5,447.85	321.02	17.970		
10,500.00	7,120.01	7,052.01	7,120.01	105.76	244.46	-90.20	-4,250.62	-7,662.91	5,699.03	5,375.35	323.68	17.607		
10,600.00	7,119.64	7,051.64	7,119.64	108.48	244.45	-90.20	-4,250.62	-7,662.91	5,630.09	5,303.68	326.41	17.249		
10,700.00	7,119.28	7,051.28	7,119.28	111.22	244.44	-90.19	-4,250.62	-7,662.91	5,562.09	5,232.89	329.21	16.896		
10,800.00	7,118.91	7,050.91	7,118.91	113.96	244.42	-90.19	-4,250.62	-7,662.91	5,495.08	5,163.00	332.07	16.548		
10,900.00	7,118.55	7,050.55	7,118.55	116.70	244.41	-90.18	-4,250.62	-7,662.91	5,429.07	5,094.06	335.01	16.206		
11,000.00	7,118.18	7,050.18	7,118.18	119.45	244.40	-90.18	-4,250.62	-7,662.91	5,364.12	5,026.10	338.02	15.869		
11,100.00	7,117.81	7,049.81	7,117.81	122.21	244.39	-90.17	-4,250.62	-7,662.91	5,300.27	4,959.17	341.10	15.539		
11,200.00	7,117.45	7,049.45	7,117.45	124.97	244.37	-90.17	-4,250.62	-7,662.91	5,237.54	4,893.29	344.24	15.215		
11,300.00	7,117.08	7,049.08	7,117.08	127.73	244.36	-90.16	-4,250.62	-7,662.91	5,175.98	4,828.53	347.45	14.897		
11,400.00	7,116.72	7,048.72	7,116.72	130.50	244.35	-90.16	-4,250.62	-7,662.91	5,115.64	4,764.91	350.73	14.586		
11,500.00	7,116.35	7,048.35	7,116.35	133.27	244.33	-90.15	-4,250.62	-7,662.91	5,056.55	4,702.49	354.07	14.281		
11,600.00	7,115.98	7,047.98	7,115.98	136.04	244.32	-90.15	-4,250.62	-7,662.91	4,998.77	4,641.30	357.47	13.984		
11,700.00	7,115.62	7,047.62	7,115.62	138.82	244.31	-90.14	-4,250.62	-7,662.91	4,942.34	4,581.41	360.93	13.693		
11,800.00	7,115.25	7,047.25	7,115.25	141.60	244.30	-90.14	-4,250.62	-7,662.91	4,887.30	4,522.85	364.44	13.410		
11,900.00	7,114.88	7,046.88	7,114.88	144.39	244.28	-90.13	-4,250.62	-7,662.91	4,833.70	4,465.69	368.01	13.135		
12,000.00	7,114.52	7,046.52	7,114.52	147.17	244.27	-90.13	-4,250.62	-7,662.91	4,781.59	4,409.96	371.63	12.867		
12,100.00	7,114.15	7,046.15	7,114.15	149.96	244.26	-90.12	-4,250.62	-7,662.91	4,731.03	4,355.73	375.30	12.606		
12,200.00	7,113.79	7,045.79	7,113.79	152.75	244.25	-90.12	-4,250.62	-7,662.91	4,682.05	4,303.05	379.00	12.354		
12,300.00	7,113.42	7,045.42	7,113.42	155.55	244.23	-90.11	-4,250.62	-7,662.91	4,634.71	4,251.96	382.75	12.109		
12,400.00	7,113.05	7,045.05	7,113.05	158.34	244.22	-90.11	-4,250.62	-7,662.91	4,589.07	4,202.54	386.53	11.873		
12,500.00	7,112.69	7,044.69	7,112.69	161.14	244.21	-90.10	-4,250.62	-7,662.91	4,545.17	4,154.83	390.34	11.644		
12,600.00	7,112.32	7,044.32	7,112.32	163.94	244.19	-90.09	-4,250.62	-7,662.91	4,503.06	4,108.89	394.17	11.424		
12,700.00	7,111.96	7,043.96	7,111.96	166.74	244.18	-90.09	-4,250.62	-7,662.91	4,462.79	4,064.78	398.01	11.213		
12,800.00	7,111.59	7,043.59	7,111.59	169.54	244.17	-90.08	-4,250.62	-7,662.91	4,424.42	4,022.55	401.87	11.010		
12,900.00	7,111.22	7,043.22	7,111.22	172.35	244.16	-90.08	-4,250.62	-7,662.91	4,387.99	3,982.26	405.73	10.815		
13,000.00	7,110.86	7,042.86	7,110.86	175.16	244.14	-90.07	-4,250.62	-7,662.91	4,353.55	3,943.97	409.58	10.629		
13,100.00	7,110.49	7,042.49	7,110.49	177.96	244.13	-90.07	-4,250.62	-7,662.91	4,321.16	3,907.74	413.42	10.452		
13,200.00	7,110.12	7,042.12	7,110.12	180.77	244.12	-90.06	-4,250.62	-7,662.91	4,290.85	3,873.60	417.24	10.284		
13,300.00	7,109.76	7,041.76	7,109.76	183.58	244.10	-90.06	-4,250.62	-7,662.91	4,262.67	3,841.63	421.04	10.124		
13,400.00	7,109.39	7,041.39	7,109.39	186.40	244.09	-90.05	-4,250.62	-7,662.91	4,236.66	3,811.87	424.80	9.973		
13,500.00	7,109.03	7,041.03	7,109.03	189.21	244.08	-90.05	-4,250.62	-7,662.91	4,212.87	3,784.37	428.51	9.831		
13,600.00	7,108.66	7,040.66	7,108.66	192.03	244.07	-90.04	-4,250.62	-7,662.91	4,191.33	3,759.17	432.17	9.698		
13,700.00	7,108.29	7,040.29	7,108.29	194.84	244.05	-90.04	-4,250.62	-7,662.91	4,172.08	3,736.32	435.76	9.574		
13,800.00	7,107.93	7,039.93	7,107.93	197.66	244.04	-90.03	-4,250.62	-7,662.91	4,155.15	3,715.85	439.29	9.459		
13,900.00	7,107.56	7,039.56	7,107.56	200.48	244.03	-90.03	-4,250.62	-7,662.91	4,140.56	3,697.82	442.74	9.352		
14,000.00	7,107.19	7,039.19	7,107.19	203.30	244.02	-90.02	-4,250.62	-7,662.91	4,128.34	3,682.24	446.10	9.254		
14,100.00	7,106.83	7,038.83	7,106.83	206.12	244.00	-90.02	-4,250.62	-7,662.91	4,118.51	3,669.15	449.37	9.165		
14,200.00	7,106.46	7,038.46	7,106.46	208.94	243.99	-90.01	-4,250.62	-7,662.91	4,111.10	3,658.57	452.53	9.085		
14,300.00	7,106.10	7,038.10	7,106.10	211.76	243.98	-90.01	-4,250.62	-7,662.91	4,106.11	3,650.52	455.59	9.013		
14,400.00	7,105.73	7,037.73	7,105.73	214.58	243.96	-90.00	-4,250.62	-7,662.91	4,103.54	3,645.02	458.53	8.949		
14,455.14	7,105.53	7,037.53	7,105.53	216.14	243.96	-90.00	-4,250.62	-7,662.91	4,103.17	3,643.08	460.09	8.918 CC		
14,500.00	7,105.36	7,037.36	7,105.36	217.40	243.95	-90.00	-4,250.62	-7,662.91	4,103.42	3,642.08	461.34	8.894		
14,600.00	7,105.00	7,037.00	7,105.00	220.23	243.94	-89.99	-4,250.62	-7,662.91	4,105.73	3,641.70	464.03	8.848 ES		
14,700.00	7,104.63	7,036.63	7,104.63	223.05	243.93	-89.99	-4,250.62	-7,662.91	4,110.47	3,643.88	466.60	8.810		
14,800.00	7,104.27	7,036.27	7,104.27	225.88	243.91	-89.98	-4,250.62	-7,662.91	4,117.64	3,648.62	469.02	8.779		
14,872.41	7,104.00	7,036.00	7,104.00	227.93	243.90	-89.98	-4,250.62	-7,662.91	4,124.34	3,653.64	470.69	8.762 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	53.00	3.28	3.28	-108.12	-2,933.21	-8,963.23	9,431.12					
100.00	100.00	47.00	100.00	3.28	3.38	-108.12	-2,933.21	-8,963.23	9,430.97	9,424.30	6.67	1,414.837		
200.00	200.00	147.00	200.00	3.34	4.71	-108.12	-2,933.21	-8,963.23	9,430.97	9,422.92	8.05	1,171.346		
300.00	300.00	247.00	300.00	3.44	7.62	-108.12	-2,933.21	-8,963.23	9,430.97	9,419.90	11.06	852.378		
400.00	400.00	347.00	400.00	3.60	10.87	-108.12	-2,933.21	-8,963.23	9,430.97	9,416.49	14.48	651.397		
500.00	500.00	447.00	500.00	3.81	14.24	-108.12	-2,933.21	-8,963.23	9,430.97	9,412.92	18.05	522.545		
600.00	599.98	546.98	599.98	4.04	17.66	-18.13	-2,933.21	-8,963.23	9,429.44	9,407.75	21.70	434.605		
700.00	699.95	646.95	699.95	4.30	21.10	-18.13	-2,933.21	-8,963.23	9,427.07	9,401.67	25.40	371.192		
800.00	799.92	746.92	799.92	4.59	24.55	-18.14	-2,933.21	-8,963.23	9,424.69	9,395.56	29.14	323.446		
900.00	899.89	846.89	899.89	4.90	28.01	-18.14	-2,933.21	-8,963.23	9,422.32	9,389.41	32.91	286.292		
1,000.00	999.86	946.86	999.86	5.23	31.48	-18.15	-2,933.21	-8,963.23	9,419.95	9,383.24	36.71	256.610		
1,100.00	1,099.83	1,046.83	1,099.83	5.58	34.95	-18.15	-2,933.21	-8,963.23	9,417.57	9,377.04	40.53	232.382		
1,200.00	1,199.80	1,146.80	1,199.80	5.94	38.43	-18.16	-2,933.21	-8,963.23	9,415.20	9,370.84	44.36	212.251		
1,300.00	1,299.77	1,246.77	1,299.77	6.30	41.91	-18.16	-2,933.21	-8,963.23	9,412.82	9,364.62	48.20	195.270		
1,400.00	1,399.73	1,346.73	1,399.73	6.68	45.39	-18.17	-2,933.21	-8,963.23	9,410.45	9,358.39	52.06	180.762		
1,500.00	1,499.70	1,446.70	1,499.70	7.07	48.87	-18.17	-2,933.21	-8,963.23	9,408.07	9,352.15	55.92	168.228		
1,600.00	1,599.67	1,546.67	1,599.67	7.46	52.35	-18.18	-2,933.21	-8,963.23	9,405.70	9,345.90	59.80	157.296		
1,700.00	1,699.64	1,646.64	1,699.64	7.85	55.84	-18.18	-2,933.21	-8,963.23	9,403.33	9,339.65	63.67	147.679		
1,800.00	1,799.61	1,746.61	1,799.61	8.25	59.32	-18.19	-2,933.21	-8,963.23	9,400.95	9,333.39	67.56	139.155		
1,900.00	1,899.58	1,846.58	1,899.58	8.66	62.80	-18.19	-2,933.21	-8,963.23	9,398.58	9,327.13	71.45	131.550		
2,000.00	1,999.55	1,946.55	1,999.55	9.06	66.29	-18.20	-2,933.21	-8,963.23	9,396.20	9,320.87	75.34	124.723		
2,100.00	2,099.52	2,046.52	2,099.52	9.47	69.78	-18.20	-2,933.21	-8,963.23	9,393.83	9,314.60	79.23	118.562		
2,200.00	2,199.48	2,146.48	2,199.48	9.89	73.26	-18.20	-2,933.21	-8,963.23	9,391.46	9,308.33	83.13	112.974		
2,300.00	2,299.45	2,246.45	2,299.45	10.30	76.75	-18.21	-2,933.21	-8,963.23	9,389.08	9,302.05	87.03	107.883		
2,400.00	2,399.42	2,346.42	2,399.42	10.72	80.24	-18.21	-2,933.21	-8,963.23	9,386.71	9,295.78	90.93	103.227		
2,500.00	2,499.39	2,446.39	2,499.39	11.14	83.72	-18.22	-2,933.21	-8,963.23	9,384.34	9,289.50	94.84	98.952		
2,600.00	2,599.36	2,546.36	2,599.36	11.56	87.21	-18.22	-2,933.21	-8,963.23	9,381.96	9,283.22	98.74	95.013		
2,700.00	2,699.33	2,646.33	2,699.33	11.98	90.70	-18.23	-2,933.21	-8,963.23	9,379.59	9,276.94	102.65	91.372		
2,800.00	2,799.30	2,746.30	2,799.30	12.41	94.19	-18.23	-2,933.21	-8,963.23	9,377.21	9,270.65	106.56	87.998		
2,900.00	2,899.27	2,846.27	2,899.27	12.83	97.67	-18.24	-2,933.21	-8,963.23	9,374.84	9,264.37	110.47	84.861		
3,000.00	2,999.23	2,946.23	2,999.23	13.26	101.16	-18.24	-2,933.21	-8,963.23	9,372.47	9,258.08	114.38	81.938		
3,100.00	3,099.20	3,046.20	3,099.20	13.68	104.65	-18.25	-2,933.21	-8,963.23	9,370.10	9,251.80	118.30	79.207		
3,200.00	3,199.17	3,146.17	3,199.17	14.11	108.14	-18.25	-2,933.21	-8,963.23	9,367.72	9,245.51	122.21	76.651		
3,300.00	3,299.14	3,246.14	3,299.14	14.54	111.63	-18.26	-2,933.21	-8,963.23	9,365.35	9,239.22	126.13	74.253		
3,400.00	3,399.11	3,346.11	3,399.11	14.97	115.11	-18.26	-2,933.21	-8,963.23	9,362.98	9,232.93	130.04	71.999		
3,500.00	3,499.08	3,446.08	3,499.08	15.40	118.60	-18.27	-2,933.21	-8,963.23	9,360.60	9,226.64	133.96	69.876		
3,600.00	3,599.05	3,546.05	3,599.05	15.83	122.09	-18.27	-2,933.21	-8,963.23	9,358.23	9,220.35	137.88	67.874		
3,700.00	3,699.02	3,646.02	3,699.02	16.26	125.58	-18.28	-2,933.21	-8,963.23	9,355.86	9,214.06	141.79	65.982		
3,800.00	3,798.98	3,745.98	3,798.98	16.69	129.07	-18.28	-2,933.21	-8,963.23	9,353.49	9,207.77	145.71	64.191		
3,900.00	3,898.95	3,845.95	3,898.95	17.12	132.56	-18.29	-2,933.21	-8,963.23	9,351.11	9,201.48	149.63	62.494		
4,000.00	3,998.92	3,945.92	3,998.92	17.55	136.05	-18.29	-2,933.21	-8,963.23	9,348.74	9,195.19	153.55	60.883		
4,100.00	4,098.89	4,045.89	4,098.89	17.98	139.54	-18.30	-2,933.21	-8,963.23	9,346.37	9,188.90	157.47	59.353		
4,200.00	4,198.86	4,145.86	4,198.86	18.42	143.02	-18.30	-2,933.21	-8,963.23	9,343.99	9,182.60	161.39	57.896		
4,300.00	4,298.83	4,245.83	4,298.83	18.85	146.51	-18.31	-2,933.21	-8,963.23	9,341.62	9,176.31	165.31	56.509		
4,400.00	4,398.80	4,345.80	4,398.80	19.28	150.00	-18.31	-2,933.21	-8,963.23	9,339.25	9,170.02	169.23	55.186		
4,500.00	4,498.77	4,445.77	4,498.77	19.72	153.49	-18.32	-2,933.21	-8,963.23	9,336.88	9,163.72	173.15	53.922		
4,600.00	4,598.73	4,545.73	4,598.73	20.15	156.98	-18.32	-2,933.21	-8,963.23	9,334.51	9,157.43	177.08	52.715		
4,700.00	4,698.70	4,645.70	4,698.70	20.58	160.47	-18.32	-2,933.21	-8,963.23	9,332.13	9,151.14	181.00	51.559		
4,800.00	4,798.67	4,745.67	4,798.67	21.02	163.96	-18.33	-2,933.21	-8,963.23	9,329.76	9,144.84	184.92	50.453		
4,900.00	4,898.64	4,845.64	4,898.64	21.45	167.45	-18.33	-2,933.21	-8,963.23	9,327.39	9,138.55	188.84	49.392		
5,000.00	4,998.61	4,945.61	4,998.61	21.89	170.94	-18.34	-2,933.21	-8,963.23	9,325.02	9,132.25	192.77	48.375		
5,100.00	5,098.58	5,045.58	5,098.58	22.32	174.43	-18.34	-2,933.21	-8,963.23	9,322.65	9,125.96	196.69	47.398		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,200.00	5,198.55	5,145.55	5,198.55	22.76	177.92	-18.35	-2,933.21	-8,963.23	9,320.27	9,119.66	200.61	46.459		
5,300.00	5,298.52	5,245.52	5,298.52	23.20	181.41	-18.35	-2,933.21	-8,963.23	9,317.90	9,113.37	204.54	45.556		
5,400.00	5,398.49	5,345.49	5,398.49	23.63	184.89	-18.36	-2,933.21	-8,963.23	9,315.53	9,107.07	208.46	44.687		
5,500.00	5,498.45	5,445.45	5,498.45	24.07	188.38	-18.36	-2,933.21	-8,963.23	9,313.16	9,100.78	212.38	43.851		
5,600.00	5,598.42	5,545.42	5,598.42	24.50	191.87	-18.37	-2,933.21	-8,963.23	9,310.79	9,094.48	216.31	43.044		
5,700.00	5,698.39	5,645.39	5,698.39	24.94	195.36	-18.37	-2,933.21	-8,963.23	9,308.42	9,088.18	220.23	42.266		
5,800.00	5,798.36	5,745.36	5,798.36	25.38	198.85	-18.38	-2,933.21	-8,963.23	9,306.05	9,081.89	224.16	41.516		
5,900.00	5,898.33	5,845.33	5,898.33	25.81	202.34	-18.38	-2,933.21	-8,963.23	9,303.67	9,075.59	228.08	40.791		
6,000.00	5,998.30	5,945.30	5,998.30	26.25	205.83	-18.39	-2,933.21	-8,963.23	9,301.30	9,069.30	232.01	40.091		
6,100.00	6,098.27	6,045.27	6,098.27	26.69	209.32	-18.39	-2,933.21	-8,963.23	9,298.93	9,063.00	235.93	39.414		
6,200.00	6,198.24	6,145.24	6,198.24	27.12	212.81	-18.40	-2,933.21	-8,963.23	9,296.56	9,056.71	239.86	38.759		
6,300.00	6,298.20	6,245.20	6,298.20	27.56	216.30	-18.40	-2,933.21	-8,963.23	9,294.19	9,050.41	243.78	38.125		
6,400.00	6,398.17	6,345.17	6,398.17	28.00	219.79	-18.41	-2,933.21	-8,963.23	9,291.82	9,044.11	247.71	37.512		
6,500.00	6,498.14	6,445.14	6,498.14	28.43	223.28	-18.41	-2,933.21	-8,963.23	9,289.45	9,037.82	251.63	36.917		
6,600.00	6,597.68	6,544.68	6,597.68	28.88	226.75	-17.69	-2,933.21	-8,963.23	9,281.31	9,025.76	255.54	36.320		
6,700.00	6,694.68	6,641.68	6,694.68	29.32	230.14	-18.30	-2,933.21	-8,963.23	9,258.51	8,999.15	259.36	35.698		
6,800.00	6,786.74	6,733.74	6,786.74	29.77	233.35	-19.51	-2,933.21	-8,963.23	9,221.52	8,958.55	262.98	35.066		
6,900.00	6,871.61	6,818.61	6,871.61	30.24	236.32	-21.44	-2,933.21	-8,963.23	9,171.27	8,904.96	266.31	34.438		
7,000.00	6,947.19	6,905.81	6,947.19	30.74	239.36	-24.38	-2,933.21	-8,963.23	9,109.01	8,839.33	269.68	33.777		
7,100.00	7,011.62	6,958.62	7,011.62	31.32	241.20	-28.85	-2,933.21	-8,963.23	9,036.29	8,764.49	271.80	33.246		
7,200.00	7,063.31	7,010.31	7,063.31	32.03	243.01	-35.86	-2,933.21	-8,963.23	8,954.94	8,681.10	273.84	32.701		
7,300.00	7,101.00	7,048.00	7,101.00	32.89	244.32	-47.21	-2,933.21	-8,963.23	8,866.98	8,591.63	275.35	32.202		
7,400.00	7,123.74	7,070.74	7,123.74	33.93	245.12	-65.57	-2,933.21	-8,963.23	8,774.60	8,498.28	276.32	31.755		
7,500.00	7,131.00	7,078.00	7,131.00	35.10	245.37	-90.63	-2,933.21	-8,963.23	8,680.08	8,403.35	276.73	31.366		
7,600.00	7,130.63	7,077.63	7,130.63	36.44	245.36	-90.62	-2,933.21	-8,963.23	8,585.33	8,308.44	276.90	31.006		
7,700.00	7,130.26	7,077.26	7,130.26	37.94	245.34	-90.61	-2,933.21	-8,963.23	8,490.71	8,213.62	277.09	30.642		
7,800.00	7,129.90	7,076.90	7,129.90	39.59	245.33	-90.60	-2,933.21	-8,963.23	8,396.20	8,118.88	277.32	30.276		
7,900.00	7,129.53	7,076.53	7,129.53	41.37	245.32	-90.60	-2,933.21	-8,963.23	8,301.83	8,024.24	277.59	29.907		
8,000.00	7,129.17	7,076.17	7,129.17	43.27	245.31	-90.59	-2,933.21	-8,963.23	8,207.59	7,929.69	277.90	29.534		
8,100.00	7,128.80	7,075.80	7,128.80	45.27	245.29	-90.58	-2,933.21	-8,963.23	8,113.48	7,835.24	278.25	29.159		
8,200.00	7,128.43	7,075.43	7,128.43	47.36	245.28	-90.57	-2,933.21	-8,963.23	8,019.52	7,740.89	278.64	28.781		
8,300.00	7,128.07	7,075.07	7,128.07	49.52	245.27	-90.56	-2,933.21	-8,963.23	7,925.71	7,646.64	279.07	28.401		
8,400.00	7,127.70	7,074.70	7,127.70	51.75	245.25	-90.56	-2,933.21	-8,963.23	7,832.05	7,552.51	279.54	28.017		
8,500.00	7,127.33	7,074.33	7,127.33	54.04	245.24	-90.55	-2,933.21	-8,963.23	7,738.55	7,458.48	280.07	27.631		
8,600.00	7,126.97	7,073.97	7,126.97	56.38	245.23	-90.54	-2,933.21	-8,963.23	7,645.21	7,364.58	280.64	27.242		
8,700.00	7,126.60	7,073.60	7,126.60	58.77	245.22	-90.53	-2,933.21	-8,963.23	7,552.05	7,270.79	281.25	26.852		
8,800.00	7,126.24	7,073.24	7,126.24	61.19	245.20	-90.53	-2,933.21	-8,963.23	7,459.06	7,177.14	281.92	26.458		
8,900.00	7,125.87	7,072.87	7,125.87	63.65	245.19	-90.52	-2,933.21	-8,963.23	7,366.25	7,083.62	282.63	26.063		
9,000.00	7,125.50	7,072.50	7,125.50	66.15	245.18	-90.51	-2,933.21	-8,963.23	7,273.64	6,990.24	283.40	25.666		
9,100.00	7,125.14	7,072.14	7,125.14	68.67	245.17	-90.50	-2,933.21	-8,963.23	7,181.22	6,897.00	284.22	25.267		
9,200.00	7,124.77	7,071.77	7,124.77	71.21	245.15	-90.50	-2,933.21	-8,963.23	7,089.01	6,803.92	285.09	24.866		
9,300.00	7,124.41	7,071.41	7,124.41	73.78	245.14	-90.49	-2,933.21	-8,963.23	6,997.01	6,711.00	286.02	24.464		
9,400.00	7,124.04	7,071.04	7,124.04	76.37	245.13	-90.48	-2,933.21	-8,963.23	6,905.24	6,618.24	287.00	24.060		
9,500.00	7,123.67	7,070.67	7,123.67	78.98	245.11	-90.47	-2,933.21	-8,963.23	6,813.69	6,525.66	288.03	23.656		
9,600.00	7,123.31	7,070.31	7,123.31	81.60	245.10	-90.47	-2,933.21	-8,963.23	6,722.39	6,433.26	289.13	23.251		
9,700.00	7,122.94	7,069.94	7,122.94	84.24	245.09	-90.46	-2,933.21	-8,963.23	6,631.34	6,341.06	290.28	22.845		
9,800.00	7,122.57	7,069.57	7,122.57	86.90	245.08	-90.45	-2,933.21	-8,963.23	6,540.55	6,249.06	291.49	22.438		
9,900.00	7,122.21	7,069.21	7,122.21	89.56	245.06	-90.44	-2,933.21	-8,963.23	6,450.03	6,157.27	292.76	22.032		
10,000.00	7,121.84	7,068.84	7,121.84	92.24	245.05	-90.44	-2,933.21	-8,963.23	6,359.80	6,065.70	294.10	21.625		
10,100.00	7,121.48	7,068.48	7,121.48	94.92	245.04	-90.43	-2,933.21	-8,963.23	6,269.86	5,974.37	295.49	21.218		
10,200.00	7,121.11	7,068.11	7,121.11	97.62	245.02	-90.42	-2,933.21	-8,963.23	6,180.23	5,883.28	296.95	20.812		
10,300.00	7,120.74	7,067.74	7,120.74	100.32	245.01	-90.41	-2,933.21	-8,963.23	6,090.93	5,792.45	298.48	20.407		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	7,067.38	7,120.38	103.04	245.00	-90.41	-2,933.21	-8,963.23	6,001.96	5,701.89	300.07	20.002		
10,500.00	7,120.01	7,067.01	7,120.01	105.76	244.99	-90.40	-2,933.21	-8,963.23	5,913.35	5,611.62	301.73	19.598		
10,600.00	7,119.64	7,066.64	7,119.64	108.48	244.97	-90.39	-2,933.21	-8,963.23	5,825.10	5,521.64	303.46	19.195		
10,700.00	7,119.28	7,066.28	7,119.28	111.22	244.96	-90.38	-2,933.21	-8,963.23	5,737.24	5,431.97	305.27	18.794		
10,800.00	7,118.91	7,065.91	7,118.91	113.96	244.95	-90.37	-2,933.21	-8,963.23	5,649.78	5,342.64	307.14	18.395		
10,900.00	7,118.55	7,065.55	7,118.55	116.70	244.94	-90.37	-2,933.21	-8,963.23	5,562.75	5,253.66	309.09	17.997		
11,000.00	7,118.18	7,065.18	7,118.18	119.45	244.92	-90.36	-2,933.21	-8,963.23	5,476.16	5,165.03	311.12	17.601		
11,100.00	7,117.81	7,064.81	7,117.81	122.21	244.91	-90.35	-2,933.21	-8,963.23	5,390.03	5,076.80	313.23	17.208		
11,200.00	7,117.45	7,064.45	7,117.45	124.97	244.90	-90.34	-2,933.21	-8,963.23	5,304.39	4,988.97	315.42	16.817		
11,300.00	7,117.08	7,064.08	7,117.08	127.73	244.88	-90.34	-2,933.21	-8,963.23	5,219.26	4,901.57	317.69	16.429		
11,400.00	7,116.72	7,063.72	7,116.72	130.50	244.87	-90.33	-2,933.21	-8,963.23	5,134.66	4,814.62	320.05	16.043		
11,500.00	7,116.35	7,063.35	7,116.35	133.27	244.86	-90.32	-2,933.21	-8,963.23	5,050.63	4,728.14	322.49	15.661		
11,600.00	7,115.98	7,062.98	7,115.98	136.04	244.85	-90.31	-2,933.21	-8,963.23	4,967.19	4,642.16	325.03	15.282		
11,700.00	7,115.62	7,062.62	7,115.62	138.82	244.83	-90.31	-2,933.21	-8,963.23	4,884.38	4,556.72	327.66	14.907		
11,800.00	7,115.25	7,062.25	7,115.25	141.60	244.82	-90.30	-2,933.21	-8,963.23	4,802.21	4,471.83	330.38	14.535		
11,900.00	7,114.88	7,061.88	7,114.88	144.39	244.81	-90.29	-2,933.21	-8,963.23	4,720.74	4,387.53	333.21	14.168		
12,000.00	7,114.52	7,061.52	7,114.52	147.17	244.79	-90.28	-2,933.21	-8,963.23	4,639.99	4,303.86	336.13	13.804		
12,100.00	7,114.15	7,061.15	7,114.15	149.96	244.78	-90.28	-2,933.21	-8,963.23	4,560.00	4,220.85	339.15	13.445		
12,200.00	7,113.79	7,060.79	7,113.79	152.75	244.77	-90.27	-2,933.21	-8,963.23	4,480.82	4,138.53	342.28	13.091		
12,300.00	7,113.42	7,060.42	7,113.42	155.55	244.76	-90.26	-2,933.21	-8,963.23	4,402.48	4,056.96	345.52	12.742		
12,400.00	7,113.05	7,060.05	7,113.05	158.34	244.74	-90.25	-2,933.21	-8,963.23	4,325.04	3,976.17	348.87	12.397		
12,500.00	7,112.69	7,059.69	7,112.69	161.14	244.73	-90.25	-2,933.21	-8,963.23	4,248.54	3,896.21	352.33	12.059		
12,600.00	7,112.32	7,059.32	7,112.32	163.94	244.72	-90.24	-2,933.21	-8,963.23	4,173.03	3,817.14	355.90	11.725		
12,700.00	7,111.96	7,058.96	7,111.96	166.74	244.71	-90.23	-2,933.21	-8,963.23	4,098.58	3,738.99	359.59	11.398		
12,800.00	7,111.59	7,058.59	7,111.59	169.54	244.69	-90.22	-2,933.21	-8,963.23	4,025.23	3,661.84	363.39	11.077		
12,900.00	7,111.22	7,058.22	7,111.22	172.35	244.68	-90.22	-2,933.21	-8,963.23	3,953.04	3,585.73	367.31	10.762		
13,000.00	7,110.86	7,057.86	7,110.86	175.16	244.67	-90.21	-2,933.21	-8,963.23	3,882.10	3,510.75	371.35	10.454		
13,100.00	7,110.49	7,057.49	7,110.49	177.96	244.65	-90.20	-2,933.21	-8,963.23	3,812.45	3,436.95	375.50	10.153		
13,200.00	7,110.12	7,057.12	7,110.12	180.77	244.64	-90.19	-2,933.21	-8,963.23	3,744.18	3,364.41	379.78	9.859		
13,300.00	7,109.76	7,056.76	7,109.76	183.58	244.63	-90.18	-2,933.21	-8,963.23	3,677.37	3,293.20	384.16	9.572		
13,400.00	7,109.39	7,056.39	7,109.39	186.40	244.62	-90.18	-2,933.21	-8,963.23	3,612.08	3,223.42	388.66	9.294		
13,500.00	7,109.03	7,056.03	7,109.03	189.21	244.60	-90.17	-2,933.21	-8,963.23	3,548.42	3,155.15	393.27	9.023		
13,600.00	7,108.66	7,055.66	7,108.66	192.03	244.59	-90.16	-2,933.21	-8,963.23	3,486.46	3,088.47	397.98	8.760		
13,700.00	7,108.29	7,055.29	7,108.29	194.84	244.58	-90.15	-2,933.21	-8,963.23	3,426.29	3,023.50	402.79	8.506		
13,800.00	7,107.93	7,054.93	7,107.93	197.66	244.56	-90.15	-2,933.21	-8,963.23	3,368.03	2,960.33	407.70	8.261		
13,900.00	7,107.56	7,054.56	7,107.56	200.48	244.55	-90.14	-2,933.21	-8,963.23	3,311.76	2,899.08	412.68	8.025		
14,000.00	7,107.19	7,054.19	7,107.19	203.30	244.54	-90.13	-2,933.21	-8,963.23	3,257.58	2,839.85	417.73	7.798		
14,100.00	7,106.83	7,053.83	7,106.83	206.12	244.53	-90.12	-2,933.21	-8,963.23	3,205.61	2,782.77	422.84	7.581		
14,200.00	7,106.46	7,053.46	7,106.46	208.94	244.51	-90.12	-2,933.21	-8,963.23	3,155.96	2,727.96	428.00	7.374		
14,300.00	7,106.10	7,053.10	7,106.10	211.76	244.50	-90.11	-2,933.21	-8,963.23	3,108.73	2,675.55	433.18	7.177		
14,400.00	7,105.73	7,052.73	7,105.73	214.58	244.49	-90.10	-2,933.21	-8,963.23	3,064.03	2,625.67	438.37	6.990		
14,500.00	7,105.36	7,052.36	7,105.36	217.40	244.48	-90.09	-2,933.21	-8,963.23	3,021.99	2,578.44	443.55	6.813		
14,600.00	7,105.00	7,052.00	7,105.00	220.23	244.46	-90.09	-2,933.21	-8,963.23	2,982.70	2,534.01	448.69	6.648		
14,700.00	7,104.63	7,051.63	7,104.63	223.05	244.45	-90.08	-2,933.21	-8,963.23	2,946.29	2,492.52	453.78	6.493		
14,800.00	7,104.27	7,051.27	7,104.27	225.88	244.44	-90.07	-2,933.21	-8,963.23	2,912.86	2,454.08	458.78	6.349		
14,872.41	7,104.00	7,051.00	7,104.00	227.93	244.43	-90.07	-2,933.21	-8,963.23	2,890.57	2,428.24	462.33	6.252 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	36.00	3.28	3.28	-107.87	-2,900.06	-8,995.48	9,451.47					
100.00	100.00	28.64	64.64	3.28	3.28	-107.87	-2,900.12	-8,995.52	9,451.52	9,444.96	6.57	1,439.621		
200.00	200.00	73.39	109.39	3.34	3.28	-107.87	-2,900.46	-8,995.72	9,452.19	9,445.57	6.62	1,427.693		
300.00	300.00	121.00	156.99	3.44	3.29	-107.87	-2,901.14	-8,996.14	9,453.44	9,446.71	6.73	1,403.810		
400.00	400.00	163.46	199.44	3.60	3.31	-107.88	-2,901.88	-8,996.73	9,455.27	9,448.36	6.91	1,367.941		
500.00	500.00	208.00	243.97	3.81	3.34	-107.88	-2,902.59	-8,997.62	9,457.68	9,450.54	7.15	1,323.472		
600.00	599.98	208.00	243.97	4.04	3.34	-17.87	-2,902.59	-8,997.62	9,459.39	9,452.01	7.38	1,281.574		
700.00	699.95	256.55	292.48	4.30	3.39	-17.87	-2,903.20	-8,999.21	9,460.79	9,453.10	7.69	1,230.430		
800.00	799.92	300.00	335.88	4.59	3.44	-17.87	-2,903.49	-9,001.41	9,463.20	9,455.17	8.03	1,178.405		
900.00	899.89	300.00	335.88	4.90	3.44	-17.87	-2,903.49	-9,001.41	9,466.26	9,457.91	8.34	1,134.365		
1,000.00	999.86	300.00	335.88	5.23	3.44	-17.87	-2,903.49	-9,001.41	9,470.37	9,461.69	8.68	1,091.275		
1,100.00	1,099.83	355.45	391.19	5.58	3.52	-17.87	-2,903.40	-9,005.30	9,474.89	9,465.79	9.10	1,040.929		
1,200.00	1,199.80	391.00	426.60	5.94	3.59	-17.86	-2,903.02	-9,008.42	9,480.41	9,470.89	9.52	996.003		
1,300.00	1,299.77	391.00	426.60	6.30	3.59	-17.86	-2,903.02	-9,008.42	9,486.72	9,476.83	9.89	959.400		
1,400.00	1,399.73	432.37	467.75	6.68	3.67	-17.85	-2,902.23	-9,012.67	9,493.73	9,483.39	10.34	918.145		
1,500.00	1,499.70	481.00	516.00	7.07	3.78	-17.83	-2,900.80	-9,018.50	9,501.67	9,490.85	10.82	878.086		
1,600.00	1,599.67	481.00	516.00	7.46	3.78	-17.83	-2,900.80	-9,018.50	9,510.18	9,498.97	11.21	848.375		
1,700.00	1,699.64	512.29	546.99	7.85	3.86	-17.82	-2,899.64	-9,022.71	9,519.54	9,507.87	11.67	815.518		
1,800.00	1,799.61	540.09	574.47	8.25	3.93	-17.81	-2,898.51	-9,026.70	9,529.66	9,517.53	12.13	785.321		
1,900.00	1,899.58	572.00	605.97	8.66	4.02	-17.79	-2,897.10	-9,031.60	9,540.53	9,527.92	12.61	756.458		
2,000.00	1,999.55	572.00	605.97	9.06	4.02	-17.79	-2,897.10	-9,031.60	9,552.25	9,539.23	13.01	734.072		
2,100.00	2,099.52	572.00	605.97	9.47	4.02	-17.79	-2,897.10	-9,031.60	9,564.99	9,551.58	13.41	713.026		
2,200.00	2,199.48	636.03	668.99	9.89	4.24	-17.76	-2,894.02	-9,042.53	9,577.82	9,563.83	14.00	684.373		
2,300.00	2,299.45	693.00	724.80	10.30	4.44	-17.72	-2,891.11	-9,053.57	9,592.12	9,577.55	14.57	658.404		
2,400.00	2,399.42	693.00	724.80	10.72	4.44	-17.72	-2,891.11	-9,053.57	9,606.70	9,591.73	14.97	641.664		
2,500.00	2,499.39	693.00	724.80	11.14	4.44	-17.72	-2,891.11	-9,053.57	9,622.29	9,606.91	15.37	625.880		
2,600.00	2,599.36	729.40	760.35	11.56	4.59	-17.70	-2,889.29	-9,061.19	9,638.62	9,622.73	15.89	606.396		
2,700.00	2,699.33	761.00	791.15	11.98	4.72	-17.68	-2,887.87	-9,068.09	9,655.75	9,639.34	16.40	588.665		
2,800.00	2,799.30	789.59	818.97	12.41	4.85	-17.66	-2,886.53	-9,074.56	9,673.56	9,656.65	16.91	572.030		
2,900.00	2,899.27	827.97	856.22	12.83	5.03	-17.64	-2,884.37	-9,083.56	9,692.01	9,674.55	17.45	555.389		
3,000.00	2,999.23	855.00	882.38	13.26	5.16	-17.62	-2,882.60	-9,090.11	9,711.07	9,693.13	17.95	541.141		
3,100.00	3,099.20	855.00	882.38	13.68	5.16	-17.62	-2,882.60	-9,090.11	9,731.04	9,712.70	18.34	530.582		
3,200.00	3,199.17	908.72	934.18	14.11	5.45	-17.57	-2,878.79	-9,103.81	9,751.37	9,732.42	18.95	514.584		
3,300.00	3,299.14	949.00	972.84	14.54	5.67	-17.54	-2,875.84	-9,114.72	9,772.71	9,753.19	19.52	500.738		
3,400.00	3,399.11	964.20	987.40	14.97	5.77	-17.52	-2,874.69	-9,118.95	9,794.66	9,774.69	19.97	490.389		
3,500.00	3,499.08	1,021.00	1,041.64	15.40	6.11	-17.47	-2,869.84	-9,135.07	9,817.17	9,796.55	20.62	476.046		
3,600.00	3,599.05	1,044.00	1,063.55	15.83	6.25	-17.44	-2,867.64	-9,141.73	9,840.19	9,819.08	21.12	466.001		
3,700.00	3,699.02	1,084.35	1,101.86	16.26	6.53	-17.40	-2,863.59	-9,153.73	9,863.82	9,842.12	21.70	454.549		
3,800.00	3,798.98	1,139.00	1,153.47	16.69	6.90	-17.34	-2,857.90	-9,170.75	9,888.36	9,866.00	22.36	442.191		
3,900.00	3,898.95	1,139.00	1,153.47	17.12	6.90	-17.34	-2,857.90	-9,170.75	9,913.28	9,890.55	22.74	435.973		
4,000.00	3,998.92	1,139.00	1,153.47	17.55	6.90	-17.34	-2,857.90	-9,170.75	9,939.15	9,916.04	23.11	430.058		
4,100.00	4,098.89	1,188.62	1,200.03	17.98	7.27	-17.28	-2,852.33	-9,187.00	9,965.52	9,941.77	23.76	419.464		
4,200.00	4,198.86	1,234.00	1,242.31	18.42	7.62	-17.23	-2,846.74	-9,202.50	9,992.72	9,968.34	24.38	409.804		
8,000.00	7,129.17	3,887.00	3,653.90	43.27	35.07	-34.10	-2,528.65	-10,260.12	9,941.66	9,885.99	55.67	178.579		
8,100.00	7,128.80	3,918.35	3,682.57	45.27	35.40	-34.28	-2,524.85	-10,272.21	9,850.76	9,794.60	56.17	175.383		
8,200.00	7,128.43	3,931.49	3,694.57	47.36	35.54	-34.35	-2,523.27	-10,277.33	9,760.05	9,703.50	56.55	172.599		
8,300.00	7,128.07	3,944.79	3,706.71	49.52	35.68	-34.43	-2,521.68	-10,282.54	9,669.46	9,612.51	56.95	169.776		
8,400.00	7,127.70	3,982.00	3,740.58	51.75	36.07	-34.65	-2,517.29	-10,297.28	9,579.09	9,521.52	57.57	166.401		
8,500.00	7,127.33	3,982.00	3,740.58	54.04	36.07	-34.65	-2,517.29	-10,297.28	9,488.70	9,430.78	57.92	163.817		
8,600.00	7,126.97	3,982.00	3,740.58	56.38	36.07	-34.65	-2,517.29	-10,297.28	9,398.51	9,340.20	58.31	161.193		
8,700.00	7,126.60	7,259.26	6,880.06	58.77	57.52	-84.24	-2,327.34	-11,005.24	9,306.03	9,231.77	74.26	125.312		
8,800.00	7,126.24	7,260.09	6,880.89	61.19	57.52	-84.26	-2,327.36	-11,005.26	9,208.71	9,134.09	74.62	123.416		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
8,900.00	7,125.87	7,260.92	6,881.72	63.65	57.52	-84.28	-2,327.37	-11,005.27	9,111.44	9,036.44	74.99	121.500		
9,000.00	7,125.50	7,261.77	6,882.56	66.15	57.52	-84.31	-2,327.39	-11,005.29	9,014.22	8,938.83	75.39	119.564		
9,100.00	7,125.14	7,262.62	6,883.41	68.67	57.53	-84.33	-2,327.41	-11,005.31	8,917.08	8,841.26	75.82	117.611		
9,200.00	7,124.77	7,263.48	6,884.27	71.21	57.53	-84.35	-2,327.43	-11,005.33	8,819.99	8,743.72	76.27	115.641		
9,300.00	7,124.41	7,264.35	6,885.14	73.78	57.53	-84.38	-2,327.45	-11,005.35	8,722.97	8,646.22	76.75	113.655		
9,400.00	7,124.04	7,265.22	6,886.02	76.37	57.53	-84.40	-2,327.47	-11,005.37	8,626.02	8,548.76	77.26	111.655		
9,500.00	7,123.67	7,266.11	6,886.90	78.98	57.54	-84.42	-2,327.49	-11,005.39	8,529.13	8,451.34	77.79	109.641		
9,600.00	7,123.31	7,267.01	6,887.80	81.60	57.54	-84.45	-2,327.51	-11,005.41	8,432.33	8,353.97	78.36	107.616		
9,700.00	7,122.94	7,267.91	6,888.70	84.24	57.54	-84.47	-2,327.53	-11,005.43	8,335.59	8,256.64	78.95	105.581		
9,800.00	7,122.57	7,268.83	6,889.62	86.90	57.54	-84.50	-2,327.55	-11,005.45	8,238.93	8,159.36	79.58	103.536		
9,900.00	7,122.21	7,269.75	6,890.55	89.56	57.54	-84.52	-2,327.57	-11,005.47	8,142.36	8,062.13	80.23	101.484		
10,000.00	7,121.84	7,270.69	6,891.48	92.24	57.55	-84.55	-2,327.59	-11,005.49	8,045.87	7,964.94	80.92	99.426		
10,100.00	7,121.48	7,271.63	6,892.42	94.92	57.55	-84.57	-2,327.62	-11,005.52	7,949.46	7,867.81	81.65	97.364		
10,200.00	7,121.11	7,272.59	6,893.38	97.62	57.55	-84.60	-2,327.64	-11,005.54	7,853.14	7,770.74	82.41	95.299		
10,300.00	7,120.74	7,273.56	6,894.35	100.32	57.55	-84.62	-2,327.66	-11,005.56	7,756.92	7,673.72	83.20	93.233		
10,400.00	7,120.38	7,274.53	6,895.32	103.04	57.56	-84.65	-2,327.68	-11,005.58	7,660.79	7,576.76	84.03	91.167		
10,500.00	7,120.01	7,275.52	6,896.31	105.76	57.56	-84.68	-2,327.71	-11,005.61	7,564.76	7,479.87	84.90	89.104		
10,600.00	7,119.64	7,276.52	6,897.31	108.48	57.56	-84.70	-2,327.73	-11,005.63	7,468.84	7,383.04	85.80	87.045		
10,700.00	7,119.28	7,277.53	6,898.32	111.22	57.56	-84.73	-2,327.75	-11,005.65	7,373.03	7,286.28	86.75	84.990		
10,800.00	7,118.91	7,278.55	6,899.34	113.96	57.57	-84.76	-2,327.78	-11,005.68	7,277.32	7,189.59	87.74	82.943		
10,900.00	7,118.55	7,279.59	6,900.37	116.70	57.57	-84.79	-2,327.80	-11,005.70	7,181.74	7,092.97	88.77	80.904		
11,000.00	7,118.18	7,280.63	6,901.42	119.45	57.57	-84.81	-2,327.83	-11,005.73	7,086.27	6,996.43	89.84	78.876		
11,100.00	7,117.81	7,281.69	6,902.47	122.21	57.57	-84.84	-2,327.85	-11,005.75	6,990.94	6,899.98	90.96	76.859		
11,200.00	7,117.45	7,282.76	6,903.54	124.97	57.58	-84.87	-2,327.88	-11,005.78	6,895.73	6,803.61	92.12	74.855		
11,300.00	7,117.08	7,283.84	6,904.62	127.73	57.58	-84.90	-2,327.91	-11,005.81	6,800.66	6,707.33	93.33	72.865		
11,400.00	7,116.72	7,284.93	6,905.72	130.50	57.58	-84.93	-2,327.93	-11,005.83	6,705.74	6,611.14	94.59	70.891		
11,500.00	7,116.35	7,286.04	6,906.82	133.27	57.58	-84.96	-2,327.96	-11,005.86	6,610.96	6,515.06	95.90	68.935		
11,600.00	7,115.98	7,287.16	6,907.94	136.04	57.59	-84.99	-2,327.99	-11,005.89	6,516.34	6,419.07	97.26	66.997		
11,700.00	7,115.62	7,288.29	6,909.07	138.82	57.59	-85.02	-2,328.02	-11,005.92	6,421.88	6,323.20	98.68	65.078		
11,800.00	7,115.25	7,289.44	6,910.22	141.60	57.59	-85.05	-2,328.05	-11,005.95	6,327.59	6,227.44	100.15	63.181		
11,900.00	7,114.88	7,290.60	6,911.38	144.39	57.59	-85.08	-2,328.07	-11,005.98	6,233.48	6,131.80	101.68	61.305		
12,000.00	7,114.52	7,291.78	6,912.55	147.17	57.60	-85.11	-2,328.10	-11,006.01	6,139.56	6,036.29	103.27	59.453		
12,100.00	7,114.15	7,292.97	6,913.74	149.96	57.60	-85.15	-2,328.13	-11,006.04	6,045.83	5,940.91	104.92	57.625		
12,200.00	7,113.79	7,294.17	6,914.95	152.75	57.60	-85.18	-2,328.16	-11,006.07	5,952.30	5,845.67	106.63	55.822		
12,300.00	7,113.42	7,295.39	6,916.16	155.55	57.61	-85.21	-2,328.20	-11,006.10	5,858.99	5,750.58	108.41	54.045		
12,400.00	7,113.05	7,296.62	6,917.40	158.34	57.61	-85.24	-2,328.23	-11,006.13	5,765.90	5,655.64	110.26	52.295		
12,500.00	7,112.69	7,297.87	6,918.65	161.14	57.61	-85.28	-2,328.26	-11,006.16	5,673.04	5,560.87	112.18	50.572		
12,600.00	7,112.32	7,299.14	6,919.91	163.94	57.61	-85.31	-2,328.29	-11,006.20	5,580.43	5,466.26	114.17	48.878		
12,700.00	7,111.96	7,300.42	6,921.19	166.74	57.62	-85.35	-2,328.33	-11,006.23	5,488.08	5,371.84	116.24	47.213		
12,800.00	7,111.59	7,301.71	6,922.49	169.54	57.62	-85.38	-2,328.36	-11,006.26	5,396.01	5,277.62	118.39	45.578		
12,900.00	7,111.22	7,303.03	6,923.80	172.35	57.62	-85.42	-2,328.40	-11,006.30	5,304.22	5,183.59	120.62	43.974		
13,000.00	7,110.86	7,304.36	6,925.13	175.16	57.63	-85.45	-2,328.43	-11,006.33	5,212.73	5,089.78	122.94	42.400		
13,100.00	7,110.49	7,305.71	6,926.48	177.96	57.63	-85.49	-2,328.47	-11,006.37	5,121.55	4,996.20	125.35	40.858		
13,200.00	7,110.12	7,307.07	6,927.84	180.77	57.63	-85.53	-2,328.50	-11,006.41	5,030.72	4,902.86	127.85	39.348		
13,300.00	7,109.76	7,308.46	6,929.22	183.58	57.64	-85.56	-2,328.54	-11,006.45	4,940.23	4,809.78	130.45	37.870		
13,400.00	7,109.39	7,309.86	6,930.62	186.40	57.64	-85.60	-2,328.58	-11,006.48	4,850.12	4,716.97	133.16	36.425		
13,500.00	7,109.03	7,311.28	6,932.04	189.21	57.64	-85.64	-2,328.62	-11,006.52	4,760.41	4,624.44	135.96	35.013		
13,600.00	7,108.66	7,312.72	6,933.48	192.03	57.65	-85.68	-2,328.66	-11,006.56	4,671.11	4,532.22	138.88	33.634		
13,700.00	7,108.29	7,314.18	6,934.94	194.84	57.65	-85.72	-2,328.70	-11,006.60	4,582.25	4,440.33	141.91	32.289		
13,800.00	7,107.93	7,315.66	6,936.42	197.66	57.65	-85.76	-2,328.74	-11,006.64	4,493.86	4,348.79	145.07	30.978		
13,900.00	7,107.56	7,317.15	6,937.92	200.48	57.66	-85.80	-2,328.78	-11,006.69	4,405.96	4,257.61	148.35	29.700		
14,000.00	7,107.19	7,318.67	6,939.43	203.30	57.66	-85.84	-2,328.82	-11,006.73	4,318.59	4,166.84	151.76	28.457		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
14,100.00	7,106.83	7,320.22	6,940.97	206.12	57.67	-85.88	-2,328.87	-11,006.77	4,231.78	4,076.48	155.30	27.249	
14,200.00	7,106.46	7,321.78	6,942.53	208.94	57.67	-85.92	-2,328.91	-11,006.82	4,145.56	3,986.57	158.99	26.075	
14,300.00	7,106.10	7,323.36	6,944.12	211.76	57.67	-85.96	-2,328.96	-11,006.86	4,059.98	3,897.15	162.82	24.935	
14,400.00	7,105.73	7,324.97	6,945.72	214.58	57.68	-86.01	-2,329.00	-11,006.91	3,975.06	3,808.25	166.81	23.830	
14,500.00	7,105.36	7,326.60	6,947.35	217.40	57.68	-86.05	-2,329.05	-11,006.96	3,890.86	3,719.90	170.96	22.759	
14,600.00	7,105.00	7,328.25	6,949.00	220.23	57.68	-86.10	-2,329.10	-11,007.01	3,807.43	3,632.15	175.27	21.723	
14,700.00	7,104.63	7,329.93	6,950.68	223.05	57.69	-86.14	-2,329.15	-11,007.06	3,724.81	3,545.05	179.76	20.721	
14,800.00	7,104.27	7,331.63	6,952.38	225.88	57.69	-86.19	-2,329.20	-11,007.11	3,643.06	3,458.64	184.42	19.754	
14,872.41	7,104.00	7,332.88	6,953.63	227.93	57.70	-86.22	-2,329.24	-11,007.15	3,584.44	3,396.53	187.91	19.075 CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-32-12(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 120-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	36.00	3.28	3.28	-107.88	-2,890.96	-8,962.93	9,417.70					
100.00	100.00	0.00	36.00	3.28	3.28	-107.88	-2,890.96	-8,962.93	9,417.85	9,411.29	6.56	1,434.578		
200.00	200.00	56.88	92.88	3.34	3.28	-107.88	-2,891.32	-8,963.16	9,418.57	9,411.95	6.62	1,422.813		
300.00	300.00	577.00	612.23	3.44	3.96	-107.80	-2,876.76	-8,962.02	9,417.59	9,410.18	7.42	1,269.989		
400.00	400.00	577.00	612.23	3.60	3.96	-107.80	-2,876.76	-8,962.02	9,414.81	9,407.24	7.57	1,244.210		
500.00	500.00	637.18	671.93	3.81	4.12	-107.75	-2,869.19	-8,962.91	9,412.53	9,404.59	7.93	1,186.871		
600.00	599.98	683.34	717.62	4.04	4.26	-17.72	-2,862.78	-8,964.29	9,409.52	9,401.22	8.30	1,133.921		
700.00	699.95	881.91	913.40	4.30	4.96	-17.53	-2,830.39	-8,971.06	9,405.48	9,396.21	9.26	1,015.170		
800.00	799.92	994.34	1,023.57	4.59	5.44	-17.40	-2,808.41	-8,975.23	9,400.71	9,390.68	10.03	937.210		
900.00	899.89	1,098.77	1,125.15	4.90	5.94	-17.26	-2,784.66	-8,980.12	9,395.97	9,385.13	10.84	866.709		
1,000.00	999.86	1,180.83	1,204.36	5.23	6.38	-17.13	-2,763.74	-8,984.64	9,391.25	9,379.64	11.60	809.319		
1,100.00	1,099.83	1,257.03	1,277.41	5.58	6.82	-17.00	-2,742.60	-8,989.60	9,386.86	9,374.47	12.38	757.971		
1,200.00	1,199.80	1,348.96	1,364.70	5.94	7.39	-16.83	-2,714.60	-8,996.43	9,382.63	9,369.31	13.31	704.699		
1,300.00	1,299.77	1,417.00	1,428.69	6.30	7.85	-16.69	-2,692.20	-9,002.06	9,378.61	9,364.47	14.14	663.472		
1,400.00	1,399.73	1,458.09	1,467.12	6.68	8.14	-16.61	-2,678.15	-9,005.80	9,375.13	9,360.32	14.80	633.252		
1,500.00	1,499.70	1,512.00	1,517.35	7.07	8.53	-16.49	-2,659.36	-9,011.30	9,372.43	9,356.85	15.58	601.695		
1,600.00	1,599.67	1,542.35	1,545.55	7.46	8.76	-16.42	-2,648.62	-9,014.62	9,370.31	9,354.12	16.20	578.572		
1,700.00	1,699.64	1,607.00	1,605.40	7.85	9.25	-16.28	-2,625.32	-9,021.93	9,368.69	9,351.60	17.08	548.383		
1,800.00	1,799.61	1,660.62	1,654.82	8.25	9.68	-16.15	-2,605.51	-9,028.33	9,367.55	9,349.63	17.91	522.938		
1,900.00	1,899.58	1,701.00	1,691.87	8.66	10.01	-16.05	-2,590.27	-9,033.41	9,366.99	9,348.35	18.64	502.490		
1,948.19	1,947.75	1,734.77	1,722.73	8.85	10.29	-15.97	-2,577.31	-9,037.84	9,366.91	9,347.79	19.12	489.830		
2,000.00	1,999.55	1,760.42	1,746.10	9.06	10.51	-15.91	-2,567.33	-9,041.31	9,366.99	9,347.44	19.55	479.100		
2,100.00	2,099.52	2,100.00	1,835.62	9.47	13.55	-15.65	-2,527.67	-9,055.14	9,367.39	9,344.39	23.00	407.300		
2,200.00	2,199.48	1,982.29	1,946.33	9.89	12.50	-15.33	-2,476.92	-9,072.25	9,367.61	9,345.24	22.37	418.814		
2,300.00	2,299.45	2,032.21	1,991.08	10.30	12.97	-15.20	-2,455.96	-9,079.35	9,368.18	9,344.94	23.25	402.964		
2,400.00	2,399.42	2,085.00	2,038.37	10.72	13.47	-15.06	-2,433.83	-9,087.12	9,369.38	9,345.22	24.16	387.800		
2,500.00	2,499.39	2,207.42	2,147.90	11.14	14.65	-14.73	-2,382.20	-9,105.10	9,370.70	9,344.94	25.76	363.808		
2,600.00	2,599.36	2,274.00	2,207.37	11.56	15.30	-14.55	-2,353.92	-9,114.95	9,372.27	9,345.44	26.82	349.425		
2,700.00	2,699.33	2,325.15	2,253.05	11.98	15.81	-14.41	-2,332.24	-9,122.68	9,374.33	9,346.59	27.74	337.945		
2,800.00	2,799.30	2,369.00	2,292.24	12.41	16.24	-14.29	-2,313.76	-9,129.43	9,376.96	9,348.37	28.58	328.042		
2,900.00	2,899.27	2,416.02	2,334.29	12.83	16.70	-14.17	-2,294.09	-9,136.87	9,380.21	9,350.75	29.46	318.386		
3,000.00	2,999.23	2,464.00	2,377.22	13.26	17.18	-14.04	-2,274.16	-9,144.74	9,384.17	9,353.82	30.35	309.214		
3,100.00	3,099.20	2,542.84	2,447.81	13.68	17.96	-13.83	-2,241.58	-9,157.86	9,388.61	9,357.06	31.54	297.633		
3,200.00	3,199.17	2,610.44	2,508.41	14.11	18.63	-13.65	-2,213.82	-9,169.10	9,393.31	9,360.68	32.63	287.915		
3,300.00	3,299.14	2,853.72	2,725.98	14.54	21.08	-13.00	-2,112.45	-9,208.61	9,397.98	9,362.49	35.50	264.751		
3,400.00	3,399.11	2,909.81	2,775.58	14.97	21.67	-12.84	-2,087.81	-9,217.51	9,401.92	9,365.42	36.50	257.613		
3,500.00	3,499.08	2,975.67	2,833.91	15.40	22.35	-12.66	-2,059.14	-9,228.14	9,406.36	9,368.77	37.59	250.246		
3,600.00	3,599.05	3,190.07	3,025.87	15.83	24.53	-12.09	-1,969.41	-9,260.73	9,410.42	9,370.23	40.19	234.169		
3,700.00	3,699.02	3,247.66	3,077.12	16.26	25.12	-11.93	-1,944.57	-9,269.32	9,414.29	9,373.11	41.19	228.570		
3,800.00	3,798.98	3,293.91	3,118.43	16.69	25.60	-11.81	-1,925.00	-9,276.37	9,418.77	9,376.70	42.07	223.878		
3,900.00	3,898.95	3,427.26	3,238.21	17.12	26.94	-11.46	-1,869.97	-9,296.48	9,423.49	9,379.66	43.83	215.010		
4,000.00	3,998.92	3,477.42	3,283.39	17.55	27.44	-11.33	-1,849.50	-9,303.99	9,428.34	9,383.60	44.74	210.752		
4,100.00	4,098.89	3,537.74	3,337.76	17.98	28.05	-11.17	-1,825.07	-9,313.23	9,433.75	9,388.00	45.75	206.218		
4,200.00	4,198.86	3,624.64	3,415.92	18.42	28.92	-10.95	-1,789.60	-9,326.79	9,439.55	9,392.52	47.03	200.733		
4,300.00	4,298.83	3,742.41	3,521.91	18.85	30.11	-10.64	-1,741.51	-9,344.81	9,445.26	9,396.64	48.61	194.289		
4,400.00	4,398.80	3,857.32	3,625.59	19.28	31.26	-10.35	-1,695.12	-9,362.18	9,451.09	9,400.92	50.17	188.382		
4,500.00	4,498.77	3,916.41	3,678.58	19.72	31.86	-10.19	-1,670.56	-9,371.13	9,457.00	9,405.82	51.18	184.790		
4,600.00	4,598.73	3,976.00	3,731.52	20.15	32.49	-10.03	-1,644.90	-9,380.65	9,463.59	9,411.39	52.20	181.307		
4,700.00	4,698.70	3,999.80	3,752.51	20.58	32.75	-9.97	-1,634.42	-9,384.61	9,470.76	9,417.91	52.85	179.203		
4,800.00	4,798.67	4,041.99	3,789.53	21.02	33.21	-9.85	-1,615.51	-9,391.81	9,478.63	9,424.93	53.70	176.506		
4,900.00	4,898.64	4,088.53	3,830.08	21.45	33.73	-9.71	-1,594.21	-9,400.04	9,487.15	9,432.54	54.61	173.740		
5,000.00	4,998.61	4,145.48	3,879.34	21.89	34.38	-9.54	-1,567.54	-9,410.38	9,496.22	9,440.58	55.64	170.677		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,098.58	4,190.44	3,917.97	22.32	34.90	-9.41	-1,546.11	-9,418.72	9,505.85	9,449.32	56.54	168.135		
5,200.00	5,198.55	4,229.27	3,951.25	22.76	35.35	-9.29	-1,527.54	-9,426.13	9,516.17	9,458.80	57.36	165.889		
5,300.00	5,298.52	4,604.39	4,281.79	23.20	39.42	-8.26	-1,363.49	-9,492.40	9,526.42	9,464.59	61.83	154.076		
5,400.00	5,398.49	4,749.16	4,413.86	23.63	40.82	-7.91	-1,308.46	-9,514.49	9,534.62	9,471.00	63.62	149.863		
5,500.00	5,498.45	5,476.83	5,101.70	24.07	46.59	-6.55	-1,088.28	-9,595.37	9,541.90	9,472.14	69.76	136.781		
5,600.00	5,598.42	5,631.42	5,252.63	24.50	47.50	-6.36	-1,056.31	-9,604.93	9,543.33	9,472.25	71.08	134.262		
5,700.00	5,698.39	5,981.69	5,599.21	24.94	49.09	-6.07	-1,008.50	-9,616.76	9,541.69	9,468.62	73.06	130.595		
5,800.00	5,798.36	6,087.56	5,704.80	25.38	49.44	-6.02	-1,001.05	-9,618.65	9,540.24	9,466.39	73.85	129.187		
5,900.00	5,898.33	6,202.74	5,819.79	25.81	49.80	-5.99	-994.67	-9,620.31	9,538.60	9,463.97	74.64	127.801		
6,000.00	5,998.30	6,362.05	5,978.95	26.25	50.26	-5.95	-987.85	-9,622.04	9,536.82	9,461.30	75.53	126.274		
6,100.00	6,098.27	6,438.01	6,054.85	26.69	50.48	-5.93	-985.16	-9,622.62	9,534.72	9,458.54	76.18	125.166		
6,200.00	6,198.24	6,512.38	6,129.19	27.12	50.68	-5.92	-982.94	-9,623.29	9,532.82	9,456.01	76.81	124.101		
6,300.00	6,298.20	6,586.12	6,202.90	27.56	50.87	-5.91	-981.15	-9,624.11	9,531.20	9,453.75	77.45	123.061		
6,400.00	6,398.17	6,669.49	6,286.25	28.00	51.09	-5.90	-979.60	-9,625.22	9,529.83	9,451.72	78.11	122.012		
6,500.00	6,498.14	6,768.70	6,385.44	28.43	51.34	-5.89	-978.22	-9,626.53	9,528.52	9,449.73	78.79	120.933		
6,600.00	6,597.68	6,866.35	6,483.08	28.88	51.58	-5.00	-977.29	-9,627.80	9,521.20	9,441.73	79.47	119.804		
6,700.00	6,694.68	6,960.39	6,577.11	29.32	51.81	-5.10	-976.64	-9,629.02	9,498.58	9,418.44	80.14	118.529		
6,800.00	6,786.74	7,051.24	6,667.95	29.77	52.03	-5.42	-976.18	-9,630.21	9,461.10	9,380.33	80.77	117.136		
6,900.00	6,871.61	7,136.78	6,753.49	30.24	52.24	-5.97	-975.77	-9,631.33	9,409.66	9,328.31	81.35	115.667		
7,000.00	6,947.19	7,213.21	6,829.90	30.74	52.43	-6.84	-975.41	-9,632.33	9,345.53	9,263.67	81.86	114.164		
7,100.00	7,011.62	7,278.62	6,895.31	31.32	52.60	-8.24	-975.09	-9,633.19	9,270.28	9,187.99	82.29	112.655		
7,200.00	7,063.31	7,331.42	6,948.11	32.03	52.73	-10.65	-974.84	-9,633.88	9,185.76	9,103.14	82.62	111.177		
7,300.00	7,101.00	7,370.31	6,986.99	32.89	52.83	-15.47	-974.65	-9,634.39	9,094.07	9,011.21	82.86	109.749		
7,400.00	7,123.74	7,396.20	7,012.88	33.93	52.89	-28.42	-974.53	-9,634.73	8,997.47	8,914.45	83.01	108.384		
7,500.00	7,131.00	7,407.70	7,024.38	35.10	52.92	-84.63	-974.48	-9,634.88	8,898.32	8,815.23	83.09	107.093		
7,600.00	7,130.63	7,408.88	7,025.56	36.44	52.92	-84.72	-974.47	-9,634.90	8,798.72	8,715.59	83.12	105.852		
7,700.00	7,130.26	7,410.06	7,026.73	37.94	52.93	-84.80	-974.47	-9,634.91	8,699.13	8,615.97	83.16	104.607		
7,800.00	7,129.90	7,411.22	7,027.90	39.59	52.93	-84.88	-974.46	-9,634.92	8,599.55	8,516.35	83.20	103.358		
7,900.00	7,129.53	7,412.38	7,029.05	41.37	52.93	-84.97	-974.45	-9,634.94	8,499.98	8,416.73	83.25	102.105		
8,000.00	7,129.17	7,413.52	7,030.20	43.27	52.93	-85.05	-974.45	-9,634.95	8,400.42	8,317.12	83.30	100.848		
8,100.00	7,128.80	7,414.66	7,031.34	45.27	52.94	-85.13	-974.44	-9,634.97	8,300.87	8,217.52	83.35	99.587		
8,200.00	7,128.43	7,415.79	7,032.47	47.36	52.94	-85.21	-974.44	-9,634.98	8,201.33	8,117.92	83.41	98.322		
8,300.00	7,128.07	7,416.91	7,033.59	49.52	52.94	-85.29	-974.43	-9,634.99	8,101.80	8,018.33	83.48	97.053		
8,400.00	7,127.70	7,418.02	7,034.70	51.75	52.95	-85.37	-974.43	-9,635.01	8,002.29	7,918.74	83.55	95.779		
8,500.00	7,127.33	7,419.13	7,035.80	54.04	52.95	-85.45	-974.42	-9,635.02	7,902.79	7,819.16	83.63	94.502		
8,600.00	7,126.97	7,420.22	7,036.90	56.38	52.95	-85.53	-974.42	-9,635.04	7,803.29	7,719.59	83.71	93.220		
8,700.00	7,126.60	7,421.31	7,037.98	58.77	52.95	-85.61	-974.41	-9,635.05	7,703.82	7,620.02	83.80	91.934		
8,800.00	7,126.24	7,422.39	7,039.06	61.19	52.96	-85.69	-974.41	-9,635.06	7,604.35	7,520.46	83.89	90.644		
8,900.00	7,125.87	7,423.46	7,040.13	63.65	52.96	-85.77	-974.40	-9,635.07	7,504.90	7,420.91	83.99	89.350		
9,000.00	7,125.50	7,424.52	7,041.19	66.15	52.96	-85.84	-974.40	-9,635.09	7,405.47	7,321.36	84.10	88.051		
9,100.00	7,125.14	7,425.57	7,042.25	68.67	52.97	-85.92	-974.39	-9,635.10	7,306.05	7,221.83	84.22	86.748		
9,200.00	7,124.77	7,426.62	7,043.30	71.21	52.97	-85.99	-974.39	-9,635.11	7,206.64	7,122.30	84.35	85.441		
9,300.00	7,124.41	7,427.66	7,044.33	73.78	52.97	-86.07	-974.38	-9,635.13	7,107.26	7,022.78	84.48	84.129		
9,400.00	7,124.04	7,428.69	7,045.37	76.37	52.97	-86.14	-974.38	-9,635.14	7,007.89	6,923.26	84.62	82.813		
9,500.00	7,123.67	7,429.71	7,046.39	78.98	52.98	-86.22	-974.37	-9,635.15	6,908.53	6,823.76	84.78	81.492		
9,600.00	7,123.31	7,430.73	7,047.41	81.60	52.98	-86.29	-974.37	-9,635.16	6,809.20	6,724.26	84.94	80.167		
9,700.00	7,122.94	7,431.74	7,048.41	84.24	52.98	-86.36	-974.36	-9,635.17	6,709.89	6,624.78	85.11	78.838		
9,800.00	7,122.57	7,432.74	7,049.42	86.90	52.98	-86.44	-974.36	-9,635.19	6,610.59	6,525.30	85.29	77.504		
9,900.00	7,122.21	7,433.74	7,050.41	89.56	52.99	-86.51	-974.35	-9,635.20	6,511.32	6,425.83	85.49	76.165		
10,000.00	7,121.84	7,434.72	7,051.40	92.24	52.99	-86.58	-974.35	-9,635.21	6,412.07	6,326.38	85.70	74.822		
10,100.00	7,121.48	7,435.70	7,052.38	94.92	52.99	-86.65	-974.34	-9,635.22	6,312.85	6,226.93	85.92	73.475		
10,200.00	7,121.11	7,436.68	7,053.35	97.62	52.99	-86.72	-974.34	-9,635.23	6,213.65	6,127.49	86.15	72.123		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.74	7,437.64	7,054.32	100.32	53.00	-86.79	-974.34	-9,635.24	6,114.47	6,028.07	86.40	70.767		
10,400.00	7,120.38	7,438.60	7,055.27	103.04	53.00	-86.86	-974.33	-9,635.25	6,015.32	5,928.66	86.67	69.406		
10,500.00	7,120.01	7,439.55	7,056.23	105.76	53.00	-86.93	-974.33	-9,635.27	5,916.21	5,829.26	86.95	68.041		
10,600.00	7,119.64	7,440.50	7,057.17	108.48	53.00	-87.00	-974.32	-9,635.28	5,817.12	5,729.87	87.25	66.672		
10,700.00	7,119.28	7,441.44	7,058.11	111.22	53.01	-87.07	-974.32	-9,635.29	5,718.06	5,630.49	87.57	65.299		
10,800.00	7,118.91	7,442.37	7,059.04	113.96	53.01	-87.13	-974.31	-9,635.30	5,619.04	5,531.13	87.91	63.921		
10,900.00	7,118.55	7,443.30	7,059.97	116.70	53.01	-87.20	-974.31	-9,635.31	5,520.05	5,431.78	88.26	62.540		
11,000.00	7,118.18	7,444.22	7,060.89	119.45	53.01	-87.27	-974.30	-9,635.32	5,421.09	5,332.45	88.65	61.154		
11,100.00	7,117.81	7,445.13	7,061.80	122.21	53.01	-87.33	-974.30	-9,635.33	5,322.18	5,233.13	89.05	59.766		
11,200.00	7,117.45	7,446.03	7,062.71	124.97	53.02	-87.40	-974.30	-9,635.34	5,223.31	5,133.83	89.48	58.373		
11,300.00	7,117.08	7,446.94	7,063.61	127.73	53.02	-87.46	-974.29	-9,635.35	5,124.48	5,034.54	89.94	56.977		
11,400.00	7,116.72	7,447.83	7,064.50	130.50	53.02	-87.53	-974.29	-9,635.36	5,025.70	4,935.27	90.43	55.579		
11,500.00	7,116.35	7,448.72	7,065.39	133.27	53.02	-87.59	-974.28	-9,635.37	4,926.97	4,836.02	90.94	54.177		
11,600.00	7,115.98	7,449.60	7,066.27	136.04	53.03	-87.66	-974.28	-9,635.38	4,828.28	4,736.79	91.49	52.773		
11,700.00	7,115.62	7,450.48	7,067.15	138.82	53.03	-87.72	-974.28	-9,635.39	4,729.66	4,637.58	92.08	51.367		
11,800.00	7,115.25	7,451.35	7,068.02	141.60	53.03	-87.78	-974.27	-9,635.40	4,631.09	4,538.39	92.70	49.958		
11,900.00	7,114.88	7,452.21	7,068.88	144.39	53.03	-87.85	-974.27	-9,635.41	4,532.59	4,439.23	93.36	48.549		
12,000.00	7,114.52	7,453.07	7,069.74	147.17	53.03	-87.91	-974.26	-9,635.42	4,434.15	4,340.08	94.07	47.138		
12,100.00	7,114.15	7,453.92	7,070.60	149.96	53.04	-87.97	-974.26	-9,635.43	4,335.78	4,240.97	94.82	45.728		
12,200.00	7,113.79	7,454.77	7,071.44	152.75	53.04	-88.03	-974.26	-9,635.44	4,237.49	4,141.88	95.62	44.317		
12,300.00	7,113.42	7,455.61	7,072.28	155.55	53.04	-88.09	-974.25	-9,635.45	4,139.29	4,042.81	96.47	42.907		
12,400.00	7,113.05	7,456.45	7,073.12	158.34	53.04	-88.15	-974.25	-9,635.46	4,041.17	3,943.78	97.38	41.498		
12,500.00	7,112.69	7,457.28	7,073.95	161.14	53.05	-88.21	-974.24	-9,635.47	3,943.14	3,844.79	98.35	40.091		
12,600.00	7,112.32	7,458.10	7,074.77	163.94	53.05	-88.27	-974.24	-9,635.48	3,845.22	3,745.82	99.39	38.687		
12,700.00	7,111.96	7,458.92	7,075.59	166.74	53.05	-88.33	-974.24	-9,635.49	3,747.40	3,646.90	100.50	37.287		
12,800.00	7,111.59	7,459.74	7,076.41	169.54	53.05	-88.39	-974.23	-9,635.49	3,649.70	3,548.02	101.69	35.892		
12,900.00	7,111.22	7,460.54	7,077.22	172.35	53.05	-88.45	-974.23	-9,635.50	3,552.14	3,449.18	102.96	34.502		
13,000.00	7,110.86	7,461.35	7,078.02	175.16	53.06	-88.51	-974.23	-9,635.51	3,454.71	3,350.39	104.31	33.118		
13,100.00	7,110.49	7,462.15	7,078.82	177.96	53.06	-88.57	-974.22	-9,635.52	3,357.43	3,251.66	105.77	31.743		
13,200.00	7,110.12	7,462.94	7,079.61	180.77	53.06	-88.63	-974.22	-9,635.53	3,260.31	3,152.98	107.33	30.376		
13,300.00	7,109.76	7,463.73	7,080.40	183.58	53.06	-88.68	-974.21	-9,635.54	3,163.38	3,054.37	109.01	29.019		
13,400.00	7,109.39	7,464.51	7,081.18	186.40	53.06	-88.74	-974.21	-9,635.55	3,066.64	2,955.83	110.81	27.674		
13,500.00	7,109.03	7,465.29	7,081.96	189.21	53.07	-88.80	-974.21	-9,635.56	2,970.12	2,857.37	112.75	26.342		
13,600.00	7,108.66	7,466.06	7,082.73	192.03	53.07	-88.85	-974.20	-9,635.56	2,873.83	2,758.99	114.84	25.025		
13,700.00	7,108.29	7,466.83	7,083.50	194.84	53.07	-88.91	-974.20	-9,635.57	2,777.81	2,660.72	117.09	23.723		
13,800.00	7,107.93	7,467.59	7,084.26	197.66	53.07	-88.96	-974.20	-9,635.58	2,682.08	2,562.55	119.53	22.439		
13,900.00	7,107.56	7,468.35	7,085.02	200.48	53.07	-89.02	-974.19	-9,635.59	2,586.67	2,464.52	122.16	21.175		
14,000.00	7,107.19	7,469.10	7,085.78	203.30	53.08	-89.07	-974.19	-9,635.60	2,491.62	2,366.62	125.00	19.932		
14,100.00	7,106.83	7,469.85	7,086.53	206.12	53.08	-89.13	-974.19	-9,635.60	2,396.98	2,268.88	128.09	18.713		
14,200.00	7,106.46	7,470.60	7,087.27	208.94	53.08	-89.18	-974.18	-9,635.61	2,302.78	2,171.34	131.45	17.519		
14,300.00	7,106.10	7,471.34	7,088.01	211.76	53.08	-89.24	-974.18	-9,635.62	2,209.10	2,074.00	135.10	16.352		
14,400.00	7,105.73	7,472.07	7,088.74	214.58	53.08	-89.29	-974.18	-9,635.63	2,115.99	1,976.92	139.08	15.215		
14,500.00	7,105.36	7,472.80	7,089.47	217.40	53.08	-89.34	-974.17	-9,635.64	2,023.55	1,880.13	143.42	14.109		
14,600.00	7,105.00	7,473.53	7,090.20	220.23	53.09	-89.39	-974.17	-9,635.64	1,931.85	1,783.68	148.17	13.038		
14,700.00	7,104.63	7,474.25	7,090.92	223.05	53.09	-89.45	-974.17	-9,635.65	1,841.02	1,687.65	153.37	12.004		
14,800.00	7,104.27	7,474.97	7,091.64	225.88	53.09	-89.50	-974.16	-9,635.66	1,751.19	1,592.11	159.08	11.009		
14,872.41	7,104.00	7,475.48	7,092.15	227.93	53.09	-89.54	-974.16	-9,635.66	1,686.85	1,523.30	163.56	10.314	CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2,207.00	2,140.89	3.28	15.40	-104.95	-2,337.08	-8,750.66	9,306.96					
100.00	100.00	2,266.59	2,195.41	3.28	15.93	-104.82	-2,314.16	-8,743.35	9,283.98	9,265.84	18.14	511.848		
200.00	200.00	2,303.81	2,229.53	3.34	16.26	-104.74	-2,299.96	-8,739.05	9,261.74	9,243.28	18.47	501.569		
300.00	300.00	2,518.25	2,426.10	3.44	18.17	-104.28	-2,218.07	-8,713.70	9,239.52	9,219.23	20.28	455.519		
400.00	400.00	2,560.08	2,464.20	3.60	18.55	-104.19	-2,201.55	-8,708.72	9,216.81	9,196.05	20.76	443.944		
500.00	500.00	2,618.61	2,517.44	3.81	19.09	-104.05	-2,178.12	-8,702.19	9,194.69	9,173.26	21.43	429.107		
600.00	599.98	2,773.64	2,658.33	4.04	20.53	-13.78	-2,115.81	-8,684.82	9,171.25	9,148.29	22.96	399.514		
700.00	699.95	2,911.35	2,782.87	4.30	21.83	-13.45	-2,059.43	-8,668.30	9,145.94	9,121.56	24.37	375.263		
800.00	799.92	2,964.00	2,830.67	4.59	22.32	-13.33	-2,038.29	-8,661.95	9,121.06	9,095.96	25.09	363.512		
900.00	899.89	3,039.11	2,899.32	4.90	23.01	-13.16	-2,009.23	-8,652.76	9,096.57	9,070.56	26.01	349.788		
1,000.00	999.86	3,126.42	2,979.51	5.23	23.80	-12.97	-1,976.46	-8,641.86	9,072.31	9,045.28	27.04	335.565		
1,100.00	1,099.83	3,225.74	3,070.46	5.58	24.70	-12.75	-1,938.49	-8,629.66	9,048.16	9,019.97	28.19	321.002		
1,200.00	1,199.80	3,282.72	3,122.72	5.94	25.21	-12.63	-1,916.88	-8,622.63	9,024.19	8,995.18	29.01	311.124		
1,300.00	1,299.77	3,346.00	3,181.19	6.30	25.77	-12.50	-1,893.94	-8,614.92	9,000.84	8,970.96	29.88	301.214		
1,400.00	1,399.73	3,346.00	3,181.19	6.68	25.77	-12.50	-1,893.94	-8,614.92	8,978.08	8,947.81	30.27	296.603		
1,500.00	1,499.70	3,404.39	3,235.47	7.07	26.27	-12.38	-1,873.54	-8,608.10	8,955.90	8,924.79	31.11	287.852		
1,600.00	1,599.67	3,447.29	3,275.49	7.46	26.63	-12.29	-1,858.81	-8,603.38	8,934.47	8,902.63	31.85	280.556		
1,700.00	1,699.64	3,562.33	3,383.13	7.85	27.59	-12.07	-1,820.38	-8,590.32	8,913.06	8,879.95	33.11	269.158		
1,800.00	1,799.61	3,851.42	3,653.80	8.25	29.99	-11.51	-1,725.74	-8,553.70	8,890.59	8,854.95	35.64	249.444		
1,900.00	1,899.58	3,951.33	3,746.51	8.66	30.86	-11.31	-1,690.99	-8,540.31	8,867.15	8,830.32	36.83	240.761		
2,000.00	1,999.55	4,015.00	3,805.31	9.06	31.42	-11.17	-1,667.92	-8,532.38	8,844.28	8,806.51	37.77	234.191		
2,100.00	2,099.52	4,061.33	3,848.04	9.47	31.83	-11.07	-1,650.85	-8,526.88	8,821.87	8,783.29	38.58	228.667		
2,200.00	2,199.48	4,136.03	3,916.83	9.89	32.50	-10.90	-1,623.07	-8,518.17	8,799.78	8,760.15	39.63	222.075		
2,300.00	2,299.45	4,204.00	3,979.48	10.30	33.11	-10.74	-1,597.89	-8,510.41	8,778.06	8,737.44	40.62	216.086		
2,400.00	2,399.42	4,679.00	4,410.34	10.72	37.61	-9.58	-1,408.61	-8,448.16	8,752.97	8,707.91	45.06	194.260		
2,500.00	2,499.39	4,722.20	4,448.82	11.14	38.05	-9.46	-1,389.91	-8,442.15	8,727.87	8,681.95	45.92	190.071		
2,600.00	2,599.36	4,774.00	4,495.17	11.56	38.57	-9.32	-1,367.84	-8,435.28	8,703.54	8,656.68	46.86	185.739		
2,700.00	2,699.33	4,774.00	4,495.17	11.98	38.57	-9.32	-1,367.84	-8,435.28	8,679.90	8,632.55	47.34	183.339		
2,800.00	2,799.30	4,827.51	4,543.43	12.41	39.08	-9.18	-1,345.73	-8,428.51	8,656.92	8,608.63	48.28	179.289		
2,900.00	2,899.27	4,869.00	4,581.16	12.83	39.48	-9.08	-1,329.24	-8,423.46	8,634.73	8,585.61	49.13	175.770		
3,000.00	2,999.23	4,932.80	4,639.57	13.26	40.06	-8.92	-1,304.75	-8,415.78	8,613.12	8,562.99	50.13	171.808		
3,100.00	3,099.20	5,052.77	4,749.67	13.68	41.16	-8.63	-1,259.41	-8,401.12	8,591.66	8,540.06	51.60	166.515		
3,200.00	3,199.17	5,096.64	4,789.82	14.11	41.56	-8.53	-1,242.55	-8,395.83	8,570.33	8,517.89	52.45	163.411		
3,300.00	3,299.14	5,152.00	4,840.75	14.54	42.06	-8.39	-1,221.82	-8,389.42	8,549.72	8,496.33	53.39	160.135		
3,400.00	3,399.11	5,178.63	4,865.35	14.97	42.30	-8.33	-1,212.08	-8,386.45	8,529.73	8,475.63	54.09	157.688		
3,500.00	3,499.08	5,219.42	4,903.19	15.40	42.65	-8.24	-1,197.48	-8,382.03	8,510.45	8,455.54	54.91	155.003		
3,600.00	3,599.05	5,247.00	4,928.86	15.83	42.89	-8.18	-1,187.83	-8,379.14	8,491.88	8,436.27	55.61	152.695		
3,700.00	3,699.02	5,300.66	4,979.05	16.26	43.33	-8.06	-1,169.63	-8,373.74	8,473.97	8,417.46	56.51	149.966		
3,800.00	3,798.98	5,342.00	5,017.93	16.69	43.68	-7.97	-1,156.15	-8,369.77	8,456.77	8,399.46	57.31	147.573		
3,900.00	3,898.95	5,342.00	5,017.93	17.12	43.68	-7.97	-1,156.15	-8,369.77	8,440.48	8,382.69	57.79	146.053		
4,000.00	3,998.92	5,399.13	5,072.07	17.55	44.11	-7.86	-1,138.62	-8,364.72	8,424.72	8,366.05	58.67	143.584		
4,100.00	4,098.89	5,437.00	5,108.25	17.98	44.40	-7.79	-1,127.84	-8,361.71	8,409.96	8,350.54	59.42	141.532		
4,200.00	4,198.86	5,437.00	5,108.25	18.42	44.40	-7.79	-1,127.84	-8,361.71	8,396.09	8,336.20	59.90	140.176		
4,300.00	4,298.83	5,497.77	5,166.72	18.85	44.81	-7.69	-1,111.86	-8,357.34	8,382.80	8,322.04	60.76	137.966		
4,400.00	4,398.80	5,538.81	5,206.44	19.28	45.09	-7.62	-1,101.91	-8,354.67	8,370.36	8,308.87	61.49	136.125		
4,500.00	4,498.77	5,626.00	5,291.24	19.72	45.63	-7.50	-1,082.47	-8,348.96	8,358.27	8,295.80	62.47	133.789		
4,600.00	4,598.73	5,681.76	5,345.75	20.15	45.95	-7.42	-1,071.36	-8,345.28	8,346.55	8,283.31	63.24	131.983		
4,700.00	4,698.70	5,761.83	5,424.45	20.58	46.39	-7.33	-1,057.47	-8,340.18	8,335.40	8,271.28	64.11	130.009		
4,800.00	4,798.67	5,814.00	5,475.81	21.02	46.66	-7.28	-1,049.06	-8,336.66	8,324.29	8,259.46	64.83	128.394		
4,900.00	4,898.64	5,865.91	5,527.04	21.45	46.91	-7.23	-1,041.41	-8,333.35	8,313.76	8,248.23	65.53	126.871		
5,000.00	4,998.61	5,909.00	5,569.71	21.89	47.12	-7.20	-1,035.84	-8,331.05	8,304.18	8,237.99	66.18	125.475		
5,100.00	5,098.58	5,952.91	5,613.27	22.32	47.31	-7.16	-1,030.65	-8,328.93	8,295.27	8,228.45	66.82	124.147		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-42-11(PR_150CC) - OH - MWD													Offset Site Error:	0.00 ft
Survey Program: 57-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	6,021.09	5,680.95	22.76	47.60	-7.12	-1,023.09	-8,325.74	8,286.76	8,219.21	67.55	122.675		
5,300.00	5,298.52	6,076.93	5,736.45	23.20	47.83	-7.08	-1,017.44	-8,323.33	8,278.73	8,210.51	68.22	121.352		
5,400.00	5,398.49	6,126.53	5,785.79	23.63	48.03	-7.05	-1,012.84	-8,321.41	8,271.25	8,202.40	68.86	120.119		
5,500.00	5,498.45	6,192.00	5,850.98	24.07	48.28	-7.02	-1,007.11	-8,319.34	8,264.47	8,194.92	69.55	118.824		
5,600.00	5,598.42	6,230.53	5,889.36	24.50	48.43	-6.99	-1,003.81	-8,318.34	8,258.20	8,188.06	70.14	117.741		
5,700.00	5,698.39	6,298.14	5,956.69	24.94	48.69	-6.96	-997.82	-8,316.82	8,252.40	8,181.56	70.84	116.498		
5,800.00	5,798.36	6,371.87	6,030.15	25.38	48.96	-6.92	-991.71	-8,315.36	8,246.95	8,175.39	71.56	115.252		
5,900.00	5,898.33	6,448.44	6,106.50	25.81	49.23	-6.88	-986.12	-8,313.98	8,241.80	8,169.53	72.27	114.040		
6,000.00	5,998.30	6,527.21	6,185.10	26.25	49.50	-6.85	-981.03	-8,312.70	8,236.93	8,163.95	72.98	112.859		
6,100.00	6,098.27	6,593.49	6,251.27	26.69	49.72	-6.82	-977.28	-8,311.73	8,232.34	8,158.70	73.64	111.787		
6,200.00	6,198.24	6,644.22	6,301.92	27.12	49.88	-6.81	-974.73	-8,311.24	8,228.31	8,154.07	74.24	110.835		
6,300.00	6,298.20	6,711.73	6,369.37	27.56	50.09	-6.79	-971.78	-8,310.91	8,224.80	8,149.92	74.88	109.833		
6,400.00	6,398.17	6,803.77	6,461.35	28.00	50.36	-6.77	-968.55	-8,310.59	8,221.55	8,145.95	75.60	108.747		
6,500.00	6,498.14	6,908.19	6,565.73	28.43	50.66	-6.75	-965.78	-8,310.06	8,218.26	8,141.91	76.35	107.642		
6,600.00	6,597.68	7,006.59	6,664.10	28.88	50.93	-6.75	-963.46	-8,309.53	8,208.95	8,131.88	77.07	106.510		
6,700.00	6,694.68	7,101.20	6,758.69	29.32	51.19	-6.03	-961.43	-8,309.01	8,184.40	8,106.63	77.77	105.236		
6,800.00	6,786.74	7,190.22	6,847.69	29.77	51.44	-6.43	-959.82	-8,308.51	8,145.12	8,066.69	78.43	103.857		
6,900.00	6,871.61	7,271.57	6,929.04	30.24	51.66	-7.11	-958.62	-8,308.05	8,092.06	8,013.05	79.01	102.414		
7,000.00	6,947.19	7,343.38	7,000.84	30.74	51.85	-8.19	-957.73	-8,307.66	8,026.54	7,947.03	79.52	100.941		
7,100.00	7,011.62	7,404.51	7,061.96	31.32	52.02	-9.93	-957.08	-8,307.34	7,950.17	7,870.24	79.93	99.463		
7,200.00	7,063.31	7,465.27	7,122.72	32.03	52.18	-13.01	-956.52	-8,307.00	7,864.78	7,784.50	80.28	97.965		
7,300.00	7,101.00	7,513.80	7,171.25	32.89	52.31	-19.30	-956.06	-8,306.65	7,772.44	7,691.90	80.54	96.509		
7,400.00	7,123.74	7,542.44	7,199.89	33.93	52.39	-36.57	-955.79	-8,306.41	7,675.47	7,594.79	80.68	95.135		
7,500.00	7,131.00	7,550.70	7,208.14	35.10	52.41	-97.49	-955.71	-8,306.33	7,576.32	7,495.59	80.73	93.852		
7,600.00	7,130.63	7,549.03	7,206.47	36.44	52.41	-97.37	-955.73	-8,306.35	7,476.89	7,396.16	80.73	92.614		
7,700.00	7,130.26	7,547.37	7,204.82	37.94	52.40	-97.26	-955.74	-8,306.36	7,377.47	7,296.73	80.74	91.372		
7,800.00	7,129.90	7,545.73	7,203.18	39.59	52.40	-97.14	-955.76	-8,306.38	7,278.08	7,197.32	80.76	90.124		
7,900.00	7,129.53	7,544.10	7,201.55	41.37	52.40	-97.03	-955.77	-8,306.39	7,178.69	7,097.92	80.78	88.871		
8,000.00	7,129.17	7,542.48	7,199.93	43.27	52.39	-96.91	-955.79	-8,306.41	7,079.33	6,998.53	80.80	87.613		
8,100.00	7,128.80	7,540.88	7,198.32	45.27	52.39	-96.80	-955.81	-8,306.42	6,979.98	6,899.15	80.83	86.349		
8,200.00	7,128.43	7,539.28	7,196.73	47.36	52.38	-96.68	-955.82	-8,306.44	6,880.65	6,799.78	80.87	85.080		
8,300.00	7,128.07	7,537.70	7,195.15	49.52	52.38	-96.57	-955.84	-8,306.45	6,781.35	6,700.43	80.92	83.806		
8,400.00	7,127.70	7,536.13	7,193.58	51.75	52.37	-96.46	-955.85	-8,306.46	6,682.06	6,601.09	80.97	82.526		
8,500.00	7,127.33	7,534.58	7,192.02	54.04	52.37	-96.35	-955.87	-8,306.48	6,582.79	6,501.76	81.03	81.240		
8,600.00	7,126.97	7,533.03	7,190.48	56.38	52.37	-96.24	-955.88	-8,306.49	6,483.55	6,402.45	81.10	79.949		
8,700.00	7,126.60	7,531.50	7,188.94	58.77	52.36	-96.13	-955.90	-8,306.50	6,384.32	6,303.15	81.17	78.651		
8,800.00	7,126.24	7,529.97	7,187.42	61.19	52.36	-96.02	-955.91	-8,306.51	6,285.13	6,203.87	81.26	77.348		
8,900.00	7,125.87	7,528.46	7,185.91	63.65	52.35	-95.91	-955.92	-8,306.53	6,185.95	6,104.60	81.35	76.038		
9,000.00	7,125.50	7,526.96	7,184.41	66.15	52.35	-95.81	-955.94	-8,306.54	6,086.81	6,005.35	81.46	74.723		
9,100.00	7,125.14	7,525.47	7,182.92	68.67	52.34	-95.70	-955.95	-8,306.55	5,987.69	5,906.12	81.57	73.401		
9,200.00	7,124.77	7,523.99	7,181.44	71.21	52.34	-95.59	-955.97	-8,306.56	5,888.61	5,806.90	81.70	72.073		
9,300.00	7,124.41	7,522.53	7,179.97	73.78	52.34	-95.49	-955.98	-8,306.58	5,789.55	5,707.71	81.84	70.739		
9,400.00	7,124.04	7,521.07	7,178.52	76.37	52.33	-95.39	-956.00	-8,306.59	5,690.53	5,608.53	82.00	69.398		
9,500.00	7,123.67	7,519.62	7,177.07	78.98	52.33	-95.28	-956.01	-8,306.60	5,591.54	5,509.37	82.17	68.050		
9,600.00	7,123.31	7,518.19	7,175.63	81.60	52.33	-95.18	-956.02	-8,306.61	5,492.58	5,410.23	82.35	66.696		
9,700.00	7,122.94	7,516.76	7,174.21	84.24	52.32	-95.08	-956.04	-8,306.62	5,393.67	5,311.12	82.55	65.336		
9,800.00	7,122.57	7,515.35	7,172.79	86.90	52.32	-94.98	-956.05	-8,306.63	5,294.80	5,212.02	82.77	63.969		
9,900.00	7,122.21	7,513.94	7,171.39	89.56	52.31	-94.88	-956.06	-8,306.65	5,195.96	5,112.96	83.01	62.595		
10,000.00	7,121.84	7,512.55	7,169.99	92.24	52.31	-94.78	-956.08	-8,306.66	5,097.18	5,013.91	83.27	61.214		
10,100.00	7,121.48	7,511.16	7,168.61	94.92	52.31	-94.68	-956.09	-8,306.67	4,998.44	4,914.89	83.55	59.827		
10,200.00	7,121.11	7,509.79	7,167.24	97.62	52.30	-94.58	-956.10	-8,306.68	4,899.75	4,815.90	83.85	58.434		
10,300.00	7,120.74	7,508.42	7,165.87	100.32	52.30	-94.48	-956.12	-8,306.69	4,801.12	4,716.94	84.18	57.034		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,120.38	7,507.07	7,164.51	103.04	52.30	-94.39	-956.13	-8,306.70	4,702.55	4,618.01	84.54	55.628		
10,500.00	7,120.01	7,505.72	7,163.17	105.76	52.29	-94.29	-956.14	-8,306.71	4,604.03	4,519.11	84.92	54.215		
10,600.00	7,119.64	7,504.38	7,161.83	108.48	52.29	-94.19	-956.15	-8,306.72	4,505.58	4,420.24	85.34	52.797		
10,700.00	7,119.28	7,503.06	7,160.50	111.22	52.28	-94.10	-956.17	-8,306.73	4,407.20	4,321.41	85.79	51.373		
10,800.00	7,118.91	7,501.74	7,159.19	113.96	52.28	-94.00	-956.18	-8,306.74	4,308.90	4,222.62	86.27	49.944		
10,900.00	7,118.55	7,500.43	7,157.88	116.70	52.28	-93.91	-956.19	-8,306.75	4,210.67	4,123.87	86.80	48.509		
11,000.00	7,118.18	7,499.13	7,156.58	119.45	52.27	-93.82	-956.20	-8,306.76	4,112.53	4,025.16	87.37	47.070		
11,100.00	7,117.81	7,497.84	7,155.28	122.21	52.27	-93.73	-956.22	-8,306.77	4,014.48	3,926.49	87.98	45.627		
11,200.00	7,117.45	7,496.55	7,154.00	124.97	52.27	-93.63	-956.23	-8,306.78	3,916.53	3,827.88	88.65	44.180		
11,300.00	7,117.08	7,495.28	7,152.73	127.73	52.26	-93.54	-956.24	-8,306.79	3,818.68	3,729.31	89.37	42.731		
11,400.00	7,116.72	7,494.02	7,151.46	130.50	52.26	-93.45	-956.25	-8,306.80	3,720.95	3,630.81	90.14	41.279		
11,500.00	7,116.35	7,492.76	7,150.21	133.27	52.26	-93.36	-956.26	-8,306.81	3,623.34	3,532.36	90.98	39.825		
11,600.00	7,115.98	7,491.51	7,148.96	136.04	52.25	-93.27	-956.28	-8,306.82	3,525.87	3,433.98	91.89	38.372		
11,700.00	7,115.62	7,490.27	7,147.72	138.82	52.25	-93.18	-956.29	-8,306.83	3,428.54	3,335.67	92.87	36.918		
11,800.00	7,115.25	7,489.04	7,146.49	141.60	52.25	-93.09	-956.30	-8,306.83	3,331.37	3,237.44	93.93	35.467		
11,900.00	7,114.88	7,487.82	7,145.27	144.39	52.24	-93.01	-956.31	-8,306.84	3,234.37	3,139.29	95.08	34.018		
12,000.00	7,114.52	7,486.60	7,144.05	147.17	52.24	-92.92	-956.32	-8,306.85	3,137.55	3,041.23	96.32	32.573		
12,100.00	7,114.15	7,485.39	7,142.84	149.96	52.24	-92.83	-956.33	-8,306.86	3,040.95	2,943.27	97.67	31.134		
12,200.00	7,113.79	7,484.20	7,141.65	152.75	52.23	-92.75	-956.34	-8,306.87	2,944.57	2,845.43	99.14	29.702		
12,300.00	7,113.42	7,483.01	7,140.45	155.55	52.23	-92.66	-956.36	-8,306.88	2,848.44	2,747.71	100.73	28.279		
12,400.00	7,113.05	7,481.82	7,139.27	158.34	52.23	-92.58	-956.37	-8,306.89	2,752.58	2,650.13	102.45	26.867		
12,500.00	7,112.69	7,480.65	7,138.10	161.14	52.22	-92.49	-956.38	-8,306.89	2,657.03	2,552.70	104.33	25.468		
12,600.00	7,112.32	7,479.48	7,136.93	163.94	52.22	-92.41	-956.39	-8,306.90	2,561.82	2,455.45	106.37	24.083		
12,700.00	7,111.96	7,478.32	7,135.77	166.74	52.22	-92.33	-956.40	-8,306.91	2,466.99	2,358.39	108.60	22.716		
12,800.00	7,111.59	7,477.17	7,134.62	169.54	52.21	-92.24	-956.41	-8,306.92	2,372.58	2,261.55	111.03	21.368		
12,900.00	7,111.22	7,476.02	7,133.47	172.35	52.21	-92.16	-956.42	-8,306.93	2,278.65	2,164.96	113.69	20.043		
13,000.00	7,110.86	7,474.88	7,132.33	175.16	52.21	-92.08	-956.43	-8,306.93	2,185.25	2,068.66	116.60	18.742		
13,100.00	7,110.49	7,473.75	7,131.20	177.96	52.21	-92.00	-956.44	-8,306.94	2,092.47	1,972.69	119.78	17.469		
13,200.00	7,110.12	7,472.63	7,130.08	180.77	52.20	-91.92	-956.45	-8,306.95	2,000.38	1,877.11	123.28	16.227		
13,300.00	7,109.76	7,471.51	7,128.96	183.58	52.20	-91.84	-956.46	-8,306.96	1,909.09	1,781.97	127.12	15.018		
13,400.00	7,109.39	7,470.40	7,127.85	186.40	52.20	-91.76	-956.47	-8,306.96	1,818.71	1,687.36	131.35	13.846		
13,500.00	7,109.03	7,469.30	7,126.75	189.21	52.19	-91.68	-956.48	-8,306.97	1,729.39	1,593.38	136.01	12.715		
13,600.00	7,108.66	7,468.21	7,125.66	192.03	52.19	-91.60	-956.49	-8,306.98	1,641.30	1,500.14	141.16	11.627		
13,700.00	7,108.29	7,467.12	7,124.57	194.84	52.19	-91.52	-956.50	-8,306.98	1,554.66	1,407.81	146.85	10.587		
13,800.00	7,107.93	7,466.04	7,123.49	197.66	52.18	-91.44	-956.51	-8,306.99	1,469.71	1,316.57	153.14	9.597		
13,900.00	7,107.56	7,464.96	7,122.41	200.48	52.18	-91.37	-956.52	-8,307.00	1,386.76	1,226.67	160.10	8.662		
14,000.00	7,107.19	7,463.90	7,121.35	203.30	52.18	-91.29	-956.53	-8,307.01	1,306.21	1,138.44	167.78	7.785		
14,100.00	7,106.83	7,462.84	7,120.29	206.12	52.18	-91.21	-956.54	-8,307.01	1,228.52	1,052.29	176.23	6.971		
14,200.00	7,106.46	7,461.78	7,119.23	208.94	52.17	-91.14	-956.55	-8,307.02	1,154.27	968.76	185.51	6.222		
14,300.00	7,106.10	7,460.73	7,118.18	211.76	52.17	-91.06	-956.56	-8,307.03	1,084.16	888.57	195.59	5.543		
14,400.00	7,105.73	7,459.69	7,117.14	214.58	52.17	-90.99	-956.57	-8,307.03	1,019.05	812.64	206.42	4.937		
14,500.00	7,105.36	7,458.66	7,116.11	217.40	52.16	-90.91	-956.58	-8,307.04	959.97	742.13	217.83	4.407		
14,600.00	7,105.00	7,457.63	7,115.08	220.23	52.16	-90.84	-956.59	-8,307.05	908.07	678.52	229.55	3.956		
14,700.00	7,104.63	7,456.61	7,114.06	223.05	52.16	-90.77	-956.60	-8,307.05	864.67	623.55	241.12	3.586		
14,800.00	7,104.27	7,455.59	7,113.04	225.88	52.16	-90.69	-956.61	-8,307.06	831.09	579.18	251.91	3.299		
14,872.41	7,104.00	7,454.86	7,112.31	227.93	52.15	-90.64	-956.62	-8,307.06	813.61	554.81	258.80	3.144 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	36.00	3.28	3.28	-108.18	-2,956.88	-9,004.13	9,477.27					
100.00	100.00	37.05	73.05	3.28	3.28	-108.18	-2,956.80	-9,004.21	9,477.30	9,470.73	6.57	1,443.474		
200.00	200.00	94.93	130.93	3.34	3.29	-108.18	-2,956.36	-9,004.66	9,477.80	9,471.18	6.62	1,431.062		
300.00	300.00	168.00	203.98	3.44	3.30	-108.17	-2,955.24	-9,005.80	9,478.78	9,472.03	6.74	1,405.755		
400.00	400.00	168.00	203.98	3.60	3.30	-108.17	-2,955.24	-9,005.80	9,480.32	9,473.41	6.90	1,373.465		
500.00	500.00	212.77	248.72	3.81	3.33	-108.16	-2,954.38	-9,007.02	9,482.50	9,475.37	7.13	1,329.407		
600.00	599.98	259.00	294.90	4.04	3.37	-18.15	-2,953.50	-9,008.93	9,484.10	9,476.70	7.40	1,280.774		
700.00	699.95	259.00	294.90	4.30	3.37	-18.15	-2,953.50	-9,008.93	9,485.47	9,477.80	7.67	1,236.787		
800.00	799.92	292.77	328.62	4.59	3.40	-18.14	-2,952.96	-9,010.71	9,487.68	9,479.69	8.00	1,186.515		
900.00	899.89	350.00	385.74	4.90	3.48	-18.13	-2,952.48	-9,014.33	9,490.82	9,482.43	8.38	1,132.193		
1,000.00	999.86	350.00	385.74	5.23	3.48	-18.13	-2,952.48	-9,014.33	9,494.39	9,485.67	8.72	1,089.367		
1,100.00	1,099.83	410.18	445.76	5.58	3.58	-18.13	-2,952.31	-9,018.62	9,498.71	9,489.55	9.16	1,037.385		
1,200.00	1,199.80	487.79	523.15	5.94	3.74	-18.12	-2,952.15	-9,024.43	9,503.38	9,493.72	9.66	983.666		
1,300.00	1,299.77	532.00	567.24	6.30	3.84	-18.11	-2,952.00	-9,027.80	9,508.30	9,498.17	10.12	939.129		
1,400.00	1,399.73	587.66	622.71	6.68	3.98	-18.11	-2,951.96	-9,032.30	9,513.71	9,503.08	10.63	894.848		
1,500.00	1,499.70	644.00	678.83	7.07	4.14	-18.10	-2,952.29	-9,037.34	9,519.90	9,508.74	11.16	853.219		
1,600.00	1,599.67	674.64	709.33	7.46	4.23	-18.10	-2,952.58	-9,040.23	9,526.60	9,514.97	11.63	819.256		
1,700.00	1,699.64	766.15	800.41	7.85	4.52	-18.09	-2,953.68	-9,049.00	9,533.71	9,521.43	12.28	776.158		
1,800.00	1,799.61	872.50	906.28	8.25	4.88	-18.09	-2,954.95	-9,059.03	9,540.68	9,527.67	13.01	733.297		
1,900.00	1,899.58	1,900.00	1,100.89	8.66	9.11	-18.07	-2,955.43	-9,077.27	9,547.34	9,529.95	17.39	549.089		
2,000.00	1,999.55	1,129.84	1,162.53	9.06	5.85	-18.06	-2,955.36	-9,082.70	9,553.38	9,538.67	14.70	649.673		
2,100.00	2,099.52	1,155.99	1,188.55	9.47	5.96	-18.05	-2,955.25	-9,085.25	9,560.15	9,544.95	15.21	628.712		
2,200.00	2,199.48	1,190.00	1,222.36	9.89	6.09	-18.05	-2,955.05	-9,088.90	9,567.71	9,551.97	15.74	607.911		
2,300.00	2,299.45	1,190.00	1,222.36	10.30	6.09	-18.05	-2,955.05	-9,088.90	9,576.08	9,559.93	16.14	593.138		
2,400.00	2,399.42	1,245.42	1,277.39	10.72	6.33	-18.04	-2,954.67	-9,095.50	9,584.99	9,568.22	16.76	571.737		
2,500.00	2,499.39	1,285.00	1,316.63	11.14	6.50	-18.03	-2,954.42	-9,100.63	9,594.69	9,577.36	17.33	553.774		
2,600.00	2,599.36	1,285.00	1,316.63	11.56	6.50	-18.03	-2,954.42	-9,100.63	9,605.17	9,587.44	17.73	541.688		
2,700.00	2,699.33	1,345.06	1,376.12	11.98	6.77	-18.01	-2,954.45	-9,108.92	9,616.13	9,597.75	18.38	523.254		
2,800.00	2,799.30	1,379.00	1,409.70	12.41	6.92	-18.01	-2,954.82	-9,113.83	9,627.87	9,608.95	18.92	508.873		
2,900.00	2,899.27	1,416.90	1,447.15	12.83	7.10	-18.00	-2,955.26	-9,119.57	9,640.26	9,620.78	19.48	494.875		
3,000.00	2,999.23	1,475.00	1,504.49	13.26	7.38	-17.99	-2,955.48	-9,128.98	9,653.34	9,633.21	20.13	479.644		
3,100.00	3,099.20	1,475.00	1,504.49	13.68	7.38	-17.99	-2,955.48	-9,128.98	9,666.98	9,646.45	20.53	470.934		
3,200.00	3,199.17	1,530.64	1,559.29	14.11	7.65	-17.97	-2,955.58	-9,138.57	9,681.21	9,660.05	21.17	457.393		
3,300.00	3,299.14	1,570.00	1,598.02	14.54	7.85	-17.96	-2,955.84	-9,145.63	9,696.12	9,674.39	21.74	446.096		
3,400.00	3,399.11	1,614.67	1,641.91	14.97	8.08	-17.95	-2,956.18	-9,153.89	9,711.61	9,689.28	22.33	434.924		
3,500.00	3,499.08	1,665.00	1,691.32	15.40	8.34	-17.94	-2,956.50	-9,163.50	9,727.62	9,704.67	22.95	423.878		
3,600.00	3,599.05	1,665.00	1,691.32	15.83	8.34	-17.94	-2,956.50	-9,163.50	9,744.37	9,721.02	23.34	417.466		
3,700.00	3,699.02	1,724.78	1,749.88	16.26	8.67	-17.92	-2,956.77	-9,175.53	9,761.52	9,737.52	24.01	406.627		
3,800.00	3,798.98	1,759.00	1,783.31	16.69	8.85	-17.91	-2,956.89	-9,182.80	9,779.50	9,754.95	24.55	398.303		
3,900.00	3,898.95	1,787.60	1,811.22	17.12	9.02	-17.90	-2,957.09	-9,189.04	9,798.14	9,773.07	25.07	390.787		
4,000.00	3,998.92	1,819.58	1,842.40	17.55	9.20	-17.89	-2,957.61	-9,196.13	9,817.45	9,791.85	25.61	383.385		
4,100.00	4,098.89	1,853.00	1,874.94	17.98	9.39	-17.89	-2,958.47	-9,203.69	9,837.42	9,811.28	26.15	376.232		
4,200.00	4,198.86	1,908.14	1,928.58	18.42	9.71	-17.87	-2,960.15	-9,216.37	9,857.93	9,831.14	26.79	367.960		
4,300.00	4,298.83	1,968.19	1,986.93	18.85	10.07	-17.86	-2,961.96	-9,230.43	9,878.84	9,851.38	27.46	359.767		
4,400.00	4,398.80	2,042.00	2,058.58	19.28	10.52	-17.85	-2,964.15	-9,248.01	9,900.09	9,871.90	28.20	351.109		
4,500.00	4,498.77	2,042.00	2,058.58	19.72	10.52	-17.85	-2,964.15	-9,248.01	9,921.90	9,893.33	28.57	347.300		
4,600.00	4,598.73	2,042.00	2,058.58	20.15	10.52	-17.85	-2,964.15	-9,248.01	9,944.66	9,915.72	28.94	343.669		
4,700.00	4,698.70	2,042.00	2,058.58	20.58	10.52	-17.85	-2,964.15	-9,248.01	9,968.37	9,939.07	29.30	340.207		
4,800.00	4,798.67	2,094.56	2,109.35	21.02	10.86	-17.83	-2,965.58	-9,261.53	9,992.03	9,962.10	29.93	333.819		
7,500.00	7,131.00	7,020.50	6,905.23	35.10	40.70	-86.10	-2,995.33	-10,249.09	9,921.49	9,857.89	63.59	156.016		
7,600.00	7,130.63	7,021.56	6,906.29	36.44	40.71	-86.12	-2,995.36	-10,249.11	9,825.60	9,761.85	63.75	154.125		
7,700.00	7,130.26	7,022.62	6,907.34	37.94	40.71	-86.14	-2,995.38	-10,249.12	9,729.80	9,665.87	63.94	152.180		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
7,800.00	7,129.90	7,023.67	6,908.39	39.59	40.71	-86.16	-2,995.41	-10,249.14	9,634.09	9,569.94	64.15	150.181		
7,900.00	7,129.53	7,024.72	6,909.45	41.37	40.72	-86.18	-2,995.43	-10,249.16	9,538.46	9,474.07	64.39	148.130		
8,000.00	7,129.17	7,025.77	6,910.50	43.27	40.72	-86.20	-2,995.46	-10,249.18	9,442.93	9,378.26	64.67	146.027		
8,100.00	7,128.80	7,026.82	6,911.54	45.27	40.72	-86.22	-2,995.48	-10,249.19	9,347.48	9,282.51	64.97	143.873		
8,200.00	7,128.43	7,027.87	6,912.59	47.36	40.73	-86.25	-2,995.51	-10,249.21	9,252.14	9,186.83	65.31	141.671		
8,300.00	7,128.07	7,028.91	6,913.64	49.52	40.73	-86.27	-2,995.53	-10,249.23	9,156.89	9,091.21	65.68	139.422		
8,400.00	7,127.70	7,029.96	6,914.68	51.75	40.73	-86.29	-2,995.56	-10,249.24	9,061.74	8,995.66	66.08	137.129		
8,500.00	7,127.33	7,031.00	6,915.72	54.04	40.74	-86.31	-2,995.59	-10,249.26	8,966.70	8,900.18	66.52	134.793		
8,600.00	7,126.97	7,032.04	6,916.76	56.38	40.74	-86.33	-2,995.61	-10,249.28	8,871.77	8,804.77	67.00	132.418		
8,700.00	7,126.60	7,033.08	6,917.80	58.77	40.74	-86.35	-2,995.64	-10,249.30	8,776.95	8,709.44	67.51	130.008		
8,800.00	7,126.24	7,034.12	6,918.84	61.19	40.75	-86.37	-2,995.66	-10,249.31	8,682.25	8,614.19	68.06	127.564		
8,900.00	7,125.87	7,035.16	6,919.88	63.65	40.75	-86.40	-2,995.69	-10,249.33	8,587.67	8,519.02	68.65	125.090		
9,000.00	7,125.50	7,036.19	6,920.91	66.15	40.75	-86.42	-2,995.71	-10,249.35	8,493.21	8,423.93	69.28	122.590		
9,100.00	7,125.14	7,037.23	6,921.95	68.67	40.76	-86.44	-2,995.74	-10,249.36	8,398.88	8,328.93	69.95	120.068		
9,200.00	7,124.77	7,038.26	6,922.98	71.21	40.76	-86.46	-2,995.77	-10,249.38	8,304.68	8,234.02	70.66	117.527		
9,300.00	7,124.41	7,039.29	6,924.01	73.78	40.76	-86.48	-2,995.79	-10,249.40	8,210.62	8,139.20	71.42	114.970		
9,400.00	7,124.04	7,040.32	6,925.04	76.37	40.77	-86.50	-2,995.82	-10,249.41	8,116.70	8,044.49	72.21	112.403		
9,500.00	7,123.67	7,041.35	6,926.07	78.98	40.77	-86.52	-2,995.85	-10,249.43	8,022.93	7,949.88	73.05	109.828		
9,600.00	7,123.31	7,042.37	6,927.09	81.60	40.77	-86.54	-2,995.87	-10,249.45	7,929.31	7,855.37	73.93	107.249		
9,700.00	7,122.94	7,043.40	6,928.12	84.24	40.78	-86.56	-2,995.90	-10,249.46	7,835.84	7,760.98	74.86	104.671		
9,800.00	7,122.57	7,044.42	6,929.14	86.90	40.78	-86.58	-2,995.93	-10,249.48	7,742.54	7,666.71	75.84	102.096		
9,900.00	7,122.21	7,045.44	6,930.16	89.56	40.78	-86.61	-2,995.95	-10,249.50	7,649.41	7,572.56	76.86	99.527		
10,000.00	7,121.84	7,046.46	6,931.18	92.24	40.79	-86.63	-2,995.98	-10,249.51	7,556.46	7,478.53	77.93	96.970		
10,100.00	7,121.48	7,047.48	6,932.20	94.92	40.79	-86.65	-2,996.01	-10,249.53	7,463.68	7,384.64	79.04	94.426		
10,200.00	7,121.11	7,048.50	6,933.22	97.62	40.79	-86.67	-2,996.03	-10,249.55	7,371.10	7,290.89	80.21	91.898		
10,300.00	7,120.74	7,049.52	6,934.23	100.32	40.80	-86.69	-2,996.06	-10,249.56	7,278.71	7,197.29	81.43	89.390		
10,400.00	7,120.38	7,050.53	6,935.25	103.04	40.80	-86.71	-2,996.09	-10,249.58	7,186.53	7,103.83	82.69	86.905		
10,500.00	7,120.01	7,051.55	6,936.26	105.76	40.80	-86.73	-2,996.12	-10,249.60	7,094.55	7,010.54	84.01	84.444		
10,600.00	7,119.64	7,052.56	6,937.27	108.48	40.81	-86.75	-2,996.14	-10,249.61	7,002.80	6,917.41	85.39	82.011		
10,700.00	7,119.28	7,053.57	6,938.28	111.22	40.81	-86.77	-2,996.17	-10,249.63	6,911.28	6,824.46	86.82	79.608		
10,800.00	7,118.91	7,054.58	6,939.29	113.96	40.81	-86.79	-2,996.20	-10,249.64	6,819.99	6,731.69	88.30	77.236		
10,900.00	7,118.55	7,055.58	6,940.30	116.70	40.82	-86.81	-2,996.23	-10,249.66	6,728.95	6,639.11	89.84	74.898		
11,000.00	7,118.18	7,056.59	6,941.30	119.45	40.82	-86.83	-2,996.25	-10,249.68	6,638.17	6,546.73	91.44	72.595		
11,100.00	7,117.81	7,057.59	6,942.30	122.21	40.82	-86.85	-2,996.28	-10,249.69	6,547.65	6,454.55	93.10	70.329		
11,200.00	7,117.45	7,058.60	6,943.31	124.97	40.83	-86.87	-2,996.31	-10,249.71	6,457.42	6,362.60	94.82	68.101		
11,300.00	7,117.08	7,059.60	6,944.31	127.73	40.83	-86.89	-2,996.34	-10,249.73	6,367.48	6,270.87	96.61	65.912		
11,400.00	7,116.72	7,060.60	6,945.31	130.50	40.83	-86.91	-2,996.37	-10,249.74	6,277.84	6,179.39	98.45	63.764		
11,500.00	7,116.35	7,061.60	6,946.31	133.27	40.84	-86.94	-2,996.39	-10,249.76	6,188.52	6,088.15	100.37	61.658		
11,600.00	7,115.98	7,062.60	6,947.30	136.04	40.84	-86.96	-2,996.42	-10,249.77	6,099.53	5,997.18	102.35	59.594		
11,700.00	7,115.62	7,063.59	6,948.30	138.82	40.84	-86.98	-2,996.45	-10,249.79	6,010.89	5,906.48	104.40	57.574		
11,800.00	7,115.25	7,064.59	6,949.29	141.60	40.85	-87.00	-2,996.48	-10,249.81	5,922.60	5,816.08	106.53	55.597		
11,900.00	7,114.88	7,065.58	6,950.29	144.39	40.85	-87.02	-2,996.51	-10,249.82	5,834.70	5,725.97	108.73	53.664		
12,000.00	7,114.52	7,066.57	6,951.28	147.17	40.85	-87.04	-2,996.54	-10,249.84	5,747.19	5,636.19	111.00	51.776		
12,100.00	7,114.15	7,067.56	6,952.27	149.96	40.86	-87.06	-2,996.56	-10,249.85	5,660.10	5,546.74	113.36	49.932		
12,200.00	7,113.79	7,068.55	6,953.26	152.75	40.86	-87.08	-2,996.59	-10,249.87	5,573.43	5,457.64	115.79	48.134		
12,300.00	7,113.42	7,069.54	6,954.24	155.55	40.86	-87.10	-2,996.62	-10,249.88	5,487.23	5,368.92	118.31	46.381		
12,400.00	7,113.05	7,070.53	6,955.23	158.34	40.87	-87.12	-2,996.65	-10,249.90	5,401.49	5,280.58	120.91	44.674		
12,500.00	7,112.69	7,071.51	6,956.21	161.14	40.87	-87.14	-2,996.68	-10,249.92	5,316.26	5,192.65	123.60	43.011		
12,600.00	7,112.32	7,072.49	6,957.20	163.94	40.87	-87.16	-2,996.71	-10,249.93	5,231.54	5,105.16	126.38	41.394		
12,700.00	7,111.96	7,073.48	6,958.18	166.74	40.88	-87.18	-2,996.74	-10,249.95	5,147.38	5,018.12	129.26	39.822		
12,800.00	7,111.59	7,074.46	6,959.16	169.54	40.88	-87.20	-2,996.77	-10,249.96	5,063.79	4,931.56	132.23	38.294		
12,900.00	7,111.22	7,075.44	6,960.14	172.35	40.88	-87.22	-2,996.80	-10,249.98	4,980.81	4,845.50	135.30	36.812		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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						
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)		
13,000.00	7,110.86	7,076.41	6,961.11	175.16	40.89	-87.24	-2,996.83	-10,249.99	4,898.46	4,759.98	138.48	35.373	
13,100.00	7,110.49	7,077.39	6,962.09	177.96	40.89	-87.26	-2,996.86	-10,250.01	4,816.78	4,675.02	141.76	33.979	
13,200.00	7,110.12	7,078.37	6,963.06	180.77	40.89	-87.28	-2,996.89	-10,250.03	4,735.80	4,590.66	145.14	32.628	
13,300.00	7,109.76	7,079.34	6,964.04	183.58	40.90	-87.30	-2,996.92	-10,250.04	4,655.56	4,506.92	148.64	31.321	
13,400.00	7,109.39	7,080.31	6,965.01	186.40	40.90	-87.32	-2,996.95	-10,250.06	4,576.10	4,423.85	152.25	30.056	
13,500.00	7,109.03	7,081.28	6,965.98	189.21	40.90	-87.34	-2,996.98	-10,250.07	4,497.46	4,341.48	155.98	28.834	
13,600.00	7,108.66	7,082.25	6,966.95	192.03	40.91	-87.36	-2,997.01	-10,250.09	4,419.68	4,259.86	159.82	27.654	
13,700.00	7,108.29	7,083.22	6,967.92	194.84	40.91	-87.38	-2,997.04	-10,250.10	4,342.81	4,179.03	163.79	26.515	
13,800.00	7,107.93	7,084.19	6,968.88	197.66	40.91	-87.40	-2,997.07	-10,250.12	4,266.90	4,099.03	167.88	25.417	
13,900.00	7,107.56	7,085.15	6,969.85	200.48	40.92	-87.42	-2,997.10	-10,250.13	4,192.00	4,019.92	172.09	24.360	
14,000.00	7,107.19	7,086.12	6,970.81	203.30	40.92	-87.44	-2,997.13	-10,250.15	4,118.17	3,941.74	176.43	23.342	
14,100.00	7,106.83	7,087.08	6,971.77	206.12	40.92	-87.46	-2,997.16	-10,250.16	4,045.46	3,864.57	180.89	22.364	
14,200.00	7,106.46	7,088.04	6,972.74	208.94	40.93	-87.48	-2,997.19	-10,250.18	3,973.94	3,788.45	185.48	21.425	
14,300.00	7,106.10	7,089.00	6,973.69	211.76	40.93	-87.50	-2,997.22	-10,250.19	3,903.67	3,713.46	190.20	20.524	
14,400.00	7,105.73	7,089.96	6,974.65	214.58	40.93	-87.52	-2,997.25	-10,250.21	3,834.71	3,639.66	195.05	19.660	
14,500.00	7,105.36	7,090.92	6,975.61	217.40	40.94	-87.53	-2,997.28	-10,250.22	3,767.15	3,567.13	200.02	18.834	
14,600.00	7,105.00	7,091.88	6,976.57	220.23	40.94	-87.55	-2,997.31	-10,250.24	3,701.06	3,495.95	205.11	18.044	
14,700.00	7,104.63	7,092.83	6,977.52	223.05	40.94	-87.57	-2,997.34	-10,250.25	3,636.52	3,426.20	210.32	17.290	
14,800.00	7,104.27	7,093.78	6,978.47	225.88	40.94	-87.59	-2,997.37	-10,250.27	3,573.61	3,357.96	215.65	16.572	
14,872.41	7,104.00	7,094.47	6,979.16	227.93	40.95	-87.61	-2,997.39	-10,250.28	3,529.13	3,309.56	219.57	16.073	CC, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	36.00	3.28	3.28	-107.89	-2,889.14	-8,948.19	9,403.11					
100.00	100.00	37.05	73.05	3.28	3.28	-107.89	-2,889.06	-8,948.27	9,403.14	9,396.57	6.57	1,432.195		
200.00	200.00	94.94	130.93	3.34	3.29	-107.89	-2,888.63	-8,948.72	9,403.65	9,397.02	6.62	1,419.975		
300.00	300.00	466.95	502.78	3.44	3.72	-107.84	-2,879.04	-8,947.67	9,401.64	9,394.47	7.17	1,310.939		
400.00	400.00	732.87	768.51	3.60	4.40	-107.80	-2,870.57	-8,942.23	9,398.90	9,390.89	8.01	1,173.421		
500.00	500.00	794.17	829.74	3.81	4.58	-107.79	-2,868.02	-8,940.57	9,395.11	9,386.72	8.39	1,119.280		
600.00	599.98	850.00	885.47	4.04	4.76	-17.79	-2,864.93	-8,939.72	9,390.38	9,381.58	8.80	1,066.875		
700.00	699.95	887.43	922.82	4.30	4.89	-17.78	-2,862.45	-8,939.51	9,385.35	9,376.16	9.18	1,022.052		
800.00	799.92	945.00	980.22	4.59	5.08	-17.76	-2,858.03	-8,939.68	9,380.87	9,371.20	9.66	970.712		
900.00	899.89	1,015.92	1,050.80	4.90	5.33	-17.72	-2,851.19	-8,940.62	9,376.78	9,366.56	10.23	916.919		
1,000.00	999.86	1,164.43	1,198.04	5.23	5.91	-17.61	-2,832.14	-8,943.73	9,372.48	9,361.35	11.13	842.316		
1,100.00	1,099.83	1,578.59	1,604.61	5.58	7.82	-17.16	-2,754.37	-8,951.78	9,366.08	9,352.71	13.37	700.430		
1,200.00	1,199.80	2,010.60	2,021.16	5.94	10.33	-16.50	-2,640.15	-8,954.36	9,355.68	9,339.49	16.18	578.071		
1,300.00	1,299.77	2,050.37	2,059.27	6.30	10.58	-16.43	-2,628.76	-8,954.35	9,344.84	9,328.04	16.80	556.328		
1,400.00	1,399.73	2,081.00	2,088.61	6.68	10.77	-16.38	-2,619.97	-8,954.52	9,334.66	9,317.30	17.36	537.575		
1,500.00	1,499.70	2,137.00	2,142.18	7.07	11.14	-16.29	-2,603.68	-8,955.22	9,325.07	9,306.96	18.11	515.010		
1,600.00	1,599.67	1,600.00	2,236.36	7.46	7.62	-16.11	-2,573.89	-8,957.19	9,315.90	9,300.85	15.05	619.008		
1,700.00	1,699.64	2,425.82	2,417.16	7.85	13.10	-15.77	-2,515.45	-8,959.71	9,305.82	9,285.01	20.81	447.154		
1,800.00	1,799.61	2,551.48	2,536.73	8.25	13.97	-15.54	-2,476.85	-8,960.84	9,295.68	9,273.61	22.07	421.247		
1,900.00	1,899.58	2,640.21	2,621.28	8.66	14.59	-15.38	-2,449.93	-8,961.35	9,285.42	9,262.34	23.08	402.301		
2,000.00	1,999.55	2,790.52	2,763.56	9.06	15.68	-15.09	-2,401.50	-8,962.42	9,274.77	9,250.22	24.56	377.685		
2,100.00	2,099.52	2,838.00	2,808.42	9.47	16.04	-15.00	-2,385.93	-8,962.81	9,264.35	9,239.03	25.32	365.914		
2,200.00	2,199.48	2,906.47	2,873.50	9.89	16.52	-14.88	-2,364.68	-8,963.32	9,254.37	9,228.15	26.22	353.015		
2,300.00	2,299.45	2,966.04	2,930.60	10.30	16.94	-14.78	-2,347.71	-8,963.64	9,244.92	9,217.87	27.05	341.802		
2,400.00	2,399.42	2,400.00	3,047.74	10.72	13.02	-14.57	-2,312.38	-8,964.56	9,235.68	9,212.08	23.60	391.358		
2,500.00	2,499.39	3,213.19	3,167.48	11.14	18.66	-14.36	-2,277.25	-8,964.54	9,225.92	9,196.36	29.57	312.027		
2,600.00	2,599.36	3,343.49	3,292.61	11.56	19.56	-14.14	-2,240.90	-8,963.87	9,215.81	9,184.94	30.87	298.545		
2,700.00	2,699.33	3,409.00	3,355.40	11.98	20.02	-14.03	-2,222.23	-8,963.96	9,206.24	9,174.49	31.75	289.988		
2,800.00	2,799.30	3,464.78	3,408.87	12.41	20.40	-13.94	-2,206.34	-8,964.26	9,197.09	9,164.53	32.56	282.448		
2,900.00	2,899.27	3,553.94	3,494.43	12.83	21.03	-13.79	-2,181.27	-8,964.61	9,188.08	9,154.47	33.61	273.410		
3,000.00	2,999.23	3,630.58	3,567.82	13.26	21.57	-13.66	-2,159.21	-8,965.19	9,179.32	9,144.75	34.57	265.525		
3,100.00	3,099.20	3,713.06	3,646.71	13.68	22.16	-13.51	-2,135.13	-8,966.08	9,170.84	9,135.26	35.59	257.709		
3,200.00	3,199.17	3,821.88	3,750.18	14.11	22.96	-13.31	-2,101.48	-8,967.69	9,162.41	9,125.60	36.81	248.907		
3,300.00	3,299.14	3,926.25	3,849.07	14.54	23.75	-13.11	-2,068.15	-8,969.40	9,153.99	9,115.97	38.02	240.756		
3,400.00	3,399.11	4,013.67	3,931.90	14.97	24.41	-12.94	-2,040.22	-8,970.74	9,145.58	9,106.47	39.11	233.838		
3,500.00	3,499.08	4,071.00	3,986.31	15.40	24.84	-12.83	-2,022.19	-8,971.70	9,137.53	9,097.55	39.98	228.567		
3,600.00	3,599.05	4,124.71	4,037.40	15.83	25.24	-12.72	-2,005.65	-8,972.74	9,129.99	9,089.18	40.81	223.714		
3,700.00	3,699.02	3,700.00	4,423.87	16.26	21.90	-11.94	-1,876.88	-8,977.20	9,122.77	9,084.85	37.91	240.622		
3,800.00	3,798.98	4,597.38	4,485.29	16.69	28.84	-11.80	-1,854.94	-8,976.82	9,112.49	9,067.29	45.19	201.631		
3,900.00	3,898.95	4,639.00	4,524.56	17.12	29.16	-11.72	-1,841.13	-8,976.78	9,102.83	9,056.87	45.97	198.033		
4,000.00	3,998.92	4,689.52	4,572.41	17.55	29.54	-11.62	-1,824.93	-8,976.88	9,093.79	9,047.00	46.79	194.351		
4,100.00	4,098.89	4,736.00	4,616.68	17.98	29.89	-11.54	-1,810.76	-8,977.05	9,085.34	9,037.75	47.58	190.929		
4,200.00	4,198.86	4,788.43	4,666.79	18.42	30.27	-11.44	-1,795.34	-8,977.39	9,077.46	9,029.05	48.41	187.524		
4,300.00	4,298.83	4,843.04	4,719.10	18.85	30.66	-11.34	-1,779.68	-8,977.94	9,070.13	9,020.89	49.24	184.207		
4,400.00	4,398.80	4,915.71	4,789.17	19.28	31.16	-11.23	-1,760.45	-8,978.58	9,063.22	9,013.04	50.18	180.631		
4,500.00	4,498.77	4,980.23	4,851.77	19.72	31.58	-11.13	-1,744.83	-8,979.04	9,056.66	9,005.63	51.04	177.459		
4,600.00	4,598.73	5,044.60	4,914.37	20.15	31.99	-11.04	-1,729.86	-8,979.61	9,050.52	8,998.64	51.88	174.435		
4,700.00	4,698.70	5,114.00	4,982.06	20.58	32.42	-10.94	-1,714.54	-8,980.32	9,044.78	8,992.02	52.76	171.445		
4,800.00	4,798.67	5,182.20	5,048.83	21.02	32.82	-10.86	-1,700.66	-8,981.00	9,039.40	8,985.80	53.60	168.659		
4,900.00	4,898.64	5,253.12	5,118.57	21.45	33.22	-10.78	-1,687.85	-8,981.60	9,034.34	8,979.91	54.43	165.983		
5,000.00	4,998.61	5,323.40	5,187.98	21.89	33.59	-10.71	-1,676.82	-8,982.09	9,029.62	8,974.38	55.24	163.463		
5,100.00	5,098.58	5,398.00	5,261.82	22.32	33.97	-10.65	-1,666.25	-8,982.64	9,025.24	8,969.19	56.05	161.014		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,198.55	5,458.89	5,322.25	22.76	34.25	-10.60	-1,658.77	-8,983.09	9,021.22	8,964.45	56.77	158.903		
5,300.00	5,298.52	5,525.24	5,388.28	23.20	34.54	-10.56	-1,652.26	-8,983.51	9,017.58	8,960.08	57.50	156.820		
5,400.00	5,398.49	5,609.56	5,472.29	23.63	34.89	-10.52	-1,645.12	-8,984.16	9,014.31	8,956.02	58.29	154.641		
5,500.00	5,498.45	5,799.51	5,661.83	24.07	35.63	-10.45	-1,632.72	-8,983.52	9,010.15	8,950.69	59.46	151.531		
5,600.00	5,598.42	5,846.51	5,708.78	24.50	35.80	-10.44	-1,630.58	-8,983.19	9,006.18	8,946.11	60.07	149.931		
5,700.00	5,698.39	5,895.25	5,757.47	24.94	35.97	-10.43	-1,628.63	-8,983.09	9,002.78	8,942.10	60.68	148.371		
5,800.00	5,798.36	5,946.03	5,808.23	25.38	36.15	-10.42	-1,627.02	-8,983.18	8,999.94	8,938.65	61.29	146.848		
5,900.00	5,898.33	6,015.71	5,877.88	25.81	36.38	-10.41	-1,625.36	-8,983.57	8,997.58	8,935.63	61.96	145.225		
6,000.00	5,998.30	6,111.36	5,973.52	26.25	36.69	-10.40	-1,623.31	-8,984.24	8,995.42	8,932.71	62.71	143.447		
6,100.00	6,098.27	6,224.04	6,086.17	26.69	37.06	-10.39	-1,621.10	-8,984.88	8,993.17	8,929.65	63.52	141.583		
6,200.00	6,198.24	6,301.58	6,163.69	27.12	37.32	-10.38	-1,619.59	-8,985.36	8,990.97	8,926.76	64.21	140.017		
6,300.00	6,298.20	6,379.00	6,241.09	27.56	37.58	-10.37	-1,617.95	-8,986.06	8,989.02	8,924.11	64.91	138.489		
6,400.00	6,398.17	6,460.90	6,322.97	28.00	37.86	-10.36	-1,616.18	-8,986.99	8,987.29	8,921.67	65.62	136.958		
6,500.00	6,498.14	6,543.85	6,405.89	28.43	38.14	-10.35	-1,614.49	-8,988.09	8,985.78	8,919.44	66.34	135.456		
6,600.00	6,597.68	6,654.00	6,516.01	28.88	38.51	-9.50	-1,612.33	-8,989.57	8,978.32	8,911.17	67.15	133.705		
6,700.00	6,694.68	6,742.92	6,604.91	29.32	38.81	-9.78	-1,610.64	-8,990.71	8,955.63	8,887.75	67.88	131.927		
6,800.00	6,786.74	6,816.69	6,678.66	29.77	39.06	-10.40	-1,609.28	-8,991.79	8,918.39	8,849.85	68.54	130.122		
6,900.00	6,871.61	6,893.65	6,755.60	30.24	39.32	-11.44	-1,607.85	-8,993.06	8,867.49	8,798.32	69.17	128.198		
7,000.00	6,947.19	6,970.78	6,832.70	30.74	39.59	-13.08	-1,606.16	-8,994.39	8,804.03	8,734.27	69.76	126.211		
7,100.00	7,011.62	7,041.54	6,903.42	31.32	39.84	-15.69	-1,604.39	-8,995.64	8,729.55	8,659.28	70.27	124.235		
7,200.00	7,063.31	7,104.00	6,965.85	32.03	40.06	-20.10	-1,602.83	-8,996.69	8,645.86	8,575.16	70.69	122.304		
7,300.00	7,101.00	7,149.90	7,011.73	32.89	40.22	-28.41	-1,601.72	-8,997.40	8,555.04	8,484.04	71.00	120.493		
7,400.00	7,123.74	7,178.20	7,040.02	33.93	40.32	-46.87	-1,601.04	-8,997.82	8,459.39	8,388.19	71.20	118.814		
7,500.00	7,131.00	7,188.31	7,050.13	35.10	40.36	-87.97	-1,600.81	-8,997.97	8,361.28	8,289.98	71.30	117.274		
7,600.00	7,130.63	7,189.50	7,051.32	36.44	40.36	-88.01	-1,600.78	-8,997.99	8,262.77	8,191.41	71.35	115.798		
7,700.00	7,130.26	7,190.69	7,052.51	37.94	40.37	-88.06	-1,600.75	-8,998.01	8,164.29	8,092.87	71.42	114.308		
7,800.00	7,129.90	7,191.88	7,053.70	39.59	40.37	-88.11	-1,600.72	-8,998.02	8,065.85	7,994.35	71.50	112.802		
7,900.00	7,129.53	7,193.06	7,054.88	41.37	40.37	-88.16	-1,600.70	-8,998.04	7,967.45	7,895.86	71.60	111.281		
8,000.00	7,129.17	7,194.23	7,056.05	43.27	40.38	-88.20	-1,600.67	-8,998.06	7,869.09	7,797.39	71.70	109.745		
8,100.00	7,128.80	7,195.40	7,057.22	45.27	40.38	-88.25	-1,600.64	-8,998.07	7,770.78	7,698.95	71.82	108.193		
8,200.00	7,128.43	7,196.56	7,058.38	47.36	40.39	-88.30	-1,600.61	-8,998.09	7,672.50	7,600.54	71.96	106.625		
8,300.00	7,128.07	7,197.72	7,059.54	49.52	40.39	-88.34	-1,600.59	-8,998.11	7,574.27	7,502.16	72.11	105.042		
8,400.00	7,127.70	7,191.20	7,053.01	51.75	40.37	-88.08	-1,600.75	-8,998.02	7,476.10	7,403.86	72.25	103.481		
8,500.00	7,127.33	7,192.14	7,053.96	54.04	40.37	-88.12	-1,600.73	-8,998.04	7,377.97	7,305.54	72.43	101.866		
8,600.00	7,126.97	7,193.09	7,054.90	56.38	40.37	-88.16	-1,600.71	-8,998.05	7,279.89	7,207.26	72.63	100.235		
8,700.00	7,126.60	7,194.03	7,055.85	58.77	40.38	-88.20	-1,600.68	-8,998.06	7,181.86	7,109.01	72.85	98.588		
8,800.00	7,126.24	7,194.98	7,056.80	61.19	40.38	-88.23	-1,600.66	-8,998.08	7,083.88	7,010.80	73.09	96.925		
8,900.00	7,125.87	7,195.94	7,057.75	63.65	40.38	-88.27	-1,600.64	-8,998.09	6,985.97	6,912.62	73.35	95.247		
9,000.00	7,125.50	7,196.89	7,058.71	66.15	40.39	-88.31	-1,600.62	-8,998.11	6,888.11	6,814.48	73.63	93.554		
9,100.00	7,125.14	7,197.85	7,059.67	68.67	40.39	-88.35	-1,600.60	-8,998.12	6,790.31	6,716.38	73.93	91.845		
9,200.00	7,124.77	7,198.81	7,060.62	71.21	40.39	-88.39	-1,600.58	-8,998.14	6,692.58	6,618.32	74.26	90.123		
9,300.00	7,124.41	7,199.77	7,061.59	73.78	40.40	-88.43	-1,600.56	-8,998.15	6,594.92	6,520.31	74.62	88.386		
9,400.00	7,124.04	7,200.73	7,062.55	76.37	40.40	-88.46	-1,600.53	-8,998.17	6,497.33	6,422.33	75.00	86.635		
9,500.00	7,123.67	7,201.70	7,063.51	78.98	40.40	-88.50	-1,600.51	-8,998.18	6,399.81	6,324.41	75.41	84.872		
9,600.00	7,123.31	7,202.67	7,064.48	81.60	40.41	-88.54	-1,600.49	-8,998.20	6,302.37	6,226.53	75.84	83.097		
9,700.00	7,122.94	7,203.64	7,065.45	84.24	40.41	-88.58	-1,600.47	-8,998.21	6,205.01	6,128.70	76.31	81.310		
9,800.00	7,122.57	7,204.61	7,066.43	86.90	40.41	-88.62	-1,600.45	-8,998.22	6,107.74	6,030.93	76.81	79.513		
9,900.00	7,122.21	7,205.59	7,067.40	89.56	40.42	-88.66	-1,600.43	-8,998.24	6,010.56	5,933.21	77.35	77.706		
10,000.00	7,121.84	7,206.56	7,068.38	92.24	40.42	-88.70	-1,600.41	-8,998.25	5,913.47	5,835.55	77.92	75.890		
10,100.00	7,121.48	7,207.54	7,069.36	94.92	40.42	-88.74	-1,600.38	-8,998.27	5,816.48	5,737.95	78.53	74.067		
10,200.00	7,121.11	7,208.52	7,070.34	97.62	40.43	-88.78	-1,600.36	-8,998.28	5,719.59	5,640.41	79.18	72.238		
10,300.00	7,120.74	7,209.51	7,071.32	100.32	40.43	-88.82	-1,600.34	-8,998.30	5,622.81	5,542.94	79.87	70.404		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,120.38	7,210.49	7,072.31	103.04	40.43	-88.86	-1,600.32	-8,998.31	5,526.14	5,445.55	80.60	68.565		
10,500.00	7,120.01	7,211.48	7,073.29	105.76	40.44	-88.89	-1,600.30	-8,998.33	5,429.60	5,348.23	81.37	66.725		
10,600.00	7,119.64	7,212.47	7,074.29	108.48	40.44	-88.93	-1,600.28	-8,998.34	5,333.18	5,250.99	82.20	64.883		
10,700.00	7,119.28	7,213.47	7,075.28	111.22	40.44	-88.97	-1,600.26	-8,998.36	5,236.90	5,153.83	83.07	63.042		
10,800.00	7,118.91	7,214.46	7,076.27	113.96	40.45	-89.01	-1,600.23	-8,998.38	5,140.76	5,056.76	83.99	61.204		
10,900.00	7,118.55	7,215.46	7,077.27	116.70	40.45	-89.05	-1,600.21	-8,998.39	5,044.77	4,959.79	84.97	59.368		
11,000.00	7,118.18	7,216.46	7,078.27	119.45	40.45	-89.09	-1,600.19	-8,998.41	4,948.93	4,862.92	86.01	57.538		
11,100.00	7,117.81	7,217.46	7,079.27	122.21	40.46	-89.13	-1,600.17	-8,998.42	4,853.27	4,766.16	87.11	55.716		
11,200.00	7,117.45	7,218.47	7,080.28	124.97	40.46	-89.17	-1,600.15	-8,998.44	4,757.78	4,669.51	88.27	53.901		
11,300.00	7,117.08	7,219.48	7,081.28	127.73	40.46	-89.22	-1,600.13	-8,998.45	4,662.48	4,572.99	89.50	52.097		
11,400.00	7,116.72	7,220.48	7,082.29	130.50	40.47	-89.26	-1,600.11	-8,998.47	4,567.38	4,476.59	90.79	50.306		
11,500.00	7,116.35	7,221.50	7,083.30	133.27	40.47	-89.30	-1,600.08	-8,998.48	4,472.50	4,380.34	92.16	48.528		
11,600.00	7,115.98	7,222.51	7,084.32	136.04	40.48	-89.34	-1,600.06	-8,998.50	4,377.84	4,284.23	93.61	46.766		
11,700.00	7,115.62	7,223.53	7,085.34	138.82	40.48	-89.38	-1,600.04	-8,998.52	4,283.43	4,188.29	95.14	45.021		
11,800.00	7,115.25	7,224.55	7,086.35	141.60	40.48	-89.42	-1,600.02	-8,998.53	4,189.28	4,092.52	96.76	43.295		
11,900.00	7,114.88	7,225.57	7,087.38	144.39	40.49	-89.46	-1,600.00	-8,998.55	4,095.40	3,996.93	98.47	41.590		
12,000.00	7,114.52	7,226.59	7,088.40	147.17	40.49	-89.50	-1,599.98	-8,998.56	4,001.82	3,901.54	100.28	39.908		
12,100.00	7,114.15	7,227.62	7,089.43	149.96	40.49	-89.54	-1,599.96	-8,998.58	3,908.55	3,806.37	102.19	38.249		
12,200.00	7,113.79	7,228.65	7,090.45	152.75	40.50	-89.58	-1,599.93	-8,998.59	3,815.63	3,711.43	104.20	36.617		
12,300.00	7,113.42	7,229.68	7,091.48	155.55	40.50	-89.62	-1,599.91	-8,998.61	3,723.07	3,616.74	106.34	35.012		
12,400.00	7,113.05	7,230.71	7,092.52	158.34	40.50	-89.67	-1,599.89	-8,998.63	3,630.91	3,522.32	108.59	33.436		
12,500.00	7,112.69	7,231.75	7,093.55	161.14	40.51	-89.71	-1,599.87	-8,998.64	3,539.17	3,428.20	110.98	31.891		
12,600.00	7,112.32	7,232.79	7,094.59	163.94	40.51	-89.75	-1,599.85	-8,998.66	3,447.90	3,334.40	113.50	30.378		
12,700.00	7,111.96	7,233.83	7,095.63	166.74	40.51	-89.79	-1,599.83	-8,998.68	3,357.12	3,240.95	116.17	28.899		
12,800.00	7,111.59	7,234.87	7,096.68	169.54	40.52	-89.83	-1,599.80	-8,998.69	3,266.87	3,147.88	118.99	27.454		
12,900.00	7,111.22	7,235.92	7,097.72	172.35	40.52	-89.88	-1,599.78	-8,998.71	3,177.21	3,055.23	121.98	26.046		
13,000.00	7,110.86	7,236.97	7,098.77	175.16	40.53	-89.92	-1,599.76	-8,998.72	3,088.19	2,963.04	125.15	24.676		
13,100.00	7,110.49	7,238.02	7,099.82	177.96	40.53	-89.96	-1,599.74	-8,998.74	2,999.86	2,871.35	128.51	23.344		
13,200.00	7,110.12	7,239.07	7,100.88	180.77	40.53	-90.00	-1,599.72	-8,998.76	2,912.28	2,780.22	132.06	22.053		
13,300.00	7,109.76	7,240.13	7,101.93	183.58	40.54	-90.04	-1,599.70	-8,998.77	2,825.52	2,689.70	135.83	20.802		
13,400.00	7,109.39	7,241.19	7,102.99	186.40	40.54	-90.09	-1,599.68	-8,998.79	2,739.67	2,599.85	139.82	19.594		
13,500.00	7,109.03	7,242.25	7,104.05	189.21	40.54	-90.13	-1,599.65	-8,998.81	2,654.81	2,510.76	144.05	18.430		
13,600.00	7,108.66	7,243.31	7,105.11	192.03	40.55	-90.17	-1,599.63	-8,998.82	2,571.04	2,422.50	148.53	17.309		
13,700.00	7,108.29	7,244.38	7,106.18	194.84	40.55	-90.22	-1,599.61	-8,998.84	2,488.46	2,335.18	153.28	16.234		
13,800.00	7,107.93	7,245.45	7,107.25	197.66	40.56	-90.26	-1,599.59	-8,998.86	2,407.21	2,248.89	158.31	15.205		
13,900.00	7,107.56	7,246.52	7,108.32	200.48	40.56	-90.30	-1,599.57	-8,998.87	2,327.41	2,163.78	163.63	14.223		
14,000.00	7,107.19	7,247.60	7,109.40	203.30	40.56	-90.34	-1,599.55	-8,998.89	2,249.23	2,079.98	169.26	13.289		
14,100.00	7,106.83	7,248.67	7,110.47	206.12	40.57	-90.39	-1,599.53	-8,998.91	2,172.84	1,997.65	175.19	12.403		
14,200.00	7,106.46	7,249.75	7,111.55	208.94	40.57	-90.43	-1,599.50	-8,998.93	2,098.44	1,916.99	181.44	11.565		
14,300.00	7,106.10	7,250.83	7,112.63	211.76	40.57	-90.47	-1,599.48	-8,998.94	2,026.24	1,838.23	188.01	10.777		
14,400.00	7,105.73	7,251.92	7,113.72	214.58	40.58	-90.52	-1,599.46	-8,998.96	1,956.48	1,761.59	194.89	10.039		
14,500.00	7,105.36	7,253.01	7,114.80	217.40	40.58	-90.56	-1,599.44	-8,998.98	1,889.45	1,687.39	202.06	9.351		
14,600.00	7,105.00	7,254.10	7,115.89	220.23	40.59	-90.61	-1,599.42	-8,998.99	1,825.43	1,615.94	209.50	8.713		
14,700.00	7,104.63	7,255.19	7,116.99	223.05	40.59	-90.65	-1,599.40	-8,999.01	1,764.76	1,547.61	217.16	8.127		
14,800.00	7,104.27	7,256.29	7,118.08	225.88	40.59	-90.69	-1,599.37	-8,999.03	1,707.80	1,482.81	224.98	7.591		
14,872.41	7,104.00	7,257.08	7,118.88	227.93	40.60	-90.73	-1,599.36	-8,999.04	1,669.08	1,438.36	230.71	7.234 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	36.00	3.28	3.28	-107.87	-2,894.96	-8,979.07	9,434.29					
100.00	100.00	183.89	219.86	3.28	3.33	-107.85	-2,892.05	-8,978.73	9,433.76	9,427.15	6.62	1,425.713		
200.00	200.00	309.48	345.41	3.34	3.47	-107.84	-2,889.09	-8,977.75	9,432.29	9,425.48	6.81	1,385.251		
300.00	300.00	416.26	452.14	3.44	3.65	-107.82	-2,885.83	-8,977.08	9,430.75	9,423.66	7.10	1,328.629		
400.00	400.00	499.07	534.89	3.60	3.83	-107.80	-2,882.75	-8,976.68	9,429.17	9,421.74	7.43	1,268.848		
500.00	500.00	542.00	577.78	3.81	3.93	-107.79	-2,880.90	-8,976.68	9,427.96	9,420.23	7.73	1,218.939		
600.00	599.98	592.78	628.50	4.04	4.06	-17.79	-2,878.62	-8,977.01	9,425.77	9,417.68	8.10	1,164.201		
700.00	699.95	648.00	683.67	4.30	4.21	-17.78	-2,876.17	-8,977.91	9,423.47	9,414.96	8.51	1,107.863		
800.00	799.92	668.42	704.06	4.59	4.26	-17.77	-2,875.29	-8,978.37	9,421.73	9,412.88	8.85	1,064.380		
900.00	899.89	722.54	758.12	4.90	4.42	-17.76	-2,873.19	-8,979.82	9,420.67	9,411.35	9.32	1,010.924		
1,000.00	999.86	790.00	825.51	5.23	4.62	-17.74	-2,870.73	-8,981.70	9,419.89	9,410.03	9.85	956.048		
1,100.00	1,099.83	842.24	877.68	5.58	4.79	-17.73	-2,868.62	-8,983.46	9,419.54	9,409.18	10.36	908.883		
1,103.52	1,103.35	843.72	879.16	5.59	4.79	-17.73	-2,868.56	-8,983.52	9,419.54	9,409.16	10.38	907.377		
1,200.00	1,199.80	884.00	919.35	5.94	4.93	-17.72	-2,866.57	-8,985.28	9,419.83	9,408.97	10.86	867.552		
1,300.00	1,299.77	884.00	919.35	6.30	4.93	-17.72	-2,866.57	-8,985.28	9,420.96	9,409.73	11.23	839.203		
1,400.00	1,399.73	939.32	974.50	6.68	5.11	-17.70	-2,863.64	-8,988.38	9,422.56	9,410.77	11.79	799.250		
1,500.00	1,499.70	979.00	1,014.03	7.07	5.25	-17.68	-2,861.54	-8,991.16	9,425.11	9,412.80	12.31	765.671		
1,600.00	1,599.67	1,007.72	1,042.62	7.46	5.36	-17.67	-2,859.93	-8,993.41	9,428.32	9,415.52	12.80	736.556		
1,700.00	1,699.64	1,074.00	1,108.50	7.85	5.60	-17.64	-2,855.50	-8,999.14	9,432.13	9,418.70	13.44	702.043		
1,800.00	1,799.61	1,139.67	1,173.64	8.25	5.86	-17.60	-2,850.07	-9,005.39	9,436.31	9,422.22	14.08	669.967		
1,900.00	1,899.58	1,168.00	1,201.70	8.66	5.97	-17.58	-2,847.38	-9,008.21	9,440.84	9,426.24	14.60	646.847		
2,000.00	1,999.55	1,230.95	1,263.93	9.06	6.23	-17.53	-2,840.75	-9,015.03	9,445.82	9,430.57	15.26	619.166		
2,100.00	2,099.52	1,263.00	1,295.53	9.47	6.37	-17.50	-2,837.05	-9,018.89	9,451.57	9,435.78	15.79	598.464		
2,200.00	2,199.48	1,300.87	1,332.79	9.89	6.54	-17.47	-2,832.36	-9,023.81	9,458.00	9,441.64	16.36	577.973		
2,300.00	2,299.45	1,358.00	1,388.78	10.30	6.80	-17.41	-2,824.56	-9,032.03	9,465.23	9,448.21	17.02	555.965		
2,400.00	2,399.42	1,385.77	1,415.94	10.72	6.94	-17.38	-2,820.57	-9,036.25	9,472.96	9,455.40	17.56	539.472		
2,500.00	2,499.39	1,489.94	1,517.84	11.14	7.45	-17.27	-2,805.80	-9,052.01	9,480.97	9,462.51	18.46	513.566		
2,600.00	2,599.36	1,569.23	1,595.57	11.56	7.84	-17.19	-2,795.40	-9,063.72	9,488.97	9,469.72	19.25	492.864		
2,700.00	2,699.33	1,614.71	1,640.13	11.98	8.07	-17.15	-2,789.51	-9,070.64	9,497.46	9,477.58	19.88	477.667		
2,800.00	2,799.30	1,684.59	1,708.54	12.41	8.44	-17.08	-2,780.46	-9,081.67	9,506.47	9,485.84	20.64	460.637		
2,900.00	2,899.27	1,855.06	1,875.62	12.83	9.34	-16.92	-2,758.88	-9,107.68	9,515.07	9,493.16	21.91	434.207		
3,000.00	2,999.23	1,895.82	1,915.52	13.26	9.56	-16.88	-2,753.45	-9,113.98	9,523.76	9,501.23	22.53	422.649		
3,100.00	3,099.20	2,022.00	2,039.10	13.68	10.25	-16.75	-2,737.25	-9,133.68	9,532.79	9,509.19	23.60	403.876		
3,200.00	3,199.17	2,086.24	2,102.10	14.11	10.60	-16.69	-2,729.39	-9,143.42	9,541.61	9,517.26	24.35	391.880		
3,300.00	3,299.14	2,352.84	2,362.86	14.54	12.11	-16.42	-2,691.47	-9,183.82	9,549.83	9,523.62	26.21	364.321		
3,400.00	3,399.11	2,401.00	2,410.05	14.97	12.38	-16.37	-2,684.96	-9,190.83	9,557.63	9,530.74	26.89	355.447		
3,500.00	3,499.08	2,447.26	2,455.42	15.40	12.65	-16.33	-2,679.14	-9,197.70	9,565.97	9,538.42	27.55	347.237		
3,600.00	3,599.05	2,514.84	2,521.64	15.83	13.03	-16.26	-2,670.32	-9,207.94	9,574.63	9,546.30	28.33	338.002		
3,700.00	3,699.02	2,564.06	2,569.79	16.26	13.32	-16.21	-2,663.68	-9,215.70	9,583.76	9,554.75	29.01	330.384		
3,800.00	3,798.98	2,661.48	2,664.96	16.69	13.89	-16.11	-2,650.21	-9,231.53	9,593.30	9,563.34	29.96	320.168		
3,900.00	3,898.95	2,744.99	2,746.58	17.12	14.38	-16.03	-2,638.73	-9,244.98	9,602.77	9,571.93	30.84	311.350		
4,000.00	3,998.92	4,000.00	2,868.09	17.55	21.77	-15.90	-2,622.54	-9,264.70	9,612.22	9,574.10	38.11	252.200		
4,100.00	4,098.89	2,916.91	2,914.94	17.98	15.38	-15.86	-2,616.93	-9,272.10	9,621.76	9,589.15	32.61	295.036		
4,200.00	4,198.86	2,969.00	2,966.02	18.42	15.68	-15.82	-2,611.28	-9,280.60	9,632.09	9,598.79	33.30	289.249		
4,300.00	4,298.83	3,005.55	3,001.83	18.85	15.90	-15.79	-2,607.34	-9,286.77	9,642.95	9,609.05	33.90	284.424		
4,400.00	4,398.80	3,220.72	3,212.94	19.28	17.13	-15.61	-2,584.15	-9,321.16	9,652.84	9,617.36	35.49	272.003		
4,500.00	4,498.77	3,401.39	3,390.89	19.72	18.12	-15.48	-2,568.41	-9,348.07	9,662.73	9,625.89	36.84	262.266		
4,600.00	4,598.73	3,730.04	3,715.40	20.15	19.89	-15.25	-2,538.46	-9,390.54	9,670.03	9,631.07	38.96	248.205		
4,700.00	4,698.70	3,763.79	3,748.67	20.58	20.08	-15.23	-2,534.84	-9,394.82	9,677.11	9,637.55	39.55	244.655		
4,800.00	4,798.67	3,824.00	3,807.87	21.02	20.41	-15.18	-2,527.74	-9,403.18	9,684.96	9,644.67	40.29	240.379		
4,900.00	4,898.64	3,824.00	3,807.87	21.45	20.41	-15.18	-2,527.74	-9,403.18	9,693.30	9,652.60	40.70	238.188		
5,000.00	4,998.61	3,873.93	3,856.82	21.89	20.71	-15.13	-2,521.43	-9,410.71	9,702.35	9,660.97	41.38	234.452		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 89-MWD													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,098.58	3,916.00	3,898.01	22.32	20.96	-15.09	-2,516.00	-9,417.37	9,712.03	9,670.00	42.02	231.108		
5,200.00	5,198.55	5,200.00	4,032.79	22.76	28.55	-14.96	-2,498.60	-9,439.49	9,722.10	9,672.67	49.44	196.650		
5,300.00	5,298.52	4,186.37	4,162.99	23.20	22.56	-14.85	-2,482.75	-9,459.55	9,731.31	9,686.95	44.37	219.336		
5,400.00	5,398.49	4,300.17	4,274.45	23.63	23.23	-14.74	-2,467.92	-9,477.01	9,740.57	9,695.15	45.42	214.439		
5,500.00	5,498.45	4,425.36	4,396.66	24.07	24.00	-14.61	-2,448.97	-9,496.40	9,749.48	9,702.91	46.57	209.335		
5,600.00	5,598.42	4,485.00	4,454.69	24.50	24.38	-14.54	-2,438.94	-9,505.89	9,758.52	9,711.18	47.34	206.144		
5,700.00	5,698.39	4,549.84	4,517.64	24.94	24.79	-14.46	-2,427.62	-9,516.54	9,767.94	9,719.80	48.14	202.894		
5,800.00	5,798.36	4,713.45	4,676.95	25.38	25.82	-14.28	-2,401.30	-9,542.80	9,777.30	9,727.76	49.54	197.351		
5,900.00	5,898.33	5,900.00	4,787.10	25.81	33.02	-14.16	-2,385.06	-9,560.07	9,786.39	9,729.73	56.66	172.715		
6,000.00	5,998.30	5,787.43	5,740.26	26.25	31.22	-13.65	-2,310.45	-9,645.66	9,789.19	9,733.54	55.65	175.912		
6,100.00	6,098.27	6,074.23	6,026.99	26.69	32.28	-13.64	-2,307.96	-9,651.12	9,788.34	9,731.20	57.14	171.306		
6,200.00	6,198.24	6,200.00	6,269.92	27.12	32.74	-13.63	-2,305.62	-9,651.22	9,785.46	9,727.45	58.01	168.684		
6,300.00	6,298.20	6,433.23	6,385.97	27.56	33.57	-13.63	-2,304.14	-9,650.40	9,782.01	9,722.70	59.31	164.917		
6,400.00	6,398.17	6,478.19	6,430.92	28.00	33.73	-13.63	-2,303.42	-9,650.29	9,778.97	9,719.03	59.94	163.149		
6,500.00	6,498.14	6,566.00	6,518.71	28.43	34.06	-13.62	-2,301.85	-9,650.86	9,776.69	9,715.98	60.71	161.031		
6,600.00	6,597.68	6,566.00	6,518.71	28.88	34.06	-12.83	-2,301.85	-9,650.86	9,768.66	9,707.49	61.18	159.681		
6,700.00	6,694.68	6,623.19	6,575.88	29.32	34.28	-13.22	-2,300.84	-9,651.69	9,746.32	9,684.48	61.84	157.598		
6,800.00	6,786.74	6,675.38	6,628.06	29.77	34.48	-14.04	-2,300.05	-9,652.64	9,709.80	9,647.33	62.47	155.438		
6,900.00	6,871.61	6,723.86	6,676.52	30.24	34.67	-15.38	-2,299.42	-9,653.71	9,659.94	9,596.90	63.04	153.234		
7,000.00	6,947.19	6,771.33	6,723.98	30.74	34.85	-17.45	-2,298.91	-9,654.91	9,597.89	9,534.32	63.56	150.999		
7,100.00	7,011.62	6,820.61	6,773.24	31.32	35.04	-20.67	-2,298.43	-9,656.25	9,525.02	9,460.98	64.04	148.737		
7,200.00	7,063.31	6,860.81	6,813.42	32.03	35.20	-25.91	-2,298.06	-9,657.41	9,443.04	9,378.62	64.43	146.566		
7,300.00	7,101.00	6,890.90	6,843.50	32.89	35.32	-35.08	-2,297.80	-9,658.31	9,353.95	9,289.22	64.73	144.508		
7,400.00	7,123.74	6,910.09	6,862.68	33.93	35.39	-52.59	-2,297.64	-9,658.91	9,259.89	9,194.94	64.95	142.576		
7,500.00	7,131.00	6,917.84	6,870.42	35.10	35.42	-83.84	-2,297.58	-9,659.15	9,163.16	9,098.06	65.09	140.776		
7,600.00	7,130.63	6,919.91	6,872.49	36.44	35.43	-83.89	-2,297.57	-9,659.21	9,065.91	9,000.70	65.21	139.030		
7,700.00	7,130.26	6,921.99	6,874.57	37.94	35.44	-83.95	-2,297.55	-9,659.28	8,968.72	8,903.37	65.35	137.251		
7,800.00	7,129.90	6,924.08	6,876.66	39.59	35.45	-84.01	-2,297.53	-9,659.34	8,871.59	8,806.09	65.50	135.439		
7,900.00	7,129.53	6,926.19	6,878.76	41.37	35.46	-84.06	-2,297.52	-9,659.41	8,774.53	8,708.85	65.68	133.595		
8,000.00	7,129.17	6,928.30	6,880.88	43.27	35.46	-84.12	-2,297.50	-9,659.48	8,677.54	8,611.66	65.88	131.717		
8,100.00	7,128.80	6,930.43	6,883.00	45.27	35.47	-84.18	-2,297.48	-9,659.55	8,580.61	8,514.51	66.10	129.807		
8,200.00	7,128.43	6,932.56	6,885.14	47.36	35.48	-84.23	-2,297.47	-9,659.61	8,483.75	8,417.40	66.35	127.865		
8,300.00	7,128.07	6,934.71	6,887.28	49.52	35.49	-84.29	-2,297.45	-9,659.68	8,386.97	8,320.35	66.62	125.891		
8,400.00	7,127.70	6,944.00	6,896.57	51.75	35.52	-84.54	-2,297.38	-9,659.98	8,290.26	8,223.32	66.94	123.840		
8,500.00	7,127.33	6,944.00	6,896.57	54.04	35.52	-84.54	-2,297.38	-9,659.98	8,193.63	8,126.37	67.26	121.821		
8,600.00	7,126.97	6,944.00	6,896.57	56.38	35.52	-84.54	-2,297.38	-9,659.98	8,097.08	8,029.47	67.60	119.772		
8,700.00	7,126.60	6,944.00	6,896.57	58.77	35.52	-84.54	-2,297.38	-9,659.98	8,000.61	7,932.64	67.98	117.695		
8,800.00	7,126.24	6,944.00	6,896.57	61.19	35.52	-84.54	-2,297.38	-9,659.98	7,904.24	7,835.85	68.38	115.590		
8,900.00	7,125.87	6,944.00	6,896.57	63.65	35.52	-84.54	-2,297.38	-9,659.98	7,807.95	7,739.13	68.82	113.461		
9,000.00	7,125.50	6,944.00	6,896.57	66.15	35.52	-84.54	-2,297.38	-9,659.98	7,711.76	7,642.47	69.28	111.308		
9,100.00	7,125.14	6,944.00	6,896.57	68.67	35.52	-84.54	-2,297.38	-9,659.98	7,615.66	7,545.88	69.78	109.133		
9,200.00	7,124.77	6,944.00	6,896.57	71.21	35.52	-84.54	-2,297.38	-9,659.98	7,519.67	7,449.35	70.32	106.938		
9,300.00	7,124.41	6,944.00	6,896.57	73.78	35.52	-84.54	-2,297.38	-9,659.98	7,423.78	7,352.89	70.89	104.725		
9,400.00	7,124.04	6,944.00	6,896.57	76.37	35.52	-84.54	-2,297.38	-9,659.98	7,328.01	7,256.51	71.50	102.496		
9,500.00	7,123.67	6,944.00	6,896.57	78.98	35.52	-84.54	-2,297.38	-9,659.98	7,232.34	7,160.20	72.14	100.254		
9,600.00	7,123.31	6,944.00	6,896.57	81.60	35.52	-84.54	-2,297.38	-9,659.98	7,136.80	7,063.98	72.82	98.001		
9,700.00	7,122.94	6,944.00	6,896.57	84.24	35.52	-84.54	-2,297.38	-9,659.98	7,041.38	6,967.83	73.55	95.739		
9,800.00	7,122.57	6,964.08	6,916.64	86.90	35.61	-85.08	-2,297.22	-9,660.65	6,946.05	6,871.67	74.38	93.386		
9,900.00	7,122.21	6,966.09	6,918.64	89.56	35.61	-85.13	-2,297.20	-9,660.72	6,850.88	6,775.69	75.19	91.108		
10,000.00	7,121.84	6,968.12	6,920.67	92.24	35.62	-85.19	-2,297.19	-9,660.79	6,755.85	6,679.80	76.05	88.831		
10,100.00	7,121.48	6,970.18	6,922.73	94.92	35.63	-85.24	-2,297.17	-9,660.86	6,660.97	6,584.01	76.96	86.555		
10,200.00	7,121.11	6,972.26	6,924.81	97.62	35.64	-85.30	-2,297.15	-9,660.93	6,566.24	6,488.33	77.91	84.283		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 89-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,120.74	6,974.37	6,926.91	100.32	35.65	-85.36	-2,297.13	-9,661.00	6,471.66	6,392.76	78.91	82.018		
10,400.00	7,120.38	6,976.50	6,929.05	103.04	35.66	-85.41	-2,297.11	-9,661.08	6,377.25	6,297.30	79.95	79.762		
10,500.00	7,120.01	6,978.66	6,931.21	105.76	35.67	-85.47	-2,297.09	-9,661.16	6,283.02	6,201.96	81.05	77.517		
10,600.00	7,119.64	6,980.85	6,933.40	108.48	35.67	-85.53	-2,297.07	-9,661.23	6,188.96	6,106.75	82.21	75.287		
10,700.00	7,119.28	6,983.07	6,935.61	111.22	35.68	-85.59	-2,297.05	-9,661.31	6,095.09	6,011.68	83.41	73.072		
10,800.00	7,118.91	6,985.32	6,937.86	113.96	35.69	-85.65	-2,297.03	-9,661.39	6,001.41	5,916.74	84.67	70.876		
10,900.00	7,118.55	6,987.59	6,940.13	116.70	35.70	-85.71	-2,297.01	-9,661.48	5,907.95	5,821.95	86.00	68.701		
11,000.00	7,118.18	6,989.90	6,942.44	119.45	35.71	-85.78	-2,296.99	-9,661.56	5,814.70	5,727.32	87.38	66.548		
11,100.00	7,117.81	6,992.23	6,944.77	122.21	35.72	-85.84	-2,296.97	-9,661.65	5,721.67	5,632.85	88.82	64.419		
11,200.00	7,117.45	6,994.60	6,947.14	124.97	35.73	-85.90	-2,296.95	-9,661.73	5,628.88	5,538.56	90.33	62.317		
11,300.00	7,117.08	6,997.00	6,949.53	127.73	35.74	-85.97	-2,296.92	-9,661.82	5,536.35	5,444.45	91.90	60.243		
11,400.00	7,116.72	6,999.43	6,951.96	130.50	35.75	-86.03	-2,296.90	-9,661.91	5,444.07	5,350.53	93.54	58.199		
11,500.00	7,116.35	7,001.90	6,954.43	133.27	35.76	-86.10	-2,296.87	-9,662.01	5,352.07	5,256.82	95.26	56.186		
11,600.00	7,115.98	7,004.40	6,956.92	136.04	35.77	-86.17	-2,296.85	-9,662.10	5,260.37	5,163.32	97.04	54.206		
11,700.00	7,115.62	7,006.93	6,959.45	138.82	35.78	-86.24	-2,296.82	-9,662.20	5,168.96	5,070.06	98.91	52.260		
11,800.00	7,115.25	7,009.50	6,962.02	141.60	35.79	-86.30	-2,296.80	-9,662.30	5,077.89	4,977.03	100.85	50.349		
11,900.00	7,114.88	7,012.10	6,964.62	144.39	35.80	-86.37	-2,296.77	-9,662.40	4,987.15	4,884.26	102.88	48.475		
12,000.00	7,114.52	7,014.74	6,967.26	147.17	35.81	-86.45	-2,296.74	-9,662.50	4,896.76	4,791.77	105.00	46.638		
12,100.00	7,114.15	7,017.42	6,969.94	149.96	35.82	-86.52	-2,296.71	-9,662.60	4,806.76	4,699.56	107.20	44.839		
12,200.00	7,113.79	7,020.14	6,972.65	152.75	35.83	-86.59	-2,296.69	-9,662.71	4,717.16	4,607.66	109.50	43.080		
12,300.00	7,113.42	7,022.89	6,975.41	155.55	35.84	-86.67	-2,296.66	-9,662.82	4,627.98	4,516.09	111.89	41.361		
12,400.00	7,113.05	7,025.69	6,978.20	158.34	35.86	-86.74	-2,296.63	-9,662.93	4,539.26	4,424.87	114.39	39.683		
12,500.00	7,112.69	7,028.53	6,981.03	161.14	35.87	-86.82	-2,296.59	-9,663.04	4,451.00	4,334.02	116.99	38.047		
12,600.00	7,112.32	7,031.40	6,983.91	163.94	35.88	-86.90	-2,296.56	-9,663.16	4,363.26	4,243.56	119.70	36.452		
12,700.00	7,111.96	7,034.33	6,986.83	166.74	35.89	-86.98	-2,296.53	-9,663.28	4,276.04	4,153.52	122.52	34.900		
12,800.00	7,111.59	7,037.29	6,989.79	169.54	35.90	-87.06	-2,296.50	-9,663.40	4,189.40	4,063.93	125.47	33.390		
12,900.00	7,111.22	7,040.30	6,992.80	172.35	35.91	-87.14	-2,296.46	-9,663.52	4,103.36	3,974.82	128.54	31.924		
13,000.00	7,110.86	7,043.35	6,995.85	175.16	35.93	-87.22	-2,296.42	-9,663.65	4,017.96	3,886.23	131.73	30.500		
13,100.00	7,110.49	7,046.46	6,998.95	177.96	35.94	-87.30	-2,296.39	-9,663.78	3,933.26	3,798.19	135.07	29.121		
13,200.00	7,110.12	7,049.61	7,002.09	180.77	35.95	-87.39	-2,296.35	-9,663.91	3,849.28	3,710.74	138.54	27.785		
13,300.00	7,109.76	7,052.80	7,005.29	183.58	35.96	-87.47	-2,296.31	-9,664.05	3,766.08	3,623.92	142.15	26.493		
13,400.00	7,109.39	7,056.05	7,008.53	186.40	35.98	-87.56	-2,296.27	-9,664.19	3,683.71	3,537.79	145.92	25.244		
13,500.00	7,109.03	7,059.35	7,011.83	189.21	35.99	-87.65	-2,296.23	-9,664.33	3,602.23	3,452.39	149.84	24.040		
13,600.00	7,108.66	7,062.70	7,015.18	192.03	36.00	-87.74	-2,296.19	-9,664.47	3,521.70	3,367.78	153.93	22.879		
13,700.00	7,108.29	7,066.11	7,018.58	194.84	36.02	-87.84	-2,296.15	-9,664.62	3,442.19	3,284.02	158.18	21.762		
13,800.00	7,107.93	7,069.57	7,022.03	197.66	36.03	-87.93	-2,296.10	-9,664.77	3,363.77	3,201.18	162.60	20.688		
13,900.00	7,107.56	7,073.08	7,025.55	200.48	36.05	-88.02	-2,296.06	-9,664.93	3,286.52	3,119.33	167.19	19.658		
14,000.00	7,107.19	7,076.66	7,029.12	203.30	36.06	-88.12	-2,296.01	-9,665.09	3,210.52	3,038.56	171.96	18.670		
14,100.00	7,106.83	7,080.29	7,032.75	206.12	36.08	-88.22	-2,295.96	-9,665.25	3,135.86	2,958.95	176.91	17.726		
14,200.00	7,106.46	7,083.99	7,036.44	208.94	36.09	-88.32	-2,295.91	-9,665.42	3,062.65	2,880.60	182.04	16.824		
14,300.00	7,106.10	7,087.74	7,040.19	211.76	36.11	-88.42	-2,295.86	-9,665.59	2,990.97	2,803.62	187.36	15.964		
14,400.00	7,105.73	7,091.56	7,044.00	214.58	36.12	-88.52	-2,295.81	-9,665.77	2,920.96	2,728.11	192.85	15.146		
14,500.00	7,105.36	7,095.45	7,047.88	217.40	36.14	-88.63	-2,295.76	-9,665.95	2,852.73	2,654.21	198.52	14.370		
14,600.00	7,105.00	7,099.40	7,051.83	220.23	36.15	-88.74	-2,295.70	-9,666.13	2,786.42	2,582.06	204.36	13.635		
14,700.00	7,104.63	7,103.42	7,055.85	223.05	36.17	-88.85	-2,295.65	-9,666.32	2,722.15	2,511.80	210.36	12.941		
14,800.00	7,104.27	7,107.51	7,059.93	225.88	36.19	-88.96	-2,295.59	-9,666.51	2,660.09	2,443.59	216.50	12.287		
14,872.41	7,104.00	7,110.52	7,062.94	227.93	36.20	-89.04	-2,295.54	-9,666.66	2,616.61	2,395.59	221.03	11.838 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	36.00	3.28	3.28	-108.19	-2,953.24	-8,987.43	9,460.28					
100.00	100.00	43.12	79.12	3.28	3.28	-108.19	-2,953.14	-8,987.52	9,460.28	9,453.72	6.57	1,440.873		
200.00	200.00	113.59	149.58	3.34	3.29	-108.18	-2,952.49	-8,988.02	9,460.67	9,454.04	6.63	1,426.959		
300.00	300.00	171.00	206.98	3.44	3.33	-108.18	-2,951.54	-8,988.72	9,461.36	9,454.59	6.77	1,397.613		
400.00	400.00	209.78	245.75	3.60	3.36	-108.17	-2,950.85	-8,989.43	9,462.62	9,455.66	6.96	1,359.349		
500.00	500.00	263.00	298.94	3.81	3.41	-108.17	-2,950.16	-8,990.91	9,464.69	9,457.47	7.22	1,310.550		
600.00	599.98	263.00	298.94	4.04	3.41	-18.16	-2,950.16	-8,990.91	9,465.82	9,458.36	7.46	1,269.277		
700.00	699.95	263.00	298.94	4.30	3.41	-18.16	-2,950.16	-8,990.91	9,467.15	9,459.43	7.72	1,225.799		
800.00	799.92	305.18	341.09	4.59	3.47	-18.16	-2,950.05	-8,992.65	9,469.03	9,460.96	8.07	1,173.514		
900.00	899.89	354.00	389.82	4.90	3.55	-18.16	-2,950.72	-8,995.52	9,472.20	9,463.75	8.46	1,120.171		
1,000.00	999.86	354.00	389.82	5.23	3.55	-18.16	-2,950.72	-8,995.52	9,475.74	9,466.95	8.79	1,078.050		
1,100.00	1,099.83	354.00	389.82	5.58	3.55	-18.16	-2,950.72	-8,995.52	9,480.33	9,471.20	9.14	1,037.383		
1,200.00	1,199.80	386.43	422.15	5.94	3.61	-18.16	-2,951.69	-8,997.82	9,485.75	9,476.20	9.55	993.016		
1,300.00	1,299.77	410.91	446.53	6.30	3.65	-18.17	-2,952.73	-8,999.69	9,491.98	9,482.01	9.97	952.429		
1,400.00	1,399.73	445.00	480.46	6.68	3.73	-18.17	-2,954.63	-9,002.49	9,499.02	9,488.61	10.41	912.613		
1,500.00	1,499.70	545.54	580.40	7.07	3.97	-18.21	-2,962.12	-9,010.42	9,506.49	9,495.48	11.01	863.354		
1,600.00	1,599.67	614.53	648.93	7.46	4.16	-18.23	-2,968.34	-9,015.50	9,513.96	9,502.39	11.57	821.973		
1,700.00	1,699.64	732.65	766.11	7.85	4.53	-18.29	-2,980.56	-9,023.85	9,521.60	9,509.30	12.30	773.872		
1,800.00	1,799.61	1,339.99	1,370.95	8.25	6.84	-18.48	-3,019.09	-9,058.96	9,528.49	9,513.63	14.86	641.414		
1,900.00	1,899.58	1,383.00	1,413.90	8.66	7.01	-18.48	-3,019.90	-9,061.09	9,531.13	9,515.71	15.42	618.024		
2,000.00	1,999.55	1,383.00	1,413.90	9.06	7.01	-18.48	-3,019.90	-9,061.09	9,534.38	9,518.55	15.83	602.374		
2,100.00	2,099.52	1,383.00	1,413.90	9.47	7.01	-18.48	-3,019.90	-9,061.09	9,538.68	9,522.45	16.24	587.522		
2,200.00	2,199.48	1,383.00	1,413.90	9.89	7.01	-18.48	-3,019.90	-9,061.09	9,544.03	9,527.38	16.64	573.429		
2,300.00	2,299.45	1,410.75	1,441.57	10.30	7.13	-18.48	-3,020.50	-9,063.10	9,549.97	9,532.81	17.16	556.514		
2,400.00	2,399.42	1,445.00	1,475.62	10.72	7.27	-18.48	-3,021.61	-9,066.61	9,557.43	9,539.73	17.70	539.865		
2,500.00	2,499.39	1,445.00	1,475.62	11.14	7.27	-18.48	-3,021.61	-9,066.61	9,565.25	9,547.14	18.11	528.117		
2,600.00	2,599.36	1,445.00	1,475.62	11.56	7.27	-18.48	-3,021.61	-9,066.61	9,574.12	9,555.60	18.52	516.964		
2,700.00	2,699.33	1,445.00	1,475.62	11.98	7.27	-18.48	-3,021.61	-9,066.61	9,584.02	9,565.09	18.93	506.372		
2,800.00	2,799.30	1,522.76	1,552.74	12.41	7.62	-18.49	-3,025.12	-9,075.90	9,594.45	9,574.80	19.65	488.240		
2,900.00	2,899.27	1,569.00	1,598.58	12.83	7.83	-18.49	-3,027.71	-9,081.43	9,605.30	9,585.05	20.25	474.380		
3,000.00	2,999.23	1,605.06	1,634.28	13.26	8.00	-18.50	-3,030.17	-9,085.83	9,616.77	9,595.96	20.81	462.188		
3,100.00	3,099.20	1,633.40	1,662.31	13.68	8.14	-18.51	-3,032.52	-9,089.39	9,628.98	9,607.65	21.33	451.375		
3,200.00	3,199.17	1,665.00	1,693.49	14.11	8.29	-18.52	-3,035.55	-9,093.47	9,641.92	9,620.05	21.87	440.846		
3,300.00	3,299.14	1,665.00	1,693.49	14.54	8.29	-18.52	-3,035.55	-9,093.47	9,655.70	9,633.43	22.27	433.557		
3,400.00	3,399.11	1,701.37	1,729.29	14.97	8.47	-18.53	-3,039.51	-9,098.46	9,670.15	9,647.31	22.83	423.523		
3,500.00	3,499.08	3,500.00	1,774.23	15.40	18.40	-18.56	-3,045.11	-9,105.37	9,685.67	9,654.32	31.34	309.016		
3,600.00	3,599.05	1,896.74	1,921.11	15.83	9.50	-18.63	-3,063.38	-9,126.80	9,700.85	9,676.32	24.53	395.508		
3,700.00	3,699.02	3,700.00	2,040.51	16.26	19.55	-18.69	-3,079.31	-9,143.58	9,715.88	9,682.63	33.25	292.212		
3,800.00	3,798.98	2,089.37	2,110.30	16.69	10.53	-18.73	-3,088.35	-9,153.05	9,730.44	9,704.20	26.23	370.902		
3,900.00	3,898.95	2,136.00	2,156.05	17.12	10.79	-18.75	-3,094.25	-9,159.90	9,745.92	9,719.07	26.85	362.941		
4,000.00	3,998.92	2,151.07	2,170.81	17.55	10.87	-18.75	-3,096.16	-9,162.22	9,761.96	9,734.64	27.32	357.357		
4,100.00	4,098.89	4,100.00	2,310.30	17.98	22.15	-18.83	-3,114.89	-9,183.67	9,778.22	9,741.34	36.89	265.100		
4,200.00	4,198.86	2,419.00	2,433.42	18.42	12.38	-18.89	-3,131.92	-9,201.53	9,793.74	9,764.31	29.42	332.853		
4,300.00	4,298.83	2,462.68	2,476.20	18.85	12.64	-18.92	-3,138.19	-9,207.76	9,809.68	9,779.64	30.03	326.612		
4,400.00	4,398.80	2,517.00	2,529.27	19.28	12.95	-18.95	-3,146.48	-9,215.78	9,826.28	9,795.58	30.70	320.086		
4,500.00	4,498.77	2,558.45	2,569.72	19.72	13.20	-18.98	-3,153.03	-9,222.04	9,843.36	9,812.06	31.30	314.497		
4,600.00	4,598.73	2,607.00	2,617.09	20.15	13.49	-19.01	-3,160.68	-9,229.45	9,860.80	9,828.86	31.93	308.786		
4,700.00	4,698.70	4,700.00	3,429.52	20.58	25.03	-19.48	-3,275.21	-9,332.92	9,874.70	9,832.09	42.61	231.727		
4,800.00	4,798.67	3,514.34	3,508.40	21.02	18.63	-19.53	-3,285.63	-9,339.87	9,885.06	9,847.70	37.36	264.586		
4,900.00	4,898.64	3,550.00	3,543.56	21.45	18.83	-19.55	-3,290.59	-9,343.14	9,896.09	9,858.15	37.95	260.799		
5,000.00	4,998.61	3,586.04	3,579.07	21.89	19.03	-19.58	-3,295.66	-9,346.67	9,907.77	9,869.24	38.53	257.135		
5,100.00	5,098.58	3,644.00	3,636.14	22.32	19.35	-19.61	-3,303.63	-9,352.91	9,920.15	9,880.92	39.23	252.882		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	3,644.00	3,636.14	22.76	19.35	-19.61	-3,303.63	-9,352.91	9,933.06	9,893.43	39.62	250.679		
5,300.00	5,298.52	3,644.00	3,636.14	23.20	19.35	-19.61	-3,303.63	-9,352.91	9,946.95	9,906.93	40.02	248.574		
5,400.00	5,398.49	3,695.71	3,686.94	23.63	19.65	-19.64	-3,310.95	-9,359.19	9,961.22	9,920.54	40.68	244.881		
5,500.00	5,498.45	3,739.00	3,729.32	24.07	19.91	-19.67	-3,317.53	-9,365.04	9,976.57	9,935.28	41.29	241.603		
5,600.00	5,598.42	3,739.00	3,729.32	24.50	19.91	-19.67	-3,317.53	-9,365.04	9,992.47	9,950.80	41.67	239.776		
6,900.00	6,871.61	6,997.49	6,956.26	30.24	35.64	-24.09	-3,546.85	-9,618.42	9,995.50	9,933.76	61.74	161.903		
7,000.00	6,947.19	7,051.09	7,009.85	30.74	35.82	-27.28	-3,545.79	-9,618.40	9,933.45	9,871.19	62.27	159.524		
7,100.00	7,011.62	7,096.94	7,055.69	31.32	35.98	-32.06	-3,544.96	-9,618.45	9,861.31	9,798.58	62.73	157.210		
7,200.00	7,063.31	7,133.88	7,092.62	32.03	36.11	-39.37	-3,544.35	-9,618.54	9,780.80	9,717.69	63.11	154.982		
7,300.00	7,101.00	7,160.97	7,119.72	32.89	36.20	-50.79	-3,543.93	-9,618.63	9,693.87	9,630.45	63.42	152.849		
7,400.00	7,123.74	7,177.50	7,136.25	33.93	36.25	-68.21	-3,543.68	-9,618.70	9,602.65	9,538.98	63.67	150.816		
7,500.00	7,131.00	7,183.00	7,141.74	35.10	36.27	-90.74	-3,543.61	-9,618.72	9,509.36	9,445.49	63.87	148.886		
7,600.00	7,130.63	7,183.04	7,141.78	36.44	36.27	-90.74	-3,543.61	-9,618.72	9,415.87	9,351.81	64.07	146.970		
7,700.00	7,130.26	7,183.07	7,141.82	37.94	36.27	-90.74	-3,543.60	-9,618.72	9,322.52	9,258.21	64.30	144.975		
7,800.00	7,129.90	7,183.11	7,141.86	39.59	36.27	-90.74	-3,543.60	-9,618.72	9,229.30	9,164.72	64.58	142.905		
7,900.00	7,129.53	7,183.15	7,141.90	41.37	36.27	-90.74	-3,543.60	-9,618.73	9,136.23	9,071.32	64.91	140.762		
8,000.00	7,129.17	7,183.19	7,141.93	43.27	36.27	-90.74	-3,543.60	-9,618.73	9,043.31	8,978.03	65.27	138.547		
8,100.00	7,128.80	7,183.23	7,141.98	45.27	36.27	-90.74	-3,543.60	-9,618.73	8,950.53	8,884.85	65.68	136.265		
8,200.00	7,128.43	7,183.27	7,142.02	47.36	36.27	-90.74	-3,543.60	-9,618.73	8,857.92	8,791.78	66.14	133.920		
8,300.00	7,128.07	7,183.32	7,142.06	49.52	36.27	-90.74	-3,543.60	-9,618.73	8,765.47	8,698.82	66.65	131.516		
8,400.00	7,127.70	7,183.36	7,142.10	51.75	36.27	-90.75	-3,543.60	-9,618.73	8,673.18	8,605.98	67.20	129.057		
8,500.00	7,127.33	7,183.40	7,142.14	54.04	36.27	-90.75	-3,543.60	-9,618.73	8,581.07	8,513.26	67.81	126.549		
8,600.00	7,126.97	7,183.44	7,142.18	56.38	36.27	-90.75	-3,543.60	-9,618.73	8,489.14	8,420.68	68.46	123.998		
8,700.00	7,126.60	7,183.48	7,142.22	58.77	36.27	-90.75	-3,543.60	-9,618.73	8,397.39	8,328.22	69.17	121.409		
8,800.00	7,126.24	7,183.52	7,142.26	61.19	36.27	-90.75	-3,543.60	-9,618.73	8,305.83	8,235.91	69.92	118.788		
8,900.00	7,125.87	7,183.56	7,142.30	63.65	36.27	-90.75	-3,543.60	-9,618.73	8,214.47	8,143.74	70.73	116.141		
9,000.00	7,125.50	7,183.60	7,142.34	66.15	36.27	-90.75	-3,543.60	-9,618.73	8,123.31	8,051.72	71.59	113.474		
9,100.00	7,125.14	7,183.65	7,142.39	68.67	36.27	-90.75	-3,543.60	-9,618.73	8,032.36	7,959.86	72.50	110.792		
9,200.00	7,124.77	7,183.69	7,142.43	71.21	36.27	-90.75	-3,543.60	-9,618.73	7,941.63	7,868.17	73.46	108.102		
9,300.00	7,124.41	7,183.73	7,142.47	73.78	36.27	-90.75	-3,543.60	-9,618.73	7,851.13	7,776.65	74.48	105.409		
9,400.00	7,124.04	7,183.77	7,142.51	76.37	36.28	-90.75	-3,543.59	-9,618.73	7,760.86	7,685.30	75.55	102.719		
9,500.00	7,123.67	7,183.82	7,142.56	78.98	36.28	-90.75	-3,543.59	-9,618.73	7,670.83	7,594.14	76.68	100.035		
9,600.00	7,123.31	7,183.86	7,142.60	81.60	36.28	-90.75	-3,543.59	-9,618.73	7,581.05	7,503.18	77.86	97.364		
9,700.00	7,122.94	7,183.90	7,142.64	84.24	36.28	-90.75	-3,543.59	-9,618.73	7,491.52	7,412.42	79.10	94.710		
9,800.00	7,122.57	7,183.95	7,142.69	86.90	36.28	-90.76	-3,543.59	-9,618.73	7,402.27	7,321.88	80.39	92.077		
9,900.00	7,122.21	7,183.99	7,142.73	89.56	36.28	-90.76	-3,543.59	-9,618.73	7,313.29	7,231.55	81.74	89.469		
10,000.00	7,121.84	7,184.03	7,142.77	92.24	36.28	-90.76	-3,543.59	-9,618.73	7,224.61	7,141.46	83.15	86.889		
10,100.00	7,121.48	7,184.08	7,142.82	94.92	36.28	-90.76	-3,543.59	-9,618.73	7,136.22	7,051.61	84.61	84.341		
10,200.00	7,121.11	7,184.12	7,142.86	97.62	36.28	-90.76	-3,543.59	-9,618.73	7,048.14	6,962.01	86.13	81.828		
10,300.00	7,120.74	7,184.17	7,142.91	100.32	36.28	-90.76	-3,543.59	-9,618.73	6,960.39	6,872.67	87.72	79.352		
10,400.00	7,120.38	7,184.21	7,142.95	103.04	36.28	-90.76	-3,543.59	-9,618.73	6,872.97	6,783.61	89.36	76.916		
10,500.00	7,120.01	7,184.26	7,143.00	105.76	36.28	-90.76	-3,543.59	-9,618.73	6,785.89	6,694.83	91.06	74.522		
10,600.00	7,119.64	7,184.30	7,143.04	108.48	36.28	-90.76	-3,543.59	-9,618.73	6,699.18	6,606.36	92.82	72.172		
10,700.00	7,119.28	7,184.35	7,143.09	111.22	36.28	-90.76	-3,543.59	-9,618.73	6,612.84	6,518.19	94.65	69.867		
10,800.00	7,118.91	7,184.39	7,143.13	113.96	36.28	-90.76	-3,543.59	-9,618.73	6,526.90	6,430.36	96.54	67.608		
10,900.00	7,118.55	7,184.44	7,143.18	116.70	36.28	-90.76	-3,543.59	-9,618.73	6,441.36	6,342.86	98.50	65.397		
11,000.00	7,118.18	7,184.48	7,143.22	119.45	36.28	-90.76	-3,543.58	-9,618.73	6,356.24	6,255.72	100.52	63.235		
11,100.00	7,117.81	7,184.53	7,143.27	122.21	36.28	-90.77	-3,543.58	-9,618.73	6,271.56	6,168.95	102.61	61.122		
11,200.00	7,117.45	7,184.58	7,143.32	124.97	36.28	-90.77	-3,543.58	-9,618.73	6,187.33	6,082.57	104.76	59.060		
11,300.00	7,117.08	7,184.62	7,143.36	127.73	36.28	-90.77	-3,543.58	-9,618.73	6,103.59	5,996.60	106.99	57.047		
11,400.00	7,116.72	7,184.67	7,143.41	130.50	36.28	-90.77	-3,543.58	-9,618.73	6,020.34	5,911.05	109.29	55.085		
11,500.00	7,116.35	7,184.72	7,143.46	133.27	36.28	-90.77	-3,543.58	-9,618.73	5,937.60	5,825.94	111.66	53.174		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-8-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
11,600.00	7,115.98	7,184.76	7,143.51	136.04	36.28	-90.77	-3,543.58	-9,618.73	5,855.41	5,741.30	114.11	51.314		
11,700.00	7,115.62	7,184.81	7,143.55	138.82	36.28	-90.77	-3,543.58	-9,618.73	5,773.78	5,657.15	116.63	49.504		
11,800.00	7,115.25	7,184.86	7,143.60	141.60	36.28	-90.77	-3,543.58	-9,618.73	5,692.73	5,573.50	119.23	47.745		
11,900.00	7,114.88	7,184.91	7,143.65	144.39	36.28	-90.77	-3,543.58	-9,618.73	5,612.29	5,490.39	121.91	46.037		
12,000.00	7,114.52	7,184.96	7,143.70	147.17	36.28	-90.77	-3,543.58	-9,618.73	5,532.50	5,407.83	124.67	44.378		
12,100.00	7,114.15	7,185.01	7,143.75	149.96	36.28	-90.77	-3,543.58	-9,618.73	5,453.37	5,325.86	127.51	42.768		
12,200.00	7,113.79	7,185.05	7,143.79	152.75	36.28	-90.77	-3,543.58	-9,618.73	5,374.93	5,244.50	130.43	41.208		
12,300.00	7,113.42	7,185.10	7,143.84	155.55	36.28	-90.78	-3,543.58	-9,618.73	5,297.22	5,163.78	133.44	39.696		
12,400.00	7,113.05	7,185.15	7,143.89	158.34	36.28	-90.78	-3,543.58	-9,618.73	5,220.27	5,083.73	136.54	38.233		
12,500.00	7,112.69	7,185.20	7,143.94	161.14	36.28	-90.78	-3,543.57	-9,618.73	5,144.12	5,004.39	139.72	36.816		
12,600.00	7,112.32	7,185.25	7,143.99	163.94	36.28	-90.78	-3,543.57	-9,618.73	5,068.79	4,925.79	143.00	35.447		
12,700.00	7,111.96	7,185.30	7,144.04	166.74	36.28	-90.78	-3,543.57	-9,618.73	4,994.32	4,847.96	146.36	34.123		
12,800.00	7,111.59	7,185.35	7,144.09	169.54	36.28	-90.78	-3,543.57	-9,618.74	4,920.77	4,770.95	149.82	32.845		
12,900.00	7,111.22	7,185.40	7,144.14	172.35	36.28	-90.78	-3,543.57	-9,618.74	4,848.16	4,694.80	153.36	31.612		
13,000.00	7,110.86	7,185.45	7,144.19	175.16	36.28	-90.78	-3,543.57	-9,618.74	4,776.54	4,619.53	157.00	30.423		
13,100.00	7,110.49	7,185.50	7,144.25	177.96	36.28	-90.78	-3,543.57	-9,618.74	4,705.95	4,545.22	160.74	29.277		
13,200.00	7,110.12	7,185.56	7,144.30	180.77	36.28	-90.78	-3,543.57	-9,618.74	4,636.45	4,471.89	164.56	28.174		
13,300.00	7,109.76	7,185.61	7,144.35	183.58	36.28	-90.78	-3,543.57	-9,618.74	4,568.08	4,399.59	168.49	27.113		
13,400.00	7,109.39	7,185.66	7,144.40	186.40	36.28	-90.78	-3,543.57	-9,618.74	4,500.89	4,328.39	172.50	26.092		
13,500.00	7,109.03	7,185.71	7,144.45	189.21	36.28	-90.79	-3,543.57	-9,618.74	4,434.94	4,258.34	176.60	25.112		
13,600.00	7,108.66	7,185.76	7,144.50	192.03	36.28	-90.79	-3,543.57	-9,618.74	4,370.28	4,189.48	180.80	24.172		
13,700.00	7,108.29	7,185.82	7,144.56	194.84	36.28	-90.79	-3,543.57	-9,618.74	4,306.98	4,121.89	185.09	23.270		
13,800.00	7,107.93	7,185.87	7,144.61	197.66	36.28	-90.79	-3,543.57	-9,618.74	4,245.08	4,055.63	189.46	22.407		
13,900.00	7,107.56	7,185.92	7,144.66	200.48	36.28	-90.79	-3,543.56	-9,618.74	4,184.67	3,990.76	193.91	21.581		
14,000.00	7,107.19	7,185.98	7,144.72	203.30	36.28	-90.79	-3,543.56	-9,618.74	4,125.78	3,927.34	198.44	20.791		
14,100.00	7,106.83	7,186.03	7,144.77	206.12	36.28	-90.79	-3,543.56	-9,618.74	4,068.51	3,865.46	203.05	20.037		
14,200.00	7,106.46	7,186.08	7,144.83	208.94	36.28	-90.79	-3,543.56	-9,618.74	4,012.91	3,805.19	207.72	19.319		
14,300.00	7,106.10	7,186.14	7,144.88	211.76	36.28	-90.79	-3,543.56	-9,618.74	3,959.06	3,746.60	212.46	18.634		
14,400.00	7,105.73	7,186.19	7,144.93	214.58	36.28	-90.79	-3,543.56	-9,618.74	3,907.02	3,689.77	217.25	17.984		
14,500.00	7,105.36	7,186.25	7,144.99	217.40	36.28	-90.79	-3,543.56	-9,618.74	3,856.88	3,634.78	222.09	17.366		
14,600.00	7,105.00	7,186.30	7,145.04	220.23	36.28	-90.80	-3,543.56	-9,618.74	3,808.70	3,581.73	226.97	16.781		
14,700.00	7,104.63	7,186.36	7,145.10	223.05	36.28	-90.80	-3,543.56	-9,618.74	3,762.56	3,530.69	231.87	16.227		
14,800.00	7,104.27	7,186.42	7,145.16	225.88	36.28	-90.80	-3,543.56	-9,618.74	3,718.54	3,481.75	236.79	15.704		
14,872.41	7,104.00	7,186.46	7,145.20	227.93	36.28	-90.80	-3,543.56	-9,618.74	3,688.03	3,447.68	240.35	15.344	CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.00	912.12	3.28	3.38	-108.86	-3,024.33	-8,851.56	9,398.34					
100.00	100.00	995.39	1,020.48	3.28	5.88	-109.00	-3,041.69	-8,834.24	9,388.45	9,379.32	9.13	1,028.617		
200.00	200.00	1,044.97	1,068.73	3.34	6.14	-109.06	-3,050.00	-8,826.47	9,378.90	9,369.48	9.42	995.436		
300.00	300.00	1,098.00	1,120.48	3.44	6.43	-109.13	-3,058.53	-8,818.60	9,369.93	9,360.13	9.80	956.476		
400.00	400.00	1,128.18	1,150.00	3.60	6.59	-109.16	-3,063.19	-8,814.38	9,361.57	9,351.47	10.10	927.205		
500.00	500.00	1,163.35	1,184.47	3.81	6.78	-109.20	-3,068.41	-8,809.76	9,353.90	9,343.43	10.47	893.398		
600.00	599.98	1,204.14	1,224.53	4.04	6.99	-19.29	-3,074.23	-8,804.78	9,345.42	9,334.51	10.91	856.609		
700.00	699.95	1,274.04	1,293.09	4.30	7.37	-19.37	-3,084.90	-8,796.30	9,336.55	9,325.02	11.53	809.722		
800.00	799.92	1,348.00	1,365.51	4.59	7.77	-19.46	-3,096.89	-8,787.31	9,327.99	9,315.78	12.21	763.897		
900.00	899.89	1,422.48	1,438.61	4.90	8.17	-19.55	-3,108.26	-8,778.69	9,319.72	9,306.81	12.91	721.679		
1,000.00	999.86	1,722.80	1,734.29	5.23	9.78	-19.86	-3,146.32	-8,742.60	9,309.63	9,294.82	14.81	628.619		
1,100.00	1,099.83	1,757.00	1,767.95	5.58	9.97	-19.90	-3,150.66	-8,738.36	9,299.77	9,284.44	15.33	606.531		
1,200.00	1,199.80	1,810.54	1,820.63	5.94	10.27	-19.95	-3,157.69	-8,731.95	9,290.53	9,274.55	15.98	581.553		
1,300.00	1,299.77	2,223.29	2,225.64	6.30	12.63	-20.42	-3,213.39	-8,675.80	9,280.17	9,261.55	18.62	498.400		
1,400.00	1,399.73	2,290.66	2,291.78	6.68	13.02	-20.49	-3,221.47	-8,665.84	9,268.04	9,248.68	19.36	478.695		
1,500.00	1,499.70	2,321.00	2,321.65	7.07	13.19	-20.52	-3,224.70	-8,661.58	9,256.37	9,236.46	19.91	464.891		
1,600.00	1,599.67	2,373.86	2,373.73	7.46	13.48	-20.57	-3,230.33	-8,654.49	9,245.27	9,224.68	20.58	449.203		
1,700.00	1,699.64	2,416.00	2,415.25	7.85	13.72	-20.62	-3,235.14	-8,649.16	9,234.93	9,213.72	21.20	435.566		
1,800.00	1,799.61	2,551.29	2,548.16	8.25	14.49	-20.77	-3,252.80	-8,631.12	9,224.59	9,202.24	22.35	412.727		
1,900.00	1,899.58	2,693.20	2,687.56	8.66	15.32	-20.92	-3,271.19	-8,611.98	9,214.22	9,190.67	23.55	391.274		
2,000.00	1,999.55	2,796.75	2,788.68	9.06	15.96	-21.06	-3,287.20	-8,596.51	9,203.30	9,178.73	24.57	374.506		
2,100.00	2,099.52	2,887.23	2,877.12	9.47	16.52	-21.17	-3,300.88	-8,583.14	9,192.46	9,166.94	25.52	360.148		
2,200.00	2,199.48	2,926.87	2,916.00	9.89	16.75	-21.22	-3,306.29	-8,577.64	9,182.00	9,155.84	26.17	350.900		
2,300.00	2,299.45	2,984.00	2,972.18	10.30	17.08	-21.28	-3,313.68	-8,570.36	9,172.27	9,145.36	26.91	340.866		
2,400.00	2,399.42	3,022.43	3,009.99	10.72	17.30	-21.32	-3,318.68	-8,565.68	9,163.05	9,135.50	27.55	332.604		
2,500.00	2,499.39	3,078.00	3,064.54	11.14	17.63	-21.39	-3,326.66	-8,558.71	9,154.23	9,125.94	28.29	323.605		
2,600.00	2,599.36	3,139.43	3,124.96	11.56	17.97	-21.46	-3,335.03	-8,551.47	9,145.86	9,116.81	29.05	314.817		
2,700.00	2,699.33	3,169.00	3,154.18	11.98	18.14	-21.49	-3,338.40	-8,548.39	9,138.12	9,108.48	29.64	308.289		
2,800.00	2,799.30	3,234.88	3,219.40	12.41	18.48	-21.55	-3,345.27	-8,542.18	9,130.87	9,100.46	30.40	300.333		
2,900.00	2,899.27	3,288.59	3,272.63	12.83	18.75	-21.59	-3,350.70	-8,537.56	9,124.22	9,093.11	31.10	293.348		
3,000.00	2,999.23	3,357.00	3,340.37	13.26	19.10	-21.65	-3,358.33	-8,531.73	9,118.02	9,086.14	31.88	285.996		
3,100.00	3,099.20	3,100.00	3,475.86	13.68	17.79	-21.78	-3,373.28	-8,520.41	9,112.11	9,081.10	31.00	293.915		
3,200.00	3,199.17	3,589.56	3,570.70	14.11	20.30	-21.86	-3,383.57	-8,511.89	9,105.49	9,071.56	33.93	268.366		
3,300.00	3,299.14	4,055.63	4,029.34	14.54	22.95	-22.38	-3,445.41	-8,458.97	9,099.14	9,062.22	36.92	246.428		
3,400.00	3,399.11	4,112.00	4,084.51	14.97	23.30	-22.45	-3,453.74	-8,450.96	9,089.13	9,051.42	37.70	241.065		
3,500.00	3,499.08	4,154.18	4,125.92	15.40	23.55	-22.50	-3,459.45	-8,445.41	9,079.66	9,041.27	38.38	236.547		
3,600.00	3,599.05	4,207.00	4,177.91	15.83	23.85	-22.56	-3,466.14	-8,438.89	9,070.70	9,031.58	39.12	231.851		
3,700.00	3,699.02	4,262.45	4,232.46	16.26	24.18	-22.62	-3,473.51	-8,432.18	9,062.25	9,022.37	39.88	227.230		
3,800.00	3,798.98	4,301.00	4,270.26	16.69	24.40	-22.67	-3,479.36	-8,427.41	9,054.35	9,013.81	40.54	223.319		
3,900.00	3,898.95	4,361.19	4,329.30	17.12	24.76	-22.74	-3,488.64	-8,420.25	9,046.98	9,005.64	41.33	218.871		
4,000.00	3,998.92	4,414.24	4,381.48	17.55	25.07	-22.80	-3,496.27	-8,414.53	9,040.21	8,998.13	42.08	214.837		
4,100.00	4,098.89	4,482.93	4,449.15	17.98	25.46	-22.88	-3,505.76	-8,407.56	9,033.85	8,990.95	42.90	210.566		
4,200.00	4,198.86	4,531.61	4,497.19	18.42	25.72	-22.93	-3,512.21	-8,402.95	9,027.95	8,984.34	43.61	207.035		
4,300.00	4,298.83	4,585.00	4,549.97	18.85	26.01	-22.99	-3,518.87	-8,398.44	9,022.65	8,978.32	44.33	203.525		
4,400.00	4,398.80	4,618.32	4,582.96	19.28	26.18	-23.02	-3,522.77	-8,395.95	9,017.97	8,973.03	44.94	200.682		
4,500.00	4,498.77	4,680.00	4,644.17	19.72	26.49	-23.07	-3,529.34	-8,392.14	9,014.03	8,968.35	45.68	197.312		
4,600.00	4,598.73	4,680.00	4,644.17	20.15	26.49	-23.07	-3,529.34	-8,392.14	9,010.67	8,964.56	46.11	195.396		
4,700.00	4,698.70	4,739.67	4,703.49	20.58	26.77	-23.11	-3,535.14	-8,389.33	9,007.95	8,961.12	46.83	192.353		
4,800.00	4,798.67	4,940.05	4,903.11	21.02	27.66	-23.24	-3,550.33	-8,381.19	9,004.75	8,956.57	48.18	186.907		
4,900.00	4,898.64	4,996.26	4,959.19	21.45	27.90	-23.26	-3,553.74	-8,379.16	9,001.53	8,952.67	48.85	184.255		
5,000.00	4,998.61	5,059.00	5,021.81	21.89	28.16	-23.29	-3,557.21	-8,377.41	8,998.82	8,949.27	49.55	181.598		
5,100.00	5,098.58	5,182.19	5,144.94	22.32	28.61	-23.32	-3,559.66	-8,375.79	8,996.10	8,945.65	50.44	178.337		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,198.55	5,249.00	5,211.75	22.76	28.83	-23.32	-3,559.60	-8,375.57	8,993.47	8,942.36	51.10	175.991		
5,300.00	5,298.52	5,313.26	5,276.01	23.20	29.04	-23.33	-3,559.65	-8,375.58	8,991.22	8,939.47	51.75	173.755		
5,400.00	5,398.49	5,391.24	5,353.99	23.63	29.30	-23.33	-3,559.97	-8,375.80	8,989.33	8,936.89	52.44	171.420		
5,500.00	5,498.45	5,482.44	5,445.19	24.07	29.60	-23.34	-3,560.45	-8,376.13	8,987.58	8,934.40	53.18	168.997		
5,600.00	5,598.42	5,573.64	5,536.38	24.50	29.90	-23.35	-3,561.02	-8,376.52	8,985.93	8,932.01	53.92	166.640		
5,700.00	5,698.39	5,676.70	5,639.44	24.94	30.24	-23.36	-3,561.70	-8,377.02	8,984.34	8,929.64	54.70	164.234		
5,800.00	5,798.36	5,793.17	5,755.91	25.38	30.62	-23.37	-3,562.18	-8,377.53	8,982.61	8,927.09	55.53	161.766		
5,900.00	5,898.33	5,909.63	5,872.37	25.81	31.00	-23.37	-3,562.29	-8,377.97	8,980.70	8,924.35	56.35	159.367		
6,000.00	5,998.30	6,010.36	5,973.10	26.25	31.35	-23.38	-3,562.49	-8,378.20	8,978.70	8,921.55	57.14	157.130		
6,100.00	6,098.27	6,111.81	6,074.54	26.69	31.70	-23.39	-3,563.14	-8,378.22	8,976.68	8,918.74	57.93	154.948		
6,200.00	6,198.24	6,226.06	6,188.79	27.12	32.11	-23.41	-3,564.39	-8,377.97	8,974.62	8,915.84	58.78	152.670		
6,300.00	6,298.20	6,377.03	6,339.75	27.56	32.68	-23.43	-3,566.24	-8,376.87	8,972.15	8,912.34	59.80	150.027		
6,400.00	6,398.17	6,527.93	6,490.62	28.00	33.26	-23.46	-3,568.15	-8,374.81	8,969.11	8,908.29	60.82	147.465		
6,500.00	6,498.14	6,571.32	6,534.00	28.43	33.44	-23.47	-3,569.01	-8,374.35	8,966.33	8,904.89	61.44	145.940		
6,600.00	6,597.68	6,644.17	6,606.82	28.88	33.72	-22.81	-3,570.55	-8,373.48	8,958.20	8,896.03	62.17	144.100		
6,700.00	6,694.68	6,715.04	6,677.67	29.32	34.00	-23.59	-3,572.36	-8,372.73	8,936.17	8,873.29	62.88	142.112		
6,800.00	6,786.74	6,797.41	6,760.00	29.77	34.33	-25.08	-3,574.74	-8,371.96	8,900.64	8,837.02	63.62	139.898		
6,900.00	6,871.61	6,892.55	6,855.10	30.24	34.71	-27.45	-3,577.16	-8,371.15	8,852.22	8,787.84	64.38	137.491		
7,000.00	6,947.19	6,977.21	6,939.74	30.74	35.04	-30.98	-3,578.93	-8,370.49	8,792.11	8,727.04	65.07	135.126		
7,100.00	7,011.62	7,054.43	7,016.95	31.32	35.35	-36.21	-3,580.24	-8,369.93	8,721.86	8,656.18	65.68	132.791		
7,200.00	7,063.31	7,129.71	7,092.22	32.03	35.65	-44.07	-3,581.44	-8,369.23	8,643.19	8,576.94	66.26	130.450		
7,300.00	7,101.00	7,183.55	7,146.05	32.89	35.86	-55.67	-3,582.29	-8,368.58	8,558.15	8,491.43	66.73	128.258		
7,400.00	7,123.74	7,214.91	7,177.40	33.93	35.99	-71.97	-3,582.79	-8,368.15	8,468.96	8,401.86	67.10	126.216		
7,500.00	7,131.00	7,223.40	7,185.88	35.10	36.02	-91.39	-3,582.92	-8,368.03	8,377.87	8,310.48	67.39	124.325		
7,600.00	7,130.63	7,220.80	7,183.29	36.44	36.01	-91.34	-3,582.88	-8,368.07	8,286.70	8,219.03	67.66	122.468		
7,700.00	7,130.26	7,218.23	7,180.72	37.94	36.00	-91.30	-3,582.84	-8,368.10	8,195.73	8,127.73	68.00	120.533		
7,800.00	7,129.90	7,215.69	7,178.18	39.59	35.99	-91.26	-3,582.80	-8,368.14	8,104.98	8,036.59	68.38	118.521		
7,900.00	7,129.53	7,213.18	7,175.67	41.37	35.98	-91.22	-3,582.76	-8,368.18	8,014.44	7,945.61	68.83	116.438		
8,000.00	7,129.17	7,210.70	7,173.19	43.27	35.97	-91.18	-3,582.72	-8,368.21	7,924.13	7,854.79	69.34	114.286		
8,100.00	7,128.80	7,208.25	7,170.74	45.27	35.96	-91.13	-3,582.68	-8,368.25	7,834.06	7,764.15	69.90	112.072		
8,200.00	7,128.43	7,205.82	7,168.31	47.36	35.95	-91.09	-3,582.65	-8,368.28	7,744.23	7,673.70	70.53	109.800		
8,300.00	7,128.07	7,203.42	7,165.91	49.52	35.94	-91.05	-3,582.61	-8,368.31	7,654.65	7,583.43	71.22	107.477		
8,400.00	7,127.70	7,201.05	7,163.54	51.75	35.93	-91.01	-3,582.57	-8,368.35	7,565.33	7,493.35	71.98	105.109		
8,500.00	7,127.33	7,198.70	7,161.20	54.04	35.92	-90.97	-3,582.53	-8,368.38	7,476.28	7,403.48	72.80	102.703		
8,600.00	7,126.97	7,196.38	7,158.88	56.38	35.91	-90.94	-3,582.50	-8,368.41	7,387.51	7,313.83	73.68	100.266		
8,700.00	7,126.60	7,194.09	7,156.58	58.77	35.91	-90.90	-3,582.46	-8,368.44	7,299.03	7,224.40	74.63	97.804		
8,800.00	7,126.24	7,191.82	7,154.32	61.19	35.90	-90.86	-3,582.42	-8,368.47	7,210.85	7,135.21	75.65	95.325		
8,900.00	7,125.87	7,189.58	7,152.07	63.65	35.89	-90.82	-3,582.39	-8,368.50	7,122.99	7,046.26	76.73	92.835		
9,000.00	7,125.50	7,187.36	7,149.85	66.15	35.88	-90.78	-3,582.35	-8,368.53	7,035.44	6,957.57	77.88	90.341		
9,100.00	7,125.14	7,185.16	7,147.66	68.67	35.87	-90.75	-3,582.32	-8,368.56	6,948.24	6,869.14	79.09	87.849		
9,200.00	7,124.77	7,182.99	7,145.48	71.21	35.86	-90.71	-3,582.28	-8,368.59	6,861.38	6,781.00	80.38	85.365		
9,300.00	7,124.41	7,180.84	7,143.33	73.78	35.85	-90.68	-3,582.25	-8,368.62	6,774.88	6,693.15	81.73	82.895		
9,400.00	7,124.04	7,178.71	7,141.21	76.37	35.84	-90.64	-3,582.22	-8,368.64	6,688.76	6,605.61	83.15	80.444		
9,500.00	7,123.67	7,176.60	7,139.10	78.98	35.84	-90.60	-3,582.18	-8,368.67	6,603.03	6,518.39	84.64	78.017		
9,600.00	7,123.31	7,174.52	7,137.02	81.60	35.83	-90.57	-3,582.15	-8,368.70	6,517.70	6,431.51	86.19	75.618		
9,700.00	7,122.94	7,172.46	7,134.96	84.24	35.82	-90.54	-3,582.12	-8,368.72	6,432.80	6,344.98	87.82	73.250		
9,800.00	7,122.57	7,170.42	7,132.92	86.90	35.81	-90.50	-3,582.09	-8,368.75	6,348.34	6,258.82	89.52	70.919		
9,900.00	7,122.21	7,168.40	7,130.90	89.56	35.80	-90.47	-3,582.05	-8,368.77	6,264.33	6,173.05	91.28	68.626		
10,000.00	7,121.84	7,166.40	7,128.90	92.24	35.80	-90.43	-3,582.02	-8,368.80	6,180.80	6,087.68	93.12	66.375		
10,100.00	7,121.48	7,164.42	7,126.92	94.92	35.79	-90.40	-3,581.99	-8,368.82	6,097.77	6,002.74	95.03	64.167		
10,200.00	7,121.11	7,162.46	7,124.97	97.62	35.78	-90.37	-3,581.96	-8,368.85	6,015.25	5,918.24	97.01	62.006		
10,300.00	7,120.74	7,160.53	7,123.03	100.32	35.77	-90.34	-3,581.93	-8,368.87	5,933.27	5,834.20	99.07	59.892		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	7,158.61	7,121.11	103.04	35.76	-90.30	-3,581.90	-8,368.89	5,851.85	5,750.65	101.20	57.827		
10,500.00	7,120.01	7,156.71	7,119.21	105.76	35.76	-90.27	-3,581.87	-8,368.92	5,771.01	5,667.61	103.40	55.813		
10,600.00	7,119.64	7,154.83	7,117.33	108.48	35.75	-90.24	-3,581.84	-8,368.94	5,690.78	5,585.10	105.68	53.850		
10,700.00	7,119.28	7,152.96	7,115.47	111.22	35.74	-90.21	-3,581.81	-8,368.96	5,611.18	5,503.15	108.04	51.938		
10,800.00	7,118.91	7,151.12	7,113.62	113.96	35.73	-90.18	-3,581.78	-8,368.98	5,532.25	5,421.78	110.47	50.079		
10,900.00	7,118.55	7,149.29	7,111.80	116.70	35.73	-90.15	-3,581.75	-8,369.00	5,454.01	5,341.02	112.98	48.273		
11,000.00	7,118.18	7,147.48	7,109.99	119.45	35.72	-90.12	-3,581.72	-8,369.03	5,376.48	5,260.91	115.57	46.520		
11,100.00	7,117.81	7,145.69	7,108.20	122.21	35.71	-90.09	-3,581.69	-8,369.05	5,299.71	5,181.47	118.25	44.819		
11,200.00	7,117.45	7,143.92	7,106.42	124.97	35.71	-90.06	-3,581.66	-8,369.07	5,223.73	5,102.73	121.00	43.171		
11,300.00	7,117.08	7,142.16	7,104.67	127.73	35.70	-90.03	-3,581.64	-8,369.09	5,148.57	5,024.73	123.84	41.576		
11,400.00	7,116.72	7,140.42	7,102.93	130.50	35.69	-90.00	-3,581.61	-8,369.11	5,074.26	4,947.51	126.75	40.032		
11,500.00	7,116.35	7,138.70	7,101.21	133.27	35.68	-89.97	-3,581.58	-8,369.13	5,000.85	4,871.09	129.76	38.540		
11,600.00	7,115.98	7,136.99	7,099.50	136.04	35.68	-89.94	-3,581.55	-8,369.14	4,928.37	4,795.53	132.84	37.100		
11,700.00	7,115.62	7,135.30	7,097.81	138.82	35.67	-89.91	-3,581.53	-8,369.16	4,856.87	4,720.86	136.01	35.709		
11,800.00	7,115.25	7,133.63	7,096.13	141.60	35.66	-89.89	-3,581.50	-8,369.18	4,786.40	4,647.13	139.26	34.369		
11,900.00	7,114.88	7,131.97	7,094.47	144.39	35.66	-89.86	-3,581.47	-8,369.20	4,716.98	4,574.38	142.60	33.078		
12,000.00	7,114.52	7,130.32	7,092.83	147.17	35.65	-89.83	-3,581.45	-8,369.22	4,648.69	4,502.66	146.02	31.835		
12,100.00	7,114.15	7,128.69	7,091.20	149.96	35.64	-89.80	-3,581.42	-8,369.24	4,581.55	4,432.03	149.53	30.640		
12,200.00	7,113.79	7,127.08	7,089.59	152.75	35.64	-89.78	-3,581.40	-8,369.25	4,515.64	4,362.52	153.11	29.492		
12,300.00	7,113.42	7,125.48	7,087.99	155.55	35.63	-89.75	-3,581.37	-8,369.27	4,450.99	4,294.21	156.78	28.390		
12,400.00	7,113.05	7,123.90	7,086.41	158.34	35.63	-89.72	-3,581.35	-8,369.29	4,387.67	4,227.14	160.52	27.333		
12,500.00	7,112.69	7,122.33	7,084.84	161.14	35.62	-89.70	-3,581.32	-8,369.30	4,325.73	4,161.39	164.35	26.321		
12,600.00	7,112.32	7,120.77	7,083.28	163.94	35.61	-89.67	-3,581.30	-8,369.32	4,265.24	4,097.00	168.24	25.352		
12,700.00	7,111.96	7,119.23	7,081.74	166.74	35.61	-89.64	-3,581.27	-8,369.34	4,206.26	4,034.05	172.21	24.426		
12,800.00	7,111.59	7,117.70	7,080.21	169.54	35.60	-89.62	-3,581.25	-8,369.35	4,148.85	3,972.61	176.24	23.541		
12,900.00	7,111.22	7,116.19	7,078.70	172.35	35.60	-89.59	-3,581.22	-8,369.37	4,093.07	3,912.74	180.33	22.697		
13,000.00	7,110.86	7,114.68	7,077.19	175.16	35.59	-89.57	-3,581.20	-8,369.38	4,039.00	3,854.52	184.48	21.894		
13,100.00	7,110.49	7,113.20	7,075.71	177.96	35.58	-89.54	-3,581.18	-8,369.40	3,986.71	3,798.03	188.68	21.129		
13,200.00	7,110.12	7,111.72	7,074.23	180.77	35.58	-89.52	-3,581.15	-8,369.41	3,936.26	3,743.34	192.92	20.403		
13,300.00	7,109.76	7,110.26	7,072.77	183.58	35.57	-89.49	-3,581.13	-8,369.43	3,887.73	3,690.53	197.20	19.715		
13,400.00	7,109.39	7,108.81	7,071.32	186.40	35.57	-89.47	-3,581.11	-8,369.44	3,841.19	3,639.68	201.50	19.062		
13,500.00	7,109.03	7,107.37	7,069.88	189.21	35.56	-89.45	-3,581.08	-8,369.46	3,796.71	3,590.88	205.83	18.446		
13,600.00	7,108.66	7,105.95	7,068.46	192.03	35.55	-89.42	-3,581.06	-8,369.47	3,754.37	3,544.21	210.15	17.865		
13,700.00	7,108.29	7,104.54	7,067.05	194.84	35.55	-89.40	-3,581.04	-8,369.49	3,714.24	3,499.76	214.48	17.317		
13,800.00	7,107.93	7,103.14	7,065.65	197.66	35.54	-89.37	-3,581.02	-8,369.50	3,676.39	3,457.60	218.79	16.803		
13,900.00	7,107.56	7,101.75	7,064.26	200.48	35.54	-89.35	-3,580.99	-8,369.51	3,640.89	3,417.83	223.07	16.322		
14,000.00	7,107.19	7,100.37	7,062.89	203.30	35.53	-89.33	-3,580.97	-8,369.53	3,607.82	3,380.51	227.31	15.872		
14,100.00	7,106.83	7,099.01	7,061.52	206.12	35.53	-89.31	-3,580.95	-8,369.54	3,577.24	3,345.75	231.49	15.453		
14,200.00	7,106.46	7,097.66	7,060.17	208.94	35.52	-89.28	-3,580.93	-8,369.55	3,549.21	3,313.60	235.61	15.064		
14,300.00	7,106.10	7,096.31	7,058.83	211.76	35.52	-89.26	-3,580.91	-8,369.57	3,523.80	3,284.16	239.64	14.705		
14,400.00	7,105.73	7,094.98	7,057.50	214.58	35.51	-89.24	-3,580.89	-8,369.58	3,501.06	3,257.48	243.57	14.374		
14,500.00	7,105.36	7,093.66	7,056.18	217.40	35.51	-89.22	-3,580.87	-8,369.59	3,481.04	3,233.65	247.40	14.071		
14,600.00	7,105.00	7,092.36	7,054.87	220.23	35.50	-89.19	-3,580.84	-8,369.60	3,463.80	3,212.71	251.09	13.795		
14,700.00	7,104.63	7,091.06	7,053.57	223.05	35.49	-89.17	-3,580.82	-8,369.62	3,449.37	3,194.72	254.65	13.545		
14,800.00	7,104.27	7,089.77	7,052.28	225.88	35.49	-89.15	-3,580.80	-8,369.63	3,437.79	3,179.73	258.06	13.322		
14,872.41	7,104.00	7,088.85	7,051.36	227.93	35.49	-89.14	-3,580.79	-8,369.64	3,431.20	3,170.77	260.42	13.175 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	65.00	3.28	3.28	-134.27	-3,286.17	-3,371.20	4,708.31				
100.00	100.00	35.00	100.00	3.28	3.34	-134.27	-3,286.17	-3,371.20	4,707.86	4,701.24	6.62	711.035	
200.00	200.00	135.00	200.00	3.34	4.42	-134.27	-3,286.17	-3,371.20	4,707.86	4,700.10	7.76	606.675	
300.00	300.00	235.00	300.00	3.44	7.24	-134.27	-3,286.17	-3,371.20	4,707.86	4,697.17	10.69	440.463	
400.00	400.00	335.00	400.00	3.60	10.48	-134.27	-3,286.17	-3,371.20	4,707.86	4,693.78	14.08	334.379	
500.00	500.00	435.00	500.00	3.81	13.83	-134.27	-3,286.17	-3,371.20	4,707.86	4,690.22	17.64	266.873	
600.00	599.98	534.98	599.98	4.04	17.25	-44.29	-3,286.17	-3,371.20	4,706.71	4,685.43	21.28	221.128	
700.00	699.95	634.95	699.95	4.30	20.68	-44.31	-3,286.17	-3,371.20	4,704.92	4,679.94	24.98	188.324	
800.00	799.92	734.92	799.92	4.59	24.13	-44.33	-3,286.17	-3,371.20	4,703.13	4,674.41	28.72	163.737	
900.00	899.89	834.89	899.89	4.90	27.60	-44.35	-3,286.17	-3,371.20	4,701.35	4,668.85	32.50	144.673	
1,000.00	999.86	934.86	999.86	5.23	31.06	-44.38	-3,286.17	-3,371.20	4,699.56	4,663.27	36.29	129.488	
1,100.00	1,099.83	1,034.83	1,099.83	5.58	34.54	-44.40	-3,286.17	-3,371.20	4,697.77	4,657.66	40.11	117.122	
1,200.00	1,199.80	1,134.80	1,199.80	5.94	38.01	-44.42	-3,286.17	-3,371.20	4,695.99	4,652.05	43.94	106.866	
1,300.00	1,299.77	1,234.77	1,299.77	6.30	41.49	-44.44	-3,286.17	-3,371.20	4,694.20	4,646.42	47.79	98.230	
1,400.00	1,399.73	1,334.73	1,399.73	6.68	44.97	-44.46	-3,286.17	-3,371.20	4,692.42	4,640.78	51.64	90.862	
1,500.00	1,499.70	1,434.70	1,499.70	7.07	48.45	-44.48	-3,286.17	-3,371.20	4,690.64	4,635.13	55.51	84.504	
1,600.00	1,599.67	1,534.67	1,599.67	7.46	51.93	-44.50	-3,286.17	-3,371.20	4,688.85	4,629.47	59.38	78.964	
1,700.00	1,699.64	1,634.64	1,699.64	7.85	55.42	-44.53	-3,286.17	-3,371.20	4,687.07	4,623.81	63.26	74.095	
1,800.00	1,799.61	1,734.61	1,799.61	8.25	58.90	-44.55	-3,286.17	-3,371.20	4,685.29	4,618.15	67.14	69.783	
1,900.00	1,899.58	1,834.58	1,899.58	8.66	62.39	-44.57	-3,286.17	-3,371.20	4,683.51	4,612.48	71.03	65.938	
2,000.00	1,999.55	1,934.55	1,999.55	9.06	65.87	-44.59	-3,286.17	-3,371.20	4,681.73	4,606.81	74.92	62.489	
2,100.00	2,099.52	2,034.52	2,099.52	9.47	69.36	-44.61	-3,286.17	-3,371.20	4,679.95	4,601.14	78.82	59.379	
2,200.00	2,199.48	2,134.48	2,199.48	9.89	72.84	-44.63	-3,286.17	-3,371.20	4,678.17	4,595.46	82.71	56.559	
2,300.00	2,299.45	2,234.45	2,299.45	10.30	76.33	-44.65	-3,286.17	-3,371.20	4,676.39	4,589.78	86.61	53.991	
2,400.00	2,399.42	2,334.42	2,399.42	10.72	79.82	-44.68	-3,286.17	-3,371.20	4,674.62	4,584.10	90.52	51.644	
2,500.00	2,499.39	2,434.39	2,499.39	11.14	83.30	-44.70	-3,286.17	-3,371.20	4,672.84	4,578.42	94.42	49.489	
2,600.00	2,599.36	2,534.36	2,599.36	11.56	86.79	-44.72	-3,286.17	-3,371.20	4,671.06	4,572.74	98.33	47.505	
2,700.00	2,699.33	2,634.33	2,699.33	11.98	90.28	-44.74	-3,286.17	-3,371.20	4,669.29	4,567.05	102.24	45.672	
2,800.00	2,799.30	2,734.30	2,799.30	12.41	93.77	-44.76	-3,286.17	-3,371.20	4,667.51	4,561.37	106.15	43.973	
2,900.00	2,899.27	2,834.27	2,899.27	12.83	97.25	-44.78	-3,286.17	-3,371.20	4,665.74	4,555.68	110.06	42.394	
3,000.00	2,999.23	2,934.23	2,999.23	13.26	100.74	-44.81	-3,286.17	-3,371.20	4,663.97	4,550.00	113.97	40.923	
3,100.00	3,099.20	3,034.20	3,099.20	13.68	104.23	-44.83	-3,286.17	-3,371.20	4,662.19	4,544.31	117.88	39.550	
3,200.00	3,199.17	3,134.17	3,199.17	14.11	107.72	-44.85	-3,286.17	-3,371.20	4,660.42	4,538.62	121.80	38.264	
3,300.00	3,299.14	3,234.14	3,299.14	14.54	111.21	-44.87	-3,286.17	-3,371.20	4,658.65	4,532.94	125.71	37.058	
3,400.00	3,399.11	3,334.11	3,399.11	14.97	114.70	-44.89	-3,286.17	-3,371.20	4,656.88	4,527.25	129.63	35.925	
3,500.00	3,499.08	3,434.08	3,499.08	15.40	118.18	-44.91	-3,286.17	-3,371.20	4,655.11	4,521.56	133.54	34.858	
3,600.00	3,599.05	3,534.05	3,599.05	15.83	121.67	-44.94	-3,286.17	-3,371.20	4,653.34	4,515.88	137.46	33.852	
3,700.00	3,699.02	3,634.02	3,699.02	16.26	125.16	-44.96	-3,286.17	-3,371.20	4,651.57	4,510.19	141.38	32.901	
3,800.00	3,798.98	3,733.98	3,798.98	16.69	128.65	-44.98	-3,286.17	-3,371.20	4,649.80	4,504.50	145.30	32.002	
3,900.00	3,898.95	3,833.95	3,898.95	17.12	132.14	-45.00	-3,286.17	-3,371.20	4,648.03	4,498.82	149.22	31.150	
4,000.00	3,998.92	3,933.92	3,998.92	17.55	135.63	-45.02	-3,286.17	-3,371.20	4,646.27	4,493.13	153.14	30.341	
4,100.00	4,098.89	4,033.89	4,098.89	17.98	139.12	-45.04	-3,286.17	-3,371.20	4,644.50	4,487.45	157.06	29.572	
4,200.00	4,198.86	4,133.86	4,198.86	18.42	142.61	-45.07	-3,286.17	-3,371.20	4,642.74	4,481.76	160.98	28.841	
4,300.00	4,298.83	4,233.83	4,298.83	18.85	146.09	-45.09	-3,286.17	-3,371.20	4,640.97	4,476.07	164.90	28.145	
4,400.00	4,398.80	4,333.80	4,398.80	19.28	149.58	-45.11	-3,286.17	-3,371.20	4,639.21	4,470.39	168.82	27.481	
4,500.00	4,498.77	4,433.77	4,498.77	19.72	153.07	-45.13	-3,286.17	-3,371.20	4,637.44	4,464.70	172.74	26.847	
4,600.00	4,598.73	4,533.73	4,598.73	20.15	156.56	-45.15	-3,286.17	-3,371.20	4,635.68	4,459.02	176.66	26.241	
4,700.00	4,698.70	4,633.70	4,698.70	20.58	160.05	-45.18	-3,286.17	-3,371.20	4,633.92	4,453.34	180.58	25.661	
4,800.00	4,798.67	4,733.67	4,798.67	21.02	163.54	-45.20	-3,286.17	-3,371.20	4,632.16	4,447.65	184.51	25.106	
4,900.00	4,898.64	4,833.64	4,898.64	21.45	167.03	-45.22	-3,286.17	-3,371.20	4,630.40	4,441.97	188.43	24.574	
5,000.00	4,998.61	4,933.61	4,998.61	21.89	170.52	-45.24	-3,286.17	-3,371.20	4,628.64	4,436.29	192.35	24.064	
5,100.00	5,098.58	5,033.58	5,098.58	22.32	174.01	-45.26	-3,286.17	-3,371.20	4,626.88	4,430.60	196.27	23.574	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - GREELEY SWD #1(XX) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,133.55	5,198.55	22.76	177.50	-45.29	-3,286.17	-3,371.20	4,625.12	4,424.92	200.20	23.103		
5,300.00	5,298.52	5,233.52	5,298.52	23.20	180.99	-45.31	-3,286.17	-3,371.20	4,623.36	4,419.24	204.12	22.650		
5,400.00	5,398.49	5,333.49	5,398.49	23.63	184.48	-45.33	-3,286.17	-3,371.20	4,621.60	4,413.56	208.04	22.215		
5,500.00	5,498.45	5,433.45	5,498.45	24.07	187.97	-45.35	-3,286.17	-3,371.20	4,619.85	4,407.88	211.97	21.795		
5,600.00	5,598.42	5,533.42	5,598.42	24.50	191.45	-45.37	-3,286.17	-3,371.20	4,618.09	4,402.20	215.89	21.391		
5,700.00	5,698.39	5,633.39	5,698.39	24.94	194.94	-45.40	-3,286.17	-3,371.20	4,616.34	4,396.52	219.82	21.001		
5,800.00	5,798.36	5,733.36	5,798.36	25.38	198.43	-45.42	-3,286.17	-3,371.20	4,614.58	4,390.84	223.74	20.625		
5,900.00	5,898.33	5,833.33	5,898.33	25.81	201.92	-45.44	-3,286.17	-3,371.20	4,612.83	4,385.16	227.67	20.261		
6,000.00	5,998.30	5,933.30	5,998.30	26.25	205.41	-45.46	-3,286.17	-3,371.20	4,611.07	4,379.48	231.59	19.910		
6,100.00	6,098.27	6,033.27	6,098.27	26.69	208.90	-45.48	-3,286.17	-3,371.20	4,609.32	4,373.81	235.52	19.571		
6,200.00	6,198.24	6,133.24	6,198.24	27.12	212.39	-45.51	-3,286.17	-3,371.20	4,607.57	4,368.13	239.44	19.243		
6,300.00	6,298.20	6,233.20	6,298.20	27.56	215.88	-45.53	-3,286.17	-3,371.20	4,605.82	4,362.45	243.37	18.926		
6,400.00	6,398.17	6,333.17	6,398.17	28.00	219.37	-45.55	-3,286.17	-3,371.20	4,604.07	4,356.78	247.29	18.618		
6,500.00	6,498.14	6,433.14	6,498.14	28.43	222.86	-45.57	-3,286.17	-3,371.20	4,602.32	4,351.10	251.22	18.320		
6,600.00	6,597.68	6,532.68	6,597.68	28.88	226.33	-45.07	-3,286.17	-3,371.20	4,596.26	4,341.13	255.13	18.016		
6,700.00	6,694.68	6,629.68	6,694.68	29.32	229.72	-46.31	-3,286.17	-3,371.20	4,579.29	4,320.34	258.95	17.684		
6,800.00	6,786.74	6,721.74	6,786.74	29.77	232.93	-48.51	-3,286.17	-3,371.20	4,551.85	4,289.27	262.58	17.335		
6,900.00	6,871.61	6,806.61	6,871.61	30.24	235.90	-51.72	-3,286.17	-3,371.20	4,514.82	4,248.87	265.95	16.976		
7,000.00	6,947.19	6,882.19	6,947.19	30.74	238.53	-55.99	-3,286.17	-3,371.20	4,469.34	4,200.35	268.99	16.615		
7,100.00	7,011.62	6,946.62	7,011.62	31.32	240.78	-61.37	-3,286.17	-3,371.20	4,416.81	4,145.15	271.67	16.258		
7,200.00	7,063.31	7,001.69	7,063.31	32.03	242.71	-67.78	-3,286.17	-3,371.20	4,358.83	4,084.76	274.07	15.904		
7,300.00	7,101.00	7,036.00	7,101.00	32.89	243.90	-75.02	-3,286.17	-3,371.20	4,297.09	4,021.26	275.83	15.579		
7,400.00	7,123.74	7,058.74	7,123.74	33.93	244.70	-82.69	-3,286.17	-3,371.20	4,233.39	3,956.09	277.30	15.266		
7,500.00	7,131.00	7,066.00	7,131.00	35.10	244.95	-90.17	-3,286.17	-3,371.20	4,169.48	3,891.13	278.35	14.979		
7,600.00	7,130.63	7,065.63	7,130.63	36.44	244.94	-90.17	-3,286.17	-3,371.20	4,106.76	3,827.48	279.28	14.705		
7,700.00	7,130.26	7,065.26	7,130.26	37.94	244.93	-90.16	-3,286.17	-3,371.20	4,045.54	3,765.16	280.39	14.428		
7,800.00	7,129.90	7,064.90	7,129.90	39.59	244.91	-90.15	-3,286.17	-3,371.20	3,985.90	3,704.23	281.67	14.151		
7,900.00	7,129.53	7,064.53	7,129.53	41.37	244.90	-90.15	-3,286.17	-3,371.20	3,927.89	3,644.78	283.11	13.874		
8,000.00	7,129.17	7,064.17	7,129.17	43.27	244.89	-90.14	-3,286.17	-3,371.20	3,871.59	3,586.87	284.72	13.598		
8,100.00	7,128.80	7,063.80	7,128.80	45.27	244.87	-90.13	-3,286.17	-3,371.20	3,817.09	3,530.61	286.48	13.324		
8,200.00	7,128.43	7,063.43	7,128.43	47.36	244.86	-90.13	-3,286.17	-3,371.20	3,764.45	3,476.06	288.39	13.053		
8,300.00	7,128.07	7,063.07	7,128.07	49.52	244.85	-90.12	-3,286.17	-3,371.20	3,713.76	3,423.32	290.44	12.786		
8,400.00	7,127.70	7,062.70	7,127.70	51.75	244.84	-90.11	-3,286.17	-3,371.20	3,665.10	3,372.47	292.63	12.525		
8,500.00	7,127.33	7,062.33	7,127.33	54.04	244.82	-90.11	-3,286.17	-3,371.20	3,618.55	3,323.62	294.93	12.269		
8,600.00	7,126.97	7,061.97	7,126.97	56.38	244.81	-90.10	-3,286.17	-3,371.20	3,574.19	3,276.84	297.34	12.020		
8,700.00	7,126.60	7,061.60	7,126.60	58.77	244.80	-90.09	-3,286.17	-3,371.20	3,532.10	3,232.24	299.86	11.779		
8,800.00	7,126.24	7,061.24	7,126.24	61.19	244.78	-90.09	-3,286.17	-3,371.20	3,492.38	3,189.91	302.47	11.546		
8,900.00	7,125.87	7,060.87	7,125.87	63.65	244.77	-90.08	-3,286.17	-3,371.20	3,455.09	3,149.93	305.16	11.322		
9,000.00	7,125.50	7,060.50	7,125.50	66.15	244.76	-90.07	-3,286.17	-3,371.20	3,420.31	3,112.39	307.92	11.108		
9,100.00	7,125.14	7,060.14	7,125.14	68.67	244.75	-90.07	-3,286.17	-3,371.20	3,388.14	3,077.40	310.74	10.904		
9,200.00	7,124.77	7,059.77	7,124.77	71.21	244.73	-90.06	-3,286.17	-3,371.20	3,358.63	3,045.03	313.60	10.710		
9,300.00	7,124.41	7,059.41	7,124.41	73.78	244.72	-90.06	-3,286.17	-3,371.20	3,331.87	3,015.36	316.50	10.527		
9,400.00	7,124.04	7,059.04	7,124.04	76.37	244.71	-90.05	-3,286.17	-3,371.20	3,307.91	2,988.48	319.43	10.356		
9,500.00	7,123.67	7,058.67	7,123.67	78.98	244.70	-90.04	-3,286.17	-3,371.20	3,286.82	2,964.46	322.36	10.196		
9,600.00	7,123.31	7,058.31	7,123.31	81.60	244.68	-90.04	-3,286.17	-3,371.20	3,268.66	2,943.36	325.30	10.048		
9,700.00	7,122.94	7,057.94	7,122.94	84.24	244.67	-90.03	-3,286.17	-3,371.20	3,253.47	2,925.25	328.22	9.913		
9,800.00	7,122.57	7,057.57	7,122.57	86.90	244.66	-90.02	-3,286.17	-3,371.20	3,241.29	2,910.18	331.11	9.789		
9,900.00	7,122.21	7,057.21	7,122.21	89.56	244.64	-90.02	-3,286.17	-3,371.20	3,232.17	2,898.20	333.97	9.678		
10,000.00	7,121.84	7,056.84	7,121.84	92.24	244.63	-90.01	-3,286.17	-3,371.20	3,226.12	2,889.34	336.78	9.579		
10,100.00	7,121.48	7,056.48	7,121.48	94.92	244.62	-90.00	-3,286.17	-3,371.20	3,223.16	2,883.63	339.53	9.493		
10,145.36	7,121.31	7,056.31	7,121.31	96.15	244.61	-90.00	-3,286.17	-3,371.20	3,222.84	2,882.08	340.76	9.458 CC		
10,200.00	7,121.11	7,056.11	7,121.11	97.62	244.61	-90.00	-3,286.17	-3,371.20	3,223.31	2,881.09	342.21	9.419 ES		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,120.74	7,055.74	7,120.74	100.32	244.59	-89.99	-3,286.17	-3,371.20	3,226.55	2,881.73	344.82	9.357		
10,400.00	7,120.38	7,055.38	7,120.38	103.04	244.58	-89.98	-3,286.17	-3,371.20	3,232.89	2,885.55	347.33	9.308		
10,500.00	7,120.01	7,055.01	7,120.01	105.76	244.57	-89.98	-3,286.17	-3,371.20	3,242.30	2,892.54	349.76	9.270		
10,600.00	7,119.64	7,054.64	7,119.64	108.48	244.55	-89.97	-3,286.17	-3,371.20	3,254.75	2,902.67	352.08	9.244		
10,700.00	7,119.28	7,054.28	7,119.28	111.22	244.54	-89.96	-3,286.17	-3,371.20	3,270.22	2,915.92	354.30	9.230		
10,800.00	7,118.91	7,053.91	7,118.91	113.96	244.53	-89.96	-3,286.17	-3,371.20	3,288.66	2,932.25	356.40	9.227 SF		
10,900.00	7,118.55	7,053.55	7,118.55	116.70	244.52	-89.95	-3,286.17	-3,371.20	3,310.01	2,951.62	358.40	9.236		
11,000.00	7,118.18	7,053.18	7,118.18	119.45	244.50	-89.94	-3,286.17	-3,371.20	3,334.23	2,973.96	360.28	9.255		
11,100.00	7,117.81	7,052.81	7,117.81	122.21	244.49	-89.94	-3,286.17	-3,371.20	3,361.26	2,999.22	362.04	9.284		
11,200.00	7,117.45	7,052.45	7,117.45	124.97	244.48	-89.93	-3,286.17	-3,371.20	3,391.01	3,027.32	363.69	9.324		
11,300.00	7,117.08	7,052.08	7,117.08	127.73	244.47	-89.92	-3,286.17	-3,371.20	3,423.43	3,058.21	365.22	9.374		
11,400.00	7,116.72	7,051.72	7,116.72	130.50	244.45	-89.92	-3,286.17	-3,371.20	3,458.44	3,091.80	366.64	9.433		
11,500.00	7,116.35	7,051.35	7,116.35	133.27	244.44	-89.91	-3,286.17	-3,371.20	3,495.96	3,128.00	367.96	9.501		
11,600.00	7,115.98	7,050.98	7,115.98	136.04	244.43	-89.91	-3,286.17	-3,371.20	3,535.91	3,166.75	369.16	9.578		
11,700.00	7,115.62	7,050.62	7,115.62	138.82	244.41	-89.90	-3,286.17	-3,371.20	3,578.21	3,207.94	370.26	9.664		
11,800.00	7,115.25	7,050.25	7,115.25	141.60	244.40	-89.89	-3,286.17	-3,371.20	3,622.78	3,251.51	371.27	9.758		
11,900.00	7,114.88	7,049.88	7,114.88	144.39	244.39	-89.89	-3,286.17	-3,371.20	3,669.53	3,297.35	372.18	9.860		
12,000.00	7,114.52	7,049.52	7,114.52	147.17	244.38	-89.88	-3,286.17	-3,371.20	3,718.38	3,345.39	372.99	9.969		
12,100.00	7,114.15	7,049.15	7,114.15	149.96	244.36	-89.87	-3,286.17	-3,371.20	3,769.25	3,395.53	373.73	10.086		
12,200.00	7,113.79	7,048.79	7,113.79	152.75	244.35	-89.87	-3,286.17	-3,371.20	3,822.07	3,447.69	374.38	10.209		
12,300.00	7,113.42	7,048.42	7,113.42	155.55	244.34	-89.86	-3,286.17	-3,371.20	3,876.74	3,501.79	374.95	10.339		
12,400.00	7,113.05	7,048.05	7,113.05	158.34	244.32	-89.85	-3,286.17	-3,371.20	3,933.20	3,557.74	375.46	10.476		
12,500.00	7,112.69	7,047.69	7,112.69	161.14	244.31	-89.85	-3,286.17	-3,371.20	3,991.36	3,615.47	375.89	10.618		
12,600.00	7,112.32	7,047.32	7,112.32	163.94	244.30	-89.84	-3,286.17	-3,371.20	4,051.16	3,674.89	376.27	10.767		
12,700.00	7,111.96	7,046.96	7,111.96	166.74	244.29	-89.83	-3,286.17	-3,371.20	4,112.52	3,735.93	376.58	10.921		
12,800.00	7,111.59	7,046.59	7,111.59	169.54	244.27	-89.83	-3,286.17	-3,371.20	4,175.37	3,798.52	376.85	11.080		
12,900.00	7,111.22	7,046.22	7,111.22	172.35	244.26	-89.82	-3,286.17	-3,371.20	4,239.65	3,862.59	377.06	11.244		
13,000.00	7,110.86	7,045.86	7,110.86	175.16	244.25	-89.81	-3,286.17	-3,371.20	4,305.30	3,928.06	377.23	11.413		
13,100.00	7,110.49	7,045.49	7,110.49	177.96	244.24	-89.81	-3,286.17	-3,371.20	4,372.24	3,994.88	377.36	11.586		
13,200.00	7,110.12	7,045.12	7,110.12	180.77	244.22	-89.80	-3,286.17	-3,371.20	4,440.43	4,062.98	377.45	11.764		
13,300.00	7,109.76	7,044.76	7,109.76	183.58	244.21	-89.79	-3,286.17	-3,371.20	4,509.80	4,132.30	377.50	11.946		
13,400.00	7,109.39	7,044.39	7,109.39	186.40	244.20	-89.79	-3,286.17	-3,371.20	4,580.31	4,202.79	377.52	12.133		
13,500.00	7,109.03	7,044.03	7,109.03	189.21	244.18	-89.78	-3,286.17	-3,371.20	4,651.90	4,274.38	377.51	12.322		
13,600.00	7,108.66	7,043.66	7,108.66	192.03	244.17	-89.78	-3,286.17	-3,371.20	4,724.52	4,347.04	377.48	12.516		
13,700.00	7,108.29	7,043.29	7,108.29	194.84	244.16	-89.77	-3,286.17	-3,371.20	4,798.12	4,420.70	377.42	12.713		
13,800.00	7,107.93	7,042.93	7,107.93	197.66	244.15	-89.76	-3,286.17	-3,371.20	4,872.67	4,495.33	377.34	12.913		
13,900.00	7,107.56	7,042.56	7,107.56	200.48	244.13	-89.76	-3,286.17	-3,371.20	4,948.11	4,570.87	377.24	13.117		
14,000.00	7,107.19	7,042.19	7,107.19	203.30	244.12	-89.75	-3,286.17	-3,371.20	5,024.42	4,647.29	377.12	13.323		
14,100.00	7,106.83	7,041.83	7,106.83	206.12	244.11	-89.74	-3,286.17	-3,371.20	5,101.54	4,724.55	376.99	13.532		
14,200.00	7,106.46	7,041.46	7,106.46	208.94	244.09	-89.74	-3,286.17	-3,371.20	5,179.44	4,802.60	376.84	13.744		
14,300.00	7,106.10	7,041.10	7,106.10	211.76	244.08	-89.73	-3,286.17	-3,371.20	5,258.09	4,881.41	376.68	13.959		
14,400.00	7,105.73	7,040.73	7,105.73	214.58	244.07	-89.72	-3,286.17	-3,371.20	5,337.45	4,960.94	376.51	14.176		
14,500.00	7,105.36	7,040.36	7,105.36	217.40	244.06	-89.72	-3,286.17	-3,371.20	5,417.50	5,041.17	376.33	14.396		
14,600.00	7,105.00	7,040.00	7,105.00	220.23	244.04	-89.71	-3,286.17	-3,371.20	5,498.20	5,122.07	376.14	14.618		
14,700.00	7,104.63	7,039.63	7,104.63	223.05	244.03	-89.70	-3,286.17	-3,371.20	5,579.53	5,203.59	375.94	14.842		
14,800.00	7,104.27	7,039.27	7,104.27	225.88	244.02	-89.70	-3,286.17	-3,371.20	5,661.46	5,285.72	375.74	15.068		
14,872.41	7,104.00	7,039.00	7,104.00	227.93	244.01	-89.69	-3,286.17	-3,371.20	5,721.14	5,345.55	375.58	15.233		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	11.00	3.28	3.28	27.08	957.76	489.78	1,075.78					
100.00	100.00	86.60	97.60	3.28	3.29	27.09	957.83	489.84	1,075.82	1,069.25	6.57	163.748		
200.00	200.00	186.67	197.67	3.34	3.33	27.09	958.00	490.04	1,076.06	1,069.39	6.67	161.352		
300.00	300.00	289.44	300.44	3.44	3.44	27.10	958.01	490.24	1,076.16	1,069.28	6.88	156.390		
321.63	321.63	311.74	322.74	3.48	3.47	27.10	957.99	490.25	1,076.15	1,069.21	6.94	155.041		
400.00	400.00	382.86	393.86	3.60	3.58	27.12	958.02	490.68	1,076.38	1,069.20	7.18	149.928 ES		
500.00	500.00	485.63	496.62	3.81	3.77	27.17	958.11	491.69	1,076.91	1,069.33	7.58	142.091		
600.00	599.98	581.12	592.11	4.04	3.99	117.27	958.12	492.63	1,078.11	1,070.08	8.03	134.244		
700.00	699.95	684.66	695.64	4.30	4.26	117.47	958.08	494.16	1,079.91	1,071.35	8.56	126.135		
800.00	799.92	786.40	797.37	4.59	4.55	117.65	957.74	495.47	1,081.36	1,072.22	9.14	118.297		
900.00	899.89	883.05	894.01	4.90	4.85	117.83	957.51	496.64	1,082.88	1,073.13	9.75	111.081		
1,000.00	999.86	986.04	996.99	5.23	5.18	118.02	957.25	498.14	1,084.52	1,074.10	10.41	104.165		
1,100.00	1,099.83	1,080.64	1,091.58	5.58	5.50	118.19	957.15	499.23	1,086.14	1,075.07	11.08	98.067		
1,200.00	1,199.80	1,181.68	1,192.61	5.94	5.86	118.37	957.26	500.69	1,088.11	1,076.33	11.79	92.324		
1,300.00	1,299.77	1,289.50	1,300.42	6.30	6.25	118.57	956.86	502.19	1,089.64	1,077.10	12.54	86.887		
1,400.00	1,399.73	1,389.85	1,400.76	6.68	6.62	118.74	956.26	503.05	1,090.73	1,077.44	13.29	82.099		
1,500.00	1,499.70	1,490.56	1,501.47	7.07	7.00	118.91	955.67	503.86	1,091.81	1,077.77	14.05	77.734		
1,600.00	1,599.67	1,589.61	1,600.51	7.46	7.37	119.10	954.89	505.02	1,092.90	1,078.08	14.81	73.786		
1,700.00	1,699.64	1,687.85	1,698.74	7.85	7.75	119.27	954.34	506.00	1,094.12	1,078.53	15.58	70.206		
1,800.00	1,799.61	1,789.72	1,800.61	8.25	8.15	119.43	953.93	506.77	1,095.36	1,078.98	16.38	66.872		
1,900.00	1,899.58	1,898.42	1,909.31	8.66	8.58	119.60	953.11	507.19	1,096.13	1,078.92	17.21	63.695		
2,000.00	1,999.55	1,993.47	2,004.35	9.06	8.95	119.71	952.52	506.94	1,096.69	1,078.70	17.99	60.957		
2,100.00	2,099.52	2,096.62	2,107.50	9.47	9.36	119.82	952.05	506.61	1,097.38	1,078.57	18.81	58.338		
2,200.00	2,199.48	2,189.67	2,200.54	9.89	9.73	119.92	951.73	506.36	1,098.19	1,078.60	19.60	56.043		
2,300.00	2,299.45	2,287.37	2,298.24	10.30	10.13	120.03	951.83	506.25	1,099.47	1,079.07	20.40	53.888		
2,400.00	2,399.42	2,385.96	2,396.84	10.72	10.53	120.15	951.89	506.48	1,100.90	1,079.68	21.22	51.884		
2,500.00	2,499.39	2,491.23	2,502.10	11.14	10.95	120.26	951.99	506.39	1,102.20	1,080.13	22.06	49.953		
2,600.00	2,599.36	2,587.13	2,598.00	11.56	11.34	120.34	952.13	505.94	1,103.36	1,080.48	22.88	48.234		
2,700.00	2,699.33	2,686.35	2,697.23	11.98	11.75	120.42	952.59	505.53	1,104.80	1,081.10	23.70	46.611		
2,800.00	2,799.30	2,789.84	2,800.72	12.41	12.17	120.50	953.01	504.92	1,106.12	1,081.57	24.55	45.056		
2,900.00	2,899.27	2,897.79	2,908.66	12.83	12.61	120.57	953.01	503.91	1,106.92	1,081.50	25.42	43.549		
3,000.00	2,999.23	2,994.00	3,004.86	13.26	13.01	120.64	952.90	502.80	1,107.50	1,081.26	26.24	42.208		
3,100.00	3,099.20	3,100.64	3,111.48	13.68	13.45	120.67	952.99	501.02	1,108.00	1,080.89	27.11	40.877		
3,200.00	3,199.17	3,195.03	3,205.86	14.11	13.84	120.70	953.07	499.30	1,108.42	1,080.50	27.92	39.694		
3,300.00	3,299.14	3,300.34	3,311.15	14.54	14.28	120.75	952.95	497.82	1,108.88	1,080.09	28.79	38.519		
3,400.00	3,399.11	3,401.44	3,412.25	14.97	14.70	120.81	952.48	496.37	1,109.03	1,079.39	29.64	37.421		
3,500.00	3,499.08	3,499.54	3,510.33	15.40	15.11	120.87	952.10	494.91	1,109.21	1,078.74	30.47	36.399		
3,600.00	3,599.05	3,593.54	3,604.33	15.83	15.50	120.94	951.84	493.98	1,109.75	1,078.45	31.30	35.461		
3,700.00	3,699.02	3,684.23	3,695.02	16.26	15.88	121.02	951.94	493.67	1,110.97	1,078.86	32.10	34.608		
3,800.00	3,798.98	3,784.70	3,795.48	16.69	16.30	121.11	952.49	493.58	1,112.67	1,079.72	32.95	33.767		
3,900.00	3,898.95	3,888.07	3,898.86	17.12	16.73	121.20	952.92	493.19	1,114.13	1,080.32	33.82	32.947		
4,000.00	3,998.92	3,987.65	3,998.43	17.55	17.15	121.27	953.33	492.54	1,115.43	1,080.77	34.66	32.179		
4,100.00	4,098.89	4,088.51	4,099.30	17.98	17.57	121.34	953.71	491.94	1,116.75	1,081.23	35.52	31.442		
4,200.00	4,198.86	4,190.43	4,201.21	18.42	18.00	121.43	953.89	491.41	1,117.93	1,081.55	36.38	30.731		
4,300.00	4,298.83	4,288.36	4,299.14	18.85	18.41	121.50	954.10	490.81	1,119.10	1,081.88	37.22	30.067		
4,400.00	4,398.80	4,388.21	4,398.99	19.28	18.83	121.58	954.37	490.35	1,120.39	1,082.32	38.07	29.428		
4,500.00	4,498.77	4,486.12	4,496.90	19.72	19.24	121.66	954.69	489.96	1,121.77	1,082.85	38.92	28.825		
4,600.00	4,598.73	4,582.02	4,592.79	20.15	19.65	121.75	955.12	489.87	1,123.42	1,083.67	39.75	28.261		
4,700.00	4,698.70	4,683.32	4,694.09	20.58	20.07	121.85	955.69	489.94	1,125.25	1,084.64	40.61	27.707		
4,800.00	4,798.67	4,777.95	4,788.72	21.02	20.47	121.94	956.25	490.08	1,127.16	1,085.72	41.44	27.199		
4,900.00	4,898.64	4,870.20	4,880.96	21.45	20.86	122.05	957.17	490.73	1,129.70	1,087.44	42.26	26.733		
5,000.00	4,998.61	4,971.08	4,981.83	21.89	21.29	122.15	958.60	491.59	1,132.68	1,089.56	43.12	26.269		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 31-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,098.58	5,079.62	5,090.36	22.32	21.75	122.25	959.87	491.88	1,135.15	1,091.14	44.02	25.789		
5,200.00	5,198.55	5,189.32	5,200.06	22.76	22.21	122.35	960.31	491.79	1,136.79	1,091.87	44.92	25.308		
5,300.00	5,298.52	5,289.69	5,300.43	23.20	22.63	122.42	960.51	491.13	1,137.93	1,092.16	45.78	24.859		
5,400.00	5,398.49	5,397.92	5,408.66	23.63	23.09	122.49	960.54	490.09	1,138.78	1,092.12	46.67	24.402		
5,500.00	5,498.45	5,502.42	5,513.14	24.07	23.53	122.55	960.14	488.58	1,139.03	1,091.49	47.54	23.958		
5,600.00	5,598.42	5,597.65	5,608.36	24.50	23.94	122.59	959.86	487.13	1,139.31	1,090.92	48.38	23.548		
5,700.00	5,698.39	5,698.57	5,709.27	24.94	24.36	122.66	959.58	485.87	1,139.75	1,090.50	49.24	23.145		
5,800.00	5,798.36	5,801.52	5,812.20	25.38	24.80	122.69	959.40	484.09	1,140.01	1,089.90	50.11	22.748		
5,900.00	5,898.33	5,897.88	5,908.55	25.81	25.21	122.72	959.40	482.21	1,140.31	1,089.35	50.96	22.377		
6,000.00	5,998.30	5,997.24	6,007.88	26.25	25.63	122.74	959.53	480.42	1,140.80	1,088.98	51.82	22.016		
6,100.00	6,098.27	6,099.69	6,110.32	26.69	26.06	122.75	959.75	478.28	1,141.20	1,088.52	52.69	21.661		
6,200.00	6,198.24	6,204.42	6,215.02	27.12	26.51	122.77	959.65	475.99	1,141.29	1,087.73	53.56	21.307		
6,230.29	6,228.52	6,233.36	6,243.95	27.25	26.63	122.78	959.57	475.37	1,141.28	1,087.46	53.82	21.206		
6,300.00	6,298.20	6,300.82	6,311.40	27.56	26.92	122.78	959.58	473.80	1,141.35	1,086.94	54.41	20.977		
6,400.00	6,398.17	6,408.79	6,419.32	28.00	27.38	122.77	959.62	470.74	1,141.20	1,085.90	55.30	20.636		
6,466.81	6,464.96	6,469.88	6,480.38	28.29	27.64	122.75	959.72	468.85	1,141.07	1,085.22	55.86	20.429		
6,500.00	6,498.14	6,500.91	6,511.40	28.43	27.77	122.74	959.86	467.91	1,141.10	1,084.97	56.13	20.329		
6,600.00	6,597.68	6,603.94	6,614.36	28.88	28.21	123.63	960.58	464.30	1,144.53	1,087.52	57.01	20.077		
6,700.00	6,694.68	6,705.62	6,715.95	29.32	28.64	123.64	961.30	460.17	1,156.40	1,098.53	57.88	19.981 SF		
6,800.00	6,786.74	6,799.32	6,809.58	29.77	29.04	123.44	961.67	456.49	1,177.15	1,118.45	58.70	20.054		
6,900.00	6,871.61	6,888.51	6,898.70	30.24	29.42	122.92	962.05	452.82	1,207.18	1,147.68	59.49	20.291		
7,000.00	6,947.19	6,968.14	6,978.23	30.74	29.76	121.74	962.63	449.03	1,246.63	1,186.39	60.24	20.694		
7,100.00	7,011.62	7,038.82	7,048.82	31.32	30.06	119.68	963.24	445.41	1,295.49	1,234.54	60.95	21.255		
7,200.00	7,063.31	7,098.09	7,108.01	32.03	30.32	116.33	963.62	442.31	1,353.25	1,291.64	61.62	21.963		
7,300.00	7,101.00	7,148.12	7,157.95	32.89	30.53	111.39	963.95	439.43	1,419.01	1,356.77	62.24	22.799		
7,400.00	7,123.74	7,182.96	7,192.71	33.93	30.68	104.18	964.27	437.12	1,491.44	1,428.65	62.78	23.755		
7,500.00	7,131.00	7,200.55	7,210.25	35.10	30.76	94.48	964.46	435.86	1,568.89	1,505.66	63.23	24.813		
7,600.00	7,130.63	7,209.41	7,219.10	36.44	30.80	95.01	964.56	435.20	1,649.31	1,585.69	63.62	25.924		
7,700.00	7,130.26	7,218.76	7,228.41	37.94	30.84	95.57	964.68	434.49	1,731.74	1,667.72	64.01	27.052		
7,800.00	7,129.90	7,220.76	7,230.41	39.59	30.84	95.69	964.67	434.39	1,815.94	1,751.57	64.37	28.209		
7,900.00	7,129.53	7,227.35	7,236.99	41.37	30.87	96.08	964.73	433.92	1,901.63	1,836.89	64.74	29.374		
8,000.00	7,129.17	7,233.86	7,243.48	43.27	30.90	96.46	964.79	433.45	1,988.63	1,923.54	65.09	30.551		
8,100.00	7,128.80	7,240.28	7,249.89	45.27	30.93	96.84	964.84	433.00	2,076.79	2,011.36	65.43	31.741		
8,200.00	7,128.43	7,274.09	7,255.50	47.36	31.07	97.17	964.90	432.60	2,165.95	2,100.08	65.87	32.883		
8,300.00	7,128.07	7,267.54	7,262.03	49.52	31.05	97.56	964.94	432.14	2,256.00	2,189.88	66.12	34.119		
8,400.00	7,127.70	7,260.99	7,268.57	51.75	31.02	97.95	964.98	431.69	2,346.84	2,280.48	66.36	35.366		
8,500.00	7,127.33	7,265.56	7,275.10	54.04	31.04	98.33	965.02	431.23	2,438.39	2,371.75	66.63	36.595		
8,600.00	7,126.97	7,272.11	7,281.63	56.38	31.07	98.71	965.07	430.78	2,530.55	2,463.65	66.90	37.826		
8,700.00	7,126.60	7,278.66	7,288.17	58.77	31.09	99.10	965.11	430.33	2,623.27	2,556.12	67.16	39.063		
8,800.00	7,126.24	7,285.21	7,294.70	61.19	31.12	99.48	965.15	429.87	2,716.50	2,649.10	67.40	40.304		
8,900.00	7,125.87	7,291.76	7,301.23	63.65	31.15	99.86	965.19	429.42	2,810.17	2,742.53	67.64	41.549		
9,000.00	7,125.50	7,298.31	7,307.77	66.15	31.18	100.24	965.23	428.97	2,904.25	2,836.39	67.86	42.797		
9,100.00	7,125.14	7,304.85	7,314.30	68.67	31.21	100.62	965.28	428.51	2,998.70	2,930.62	68.08	44.049		
9,200.00	7,124.77	7,311.40	7,320.83	71.21	31.24	101.00	965.32	428.06	3,093.49	3,025.20	68.29	45.302		
9,300.00	7,124.41	7,317.95	7,327.37	73.78	31.26	101.37	965.36	427.60	3,188.58	3,120.09	68.49	46.558		
9,400.00	7,124.04	7,324.50	7,333.90	76.37	31.29	101.75	965.40	427.15	3,283.94	3,215.26	68.68	47.815		
9,500.00	7,123.67	7,331.05	7,340.43	78.98	31.32	102.13	965.45	426.70	3,379.57	3,310.70	68.87	49.073		
9,600.00	7,123.31	7,337.60	7,346.96	81.60	31.35	102.50	965.49	426.24	3,475.43	3,406.37	69.05	50.332		
9,700.00	7,122.94	7,344.15	7,353.50	84.24	31.38	102.87	965.53	425.79	3,571.50	3,502.27	69.23	51.591		
9,800.00	7,122.57	7,350.70	7,360.03	86.90	31.41	103.25	965.57	425.34	3,667.77	3,598.37	69.40	52.851		
9,900.00	7,122.21	7,357.25	7,366.56	89.56	31.44	103.62	965.61	424.88	3,764.22	3,694.66	69.57	54.110		
10,000.00	7,121.84	7,363.80	7,373.10	92.24	31.46	103.99	965.66	424.43	3,860.85	3,791.12	69.73	55.369		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,100.00	7,121.48	7,370.34	7,379.63	94.92	31.49	104.35	965.70	423.97	3,957.63	3,887.74	69.89	56.627		
10,200.00	7,121.11	7,376.89	7,386.16	97.62	31.52	104.72	965.74	423.52	4,054.55	3,984.51	70.05	57.885		
10,300.00	7,120.74	7,383.44	7,392.70	100.32	31.55	105.09	965.78	423.07	4,151.61	4,081.42	70.20	59.142		
10,400.00	7,120.38	7,389.99	7,399.23	103.04	31.58	105.45	965.83	422.61	4,248.80	4,178.45	70.35	60.397		
10,500.00	7,120.01	7,396.54	7,405.76	105.76	31.61	105.81	965.87	422.16	4,346.11	4,275.61	70.50	61.651		
10,600.00	7,119.64	7,403.09	7,412.30	108.48	31.64	106.18	965.91	421.71	4,443.52	4,372.88	70.64	62.904		
10,700.00	7,119.28	7,409.64	7,418.83	111.22	31.66	106.54	965.95	421.25	4,541.04	4,470.26	70.78	64.155		
10,800.00	7,118.91	7,416.19	7,425.36	113.96	31.69	106.89	966.00	420.80	4,638.66	4,567.73	70.92	65.404		
10,900.00	7,118.55	7,422.74	7,431.90	116.70	31.72	107.25	966.04	420.34	4,736.36	4,665.30	71.06	66.651		
11,000.00	7,118.18	7,429.29	7,438.43	119.45	31.75	107.61	966.08	419.89	4,834.15	4,762.95	71.20	67.897		
11,100.00	7,117.81	7,435.83	7,444.96	122.21	31.78	107.96	966.12	419.44	4,932.02	4,860.69	71.33	69.140		
11,200.00	7,117.45	7,442.38	7,451.49	124.97	31.81	108.32	966.16	418.98	5,029.97	4,958.50	71.47	70.381		
11,300.00	7,117.08	7,448.93	7,458.03	127.73	31.84	108.67	966.21	418.53	5,127.98	5,056.38	71.60	71.620		
11,400.00	7,116.72	7,455.48	7,464.56	130.50	31.86	109.02	966.25	418.08	5,226.07	5,154.34	71.73	72.856		
11,500.00	7,116.35	7,462.03	7,471.11	133.27	31.89	109.37	966.29	417.63	5,324.25	5,252.49	71.86	74.092		
11,600.00	7,115.98	7,468.58	7,477.19	136.04	31.92	109.72	966.33	417.18	5,422.48	5,350.62	71.99	75.328		
11,700.00	7,115.62	7,475.13	7,483.23	138.82	31.95	110.07	966.37	416.73	5,520.78	5,448.83	72.12	76.564		
11,800.00	7,115.25	7,481.68	7,489.28	141.60	31.98	110.42	966.41	416.28	5,619.13	5,547.09	72.25	77.800		
11,900.00	7,114.88	7,488.23	7,495.83	144.39	32.01	110.77	966.45	415.83	5,717.55	5,645.41	72.38	79.036		
12,000.00	7,114.52	7,494.78	7,502.38	147.17	32.04	111.12	966.49	415.38	5,816.01	5,743.79	72.51	80.272		
12,100.00	7,114.15	7,501.33	7,508.93	149.96	32.07	111.47	966.53	414.93	5,914.53	5,842.22	72.64	81.508		
12,200.00	7,113.79	7,507.88	7,515.48	152.75	32.10	111.82	966.57	414.48	6,013.10	5,940.70	72.77	82.744		
12,300.00	7,113.42	7,514.43	7,522.03	155.55	32.13	112.17	966.61	414.03	6,111.71	6,039.23	72.90	83.980		
12,400.00	7,113.05	7,520.98	7,528.58	158.34	32.16	112.52	966.65	413.58	6,210.37	6,137.80	73.03	85.216		
12,500.00	7,112.69	7,527.53	7,535.13	161.14	32.19	112.87	966.69	413.13	6,309.07	6,236.41	73.16	86.452		
12,600.00	7,112.32	7,534.08	7,542.68	163.94	32.22	113.22	966.73	412.68	6,407.81	6,335.07	73.29	87.688		
12,700.00	7,111.96	7,540.63	7,549.23	166.74	32.25	113.57	966.77	412.23	6,506.59	6,433.76	73.42	88.924		
12,800.00	7,111.59	7,547.18	7,556.78	169.54	32.28	113.92	966.81	411.78	6,605.41	6,532.49	73.55	90.160		
12,900.00	7,111.22	7,553.73	7,564.33	172.35	32.31	114.27	966.85	411.33	6,704.26	6,631.26	73.68	91.396		
13,000.00	7,110.86	7,560.28	7,571.88	175.16	32.34	114.62	966.89	410.88	6,803.15	6,730.06	73.81	92.632		
13,100.00	7,110.49	7,566.83	7,579.43	177.96	32.37	114.97	966.93	410.43	6,902.06	6,828.89	73.94	93.868		
13,200.00	7,110.12	7,573.38	7,586.98	180.77	32.40	115.32	966.97	410.00	7,001.01	6,927.75	74.07	95.104		
13,300.00	7,109.76	7,579.93	7,594.53	183.58	32.43	115.67	967.01	409.55	7,099.99	7,026.64	74.20	96.340		
13,400.00	7,109.39	7,586.48	7,602.08	186.40	32.46	116.02	967.05	409.10	7,199.00	7,125.56	74.33	97.576		
13,500.00	7,109.03	7,593.03	7,609.63	189.21	32.49	116.37	967.09	408.65	7,298.03	7,224.51	74.46	98.812		
13,600.00	7,108.66	7,599.58	7,617.18	192.03	32.52	116.72	967.13	408.20	7,397.09	7,323.49	74.59	100.048		
13,700.00	7,108.29	7,606.13	7,624.73	194.84	32.55	117.07	967.17	407.75	7,496.17	7,422.49	74.72	101.284		
13,800.00	7,107.93	7,612.68	7,632.28	197.66	32.58	117.42	967.21	407.30	7,595.28	7,521.51	74.85	102.520		
13,900.00	7,107.56	7,619.23	7,639.83	200.48	32.61	117.77	967.25	406.85	7,694.41	7,620.56	74.98	103.756		
14,000.00	7,107.19	7,625.78	7,647.38	203.30	32.64	118.12	967.29	406.40	7,793.56	7,719.62	75.11	104.992		
14,100.00	7,106.83	7,632.33	7,654.93	206.12	32.67	118.47	967.33	405.95	7,892.74	7,818.71	75.24	106.228		
14,200.00	7,106.46	7,638.88	7,662.48	208.94	32.70	118.82	967.37	405.50	7,991.93	7,917.82	75.37	107.464		
14,300.00	7,106.10	7,645.43	7,669.93	211.76	32.73	119.17	967.41	405.05	8,091.15	8,016.95	75.50	108.700		
14,400.00	7,105.73	7,651.98	7,677.48	214.58	32.76	119.52	967.45	404.60	8,190.38	8,116.10	75.63	109.936		
14,500.00	7,105.36	7,658.53	7,685.03	217.40	32.79	119.87	967.49	404.15	8,289.63	8,215.27	75.76	111.172		
14,600.00	7,105.00	7,665.08	7,692.58	220.23	32.82	120.22	967.53	403.70	8,388.90	8,314.45	75.89	112.408		
14,700.00	7,104.63	7,671.63	7,700.13	223.05	32.85	120.57	967.57	403.25	8,488.19	8,413.66	76.02	113.644		
14,800.00	7,104.27	7,678.18	7,707.68	225.88	32.88	120.92	967.61	402.80	8,587.49	8,512.87	76.15	114.880		
14,872.41	7,104.00	7,684.73	7,715.23	227.93	32.91	121.27	967.65	402.35	8,659.41	8,584.73	76.28	116.116		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 32-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	21.00	3.28	3.28	100.35	-95.08	520.40	529.43					
100.00	100.00	79.75	100.75	3.28	3.28	100.30	-94.53	520.44	528.96	522.39	6.57	80.514		
200.00	200.00	182.17	203.15	3.34	3.33	100.13	-92.93	520.37	528.62	521.95	6.67	79.268		
300.00	300.00	282.76	303.73	3.44	3.43	100.00	-91.63	519.90	527.93	521.05	6.88	76.758		
400.00	400.00	380.40	401.37	3.60	3.58	99.88	-90.49	519.58	527.40	520.22	7.18	73.447		
460.31	460.31	439.35	460.31	3.72	3.69	99.80	-89.78	519.63	527.33	519.93	7.41	71.206	CC	
500.00	500.00	478.26	499.22	3.81	3.76	99.75	-89.32	519.74	527.36	519.79	7.57	69.668	ES	
600.00	599.98	577.94	598.89	4.04	3.99	-170.42	-87.99	520.18	529.16	521.13	8.03	65.899		
700.00	699.95	677.06	697.99	4.30	4.25	-170.64	-86.43	520.71	531.89	523.34	8.55	62.231		
800.00	799.92	776.67	797.59	4.59	4.53	-170.85	-85.03	521.36	534.77	525.65	9.12	58.649		
900.00	899.89	875.47	896.38	4.90	4.83	-171.08	-83.37	522.15	537.76	528.03	9.73	55.265		
1,000.00	999.86	975.49	996.38	5.23	5.15	-171.29	-81.88	523.07	540.91	530.53	10.38	52.100		
1,100.00	1,099.83	1,075.92	1,096.80	5.58	5.49	-171.50	-80.41	523.90	543.98	532.92	11.06	49.164		
1,200.00	1,199.80	1,176.59	1,197.45	5.94	5.84	-171.70	-78.89	524.63	546.95	535.18	11.77	46.460		
1,300.00	1,299.77	1,278.23	1,299.08	6.30	6.21	-171.90	-77.44	525.14	549.72	537.21	12.50	43.962		
1,400.00	1,399.73	1,377.32	1,398.15	6.68	6.57	-172.11	-75.82	525.52	552.34	539.10	13.24	41.705		
1,500.00	1,499.70	1,479.15	1,499.98	7.07	6.96	-172.29	-74.41	525.91	555.01	541.00	14.01	39.621		
1,600.00	1,599.67	1,580.50	1,601.32	7.46	7.34	-172.45	-73.18	525.87	557.29	542.50	14.78	37.700		
1,700.00	1,699.64	1,682.78	1,703.59	7.85	7.74	-172.61	-71.88	525.54	559.29	543.72	15.57	35.921		
1,800.00	1,799.61	1,780.88	1,801.69	8.25	8.12	-172.73	-71.03	525.05	561.16	544.81	16.35	34.322		
1,900.00	1,899.58	1,880.50	1,901.30	8.66	8.51	-172.84	-70.19	524.86	563.34	546.20	17.14	32.861		
2,000.00	1,999.55	1,982.62	2,003.42	9.06	8.92	-172.96	-69.27	524.50	565.36	547.41	17.95	31.490		
2,100.00	2,099.52	2,083.65	2,104.44	9.47	9.32	-173.02	-68.89	523.73	567.04	548.27	18.77	30.218		
2,200.00	2,199.48	2,182.69	2,203.48	9.89	9.72	-173.04	-68.89	522.92	568.71	549.14	19.57	29.054		
2,300.00	2,299.45	2,282.34	2,303.13	10.30	10.12	-173.06	-68.96	522.25	570.53	550.14	20.39	27.981		
2,400.00	2,399.42	2,383.65	2,404.43	10.72	10.53	-173.04	-69.38	521.45	572.28	551.06	21.22	26.973		
2,500.00	2,499.39	2,482.10	2,502.88	11.14	10.93	-173.00	-69.98	520.60	573.97	551.94	22.03	26.048		
2,600.00	2,599.36	2,581.38	2,602.15	11.56	11.33	-172.93	-70.92	519.96	575.93	553.07	22.86	25.194		
2,700.00	2,699.33	2,678.81	2,699.57	11.98	11.73	-172.85	-71.92	519.54	578.11	554.43	23.68	24.414		
2,800.00	2,799.30	2,779.71	2,800.47	12.41	12.14	-172.78	-72.98	519.36	580.54	556.02	24.52	23.680		
2,900.00	2,899.27	2,881.17	2,901.92	12.83	12.55	-172.70	-74.05	518.87	582.68	557.32	25.36	22.978		
3,000.00	2,999.23	2,981.18	3,001.93	13.26	12.97	-172.66	-74.70	518.31	584.68	558.48	26.20	22.320		
3,100.00	3,099.20	3,082.68	3,103.42	13.68	13.39	-172.64	-75.13	517.68	586.60	559.55	27.04	21.692		
3,200.00	3,199.17	3,183.37	3,204.12	14.11	13.80	-172.65	-75.28	516.85	588.28	560.39	27.89	21.096		
3,300.00	3,299.14	3,283.29	3,304.03	14.54	14.22	-172.65	-75.47	515.98	589.91	561.18	28.73	20.534		
3,400.00	3,399.11	3,379.55	3,400.29	14.97	14.62	-172.65	-75.67	515.40	591.83	562.27	29.56	20.024		
3,500.00	3,499.08	3,479.20	3,499.94	15.40	15.04	-172.65	-75.97	515.26	594.21	563.81	30.40	19.546		
3,600.00	3,599.05	3,579.99	3,600.72	15.83	15.46	-172.64	-76.37	515.00	596.47	565.22	31.25	19.086		
3,700.00	3,699.02	3,680.78	3,701.51	16.26	15.88	-172.62	-76.87	514.58	598.60	566.50	32.10	18.646		
3,800.00	3,798.98	3,781.57	3,802.30	16.69	16.30	-172.59	-77.48	514.01	600.60	567.64	32.96	18.224		
3,900.00	3,898.95	3,882.37	3,903.09	17.12	16.73	-172.54	-78.19	513.28	602.46	568.64	33.81	17.818		
4,000.00	3,998.92	3,983.17	4,003.88	17.55	17.15	-172.49	-79.00	512.41	604.18	569.51	34.67	17.429		
4,100.00	4,098.89	4,083.97	4,104.68	17.98	17.57	-172.42	-79.91	511.39	605.77	570.25	35.52	17.054		
4,200.00	4,198.86	4,184.78	4,205.47	18.42	18.00	-172.34	-80.93	510.21	607.22	570.84	36.38	16.692		
4,300.00	4,298.83	4,283.56	4,304.24	18.85	18.41	-172.26	-81.97	509.06	608.68	571.46	37.23	16.351		
4,400.00	4,398.80	4,381.13	4,401.80	19.28	18.82	-172.19	-82.92	508.24	610.46	572.39	38.07	16.036		
4,500.00	4,498.77	4,482.24	4,502.91	19.72	19.25	-172.16	-83.55	507.61	612.41	573.48	38.93	15.732		
4,600.00	4,598.73	4,582.96	4,603.63	20.15	19.67	-172.16	-83.75	506.82	614.13	574.34	39.79	15.436		
4,700.00	4,698.70	4,681.51	4,702.17	20.58	20.09	-172.17	-83.92	506.09	615.90	575.26	40.63	15.157		
4,800.00	4,798.67	4,779.73	4,800.39	21.02	20.50	-172.17	-84.13	505.65	617.95	576.47	41.48	14.897		
4,900.00	4,898.64	4,878.98	4,899.65	21.45	20.92	-172.18	-84.33	505.42	620.23	577.89	42.33	14.651		
5,000.00	4,998.61	4,980.62	5,001.28	21.89	21.35	-172.23	-84.12	505.18	622.44	579.24	43.20	14.409		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTER 32-15(SI_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,098.58	5,080.87	5,101.53	22.32	21.77	-172.28	-83.87	504.73	624.44	580.38	44.06	14.173		
5,200.00	5,198.55	5,180.91	5,201.57	22.76	22.20	-172.32	-83.70	504.27	626.44	581.52	44.92	13.947		
5,300.00	5,298.52	5,283.58	5,304.24	23.20	22.63	-172.36	-83.48	503.62	628.26	582.47	45.79	13.722		
5,400.00	5,398.49	5,384.54	5,405.19	23.63	23.06	-172.39	-83.43	502.59	629.72	583.07	46.65	13.499		
5,500.00	5,498.45	5,483.22	5,503.87	24.07	23.48	-172.40	-83.52	501.59	631.21	583.71	47.50	13.288		
5,600.00	5,598.42	5,581.38	5,602.03	24.50	23.89	-172.41	-83.56	500.88	632.97	584.62	48.35	13.091		
5,700.00	5,698.39	5,680.87	5,701.52	24.94	24.32	-172.41	-83.80	500.34	634.94	585.73	49.21	12.903		
5,800.00	5,798.36	5,780.92	5,801.56	25.38	24.74	-172.39	-84.35	499.77	636.92	586.85	50.07	12.721		
5,900.00	5,898.33	5,879.73	5,900.37	25.81	25.16	-172.38	-84.74	499.28	638.97	588.04	50.92	12.548		
6,000.00	5,998.30	5,981.34	6,001.98	26.25	25.59	-172.40	-84.76	498.87	641.05	589.25	51.79	12.377		
6,100.00	6,098.27	6,082.43	6,103.07	26.69	26.02	-172.42	-84.83	498.17	642.84	590.19	52.66	12.208		
6,200.00	6,198.24	6,181.70	6,202.33	27.12	26.44	-172.42	-85.06	497.43	644.61	591.09	53.52	12.045		
6,300.00	6,298.20	6,279.79	6,300.42	27.56	26.86	-172.43	-85.19	496.91	646.58	592.22	54.37	11.893		
6,400.00	6,398.17	6,379.22	6,399.85	28.00	27.28	-172.45	-85.21	496.64	648.79	593.56	55.23	11.748		
6,500.00	6,498.14	6,479.06	6,499.69	28.43	27.71	-172.48	-85.22	496.38	651.02	594.93	56.09	11.607		
6,600.00	6,597.68	6,578.48	6,599.11	28.88	28.13	-171.52	-85.22	496.16	659.24	602.29	56.95	11.576 SF		
6,700.00	6,694.68	6,675.39	6,696.02	29.32	28.54	-171.41	-85.23	495.95	682.69	624.89	57.79	11.812		
6,800.00	6,786.74	6,767.39	6,788.02	29.77	28.93	-171.29	-85.24	495.78	720.91	662.32	58.59	12.303		
6,900.00	6,871.61	6,852.21	6,872.84	30.24	29.29	-171.04	-85.24	495.64	773.02	713.69	59.33	13.030		
7,000.00	6,947.19	6,927.76	6,948.39	30.74	29.62	-170.53	-85.25	495.52	837.75	777.78	59.97	13.970		
7,100.00	7,011.62	6,992.18	7,012.81	31.32	29.89	-169.56	-85.25	495.43	913.52	853.02	60.50	15.100		
7,200.00	7,063.31	7,043.87	7,064.50	32.03	30.11	-167.65	-85.25	495.37	998.49	937.58	60.92	16.391		
7,300.00	7,101.00	7,081.58	7,102.21	32.89	30.27	-163.50	-85.26	495.32	1,090.56	1,029.35	61.21	17.817		
7,400.00	7,123.74	7,104.38	7,125.01	33.93	30.37	-151.35	-85.26	495.30	1,187.44	1,126.06	61.38	19.345		
7,500.00	7,131.00	7,111.72	7,132.34	35.10	30.40	-88.05	-85.26	495.29	1,286.76	1,225.31	61.44	20.942		
7,600.00	7,130.63	7,111.46	7,132.08	36.44	30.40	-87.89	-85.26	495.29	1,386.48	1,325.03	61.45	22.561		
7,700.00	7,130.26	7,111.20	7,131.82	37.94	30.40	-87.74	-85.26	495.29	1,486.25	1,424.78	61.47	24.180		
7,800.00	7,129.90	7,110.94	7,131.56	39.59	30.40	-87.59	-85.26	495.29	1,586.05	1,524.57	61.48	25.798		
7,900.00	7,129.53	7,110.68	7,131.30	41.37	30.40	-87.44	-85.26	495.29	1,685.86	1,624.37	61.49	27.415		
8,000.00	7,129.17	7,110.42	7,131.04	43.27	30.39	-87.29	-85.26	495.29	1,785.70	1,724.20	61.51	29.032		
8,100.00	7,128.80	7,110.16	7,130.79	45.27	30.39	-87.14	-85.26	495.29	1,885.56	1,824.04	61.53	30.647		
8,200.00	7,128.43	7,109.90	7,130.53	47.36	30.39	-86.99	-85.26	495.29	1,985.43	1,923.89	61.54	32.261		
8,300.00	7,128.07	7,109.64	7,130.27	49.52	30.39	-86.83	-85.26	495.29	2,085.32	2,023.75	61.56	33.874		
8,400.00	7,127.70	7,109.38	7,130.01	51.75	30.39	-86.68	-85.26	495.29	2,185.21	2,123.63	61.58	35.485		
8,500.00	7,127.33	7,109.12	7,129.75	54.04	30.39	-86.53	-85.26	495.29	2,285.11	2,223.51	61.60	37.095		
8,600.00	7,126.97	7,108.86	7,129.49	56.38	30.39	-86.38	-85.26	495.29	2,385.02	2,323.40	61.62	38.703		
8,700.00	7,126.60	7,108.60	7,129.23	58.77	30.39	-86.23	-85.26	495.29	2,484.94	2,423.30	61.65	40.310		
8,800.00	7,126.24	7,108.34	7,128.97	61.19	30.39	-86.08	-85.26	495.29	2,584.87	2,523.20	61.67	41.915		
8,900.00	7,125.87	7,108.08	7,128.71	63.65	30.38	-85.93	-85.26	495.29	2,684.80	2,623.10	61.69	43.518		
9,000.00	7,125.50	7,107.83	7,128.45	66.15	30.38	-85.78	-85.26	495.29	2,784.73	2,723.01	61.72	45.119		
9,100.00	7,125.14	7,107.57	7,128.20	68.67	30.38	-85.63	-85.26	495.29	2,884.67	2,822.92	61.75	46.717		
9,200.00	7,124.77	7,107.31	7,127.94	71.21	30.38	-85.48	-85.26	495.29	2,984.62	2,922.84	61.78	48.314		
9,300.00	7,124.41	7,107.05	7,127.68	73.78	30.38	-85.33	-85.26	495.30	3,084.56	3,022.76	61.80	49.909		
9,400.00	7,124.04	7,106.79	7,127.42	76.37	30.38	-85.18	-85.26	495.30	3,184.51	3,122.68	61.83	51.501		
9,500.00	7,123.67	7,106.53	7,127.16	78.98	30.38	-85.03	-85.26	495.30	3,284.47	3,222.60	61.87	53.091		
9,600.00	7,123.31	7,106.28	7,126.90	81.60	30.38	-84.88	-85.26	495.30	3,384.42	3,322.53	61.90	54.678		
9,700.00	7,122.94	7,106.02	7,126.65	84.24	30.38	-84.73	-85.26	495.30	3,484.38	3,422.45	61.93	56.263		
9,800.00	7,122.57	7,105.76	7,126.39	86.90	30.37	-84.58	-85.26	495.30	3,584.34	3,522.38	61.97	57.845		
9,900.00	7,122.21	7,105.50	7,126.13	89.56	30.37	-84.44	-85.26	495.30	3,684.31	3,622.31	62.00	59.424		
10,000.00	7,121.84	7,105.25	7,125.87	92.24	30.37	-84.29	-85.26	495.30	3,784.27	3,722.23	62.04	61.000		
10,100.00	7,121.48	7,104.99	7,125.62	94.92	30.37	-84.14	-85.26	495.30	3,884.24	3,822.16	62.07	62.574		
10,200.00	7,121.11	7,104.73	7,125.36	97.62	30.37	-83.99	-85.26	495.30	3,984.21	3,922.09	62.11	64.145		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,120.74	7,104.47	7,125.10	100.32	30.37	-83.84	-85.26	495.30	4,084.18	4,022.02	62.15	65.712		
10,400.00	7,120.38	7,104.22	7,124.85	103.04	30.37	-83.69	-85.26	495.30	4,184.15	4,121.96	62.19	67.277		
10,500.00	7,120.01	7,103.96	7,124.59	105.76	30.37	-83.54	-85.26	495.30	4,284.12	4,221.89	62.23	68.838		
10,600.00	7,119.64	7,103.70	7,124.33	108.48	30.37	-83.40	-85.26	495.30	4,384.10	4,321.82	62.28	70.396		
10,700.00	7,119.28	7,103.45	7,124.07	111.22	30.36	-83.25	-85.26	495.30	4,484.07	4,421.75	62.32	71.951		
10,800.00	7,118.91	7,103.19	7,123.82	113.96	30.36	-83.10	-85.26	495.30	4,584.05	4,521.68	62.37	73.502		
10,900.00	7,118.55	7,102.93	7,123.56	116.70	30.36	-82.95	-85.26	495.30	4,684.02	4,621.61	62.41	75.050		
11,000.00	7,118.18	7,102.68	7,123.30	119.45	30.36	-82.81	-85.26	495.30	4,784.00	4,721.54	62.46	76.594		
11,100.00	7,117.81	7,102.42	7,123.05	122.21	30.36	-82.66	-85.26	495.30	4,883.98	4,821.47	62.51	78.135		
11,200.00	7,117.45	7,102.16	7,122.79	124.97	30.36	-82.51	-85.26	495.30	4,983.96	4,921.40	62.56	79.672		
11,300.00	7,117.08	7,101.91	7,122.54	127.73	30.36	-82.36	-85.26	495.30	5,083.94	5,021.34	62.61	81.205		
11,400.00	7,116.72	7,101.65	7,122.28	130.50	30.36	-82.22	-85.26	495.30	5,183.92	5,121.27	62.66	82.735		
11,500.00	7,116.35	7,101.40	7,122.02	133.27	30.36	-82.07	-85.26	495.30	5,283.90	5,221.20	62.71	84.260		
11,600.00	7,115.98	7,101.14	7,121.77	136.04	30.35	-81.92	-85.26	495.30	5,383.89	5,321.13	62.76	85.782		
11,700.00	7,115.62	7,100.89	7,121.51	138.82	30.35	-81.78	-85.26	495.30	5,483.87	5,421.05	62.82	87.300		
11,800.00	7,115.25	7,100.63	7,121.26	141.60	30.35	-81.63	-85.26	495.30	5,583.85	5,520.98	62.87	88.814		
11,900.00	7,114.88	7,100.37	7,121.00	144.39	30.35	-81.49	-85.26	495.30	5,683.84	5,620.91	62.93	90.324		
12,000.00	7,114.52	7,100.12	7,120.75	147.17	30.35	-81.34	-85.26	495.30	5,783.82	5,720.84	62.98	91.829		
12,100.00	7,114.15	7,099.86	7,120.49	149.96	30.35	-81.20	-85.26	495.30	5,883.81	5,820.77	63.04	93.331		
12,200.00	7,113.79	7,099.61	7,120.24	152.75	30.35	-81.05	-85.26	495.30	5,983.80	5,920.69	63.10	94.828		
12,300.00	7,113.42	7,099.35	7,119.98	155.55	30.35	-80.90	-85.26	495.30	6,083.78	6,020.62	63.16	96.321		
12,400.00	7,113.05	7,099.10	7,119.73	158.34	30.35	-80.76	-85.26	495.30	6,183.77	6,120.55	63.22	97.809		
12,500.00	7,112.69	7,098.84	7,119.47	161.14	30.35	-80.61	-85.26	495.30	6,283.76	6,220.47	63.28	99.294		
12,600.00	7,112.32	7,098.59	7,119.22	163.94	30.34	-80.47	-85.26	495.30	6,383.74	6,320.40	63.35	100.773		
12,700.00	7,111.96	7,098.33	7,118.96	166.74	30.34	-80.33	-85.26	495.30	6,483.73	6,420.32	63.41	102.249		
12,800.00	7,111.59	7,098.08	7,118.71	169.54	30.34	-80.18	-85.26	495.30	6,583.72	6,520.24	63.48	103.719		
12,900.00	7,111.22	7,097.83	7,118.45	172.35	30.34	-80.04	-85.26	495.31	6,683.71	6,620.17	63.54	105.186		
13,000.00	7,110.86	7,097.57	7,118.20	175.16	30.34	-79.89	-85.26	495.31	6,783.70	6,720.09	63.61	106.647		
13,100.00	7,110.49	7,097.32	7,117.95	177.96	30.34	-79.75	-85.26	495.31	6,883.69	6,820.01	63.68	108.104		
13,200.00	7,110.12	7,097.06	7,117.69	180.77	30.34	-79.61	-85.26	495.31	6,983.68	6,919.93	63.75	109.556		
13,300.00	7,109.76	7,096.81	7,117.44	183.58	30.34	-79.46	-85.26	495.31	7,083.67	7,019.85	63.81	111.004		
13,400.00	7,109.39	7,096.56	7,117.18	186.40	30.34	-79.32	-85.26	495.31	7,183.66	7,119.77	63.88	112.447		
13,500.00	7,109.03	7,096.30	7,116.93	189.21	30.33	-79.18	-85.26	495.31	7,283.65	7,219.69	63.96	113.885		
13,600.00	7,108.66	7,096.05	7,116.68	192.03	30.33	-79.03	-85.26	495.31	7,383.64	7,319.61	64.03	115.318		
13,700.00	7,108.29	7,095.79	7,116.42	194.84	30.33	-78.89	-85.26	495.31	7,483.63	7,419.53	64.10	116.746		
13,800.00	7,107.93	7,095.54	7,116.17	197.66	30.33	-78.75	-85.26	495.31	7,583.62	7,519.45	64.18	118.170		
13,900.00	7,107.56	7,095.29	7,115.92	200.48	30.33	-78.61	-85.26	495.31	7,683.61	7,619.36	64.25	119.588		
14,000.00	7,107.19	7,095.03	7,115.66	203.30	30.33	-78.47	-85.26	495.31	7,783.60	7,719.28	64.33	121.001		
14,100.00	7,106.83	7,094.78	7,115.41	206.12	30.33	-78.32	-85.26	495.31	7,883.60	7,819.19	64.40	122.410		
14,200.00	7,106.46	7,094.53	7,115.16	208.94	30.33	-78.18	-85.26	495.31	7,983.59	7,919.11	64.48	123.813		
14,300.00	7,106.10	7,094.28	7,114.90	211.76	30.33	-78.04	-85.26	495.31	8,083.58	8,019.02	64.56	125.212		
14,400.00	7,105.73	7,094.02	7,114.65	214.58	30.32	-77.90	-85.26	495.31	8,183.57	8,118.93	64.64	126.605		
14,500.00	7,105.36	7,093.77	7,114.40	217.40	30.32	-77.76	-85.26	495.31	8,283.56	8,218.85	64.72	127.993		
14,600.00	7,105.00	7,093.52	7,114.15	220.23	30.32	-77.62	-85.26	495.31	8,383.56	8,318.76	64.80	129.377		
14,700.00	7,104.63	7,093.27	7,113.89	223.05	30.32	-77.48	-85.26	495.31	8,483.55	8,418.67	64.88	130.755		
14,800.00	7,104.27	7,093.01	7,113.64	225.88	30.32	-77.34	-85.26	495.31	8,583.54	8,518.58	64.96	132.127		
14,872.41	7,104.00	7,092.83	7,113.46	227.93	30.32	-77.24	-85.26	495.31	8,655.95	8,590.92	65.02	133.118		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1.00	0.00	3.28	3.28	0.50	159.93	1.39	159.93					
100.00	100.00	101.00	100.00	3.28	3.28	0.50	159.93	1.39	159.93	153.36	6.57	24.344		
200.00	200.00	201.00	200.00	3.34	3.34	0.50	159.93	1.39	159.93	153.26	6.67	23.960	CC, ES	
300.00	300.00	295.65	294.64	3.44	3.44	0.44	161.51	1.23	161.61	154.71	6.89	23.440		
400.00	400.00	390.15	389.01	3.60	3.59	0.26	166.20	0.76	166.57	159.34	7.23	23.050		
500.00	500.00	484.24	482.77	3.81	3.78	-0.01	173.94	-0.02	174.80	167.15	7.65	22.848		
600.00	599.98	577.72	575.62	4.04	4.01	89.97	184.67	-1.09	186.27	178.13	8.14	22.879		
700.00	699.95	670.40	667.29	4.30	4.26	90.24	198.27	-2.46	200.95	192.26	8.69	23.135		
800.00	799.92	762.12	757.52	4.59	4.54	90.38	214.62	-4.10	218.79	209.51	9.27	23.593		
900.00	899.89	852.70	846.07	4.90	4.84	90.43	233.59	-6.00	239.73	229.84	9.89	24.250		
1,000.00	999.86	941.99	932.72	5.23	5.16	90.40	255.00	-8.15	263.71	253.19	10.53	25.055		
1,100.00	1,099.83	1,029.84	1,017.29	5.58	5.49	90.31	278.68	-10.53	290.67	279.50	11.17	26.011		
1,200.00	1,199.80	1,123.91	1,107.29	5.94	5.88	90.19	305.88	-13.26	319.58	307.73	11.85	26.963		
1,300.00	1,299.77	1,219.62	1,198.86	6.30	6.29	90.09	333.60	-16.05	348.54	335.98	12.56	27.744		
1,400.00	1,399.73	1,315.34	1,290.43	6.68	6.72	90.01	361.32	-18.83	377.51	364.21	13.30	28.391		
1,500.00	1,499.70	1,411.05	1,382.00	7.07	7.16	89.93	389.05	-21.61	406.47	392.42	14.05	28.928		
1,600.00	1,599.67	1,506.76	1,473.57	7.46	7.60	89.87	416.77	-24.40	435.43	420.61	14.82	29.376		
1,700.00	1,699.64	1,602.47	1,565.13	7.85	8.06	89.81	444.49	-27.18	464.40	448.79	15.61	29.751		
1,800.00	1,799.61	1,701.81	1,656.70	8.25	8.54	89.76	472.21	-29.96	493.36	476.94	16.42	30.038		
1,900.00	1,899.58	1,806.10	1,748.27	8.66	9.05	89.72	499.93	-32.74	522.33	505.06	17.27	30.238		
2,000.00	1,999.55	1,889.61	1,839.84	9.06	9.47	89.68	527.65	-35.53	551.30	533.26	18.04	30.564		
2,100.00	2,099.52	1,985.32	1,931.40	9.47	9.94	89.65	555.37	-38.31	580.26	561.40	18.86	30.760		
2,200.00	2,199.48	2,081.03	2,022.97	9.89	10.42	89.61	583.10	-41.09	609.23	589.53	19.70	30.927		
2,300.00	2,299.45	2,176.75	2,114.54	10.30	10.91	89.59	610.82	-43.88	638.19	617.65	20.54	31.072		
2,400.00	2,399.42	2,272.46	2,206.11	10.72	11.40	89.56	638.54	-46.66	667.16	645.77	21.39	31.197		
2,500.00	2,499.39	2,368.17	2,297.67	11.14	11.88	89.54	666.26	-49.44	696.13	673.89	22.24	31.306		
2,600.00	2,599.36	2,463.88	2,389.24	11.56	12.38	89.51	693.98	-52.23	725.09	702.00	23.09	31.401		
2,700.00	2,699.33	2,559.60	2,480.81	11.98	12.87	89.49	721.70	-55.01	754.06	730.11	23.95	31.484		
2,800.00	2,799.30	2,655.31	2,572.38	12.41	13.36	89.47	749.42	-57.79	783.03	758.21	24.81	31.557		
2,900.00	2,899.27	2,751.02	2,663.95	12.83	13.86	89.46	777.15	-60.58	811.99	786.32	25.68	31.621		
3,000.00	2,999.23	2,846.73	2,755.51	13.26	14.36	89.44	804.87	-63.36	840.96	814.41	26.55	31.678		
3,100.00	3,099.20	2,942.45	2,847.08	13.68	14.86	89.42	832.59	-66.14	869.93	842.51	27.42	31.728		
3,200.00	3,199.17	3,038.16	2,938.65	14.11	15.36	89.41	860.31	-68.93	898.89	870.60	28.29	31.773		
3,300.00	3,299.14	3,133.87	3,030.22	14.54	15.86	89.40	888.03	-71.71	927.86	898.70	29.17	31.812		
3,400.00	3,399.11	3,229.58	3,121.78	14.97	16.36	89.38	915.75	-74.49	956.83	926.79	30.04	31.848		
3,500.00	3,499.08	3,325.30	3,213.35	15.40	16.86	89.37	943.47	-77.27	985.80	954.87	30.92	31.879		
3,600.00	3,599.05	3,421.01	3,304.92	15.83	17.37	89.36	971.20	-80.06	1,014.76	982.96	31.80	31.907		
3,700.00	3,699.02	3,516.72	3,396.49	16.26	17.87	89.35	998.92	-82.84	1,043.73	1,011.04	32.69	31.932		
3,800.00	3,798.98	3,612.43	3,488.05	16.69	18.38	89.34	1,026.64	-85.62	1,072.70	1,039.13	33.57	31.954		
3,900.00	3,898.95	3,708.15	3,579.62	17.12	18.88	89.33	1,054.36	-88.41	1,101.67	1,067.21	34.45	31.975		
4,000.00	3,998.92	3,803.86	3,671.19	17.55	19.39	89.32	1,082.08	-91.19	1,130.63	1,095.29	35.34	31.993		
4,100.00	4,098.89	3,900.43	3,762.76	17.98	19.90	89.31	1,109.80	-93.97	1,159.60	1,123.37	36.23	32.005		
4,200.00	4,198.86	4,004.72	3,854.33	18.42	20.45	89.30	1,137.52	-96.76	1,188.57	1,151.40	37.16	31.983		
4,300.00	4,298.83	4,109.00	3,945.89	18.85	21.00	89.30	1,165.25	-99.54	1,217.53	1,179.44	38.09	31.961		
4,400.00	4,398.80	4,186.71	4,037.46	19.28	21.41	89.29	1,192.97	-102.32	1,246.50	1,207.61	38.89	32.048		
4,500.00	4,498.77	4,282.42	4,129.03	19.72	21.92	89.28	1,220.69	-105.11	1,275.47	1,235.68	39.79	32.058		
4,600.00	4,598.73	4,378.13	4,220.60	20.15	22.43	89.28	1,248.41	-107.89	1,304.44	1,263.76	40.68	32.068		
4,700.00	4,698.70	4,473.85	4,312.16	20.58	22.94	89.27	1,276.13	-110.67	1,333.40	1,291.84	41.57	32.076		
4,800.00	4,798.67	4,569.56	4,403.73	21.02	23.45	89.26	1,303.85	-113.46	1,362.37	1,319.91	42.46	32.084		
4,900.00	4,898.64	4,665.27	4,495.30	21.45	23.96	89.26	1,331.57	-116.24	1,391.34	1,347.98	43.36	32.091		
5,000.00	4,998.61	4,760.98	4,586.87	21.89	24.47	89.25	1,359.30	-119.02	1,420.31	1,376.06	44.25	32.097		
5,100.00	5,098.58	4,856.69	4,678.43	22.32	24.97	89.25	1,387.02	-121.80	1,449.27	1,404.13	45.15	32.102		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,198.55	4,952.41	4,770.00	22.76	25.48	89.24	1,414.74	-124.59	1,478.24	1,432.20	46.04	32.107		
5,300.00	5,298.52	5,048.12	4,861.57	23.20	25.99	89.24	1,442.46	-127.37	1,507.21	1,460.27	46.94	32.111		
5,400.00	5,398.49	5,143.83	4,953.14	23.63	26.50	89.23	1,470.18	-130.15	1,536.18	1,488.34	47.83	32.115		
5,500.00	5,498.45	5,239.54	5,044.71	24.07	27.01	89.23	1,497.90	-132.94	1,565.15	1,516.41	48.73	32.118		
5,600.00	5,598.42	5,335.26	5,136.27	24.50	27.53	89.22	1,525.62	-135.72	1,594.11	1,544.48	49.63	32.121		
5,700.00	5,698.39	5,482.87	5,277.91	24.94	28.30	89.22	1,566.97	-139.87	1,622.44	1,571.43	51.01	31.807		
5,800.00	5,798.36	5,708.63	5,497.98	25.38	29.41	89.26	1,616.82	-144.88	1,644.54	1,591.69	52.85	31.117		
5,900.00	5,898.33	5,941.12	5,728.01	25.81	30.43	89.36	1,649.97	-148.20	1,658.80	1,604.47	54.33	30.530		
6,000.00	5,998.30	6,177.48	5,963.84	26.25	31.36	89.52	1,664.55	-149.67	1,664.96	1,609.56	55.40	30.052		
6,100.00	6,098.27	6,311.91	6,098.27	26.69	31.84	89.63	1,665.17	-149.73	1,665.20	1,608.99	56.21	29.622		
6,200.00	6,198.24	6,411.88	6,198.24	27.12	32.19	89.72	1,665.17	-149.73	1,665.19	1,608.15	57.03	29.197		
6,300.00	6,298.20	6,511.85	6,298.20	27.56	32.55	89.80	1,665.17	-149.73	1,665.18	1,607.32	57.85	28.783		
6,400.00	6,398.17	6,611.81	6,398.17	28.00	32.91	89.89	1,665.17	-149.73	1,665.17	1,606.49	58.68	28.379		
6,500.00	6,498.14	6,711.78	6,498.14	28.43	33.27	89.98	1,665.17	-149.73	1,665.17	1,605.67	59.50	27.987		
6,500.39	6,498.53	6,712.18	6,498.53	28.44	33.27	90.00	1,665.17	-149.73	1,665.17	1,605.66	59.50	27.985		
6,600.00	6,597.68	6,811.32	6,597.68	28.88	33.63	91.20	1,665.17	-149.73	1,665.30	1,604.98	60.33	27.604		
6,700.00	6,694.68	6,913.34	6,699.52	29.32	34.00	91.92	1,665.13	-154.30	1,665.90	1,604.75	61.15	27.245		
6,800.00	6,786.74	7,019.86	6,803.71	29.77	34.38	92.57	1,664.96	-175.80	1,666.89	1,604.94	61.95	26.906		
6,900.00	6,871.61	7,130.18	6,906.29	30.24	34.75	93.15	1,664.65	-216.04	1,668.22	1,605.45	62.77	26.577		
7,000.00	6,947.19	7,244.34	7,003.47	30.74	35.11	93.65	1,664.18	-275.64	1,669.78	1,606.15	63.63	26.241		
7,100.00	7,011.62	7,362.15	7,090.95	31.32	35.44	94.06	1,663.57	-354.30	1,671.48	1,606.85	64.63	25.861		
7,200.00	7,063.31	7,483.17	7,164.17	32.03	35.76	94.35	1,662.81	-450.43	1,673.18	1,607.29	65.89	25.394		
7,300.00	7,101.00	7,606.70	7,218.79	32.89	36.21	94.51	1,661.95	-561.00	1,674.77	1,607.25	67.53	24.802		
7,400.00	7,123.74	7,731.77	7,251.32	33.93	37.07	94.53	1,661.01	-681.56	1,676.16	1,606.54	69.62	24.075		
7,500.00	7,131.00	7,853.65	7,259.94	35.10	38.31	94.41	1,660.06	-802.96	1,677.29	1,605.19	72.11	23.262		
7,600.00	7,130.63	7,953.64	7,259.56	36.44	39.57	94.40	1,659.28	-902.95	1,678.46	1,603.74	74.72	22.463		
7,700.00	7,130.26	8,053.64	7,259.18	37.94	40.98	94.40	1,658.49	-1,002.94	1,679.63	1,601.98	77.65	21.630		
7,800.00	7,129.90	8,153.63	7,258.80	39.59	42.54	94.40	1,657.71	-1,102.92	1,680.80	1,599.92	80.88	20.781		
7,900.00	7,129.53	8,253.62	7,258.42	41.37	44.24	94.39	1,656.93	-1,202.91	1,681.97	1,597.60	84.37	19.935		
8,000.00	7,129.17	8,353.62	7,258.04	43.27	46.05	94.39	1,656.15	-1,302.90	1,683.14	1,595.05	88.09	19.107		
8,100.00	7,128.80	8,453.61	7,257.66	45.27	47.96	94.39	1,655.37	-1,402.89	1,684.31	1,592.29	92.01	18.305		
8,200.00	7,128.43	8,553.60	7,257.28	47.36	49.97	94.38	1,654.58	-1,502.88	1,685.47	1,589.36	96.11	17.536		
8,300.00	7,128.07	8,653.59	7,256.91	49.52	52.05	94.38	1,653.80	-1,602.87	1,686.64	1,586.28	100.37	16.804		
8,400.00	7,127.70	8,753.59	7,256.53	51.75	54.21	94.38	1,653.02	-1,702.86	1,687.81	1,583.05	104.76	16.111		
8,500.00	7,127.33	8,853.58	7,256.15	54.04	56.43	94.37	1,652.24	-1,802.85	1,688.98	1,579.71	109.28	15.456		
8,600.00	7,126.97	8,953.57	7,255.77	56.38	58.70	94.37	1,651.46	-1,902.84	1,690.15	1,576.26	113.89	14.840		
8,700.00	7,126.60	9,053.57	7,255.39	58.77	61.03	94.36	1,650.67	-2,002.83	1,691.32	1,572.71	118.61	14.260		
8,800.00	7,126.24	9,153.56	7,255.01	61.19	63.39	94.36	1,649.89	-2,102.82	1,692.49	1,569.09	123.40	13.715		
8,900.00	7,125.87	9,253.55	7,254.63	63.65	65.80	94.36	1,649.11	-2,202.81	1,693.66	1,565.38	128.27	13.203		
9,000.00	7,125.50	9,353.55	7,254.25	66.15	68.24	94.35	1,648.33	-2,302.80	1,694.83	1,561.62	133.21	12.723		
9,100.00	7,125.14	9,453.54	7,253.87	68.67	70.71	94.35	1,647.55	-2,402.79	1,696.00	1,557.79	138.20	12.272		
9,200.00	7,124.77	9,553.53	7,253.49	71.21	73.21	94.35	1,646.76	-2,502.78	1,697.17	1,553.92	143.25	11.847		
9,300.00	7,124.41	9,653.53	7,253.11	73.78	75.74	94.34	1,645.98	-2,602.77	1,698.34	1,549.99	148.35	11.449		
9,400.00	7,124.04	9,753.52	7,252.73	76.37	78.29	94.34	1,645.20	-2,702.75	1,699.51	1,546.02	153.48	11.073		
9,500.00	7,123.67	9,853.51	7,252.35	78.98	80.86	94.34	1,644.42	-2,802.74	1,700.67	1,542.02	158.66	10.719		
9,600.00	7,123.31	9,953.51	7,251.97	81.60	83.45	94.33	1,643.64	-2,902.73	1,701.84	1,537.98	163.87	10.386		
9,700.00	7,122.94	10,053.50	7,251.59	84.24	86.05	94.33	1,642.85	-3,002.72	1,703.01	1,533.91	169.11	10.071		
9,800.00	7,122.57	10,153.49	7,251.21	86.90	88.67	94.33	1,642.07	-3,102.71	1,704.18	1,529.81	174.38	9.773		
9,900.00	7,122.21	10,253.48	7,250.83	89.56	91.31	94.32	1,641.29	-3,202.70	1,705.35	1,525.68	179.67	9.491		
10,000.00	7,121.84	10,353.48	7,250.45	92.24	93.95	94.32	1,640.51	-3,302.69	1,706.52	1,521.53	184.99	9.225		
10,100.00	7,121.48	10,453.47	7,250.07	94.92	96.61	94.32	1,639.73	-3,402.68	1,707.69	1,517.36	190.33	8.972		
10,200.00	7,121.11	10,553.46	7,249.70	97.62	99.29	94.31	1,638.94	-3,502.67	1,708.86	1,513.16	195.70	8.732		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,120.74	10,653.46	7,249.32	100.32	101.97	94.31	1,638.16	-3,602.66	1,710.03	1,508.95	201.08	8.504		
10,400.00	7,120.38	10,753.45	7,248.94	103.04	104.66	94.31	1,637.38	-3,702.65	1,711.20	1,504.73	206.47	8.288		
10,500.00	7,120.01	10,853.44	7,248.56	105.76	107.36	94.30	1,636.60	-3,802.64	1,712.37	1,500.48	211.89	8.082		
10,600.00	7,119.64	10,953.44	7,248.18	108.48	110.06	94.30	1,635.82	-3,902.63	1,713.54	1,496.22	217.31	7.885		
10,700.00	7,119.28	11,053.43	7,247.80	111.22	112.78	94.30	1,635.03	-4,002.62	1,714.71	1,491.95	222.75	7.698		
10,800.00	7,118.91	11,153.42	7,247.42	113.96	115.50	94.29	1,634.25	-4,102.61	1,715.88	1,487.67	228.21	7.519		
10,900.00	7,118.55	11,253.42	7,247.04	116.70	118.23	94.29	1,633.47	-4,202.59	1,717.04	1,483.37	233.67	7.348		
11,000.00	7,118.18	11,353.41	7,246.66	119.45	120.96	94.29	1,632.69	-4,302.58	1,718.21	1,479.06	239.15	7.185		
11,100.00	7,117.81	11,453.40	7,246.28	122.21	123.70	94.28	1,631.91	-4,402.57	1,719.38	1,474.75	244.64	7.028		
11,200.00	7,117.45	11,553.39	7,245.90	124.97	126.45	94.28	1,631.12	-4,502.56	1,720.55	1,470.42	250.13	6.879		
11,300.00	7,117.08	11,653.39	7,245.52	127.73	129.20	94.28	1,630.34	-4,602.55	1,721.72	1,466.09	255.64	6.735		
11,400.00	7,116.72	11,753.38	7,245.14	130.50	131.95	94.27	1,629.56	-4,702.54	1,722.89	1,461.74	261.15	6.597		
11,500.00	7,116.35	11,853.37	7,244.76	133.27	134.71	94.27	1,628.78	-4,802.53	1,724.06	1,457.39	266.67	6.465		
11,600.00	7,115.98	11,953.37	7,244.38	136.04	137.47	94.27	1,628.00	-4,902.52	1,725.23	1,453.03	272.20	6.338		
11,700.00	7,115.62	12,053.36	7,244.00	138.82	140.24	94.26	1,627.21	-5,002.51	1,726.40	1,448.67	277.73	6.216		
11,800.00	7,115.25	12,153.35	7,243.62	141.60	143.01	94.26	1,626.43	-5,102.50	1,727.57	1,444.29	283.28	6.099		
11,900.00	7,114.88	12,253.35	7,243.24	144.39	145.78	94.26	1,625.65	-5,202.49	1,728.74	1,439.91	288.82	5.985		
12,000.00	7,114.52	12,353.34	7,242.86	147.17	148.56	94.25	1,624.87	-5,302.48	1,729.91	1,435.53	294.38	5.876		
12,100.00	7,114.15	12,453.33	7,242.48	149.96	151.34	94.25	1,624.09	-5,402.47	1,731.08	1,431.14	299.94	5.771		
12,200.00	7,113.79	12,553.33	7,242.11	152.75	154.12	94.25	1,623.31	-5,502.46	1,732.25	1,426.75	305.50	5.670		
12,300.00	7,113.42	12,653.32	7,241.73	155.55	156.91	94.24	1,622.52	-5,602.45	1,733.42	1,422.35	311.07	5.572		
12,400.00	7,113.05	12,753.31	7,241.35	158.34	159.70	94.24	1,621.74	-5,702.43	1,734.59	1,417.94	316.64	5.478		
12,500.00	7,112.69	12,853.31	7,240.97	161.14	162.49	94.24	1,620.96	-5,802.42	1,735.76	1,413.53	322.22	5.387		
12,600.00	7,112.32	12,953.30	7,240.59	163.94	165.28	94.23	1,620.18	-5,902.41	1,736.92	1,409.12	327.80	5.299		
12,700.00	7,111.96	13,053.29	7,240.21	166.74	168.07	94.23	1,619.40	-6,002.40	1,738.09	1,404.70	333.39	5.213		
12,800.00	7,111.59	13,153.28	7,239.83	169.54	170.87	94.23	1,618.61	-6,102.39	1,739.26	1,400.28	338.98	5.131		
12,900.00	7,111.22	13,253.28	7,239.45	172.35	173.67	94.22	1,617.83	-6,202.38	1,740.43	1,395.86	344.57	5.051		
13,000.00	7,110.86	13,353.27	7,239.07	175.16	176.47	94.22	1,617.05	-6,302.37	1,741.60	1,391.43	350.17	4.974		
13,100.00	7,110.49	13,453.26	7,238.69	177.96	179.27	94.22	1,616.27	-6,402.36	1,742.77	1,387.00	355.77	4.899		
13,200.00	7,110.12	13,553.26	7,238.31	180.77	182.08	94.21	1,615.49	-6,502.35	1,743.94	1,382.57	361.38	4.826		
13,300.00	7,109.76	13,653.25	7,237.93	183.58	184.88	94.21	1,614.70	-6,602.34	1,745.11	1,378.13	366.98	4.755		
13,400.00	7,109.39	13,753.24	7,237.55	186.40	187.69	94.21	1,613.92	-6,702.33	1,746.28	1,373.69	372.59	4.687		
13,500.00	7,109.03	13,853.24	7,237.17	189.21	190.50	94.20	1,613.14	-6,802.32	1,747.45	1,369.25	378.20	4.620		
13,600.00	7,108.66	13,953.23	7,236.79	192.03	193.31	94.20	1,612.36	-6,902.31	1,748.62	1,364.80	383.82	4.556		
13,700.00	7,108.29	14,053.22	7,236.41	194.84	196.12	94.20	1,611.58	-7,002.30	1,749.79	1,360.35	389.44	4.493		
13,800.00	7,107.93	14,153.22	7,236.03	197.66	198.94	94.19	1,610.79	-7,102.29	1,750.96	1,355.90	395.05	4.432		
13,900.00	7,107.56	14,253.21	7,235.65	200.48	201.75	94.19	1,610.01	-7,202.27	1,752.13	1,351.45	400.68	4.373		
14,000.00	7,107.19	14,353.20	7,235.27	203.30	204.57	94.19	1,609.23	-7,302.26	1,753.30	1,347.00	406.30	4.315		
14,100.00	7,106.83	14,453.20	7,234.90	206.12	207.38	94.18	1,608.45	-7,402.25	1,754.47	1,342.54	411.93	4.259		
14,200.00	7,106.46	14,553.19	7,234.52	208.94	210.20	94.18	1,607.67	-7,502.24	1,755.64	1,338.08	417.56	4.205		
14,300.00	7,106.10	14,653.18	7,234.14	211.76	213.02	94.18	1,606.88	-7,602.23	1,756.81	1,333.62	423.19	4.151		
14,400.00	7,105.73	14,753.17	7,233.76	214.58	215.84	94.17	1,606.10	-7,702.22	1,757.98	1,329.16	428.82	4.100		
14,500.00	7,105.36	14,853.17	7,233.38	217.40	218.66	94.17	1,605.32	-7,802.21	1,759.14	1,324.69	434.45	4.049		
14,600.00	7,105.00	14,953.16	7,233.00	220.23	221.48	94.17	1,604.54	-7,902.20	1,760.31	1,320.23	440.09	4.000		
14,700.00	7,104.63	15,053.15	7,232.62	223.05	224.31	94.16	1,603.76	-8,002.19	1,761.48	1,315.76	445.72	3.952		
14,800.00	7,104.27	15,153.15	7,232.24	225.88	227.13	94.16	1,602.97	-8,102.18	1,762.65	1,311.29	451.36	3.905		
14,872.41	7,104.00	15,216.01	7,232.00	227.93	228.91	94.16	1,602.48	-8,165.04	1,763.53	1,308.34	455.19	3.874 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1.00	0.00	3.28	3.28	0.57	140.26	1.39	140.26					
100.00	100.00	101.00	100.00	3.28	3.28	0.57	140.26	1.39	140.26	133.69	6.57	21.350		
200.00	200.00	201.00	200.00	3.34	3.34	0.57	140.26	1.39	140.26	133.59	6.67	21.014		
300.00	300.00	301.00	300.00	3.44	3.45	0.57	140.26	1.39	140.26	133.37	6.89	20.354 CC, ES		
400.00	400.00	396.29	395.27	3.60	3.60	0.48	141.86	1.19	141.95	134.74	7.21	19.689		
500.00	500.00	491.42	490.27	3.81	3.79	0.23	146.60	0.58	146.92	139.30	7.63	19.268		
600.00	599.98	586.13	584.65	4.04	4.02	90.30	154.42	-0.42	155.18	147.07	8.11	19.132		
700.00	699.95	680.22	678.11	4.30	4.28	90.60	165.25	-1.81	166.70	158.05	8.65	19.262		
800.00	799.92	773.52	770.37	4.59	4.56	90.73	178.99	-3.57	181.43	172.19	9.24	19.629		
900.00	899.89	865.84	861.17	4.90	4.86	90.72	195.51	-5.69	199.33	189.47	9.86	20.209		
1,000.00	999.86	963.41	956.80	5.23	5.20	90.63	214.71	-8.15	219.02	208.52	10.50	20.862		
1,100.00	1,099.83	1,061.46	1,052.89	5.58	5.55	90.56	234.02	-10.62	238.71	227.53	11.18	21.353		
1,200.00	1,199.80	1,159.50	1,148.98	5.94	5.93	90.50	253.33	-13.10	258.40	246.52	11.88	21.744		
1,300.00	1,299.77	1,257.54	1,245.07	6.30	6.32	90.45	272.64	-15.57	278.10	265.48	12.61	22.049		
1,400.00	1,399.73	1,355.58	1,341.16	6.68	6.72	90.41	291.95	-18.05	297.79	284.43	13.36	22.287		
1,500.00	1,499.70	1,453.62	1,437.25	7.07	7.13	90.37	311.26	-20.52	317.48	303.36	14.13	22.472		
1,600.00	1,599.67	1,551.66	1,533.34	7.46	7.55	90.34	330.57	-23.00	337.18	322.27	14.91	22.617		
1,700.00	1,699.64	1,649.70	1,629.43	7.85	7.97	90.31	349.88	-25.47	356.87	341.17	15.70	22.730		
1,800.00	1,799.61	1,747.74	1,725.51	8.25	8.40	90.28	369.19	-27.95	376.57	360.06	16.50	22.818		
1,900.00	1,899.58	1,845.79	1,821.60	8.66	8.84	90.25	388.50	-30.42	396.26	378.95	17.32	22.885		
2,000.00	1,999.55	1,943.83	1,917.69	9.06	9.28	90.23	407.81	-32.89	415.96	397.82	18.14	22.937		
2,100.00	2,099.52	2,041.87	2,013.78	9.47	9.72	90.21	427.11	-35.37	435.65	416.69	18.96	22.975		
2,200.00	2,199.48	2,139.91	2,109.87	9.89	10.16	90.19	446.42	-37.84	455.34	435.55	19.79	23.004		
2,300.00	2,299.45	2,237.95	2,205.96	10.30	10.61	90.18	465.73	-40.32	475.04	454.41	20.63	23.025		
2,400.00	2,399.42	2,335.99	2,302.05	10.72	11.06	90.16	485.04	-42.79	494.73	473.26	21.47	23.039		
2,500.00	2,499.39	2,434.03	2,398.14	11.14	11.51	90.15	504.35	-45.27	514.43	492.11	22.32	23.048		
2,600.00	2,599.36	2,532.08	2,494.23	11.56	11.97	90.13	523.66	-47.74	534.12	510.95	23.17	23.052		
2,700.00	2,699.33	2,630.12	2,590.32	11.98	12.42	90.12	542.97	-50.21	553.82	529.79	24.02	23.053		
2,800.00	2,799.30	2,728.16	2,686.41	12.41	12.88	90.11	562.28	-52.69	573.51	548.63	24.88	23.051		
2,900.00	2,899.27	2,826.20	2,782.50	12.83	13.34	90.10	581.59	-55.16	593.21	567.47	25.74	23.048		
3,000.00	2,999.23	2,924.24	2,878.59	13.26	13.80	90.09	600.90	-57.64	612.90	586.30	26.60	23.042		
3,100.00	3,099.20	3,022.28	2,974.68	13.68	14.26	90.08	620.21	-60.11	632.60	605.13	27.46	23.035		
3,200.00	3,199.17	3,120.32	3,070.76	14.11	14.72	90.07	639.51	-62.59	652.29	623.96	28.33	23.026		
3,300.00	3,299.14	3,218.37	3,166.85	14.54	15.18	90.06	658.82	-65.06	671.99	642.79	29.20	23.017		
3,400.00	3,399.11	3,316.41	3,262.94	14.97	15.64	90.05	678.13	-67.53	691.68	661.62	30.06	23.007		
3,500.00	3,499.08	3,414.45	3,359.03	15.40	16.11	90.05	697.44	-70.01	711.38	680.44	30.93	22.997		
3,600.00	3,599.05	3,512.49	3,455.12	15.83	16.57	90.04	716.75	-72.48	731.07	699.26	31.81	22.986		
3,700.00	3,699.02	3,610.53	3,551.21	16.26	17.03	90.03	736.06	-74.96	750.76	718.09	32.68	22.975		
3,800.00	3,798.98	3,708.57	3,647.30	16.69	17.50	90.03	755.37	-77.43	770.46	736.91	33.55	22.963		
3,900.00	3,898.95	3,806.61	3,743.39	17.12	17.96	90.02	774.68	-79.91	790.15	755.73	34.43	22.952		
4,000.00	3,998.92	3,904.65	3,839.48	17.55	18.43	90.01	793.99	-82.38	809.85	774.55	35.30	22.940		
4,100.00	4,098.89	4,002.70	3,935.57	17.98	18.90	90.01	813.30	-84.86	829.54	793.36	36.18	22.928		
4,200.00	4,198.86	4,100.74	4,031.66	18.42	19.36	90.00	832.61	-87.33	849.24	812.18	37.06	22.917		
4,300.00	4,298.83	4,201.22	4,127.75	18.85	19.84	90.00	851.91	-89.80	868.93	830.99	37.95	22.898		
4,400.00	4,398.80	4,303.18	4,223.84	19.28	20.33	89.99	871.22	-92.28	888.63	849.78	38.85	22.876		
4,500.00	4,498.77	4,394.86	4,319.92	19.72	20.77	89.99	890.53	-94.75	908.32	868.63	39.70	22.882		
4,600.00	4,598.73	4,492.90	4,416.01	20.15	21.24	89.98	909.84	-97.23	928.02	887.44	40.58	22.871		
4,700.00	4,698.70	4,609.06	4,512.10	20.58	21.79	89.98	929.15	-99.70	947.71	906.17	41.54	22.813		
4,800.00	4,798.67	4,688.99	4,608.19	21.02	22.17	89.98	948.46	-102.18	967.41	925.07	42.34	22.849		
4,900.00	4,898.64	4,787.03	4,704.28	21.45	22.64	89.97	967.77	-104.65	987.10	943.88	43.22	22.838		
5,000.00	4,998.61	4,885.07	4,800.37	21.89	23.11	89.97	987.08	-107.12	1,006.80	962.69	44.11	22.827		
5,100.00	5,098.58	4,983.11	4,896.46	22.32	23.58	89.97	1,006.39	-109.60	1,026.49	981.50	44.99	22.817		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,198.55	5,081.15	4,992.55	22.76	24.05	89.96	1,025.70	-112.07	1,046.19	1,000.31	45.87	22.806		
5,300.00	5,298.52	5,179.19	5,088.64	23.20	24.52	89.96	1,045.01	-114.55	1,065.88	1,019.13	46.76	22.796		
5,400.00	5,398.49	5,277.23	5,184.73	23.63	24.99	89.96	1,064.31	-117.02	1,085.58	1,037.94	47.64	22.786		
5,500.00	5,498.45	5,375.28	5,280.82	24.07	25.46	89.95	1,083.62	-119.50	1,105.27	1,056.75	48.53	22.776		
5,600.00	5,598.42	5,473.32	5,376.91	24.50	25.93	89.95	1,102.93	-121.97	1,124.97	1,075.55	49.41	22.767		
5,700.00	5,698.39	5,571.36	5,473.00	24.94	26.40	89.95	1,122.24	-124.44	1,144.66	1,094.36	50.30	22.757		
5,800.00	5,798.36	5,669.40	5,569.08	25.38	26.87	89.94	1,141.55	-126.92	1,164.36	1,113.17	51.18	22.748		
5,900.00	5,898.33	5,767.44	5,665.17	25.81	27.34	89.94	1,160.86	-129.39	1,184.05	1,131.98	52.07	22.739		
6,000.00	5,998.30	5,865.48	5,761.26	26.25	27.81	89.94	1,180.17	-131.87	1,203.75	1,150.79	52.96	22.730		
6,100.00	6,098.27	5,963.52	5,857.35	26.69	28.29	89.94	1,199.48	-134.34	1,223.44	1,169.60	53.85	22.721		
6,200.00	6,198.24	6,061.56	5,953.44	27.12	28.76	89.93	1,218.79	-136.82	1,243.14	1,188.40	54.73	22.713		
6,300.00	6,298.20	6,159.61	6,049.53	27.56	29.23	89.93	1,238.10	-139.29	1,262.83	1,207.21	55.62	22.704		
6,400.00	6,398.17	6,257.65	6,145.62	28.00	29.70	89.93	1,257.41	-141.76	1,282.53	1,226.02	56.51	22.696		
6,500.00	6,498.14	6,355.69	6,241.71	28.43	30.17	89.93	1,276.71	-144.24	1,302.22	1,244.82	57.40	22.688		
6,600.00	6,597.68	6,453.44	6,337.51	28.88	30.64	89.54	1,295.97	-146.71	1,321.98	1,263.69	58.29	22.680		
6,700.00	6,694.68	6,549.02	6,431.20	29.32	31.10	88.71	1,314.79	-149.12	1,341.85	1,282.67	59.18	22.674		
6,800.00	6,786.74	6,648.21	6,528.19	29.77	31.58	88.33	1,334.26	-155.24	1,361.86	1,301.73	60.13	22.648		
6,900.00	6,871.61	6,756.34	6,631.62	30.24	32.09	88.08	1,354.90	-178.49	1,381.43	1,320.23	61.20	22.574		
7,000.00	6,947.19	6,872.54	6,736.77	30.74	32.62	87.91	1,375.74	-222.94	1,399.93	1,337.57	62.36	22.449		
7,100.00	7,011.62	6,997.91	6,839.31	31.32	33.16	87.84	1,395.88	-291.83	1,416.71	1,353.05	63.66	22.256		
7,200.00	7,063.31	7,133.02	6,932.73	32.03	33.75	87.83	1,414.01	-387.39	1,431.03	1,365.86	65.17	21.959		
7,300.00	7,101.00	7,277.39	7,008.38	32.89	34.57	87.82	1,428.38	-509.15	1,442.15	1,375.11	67.04	21.512		
7,400.00	7,123.74	7,428.99	7,056.81	33.93	35.83	87.77	1,437.12	-652.16	1,449.43	1,380.02	69.41	20.883		
7,500.00	7,131.00	7,577.99	7,070.97	35.10	37.45	87.63	1,438.94	-800.14	1,452.44	1,380.24	72.20	20.117		
7,600.00	7,130.63	7,677.98	7,070.69	36.44	38.74	87.63	1,438.19	-900.13	1,453.64	1,378.78	74.86	19.418		
7,700.00	7,130.26	7,777.98	7,070.40	37.94	40.19	87.64	1,437.44	-1,000.12	1,454.84	1,377.00	77.84	18.690		
7,800.00	7,129.90	7,877.97	7,070.12	39.59	41.78	87.64	1,436.69	-1,100.11	1,456.03	1,374.92	81.11	17.951		
7,900.00	7,129.53	7,977.96	7,069.83	41.37	43.51	87.65	1,435.93	-1,200.10	1,457.23	1,372.59	84.64	17.216		
8,000.00	7,129.17	8,077.95	7,069.55	43.27	45.35	87.65	1,435.18	-1,300.09	1,458.43	1,370.03	88.40	16.498		
8,100.00	7,128.80	8,177.95	7,069.26	45.27	47.29	87.66	1,434.43	-1,400.08	1,459.63	1,367.27	92.36	15.804		
8,200.00	7,128.43	8,277.94	7,068.98	47.36	49.32	87.66	1,433.68	-1,500.06	1,460.83	1,364.34	96.49	15.139		
8,300.00	7,128.07	8,377.93	7,068.69	49.52	51.43	87.67	1,432.92	-1,600.05	1,462.03	1,361.25	100.78	14.507		
8,400.00	7,127.70	8,477.93	7,068.41	51.75	53.61	87.67	1,432.17	-1,700.04	1,463.23	1,358.02	105.21	13.908		
8,500.00	7,127.33	8,577.92	7,068.12	54.04	55.86	87.68	1,431.42	-1,800.03	1,464.43	1,354.68	109.75	13.344		
8,600.00	7,126.97	8,677.91	7,067.84	56.38	58.15	87.69	1,430.67	-1,900.02	1,465.63	1,351.23	114.39	12.812		
8,700.00	7,126.60	8,777.90	7,067.55	58.77	60.50	87.69	1,429.91	-2,000.01	1,466.83	1,347.69	119.13	12.313		
8,800.00	7,126.24	8,877.90	7,067.27	61.19	62.89	87.70	1,429.16	-2,100.00	1,468.02	1,344.07	123.95	11.843		
8,900.00	7,125.87	8,977.89	7,066.98	63.65	65.31	87.70	1,428.41	-2,199.99	1,469.22	1,340.38	128.85	11.403		
9,000.00	7,125.50	9,077.88	7,066.70	66.15	67.77	87.71	1,427.66	-2,299.98	1,470.42	1,336.62	133.80	10.989		
9,100.00	7,125.14	9,177.87	7,066.42	68.67	70.26	87.71	1,426.91	-2,399.97	1,471.62	1,332.80	138.82	10.601		
9,200.00	7,124.77	9,277.87	7,066.13	71.21	72.78	87.72	1,426.15	-2,499.96	1,472.82	1,328.93	143.89	10.236		
9,300.00	7,124.41	9,377.86	7,065.85	73.78	75.32	87.72	1,425.40	-2,599.95	1,474.02	1,325.02	149.00	9.893		
9,400.00	7,124.04	9,477.85	7,065.56	76.37	77.88	87.73	1,424.65	-2,699.94	1,475.22	1,321.06	154.16	9.570		
9,500.00	7,123.67	9,577.85	7,065.28	78.98	80.46	87.73	1,423.90	-2,799.93	1,476.42	1,317.07	159.35	9.265		
9,600.00	7,123.31	9,677.84	7,064.99	81.60	83.07	87.74	1,423.14	-2,899.92	1,477.62	1,313.04	164.58	8.978		
9,700.00	7,122.94	9,777.83	7,064.71	84.24	85.68	87.74	1,422.39	-2,999.91	1,478.82	1,308.98	169.84	8.707		
9,800.00	7,122.57	9,877.82	7,064.42	86.90	88.32	87.75	1,421.64	-3,099.90	1,480.01	1,304.89	175.12	8.451		
9,900.00	7,122.21	9,977.82	7,064.14	89.56	90.96	87.75	1,420.89	-3,199.89	1,481.21	1,300.78	180.44	8.209		
10,000.00	7,121.84	10,077.81	7,063.85	92.24	93.62	87.76	1,420.13	-3,299.88	1,482.41	1,296.64	185.77	7.980		
10,100.00	7,121.48	10,177.80	7,063.57	94.92	96.29	87.76	1,419.38	-3,399.87	1,483.61	1,292.48	191.13	7.762		
10,200.00	7,121.11	10,277.80	7,063.28	97.62	98.97	87.77	1,418.63	-3,499.85	1,484.81	1,288.30	196.51	7.556		
10,300.00	7,120.74	10,377.79	7,063.00	100.32	101.66	87.77	1,417.88	-3,599.84	1,486.01	1,284.11	201.90	7.360		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	10,477.78	7,062.71	103.04	104.36	87.78	1,417.12	-3,699.83	1,487.21	1,279.89	207.31	7.174		
10,500.00	7,120.01	10,577.77	7,062.43	105.76	107.07	87.78	1,416.37	-3,799.82	1,488.41	1,275.67	212.74	6.996		
10,600.00	7,119.64	10,677.77	7,062.14	108.48	109.78	87.79	1,415.62	-3,899.81	1,489.61	1,271.42	218.18	6.827		
10,700.00	7,119.28	10,777.76	7,061.86	111.22	112.50	87.79	1,414.87	-3,999.80	1,490.81	1,267.17	223.64	6.666		
10,800.00	7,118.91	10,877.75	7,061.57	113.96	115.23	87.79	1,414.11	-4,099.79	1,492.01	1,262.90	229.11	6.512		
10,900.00	7,118.55	10,977.74	7,061.29	116.70	117.97	87.80	1,413.36	-4,199.78	1,493.20	1,258.62	234.59	6.365		
11,000.00	7,118.18	11,077.74	7,061.01	119.45	120.71	87.80	1,412.61	-4,299.77	1,494.40	1,254.33	240.08	6.225		
11,100.00	7,117.81	11,177.73	7,060.72	122.21	123.45	87.81	1,411.86	-4,399.76	1,495.60	1,250.02	245.58	6.090		
11,200.00	7,117.45	11,277.72	7,060.44	124.97	126.21	87.81	1,411.10	-4,499.75	1,496.80	1,245.71	251.09	5.961		
11,300.00	7,117.08	11,377.72	7,060.15	127.73	128.96	87.82	1,410.35	-4,599.74	1,498.00	1,241.39	256.61	5.838		
11,400.00	7,116.72	11,477.71	7,059.87	130.50	131.72	87.82	1,409.60	-4,699.73	1,499.20	1,237.07	262.13	5.719		
11,500.00	7,116.35	11,577.70	7,059.58	133.27	134.49	87.83	1,408.85	-4,799.72	1,500.40	1,232.73	267.67	5.605		
11,600.00	7,115.98	11,677.69	7,059.30	136.04	137.25	87.83	1,408.10	-4,899.71	1,501.60	1,228.39	273.21	5.496		
11,700.00	7,115.62	11,777.69	7,059.01	138.82	140.02	87.84	1,407.34	-4,999.70	1,502.80	1,224.04	278.76	5.391		
11,800.00	7,115.25	11,877.68	7,058.73	141.60	142.80	87.84	1,406.59	-5,099.69	1,504.00	1,219.69	284.31	5.290		
11,900.00	7,114.88	11,977.67	7,058.44	144.39	145.58	87.85	1,405.84	-5,199.68	1,505.20	1,215.32	289.87	5.193		
12,000.00	7,114.52	12,077.66	7,058.16	147.17	148.36	87.85	1,405.09	-5,299.67	1,506.40	1,210.96	295.44	5.099		
12,100.00	7,114.15	12,177.66	7,057.87	149.96	151.14	87.86	1,404.33	-5,399.65	1,507.60	1,206.58	301.01	5.008		
12,200.00	7,113.79	12,277.65	7,057.59	152.75	153.93	87.86	1,403.58	-5,499.64	1,508.80	1,202.21	306.59	4.921		
12,300.00	7,113.42	12,377.64	7,057.30	155.55	156.72	87.87	1,402.83	-5,599.63	1,509.99	1,197.82	312.17	4.837		
12,400.00	7,113.05	12,477.64	7,057.02	158.34	159.51	87.87	1,402.08	-5,699.62	1,511.19	1,193.44	317.76	4.756		
12,500.00	7,112.69	12,577.63	7,056.73	161.14	162.31	87.88	1,401.32	-5,799.61	1,512.39	1,189.05	323.35	4.677		
12,600.00	7,112.32	12,677.62	7,056.45	163.94	165.10	87.88	1,400.57	-5,899.60	1,513.59	1,184.65	328.94	4.601		
12,700.00	7,111.96	12,777.61	7,056.16	166.74	167.90	87.89	1,399.82	-5,999.59	1,514.79	1,180.25	334.54	4.528		
12,800.00	7,111.59	12,877.61	7,055.88	169.54	170.70	87.89	1,399.07	-6,099.58	1,515.99	1,175.85	340.14	4.457		
12,900.00	7,111.22	12,977.60	7,055.60	172.35	173.50	87.90	1,398.31	-6,199.57	1,517.19	1,171.44	345.75	4.388		
13,000.00	7,110.86	13,077.59	7,055.31	175.16	176.31	87.90	1,397.56	-6,299.56	1,518.39	1,167.03	351.36	4.321		
13,100.00	7,110.49	13,177.58	7,055.03	177.96	179.11	87.91	1,396.81	-6,399.55	1,519.59	1,162.62	356.97	4.257		
13,200.00	7,110.12	13,277.58	7,054.74	180.77	181.92	87.91	1,396.06	-6,499.54	1,520.79	1,158.20	362.59	4.194		
13,300.00	7,109.76	13,377.57	7,054.46	183.58	184.73	87.92	1,395.30	-6,599.53	1,521.99	1,153.78	368.21	4.134		
13,400.00	7,109.39	13,477.56	7,054.17	186.40	187.54	87.92	1,394.55	-6,699.52	1,523.19	1,149.36	373.83	4.075		
13,500.00	7,109.03	13,577.56	7,053.89	189.21	190.35	87.92	1,393.80	-6,799.51	1,524.39	1,144.94	379.45	4.017		
13,600.00	7,108.66	13,677.55	7,053.60	192.03	193.16	87.93	1,393.05	-6,899.50	1,525.59	1,140.51	385.08	3.962		
13,700.00	7,108.29	13,777.54	7,053.32	194.84	195.98	87.93	1,392.30	-6,999.49	1,526.79	1,136.08	390.71	3.908		
13,800.00	7,107.93	13,877.53	7,053.03	197.66	198.79	87.94	1,391.54	-7,099.48	1,527.99	1,131.65	396.34	3.855		
13,900.00	7,107.56	13,977.53	7,052.75	200.48	201.61	87.94	1,390.79	-7,199.47	1,529.19	1,127.21	401.97	3.804		
14,000.00	7,107.19	14,077.52	7,052.46	203.30	204.43	87.95	1,390.04	-7,299.46	1,530.38	1,122.78	407.61	3.755		
14,100.00	7,106.83	14,177.51	7,052.18	206.12	207.25	87.95	1,389.29	-7,399.44	1,531.58	1,118.34	413.25	3.706		
14,200.00	7,106.46	14,277.50	7,051.89	208.94	210.07	87.96	1,388.53	-7,499.43	1,532.78	1,113.90	418.88	3.659		
14,300.00	7,106.10	14,377.50	7,051.61	211.76	212.89	87.96	1,387.78	-7,599.42	1,533.98	1,109.46	424.53	3.613		
14,400.00	7,105.73	14,477.49	7,051.32	214.58	215.71	87.97	1,387.03	-7,699.41	1,535.18	1,105.01	430.17	3.569		
14,500.00	7,105.36	14,577.48	7,051.04	217.40	218.54	87.97	1,386.28	-7,799.40	1,536.38	1,100.57	435.82	3.525		
14,600.00	7,105.00	14,677.48	7,050.75	220.23	221.36	87.98	1,385.52	-7,899.39	1,537.58	1,096.12	441.46	3.483		
14,700.00	7,104.63	14,777.47	7,050.47	223.05	224.19	87.98	1,384.77	-7,999.38	1,538.78	1,091.67	447.11	3.442		
14,800.00	7,104.27	14,877.46	7,050.19	225.88	227.01	87.98	1,384.02	-8,099.37	1,539.98	1,087.22	452.76	3.401		
14,872.41	7,104.00	14,942.37	7,050.00	227.93	228.85	87.99	1,383.53	-8,164.28	1,540.87	1,084.22	456.65	3.374 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.00	0.00	3.28	3.28	0.53	60.11	0.56	60.11					
100.00	100.00	100.00	100.00	3.28	3.28	0.53	60.11	0.56	60.11	53.54	6.57	9.150		
200.00	200.00	200.00	200.00	3.34	3.34	0.53	60.11	0.56	60.11	53.43	6.67	9.006		
300.00	300.00	300.00	300.00	3.44	3.44	0.53	60.11	0.56	60.11	53.22	6.89	8.724		
400.00	400.00	400.00	400.00	3.60	3.60	0.53	60.11	0.56	60.11	52.90	7.21	8.341		
500.00	500.00	500.00	500.00	3.81	3.81	0.53	60.11	0.56	60.11	52.50	7.61	7.897 CC		
600.00	599.98	599.98	599.98	4.04	4.05	92.06	60.11	0.56	60.15	52.06	8.09	7.439 ES		
700.00	699.95	698.08	698.06	4.30	4.31	93.67	61.65	-0.10	61.81	53.19	8.62	7.173		
800.00	799.92	796.18	796.02	4.59	4.61	93.84	66.28	-2.05	66.55	57.35	9.21	7.230		
900.00	899.89	904.01	895.63	4.90	4.95	93.48	72.31	-4.60	72.58	62.72	9.86	7.362		
1,000.00	999.86	995.81	995.23	5.23	5.26	93.17	78.34	-7.15	78.60	68.11	10.49	7.490		
1,100.00	1,099.83	1,104.37	1,094.83	5.58	5.64	92.90	84.37	-9.69	84.63	73.41	11.22	7.544		
1,200.00	1,199.80	1,204.55	1,194.43	5.94	6.00	92.67	90.40	-12.24	90.66	78.72	11.94	7.594		
1,300.00	1,299.77	1,295.26	1,294.04	6.30	6.34	92.47	96.43	-14.79	96.70	84.05	12.64	7.647		
1,400.00	1,399.73	1,404.92	1,393.64	6.68	6.76	92.30	102.46	-17.33	102.73	89.29	13.44	7.644		
1,500.00	1,499.70	1,505.10	1,493.24	7.07	7.15	92.14	108.49	-19.88	108.76	94.55	14.21	7.653		
1,600.00	1,599.67	1,594.72	1,592.84	7.46	7.50	92.00	114.52	-22.43	114.80	99.84	14.95	7.677		
1,700.00	1,699.64	1,705.47	1,692.45	7.85	7.95	91.87	120.55	-24.97	120.83	105.04	15.79	7.652		
1,800.00	1,799.61	1,794.35	1,792.05	8.25	8.30	91.75	126.58	-27.52	126.87	110.32	16.55	7.666		
1,900.00	1,899.58	1,905.83	1,891.65	8.66	8.76	91.65	132.61	-30.07	132.91	115.50	17.41	7.635		
2,000.00	1,999.55	2,006.01	1,991.25	9.06	9.17	91.55	138.64	-32.62	138.94	120.72	18.23	7.624		
2,100.00	2,099.52	2,106.20	2,090.86	9.47	9.59	91.47	144.67	-35.16	144.98	125.93	19.05	7.611		
2,200.00	2,199.48	2,206.38	2,190.46	9.89	10.00	91.39	150.70	-37.71	151.02	131.14	19.88	7.597		
2,300.00	2,299.45	2,306.56	2,290.06	10.30	10.42	91.31	156.73	-40.26	157.06	136.34	20.71	7.583		
2,400.00	2,399.42	2,406.74	2,389.66	10.72	10.84	91.24	162.76	-42.80	163.10	141.55	21.55	7.568		
2,500.00	2,499.39	2,506.93	2,489.27	11.14	11.27	91.18	168.79	-45.35	169.13	146.74	22.39	7.554		
2,600.00	2,599.36	2,607.11	2,588.87	11.56	11.69	91.12	174.82	-47.90	175.17	151.94	23.23	7.539		
2,700.00	2,699.33	2,707.29	2,688.47	11.98	12.12	91.06	180.85	-50.44	181.21	157.13	24.08	7.525		
2,800.00	2,799.30	2,807.48	2,788.07	12.41	12.55	91.01	186.88	-52.99	187.25	162.32	24.93	7.511		
2,900.00	2,899.27	2,907.66	2,887.68	12.83	12.97	90.96	192.91	-55.54	193.29	167.51	25.78	7.497		
3,000.00	2,999.23	3,007.84	2,987.28	13.26	13.40	90.92	198.94	-58.09	199.33	172.69	26.64	7.483		
3,100.00	3,099.20	3,091.98	3,086.88	13.68	13.76	90.87	204.97	-60.63	205.37	177.94	27.42	7.489		
3,200.00	3,199.17	3,208.21	3,186.48	14.11	14.26	90.83	211.00	-63.18	211.41	183.06	28.35	7.457		
3,300.00	3,299.14	3,291.61	3,286.09	14.54	14.62	90.80	217.03	-65.73	217.45	188.31	29.14	7.463		
3,400.00	3,399.11	3,408.57	3,385.69	14.97	15.13	90.76	223.06	-68.27	223.49	193.42	30.07	7.433		
3,500.00	3,499.08	3,508.75	3,485.29	15.40	15.56	90.73	229.09	-70.82	229.53	198.60	30.93	7.421		
3,600.00	3,599.05	3,608.94	3,584.89	15.83	15.99	90.69	235.12	-73.37	235.57	203.77	31.79	7.409		
3,700.00	3,699.02	3,709.12	3,684.50	16.26	16.43	90.66	241.15	-75.91	241.60	208.95	32.66	7.398		
3,800.00	3,798.98	3,809.30	3,784.10	16.69	16.86	90.63	247.18	-78.46	247.64	214.12	33.52	7.388		
3,900.00	3,898.95	3,909.48	3,883.70	17.12	17.30	90.60	253.21	-81.01	253.68	219.30	34.39	7.377		
4,000.00	3,998.92	4,009.67	3,983.30	17.55	17.73	90.58	259.24	-83.56	259.72	224.47	35.25	7.367		
4,100.00	4,098.89	4,109.85	4,082.91	17.98	18.17	90.55	265.27	-86.10	265.76	229.64	36.12	7.358		
4,200.00	4,198.86	4,189.97	4,182.51	18.42	18.52	90.53	271.30	-88.65	271.81	234.90	36.90	7.366		
4,300.00	4,298.83	4,289.78	4,282.11	18.85	18.95	90.50	277.33	-91.20	277.85	240.08	37.77	7.357		
4,400.00	4,398.80	4,389.60	4,381.71	19.28	19.39	90.48	283.36	-93.74	283.89	245.25	38.64	7.348		
4,500.00	4,498.77	4,489.42	4,481.32	19.72	19.83	90.46	289.39	-96.29	289.93	250.42	39.50	7.339		
4,600.00	4,598.73	4,589.24	4,580.92	20.15	20.26	90.44	295.42	-98.84	295.97	255.59	40.37	7.331		
4,700.00	4,698.70	4,689.05	4,680.52	20.58	20.70	90.42	301.45	-101.38	302.01	260.76	41.24	7.323		
4,800.00	4,798.67	4,788.87	4,780.12	21.02	21.13	90.40	307.48	-103.93	308.05	265.93	42.11	7.315		
4,900.00	4,898.64	4,888.69	4,879.73	21.45	21.57	90.38	313.51	-106.48	314.09	271.10	42.98	7.307		
5,000.00	4,998.61	4,988.51	4,979.33	21.89	22.01	90.37	319.54	-109.03	320.13	276.27	43.85	7.300		
5,100.00	5,098.58	5,088.32	5,078.93	22.32	22.44	90.35	325.57	-111.57	326.17	281.44	44.73	7.293		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,198.55	5,188.14	5,178.53	22.76	22.88	90.33	331.60	-114.12	332.21	286.61	45.60	7.286		
5,300.00	5,298.52	5,287.96	5,278.14	23.20	23.32	90.32	337.63	-116.67	338.25	291.78	46.47	7.279		
5,400.00	5,398.49	5,387.78	5,377.74	23.63	23.76	90.30	343.66	-119.21	344.29	296.95	47.34	7.272		
5,500.00	5,498.45	5,487.59	5,477.34	24.07	24.19	90.29	349.69	-121.76	350.33	302.12	48.21	7.266		
5,600.00	5,598.42	5,587.41	5,576.94	24.50	24.63	90.27	355.72	-124.31	356.37	307.28	49.09	7.260		
5,700.00	5,698.39	5,687.23	5,676.55	24.94	25.07	90.26	361.75	-126.85	362.41	312.45	49.96	7.254		
5,800.00	5,798.36	5,787.05	5,776.15	25.38	25.51	90.25	367.78	-129.40	368.45	317.62	50.83	7.248		
5,900.00	5,898.33	5,886.86	5,875.75	25.81	25.95	90.23	373.81	-131.95	374.49	322.78	51.71	7.242		
6,000.00	5,998.30	5,986.68	5,975.35	26.25	26.38	90.22	379.84	-134.50	380.53	327.95	52.58	7.237		
6,100.00	6,098.27	6,086.50	6,074.96	26.69	26.82	90.21	385.87	-137.04	386.57	333.12	53.46	7.232		
6,200.00	6,198.24	6,186.31	6,174.56	27.12	27.26	90.20	391.90	-139.59	392.61	338.28	54.33	7.226		
6,300.00	6,298.20	6,286.13	6,274.16	27.56	27.70	90.19	397.93	-142.14	398.66	343.45	55.21	7.221		
6,400.00	6,398.17	6,385.95	6,373.76	28.00	28.14	90.18	403.95	-144.68	404.70	348.62	56.08	7.216		
6,500.00	6,498.14	6,485.77	6,473.37	28.43	28.58	90.16	409.98	-147.23	410.74	353.78	56.96	7.211		
6,600.00	6,597.68	6,585.30	6,572.69	28.88	29.02	91.44	416.00	-149.77	416.94	359.11	57.83	7.209		
6,700.00	6,694.68	6,684.21	6,671.33	29.32	29.45	93.60	421.98	-153.40	424.09	365.37	58.72	7.222		
6,800.00	6,786.74	6,787.32	6,772.74	29.77	29.91	95.99	428.20	-170.35	432.56	372.92	59.64	7.252		
6,900.00	6,871.61	6,894.73	6,874.00	30.24	30.38	98.18	434.52	-205.19	441.99	381.43	60.56	7.299		
7,000.00	6,947.19	7,006.72	6,971.80	30.74	30.89	100.13	440.74	-259.11	451.89	390.47	61.41	7.358		
7,100.00	7,011.62	7,123.43	7,062.04	31.32	31.47	101.77	446.63	-332.64	461.70	399.48	62.22	7.420		
7,200.00	7,063.31	7,244.73	7,140.00	32.03	32.18	103.07	451.88	-425.17	470.82	407.73	63.09	7.463		
7,300.00	7,101.00	7,370.10	7,200.68	32.89	33.12	103.97	456.19	-534.56	478.66	414.42	64.24	7.451		
7,400.00	7,123.74	7,498.64	7,239.47	33.93	34.33	104.44	459.25	-656.84	484.69	418.80	65.90	7.355		
7,500.00	7,131.00	7,629.06	7,253.00	35.10	35.82	104.46	460.83	-786.32	488.53	420.32	68.21	7.162		
7,600.00	7,130.63	7,729.86	7,252.64	36.44	37.16	104.39	461.40	-887.12	490.98	420.15	70.83	6.932		
7,700.00	7,130.26	7,829.83	7,252.28	37.94	38.63	104.32	461.97	-987.09	493.42	419.67	73.75	6.691		
7,800.00	7,129.90	7,929.80	7,251.91	39.59	40.26	104.24	462.54	-1,087.05	495.87	418.90	76.96	6.443		
7,900.00	7,129.53	8,029.77	7,251.54	41.37	42.02	104.17	463.10	-1,187.02	498.31	417.87	80.44	6.195		
8,000.00	7,129.17	8,129.74	7,251.18	43.27	43.89	104.10	463.67	-1,286.98	500.76	416.62	84.14	5.952		
8,100.00	7,128.80	8,229.70	7,250.81	45.27	45.87	104.03	464.24	-1,386.95	503.21	415.17	88.04	5.716		
8,200.00	7,128.43	8,329.67	7,250.44	47.36	47.93	103.96	464.80	-1,486.92	505.65	413.54	92.12	5.489		
8,300.00	7,128.07	8,429.64	7,250.08	49.52	50.08	103.89	465.37	-1,586.88	508.10	411.76	96.34	5.274		
8,400.00	7,127.70	8,529.61	7,249.71	51.75	52.29	103.83	465.94	-1,686.85	510.55	409.84	100.71	5.070		
8,500.00	7,127.33	8,629.58	7,249.35	54.04	54.56	103.76	466.50	-1,786.81	513.00	407.81	105.19	4.877		
8,600.00	7,126.97	8,729.54	7,248.98	56.38	56.89	103.69	467.07	-1,886.78	515.45	405.68	109.77	4.696		
8,700.00	7,126.60	8,829.51	7,248.61	58.77	59.26	103.63	467.64	-1,986.75	517.90	403.46	114.45	4.525		
8,800.00	7,126.24	8,929.48	7,248.25	61.19	61.68	103.56	468.20	-2,086.71	520.35	401.15	119.20	4.365		
8,900.00	7,125.87	9,029.45	7,247.88	63.65	64.13	103.50	468.77	-2,186.68	522.80	398.78	124.03	4.215		
9,000.00	7,125.50	9,129.42	7,247.52	66.15	66.61	103.43	469.34	-2,286.64	525.26	396.34	128.92	4.074		
9,100.00	7,125.14	9,229.39	7,247.15	68.67	69.13	103.37	469.90	-2,386.61	527.71	393.84	133.87	3.942		
9,200.00	7,124.77	9,329.35	7,246.78	71.21	71.66	103.30	470.47	-2,486.58	530.17	391.29	138.87	3.818		
9,300.00	7,124.41	9,429.32	7,246.42	73.78	74.23	103.24	471.04	-2,586.54	532.62	388.70	143.92	3.701		
9,400.00	7,124.04	9,529.29	7,246.05	76.37	76.81	103.18	471.60	-2,686.51	535.08	386.07	149.01	3.591		
9,500.00	7,123.67	9,629.26	7,245.69	78.98	79.42	103.12	472.17	-2,786.47	537.53	383.39	154.14	3.487		
9,600.00	7,123.31	9,729.23	7,245.32	81.60	82.04	103.06	472.74	-2,886.44	539.99	380.69	159.30	3.390		
9,700.00	7,122.94	9,829.19	7,244.95	84.24	84.67	103.00	473.30	-2,986.40	542.45	377.95	164.49	3.298		
9,800.00	7,122.57	9,929.16	7,244.59	86.90	87.32	102.94	473.87	-3,086.37	544.90	375.19	169.71	3.211		
9,900.00	7,122.21	10,029.13	7,244.22	89.56	89.98	102.88	474.44	-3,186.34	547.36	372.40	174.96	3.128		
10,000.00	7,121.84	10,129.10	7,243.86	92.24	92.66	102.82	475.00	-3,286.30	549.82	369.59	180.23	3.051		
10,100.00	7,121.48	10,229.07	7,243.49	94.92	95.35	102.76	475.57	-3,386.27	552.28	366.75	185.53	2.977		
10,200.00	7,121.11	10,329.04	7,243.12	97.62	98.04	102.70	476.14	-3,486.23	554.74	363.90	190.84	2.907		
10,300.00	7,120.74	10,429.00	7,242.76	100.32	100.75	102.65	476.70	-3,586.20	557.20	361.03	196.18	2.840		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	10,528.97	7,242.39	103.04	103.46	102.59	477.27	-3,686.17	559.66	358.14	201.53	2.777		
10,500.00	7,120.01	10,628.94	7,242.02	105.76	106.18	102.53	477.84	-3,786.13	562.13	355.23	206.89	2.717		
10,600.00	7,119.64	10,728.91	7,241.66	108.48	108.91	102.48	478.40	-3,886.10	564.59	352.31	212.28	2.660		
10,700.00	7,119.28	10,828.88	7,241.29	111.22	111.64	102.42	478.97	-3,986.06	567.05	349.38	217.67	2.605		
10,800.00	7,118.91	10,928.84	7,240.93	113.96	114.39	102.37	479.54	-4,086.03	569.51	346.43	223.08	2.553		
10,900.00	7,118.55	11,028.81	7,240.56	116.70	117.13	102.32	480.10	-4,186.00	571.98	343.48	228.50	2.503		
11,000.00	7,118.18	11,128.78	7,240.19	119.45	119.89	102.26	480.67	-4,285.96	574.44	340.51	233.94	2.456		
11,100.00	7,117.81	11,228.75	7,239.83	122.21	122.64	102.21	481.24	-4,385.93	576.91	337.53	239.38	2.410		
11,200.00	7,117.45	11,328.72	7,239.46	124.97	125.40	102.16	481.80	-4,485.89	579.37	334.54	244.84	2.366		
11,300.00	7,117.08	11,428.69	7,239.10	127.73	128.17	102.10	482.37	-4,585.86	581.84	331.54	250.30	2.325		
11,400.00	7,116.72	11,528.65	7,238.73	130.50	130.94	102.05	482.94	-4,685.83	584.31	328.53	255.77	2.284		
11,500.00	7,116.35	11,628.62	7,238.36	133.27	133.72	102.00	483.50	-4,785.79	586.77	325.52	261.25	2.246		
11,600.00	7,115.98	11,728.59	7,238.00	136.04	136.49	101.95	484.07	-4,885.76	589.24	322.50	266.74	2.209		
11,700.00	7,115.62	11,828.56	7,237.63	138.82	139.28	101.90	484.64	-4,985.72	591.71	319.47	272.24	2.173		
11,800.00	7,115.25	11,928.53	7,237.27	141.60	142.06	101.85	485.20	-5,085.69	594.18	316.43	277.75	2.139		
11,900.00	7,114.88	12,028.49	7,236.90	144.39	144.85	101.80	485.77	-5,185.65	596.65	313.39	283.26	2.106		
12,000.00	7,114.52	12,128.46	7,236.53	147.17	147.64	101.75	486.34	-5,285.62	599.11	310.34	288.77	2.075		
12,100.00	7,114.15	12,228.43	7,236.17	149.96	150.43	101.70	486.90	-5,385.59	601.58	307.29	294.30	2.044		
12,200.00	7,113.79	12,328.40	7,235.80	152.75	153.23	101.65	487.47	-5,485.55	604.05	304.23	299.83	2.015		
12,300.00	7,113.42	12,428.37	7,235.44	155.55	156.02	101.60	488.04	-5,585.52	606.53	301.16	305.36	1.986		
12,400.00	7,113.05	12,528.34	7,235.07	158.34	158.82	101.56	488.60	-5,685.48	609.00	298.09	310.91	1.959		
12,500.00	7,112.69	12,628.30	7,234.70	161.14	161.63	101.51	489.17	-5,785.45	611.47	295.02	316.45	1.932		
12,600.00	7,112.32	12,728.27	7,234.34	163.94	164.43	101.46	489.74	-5,885.42	613.94	291.94	322.00	1.907		
12,700.00	7,111.96	12,828.24	7,233.97	166.74	167.24	101.42	490.30	-5,985.38	616.41	288.85	327.56	1.882		
12,800.00	7,111.59	12,928.21	7,233.61	169.54	170.05	101.37	490.87	-6,085.35	618.88	285.76	333.12	1.858		
12,900.00	7,111.22	13,028.18	7,233.24	172.35	172.86	101.32	491.44	-6,185.31	621.36	282.67	338.68	1.835		
13,000.00	7,110.86	13,128.15	7,232.87	175.16	175.67	101.28	492.00	-6,285.28	623.83	279.58	344.25	1.812		
13,100.00	7,110.49	13,228.11	7,232.51	177.96	178.48	101.23	492.57	-6,385.25	626.30	276.48	349.83	1.790		
13,200.00	7,110.12	13,328.08	7,232.14	180.77	181.29	101.19	493.14	-6,485.21	628.78	273.38	355.40	1.769		
13,300.00	7,109.76	13,428.05	7,231.77	183.58	184.11	101.14	493.70	-6,585.18	631.25	270.27	360.98	1.749		
13,400.00	7,109.39	13,528.02	7,231.41	186.40	186.93	101.10	494.27	-6,685.14	633.73	267.16	366.57	1.729		
13,500.00	7,109.03	13,627.99	7,231.04	189.21	189.75	101.06	494.84	-6,785.11	636.20	264.05	372.15	1.710		
13,600.00	7,108.66	13,727.95	7,230.68	192.03	192.57	101.01	495.40	-6,885.08	638.68	260.93	377.75	1.691		
13,700.00	7,108.29	13,827.92	7,230.31	194.84	195.39	100.97	495.97	-6,985.04	641.15	257.82	383.34	1.673		
13,800.00	7,107.93	13,927.89	7,229.94	197.66	198.21	100.93	496.54	-7,085.01	643.63	254.70	388.94	1.655		
13,900.00	7,107.56	14,027.86	7,229.58	200.48	201.04	100.88	497.10	-7,184.97	646.11	251.57	394.54	1.638		
14,000.00	7,107.19	14,127.83	7,229.21	203.30	203.86	100.84	497.67	-7,284.94	648.58	248.45	400.14	1.621		
14,100.00	7,106.83	14,227.80	7,228.85	206.12	206.69	100.80	498.24	-7,384.90	651.06	245.32	405.74	1.605		
14,200.00	7,106.46	14,327.76	7,228.48	208.94	209.51	100.76	498.80	-7,484.87	653.54	242.19	411.35	1.589		
14,300.00	7,106.10	14,427.73	7,228.11	211.76	212.34	100.72	499.37	-7,584.84	656.02	239.06	416.96	1.573		
14,400.00	7,105.73	14,527.70	7,227.75	214.58	215.17	100.68	499.94	-7,684.80	658.50	235.92	422.58	1.558		
14,500.00	7,105.36	14,627.67	7,227.38	217.40	218.00	100.64	500.50	-7,784.77	660.98	232.79	428.19	1.544		
14,600.00	7,105.00	14,727.64	7,227.02	220.23	220.83	100.60	501.07	-7,884.73	663.45	229.65	433.81	1.529		
14,700.00	7,104.63	14,827.60	7,226.65	223.05	223.66	100.56	501.64	-7,984.70	665.93	226.51	439.43	1.515		
14,800.00	7,104.27	14,927.57	7,226.28	225.88	226.49	100.52	502.20	-8,084.67	668.41	223.36	445.05	1.502		
14,872.41	7,104.00	14,999.96	7,226.02	227.93	228.54	100.49	502.61	-8,157.05	670.21	221.09	449.12	1.492 Level 3, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-179.53	-239.72	-1.95	239.73					
100.00	100.00	101.00	100.00	3.28	3.28	-179.53	-239.72	-1.95	239.73	233.16	6.57	36.491		
200.00	200.00	199.00	200.00	3.34	3.34	-179.53	-239.72	-1.95	239.73	233.06	6.67	35.924	CC, ES	
300.00	300.00	291.34	292.33	3.44	3.43	-179.51	-241.17	-2.07	241.30	234.42	6.88	35.056		
400.00	400.00	383.42	384.30	3.60	3.56	-179.43	-245.57	-2.43	246.08	238.89	7.20	34.185		
500.00	500.00	475.12	475.70	3.81	3.74	-179.31	-252.88	-3.04	254.06	246.45	7.60	33.407		
600.00	599.98	566.26	566.26	4.04	3.95	-89.32	-263.02	-3.88	265.18	257.11	8.08	32.828		
700.00	699.95	656.67	655.73	4.30	4.19	-89.59	-275.92	-4.96	279.44	270.83	8.61	32.473		
800.00	799.92	746.17	743.87	4.59	4.46	-89.79	-291.45	-6.25	296.79	287.61	9.18	32.340		
900.00	899.89	834.63	830.45	4.90	4.76	-89.93	-309.49	-7.75	317.18	307.41	9.78	32.437		
1,000.00	999.86	921.88	915.27	5.23	5.08	-90.01	-329.88	-9.44	340.56	330.16	10.40	32.741		
1,100.00	1,099.83	1,009.85	1,000.12	5.58	5.44	-90.04	-352.98	-11.37	366.80	355.76	11.04	33.218		
1,200.00	1,199.80	1,106.08	1,092.70	5.94	5.85	-90.06	-379.15	-13.54	394.00	382.27	11.72	33.609		
1,300.00	1,299.77	1,202.31	1,185.28	6.30	6.28	-90.07	-405.32	-15.72	421.19	408.76	12.43	33.878		
1,400.00	1,399.73	1,301.46	1,277.86	6.68	6.73	-90.09	-431.49	-17.89	448.38	435.21	13.18	34.025		
1,500.00	1,499.70	1,405.23	1,370.44	7.07	7.23	-90.10	-457.66	-20.07	475.58	461.61	13.96	34.057		
1,600.00	1,599.67	1,508.99	1,463.02	7.46	7.73	-90.11	-483.82	-22.25	502.77	488.00	14.77	34.044		
1,700.00	1,699.64	1,587.24	1,555.60	7.85	8.12	-90.12	-509.99	-24.42	529.96	514.49	15.48	34.243		
1,800.00	1,799.61	1,683.47	1,648.18	8.25	8.60	-90.13	-536.16	-26.60	557.16	540.88	16.27	34.235		
1,900.00	1,899.58	1,779.70	1,740.76	8.66	9.08	-90.14	-562.33	-28.78	584.35	567.27	17.08	34.206		
2,000.00	1,999.55	1,875.93	1,833.34	9.06	9.58	-90.14	-588.50	-30.95	611.54	593.64	17.90	34.162		
2,100.00	2,099.52	1,972.16	1,925.92	9.47	10.07	-90.15	-614.66	-33.13	638.74	620.01	18.73	34.107		
2,200.00	2,199.48	2,068.40	2,018.50	9.89	10.57	-90.16	-640.83	-35.30	665.93	646.37	19.56	34.045		
2,300.00	2,299.45	2,164.63	2,111.08	10.30	11.07	-90.16	-667.00	-37.48	693.12	672.72	20.40	33.978		
2,400.00	2,399.42	2,260.86	2,203.66	10.72	11.58	-90.17	-693.17	-39.66	720.32	699.07	21.24	33.907		
2,500.00	2,499.39	2,357.09	2,296.24	11.14	12.08	-90.17	-719.34	-41.83	747.51	725.41	22.09	33.834		
2,600.00	2,599.36	2,453.32	2,388.82	11.56	12.59	-90.18	-745.50	-44.01	774.70	751.75	22.95	33.761		
2,700.00	2,699.33	2,549.55	2,481.40	11.98	13.11	-90.18	-771.67	-46.19	801.89	778.09	23.80	33.687		
2,800.00	2,799.30	2,645.79	2,573.98	12.41	13.62	-90.19	-797.84	-48.36	829.09	804.42	24.67	33.614		
2,900.00	2,899.27	2,742.02	2,666.56	12.83	14.13	-90.19	-824.01	-50.54	856.28	830.75	25.53	33.542		
3,000.00	2,999.23	2,838.25	2,759.14	13.26	14.65	-90.19	-850.18	-52.71	883.47	857.08	26.40	33.471		
3,100.00	3,099.20	2,934.48	2,851.72	13.68	15.16	-90.20	-876.35	-54.89	910.67	883.40	27.26	33.401		
3,200.00	3,199.17	3,030.71	2,944.30	14.11	15.68	-90.20	-902.51	-57.07	937.86	909.72	28.14	33.333		
3,300.00	3,299.14	3,126.94	3,036.88	14.54	16.20	-90.20	-928.68	-59.24	965.05	936.04	29.01	33.267		
3,400.00	3,399.11	3,223.17	3,129.46	14.97	16.72	-90.20	-954.85	-61.42	992.25	962.36	29.88	33.202		
3,500.00	3,499.08	3,319.41	3,222.04	15.40	17.24	-90.21	-981.02	-63.59	1,019.44	988.68	30.76	33.140		
3,600.00	3,599.05	3,415.64	3,314.62	15.83	17.76	-90.21	-1,007.19	-65.77	1,046.63	1,014.99	31.64	33.079		
3,700.00	3,699.02	3,511.87	3,407.19	16.26	18.28	-90.21	-1,033.35	-67.95	1,073.83	1,041.31	32.52	33.020		
3,800.00	3,798.98	3,608.10	3,499.77	16.69	18.81	-90.21	-1,059.52	-70.12	1,101.02	1,067.62	33.40	32.963		
3,900.00	3,898.95	3,704.33	3,592.35	17.12	19.33	-90.22	-1,085.69	-72.30	1,128.21	1,093.93	34.28	32.907		
4,000.00	3,998.92	3,800.56	3,684.93	17.55	19.85	-90.22	-1,111.86	-74.48	1,155.41	1,120.24	35.17	32.853		
4,100.00	4,098.89	3,903.20	3,777.51	17.98	20.41	-90.22	-1,138.03	-76.65	1,182.60	1,146.51	36.08	32.773		
4,200.00	4,198.86	3,993.03	3,870.09	18.42	20.90	-90.22	-1,164.19	-78.83	1,209.79	1,172.85	36.94	32.751		
4,300.00	4,298.83	4,089.26	3,962.67	18.85	21.42	-90.22	-1,190.36	-81.00	1,236.99	1,199.16	37.83	32.702		
4,400.00	4,398.80	4,185.49	4,055.25	19.28	21.95	-90.23	-1,216.53	-83.18	1,264.18	1,225.46	38.71	32.654		
4,500.00	4,498.77	4,281.72	4,147.83	19.72	22.47	-90.23	-1,242.70	-85.36	1,291.37	1,251.77	39.60	32.608		
4,600.00	4,598.73	4,377.95	4,240.41	20.15	23.00	-90.23	-1,268.87	-87.53	1,318.57	1,278.07	40.49	32.564		
4,700.00	4,698.70	4,474.19	4,332.99	20.58	23.53	-90.23	-1,295.03	-89.71	1,345.76	1,304.38	41.38	32.520		
4,800.00	4,798.67	4,570.42	4,425.57	21.02	24.05	-90.23	-1,321.20	-91.89	1,372.95	1,330.68	42.27	32.478		
4,900.00	4,898.64	4,666.65	4,518.15	21.45	24.58	-90.23	-1,347.37	-94.06	1,400.14	1,356.98	43.16	32.438		
5,000.00	4,998.61	4,762.88	4,610.73	21.89	25.11	-90.23	-1,373.54	-96.24	1,427.34	1,383.28	44.06	32.398		
5,100.00	5,098.58	4,859.11	4,703.31	22.32	25.63	-90.24	-1,399.71	-98.41	1,454.53	1,409.58	44.95	32.360		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,198.55	4,955.34	4,795.89	22.76	26.16	-90.24	-1,425.88	-100.59	1,481.72	1,435.88	45.84	32.323		
5,300.00	5,298.52	5,051.58	4,888.47	23.20	26.69	-90.24	-1,452.04	-102.77	1,508.92	1,462.18	46.74	32.287		
5,400.00	5,398.49	5,147.81	4,981.05	23.63	27.21	-90.24	-1,478.21	-104.94	1,536.11	1,488.48	47.63	32.251		
5,500.00	5,498.45	5,244.04	5,073.63	24.07	27.74	-90.24	-1,504.38	-107.12	1,563.30	1,514.78	48.52	32.217		
5,600.00	5,598.42	5,340.27	5,166.21	24.50	28.27	-90.24	-1,530.55	-109.30	1,590.50	1,541.08	49.42	32.184		
5,700.00	5,698.39	5,436.50	5,258.79	24.94	28.80	-90.24	-1,556.72	-111.47	1,617.69	1,567.38	50.31	32.152		
5,800.00	5,798.36	5,532.73	5,351.37	25.38	29.33	-90.24	-1,582.88	-113.65	1,644.88	1,593.67	51.21	32.120		
5,900.00	5,898.33	5,628.97	5,443.95	25.81	29.86	-90.24	-1,609.05	-115.82	1,672.08	1,619.97	52.11	32.090		
6,000.00	5,998.30	5,725.20	5,536.53	26.25	30.38	-90.24	-1,635.22	-118.00	1,699.27	1,646.27	53.00	32.060		
6,100.00	6,098.27	5,821.43	5,629.11	26.69	30.91	-90.25	-1,661.39	-120.18	1,726.46	1,672.56	53.90	32.031		
6,200.00	6,198.24	5,917.66	5,721.69	27.12	31.44	-90.25	-1,687.56	-122.35	1,753.66	1,698.86	54.80	32.003		
6,300.00	6,298.20	6,013.89	5,814.27	27.56	31.97	-90.25	-1,713.72	-124.53	1,780.85	1,725.16	55.69	31.975		
6,400.00	6,398.17	6,110.12	5,906.85	28.00	32.50	-90.25	-1,739.89	-126.70	1,808.04	1,751.45	56.59	31.949		
6,500.00	6,498.14	6,206.36	5,999.43	28.43	33.03	-90.25	-1,766.06	-128.88	1,835.24	1,777.75	57.49	31.922		
6,600.00	6,597.68	6,302.34	6,091.77	28.88	33.56	-87.28	-1,792.16	-131.05	1,862.27	1,803.88	58.39	31.892		
6,700.00	6,694.68	6,403.69	6,182.18	29.32	34.11	-85.39	-1,817.72	-133.18	1,888.68	1,829.35	59.33	31.831		
6,800.00	6,786.74	6,485.96	6,268.42	29.77	34.57	-84.02	-1,842.09	-135.20	1,914.31	1,854.12	60.19	31.802		
6,900.00	6,871.61	6,569.06	6,348.37	30.24	35.02	-83.00	-1,864.69	-137.08	1,939.32	1,878.24	61.08	31.750		
7,000.00	6,947.19	6,643.59	6,420.07	30.74	35.43	-82.15	-1,884.96	-138.77	1,964.08	1,902.10	61.98	31.691		
7,100.00	7,011.62	6,707.70	6,481.75	31.32	35.79	-81.28	-1,902.39	-140.22	1,989.05	1,926.15	62.91	31.619		
7,200.00	7,063.31	6,759.81	6,531.88	32.03	36.07	-80.21	-1,916.56	-141.40	2,014.70	1,950.80	63.90	31.528		
7,300.00	7,101.00	6,801.36	6,569.24	32.89	36.30	-78.81	-1,927.12	-142.27	2,041.34	1,976.35	64.99	31.412		
7,400.00	7,123.74	6,823.24	6,592.90	33.93	36.42	-76.95	-1,933.81	-142.83	2,069.04	2,002.94	66.11	31.298		
7,500.00	7,131.00	6,833.00	6,602.29	35.10	36.48	-74.67	-1,936.46	-143.05	2,097.62	2,030.35	67.27	31.184		
7,600.00	7,130.63	7,967.85	7,249.44	36.44	41.36	-93.22	-2,124.79	-877.76	2,114.00	2,038.80	75.20	28.112		
7,700.00	7,130.26	8,067.84	7,248.84	37.94	42.31	-93.22	-2,125.38	-977.74	2,112.61	2,034.57	78.04	27.070		
7,800.00	7,129.90	8,167.83	7,248.24	39.59	43.53	-93.22	-2,125.96	-1,077.73	2,111.23	2,030.04	81.19	26.004		
7,900.00	7,129.53	8,267.82	7,247.65	41.37	44.97	-93.21	-2,126.54	-1,177.72	2,109.85	2,025.25	84.60	24.939		
8,000.00	7,129.17	8,367.81	7,247.05	43.27	46.58	-93.21	-2,127.13	-1,277.70	2,108.47	2,020.21	88.25	23.892		
8,100.00	7,128.80	8,467.80	7,246.46	45.27	48.34	-93.20	-2,127.71	-1,377.69	2,107.08	2,014.97	92.11	22.876		
8,200.00	7,128.43	8,567.79	7,245.86	47.36	50.22	-93.20	-2,128.30	-1,477.68	2,105.70	2,009.55	96.15	21.900		
8,300.00	7,128.07	8,667.78	7,245.27	49.52	52.20	-93.20	-2,128.88	-1,577.66	2,104.32	2,003.96	100.36	20.968		
8,400.00	7,127.70	8,767.77	7,244.67	51.75	54.26	-93.19	-2,129.46	-1,677.65	2,102.94	1,998.23	104.70	20.085		
8,500.00	7,127.33	8,867.76	7,244.07	54.04	56.40	-93.19	-2,130.05	-1,777.64	2,101.55	1,992.38	109.17	19.250		
8,600.00	7,126.97	8,967.75	7,243.48	56.38	58.60	-93.18	-2,130.63	-1,877.62	2,100.17	1,986.41	113.76	18.462		
8,700.00	7,126.60	9,067.74	7,242.88	58.77	60.86	-93.18	-2,131.21	-1,977.61	2,098.79	1,980.35	118.44	17.721		
8,800.00	7,126.24	9,167.73	7,242.29	61.19	63.17	-93.18	-2,131.80	-2,077.60	2,097.41	1,974.20	123.20	17.024		
8,900.00	7,125.87	9,267.72	7,241.69	63.65	65.53	-93.17	-2,132.38	-2,177.59	2,096.02	1,967.98	128.04	16.369		
9,000.00	7,125.50	9,367.71	7,241.09	66.15	67.92	-93.17	-2,132.96	-2,277.57	2,094.64	1,961.68	132.96	15.754		
9,100.00	7,125.14	9,467.70	7,240.50	68.67	70.35	-93.16	-2,133.55	-2,377.56	2,093.26	1,955.33	137.93	15.176		
9,200.00	7,124.77	9,567.69	7,239.90	71.21	72.82	-93.16	-2,134.13	-2,477.55	2,091.88	1,948.92	142.96	14.633		
9,300.00	7,124.41	9,667.68	7,239.31	73.78	75.31	-93.15	-2,134.72	-2,577.53	2,090.49	1,942.46	148.03	14.122		
9,400.00	7,124.04	9,767.67	7,238.71	76.37	77.82	-93.15	-2,135.30	-2,677.52	2,089.11	1,935.96	153.15	13.641		
9,500.00	7,123.67	9,867.66	7,238.12	78.98	80.36	-93.15	-2,135.88	-2,777.51	2,087.73	1,929.41	158.32	13.187		
9,600.00	7,123.31	9,967.65	7,237.52	81.60	82.92	-93.14	-2,136.47	-2,877.49	2,086.35	1,922.83	163.51	12.760		
9,700.00	7,122.94	10,067.64	7,236.92	84.24	85.50	-93.14	-2,137.05	-2,977.48	2,084.96	1,916.22	168.74	12.356		
9,800.00	7,122.57	10,167.63	7,236.33	86.90	88.10	-93.13	-2,137.63	-3,077.47	2,083.58	1,909.58	174.00	11.974		
9,900.00	7,122.21	10,267.62	7,235.73	89.56	90.71	-93.13	-2,138.22	-3,177.45	2,082.20	1,902.91	179.29	11.614		
10,000.00	7,121.84	10,367.61	7,235.14	92.24	93.34	-93.12	-2,138.80	-3,277.44	2,080.82	1,896.21	184.60	11.272		
10,100.00	7,121.48	10,467.60	7,234.54	94.92	95.98	-93.12	-2,139.39	-3,377.43	2,079.43	1,889.49	189.94	10.948		
10,200.00	7,121.11	10,567.59	7,233.95	97.62	98.64	-93.12	-2,139.97	-3,477.41	2,078.05	1,882.76	195.30	10.641		
10,300.00	7,120.74	10,667.58	7,233.35	100.32	101.30	-93.11	-2,140.55	-3,577.40	2,076.67	1,876.00	200.67	10.349		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,120.38	10,767.57	7,232.75	103.04	103.98	-93.11	-2,141.14	-3,677.39	2,075.29	1,869.22	206.07	10.071		
10,500.00	7,120.01	10,867.56	7,232.16	105.76	106.66	-93.10	-2,141.72	-3,777.37	2,073.91	1,862.43	211.48	9.807		
10,600.00	7,119.64	10,967.55	7,231.56	108.48	109.35	-93.10	-2,142.30	-3,877.36	2,072.52	1,855.62	216.90	9.555		
10,700.00	7,119.28	11,067.55	7,230.97	111.22	112.06	-93.09	-2,142.89	-3,977.35	2,071.14	1,848.80	222.34	9.315		
10,800.00	7,118.91	11,167.54	7,230.37	113.96	114.77	-93.09	-2,143.47	-4,077.34	2,069.76	1,841.96	227.79	9.086		
10,900.00	7,118.55	11,267.53	7,229.77	116.70	117.48	-93.09	-2,144.06	-4,177.32	2,068.38	1,835.12	233.26	8.867		
11,000.00	7,118.18	11,367.52	7,229.18	119.45	120.21	-93.08	-2,144.64	-4,277.31	2,066.99	1,828.26	238.74	8.658		
11,100.00	7,117.81	11,467.51	7,228.58	122.21	122.93	-93.08	-2,145.22	-4,377.30	2,065.61	1,821.39	244.22	8.458		
11,200.00	7,117.45	11,567.50	7,227.99	124.97	125.67	-93.07	-2,145.81	-4,477.28	2,064.23	1,814.51	249.72	8.266		
11,300.00	7,117.08	11,667.49	7,227.39	127.73	128.41	-93.07	-2,146.39	-4,577.27	2,062.85	1,807.62	255.23	8.082		
11,400.00	7,116.72	11,767.48	7,226.80	130.50	131.16	-93.06	-2,146.97	-4,677.26	2,061.47	1,800.72	260.74	7.906		
11,500.00	7,116.35	11,867.47	7,226.20	133.27	133.91	-93.06	-2,147.56	-4,777.24	2,060.08	1,793.82	266.26	7.737		
11,600.00	7,115.98	11,967.46	7,225.60	136.04	136.66	-93.06	-2,148.14	-4,877.23	2,058.70	1,786.91	271.79	7.574		
11,700.00	7,115.62	12,067.45	7,225.01	138.82	139.42	-93.05	-2,148.73	-4,977.22	2,057.32	1,779.99	277.33	7.418		
11,800.00	7,115.25	12,167.44	7,224.41	141.60	142.18	-93.05	-2,149.31	-5,077.20	2,055.94	1,773.06	282.88	7.268		
11,900.00	7,114.88	12,267.43	7,223.82	144.39	144.95	-93.04	-2,149.89	-5,177.19	2,054.55	1,766.13	288.43	7.123		
12,000.00	7,114.52	12,367.42	7,223.22	147.17	147.72	-93.04	-2,150.48	-5,277.18	2,053.17	1,759.19	293.98	6.984		
12,100.00	7,114.15	12,467.41	7,222.62	149.96	150.49	-93.03	-2,151.06	-5,377.16	2,051.79	1,752.24	299.55	6.850		
12,200.00	7,113.79	12,567.40	7,222.03	152.75	153.27	-93.03	-2,151.64	-5,477.15	2,050.41	1,745.29	305.12	6.720		
12,300.00	7,113.42	12,667.39	7,221.43	155.55	156.05	-93.02	-2,152.23	-5,577.14	2,049.03	1,738.34	310.69	6.595		
12,400.00	7,113.05	12,767.38	7,220.84	158.34	158.83	-93.02	-2,152.81	-5,677.12	2,047.64	1,731.38	316.27	6.474		
12,500.00	7,112.69	12,867.37	7,220.24	161.14	161.62	-93.02	-2,153.39	-5,777.11	2,046.26	1,724.41	321.85	6.358		
12,600.00	7,112.32	12,967.36	7,219.65	163.94	164.41	-93.01	-2,153.98	-5,877.10	2,044.88	1,717.44	327.44	6.245		
12,700.00	7,111.96	13,067.35	7,219.05	166.74	167.20	-93.01	-2,154.56	-5,977.09	2,043.50	1,710.47	333.03	6.136		
12,800.00	7,111.59	13,167.34	7,218.45	169.54	169.99	-93.00	-2,155.15	-6,077.07	2,042.12	1,703.49	338.62	6.031		
12,900.00	7,111.22	13,267.33	7,217.86	172.35	172.78	-93.00	-2,155.73	-6,177.06	2,040.73	1,696.51	344.22	5.929		
13,000.00	7,110.86	13,367.32	7,217.26	175.16	175.58	-92.99	-2,156.31	-6,277.05	2,039.35	1,689.53	349.82	5.830		
13,100.00	7,110.49	13,467.31	7,216.67	177.96	178.38	-92.99	-2,156.90	-6,377.03	2,037.97	1,682.54	355.43	5.734		
13,200.00	7,110.12	13,567.30	7,216.07	180.77	181.18	-92.99	-2,157.48	-6,477.02	2,036.59	1,675.55	361.04	5.641		
13,300.00	7,109.76	13,667.29	7,215.48	183.58	183.98	-92.98	-2,158.06	-6,577.01	2,035.21	1,668.56	366.65	5.551		
13,400.00	7,109.39	13,767.28	7,214.88	186.40	186.78	-92.98	-2,158.65	-6,676.99	2,033.82	1,661.56	372.27	5.463		
13,500.00	7,109.03	13,867.27	7,214.28	189.21	189.59	-92.97	-2,159.23	-6,776.98	2,032.44	1,654.56	377.88	5.378		
13,600.00	7,108.66	13,967.26	7,213.69	192.03	192.40	-92.97	-2,159.82	-6,876.97	2,031.06	1,647.56	383.51	5.296		
13,700.00	7,108.29	14,067.26	7,213.09	194.84	195.21	-92.96	-2,160.40	-6,976.95	2,029.68	1,640.55	389.13	5.216		
13,800.00	7,107.93	14,167.25	7,212.50	197.66	198.02	-92.96	-2,160.98	-7,076.94	2,028.30	1,633.54	394.75	5.138		
13,900.00	7,107.56	14,267.24	7,211.90	200.48	200.83	-92.95	-2,161.57	-7,176.93	2,026.92	1,626.53	400.38	5.062		
14,000.00	7,107.19	14,367.23	7,211.30	203.30	203.64	-92.95	-2,162.15	-7,276.91	2,025.53	1,619.52	406.01	4.989		
14,100.00	7,106.83	14,467.22	7,210.71	206.12	206.45	-92.94	-2,162.73	-7,376.90	2,024.15	1,612.51	411.64	4.917		
14,200.00	7,106.46	14,567.21	7,210.11	208.94	209.27	-92.94	-2,163.32	-7,476.89	2,022.77	1,605.49	417.28	4.848		
14,300.00	7,106.10	14,667.20	7,209.52	211.76	212.09	-92.94	-2,163.90	-7,576.87	2,021.39	1,598.47	422.92	4.780		
14,400.00	7,105.73	14,767.19	7,208.92	214.58	214.90	-92.93	-2,164.49	-7,676.86	2,020.01	1,591.45	428.55	4.714		
14,500.00	7,105.36	14,867.18	7,208.33	217.40	217.72	-92.93	-2,165.07	-7,776.85	2,018.62	1,584.43	434.20	4.649		
14,600.00	7,105.00	14,967.17	7,207.73	220.23	220.54	-92.92	-2,165.65	-7,876.84	2,017.24	1,577.40	439.84	4.586		
14,700.00	7,104.63	15,067.16	7,207.13	223.05	223.36	-92.92	-2,166.24	-7,976.82	2,015.86	1,570.38	445.48	4.525		
14,800.00	7,104.27	15,167.15	7,206.54	225.88	226.18	-92.91	-2,166.82	-8,076.81	2,014.48	1,563.35	451.13	4.465		
14,872.41	7,104.00	15,239.55	7,206.11	227.93	228.23	-92.91	-2,167.24	-8,149.21	2,013.48	1,558.26	455.22	4.423 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2.00	0.00	3.28	3.28	-179.56	-359.93	-2.78	359.94					
100.00	100.00	102.00	100.00	3.28	3.29	-179.56	-359.93	-2.78	359.94	353.37	6.57	54.787		
200.00	200.00	198.00	200.00	3.34	3.34	-179.56	-359.93	-2.78	359.94	353.27	6.67	53.945 CC, ES		
300.00	300.00	287.04	289.03	3.44	3.42	-179.55	-361.25	-2.84	361.43	354.55	6.88	52.554		
400.00	400.00	375.69	377.58	3.60	3.55	-179.52	-365.31	-3.03	366.01	358.83	7.18	50.951		
500.00	500.00	464.01	465.64	3.81	3.72	-179.49	-372.08	-3.34	373.68	366.10	7.58	49.313		
600.00	599.98	551.82	552.94	4.04	3.91	-89.50	-381.49	-3.78	384.38	376.35	8.04	47.829		
700.00	699.95	638.97	639.25	4.30	4.14	-89.75	-393.46	-4.33	398.12	389.57	8.55	46.568		
800.00	799.92	725.31	724.37	4.59	4.39	-89.96	-407.91	-5.00	414.85	405.74	9.11	45.560		
900.00	899.89	810.70	808.09	4.90	4.68	-90.14	-424.71	-5.78	434.53	424.84	9.69	44.829		
1,000.00	999.86	895.01	890.22	5.23	4.98	-90.28	-443.74	-6.66	457.11	446.81	10.30	44.376		
1,100.00	1,099.83	978.12	970.59	5.58	5.31	-90.40	-464.85	-7.63	482.52	471.60	10.93	44.164		
1,200.00	1,199.80	1,059.91	1,049.06	5.94	5.65	-90.48	-487.89	-8.70	510.71	499.15	11.56	44.185		
1,300.00	1,299.77	1,140.29	1,125.50	6.30	6.01	-90.55	-512.70	-9.85	541.59	529.40	12.19	44.417		
1,400.00	1,399.73	1,219.17	1,199.81	6.68	6.39	-90.59	-539.13	-11.07	575.10	562.27	12.83	44.836		
1,500.00	1,499.70	1,296.47	1,271.90	7.07	6.78	-90.61	-567.00	-12.36	611.16	597.71	13.46	45.421		
1,600.00	1,599.67	1,372.13	1,341.70	7.46	7.18	-90.62	-596.15	-13.71	649.69	635.62	14.08	46.150		
1,700.00	1,699.64	1,446.11	1,409.18	7.85	7.59	-90.61	-626.42	-15.11	690.62	675.93	14.69	47.011		
1,800.00	1,799.61	1,518.36	1,474.31	8.25	8.00	-90.60	-657.65	-16.55	733.86	718.56	15.29	47.991		
1,900.00	1,899.58	1,588.84	1,537.08	8.66	8.43	-90.58	-689.69	-18.03	779.32	763.44	15.88	49.075		
2,000.00	1,999.55	1,657.56	1,597.48	9.06	8.86	-90.55	-722.41	-19.55	826.93	810.48	16.46	50.249		
2,100.00	2,099.52	1,724.49	1,655.55	9.47	9.29	-90.52	-755.65	-21.08	876.61	859.59	17.02	51.512		
2,200.00	2,199.48	1,789.63	1,711.30	9.89	9.73	-90.49	-789.30	-22.64	928.27	910.71	17.56	52.853		
2,300.00	2,299.45	1,860.83	1,771.44	10.30	10.22	-90.45	-827.39	-24.40	981.71	963.53	18.18	53.990		
2,400.00	2,399.42	1,945.11	1,842.44	10.72	10.81	-90.40	-872.75	-26.50	1,035.53	1,016.57	18.96	54.609		
2,500.00	2,499.39	2,029.39	1,913.44	11.14	11.42	-90.36	-918.11	-28.60	1,089.35	1,069.59	19.75	55.146		
2,600.00	2,599.36	2,113.67	1,984.44	11.56	12.03	-90.33	-963.47	-30.70	1,143.17	1,122.61	20.56	55.613		
2,700.00	2,699.33	2,202.05	2,055.44	11.98	12.67	-90.29	-1,008.83	-32.79	1,196.99	1,175.60	21.39	55.958		
2,800.00	2,799.30	2,282.23	2,126.44	12.41	13.26	-90.26	-1,054.19	-34.89	1,250.81	1,228.62	22.19	56.374		
2,900.00	2,899.27	2,366.51	2,197.44	12.83	13.89	-90.24	-1,099.55	-36.99	1,304.63	1,281.61	23.01	56.686		
3,000.00	2,999.23	2,450.79	2,268.44	13.26	14.52	-90.21	-1,144.91	-39.09	1,358.45	1,334.60	23.85	56.960		
3,100.00	3,099.20	2,535.07	2,339.45	13.68	15.16	-90.19	-1,190.27	-41.18	1,412.27	1,387.58	24.69	57.202		
3,200.00	3,199.17	2,619.35	2,410.45	14.11	15.79	-90.17	-1,235.63	-43.28	1,466.09	1,440.56	25.53	57.417		
3,300.00	3,299.14	2,703.63	2,481.45	14.54	16.43	-90.15	-1,280.99	-45.38	1,519.91	1,493.53	26.38	57.607		
3,400.00	3,399.11	2,787.91	2,552.45	14.97	17.08	-90.13	-1,326.35	-47.48	1,573.73	1,546.49	27.24	57.775		
3,500.00	3,499.08	2,872.19	2,623.45	15.40	17.72	-90.11	-1,371.71	-49.58	1,627.55	1,599.45	28.10	57.925		
3,600.00	3,599.05	2,956.47	2,694.45	15.83	18.37	-90.09	-1,417.07	-51.67	1,681.37	1,652.41	28.96	58.059		
3,700.00	3,699.02	3,040.75	2,765.45	16.26	19.02	-90.08	-1,462.44	-53.77	1,735.19	1,705.37	29.82	58.179		
3,800.00	3,798.98	3,125.03	2,836.45	16.69	19.67	-90.06	-1,507.80	-55.87	1,789.02	1,758.32	30.69	58.287		
3,900.00	3,898.95	3,209.31	2,907.45	17.12	20.32	-90.05	-1,553.16	-57.97	1,842.84	1,811.27	31.56	58.383		
4,000.00	3,998.92	3,306.41	2,978.45	17.55	21.07	-90.04	-1,598.52	-60.07	1,896.66	1,864.14	32.52	58.328		
4,100.00	4,098.89	3,377.87	3,049.45	17.98	21.63	-90.02	-1,643.88	-62.16	1,950.48	1,917.17	33.31	58.547		
4,200.00	4,198.86	3,462.15	3,120.45	18.42	22.28	-90.01	-1,689.24	-64.26	2,004.30	1,970.11	34.19	58.617		
4,300.00	4,298.83	3,546.43	3,191.46	18.85	22.94	-90.00	-1,734.60	-66.36	2,058.12	2,023.05	35.07	58.680		
4,400.00	4,398.80	3,630.71	3,262.46	19.28	23.59	-89.99	-1,779.96	-68.46	2,111.95	2,075.99	35.96	58.736		
4,500.00	4,498.77	3,714.99	3,333.46	19.72	24.25	-89.98	-1,825.32	-70.56	2,165.77	2,128.93	36.84	58.787		
4,600.00	4,598.73	3,800.73	3,404.46	20.15	24.92	-89.97	-1,870.68	-72.65	2,219.59	2,181.85	37.74	58.819		
4,700.00	4,698.70	3,883.55	3,475.46	20.58	25.57	-89.96	-1,916.04	-74.75	2,273.41	2,234.80	38.61	58.875		
4,800.00	4,798.67	3,967.83	3,546.46	21.02	26.23	-89.95	-1,961.40	-76.85	2,327.23	2,287.73	39.50	58.912		
4,900.00	4,898.64	4,052.11	3,617.46	21.45	26.89	-89.95	-2,006.76	-78.95	2,381.06	2,340.66	40.39	58.946		
5,000.00	4,998.61	4,136.39	3,688.46	21.89	27.55	-89.94	-2,052.12	-81.05	2,434.88	2,393.59	41.29	58.976		
5,100.00	5,098.58	4,220.67	3,759.46	22.32	28.21	-89.93	-2,097.48	-83.14	2,488.70	2,446.52	42.18	59.004		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,198.55	4,304.95	3,830.46	22.76	28.88	-89.92	-2,142.84	-85.24	2,542.52	2,499.45	43.07	59.028		
5,300.00	5,298.52	4,389.23	3,901.46	23.20	29.54	-89.92	-2,188.21	-87.34	2,596.34	2,552.38	43.97	59.050		
5,400.00	5,398.49	4,473.51	3,972.46	23.63	30.20	-89.91	-2,233.57	-89.44	2,650.17	2,605.30	44.87	59.070		
5,500.00	5,498.45	4,557.79	4,043.47	24.07	30.86	-89.90	-2,278.93	-91.54	2,703.99	2,658.23	45.76	59.087		
5,600.00	5,598.42	4,642.07	4,114.47	24.50	31.53	-89.90	-2,324.29	-93.63	2,757.81	2,711.15	46.66	59.103		
5,700.00	5,698.39	4,726.35	4,185.47	24.94	32.19	-89.89	-2,369.65	-95.73	2,811.63	2,764.07	47.56	59.117		
5,800.00	5,798.36	4,810.63	4,256.47	25.38	32.86	-89.89	-2,415.01	-97.83	2,865.46	2,816.99	48.46	59.129		
5,900.00	5,898.33	4,905.09	4,327.47	25.81	33.60	-89.88	-2,460.37	-99.93	2,919.28	2,869.85	49.43	59.062		
6,000.00	5,998.30	4,979.19	4,398.47	26.25	34.19	-89.87	-2,505.73	-102.03	2,973.10	2,922.83	50.27	59.148		
6,100.00	6,098.27	5,063.47	4,469.47	26.69	34.85	-89.87	-2,551.09	-104.12	3,026.92	2,975.75	51.17	59.156		
6,200.00	6,198.24	5,147.75	4,540.47	27.12	35.52	-89.86	-2,596.45	-106.22	3,080.74	3,028.67	52.07	59.163		
6,300.00	6,298.20	5,232.03	4,611.47	27.56	36.18	-89.86	-2,641.81	-108.32	3,134.57	3,081.59	52.98	59.168		
6,400.00	6,398.17	5,316.31	4,682.47	28.00	36.85	-89.86	-2,687.17	-110.42	3,188.39	3,134.51	53.88	59.173		
6,500.00	6,498.14	5,400.59	4,753.47	28.43	37.52	-89.85	-2,732.53	-112.52	3,242.21	3,187.42	54.79	59.176		
6,600.00	6,597.68	5,484.72	4,824.35	28.88	38.18	-84.02	-2,777.81	-114.61	3,295.78	3,240.08	55.70	59.171		
6,700.00	6,694.68	5,567.26	4,893.88	29.32	38.83	-78.90	-2,822.24	-116.66	3,347.99	3,291.38	56.61	59.142		
6,800.00	6,786.74	5,651.51	4,963.41	29.77	39.48	-89.85	-3,380.63	-171.53	3,379.74	3,312.90	66.84	50.565		
6,900.00	6,871.61	5,736.76	5,033.94	30.24	40.13	-90.18	-3,380.87	-210.89	3,379.27	3,311.72	67.54	50.032		
7,000.00	6,947.19	5,822.01	5,104.47	30.74	40.78	-90.52	-3,381.22	-267.49	3,378.68	3,310.41	68.27	49.490		
7,100.00	7,011.62	5,907.26	5,175.00	31.22	41.43	-90.85	-3,381.67	-341.04	3,377.99	3,308.88	69.10	48.882		
7,200.00	7,063.31	5,992.51	5,245.53	31.69	42.08	-91.17	-3,382.22	-430.43	3,377.17	3,307.02	70.15	48.140		
7,300.00	7,101.00	6,077.76	5,316.06	32.16	42.73	-91.45	-3,382.85	-533.49	3,376.23	3,304.70	71.53	47.198		
7,400.00	7,123.74	6,162.01	5,386.59	32.63	43.38	-91.69	-3,383.54	-646.96	3,375.16	3,301.82	73.34	46.022		
7,500.00	7,131.00	6,247.26	5,457.12	33.10	44.03	-91.89	-3,384.28	-766.55	3,373.96	3,298.40	75.56	44.652		
7,600.00	7,130.63	6,332.51	5,527.65	33.57	44.68	-91.89	-3,384.90	-869.18	3,372.62	3,294.61	78.01	43.232		
7,700.00	7,130.26	6,417.76	5,598.18	34.04	45.33	-91.89	-3,385.52	-969.16	3,371.28	3,290.51	80.76	41.742		
7,800.00	7,129.90	6,503.01	5,668.71	34.51	45.98	-91.89	-3,386.13	-1,069.15	3,369.94	3,286.12	83.82	40.207		
7,900.00	7,129.53	6,588.26	5,739.24	34.98	46.63	-91.89	-3,386.74	-1,169.14	3,368.59	3,281.46	87.13	38.661		
8,000.00	7,129.17	6,673.51	5,809.77	35.45	47.28	-91.89	-3,387.35	-1,269.13	3,367.25	3,276.56	90.69	37.130		
8,100.00	7,128.80	6,758.76	5,880.30	35.92	47.93	-91.89	-3,387.97	-1,369.12	3,365.90	3,271.45	94.45	35.636		
8,200.00	7,128.43	6,844.01	5,950.83	36.39	48.58	-91.89	-3,388.58	-1,469.10	3,364.56	3,266.16	98.40	34.191		
8,300.00	7,128.07	6,929.26	6,021.36	36.86	49.23	-91.89	-3,389.19	-1,569.09	3,363.22	3,260.69	102.52	32.805		
8,400.00	7,127.70	7,014.51	6,091.89	37.33	49.88	-91.89	-3,389.80	-1,669.08	3,361.87	3,255.09	106.78	31.483		
8,500.00	7,127.33	7,100.00	6,162.42	37.80	50.53	-91.89	-3,390.42	-1,769.07	3,360.53	3,249.35	111.18	30.227		
8,600.00	7,126.97	7,185.50	6,232.95	38.27	51.18	-91.89	-3,391.03	-1,869.06	3,359.19	3,243.50	115.68	29.038		
8,700.00	7,126.60	7,271.00	6,303.48	38.74	51.83	-91.89	-3,391.64	-1,969.05	3,357.84	3,237.55	120.29	27.914		
8,800.00	7,126.24	7,356.50	6,373.99	39.21	52.48	-91.89	-3,392.25	-2,069.03	3,356.50	3,231.51	124.99	26.854		
8,900.00	7,125.87	7,442.00	6,444.52	39.68	53.13	-91.89	-3,392.87	-2,169.02	3,355.15	3,225.38	129.77	25.854		
9,000.00	7,125.50	7,527.50	6,515.05	40.15	53.78	-91.89	-3,393.48	-2,269.01	3,353.81	3,219.19	134.62	24.912		
9,100.00	7,125.14	7,613.00	6,585.58	40.62	54.43	-91.89	-3,394.09	-2,369.00	3,352.47	3,212.93	139.54	24.025		
9,200.00	7,124.77	7,698.50	6,656.11	41.09	55.08	-91.89	-3,394.70	-2,468.99	3,351.12	3,206.61	144.52	23.189		
9,300.00	7,124.41	7,784.00	6,726.64	41.56	55.73	-91.89	-3,395.32	-2,568.98	3,349.78	3,200.24	149.54	22.400		
9,400.00	7,124.04	7,869.50	6,797.17	42.03	56.38	-91.89	-3,395.93	-2,668.96	3,348.44	3,193.82	154.62	21.656		
9,500.00	7,123.67	7,955.00	6,867.70	42.50	57.03	-91.89	-3,396.54	-2,768.95	3,347.09	3,187.36	159.73	20.954		
9,600.00	7,123.31	8,040.50	6,938.23	42.97	57.68	-91.89	-3,397.15	-2,868.94	3,345.75	3,180.86	164.89	20.291		
9,700.00	7,122.94	8,126.00	7,008.76	43.44	58.33	-91.89	-3,397.77	-2,968.93	3,344.40	3,174.32	170.08	19.663		
9,800.00	7,122.57	8,211.50	7,079.29	43.91	58.98	-91.89	-3,398.38	-3,068.92	3,343.06	3,167.75	175.31	19.070		
9,900.00	7,122.21	8,297.00	7,149.82	44.38	59.63	-91.89	-3,398.99	-3,168.91	3,341.72	3,161.16	180.56	18.508		
10,000.00	7,121.84	8,382.50	7,220.35	44.85	60.28	-91.89	-3,399.60	-3,268.89	3,340.37	3,154.53	185.84	17.975		
10,100.00	7,121.48	8,468.00	7,290.88	45.32	60.93	-91.89	-3,400.21	-3,368.88	3,339.03	3,147.89	191.14	17.469		
10,200.00	7,121.11	8,553.50	7,361.41	45.79	61.58	-91.89	-3,400.83	-3,468.87	3,337.69	3,141.21	196.47	16.988		
10,300.00	7,120.74	8,639.00	7,431.94	46.26	62.23	-91.89	-3,401.44	-3,568.86	3,336.34	3,134.52	201.82	16.531		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,120.38	11,286.57	7,230.29	103.04	104.84	-91.89	-3,402.05	-3,668.85	3,335.00	3,127.81	207.19	16.097		
10,500.00	7,120.01	11,386.56	7,229.88	105.76	107.50	-91.89	-3,402.66	-3,768.84	3,333.65	3,121.08	212.57	15.682		
10,600.00	7,119.64	11,486.55	7,229.48	108.48	110.16	-91.89	-3,403.28	-3,868.82	3,332.31	3,114.34	217.97	15.288		
10,700.00	7,119.28	11,586.54	7,229.07	111.22	112.84	-91.89	-3,403.89	-3,968.81	3,330.97	3,107.58	223.39	14.911		
10,800.00	7,118.91	11,686.53	7,228.67	113.96	115.53	-91.89	-3,404.50	-4,068.80	3,329.62	3,100.80	228.82	14.551		
10,900.00	7,118.55	11,786.52	7,228.26	116.70	118.22	-91.89	-3,405.11	-4,168.79	3,328.28	3,094.01	234.27	14.207		
11,000.00	7,118.18	11,886.51	7,227.86	119.45	120.93	-91.89	-3,405.73	-4,268.78	3,326.94	3,087.21	239.72	13.878		
11,100.00	7,117.81	11,986.50	7,227.45	122.21	123.64	-91.89	-3,406.34	-4,368.76	3,325.59	3,080.40	245.19	13.563		
11,200.00	7,117.45	12,086.49	7,227.04	124.97	126.35	-91.89	-3,406.95	-4,468.75	3,324.25	3,073.58	250.67	13.261		
11,300.00	7,117.08	12,186.48	7,226.64	127.73	129.08	-91.89	-3,407.56	-4,568.74	3,322.90	3,066.74	256.16	12.972		
11,400.00	7,116.72	12,286.47	7,226.23	130.50	131.80	-91.89	-3,408.18	-4,668.73	3,321.56	3,059.90	261.66	12.694		
11,500.00	7,116.35	12,386.47	7,225.83	133.27	134.54	-91.89	-3,408.79	-4,768.72	3,320.22	3,053.05	267.17	12.427		
11,600.00	7,115.98	12,486.46	7,225.42	136.04	137.28	-91.89	-3,409.40	-4,868.71	3,318.87	3,046.19	272.68	12.171		
11,700.00	7,115.62	12,586.45	7,225.02	138.82	140.02	-91.89	-3,410.01	-4,968.69	3,317.53	3,039.32	278.21	11.925		
11,800.00	7,115.25	12,686.44	7,224.61	141.60	142.77	-91.89	-3,410.63	-5,068.68	3,316.19	3,032.45	283.74	11.687		
11,900.00	7,114.88	12,786.43	7,224.20	144.39	145.52	-91.89	-3,411.24	-5,168.67	3,314.84	3,025.56	289.28	11.459		
12,000.00	7,114.52	12,886.42	7,223.80	147.17	148.28	-91.89	-3,411.85	-5,268.66	3,313.50	3,018.68	294.82	11.239		
12,100.00	7,114.15	12,986.41	7,223.39	149.96	151.04	-91.89	-3,412.46	-5,368.65	3,312.15	3,011.78	300.37	11.027		
12,200.00	7,113.79	13,086.40	7,222.99	152.75	153.80	-91.89	-3,413.08	-5,468.64	3,310.81	3,004.88	305.93	10.822		
12,300.00	7,113.42	13,186.39	7,222.58	155.55	156.57	-91.89	-3,413.69	-5,568.62	3,309.47	2,997.98	311.49	10.625		
12,400.00	7,113.05	13,286.38	7,222.18	158.34	159.34	-91.89	-3,414.30	-5,668.61	3,308.12	2,991.06	317.06	10.434		
12,500.00	7,112.69	13,386.38	7,221.77	161.14	162.11	-91.89	-3,414.91	-5,768.60	3,306.78	2,984.15	322.63	10.249		
12,600.00	7,112.32	13,486.37	7,221.36	163.94	164.89	-91.89	-3,415.53	-5,868.59	3,305.44	2,977.23	328.21	10.071		
12,700.00	7,111.96	13,586.36	7,220.96	166.74	167.67	-91.89	-3,416.14	-5,968.58	3,304.09	2,970.30	333.79	9.899		
12,800.00	7,111.59	13,686.35	7,220.55	169.54	170.45	-91.89	-3,416.75	-6,068.57	3,302.75	2,963.37	339.38	9.732		
12,900.00	7,111.22	13,786.34	7,220.15	172.35	173.23	-91.89	-3,417.36	-6,168.55	3,301.40	2,956.44	344.97	9.570		
13,000.00	7,110.86	13,886.33	7,219.74	175.16	176.02	-91.89	-3,417.97	-6,268.54	3,300.06	2,949.50	350.56	9.414		
13,100.00	7,110.49	13,986.32	7,219.34	177.96	178.81	-91.89	-3,418.59	-6,368.53	3,298.72	2,942.56	356.16	9.262		
13,200.00	7,110.12	14,086.31	7,218.93	180.77	181.60	-91.89	-3,419.20	-6,468.52	3,297.37	2,935.61	361.76	9.115		
13,300.00	7,109.76	14,186.30	7,218.52	183.58	184.39	-91.89	-3,419.81	-6,568.51	3,296.03	2,928.67	367.36	8.972		
13,400.00	7,109.39	14,286.29	7,218.12	186.40	187.19	-91.89	-3,420.42	-6,668.50	3,294.69	2,921.71	372.97	8.834		
13,500.00	7,109.03	14,386.29	7,217.71	189.21	189.99	-91.89	-3,421.04	-6,768.48	3,293.34	2,914.76	378.58	8.699		
13,600.00	7,108.66	14,486.28	7,217.31	192.03	192.78	-91.89	-3,421.65	-6,868.47	3,292.00	2,907.80	384.20	8.569		
13,700.00	7,108.29	14,586.27	7,216.90	194.84	195.59	-91.89	-3,422.26	-6,968.46	3,290.65	2,900.84	389.81	8.442		
13,800.00	7,107.93	14,686.26	7,216.50	197.66	198.39	-91.89	-3,422.87	-7,068.45	3,289.31	2,893.88	395.43	8.318		
13,900.00	7,107.56	14,786.25	7,216.09	200.48	201.19	-91.89	-3,423.49	-7,168.44	3,287.97	2,886.91	401.05	8.198		
14,000.00	7,107.19	14,886.24	7,215.68	203.30	204.00	-91.89	-3,424.10	-7,268.42	3,286.62	2,879.95	406.68	8.082		
14,100.00	7,106.83	14,986.23	7,215.28	206.12	206.80	-91.89	-3,424.71	-7,368.41	3,285.28	2,872.97	412.30	7.968		
14,200.00	7,106.46	15,086.22	7,214.87	208.94	209.61	-91.89	-3,425.32	-7,468.40	3,283.94	2,866.00	417.93	7.858		
14,300.00	7,106.10	15,186.21	7,214.47	211.76	212.42	-91.89	-3,425.94	-7,568.39	3,282.59	2,859.03	423.56	7.750		
14,400.00	7,105.73	15,286.20	7,214.06	214.58	215.23	-91.89	-3,426.55	-7,668.38	3,281.25	2,852.05	429.20	7.645		
14,500.00	7,105.36	15,386.19	7,213.66	217.40	218.04	-91.90	-3,427.16	-7,768.37	3,279.90	2,845.07	434.83	7.543		
14,600.00	7,105.00	15,486.18	7,213.25	220.23	220.86	-91.90	-3,427.77	-7,868.35	3,278.56	2,838.09	440.47	7.443		
14,700.00	7,104.63	15,586.17	7,212.84	223.05	223.67	-91.90	-3,428.39	-7,968.34	3,277.22	2,831.11	446.11	7.346		
14,800.00	7,104.27	15,686.16	7,212.44	225.88	226.49	-91.90	-3,429.00	-8,068.33	3,275.87	2,824.12	451.75	7.252		
14,872.41	7,104.00	15,758.57	7,212.15	227.93	228.53	-91.90	-3,429.44	-8,140.73	3,274.90	2,819.07	455.83	7.184 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.00	0.00	3.28	3.28	0.80	20.03	0.28	20.03					
100.00	100.00	100.00	100.00	3.28	3.28	0.80	20.03	0.28	20.03	13.47	6.57	3.050		
200.00	200.00	200.00	200.00	3.34	3.34	0.80	20.03	0.28	20.03	13.36	6.67	3.002		
300.00	300.00	300.00	300.00	3.44	3.44	0.80	20.03	0.28	20.03	13.14	6.89	2.908		
400.00	400.00	400.00	400.00	3.60	3.60	0.80	20.03	0.28	20.03	12.83	7.21	2.780		
500.00	500.00	500.00	500.00	3.81	3.81	0.80	20.03	0.28	20.03	12.42	7.61	2.632 CC		
600.00	599.98	599.98	599.98	4.04	4.05	95.37	20.03	0.28	20.12	12.04	8.09	2.489		
700.00	699.95	700.28	699.70	4.30	4.32	97.98	20.93	-1.16	21.14	12.52	8.62	2.453		
800.00	799.92	800.30	799.64	4.59	4.61	97.38	22.50	-3.68	22.70	13.50	9.20	2.467		
900.00	899.89	900.31	899.58	4.90	4.92	96.87	24.08	-6.19	24.25	14.43	9.83	2.469		
1,000.00	999.86	1,000.32	999.53	5.23	5.26	96.41	25.65	-8.71	25.81	15.33	10.49	2.461		
1,100.00	1,099.83	1,100.33	1,099.47	5.58	5.60	96.00	27.22	-11.22	27.37	16.19	11.18	2.448		
1,200.00	1,199.80	1,200.35	1,199.42	5.94	5.96	95.64	28.79	-13.74	28.94	17.04	11.90	2.432		
1,300.00	1,299.77	1,300.36	1,299.36	6.30	6.33	95.32	30.36	-16.26	30.50	17.86	12.64	2.414		
1,400.00	1,399.73	1,400.37	1,399.30	6.68	6.71	95.03	31.94	-18.77	32.06	18.67	13.39	2.394		
1,500.00	1,499.70	1,500.38	1,499.25	7.07	7.10	94.76	33.51	-21.29	33.63	19.47	14.16	2.375		
1,600.00	1,599.67	1,599.60	1,599.19	7.46	7.49	94.52	35.08	-23.80	35.19	20.26	14.94	2.356		
1,700.00	1,699.64	1,700.41	1,699.13	7.85	7.89	94.30	36.65	-26.32	36.76	21.03	15.73	2.336		
1,800.00	1,799.61	1,800.42	1,799.08	8.25	8.29	94.10	38.22	-28.84	38.33	21.79	16.54	2.318		
1,900.00	1,899.58	1,900.43	1,899.02	8.66	8.69	93.91	39.80	-31.35	39.89	22.55	17.34	2.300		
2,000.00	1,999.55	2,000.44	1,998.96	9.06	9.10	93.74	41.37	-33.87	41.46	23.30	18.16	2.283		
2,100.00	2,099.52	2,100.46	2,098.91	9.47	9.51	93.58	42.94	-36.38	43.03	24.05	18.98	2.267		
2,200.00	2,199.48	2,200.47	2,198.85	9.89	9.92	93.43	44.51	-38.90	44.60	24.79	19.81	2.252		
2,300.00	2,299.45	2,300.48	2,298.80	10.30	10.34	93.29	46.09	-41.41	46.17	25.53	20.64	2.237		
2,400.00	2,399.42	2,400.49	2,398.74	10.72	10.76	93.16	47.66	-43.93	47.74	26.26	21.47	2.223		
2,500.00	2,499.39	2,500.51	2,498.68	11.14	11.18	93.04	49.23	-46.45	49.30	27.00	22.31	2.210		
2,600.00	2,599.36	2,600.52	2,598.63	11.56	11.60	92.93	50.80	-48.96	50.87	27.72	23.15	2.198		
2,700.00	2,699.33	2,700.53	2,698.57	11.98	12.02	92.82	52.37	-51.48	52.44	28.45	23.99	2.186		
2,800.00	2,799.30	2,800.54	2,798.51	12.41	12.44	92.72	53.95	-53.99	54.01	29.17	24.84	2.174		
2,900.00	2,899.27	2,900.56	2,898.46	12.83	12.87	92.62	55.52	-56.51	55.58	29.89	25.69	2.164		
3,000.00	2,999.23	3,000.57	2,998.40	13.26	13.29	92.53	57.09	-59.03	57.15	30.61	26.54	2.153		
3,100.00	3,099.20	3,100.58	3,098.34	13.68	13.72	92.45	58.66	-61.54	58.72	31.33	27.39	2.144		
3,200.00	3,199.17	3,200.59	3,198.29	14.11	14.15	92.37	60.23	-64.06	60.29	32.05	28.25	2.134		
3,300.00	3,299.14	3,300.61	3,298.23	14.54	14.58	92.29	61.81	-66.57	61.86	32.76	29.10	2.126		
3,400.00	3,399.11	3,400.62	3,398.18	14.97	15.00	92.22	63.38	-69.09	63.43	33.47	29.96	2.117		
3,500.00	3,499.08	3,500.63	3,498.12	15.40	15.43	92.15	64.95	-71.60	65.00	34.19	30.82	2.109		
3,600.00	3,599.05	3,600.64	3,598.06	15.83	15.86	92.08	66.52	-74.12	66.57	34.90	31.68	2.102		
3,700.00	3,699.02	3,700.65	3,698.01	16.26	16.29	92.02	68.09	-76.64	68.14	35.61	32.54	2.094		
3,800.00	3,798.98	3,800.67	3,797.95	16.69	16.73	91.96	69.67	-79.15	69.72	36.32	33.40	2.087		
3,900.00	3,898.95	3,900.68	3,897.89	17.12	17.16	91.90	71.24	-81.67	71.29	37.02	34.26	2.081		
4,000.00	3,998.92	4,000.69	3,997.84	17.55	17.59	91.85	72.81	-84.18	72.86	37.73	35.13	2.074		
4,100.00	4,098.89	4,100.70	4,097.78	17.98	18.02	91.79	74.38	-86.70	74.43	38.44	35.99	2.068		
4,200.00	4,198.86	4,200.72	4,197.72	18.42	18.45	91.74	75.95	-89.22	76.00	39.14	36.86	2.062		
4,300.00	4,298.83	4,300.73	4,297.67	18.85	18.89	91.70	77.53	-91.73	77.57	39.85	37.72	2.056		
4,400.00	4,398.80	4,400.74	4,397.61	19.28	19.32	91.65	79.10	-94.25	79.14	40.55	38.59	2.051		
4,500.00	4,498.77	4,500.75	4,497.55	19.72	19.75	91.60	80.67	-96.76	80.71	41.26	39.46	2.046		
4,600.00	4,598.73	4,600.77	4,597.50	20.15	20.19	91.56	82.24	-99.28	82.28	41.96	40.32	2.041		
4,700.00	4,698.70	4,700.78	4,697.44	20.58	20.62	91.52	83.81	-101.79	83.85	42.66	41.19	2.036		
4,800.00	4,798.67	4,800.79	4,797.39	21.02	21.06	91.48	85.39	-104.31	85.43	43.37	42.06	2.031		
4,900.00	4,898.64	4,900.80	4,897.33	21.45	21.49	91.44	86.96	-106.83	87.00	44.07	42.93	2.027		
5,000.00	4,998.61	5,000.82	4,997.27	21.89	21.93	91.40	88.53	-109.34	88.57	44.77	43.80	2.022		
5,100.00	5,098.58	5,100.83	5,097.22	22.32	22.36	91.37	90.10	-111.86	90.14	45.47	44.67	2.018		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,198.55	5,200.84	5,197.16	22.76	22.80	91.33	91.68	-114.37	91.71	46.17	45.54	2.014		
5,300.00	5,298.52	5,300.85	5,297.10	23.20	23.23	91.30	93.25	-116.89	93.28	46.87	46.41	2.010		
5,400.00	5,398.49	5,400.86	5,397.05	23.63	23.67	91.27	94.82	-119.41	94.85	47.57	47.28	2.006		
5,500.00	5,498.45	5,500.88	5,496.99	24.07	24.10	91.24	96.39	-121.92	96.43	48.27	48.15	2.003		
5,600.00	5,598.42	5,600.89	5,596.93	24.50	24.54	91.21	97.96	-124.44	98.00	48.97	49.02	1.999		
5,700.00	5,698.39	5,700.90	5,696.88	24.94	24.98	91.18	99.54	-126.95	99.57	49.67	49.90	1.996		
5,800.00	5,798.36	5,800.91	5,796.82	25.38	25.41	91.15	101.11	-129.47	101.14	50.37	50.77	1.992		
5,900.00	5,898.33	5,900.93	5,896.77	25.81	25.85	91.12	102.68	-131.98	102.71	51.07	51.64	1.989		
6,000.00	5,998.30	6,000.94	5,996.71	26.25	26.29	91.10	104.25	-134.50	104.28	51.77	52.51	1.986		
6,100.00	6,098.27	6,100.95	6,096.65	26.69	26.72	91.07	105.82	-137.02	105.86	52.47	53.39	1.983		
6,200.00	6,198.24	6,200.96	6,196.60	27.12	27.16	91.04	107.40	-139.53	107.43	53.17	54.26	1.980		
6,300.00	6,298.20	6,300.98	6,296.54	27.56	27.60	91.02	108.97	-142.05	109.00	53.87	55.13	1.977		
6,400.00	6,398.17	6,400.99	6,396.48	28.00	28.03	91.00	110.54	-144.56	110.57	54.56	56.01	1.974		
6,500.00	6,498.14	6,501.00	6,496.43	28.43	28.47	90.97	112.11	-147.08	112.14	55.26	56.88	1.972		
6,600.00	6,597.68	6,601.29	6,596.09	28.88	28.91	94.77	113.68	-149.59	114.09	56.34	57.75	1.975		
6,700.00	6,694.68	6,699.37	6,696.46	29.32	29.34	102.99	115.23	-156.11	118.52	59.92	58.60	2.023		
6,800.00	6,786.74	6,803.55	6,798.02	29.77	29.80	110.58	116.67	-178.72	125.52	66.26	59.26	2.118		
6,900.00	6,871.61	6,911.02	6,897.50	30.24	30.29	116.93	117.95	-219.06	134.22	74.88	59.34	2.262		
7,000.00	6,947.19	7,021.86	6,991.47	30.74	30.81	121.99	119.00	-277.56	143.68	85.09	58.59	2.452		
7,100.00	7,011.62	7,135.97	7,076.13	31.32	31.40	125.83	119.76	-353.84	152.97	95.93	57.04	2.682		
7,200.00	7,063.31	7,253.07	7,147.44	32.03	32.12	128.58	120.19	-446.52	161.29	106.23	55.05	2.930		
7,300.00	7,101.00	7,372.69	7,201.52	32.89	33.05	130.33	120.24	-553.01	167.96	114.66	53.30	3.151		
7,400.00	7,123.74	7,494.11	7,235.10	33.93	34.23	131.19	119.89	-669.51	172.49	119.90	52.59	3.280		
7,500.00	7,131.00	7,616.48	7,245.98	35.10	35.63	131.20	119.13	-791.20	174.58	120.99	53.59	3.258		
7,600.00	7,130.63	7,716.03	7,245.68	36.44	36.96	130.96	118.37	-890.75	175.51	119.60	55.91	3.139		
7,700.00	7,130.26	7,816.03	7,245.37	37.94	38.44	130.72	117.60	-990.74	176.45	117.95	58.50	3.016		
7,800.00	7,129.90	7,916.02	7,245.05	39.59	40.08	130.48	116.83	-1,090.73	177.38	116.05	61.33	2.892		
7,900.00	7,129.53	8,016.01	7,244.74	41.37	41.84	130.25	116.07	-1,190.71	178.33	113.94	64.39	2.770		
8,000.00	7,129.17	8,116.00	7,244.43	43.27	43.72	130.01	115.30	-1,290.70	179.27	111.63	67.64	2.650		
8,100.00	7,128.80	8,216.00	7,244.12	45.27	45.71	129.78	114.53	-1,390.69	180.21	109.15	71.06	2.536		
8,200.00	7,128.43	8,315.99	7,243.81	47.36	47.78	129.56	113.76	-1,490.68	181.16	106.53	74.64	2.427		
8,300.00	7,128.07	8,415.98	7,243.50	49.52	49.93	129.33	113.00	-1,590.67	182.12	103.77	78.35	2.324		
8,400.00	7,127.70	8,515.98	7,243.18	51.75	52.15	129.11	112.23	-1,690.66	183.07	100.89	82.18	2.228		
8,500.00	7,127.33	8,615.97	7,242.87	54.04	54.42	128.89	111.46	-1,790.65	184.03	97.91	86.12	2.137		
8,600.00	7,126.97	8,715.96	7,242.56	56.38	56.75	128.67	110.69	-1,890.64	184.99	94.84	90.15	2.052		
8,700.00	7,126.60	8,815.95	7,242.25	58.77	59.13	128.46	109.93	-1,990.63	185.95	91.68	94.28	1.972		
8,800.00	7,126.24	8,915.95	7,241.94	61.19	61.55	128.24	109.16	-2,090.62	186.92	88.44	98.48	1.898		
8,900.00	7,125.87	9,015.94	7,241.62	63.65	64.00	128.03	108.39	-2,190.61	187.88	85.13	102.75	1.829		
9,000.00	7,125.50	9,115.93	7,241.31	66.15	66.49	127.82	107.62	-2,290.60	188.85	81.77	107.09	1.764		
9,100.00	7,125.14	9,215.93	7,241.00	68.67	69.00	127.62	106.86	-2,390.59	189.83	78.34	111.49	1.703		
9,200.00	7,124.77	9,315.92	7,240.69	71.21	71.54	127.41	106.09	-2,490.58	190.80	74.86	115.94	1.646		
9,300.00	7,124.41	9,415.91	7,240.38	73.78	74.11	127.21	105.32	-2,590.57	191.78	71.34	120.44	1.592		
9,400.00	7,124.04	9,515.91	7,240.06	76.37	76.69	127.01	104.55	-2,690.56	192.76	67.77	125.00	1.542		
9,500.00	7,123.67	9,615.90	7,239.75	78.98	79.29	126.81	103.79	-2,790.55	193.74	64.15	129.59	1.495 Level 3		
9,600.00	7,123.31	9,715.89	7,239.44	81.60	81.91	126.61	103.02	-2,890.54	194.73	60.50	134.22	1.451 Level 3		
9,700.00	7,122.94	9,815.88	7,239.13	84.24	84.55	126.42	102.25	-2,990.53	195.72	56.82	138.90	1.409 Level 3		
9,800.00	7,122.57	9,915.88	7,238.82	86.90	87.20	126.22	101.48	-3,090.52	196.71	53.10	143.61	1.370 Level 3		
9,900.00	7,122.21	10,015.87	7,238.51	89.56	89.86	126.03	100.72	-3,190.50	197.70	49.35	148.35	1.333 Level 3		
10,000.00	7,121.84	10,115.86	7,238.19	92.24	92.54	125.84	99.95	-3,290.49	198.69	45.57	153.12	1.298 Level 3		
10,100.00	7,121.48	10,215.86	7,237.88	94.92	95.22	125.66	99.18	-3,390.48	199.69	41.76	157.93	1.264 Level 3		
10,200.00	7,121.11	10,315.85	7,237.57	97.62	97.92	125.47	98.41	-3,490.47	200.68	37.92	162.76	1.233 Level 2		
10,300.00	7,120.74	10,415.84	7,237.26	100.32	100.62	125.29	97.65	-3,590.46	201.68	34.06	167.62	1.203 Level 2		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	10,515.83	7,236.95	103.04	103.33	125.11	96.88	-3,690.45	202.69	30.18	172.51	1.175	Level 2
10,500.00	7,120.01	10,615.83	7,236.63	105.76	106.05	124.93	96.11	-3,790.44	203.69	26.28	177.42	1.148	Level 2
10,600.00	7,119.64	10,715.82	7,236.32	108.48	108.78	124.75	95.34	-3,890.43	204.70	22.35	182.35	1.123	Level 2
10,700.00	7,119.28	10,815.81	7,236.01	111.22	111.51	124.57	94.58	-3,990.42	205.71	18.40	187.30	1.098	Level 2
10,800.00	7,118.91	10,915.81	7,235.70	113.96	114.25	124.40	93.81	-4,090.41	206.72	14.43	192.28	1.075	Level 2
10,900.00	7,118.55	11,015.80	7,235.39	116.70	117.00	124.23	93.04	-4,190.40	207.73	10.45	197.28	1.053	Level 2
11,000.00	7,118.18	11,115.79	7,235.07	119.45	119.75	124.06	92.27	-4,290.39	208.74	6.45	202.30	1.032	Level 2
11,100.00	7,117.81	11,215.79	7,234.76	122.21	122.50	123.89	91.51	-4,390.38	209.76	2.43	207.33	1.012	Level 2
11,200.00	7,117.45	11,315.78	7,234.45	124.97	125.26	123.72	90.74	-4,490.37	210.77	-1.61	212.39	0.992	Level 1
11,300.00	7,117.08	11,415.77	7,234.14	127.73	128.03	123.55	89.97	-4,590.36	211.79	-5.66	217.46	0.974	Level 1
11,400.00	7,116.72	11,515.76	7,233.83	130.50	130.80	123.39	89.20	-4,690.35	212.81	-9.73	222.54	0.956	Level 1
11,500.00	7,116.35	11,615.76	7,233.51	133.27	133.57	123.22	88.44	-4,790.34	213.84	-13.81	227.65	0.939	Level 1
11,600.00	7,115.98	11,715.75	7,233.20	136.04	136.34	123.06	87.67	-4,890.33	214.86	-17.91	232.77	0.923	Level 1
11,700.00	7,115.62	11,815.74	7,232.89	138.82	139.12	122.90	86.90	-4,990.32	215.89	-22.02	237.90	0.907	Level 1
11,800.00	7,115.25	11,915.74	7,232.58	141.60	141.91	122.74	86.13	-5,090.31	216.92	-26.14	243.05	0.892	Level 1
11,900.00	7,114.88	12,015.73	7,232.27	144.39	144.69	122.59	85.37	-5,190.29	217.94	-30.27	248.22	0.878	Level 1
12,000.00	7,114.52	12,115.72	7,231.96	147.17	147.48	122.43	84.60	-5,290.28	218.98	-34.42	253.40	0.864	Level 1
12,100.00	7,114.15	12,215.71	7,231.64	149.96	150.27	122.28	83.83	-5,390.27	220.01	-38.58	258.59	0.851	Level 1
12,200.00	7,113.79	12,315.71	7,231.33	152.75	153.06	122.13	83.06	-5,490.26	221.04	-42.75	263.79	0.838	Level 1
12,300.00	7,113.42	12,415.70	7,231.02	155.55	155.86	121.97	82.30	-5,590.25	222.08	-46.93	269.01	0.826	Level 1
12,400.00	7,113.05	12,515.69	7,230.71	158.34	158.65	121.82	81.53	-5,690.24	223.12	-51.12	274.24	0.814	Level 1
12,500.00	7,112.69	12,615.69	7,230.40	161.14	161.45	121.68	80.76	-5,790.23	224.15	-55.32	279.48	0.802	Level 1
12,600.00	7,112.32	12,715.68	7,230.08	163.94	164.26	121.53	79.99	-5,890.22	225.19	-59.53	284.73	0.791	Level 1
12,700.00	7,111.96	12,815.67	7,229.77	166.74	167.06	121.38	79.23	-5,990.21	226.24	-63.76	289.99	0.780	Level 1
12,800.00	7,111.59	12,915.67	7,229.46	169.54	169.87	121.24	78.46	-6,090.20	227.28	-67.99	295.27	0.770	Level 1
12,900.00	7,111.22	13,015.66	7,229.15	172.35	172.67	121.10	77.69	-6,190.19	228.32	-72.23	300.55	0.760	Level 1
13,000.00	7,110.86	13,115.65	7,228.84	175.16	175.48	120.95	76.92	-6,290.18	229.37	-76.47	305.84	0.750	Level 1
13,100.00	7,110.49	13,215.64	7,228.52	177.96	178.29	120.81	76.16	-6,390.17	230.42	-80.73	311.15	0.741	Level 1
13,200.00	7,110.12	13,315.64	7,228.21	180.77	181.10	120.67	75.39	-6,490.16	231.47	-85.00	316.46	0.731	Level 1
13,300.00	7,109.76	13,415.63	7,227.90	183.58	183.92	120.54	74.62	-6,590.15	232.52	-89.27	321.79	0.723	Level 1
13,400.00	7,109.39	13,515.62	7,227.59	186.40	186.73	120.40	73.85	-6,690.14	233.57	-93.55	327.12	0.714	Level 1
13,500.00	7,109.03	13,615.62	7,227.28	189.21	189.55	120.27	73.09	-6,790.13	234.62	-97.84	332.46	0.706	Level 1
13,600.00	7,108.66	13,715.61	7,226.96	192.03	192.36	120.13	72.32	-6,890.12	235.68	-102.13	337.81	0.698	Level 1
13,700.00	7,108.29	13,815.60	7,226.65	194.84	195.18	120.00	71.55	-6,990.11	236.73	-106.44	343.17	0.690	Level 1
13,800.00	7,107.93	13,915.59	7,226.34	197.66	198.00	119.87	70.78	-7,090.09	237.79	-110.75	348.53	0.682	Level 1
13,900.00	7,107.56	14,015.59	7,226.03	200.48	200.82	119.74	70.02	-7,190.08	238.85	-115.06	353.91	0.675	Level 1
14,000.00	7,107.19	14,115.58	7,225.72	203.30	203.64	119.61	69.25	-7,290.07	239.90	-119.39	359.29	0.668	Level 1
14,100.00	7,106.83	14,215.57	7,225.41	206.12	206.47	119.48	68.48	-7,390.06	240.97	-123.72	364.68	0.661	Level 1
14,200.00	7,106.46	14,315.57	7,225.09	208.94	209.29	119.35	67.71	-7,490.05	242.03	-128.05	370.08	0.654	Level 1
14,300.00	7,106.10	14,415.56	7,224.78	211.76	212.12	119.22	66.95	-7,590.04	243.09	-132.39	375.48	0.647	Level 1
14,400.00	7,105.73	14,515.55	7,224.47	214.58	214.94	119.10	66.18	-7,690.03	244.15	-136.74	380.90	0.641	Level 1
14,500.00	7,105.36	14,615.54	7,224.16	217.40	217.77	118.98	65.41	-7,790.02	245.22	-141.10	386.31	0.635	Level 1
14,600.00	7,105.00	14,715.54	7,223.85	220.23	220.59	118.85	64.64	-7,890.01	246.28	-145.46	391.74	0.629	Level 1
14,700.00	7,104.63	14,815.53	7,223.53	223.05	223.42	118.73	63.88	-7,990.00	247.35	-149.82	397.17	0.623	Level 1
14,800.00	7,104.27	14,915.52	7,223.22	225.88	226.25	118.61	63.11	-8,089.99	248.42	-154.19	402.61	0.617	Level 1
14,872.41	7,104.00	14,987.93	7,223.00	227.93	228.30	118.52	62.55	-8,162.39	249.19	-157.36	406.55	0.613	Level 1, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-179.52	-200.01	-1.67	200.02					
100.00	100.00	101.00	100.00	3.28	3.28	-179.52	-200.01	-1.67	200.02	193.45	6.57	30.446		
200.00	200.00	199.00	200.00	3.34	3.34	-179.52	-200.01	-1.67	200.02	193.35	6.67	29.973	CC, ES	
300.00	300.00	292.54	293.52	3.44	3.43	-179.48	-201.50	-1.83	201.61	194.73	6.89	29.282		
400.00	400.00	385.81	386.68	3.60	3.57	-179.36	-206.00	-2.31	206.44	199.24	7.20	28.660		
500.00	500.00	478.69	479.25	3.81	3.75	-179.17	-213.48	-3.11	214.51	206.90	7.61	28.174		
600.00	599.98	570.99	570.96	4.04	3.96	-89.15	-223.87	-4.21	225.75	217.66	8.09	27.901		
700.00	699.95	662.54	661.53	4.30	4.20	-89.40	-237.06	-5.62	240.16	231.53	8.62	27.848		
800.00	799.92	753.16	750.73	4.59	4.48	-89.56	-252.95	-7.31	257.69	248.49	9.20	28.007		
900.00	899.89	842.69	838.31	4.90	4.79	-89.64	-271.39	-9.28	278.29	268.49	9.81	28.376		
1,000.00	999.86	939.49	932.63	5.23	5.15	-89.67	-293.03	-11.59	300.64	290.20	10.44	28.810		
1,100.00	1,099.83	1,036.96	1,027.61	5.58	5.53	-89.71	-314.82	-13.91	322.99	311.89	11.10	29.092		
1,200.00	1,199.80	1,134.42	1,122.58	5.94	5.94	-89.73	-336.60	-16.24	345.35	333.55	11.80	29.267		
1,300.00	1,299.77	1,231.89	1,217.56	6.30	6.36	-89.76	-358.39	-18.56	367.70	355.18	12.52	29.362		
1,400.00	1,399.73	1,329.36	1,312.53	6.68	6.79	-89.78	-380.18	-20.88	390.06	376.79	13.27	29.399		
1,500.00	1,499.70	1,426.83	1,407.50	7.07	7.23	-89.80	-401.97	-23.21	412.41	398.38	14.03	29.395		
1,600.00	1,599.67	1,524.30	1,502.48	7.46	7.68	-89.82	-423.76	-25.53	434.77	419.96	14.81	29.361		
1,700.00	1,699.64	1,621.77	1,597.45	7.85	8.13	-89.83	-445.55	-27.85	457.12	441.52	15.60	29.305		
1,800.00	1,799.61	1,719.24	1,692.43	8.25	8.59	-89.84	-467.34	-30.18	479.47	463.07	16.40	29.236		
1,900.00	1,899.58	1,816.71	1,787.40	8.66	9.06	-89.86	-489.13	-32.50	501.83	484.62	17.21	29.156		
2,000.00	1,999.55	1,914.18	1,882.38	9.06	9.53	-89.87	-510.92	-34.82	524.18	506.15	18.03	29.071		
2,100.00	2,099.52	2,011.65	1,977.35	9.47	10.00	-89.88	-532.71	-37.15	546.54	527.68	18.86	28.981		
2,200.00	2,199.48	2,109.12	2,072.32	9.89	10.48	-89.89	-554.49	-39.47	568.89	549.20	19.69	28.891		
2,300.00	2,299.45	2,206.59	2,167.30	10.30	10.96	-89.90	-576.28	-41.79	591.25	570.72	20.53	28.799		
2,400.00	2,399.42	2,304.06	2,262.27	10.72	11.44	-89.91	-598.07	-44.12	613.60	592.23	21.37	28.709		
2,500.00	2,499.39	2,401.53	2,357.25	11.14	11.93	-89.92	-619.86	-46.44	635.96	613.74	22.22	28.620		
2,600.00	2,599.36	2,501.01	2,452.22	11.56	12.42	-89.92	-641.65	-48.77	658.31	635.23	23.08	28.521		
2,700.00	2,699.33	2,603.54	2,547.19	11.98	12.94	-89.93	-663.44	-51.09	680.67	656.71	23.96	28.408		
2,800.00	2,799.30	2,693.93	2,642.17	12.41	13.39	-89.94	-685.23	-53.41	703.02	678.23	24.79	28.364		
2,900.00	2,899.27	2,808.60	2,737.14	12.83	13.97	-89.94	-707.02	-55.74	725.38	699.65	25.73	28.196		
3,000.00	2,999.23	2,888.87	2,832.12	13.26	14.37	-89.95	-728.81	-58.06	747.73	721.22	26.51	28.206		
3,100.00	3,099.20	2,986.34	2,927.09	13.68	14.87	-89.95	-750.60	-60.38	770.08	742.71	27.38	28.131		
3,200.00	3,199.17	3,083.81	3,022.07	14.11	15.36	-89.96	-772.38	-62.71	792.44	764.20	28.24	28.058		
3,300.00	3,299.14	3,181.28	3,117.04	14.54	15.85	-89.96	-794.17	-65.03	814.79	785.68	29.11	27.988		
3,400.00	3,399.11	3,278.75	3,212.01	14.97	16.35	-89.97	-815.96	-67.35	837.15	807.17	29.98	27.921		
3,500.00	3,499.08	3,376.22	3,306.99	15.40	16.85	-89.97	-837.75	-69.68	859.50	828.65	30.86	27.855		
3,600.00	3,599.05	3,473.69	3,401.96	15.83	17.34	-89.98	-859.54	-72.00	881.86	850.13	31.73	27.792		
3,700.00	3,699.02	3,571.16	3,496.94	16.26	17.84	-89.98	-881.33	-74.32	904.21	871.61	32.61	27.732		
3,800.00	3,798.98	3,668.63	3,591.91	16.69	18.34	-89.98	-903.12	-76.65	926.57	893.09	33.48	27.673		
3,900.00	3,898.95	3,766.10	3,686.89	17.12	18.84	-89.99	-924.91	-78.97	948.92	914.56	34.36	27.617		
4,000.00	3,998.92	3,863.57	3,781.86	17.55	19.33	-89.99	-946.70	-81.30	971.28	936.04	35.24	27.563		
4,100.00	4,098.89	3,961.03	3,876.83	17.98	19.83	-89.99	-968.49	-83.62	993.63	957.51	36.12	27.510		
4,200.00	4,198.86	4,058.50	3,971.81	18.42	20.33	-90.00	-990.28	-85.94	1,015.99	978.99	37.00	27.459		
4,300.00	4,298.83	4,155.97	4,066.78	18.85	20.83	-90.00	-1,012.06	-88.27	1,038.34	1,000.46	37.88	27.411		
4,400.00	4,398.80	4,253.44	4,161.76	19.28	21.33	-90.00	-1,033.85	-90.59	1,060.70	1,021.93	38.76	27.363		
4,500.00	4,498.77	4,350.91	4,256.73	19.72	21.83	-90.00	-1,055.64	-92.91	1,083.05	1,043.40	39.65	27.318		
4,600.00	4,598.73	4,448.38	4,351.70	20.15	22.33	-90.01	-1,077.43	-95.24	1,105.41	1,064.88	40.53	27.274		
4,700.00	4,698.70	4,545.85	4,446.68	20.58	22.84	-90.01	-1,099.22	-97.56	1,127.76	1,086.35	41.41	27.231		
4,800.00	4,798.67	4,643.32	4,541.65	21.02	23.34	-90.01	-1,121.01	-99.88	1,150.12	1,107.82	42.30	27.190		
4,900.00	4,898.64	4,740.79	4,636.63	21.45	23.84	-90.01	-1,142.80	-102.21	1,172.47	1,129.28	43.19	27.150		
5,000.00	4,998.61	4,838.26	4,731.60	21.89	24.34	-90.02	-1,164.59	-104.53	1,194.82	1,150.75	44.07	27.111		
5,100.00	5,098.58	4,935.73	4,826.58	22.32	24.84	-90.02	-1,186.38	-106.85	1,217.18	1,172.22	44.96	27.074		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,198.55	5,033.20	4,921.55	22.76	25.34	-90.02	-1,208.17	-109.18	1,239.53	1,193.69	45.85	27.037		
5,300.00	5,298.52	5,130.67	5,016.52	23.20	25.85	-90.02	-1,229.95	-111.50	1,261.89	1,215.16	46.73	27.002		
5,400.00	5,398.49	5,228.14	5,111.50	23.63	26.35	-90.02	-1,251.74	-113.83	1,284.24	1,236.62	47.62	26.968		
5,500.00	5,498.45	5,325.60	5,206.47	24.07	26.85	-90.03	-1,273.53	-116.15	1,306.60	1,258.09	48.51	26.935		
5,600.00	5,598.42	5,423.07	5,301.45	24.50	27.36	-90.03	-1,295.32	-118.47	1,328.95	1,279.55	49.40	26.903		
5,700.00	5,698.39	5,520.54	5,396.42	24.94	27.86	-90.03	-1,317.11	-120.80	1,351.31	1,301.02	50.29	26.871		
5,800.00	5,798.36	5,618.01	5,491.40	25.38	28.36	-90.03	-1,338.90	-123.12	1,373.66	1,322.49	51.18	26.841		
5,900.00	5,898.33	5,715.48	5,586.37	25.81	28.87	-90.03	-1,360.69	-125.44	1,396.02	1,343.95	52.07	26.812		
6,000.00	5,998.30	5,812.95	5,681.34	26.25	29.37	-90.04	-1,382.48	-127.77	1,418.37	1,365.41	52.96	26.783		
6,100.00	6,098.27	5,910.42	5,776.32	26.69	29.87	-90.04	-1,404.27	-130.09	1,440.73	1,386.88	53.85	26.755		
6,200.00	6,198.24	6,007.89	5,871.29	27.12	30.38	-90.04	-1,426.06	-132.41	1,463.08	1,408.34	54.74	26.728		
6,300.00	6,298.20	6,105.36	5,966.27	27.56	30.88	-90.04	-1,447.84	-134.74	1,485.44	1,429.81	55.63	26.702		
6,400.00	6,398.17	6,202.83	6,061.24	28.00	31.38	-90.04	-1,469.63	-137.06	1,507.79	1,451.27	56.52	26.676		
6,500.00	6,498.14	6,300.30	6,156.22	28.43	31.89	-90.04	-1,491.42	-139.38	1,530.15	1,472.73	57.41	26.651		
6,600.00	6,597.68	6,402.48	6,250.95	28.88	32.42	-87.53	-1,513.16	-141.70	1,552.34	1,494.01	58.33	26.611		
6,700.00	6,694.68	6,507.30	6,343.69	29.32	32.96	-86.23	-1,534.43	-143.97	1,573.99	1,514.71	59.28	26.552		
6,800.00	6,786.74	6,583.49	6,432.16	29.77	33.35	-85.49	-1,554.73	-146.14	1,595.15	1,535.05	60.10	26.541		
6,900.00	6,871.61	6,679.36	6,525.37	30.24	33.85	-85.23	-1,576.14	-151.84	1,616.07	1,554.98	61.09	26.454		
7,000.00	6,947.19	6,788.94	6,629.59	30.74	34.39	-85.26	-1,600.18	-175.06	1,636.14	1,573.88	62.25	26.282		
7,100.00	7,011.62	6,912.20	6,740.17	31.32	34.94	-85.54	-1,625.84	-222.59	1,654.65	1,591.09	63.56	26.034		
7,200.00	7,063.31	7,052.77	6,852.62	32.03	35.49	-86.05	-1,652.14	-302.24	1,670.73	1,605.73	65.01	25.700		
7,300.00	7,101.00	7,213.63	6,956.76	32.89	36.03	-86.73	-1,676.80	-421.76	1,683.32	1,616.63	66.69	25.240		
7,400.00	7,123.74	7,394.59	7,034.85	33.93	36.63	-87.39	-1,695.75	-583.21	1,691.18	1,622.33	68.86	24.560		
7,500.00	7,131.00	7,589.30	7,065.96	35.10	37.75	-87.80	-1,704.13	-774.47	1,693.23	1,621.43	71.80	23.582		
7,600.00	7,130.63	7,706.08	7,065.78	36.44	38.89	-87.81	-1,704.77	-879.10	1,691.88	1,617.29	74.59	22.683		
7,700.00	7,130.26	7,806.09	7,065.55	37.94	40.15	-87.81	-1,705.37	-979.09	1,690.51	1,612.99	77.52	21.807		
7,800.00	7,129.90	7,906.10	7,065.32	39.59	41.61	-87.81	-1,705.97	-1,079.07	1,689.15	1,608.40	80.75	20.918		
7,900.00	7,129.53	8,006.11	7,065.09	41.37	43.24	-87.81	-1,706.57	-1,179.06	1,687.79	1,603.55	84.24	20.035		
8,000.00	7,129.17	8,106.11	7,064.86	43.27	45.01	-87.82	-1,707.17	-1,279.05	1,686.43	1,598.46	87.97	19.171		
8,100.00	7,128.80	8,206.12	7,064.63	45.27	46.90	-87.82	-1,707.77	-1,379.04	1,685.07	1,593.17	91.90	18.337		
8,200.00	7,128.43	8,306.13	7,064.40	47.36	48.89	-87.82	-1,708.36	-1,479.03	1,683.71	1,587.71	96.00	17.538		
8,300.00	7,128.07	8,406.14	7,064.17	49.52	50.96	-87.83	-1,708.96	-1,579.02	1,682.35	1,582.08	100.27	16.779		
8,400.00	7,127.70	8,506.15	7,063.94	51.75	53.11	-87.83	-1,709.56	-1,679.01	1,680.99	1,576.32	104.67	16.060		
8,500.00	7,127.33	8,593.84	7,063.71	54.04	55.05	-87.83	-1,710.16	-1,778.99	1,679.63	1,570.71	108.91	15.422		
8,600.00	7,126.97	8,706.17	7,063.48	56.38	57.60	-87.83	-1,710.76	-1,878.98	1,678.27	1,564.44	113.82	14.745		
8,700.00	7,126.60	8,806.18	7,063.25	58.77	59.92	-87.84	-1,711.36	-1,978.97	1,676.90	1,558.36	118.55	14.146		
8,800.00	7,126.24	8,906.19	7,063.02	61.19	62.29	-87.84	-1,711.96	-2,078.96	1,675.54	1,552.19	123.35	13.583		
8,900.00	7,125.87	9,006.20	7,062.79	63.65	64.70	-87.84	-1,712.56	-2,178.95	1,674.18	1,545.95	128.23	13.056		
9,000.00	7,125.50	9,106.21	7,062.56	66.15	67.15	-87.85	-1,713.15	-2,278.94	1,672.82	1,539.64	133.18	12.561		
9,100.00	7,125.14	9,206.22	7,062.33	68.67	69.63	-87.85	-1,713.75	-2,378.93	1,671.46	1,533.28	138.19	12.096		
9,200.00	7,124.77	9,306.23	7,062.10	71.21	72.13	-87.85	-1,714.35	-2,478.91	1,670.10	1,526.86	143.24	11.659		
9,300.00	7,124.41	9,406.24	7,061.87	73.78	74.67	-87.85	-1,714.95	-2,578.90	1,668.74	1,520.39	148.35	11.249		
9,400.00	7,124.04	9,506.24	7,061.64	76.37	77.22	-87.86	-1,715.55	-2,678.89	1,667.38	1,513.88	153.50	10.863		
9,500.00	7,123.67	9,606.25	7,061.41	78.98	79.80	-87.86	-1,716.15	-2,778.88	1,666.02	1,507.33	158.68	10.499		
9,600.00	7,123.31	9,706.26	7,061.18	81.60	82.39	-87.86	-1,716.75	-2,878.87	1,664.66	1,500.75	163.90	10.156		
9,700.00	7,122.94	9,806.27	7,060.95	84.24	85.00	-87.87	-1,717.35	-2,978.86	1,663.30	1,494.14	169.16	9.833		
9,800.00	7,122.57	9,906.28	7,060.72	86.90	87.63	-87.87	-1,717.94	-3,078.85	1,661.93	1,487.50	174.44	9.527		
9,900.00	7,122.21	10,006.29	7,060.49	89.56	90.27	-87.87	-1,718.54	-3,178.84	1,660.57	1,480.83	179.75	9.238		
10,000.00	7,121.84	10,106.30	7,060.26	92.24	92.93	-87.88	-1,719.14	-3,278.82	1,659.21	1,474.14	185.08	8.965		
10,100.00	7,121.48	10,206.31	7,060.03	94.92	95.59	-87.88	-1,719.74	-3,378.81	1,657.85	1,467.42	190.43	8.706		
10,200.00	7,121.11	10,306.32	7,059.79	97.62	98.27	-87.88	-1,720.34	-3,478.80	1,656.49	1,460.69	195.80	8.460		
10,300.00	7,120.74	10,406.33	7,059.56	100.32	100.96	-87.88	-1,720.94	-3,578.79	1,655.13	1,453.93	201.20	8.226		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,120.38	10,506.34	7,059.33	103.04	103.65	-87.89	-1,721.54	-3,678.78	1,653.77	1,447.16	206.60	8.005		
10,500.00	7,120.01	10,606.35	7,059.10	105.76	106.36	-87.89	-1,722.14	-3,778.77	1,652.41	1,440.38	212.03	7.793		
10,600.00	7,119.64	10,706.36	7,058.87	108.48	109.07	-87.89	-1,722.73	-3,878.76	1,651.05	1,433.58	217.47	7.592		
10,700.00	7,119.28	10,806.37	7,058.64	111.22	111.79	-87.90	-1,723.33	-3,978.74	1,649.69	1,426.77	222.92	7.400		
10,800.00	7,118.91	10,906.38	7,058.41	113.96	114.52	-87.90	-1,723.93	-4,078.73	1,648.33	1,419.94	228.39	7.217		
10,900.00	7,118.55	11,006.38	7,058.18	116.70	117.25	-87.90	-1,724.53	-4,178.72	1,646.96	1,413.10	233.86	7.042		
11,000.00	7,118.18	11,106.39	7,057.95	119.45	119.99	-87.91	-1,725.13	-4,278.71	1,645.60	1,406.25	239.35	6.875		
11,100.00	7,117.81	11,206.40	7,057.72	122.21	122.74	-87.91	-1,725.73	-4,378.70	1,644.24	1,399.39	244.85	6.715		
11,200.00	7,117.45	11,306.41	7,057.49	124.97	125.49	-87.91	-1,726.33	-4,478.69	1,642.88	1,392.53	250.36	6.562		
11,300.00	7,117.08	11,406.42	7,057.26	127.73	128.24	-87.91	-1,726.93	-4,578.68	1,641.52	1,385.65	255.87	6.415		
11,400.00	7,116.72	11,506.43	7,057.03	130.50	131.00	-87.92	-1,727.53	-4,678.66	1,640.16	1,378.76	261.40	6.275		
11,500.00	7,116.35	11,606.44	7,056.80	133.27	133.76	-87.92	-1,728.12	-4,778.65	1,638.80	1,371.87	266.93	6.139		
11,600.00	7,115.98	11,706.45	7,056.57	136.04	136.53	-87.92	-1,728.72	-4,878.64	1,637.44	1,364.97	272.47	6.010		
11,700.00	7,115.62	11,806.46	7,056.34	138.82	139.30	-87.93	-1,729.32	-4,978.63	1,636.08	1,358.06	278.02	5.885		
11,800.00	7,115.25	11,906.47	7,056.11	141.60	142.08	-87.93	-1,729.92	-5,078.62	1,634.72	1,351.15	283.57	5.765		
11,900.00	7,114.88	12,006.48	7,055.88	144.39	144.85	-87.93	-1,730.52	-5,178.61	1,633.36	1,344.23	289.13	5.649		
12,000.00	7,114.52	12,106.49	7,055.65	147.17	147.63	-87.94	-1,731.12	-5,278.60	1,632.00	1,337.30	294.69	5.538		
12,100.00	7,114.15	12,206.50	7,055.42	149.96	150.42	-87.94	-1,731.72	-5,378.59	1,630.63	1,330.37	300.26	5.431		
12,200.00	7,113.79	12,306.51	7,055.19	152.75	153.21	-87.94	-1,732.32	-5,478.57	1,629.27	1,323.43	305.84	5.327		
12,300.00	7,113.42	12,406.51	7,054.96	155.55	155.99	-87.94	-1,732.91	-5,578.56	1,627.91	1,316.49	311.42	5.227		
12,400.00	7,113.05	12,493.48	7,054.73	158.34	158.42	-87.95	-1,733.51	-5,678.55	1,626.55	1,309.91	316.64	5.137		
12,500.00	7,112.69	12,606.53	7,054.50	161.14	161.58	-87.95	-1,734.11	-5,778.54	1,625.19	1,302.60	322.59	5.038		
12,600.00	7,112.32	12,706.54	7,054.27	163.94	164.38	-87.95	-1,734.71	-5,878.53	1,623.83	1,295.64	328.19	4.948		
12,700.00	7,111.96	12,806.55	7,054.04	166.74	167.17	-87.96	-1,735.31	-5,978.52	1,622.47	1,288.68	333.79	4.861		
12,800.00	7,111.59	12,906.56	7,053.81	169.54	169.98	-87.96	-1,735.91	-6,078.51	1,621.11	1,281.72	339.39	4.777		
12,900.00	7,111.22	13,006.57	7,053.58	172.35	172.78	-87.96	-1,736.51	-6,178.49	1,619.75	1,274.76	344.99	4.695		
13,000.00	7,110.86	13,106.58	7,053.34	175.16	175.58	-87.97	-1,737.11	-6,278.48	1,618.39	1,267.79	350.60	4.616		
13,100.00	7,110.49	13,206.59	7,053.11	177.96	178.39	-87.97	-1,737.70	-6,378.47	1,617.03	1,260.82	356.21	4.540		
13,200.00	7,110.12	13,306.60	7,052.88	180.77	181.20	-87.97	-1,738.30	-6,478.46	1,615.67	1,253.84	361.83	4.465		
13,300.00	7,109.76	13,406.61	7,052.65	183.58	184.00	-87.98	-1,738.90	-6,578.45	1,614.31	1,246.86	367.44	4.393		
13,400.00	7,109.39	13,506.62	7,052.42	186.40	186.82	-87.98	-1,739.50	-6,678.44	1,612.94	1,239.88	373.06	4.324		
13,500.00	7,109.03	13,606.63	7,052.19	189.21	189.63	-87.98	-1,740.10	-6,778.43	1,611.58	1,232.90	378.69	4.256		
13,600.00	7,108.66	13,706.64	7,051.96	192.03	192.44	-87.98	-1,740.70	-6,878.42	1,610.22	1,225.91	384.31	4.190		
13,700.00	7,108.29	13,806.64	7,051.73	194.84	195.26	-87.99	-1,741.30	-6,978.40	1,608.86	1,218.92	389.94	4.126		
13,800.00	7,107.93	13,906.65	7,051.50	197.66	198.07	-87.99	-1,741.90	-7,078.39	1,607.50	1,211.93	395.57	4.064		
13,900.00	7,107.56	14,006.66	7,051.27	200.48	200.89	-87.99	-1,742.49	-7,178.38	1,606.14	1,204.94	401.20	4.003		
14,000.00	7,107.19	14,106.67	7,051.04	203.30	203.71	-88.00	-1,743.09	-7,278.37	1,604.78	1,197.94	406.84	3.945		
14,100.00	7,106.83	14,206.68	7,050.81	206.12	206.53	-88.00	-1,743.69	-7,378.36	1,603.42	1,190.94	412.47	3.887		
14,200.00	7,106.46	14,306.69	7,050.58	208.94	209.35	-88.00	-1,744.29	-7,478.35	1,602.06	1,183.94	418.11	3.832		
14,300.00	7,106.10	14,406.70	7,050.35	211.76	212.17	-88.01	-1,744.89	-7,578.34	1,600.70	1,176.94	423.75	3.777		
14,400.00	7,105.73	14,506.71	7,050.12	214.58	214.99	-88.01	-1,745.49	-7,678.32	1,599.34	1,169.94	429.40	3.725		
14,500.00	7,105.36	14,606.72	7,049.89	217.40	217.82	-88.01	-1,746.09	-7,778.31	1,597.98	1,162.93	435.04	3.673		
14,600.00	7,105.00	14,693.27	7,049.66	220.23	220.26	-88.02	-1,746.69	-7,878.30	1,596.62	1,156.31	440.31	3.626		
14,700.00	7,104.63	14,806.74	7,049.43	223.05	223.47	-88.02	-1,747.28	-7,978.29	1,595.26	1,148.92	446.34	3.574		
14,800.00	7,104.27	14,893.25	7,049.20	225.88	225.91	-88.02	-1,747.88	-8,078.28	1,593.89	1,142.29	451.60	3.529		
14,872.41	7,104.00	14,965.66	7,049.03	227.93	227.96	-88.03	-1,748.32	-8,150.68	1,592.91	1,137.21	455.69	3.496 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2.00	0.00	3.28	3.28	-179.52	-299.83	-2.50	299.84					
100.00	100.00	102.00	100.00	3.28	3.29	-179.52	-299.83	-2.50	299.84	293.27	6.57	45.639		
200.00	200.00	198.00	200.00	3.34	3.34	-179.52	-299.83	-2.50	299.84	293.17	6.67	44.937 CC, ES		
300.00	300.00	288.70	290.68	3.44	3.43	-179.51	-301.20	-2.59	301.36	294.48	6.88	43.804		
400.00	400.00	379.03	380.92	3.60	3.56	-179.46	-305.41	-2.86	306.02	298.83	7.19	42.562		
500.00	500.00	469.01	470.62	3.81	3.73	-179.39	-312.43	-3.30	313.82	306.23	7.59	41.348		
600.00	599.98	558.46	559.52	4.04	3.93	-89.41	-322.18	-3.92	324.72	316.67	8.06	40.310		
700.00	699.95	647.21	647.39	4.30	4.16	-89.67	-334.60	-4.71	338.70	330.12	8.58	39.497		
800.00	799.92	735.11	734.00	4.59	4.42	-89.88	-349.56	-5.66	355.72	346.59	9.14	38.923		
900.00	899.89	822.01	819.13	4.90	4.72	-90.05	-366.96	-6.77	375.75	366.01	9.73	38.602		
1,000.00	999.86	907.77	902.60	5.23	5.03	-90.17	-386.64	-8.02	398.71	388.36	10.35	38.526		
1,100.00	1,099.83	992.27	984.21	5.58	5.36	-90.25	-408.47	-9.41	424.54	413.56	10.98	38.667		
1,200.00	1,199.80	1,075.39	1,063.83	5.94	5.72	-90.30	-432.27	-10.92	453.19	441.57	11.62	39.008		
1,300.00	1,299.77	1,157.01	1,141.31	6.30	6.09	-90.32	-457.88	-12.55	484.57	472.31	12.26	39.529		
1,400.00	1,399.73	1,238.11	1,217.54	6.68	6.48	-90.32	-485.49	-14.30	518.60	505.70	12.90	40.197		
1,500.00	1,499.70	1,331.72	1,305.16	7.07	6.95	-90.31	-518.40	-16.40	553.76	540.13	13.63	40.636		
1,600.00	1,599.67	1,425.34	1,392.77	7.46	7.44	-90.30	-551.31	-18.49	588.91	574.54	14.38	40.967		
1,700.00	1,699.64	1,518.96	1,480.39	7.85	7.94	-90.30	-584.22	-20.58	624.07	608.93	15.14	41.215		
1,800.00	1,799.61	1,612.57	1,568.00	8.25	8.44	-90.29	-617.14	-22.67	659.22	643.30	15.92	41.398		
1,900.00	1,899.58	1,706.19	1,655.62	8.66	8.96	-90.28	-650.05	-24.76	694.38	677.66	16.72	41.530		
2,000.00	1,999.55	1,800.19	1,743.23	9.06	9.49	-90.28	-682.96	-26.85	729.54	712.01	17.53	41.618		
2,100.00	2,099.52	1,906.58	1,830.85	9.47	10.09	-90.27	-715.87	-28.95	764.69	746.28	18.41	41.539		
2,200.00	2,199.48	1,987.04	1,918.47	9.89	10.55	-90.27	-748.78	-31.04	799.85	780.68	19.17	41.719		
2,300.00	2,299.45	2,080.66	2,006.08	10.30	11.09	-90.27	-781.69	-33.13	835.00	815.00	20.01	41.736		
2,400.00	2,399.42	2,174.27	2,093.70	10.72	11.63	-90.26	-814.61	-35.22	870.16	849.31	20.85	41.739		
2,500.00	2,499.39	2,267.89	2,181.31	11.14	12.18	-90.26	-847.52	-37.31	905.32	883.62	21.70	41.729		
2,600.00	2,599.36	2,361.51	2,268.93	11.56	12.73	-90.25	-880.43	-39.40	940.47	917.92	22.55	41.710		
2,700.00	2,699.33	2,455.12	2,356.54	11.98	13.28	-90.25	-913.34	-41.50	975.63	952.22	23.40	41.685		
2,800.00	2,799.30	2,548.74	2,444.16	12.41	13.83	-90.25	-946.25	-43.59	1,010.78	986.52	24.27	41.653		
2,900.00	2,899.27	2,642.36	2,531.77	12.83	14.39	-90.25	-979.16	-45.68	1,045.94	1,020.81	25.13	41.618		
3,000.00	2,999.23	2,735.97	2,619.39	13.26	14.94	-90.24	-1,012.08	-47.77	1,081.10	1,055.10	26.00	41.580		
3,100.00	3,099.20	2,829.59	2,707.01	13.68	15.50	-90.24	-1,044.99	-49.86	1,116.25	1,089.38	26.87	41.539		
3,200.00	3,199.17	2,923.21	2,794.62	14.11	16.06	-90.24	-1,077.90	-51.96	1,151.41	1,123.66	27.75	41.497		
3,300.00	3,299.14	3,016.82	2,882.24	14.54	16.62	-90.24	-1,110.81	-54.05	1,186.56	1,157.94	28.62	41.453		
3,400.00	3,399.11	3,110.44	2,969.85	14.97	17.18	-90.24	-1,143.72	-56.14	1,221.72	1,192.22	29.50	41.409		
3,500.00	3,499.08	3,204.06	3,057.47	15.40	17.74	-90.23	-1,176.63	-58.23	1,256.88	1,226.49	30.39	41.365		
3,600.00	3,599.05	3,302.33	3,145.08	15.83	18.34	-90.23	-1,209.55	-60.32	1,292.03	1,260.74	31.29	41.288		
3,700.00	3,699.02	3,408.71	3,232.70	16.26	18.98	-90.23	-1,242.46	-62.41	1,327.19	1,294.94	32.24	41.160		
3,800.00	3,798.98	3,484.90	3,320.32	16.69	19.44	-90.23	-1,275.37	-64.51	1,362.34	1,329.30	33.04	41.232		
3,900.00	3,898.95	3,578.52	3,407.93	17.12	20.00	-90.23	-1,308.28	-66.60	1,397.50	1,363.57	33.93	41.188		
4,000.00	3,998.92	3,672.14	3,495.55	17.55	20.57	-90.23	-1,341.19	-68.69	1,432.66	1,397.84	34.82	41.145		
4,100.00	4,098.89	3,765.75	3,583.16	17.98	21.14	-90.22	-1,374.10	-70.78	1,467.81	1,432.10	35.71	41.103		
4,200.00	4,198.86	3,859.37	3,670.78	18.42	21.70	-90.22	-1,407.02	-72.87	1,502.97	1,466.36	36.60	41.061		
4,300.00	4,298.83	3,952.99	3,758.39	18.85	22.27	-90.22	-1,439.93	-74.97	1,538.12	1,500.63	37.50	41.020		
4,400.00	4,398.80	4,046.60	3,846.01	19.28	22.84	-90.22	-1,472.84	-77.06	1,573.28	1,534.89	38.39	40.980		
4,500.00	4,498.77	4,140.22	3,933.62	19.72	23.41	-90.22	-1,505.75	-79.15	1,608.44	1,569.15	39.29	40.940		
4,600.00	4,598.73	4,233.84	4,021.24	20.15	23.98	-90.22	-1,538.66	-81.24	1,643.59	1,603.41	40.18	40.902		
4,700.00	4,698.70	4,327.45	4,108.86	20.58	24.55	-90.22	-1,571.57	-83.33	1,678.75	1,637.67	41.08	40.864		
4,800.00	4,798.67	4,421.07	4,196.47	21.02	25.12	-90.22	-1,604.49	-85.42	1,713.90	1,671.92	41.98	40.827		
4,900.00	4,898.64	4,514.69	4,284.09	21.45	25.69	-90.22	-1,637.40	-87.52	1,749.06	1,706.18	42.88	40.791		
5,000.00	4,998.61	4,608.30	4,371.70	21.89	26.26	-90.22	-1,670.31	-89.61	1,784.22	1,740.44	43.78	40.755		
5,100.00	5,098.58	4,701.92	4,459.32	22.32	26.83	-90.21	-1,703.22	-91.70	1,819.37	1,774.69	44.68	40.721		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,198.55	4,804.46	4,546.93	22.76	27.46	-90.21	-1,736.13	-93.79	1,854.53	1,808.90	45.63	40.645		
5,300.00	5,298.52	4,889.15	4,634.55	23.20	27.97	-90.21	-1,769.04	-95.88	1,889.68	1,843.20	46.48	40.654		
5,400.00	5,398.49	4,982.77	4,722.17	23.63	28.54	-90.21	-1,801.96	-97.98	1,924.84	1,877.46	47.38	40.621		
5,500.00	5,498.45	5,076.39	4,809.78	24.07	29.12	-90.21	-1,834.87	-100.07	1,960.00	1,911.71	48.29	40.590		
5,600.00	5,598.42	5,170.00	4,897.40	24.50	29.69	-90.21	-1,867.78	-102.16	1,995.15	1,945.96	49.19	40.559		
5,700.00	5,698.39	5,263.62	4,985.01	24.94	30.26	-90.21	-1,900.69	-104.25	2,030.31	1,980.21	50.10	40.529		
5,800.00	5,798.36	5,357.24	5,072.63	25.38	30.83	-90.21	-1,933.60	-106.34	2,065.46	2,014.46	51.00	40.499		
5,900.00	5,898.33	5,450.85	5,160.24	25.81	31.40	-90.21	-1,966.52	-108.43	2,100.62	2,048.72	51.91	40.470		
6,000.00	5,998.30	5,544.47	5,247.86	26.25	31.98	-90.21	-1,999.43	-110.53	2,135.78	2,082.97	52.81	40.442		
6,100.00	6,098.27	5,638.08	5,335.48	26.69	32.55	-90.21	-2,032.34	-112.62	2,170.93	2,117.22	53.72	40.414		
6,200.00	6,198.24	5,731.70	5,423.09	27.12	33.12	-90.21	-2,065.25	-114.71	2,206.09	2,151.47	54.62	40.387		
6,300.00	6,298.20	5,825.32	5,510.71	27.56	33.70	-90.21	-2,098.16	-116.80	2,241.24	2,185.71	55.53	40.361		
6,400.00	6,398.17	5,918.93	5,598.32	28.00	34.27	-90.21	-2,131.07	-118.89	2,276.40	2,219.96	56.44	40.335		
6,500.00	6,498.14	6,012.55	5,685.94	28.43	34.84	-90.20	-2,163.99	-120.98	2,311.56	2,254.21	57.35	40.309		
6,600.00	6,597.68	6,105.94	5,773.34	28.88	35.41	-86.47	-2,196.82	-123.07	2,346.53	2,288.27	58.26	40.278		
6,700.00	6,694.68	6,202.60	5,858.94	29.32	36.01	-83.66	-2,228.97	-125.12	2,380.66	2,321.46	59.20	40.215		
6,800.00	6,786.74	6,284.68	5,940.63	29.77	36.51	-81.37	-2,259.66	-127.07	2,413.50	2,353.43	60.07	40.176		
6,900.00	6,871.61	6,365.64	6,016.39	30.24	37.01	-79.47	-2,288.12	-128.87	2,444.87	2,383.90	60.96	40.104		
7,000.00	6,947.19	6,438.27	6,084.36	30.74	37.45	-77.84	-2,313.65	-130.50	2,474.77	2,412.91	61.86	40.006		
7,100.00	7,011.62	6,500.78	6,142.88	31.32	37.83	-76.35	-2,335.63	-131.89	2,503.34	2,440.55	62.79	39.870		
7,200.00	7,063.31	6,551.65	6,190.48	32.03	38.15	-74.88	-2,353.51	-133.03	2,530.72	2,466.94	63.78	39.679		
7,300.00	7,101.00	6,589.62	6,226.01	32.89	38.38	-73.34	-2,366.86	-133.88	2,557.02	2,492.17	64.85	39.429		
7,400.00	7,123.74	6,613.74	6,248.59	33.93	38.53	-71.64	-2,375.34	-134.42	2,582.22	2,516.22	66.00	39.126		
7,500.00	7,131.00	6,623.44	6,257.67	35.10	38.59	-69.79	-2,378.75	-134.63	2,606.13	2,538.94	67.19	38.790		
7,600.00	7,130.63	6,626.02	6,260.08	36.44	38.60	-69.85	-2,379.66	-134.69	2,631.14	2,562.69	68.45	38.439		
7,700.00	7,130.26	6,628.60	6,262.50	37.94	38.62	-69.91	-2,380.56	-134.75	2,659.68	2,589.86	69.82	38.092		
7,800.00	7,129.90	6,631.18	6,264.91	39.59	38.63	-69.97	-2,381.47	-134.81	2,691.64	2,620.36	71.27	37.764		
7,900.00	7,129.53	6,633.76	6,267.32	41.37	38.65	-70.03	-2,382.38	-134.87	2,726.88	2,654.11	72.78	37.468		
8,000.00	7,129.17	6,636.42	6,269.73	43.27	38.66	-70.09	-2,383.29	-134.92	2,762.12	2,687.89	74.33	37.161		
8,100.00	7,128.80	6,639.09	6,272.14	45.27	38.67	-70.15	-2,384.20	-134.97	2,797.36	2,721.60	75.92	36.844		
8,200.00	7,128.43	6,641.76	6,274.55	47.36	38.68	-70.21	-2,385.11	-135.02	2,832.59	2,755.81	77.54	36.517		
8,300.00	7,128.07	6,644.42	6,276.96	49.52	38.69	-70.27	-2,386.02	-135.07	2,867.82	2,789.92	79.19	36.180		
8,400.00	7,127.70	6,647.09	6,279.37	51.75	38.70	-70.33	-2,386.93	-135.12	2,903.05	2,824.13	80.87	35.833		
8,500.00	7,127.33	6,649.76	6,281.78	54.04	38.71	-70.39	-2,387.84	-135.17	2,938.28	2,858.34	82.58	35.486		
8,600.00	7,126.97	6,652.42	6,284.19	56.38	38.72	-70.45	-2,388.75	-135.22	2,973.51	2,892.55	84.31	35.139		
8,700.00	7,126.60	6,655.09	6,286.60	58.77	38.73	-70.51	-2,389.66	-135.27	3,008.74	2,926.76	86.06	34.792		
8,800.00	7,126.24	6,657.76	6,289.01	61.19	38.74	-70.57	-2,390.57	-135.32	3,043.97	2,960.97	87.83	34.445		
8,900.00	7,125.87	6,660.42	6,291.42	63.65	38.75	-70.63	-2,391.48	-135.37	3,079.20	2,995.18	89.61	34.098		
9,000.00	7,125.50	6,663.09	6,293.83	66.15	38.76	-70.69	-2,392.39	-135.42	3,114.43	3,029.39	91.40	33.751		
9,100.00	7,125.14	6,665.76	6,296.24	68.67	38.77	-70.75	-2,393.30	-135.47	3,149.66	3,063.60	93.20	33.404		
9,200.00	7,124.77	6,668.42	6,298.65	71.21	38.78	-70.81	-2,394.21	-135.52	3,184.89	3,097.81	95.01	33.057		
9,300.00	7,124.41	6,671.09	6,301.06	73.78	38.79	-70.87	-2,395.12	-135.57	3,220.12	3,132.02	96.83	32.710		
9,400.00	7,124.04	6,673.76	6,303.47	76.37	38.80	-70.93	-2,396.03	-135.62	3,255.35	3,166.23	98.66	32.363		
9,500.00	7,123.67	6,676.42	6,305.88	78.98	38.81	-70.99	-2,396.94	-135.67	3,290.58	3,200.44	100.50	32.016		
9,600.00	7,123.31	6,679.09	6,308.29	81.60	38.82	-71.05	-2,397.85	-135.72	3,325.81	3,234.65	102.35	31.669		
9,700.00	7,122.94	6,681.76	6,310.70	84.24	38.83	-71.11	-2,398.76	-135.77	3,361.04	3,268.86	104.21	31.322		
9,800.00	7,122.57	6,684.42	6,313.11	86.90	38.84	-71.17	-2,399.67	-135.82	3,396.27	3,303.07	106.07	30.975		
9,900.00	7,122.21	6,687.09	6,315.52	89.56	38.85	-71.23	-2,400.58	-135.87	3,431.50	3,337.28	107.94	30.628		
10,000.00	7,121.84	6,689.76	6,317.93	92.24	38.86	-71.29	-2,401.49	-135.92	3,466.73	3,371.49	109.81	30.281		
10,100.00	7,121.48	6,692.42	6,320.34	94.92	38.87	-71.35	-2,402.40	-135.97	3,501.96	3,405.70	111.68	29.934		
10,200.00	7,121.11	6,695.09	6,322.75	97.62	38.88	-71.41	-2,403.31	-136.02	3,537.19	3,439.91	113.56	29.587		
10,300.00	7,120.74	6,697.76	6,325.16	100.32	38.89	-71.47	-2,404.22	-136.07	3,572.42	3,474.12	115.43	29.240		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,400.00	7,120.38	10,938.20	7,232.52	103.04	104.55	-92.38	-2,772.23	-3,673.48	2,705.67	2,499.05	206.62	13.095		
10,500.00	7,120.01	11,038.19	7,232.02	105.76	107.22	-92.38	-2,772.82	-3,773.46	2,704.30	2,492.29	212.01	12.755		
10,600.00	7,119.64	11,138.18	7,231.52	108.48	109.89	-92.38	-2,773.40	-3,873.45	2,702.93	2,485.51	217.42	12.432		
10,700.00	7,119.28	11,238.17	7,231.02	111.22	112.57	-92.37	-2,773.99	-3,973.44	2,701.55	2,478.71	222.85	12.123		
10,800.00	7,118.91	11,338.16	7,230.52	113.96	115.26	-92.37	-2,774.58	-4,073.43	2,700.18	2,471.90	228.28	11.828		
10,900.00	7,118.55	11,438.15	7,230.02	116.70	117.96	-92.37	-2,775.17	-4,173.41	2,698.81	2,465.08	233.74	11.546		
11,000.00	7,118.18	11,538.14	7,229.52	119.45	120.66	-92.37	-2,775.76	-4,273.40	2,697.44	2,458.24	239.20	11.277		
11,100.00	7,117.81	11,638.13	7,229.02	122.21	123.37	-92.37	-2,776.34	-4,373.39	2,696.07	2,451.39	244.67	11.019		
11,200.00	7,117.45	11,738.12	7,228.52	124.97	126.09	-92.37	-2,776.93	-4,473.38	2,694.70	2,444.54	250.16	10.772		
11,300.00	7,117.08	11,838.11	7,228.02	127.73	128.82	-92.36	-2,777.52	-4,573.36	2,693.32	2,437.67	255.66	10.535		
11,400.00	7,116.72	11,938.10	7,227.52	130.50	131.55	-92.36	-2,778.11	-4,673.35	2,691.95	2,430.79	261.16	10.308		
11,500.00	7,116.35	12,038.09	7,227.02	133.27	134.28	-92.36	-2,778.70	-4,773.34	2,690.58	2,423.91	266.67	10.089		
11,600.00	7,115.98	12,138.08	7,226.52	136.04	137.02	-92.36	-2,779.29	-4,873.33	2,689.21	2,417.01	272.19	9.880		
11,700.00	7,115.62	12,238.07	7,226.01	138.82	139.77	-92.36	-2,779.87	-4,973.32	2,687.84	2,410.11	277.72	9.678		
11,800.00	7,115.25	12,338.06	7,225.51	141.60	142.52	-92.36	-2,780.46	-5,073.30	2,686.46	2,403.21	283.26	9.484		
11,900.00	7,114.88	12,438.05	7,225.01	144.39	145.28	-92.35	-2,781.05	-5,173.29	2,685.09	2,396.29	288.80	9.297		
12,000.00	7,114.52	12,538.04	7,224.51	147.17	148.03	-92.35	-2,781.64	-5,273.28	2,683.72	2,389.37	294.35	9.117		
12,100.00	7,114.15	12,638.04	7,224.01	149.96	150.80	-92.35	-2,782.23	-5,373.27	2,682.35	2,382.44	299.91	8.944		
12,200.00	7,113.79	12,738.03	7,223.51	152.75	153.56	-92.35	-2,782.81	-5,473.25	2,680.98	2,375.51	305.47	8.777		
12,300.00	7,113.42	12,838.02	7,223.01	155.55	156.33	-92.35	-2,783.40	-5,573.24	2,679.61	2,368.57	311.03	8.615		
12,400.00	7,113.05	12,938.01	7,222.51	158.34	159.10	-92.35	-2,783.99	-5,673.23	2,678.23	2,361.63	316.60	8.459		
12,500.00	7,112.69	13,038.00	7,222.01	161.14	161.88	-92.34	-2,784.58	-5,773.22	2,676.86	2,354.68	322.18	8.309		
12,600.00	7,112.32	13,137.99	7,221.51	163.94	164.66	-92.34	-2,785.17	-5,873.20	2,675.49	2,347.73	327.76	8.163		
12,700.00	7,111.96	13,237.98	7,221.01	166.74	167.44	-92.34	-2,785.75	-5,973.19	2,674.12	2,340.77	333.35	8.022		
12,800.00	7,111.59	13,337.97	7,220.51	169.54	170.22	-92.34	-2,786.34	-6,073.18	2,672.75	2,333.81	338.93	7.886		
12,900.00	7,111.22	13,437.96	7,220.01	172.35	173.01	-92.34	-2,786.93	-6,173.17	2,671.37	2,326.85	344.53	7.754		
13,000.00	7,110.86	13,537.95	7,219.51	175.16	175.80	-92.34	-2,787.52	-6,273.15	2,670.00	2,319.88	350.13	7.626		
13,100.00	7,110.49	13,637.94	7,219.01	177.96	178.59	-92.33	-2,788.11	-6,373.14	2,668.63	2,312.91	355.73	7.502		
13,200.00	7,110.12	13,737.93	7,218.51	180.77	181.38	-92.33	-2,788.69	-6,473.13	2,667.26	2,305.93	361.33	7.382		
13,300.00	7,109.76	13,837.92	7,218.00	183.58	184.17	-92.33	-2,789.28	-6,573.12	2,665.89	2,298.95	366.94	7.265		
13,400.00	7,109.39	13,937.91	7,217.50	186.40	186.97	-92.33	-2,789.87	-6,673.10	2,664.52	2,291.97	372.55	7.152		
13,500.00	7,109.03	14,037.90	7,217.00	189.21	189.77	-92.33	-2,790.46	-6,773.09	2,663.14	2,284.98	378.16	7.042		
13,600.00	7,108.66	14,137.89	7,216.50	192.03	192.57	-92.33	-2,791.05	-6,873.08	2,661.77	2,278.00	383.78	6.936		
13,700.00	7,108.29	14,237.88	7,216.00	194.84	195.37	-92.32	-2,791.64	-6,973.07	2,660.40	2,271.00	389.40	6.832		
13,800.00	7,107.93	14,337.87	7,215.50	197.66	198.18	-92.32	-2,792.22	-7,073.05	2,659.03	2,264.01	395.02	6.731		
13,900.00	7,107.56	14,437.87	7,215.00	200.48	200.98	-92.32	-2,792.81	-7,173.04	2,657.66	2,257.02	400.64	6.634		
14,000.00	7,107.19	14,537.86	7,214.50	203.30	203.79	-92.32	-2,793.40	-7,273.03	2,656.29	2,250.02	406.27	6.538		
14,100.00	7,106.83	14,637.85	7,214.00	206.12	206.60	-92.32	-2,793.99	-7,373.02	2,654.91	2,243.02	411.90	6.446		
14,200.00	7,106.46	14,737.84	7,213.50	208.94	209.41	-92.31	-2,794.58	-7,473.00	2,653.54	2,236.01	417.53	6.355		
14,300.00	7,106.10	14,837.83	7,213.00	211.76	212.22	-92.31	-2,795.16	-7,572.99	2,652.17	2,229.01	423.16	6.268		
14,400.00	7,105.73	14,937.82	7,212.50	214.58	215.03	-92.31	-2,795.75	-7,672.98	2,650.80	2,222.00	428.80	6.182		
14,500.00	7,105.36	15,037.81	7,212.00	217.40	217.84	-92.31	-2,796.34	-7,772.97	2,649.43	2,214.99	434.43	6.099		
14,600.00	7,105.00	15,137.80	7,211.50	220.23	220.66	-92.31	-2,796.93	-7,872.95	2,648.05	2,207.98	440.07	6.017		
14,700.00	7,104.63	15,237.79	7,211.00	223.05	223.47	-92.31	-2,797.52	-7,972.94	2,646.68	2,200.97	445.71	5.938		
14,800.00	7,104.27	15,337.78	7,210.50	225.88	226.29	-92.30	-2,798.10	-8,072.93	2,645.31	2,193.96	451.35	5.861		
14,872.41	7,104.00	15,410.18	7,210.13	227.93	228.33	-92.30	-2,798.53	-8,145.33	2,644.32	2,188.88	455.44	5.806 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2.00	0.00	3.28	3.28	-179.54	-279.79	-2.23	279.80					
100.00	100.00	102.00	100.00	3.28	3.29	-179.54	-279.79	-2.23	279.80	273.23	6.57	42.589		
200.00	200.00	198.00	200.00	3.34	3.34	-179.54	-279.79	-2.23	279.80	273.13	6.67	41.934 CC, ES		
300.00	300.00	289.27	291.25	3.44	3.43	-179.53	-281.18	-2.32	281.33	274.45	6.88	40.888		
400.00	400.00	380.17	382.06	3.60	3.56	-179.47	-285.45	-2.62	286.02	278.83	7.19	39.768		
500.00	500.00	470.72	472.32	3.81	3.73	-179.39	-292.55	-3.11	293.87	286.28	7.59	38.697		
600.00	599.98	560.73	561.77	4.04	3.94	-89.41	-302.42	-3.79	304.83	296.77	8.06	37.811		
700.00	699.95	650.02	650.17	4.30	4.17	-89.67	-314.98	-4.66	318.89	310.31	8.58	37.149		
800.00	799.92	738.46	737.29	4.59	4.44	-89.88	-330.13	-5.71	336.02	326.87	9.15	36.721		
900.00	899.89	825.87	822.91	4.90	4.73	-90.04	-347.73	-6.92	356.15	346.41	9.75	36.538		
1,000.00	999.86	912.13	906.82	5.23	5.05	-90.15	-367.64	-8.30	379.25	368.88	10.37	36.589		
1,100.00	1,099.83	997.10	988.86	5.58	5.38	-90.22	-389.71	-9.83	405.23	394.23	11.00	36.845		
1,200.00	1,199.80	1,080.66	1,068.86	5.94	5.74	-90.25	-413.77	-11.49	434.03	422.39	11.64	37.293		
1,300.00	1,299.77	1,169.00	1,146.25	6.30	6.14	-90.26	-439.50	-13.27	465.57	453.27	12.30	37.837		
1,400.00	1,399.73	1,256.65	1,235.34	6.68	6.57	-90.25	-470.65	-15.43	498.57	485.58	12.99	38.383		
1,500.00	1,499.70	1,351.05	1,324.43	7.07	7.04	-90.24	-501.79	-17.58	531.56	517.84	13.73	38.729		
1,600.00	1,599.67	1,445.45	1,413.52	7.46	7.52	-90.24	-532.94	-19.74	564.55	550.07	14.48	38.985		
1,700.00	1,699.64	1,539.85	1,502.61	7.85	8.01	-90.23	-564.08	-21.89	597.55	582.29	15.25	39.171		
1,800.00	1,799.61	1,634.25	1,591.70	8.25	8.51	-90.23	-595.23	-24.04	630.54	614.50	16.04	39.303		
1,900.00	1,899.58	1,728.65	1,680.79	8.66	9.02	-90.22	-626.37	-26.20	663.53	646.69	16.84	39.393		
2,000.00	1,999.55	1,823.05	1,769.87	9.06	9.54	-90.22	-657.52	-28.35	696.53	678.87	17.66	39.451		
2,100.00	2,099.52	1,917.45	1,858.96	9.47	10.06	-90.21	-688.67	-30.51	729.52	711.04	18.48	39.483		
2,200.00	2,199.48	2,011.85	1,948.05	9.89	10.59	-90.21	-719.81	-32.66	762.51	743.21	19.31	39.495		
2,300.00	2,299.45	2,106.25	2,037.14	10.30	11.11	-90.21	-750.96	-34.82	795.51	775.36	20.14	39.493		
2,400.00	2,399.42	2,200.65	2,126.23	10.72	11.65	-90.20	-782.10	-36.97	828.50	807.51	20.99	39.478		
2,500.00	2,499.39	2,304.95	2,215.32	11.14	12.24	-90.20	-813.25	-39.13	861.49	839.61	21.88	39.367		
2,600.00	2,599.36	2,389.45	2,304.40	11.56	12.72	-90.20	-844.39	-41.28	894.49	871.80	22.69	39.425		
2,700.00	2,699.33	2,483.85	2,393.49	11.98	13.26	-90.20	-875.54	-43.43	927.48	903.93	23.55	39.389		
2,800.00	2,799.30	2,578.25	2,482.58	12.41	13.80	-90.19	-906.69	-45.59	960.47	936.06	24.41	39.350		
2,900.00	2,899.27	2,672.65	2,571.67	12.83	14.35	-90.19	-937.83	-47.74	993.47	968.19	25.27	39.308		
3,000.00	2,999.23	2,767.05	2,660.76	13.26	14.89	-90.19	-968.98	-49.90	1,026.46	1,000.32	26.14	39.263		
3,100.00	3,099.20	2,861.45	2,749.85	13.68	15.44	-90.19	-1,000.12	-52.05	1,059.45	1,032.44	27.01	39.218		
3,200.00	3,199.17	2,955.85	2,838.93	14.11	15.99	-90.19	-1,031.27	-54.21	1,092.45	1,064.56	27.89	39.171		
3,300.00	3,299.14	3,050.25	2,928.02	14.54	16.54	-90.19	-1,062.41	-56.36	1,125.44	1,096.67	28.77	39.124		
3,400.00	3,399.11	3,144.65	3,017.11	14.97	17.09	-90.18	-1,093.56	-58.52	1,158.43	1,128.79	29.64	39.077		
3,500.00	3,499.08	3,239.06	3,106.20	15.40	17.64	-90.18	-1,124.71	-60.67	1,191.43	1,160.90	30.53	39.030		
3,600.00	3,599.05	3,333.46	3,195.29	15.83	18.19	-90.18	-1,155.85	-62.82	1,224.42	1,193.01	31.41	38.984		
3,700.00	3,699.02	3,427.86	3,284.38	16.26	18.74	-90.18	-1,187.00	-64.98	1,257.41	1,225.12	32.29	38.938		
3,800.00	3,798.98	3,522.26	3,373.47	16.69	19.30	-90.18	-1,218.14	-67.13	1,290.41	1,257.23	33.18	38.893		
3,900.00	3,898.95	3,616.66	3,462.55	17.12	19.85	-90.18	-1,249.29	-69.29	1,323.40	1,289.33	34.07	38.848		
4,000.00	3,998.92	3,711.06	3,551.64	17.55	20.41	-90.18	-1,280.43	-71.44	1,356.39	1,321.44	34.95	38.804		
4,100.00	4,098.89	3,805.46	3,640.73	17.98	20.96	-90.18	-1,311.58	-73.60	1,389.39	1,353.54	35.84	38.761		
4,200.00	4,198.86	3,900.14	3,729.82	18.42	21.52	-90.17	-1,342.73	-75.75	1,422.38	1,385.64	36.74	38.718		
4,300.00	4,298.83	4,005.74	3,818.91	18.85	22.14	-90.17	-1,373.87	-77.91	1,455.37	1,417.69	37.69	38.617		
4,400.00	4,398.80	4,088.66	3,908.00	19.28	22.63	-90.17	-1,405.02	-80.06	1,488.37	1,449.84	38.52	38.638		
4,500.00	4,498.77	4,183.06	3,997.08	19.72	23.19	-90.17	-1,436.16	-82.21	1,521.36	1,481.94	39.42	38.598		
4,600.00	4,598.73	4,277.46	4,086.17	20.15	23.74	-90.17	-1,467.31	-84.37	1,554.35	1,514.04	40.31	38.560		
4,700.00	4,698.70	4,371.86	4,175.26	20.58	24.30	-90.17	-1,498.45	-86.52	1,587.35	1,546.14	41.21	38.522		
4,800.00	4,798.67	4,466.26	4,264.35	21.02	24.86	-90.17	-1,529.60	-88.68	1,620.34	1,578.24	42.10	38.485		
4,900.00	4,898.64	4,560.66	4,353.44	21.45	25.42	-90.17	-1,560.75	-90.83	1,653.33	1,610.33	43.00	38.449		
5,000.00	4,998.61	4,655.06	4,442.53	21.89	25.98	-90.17	-1,591.89	-92.99	1,686.33	1,642.43	43.90	38.414		
5,100.00	5,098.58	4,749.46	4,531.61	22.32	26.53	-90.17	-1,623.04	-95.14	1,719.32	1,674.52	44.80	38.380		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,198.55	4,843.86	4,620.70	22.76	27.09	-90.17	-1,654.18	-97.30	1,752.31	1,706.62	45.70	38.347		
5,300.00	5,298.52	4,938.26	4,709.79	23.20	27.65	-90.17	-1,685.33	-99.45	1,785.31	1,738.71	46.60	38.314		
5,400.00	5,398.49	5,032.66	4,798.88	23.63	28.21	-90.17	-1,716.47	-101.60	1,818.30	1,770.80	47.50	38.282		
5,500.00	5,498.45	5,127.06	4,887.97	24.07	28.77	-90.16	-1,747.62	-103.76	1,851.29	1,802.89	48.40	38.251		
5,600.00	5,598.42	5,221.46	4,977.06	24.50	29.33	-90.16	-1,778.77	-105.91	1,884.29	1,834.99	49.30	38.221		
5,700.00	5,698.39	5,315.87	5,066.15	24.94	29.89	-90.16	-1,809.91	-108.07	1,917.28	1,867.08	50.20	38.192		
5,800.00	5,798.36	5,410.27	5,155.23	25.38	30.45	-90.16	-1,841.06	-110.22	1,950.27	1,899.17	51.10	38.163		
5,900.00	5,898.33	5,504.67	5,244.32	25.81	31.01	-90.16	-1,872.20	-112.38	1,983.26	1,931.26	52.01	38.134		
6,000.00	5,998.30	5,599.07	5,333.41	26.25	31.57	-90.16	-1,903.35	-114.53	2,016.26	1,963.35	52.91	38.107		
6,100.00	6,098.27	5,706.53	5,422.50	26.69	32.21	-90.16	-1,934.49	-116.69	2,049.25	1,995.37	53.88	38.032		
6,200.00	6,198.24	5,787.87	5,511.59	27.12	32.69	-90.16	-1,965.64	-118.84	2,082.24	2,027.53	54.72	38.053		
6,300.00	6,298.20	5,882.27	5,600.68	27.56	33.26	-90.16	-1,996.79	-120.99	2,115.24	2,059.61	55.62	38.028		
6,400.00	6,398.17	5,976.67	5,689.76	28.00	33.82	-90.16	-2,027.93	-123.15	2,148.23	2,091.70	56.53	38.002		
6,500.00	6,498.14	6,071.07	5,778.85	28.43	34.38	-90.16	-2,059.08	-125.30	2,181.22	2,123.79	57.43	37.978		
6,600.00	6,597.68	6,165.24	5,867.73	28.88	34.94	-86.63	-2,090.15	-127.45	2,214.04	2,155.69	58.34	37.948		
6,700.00	6,694.68	6,257.46	5,954.76	29.32	35.49	-84.08	-2,120.58	-129.56	2,246.05	2,186.79	59.26	37.905		
6,800.00	6,786.74	6,345.47	6,037.81	29.77	36.01	-82.04	-2,149.61	-131.57	2,276.89	2,216.73	60.16	37.850		
6,900.00	6,871.61	6,427.09	6,114.84	30.24	36.50	-80.37	-2,176.54	-133.43	2,306.46	2,245.41	61.05	37.782		
7,000.00	6,947.19	6,500.32	6,183.94	30.74	36.93	-78.95	-2,200.70	-135.10	2,334.86	2,272.92	61.94	37.694		
7,100.00	7,011.62	6,563.34	6,243.43	31.32	37.31	-77.64	-2,221.49	-136.54	2,362.31	2,299.44	62.87	37.573		
7,200.00	7,063.31	6,614.62	6,291.82	32.03	37.61	-76.29	-2,238.41	-137.71	2,389.04	2,325.17	63.87	37.407		
7,300.00	7,101.00	6,652.89	6,327.93	32.89	37.84	-74.79	-2,251.04	-138.58	2,415.20	2,350.26	64.94	37.191		
7,400.00	7,123.74	6,677.20	6,350.87	33.93	37.98	-73.07	-2,259.06	-139.14	2,440.82	2,374.73	66.09	36.933		
7,500.00	7,131.00	6,686.96	6,360.08	35.10	38.04	-71.13	-2,262.28	-139.36	2,465.69	2,398.42	67.27	36.652		
7,600.00	7,130.63	6,689.54	6,362.52	36.44	38.06	-71.19	-2,263.13	-139.42	2,492.04	2,423.51	68.53	36.364		
7,700.00	7,130.26	6,707.88	6,364.96	37.94	38.17	-71.26	-2,263.98	-139.48	2,522.07	2,452.10	69.97	36.043		
7,800.00	7,129.90	8,177.93	7,144.34	39.59	45.16	-90.33	-2,543.89	-1,073.93	2,525.90	2,443.44	82.46	30.632		
7,900.00	7,129.53	8,277.92	7,143.77	41.37	46.34	-90.33	-2,544.50	-1,173.92	2,524.55	2,438.71	85.84	29.410		
8,000.00	7,129.17	8,377.91	7,143.20	43.27	47.76	-90.32	-2,545.12	-1,273.90	2,523.21	2,433.75	89.45	28.207		
8,100.00	7,128.80	8,477.90	7,142.64	45.27	49.37	-90.32	-2,545.73	-1,373.89	2,521.87	2,428.59	93.28	27.035		
8,200.00	7,128.43	8,577.89	7,142.07	47.36	51.13	-90.31	-2,546.34	-1,473.88	2,520.52	2,423.23	97.29	25.907		
8,300.00	7,128.07	8,677.88	7,141.50	49.52	53.02	-90.31	-2,546.95	-1,573.87	2,519.18	2,417.72	101.46	24.829		
8,400.00	7,127.70	8,777.87	7,140.93	51.75	55.01	-90.30	-2,547.57	-1,673.85	2,517.83	2,412.05	105.78	23.803		
8,500.00	7,127.33	8,877.86	7,140.36	54.04	57.08	-90.30	-2,548.18	-1,773.84	2,516.49	2,406.27	110.22	22.831		
8,600.00	7,126.97	8,977.85	7,139.79	56.38	59.23	-90.30	-2,548.79	-1,873.83	2,515.15	2,400.37	114.78	21.913		
8,700.00	7,126.60	9,077.84	7,139.23	58.77	61.45	-90.29	-2,549.41	-1,973.82	2,513.80	2,394.37	119.43	21.048		
8,800.00	7,126.24	9,177.83	7,138.66	61.19	63.71	-90.29	-2,550.02	-2,073.80	2,512.46	2,388.28	124.18	20.233		
8,900.00	7,125.87	9,277.82	7,138.09	63.65	66.03	-90.28	-2,550.63	-2,173.79	2,511.12	2,382.12	129.00	19.466		
9,000.00	7,125.50	9,377.81	7,137.52	66.15	68.39	-90.28	-2,551.24	-2,273.78	2,509.77	2,375.88	133.89	18.745		
9,100.00	7,125.14	9,477.81	7,136.95	68.67	70.79	-90.27	-2,551.86	-2,373.76	2,508.43	2,369.59	138.84	18.067		
9,200.00	7,124.77	9,577.80	7,136.38	71.21	73.23	-90.27	-2,552.47	-2,473.75	2,507.09	2,363.23	143.85	17.428		
9,300.00	7,124.41	9,677.79	7,135.82	73.78	75.69	-90.26	-2,553.08	-2,573.74	2,505.74	2,356.83	148.91	16.827		
9,400.00	7,124.04	9,777.78	7,135.25	76.37	78.19	-90.26	-2,553.70	-2,673.73	2,504.40	2,350.38	154.02	16.260		
9,500.00	7,123.67	9,877.77	7,134.68	78.98	80.70	-90.25	-2,554.31	-2,773.71	2,503.05	2,343.89	159.17	15.726		
9,600.00	7,123.31	9,977.76	7,134.11	81.60	83.24	-90.25	-2,554.92	-2,873.70	2,501.71	2,337.36	164.35	15.222		
9,700.00	7,122.94	10,077.75	7,133.54	84.24	85.81	-90.25	-2,555.54	-2,973.69	2,500.37	2,330.80	169.57	14.745		
9,800.00	7,122.57	10,177.74	7,132.97	86.90	88.39	-90.24	-2,556.15	-3,073.68	2,499.02	2,324.20	174.82	14.295		
9,900.00	7,122.21	10,277.73	7,132.40	89.56	90.98	-90.24	-2,556.76	-3,173.66	2,497.68	2,317.58	180.10	13.868		
10,000.00	7,121.84	10,377.72	7,131.84	92.24	93.59	-90.23	-2,557.37	-3,273.65	2,496.34	2,310.93	185.40	13.464		
10,100.00	7,121.48	10,477.71	7,131.27	94.92	96.22	-90.23	-2,557.99	-3,373.64	2,494.99	2,304.26	190.73	13.081		
10,200.00	7,121.11	10,577.70	7,130.70	97.62	98.86	-90.22	-2,558.60	-3,473.62	2,493.65	2,297.57	196.08	12.718		
10,300.00	7,120.74	10,677.70	7,130.13	100.32	101.51	-90.22	-2,559.21	-3,573.61	2,492.31	2,290.86	201.45	12.372		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
10,400.00	7,120.38	10,777.69	7,129.56	103.04	104.18	-90.21	-2,559.83	-3,673.60	2,490.96	2,284.13	206.84	12.043	
10,500.00	7,120.01	10,877.68	7,128.99	105.76	106.85	-90.21	-2,560.44	-3,773.59	2,489.62	2,277.38	212.24	11.730	
10,600.00	7,119.64	10,977.67	7,128.43	108.48	109.53	-90.21	-2,561.05	-3,873.57	2,488.28	2,270.62	217.66	11.432	
10,700.00	7,119.28	11,077.66	7,127.86	111.22	112.22	-90.20	-2,561.66	-3,973.56	2,486.93	2,263.84	223.10	11.147	
10,800.00	7,118.91	11,177.65	7,127.29	113.96	114.92	-90.20	-2,562.28	-4,073.55	2,485.59	2,257.05	228.54	10.876	
10,900.00	7,118.55	11,277.64	7,126.72	116.70	117.63	-90.19	-2,562.89	-4,173.54	2,484.25	2,250.24	234.00	10.616	
11,000.00	7,118.18	11,377.63	7,126.15	119.45	120.34	-90.19	-2,563.50	-4,273.52	2,482.90	2,243.43	239.48	10.368	
11,100.00	7,117.81	11,477.62	7,125.58	122.21	123.06	-90.18	-2,564.12	-4,373.51	2,481.56	2,236.60	244.96	10.130	
11,200.00	7,117.45	11,577.61	7,125.02	124.97	125.79	-90.18	-2,564.73	-4,473.50	2,480.22	2,229.76	250.45	9.903	
11,300.00	7,117.08	11,677.60	7,124.45	127.73	128.52	-90.17	-2,565.34	-4,573.48	2,478.87	2,222.92	255.96	9.685	
11,400.00	7,116.72	11,777.59	7,123.88	130.50	131.26	-90.17	-2,565.95	-4,673.47	2,477.53	2,216.06	261.47	9.475	
11,500.00	7,116.35	11,877.58	7,123.31	133.27	134.01	-90.16	-2,566.57	-4,773.46	2,476.19	2,209.20	266.99	9.274	
11,600.00	7,115.98	11,977.58	7,122.74	136.04	136.75	-90.16	-2,567.18	-4,873.45	2,474.84	2,202.32	272.52	9.081	
11,700.00	7,115.62	12,077.57	7,122.17	138.82	139.51	-90.15	-2,567.79	-4,973.43	2,473.50	2,195.44	278.06	8.896	
11,800.00	7,115.25	12,177.56	7,121.61	141.60	142.26	-90.15	-2,568.41	-5,073.42	2,472.16	2,188.56	283.60	8.717	
11,900.00	7,114.88	12,277.55	7,121.04	144.39	145.02	-90.15	-2,569.02	-5,173.41	2,470.81	2,181.66	289.15	8.545	
12,000.00	7,114.52	12,377.54	7,120.47	147.17	147.79	-90.14	-2,569.63	-5,273.40	2,469.47	2,174.76	294.71	8.379	
12,100.00	7,114.15	12,477.53	7,119.90	149.96	150.56	-90.14	-2,570.25	-5,373.38	2,468.13	2,167.86	300.27	8.220	
12,200.00	7,113.79	12,577.52	7,119.33	152.75	153.33	-90.13	-2,570.86	-5,473.37	2,466.78	2,160.95	305.84	8.066	
12,300.00	7,113.42	12,677.51	7,118.76	155.55	156.10	-90.13	-2,571.47	-5,573.36	2,465.44	2,154.03	311.41	7.917	
12,400.00	7,113.05	12,777.50	7,118.19	158.34	158.88	-90.12	-2,572.08	-5,673.34	2,464.10	2,147.11	316.99	7.774	
12,500.00	7,112.69	12,877.49	7,117.63	161.14	161.66	-90.12	-2,572.70	-5,773.33	2,462.76	2,140.19	322.57	7.635	
12,600.00	7,112.32	12,977.48	7,117.06	163.94	164.44	-90.11	-2,573.31	-5,873.32	2,461.41	2,133.26	328.16	7.501	
12,700.00	7,111.96	13,077.47	7,116.49	166.74	167.23	-90.11	-2,573.92	-5,973.31	2,460.07	2,126.32	333.75	7.371	
12,800.00	7,111.59	13,177.46	7,115.92	169.54	170.02	-90.10	-2,574.54	-6,073.29	2,458.73	2,119.38	339.34	7.246	
12,900.00	7,111.22	13,277.45	7,115.35	172.35	172.81	-90.10	-2,575.15	-6,173.28	2,457.38	2,112.44	344.94	7.124	
13,000.00	7,110.86	13,377.44	7,114.78	175.16	175.60	-90.09	-2,575.76	-6,273.27	2,456.04	2,105.50	350.54	7.006	
13,100.00	7,110.49	13,477.43	7,114.22	177.96	178.39	-90.09	-2,576.37	-6,373.26	2,454.70	2,098.55	356.15	6.892	
13,200.00	7,110.12	13,577.42	7,113.65	180.77	181.19	-90.09	-2,576.99	-6,473.24	2,453.35	2,091.59	361.76	6.782	
13,300.00	7,109.76	13,677.41	7,113.08	183.58	183.99	-90.08	-2,577.60	-6,573.23	2,452.01	2,084.64	367.37	6.674	
13,400.00	7,109.39	13,777.40	7,112.51	186.40	186.79	-90.08	-2,578.21	-6,673.22	2,450.67	2,077.68	372.99	6.570	
13,500.00	7,109.03	13,877.39	7,111.94	189.21	189.59	-90.07	-2,578.83	-6,773.20	2,449.33	2,070.72	378.61	6.469	
13,600.00	7,108.66	13,977.38	7,111.37	192.03	192.40	-90.07	-2,579.44	-6,873.19	2,447.98	2,063.75	384.23	6.371	
13,700.00	7,108.29	14,077.37	7,110.81	194.84	195.20	-90.06	-2,580.05	-6,973.18	2,446.64	2,056.79	389.85	6.276	
13,800.00	7,107.93	14,177.36	7,110.24	197.66	198.01	-90.06	-2,580.66	-7,073.17	2,445.30	2,049.82	395.48	6.183	
13,900.00	7,107.56	14,277.35	7,109.67	200.48	200.82	-90.05	-2,581.28	-7,173.15	2,443.95	2,042.84	401.11	6.093	
14,000.00	7,107.19	14,377.34	7,109.10	203.30	203.63	-90.05	-2,581.89	-7,273.14	2,442.61	2,035.87	406.74	6.005	
14,100.00	7,106.83	14,477.33	7,108.53	206.12	206.44	-90.04	-2,582.50	-7,373.13	2,441.27	2,028.89	412.38	5.920	
14,200.00	7,106.46	14,577.32	7,107.96	208.94	209.25	-90.04	-2,583.12	-7,473.12	2,439.93	2,021.91	418.01	5.837	
14,300.00	7,106.10	14,677.31	7,107.40	211.76	212.06	-90.03	-2,583.73	-7,573.10	2,438.58	2,014.93	423.65	5.756	
14,400.00	7,105.73	14,777.30	7,106.83	214.58	214.88	-90.03	-2,584.34	-7,673.09	2,437.24	2,007.95	429.29	5.677	
14,500.00	7,105.36	14,877.29	7,106.26	217.40	217.69	-90.02	-2,584.96	-7,773.08	2,435.90	2,000.97	434.93	5.601	
14,600.00	7,105.00	14,977.28	7,105.69	220.23	220.51	-90.02	-2,585.57	-7,873.07	2,434.55	1,993.98	440.57	5.526	
14,700.00	7,104.63	15,077.27	7,105.12	223.05	223.33	-90.01	-2,586.18	-7,973.05	2,433.21	1,986.99	446.22	5.453	
14,800.00	7,104.27	15,177.26	7,104.55	225.88	226.15	-90.01	-2,586.79	-8,073.04	2,431.87	1,980.00	451.87	5.382	
14,872.41	7,104.00	15,249.68	7,104.14	227.93	228.19	-90.01	-2,587.24	-8,145.44	2,430.90	1,974.94	455.96	5.331 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1.00	0.00	3.28	0.00	0.53	120.22	1.11	120.23					
100.00	100.00	101.00	100.00	3.28	0.18	0.53	120.22	1.11	120.23	116.76	3.46	34.701		
200.00	200.00	201.00	200.00	3.34	0.62	0.53	120.22	1.11	120.23	116.27	3.96	30.393		
300.00	300.00	301.00	300.00	3.44	1.06	0.53	120.22	1.11	120.23	115.72	4.50	26.703		
400.00	400.00	401.00	400.00	3.60	1.50	0.53	120.22	1.11	120.23	115.13	5.10	23.576		
500.00	500.00	501.00	500.00	3.81	1.93	0.53	120.22	1.11	120.23	114.48	5.74	20.942 CC, ES		
600.00	599.98	596.93	595.91	4.04	2.36	91.13	121.85	0.89	121.94	115.53	6.41	19.034		
700.00	699.95	692.68	691.54	4.30	2.78	91.87	126.64	0.24	126.99	119.88	7.11	17.855		
800.00	799.92	788.03	786.55	4.59	3.20	92.31	134.56	-0.84	135.34	127.50	7.85	17.249		
900.00	899.89	882.77	880.63	4.90	3.63	92.47	145.52	-2.33	146.95	138.35	8.60	17.090		
1,000.00	999.86	976.69	973.49	5.23	4.05	92.41	159.43	-4.22	161.76	152.40	9.36	17.284		
1,100.00	1,099.83	1,071.90	1,067.16	5.58	4.48	92.19	176.33	-6.52	179.49	169.37	10.12	17.739		
1,200.00	1,199.80	1,170.21	1,163.78	5.94	4.91	91.98	194.34	-8.97	197.79	186.90	10.90	18.153		
1,300.00	1,299.77	1,268.52	1,260.39	6.30	5.36	91.80	212.34	-11.42	216.09	204.41	11.69	18.488		
1,400.00	1,399.73	1,366.83	1,357.01	6.68	5.81	91.66	230.34	-13.87	234.40	221.90	12.49	18.762		
1,500.00	1,499.70	1,465.14	1,453.63	7.07	6.27	91.53	248.34	-16.32	252.70	239.39	13.31	18.989		
1,600.00	1,599.67	1,563.45	1,550.24	7.46	6.72	91.42	266.35	-18.77	271.01	256.88	14.13	19.177		
1,700.00	1,699.64	1,661.76	1,646.86	7.85	7.18	91.32	284.35	-21.22	289.31	274.35	14.96	19.335		
1,800.00	1,799.61	1,760.07	1,743.47	8.25	7.64	91.24	302.35	-23.66	307.62	291.82	15.80	19.469		
1,900.00	1,899.58	1,858.37	1,840.09	8.66	8.11	91.16	320.35	-26.11	325.93	309.28	16.64	19.582		
2,000.00	1,999.55	1,956.68	1,936.70	9.06	8.57	91.09	338.36	-28.56	344.24	326.74	17.49	19.680		
2,100.00	2,099.52	2,054.99	2,033.32	9.47	9.03	91.03	356.36	-31.01	362.55	344.20	18.34	19.764		
2,200.00	2,199.48	2,153.30	2,129.93	9.89	9.50	90.98	374.36	-33.46	380.85	361.65	19.20	19.837		
2,300.00	2,299.45	2,251.61	2,226.55	10.30	9.96	90.93	392.36	-35.91	399.16	379.11	20.06	19.900		
2,400.00	2,399.42	2,349.92	2,323.17	10.72	10.43	90.88	410.37	-38.36	417.47	396.55	20.92	19.956		
2,500.00	2,499.39	2,448.23	2,419.78	11.14	10.89	90.84	428.37	-40.81	435.78	414.00	21.78	20.005		
2,600.00	2,599.36	2,546.54	2,516.40	11.56	11.36	90.80	446.37	-43.26	454.09	431.44	22.65	20.049		
2,700.00	2,699.33	2,644.85	2,613.01	11.98	11.82	90.77	464.37	-45.71	472.40	448.89	23.52	20.087		
2,800.00	2,799.30	2,743.16	2,709.63	12.41	12.29	90.73	482.38	-48.16	490.71	466.33	24.39	20.122		
2,900.00	2,899.27	2,841.47	2,806.24	12.83	12.76	90.70	500.38	-50.60	509.02	483.76	25.26	20.152		
3,000.00	2,999.23	2,939.77	2,902.86	13.26	13.22	90.68	518.38	-53.05	527.33	501.20	26.13	20.180		
3,100.00	3,099.20	3,038.08	2,999.47	13.68	13.69	90.65	536.38	-55.50	545.64	518.64	27.01	20.205		
3,200.00	3,199.17	3,136.39	3,096.09	14.11	14.16	90.62	554.39	-57.95	563.96	536.07	27.88	20.227		
3,300.00	3,299.14	3,234.70	3,192.71	14.54	14.63	90.60	572.39	-60.40	582.27	553.51	28.76	20.248		
3,400.00	3,399.11	3,333.01	3,289.32	14.97	15.09	90.58	590.39	-62.85	600.58	570.94	29.63	20.266		
3,500.00	3,499.08	3,431.32	3,385.94	15.40	15.56	90.56	608.40	-65.30	618.89	588.38	30.51	20.283		
3,600.00	3,599.05	3,529.63	3,482.55	15.83	16.03	90.54	626.40	-67.75	637.20	605.81	31.39	20.298		
3,700.00	3,699.02	3,627.94	3,579.17	16.26	16.50	90.52	644.40	-70.20	655.51	623.24	32.27	20.313		
3,800.00	3,798.98	3,726.25	3,675.78	16.69	16.97	90.50	662.40	-72.65	673.82	640.67	33.15	20.325		
3,900.00	3,898.95	3,824.56	3,772.40	17.12	17.43	90.49	680.41	-75.10	692.13	658.10	34.03	20.337		
4,000.00	3,998.92	3,922.86	3,869.02	17.55	17.90	90.47	698.41	-77.54	710.44	675.53	34.91	20.348		
4,100.00	4,098.89	4,021.17	3,965.63	17.98	18.37	90.46	716.41	-79.99	728.76	692.96	35.80	20.358		
4,200.00	4,198.86	4,119.48	4,062.25	18.42	18.84	90.44	734.41	-82.44	747.07	710.39	36.68	20.367		
4,300.00	4,298.83	4,217.79	4,158.86	18.85	19.31	90.43	752.42	-84.89	765.38	727.82	37.56	20.376		
4,400.00	4,398.80	4,316.10	4,255.48	19.28	19.78	90.42	770.42	-87.34	783.69	745.24	38.45	20.384		
4,500.00	4,498.77	4,414.41	4,352.09	19.72	20.24	90.41	788.42	-89.79	802.00	762.67	39.33	20.391		
4,600.00	4,598.73	4,512.72	4,448.71	20.15	20.71	90.40	806.42	-92.24	820.31	780.10	40.22	20.398		
4,700.00	4,698.70	4,611.03	4,545.32	20.58	21.18	90.38	824.43	-94.69	838.62	797.52	41.10	20.404		
4,800.00	4,798.67	4,709.34	4,641.94	21.02	21.65	90.37	842.43	-97.14	856.94	814.95	41.99	20.410		
4,900.00	4,898.64	4,807.65	4,738.56	21.45	22.12	90.36	860.43	-99.59	875.25	832.38	42.87	20.416		
5,000.00	4,998.61	4,905.95	4,835.17	21.89	22.59	90.35	878.43	-102.04	893.56	849.80	43.76	20.421		
5,100.00	5,098.58	5,004.26	4,931.79	22.32	23.06	90.34	896.44	-104.48	911.87	867.23	44.64	20.426		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,198.55	5,102.57	5,028.40	22.76	23.53	90.34	914.44	-106.93	930.18	884.65	45.53	20.430		
5,300.00	5,298.52	5,200.88	5,125.02	23.20	23.99	90.33	932.44	-109.38	948.49	902.08	46.42	20.435		
5,400.00	5,398.49	5,300.81	5,221.63	23.63	24.47	90.32	950.44	-111.83	966.81	919.50	47.31	20.435		
5,500.00	5,498.45	5,402.50	5,318.25	24.07	24.96	90.31	968.45	-114.28	985.12	936.90	48.21	20.432		
5,600.00	5,598.42	5,495.81	5,414.86	24.50	25.40	90.30	986.45	-116.73	1,003.43	954.35	49.08	20.446		
5,700.00	5,698.39	5,605.88	5,511.48	24.94	25.93	90.30	1,004.45	-119.18	1,021.74	971.72	50.02	20.426		
5,800.00	5,798.36	5,707.57	5,608.10	25.38	26.41	90.29	1,022.45	-121.63	1,040.05	989.13	50.92	20.424		
5,900.00	5,898.33	5,809.26	5,704.71	25.81	26.90	90.28	1,040.46	-124.08	1,058.37	1,006.54	51.83	20.421		
6,000.00	5,998.30	5,889.04	5,801.33	26.25	27.28	90.28	1,058.46	-126.53	1,076.68	1,024.05	52.63	20.457		
6,100.00	6,098.27	5,987.35	5,897.94	26.69	27.75	90.27	1,076.46	-128.98	1,094.99	1,041.47	53.52	20.460		
6,200.00	6,198.24	6,085.66	5,994.56	27.12	28.22	90.26	1,094.46	-131.42	1,113.30	1,058.89	54.41	20.462		
6,300.00	6,298.20	6,183.97	6,091.17	27.56	28.69	90.26	1,112.47	-133.87	1,131.61	1,076.32	55.30	20.465		
6,400.00	6,398.17	6,282.28	6,187.79	28.00	29.15	90.25	1,130.47	-136.32	1,149.92	1,093.74	56.19	20.467		
6,500.00	6,498.14	6,380.59	6,284.40	28.43	29.62	90.25	1,148.47	-138.77	1,168.24	1,111.16	57.07	20.469		
6,600.00	6,597.68	6,478.61	6,380.73	28.88	30.09	90.00	1,166.42	-141.21	1,186.65	1,128.69	57.97	20.471		
6,700.00	6,694.68	6,574.45	6,474.93	29.32	30.55	89.38	1,183.97	-143.60	1,205.32	1,146.46	58.86	20.478		
6,800.00	6,786.74	6,665.77	6,564.67	29.77	30.99	89.23	1,200.69	-145.88	1,224.55	1,164.81	59.73	20.500		
6,900.00	6,871.61	6,750.30	6,647.75	30.24	31.39	89.36	1,216.17	-147.98	1,245.09	1,184.50	60.59	20.548		
7,000.00	6,947.19	6,860.97	6,755.78	30.74	31.92	90.26	1,236.16	-160.10	1,266.91	1,205.15	61.76	20.514		
7,100.00	7,011.62	6,990.45	6,877.33	31.32	32.51	91.42	1,258.25	-198.11	1,288.62	1,225.53	63.09	20.425		
7,200.00	7,063.31	7,145.68	7,009.49	32.03	33.18	92.85	1,281.71	-275.32	1,308.86	1,244.33	64.53	20.283		
7,300.00	7,101.00	7,333.98	7,139.43	32.89	34.02	94.37	1,303.87	-408.83	1,325.60	1,259.47	66.13	20.045		
7,400.00	7,123.74	7,556.01	7,235.74	33.93	35.57	95.47	1,318.72	-607.07	1,336.26	1,267.90	68.36	19.547		
7,500.00	7,131.00	7,763.38	7,260.91	35.10	37.78	95.57	1,320.18	-812.04	1,338.90	1,267.42	71.48	18.731		
7,600.00	7,130.63	7,863.38	7,260.48	36.44	39.09	95.56	1,318.52	-912.02	1,339.19	1,265.06	74.13	18.065		
7,700.00	7,130.26	7,963.38	7,260.06	37.94	40.54	95.56	1,316.86	-1,012.01	1,339.48	1,262.39	77.10	17.374		
7,800.00	7,129.90	8,063.37	7,259.64	39.59	42.15	95.56	1,315.20	-1,111.99	1,339.77	1,259.42	80.35	16.673		
7,900.00	7,129.53	8,163.37	7,259.22	41.37	43.88	95.55	1,313.54	-1,211.98	1,340.06	1,256.19	83.87	15.977		
8,000.00	7,129.17	8,263.37	7,258.80	43.27	45.72	95.55	1,311.88	-1,311.96	1,340.35	1,252.73	87.62	15.297		
8,100.00	7,128.80	8,363.37	7,258.38	45.27	47.66	95.55	1,310.22	-1,411.95	1,340.64	1,249.08	91.57	14.641		
8,200.00	7,128.43	8,463.37	7,257.96	47.36	49.70	95.54	1,308.57	-1,511.93	1,340.93	1,245.25	95.69	14.014		
8,300.00	7,128.07	8,563.37	7,257.54	49.52	51.81	95.54	1,306.91	-1,611.92	1,341.22	1,241.26	99.96	13.417		
8,400.00	7,127.70	8,663.37	7,257.12	51.75	53.98	95.54	1,305.25	-1,711.90	1,341.51	1,237.14	104.37	12.853		
8,500.00	7,127.33	8,763.37	7,256.70	54.04	56.22	95.53	1,303.59	-1,811.89	1,341.80	1,232.91	108.90	12.322		
8,600.00	7,126.97	8,863.37	7,256.28	56.38	58.52	95.53	1,301.93	-1,911.87	1,342.09	1,228.56	113.53	11.821		
8,700.00	7,126.60	8,963.37	7,255.86	58.77	60.86	95.53	1,300.27	-2,011.86	1,342.39	1,224.13	118.26	11.352		
8,800.00	7,126.24	9,063.37	7,255.44	61.19	63.24	95.52	1,298.61	-2,111.84	1,342.68	1,219.61	123.06	10.911		
8,900.00	7,125.87	9,163.37	7,255.02	63.65	65.66	95.52	1,296.96	-2,211.83	1,342.97	1,215.03	127.94	10.497		
9,000.00	7,125.50	9,263.37	7,254.60	66.15	68.12	95.51	1,295.30	-2,311.81	1,343.26	1,210.38	132.88	10.109		
9,100.00	7,125.14	9,363.37	7,254.18	68.67	70.60	95.51	1,293.64	-2,411.80	1,343.55	1,205.67	137.88	9.744		
9,200.00	7,124.77	9,463.37	7,253.76	71.21	73.12	95.51	1,291.98	-2,511.78	1,343.84	1,200.91	142.93	9.402		
9,300.00	7,124.41	9,563.37	7,253.34	73.78	75.65	95.50	1,290.32	-2,611.77	1,344.13	1,196.10	148.03	9.080		
9,400.00	7,124.04	9,663.37	7,252.92	76.37	78.21	95.50	1,288.66	-2,711.75	1,344.42	1,191.25	153.17	8.778		
9,500.00	7,123.67	9,763.37	7,252.50	78.98	80.79	95.50	1,287.00	-2,811.74	1,344.71	1,186.37	158.34	8.492		
9,600.00	7,123.31	9,863.37	7,252.08	81.60	83.39	95.49	1,285.35	-2,911.72	1,345.00	1,181.45	163.55	8.224		
9,700.00	7,122.94	9,963.37	7,251.66	84.24	86.00	95.49	1,283.69	-3,011.71	1,345.29	1,176.50	168.79	7.970		
9,800.00	7,122.57	10,063.37	7,251.24	86.90	88.63	95.49	1,282.03	-3,111.69	1,345.58	1,171.52	174.06	7.731		
9,900.00	7,122.21	10,163.37	7,250.82	89.56	91.27	95.48	1,280.37	-3,211.68	1,345.87	1,166.52	179.35	7.504		
10,000.00	7,121.84	10,263.36	7,250.40	92.24	93.92	95.48	1,278.71	-3,311.66	1,346.16	1,161.49	184.67	7.289		
10,100.00	7,121.48	10,363.36	7,249.98	94.92	96.59	95.48	1,277.05	-3,411.65	1,346.45	1,156.44	190.01	7.086		
10,200.00	7,121.11	10,463.36	7,249.56	97.62	99.26	95.47	1,275.39	-3,511.63	1,346.74	1,151.37	195.37	6.893		
10,300.00	7,120.74	10,563.36	7,249.14	100.32	101.95	95.47	1,273.74	-3,611.62	1,347.03	1,146.29	200.75	6.710		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	10,663.36	7,248.72	103.04	104.64	95.47	1,272.08	-3,711.60	1,347.32	1,141.18	206.14	6.536		
10,500.00	7,120.01	10,763.36	7,248.30	105.76	107.35	95.46	1,270.42	-3,811.59	1,347.61	1,136.07	211.55	6.370		
10,600.00	7,119.64	10,863.36	7,247.88	108.48	110.06	95.46	1,268.76	-3,911.57	1,347.90	1,130.93	216.97	6.212		
10,700.00	7,119.28	10,963.36	7,247.46	111.22	112.78	95.45	1,267.10	-4,011.56	1,348.19	1,125.79	222.41	6.062		
10,800.00	7,118.91	11,063.36	7,247.03	113.96	115.50	95.45	1,265.44	-4,111.54	1,348.48	1,120.63	227.85	5.918		
10,900.00	7,118.55	11,163.36	7,246.61	116.70	118.23	95.45	1,263.78	-4,211.53	1,348.77	1,115.46	233.31	5.781		
11,000.00	7,118.18	11,263.36	7,246.19	119.45	120.97	95.44	1,262.12	-4,311.51	1,349.07	1,110.28	238.78	5.650		
11,100.00	7,117.81	11,363.36	7,245.77	122.21	123.71	95.44	1,260.47	-4,411.50	1,349.36	1,105.09	244.27	5.524		
11,200.00	7,117.45	11,463.36	7,245.35	124.97	126.46	95.44	1,258.81	-4,511.48	1,349.65	1,099.89	249.75	5.404		
11,300.00	7,117.08	11,563.36	7,244.93	127.73	129.21	95.43	1,257.15	-4,611.46	1,349.94	1,094.68	255.25	5.289		
11,400.00	7,116.72	11,663.36	7,244.51	130.50	131.96	95.43	1,255.49	-4,711.45	1,350.23	1,089.47	260.76	5.178		
11,500.00	7,116.35	11,763.36	7,244.09	133.27	134.73	95.43	1,253.83	-4,811.43	1,350.52	1,084.24	266.27	5.072		
11,600.00	7,115.98	11,863.36	7,243.67	136.04	137.49	95.42	1,252.17	-4,911.42	1,350.81	1,079.01	271.79	4.970		
11,700.00	7,115.62	11,963.36	7,243.25	138.82	140.26	95.42	1,250.51	-5,011.40	1,351.10	1,073.78	277.32	4.872		
11,800.00	7,115.25	12,063.36	7,242.83	141.60	143.03	95.42	1,248.86	-5,111.39	1,351.39	1,068.53	282.86	4.778		
11,900.00	7,114.88	12,163.36	7,242.41	144.39	145.80	95.41	1,247.20	-5,211.37	1,351.68	1,063.28	288.40	4.687		
12,000.00	7,114.52	12,263.36	7,241.99	147.17	148.58	95.41	1,245.54	-5,311.36	1,351.97	1,058.03	293.94	4.599		
12,100.00	7,114.15	12,363.36	7,241.57	149.96	151.36	95.41	1,243.88	-5,411.34	1,352.26	1,052.77	299.49	4.515		
12,200.00	7,113.79	12,463.35	7,241.15	152.75	154.14	95.40	1,242.22	-5,511.33	1,352.55	1,047.50	305.05	4.434		
12,300.00	7,113.42	12,563.35	7,240.73	155.55	156.93	95.40	1,240.56	-5,611.31	1,352.84	1,042.23	310.61	4.355		
12,400.00	7,113.05	12,663.35	7,240.31	158.34	159.72	95.40	1,238.90	-5,711.30	1,353.13	1,036.95	316.18	4.280		
12,500.00	7,112.69	12,763.35	7,239.89	161.14	162.51	95.39	1,237.25	-5,811.28	1,353.42	1,031.68	321.75	4.206		
12,600.00	7,112.32	12,863.35	7,239.47	163.94	165.30	95.39	1,235.59	-5,911.27	1,353.71	1,026.39	327.32	4.136		
12,700.00	7,111.96	12,963.35	7,239.05	166.74	168.10	95.39	1,233.93	-6,011.25	1,354.00	1,021.10	332.90	4.067		
12,800.00	7,111.59	13,063.35	7,238.63	169.54	170.89	95.38	1,232.27	-6,111.24	1,354.29	1,015.81	338.48	4.001		
12,900.00	7,111.22	13,163.35	7,238.21	172.35	173.69	95.38	1,230.61	-6,211.22	1,354.59	1,010.52	344.07	3.937		
13,000.00	7,110.86	13,263.35	7,237.79	175.16	176.49	95.38	1,228.95	-6,311.21	1,354.88	1,005.22	349.66	3.875		
13,100.00	7,110.49	13,363.35	7,237.37	177.96	179.29	95.37	1,227.29	-6,411.19	1,355.17	999.92	355.25	3.815		
13,200.00	7,110.12	13,463.35	7,236.95	180.77	182.10	95.37	1,225.64	-6,511.18	1,355.46	994.62	360.84	3.756		
13,300.00	7,109.76	13,563.35	7,236.53	183.58	184.90	95.36	1,223.98	-6,611.16	1,355.75	989.31	366.44	3.700		
13,400.00	7,109.39	13,663.35	7,236.11	186.40	187.71	95.36	1,222.32	-6,711.15	1,356.04	984.00	372.04	3.645		
13,500.00	7,109.03	13,763.35	7,235.69	189.21	190.52	95.36	1,220.66	-6,811.13	1,356.33	978.69	377.64	3.592		
13,600.00	7,108.66	13,863.35	7,235.27	192.03	193.33	95.35	1,219.00	-6,911.12	1,356.62	973.37	383.25	3.540		
13,700.00	7,108.29	13,963.35	7,234.85	194.84	196.14	95.35	1,217.34	-7,011.10	1,356.91	968.05	388.86	3.489		
13,800.00	7,107.93	14,063.35	7,234.43	197.66	198.95	95.35	1,215.68	-7,111.09	1,357.20	962.73	394.47	3.441		
13,900.00	7,107.56	14,163.35	7,234.01	200.48	201.77	95.34	1,214.02	-7,211.07	1,357.49	957.41	400.08	3.393		
14,000.00	7,107.19	14,263.35	7,233.58	203.30	204.58	95.34	1,212.37	-7,311.06	1,357.78	952.09	405.70	3.347		
14,100.00	7,106.83	14,363.35	7,233.16	206.12	207.40	95.34	1,210.71	-7,411.04	1,358.07	946.76	411.31	3.302		
14,200.00	7,106.46	14,463.35	7,232.74	208.94	210.21	95.33	1,209.05	-7,511.03	1,358.36	941.43	416.93	3.258		
14,300.00	7,106.10	14,563.35	7,232.32	211.76	213.03	95.33	1,207.39	-7,611.01	1,358.65	936.10	422.55	3.215		
14,400.00	7,105.73	14,663.34	7,231.90	214.58	215.85	95.33	1,205.73	-7,711.00	1,358.94	930.77	428.18	3.174		
14,500.00	7,105.36	14,763.34	7,231.48	217.40	218.67	95.32	1,204.07	-7,810.98	1,359.24	925.44	433.80	3.133		
14,600.00	7,105.00	14,863.34	7,231.06	220.23	221.49	95.32	1,202.41	-7,910.97	1,359.53	920.10	439.43	3.094		
14,700.00	7,104.63	14,963.34	7,230.64	223.05	224.31	95.32	1,200.76	-8,010.95	1,359.82	914.76	445.05	3.055		
14,800.00	7,104.27	15,063.34	7,230.22	225.88	227.13	95.31	1,199.10	-8,110.94	1,360.11	909.42	450.68	3.018		
14,872.41	7,104.00	15,116.21	7,230.00	227.93	228.63	95.31	1,198.22	-8,163.80	1,360.46	906.22	454.24	2.995 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-303 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	1.00	3.28	3.28	9.71	1,430.62	244.75	1,451.41					
100.00	100.00	107.79	108.79	3.28	3.29	9.71	1,430.28	244.81	1,451.11	1,444.54	6.57	220.755		
200.00	200.00	213.30	214.29	3.34	3.34	9.72	1,429.38	244.89	1,450.27	1,443.60	6.67	217.273		
300.00	300.00	316.17	317.16	3.44	3.45	9.73	1,428.25	244.80	1,449.18	1,442.29	6.89	210.183		
400.00	400.00	409.08	410.07	3.60	3.60	9.73	1,427.35	244.64	1,448.20	1,441.00	7.20	201.169		
500.00	500.00	504.86	505.84	3.81	3.79	9.71	1,426.91	244.23	1,447.67	1,440.08	7.59	190.712		
600.00	599.98	612.02	613.00	4.04	4.04	99.77	1,426.29	243.86	1,447.32	1,439.24	8.08	179.172		
700.00	699.95	708.53	709.51	4.30	4.30	99.85	1,425.67	243.23	1,446.99	1,438.40	8.60	168.288		
800.00	799.92	808.23	809.20	4.59	4.59	99.91	1,425.25	242.16	1,446.82	1,437.65	9.18	157.637		
900.00	899.89	911.92	912.88	4.90	4.92	99.97	1,424.54	240.98	1,446.38	1,436.56	9.82	147.353		
976.99	976.86	982.18	983.13	5.15	5.15	100.00	1,424.17	240.07	1,446.15	1,435.85	10.30	140.407		
1,000.00	999.86	1,000.44	1,001.39	5.23	5.21	100.01	1,424.18	239.74	1,446.19	1,435.75	10.44	138.557		
1,100.00	1,099.83	1,080.73	1,081.64	5.58	5.48	99.99	1,425.08	237.44	1,447.22	1,436.17	11.05	130.929		
1,200.00	1,199.80	1,163.27	1,164.06	5.94	5.77	99.90	1,427.29	233.58	1,449.49	1,437.80	11.70	123.935		
1,300.00	1,299.77	1,240.61	1,241.16	6.30	6.04	99.76	1,430.72	228.53	1,453.17	1,440.83	12.34	117.786		
1,400.00	1,399.73	1,329.72	1,329.76	6.68	6.37	99.51	1,436.06	220.71	1,458.04	1,445.00	13.04	111.795		
1,500.00	1,499.70	1,413.02	1,412.33	7.07	6.69	99.19	1,442.07	211.51	1,463.80	1,450.05	13.74	106.506		
1,600.00	1,599.67	1,502.22	1,500.54	7.46	7.05	98.81	1,449.58	200.58	1,470.62	1,456.13	14.49	101.505		
1,700.00	1,699.64	1,599.30	1,596.45	7.85	7.46	98.38	1,458.18	188.31	1,477.91	1,462.62	15.29	96.685		
1,800.00	1,799.61	1,714.49	1,710.28	8.25	7.96	97.87	1,467.95	173.66	1,484.91	1,468.73	16.19	91.739		
1,900.00	1,899.58	1,815.35	1,810.06	8.66	8.42	97.45	1,475.67	161.07	1,491.21	1,474.18	17.03	87.542		
2,000.00	1,999.55	1,934.30	1,927.83	9.06	8.96	96.96	1,483.89	146.53	1,496.86	1,478.88	17.98	83.245		
2,100.00	2,099.52	2,035.06	2,027.69	9.47	9.42	96.58	1,490.00	134.57	1,501.81	1,482.96	18.85	79.675		
2,200.00	2,199.48	2,121.83	2,113.66	9.89	9.83	96.24	1,495.71	124.29	1,507.32	1,487.67	19.65	76.691		
2,300.00	2,299.45	2,210.44	2,201.36	10.30	10.25	95.89	1,502.32	113.48	1,513.74	1,493.26	20.47	73.933		
2,400.00	2,399.42	2,312.49	2,302.38	10.72	10.74	95.50	1,509.99	101.22	1,520.31	1,498.94	21.37	71.144		
2,500.00	2,499.39	2,401.75	2,390.75	11.14	11.17	95.16	1,517.06	90.78	1,527.36	1,505.16	22.20	68.802		
2,600.00	2,599.36	2,503.21	2,491.23	11.56	11.66	94.80	1,525.14	79.32	1,534.56	1,511.46	23.10	66.441		
2,700.00	2,699.33	2,596.23	2,583.35	11.98	12.11	94.48	1,532.87	68.94	1,542.16	1,518.21	23.95	64.391		
2,800.00	2,799.30	2,706.66	2,692.73	12.41	12.65	94.10	1,541.64	56.57	1,549.46	1,524.56	24.90	62.219		
2,900.00	2,899.27	2,805.61	2,790.72	12.83	13.14	93.75	1,549.21	45.09	1,556.50	1,530.70	25.80	60.332		
3,000.00	2,999.23	2,900.11	2,884.22	13.26	13.61	93.39	1,556.68	33.58	1,563.82	1,537.15	26.68	58.625		
3,100.00	3,099.20	3,003.39	2,986.36	13.68	14.13	93.00	1,565.04	20.81	1,571.40	1,543.80	27.60	56.926		
3,200.00	3,199.17	3,106.33	3,088.28	14.11	14.65	92.63	1,572.75	8.55	1,578.45	1,549.91	28.53	55.323		
3,300.00	3,299.14	3,202.06	3,183.04	14.54	15.13	92.29	1,580.12	-2.90	1,585.77	1,556.35	29.42	53.901		
3,400.00	3,399.11	3,326.47	3,306.16	14.97	15.76	91.84	1,589.16	-18.23	1,592.77	1,562.30	30.47	52.268		
3,500.00	3,499.08	3,432.29	3,411.09	15.40	16.28	91.49	1,595.42	-30.46	1,598.44	1,567.02	31.42	50.878		
3,600.00	3,599.05	3,530.45	3,508.53	15.83	16.77	91.20	1,601.12	-40.81	1,604.08	1,571.76	32.31	49.642		
3,700.00	3,699.02	3,609.89	3,587.42	16.26	17.15	90.99	1,606.28	-48.63	1,610.44	1,577.34	33.10	48.652		
3,800.00	3,798.98	3,697.05	3,673.89	16.69	17.58	90.75	1,612.82	-57.31	1,617.84	1,583.91	33.93	47.681		
3,900.00	3,898.95	3,800.47	3,776.50	17.12	18.09	90.48	1,620.90	-67.49	1,625.61	1,590.75	34.85	46.641		
4,000.00	3,998.92	3,882.55	3,857.93	17.55	18.50	90.27	1,627.49	-75.37	1,633.62	1,597.97	35.65	45.824		
4,100.00	4,098.89	3,976.77	3,951.34	17.98	18.97	90.04	1,635.94	-84.30	1,642.58	1,606.07	36.52	44.981		
4,200.00	4,198.86	4,069.67	4,043.36	18.42	19.44	89.78	1,644.38	-93.96	1,651.72	1,614.34	37.38	44.185		
4,300.00	4,298.83	4,162.11	4,134.82	18.85	19.91	89.51	1,653.23	-104.06	1,661.37	1,623.13	38.25	43.439		
4,400.00	4,398.80	4,289.00	4,260.46	19.28	20.56	89.16	1,664.87	-117.40	1,670.74	1,631.42	39.32	42.486		
4,500.00	4,498.77	4,404.08	4,374.59	19.72	21.13	88.86	1,673.68	-129.19	1,678.56	1,638.23	40.32	41.627		
4,600.00	4,598.73	4,533.17	4,502.78	20.15	21.77	88.54	1,682.07	-141.92	1,685.29	1,643.90	41.39	40.715		
4,700.00	4,698.70	4,667.53	4,636.51	20.58	22.40	88.27	1,687.91	-153.49	1,689.78	1,647.31	42.46	39.792		
4,800.00	4,798.67	4,785.52	4,754.01	21.02	22.95	88.03	1,691.31	-163.60	1,692.86	1,649.41	43.44	38.967		
4,900.00	4,898.64	4,896.29	4,864.48	21.45	23.45	87.86	1,693.47	-171.54	1,694.97	1,650.60	44.38	38.196		
5,000.00	4,998.61	5,001.63	4,969.66	21.89	23.91	87.77	1,695.31	-176.84	1,696.82	1,651.55	45.27	37.484		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,098.58	5,113.83	5,081.82	22.32	24.38	87.76	1,696.72	-179.88	1,698.08	1,651.90	46.17	36.776		
5,200.00	5,198.55	5,214.10	5,182.06	22.76	24.79	87.77	1,697.52	-182.27	1,698.87	1,651.84	47.03	36.124		
5,300.00	5,298.52	5,321.00	5,288.93	23.20	25.23	87.79	1,698.32	-184.49	1,699.61	1,651.71	47.91	35.477		
5,400.00	5,398.49	5,419.41	5,387.32	23.63	25.63	87.80	1,698.82	-186.49	1,700.10	1,651.34	48.75	34.871		
5,500.00	5,498.45	5,536.10	5,503.99	24.07	26.11	87.83	1,698.97	-188.54	1,700.20	1,650.54	49.66	34.235		
5,600.00	5,598.42	5,585.96	7,212.02	24.50	46.30	-47.43	-14.36	-180.06	1,614.55	1,595.47	19.08	84.615		
5,700.00	5,698.39	8,584.90	7,212.03	24.94	46.29	-45.23	-13.30	-180.07	1,514.56	1,495.40	19.15	79.076		
5,800.00	5,798.36	8,583.87	7,212.04	25.38	46.27	-42.91	-12.27	-180.07	1,414.57	1,395.33	19.23	73.543		
5,900.00	5,898.33	8,582.87	7,212.05	25.81	46.25	-40.47	-11.27	-180.08	1,314.57	1,295.25	19.33	68.024		
6,000.00	5,998.30	8,581.89	7,212.06	26.25	46.24	-37.91	-10.29	-180.08	1,214.58	1,195.16	19.42	62.528		
6,100.00	6,098.27	8,580.93	7,212.06	26.69	46.22	-35.23	-9.33	-180.09	1,114.59	1,095.06	19.53	57.064		
6,200.00	6,198.24	8,580.00	7,212.07	27.12	46.21	-32.43	-8.40	-180.09	1,014.60	994.96	19.65	51.638		
6,300.00	6,298.20	8,579.09	7,212.08	27.56	46.20	-29.53	-7.49	-180.10	914.62	894.84	19.77	46.257		
6,400.00	6,398.17	8,578.20	7,212.09	28.00	46.18	-26.52	-6.60	-180.10	814.63	794.73	19.90	40.927		
6,500.00	6,498.14	8,577.34	7,212.09	28.43	46.17	-23.43	-5.73	-180.11	714.65	694.61	20.04	35.653		
6,600.00	6,597.68	8,576.58	7,212.10	28.88	46.16	-176.68	-4.98	-180.11	614.85	594.67	20.18	30.469		
6,700.00	6,694.68	8,576.09	7,212.10	29.32	46.15	-178.61	-4.49	-180.12	517.44	496.88	20.56	25.166		
6,800.00	6,786.74	8,575.86	7,212.10	29.77	46.14	-179.07	-4.26	-180.12	427.26	404.27	22.98	18.591		
6,900.00	6,871.61	8,575.90	7,212.10	30.24	46.14	-179.21	-4.30	-180.12	352.92	321.86	31.06	11.363		
7,000.00	6,947.19	8,576.20	7,212.10	30.74	46.15	-179.21	-4.60	-180.12	308.51	262.27	46.24	6.672		
7,050.08	6,980.96	8,576.44	7,212.10	31.03	46.15	-179.17	-4.84	-180.11	302.46	247.61	54.85	5.514 CC		
7,100.00	7,011.62	8,576.74	7,212.10	31.32	46.16	-179.10	-5.14	-180.11	308.47	246.05	62.42	4.942 ES		
7,200.00	7,063.31	8,577.52	7,212.09	32.03	46.17	-178.86	-5.92	-180.11	352.82	280.87	71.95	4.904 SF		
7,300.00	7,101.00	8,578.53	7,212.08	32.89	46.19	-178.38	-6.93	-180.10	427.12	351.56	75.56	5.653		
7,400.00	7,123.74	8,579.73	7,212.07	33.93	46.21	-177.28	-8.13	-180.10	517.28	440.63	76.65	6.748		
7,500.00	7,131.00	8,581.12	7,212.06	35.10	46.23	-173.33	-9.52	-180.09	614.68	537.72	76.95	7.988		
7,600.00	7,130.63	8,582.60	7,212.05	36.44	46.25	-172.27	-11.00	-180.08	713.95	636.89	77.06	9.265		
7,700.00	7,130.26	8,584.09	7,212.04	37.94	46.27	-171.20	-12.49	-180.07	813.41	736.27	77.14	10.545		
7,800.00	7,129.90	8,585.61	7,212.02	39.59	46.30	-170.13	-14.00	-180.06	912.98	835.78	77.20	11.826		
7,900.00	7,129.53	8,587.15	7,212.01	41.37	46.32	-169.05	-15.54	-180.06	1,012.63	935.38	77.25	13.108		
8,000.00	7,129.17	8,588.71	7,212.00	43.27	46.35	-167.96	-17.10	-180.05	1,112.34	1,035.04	77.30	14.390		
8,100.00	7,128.80	8,590.28	7,211.98	45.27	46.37	-166.86	-18.68	-180.04	1,212.10	1,134.76	77.34	15.672		
8,200.00	7,128.43	8,591.88	7,211.97	47.36	46.40	-165.76	-20.28	-180.03	1,311.89	1,234.50	77.39	16.952		
8,300.00	7,128.07	8,593.50	7,211.95	49.52	46.42	-164.66	-21.90	-180.02	1,411.71	1,334.28	77.43	18.232		
8,400.00	7,127.70	8,595.14	7,211.93	51.75	46.45	-163.55	-23.54	-180.02	1,511.56	1,434.08	77.48	19.510		
8,500.00	7,127.33	8,596.80	7,211.92	54.04	46.48	-162.44	-25.20	-180.01	1,611.42	1,533.89	77.52	20.786		
8,600.00	7,126.97	8,598.48	7,211.90	56.38	46.50	-161.33	-26.88	-180.00	1,711.29	1,633.72	77.57	22.061		
8,700.00	7,126.60	8,600.19	7,211.88	58.77	46.53	-160.22	-28.58	-179.99	1,811.18	1,733.56	77.62	23.335		
8,800.00	7,126.24	8,601.91	7,211.86	61.19	46.56	-159.11	-30.31	-179.99	1,911.08	1,833.41	77.67	24.606		
8,900.00	7,125.87	8,603.66	7,211.84	63.65	46.59	-158.00	-32.06	-179.98	2,010.99	1,933.27	77.72	25.875		
9,000.00	7,125.50	8,605.43	7,211.82	66.15	46.61	-156.90	-33.83	-179.97	2,110.90	2,033.13	77.77	27.142		
9,100.00	7,125.14	8,607.23	7,211.80	68.67	46.64	-155.79	-35.62	-179.96	2,210.82	2,133.00	77.83	28.407		
9,200.00	7,124.77	8,609.04	7,211.78	71.21	46.67	-154.70	-37.44	-179.96	2,310.75	2,232.87	77.88	29.670		
9,300.00	7,124.41	8,610.89	7,211.75	73.78	46.70	-153.60	-39.28	-179.95	2,410.68	2,332.74	77.94	30.930		
9,400.00	7,124.04	8,612.75	7,211.73	76.37	46.73	-152.51	-41.15	-179.94	2,510.62	2,432.62	78.00	32.187		
9,500.00	7,123.67	8,614.64	7,211.70	78.98	46.76	-151.43	-43.04	-179.94	2,610.56	2,532.49	78.06	33.442		
9,600.00	7,123.31	8,616.56	7,211.68	81.60	46.79	-150.35	-44.96	-179.93	2,710.50	2,632.37	78.13	34.694		
9,700.00	7,122.94	8,618.50	7,211.64	84.24	46.84	-148.82	-47.74	-179.92	2,810.45	2,732.24	78.21	35.936		
9,800.00	7,122.57	8,622.56	7,211.59	86.90	46.89	-147.13	-50.95	-179.91	2,910.39	2,832.10	78.30	37.171		
9,900.00	7,122.21	8,625.97	7,211.54	89.56	46.94	-145.38	-54.37	-179.90	3,010.34	2,931.95	78.39	38.401		
10,000.00	7,121.84	8,629.62	7,211.48	92.24	47.00	-143.59	-58.02	-179.90	3,110.29	3,031.80	78.49	39.625		
10,100.00	7,121.48	8,633.53	7,211.42	94.92	47.06	-141.76	-61.92	-179.89	3,210.24	3,131.64	78.60	40.842		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,121.11	8,637.72	7,211.36	97.62	47.13	-139.89	-66.11	-179.89	3,310.20	3,231.48	78.71	42.053		
10,300.00	7,120.74	8,642.23	7,211.28	100.32	47.20	-137.99	-70.62	-179.89	3,410.15	3,331.31	78.84	43.256		
10,400.00	7,120.38	8,647.10	7,211.20	103.04	47.28	-136.05	-75.49	-179.90	3,510.10	3,431.14	78.97	44.450		
10,500.00	7,120.01	8,651.96	7,210.53	105.76	47.85	-125.09	-110.34	-180.10	3,610.04	3,530.35	79.69	45.301		
10,600.00	7,119.64	8,654.45	7,210.48	108.48	47.89	-124.48	-112.84	-180.13	3,709.97	3,630.20	79.78	46.504		
10,700.00	7,119.28	10,700.00	7,210.74	111.22	80.74	-127.93	-99.78	-180.04	3,809.90	3,697.35	112.55	33.850		
10,800.00	7,118.91	8,689.37	7,210.37	113.96	47.97	-123.30	-117.76	-180.18	3,909.84	3,829.88	79.96	48.899		
10,900.00	7,118.55	8,691.80	7,210.32	116.70	48.01	-122.75	-120.18	-180.20	4,009.78	3,929.73	80.05	50.091		
11,000.00	7,118.18	8,694.21	7,210.27	119.45	48.05	-122.22	-122.59	-180.23	4,109.72	4,029.57	80.14	51.281		
11,100.00	7,117.81	8,696.59	7,210.22	122.21	48.09	-121.71	-124.97	-180.25	4,209.65	4,129.42	80.23	52.467		
11,200.00	7,117.45	8,698.95	7,210.17	124.97	48.12	-121.21	-127.33	-180.27	4,309.59	4,229.27	80.33	53.650		
11,300.00	7,117.08	8,701.29	7,210.12	127.73	48.16	-120.73	-129.67	-180.29	4,409.54	4,329.11	80.42	54.830		
11,400.00	7,116.72	8,703.61	7,210.06	130.50	48.20	-120.27	-131.98	-180.32	4,509.48	4,428.96	80.52	56.006		
11,500.00	7,116.35	8,705.90	7,210.01	133.27	48.24	-119.83	-134.28	-180.34	4,609.42	4,528.81	80.61	57.179		
11,600.00	7,115.98	8,708.18	7,209.96	136.04	48.28	-119.39	-136.56	-180.36	4,709.37	4,628.66	80.71	58.349		
11,700.00	7,115.62	8,710.44	7,209.91	138.82	48.31	-118.98	-138.81	-180.38	4,809.31	4,728.50	80.81	59.516		
11,800.00	7,115.25	8,712.00	7,209.88	141.60	48.34	-118.70	-140.38	-180.39	4,909.26	4,828.37	80.89	60.689		
11,900.00	7,114.88	8,712.00	7,209.88	144.39	48.34	-118.70	-140.38	-180.39	5,009.21	4,928.26	80.95	61.884		
12,000.00	7,114.52	8,716.21	7,209.78	147.17	48.41	-117.96	-144.58	-180.43	5,109.15	5,028.07	81.09	63.008		
12,100.00	7,114.15	8,717.99	7,209.74	149.96	48.44	-117.65	-146.37	-180.44	5,209.10	5,127.92	81.18	64.168		
12,200.00	7,113.79	8,719.75	7,209.70	152.75	48.47	-117.36	-148.12	-180.46	5,309.05	5,227.78	81.27	65.324		
12,300.00	7,113.42	8,721.49	7,209.66	155.55	48.49	-117.08	-149.86	-180.47	5,409.00	5,327.64	81.37	66.477		
12,400.00	7,113.05	8,723.20	7,209.62	158.34	48.52	-116.80	-151.57	-180.48	5,508.96	5,427.50	81.46	67.627		
12,500.00	7,112.69	8,724.89	7,209.58	161.14	48.55	-116.54	-153.26	-180.49	5,608.91	5,527.35	81.56	68.774		
12,600.00	7,112.32	8,726.55	7,209.54	163.94	48.58	-116.28	-154.92	-180.51	5,708.86	5,627.21	81.65	69.918		
12,700.00	7,111.96	8,728.20	7,209.50	166.74	48.61	-116.03	-156.57	-180.52	5,808.82	5,727.07	81.75	71.059		
12,800.00	7,111.59	8,729.82	7,209.46	169.54	48.63	-115.78	-158.19	-180.53	5,908.77	5,826.93	81.84	72.196		
12,900.00	7,111.22	8,731.42	7,209.43	172.35	48.66	-115.55	-159.79	-180.54	6,008.73	5,926.79	81.94	73.330		
13,000.00	7,110.86	8,733.00	7,209.39	175.16	48.68	-115.32	-161.37	-180.55	6,108.69	6,026.65	82.04	74.461		
13,100.00	7,110.49	8,734.56	7,209.35	177.96	48.71	-115.09	-162.93	-180.56	6,208.65	6,126.51	82.14	75.589		
13,200.00	7,110.12	8,736.10	7,209.31	180.77	48.74	-114.88	-164.47	-180.57	6,308.60	6,226.37	82.24	76.713		
13,300.00	7,109.76	8,737.62	7,209.28	183.58	48.76	-114.66	-165.98	-180.58	6,408.56	6,326.23	82.34	77.835		
13,400.00	7,109.39	8,739.12	7,209.24	186.40	48.79	-114.46	-167.48	-180.59	6,508.52	6,426.09	82.44	78.953		
13,500.00	7,109.03	8,744.00	7,209.12	189.21	48.87	-113.81	-172.37	-180.61	6,608.49	6,525.88	82.61	79.998		
13,600.00	7,108.66	8,744.00	7,209.12	192.03	48.87	-113.81	-172.37	-180.61	6,708.45	6,625.77	82.68	81.139		
13,700.00	7,108.29	8,744.00	7,209.12	194.84	48.87	-113.81	-172.37	-180.61	6,808.41	6,725.66	82.75	82.277		
13,800.00	7,107.93	8,744.00	7,209.12	197.66	48.87	-113.81	-172.37	-180.61	6,908.37	6,825.55	82.82	83.412		
13,900.00	7,107.56	8,744.00	7,209.12	200.48	48.87	-113.81	-172.37	-180.61	7,008.33	6,925.44	82.90	84.544		
14,000.00	7,107.19	8,744.00	7,209.12	203.30	48.87	-113.81	-172.37	-180.61	7,108.30	7,025.33	82.97	85.673		
14,100.00	7,106.83	8,744.00	7,209.12	206.12	48.87	-113.81	-172.37	-180.61	7,208.26	7,125.22	83.04	86.800		
14,200.00	7,106.46	8,750.42	7,208.97	208.94	48.97	-113.00	-178.78	-180.65	7,308.22	7,224.97	83.26	87.779		
14,300.00	7,106.10	8,751.75	7,208.93	211.76	48.99	-112.84	-180.11	-180.65	7,408.19	7,324.83	83.36	88.867		
14,400.00	7,105.73	8,753.07	7,208.90	214.58	49.02	-112.68	-181.43	-180.66	7,508.15	7,424.69	83.47	89.952		
14,500.00	7,105.36	8,754.37	7,208.87	217.40	49.04	-112.53	-182.73	-180.66	7,608.12	7,524.55	83.57	91.034		
14,600.00	7,105.00	8,755.65	7,208.84	220.23	49.06	-112.38	-184.01	-180.67	7,708.09	7,624.41	83.68	92.112		
14,700.00	7,104.63	8,756.92	7,208.81	223.05	49.08	-112.23	-185.28	-180.67	7,808.05	7,724.27	83.79	93.187		
14,800.00	7,104.27	8,758.18	7,208.78	225.88	49.10	-112.09	-186.54	-180.68	7,908.02	7,824.12	83.90	94.259		
14,872.41	7,104.00	8,759.08	7,208.76	227.93	49.12	-111.99	-187.44	-180.68	7,980.41	7,896.43	83.98	95.032		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-423(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	1.00	3.28	3.28	10.90	1,432.08	275.90	1,458.42					
100.00	100.00	102.29	103.29	3.28	3.29	10.91	1,431.93	276.09	1,458.30	1,451.73	6.57	221.883		
200.00	200.00	209.51	210.50	3.34	3.33	10.94	1,431.37	276.60	1,457.89	1,451.22	6.67	218.522		
300.00	300.00	313.36	314.35	3.44	3.44	10.94	1,430.44	276.45	1,456.98	1,450.09	6.89	211.521		
400.00	400.00	416.55	417.53	3.60	3.60	10.91	1,429.49	275.47	1,455.89	1,448.69	7.21	202.034		
500.00	500.00	520.60	521.57	3.81	3.81	10.92	1,428.07	275.45	1,454.55	1,446.93	7.62	190.894		
600.00	599.98	613.17	614.14	4.04	4.04	101.01	1,426.92	275.68	1,453.68	1,445.61	8.07	180.048		
700.00	699.95	716.00	716.96	4.30	4.32	101.14	1,425.73	276.19	1,453.12	1,444.50	8.61	168.700		
800.00	799.92	819.25	820.19	4.59	4.62	101.27	1,424.16	276.83	1,452.23	1,443.02	9.21	157.690		
900.00	899.89	915.39	916.32	4.90	4.93	101.40	1,422.79	277.56	1,451.47	1,441.65	9.83	147.716		
1,000.00	999.86	1,009.20	1,010.12	5.23	5.24	101.55	1,421.60	278.72	1,450.98	1,440.51	10.47	138.611		
1,027.80	1,027.65	1,034.02	1,034.93	5.33	5.33	101.59	1,421.39	279.00	1,450.95	1,440.31	10.65	136.277		
1,100.00	1,099.83	1,102.07	1,102.98	5.58	5.56	101.68	1,421.05	279.63	1,451.10	1,439.96	11.13	130.343		
1,200.00	1,199.80	1,201.14	1,202.05	5.94	5.92	101.80	1,420.74	280.33	1,451.44	1,439.59	11.84	122.560		
1,300.00	1,299.77	1,302.92	1,303.82	6.30	6.29	101.93	1,420.38	281.08	1,451.76	1,439.18	12.58	115.367		
1,400.00	1,399.73	1,399.83	1,400.73	6.68	6.65	102.05	1,420.00	281.62	1,452.01	1,438.69	13.32	108.984		
1,500.00	1,499.70	1,496.34	1,497.24	7.07	7.02	102.17	1,419.98	282.28	1,452.66	1,438.58	14.07	103.230		
1,600.00	1,599.67	1,595.69	1,596.59	7.46	7.40	102.29	1,420.00	283.00	1,453.36	1,438.52	14.84	97.918		
1,700.00	1,699.64	1,697.05	1,697.94	7.85	7.79	102.42	1,420.03	283.79	1,454.10	1,438.46	15.63	93.016		
1,800.00	1,799.61	1,803.30	1,804.19	8.25	8.21	102.55	1,419.81	284.47	1,454.57	1,438.12	16.45	88.399		
1,900.00	1,899.58	1,895.35	1,896.24	8.66	8.57	102.65	1,419.60	284.82	1,454.98	1,437.76	17.22	84.511		
2,000.00	1,999.55	1,982.71	1,983.59	9.06	8.90	102.70	1,420.36	284.01	1,456.18	1,438.23	17.95	81.112		
2,100.00	2,099.52	2,065.44	2,066.29	9.47	9.22	102.70	1,422.10	282.41	1,458.37	1,439.70	18.67	78.105		
2,200.00	2,199.48	2,144.11	2,144.88	9.89	9.52	102.67	1,424.96	280.34	1,461.89	1,442.52	19.38	75.442		
2,300.00	2,299.45	2,223.25	2,223.87	10.30	9.82	102.63	1,429.15	278.05	1,466.95	1,446.86	20.09	73.030		
2,400.00	2,399.42	2,310.27	2,310.68	10.72	10.17	102.57	1,434.67	275.64	1,473.09	1,452.25	20.83	70.704		
2,500.00	2,499.39	2,397.63	2,397.78	11.14	10.51	102.51	1,440.96	273.34	1,480.09	1,458.50	21.59	68.563		
2,600.00	2,599.36	2,490.11	2,489.92	11.56	10.89	102.43	1,448.35	270.41	1,487.74	1,465.37	22.37	66.511		
2,700.00	2,699.33	2,576.21	2,575.63	11.98	11.24	102.33	1,455.91	267.35	1,496.09	1,472.97	23.12	64.706		
2,800.00	2,799.30	2,664.50	2,663.46	12.41	11.60	102.22	1,464.42	264.17	1,505.27	1,481.39	23.89	63.014		
2,900.00	2,899.27	2,748.91	2,747.32	12.83	11.96	102.11	1,473.34	260.83	1,515.31	1,490.67	24.64	61.509		
3,000.00	2,999.23	2,846.41	2,844.08	13.26	12.37	101.94	1,484.48	256.37	1,526.06	1,500.60	25.46	59.942		
3,100.00	3,099.20	2,959.96	2,956.81	13.68	12.86	101.75	1,496.98	250.87	1,536.36	1,509.98	26.38	58.246		
3,200.00	3,199.17	3,061.27	3,057.41	14.11	13.31	101.56	1,507.60	245.51	1,546.07	1,518.84	27.23	56.775		
3,300.00	3,299.14	3,165.66	3,161.07	14.54	13.77	101.36	1,518.45	239.45	1,555.62	1,527.51	28.11	55.345		
3,400.00	3,399.11	3,272.34	3,267.07	14.97	14.24	101.17	1,528.88	233.74	1,564.64	1,535.65	29.00	53.954		
3,500.00	3,499.08	3,364.77	3,358.96	15.40	14.65	101.03	1,537.89	229.43	1,573.80	1,543.99	29.81	52.789		
3,600.00	3,599.05	3,458.11	3,451.73	15.83	15.07	100.90	1,547.39	225.14	1,583.40	1,552.76	30.63	51.688		
3,700.00	3,699.02	3,555.25	3,548.24	16.26	15.51	100.76	1,557.52	220.87	1,593.28	1,561.81	31.48	50.615		
3,800.00	3,798.98	3,658.19	3,650.52	16.69	15.97	100.62	1,568.21	216.22	1,603.13	1,570.77	32.36	49.541		
3,900.00	3,898.95	3,762.95	3,754.59	17.12	16.45	100.45	1,578.91	210.85	1,612.69	1,579.44	33.25	48.496		
4,000.00	3,998.92	3,857.73	3,848.75	17.55	16.89	100.30	1,588.43	205.83	1,622.08	1,587.99	34.09	47.579		
4,100.00	4,098.89	3,945.26	3,935.59	17.98	17.29	100.12	1,598.04	200.45	1,632.24	1,597.35	34.89	46.784		
4,200.00	4,198.86	4,038.31	4,027.83	18.42	17.73	99.93	1,608.69	194.37	1,642.83	1,607.11	35.72	45.990		
4,300.00	4,298.83	4,129.83	4,118.48	18.85	18.16	99.73	1,619.70	188.34	1,654.00	1,617.46	36.54	45.260		
4,400.00	4,398.80	4,235.32	4,223.04	19.28	18.66	99.54	1,632.27	182.31	1,665.22	1,627.76	37.46	44.456		
4,500.00	4,498.77	4,346.42	4,333.27	19.72	19.19	99.36	1,644.76	176.19	1,675.82	1,637.42	38.41	43.635		
4,600.00	4,598.73	4,446.92	4,433.08	20.15	19.66	99.21	1,655.50	171.17	1,685.97	1,646.69	39.29	42.915		
4,700.00	4,698.70	4,545.12	4,530.63	20.58	20.12	99.11	1,665.97	167.34	1,696.28	1,656.13	40.15	42.247		
4,800.00	4,798.67	4,649.80	4,634.67	21.02	20.61	99.01	1,676.97	163.48	1,706.47	1,665.42	41.06	41.564		
4,900.00	4,898.64	4,766.62	4,750.83	21.45	21.25	98.91	1,689.60	159.11	1,715.52	1,673.37	42.15	40.701		
5,000.00	4,998.61	4,917.13	4,900.96	21.89	21.84	98.85	1,698.90	155.43	1,722.52	1,679.33	43.19	39.885		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,098.58	5,056.18	5,039.79	22.32	22.45	98.81	1,705.85	152.00	1,727.47	1,683.23	44.25	39.041		
5,200.00	5,198.55	5,187.60	5,171.15	22.76	23.01	98.87	1,709.13	151.08	1,730.17	1,684.93	45.25	38.240		
5,300.00	5,298.52	5,300.56	5,284.10	23.20	23.48	98.94	1,710.59	150.46	1,731.75	1,685.60	46.16	37.519		
5,400.00	5,398.49	5,412.93	5,396.46	23.63	23.95	98.99	1,711.34	149.19	1,732.62	1,685.56	47.06	36.816		
5,500.00	5,498.45	5,522.05	5,505.56	24.07	24.39	99.00	1,711.51	146.95	1,732.85	1,684.89	47.95	36.137		
5,600.00	5,598.42	8,747.11	7,237.51	24.50	47.65	-162.22	-104.93	159.85	1,667.23	1,642.65	24.58	67.830		
5,700.00	5,698.39	8,744.30	7,237.64	24.94	47.61	-162.68	-102.14	160.16	1,569.51	1,544.31	25.20	62.288		
5,800.00	5,798.36	8,741.33	7,237.78	25.38	47.56	-163.17	-99.19	160.47	1,472.08	1,446.17	25.92	56.804		
5,900.00	5,898.33	8,738.20	7,237.92	25.81	47.51	-163.68	-96.08	160.80	1,375.02	1,348.27	26.75	51.396		
6,000.00	5,998.30	8,734.88	7,238.09	26.25	47.46	-164.23	-92.78	161.15	1,278.40	1,250.66	27.74	46.084		
6,100.00	6,098.27	8,731.36	7,238.26	26.69	47.40	-164.81	-89.28	161.52	1,182.32	1,153.41	28.91	40.892		
6,200.00	6,198.24	8,727.61	7,238.46	27.12	47.34	-165.44	-85.56	161.90	1,086.94	1,056.62	30.32	35.846		
6,300.00	6,298.20	8,723.70	7,238.66	27.56	47.28	-166.09	-81.67	162.29	992.45	960.42	32.04	30.980		
6,400.00	6,398.17	8,718.98	7,238.92	28.00	47.21	-166.88	-76.98	162.75	899.13	865.00	34.14	26.340		
6,500.00	6,498.14	8,713.95	7,239.20	28.43	47.12	-167.72	-71.98	163.23	807.38	770.63	36.75	21.968		
6,600.00	6,597.68	8,709.26	7,239.48	28.88	47.05	-170.20	-67.32	163.66	720.84	680.39	40.45	17.821		
6,700.00	6,694.68	8,706.07	7,239.66	29.32	47.00	-172.02	-64.15	163.95	648.35	602.23	46.13	14.056		
6,800.00	6,786.74	8,704.62	7,239.75	29.77	46.98	-172.87	-62.71	164.08	597.23	543.61	53.62	11.138		
6,900.00	6,871.61	8,705.24	7,239.71	30.24	46.99	-173.05	-63.32	164.02	574.58	512.81	61.77	9.302		
6,920.24	6,887.73	8,705.65	7,239.69	30.34	46.99	-173.02	-63.73	163.99	573.90	510.57	63.33	9.062 CC, ES		
7,000.00	6,947.19	8,708.38	7,239.53	30.74	47.04	-172.62	-66.44	163.74	584.29	515.50	68.79	8.494		
7,100.00	7,011.62	8,714.66	7,239.16	31.32	47.14	-171.39	-72.69	163.16	624.60	551.01	73.58	8.488 SF		
7,200.00	7,063.31	8,724.91	7,238.60	32.03	47.30	-168.88	-82.87	162.17	689.23	612.91	76.32	9.031		
7,300.00	7,101.00	8,736.46	7,238.01	32.89	47.48	-164.33	-94.35	160.99	770.67	692.96	77.71	9.917		
7,400.00	7,123.74	8,751.89	7,237.30	33.93	47.73	-154.20	-109.67	159.33	862.41	783.95	78.46	10.992		
7,500.00	7,131.00	8,763.25	7,236.87	35.10	47.91	-128.83	-120.95	158.07	959.54	880.70	78.84	12.171		
7,600.00	7,130.63	8,773.86	7,236.59	36.44	48.08	-126.55	-131.49	156.90	1,058.15	979.04	79.11	13.377		
7,700.00	7,130.26	8,784.28	7,236.42	37.94	48.25	-124.55	-141.85	155.77	1,156.88	1,077.53	79.35	14.579		
7,800.00	7,129.90	8,795.19	7,236.36	39.59	48.42	-122.67	-152.70	154.59	1,255.71	1,176.10	79.61	15.774		
7,900.00	7,129.53	8,806.12	7,236.39	41.37	48.60	-120.99	-163.57	153.42	1,354.60	1,274.75	79.85	16.964		
8,000.00	7,129.17	8,816.94	7,236.53	43.27	48.78	-119.49	-174.33	152.27	1,453.56	1,373.46	80.10	18.147		
8,100.00	7,128.80	8,831.52	7,236.79	45.27	49.01	-117.70	-188.82	150.71	1,552.54	1,472.13	80.41	19.307		
8,200.00	7,128.43	8,846.89	7,237.09	47.36	49.26	-116.03	-204.10	149.04	1,651.53	1,570.79	80.74	20.454		
8,300.00	7,128.07	8,860.36	7,237.37	49.52	49.48	-114.73	-217.48	147.56	1,750.53	1,669.48	81.05	21.599		
8,400.00	7,127.70	8,873.50	7,237.60	51.75	49.70	-113.57	-230.54	146.12	1,849.55	1,768.20	81.35	22.736		
8,500.00	7,127.33	8,887.60	7,237.82	54.04	49.93	-112.43	-244.56	144.57	1,948.57	1,866.90	81.67	23.858		
8,600.00	7,126.97	8,903.12	7,237.95	56.38	50.19	-111.28	-259.98	142.86	2,047.60	1,965.57	82.03	24.961		
8,700.00	7,126.60	8,918.86	7,237.97	58.77	50.45	-110.20	-275.61	141.11	2,146.62	2,064.22	82.40	26.051		
8,800.00	7,126.24	8,929.25	7,237.95	61.19	50.62	-109.54	-285.94	139.96	2,245.66	2,162.99	82.67	27.165		
8,900.00	7,125.87	8,940.97	7,237.91	63.65	50.82	-108.84	-297.59	138.66	2,344.71	2,261.75	82.96	28.262		
9,000.00	7,125.50	8,952.72	7,237.84	66.15	51.01	-108.18	-309.27	137.38	2,443.78	2,360.51	83.27	29.349		
9,100.00	7,125.14	8,964.44	7,237.72	68.67	51.21	-107.55	-320.92	136.10	2,542.86	2,459.29	83.57	30.427		
9,200.00	7,124.77	8,976.04	7,237.54	71.21	51.40	-106.96	-332.45	134.84	2,641.95	2,558.07	83.88	31.497		
9,300.00	7,124.41	8,983.45	7,237.40	73.78	51.53	-106.60	-339.82	134.05	2,741.07	2,656.97	84.10	32.594		
9,400.00	7,124.04	8,990.65	7,237.26	76.37	51.65	-106.26	-346.98	133.29	2,840.21	2,755.90	84.31	33.687		
9,500.00	7,123.67	8,997.63	7,237.10	78.98	51.77	-105.94	-353.92	132.58	2,939.39	2,854.86	84.52	34.776		
9,600.00	7,123.31	9,008.00	7,236.84	81.60	51.94	-105.49	-364.23	131.53	3,038.59	2,953.78	84.82	35.826		
9,700.00	7,122.94	9,008.00	7,236.84	84.24	51.94	-105.49	-364.23	131.53	3,137.81	3,052.95	84.87	36.973		
9,800.00	7,122.57	9,017.02	7,236.61	86.90	52.10	-105.10	-373.20	130.65	3,237.06	3,151.93	85.13	38.024		
9,900.00	7,122.21	9,023.00	7,236.46	89.56	52.20	-104.86	-379.15	130.07	3,336.34	3,251.01	85.33	39.101		
10,000.00	7,121.84	9,028.81	7,236.31	92.24	52.30	-104.63	-384.94	129.53	3,435.63	3,350.11	85.52	40.174		
10,100.00	7,121.48	9,039.00	7,236.06	94.92	52.47	-104.24	-395.08	128.59	3,534.96	3,449.14	85.82	41.191		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,200.00	7,121.11	9,039.00	7,236.06	97.62	52.47	-104.24	-395.08	128.59	3,634.29	3,548.42	85.87	42.323		
10,300.00	7,120.74	9,048.27	7,235.83	100.32	52.63	-103.91	-404.32	127.75	3,733.64	3,647.49	86.15	43.338		
10,400.00	7,120.38	9,056.04	7,235.63	103.04	52.76	-103.63	-412.05	127.06	3,833.00	3,746.61	86.40	44.364		
10,500.00	7,120.01	9,063.69	7,235.42	105.76	52.89	-103.37	-419.66	126.38	3,932.38	3,845.74	86.64	45.386		
10,600.00	7,119.64	9,071.00	7,235.22	108.48	53.02	-103.13	-426.95	125.74	4,031.77	3,944.88	86.88	46.405		
10,700.00	7,119.28	9,079.48	7,235.01	111.22	53.17	-102.86	-435.39	125.01	4,131.16	4,044.01	87.15	47.401		
10,800.00	7,118.91	9,087.65	7,234.84	113.96	53.31	-102.62	-443.53	124.30	4,230.56	4,143.14	87.42	48.394		
10,900.00	7,118.55	9,095.75	7,234.71	116.70	53.45	-102.39	-451.59	123.61	4,329.97	4,242.29	87.69	49.381		
11,000.00	7,118.18	9,104.02	7,234.63	119.45	53.59	-102.17	-459.84	122.90	4,429.39	4,341.43	87.96	50.358		
11,100.00	7,117.81	9,114.51	7,234.53	122.21	53.77	-101.90	-470.29	122.00	4,528.81	4,440.52	88.29	51.294		
11,200.00	7,117.45	9,125.00	7,234.44	124.97	53.96	-101.64	-480.74	121.11	4,628.23	4,539.61	88.63	52.220		
11,300.00	7,117.08	9,135.49	7,234.35	127.73	54.14	-101.39	-491.19	120.21	4,727.66	4,638.69	88.97	53.139		
11,400.00	7,116.72	9,134.00	7,234.36	130.50	54.11	-101.42	-489.71	120.34	4,827.10	4,738.11	88.99	54.244		
11,500.00	7,116.35	9,145.00	7,234.25	133.27	54.30	-101.17	-500.67	119.41	4,926.53	4,837.19	89.35	55.140		
11,600.00	7,115.98	9,149.97	7,234.19	136.04	54.39	-101.06	-505.62	119.00	5,025.99	4,936.45	89.54	56.129		
11,700.00	7,115.62	9,154.83	7,234.12	138.82	54.48	-100.95	-510.47	118.61	5,125.46	5,035.72	89.74	57.116		
11,800.00	7,115.25	9,166.00	7,233.95	141.60	54.67	-100.71	-521.60	117.72	5,224.94	5,134.84	90.11	57.986		
11,900.00	7,114.88	9,166.00	7,233.95	144.39	54.67	-100.71	-521.60	117.72	5,324.43	5,234.26	90.17	59.049		
12,000.00	7,114.52	9,170.84	7,233.86	147.17	54.76	-100.60	-526.42	117.34	5,423.92	5,333.56	90.37	60.021		
12,100.00	7,114.15	9,178.54	7,233.70	149.96	54.89	-100.44	-534.09	116.74	5,523.43	5,432.78	90.65	60.934		
12,200.00	7,113.79	9,186.18	7,233.54	152.75	55.03	-100.28	-541.71	116.14	5,622.94	5,532.01	90.92	61.842		
12,300.00	7,113.42	9,193.75	7,233.36	155.55	55.16	-100.13	-549.26	115.56	5,722.45	5,631.24	91.20	62.744		
12,400.00	7,113.05	9,202.01	7,233.15	158.34	55.31	-99.96	-557.49	114.93	5,821.96	5,730.46	91.50	63.626		
12,500.00	7,112.69	9,211.23	7,232.93	161.14	55.47	-99.79	-566.67	114.22	5,921.48	5,829.65	91.83	64.481		
12,600.00	7,112.32	9,220.44	7,232.75	163.94	55.63	-99.62	-575.86	113.51	6,021.00	5,928.84	92.16	65.329		
12,700.00	7,111.96	9,229.65	7,232.60	166.74	55.80	-99.46	-585.04	112.81	6,120.52	6,028.02	92.50	66.169		
12,800.00	7,111.59	9,231.00	7,232.58	169.54	55.82	-99.43	-586.39	112.70	6,220.05	6,127.44	92.61	67.167		
12,900.00	7,111.22	9,231.00	7,232.58	172.35	55.82	-99.43	-586.39	112.70	6,319.59	6,226.91	92.67	68.191		
13,000.00	7,110.86	9,240.46	7,232.49	175.16	55.99	-99.28	-595.82	111.99	6,419.12	6,326.10	93.02	69.008		
13,100.00	7,110.49	9,243.65	7,232.47	177.96	56.04	-99.23	-599.01	111.75	6,518.68	6,425.49	93.18	69.955		
13,200.00	7,110.12	9,246.79	7,232.46	180.77	56.10	-99.18	-602.13	111.53	6,618.24	6,524.89	93.35	70.900		
13,300.00	7,109.76	9,249.86	7,232.46	183.58	56.15	-99.14	-605.19	111.31	6,717.81	6,624.30	93.51	71.842		
13,400.00	7,109.39	9,262.00	7,232.53	186.40	56.37	-98.97	-617.30	110.46	6,817.41	6,723.47	93.94	72.573		
13,500.00	7,109.03	9,262.00	7,232.53	189.21	56.37	-98.97	-617.30	110.46	6,916.99	6,822.98	94.01	73.577		
13,600.00	7,108.66	9,262.00	7,232.53	192.03	56.37	-98.97	-617.30	110.46	7,016.58	6,922.49	94.08	74.578		
13,700.00	7,108.29	9,262.00	7,232.53	194.84	56.37	-98.97	-617.30	110.46	7,116.18	7,022.02	94.16	75.578		
13,800.00	7,107.93	9,267.20	7,232.59	197.66	56.46	-98.90	-622.49	110.11	7,215.79	7,121.40	94.39	76.450		
13,900.00	7,107.56	9,273.25	7,232.66	200.48	56.57	-98.83	-628.53	109.70	7,315.40	7,220.76	94.64	77.296		
14,000.00	7,107.19	9,279.26	7,232.74	203.30	56.68	-98.75	-634.52	109.29	7,415.02	7,320.12	94.90	78.138		
14,100.00	7,106.83	9,285.21	7,232.83	206.12	56.79	-98.68	-640.46	108.90	7,514.64	7,419.49	95.15	78.975		
14,200.00	7,106.46	9,293.00	7,232.96	208.94	56.93	-98.59	-648.23	108.38	7,614.26	7,518.80	95.46	79.761		
14,300.00	7,106.10	9,293.00	7,232.96	211.76	56.93	-98.59	-648.23	108.38	7,713.89	7,618.35	95.54	80.740		
14,400.00	7,105.73	9,293.00	7,232.96	214.58	56.93	-98.59	-648.23	108.38	7,813.53	7,717.91	95.62	81.716		
14,500.00	7,105.36	9,302.95	7,233.14	217.40	57.11	-98.48	-658.16	107.73	7,913.16	7,817.16	96.00	82.430		
14,600.00	7,105.00	9,306.57	7,233.21	220.23	57.17	-98.44	-661.77	107.50	8,012.80	7,916.61	96.19	83.304		
14,700.00	7,104.63	9,310.13	7,233.28	223.05	57.23	-98.40	-665.33	107.27	8,112.45	8,016.07	96.38	84.176		
14,800.00	7,104.27	9,313.65	7,233.35	225.88	57.30	-98.37	-668.84	107.05	8,212.10	8,115.54	96.56	85.044		
14,872.41	7,104.00	9,316.17	7,233.40	227.93	57.34	-98.34	-671.35	106.89	8,284.26	8,187.56	96.70	85.672		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	12.00	1,427.71	303.43	1,459.60					
100.00	100.00	79.29	80.28	3.28	3.29	12.02	1,428.12	304.06	1,460.27	1,453.70	6.57	222.257		
200.00	200.00	164.19	165.15	3.34	3.31	12.09	1,429.45	306.09	1,462.27	1,455.63	6.64	220.057		
300.00	300.00	281.12	282.02	3.44	3.41	12.21	1,431.03	309.63	1,464.26	1,457.40	6.85	213.685		
400.00	400.00	374.90	375.75	3.60	3.54	12.31	1,431.31	312.40	1,465.21	1,458.06	7.14	205.085		
500.00	500.00	471.77	472.59	3.81	3.72	12.33	1,433.46	313.28	1,467.55	1,460.03	7.52	195.034		
600.00	599.98	592.89	593.70	4.04	3.99	102.37	1,434.64	313.22	1,468.79	1,460.76	8.03	182.937		
700.00	699.95	682.83	683.64	4.30	4.23	102.46	1,435.19	313.57	1,470.02	1,461.49	8.53	172.407		
800.00	799.92	774.81	775.61	4.59	4.49	102.57	1,436.36	314.29	1,471.97	1,462.88	9.08	162.104		
900.00	899.89	886.22	887.01	4.90	4.84	102.69	1,437.70	315.15	1,473.87	1,464.13	9.74	151.353		
1,000.00	999.86	982.16	982.95	5.23	5.15	102.80	1,438.62	315.66	1,475.47	1,465.08	10.38	142.087		
1,100.00	1,099.83	1,071.07	1,071.85	5.58	5.46	102.89	1,439.92	316.18	1,477.58	1,466.54	11.03	133.900		
1,200.00	1,199.80	1,172.56	1,173.31	5.94	5.82	102.98	1,441.79	316.63	1,480.03	1,468.28	11.75	125.932		
1,300.00	1,299.77	1,279.38	1,280.12	6.30	6.21	103.06	1,443.48	316.24	1,482.05	1,469.54	12.51	118.494		
1,400.00	1,399.73	1,377.96	1,378.69	6.68	6.57	103.11	1,445.10	315.46	1,484.04	1,470.79	13.25	112.020		
1,500.00	1,499.70	1,471.77	1,472.48	7.07	6.93	103.16	1,446.62	314.80	1,486.03	1,472.05	13.99	106.254		
1,600.00	1,599.67	1,549.66	1,550.33	7.46	7.23	103.26	1,448.40	315.94	1,489.17	1,474.49	14.67	101.486		
1,700.00	1,699.64	1,625.56	1,626.14	7.85	7.53	103.41	1,450.94	318.72	1,493.86	1,478.50	15.36	97.245		
1,800.00	1,799.61	1,711.17	1,711.53	8.25	7.87	103.64	1,454.53	323.65	1,499.87	1,483.77	16.10	93.175		
1,900.00	1,899.58	1,789.50	1,789.54	8.66	8.19	103.90	1,458.29	329.70	1,507.00	1,490.19	16.81	89.665		
2,000.00	1,999.55	1,865.59	1,865.19	9.06	8.51	104.18	1,462.90	336.49	1,515.69	1,498.18	17.51	86.562		
2,100.00	2,099.52	1,946.66	1,945.68	9.47	8.86	104.47	1,469.03	343.86	1,525.90	1,507.66	18.24	83.661		
2,200.00	2,199.48	2,039.10	2,037.39	9.89	9.26	104.80	1,476.56	352.61	1,536.85	1,517.82	19.03	80.763		
2,300.00	2,299.45	2,133.94	2,131.54	10.30	9.68	105.08	1,485.01	360.31	1,548.22	1,528.39	19.84	78.052		
2,400.00	2,399.42	2,233.38	2,230.22	10.72	10.12	105.39	1,493.85	368.87	1,559.75	1,539.08	20.67	75.453		
2,500.00	2,499.39	2,346.68	2,342.59	11.14	10.64	105.79	1,503.18	379.95	1,571.06	1,549.47	21.59	72.773		
2,600.00	2,599.36	2,455.05	2,450.21	11.56	11.13	106.16	1,510.89	390.12	1,581.18	1,558.70	22.48	70.326		
2,700.00	2,699.33	2,546.37	2,540.90	11.98	11.55	106.46	1,517.63	398.34	1,591.54	1,568.24	23.29	68.332		
2,800.00	2,799.30	2,632.26	2,626.14	12.41	11.94	106.74	1,524.46	406.39	1,602.59	1,578.52	24.07	66.576		
2,900.00	2,899.27	2,727.21	2,720.28	12.83	12.39	107.06	1,532.62	415.77	1,614.45	1,589.55	24.90	64.826		
3,000.00	2,999.23	2,854.19	2,846.15	13.26	12.99	107.53	1,542.17	429.43	1,625.67	1,599.75	25.92	62.714		
3,100.00	3,099.20	2,961.59	2,952.70	13.68	13.50	107.95	1,548.55	441.37	1,635.53	1,608.69	26.83	60.951		
3,200.00	3,199.17	3,072.15	3,062.60	14.11	14.02	108.30	1,555.28	451.37	1,644.94	1,617.18	27.76	59.258		
3,300.00	3,299.14	3,154.65	3,144.59	14.54	14.40	108.56	1,560.56	458.83	1,654.66	1,626.13	28.53	57.993		
3,400.00	3,399.11	3,240.01	3,229.32	14.97	14.81	108.84	1,566.46	467.29	1,665.23	1,635.90	29.32	56.791		
3,500.00	3,499.08	3,366.50	3,355.02	15.40	15.41	109.21	1,574.90	478.57	1,675.25	1,644.91	30.34	55.210		
3,600.00	3,599.05	3,460.20	3,448.19	15.83	15.85	109.47	1,580.85	486.41	1,684.87	1,653.69	31.18	54.036		
3,700.00	3,699.02	3,554.48	3,541.91	16.26	16.29	109.75	1,586.92	494.81	1,694.79	1,662.77	32.02	52.926		
3,800.00	3,798.98	3,647.74	3,634.59	16.69	16.74	110.01	1,593.36	502.98	1,705.14	1,672.28	32.86	51.893		
3,900.00	3,898.95	3,748.23	3,734.39	17.12	17.22	110.31	1,600.12	512.52	1,715.62	1,681.89	33.74	50.849		
4,000.00	3,998.92	3,840.26	3,825.75	17.55	17.66	110.61	1,606.01	521.91	1,726.12	1,691.55	34.57	49.925		
4,100.00	4,098.89	3,912.00	3,896.82	17.98	18.02	110.86	1,611.12	530.24	1,737.84	1,702.55	35.28	49.252		
4,200.00	4,198.86	4,002.11	3,985.93	18.42	18.47	111.20	1,618.16	541.63	1,750.63	1,714.52	36.11	48.480		
4,300.00	4,298.83	4,089.29	4,072.12	18.85	18.91	111.51	1,625.57	552.44	1,764.04	1,727.13	36.92	47.786		
4,400.00	4,398.80	4,204.83	4,186.49	19.28	19.49	111.85	1,636.08	565.03	1,777.51	1,739.61	37.90	46.898		
4,500.00	4,498.77	4,331.15	4,311.91	19.72	20.10	112.13	1,646.69	575.57	1,789.31	1,750.36	38.94	45.947		
4,600.00	4,598.73	4,430.20	4,410.37	20.15	20.58	112.31	1,655.05	582.52	1,800.73	1,760.92	39.81	45.232		
4,700.00	4,698.70	4,525.41	4,505.00	20.58	21.03	112.47	1,663.14	589.05	1,812.16	1,771.51	40.66	44.573		
4,800.00	4,798.67	4,623.63	4,602.59	21.02	21.50	112.66	1,671.65	596.38	1,824.00	1,782.48	41.52	43.931		
4,900.00	4,898.64	4,733.24	4,711.54	21.45	22.03	112.84	1,680.86	603.97	1,835.40	1,792.95	42.45	43.232		
5,000.00	4,998.61	4,852.86	4,830.52	21.89	22.60	113.06	1,689.93	612.38	1,846.13	1,802.68	43.45	42.493		
5,100.00	5,098.58	4,989.01	4,966.11	22.32	23.23	113.30	1,698.57	621.07	1,855.56	1,811.03	44.52	41.678		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,198.55	5,153.91	5,130.69	22.76	23.97	113.59	1,704.16	629.39	1,861.50	1,815.79	45.71	40.725		
5,300.00	5,298.52	5,350.84	5,327.54	23.20	24.77	113.73	1,707.79	631.12	1,865.51	1,818.61	46.90	39.775		
5,400.00	5,398.49	5,445.19	5,421.87	23.63	25.11	113.78	1,706.80	630.08	1,865.11	1,817.41	47.70	39.102		
5,500.00	5,498.45	8,403.47	7,134.92	24.07	43.46	171.18	124.16	635.10	1,808.24	1,775.78	32.46	55.702		
5,600.00	5,598.42	8,404.23	7,134.93	24.50	43.47	171.23	123.41	635.20	1,719.40	1,685.46	33.94	50.660		
5,700.00	5,698.39	8,405.01	7,134.95	24.94	43.48	171.28	122.63	635.29	1,631.85	1,596.27	35.58	45.863		
5,800.00	5,798.36	8,405.81	7,134.96	25.38	43.49	171.34	121.84	635.40	1,545.81	1,508.41	37.41	41.325		
5,900.00	5,898.33	8,406.65	7,134.98	25.81	43.51	171.40	121.01	635.50	1,461.55	1,422.11	39.44	37.062		
6,000.00	5,998.30	8,407.51	7,134.99	26.25	43.52	171.46	120.16	635.61	1,379.39	1,337.70	41.69	33.087		
6,100.00	6,098.27	8,408.40	7,135.01	26.69	43.53	171.52	119.27	635.72	1,299.73	1,255.54	44.19	29.412		
6,200.00	6,198.24	8,409.32	7,135.03	27.12	43.55	171.59	118.36	635.84	1,223.07	1,176.11	46.95	26.049		
6,300.00	6,298.20	8,410.27	7,135.05	27.56	43.56	171.66	117.41	635.96	1,149.99	1,100.01	49.98	23.008		
6,400.00	6,398.17	8,411.26	7,135.07	28.00	43.58	171.73	116.43	636.08	1,081.23	1,027.96	53.27	20.298		
6,500.00	6,498.14	8,412.28	7,135.09	28.43	43.59	171.80	115.42	636.22	1,017.66	960.89	56.77	17.925		
6,600.00	6,597.68	8,412.94	7,135.10	28.88	43.60	173.35	114.77	636.30	965.53	904.99	60.54	15.950		
6,700.00	6,694.68	8,412.56	7,135.10	29.32	43.60	173.72	115.15	636.25	935.95	871.51	64.43	14.526		
6,765.42	6,755.61	8,411.73	7,135.08	29.62	43.59	173.74	115.97	636.14	930.33	863.52	66.80	13.926 CC, ES		
6,800.00	6,786.74	8,411.11	7,135.07	29.77	43.58	173.70	116.59	636.07	931.90	863.96	67.95	13.715		
6,900.00	6,871.61	8,408.64	7,135.02	30.24	43.54	173.33	119.03	635.75	953.81	883.15	70.67	13.498 SF		
7,000.00	6,947.19	8,405.27	7,134.95	30.74	43.48	172.54	122.37	635.33	999.45	926.98	72.47	13.792		
7,100.00	7,011.62	8,401.17	7,134.88	31.32	43.42	171.14	126.45	634.82	1,064.73	991.24	73.48	14.489		
7,200.00	7,063.31	8,396.53	7,134.80	32.03	43.35	168.60	131.05	634.26	1,144.84	1,070.87	73.97	15.478		
7,300.00	7,101.00	8,391.57	7,134.73	32.89	43.27	163.42	135.97	633.68	1,235.12	1,160.99	74.14	16.660		
7,400.00	7,123.74	8,386.00	7,134.66	33.93	43.18	149.09	141.50	633.04	1,331.53	1,257.39	74.15	17.958		
7,500.00	7,131.00	8,381.22	7,134.60	35.10	43.11	89.29	146.25	632.50	1,430.70	1,356.59	74.11	19.306		
7,600.00	7,130.63	8,376.15	7,134.53	36.44	43.03	89.29	151.29	631.95	1,530.29	1,456.24	74.05	20.666		
7,700.00	7,130.26	8,371.37	7,134.46	37.94	42.95	89.29	156.05	631.43	1,629.91	1,555.92	73.99	22.028		
7,800.00	7,129.90	8,366.84	7,134.40	39.59	42.88	89.29	160.55	630.96	1,729.55	1,655.60	73.94	23.390		
7,900.00	7,129.53	8,362.56	7,134.34	41.37	42.82	89.28	164.81	630.52	1,829.21	1,755.30	73.90	24.752		
8,000.00	7,129.17	8,356.00	7,134.24	43.27	42.71	89.28	171.33	629.87	1,928.88	1,855.06	73.83	26.127		
8,100.00	7,128.80	8,356.00	7,134.24	45.27	42.71	89.28	171.33	629.87	2,028.57	1,954.72	73.85	27.469		
8,200.00	7,128.43	8,356.00	7,134.24	47.36	42.71	89.28	171.33	629.87	2,128.29	2,054.42	73.87	28.811		
8,300.00	7,128.07	8,356.00	7,134.24	49.52	42.71	89.28	171.33	629.87	2,228.04	2,154.14	73.89	30.153		
8,400.00	7,127.70	8,356.00	7,134.24	51.75	42.71	89.28	171.33	629.87	2,327.80	2,253.89	73.91	31.494		
8,500.00	7,127.33	8,356.00	7,134.24	54.04	42.71	89.28	171.33	629.87	2,427.59	2,353.65	73.94	32.833		
8,600.00	7,126.97	8,356.00	7,134.24	56.38	42.71	89.28	171.33	629.87	2,527.39	2,453.43	73.96	34.172		
8,700.00	7,126.60	8,356.00	7,134.24	58.77	42.71	89.28	171.33	629.87	2,627.21	2,553.22	73.99	35.509		
8,800.00	7,126.24	8,343.73	7,134.05	61.19	42.53	89.27	183.56	628.78	2,726.91	2,653.05	73.85	36.923		
8,900.00	7,125.87	8,342.45	7,134.03	63.65	42.51	89.27	184.83	628.67	2,826.72	2,752.86	73.86	38.269		
9,000.00	7,125.50	8,341.24	7,134.02	66.15	42.49	89.27	186.04	628.58	2,926.55	2,852.67	73.88	39.613		
9,100.00	7,125.14	8,340.09	7,134.00	68.67	42.47	89.27	187.18	628.49	3,026.38	2,952.49	73.89	40.956		
9,200.00	7,124.77	8,339.01	7,133.99	71.21	42.46	89.27	188.26	628.41	3,126.23	3,052.31	73.91	42.297		
9,300.00	7,124.41	8,337.98	7,133.97	73.78	42.44	89.26	189.29	628.33	3,226.08	3,152.15	73.93	43.637		
9,400.00	7,124.04	8,325.00	7,133.80	76.37	42.24	89.26	202.24	627.50	3,326.05	3,252.25	73.80	45.068		
9,500.00	7,123.67	8,325.00	7,133.80	78.98	42.24	89.26	202.24	627.50	3,425.90	3,352.06	73.84	46.399		
9,600.00	7,123.31	8,325.00	7,133.80	81.60	42.24	89.26	202.24	627.50	3,525.76	3,451.89	73.87	47.728		
9,700.00	7,122.94	8,325.00	7,133.80	84.24	42.24	89.26	202.24	627.50	3,625.62	3,551.71	73.91	49.056		
9,800.00	7,122.57	8,325.00	7,133.80	86.90	42.24	89.26	202.24	627.50	3,725.49	3,651.55	73.94	50.382		
9,900.00	7,122.21	8,325.00	7,133.80	89.56	42.24	89.26	202.24	627.50	3,825.37	3,751.39	73.98	51.706		
10,000.00	7,121.84	8,325.00	7,133.80	92.24	42.24	89.26	202.24	627.50	3,925.25	3,851.23	74.02	53.028		
10,100.00	7,121.48	8,325.00	7,133.80	94.92	42.24	89.26	202.24	627.50	4,025.14	3,951.08	74.06	54.348		
10,200.00	7,121.11	8,325.00	7,133.80	97.62	42.24	89.26	202.24	627.50	4,125.04	4,050.93	74.10	55.666		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.74	8,325.00	7,133.80	100.32	42.24	89.26	202.24	627.50	4,224.94	4,150.79	74.14	56.982		
10,400.00	7,120.38	8,325.00	7,133.80	103.04	42.24	89.26	202.24	627.50	4,324.84	4,250.65	74.19	58.296		
10,500.00	7,120.01	8,325.00	7,133.80	105.76	42.24	89.26	202.24	627.50	4,424.75	4,350.52	74.23	59.607		
10,600.00	7,119.64	8,325.00	7,133.80	108.48	42.24	89.26	202.24	627.50	4,524.66	4,450.39	74.28	60.916		
10,700.00	7,119.28	8,325.00	7,133.80	111.22	42.24	89.26	202.24	627.50	4,624.58	4,550.26	74.32	62.223		
10,800.00	7,118.91	8,325.00	7,133.80	113.96	42.24	89.26	202.24	627.50	4,724.50	4,650.13	74.37	63.527		
10,900.00	7,118.55	8,325.00	7,133.80	116.70	42.24	89.26	202.24	627.50	4,824.42	4,750.01	74.42	64.829		
11,000.00	7,118.18	8,325.00	7,133.80	119.45	42.24	89.26	202.24	627.50	4,924.35	4,849.88	74.47	66.129		
11,100.00	7,117.81	8,325.00	7,133.80	122.21	42.24	89.26	202.24	627.50	5,024.28	4,949.76	74.52	67.425		
11,200.00	7,117.45	8,325.00	7,133.80	124.97	42.24	89.26	202.24	627.50	5,124.21	5,049.64	74.57	68.720		
11,300.00	7,117.08	8,325.00	7,133.80	127.73	42.24	89.26	202.24	627.50	5,224.15	5,149.53	74.62	70.011		
11,400.00	7,116.72	8,325.00	7,133.80	130.50	42.24	89.26	202.24	627.50	5,324.08	5,249.41	74.67	71.300		
11,500.00	7,116.35	8,325.00	7,133.80	133.27	42.24	89.26	202.24	627.50	5,424.02	5,349.30	74.73	72.586		
11,600.00	7,115.98	8,325.00	7,133.80	136.04	42.24	89.26	202.24	627.50	5,523.97	5,449.19	74.78	73.870		
11,700.00	7,115.62	8,325.00	7,133.80	138.82	42.24	89.26	202.24	627.50	5,623.91	5,549.07	74.84	75.150		
11,800.00	7,115.25	8,325.00	7,133.80	141.60	42.24	89.26	202.24	627.50	5,723.85	5,648.96	74.89	76.428		
11,900.00	7,114.88	8,325.00	7,133.80	144.39	42.24	89.26	202.24	627.50	5,823.80	5,748.85	74.95	77.702		
12,000.00	7,114.52	8,325.00	7,133.80	147.17	42.24	89.26	202.24	627.50	5,923.75	5,848.74	75.01	78.974		
12,100.00	7,114.15	8,325.00	7,133.80	149.96	42.24	89.26	202.24	627.50	6,023.70	5,948.63	75.07	80.243		
12,200.00	7,113.79	8,325.00	7,133.80	152.75	42.24	89.26	202.24	627.50	6,123.66	6,048.53	75.13	81.509		
12,300.00	7,113.42	8,325.00	7,133.80	155.55	42.24	89.26	202.24	627.50	6,223.61	6,148.42	75.19	82.772		
12,400.00	7,113.05	8,325.00	7,133.80	158.34	42.24	89.26	202.24	627.50	6,323.57	6,248.31	75.25	84.031		
12,500.00	7,112.69	8,325.00	7,133.80	161.14	42.24	89.26	202.24	627.50	6,423.52	6,348.21	75.32	85.288		
12,600.00	7,112.32	8,325.00	7,133.80	163.94	42.24	89.26	202.24	627.50	6,523.48	6,448.10	75.38	86.541		
12,700.00	7,111.96	8,325.00	7,133.80	166.74	42.24	89.26	202.24	627.50	6,623.44	6,548.00	75.45	87.791		
12,800.00	7,111.59	8,325.00	7,133.80	169.54	42.24	89.26	202.24	627.50	6,723.40	6,647.89	75.51	89.038		
12,900.00	7,111.22	8,325.00	7,133.80	172.35	42.24	89.26	202.24	627.50	6,823.36	6,747.79	75.58	90.282		
13,000.00	7,110.86	8,325.00	7,133.80	175.16	42.24	89.26	202.24	627.50	6,923.33	6,847.68	75.65	91.522		
13,100.00	7,110.49	8,325.00	7,133.80	177.96	42.24	89.26	202.24	627.50	7,023.29	6,947.58	75.72	92.759		
13,200.00	7,110.12	8,325.00	7,133.80	180.77	42.24	89.26	202.24	627.50	7,123.26	7,047.47	75.79	93.993		
13,300.00	7,109.76	8,325.00	7,133.80	183.58	42.24	89.26	202.24	627.50	7,223.22	7,147.37	75.86	95.223		
13,400.00	7,109.39	8,325.00	7,133.80	186.40	42.24	89.26	202.24	627.50	7,323.19	7,247.26	75.93	96.450		
13,500.00	7,109.03	8,325.00	7,133.80	189.21	42.24	89.26	202.24	627.50	7,423.16	7,347.16	76.00	97.673		
13,600.00	7,108.66	8,325.00	7,133.80	192.03	42.24	89.26	202.24	627.50	7,523.13	7,447.05	76.07	98.893		
13,700.00	7,108.29	8,325.00	7,133.80	194.84	42.24	89.26	202.24	627.50	7,623.10	7,546.95	76.15	100.109		
13,800.00	7,107.93	8,325.00	7,133.80	197.66	42.24	89.26	202.24	627.50	7,723.07	7,646.84	76.22	101.322		
13,900.00	7,107.56	8,325.00	7,133.80	200.48	42.24	89.26	202.24	627.50	7,823.04	7,746.74	76.30	102.532		
14,000.00	7,107.19	8,325.00	7,133.80	203.30	42.24	89.26	202.24	627.50	7,923.01	7,846.63	76.38	103.737		
14,100.00	7,106.83	8,325.00	7,133.80	206.12	42.24	89.26	202.24	627.50	8,022.98	7,946.53	76.45	104.940		
14,200.00	7,106.46	8,325.00	7,133.80	208.94	42.24	89.26	202.24	627.50	8,122.95	8,046.42	76.53	106.138		
14,300.00	7,106.10	8,325.00	7,133.80	211.76	42.24	89.26	202.24	627.50	8,222.93	8,146.32	76.61	107.333		
14,400.00	7,105.73	8,325.00	7,133.80	214.58	42.24	89.26	202.24	627.50	8,322.90	8,246.21	76.69	108.524		
14,500.00	7,105.36	8,325.00	7,133.80	217.40	42.24	89.26	202.24	627.50	8,422.88	8,346.11	76.77	109.712		
14,600.00	7,105.00	8,325.00	7,133.80	220.23	42.24	89.26	202.24	627.50	8,522.85	8,446.00	76.85	110.896		
14,700.00	7,104.63	8,325.00	7,133.80	223.05	42.24	89.26	202.24	627.50	8,622.83	8,545.89	76.94	112.076		
14,800.00	7,104.27	8,325.00	7,133.80	225.88	42.24	89.26	202.24	627.50	8,722.81	8,645.79	77.02	113.252		
14,872.41	7,104.00	8,325.00	7,133.80	227.93	42.24	89.26	202.24	627.50	8,795.20	8,718.12	77.08	114.102		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	11.79	2.79	3.28	3.28	49.95	1,424.12	1,694.03	2,213.11					
100.00	100.00	142.74	133.74	3.28	3.29	49.93	1,424.01	1,692.70	2,212.28	2,205.71	6.58	336.329		
200.00	200.00	257.05	248.00	3.34	3.37	49.87	1,424.26	1,689.72	2,210.43	2,203.72	6.71	329.432		
300.00	300.00	360.16	351.03	3.44	3.51	49.79	1,425.25	1,685.66	2,208.03	2,201.08	6.95	317.662		
400.00	400.00	449.83	440.60	3.60	3.67	49.68	1,427.06	1,681.79	2,206.03	2,198.76	7.27	303.551		
500.00	500.00	548.87	539.50	3.81	3.89	49.56	1,429.58	1,677.26	2,204.19	2,196.51	7.69	286.766		
587.93	587.93	634.26	624.73	4.01	4.11	139.45	1,432.34	1,672.97	2,203.41	2,195.30	8.11	271.794		
600.00	599.98	646.08	636.53	4.04	4.14	139.45	1,432.76	1,672.35	2,203.69	2,195.52	8.17	269.770		
700.00	699.95	740.62	730.86	4.30	4.41	139.33	1,436.42	1,667.26	2,204.02	2,195.32	8.70	253.249		
800.00	799.92	842.24	832.21	4.59	4.74	139.18	1,441.03	1,661.53	2,204.60	2,195.29	9.31	236.727		
900.00	899.89	937.21	926.94	4.90	5.06	139.05	1,445.20	1,656.03	2,204.99	2,195.05	9.94	221.723		
1,000.00	999.86	1,027.51	1,016.95	5.23	5.38	138.90	1,449.94	1,650.78	2,205.93	2,195.33	10.60	208.144		
1,100.00	1,099.83	1,300.92	1,286.86	5.58	6.54	137.97	1,471.28	1,614.12	2,202.44	2,190.36	12.08	182.282		
1,200.00	1,199.80	1,412.87	1,396.68	5.94	7.08	137.51	1,479.09	1,593.86	2,195.46	2,182.50	12.96	169.413		
1,300.00	1,299.77	1,501.87	1,483.91	6.30	7.53	137.14	1,485.52	1,577.42	2,188.50	2,174.74	13.76	159.077		
1,400.00	1,399.73	1,686.05	1,664.30	6.68	8.50	136.38	1,495.90	1,541.86	2,179.93	2,164.90	15.03	145.033		
1,500.00	1,499.70	1,798.37	1,774.32	7.07	9.10	135.95	1,499.38	1,519.50	2,169.39	2,153.42	15.97	135.840		
1,600.00	1,599.67	1,874.09	1,848.55	7.46	9.50	135.67	1,501.33	1,504.71	2,158.89	2,142.14	16.75	128.913		
1,700.00	1,699.64	1,942.74	1,916.05	7.85	9.87	135.43	1,503.47	1,492.37	2,149.90	2,132.41	17.50	122.877		
1,800.00	1,799.61	2,011.00	1,983.31	8.25	10.23	135.21	1,505.86	1,480.98	2,142.25	2,124.00	18.25	117.401		
1,900.00	1,899.58	2,078.13	2,049.57	8.66	10.58	134.99	1,508.76	1,470.61	2,136.11	2,117.11	18.99	112.461		
2,000.00	1,999.55	2,158.83	2,129.30	9.06	10.99	134.72	1,513.22	1,458.94	2,131.49	2,111.68	19.81	107.586		
2,100.00	2,099.52	2,248.00	2,217.32	9.47	11.46	134.40	1,518.83	1,445.84	2,127.37	2,106.69	20.68	102.868		
2,200.00	2,199.48	2,333.10	2,301.26	9.89	11.91	134.08	1,525.01	1,433.26	2,123.95	2,102.41	21.54	98.606		
2,300.00	2,299.45	2,425.14	2,391.99	10.30	12.40	133.72	1,532.43	1,419.68	2,121.21	2,098.77	22.44	94.523		
2,400.00	2,399.42	2,522.51	2,488.14	10.72	12.91	133.37	1,539.51	1,406.09	2,118.54	2,095.18	23.37	90.662		
2,500.00	2,499.39	2,613.04	2,577.65	11.14	13.38	133.06	1,545.98	1,394.14	2,116.38	2,092.13	24.25	87.258		
2,600.00	2,599.36	2,715.85	2,679.39	11.56	13.91	132.72	1,552.98	1,381.06	2,114.38	2,089.18	25.20	83.898		
2,700.00	2,699.33	2,852.71	2,814.66	11.98	14.62	132.25	1,562.02	1,362.41	2,111.79	2,085.46	26.33	80.206		
2,800.00	2,799.30	2,979.52	2,939.44	12.41	15.33	131.74	1,570.40	1,341.43	2,107.18	2,079.75	27.44	76.805		
2,900.00	2,899.27	3,073.58	3,032.02	12.83	15.85	131.36	1,576.21	1,325.85	2,102.40	2,074.02	28.38	74.083		
3,000.00	2,999.23	3,175.27	3,132.22	13.26	16.41	130.97	1,582.02	1,309.48	2,097.67	2,068.32	29.36	71.456		
3,100.00	3,099.20	3,269.06	3,224.62	13.68	16.93	130.61	1,587.48	1,294.33	2,093.11	2,062.81	30.29	69.094		
3,200.00	3,199.17	3,369.08	3,323.51	14.11	17.46	130.29	1,592.03	1,280.19	2,088.97	2,057.72	31.24	66.862		
3,300.00	3,299.14	3,478.31	3,431.68	14.54	18.02	129.97	1,595.26	1,265.35	2,084.01	2,051.79	32.22	64.689		
3,400.00	3,399.11	3,556.79	3,509.51	14.97	18.41	129.77	1,597.54	1,255.52	2,079.79	2,046.74	33.05	62.936		
3,500.00	3,499.08	3,637.14	3,589.17	15.40	18.82	129.54	1,600.84	1,245.52	2,076.56	2,042.68	33.89	61.281		
3,600.00	3,599.05	3,720.34	3,671.56	15.83	19.25	129.27	1,605.42	1,234.84	2,074.23	2,039.48	34.75	59.690		
3,700.00	3,699.02	3,826.45	3,776.34	16.26	19.82	128.88	1,612.75	1,219.81	2,072.20	2,036.44	35.75	57.957		
3,800.00	3,798.98	3,938.64	3,886.74	16.69	20.45	128.40	1,621.50	1,201.88	2,069.83	2,033.01	36.82	56.220		
3,900.00	3,898.95	4,063.59	4,009.52	17.12	21.17	127.85	1,630.71	1,180.62	2,066.60	2,028.65	37.96	54.446		
4,000.00	3,998.92	4,191.29	4,134.90	17.55	21.91	127.28	1,638.79	1,157.76	2,062.15	2,023.04	39.11	52.728		
4,100.00	4,098.89	4,277.86	4,219.96	17.98	22.40	126.90	1,643.64	1,142.46	2,057.39	2,017.35	40.04	51.384		
4,200.00	4,198.86	4,363.60	4,304.46	18.42	22.88	126.56	1,648.14	1,128.61	2,053.37	2,012.41	40.96	50.127		
4,300.00	4,298.83	4,453.14	4,392.87	18.85	23.37	126.24	1,652.67	1,115.23	2,050.01	2,008.12	41.89	48.937		
4,400.00	4,398.80	4,543.99	4,482.64	19.28	23.86	125.91	1,657.42	1,102.07	2,047.14	2,004.32	42.82	47.808		
4,500.00	4,498.77	4,631.41	4,569.07	19.72	24.32	125.61	1,662.15	1,089.87	2,044.80	2,001.08	43.72	46.766		
4,600.00	4,598.73	4,717.09	4,653.89	20.15	24.77	125.32	1,666.89	1,078.72	2,043.18	1,998.57	44.61	45.798		
4,700.00	4,698.70	4,799.30	4,735.38	20.58	25.19	125.07	1,671.54	1,068.85	2,042.32	1,996.85	45.48	44.909		
4,732.10	4,730.79	4,824.18	4,760.06	20.72	25.32	125.00	1,673.01	1,066.06	2,042.27	1,996.52	45.74	44.647		
4,800.00	4,798.67	4,878.59	4,814.06	21.02	25.59	124.84	1,676.31	1,060.34	2,042.52	1,996.21	46.31	44.105		
4,900.00	4,898.64	4,966.31	4,901.23	21.45	26.02	124.62	1,681.62	1,052.04	2,043.52	1,996.35	47.17	43.319		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,000.00	4,998.61	5,063.16	4,997.53	21.89	26.48	124.38	1,687.41	1,043.55	2,044.89	1,996.82	48.08	42.532		
5,100.00	5,098.58	5,157.77	5,091.49	22.32	26.94	124.13	1,693.76	1,034.58	2,046.51	1,997.53	48.98	41.782		
5,200.00	5,198.55	5,258.65	5,191.73	22.76	27.43	123.87	1,700.49	1,025.31	2,048.31	1,998.39	49.92	41.035		
5,300.00	5,298.52	5,371.33	5,303.84	23.20	27.96	123.62	1,706.69	1,015.97	2,049.65	1,998.76	50.89	40.273		
5,400.00	5,398.49	5,470.57	5,402.76	23.63	28.40	123.45	1,710.88	1,009.13	2,050.75	1,998.96	51.78	39.604		
5,500.00	5,498.45	5,567.69	5,499.68	24.07	28.82	123.34	1,714.17	1,004.00	2,052.03	1,999.39	52.64	38.983		
5,600.00	5,598.42	5,694.64	5,598.61	24.50	29.24	123.23	1,717.46	998.87	2,053.31	1,999.82	53.52	38.362		
5,700.00	5,698.39	5,791.77	5,698.61	24.94	29.66	123.12	1,720.75	993.74	2,054.59	1,999.99	54.40	37.741		
5,800.00	5,798.36	5,888.85	5,798.61	25.38	30.08	123.01	1,724.04	988.61	2,055.87	1,999.99	55.28	37.120		
5,900.00	5,898.33	5,985.93	5,898.61	25.81	30.50	122.90	1,727.33	983.48	2,057.15	1,999.99	56.16	36.499		
6,000.00	5,998.30	6,083.01	5,998.61	26.25	30.92	122.79	1,730.62	978.35	2,058.43	1,999.99	57.04	35.878		
6,100.00	6,098.27	6,180.09	6,098.61	26.69	31.34	122.68	1,733.91	973.22	2,059.71	1,999.99	57.92	35.257		
6,200.00	6,198.24	6,277.17	6,198.61	27.12	31.76	122.57	1,737.20	968.09	2,060.99	1,999.99	58.80	34.636		
6,300.00	6,298.20	6,374.25	6,298.61	27.56	32.18	122.46	1,740.49	962.96	2,062.27	1,999.99	59.68	34.015		
6,400.00	6,398.17	6,471.33	6,398.61	28.00	32.60	122.35	1,743.78	957.83	2,063.55	1,999.99	60.56	33.394		
6,500.00	6,498.14	6,568.41	6,498.61	28.43	33.02	122.24	1,747.07	952.70	2,064.83	1,999.99	61.44	32.773		
6,600.00	6,597.68	6,665.49	6,597.61	28.88	33.44	122.13	1,750.36	947.57	2,066.11	1,999.99	62.32	32.152		
6,700.00	6,697.65	6,762.57	6,697.61	29.32	33.86	122.02	1,753.65	942.44	2,067.39	1,999.99	63.20	31.531		
6,755.65	6,746.67	6,859.65	6,746.61	29.57	34.07	121.91	1,756.94	937.31	2,068.67	1,999.99	64.08	30.910		
6,800.00	6,786.74	6,899.72	6,786.61	29.77	34.28	121.80	1,759.23	932.18	2,069.95	1,999.99	64.96	30.289		
6,900.00	6,871.61	6,984.59	6,871.61	30.24	34.70	121.69	1,762.52	927.05	2,071.23	1,999.99	65.84	29.668		
7,000.00	6,947.19	7,069.77	6,947.19	30.74	35.12	121.58	1,765.21	921.92	2,072.51	1,999.99	66.72	29.047		
7,100.00	7,011.62	7,144.20	7,011.62	31.32	35.54	121.47	1,768.90	916.79	2,073.79	1,999.99	67.60	28.426		
7,200.00	7,063.31	7,196.89	7,063.31	32.03	36.00	121.36	1,772.59	911.66	2,075.07	1,999.99	68.48	27.805		
7,300.00	7,101.00	7,234.58	7,101.00	32.89	36.50	121.25	1,776.28	906.53	2,076.35	1,999.99	69.36	27.184		
7,400.00	7,123.74	7,267.32	7,123.74	33.93	37.04	121.14	1,779.97	901.40	2,077.63	1,999.99	70.24	26.563		
7,500.00	7,131.00	7,274.58	7,131.00	35.10	37.33	121.03	1,783.66	896.27	2,078.91	1,999.99	71.12	25.942		
7,600.00	7,130.63	7,281.84	7,130.63	36.44	37.35	120.92	1,787.35	891.14	2,080.19	1,999.99	72.00	25.321		
7,700.00	7,130.26	7,289.10	7,130.26	37.94	37.37	120.81	1,791.04	886.01	2,081.47	1,999.99	72.88	24.700		
7,800.00	7,129.90	7,296.36	7,129.90	39.59	37.39	120.70	1,794.73	880.88	2,082.75	1,999.99	73.76	24.079		
7,900.00	7,129.53	7,303.62	7,129.53	41.37	37.41	120.59	1,798.42	875.75	2,084.03	1,999.99	74.64	23.458		
8,000.00	7,129.17	7,310.88	7,129.17	43.27	37.43	120.48	1,802.11	870.62	2,085.31	1,999.99	75.52	22.837		
8,100.00	7,128.80	7,318.14	7,128.80	45.27	37.45	120.37	1,805.80	865.49	2,086.59	1,999.99	76.40	22.216		
8,200.00	7,128.43	7,325.40	7,128.43	47.36	37.46	120.26	1,809.49	860.36	2,087.87	1,999.99	77.28	21.595		
8,300.00	7,128.07	7,332.66	7,128.07	49.52	37.48	120.15	1,813.18	855.23	2,089.15	1,999.99	78.16	20.974		
8,400.00	7,127.70	7,339.92	7,127.70	51.75	37.50	120.04	1,816.87	850.10	2,090.43	1,999.99	79.04	20.353		
8,500.00	7,127.33	7,347.18	7,127.33	54.04	37.52	119.93	1,820.56	844.97	2,091.71	1,999.99	79.92	19.732		
8,600.00	7,126.97	7,354.44	7,126.97	56.38	37.54	119.82	1,824.25	839.84	2,093.00	1,999.99	80.80	19.111		
8,700.00	7,126.60	7,361.70	7,126.60	58.77	37.55	119.71	1,827.94	834.71	2,094.28	1,999.99	81.68	18.490		
8,800.00	7,126.24	7,368.96	7,126.24	61.19	37.57	119.60	1,831.63	829.58	2,095.56	1,999.99	82.56	17.869		
8,900.00	7,125.87	7,376.22	7,125.87	63.65	37.59	119.49	1,835.32	824.45	2,096.84	1,999.99	83.44	17.248		
9,000.00	7,125.50	7,383.48	7,125.50	66.15	37.61	119.38	1,839.01	819.32	2,098.13	1,999.99	84.32	16.627		
9,100.00	7,125.14	7,390.74	7,125.14	68.67	37.62	119.27	1,842.70	814.19	2,099.41	1,999.99	85.20	16.006		
9,200.00	7,124.77	7,398.00	7,124.77	71.21	37.64	119.16	1,846.39	809.06	2,100.69	1,999.99	86.08	15.385		
9,300.00	7,124.41	7,405.26	7,124.41	73.78	37.66	119.05	1,850.08	803.93	2,101.97	1,999.99	86.96	14.764		
9,400.00	7,124.04	7,412.52	7,124.04	76.37	37.67	118.94	1,853.77	798.80	2,103.25	1,999.99	87.84	14.143		
9,500.00	7,123.67	7,419.78	7,123.67	78.98	37.69	118.83	1,857.46	793.67	2,104.53	1,999.99	88.72	13.522		
9,600.00	7,123.31	7,427.04	7,123.31	81.60	37.70	118.72	1,861.15	788.54	2,105.81	1,999.99	89.60	12.901		
9,700.00	7,122.94	7,434.30	7,122.94	84.24	37.72	118.61	1,864.84	783.41	2,107.09	1,999.99	90.48	12.280		
9,800.00	7,122.57	7,441.56	7,122.57	86.90	37.74	118.50	1,868.53	778.28	2,108.37	1,999.99	91.36	11.659		
9,900.00	7,122.21	7,448.82	7,122.21	89.56	37.75	118.39	1,872.22	773.15	2,109.65	1,999.99	92.24	11.038		
10,000.00	7,121.84	7,456.08	7,121.84	92.24	37.75	118.28	1,875.91	768.02	2,110.93	1,999.99	93.12	10.417		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,100.00	7,121.48	8,712.00	7,248.38	94.92	47.75	-154.50	-30.90	962.33	4,353.18	4,274.70	78.48	55.472		
10,200.00	7,121.11	8,712.00	7,248.38	97.62	47.75	-154.50	-30.90	962.33	4,453.14	4,374.63	78.51	56.720		
10,300.00	7,120.74	8,715.70	7,248.34	100.32	47.80	-152.95	-34.60	962.36	4,553.10	4,474.48	78.62	57.916		
10,400.00	7,120.38	8,716.51	7,248.33	103.04	47.82	-152.62	-35.41	962.37	4,653.06	4,574.39	78.67	59.148		
10,500.00	7,120.01	8,717.30	7,248.32	105.76	47.83	-152.29	-36.20	962.37	4,753.03	4,674.31	78.72	60.378		
10,600.00	7,119.64	8,718.08	7,248.31	108.48	47.84	-151.98	-36.99	962.38	4,852.99	4,774.22	78.78	61.605		
10,700.00	7,119.28	8,718.86	7,248.30	111.22	47.85	-151.66	-37.76	962.38	4,952.96	4,874.13	78.83	62.830		
10,800.00	7,118.91	8,719.62	7,248.29	113.96	47.86	-151.36	-38.52	962.39	5,052.93	4,974.04	78.89	64.052		
10,900.00	7,118.55	8,720.37	7,248.28	116.70	47.88	-151.06	-39.27	962.40	5,152.90	5,073.95	78.95	65.271		
11,000.00	7,118.18	8,721.11	7,248.27	119.45	47.89	-150.76	-40.01	962.40	5,252.87	5,173.86	79.00	66.489		
11,100.00	7,117.81	8,721.84	7,248.26	122.21	47.90	-150.48	-40.74	962.41	5,352.84	5,273.78	79.06	67.703		
11,200.00	7,117.45	8,722.56	7,248.25	124.97	47.91	-150.19	-41.46	962.41	5,452.81	5,373.69	79.12	68.915		
11,300.00	7,117.08	8,723.27	7,248.24	127.73	47.92	-149.92	-42.17	962.42	5,552.78	5,473.60	79.18	70.124		
11,400.00	7,116.72	8,723.97	7,248.24	130.50	47.93	-149.64	-42.87	962.43	5,652.76	5,573.51	79.25	71.331		
11,500.00	7,116.35	8,724.66	7,248.23	133.27	47.94	-149.38	-43.56	962.43	5,752.73	5,673.42	79.31	72.535		
11,600.00	7,115.98	8,725.34	7,248.22	136.04	47.95	-149.11	-44.24	962.44	5,852.71	5,773.33	79.37	73.736		
11,700.00	7,115.62	8,726.01	7,248.21	138.82	47.96	-148.86	-44.92	962.44	5,952.68	5,873.24	79.44	74.934		
11,800.00	7,115.25	8,726.68	7,248.20	141.60	47.97	-148.60	-45.58	962.45	6,052.66	5,973.16	79.50	76.130		
11,900.00	7,114.88	8,727.33	7,248.19	144.39	47.98	-148.36	-46.23	962.45	6,152.64	6,073.07	79.57	77.323		
12,000.00	7,114.52	8,727.98	7,248.19	147.17	47.99	-148.11	-46.88	962.46	6,252.62	6,172.98	79.64	78.512		
12,100.00	7,114.15	8,728.62	7,248.18	149.96	48.00	-147.87	-47.52	962.47	6,352.59	6,272.89	79.71	79.699		
12,200.00	7,113.79	8,729.25	7,248.17	152.75	48.01	-147.64	-48.15	962.47	6,452.57	6,372.80	79.78	80.883		
12,300.00	7,113.42	8,729.87	7,248.16	155.55	48.02	-147.41	-48.77	962.48	6,552.55	6,472.71	79.85	82.064		
12,400.00	7,113.05	8,730.48	7,248.16	158.34	48.03	-147.18	-49.39	962.48	6,652.53	6,572.62	79.92	83.242		
12,500.00	7,112.69	8,731.09	7,248.15	161.14	48.04	-146.96	-49.99	962.49	6,752.51	6,672.52	79.99	84.417		
12,600.00	7,112.32	8,731.69	7,248.14	163.94	48.05	-146.74	-50.59	962.49	6,852.49	6,772.43	80.06	85.589		
12,700.00	7,111.96	8,732.28	7,248.13	166.74	48.06	-146.52	-51.18	962.50	6,952.48	6,872.34	80.14	86.758		
12,800.00	7,111.59	8,732.87	7,248.13	169.54	48.07	-146.31	-51.77	962.50	7,052.46	6,972.25	80.21	87.924		
12,900.00	7,111.22	8,733.44	7,248.12	172.35	48.08	-146.10	-52.35	962.51	7,152.44	7,072.15	80.29	89.086		
13,000.00	7,110.86	8,734.01	7,248.11	175.16	48.09	-145.90	-52.92	962.52	7,252.42	7,172.06	80.36	90.246		
13,100.00	7,110.49	8,734.58	7,248.11	177.96	48.10	-145.70	-53.48	962.52	7,352.41	7,271.97	80.44	91.402		
13,200.00	7,110.12	8,735.13	7,248.10	180.77	48.11	-145.50	-54.03	962.53	7,452.39	7,371.87	80.52	92.556		
13,300.00	7,109.76	8,735.68	7,248.09	183.58	48.11	-145.31	-54.58	962.53	7,552.37	7,471.78	80.60	93.706		
13,400.00	7,109.39	8,736.23	7,248.09	186.40	48.12	-145.12	-55.13	962.54	7,652.36	7,571.68	80.68	94.852		
13,500.00	7,109.03	8,736.76	7,248.08	189.21	48.13	-144.93	-55.66	962.54	7,752.34	7,671.59	80.76	95.996		
13,600.00	7,108.66	8,737.29	7,248.07	192.03	48.14	-144.74	-56.20	962.55	7,852.33	7,771.49	80.84	97.136		
13,700.00	7,108.29	8,737.82	7,248.07	194.84	48.15	-144.56	-56.72	962.55	7,952.31	7,871.39	80.92	98.273		
13,800.00	7,107.93	8,744.00	7,247.99	197.66	48.24	-142.47	-62.90	962.61	8,052.30	7,971.20	81.11	99.280		
13,900.00	7,107.56	8,744.00	7,247.99	200.48	48.24	-142.47	-62.90	962.61	8,152.29	8,071.11	81.18	100.421		
14,000.00	7,107.19	8,744.00	7,247.99	203.30	48.24	-142.47	-62.90	962.61	8,252.27	8,171.02	81.26	101.558		
14,100.00	7,106.83	8,744.00	7,247.99	206.12	48.24	-142.47	-62.90	962.61	8,352.26	8,270.93	81.33	102.693		
14,200.00	7,106.46	8,744.00	7,247.99	208.94	48.24	-142.47	-62.90	962.61	8,452.25	8,370.84	81.41	103.823		
14,300.00	7,106.10	8,744.00	7,247.99	211.76	48.24	-142.47	-62.90	962.61	8,552.23	8,470.74	81.49	104.951		
14,400.00	7,105.73	8,744.00	7,247.99	214.58	48.24	-142.47	-62.90	962.61	8,652.22	8,570.65	81.57	106.075		
14,500.00	7,105.36	8,744.00	7,247.99	217.40	48.24	-142.47	-62.90	962.61	8,752.21	8,670.56	81.65	107.196		
14,600.00	7,105.00	8,744.00	7,247.99	220.23	48.24	-142.47	-62.90	962.61	8,852.19	8,770.47	81.73	108.314		
14,700.00	7,104.63	8,744.00	7,247.99	223.05	48.24	-142.47	-62.90	962.61	8,952.18	8,870.37	81.81	109.428		
14,800.00	7,104.27	8,744.00	7,247.99	225.88	48.24	-142.47	-62.90	962.61	9,052.17	8,970.28	81.89	110.539		
14,872.41	7,104.00	8,744.00	7,247.99	227.93	48.24	-142.47	-62.90	962.61	9,124.57	9,042.62	81.95	111.341		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-179.57	-220.04	-1.67	220.05					
100.00	100.00	101.00	100.00	3.28	3.28	-179.57	-220.04	-1.67	220.05	213.48	6.57	33.495		
200.00	200.00	199.00	200.00	3.34	3.34	-179.57	-220.04	-1.67	220.05	213.38	6.67	32.975 CC, ES		
300.00	300.00	291.93	292.92	3.44	3.43	-179.53	-221.51	-1.81	221.63	214.75	6.88	32.194		
400.00	400.00	384.60	385.47	3.60	3.57	-179.44	-225.96	-2.23	226.44	219.24	7.20	31.446		
500.00	500.00	476.88	477.45	3.81	3.74	-179.28	-233.36	-2.92	234.46	226.85	7.61	30.813		
600.00	599.98	568.59	568.58	4.04	3.95	-89.28	-243.62	-3.89	245.65	237.56	8.08	30.385		
700.00	699.95	659.56	658.59	4.30	4.20	-89.54	-256.66	-5.12	259.98	251.36	8.61	30.179		
800.00	799.92	749.61	747.25	4.59	4.47	-89.72	-272.37	-6.60	277.42	268.23	9.19	30.191		
900.00	899.89	838.60	834.32	4.90	4.77	-89.83	-290.61	-8.32	297.92	288.13	9.79	30.425		
1,000.00	999.86	926.36	919.60	5.23	5.10	-89.88	-311.23	-10.26	321.42	311.00	10.42	30.850		
1,100.00	1,099.83	1,020.94	1,011.02	5.58	5.48	-89.89	-335.39	-12.53	346.95	335.88	11.07	31.339		
1,200.00	1,199.80	1,117.61	1,104.44	5.94	5.89	-89.90	-360.13	-14.87	372.55	360.79	11.76	31.683		
1,300.00	1,299.77	1,214.28	1,197.85	6.30	6.32	-89.90	-384.88	-17.20	398.15	385.68	12.47	31.920		
1,400.00	1,399.73	1,310.94	1,291.27	6.68	6.76	-89.91	-409.63	-19.53	423.75	410.54	13.21	32.074		
1,500.00	1,499.70	1,407.61	1,384.69	7.07	7.21	-89.92	-434.38	-21.86	449.35	435.38	13.97	32.168		
1,600.00	1,599.67	1,504.28	1,478.10	7.46	7.67	-89.92	-459.12	-24.19	474.95	460.21	14.74	32.216		
1,700.00	1,699.64	1,600.95	1,571.52	7.85	8.14	-89.93	-483.87	-26.52	500.55	485.02	15.53	32.230		
1,800.00	1,799.61	1,702.39	1,664.94	8.25	8.63	-89.93	-508.62	-28.85	526.15	509.80	16.35	32.177		
1,900.00	1,899.58	1,805.72	1,758.36	8.66	9.15	-89.93	-533.37	-31.18	551.75	534.56	17.19	32.094		
2,000.00	1,999.55	1,909.05	1,851.77	9.06	9.67	-89.94	-558.11	-33.51	577.35	559.31	18.04	32.002		
2,100.00	2,099.52	1,987.62	1,945.19	9.47	10.06	-89.94	-582.86	-35.85	602.95	584.17	18.79	32.096		
2,200.00	2,199.48	2,084.28	2,038.61	9.89	10.56	-89.94	-607.61	-38.18	628.55	608.93	19.62	32.037		
2,300.00	2,299.45	2,180.95	2,132.02	10.30	11.05	-89.94	-632.35	-40.51	654.15	633.70	20.46	31.974		
2,400.00	2,399.42	2,277.62	2,225.44	10.72	11.55	-89.95	-657.10	-42.84	679.75	658.45	21.30	31.909		
2,500.00	2,499.39	2,374.29	2,318.86	11.14	12.05	-89.95	-681.85	-45.17	705.36	683.20	22.15	31.841		
2,600.00	2,599.36	2,470.95	2,412.27	11.56	12.55	-89.95	-706.60	-47.50	730.96	707.95	23.01	31.773		
2,700.00	2,699.33	2,567.62	2,505.69	11.98	13.05	-89.95	-731.34	-49.83	756.56	732.69	23.86	31.705		
2,800.00	2,799.30	2,664.29	2,599.11	12.41	13.56	-89.96	-756.09	-52.16	782.16	757.43	24.72	31.638		
2,900.00	2,899.27	2,760.96	2,692.53	12.83	14.07	-89.96	-780.84	-54.49	807.76	782.17	25.59	31.571		
3,000.00	2,999.23	2,857.62	2,785.94	13.26	14.57	-89.96	-805.59	-56.83	833.36	806.91	26.45	31.506		
3,100.00	3,099.20	2,954.29	2,879.36	13.68	15.08	-89.96	-830.33	-59.16	858.96	831.64	27.32	31.442		
3,200.00	3,199.17	3,050.96	2,972.78	14.11	15.59	-89.96	-855.08	-61.49	884.56	856.37	28.19	31.379		
3,300.00	3,299.14	3,147.63	3,066.19	14.54	16.10	-89.96	-879.83	-63.82	910.16	881.10	29.06	31.318		
3,400.00	3,399.11	3,244.29	3,159.61	14.97	16.61	-89.96	-904.58	-66.15	935.76	905.82	29.94	31.259		
3,500.00	3,499.08	3,340.96	3,253.03	15.40	17.13	-89.97	-929.32	-68.48	961.36	930.55	30.81	31.201		
3,600.00	3,599.05	3,437.63	3,346.45	15.83	17.64	-89.97	-954.07	-70.81	986.96	955.27	31.69	31.146		
3,700.00	3,699.02	3,534.30	3,439.86	16.26	18.15	-89.97	-978.82	-73.14	1,012.56	979.99	32.57	31.091		
3,800.00	3,798.98	3,630.97	3,533.28	16.69	18.67	-89.97	-1,003.56	-75.48	1,038.16	1,004.71	33.45	31.039		
3,900.00	3,898.95	3,727.63	3,626.70	17.12	19.18	-89.97	-1,028.31	-77.81	1,063.76	1,029.43	34.33	30.988		
4,000.00	3,998.92	3,824.30	3,720.11	17.55	19.70	-89.97	-1,053.06	-80.14	1,089.36	1,054.15	35.21	30.938		
4,100.00	4,098.89	3,920.97	3,813.53	17.98	20.21	-89.97	-1,077.81	-82.47	1,114.96	1,078.87	36.09	30.890		
4,200.00	4,198.86	4,017.64	3,906.95	18.42	20.73	-89.97	-1,102.55	-84.80	1,140.56	1,103.58	36.98	30.844		
4,300.00	4,298.83	4,114.30	4,000.37	18.85	21.24	-89.97	-1,127.30	-87.13	1,166.16	1,128.30	37.86	30.799		
4,400.00	4,398.80	4,210.97	4,093.78	19.28	21.76	-89.97	-1,152.05	-89.46	1,191.76	1,153.01	38.75	30.755		
4,500.00	4,498.77	4,307.64	4,187.20	19.72	22.28	-89.97	-1,176.80	-91.79	1,217.36	1,177.73	39.64	30.713		
4,600.00	4,598.73	4,404.31	4,280.62	20.15	22.79	-89.98	-1,201.54	-94.12	1,242.96	1,202.44	40.52	30.672		
4,700.00	4,698.70	4,500.97	4,374.03	20.58	23.31	-89.98	-1,226.29	-96.46	1,268.56	1,227.15	41.41	30.633		
4,800.00	4,798.67	4,602.36	4,467.45	21.02	23.86	-89.98	-1,251.04	-98.79	1,294.17	1,251.84	42.32	30.577		
4,900.00	4,898.64	4,694.31	4,560.87	21.45	24.35	-89.98	-1,275.79	-101.12	1,319.77	1,276.58	43.19	30.557		
5,000.00	4,998.61	4,790.98	4,654.28	21.89	24.87	-89.98	-1,300.53	-103.45	1,345.37	1,301.29	44.08	30.520		
5,100.00	5,098.58	4,887.64	4,747.70	22.32	25.39	-89.98	-1,325.28	-105.78	1,370.97	1,326.00	44.97	30.485		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	4,984.31	4,841.12	22.76	25.90	-89.98	-1,350.03	-108.11	1,396.57	1,350.70	45.86	30.451		
5,300.00	5,298.52	5,080.98	4,934.54	23.20	26.42	-89.98	-1,374.77	-110.44	1,422.17	1,375.41	46.75	30.418		
5,400.00	5,398.49	5,177.65	5,027.95	23.63	26.94	-89.98	-1,399.52	-112.77	1,447.77	1,400.12	47.65	30.386		
5,500.00	5,498.45	5,274.31	5,121.37	24.07	27.46	-89.98	-1,424.27	-115.11	1,473.37	1,424.83	48.54	30.354		
5,600.00	5,598.42	5,370.98	5,214.79	24.50	27.98	-89.98	-1,449.02	-117.44	1,498.97	1,449.54	49.43	30.324		
5,700.00	5,698.39	5,467.65	5,308.20	24.94	28.50	-89.98	-1,473.76	-119.77	1,524.57	1,474.24	50.33	30.294		
5,800.00	5,798.36	5,564.32	5,401.62	25.38	29.02	-89.98	-1,498.51	-122.10	1,550.17	1,498.95	51.22	30.265		
5,900.00	5,898.33	5,660.98	5,495.04	25.81	29.54	-89.98	-1,523.26	-124.43	1,575.77	1,523.66	52.11	30.237		
6,000.00	5,998.30	5,757.65	5,588.46	26.25	30.06	-89.98	-1,548.01	-126.76	1,601.37	1,548.36	53.01	30.210		
6,100.00	6,098.27	5,854.32	5,681.87	26.69	30.58	-89.98	-1,572.75	-129.09	1,626.97	1,573.07	53.90	30.183		
6,200.00	6,198.24	5,950.99	5,775.29	27.12	31.10	-89.98	-1,597.50	-131.42	1,652.57	1,597.77	54.80	30.157		
6,300.00	6,298.20	6,047.65	5,868.71	27.56	31.62	-89.98	-1,622.25	-133.75	1,678.17	1,622.48	55.69	30.132		
6,400.00	6,398.17	6,144.32	5,962.12	28.00	32.14	-89.98	-1,647.00	-136.09	1,703.77	1,647.18	56.59	30.107		
6,500.00	6,498.14	6,240.99	6,055.54	28.43	32.66	-89.98	-1,671.74	-138.42	1,729.37	1,671.89	57.49	30.083		
6,600.00	6,597.68	6,337.42	6,148.73	28.88	33.18	-87.17	-1,696.43	-140.74	1,754.80	1,696.41	58.39	30.055		
6,700.00	6,694.68	6,431.84	6,239.97	29.32	33.69	-85.48	-1,720.60	-143.02	1,779.56	1,720.27	59.29	30.015		
6,800.00	6,786.74	6,521.93	6,327.03	29.77	34.18	-84.32	-1,743.66	-145.19	1,803.60	1,743.41	60.18	29.968		
6,900.00	6,871.61	6,617.79	6,419.43	30.24	34.69	-83.64	-1,768.17	-151.40	1,826.95	1,765.76	61.18	29.860		
7,000.00	6,947.19	6,726.68	6,521.98	30.74	35.25	-83.27	-1,795.48	-175.18	1,848.96	1,786.60	62.36	29.650		
7,100.00	7,011.62	6,849.07	6,630.62	31.32	35.81	-83.17	-1,824.58	-222.99	1,868.94	1,805.25	63.69	29.345		
7,200.00	7,063.31	6,988.60	6,740.98	32.03	36.37	-83.36	-1,854.35	-302.50	1,886.04	1,820.85	65.19	28.931		
7,300.00	7,101.00	7,148.19	6,843.18	32.89	36.91	-83.77	-1,882.24	-421.32	1,899.24	1,832.30	66.95	28.369		
7,400.00	7,123.74	7,327.72	6,919.97	33.93	37.48	-84.25	-1,903.69	-581.51	1,907.43	1,838.23	69.20	27.565		
7,500.00	7,131.00	7,520.99	6,950.94	35.10	38.41	-84.59	-1,913.21	-771.29	1,909.59	1,837.43	72.16	26.463		
7,600.00	7,130.63	7,627.02	6,950.65	36.44	39.28	-84.59	-1,913.88	-877.31	1,908.25	1,833.45	74.80	25.512		
7,700.00	7,130.26	7,727.01	6,950.27	37.94	40.39	-84.59	-1,914.48	-977.30	1,906.90	1,829.21	77.70	24.543		
7,800.00	7,129.90	7,827.00	6,949.89	39.59	41.75	-84.58	-1,915.07	-1,077.29	1,905.55	1,824.66	80.89	23.557		
7,900.00	7,129.53	7,926.99	6,949.51	41.37	43.30	-84.58	-1,915.67	-1,177.28	1,904.20	1,819.86	84.35	22.576		
8,000.00	7,129.17	8,026.98	6,949.13	43.27	45.02	-84.57	-1,916.27	-1,277.27	1,902.85	1,814.82	88.04	21.615		
8,100.00	7,128.80	8,126.97	6,948.75	45.27	46.86	-84.57	-1,916.87	-1,377.26	1,901.50	1,809.58	91.93	20.685		
8,200.00	7,128.43	8,226.96	6,948.37	47.36	48.81	-84.56	-1,917.47	-1,477.24	1,900.15	1,804.15	96.00	19.793		
8,300.00	7,128.07	8,326.95	6,947.99	49.52	50.85	-84.56	-1,918.07	-1,577.23	1,898.80	1,798.57	100.23	18.945		
8,400.00	7,127.70	8,426.94	6,947.61	51.75	52.97	-84.56	-1,918.67	-1,677.22	1,897.45	1,792.86	104.60	18.141		
8,500.00	7,127.33	8,526.93	6,947.23	54.04	55.17	-84.55	-1,919.26	-1,777.21	1,896.10	1,787.02	109.09	17.382		
8,600.00	7,126.97	8,626.92	6,946.85	56.38	57.42	-84.55	-1,919.86	-1,877.20	1,894.75	1,781.07	113.68	16.667		
8,700.00	7,126.60	8,726.92	6,946.48	58.77	59.73	-84.54	-1,920.46	-1,977.19	1,893.41	1,775.03	118.37	15.995		
8,800.00	7,126.24	8,826.91	6,946.10	61.19	62.08	-84.54	-1,921.06	-2,077.17	1,892.06	1,768.91	123.15	15.364		
8,900.00	7,125.87	8,926.90	6,945.72	63.65	64.48	-84.53	-1,921.66	-2,177.16	1,890.71	1,762.71	128.00	14.771		
9,000.00	7,125.50	9,026.89	6,945.34	66.15	66.91	-84.53	-1,922.26	-2,277.15	1,889.36	1,756.44	132.91	14.215		
9,100.00	7,125.14	9,126.88	6,944.96	68.67	69.38	-84.53	-1,922.86	-2,377.14	1,888.01	1,750.12	137.89	13.692		
9,200.00	7,124.77	9,226.87	6,944.58	71.21	71.88	-84.52	-1,923.45	-2,477.13	1,886.66	1,743.74	142.92	13.201		
9,300.00	7,124.41	9,326.86	6,944.20	73.78	74.40	-84.52	-1,924.05	-2,577.12	1,885.31	1,737.31	147.99	12.739		
9,400.00	7,124.04	9,426.85	6,943.82	76.37	76.94	-84.51	-1,924.65	-2,677.10	1,883.96	1,730.85	153.11	12.304		
9,500.00	7,123.67	9,526.84	6,943.44	78.98	79.51	-84.51	-1,925.25	-2,777.09	1,882.61	1,724.34	158.27	11.895		
9,600.00	7,123.31	9,626.83	6,943.06	81.60	82.10	-84.50	-1,925.85	-2,877.08	1,881.26	1,717.80	163.46	11.509		
9,700.00	7,122.94	9,726.82	6,942.68	84.24	84.71	-84.50	-1,926.45	-2,977.07	1,879.91	1,711.22	168.69	11.144		
9,800.00	7,122.57	9,826.81	6,942.30	86.90	87.33	-84.50	-1,927.05	-3,077.06	1,878.56	1,704.62	173.94	10.800		
9,900.00	7,122.21	9,926.80	6,941.92	89.56	89.96	-84.49	-1,927.64	-3,177.04	1,877.21	1,697.99	179.22	10.474		
10,000.00	7,121.84	10,026.80	6,941.54	92.24	92.61	-84.49	-1,928.24	-3,277.03	1,875.86	1,691.34	184.52	10.166		
10,100.00	7,121.48	10,126.79	6,941.17	94.92	95.27	-84.48	-1,928.84	-3,377.02	1,874.51	1,684.66	189.85	9.874		
10,200.00	7,121.11	10,226.78	6,940.79	97.62	97.94	-84.48	-1,929.44	-3,477.01	1,873.16	1,677.97	195.20	9.596		
10,300.00	7,120.74	10,326.77	6,940.41	100.32	100.63	-84.47	-1,930.04	-3,577.00	1,871.81	1,671.25	200.56	9.333		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,120.38	10,426.76	6,940.03	103.04	103.32	-84.47	-1,930.64	-3,676.99	1,870.46	1,664.52	205.94	9.082		
10,500.00	7,120.01	10,526.75	6,939.65	105.76	106.02	-84.46	-1,931.24	-3,776.97	1,869.11	1,657.77	211.34	8.844		
10,600.00	7,119.64	10,626.74	6,939.27	108.48	108.73	-84.46	-1,931.83	-3,876.96	1,867.77	1,651.01	216.75	8.617		
10,700.00	7,119.28	10,726.73	6,938.89	111.22	111.45	-84.46	-1,932.43	-3,976.95	1,866.42	1,644.23	222.18	8.400		
10,800.00	7,118.91	10,826.72	6,938.51	113.96	114.17	-84.45	-1,933.03	-4,076.94	1,865.07	1,637.45	227.62	8.194		
10,900.00	7,118.55	10,926.71	6,938.13	116.70	116.90	-84.45	-1,933.63	-4,176.93	1,863.72	1,630.65	233.07	7.996		
11,000.00	7,118.18	11,026.70	6,937.75	119.45	119.64	-84.44	-1,934.23	-4,276.92	1,862.37	1,623.84	238.53	7.808		
11,100.00	7,117.81	11,126.69	6,937.37	122.21	122.38	-84.44	-1,934.83	-4,376.90	1,861.02	1,617.02	244.00	7.627		
11,200.00	7,117.45	11,226.69	6,936.99	124.97	125.12	-84.43	-1,935.43	-4,476.89	1,859.67	1,610.18	249.48	7.454		
11,300.00	7,117.08	11,326.68	6,936.61	127.73	127.88	-84.43	-1,936.02	-4,576.88	1,858.32	1,603.35	254.97	7.288		
11,400.00	7,116.72	11,426.67	6,936.23	130.50	130.63	-84.42	-1,936.62	-4,676.87	1,856.97	1,596.50	260.47	7.129		
11,500.00	7,116.35	11,526.66	6,935.86	133.27	133.39	-84.42	-1,937.22	-4,776.86	1,855.62	1,589.64	265.98	6.977		
11,600.00	7,115.98	11,626.65	6,935.48	136.04	136.16	-84.42	-1,937.82	-4,876.85	1,854.27	1,582.78	271.49	6.830		
11,700.00	7,115.62	11,726.64	6,935.10	138.82	138.93	-84.41	-1,938.42	-4,976.83	1,852.92	1,575.91	277.01	6.689		
11,800.00	7,115.25	11,826.63	6,934.72	141.60	141.70	-84.41	-1,939.02	-5,076.82	1,851.57	1,569.03	282.54	6.553		
11,900.00	7,114.88	11,926.62	6,934.34	144.39	144.48	-84.40	-1,939.62	-5,176.81	1,850.22	1,562.15	288.07	6.423		
12,000.00	7,114.52	12,026.61	6,933.96	147.17	147.25	-84.40	-1,940.21	-5,276.80	1,848.87	1,555.26	293.61	6.297		
12,100.00	7,114.15	12,126.60	6,933.58	149.96	150.04	-84.39	-1,940.81	-5,376.79	1,847.53	1,548.37	299.15	6.176		
12,200.00	7,113.79	12,226.59	6,933.20	152.75	152.82	-84.39	-1,941.41	-5,476.78	1,846.18	1,541.47	304.70	6.059		
12,300.00	7,113.42	12,326.58	6,932.82	155.55	155.61	-84.38	-1,942.01	-5,576.76	1,844.83	1,534.57	310.26	5.946		
12,400.00	7,113.05	12,426.57	6,932.44	158.34	158.40	-84.38	-1,942.61	-5,676.75	1,843.48	1,527.66	315.82	5.837		
12,500.00	7,112.69	12,526.57	6,932.06	161.14	161.19	-84.38	-1,943.21	-5,776.74	1,842.13	1,520.75	321.38	5.732		
12,600.00	7,112.32	12,626.56	6,931.68	163.94	163.98	-84.37	-1,943.81	-5,876.73	1,840.78	1,513.83	326.95	5.630		
12,700.00	7,111.96	12,726.55	6,931.30	166.74	166.78	-84.37	-1,944.40	-5,976.72	1,839.43	1,506.91	332.52	5.532		
12,800.00	7,111.59	12,826.54	6,930.92	169.54	169.58	-84.36	-1,945.00	-6,076.71	1,838.08	1,499.99	338.09	5.437		
12,900.00	7,111.22	12,926.53	6,930.55	172.35	172.38	-84.36	-1,945.60	-6,176.69	1,836.73	1,493.06	343.67	5.344		
13,000.00	7,110.86	13,026.52	6,930.17	175.16	175.18	-84.35	-1,946.20	-6,276.68	1,835.38	1,486.13	349.25	5.255		
13,100.00	7,110.49	13,126.51	6,929.79	177.96	177.99	-84.35	-1,946.80	-6,376.67	1,834.03	1,479.20	354.84	5.169		
13,200.00	7,110.12	13,226.50	6,929.41	180.77	180.79	-84.34	-1,947.40	-6,476.66	1,832.68	1,472.26	360.42	5.085		
13,300.00	7,109.76	13,326.49	6,929.03	183.58	183.60	-84.34	-1,948.00	-6,576.65	1,831.34	1,465.32	366.01	5.003		
13,400.00	7,109.39	13,426.48	6,928.65	186.40	186.41	-84.33	-1,948.59	-6,676.63	1,829.99	1,458.38	371.61	4.925		
13,500.00	7,109.03	13,526.47	6,928.27	189.21	189.22	-84.33	-1,949.19	-6,776.62	1,828.64	1,451.43	377.20	4.848		
13,600.00	7,108.66	13,626.46	6,927.89	192.03	192.03	-84.32	-1,949.79	-6,876.61	1,827.29	1,444.49	382.80	4.773		
13,700.00	7,108.29	13,726.46	6,927.51	194.84	194.85	-84.32	-1,950.39	-6,976.60	1,825.94	1,437.54	388.40	4.701		
13,800.00	7,107.93	13,826.45	6,927.13	197.66	197.66	-84.32	-1,950.99	-7,076.59	1,824.59	1,430.58	394.01	4.631		
13,900.00	7,107.56	13,926.44	6,926.75	200.48	200.48	-84.31	-1,951.59	-7,176.58	1,823.24	1,423.63	399.61	4.563		
14,000.00	7,107.19	14,026.43	6,926.37	203.30	203.30	-84.31	-1,952.19	-7,276.56	1,821.89	1,416.67	405.22	4.496		
14,100.00	7,106.83	14,126.42	6,925.99	206.12	206.11	-84.30	-1,952.78	-7,376.55	1,820.54	1,409.72	410.83	4.431		
14,200.00	7,106.46	14,226.41	6,925.61	208.94	208.93	-84.30	-1,953.38	-7,476.54	1,819.19	1,402.76	416.44	4.368		
14,300.00	7,106.10	14,326.40	6,925.23	211.76	211.75	-84.29	-1,953.98	-7,576.53	1,817.85	1,395.79	422.05	4.307		
14,400.00	7,105.73	14,426.39	6,924.86	214.58	214.58	-84.29	-1,954.58	-7,676.52	1,816.50	1,388.83	427.67	4.247		
14,500.00	7,105.36	14,526.38	6,924.48	217.40	217.40	-84.28	-1,955.18	-7,776.51	1,815.15	1,381.86	433.28	4.189		
14,600.00	7,105.00	14,626.37	6,924.10	220.23	220.22	-84.28	-1,955.78	-7,876.49	1,813.80	1,374.90	438.90	4.133		
14,700.00	7,104.63	14,726.36	6,923.72	223.05	223.05	-84.27	-1,956.38	-7,976.48	1,812.45	1,367.93	444.52	4.077		
14,800.00	7,104.27	14,826.35	6,923.34	225.88	225.87	-84.27	-1,956.97	-8,076.47	1,811.10	1,360.96	450.14	4.023		
14,872.41	7,104.00	14,898.76	6,923.06	227.93	227.92	-84.27	-1,957.41	-8,148.87	1,810.12	1,355.91	454.21	3.985 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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-179.56	-179.97	-1.39	179.97					
100.00	100.00	101.00	100.00	3.28	3.28	-179.56	-179.97	-1.39	179.97	173.40	6.57	27.395		
200.00	200.00	199.00	200.00	3.34	3.34	-179.56	-179.97	-1.39	179.97	173.30	6.67	26.969	CC, ES	
300.00	300.00	293.16	294.14	3.44	3.43	-179.50	-181.47	-1.58	181.57	174.68	6.89	26.368		
400.00	400.00	387.05	387.92	3.60	3.57	-179.33	-186.02	-2.17	186.43	179.22	7.21	25.872		
500.00	500.00	480.55	481.10	3.81	3.75	-179.07	-193.58	-3.15	194.53	186.91	7.62	25.535		
600.00	599.98	573.46	573.40	4.04	3.97	-89.00	-204.07	-4.50	205.82	197.72	8.10	25.415		
700.00	699.95	665.60	664.55	4.30	4.21	-89.21	-217.41	-6.22	220.28	211.65	8.63	25.515		
800.00	799.92	759.21	756.70	4.59	4.50	-89.31	-233.76	-8.33	237.72	228.52	9.21	25.824		
900.00	899.89	857.55	853.38	4.90	4.83	-89.39	-251.61	-10.63	255.88	246.08	9.80	26.110		
1,000.00	999.86	955.89	950.05	5.23	5.19	-89.45	-269.47	-12.94	274.04	263.59	10.45	26.231		
1,100.00	1,099.83	1,054.23	1,046.73	5.58	5.57	-89.51	-287.33	-15.24	292.19	281.07	11.12	26.265		
1,200.00	1,199.80	1,152.56	1,143.40	5.94	5.97	-89.56	-305.18	-17.54	310.35	298.52	11.83	26.232		
1,300.00	1,299.77	1,250.90	1,240.08	6.30	6.37	-89.60	-323.04	-19.85	328.51	315.95	12.56	26.153		
1,400.00	1,399.73	1,349.24	1,336.75	6.68	6.79	-89.64	-340.90	-22.15	346.67	333.36	13.31	26.044		
1,500.00	1,499.70	1,447.58	1,433.43	7.07	7.22	-89.68	-358.75	-24.45	364.83	350.75	14.08	25.916		
1,600.00	1,599.67	1,545.91	1,530.10	7.46	7.65	-89.71	-376.61	-26.76	382.98	368.13	14.86	25.777		
1,700.00	1,699.64	1,644.25	1,626.78	7.85	8.09	-89.74	-394.47	-29.06	401.14	385.49	15.65	25.632		
1,800.00	1,799.61	1,742.59	1,723.45	8.25	8.53	-89.77	-412.33	-31.36	419.30	402.85	16.45	25.485		
1,900.00	1,899.58	1,840.93	1,820.13	8.66	8.98	-89.79	-430.18	-33.67	437.46	420.19	17.26	25.338		
2,000.00	1,999.55	1,939.26	1,916.80	9.06	9.44	-89.81	-448.04	-35.97	455.62	437.53	18.08	25.194		
2,100.00	2,099.52	2,037.60	2,013.48	9.47	9.89	-89.84	-465.90	-38.27	473.77	454.87	18.91	25.054		
2,200.00	2,199.48	2,135.94	2,110.15	9.89	10.35	-89.85	-483.75	-40.58	491.93	472.19	19.74	24.918		
2,300.00	2,299.45	2,234.28	2,206.83	10.30	10.81	-89.87	-501.61	-42.88	510.09	489.51	20.58	24.788		
2,400.00	2,399.42	2,332.61	2,303.50	10.72	11.28	-89.89	-519.47	-45.18	528.25	506.83	21.42	24.662		
2,500.00	2,499.39	2,430.95	2,400.18	11.14	11.74	-89.91	-537.32	-47.49	546.41	524.14	22.27	24.541		
2,600.00	2,599.36	2,529.29	2,496.85	11.56	12.21	-89.92	-555.18	-49.79	564.57	541.45	23.11	24.425		
2,700.00	2,699.33	2,627.62	2,593.53	11.98	12.68	-89.93	-573.04	-52.09	582.73	558.76	23.97	24.314		
2,800.00	2,799.30	2,725.96	2,690.20	12.41	13.15	-89.95	-590.90	-54.40	600.89	576.06	24.82	24.209		
2,900.00	2,899.27	2,824.30	2,786.88	12.83	13.62	-89.96	-608.75	-56.70	619.04	593.37	25.68	24.107		
3,000.00	2,999.23	2,922.64	2,883.55	13.26	14.09	-89.97	-626.61	-59.00	637.20	610.66	26.54	24.011		
3,100.00	3,099.20	3,020.97	2,980.23	13.68	14.57	-89.98	-644.47	-61.31	655.36	627.96	27.40	23.918		
3,200.00	3,199.17	3,119.31	3,076.90	14.11	15.04	-89.99	-662.32	-63.61	673.52	645.26	28.26	23.829		
3,300.00	3,299.14	3,217.65	3,173.58	14.54	15.52	-90.00	-680.18	-65.91	691.68	662.55	29.13	23.745		
3,400.00	3,399.11	3,315.99	3,270.25	14.97	15.99	-90.01	-698.04	-68.22	709.84	679.84	30.00	23.664		
3,500.00	3,499.08	3,414.32	3,366.93	15.40	16.47	-90.02	-715.89	-70.52	728.00	697.13	30.87	23.586		
3,600.00	3,599.05	3,512.66	3,463.60	15.83	16.95	-90.03	-733.75	-72.82	746.16	714.42	31.74	23.512		
3,700.00	3,699.02	3,611.00	3,560.28	16.26	17.42	-90.04	-751.61	-75.13	764.32	731.71	32.61	23.440		
3,800.00	3,798.98	3,709.34	3,656.95	16.69	17.90	-90.04	-769.47	-77.43	782.47	749.00	33.48	23.372		
3,900.00	3,898.95	3,807.67	3,753.63	17.12	18.38	-90.05	-787.32	-79.73	800.63	766.28	34.35	23.306		
4,000.00	3,998.92	3,906.01	3,850.30	17.55	18.86	-90.06	-805.18	-82.04	818.79	783.57	35.23	23.243		
4,100.00	4,098.89	4,004.35	3,946.98	17.98	19.34	-90.06	-823.04	-84.34	836.95	800.85	36.10	23.183		
4,200.00	4,198.86	4,102.69	4,043.65	18.42	19.82	-90.07	-840.89	-86.64	855.11	818.13	36.98	23.125		
4,300.00	4,298.83	4,201.02	4,140.33	18.85	20.30	-90.08	-858.75	-88.95	873.27	835.41	37.86	23.069		
4,400.00	4,398.80	4,300.64	4,237.00	19.28	20.79	-90.08	-876.61	-91.25	891.43	852.69	38.74	23.011		
4,500.00	4,498.77	4,402.30	4,333.68	19.72	21.28	-90.09	-894.46	-93.55	909.59	869.96	39.63	22.951		
4,600.00	4,598.73	4,503.96	4,430.35	20.15	21.78	-90.09	-912.32	-95.86	927.75	887.22	40.53	22.892		
4,700.00	4,698.70	4,605.63	4,527.03	20.58	22.28	-90.10	-930.18	-98.16	945.91	904.48	41.42	22.836		
4,800.00	4,798.67	4,707.29	4,623.70	21.02	22.78	-90.10	-948.04	-100.46	964.07	921.75	42.32	22.782		
4,900.00	4,898.64	4,808.95	4,720.38	21.45	23.28	-90.11	-965.89	-102.77	982.22	939.01	43.21	22.730		
5,000.00	4,998.61	4,889.38	4,817.05	21.89	23.67	-90.11	-983.75	-105.07	1,000.38	956.37	44.01	22.730		
5,100.00	5,098.58	4,987.72	4,913.73	22.32	24.15	-90.12	-1,001.61	-107.37	1,018.54	973.65	44.89	22.688		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,086.06	5,010.40	22.76	24.64	-90.12	-1,019.46	-109.68	1,036.70	990.93	45.78	22.648		
5,300.00	5,298.52	5,184.40	5,107.08	23.20	25.12	-90.13	-1,037.32	-111.98	1,054.86	1,008.20	46.66	22.608		
5,400.00	5,398.49	5,282.73	5,203.75	23.63	25.60	-90.13	-1,055.18	-114.28	1,073.02	1,025.48	47.54	22.570		
5,500.00	5,498.45	5,381.07	5,300.43	24.07	26.09	-90.13	-1,073.03	-116.59	1,091.18	1,042.75	48.42	22.534		
5,600.00	5,598.42	5,479.41	5,397.10	24.50	26.57	-90.14	-1,090.89	-118.89	1,109.34	1,060.03	49.31	22.498		
5,700.00	5,698.39	5,577.75	5,493.78	24.94	27.05	-90.14	-1,108.75	-121.19	1,127.50	1,077.31	50.19	22.464		
5,800.00	5,798.36	5,676.08	5,590.45	25.38	27.54	-90.14	-1,126.61	-123.50	1,145.66	1,094.58	51.08	22.430		
5,900.00	5,898.33	5,774.42	5,687.13	25.81	28.02	-90.15	-1,144.46	-125.80	1,163.82	1,111.85	51.96	22.398		
6,000.00	5,998.30	5,872.76	5,783.80	26.25	28.50	-90.15	-1,162.32	-128.10	1,181.97	1,129.13	52.85	22.366		
6,100.00	6,098.27	5,971.10	5,880.48	26.69	28.99	-90.15	-1,180.18	-130.41	1,200.13	1,146.40	53.73	22.336		
6,200.00	6,198.24	6,069.43	5,977.15	27.12	29.47	-90.16	-1,198.03	-132.71	1,218.29	1,163.68	54.62	22.306		
6,300.00	6,298.20	6,167.77	6,073.83	27.56	29.96	-90.16	-1,215.89	-135.01	1,236.45	1,180.95	55.50	22.277		
6,400.00	6,398.17	6,266.11	6,170.51	28.00	30.44	-90.16	-1,233.75	-137.32	1,254.61	1,198.22	56.39	22.249		
6,500.00	6,498.14	6,364.45	6,267.18	28.43	30.92	-90.17	-1,251.60	-139.62	1,272.77	1,215.50	57.27	22.222		
6,600.00	6,597.68	6,462.52	6,363.60	28.88	31.41	-88.05	-1,269.41	-141.92	1,290.79	1,232.63	58.17	22.191		
6,700.00	6,694.68	6,558.52	6,457.97	29.32	31.88	-87.28	-1,286.85	-144.17	1,308.44	1,249.38	59.06	22.154		
6,800.00	6,786.74	6,651.56	6,549.43	29.77	32.34	-87.14	-1,303.74	-146.61	1,325.98	1,266.02	59.96	22.114		
6,900.00	6,871.61	6,753.01	6,648.19	30.24	32.83	-87.34	-1,322.17	-159.92	1,343.46	1,282.49	60.98	22.032		
7,000.00	6,947.19	6,863.09	6,751.46	30.74	33.33	-87.67	-1,341.74	-192.19	1,360.36	1,298.27	62.09	21.909		
7,100.00	7,011.62	6,983.76	6,856.44	31.32	33.83	-88.15	-1,362.02	-247.73	1,376.07	1,312.76	63.31	21.737		
7,200.00	7,063.31	7,116.85	6,957.91	32.03	34.32	-88.74	-1,382.11	-331.10	1,389.86	1,325.21	64.65	21.498		
7,300.00	7,101.00	7,263.48	7,047.21	32.89	34.81	-89.39	-1,400.48	-445.52	1,400.88	1,334.64	66.24	21.149		
7,400.00	7,123.74	7,422.91	7,112.29	33.93	35.45	-89.98	-1,414.89	-589.88	1,408.21	1,339.93	68.28	20.623		
7,500.00	7,131.00	7,591.54	7,140.53	35.10	36.69	-90.39	-1,422.86	-755.45	1,411.09	1,340.11	70.97	19.882		
7,600.00	7,130.63	7,703.39	7,140.54	36.44	37.90	-90.40	-1,424.73	-867.27	1,410.77	1,337.11	73.66	19.153		
7,700.00	7,130.26	7,803.39	7,140.00	37.94	39.22	-90.40	-1,426.30	-967.26	1,410.38	1,333.81	76.57	18.419		
7,800.00	7,129.90	7,903.39	7,139.46	39.59	40.72	-90.39	-1,427.87	-1,067.24	1,409.99	1,330.20	79.79	17.671		
7,900.00	7,129.53	8,003.39	7,138.92	41.37	42.37	-90.38	-1,429.44	-1,167.23	1,409.61	1,326.33	83.28	16.927		
8,000.00	7,129.17	8,103.39	7,138.38	43.27	44.16	-90.38	-1,431.01	-1,267.22	1,409.22	1,322.22	87.00	16.198		
8,100.00	7,128.80	8,203.39	7,137.83	45.27	46.05	-90.37	-1,432.58	-1,367.20	1,408.83	1,317.91	90.93	15.494		
8,200.00	7,128.43	8,303.39	7,137.29	47.36	48.05	-90.36	-1,434.15	-1,467.19	1,408.45	1,313.41	95.03	14.820		
8,300.00	7,128.07	8,403.39	7,136.75	49.52	50.13	-90.35	-1,435.72	-1,567.17	1,408.06	1,308.76	99.30	14.180		
8,400.00	7,127.70	8,503.39	7,136.21	51.75	52.29	-90.35	-1,437.29	-1,667.16	1,407.67	1,303.97	103.71	13.574		
8,500.00	7,127.33	8,603.39	7,135.67	54.04	54.51	-90.34	-1,438.86	-1,767.14	1,407.29	1,299.05	108.23	13.002		
8,600.00	7,126.97	8,703.38	7,135.12	56.38	56.78	-90.33	-1,440.43	-1,867.13	1,406.90	1,294.03	112.87	12.465		
8,700.00	7,126.60	8,803.38	7,134.58	58.77	59.11	-90.33	-1,442.00	-1,967.11	1,406.51	1,288.92	117.60	11.960		
8,800.00	7,126.24	8,903.38	7,134.04	61.19	61.49	-90.32	-1,443.57	-2,067.10	1,406.13	1,283.72	122.41	11.487		
8,900.00	7,125.87	9,003.38	7,133.50	63.65	63.90	-90.31	-1,445.14	-2,167.08	1,405.74	1,278.44	127.30	11.043		
9,000.00	7,125.50	9,103.38	7,132.96	66.15	66.35	-90.30	-1,446.71	-2,267.07	1,405.35	1,273.10	132.25	10.626		
9,100.00	7,125.14	9,203.38	7,132.42	68.67	68.83	-90.30	-1,448.28	-2,367.05	1,404.97	1,267.70	137.26	10.236		
9,200.00	7,124.77	9,303.38	7,131.87	71.21	71.34	-90.29	-1,449.85	-2,467.04	1,404.58	1,262.25	142.33	9.869		
9,300.00	7,124.41	9,403.38	7,131.33	73.78	73.87	-90.28	-1,451.42	-2,567.02	1,404.20	1,256.75	147.44	9.524		
9,400.00	7,124.04	9,503.38	7,130.79	76.37	76.43	-90.28	-1,452.99	-2,667.01	1,403.81	1,251.21	152.59	9.200		
9,500.00	7,123.67	9,603.38	7,130.25	78.98	79.01	-90.27	-1,454.56	-2,767.00	1,403.42	1,245.64	157.79	8.894		
9,600.00	7,123.31	9,703.38	7,129.71	81.60	81.60	-90.26	-1,456.13	-2,866.98	1,403.04	1,240.02	163.01	8.607		
9,700.00	7,122.94	9,803.37	7,129.16	84.24	84.22	-90.26	-1,457.70	-2,966.97	1,402.65	1,234.38	168.27	8.336		
9,800.00	7,122.57	9,903.37	7,128.62	86.90	86.84	-90.25	-1,459.27	-3,066.95	1,402.26	1,228.70	173.56	8.079		
9,900.00	7,122.21	10,003.37	7,128.08	89.56	89.49	-90.24	-1,460.84	-3,166.94	1,401.88	1,223.00	178.87	7.837		
10,000.00	7,121.84	10,103.37	7,127.54	92.24	92.14	-90.23	-1,462.41	-3,266.92	1,401.49	1,217.28	184.21	7.608		
10,100.00	7,121.48	10,203.37	7,127.00	94.92	94.81	-90.23	-1,463.98	-3,366.91	1,401.10	1,211.54	189.57	7.391		
10,200.00	7,121.11	10,303.37	7,126.45	97.62	97.49	-90.22	-1,465.55	-3,466.89	1,400.72	1,205.77	194.95	7.185		
10,300.00	7,120.74	10,403.37	7,125.91	100.32	100.17	-90.21	-1,467.12	-3,566.88	1,400.33	1,199.99	200.34	6.990		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 12N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,120.38	10,503.37	7,125.37	103.04	102.87	-90.21	-1,468.69	-3,666.86	1,399.95	1,194.19	205.76	6.804		
10,500.00	7,120.01	10,603.37	7,124.83	105.76	105.57	-90.20	-1,470.26	-3,766.85	1,399.56	1,188.37	211.19	6.627		
10,600.00	7,119.64	10,703.37	7,124.29	108.48	108.29	-90.19	-1,471.83	-3,866.83	1,399.17	1,182.54	216.63	6.459		
10,700.00	7,119.28	10,803.37	7,123.74	111.22	111.01	-90.18	-1,473.40	-3,966.82	1,398.79	1,176.70	222.09	6.298		
10,800.00	7,118.91	10,903.36	7,123.20	113.96	113.73	-90.18	-1,474.97	-4,066.80	1,398.40	1,170.84	227.56	6.145		
10,900.00	7,118.55	11,003.36	7,122.66	116.70	116.47	-90.17	-1,476.54	-4,166.79	1,398.02	1,164.97	233.04	5.999		
11,000.00	7,118.18	11,103.36	7,122.12	119.45	119.20	-90.16	-1,478.11	-4,266.77	1,397.63	1,159.10	238.53	5.859		
11,100.00	7,117.81	11,203.36	7,121.58	122.21	121.95	-90.16	-1,479.68	-4,366.76	1,397.24	1,153.21	244.03	5.726		
11,200.00	7,117.45	11,303.36	7,121.03	124.97	124.70	-90.15	-1,481.25	-4,466.75	1,396.86	1,147.31	249.55	5.598		
11,300.00	7,117.08	11,403.36	7,120.49	127.73	127.45	-90.14	-1,482.82	-4,566.73	1,396.47	1,141.41	255.07	5.475		
11,400.00	7,116.72	11,503.36	7,119.95	130.50	130.21	-90.13	-1,484.39	-4,666.72	1,396.09	1,135.49	260.59	5.357		
11,500.00	7,116.35	11,603.36	7,119.41	133.27	132.97	-90.13	-1,485.96	-4,766.70	1,395.70	1,129.57	266.13	5.244		
11,600.00	7,115.98	11,703.36	7,118.87	136.04	135.74	-90.12	-1,487.53	-4,866.69	1,395.31	1,123.64	271.67	5.136		
11,700.00	7,115.62	11,803.36	7,118.32	138.82	138.50	-90.11	-1,489.10	-4,966.67	1,394.93	1,117.70	277.22	5.032		
11,800.00	7,115.25	11,903.36	7,117.78	141.60	141.28	-90.10	-1,490.67	-5,066.66	1,394.54	1,111.76	282.78	4.932		
11,900.00	7,114.88	12,003.35	7,117.24	144.39	144.05	-90.10	-1,492.24	-5,166.64	1,394.16	1,105.81	288.34	4.835		
12,000.00	7,114.52	12,103.35	7,116.70	147.17	146.83	-90.09	-1,493.81	-5,266.63	1,393.77	1,099.86	293.91	4.742		
12,100.00	7,114.15	12,203.35	7,116.16	149.96	149.62	-90.08	-1,495.38	-5,366.61	1,393.38	1,093.90	299.48	4.653		
12,200.00	7,113.79	12,303.35	7,115.61	152.75	152.40	-90.08	-1,496.95	-5,466.60	1,393.00	1,087.94	305.06	4.566		
12,300.00	7,113.42	12,403.35	7,115.07	155.55	155.19	-90.07	-1,498.52	-5,566.58	1,392.61	1,081.97	310.64	4.483		
12,400.00	7,113.05	12,503.35	7,114.53	158.34	157.98	-90.06	-1,500.09	-5,666.57	1,392.23	1,075.99	316.23	4.403		
12,500.00	7,112.69	12,603.35	7,113.99	161.14	160.77	-90.05	-1,501.66	-5,766.55	1,391.84	1,070.02	321.82	4.325		
12,600.00	7,112.32	12,703.35	7,113.45	163.94	163.56	-90.05	-1,503.23	-5,866.54	1,391.46	1,064.03	327.42	4.250		
12,700.00	7,111.96	12,803.35	7,112.90	166.74	166.36	-90.04	-1,504.80	-5,966.53	1,391.07	1,058.05	333.02	4.177		
12,800.00	7,111.59	12,903.35	7,112.36	169.54	169.16	-90.03	-1,506.37	-6,066.51	1,390.68	1,052.06	338.62	4.107		
12,900.00	7,111.22	13,003.35	7,111.82	172.35	171.96	-90.03	-1,507.94	-6,166.50	1,390.30	1,046.07	344.23	4.039		
13,000.00	7,110.86	13,103.35	7,111.28	175.16	174.76	-90.02	-1,509.51	-6,266.48	1,389.91	1,040.07	349.84	3.973		
13,100.00	7,110.49	13,203.34	7,110.74	177.96	177.56	-90.01	-1,511.08	-6,366.47	1,389.53	1,034.07	355.46	3.909		
13,200.00	7,110.12	13,303.34	7,110.19	180.77	180.37	-90.00	-1,512.65	-6,466.45	1,389.14	1,028.07	361.07	3.847		
13,300.00	7,109.76	13,403.34	7,109.65	183.58	183.18	-90.00	-1,514.22	-6,566.44	1,388.76	1,022.06	366.69	3.787		
13,400.00	7,109.39	13,503.34	7,109.11	186.40	185.99	-89.99	-1,515.79	-6,666.42	1,388.37	1,016.06	372.31	3.729		
13,500.00	7,109.03	13,603.34	7,108.57	189.21	188.80	-89.98	-1,517.36	-6,766.41	1,387.98	1,010.05	377.94	3.673		
13,600.00	7,108.66	13,703.34	7,108.03	192.03	191.61	-89.97	-1,518.93	-6,866.39	1,387.60	1,004.03	383.57	3.618		
13,700.00	7,108.29	13,803.34	7,107.48	194.84	194.42	-89.97	-1,520.50	-6,966.38	1,387.21	998.02	389.20	3.564		
13,800.00	7,107.93	13,903.34	7,106.94	197.66	197.23	-89.96	-1,522.07	-7,066.36	1,386.83	992.00	394.83	3.512		
13,900.00	7,107.56	14,003.34	7,106.40	200.48	200.05	-89.95	-1,523.64	-7,166.35	1,386.44	985.98	400.46	3.462		
14,000.00	7,107.19	14,103.34	7,105.86	203.30	202.86	-89.95	-1,525.21	-7,266.33	1,386.06	979.96	406.10	3.413		
14,100.00	7,106.83	14,203.34	7,105.32	206.12	205.68	-89.94	-1,526.78	-7,366.32	1,385.67	973.94	411.74	3.365		
14,200.00	7,106.46	14,303.33	7,104.78	208.94	208.50	-89.93	-1,528.35	-7,466.30	1,385.29	967.91	417.38	3.319		
14,300.00	7,106.10	14,403.33	7,104.23	211.76	211.32	-89.92	-1,529.92	-7,566.29	1,384.90	961.88	423.02	3.274		
14,400.00	7,105.73	14,503.33	7,103.69	214.58	214.14	-89.92	-1,531.49	-7,666.28	1,384.52	955.85	428.66	3.230		
14,500.00	7,105.36	14,603.33	7,103.15	217.40	216.96	-89.91	-1,533.06	-7,766.26	1,384.13	949.82	434.31	3.187		
14,600.00	7,105.00	14,703.33	7,102.61	220.23	219.78	-89.90	-1,534.63	-7,866.25	1,383.75	943.79	439.96	3.145		
14,700.00	7,104.63	14,803.33	7,102.07	223.05	222.60	-89.89	-1,536.20	-7,966.23	1,383.36	937.76	445.60	3.104		
14,800.00	7,104.27	14,903.33	7,101.52	225.88	225.43	-89.89	-1,537.77	-8,066.22	1,382.98	931.72	451.25	3.065		
14,872.41	7,104.00	14,975.74	7,101.13	227.93	227.47	-89.88	-1,538.91	-8,138.62	1,382.70	927.35	455.35	3.037 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	2.00	0.00	3.28	3.28	-179.55	-319.86	-2.50	319.87					
100.00	100.00	102.00	100.00	3.28	3.29	-179.55	-319.86	-2.50	319.87	313.30	6.57	48.687		
200.00	200.00	198.00	200.00	3.34	3.34	-179.55	-319.86	-2.50	319.87	313.20	6.67	47.939 CC, ES		
300.00	300.00	288.14	290.13	3.44	3.42	-179.54	-321.21	-2.58	321.38	314.50	6.88	46.719		
400.00	400.00	377.91	379.79	3.60	3.55	-179.50	-325.37	-2.83	326.01	318.82	7.19	45.356		
500.00	500.00	467.33	468.94	3.81	3.72	-179.44	-332.30	-3.24	333.77	326.18	7.59	43.999		
600.00	599.98	556.22	557.30	4.04	3.92	-89.45	-341.94	-3.82	344.60	336.55	8.05	42.812		
700.00	699.95	644.43	644.65	4.30	4.15	-89.70	-354.20	-4.55	358.50	349.93	8.57	41.849		
800.00	799.92	731.81	730.76	4.59	4.41	-89.91	-368.99	-5.43	375.42	366.29	9.13	41.130		
900.00	899.89	818.21	815.42	4.90	4.70	-90.08	-386.19	-6.46	395.33	385.61	9.72	40.671		
1,000.00	999.86	903.48	898.43	5.23	5.01	-90.20	-405.65	-7.61	418.16	407.82	10.33	40.468		
1,100.00	1,099.83	987.51	979.63	5.58	5.35	-90.29	-427.23	-8.90	443.85	432.89	10.96	40.492		
1,200.00	1,199.80	1,070.19	1,058.87	5.94	5.70	-90.35	-450.78	-10.30	472.33	460.74	11.60	40.726		
1,300.00	1,299.77	1,151.40	1,136.01	6.30	6.07	-90.38	-476.12	-11.81	503.54	491.31	12.24	41.151		
1,400.00	1,399.73	1,231.06	1,210.94	6.68	6.45	-90.39	-503.08	-13.42	537.40	524.53	12.87	41.745		
1,500.00	1,499.70	1,309.09	1,283.60	7.07	6.84	-90.39	-531.51	-15.11	573.83	560.33	13.50	42.491		
1,600.00	1,599.67	1,404.87	1,362.98	7.46	7.35	-90.36	-564.64	-17.09	612.32	598.08	14.24	43.002		
1,700.00	1,699.64	1,487.35	1,447.99	7.85	7.80	-90.34	-600.31	-19.21	651.00	636.05	14.95	43.550		
1,800.00	1,799.61	1,579.56	1,533.00	8.25	8.32	-90.32	-635.98	-21.34	689.68	673.96	15.72	43.877		
1,900.00	1,899.58	1,671.78	1,618.01	8.66	8.85	-90.31	-671.65	-23.46	728.36	711.86	16.50	44.132		
2,000.00	1,999.55	1,763.99	1,703.02	9.06	9.38	-90.29	-707.32	-25.59	767.05	749.74	17.30	44.330		
2,100.00	2,099.52	1,856.21	1,788.02	9.47	9.92	-90.28	-743.00	-27.71	805.73	787.61	18.11	44.483		
2,200.00	2,199.48	1,948.42	1,873.03	9.89	10.47	-90.26	-778.67	-29.84	844.41	825.48	18.93	44.599		
2,300.00	2,299.45	2,040.64	1,958.04	10.30	11.03	-90.25	-814.34	-31.97	883.09	863.33	19.76	44.685		
2,400.00	2,399.42	2,132.85	2,043.05	10.72	11.59	-90.24	-850.01	-34.09	921.78	901.18	20.60	44.748		
2,500.00	2,499.39	2,225.07	2,128.06	11.14	12.15	-90.23	-885.68	-36.22	960.46	939.02	21.44	44.792		
2,600.00	2,599.36	2,317.28	2,213.07	11.56	12.71	-90.22	-921.35	-38.34	999.14	976.85	22.29	44.821		
2,700.00	2,699.33	2,409.50	2,298.08	11.98	13.28	-90.21	-957.03	-40.47	1,037.83	1,014.68	23.15	44.837		
2,800.00	2,799.30	2,501.71	2,383.09	12.41	13.85	-90.21	-992.70	-42.59	1,076.51	1,052.50	24.01	44.843		
2,900.00	2,899.27	2,606.07	2,468.10	12.83	14.50	-90.20	-1,028.37	-44.72	1,115.19	1,090.26	24.93	44.727		
3,000.00	2,999.23	2,686.15	2,553.11	13.26	15.00	-90.19	-1,064.04	-46.84	1,153.87	1,128.14	25.74	44.833		
3,100.00	3,099.20	2,778.36	2,638.12	13.68	15.57	-90.19	-1,099.71	-48.97	1,192.56	1,165.95	26.61	44.819		
3,200.00	3,199.17	2,870.58	2,723.13	14.11	16.15	-90.18	-1,135.38	-51.09	1,231.24	1,203.76	27.48	44.801		
3,300.00	3,299.14	2,962.79	2,808.14	14.54	16.73	-90.17	-1,171.06	-53.22	1,269.92	1,241.56	28.36	44.780		
3,400.00	3,399.11	3,055.01	2,893.15	14.97	17.31	-90.17	-1,206.73	-55.35	1,308.61	1,279.37	29.24	44.756		
3,500.00	3,499.08	3,147.22	2,978.16	15.40	17.89	-90.16	-1,242.40	-57.47	1,347.29	1,317.17	30.12	44.730		
3,600.00	3,599.05	3,239.44	3,063.17	15.83	18.47	-90.16	-1,278.07	-59.60	1,385.97	1,354.97	31.00	44.703		
3,700.00	3,699.02	3,331.65	3,148.18	16.26	19.06	-90.16	-1,313.74	-61.72	1,424.65	1,392.76	31.89	44.674		
3,800.00	3,798.98	3,423.87	3,233.19	16.69	19.64	-90.15	-1,349.41	-63.85	1,463.34	1,430.56	32.78	44.644		
3,900.00	3,898.95	3,516.08	3,318.20	17.12	20.22	-90.15	-1,385.09	-65.97	1,502.02	1,468.35	33.67	44.614		
4,000.00	3,998.92	3,608.30	3,403.21	17.55	20.81	-90.14	-1,420.76	-68.10	1,540.70	1,506.15	34.56	44.583		
4,100.00	4,098.89	3,700.51	3,488.22	17.98	21.40	-90.14	-1,456.43	-70.22	1,579.39	1,543.94	35.45	44.551		
4,200.00	4,198.86	3,807.27	3,573.23	18.42	22.08	-90.14	-1,492.10	-72.35	1,618.07	1,581.65	36.42	44.424		
4,300.00	4,298.83	3,884.94	3,658.24	18.85	22.57	-90.13	-1,527.77	-74.47	1,656.75	1,619.51	37.24	44.489		
4,400.00	4,398.80	3,977.16	3,743.25	19.28	23.16	-90.13	-1,563.44	-76.60	1,695.44	1,657.30	38.14	44.458		
4,500.00	4,498.77	4,069.37	3,828.26	19.72	23.75	-90.13	-1,599.12	-78.72	1,734.12	1,695.09	39.03	44.427		
4,600.00	4,598.73	4,161.59	3,913.26	20.15	24.33	-90.13	-1,634.79	-80.85	1,772.80	1,732.87	39.93	44.396		
4,700.00	4,698.70	4,253.80	3,998.27	20.58	24.92	-90.12	-1,670.46	-82.98	1,811.48	1,770.65	40.83	44.365		
4,800.00	4,798.67	4,346.02	4,083.28	21.02	25.51	-90.12	-1,706.13	-85.10	1,850.17	1,808.44	41.73	44.335		
4,900.00	4,898.64	4,438.23	4,168.29	21.45	26.10	-90.12	-1,741.80	-87.23	1,888.85	1,846.22	42.63	44.305		
5,000.00	4,998.61	4,530.45	4,253.30	21.89	26.69	-90.11	-1,777.47	-89.35	1,927.53	1,884.00	43.53	44.276		
5,100.00	5,098.58	4,622.66	4,338.31	22.32	27.28	-90.11	-1,813.15	-91.48	1,966.22	1,921.78	44.44	44.247		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	4,714.88	4,423.32	22.76	27.87	-90.11	-1,848.82	-93.60	2,004.90	1,959.56	45.34	44.219		
5,300.00	5,298.52	4,807.09	4,508.33	23.20	28.46	-90.11	-1,884.49	-95.73	2,043.58	1,997.34	46.24	44.190		
5,400.00	5,398.49	4,900.69	4,593.34	23.63	29.06	-90.11	-1,920.16	-97.85	2,082.27	2,035.11	47.16	44.156		
5,500.00	5,498.45	5,008.48	4,678.35	24.07	29.75	-90.10	-1,955.83	-99.98	2,120.95	2,072.80	48.15	44.051		
5,600.00	5,598.42	5,083.74	4,763.36	24.50	30.24	-90.10	-1,991.50	-102.10	2,159.63	2,110.67	48.96	44.109		
5,700.00	5,698.39	5,175.95	4,848.37	24.94	30.83	-90.10	-2,027.17	-104.23	2,198.32	2,148.45	49.87	44.083		
5,800.00	5,798.36	5,268.17	4,933.38	25.38	31.42	-90.10	-2,062.85	-106.36	2,237.00	2,186.22	50.78	44.057		
5,900.00	5,898.33	5,360.38	5,018.39	25.81	32.01	-90.10	-2,098.52	-108.48	2,275.68	2,224.00	51.68	44.031		
6,000.00	5,998.30	5,452.60	5,103.40	26.25	32.61	-90.10	-2,134.19	-110.61	2,314.36	2,261.77	52.59	44.006		
6,100.00	6,098.27	5,544.81	5,188.41	26.69	33.20	-90.09	-2,169.86	-112.73	2,353.05	2,299.55	53.50	43.982		
6,200.00	6,198.24	5,637.03	5,273.42	27.12	33.79	-90.09	-2,205.53	-114.86	2,391.73	2,337.32	54.41	43.958		
6,300.00	6,298.20	5,729.24	5,358.43	27.56	34.38	-90.09	-2,241.20	-116.98	2,430.41	2,375.09	55.32	43.934		
6,400.00	6,398.17	5,821.46	5,443.44	28.00	34.98	-90.09	-2,276.88	-119.11	2,469.10	2,412.87	56.23	43.911		
6,500.00	6,498.14	5,913.67	5,528.45	28.43	35.57	-90.09	-2,312.55	-121.23	2,507.78	2,450.64	57.14	43.888		
6,600.00	6,597.68	6,005.68	5,613.26	28.88	36.16	-86.00	-2,348.14	-123.35	2,546.26	2,488.21	58.06	43.859		
6,700.00	6,694.68	6,104.19	5,696.35	29.32	36.80	-82.78	-2,383.00	-125.43	2,583.78	2,524.77	59.02	43.780		
6,800.00	6,786.74	6,181.85	5,775.67	29.77	37.30	-80.10	-2,416.29	-127.41	2,619.79	2,559.91	59.88	43.754		
6,900.00	6,871.61	6,261.68	5,849.26	30.24	37.81	-77.84	-2,447.17	-129.25	2,653.96	2,593.19	60.77	43.674		
7,000.00	6,947.19	6,333.34	5,915.32	30.74	38.27	-75.91	-2,474.89	-130.91	2,686.18	2,624.52	61.66	43.562		
7,100.00	7,011.62	6,404.94	5,972.22	31.32	38.73	-74.18	-2,498.76	-132.33	2,716.46	2,653.81	62.64	43.363		
7,200.00	7,063.31	6,445.32	6,018.55	32.03	38.99	-72.56	-2,518.21	-133.49	2,744.83	2,681.25	63.58	43.173		
7,300.00	7,101.00	6,482.88	6,053.18	32.89	39.23	-70.96	-2,532.74	-134.35	2,771.32	2,706.67	64.65	42.869		
7,400.00	7,123.74	6,506.83	6,075.25	33.93	39.39	-69.30	-2,542.00	-134.90	2,795.87	2,730.07	65.79	42.495		
7,500.00	7,131.00	6,516.56	6,084.23	35.10	39.45	-67.61	-2,545.76	-135.13	2,818.27	2,751.29	66.98	42.075		
7,600.00	7,130.63	6,519.28	6,086.74	36.44	39.47	-67.66	-2,546.82	-135.19	2,841.27	2,773.01	68.26	41.627		
7,700.00	7,130.26	6,522.01	6,089.25	37.94	39.49	-67.72	-2,547.87	-135.25	2,867.56	2,797.92	69.65	41.173		
7,800.00	7,129.90	6,524.73	6,091.76	39.59	39.50	-67.78	-2,548.92	-135.32	2,897.07	2,825.95	71.12	40.733		
7,900.00	7,129.53	6,527.45	6,094.27	41.37	39.52	-67.83	-2,549.98	-135.38	2,929.70	2,857.04	72.66	40.319		
8,000.00	7,129.17	6,441.50	7,069.54	43.27	49.51	-88.84	-2,967.26	-1,271.50	2,945.92	2,855.34	90.58	32.523		
8,100.00	7,128.80	8,541.49	7,069.24	45.27	50.87	-88.84	-2,967.85	-1,371.49	2,944.56	2,850.20	94.36	31.206		
8,200.00	7,128.43	8,641.48	7,068.95	47.36	52.43	-88.84	-2,968.45	-1,471.48	2,943.20	2,844.88	98.32	29.934		
8,300.00	7,128.07	8,741.47	7,068.65	49.52	54.17	-88.85	-2,969.05	-1,571.47	2,941.84	2,839.39	102.45	28.714		
8,400.00	7,127.70	8,841.46	7,068.35	51.75	56.04	-88.85	-2,969.65	-1,671.46	2,940.49	2,833.76	106.73	27.551		
8,500.00	7,127.33	8,941.45	7,068.05	54.04	58.02	-88.85	-2,970.25	-1,771.45	2,939.13	2,828.00	111.13	26.447		
8,600.00	7,126.97	9,041.44	7,067.76	56.38	60.08	-88.85	-2,970.84	-1,871.43	2,937.77	2,822.12	115.65	25.403		
8,700.00	7,126.60	9,141.43	7,067.46	58.77	62.23	-88.85	-2,971.44	-1,971.42	2,936.41	2,816.14	120.27	24.416		
8,800.00	7,126.24	9,241.43	7,067.16	61.19	64.44	-88.85	-2,972.04	-2,071.41	2,935.05	2,810.08	124.97	23.485		
8,900.00	7,125.87	9,341.42	7,066.86	63.65	66.71	-88.85	-2,972.64	-2,171.40	2,933.69	2,803.93	129.76	22.608		
9,000.00	7,125.50	9,441.41	7,066.57	66.15	69.03	-88.85	-2,973.23	-2,271.39	2,932.33	2,797.71	134.62	21.782		
9,100.00	7,125.14	9,541.40	7,066.27	68.67	71.38	-88.85	-2,973.83	-2,371.38	2,930.97	2,791.43	139.55	21.003		
9,200.00	7,124.77	9,641.39	7,065.97	71.21	73.78	-88.85	-2,974.43	-2,471.36	2,929.61	2,785.09	144.53	20.270		
9,300.00	7,124.41	9,741.38	7,065.67	73.78	76.21	-88.85	-2,975.03	-2,571.35	2,928.26	2,778.69	149.56	19.579		
9,400.00	7,124.04	9,841.37	7,065.37	76.37	78.68	-88.85	-2,975.63	-2,671.34	2,926.90	2,772.25	154.64	18.927		
9,500.00	7,123.67	9,941.36	7,065.08	78.98	81.17	-88.86	-2,976.22	-2,771.33	2,925.54	2,765.77	159.77	18.311		
9,600.00	7,123.31	10,041.35	7,064.78	81.60	83.68	-88.86	-2,976.82	-2,871.32	2,924.18	2,759.25	164.93	17.730		
9,700.00	7,122.94	10,141.34	7,064.48	84.24	86.22	-88.86	-2,977.42	-2,971.31	2,922.82	2,752.69	170.13	17.180		
9,800.00	7,122.57	10,241.33	7,064.18	86.90	88.78	-88.86	-2,978.02	-3,071.30	2,921.46	2,746.11	175.36	16.660		
9,900.00	7,122.21	10,341.32	7,063.89	89.56	91.35	-88.86	-2,978.62	-3,171.28	2,920.10	2,739.49	180.61	16.168		
10,000.00	7,121.84	10,441.31	7,063.59	92.24	93.95	-88.86	-2,979.21	-3,271.27	2,918.74	2,732.85	185.90	15.701		
10,100.00	7,121.48	10,541.31	7,063.29	94.92	96.56	-88.86	-2,979.81	-3,371.26	2,917.39	2,726.18	191.21	15.258		
10,200.00	7,121.11	10,641.30	7,062.99	97.62	99.18	-88.86	-2,980.41	-3,471.25	2,916.03	2,719.49	196.54	14.837		
10,300.00	7,120.74	10,741.29	7,062.70	100.32	101.81	-88.86	-2,981.01	-3,571.24	2,914.67	2,712.78	201.89	14.437		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 13N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,120.38	10,841.28	7,062.40	103.04	104.46	-88.86	-2,981.60	-3,671.23	2,913.31	2,706.05	207.26	14.056		
10,500.00	7,120.01	10,941.27	7,062.10	105.76	107.12	-88.86	-2,982.20	-3,771.22	2,911.95	2,699.30	212.65	13.693		
10,600.00	7,119.64	11,041.26	7,061.80	108.48	109.79	-88.86	-2,982.80	-3,871.20	2,910.59	2,692.53	218.06	13.348		
10,700.00	7,119.28	11,141.25	7,061.51	111.22	112.47	-88.86	-2,983.40	-3,971.19	2,909.23	2,685.75	223.48	13.018		
10,800.00	7,118.91	11,241.24	7,061.21	113.96	115.16	-88.87	-2,984.00	-4,071.18	2,907.87	2,678.96	228.91	12.703		
10,900.00	7,118.55	11,341.23	7,060.91	116.70	117.85	-88.87	-2,984.59	-4,171.17	2,906.51	2,672.15	234.36	12.402		
11,000.00	7,118.18	11,441.22	7,060.61	119.45	120.55	-88.87	-2,985.19	-4,271.16	2,905.16	2,665.33	239.82	12.114		
11,100.00	7,117.81	11,541.21	7,060.32	122.21	123.26	-88.87	-2,985.79	-4,371.15	2,903.80	2,658.50	245.29	11.838		
11,200.00	7,117.45	11,641.20	7,060.02	124.97	125.98	-88.87	-2,986.39	-4,471.14	2,902.44	2,651.66	250.78	11.574		
11,300.00	7,117.08	11,741.19	7,059.72	127.73	128.71	-88.87	-2,986.99	-4,571.12	2,901.08	2,644.81	256.27	11.321		
11,400.00	7,116.72	11,841.19	7,059.42	130.50	131.43	-88.87	-2,987.58	-4,671.11	2,899.72	2,637.95	261.77	11.077		
11,500.00	7,116.35	11,941.18	7,059.13	133.27	134.17	-88.87	-2,988.18	-4,771.10	2,898.36	2,631.08	267.28	10.844		
11,600.00	7,115.98	12,041.17	7,058.83	136.04	136.91	-88.87	-2,988.78	-4,871.09	2,897.00	2,624.20	272.80	10.620		
11,700.00	7,115.62	12,141.16	7,058.53	138.82	139.65	-88.87	-2,989.38	-4,971.08	2,895.64	2,617.32	278.32	10.404		
11,800.00	7,115.25	12,241.15	7,058.23	141.60	142.40	-88.87	-2,989.97	-5,071.07	2,894.29	2,610.43	283.86	10.196		
11,900.00	7,114.88	12,341.14	7,057.94	144.39	145.16	-88.87	-2,990.57	-5,171.06	2,892.93	2,603.53	289.40	9.996		
12,000.00	7,114.52	12,441.13	7,057.64	147.17	147.91	-88.88	-2,991.17	-5,271.04	2,891.57	2,596.62	294.95	9.804		
12,100.00	7,114.15	12,541.12	7,057.34	149.96	150.67	-88.88	-2,991.77	-5,371.03	2,890.21	2,589.71	300.50	9.618		
12,200.00	7,113.79	12,641.11	7,057.04	152.75	153.44	-88.88	-2,992.37	-5,471.02	2,888.85	2,582.79	306.06	9.439		
12,300.00	7,113.42	12,741.10	7,056.75	155.55	156.21	-88.88	-2,992.96	-5,571.01	2,887.49	2,575.87	311.62	9.266		
12,400.00	7,113.05	12,841.09	7,056.45	158.34	158.98	-88.88	-2,993.56	-5,671.00	2,886.13	2,568.94	317.19	9.099		
12,500.00	7,112.69	12,941.08	7,056.15	161.14	161.75	-88.88	-2,994.16	-5,770.99	2,884.77	2,562.01	322.77	8.938		
12,600.00	7,112.32	13,041.07	7,055.85	163.94	164.53	-88.88	-2,994.76	-5,870.98	2,883.42	2,555.07	328.35	8.782		
12,700.00	7,111.96	13,141.06	7,055.56	166.74	167.31	-88.88	-2,995.36	-5,970.96	2,882.06	2,548.13	333.93	8.631		
12,800.00	7,111.59	13,241.06	7,055.26	169.54	170.09	-88.88	-2,995.95	-6,070.95	2,880.70	2,541.18	339.52	8.485		
12,900.00	7,111.22	13,341.05	7,054.96	172.35	172.88	-88.88	-2,996.55	-6,170.94	2,879.34	2,534.23	345.11	8.343		
13,000.00	7,110.86	13,441.04	7,054.66	175.16	175.67	-88.88	-2,997.15	-6,270.93	2,877.98	2,527.27	350.71	8.206		
13,100.00	7,110.49	13,541.03	7,054.36	177.96	178.46	-88.88	-2,997.75	-6,370.92	2,876.62	2,520.31	356.31	8.073		
13,200.00	7,110.12	13,641.02	7,054.07	180.77	181.25	-88.89	-2,998.34	-6,470.91	2,875.26	2,513.35	361.91	7.945		
13,300.00	7,109.76	13,741.01	7,053.77	183.58	184.04	-88.89	-2,998.94	-6,570.89	2,873.90	2,506.39	367.52	7.820		
13,400.00	7,109.39	13,841.00	7,053.47	186.40	186.84	-88.89	-2,999.54	-6,670.88	2,872.54	2,499.42	373.13	7.699		
13,500.00	7,109.03	13,940.99	7,053.17	189.21	189.64	-88.89	-3,000.14	-6,770.87	2,871.19	2,492.45	378.74	7.581		
13,600.00	7,108.66	14,040.98	7,052.88	192.03	192.44	-88.89	-3,000.74	-6,870.86	2,869.83	2,485.47	384.35	7.467		
13,700.00	7,108.29	14,140.97	7,052.58	194.84	195.24	-88.89	-3,001.33	-6,970.85	2,868.47	2,478.50	389.97	7.356		
13,800.00	7,107.93	14,240.96	7,052.28	197.66	198.04	-88.89	-3,001.93	-7,070.84	2,867.11	2,471.52	395.59	7.248		
13,900.00	7,107.56	14,340.95	7,051.98	200.48	200.85	-88.89	-3,002.53	-7,170.83	2,865.75	2,464.53	401.22	7.143		
14,000.00	7,107.19	14,440.94	7,051.69	203.30	203.65	-88.89	-3,003.13	-7,270.81	2,864.39	2,457.55	406.84	7.041		
14,100.00	7,106.83	14,540.94	7,051.39	206.12	206.46	-88.89	-3,003.73	-7,370.80	2,863.03	2,450.56	412.47	6.941		
14,200.00	7,106.46	14,640.93	7,051.09	208.94	209.27	-88.89	-3,004.32	-7,470.79	2,861.67	2,443.57	418.10	6.844		
14,300.00	7,106.10	14,740.92	7,050.79	211.76	212.08	-88.89	-3,004.92	-7,570.78	2,860.32	2,436.58	423.74	6.750		
14,400.00	7,105.73	14,840.91	7,050.50	214.58	214.89	-88.90	-3,005.52	-7,670.77	2,858.96	2,429.59	429.37	6.658		
14,500.00	7,105.36	14,940.90	7,050.20	217.40	217.70	-88.90	-3,006.12	-7,770.76	2,857.60	2,422.59	435.01	6.569		
14,600.00	7,105.00	15,040.89	7,049.90	220.23	220.52	-88.90	-3,006.71	-7,870.75	2,856.24	2,415.59	440.65	6.482		
14,700.00	7,104.63	15,140.88	7,049.60	223.05	223.33	-88.90	-3,007.31	-7,970.73	2,854.88	2,408.59	446.29	6.397		
14,800.00	7,104.27	15,240.87	7,049.31	225.88	226.15	-88.90	-3,007.91	-8,070.72	2,853.52	2,401.59	451.93	6.314		
14,872.41	7,104.00	15,313.27	7,049.09	227.93	228.19	-88.90	-3,008.34	-8,143.12	2,852.54	2,396.52	456.01	6.255 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.00	0.00	3.28	3.28	0.80	40.08	0.56	40.08					
100.00	100.00	100.00	100.00	3.28	3.28	0.80	40.08	0.56	40.08	33.51	6.57	6.101		
200.00	200.00	200.00	200.00	3.34	3.34	0.80	40.08	0.56	40.08	33.41	6.67	6.006		
300.00	300.00	300.00	300.00	3.44	3.44	0.80	40.08	0.56	40.08	33.19	6.89	5.818		
400.00	400.00	400.00	400.00	3.60	3.60	0.80	40.08	0.56	40.08	32.87	7.21	5.562		
500.00	500.00	500.00	500.00	3.81	3.81	0.80	40.08	0.56	40.08	32.47	7.61	5.266 CC, ES		
600.00	599.98	598.75	598.73	4.04	4.04	91.85	41.59	-0.23	41.63	33.54	8.09	5.148		
700.00	699.95	702.02	697.85	4.30	4.33	92.05	45.81	-2.41	45.89	37.26	8.63	5.315		
800.00	799.92	802.13	797.60	4.59	4.62	91.94	50.49	-4.83	50.57	41.35	9.22	5.485		
900.00	899.89	902.24	897.35	4.90	4.94	91.85	55.16	-7.26	55.25	45.40	9.85	5.610		
1,000.00	999.86	1,002.35	997.10	5.23	5.28	91.77	59.84	-9.68	59.94	49.42	10.52	5.700		
1,100.00	1,099.83	1,102.46	1,096.85	5.58	5.63	91.71	64.52	-12.10	64.62	53.41	11.21	5.764		
1,200.00	1,199.80	1,202.57	1,196.60	5.94	5.99	91.65	69.20	-14.52	69.30	57.37	11.93	5.808		
1,300.00	1,299.77	1,302.68	1,296.35	6.30	6.37	91.60	73.87	-16.95	73.98	61.31	12.67	5.838		
1,400.00	1,399.73	1,402.79	1,396.11	6.68	6.75	91.56	78.55	-19.37	78.66	65.23	13.43	5.857		
1,500.00	1,499.70	1,502.90	1,495.86	7.07	7.14	91.52	83.23	-21.79	83.35	69.15	14.20	5.869		
1,600.00	1,599.67	1,603.01	1,595.61	7.46	7.53	91.48	87.90	-24.21	88.03	73.04	14.99	5.874		
1,700.00	1,699.64	1,703.12	1,695.36	7.85	7.93	91.45	92.58	-26.63	92.71	76.93	15.78	5.875		
1,800.00	1,799.61	1,803.23	1,795.11	8.25	8.34	91.42	97.26	-29.06	97.39	80.81	16.58	5.873		
1,900.00	1,899.58	1,896.66	1,894.86	8.66	8.72	91.40	101.93	-31.48	102.08	84.71	17.37	5.877		
2,000.00	1,999.55	2,003.45	1,994.61	9.06	9.15	91.38	106.61	-33.90	106.76	88.55	18.21	5.862		
2,100.00	2,099.52	2,096.45	2,094.36	9.47	9.54	91.35	111.29	-36.32	111.44	92.44	19.01	5.863		
2,200.00	2,199.48	2,203.66	2,194.12	9.89	9.98	91.34	115.97	-38.75	116.12	96.26	19.86	5.846		
2,300.00	2,299.45	2,303.77	2,293.87	10.30	10.40	91.32	120.64	-41.17	120.81	100.11	20.70	5.837		
2,400.00	2,399.42	2,403.88	2,393.62	10.72	10.82	91.30	125.32	-43.59	125.49	103.96	21.53	5.828		
2,500.00	2,499.39	2,503.99	2,493.37	11.14	11.24	91.29	130.00	-46.01	130.17	107.80	22.37	5.818		
2,600.00	2,599.36	2,604.10	2,593.12	11.56	11.67	91.27	134.67	-48.43	134.86	111.64	23.22	5.809		
2,700.00	2,699.33	2,704.21	2,692.87	11.98	12.09	91.26	139.35	-50.86	139.54	115.48	24.06	5.799		
2,800.00	2,799.30	2,804.32	2,792.62	12.41	12.52	91.24	144.03	-53.28	144.22	119.31	24.91	5.790		
2,900.00	2,899.27	2,904.43	2,892.38	12.83	12.94	91.23	148.71	-55.70	148.90	123.14	25.76	5.780		
3,000.00	2,999.23	3,004.54	2,992.13	13.26	13.37	91.22	153.38	-58.12	153.59	126.97	26.61	5.771		
3,100.00	3,099.20	3,104.65	3,091.88	13.68	13.80	91.21	158.06	-60.54	158.27	130.80	27.47	5.762		
3,200.00	3,199.17	3,204.76	3,191.63	14.11	14.23	91.20	162.74	-62.97	162.95	134.63	28.32	5.753		
3,300.00	3,299.14	3,295.13	3,291.38	14.54	14.62	91.19	167.41	-65.39	167.63	138.49	29.14	5.753		
3,400.00	3,399.11	3,404.98	3,391.13	14.97	15.09	91.18	172.09	-67.81	172.32	142.28	30.04	5.736		
3,500.00	3,499.08	3,494.91	3,490.88	15.40	15.48	91.18	176.77	-70.23	177.00	146.14	30.86	5.736		
3,600.00	3,599.05	3,605.20	3,590.63	15.83	15.95	91.17	181.44	-72.66	181.68	149.92	31.76	5.720		
3,700.00	3,699.02	3,705.31	3,690.39	16.26	16.39	91.16	186.12	-75.08	186.36	153.74	32.62	5.712		
3,800.00	3,798.98	3,805.42	3,790.14	16.69	16.82	91.15	190.80	-77.50	191.05	157.56	33.49	5.705		
3,900.00	3,898.95	3,905.53	3,889.89	17.12	17.25	91.15	195.48	-79.92	195.73	161.38	34.35	5.698		
4,000.00	3,998.92	4,005.64	3,989.64	17.55	17.69	91.14	200.15	-82.34	200.41	165.19	35.22	5.691		
4,100.00	4,098.89	4,105.75	4,089.39	17.98	18.12	91.13	204.83	-84.77	205.09	169.01	36.08	5.684		
4,200.00	4,198.86	4,205.86	4,189.14	18.42	18.56	91.13	209.51	-87.19	209.78	172.83	36.95	5.677		
4,300.00	4,298.83	4,305.97	4,288.89	18.85	18.99	91.12	214.18	-89.61	214.46	176.64	37.82	5.671		
4,400.00	4,398.80	4,406.08	4,388.65	19.28	19.43	91.12	218.86	-92.03	219.14	180.46	38.69	5.665		
4,500.00	4,498.77	4,506.19	4,488.40	19.72	19.86	91.11	223.54	-94.46	223.83	184.27	39.56	5.659		
4,600.00	4,598.73	4,606.30	4,588.15	20.15	20.30	91.11	228.21	-96.88	228.51	188.08	40.42	5.653		
4,700.00	4,698.70	4,706.41	4,687.90	20.58	20.73	91.10	232.89	-99.30	233.19	191.90	41.29	5.647		
4,800.00	4,798.67	4,806.52	4,787.65	21.02	21.17	91.10	237.57	-101.72	237.87	195.71	42.16	5.642		
4,900.00	4,898.64	4,906.63	4,887.40	21.45	21.61	91.09	242.25	-104.14	242.56	199.52	43.04	5.636		
5,000.00	4,998.61	5,006.74	4,987.15	21.89	22.04	91.09	246.92	-106.57	247.24	203.33	43.91	5.631		
5,100.00	5,098.58	5,093.15	5,086.90	22.32	22.42	91.08	251.60	-108.99	251.92	207.20	44.72	5.634		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 31N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,193.04	5,186.66	22.76	22.86	91.08	256.28	-111.41	256.60	211.01	45.59	5.629		
5,300.00	5,298.52	5,292.93	5,286.41	23.20	23.29	91.08	260.95	-113.83	261.29	214.83	46.46	5.624		
5,400.00	5,398.49	5,407.18	5,386.16	23.63	23.79	91.07	265.63	-116.25	265.97	218.57	47.40	5.612		
5,500.00	5,498.45	5,507.28	5,485.91	24.07	24.23	91.07	270.31	-118.68	270.65	222.38	48.27	5.607		
5,600.00	5,598.42	5,607.39	5,585.66	24.50	24.67	91.07	274.99	-121.10	275.33	226.19	49.14	5.603		
5,700.00	5,698.39	5,707.50	5,685.41	24.94	25.11	91.06	279.66	-123.52	280.02	230.00	50.02	5.599		
5,800.00	5,798.36	5,807.61	5,785.16	25.38	25.54	91.06	284.34	-125.94	284.70	233.81	50.89	5.595		
5,900.00	5,898.33	5,907.72	5,884.92	25.81	25.98	91.06	289.02	-128.37	289.38	237.62	51.76	5.591		
6,000.00	5,998.30	6,007.83	5,984.67	26.25	26.42	91.05	293.69	-130.79	294.07	241.43	52.64	5.587		
6,100.00	6,098.27	6,107.94	6,084.42	26.69	26.86	91.05	298.37	-133.21	298.75	245.24	53.51	5.583		
6,200.00	6,198.24	6,208.05	6,184.17	27.12	27.30	91.05	303.05	-135.63	303.43	249.04	54.39	5.579		
6,300.00	6,298.20	6,308.16	6,283.92	27.56	27.74	91.05	307.72	-138.05	308.11	252.85	55.26	5.575		
6,400.00	6,398.17	6,391.73	6,383.67	28.00	28.10	91.04	312.40	-140.48	312.80	256.73	56.06	5.579		
6,500.00	6,498.14	6,492.12	6,483.85	28.43	28.54	90.77	317.09	-144.40	317.44	260.50	56.94	5.575		
6,600.00	6,597.68	6,592.05	6,582.12	28.88	28.98	89.81	321.60	-161.41	322.12	264.29	57.82	5.571		
6,700.00	6,694.68	6,690.64	6,675.29	29.32	29.42	87.98	325.77	-193.05	327.09	268.40	58.69	5.573		
6,800.00	6,786.74	6,788.00	6,761.44	29.77	29.86	86.20	329.52	-238.05	332.22	272.68	59.54	5.580		
6,900.00	6,871.61	6,884.23	6,838.89	30.24	30.32	84.54	332.78	-294.93	337.34	276.95	60.39	5.586		
7,000.00	6,947.19	6,979.47	6,906.24	30.74	30.84	83.05	335.50	-362.08	342.28	280.98	61.30	5.584		
7,100.00	7,011.62	7,073.84	6,962.40	31.32	31.44	81.75	337.64	-437.79	346.88	284.54	62.34	5.564		
7,200.00	7,063.31	7,167.50	7,006.47	32.03	32.16	80.66	339.16	-520.32	350.97	287.37	63.60	5.518		
7,300.00	7,101.00	7,260.57	7,037.83	32.89	33.01	79.79	340.05	-607.85	354.44	289.28	65.15	5.440		
7,400.00	7,123.74	7,353.20	7,056.07	33.93	34.00	79.15	340.30	-698.59	357.15	290.12	67.03	5.328		
7,500.00	7,131.00	7,445.64	7,060.98	35.10	35.12	78.75	339.91	-790.82	359.02	289.80	69.22	5.187		
7,600.00	7,130.63	7,545.62	7,059.23	36.44	36.49	78.57	339.16	-890.78	360.47	288.62	71.85	5.017		
7,700.00	7,130.26	7,645.61	7,057.48	37.94	38.01	78.39	338.40	-990.75	361.93	287.13	74.79	4.839		
7,800.00	7,129.90	7,745.59	7,055.73	39.59	39.68	78.22	337.65	-1,090.71	363.38	285.37	78.02	4.658		
7,900.00	7,129.53	7,845.57	7,053.98	41.37	41.48	78.04	336.90	-1,190.68	364.85	283.35	81.50	4.477		
8,000.00	7,129.17	7,945.56	7,052.23	43.27	43.39	77.87	336.15	-1,290.64	366.31	281.12	85.19	4.300		
8,100.00	7,128.80	8,045.54	7,050.48	45.27	45.41	77.70	335.39	-1,390.61	367.78	278.70	89.08	4.128		
8,200.00	7,128.43	8,145.52	7,048.73	47.36	47.50	77.53	334.64	-1,490.57	369.25	276.11	93.14	3.965		
8,300.00	7,128.07	8,245.51	7,046.98	49.52	49.68	77.36	333.89	-1,590.54	370.73	273.39	97.34	3.809		
8,400.00	7,127.70	8,345.49	7,045.23	51.75	51.92	77.19	333.14	-1,690.50	372.20	270.54	101.66	3.661		
8,500.00	7,127.33	8,445.47	7,043.49	54.04	54.22	77.03	332.38	-1,790.47	373.68	267.59	106.09	3.522		
8,600.00	7,126.97	8,545.46	7,041.74	56.38	56.57	76.86	331.63	-1,890.43	375.17	264.55	110.62	3.392		
8,700.00	7,126.60	8,645.44	7,039.99	58.77	58.96	76.70	330.88	-1,990.40	376.66	261.43	115.23	3.269		
8,800.00	7,126.24	8,745.42	7,038.24	61.19	61.40	76.54	330.13	-2,090.36	378.15	258.24	119.91	3.154		
8,900.00	7,125.87	8,845.41	7,036.49	63.65	63.87	76.38	329.37	-2,190.33	379.64	254.99	124.65	3.046		
9,000.00	7,125.50	8,945.39	7,034.74	66.15	66.37	76.22	328.62	-2,290.29	381.14	251.69	129.45	2.944		
9,100.00	7,125.14	9,045.37	7,032.99	68.67	68.90	76.06	327.87	-2,390.26	382.63	248.34	134.30	2.849		
9,200.00	7,124.77	9,145.35	7,031.24	71.21	71.45	75.90	327.12	-2,490.22	384.14	244.95	139.19	2.760		
9,300.00	7,124.41	9,245.34	7,029.49	73.78	74.03	75.75	326.36	-2,590.19	385.64	241.53	144.11	2.676		
9,400.00	7,124.04	9,345.32	7,027.74	76.37	76.62	75.59	325.61	-2,690.15	387.15	238.08	149.07	2.597		
9,500.00	7,123.67	9,445.30	7,025.99	78.98	79.24	75.44	324.86	-2,790.12	388.66	234.60	154.06	2.523		
9,600.00	7,123.31	9,545.29	7,024.24	81.60	81.87	75.29	324.11	-2,890.08	390.17	231.10	159.07	2.453		
9,700.00	7,122.94	9,645.27	7,022.49	84.24	84.51	75.14	323.35	-2,990.05	391.69	227.58	164.11	2.387		
9,800.00	7,122.57	9,745.25	7,020.75	86.90	87.17	74.99	322.60	-3,090.01	393.21	224.04	169.17	2.324		
9,900.00	7,122.21	9,845.24	7,019.00	89.56	89.84	74.84	321.85	-3,189.98	394.73	220.49	174.24	2.265		
10,000.00	7,121.84	9,945.22	7,017.25	92.24	92.52	74.69	321.10	-3,289.94	396.25	216.92	179.33	2.210		
10,100.00	7,121.48	10,045.20	7,015.50	94.92	95.21	74.54	320.34	-3,389.91	397.78	213.35	184.43	2.157		
10,200.00	7,121.11	10,145.19	7,013.75	97.62	97.91	74.40	319.59	-3,489.87	399.31	209.76	189.55	2.107		
10,300.00	7,120.74	10,245.17	7,012.00	100.32	100.62	74.25	318.84	-3,589.84	400.84	206.17	194.67	2.059		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	10,345.15	7,010.25	103.04	103.34	74.11	318.09	-3,689.80	402.38	202.57	199.81	2.014		
10,500.00	7,120.01	10,445.14	7,008.50	105.76	106.07	73.97	317.33	-3,789.77	403.91	198.97	204.95	1.971		
10,600.00	7,119.64	10,545.12	7,006.75	108.48	108.80	73.83	316.58	-3,889.73	405.45	195.36	210.09	1.930		
10,700.00	7,119.28	10,645.10	7,005.00	111.22	111.54	73.69	315.83	-3,989.70	406.99	191.75	215.25	1.891		
10,800.00	7,118.91	10,745.09	7,003.25	113.96	114.28	73.55	315.08	-4,089.66	408.54	188.13	220.40	1.854		
10,900.00	7,118.55	10,845.07	7,001.50	116.70	117.03	73.41	314.32	-4,189.63	410.09	184.52	225.57	1.818		
11,000.00	7,118.18	10,945.05	6,999.75	119.45	119.78	73.27	313.57	-4,289.59	411.63	180.90	230.73	1.784		
11,100.00	7,117.81	11,045.04	6,998.01	122.21	122.54	73.14	312.82	-4,389.56	413.19	177.29	235.90	1.752		
11,200.00	7,117.45	11,145.02	6,996.26	124.97	125.31	73.00	312.07	-4,489.52	414.74	173.67	241.07	1.720		
11,300.00	7,117.08	11,245.00	6,994.51	127.73	128.08	72.87	311.31	-4,589.49	416.29	170.06	246.24	1.691		
11,400.00	7,116.72	11,344.98	6,992.76	130.50	130.85	72.74	310.56	-4,689.45	417.85	166.44	251.41	1.662		
11,500.00	7,116.35	11,444.97	6,991.01	133.27	133.62	72.61	309.81	-4,789.42	419.41	162.83	256.58	1.635		
11,600.00	7,115.98	11,544.95	6,989.26	136.04	136.40	72.48	309.06	-4,889.38	420.98	159.22	261.75	1.608		
11,700.00	7,115.62	11,644.93	6,987.51	138.82	139.18	72.35	308.30	-4,989.35	422.54	155.62	266.92	1.583		
11,800.00	7,115.25	11,744.92	6,985.76	141.60	141.97	72.22	307.55	-5,089.31	424.11	152.01	272.09	1.559		
11,900.00	7,114.88	11,844.90	6,984.01	144.39	144.76	72.09	306.80	-5,189.28	425.68	148.41	277.26	1.535		
12,000.00	7,114.52	11,944.88	6,982.26	147.17	147.55	71.96	306.05	-5,289.24	427.25	144.82	282.43	1.513		
12,100.00	7,114.15	12,044.87	6,980.51	149.96	150.34	71.84	305.29	-5,389.21	428.82	141.22	287.60	1.491 Level 3		
12,200.00	7,113.79	12,144.85	6,978.76	152.75	153.13	71.71	304.54	-5,489.17	430.39	137.63	292.76	1.470 Level 3		
12,300.00	7,113.43	12,244.83	6,977.01	155.55	155.93	71.59	303.79	-5,589.14	431.97	134.05	297.92	1.450 Level 3		
12,400.00	7,113.05	12,344.82	6,975.27	158.34	158.73	71.46	303.04	-5,689.10	433.55	130.47	303.08	1.430 Level 3		
12,500.00	7,112.69	12,444.80	6,973.52	161.14	161.53	71.34	302.28	-5,789.07	435.13	126.89	308.24	1.412 Level 3		
12,600.00	7,112.32	12,544.78	6,971.77	163.94	164.34	71.22	301.53	-5,889.03	436.72	123.32	313.39	1.394 Level 3		
12,700.00	7,111.96	12,644.77	6,970.02	166.74	167.14	71.10	300.78	-5,989.00	438.30	119.76	318.55	1.376 Level 3		
12,800.00	7,111.59	12,744.75	6,968.27	169.54	169.95	70.98	300.03	-6,088.96	439.89	116.19	323.69	1.359 Level 3		
12,900.00	7,111.22	12,844.73	6,966.52	172.35	172.76	70.86	299.27	-6,188.93	441.48	112.64	328.84	1.343 Level 3		
13,000.00	7,110.86	12,944.72	6,964.77	175.16	175.57	70.74	298.52	-6,288.89	443.07	109.09	333.98	1.327 Level 3		
13,100.00	7,110.49	13,044.70	6,963.02	177.96	178.38	70.63	297.77	-6,388.86	444.66	105.54	339.12	1.311 Level 3		
13,200.00	7,110.12	13,144.68	6,961.27	180.77	181.19	70.51	297.02	-6,488.82	446.25	102.00	344.25	1.296 Level 3		
13,300.00	7,109.76	13,244.67	6,959.52	183.58	184.01	70.39	296.26	-6,588.79	447.85	98.47	349.38	1.282 Level 3		
13,400.00	7,109.39	13,344.65	6,957.77	186.40	186.83	70.28	295.51	-6,688.75	449.45	94.94	354.51	1.268 Level 3		
13,500.00	7,109.03	13,444.63	6,956.02	189.21	189.64	70.16	294.76	-6,788.72	451.05	91.42	359.63	1.254 Level 3		
13,600.00	7,108.66	13,544.62	6,954.27	192.03	192.46	70.05	294.01	-6,888.68	452.65	87.90	364.75	1.241 Level 2		
13,700.00	7,108.29	13,644.60	6,952.52	194.84	195.28	69.94	293.25	-6,988.65	454.25	84.39	369.87	1.228 Level 2		
13,800.00	7,107.93	13,744.58	6,950.78	197.66	198.10	69.83	292.50	-7,088.61	455.86	80.88	374.98	1.216 Level 2		
13,900.00	7,107.56	13,844.56	6,949.03	200.48	200.92	69.72	291.75	-7,188.58	457.47	77.38	380.08	1.204 Level 2		
14,000.00	7,107.19	13,944.55	6,947.28	203.30	203.75	69.61	291.00	-7,288.54	459.08	73.89	385.18	1.192 Level 2		
14,100.00	7,106.83	14,044.53	6,945.53	206.12	206.57	69.50	290.24	-7,388.51	460.69	70.40	390.28	1.180 Level 2		
14,200.00	7,106.46	14,144.51	6,943.78	208.94	209.39	69.39	289.49	-7,488.47	462.30	66.92	395.38	1.169 Level 2		
14,300.00	7,106.10	14,244.50	6,942.03	211.76	212.22	69.28	288.74	-7,588.44	463.91	63.45	400.47	1.158 Level 2		
14,400.00	7,105.73	14,344.48	6,940.28	214.58	215.05	69.18	287.99	-7,688.40	465.53	59.98	405.55	1.148 Level 2		
14,500.00	7,105.36	14,444.46	6,938.53	217.40	217.87	69.07	287.23	-7,788.37	467.14	56.51	410.63	1.138 Level 2		
14,600.00	7,105.00	14,544.45	6,936.78	220.23	220.70	68.96	286.48	-7,888.33	468.76	53.06	415.71	1.128 Level 2		
14,700.00	7,104.63	14,644.43	6,935.03	223.05	223.53	68.86	285.73	-7,988.30	470.38	49.60	420.78	1.118 Level 2		
14,800.00	7,104.27	14,744.41	6,933.28	225.88	226.36	68.75	284.98	-8,088.26	472.00	46.16	425.84	1.108 Level 2		
14,872.41	7,104.00	14,816.81	6,932.02	227.93	228.41	68.68	284.43	-8,160.65	473.18	43.67	429.51	1.102 Level 2, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-179.60	-159.93	-1.11	159.93					
100.00	100.00	101.00	100.00	3.28	3.28	-179.60	-159.93	-1.11	159.93	153.36	6.57	24.344		
200.00	200.00	199.00	200.00	3.34	3.34	-179.60	-159.93	-1.11	159.93	153.26	6.67	23.966	CC, ES	
300.00	300.00	293.78	294.76	3.44	3.43	-179.53	-161.45	-1.33	161.54	154.65	6.89	23.457		
400.00	400.00	388.29	389.16	3.60	3.57	-179.32	-166.06	-1.98	166.42	159.21	7.21	23.088		
500.00	500.00	482.40	482.95	3.81	3.76	-178.99	-173.70	-3.06	174.56	166.94	7.62	22.900		
600.00	599.98	575.92	575.84	4.04	3.99	-88.89	-184.32	-4.56	185.91	177.81	8.11	22.937		
700.00	699.95	668.66	667.57	4.30	4.27	-89.08	-197.80	-6.46	200.45	191.81	8.64	23.192		
800.00	799.92	767.09	764.67	4.59	4.62	-89.20	-213.79	-8.72	216.68	207.48	9.21	23.535		
900.00	899.89	865.77	862.01	4.90	5.01	-89.29	-229.81	-10.99	232.92	223.11	9.81	23.747		
1,000.00	999.86	964.44	959.34	5.23	5.42	-89.38	-245.84	-13.25	249.16	238.70	10.46	23.822		
1,100.00	1,099.83	1,063.11	1,056.68	5.58	5.86	-89.45	-261.87	-15.51	265.40	254.26	11.14	23.820		
1,200.00	1,199.80	1,161.78	1,154.02	5.94	6.32	-89.52	-277.89	-17.78	281.64	269.79	11.85	23.762		
1,300.00	1,299.77	1,260.45	1,251.35	6.30	6.79	-89.58	-293.92	-20.04	297.88	285.29	12.59	23.667		
1,400.00	1,399.73	1,359.13	1,348.69	6.68	7.27	-89.63	-309.94	-22.30	314.12	300.78	13.34	23.548		
1,500.00	1,499.70	1,457.80	1,446.02	7.07	7.76	-89.68	-325.97	-24.57	330.36	316.25	14.11	23.415		
1,600.00	1,599.67	1,556.47	1,543.36	7.46	8.26	-89.72	-341.99	-26.83	346.60	331.71	14.89	23.275		
1,700.00	1,699.64	1,655.14	1,640.70	7.85	8.77	-89.76	-358.02	-29.10	362.84	347.15	15.69	23.131		
1,800.00	1,799.61	1,753.82	1,738.03	8.25	9.28	-89.80	-374.04	-31.36	379.08	362.59	16.49	22.987		
1,900.00	1,899.58	1,852.49	1,835.37	8.66	9.80	-89.83	-390.07	-33.62	395.32	378.02	17.30	22.845		
2,000.00	1,999.55	1,951.16	1,932.70	9.06	10.32	-89.86	-406.10	-35.89	411.56	393.44	18.12	22.707		
2,100.00	2,099.52	2,049.83	2,030.04	9.47	10.84	-89.89	-422.12	-38.15	427.80	408.85	18.95	22.573		
2,200.00	2,199.48	2,148.50	2,127.37	9.89	11.37	-89.92	-438.15	-40.42	444.04	424.26	19.78	22.444		
2,300.00	2,299.45	2,247.18	2,224.71	10.30	11.90	-89.94	-454.17	-42.68	460.28	439.66	20.62	22.320		
2,400.00	2,399.42	2,345.85	2,322.05	10.72	12.43	-89.96	-470.20	-44.94	476.52	455.06	21.46	22.201		
2,500.00	2,499.39	2,444.52	2,419.38	11.14	12.96	-89.98	-486.22	-47.21	492.77	470.46	22.31	22.087		
2,600.00	2,599.36	2,543.19	2,516.72	11.56	13.49	-90.00	-502.25	-49.47	509.01	485.85	23.16	21.978		
2,700.00	2,699.33	2,641.86	2,614.05	11.98	14.03	-90.02	-518.27	-51.74	525.25	501.24	24.01	21.874		
2,800.00	2,799.30	2,740.54	2,711.39	12.41	14.57	-90.04	-534.30	-54.00	541.49	516.62	24.87	21.775		
2,900.00	2,899.27	2,839.21	2,808.72	12.83	15.11	-90.06	-550.33	-56.26	557.73	532.00	25.73	21.680		
3,000.00	2,999.23	2,937.88	2,906.06	13.26	15.65	-90.07	-566.35	-58.53	573.97	547.39	26.59	21.589		
3,100.00	3,099.20	3,036.55	3,003.40	13.68	16.19	-90.09	-582.38	-60.79	590.21	562.77	27.45	21.503		
3,200.00	3,199.17	3,135.23	3,100.73	14.11	16.73	-90.10	-598.40	-63.06	606.46	578.14	28.31	21.420		
3,300.00	3,299.14	3,233.90	3,198.07	14.54	17.27	-90.11	-614.43	-65.32	622.70	593.52	29.18	21.341		
3,400.00	3,399.11	3,332.57	3,295.40	14.97	17.81	-90.13	-630.45	-67.58	638.94	608.89	30.05	21.266		
3,500.00	3,499.08	3,431.24	3,392.74	15.40	18.36	-90.14	-646.48	-69.85	655.18	624.27	30.91	21.194		
3,600.00	3,599.05	3,529.91	3,490.07	15.83	18.90	-90.15	-662.50	-72.11	671.42	639.64	31.78	21.125		
3,700.00	3,699.02	3,628.59	3,587.41	16.26	19.45	-90.16	-678.53	-74.38	687.66	655.01	32.66	21.058		
3,800.00	3,798.98	3,727.26	3,684.75	16.69	19.99	-90.17	-694.56	-76.64	703.90	670.38	33.53	20.995		
3,900.00	3,898.95	3,825.93	3,782.08	17.12	20.54	-90.18	-710.58	-78.90	720.15	685.75	34.40	20.934		
4,000.00	3,998.92	3,924.60	3,879.42	17.55	21.08	-90.19	-726.61	-81.17	736.39	701.11	35.28	20.875		
4,100.00	4,098.89	4,023.27	3,976.75	17.98	21.63	-90.20	-742.63	-83.43	752.63	716.48	36.15	20.819		
4,200.00	4,198.86	4,121.95	4,074.09	18.42	22.18	-90.21	-758.66	-85.70	768.87	731.85	37.03	20.765		
4,300.00	4,298.83	4,220.62	4,171.42	18.85	22.72	-90.22	-774.68	-87.96	785.11	747.21	37.90	20.714		
4,400.00	4,398.80	4,319.29	4,268.76	19.28	23.27	-90.22	-790.71	-90.22	801.36	762.57	38.78	20.664		
4,500.00	4,498.77	4,417.96	4,366.10	19.72	23.82	-90.23	-806.73	-92.49	817.60	777.94	39.66	20.616		
4,600.00	4,598.73	4,516.64	4,463.43	20.15	24.37	-90.24	-822.76	-94.75	833.84	793.30	40.54	20.569		
4,700.00	4,698.70	4,615.31	4,560.77	20.58	24.91	-90.25	-838.79	-97.01	850.08	808.66	41.42	20.525		
4,800.00	4,798.67	4,713.98	4,658.10	21.02	25.46	-90.25	-854.81	-99.28	866.32	824.03	42.30	20.482		
4,900.00	4,898.64	4,812.65	4,755.44	21.45	26.01	-90.26	-870.84	-101.54	882.56	839.39	43.18	20.440		
5,000.00	4,998.61	4,911.32	4,852.78	21.89	26.56	-90.26	-886.86	-103.81	898.81	854.75	44.06	20.400		
5,100.00	5,098.58	5,010.00	4,950.11	22.32	27.11	-90.27	-902.89	-106.07	915.05	870.11	44.94	20.362		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,108.67	5,047.45	22.76	27.66	-90.28	-918.91	-108.33	931.29	885.47	45.82	20.324		
5,300.00	5,298.52	5,207.34	5,144.78	23.20	28.21	-90.28	-934.94	-110.60	947.53	900.83	46.70	20.288		
5,400.00	5,398.49	5,306.01	5,242.12	23.63	28.76	-90.29	-950.96	-112.86	963.77	916.19	47.59	20.253		
5,500.00	5,498.45	5,404.68	5,339.45	24.07	29.31	-90.29	-966.99	-115.13	980.02	931.55	48.47	20.219		
5,600.00	5,598.42	5,503.36	5,436.79	24.50	29.86	-90.30	-983.02	-117.39	996.26	946.90	49.35	20.186		
5,700.00	5,698.39	5,602.03	5,534.13	24.94	30.41	-90.30	-999.04	-119.65	1,012.50	962.26	50.24	20.154		
5,800.00	5,798.36	5,700.70	5,631.46	25.38	30.96	-90.31	-1,015.07	-121.92	1,028.74	977.62	51.12	20.124		
5,900.00	5,898.33	5,799.37	5,728.80	25.81	31.51	-90.31	-1,031.09	-124.18	1,044.98	992.98	52.01	20.094		
6,000.00	5,998.30	5,901.95	5,826.13	26.25	32.08	-90.32	-1,047.12	-126.45	1,061.23	1,008.32	52.91	20.058		
6,100.00	6,098.27	6,003.28	5,923.47	26.69	32.65	-90.32	-1,063.14	-128.71	1,077.47	1,023.66	53.81	20.025		
6,200.00	6,198.24	6,104.61	6,020.80	27.12	33.21	-90.32	-1,079.17	-130.97	1,093.71	1,039.01	54.70	19.994		
6,300.00	6,298.20	6,205.94	6,118.14	27.56	33.78	-90.33	-1,095.19	-133.24	1,109.95	1,054.35	55.60	19.963		
6,400.00	6,398.17	6,307.27	6,215.48	28.00	34.34	-90.33	-1,111.22	-135.50	1,126.19	1,069.70	56.50	19.933		
6,500.00	6,498.14	6,408.59	6,312.81	28.43	34.91	-90.34	-1,127.25	-137.77	1,142.44	1,085.04	57.40	19.904		
6,600.00	6,597.68	6,489.81	6,409.88	28.88	35.36	-88.40	-1,143.23	-140.02	1,158.57	1,100.35	58.22	19.901		
6,700.00	6,694.68	6,586.11	6,504.88	29.32	35.90	-87.91	-1,158.87	-142.23	1,174.43	1,115.29	59.14	19.859		
6,800.00	6,786.74	6,677.94	6,595.46	29.77	36.41	-88.06	-1,173.78	-144.34	1,190.45	1,130.37	60.08	19.813		
6,900.00	6,871.61	6,773.44	6,689.54	30.24	36.95	-88.74	-1,189.29	-149.03	1,207.30	1,146.15	61.15	19.744		
7,000.00	6,947.19	6,884.36	6,796.68	30.74	37.57	-89.73	-1,207.06	-170.92	1,224.44	1,162.00	62.43	19.612		
7,100.00	7,011.62	7,009.51	6,910.92	31.32	38.27	-90.90	-1,226.16	-217.75	1,241.07	1,177.19	63.88	19.428		
7,200.00	7,063.31	7,152.72	7,027.62	32.03	39.05	-92.21	-1,245.90	-297.85	1,256.20	1,190.73	65.47	19.187		
7,300.00	7,101.00	7,317.09	7,135.86	32.89	40.01	-93.56	-1,264.52	-419.53	1,268.47	1,201.17	67.31	18.846		
7,400.00	7,123.74	7,502.32	7,216.47	33.93	41.32	-94.67	-1,278.89	-584.94	1,276.32	1,206.61	69.70	18.310		
7,500.00	7,131.00	7,701.36	7,247.01	35.10	43.34	-95.21	-1,285.23	-780.70	1,278.32	1,205.24	73.07	17.494		
7,600.00	7,130.63	7,803.21	7,246.48	36.44	44.69	-95.21	-1,285.82	-882.55	1,276.94	1,200.72	76.21	16.754		
7,700.00	7,130.26	7,903.20	7,245.95	37.94	46.26	-95.21	-1,286.41	-982.54	1,275.56	1,195.86	79.69	16.006		
7,800.00	7,129.90	8,003.19	7,245.43	39.59	48.05	-95.21	-1,286.99	-1,082.53	1,274.18	1,190.69	83.48	15.263		
7,900.00	7,129.53	8,103.18	7,244.90	41.37	50.03	-95.20	-1,287.58	-1,182.51	1,272.80	1,185.26	87.54	14.540		
8,000.00	7,129.17	8,203.17	7,244.37	43.27	52.17	-95.20	-1,288.16	-1,282.50	1,271.42	1,179.58	91.83	13.845		
8,100.00	7,128.80	8,303.16	7,243.84	45.27	54.46	-95.20	-1,288.74	-1,382.49	1,270.04	1,173.71	96.33	13.184		
8,200.00	7,128.43	8,403.15	7,243.31	47.36	56.86	-95.20	-1,289.33	-1,482.48	1,268.65	1,167.65	101.00	12.561		
8,300.00	7,128.07	8,503.14	7,242.78	49.52	59.37	-95.20	-1,289.91	-1,582.46	1,267.27	1,161.45	105.83	11.975		
8,400.00	7,127.70	8,603.13	7,242.25	51.75	61.96	-95.20	-1,290.50	-1,682.45	1,265.89	1,155.11	110.78	11.427		
8,500.00	7,127.33	8,703.12	7,241.73	54.04	64.63	-95.19	-1,291.08	-1,782.44	1,264.51	1,148.66	115.86	10.914		
8,600.00	7,126.97	8,803.11	7,241.20	56.38	67.36	-95.19	-1,291.67	-1,882.42	1,263.13	1,142.10	121.03	10.436		
8,700.00	7,126.60	8,903.10	7,240.67	58.77	70.15	-95.19	-1,292.25	-1,982.41	1,261.75	1,135.46	126.30	9.990		
8,800.00	7,126.24	9,003.09	7,240.14	61.19	72.98	-95.19	-1,292.83	-2,082.40	1,260.37	1,128.73	131.64	9.575		
8,900.00	7,125.87	9,103.08	7,239.61	63.65	75.86	-95.19	-1,293.42	-2,182.39	1,258.99	1,121.94	137.05	9.186		
9,000.00	7,125.50	9,203.07	7,239.08	66.15	78.78	-95.19	-1,294.00	-2,282.37	1,257.61	1,115.09	142.52	8.824		
9,100.00	7,125.14	9,303.06	7,238.55	68.67	81.73	-95.18	-1,294.59	-2,382.36	1,256.23	1,108.18	148.05	8.485		
9,200.00	7,124.77	9,403.05	7,238.02	71.21	84.72	-95.18	-1,295.17	-2,482.35	1,254.85	1,101.23	153.62	8.168		
9,300.00	7,124.41	9,503.05	7,237.50	73.78	87.72	-95.18	-1,295.76	-2,582.34	1,253.47	1,094.23	159.24	7.871		
9,400.00	7,124.04	9,603.04	7,236.97	76.37	90.76	-95.18	-1,296.34	-2,682.32	1,252.09	1,087.19	164.90	7.593		
9,500.00	7,123.67	9,703.03	7,236.44	78.98	93.81	-95.18	-1,296.92	-2,782.31	1,250.71	1,080.11	170.60	7.331		
9,600.00	7,123.31	9,803.02	7,235.91	81.60	96.88	-95.17	-1,297.51	-2,882.30	1,249.33	1,073.01	176.32	7.086		
9,700.00	7,122.94	9,903.01	7,235.38	84.24	99.97	-95.17	-1,298.09	-2,982.29	1,247.95	1,065.87	182.08	6.854		
9,800.00	7,122.57	10,003.00	7,234.85	86.90	103.08	-95.17	-1,298.68	-3,082.27	1,246.57	1,058.71	187.86	6.636		
9,900.00	7,122.21	10,102.99	7,234.32	89.56	106.19	-95.17	-1,299.26	-3,182.26	1,245.19	1,051.53	193.66	6.430		
10,000.00	7,121.84	10,202.98	7,233.80	92.24	109.33	-95.17	-1,299.85	-3,282.25	1,243.81	1,044.32	199.49	6.235		
10,100.00	7,121.48	10,302.97	7,233.27	94.92	112.47	-95.17	-1,300.43	-3,382.24	1,242.43	1,037.10	205.33	6.051		
10,200.00	7,121.11	10,402.96	7,232.74	97.62	115.63	-95.16	-1,301.01	-3,482.22	1,241.05	1,029.85	211.20	5.876		
10,300.00	7,120.74	10,502.95	7,232.21	100.32	118.79	-95.16	-1,301.60	-3,582.21	1,239.67	1,022.59	217.08	5.711		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,400.00	7,120.38	10,602.94	7,231.68	103.04	121.97	-95.16	-1,302.18	-3,682.20	1,238.29	1,015.31	222.97	5.554	
10,500.00	7,120.01	10,702.93	7,231.15	105.76	125.15	-95.16	-1,302.77	-3,782.18	1,236.91	1,008.02	228.88	5.404	
10,600.00	7,119.64	10,802.92	7,230.62	108.48	128.34	-95.16	-1,303.35	-3,882.17	1,235.53	1,000.72	234.81	5.262	
10,700.00	7,119.28	10,902.91	7,230.09	111.22	131.54	-95.16	-1,303.94	-3,982.16	1,234.15	993.40	240.74	5.126	
10,800.00	7,118.91	11,002.90	7,229.57	113.96	134.74	-95.15	-1,304.52	-4,082.15	1,232.77	986.08	246.69	4.997	
10,900.00	7,118.55	11,102.89	7,229.04	116.70	137.95	-95.15	-1,305.10	-4,182.13	1,231.39	978.74	252.65	4.874	
11,000.00	7,118.18	11,202.88	7,228.51	119.45	141.17	-95.15	-1,305.69	-4,282.12	1,230.01	971.39	258.62	4.756	
11,100.00	7,117.81	11,302.87	7,227.98	122.21	144.39	-95.15	-1,306.27	-4,382.11	1,228.62	964.03	264.59	4.643	
11,200.00	7,117.45	11,402.86	7,227.45	124.97	147.62	-95.15	-1,306.86	-4,482.10	1,227.24	956.67	270.58	4.536	
11,300.00	7,117.08	11,502.85	7,226.92	127.73	150.85	-95.14	-1,307.44	-4,582.08	1,225.86	949.29	276.57	4.432	
11,400.00	7,116.72	11,602.84	7,226.39	130.50	154.08	-95.14	-1,308.03	-4,682.07	1,224.48	941.91	282.57	4.333	
11,500.00	7,116.35	11,702.84	7,225.87	133.27	157.32	-95.14	-1,308.61	-4,782.06	1,223.10	934.52	288.58	4.238	
11,600.00	7,115.98	11,802.83	7,225.34	136.04	160.57	-95.14	-1,309.19	-4,882.05	1,221.72	927.13	294.59	4.147	
11,700.00	7,115.62	11,902.82	7,224.81	138.82	163.82	-95.14	-1,309.78	-4,982.03	1,220.34	919.73	300.61	4.059	
11,800.00	7,115.25	12,002.81	7,224.28	141.60	167.07	-95.14	-1,310.36	-5,082.02	1,218.96	912.32	306.64	3.975	
11,900.00	7,114.88	12,102.80	7,223.75	144.39	170.32	-95.13	-1,310.95	-5,182.01	1,217.58	904.91	312.67	3.894	
12,000.00	7,114.52	12,202.79	7,223.22	147.17	173.58	-95.13	-1,311.53	-5,282.00	1,216.20	897.49	318.71	3.816	
12,100.00	7,114.15	12,302.78	7,222.69	149.96	176.84	-95.13	-1,312.12	-5,381.98	1,214.82	890.07	324.75	3.741	
12,200.00	7,113.79	12,402.77	7,222.17	152.75	180.10	-95.13	-1,312.70	-5,481.97	1,213.44	882.64	330.80	3.668	
12,300.00	7,113.42	12,502.76	7,221.64	155.55	183.37	-95.13	-1,313.28	-5,581.96	1,212.06	875.21	336.85	3.598	
12,400.00	7,113.05	12,602.75	7,221.11	158.34	186.63	-95.12	-1,313.87	-5,681.94	1,210.68	867.78	342.91	3.531	
12,500.00	7,112.69	12,702.74	7,220.58	161.14	189.90	-95.12	-1,314.45	-5,781.93	1,209.30	860.34	348.97	3.465	
12,600.00	7,112.32	12,802.73	7,220.05	163.94	193.18	-95.12	-1,315.04	-5,881.92	1,207.92	852.89	355.03	3.402	
12,700.00	7,111.96	12,902.72	7,219.52	166.74	196.45	-95.12	-1,315.62	-5,981.91	1,206.54	845.45	361.09	3.341	
12,800.00	7,111.59	13,002.71	7,218.99	169.54	199.73	-95.12	-1,316.21	-6,081.89	1,205.16	838.00	367.16	3.282	
12,900.00	7,111.22	13,102.70	7,218.46	172.35	203.01	-95.11	-1,316.79	-6,181.88	1,203.78	830.54	373.24	3.225	
13,000.00	7,110.86	13,202.69	7,217.94	175.16	206.29	-95.11	-1,317.37	-6,281.87	1,202.40	823.09	379.31	3.170	
13,100.00	7,110.49	13,302.68	7,217.41	177.96	209.57	-95.11	-1,317.96	-6,381.86	1,201.02	815.63	385.39	3.116	
13,200.00	7,110.12	13,402.67	7,216.88	180.77	212.85	-95.11	-1,318.54	-6,481.84	1,199.64	808.16	391.48	3.064	
13,300.00	7,109.76	13,502.66	7,216.35	183.58	216.14	-95.11	-1,319.13	-6,581.83	1,198.26	800.70	397.56	3.014	
13,400.00	7,109.39	13,602.65	7,215.82	186.40	219.42	-95.11	-1,319.71	-6,681.82	1,196.88	793.23	403.65	2.965	
13,500.00	7,109.03	13,702.64	7,215.29	189.21	222.71	-95.10	-1,320.30	-6,781.81	1,195.50	785.76	409.74	2.918	
13,600.00	7,108.66	13,802.64	7,214.76	192.03	226.00	-95.10	-1,320.88	-6,881.79	1,194.12	778.29	415.83	2.872	
13,700.00	7,108.29	13,902.63	7,214.24	194.84	229.29	-95.10	-1,321.46	-6,981.78	1,192.74	770.81	421.92	2.827	
13,800.00	7,107.93	14,002.62	7,213.71	197.66	232.58	-95.10	-1,322.05	-7,081.77	1,191.36	763.34	428.02	2.783	
13,900.00	7,107.56	14,102.61	7,213.18	200.48	235.87	-95.10	-1,322.63	-7,181.76	1,189.98	755.86	434.12	2.741	
14,000.00	7,107.19	14,202.60	7,212.65	203.30	239.17	-95.09	-1,323.22	-7,281.74	1,188.60	748.38	440.22	2.700	
14,100.00	7,106.83	14,302.59	7,212.12	206.12	242.46	-95.09	-1,323.80	-7,381.73	1,187.22	740.90	446.32	2.660	
14,200.00	7,106.46	14,402.58	7,211.59	208.94	245.76	-95.09	-1,324.39	-7,481.72	1,185.84	733.41	452.42	2.621	
14,300.00	7,106.10	14,502.57	7,211.06	211.76	249.05	-95.09	-1,324.97	-7,581.70	1,184.46	725.93	458.53	2.583	
14,400.00	7,105.73	14,602.56	7,210.53	214.58	252.35	-95.09	-1,325.55	-7,681.69	1,183.08	718.44	464.64	2.546	
14,500.00	7,105.36	14,702.55	7,210.01	217.40	255.65	-95.08	-1,326.14	-7,781.68	1,181.69	710.95	470.75	2.510	
14,600.00	7,105.00	14,802.54	7,209.48	220.23	258.95	-95.08	-1,326.72	-7,881.67	1,180.31	703.46	476.86	2.475	
14,700.00	7,104.63	14,902.53	7,208.95	223.05	262.25	-95.08	-1,327.31	-7,981.65	1,178.93	695.97	482.97	2.441	
14,800.00	7,104.27	15,002.52	7,208.42	225.88	265.55	-95.08	-1,327.89	-8,081.64	1,177.55	688.47	489.08	2.408	
14,872.41	7,104.00	15,074.92	7,208.04	227.93	267.94	-95.08	-1,328.31	-8,154.04	1,176.55	683.05	493.51	2.384 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.00	0.00	3.28	3.28	-179.60	-40.07	-0.28	40.07					
100.00	100.00	100.00	100.00	3.28	3.28	-179.60	-40.07	-0.28	40.07	33.51	6.57	6.100		
200.00	200.00	200.00	200.00	3.34	3.34	-179.60	-40.07	-0.28	40.07	33.40	6.67	6.005		
300.00	300.00	300.00	300.00	3.44	3.44	-179.60	-40.07	-0.28	40.07	33.18	6.89	5.817		
400.00	400.00	400.00	400.00	3.60	3.60	-179.60	-40.07	-0.28	40.07	32.87	7.21	5.561		
500.00	500.00	500.00	500.00	3.81	3.81	-179.60	-40.07	-0.28	40.07	32.46	7.61	5.265 CC		
600.00	599.98	598.65	598.63	4.04	4.03	-91.05	-41.69	-0.81	41.72	33.64	8.08	5.165		
700.00	699.95	697.10	696.94	4.30	4.28	-92.01	-46.51	-2.39	46.64	38.04	8.60	5.424		
800.00	799.92	803.61	795.94	4.59	4.58	-91.84	-53.79	-4.78	53.97	44.78	9.19	5.874		
900.00	899.89	903.88	895.36	4.90	4.89	-91.66	-61.22	-7.22	61.42	51.62	9.80	6.267		
1,000.00	999.86	1,004.16	994.77	5.23	5.21	-91.51	-68.66	-9.66	68.87	58.42	10.45	6.589		
1,100.00	1,099.83	1,104.44	1,094.19	5.58	5.56	-91.40	-76.09	-12.09	76.33	65.19	11.14	6.853		
1,200.00	1,199.80	1,204.72	1,193.60	5.94	5.92	-91.31	-83.53	-14.53	83.78	71.93	11.85	7.071		
1,300.00	1,299.77	1,305.00	1,293.01	6.30	6.29	-91.23	-90.96	-16.97	91.23	78.65	12.58	7.252		
1,400.00	1,399.73	1,394.73	1,392.43	6.68	6.64	-91.16	-98.39	-19.41	98.69	85.40	13.29	7.424		
1,500.00	1,499.70	1,505.55	1,491.84	7.07	7.07	-91.11	-105.83	-21.85	106.14	92.04	14.10	7.528		
1,600.00	1,599.67	1,605.83	1,591.26	7.46	7.47	-91.06	-113.26	-24.29	113.60	98.72	14.88	7.634		
1,700.00	1,699.64	1,706.11	1,690.67	7.85	7.87	-91.01	-120.70	-26.73	121.05	105.38	15.67	7.725		
1,800.00	1,799.61	1,806.39	1,790.09	8.25	8.28	-90.98	-128.13	-29.17	128.51	112.04	16.47	7.802		
1,900.00	1,899.58	1,906.67	1,889.50	8.66	8.69	-90.94	-135.57	-31.61	135.96	118.68	17.28	7.868		
2,000.00	1,999.55	2,006.94	1,988.91	9.06	9.11	-90.91	-143.00	-34.05	143.42	125.32	18.10	7.925		
2,100.00	2,099.52	2,092.78	2,088.33	9.47	9.47	-90.88	-150.44	-36.49	150.87	132.01	18.86	8.000		
2,200.00	2,199.48	2,192.50	2,187.74	9.89	9.89	-90.86	-157.87	-38.93	158.33	138.65	19.68	8.044		
2,300.00	2,299.45	2,307.78	2,287.16	10.30	10.38	-90.83	-165.31	-41.36	165.78	145.21	20.58	8.056		
2,400.00	2,399.42	2,408.06	2,386.57	10.72	10.81	-90.81	-172.74	-43.80	173.24	151.82	21.42	8.090		
2,500.00	2,499.39	2,508.34	2,485.99	11.14	11.24	-90.80	-180.17	-46.24	180.69	158.44	22.26	8.119		
2,600.00	2,599.36	2,608.61	2,585.40	11.56	11.67	-90.78	-187.61	-48.68	188.15	165.05	23.10	8.145		
2,700.00	2,699.33	2,691.11	2,684.81	11.98	12.03	-90.76	-195.04	-51.12	195.60	171.74	23.87	8.195		
2,800.00	2,799.30	2,809.17	2,784.23	12.41	12.54	-90.75	-202.48	-53.56	203.06	178.27	24.79	8.190		
2,900.00	2,899.27	2,909.45	2,883.64	12.83	12.98	-90.73	-209.91	-56.00	210.52	184.87	25.65	8.209		
3,000.00	2,999.23	3,009.73	2,983.06	13.26	13.41	-90.72	-217.35	-58.44	217.97	191.47	26.50	8.225		
3,100.00	3,099.20	3,089.99	3,082.47	13.68	13.76	-90.71	-224.78	-60.88	225.43	198.16	27.27	8.267		
3,200.00	3,199.17	3,189.72	3,181.89	14.11	14.20	-90.70	-232.22	-63.32	232.88	204.76	28.12	8.280		
3,300.00	3,299.14	3,289.44	3,281.30	14.54	14.64	-90.69	-239.65	-65.76	240.34	211.36	28.98	8.293		
3,400.00	3,399.11	3,389.16	3,380.71	14.97	15.08	-90.68	-247.08	-68.20	247.79	217.95	29.84	8.304		
3,500.00	3,499.08	3,488.88	3,480.13	15.40	15.51	-90.67	-254.52	-70.64	255.25	224.55	30.70	8.315		
3,600.00	3,599.05	3,588.60	3,579.54	15.83	15.95	-90.66	-261.95	-73.07	262.70	231.14	31.56	8.324		
3,700.00	3,699.02	3,688.32	3,678.96	16.26	16.39	-90.65	-269.39	-75.51	270.16	237.74	32.42	8.333		
3,800.00	3,798.98	3,788.05	3,778.37	16.69	16.84	-90.64	-276.82	-77.95	277.61	244.33	33.28	8.341		
3,900.00	3,898.95	3,887.77	3,877.79	17.12	17.28	-90.63	-284.26	-80.39	285.07	250.92	34.15	8.348		
4,000.00	3,998.92	3,987.49	3,977.20	17.55	17.72	-90.63	-291.69	-82.83	292.52	257.51	35.01	8.355		
4,100.00	4,098.89	4,087.21	4,076.61	17.98	18.16	-90.62	-299.13	-85.27	299.98	264.10	35.88	8.361		
4,200.00	4,198.86	4,186.93	4,176.03	18.42	18.60	-90.61	-306.56	-87.71	307.43	270.69	36.74	8.367		
4,300.00	4,298.83	4,286.65	4,275.44	18.85	19.05	-90.61	-314.00	-90.15	314.89	277.28	37.61	8.372		
4,400.00	4,398.80	4,386.38	4,374.86	19.28	19.49	-90.60	-321.43	-92.59	322.34	283.87	38.48	8.377		
4,500.00	4,498.77	4,486.10	4,474.27	19.72	19.93	-90.59	-328.86	-95.03	329.80	290.45	39.35	8.382		
4,600.00	4,598.73	4,585.82	4,573.69	20.15	20.38	-90.59	-336.30	-97.47	337.26	297.04	40.22	8.386		
4,700.00	4,698.70	4,685.54	4,673.10	20.58	20.82	-90.58	-343.73	-99.91	344.71	303.62	41.09	8.390		
4,800.00	4,798.67	4,785.26	4,772.51	21.02	21.27	-90.58	-351.17	-102.34	352.17	310.21	41.96	8.394		
4,900.00	4,898.64	4,884.98	4,871.93	21.45	21.71	-90.57	-358.60	-104.78	359.62	316.79	42.83	8.397		
5,000.00	4,998.61	4,984.71	4,971.34	21.89	22.15	-90.57	-366.04	-107.22	367.08	323.38	43.70	8.400		
5,100.00	5,098.58	5,084.43	5,070.76	22.32	22.60	-90.57	-373.47	-109.66	374.53	329.96	44.57	8.403		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,200.00	5,198.55	5,184.15	5,170.17	22.76	23.05	-90.56	-380.91	-112.10	381.99	336.55	45.44	8.406		
5,300.00	5,298.52	5,283.87	5,269.59	23.20	23.49	-90.56	-388.34	-114.54	389.44	343.13	46.31	8.409		
5,400.00	5,398.49	5,383.59	5,369.00	23.63	23.94	-90.55	-395.78	-116.98	396.90	349.71	47.19	8.411		
5,500.00	5,498.45	5,483.31	5,468.41	24.07	24.38	-90.55	-403.21	-119.42	404.35	356.29	48.06	8.414		
5,600.00	5,598.42	5,583.04	5,567.83	24.50	24.83	-90.55	-410.64	-121.86	411.81	362.88	48.93	8.416		
5,700.00	5,698.39	5,682.76	5,667.24	24.94	25.28	-90.54	-418.08	-124.30	419.26	369.46	49.81	8.418		
5,800.00	5,798.36	5,782.48	5,766.66	25.38	25.72	-90.54	-425.51	-126.74	426.72	376.04	50.68	8.420		
5,900.00	5,898.33	5,882.20	5,866.07	25.81	26.17	-90.54	-432.95	-129.18	434.17	382.62	51.55	8.422		
6,000.00	5,998.30	5,981.92	5,965.49	26.25	26.61	-90.53	-440.38	-131.61	441.63	389.20	52.43	8.423		
6,100.00	6,098.27	6,081.65	6,064.90	26.69	27.06	-90.53	-447.82	-134.05	449.09	395.78	53.30	8.425		
6,200.00	6,198.24	6,181.37	6,164.31	27.12	27.51	-90.53	-455.25	-136.49	456.54	402.36	54.18	8.426		
6,300.00	6,298.20	6,281.09	6,263.73	27.56	27.96	-90.52	-462.69	-138.93	464.00	408.94	55.05	8.428		
6,400.00	6,398.17	6,380.81	6,363.14	28.00	28.40	-90.52	-470.12	-141.37	471.45	415.52	55.93	8.429		
6,500.00	6,498.14	6,480.53	6,462.56	28.43	28.85	-90.52	-477.55	-143.81	478.91	422.10	56.81	8.431		
6,600.00	6,597.68	6,579.98	6,561.70	28.88	29.30	-89.69	-484.97	-146.24	486.32	428.63	57.69	8.430		
6,700.00	6,694.68	6,678.91	6,660.27	29.32	29.74	-91.27	-492.35	-149.70	494.03	435.44	58.59	8.432		
6,800.00	6,786.74	6,782.37	6,761.96	29.77	30.20	-93.22	-500.07	-166.46	502.32	442.78	59.54	8.437		
6,900.00	6,871.61	6,890.25	6,863.63	30.24	30.66	-95.11	-507.93	-201.25	510.81	450.32	60.49	8.445		
7,000.00	6,947.19	7,002.84	6,961.90	30.74	31.11	-96.86	-515.70	-255.36	519.09	457.70	61.39	8.456		
7,100.00	7,011.62	7,120.25	7,052.58	31.32	31.55	-98.45	-523.07	-329.32	526.68	464.41	62.27	8.458		
7,200.00	7,063.31	7,242.29	7,130.81	32.03	32.09	-99.80	-529.66	-422.51	533.07	469.85	63.23	8.431		
7,300.00	7,101.00	7,368.37	7,191.50	32.89	32.88	-100.87	-535.08	-532.65	537.76	473.30	64.46	8.343		
7,400.00	7,123.74	7,497.50	7,230.00	33.93	34.02	-101.60	-538.95	-655.61	540.33	474.16	66.17	8.166		
7,500.00	7,131.00	7,628.28	7,243.00	35.10	35.47	-101.96	-540.97	-785.50	540.50	472.02	68.49	7.892		
7,600.00	7,130.63	7,728.47	7,242.61	36.44	36.79	-101.99	-541.76	-885.68	539.35	468.26	71.09	7.586		
7,700.00	7,130.26	7,828.46	7,242.22	37.94	38.27	-102.01	-542.54	-985.67	538.20	464.18	74.02	7.271		
7,800.00	7,129.90	7,928.45	7,241.82	39.59	39.89	-102.03	-543.32	-1,085.66	537.04	459.81	77.24	6.953		
7,900.00	7,129.53	8,028.45	7,241.43	41.37	41.65	-102.06	-544.10	-1,185.65	535.89	455.17	80.72	6.639		
8,000.00	7,129.17	8,128.44	7,241.04	43.27	43.53	-102.08	-544.88	-1,285.64	534.74	450.31	84.42	6.334		
8,100.00	7,128.80	8,228.43	7,240.64	45.27	45.51	-102.10	-545.67	-1,385.63	533.58	445.26	88.33	6.041		
8,200.00	7,128.43	8,328.43	7,240.25	47.36	47.57	-102.13	-546.45	-1,485.62	532.43	440.02	92.41	5.762		
8,300.00	7,128.07	8,428.42	7,239.86	49.52	49.72	-102.15	-547.23	-1,585.61	531.28	434.64	96.64	5.498		
8,400.00	7,127.70	8,528.41	7,239.46	51.75	51.94	-102.17	-548.01	-1,685.60	530.13	429.12	101.00	5.249		
8,500.00	7,127.33	8,628.41	7,239.07	54.04	54.21	-102.20	-548.79	-1,785.59	528.97	423.49	105.48	5.015		
8,600.00	7,126.97	8,728.40	7,238.68	56.38	56.54	-102.22	-549.58	-1,885.58	527.82	417.76	110.06	4.796		
8,700.00	7,126.60	8,828.39	7,238.28	58.77	58.92	-102.25	-550.36	-1,985.57	526.67	411.94	114.73	4.591		
8,800.00	7,126.24	8,928.38	7,237.89	61.19	61.34	-102.27	-551.14	-2,085.55	525.51	406.04	119.48	4.398		
8,900.00	7,125.87	9,028.38	7,237.50	63.65	63.79	-102.29	-551.92	-2,185.54	524.36	400.07	124.29	4.219		
9,000.00	7,125.50	9,128.37	7,237.10	66.15	66.28	-102.32	-552.71	-2,285.53	523.21	394.04	129.17	4.050		
9,100.00	7,125.14	9,228.36	7,236.71	68.67	68.79	-102.34	-553.49	-2,385.52	522.06	387.95	134.11	3.893		
9,200.00	7,124.77	9,328.36	7,236.32	71.21	71.33	-102.37	-554.27	-2,485.51	520.91	381.82	139.09	3.745		
9,300.00	7,124.41	9,428.35	7,235.92	73.78	73.90	-102.39	-555.05	-2,585.50	519.75	375.64	144.11	3.607		
9,400.00	7,124.04	9,528.34	7,235.53	76.37	76.48	-102.42	-555.83	-2,685.49	518.60	369.42	149.18	3.476		
9,500.00	7,123.67	9,628.34	7,235.14	78.98	79.08	-102.44	-556.62	-2,785.48	517.45	363.17	154.28	3.354		
9,600.00	7,123.31	9,728.33	7,234.74	81.60	81.70	-102.47	-557.40	-2,885.47	516.30	356.89	159.41	3.239		
9,700.00	7,122.94	9,828.32	7,234.35	84.24	84.34	-102.49	-558.18	-2,985.46	515.15	350.58	164.57	3.130		
9,800.00	7,122.57	9,928.32	7,233.96	86.90	86.99	-102.52	-558.96	-3,085.45	514.00	344.24	169.75	3.028		
9,900.00	7,122.21	10,028.31	7,233.56	89.56	89.65	-102.54	-559.74	-3,185.44	512.84	337.88	174.96	2.931		
10,000.00	7,121.84	10,128.30	7,233.17	92.24	92.33	-102.57	-560.53	-3,285.43	511.69	331.50	180.19	2.840		
10,100.00	7,121.48	10,228.30	7,232.78	94.92	95.01	-102.60	-561.31	-3,385.42	510.54	325.10	185.44	2.753		
10,200.00	7,121.11	10,328.29	7,232.38	97.62	97.71	-102.62	-562.09	-3,485.40	509.39	318.68	190.71	2.671		
10,300.00	7,120.74	10,428.28	7,231.99	100.32	100.41	-102.65	-562.87	-3,585.39	508.24	312.25	195.99	2.593		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	10,528.27	7,231.60	103.04	103.13	-102.67	-563.66	-3,685.38	507.09	305.80	201.29	2.519		
10,500.00	7,120.01	10,628.27	7,231.20	105.76	105.85	-102.70	-564.44	-3,785.37	505.94	299.34	206.60	2.449		
10,600.00	7,119.64	10,728.26	7,230.81	108.48	108.57	-102.73	-565.22	-3,885.36	504.79	292.86	211.93	2.382		
10,700.00	7,119.28	10,828.25	7,230.42	111.22	111.31	-102.75	-566.00	-3,985.35	503.64	286.38	217.26	2.318		
10,800.00	7,118.91	10,928.25	7,230.02	113.96	114.05	-102.78	-566.78	-4,085.34	502.49	279.88	222.61	2.257		
10,900.00	7,118.55	11,028.24	7,229.63	116.70	116.79	-102.81	-567.57	-4,185.33	501.34	273.37	227.96	2.199		
11,000.00	7,118.18	11,128.23	7,229.24	119.45	119.54	-102.83	-568.35	-4,285.32	500.19	266.86	233.33	2.144		
11,100.00	7,117.81	11,228.23	7,228.84	122.21	122.30	-102.86	-569.13	-4,385.31	499.04	260.34	238.70	2.091		
11,200.00	7,117.45	11,328.22	7,228.45	124.97	125.06	-102.89	-569.91	-4,485.30	497.89	253.81	244.08	2.040		
11,300.00	7,117.08	11,428.21	7,228.06	127.73	127.83	-102.91	-570.69	-4,585.29	496.74	247.27	249.47	1.991		
11,400.00	7,116.72	11,528.21	7,227.66	130.50	130.59	-102.94	-571.48	-4,685.28	495.59	240.73	254.86	1.945		
11,500.00	7,116.35	11,628.20	7,227.27	133.27	133.37	-102.97	-572.26	-4,785.27	494.44	234.18	260.26	1.900		
11,600.00	7,115.98	11,728.19	7,226.88	136.04	136.14	-103.00	-573.04	-4,885.25	493.29	227.62	265.66	1.857		
11,700.00	7,115.62	11,828.18	7,226.48	138.82	138.92	-103.02	-573.82	-4,985.24	492.14	221.06	271.07	1.816		
11,800.00	7,115.25	11,928.18	7,226.09	141.60	141.70	-103.05	-574.61	-5,085.23	490.99	214.50	276.49	1.776		
11,900.00	7,114.88	12,028.17	7,225.70	144.39	144.49	-103.08	-575.39	-5,185.22	489.84	207.93	281.91	1.738		
12,000.00	7,114.52	12,128.16	7,225.30	147.17	147.28	-103.11	-576.17	-5,285.21	488.69	201.36	287.33	1.701		
12,100.00	7,114.15	12,228.16	7,224.91	149.96	150.07	-103.13	-576.95	-5,385.20	487.54	194.78	292.76	1.665		
12,200.00	7,113.79	12,328.15	7,224.52	152.75	152.86	-103.16	-577.73	-5,485.19	486.39	188.20	298.19	1.631		
12,300.00	7,113.42	12,428.14	7,224.12	155.55	155.66	-103.19	-578.52	-5,585.18	485.24	181.62	303.62	1.598		
12,400.00	7,113.05	12,528.14	7,223.73	158.34	158.46	-103.22	-579.30	-5,685.17	484.10	175.04	309.06	1.566		
12,500.00	7,112.69	12,628.13	7,223.34	161.14	161.26	-103.25	-580.08	-5,785.16	482.95	168.45	314.50	1.536		
12,600.00	7,112.32	12,728.12	7,222.95	163.94	164.06	-103.28	-580.86	-5,885.15	481.80	161.86	319.94	1.506		
12,700.00	7,111.96	12,828.12	7,222.55	166.74	166.86	-103.31	-581.65	-5,985.14	480.65	155.27	325.38	1.477 Level 3		
12,800.00	7,111.59	12,928.11	7,222.16	169.54	169.67	-103.34	-582.43	-6,085.13	479.50	148.67	330.83	1.449 Level 3		
12,900.00	7,111.22	13,028.10	7,221.77	172.35	172.47	-103.36	-583.21	-6,185.12	478.35	142.08	336.27	1.423 Level 3		
13,000.00	7,110.86	13,128.10	7,221.37	175.16	175.28	-103.39	-583.99	-6,285.10	477.21	135.48	341.72	1.396 Level 3		
13,100.00	7,110.49	13,228.09	7,220.98	177.96	178.09	-103.42	-584.77	-6,385.09	476.06	128.88	347.17	1.371 Level 3		
13,200.00	7,110.12	13,328.08	7,220.59	180.77	180.91	-103.45	-585.56	-6,485.08	474.91	122.28	352.63	1.347 Level 3		
13,300.00	7,109.76	13,428.07	7,220.19	183.58	183.72	-103.48	-586.34	-6,585.07	473.76	115.68	358.08	1.323 Level 3		
13,400.00	7,109.39	13,528.07	7,219.80	186.40	186.53	-103.51	-587.12	-6,685.06	472.62	109.08	363.53	1.300 Level 3		
13,500.00	7,109.03	13,628.06	7,219.41	189.21	189.35	-103.54	-587.90	-6,785.05	471.47	102.48	368.99	1.278 Level 3		
13,600.00	7,108.66	13,728.05	7,219.01	192.03	192.17	-103.57	-588.68	-6,885.04	470.32	95.88	374.45	1.256 Level 3		
13,700.00	7,108.29	13,828.05	7,218.62	194.84	194.99	-103.60	-589.47	-6,985.03	469.17	89.27	379.90	1.235 Level 2		
13,800.00	7,107.93	13,928.04	7,218.23	197.66	197.81	-103.63	-590.25	-7,085.02	468.03	82.67	385.36	1.215 Level 2		
13,900.00	7,107.56	14,028.03	7,217.83	200.48	200.63	-103.67	-591.03	-7,185.01	466.88	76.06	390.82	1.195 Level 2		
14,000.00	7,107.19	14,128.03	7,217.44	203.30	203.45	-103.70	-591.81	-7,285.00	465.73	69.46	396.28	1.175 Level 2		
14,100.00	7,106.83	14,228.02	7,217.05	206.12	206.27	-103.73	-592.60	-7,384.99	464.59	62.85	401.73	1.156 Level 2		
14,200.00	7,106.46	14,328.01	7,216.65	208.94	209.10	-103.76	-593.38	-7,484.98	463.44	56.25	407.19	1.138 Level 2		
14,300.00	7,106.10	14,428.01	7,216.26	211.76	211.92	-103.79	-594.16	-7,584.97	462.30	49.64	412.65	1.120 Level 2		
14,400.00	7,105.73	14,528.00	7,215.87	214.58	214.75	-103.82	-594.94	-7,684.95	461.15	43.04	418.11	1.103 Level 2		
14,500.00	7,105.36	14,627.99	7,215.47	217.40	217.57	-103.85	-595.72	-7,784.94	460.00	36.43	423.57	1.086 Level 2		
14,600.00	7,105.00	14,727.99	7,215.08	220.23	220.40	-103.88	-596.51	-7,884.93	458.86	29.83	429.03	1.070 Level 2		
14,700.00	7,104.63	14,827.98	7,214.69	223.05	223.23	-103.92	-597.29	-7,984.92	457.71	23.22	434.49	1.053 Level 2		
14,800.00	7,104.27	14,927.97	7,214.29	225.88	226.06	-103.95	-598.07	-8,084.91	456.57	16.62	439.95	1.038 Level 2		
14,872.41	7,104.00	15,000.38	7,214.01	227.93	228.11	-103.97	-598.64	-8,157.31	455.74	11.84	443.90	1.027 Level 2, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-179.54	-139.89	-1.11	139.90					
100.00	100.00	101.00	100.00	3.28	3.28	-179.54	-139.89	-1.11	139.90	133.33	6.57	21.295		
200.00	200.00	201.00	200.00	3.34	3.34	-179.54	-139.89	-1.11	139.90	133.22	6.67	20.959		
300.00	300.00	299.00	300.00	3.44	3.44	-179.54	-139.89	-1.11	139.90	133.01	6.89	20.309 CC, ES		
400.00	400.00	394.42	395.40	3.60	3.59	-179.44	-141.43	-1.38	141.51	134.31	7.20	19.659		
500.00	500.00	489.58	490.44	3.81	3.77	-179.14	-146.07	-2.19	146.40	138.80	7.60	19.264		
600.00	599.98	584.33	584.86	4.04	3.98	-89.14	-153.78	-3.52	154.54	146.46	8.07	19.143		
700.00	699.95	678.49	678.39	4.30	4.23	-89.37	-164.49	-5.38	165.90	157.30	8.61	19.280		
800.00	799.92	775.90	774.84	4.59	4.51	-89.44	-177.93	-7.72	179.70	170.53	9.17	19.594		
900.00	899.89	874.92	872.87	4.90	4.83	-89.50	-191.74	-10.11	193.64	183.86	9.78	19.806		
1,000.00	999.86	973.95	970.89	5.23	5.18	-89.54	-205.54	-12.51	207.57	197.15	10.42	19.912		
1,100.00	1,099.83	1,072.97	1,068.92	5.58	5.54	-89.59	-219.35	-14.91	221.51	210.41	11.11	19.946		
1,200.00	1,199.80	1,171.99	1,166.95	5.94	5.92	-89.62	-233.15	-17.30	235.45	223.64	11.81	19.930		
1,300.00	1,299.77	1,271.02	1,264.98	6.30	6.31	-89.66	-246.95	-19.70	249.39	236.85	12.55	19.880		
1,400.00	1,399.73	1,370.04	1,363.00	6.68	6.71	-89.69	-260.76	-22.10	263.33	250.04	13.30	19.806		
1,500.00	1,499.70	1,469.06	1,461.03	7.07	7.12	-89.72	-274.56	-24.49	277.27	263.21	14.06	19.718		
1,600.00	1,599.67	1,568.09	1,559.06	7.46	7.53	-89.74	-288.36	-26.89	291.21	276.37	14.84	19.621		
1,700.00	1,699.64	1,667.11	1,657.09	7.85	7.96	-89.76	-302.17	-29.29	305.15	289.52	15.63	19.520		
1,800.00	1,799.61	1,766.14	1,755.11	8.25	8.38	-89.78	-315.97	-31.68	319.09	302.65	16.43	19.416		
1,900.00	1,899.58	1,865.16	1,853.14	8.66	8.82	-89.80	-329.77	-34.08	333.03	315.78	17.24	19.313		
2,000.00	1,999.55	1,964.18	1,951.17	9.06	9.25	-89.82	-343.58	-36.47	346.97	328.91	18.06	19.211		
2,100.00	2,099.52	2,063.21	2,049.20	9.47	9.69	-89.83	-357.38	-38.87	360.91	342.02	18.88	19.112		
2,200.00	2,199.48	2,162.23	2,147.22	9.89	10.13	-89.85	-371.18	-41.27	374.85	355.13	19.71	19.015		
2,300.00	2,299.45	2,261.25	2,245.25	10.30	10.58	-89.86	-384.99	-43.66	388.79	368.24	20.55	18.922		
2,400.00	2,399.42	2,360.28	2,343.28	10.72	11.02	-89.87	-398.79	-46.06	402.72	381.34	21.39	18.832		
2,500.00	2,499.39	2,459.30	2,441.31	11.14	11.47	-89.88	-412.60	-48.46	416.66	394.44	22.23	18.746		
2,600.00	2,599.36	2,558.32	2,539.33	11.56	11.92	-89.90	-426.40	-50.85	430.60	407.53	23.07	18.663		
2,700.00	2,699.33	2,657.35	2,637.36	11.98	12.37	-89.91	-440.20	-53.25	444.54	420.62	23.92	18.583		
2,800.00	2,799.30	2,756.37	2,735.39	12.41	12.83	-89.92	-454.01	-55.65	458.48	433.71	24.77	18.508		
2,900.00	2,899.27	2,855.40	2,833.42	12.83	13.28	-89.92	-467.81	-58.04	472.42	446.80	25.63	18.435		
3,000.00	2,999.23	2,954.42	2,931.44	13.26	13.73	-89.93	-481.61	-60.44	486.36	459.88	26.48	18.365		
3,100.00	3,099.20	3,053.44	3,029.47	13.68	14.19	-89.94	-495.42	-62.84	500.30	472.96	27.34	18.299		
3,200.00	3,199.17	3,152.47	3,127.50	14.11	14.65	-89.95	-509.22	-65.23	514.24	486.04	28.20	18.235		
3,300.00	3,299.14	3,251.49	3,225.53	14.54	15.10	-89.96	-523.02	-67.63	528.18	499.12	29.06	18.174		
3,400.00	3,399.11	3,350.51	3,323.55	14.97	15.56	-89.96	-536.83	-70.02	542.12	512.20	29.93	18.116		
3,500.00	3,499.08	3,449.54	3,421.58	15.40	16.02	-89.97	-550.63	-72.42	556.06	525.27	30.79	18.060		
3,600.00	3,599.05	3,548.56	3,519.61	15.83	16.48	-89.98	-564.43	-74.82	570.00	538.34	31.66	18.006		
3,700.00	3,699.02	3,647.59	3,617.64	16.26	16.94	-89.98	-578.24	-77.21	583.94	551.42	32.52	17.955		
3,800.00	3,798.98	3,746.61	3,715.67	16.69	17.40	-89.99	-592.04	-79.61	597.88	564.49	33.39	17.906		
3,900.00	3,898.95	3,845.63	3,813.69	17.12	17.87	-89.99	-605.85	-82.01	611.82	577.56	34.26	17.858		
4,000.00	3,998.92	3,944.66	3,911.72	17.55	18.33	-90.00	-619.65	-84.40	625.76	590.63	35.13	17.813		
4,100.00	4,098.89	4,043.68	4,009.75	17.98	18.79	-90.00	-633.45	-86.80	639.70	603.70	36.00	17.769		
4,200.00	4,198.86	4,142.70	4,107.78	18.42	19.25	-90.01	-647.26	-89.20	653.64	616.77	36.87	17.727		
4,300.00	4,298.83	4,241.73	4,205.80	18.85	19.72	-90.01	-661.06	-91.59	667.58	629.83	37.74	17.687		
4,400.00	4,398.80	4,340.75	4,303.83	19.28	20.18	-90.02	-674.86	-93.99	681.52	642.90	38.62	17.648		
4,500.00	4,498.77	4,439.77	4,401.86	19.72	20.64	-90.02	-688.67	-96.39	695.46	655.97	39.49	17.610		
4,600.00	4,598.73	4,538.80	4,499.89	20.15	21.11	-90.02	-702.47	-98.78	709.40	669.03	40.37	17.574		
4,700.00	4,698.70	4,637.82	4,597.91	20.58	21.57	-90.03	-716.27	-101.18	723.34	682.10	41.24	17.539		
4,800.00	4,798.67	4,736.85	4,695.94	21.02	22.03	-90.03	-730.08	-103.57	737.28	695.16	42.12	17.506		
4,900.00	4,898.64	4,835.87	4,793.97	21.45	22.50	-90.04	-743.88	-105.97	751.22	708.22	42.99	17.473		
5,000.00	4,998.61	4,934.89	4,892.00	21.89	22.96	-90.04	-757.68	-108.37	765.16	721.29	43.87	17.442		
5,100.00	5,098.58	5,033.92	4,990.02	22.32	23.43	-90.04	-771.49	-110.76	779.09	734.35	44.75	17.412		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,132.94	5,088.05	22.76	23.90	-90.05	-785.29	-113.16	793.03	747.41	45.62	17.382		
5,300.00	5,298.52	5,231.96	5,186.08	23.20	24.36	-90.05	-799.10	-115.56	806.97	760.47	46.50	17.354		
5,400.00	5,398.49	5,330.99	5,284.11	23.63	24.83	-90.05	-812.90	-117.95	820.91	773.53	47.38	17.326		
5,500.00	5,498.45	5,430.01	5,382.13	24.07	25.29	-90.05	-826.70	-120.35	834.85	786.60	48.26	17.300		
5,600.00	5,598.42	5,529.03	5,480.16	24.50	25.76	-90.06	-840.51	-122.75	848.79	799.66	49.14	17.274		
5,700.00	5,698.39	5,628.06	5,578.19	24.94	26.22	-90.06	-854.31	-125.14	862.73	812.72	50.02	17.249		
5,800.00	5,798.36	5,727.08	5,676.22	25.38	26.69	-90.06	-868.11	-127.54	876.67	825.78	50.90	17.225		
5,900.00	5,898.33	5,826.11	5,774.24	25.81	27.16	-90.06	-881.92	-129.94	890.61	838.84	51.78	17.201		
6,000.00	5,998.30	5,925.13	5,872.27	26.25	27.62	-90.07	-895.72	-132.33	904.55	851.90	52.66	17.179		
6,100.00	6,098.27	6,024.15	5,970.30	26.69	28.09	-90.07	-909.52	-134.73	918.49	864.96	53.54	17.157		
6,200.00	6,198.24	6,123.18	6,068.33	27.12	28.56	-90.07	-923.33	-137.13	932.43	878.02	54.42	17.135		
6,300.00	6,298.20	6,222.20	6,166.35	27.56	29.02	-90.07	-937.13	-139.52	946.37	891.07	55.30	17.114		
6,400.00	6,398.17	6,321.22	6,264.38	28.00	29.49	-90.08	-950.93	-141.92	960.31	904.13	56.18	17.094		
6,500.00	6,498.14	6,420.25	6,362.41	28.43	29.96	-90.08	-964.74	-144.31	974.25	917.19	57.06	17.074		
6,600.00	6,597.68	6,519.04	6,460.21	28.88	30.43	-88.38	-978.51	-146.76	988.06	930.11	57.95	17.051		
6,700.00	6,694.68	6,618.70	6,558.12	29.32	30.89	-87.81	-992.38	-158.30	1,001.46	942.61	58.86	17.016		
6,800.00	6,786.74	6,720.51	6,655.03	29.77	31.34	-87.35	-1,006.24	-185.86	1,014.17	954.39	59.78	16.965		
6,900.00	6,871.61	6,824.61	6,748.31	30.24	31.77	-86.97	-1,019.74	-229.77	1,025.85	965.12	60.73	16.892		
7,000.00	6,947.19	6,931.04	6,835.04	30.74	32.18	-86.69	-1,032.45	-289.92	1,036.19	974.45	61.74	16.784		
7,100.00	7,011.62	7,039.77	6,912.11	31.32	32.56	-86.48	-1,043.95	-365.55	1,044.91	982.03	62.88	16.618		
7,200.00	7,063.31	7,150.61	6,976.41	32.03	32.97	-86.36	-1,053.76	-455.13	1,051.73	987.49	64.24	16.371		
7,300.00	7,101.00	7,263.24	7,024.98	32.89	33.52	-86.33	-1,061.47	-556.30	1,056.45	990.50	65.95	16.019		
7,400.00	7,123.74	7,377.21	7,055.39	33.93	34.40	-86.37	-1,066.69	-665.86	1,058.90	990.87	68.03	15.564		
7,500.00	7,131.00	7,491.97	7,066.00	35.10	35.59	-86.48	-1,069.17	-779.94	1,059.00	988.52	70.48	15.026		
7,600.00	7,130.63	7,592.58	7,065.62	36.44	36.85	-86.48	-1,069.99	-880.54	1,057.86	984.74	73.12	14.467		
7,700.00	7,130.26	7,707.43	7,065.23	37.94	38.51	-86.47	-1,070.81	-980.53	1,056.72	980.40	76.32	13.845		
7,800.00	7,129.90	7,807.43	7,064.83	39.59	40.13	-86.47	-1,071.62	-1,080.52	1,055.58	975.97	79.61	13.259		
7,900.00	7,129.53	7,907.44	7,064.44	41.37	41.89	-86.46	-1,072.43	-1,180.51	1,054.44	971.27	83.17	12.679		
8,000.00	7,129.17	8,007.45	7,064.05	43.27	43.76	-86.46	-1,073.24	-1,280.50	1,053.30	966.35	86.95	12.114		
8,100.00	7,128.80	8,107.45	7,063.65	45.27	45.74	-86.45	-1,074.05	-1,380.49	1,052.16	961.23	90.93	11.571		
8,200.00	7,128.43	8,207.46	7,063.26	47.36	47.81	-86.45	-1,074.86	-1,480.48	1,051.02	955.93	95.09	11.053		
8,300.00	7,128.07	8,307.47	7,062.87	49.52	49.95	-86.44	-1,075.68	-1,580.47	1,049.88	950.48	99.40	10.563		
8,400.00	7,127.70	8,392.53	7,062.47	51.75	51.83	-86.44	-1,076.49	-1,680.46	1,048.74	945.23	103.50	10.132		
8,500.00	7,127.33	8,507.48	7,062.08	54.04	54.45	-86.43	-1,077.30	-1,780.45	1,047.60	939.20	108.40	9.664		
8,600.00	7,126.97	8,607.49	7,061.69	56.38	56.77	-86.43	-1,078.11	-1,880.44	1,046.46	933.39	113.07	9.255		
8,700.00	7,126.60	8,707.49	7,061.30	58.77	59.15	-86.42	-1,078.92	-1,980.43	1,045.32	927.50	117.82	8.872		
8,800.00	7,126.24	8,807.50	7,060.90	61.19	61.57	-86.41	-1,079.73	-2,080.42	1,044.18	921.52	122.66	8.513		
8,900.00	7,125.87	8,907.51	7,060.51	63.65	64.02	-86.41	-1,080.55	-2,180.41	1,043.04	915.47	127.57	8.176		
9,000.00	7,125.50	9,007.51	7,060.12	66.15	66.50	-86.40	-1,081.36	-2,280.39	1,041.90	909.36	132.54	7.861		
9,100.00	7,125.14	9,107.52	7,059.72	68.67	69.02	-86.40	-1,082.17	-2,380.38	1,040.76	903.19	137.57	7.565		
9,200.00	7,124.77	9,207.53	7,059.33	71.21	71.56	-86.39	-1,082.98	-2,480.37	1,039.62	896.97	142.65	7.288		
9,300.00	7,124.41	9,307.53	7,058.94	73.78	74.12	-86.39	-1,083.79	-2,580.36	1,038.48	890.71	147.77	7.028		
9,400.00	7,124.04	9,407.54	7,058.54	76.37	76.71	-86.38	-1,084.60	-2,680.35	1,037.34	884.40	152.94	6.783		
9,500.00	7,123.67	9,507.55	7,058.15	78.98	79.31	-86.38	-1,085.42	-2,780.34	1,036.20	878.06	158.14	6.552		
9,600.00	7,123.31	9,607.55	7,057.76	81.60	81.93	-86.37	-1,086.23	-2,880.33	1,035.06	871.69	163.37	6.336		
9,700.00	7,122.94	9,692.44	7,057.36	84.24	84.17	-86.37	-1,087.04	-2,980.32	1,033.92	865.68	168.24	6.146		
9,800.00	7,122.57	9,792.43	7,056.97	86.90	86.81	-86.36	-1,087.85	-3,080.31	1,032.78	859.25	173.53	5.952		
9,900.00	7,122.21	9,907.57	7,056.58	89.56	89.88	-86.35	-1,088.66	-3,180.30	1,031.64	852.39	179.25	5.755		
10,000.00	7,121.84	10,007.58	7,056.18	92.24	92.55	-86.35	-1,089.47	-3,280.29	1,030.50	845.91	184.59	5.583		
10,100.00	7,121.48	10,107.59	7,055.79	94.92	95.24	-86.34	-1,090.29	-3,380.28	1,029.36	839.41	189.95	5.419		
10,200.00	7,121.11	10,207.59	7,055.40	97.62	97.93	-86.34	-1,091.10	-3,480.27	1,028.22	832.89	195.33	5.264		
10,300.00	7,120.74	10,307.60	7,055.00	100.32	100.64	-86.33	-1,091.91	-3,580.26	1,027.08	826.35	200.73	5.117		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	10,392.40	7,054.61	103.04	102.94	-86.33	-1,092.72	-3,680.25	1,025.94	820.21	205.73	4.987		
10,500.00	7,120.01	10,507.61	7,054.22	105.76	106.07	-86.32	-1,093.53	-3,780.24	1,024.80	813.23	211.57	4.844		
10,600.00	7,119.64	10,607.62	7,053.83	108.48	108.80	-86.32	-1,094.34	-3,880.23	1,023.66	806.65	217.01	4.717		
10,700.00	7,119.28	10,707.62	7,053.43	111.22	111.53	-86.31	-1,095.16	-3,980.21	1,022.52	800.05	222.47	4.596		
10,800.00	7,118.91	10,807.63	7,053.04	113.96	114.27	-86.30	-1,095.97	-4,080.20	1,021.38	793.44	227.94	4.481		
10,900.00	7,118.55	10,907.64	7,052.65	116.70	117.01	-86.30	-1,096.78	-4,180.19	1,020.24	786.83	233.42	4.371		
11,000.00	7,118.18	11,007.64	7,052.25	119.45	119.77	-86.29	-1,097.59	-4,280.18	1,019.10	780.20	238.90	4.266		
11,100.00	7,117.81	11,107.65	7,051.86	122.21	122.52	-86.29	-1,098.40	-4,380.17	1,017.96	773.56	244.40	4.165		
11,200.00	7,117.45	11,207.66	7,051.47	124.97	125.28	-86.28	-1,099.21	-4,480.16	1,016.82	766.91	249.91	4.069		
11,300.00	7,117.08	11,307.66	7,051.07	127.73	128.05	-86.28	-1,100.03	-4,580.15	1,015.68	760.26	255.43	3.976		
11,400.00	7,116.72	11,407.67	7,050.68	130.50	130.81	-86.27	-1,100.84	-4,680.14	1,014.54	753.59	260.95	3.888		
11,500.00	7,116.35	11,507.68	7,050.29	133.27	133.59	-86.26	-1,101.65	-4,780.13	1,013.40	746.92	266.48	3.803		
11,600.00	7,115.98	11,607.68	7,049.89	136.04	136.36	-86.26	-1,102.46	-4,880.12	1,012.26	740.25	272.02	3.721		
11,700.00	7,115.62	11,707.69	7,049.50	138.82	139.14	-86.25	-1,103.27	-4,980.11	1,011.12	733.56	277.56	3.643		
11,800.00	7,115.25	11,807.70	7,049.11	141.60	141.92	-86.25	-1,104.08	-5,080.10	1,009.98	726.87	283.11	3.567		
11,900.00	7,114.88	11,892.30	7,048.71	144.39	144.28	-86.24	-1,104.90	-5,180.09	1,008.84	720.60	288.24	3.500		
12,000.00	7,114.52	11,992.29	7,048.32	147.17	147.07	-86.24	-1,105.71	-5,280.08	1,007.70	713.90	293.80	3.430		
12,100.00	7,114.15	12,107.72	7,047.93	149.96	150.29	-86.23	-1,106.52	-5,380.07	1,006.56	706.77	299.80	3.357		
12,200.00	7,113.79	12,207.72	7,047.54	152.75	153.08	-86.22	-1,107.33	-5,480.06	1,005.42	700.06	305.37	3.293		
12,300.00	7,113.42	12,307.73	7,047.14	155.55	155.88	-86.22	-1,108.14	-5,580.04	1,004.29	693.34	310.94	3.230		
12,400.00	7,113.05	12,407.74	7,046.75	158.34	158.67	-86.21	-1,108.95	-5,680.03	1,003.15	686.62	316.52	3.169		
12,500.00	7,112.69	12,507.74	7,046.36	161.14	161.47	-86.21	-1,109.77	-5,780.02	1,002.01	679.90	322.11	3.111		
12,600.00	7,112.32	12,607.75	7,045.96	163.94	164.28	-86.20	-1,110.58	-5,880.01	1,000.87	673.17	327.70	3.054		
12,700.00	7,111.96	12,707.76	7,045.57	166.74	167.08	-86.19	-1,111.39	-5,980.00	999.73	666.44	333.29	3.000		
12,800.00	7,111.59	12,807.76	7,045.18	169.54	169.89	-86.19	-1,112.20	-6,079.99	998.59	659.70	338.88	2.947		
12,900.00	7,111.22	12,907.77	7,044.78	172.35	172.69	-86.18	-1,113.01	-6,179.98	997.45	652.97	344.48	2.896		
13,000.00	7,110.86	13,007.78	7,044.39	175.16	175.50	-86.18	-1,113.82	-6,279.97	996.31	646.23	350.08	2.846		
13,100.00	7,110.49	13,107.78	7,044.00	177.96	178.31	-86.17	-1,114.64	-6,379.96	995.17	639.48	355.69	2.798		
13,200.00	7,110.12	13,207.79	7,043.60	180.77	181.13	-86.17	-1,115.45	-6,479.95	994.03	632.73	361.29	2.751		
13,300.00	7,109.76	13,307.80	7,043.21	183.58	183.94	-86.16	-1,116.26	-6,579.94	992.89	625.98	366.90	2.706		
13,400.00	7,109.39	13,407.80	7,042.82	186.40	186.75	-86.15	-1,117.07	-6,679.93	991.75	619.23	372.52	2.662		
13,500.00	7,109.03	13,507.81	7,042.42	189.21	189.57	-86.15	-1,117.88	-6,779.92	990.61	612.48	378.13	2.620		
13,600.00	7,108.66	13,607.81	7,042.03	192.03	192.39	-86.14	-1,118.69	-6,879.91	989.47	605.72	383.75	2.578		
13,700.00	7,108.29	13,707.82	7,041.64	194.84	195.21	-86.14	-1,119.51	-6,979.90	988.33	598.96	389.37	2.538		
13,800.00	7,107.93	13,807.83	7,041.25	197.66	198.03	-86.13	-1,120.32	-7,079.89	987.19	592.20	394.99	2.499		
13,900.00	7,107.56	13,907.83	7,040.85	200.48	200.85	-86.12	-1,121.13	-7,179.88	986.05	585.44	400.62	2.461		
14,000.00	7,107.19	14,007.84	7,040.46	203.30	203.67	-86.12	-1,121.94	-7,279.86	984.91	578.67	406.24	2.424		
14,100.00	7,106.83	14,107.85	7,040.07	206.12	206.49	-86.11	-1,122.75	-7,379.85	983.77	571.90	411.87	2.389		
14,200.00	7,106.46	14,207.85	7,039.67	208.94	209.32	-86.10	-1,123.56	-7,479.84	982.63	565.13	417.50	2.354		
14,300.00	7,106.10	14,307.86	7,039.28	211.76	212.14	-86.10	-1,124.38	-7,579.83	981.49	558.36	423.13	2.320		
14,400.00	7,105.73	14,407.87	7,038.89	214.58	214.97	-86.09	-1,125.19	-7,679.82	980.35	551.59	428.76	2.286		
14,500.00	7,105.36	14,507.87	7,038.49	217.40	217.79	-86.09	-1,126.00	-7,779.81	979.22	544.82	434.40	2.254		
14,600.00	7,105.00	14,607.88	7,038.10	220.23	220.62	-86.08	-1,126.81	-7,879.80	978.08	538.04	440.03	2.223		
14,700.00	7,104.63	14,707.89	7,037.71	223.05	223.45	-86.07	-1,127.62	-7,979.79	976.94	531.26	445.67	2.192		
14,800.00	7,104.27	14,792.11	7,037.31	225.88	225.83	-86.07	-1,128.43	-8,079.78	975.80	524.93	450.87	2.164		
14,872.41	7,104.00	14,864.51	7,037.03	227.93	227.88	-86.06	-1,129.02	-8,152.18	974.97	520.02	454.95	2.143 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.00	0.00	3.28	3.28	-179.73	-59.74	-0.28	59.74					
100.00	100.00	100.00	100.00	3.28	3.28	-179.73	-59.74	-0.28	59.74	53.17	6.57	9.094		
200.00	200.00	200.00	200.00	3.34	3.34	-179.73	-59.74	-0.28	59.74	53.07	6.67	8.951		
300.00	300.00	300.00	300.00	3.44	3.44	-179.73	-59.74	-0.28	59.74	52.85	6.89	8.671		
400.00	400.00	400.00	400.00	3.60	3.60	-179.73	-59.74	-0.28	59.74	52.54	7.21	8.290		
500.00	500.00	500.00	500.00	3.81	3.81	-179.73	-59.74	-0.28	59.74	52.13	7.61	7.849		
547.18	547.18	547.18	547.18	3.91	3.92	-90.00	-59.74	-0.28	59.74	51.92	7.83	7.633 CC		
600.00	599.98	599.59	599.59	4.04	4.04	-91.25	-59.81	-0.29	59.82	51.74	8.08	7.402 ES		
700.00	699.95	697.53	697.50	4.30	4.29	-92.96	-62.09	-0.83	62.22	53.63	8.59	7.241		
800.00	799.92	795.24	795.04	4.59	4.56	-93.69	-67.61	-2.12	67.94	58.77	9.16	7.414		
900.00	899.89	892.49	891.87	4.90	4.85	-93.56	-76.32	-4.15	76.90	67.12	9.78	7.865		
1,000.00	999.86	1,008.24	990.53	5.23	5.23	-93.10	-87.03	-6.66	87.67	77.20	10.47	8.370		
1,100.00	1,099.83	1,108.82	1,089.33	5.58	5.57	-92.74	-97.77	-9.16	98.45	87.30	11.16	8.826		
1,200.00	1,199.80	1,209.41	1,188.14	5.94	5.94	-92.44	-108.50	-11.67	109.23	97.37	11.86	9.207		
1,300.00	1,299.77	1,309.99	1,286.94	6.30	6.32	-92.21	-119.23	-14.18	120.02	107.42	12.60	9.528		
1,400.00	1,399.73	1,389.42	1,385.74	6.68	6.62	-92.01	-129.96	-16.69	130.81	117.54	13.27	9.859		
1,500.00	1,499.70	1,488.84	1,484.54	7.07	7.01	-91.84	-140.70	-19.20	141.60	127.57	14.03	10.093		
1,600.00	1,599.67	1,588.25	1,583.35	7.46	7.41	-91.69	-151.43	-21.70	152.38	137.58	14.80	10.294		
1,700.00	1,699.64	1,687.67	1,682.15	7.85	7.82	-91.57	-162.16	-24.21	163.17	147.58	15.59	10.466		
1,800.00	1,799.61	1,787.09	1,780.95	8.25	8.23	-91.46	-172.89	-26.72	173.97	157.58	16.39	10.616		
1,900.00	1,899.58	1,886.50	1,879.75	8.66	8.65	-91.36	-183.63	-29.23	184.76	167.56	17.19	10.746		
2,000.00	1,999.55	1,985.92	1,978.56	9.06	9.07	-91.27	-194.36	-31.73	195.55	177.54	18.01	10.861		
2,100.00	2,099.52	2,085.33	2,077.36	9.47	9.49	-91.20	-205.09	-34.24	206.34	187.52	18.82	10.961		
2,200.00	2,199.48	2,184.75	2,176.16	9.89	9.92	-91.13	-215.82	-36.75	217.13	197.48	19.65	11.050		
2,300.00	2,299.45	2,284.16	2,274.97	10.30	10.35	-91.06	-226.56	-39.26	227.93	207.45	20.48	11.129		
2,400.00	2,399.42	2,383.58	2,373.77	10.72	10.78	-91.01	-237.29	-41.77	238.72	217.41	21.31	11.200		
2,500.00	2,499.39	2,482.99	2,472.57	11.14	11.22	-90.95	-248.02	-44.27	249.51	227.36	22.15	11.264		
2,600.00	2,599.36	2,582.41	2,571.37	11.56	11.66	-90.91	-258.75	-46.78	260.31	237.31	22.99	11.321		
2,700.00	2,699.33	2,681.83	2,670.18	11.98	12.09	-90.86	-269.49	-49.29	271.10	247.26	23.84	11.372		
2,800.00	2,799.30	2,781.24	2,768.98	12.41	12.53	-90.82	-280.22	-51.80	281.90	257.21	24.69	11.419		
2,900.00	2,899.27	2,880.66	2,867.78	12.83	12.98	-90.78	-290.95	-54.31	292.69	267.15	25.54	11.462		
3,000.00	2,999.23	2,980.07	2,966.58	13.26	13.42	-90.75	-301.69	-56.81	303.48	277.10	26.39	11.500		
3,100.00	3,099.20	3,079.49	3,065.39	13.68	13.86	-90.72	-312.42	-59.32	314.28	287.04	27.24	11.536		
3,200.00	3,199.17	3,178.90	3,164.19	14.11	14.31	-90.69	-323.15	-61.83	325.07	296.97	28.10	11.569		
3,300.00	3,299.14	3,278.32	3,262.99	14.54	14.75	-90.66	-333.88	-64.34	335.87	306.91	28.96	11.599		
3,400.00	3,399.11	3,377.73	3,361.79	14.97	15.20	-90.63	-344.62	-66.85	346.66	316.84	29.82	11.626		
3,500.00	3,499.08	3,477.15	3,460.60	15.40	15.65	-90.60	-355.35	-69.35	357.46	326.78	30.68	11.652		
3,600.00	3,599.05	3,576.57	3,559.40	15.83	16.09	-90.58	-366.08	-71.86	368.25	336.71	31.54	11.675		
3,700.00	3,699.02	3,675.98	3,658.20	16.26	16.54	-90.56	-376.81	-74.37	379.05	346.64	32.40	11.697		
3,800.00	3,798.98	3,775.40	3,757.01	16.69	16.99	-90.54	-387.55	-76.88	389.84	356.57	33.27	11.718		
3,900.00	3,898.95	3,874.81	3,855.81	17.12	17.44	-90.52	-398.28	-79.39	400.64	366.50	34.13	11.737		
4,000.00	3,998.92	3,974.23	3,954.61	17.55	17.89	-90.50	-409.01	-81.89	411.43	376.43	35.00	11.755		
4,100.00	4,098.89	4,073.64	4,053.41	17.98	18.34	-90.48	-419.74	-84.40	422.23	386.36	35.87	11.771		
4,200.00	4,198.86	4,173.06	4,152.22	18.42	18.79	-90.46	-430.48	-86.91	433.02	396.28	36.74	11.787		
4,300.00	4,298.83	4,272.47	4,251.02	18.85	19.25	-90.45	-441.21	-89.42	443.82	406.21	37.61	11.802		
4,400.00	4,398.80	4,371.89	4,349.82	19.28	19.70	-90.43	-451.94	-91.93	454.61	416.13	38.48	11.815		
4,500.00	4,498.77	4,471.31	4,448.62	19.72	20.15	-90.42	-462.67	-94.43	465.41	426.06	39.35	11.828		
4,600.00	4,598.73	4,570.72	4,547.43	20.15	20.60	-90.40	-473.41	-96.94	476.20	435.98	40.22	11.841		
4,700.00	4,698.70	4,670.14	4,646.23	20.58	21.06	-90.39	-484.14	-99.45	487.00	445.91	41.09	11.852		
4,800.00	4,798.67	4,769.55	4,745.03	21.02	21.51	-90.38	-494.87	-101.96	497.79	455.83	41.96	11.863		
4,900.00	4,898.64	4,868.97	4,843.84	21.45	21.96	-90.36	-505.60	-104.47	508.59	465.75	42.83	11.873		
5,000.00	4,998.61	4,968.38	4,942.64	21.89	22.42	-90.35	-516.34	-106.97	519.38	475.67	43.71	11.883		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	5,098.58	5,067.80	5,041.44	22.32	22.87	-90.34	-527.07	-109.48	530.18	485.60	44.58	11.892		
5,200.00	5,198.55	5,167.21	5,140.24	22.76	23.32	-90.33	-537.80	-111.99	540.97	495.52	45.46	11.901		
5,300.00	5,298.52	5,266.63	5,239.05	23.20	23.78	-90.32	-548.54	-114.50	551.77	505.44	46.33	11.909		
5,400.00	5,398.49	5,366.05	5,337.85	23.63	24.23	-90.31	-559.27	-117.00	562.56	515.36	47.21	11.917		
5,500.00	5,498.45	5,465.46	5,436.65	24.07	24.69	-90.30	-570.00	-119.51	573.36	525.28	48.08	11.925		
5,600.00	5,598.42	5,564.88	5,535.45	24.50	25.14	-90.29	-580.73	-122.02	584.15	535.20	48.96	11.932		
5,700.00	5,698.39	5,664.29	5,634.26	24.94	25.60	-90.28	-591.47	-124.53	594.95	545.12	49.83	11.939		
5,800.00	5,798.36	5,763.71	5,733.06	25.38	26.05	-90.27	-602.20	-127.04	605.75	555.04	50.71	11.946		
5,900.00	5,898.33	5,863.12	5,831.86	25.81	26.51	-90.26	-612.93	-129.54	616.54	564.96	51.58	11.952		
6,000.00	5,998.30	5,962.54	5,930.67	26.25	26.96	-90.26	-623.66	-132.05	627.34	574.87	52.46	11.958		
6,100.00	6,098.27	6,061.95	6,029.47	26.69	27.42	-90.25	-634.40	-134.56	638.13	584.79	53.34	11.964		
6,200.00	6,198.24	6,161.37	6,128.27	27.12	27.88	-90.24	-645.13	-137.07	648.93	594.71	54.22	11.969		
6,300.00	6,298.20	6,260.79	6,227.07	27.56	28.33	-90.23	-655.86	-139.58	659.72	604.63	55.09	11.974		
6,400.00	6,398.17	6,360.20	6,325.88	28.00	28.79	-90.23	-666.59	-142.08	670.52	614.55	55.97	11.980		
6,500.00	6,498.14	6,459.62	6,424.68	28.43	29.24	-90.22	-677.33	-144.59	681.31	624.46	56.85	11.984		
6,600.00	6,597.68	6,558.84	6,523.28	28.88	29.70	-88.91	-688.04	-147.16	692.01	634.27	57.73	11.986		
6,700.00	6,694.68	6,659.27	6,622.33	29.32	30.16	-88.90	-698.87	-158.95	702.43	643.79	58.65	11.978		
6,800.00	6,786.74	6,761.80	6,720.24	29.77	30.61	-88.97	-709.72	-186.98	712.36	652.79	59.57	11.958		
6,900.00	6,871.61	6,866.53	6,814.30	30.24	31.04	-89.08	-720.29	-231.54	721.52	661.00	60.52	11.922		
7,000.00	6,947.19	6,973.47	6,901.51	30.74	31.45	-89.21	-730.24	-292.39	729.64	668.12	61.52	11.860		
7,100.00	7,011.62	7,082.52	6,978.74	31.32	31.85	-89.36	-739.24	-368.67	736.47	673.82	62.65	11.756		
7,200.00	7,063.31	7,193.49	7,042.86	32.03	32.32	-89.52	-746.94	-458.73	741.78	677.78	64.00	11.591		
7,300.00	7,101.00	7,306.04	7,091.04	32.89	33.03	-89.69	-753.00	-560.11	745.39	679.71	65.68	11.349		
7,400.00	7,123.74	7,419.75	7,120.93	33.93	34.04	-89.85	-757.14	-669.58	747.15	679.39	67.76	11.027		
7,500.00	7,131.00	7,534.09	7,131.00	35.10	35.30	-90.00	-759.17	-783.31	746.98	676.79	70.19	10.642		
7,600.00	7,130.63	7,634.36	7,130.57	36.44	36.61	-90.00	-759.95	-883.57	745.80	672.94	72.86	10.236		
7,700.00	7,130.26	7,734.35	7,130.14	37.94	38.08	-89.99	-760.73	-983.56	744.62	668.77	75.85	9.817		
7,800.00	7,129.90	7,834.34	7,129.70	39.59	39.71	-89.99	-761.50	-1,083.55	743.45	664.31	79.14	9.394		
7,900.00	7,129.53	7,934.34	7,129.27	41.37	41.46	-89.98	-762.28	-1,183.54	742.27	659.57	82.69	8.976		
8,000.00	7,129.17	8,034.33	7,128.83	43.27	43.34	-89.98	-763.06	-1,283.53	741.09	654.61	86.48	8.570		
8,100.00	7,128.80	8,134.32	7,128.40	45.27	45.32	-89.97	-763.84	-1,383.52	739.91	649.45	90.46	8.179		
8,200.00	7,128.43	8,234.32	7,127.97	47.36	47.39	-89.97	-764.61	-1,483.51	738.73	644.10	94.63	7.807		
8,300.00	7,128.07	8,334.31	7,127.53	49.52	49.54	-89.96	-765.39	-1,583.50	737.55	638.61	98.95	7.454		
8,400.00	7,127.70	8,434.30	7,127.10	51.75	51.76	-89.96	-766.17	-1,683.48	736.38	632.97	103.40	7.122		
8,500.00	7,127.33	8,534.30	7,126.67	54.04	54.04	-89.95	-766.95	-1,783.47	735.20	627.22	107.97	6.809		
8,600.00	7,126.97	8,634.29	7,126.23	56.38	56.37	-89.94	-767.72	-1,883.46	734.02	621.37	112.65	6.516		
8,700.00	7,126.60	8,734.28	7,125.80	58.77	58.74	-89.94	-768.50	-1,983.45	732.84	615.42	117.42	6.241		
8,800.00	7,126.24	8,834.27	7,125.36	61.19	61.16	-89.93	-769.28	-2,083.44	731.66	609.39	122.27	5.984		
8,900.00	7,125.87	8,934.27	7,124.93	63.65	63.62	-89.93	-770.05	-2,183.43	730.49	603.30	127.19	5.743		
9,000.00	7,125.50	9,034.26	7,124.50	66.15	66.11	-89.92	-770.83	-2,283.42	729.31	597.13	132.18	5.518		
9,100.00	7,125.14	9,134.25	7,124.06	68.67	68.63	-89.92	-771.61	-2,383.41	728.13	590.91	137.22	5.306		
9,200.00	7,124.77	9,234.25	7,123.63	71.21	71.17	-89.91	-772.39	-2,483.40	726.95	584.64	142.31	5.108		
9,300.00	7,124.41	9,334.24	7,123.19	73.78	73.73	-89.91	-773.16	-2,583.39	725.77	578.33	147.45	4.922		
9,400.00	7,124.04	9,434.23	7,122.76	76.37	76.32	-89.90	-773.94	-2,683.38	724.59	571.97	152.63	4.748		
9,500.00	7,123.67	9,534.23	7,122.33	78.98	78.93	-89.90	-774.72	-2,783.36	723.42	565.58	157.84	4.583		
9,600.00	7,123.31	9,634.22	7,121.89	81.60	81.55	-89.89	-775.50	-2,883.35	722.24	559.15	163.09	4.428		
9,700.00	7,122.94	9,734.21	7,121.46	84.24	84.19	-89.88	-776.27	-2,983.34	721.06	552.69	168.37	4.283		
9,800.00	7,122.57	9,834.21	7,121.02	86.90	86.84	-89.88	-777.05	-3,083.33	719.88	546.21	173.67	4.145		
9,900.00	7,122.21	9,934.20	7,120.59	89.56	89.50	-89.87	-777.83	-3,183.32	718.70	539.70	179.01	4.015		
10,000.00	7,121.84	10,034.19	7,120.16	92.24	92.18	-89.87	-778.61	-3,283.31	717.53	533.17	184.36	3.892		
10,100.00	7,121.48	10,134.18	7,119.72	94.92	94.87	-89.86	-779.38	-3,383.30	716.35	526.61	189.73	3.776		
10,200.00	7,121.11	10,234.18	7,119.29	97.62	97.56	-89.86	-780.16	-3,483.29	715.17	520.04	195.13	3.665		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,120.74	10,334.17	7,118.86	100.32	100.27	-89.85	-780.94	-3,583.28	713.99	513.45	200.54	3.560		
10,400.00	7,120.38	10,434.16	7,118.42	103.04	102.98	-89.85	-781.71	-3,683.27	712.81	506.84	205.97	3.461		
10,500.00	7,120.01	10,534.16	7,117.99	105.76	105.70	-89.84	-782.49	-3,783.26	711.64	500.22	211.41	3.366		
10,600.00	7,119.64	10,634.15	7,117.55	108.48	108.43	-89.83	-783.27	-3,883.24	710.46	493.59	216.87	3.276		
10,700.00	7,119.28	10,734.14	7,117.12	111.22	111.17	-89.83	-784.05	-3,983.23	709.28	486.94	222.34	3.190		
10,800.00	7,118.91	10,834.14	7,116.69	113.96	113.91	-89.82	-784.82	-4,083.22	708.10	480.28	227.82	3.108		
10,900.00	7,118.55	10,934.13	7,116.25	116.70	116.65	-89.82	-785.60	-4,183.21	706.92	473.61	233.31	3.030		
11,000.00	7,118.18	11,034.12	7,115.82	119.45	119.41	-89.81	-786.38	-4,283.20	705.74	466.93	238.81	2.955		
11,100.00	7,117.81	11,134.11	7,115.38	122.21	122.16	-89.80	-787.16	-4,383.19	704.57	460.24	244.33	2.884		
11,200.00	7,117.45	11,234.11	7,114.95	124.97	124.92	-89.80	-787.93	-4,483.18	703.39	453.54	249.85	2.815		
11,300.00	7,117.08	11,334.10	7,114.52	127.73	127.69	-89.79	-788.71	-4,583.17	702.21	446.83	255.38	2.750		
11,400.00	7,116.72	11,434.09	7,114.08	130.50	130.46	-89.79	-789.49	-4,683.16	701.03	440.12	260.92	2.687		
11,500.00	7,116.35	11,534.09	7,113.65	133.27	133.23	-89.78	-790.26	-4,783.15	699.85	433.39	266.46	2.626		
11,600.00	7,115.98	11,634.08	7,113.21	136.04	136.01	-89.78	-791.04	-4,883.13	698.68	426.66	272.01	2.569		
11,700.00	7,115.62	11,734.07	7,112.78	138.82	138.79	-89.77	-791.82	-4,983.12	697.50	419.93	277.57	2.513		
11,800.00	7,115.25	11,834.07	7,112.35	141.60	141.57	-89.76	-792.60	-5,083.11	696.32	413.18	283.14	2.459		
11,900.00	7,114.88	11,934.06	7,111.91	144.39	144.36	-89.76	-793.37	-5,183.10	695.14	406.44	288.71	2.408		
12,000.00	7,114.52	12,034.05	7,111.48	147.17	147.15	-89.75	-794.15	-5,283.09	693.96	399.68	294.28	2.358		
12,100.00	7,114.15	12,134.04	7,111.05	149.96	149.94	-89.75	-794.93	-5,383.08	692.79	392.92	299.86	2.310		
12,200.00	7,113.79	12,234.04	7,110.61	152.75	152.73	-89.74	-795.71	-5,483.07	691.61	386.16	305.45	2.264		
12,300.00	7,113.42	12,334.03	7,110.18	155.55	155.53	-89.73	-796.48	-5,583.06	690.43	379.39	311.04	2.220		
12,400.00	7,113.05	12,434.02	7,109.74	158.34	158.33	-89.73	-797.26	-5,683.05	689.25	372.62	316.63	2.177		
12,500.00	7,112.69	12,534.02	7,109.31	161.14	161.13	-89.72	-798.04	-5,783.04	688.07	365.84	322.23	2.135		
12,600.00	7,112.32	12,634.01	7,108.88	163.94	163.93	-89.72	-798.82	-5,883.03	686.90	359.06	327.83	2.095		
12,700.00	7,111.96	12,734.00	7,108.44	166.74	166.73	-89.71	-799.59	-5,983.01	685.72	352.28	333.44	2.056		
12,800.00	7,111.59	12,834.00	7,108.01	169.54	169.54	-89.70	-800.37	-6,083.00	684.54	345.49	339.05	2.019		
12,900.00	7,111.22	12,933.99	7,107.57	172.35	172.35	-89.70	-801.15	-6,182.99	683.36	338.70	344.66	1.983		
13,000.00	7,110.86	13,033.98	7,107.14	175.16	175.16	-89.69	-801.92	-6,282.98	682.19	331.91	350.28	1.948		
13,100.00	7,110.49	13,133.98	7,106.71	177.96	177.97	-89.68	-802.70	-6,382.97	681.01	325.11	355.90	1.913		
13,200.00	7,110.12	13,233.97	7,106.27	180.77	180.78	-89.68	-803.48	-6,482.96	679.83	318.31	361.52	1.880		
13,300.00	7,109.76	13,333.96	7,105.84	183.58	183.60	-89.67	-804.26	-6,582.95	678.65	311.51	367.15	1.848		
13,400.00	7,109.39	13,433.95	7,105.40	186.40	186.41	-89.67	-805.03	-6,682.94	677.47	304.70	372.77	1.817		
13,500.00	7,109.03	13,533.95	7,104.97	189.21	189.23	-89.66	-805.81	-6,782.93	676.30	297.89	378.40	1.787		
13,600.00	7,108.66	13,633.94	7,104.54	192.03	192.05	-89.65	-806.59	-6,882.92	675.12	291.08	384.04	1.758		
13,700.00	7,108.29	13,733.93	7,104.10	194.84	194.86	-89.65	-807.37	-6,982.91	673.94	284.27	389.67	1.730		
13,800.00	7,107.93	13,833.93	7,103.67	197.66	197.68	-89.64	-808.14	-7,082.89	672.76	277.46	395.31	1.702		
13,900.00	7,107.56	13,933.92	7,103.24	200.48	200.51	-89.63	-808.92	-7,182.88	671.58	270.64	400.95	1.675		
14,000.00	7,107.19	14,033.91	7,102.80	203.30	203.33	-89.63	-809.70	-7,282.87	670.41	263.82	406.59	1.649		
14,100.00	7,106.83	14,133.91	7,102.37	206.12	206.15	-89.62	-810.47	-7,382.86	669.23	257.00	412.23	1.623		
14,200.00	7,106.46	14,233.90	7,101.93	208.94	208.98	-89.61	-811.25	-7,482.85	668.05	250.18	417.88	1.599		
14,300.00	7,106.10	14,333.89	7,101.50	211.76	211.80	-89.61	-812.03	-7,582.84	666.87	243.35	423.52	1.575		
14,400.00	7,105.73	14,433.88	7,101.07	214.58	214.63	-89.60	-812.81	-7,682.83	665.70	236.53	429.17	1.551		
14,500.00	7,105.36	14,533.88	7,100.63	217.40	217.45	-89.59	-813.58	-7,782.82	664.52	229.70	434.82	1.528		
14,600.00	7,105.00	14,633.87	7,100.20	220.23	220.28	-89.59	-814.36	-7,882.81	663.34	222.87	440.47	1.506		
14,700.00	7,104.63	14,733.86	7,099.76	223.05	223.11	-89.58	-815.14	-7,982.80	662.16	216.04	446.12	1.484 Level 3		
14,800.00	7,104.27	14,833.86	7,099.33	225.88	225.94	-89.57	-815.92	-8,082.79	660.98	209.21	451.78	1.463 Level 3		
14,872.41	7,104.00	14,906.26	7,099.02	227.93	227.99	-89.57	-816.48	-8,155.19	660.13	204.26	455.87	1.448 Level 3, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-179.57	-259.75	-1.95	259.75					
100.00	100.00	101.00	100.00	3.28	3.28	-179.57	-259.75	-1.95	259.75	253.18	6.57	39.538		
200.00	200.00	199.00	200.00	3.34	3.34	-179.57	-259.75	-1.95	259.75	253.08	6.67	38.925 CC, ES		
300.00	300.00	290.76	291.74	3.44	3.43	-179.55	-261.18	-2.06	261.32	254.43	6.88	37.968		
400.00	400.00	382.25	383.12	3.60	3.56	-179.48	-265.52	-2.39	266.07	258.87	7.20	36.973		
500.00	500.00	473.36	473.95	3.81	3.74	-179.38	-272.74	-2.94	274.00	266.40	7.60	36.049		
600.00	599.98	563.93	563.95	4.04	3.94	-89.39	-282.76	-3.71	285.06	276.99	8.07	35.318		
700.00	699.95	653.78	652.88	4.30	4.18	-89.66	-295.50	-4.69	299.23	290.63	8.60	34.810		
800.00	799.92	742.74	740.50	4.59	4.45	-89.86	-310.85	-5.87	316.48	307.32	9.17	34.530		
900.00	899.89	830.67	828.59	4.90	4.75	-90.01	-328.68	-7.24	336.76	327.00	9.76	34.488		
1,000.00	999.86	917.42	910.94	5.23	5.07	-90.10	-348.85	-8.78	360.01	349.62	10.38	34.667		
1,100.00	1,099.83	1,002.85	993.38	5.58	5.41	-90.15	-371.18	-10.50	386.16	375.14	11.02	35.041		
1,200.00	1,199.80	1,086.86	1,073.76	5.94	5.77	-90.16	-395.53	-12.37	415.14	403.48	11.66	35.597		
1,300.00	1,299.77	1,181.01	1,163.37	6.30	6.20	-90.15	-424.34	-14.58	445.75	433.39	12.35	36.081		
1,400.00	1,399.73	1,276.21	1,253.97	6.68	6.65	-90.14	-453.49	-16.81	476.36	463.29	13.08	36.429		
1,500.00	1,499.70	1,371.41	1,344.57	7.07	7.11	-90.14	-482.63	-19.05	506.98	493.16	13.82	36.681		
1,600.00	1,599.67	1,466.61	1,435.17	7.46	7.59	-90.13	-511.78	-21.29	537.59	523.01	14.58	36.859		
1,700.00	1,699.64	1,561.81	1,525.77	7.85	8.08	-90.13	-540.92	-23.52	568.21	552.84	15.36	36.982		
1,800.00	1,799.61	1,657.01	1,616.37	8.25	8.57	-90.13	-570.07	-25.76	598.82	582.66	16.16	37.061		
1,900.00	1,899.58	1,752.20	1,706.97	8.66	9.07	-90.12	-599.21	-27.99	629.44	612.47	16.96	37.107		
2,000.00	1,999.55	1,847.40	1,797.57	9.06	9.58	-90.12	-628.36	-30.23	660.05	642.27	17.78	37.128		
2,100.00	2,099.52	1,942.60	1,888.17	9.47	10.09	-90.12	-657.50	-32.47	690.67	672.06	18.60	37.129		
2,200.00	2,199.48	2,037.80	1,978.77	9.89	10.60	-90.11	-686.65	-34.70	721.28	701.85	19.43	37.116		
2,300.00	2,299.45	2,133.00	2,069.37	10.30	11.12	-90.11	-715.79	-36.94	751.90	731.62	20.27	37.091		
2,400.00	2,399.42	2,228.20	2,159.97	10.72	11.64	-90.11	-744.94	-39.18	782.51	761.39	21.12	37.058		
2,500.00	2,499.39	2,323.39	2,250.57	11.14	12.17	-90.11	-774.08	-41.41	813.13	791.16	21.97	37.019		
2,600.00	2,599.36	2,418.59	2,341.17	11.56	12.69	-90.11	-803.23	-43.65	843.74	820.92	22.82	36.975		
2,700.00	2,699.33	2,513.79	2,431.77	11.98	13.22	-90.10	-832.37	-45.88	874.36	850.68	23.68	36.927		
2,800.00	2,799.30	2,608.99	2,522.37	12.41	13.75	-90.10	-861.52	-48.12	904.97	880.43	24.54	36.878		
2,900.00	2,899.27	2,704.19	2,612.97	12.83	14.28	-90.10	-890.66	-50.36	935.58	910.18	25.40	36.827		
3,000.00	2,999.23	2,800.61	2,703.57	13.26	14.82	-90.10	-919.81	-52.59	966.20	939.92	26.28	36.767		
3,100.00	3,099.20	2,905.42	2,794.17	13.68	15.41	-90.10	-948.95	-54.83	996.81	969.62	27.20	36.651		
3,200.00	3,199.17	2,989.78	2,884.77	14.11	15.89	-90.10	-978.09	-57.07	1,027.43	999.41	28.02	36.671		
3,300.00	3,299.14	3,084.98	2,975.37	14.54	16.42	-90.10	-1,007.24	-59.30	1,058.04	1,029.15	28.89	36.619		
3,400.00	3,399.11	3,180.18	3,065.97	14.97	16.96	-90.09	-1,036.38	-61.54	1,088.66	1,058.89	29.77	36.568		
3,500.00	3,499.08	3,275.38	3,156.57	15.40	17.50	-90.09	-1,065.53	-63.77	1,119.27	1,088.62	30.65	36.517		
3,600.00	3,599.05	3,370.58	3,247.17	15.83	18.04	-90.09	-1,094.67	-66.01	1,149.89	1,118.36	31.53	36.467		
3,700.00	3,699.02	3,465.78	3,337.76	16.26	18.58	-90.09	-1,123.82	-68.25	1,180.50	1,148.09	32.42	36.418		
3,800.00	3,798.98	3,560.97	3,428.36	16.69	19.12	-90.09	-1,152.96	-70.48	1,211.12	1,177.82	33.30	36.370		
3,900.00	3,898.95	3,656.17	3,518.96	17.12	19.66	-90.09	-1,182.11	-72.72	1,241.73	1,207.55	34.19	36.324		
4,000.00	3,998.92	3,751.37	3,609.56	17.55	20.20	-90.09	-1,211.25	-74.96	1,272.35	1,237.28	35.07	36.278		
4,100.00	4,098.89	3,846.57	3,700.16	17.98	20.75	-90.09	-1,240.40	-77.19	1,302.96	1,267.00	35.96	36.233		
4,200.00	4,198.86	3,941.77	3,790.76	18.42	21.29	-90.09	-1,269.54	-79.43	1,333.58	1,296.73	36.85	36.190		
4,300.00	4,298.83	4,036.97	3,881.36	18.85	21.83	-90.09	-1,298.69	-81.66	1,364.19	1,326.45	37.74	36.147		
4,400.00	4,398.80	4,132.16	3,971.96	19.28	22.37	-90.09	-1,327.83	-83.90	1,394.81	1,356.18	38.63	36.106		
4,500.00	4,498.77	4,227.36	4,062.56	19.72	22.92	-90.08	-1,356.98	-86.14	1,425.42	1,385.90	39.52	36.065		
4,600.00	4,598.73	4,322.56	4,153.16	20.15	23.46	-90.08	-1,386.12	-88.37	1,456.04	1,415.62	40.42	36.026		
4,700.00	4,698.70	4,417.76	4,243.76	20.58	24.01	-90.08	-1,415.27	-90.61	1,486.65	1,445.34	41.31	35.988		
4,800.00	4,798.67	4,512.96	4,334.36	21.02	24.55	-90.08	-1,444.41	-92.85	1,517.27	1,475.06	42.20	35.951		
4,900.00	4,898.64	4,608.16	4,424.96	21.45	25.10	-90.08	-1,473.56	-95.08	1,547.88	1,504.78	43.10	35.914		
5,000.00	4,998.61	4,703.35	4,515.56	21.89	25.64	-90.08	-1,502.70	-97.32	1,578.50	1,534.50	43.99	35.879		
5,100.00	5,098.58	4,801.45	4,606.16	22.32	26.20	-90.08	-1,531.85	-99.56	1,609.11	1,564.20	44.91	35.833		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	4,906.25	4,696.76	22.76	26.81	-90.08	-1,560.99	-101.79	1,639.72	1,593.87	45.85	35.761		
5,300.00	5,298.52	4,988.95	4,787.36	23.20	27.28	-90.08	-1,590.13	-104.03	1,670.34	1,623.65	46.69	35.778		
5,400.00	5,398.49	5,084.15	4,877.96	23.63	27.83	-90.08	-1,619.28	-106.26	1,700.95	1,653.37	47.58	35.746		
5,500.00	5,498.45	5,179.35	4,968.56	24.07	28.37	-90.08	-1,648.42	-108.50	1,731.57	1,683.09	48.48	35.715		
5,600.00	5,598.42	5,274.54	5,059.16	24.50	28.92	-90.08	-1,677.57	-110.74	1,762.18	1,712.80	49.38	35.685		
5,700.00	5,698.39	5,369.74	5,149.76	24.94	29.47	-90.08	-1,706.71	-112.97	1,792.80	1,742.52	50.28	35.655		
5,800.00	5,798.36	5,464.94	5,240.36	25.38	30.01	-90.08	-1,735.86	-115.21	1,823.41	1,772.23	51.18	35.627		
5,900.00	5,898.33	5,560.14	5,330.96	25.81	30.56	-90.08	-1,765.00	-117.45	1,854.03	1,801.95	52.08	35.599		
6,000.00	5,998.30	5,655.34	5,421.56	26.25	31.11	-90.08	-1,794.15	-119.68	1,884.64	1,831.66	52.98	35.571		
6,100.00	6,098.27	5,750.54	5,512.16	26.69	31.66	-90.08	-1,823.29	-121.92	1,915.26	1,861.37	53.88	35.544		
6,200.00	6,198.24	5,845.74	5,602.76	27.12	32.20	-90.08	-1,852.44	-124.15	1,945.87	1,891.09	54.79	35.518		
6,300.00	6,298.20	5,940.93	5,693.36	27.56	32.75	-90.08	-1,881.58	-126.39	1,976.49	1,920.80	55.69	35.493		
6,400.00	6,398.17	6,036.13	5,783.96	28.00	33.30	-90.08	-1,910.73	-128.63	2,007.10	1,950.51	56.59	35.468		
6,500.00	6,498.14	6,131.33	5,874.56	28.43	33.85	-90.08	-1,939.87	-130.86	2,037.72	1,980.22	57.49	35.443		
6,600.00	6,597.68	6,226.30	5,964.94	28.88	34.39	-86.78	-1,968.95	-133.09	2,068.15	2,009.75	58.40	35.414		
6,700.00	6,694.68	6,319.30	6,053.45	29.32	34.93	-84.50	-1,997.42	-135.28	2,097.82	2,038.51	59.31	35.371		
6,800.00	6,786.74	6,408.05	6,137.91	29.77	35.44	-82.74	-2,024.59	-137.36	2,126.44	2,066.23	60.21	35.319		
6,900.00	6,871.61	6,490.36	6,216.24	30.24	35.91	-81.35	-2,049.79	-139.30	2,154.02	2,092.93	61.10	35.256		
7,000.00	6,947.19	6,564.20	6,286.52	30.74	36.34	-80.17	-2,072.39	-141.03	2,180.77	2,118.78	61.99	35.177		
7,100.00	7,011.62	6,627.75	6,347.00	31.32	36.70	-79.05	-2,091.85	-142.52	2,207.01	2,144.09	62.92	35.074		
7,200.00	7,063.31	6,679.46	6,396.21	32.03	37.00	-77.83	-2,107.68	-143.74	2,233.06	2,169.14	63.92	34.935		
7,300.00	7,101.00	6,718.05	6,432.93	32.89	37.22	-76.39	-2,119.49	-144.65	2,259.14	2,194.14	65.00	34.758		
7,400.00	7,123.74	6,742.56	6,456.26	33.93	37.37	-74.64	-2,127.00	-145.22	2,285.30	2,219.16	66.14	34.551		
7,500.00	7,131.00	6,752.40	6,466.62	35.10	37.42	-72.60	-2,130.01	-145.45	2,311.37	2,244.05	67.32	34.333		
7,600.00	7,130.63	7,849.78	7,075.70	36.44	41.99	-88.64	-2,331.77	-873.72	2,318.30	2,242.30	76.01	30.501		
7,700.00	7,130.26	7,949.77	7,075.38	37.94	42.78	-88.65	-2,332.44	-973.71	2,317.02	2,238.17	78.85	29.386		
7,800.00	7,129.90	8,049.77	7,075.05	39.59	43.85	-88.65	-2,333.11	-1,073.70	2,315.73	2,233.74	81.98	28.246		
7,900.00	7,129.53	8,149.76	7,074.73	41.37	45.17	-88.65	-2,333.77	-1,173.69	2,314.44	2,229.05	85.39	27.105		
8,000.00	7,129.17	8,249.75	7,074.40	43.27	46.71	-88.65	-2,334.44	-1,273.68	2,313.15	2,224.12	89.03	25.982		
8,100.00	7,128.80	8,349.74	7,074.08	45.27	48.41	-88.65	-2,335.11	-1,373.67	2,311.86	2,218.98	92.88	24.892		
8,200.00	7,128.43	8,449.73	7,073.75	47.36	50.24	-88.65	-2,335.78	-1,473.66	2,310.57	2,213.66	96.91	23.843		
8,300.00	7,128.07	8,549.72	7,073.43	49.52	52.19	-88.65	-2,336.44	-1,573.64	2,309.28	2,208.18	101.10	22.841		
8,400.00	7,127.70	8,649.72	7,073.10	51.75	54.22	-88.65	-2,337.11	-1,673.63	2,307.99	2,202.56	105.44	21.890		
8,500.00	7,127.33	8,749.71	7,072.78	54.04	56.34	-88.65	-2,337.78	-1,773.62	2,306.71	2,196.81	109.90	20.989		
8,600.00	7,126.97	8,849.70	7,072.45	56.38	58.53	-88.65	-2,338.45	-1,873.61	2,305.42	2,190.94	114.47	20.140		
8,700.00	7,126.60	8,949.69	7,072.13	58.77	60.77	-88.65	-2,339.11	-1,973.60	2,304.13	2,184.99	119.14	19.339		
8,800.00	7,126.24	9,049.68	7,071.80	61.19	63.07	-88.65	-2,339.78	-2,073.59	2,302.84	2,178.94	123.90	18.586		
8,900.00	7,125.87	9,149.68	7,071.48	63.65	65.41	-88.65	-2,340.45	-2,173.58	2,301.55	2,172.82	128.73	17.878		
9,000.00	7,125.50	9,249.67	7,071.15	66.15	67.80	-88.65	-2,341.11	-2,273.57	2,300.26	2,166.62	133.64	17.213		
9,100.00	7,125.14	9,349.66	7,070.83	68.67	70.22	-88.65	-2,341.78	-2,373.56	2,298.97	2,160.37	138.60	16.587		
9,200.00	7,124.77	9,449.65	7,070.50	71.21	72.68	-88.65	-2,342.45	-2,473.54	2,297.68	2,154.06	143.62	15.998		
9,300.00	7,124.41	9,549.64	7,070.18	73.78	75.16	-88.65	-2,343.12	-2,573.53	2,296.40	2,147.70	148.69	15.444		
9,400.00	7,124.04	9,649.63	7,069.86	76.37	77.67	-88.65	-2,343.78	-2,673.52	2,295.11	2,141.30	153.81	14.922		
9,500.00	7,123.67	9,749.63	7,069.53	78.98	80.21	-88.65	-2,344.45	-2,773.51	2,293.82	2,134.85	158.97	14.430		
9,600.00	7,123.31	9,849.62	7,069.21	81.60	82.77	-88.65	-2,345.12	-2,873.50	2,292.53	2,128.37	164.16	13.965		
9,700.00	7,122.94	9,949.61	7,068.88	84.24	85.34	-88.65	-2,345.79	-2,973.49	2,291.24	2,121.86	169.38	13.527		
9,800.00	7,122.57	10,049.60	7,068.56	86.90	87.94	-88.65	-2,346.45	-3,073.48	2,289.95	2,115.31	174.64	13.112		
9,900.00	7,122.21	10,149.59	7,068.23	89.56	90.55	-88.65	-2,347.12	-3,173.47	2,288.66	2,108.74	179.93	12.720		
10,000.00	7,121.84	10,249.58	7,067.91	92.24	93.17	-88.65	-2,347.79	-3,273.46	2,287.37	2,102.14	185.23	12.349		
10,100.00	7,121.48	10,349.58	7,067.58	94.92	95.81	-88.65	-2,348.46	-3,373.45	2,286.08	2,095.52	190.57	11.996		
10,200.00	7,121.11	10,449.57	7,067.26	97.62	98.46	-88.65	-2,349.12	-3,473.43	2,284.80	2,088.88	195.92	11.662		
10,300.00	7,120.74	10,549.56	7,066.93	100.32	101.12	-88.65	-2,349.79	-3,573.42	2,283.51	2,082.21	201.29	11.344		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 33N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,120.38	10,649.55	7,066.61	103.04	103.79	-88.65	-2,350.46	-3,673.41	2,282.22	2,075.53	206.69	11.042		
10,500.00	7,120.01	10,749.54	7,066.28	105.76	106.48	-88.65	-2,351.13	-3,773.40	2,280.93	2,068.84	212.09	10.754		
10,600.00	7,119.64	10,849.53	7,065.96	108.48	109.17	-88.65	-2,351.79	-3,873.39	2,279.64	2,062.12	217.52	10.480		
10,700.00	7,119.28	10,949.53	7,065.63	111.22	111.87	-88.65	-2,352.46	-3,973.38	2,278.35	2,055.40	222.95	10.219		
10,800.00	7,118.91	11,049.52	7,065.31	113.96	114.58	-88.65	-2,353.13	-4,073.37	2,277.06	2,048.66	228.41	9.969		
10,900.00	7,118.55	11,149.51	7,064.98	116.70	117.29	-88.65	-2,353.80	-4,173.36	2,275.77	2,041.91	233.87	9.731		
11,000.00	7,118.18	11,249.50	7,064.66	119.45	120.01	-88.65	-2,354.46	-4,273.35	2,274.49	2,035.14	239.34	9.503		
11,100.00	7,117.81	11,349.49	7,064.33	122.21	122.74	-88.65	-2,355.13	-4,373.33	2,273.20	2,028.37	244.83	9.285		
11,200.00	7,117.45	11,449.48	7,064.01	124.97	125.47	-88.65	-2,355.80	-4,473.32	2,271.91	2,021.58	250.33	9.076		
11,300.00	7,117.08	11,549.48	7,063.68	127.73	128.21	-88.66	-2,356.47	-4,573.31	2,270.62	2,014.79	255.83	8.875		
11,400.00	7,116.72	11,649.47	7,063.36	130.50	130.96	-88.66	-2,357.13	-4,673.30	2,269.33	2,007.99	261.35	8.683		
11,500.00	7,116.35	11,749.46	7,063.03	133.27	133.71	-88.66	-2,357.80	-4,773.29	2,268.04	2,001.17	266.87	8.499		
11,600.00	7,115.98	11,849.45	7,062.71	136.04	136.46	-88.66	-2,358.47	-4,873.28	2,266.75	1,994.36	272.40	8.321		
11,700.00	7,115.62	11,949.44	7,062.38	138.82	139.22	-88.66	-2,359.14	-4,973.27	2,265.46	1,987.53	277.94	8.151		
11,800.00	7,115.25	12,049.43	7,062.06	141.60	141.98	-88.66	-2,359.80	-5,073.26	2,264.18	1,980.70	283.48	7.987		
11,900.00	7,114.88	12,149.43	7,061.73	144.39	144.75	-88.66	-2,360.47	-5,173.25	2,262.89	1,973.86	289.03	7.829		
12,000.00	7,114.52	12,249.42	7,061.41	147.17	147.52	-88.66	-2,361.14	-5,273.23	2,261.60	1,967.01	294.59	7.677		
12,100.00	7,114.15	12,349.41	7,061.08	149.96	150.29	-88.66	-2,361.80	-5,373.22	2,260.31	1,960.16	300.15	7.531		
12,200.00	7,113.79	12,449.40	7,060.76	152.75	153.06	-88.66	-2,362.47	-5,473.21	2,259.02	1,953.30	305.72	7.389		
12,300.00	7,113.42	12,549.39	7,060.43	155.55	155.84	-88.66	-2,363.14	-5,573.20	2,257.73	1,946.44	311.29	7.253		
12,400.00	7,113.05	12,649.38	7,060.11	158.34	158.62	-88.66	-2,363.81	-5,673.19	2,256.44	1,939.57	316.87	7.121		
12,500.00	7,112.69	12,749.38	7,059.78	161.14	161.41	-88.66	-2,364.47	-5,773.18	2,255.15	1,932.70	322.45	6.994		
12,600.00	7,112.32	12,849.37	7,059.46	163.94	164.19	-88.66	-2,365.14	-5,873.17	2,253.87	1,925.83	328.04	6.871		
12,700.00	7,111.96	12,949.36	7,059.13	166.74	166.98	-88.66	-2,365.81	-5,973.16	2,252.58	1,918.95	333.63	6.752		
12,800.00	7,111.59	13,049.35	7,058.81	169.54	169.78	-88.66	-2,366.48	-6,073.15	2,251.29	1,912.06	339.23	6.637		
12,900.00	7,111.22	13,149.34	7,058.48	172.35	172.57	-88.66	-2,367.14	-6,173.14	2,250.00	1,905.17	344.82	6.525		
13,000.00	7,110.86	13,249.33	7,058.16	175.16	175.37	-88.66	-2,367.81	-6,273.12	2,248.71	1,898.28	350.43	6.417		
13,100.00	7,110.49	13,349.33	7,057.83	177.96	178.16	-88.66	-2,368.48	-6,373.11	2,247.42	1,891.39	356.03	6.312		
13,200.00	7,110.12	13,449.32	7,057.51	180.77	180.96	-88.66	-2,369.15	-6,473.10	2,246.13	1,884.49	361.64	6.211		
13,300.00	7,109.76	13,549.31	7,057.19	183.58	183.76	-88.66	-2,369.81	-6,573.09	2,244.84	1,877.59	367.26	6.112		
13,400.00	7,109.39	13,649.30	7,056.86	186.40	186.57	-88.66	-2,370.48	-6,673.08	2,243.56	1,870.68	372.87	6.017		
13,500.00	7,109.03	13,749.29	7,056.54	189.21	189.37	-88.66	-2,371.15	-6,773.07	2,242.27	1,863.78	378.49	5.924		
13,600.00	7,108.66	13,849.28	7,056.21	192.03	192.18	-88.66	-2,371.82	-6,873.06	2,240.98	1,856.87	384.11	5.834		
13,700.00	7,108.29	13,949.28	7,055.89	194.84	194.99	-88.66	-2,372.48	-6,973.05	2,239.69	1,849.95	389.73	5.747		
13,800.00	7,107.93	14,049.27	7,055.56	197.66	197.80	-88.66	-2,373.15	-7,073.04	2,238.40	1,843.04	395.36	5.662		
13,900.00	7,107.56	14,149.26	7,055.24	200.48	200.61	-88.66	-2,373.82	-7,173.02	2,237.11	1,836.12	400.99	5.579		
14,000.00	7,107.19	14,249.25	7,054.91	203.30	203.42	-88.66	-2,374.49	-7,273.01	2,235.82	1,829.20	406.62	5.499		
14,100.00	7,106.83	14,349.24	7,054.59	206.12	206.23	-88.66	-2,375.15	-7,373.00	2,234.53	1,822.28	412.25	5.420		
14,200.00	7,106.46	14,449.24	7,054.26	208.94	209.05	-88.66	-2,375.82	-7,472.99	2,233.24	1,815.36	417.89	5.344		
14,300.00	7,106.10	14,549.23	7,053.94	211.76	211.86	-88.66	-2,376.49	-7,572.98	2,231.96	1,808.43	423.52	5.270		
14,400.00	7,105.73	14,649.22	7,053.61	214.58	214.68	-88.66	-2,377.16	-7,672.97	2,230.67	1,801.50	429.16	5.198		
14,500.00	7,105.36	14,749.21	7,053.29	217.40	217.50	-88.66	-2,377.82	-7,772.96	2,229.38	1,794.57	434.80	5.127		
14,600.00	7,105.00	14,849.20	7,052.96	220.23	220.32	-88.66	-2,378.49	-7,872.95	2,228.09	1,787.64	440.45	5.059		
14,700.00	7,104.63	14,949.19	7,052.64	223.05	223.14	-88.66	-2,379.16	-7,972.94	2,226.80	1,780.71	446.09	4.992		
14,800.00	7,104.27	15,049.19	7,052.31	225.88	225.96	-88.66	-2,379.83	-8,072.93	2,225.51	1,773.77	451.74	4.927		
14,872.41	7,104.00	15,121.59	7,052.08	227.93	228.00	-88.67	-2,380.31	-8,145.33	2,224.58	1,768.75	455.83	4.880 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	2.00	0.00	3.28	3.28	-179.53	-339.90	-2.78	339.91					
100.00	100.00	102.00	100.00	3.28	3.29	-179.53	-339.90	-2.78	339.91	333.34	6.57	51.737		
200.00	200.00	198.00	200.00	3.34	3.34	-179.53	-339.90	-2.78	339.91	333.24	6.67	50.942 CC, ES		
300.00	300.00	287.59	289.57	3.44	3.42	-179.52	-341.23	-2.85	341.40	334.53	6.88	49.636		
400.00	400.00	376.79	378.68	3.60	3.55	-179.49	-345.34	-3.08	346.01	338.83	7.19	48.153		
500.00	500.00	465.66	467.28	3.81	3.72	-179.44	-352.19	-3.45	353.72	346.14	7.58	46.655		
600.00	599.98	554.01	555.11	4.04	3.92	-89.45	-361.71	-3.98	364.49	356.45	8.04	45.318		
700.00	699.95	641.69	641.94	4.30	4.15	-89.70	-373.83	-4.64	378.30	369.75	8.56	44.206		
800.00	799.92	728.54	727.55	4.59	4.40	-89.90	-388.44	-5.44	395.13	386.01	9.12	43.342		
900.00	899.89	814.44	811.74	4.90	4.69	-90.07	-405.44	-6.37	414.92	405.21	9.71	42.746		
1,000.00	999.86	899.23	894.31	5.23	5.00	-90.21	-424.68	-7.42	437.62	427.30	10.32	42.417		
1,100.00	1,099.83	982.80	975.10	5.58	5.33	-90.31	-446.02	-8.59	463.17	452.23	10.94	42.324		
1,200.00	1,199.80	1,065.03	1,053.95	5.94	5.67	-90.38	-469.31	-9.87	491.50	479.92	11.58	42.451		
1,300.00	1,299.77	1,145.83	1,130.74	6.30	6.04	-90.42	-494.39	-11.24	522.54	510.33	12.21	42.779		
1,400.00	1,399.73	1,225.10	1,205.36	6.68	6.42	-90.44	-521.08	-12.70	556.22	543.37	12.85	43.286		
1,500.00	1,499.70	1,302.77	1,277.74	7.07	6.81	-90.45	-549.22	-14.24	592.46	578.98	13.48	43.951		
1,600.00	1,599.67	1,378.78	1,347.79	7.46	7.21	-90.44	-578.65	-15.85	631.19	617.08	14.10	44.753		
1,700.00	1,699.64	1,464.15	1,425.77	7.85	7.69	-90.42	-613.37	-17.75	671.83	657.03	14.80	45.389		
1,800.00	1,799.61	1,555.45	1,509.10	8.25	8.21	-90.40	-650.61	-19.79	712.62	697.06	15.56	45.793		
1,900.00	1,899.58	1,646.75	1,592.43	8.66	8.74	-90.38	-687.86	-21.83	753.42	737.08	16.34	46.112		
2,000.00	1,999.55	1,738.05	1,675.77	9.06	9.28	-90.37	-725.10	-23.87	794.21	777.08	17.13	46.363		
2,100.00	2,099.52	1,829.35	1,759.10	9.47	9.83	-90.35	-762.35	-25.91	835.01	817.07	17.93	46.560		
2,200.00	2,199.48	1,920.65	1,842.43	9.89	10.38	-90.34	-799.60	-27.95	875.80	857.05	18.75	46.712		
2,300.00	2,299.45	2,011.95	1,925.76	10.30	10.94	-90.33	-836.84	-29.99	916.60	897.02	19.57	46.830		
2,400.00	2,399.42	2,103.25	2,009.09	10.72	11.51	-90.31	-874.09	-32.03	957.39	936.99	20.41	46.918		
2,500.00	2,499.39	2,205.45	2,092.43	11.14	12.15	-90.30	-911.34	-34.07	998.19	976.88	21.30	46.860		
2,600.00	2,599.36	2,285.85	2,175.76	11.56	12.65	-90.29	-948.58	-36.11	1,038.98	1,016.89	22.09	47.031		
2,700.00	2,699.33	2,377.15	2,259.09	11.98	13.23	-90.29	-985.83	-38.15	1,079.78	1,056.83	22.94	47.063		
2,800.00	2,799.30	2,468.45	2,342.42	12.41	13.81	-90.28	-1,023.07	-40.19	1,120.57	1,096.77	23.80	47.082		
2,900.00	2,899.27	2,559.75	2,425.76	12.83	14.39	-90.27	-1,060.32	-42.23	1,161.37	1,136.71	24.66	47.091		
3,000.00	2,999.23	2,651.05	2,509.09	13.26	14.98	-90.26	-1,097.57	-44.27	1,202.16	1,176.63	25.53	47.092		
3,100.00	3,099.20	2,742.35	2,592.42	13.68	15.56	-90.26	-1,134.81	-46.30	1,242.96	1,216.56	26.40	47.087		
3,200.00	3,199.17	2,833.65	2,675.75	14.11	16.15	-90.25	-1,172.06	-48.34	1,283.75	1,256.48	27.27	47.076		
3,300.00	3,299.14	2,924.95	2,759.09	14.54	16.74	-90.25	-1,209.31	-50.38	1,324.55	1,296.40	28.15	47.061		
3,400.00	3,399.11	3,016.25	2,842.42	14.97	17.33	-90.24	-1,246.55	-52.42	1,365.34	1,336.32	29.02	47.042		
3,500.00	3,499.08	3,107.55	2,925.75	15.40	17.92	-90.24	-1,283.80	-54.46	1,406.14	1,376.23	29.91	47.020		
3,600.00	3,599.05	3,201.15	3,009.08	15.83	18.53	-90.23	-1,321.04	-56.50	1,446.93	1,416.13	30.80	46.977		
3,700.00	3,699.02	3,309.85	3,092.42	16.26	19.24	-90.23	-1,358.29	-58.54	1,487.73	1,455.95	31.78	46.812		
3,800.00	3,798.98	3,381.45	3,175.75	16.69	19.71	-90.22	-1,395.54	-60.58	1,528.52	1,495.96	32.56	46.943		
3,900.00	3,898.95	3,472.75	3,259.08	17.12	20.30	-90.22	-1,432.78	-62.62	1,569.32	1,535.87	33.45	46.915		
4,000.00	3,998.92	3,564.06	3,342.41	17.55	20.90	-90.21	-1,470.03	-64.66	1,610.11	1,575.77	34.34	46.885		
4,100.00	4,098.89	3,655.36	3,425.75	17.98	21.49	-90.21	-1,507.28	-66.70	1,650.91	1,615.68	35.23	46.856		
4,200.00	4,198.86	3,746.66	3,509.08	18.42	22.09	-90.21	-1,544.52	-68.74	1,691.71	1,655.58	36.13	46.826		
4,300.00	4,298.83	3,837.96	3,592.41	18.85	22.69	-90.20	-1,581.77	-70.78	1,732.50	1,695.48	37.02	46.795		
4,400.00	4,398.80	3,929.26	3,675.74	19.28	23.29	-90.20	-1,619.01	-72.82	1,773.30	1,735.38	37.92	46.765		
4,500.00	4,498.77	4,020.56	3,759.08	19.72	23.89	-90.20	-1,656.26	-74.85	1,814.09	1,775.27	38.82	46.734		
4,600.00	4,598.73	4,111.86	3,842.41	20.15	24.49	-90.19	-1,693.51	-76.89	1,854.89	1,815.17	39.72	46.704		
4,700.00	4,698.70	4,203.16	3,925.74	20.58	25.09	-90.19	-1,730.75	-78.93	1,895.68	1,855.07	40.62	46.674		
4,800.00	4,798.67	4,294.46	4,009.07	21.02	25.69	-90.19	-1,768.00	-80.97	1,936.48	1,894.96	41.52	46.644		
4,900.00	4,898.64	4,385.76	4,092.41	21.45	26.29	-90.19	-1,805.25	-83.01	1,977.27	1,934.85	42.42	46.614		
5,000.00	4,998.61	4,477.06	4,175.74	21.89	26.89	-90.18	-1,842.49	-85.05	2,018.07	1,974.75	43.32	46.584		
5,100.00	5,098.58	4,568.36	4,259.07	22.32	27.49	-90.18	-1,879.74	-87.09	2,058.86	2,014.64	44.22	46.555		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	4,659.66	4,342.40	22.76	28.10	-90.18	-1,916.98	-89.13	2,099.66	2,054.53	45.13	46.526		
5,300.00	5,298.52	4,750.96	4,425.74	23.20	28.70	-90.18	-1,954.23	-91.17	2,140.45	2,094.42	46.03	46.498		
5,400.00	5,398.49	4,842.26	4,509.07	23.63	29.30	-90.18	-1,991.48	-93.21	2,181.25	2,134.31	46.94	46.470		
5,500.00	5,498.45	4,933.56	4,592.40	24.07	29.90	-90.17	-2,028.72	-95.25	2,222.04	2,174.20	47.85	46.442		
5,600.00	5,598.42	5,024.86	4,675.73	24.50	30.51	-90.17	-2,065.97	-97.29	2,262.84	2,214.09	48.75	46.415		
5,700.00	5,698.39	5,116.16	4,759.06	24.94	31.11	-90.17	-2,103.22	-99.33	2,303.64	2,253.97	49.66	46.388		
5,800.00	5,798.36	5,207.46	4,842.40	25.38	31.71	-90.17	-2,140.46	-101.37	2,344.43	2,293.86	50.57	46.362		
5,900.00	5,898.33	5,301.24	4,925.73	25.81	32.33	-90.17	-2,177.71	-103.40	2,385.23	2,333.73	51.49	46.323		
6,000.00	5,998.30	5,409.94	5,009.06	26.25	33.05	-90.16	-2,214.95	-105.44	2,426.02	2,373.52	52.50	46.212		
6,100.00	6,098.27	5,481.36	5,092.39	26.69	33.52	-90.16	-2,252.20	-107.48	2,466.82	2,413.52	53.30	46.285		
6,200.00	6,198.24	5,572.66	5,175.73	27.12	34.13	-90.16	-2,289.45	-109.52	2,507.61	2,453.40	54.21	46.260		
6,300.00	6,298.20	5,663.96	5,259.06	27.56	34.73	-90.16	-2,326.69	-111.56	2,548.41	2,493.29	55.12	46.235		
6,400.00	6,398.17	5,755.26	5,342.39	28.00	35.34	-90.16	-2,363.94	-113.60	2,589.20	2,533.17	56.03	46.211		
6,500.00	6,498.14	5,846.56	5,425.72	28.43	35.94	-90.16	-2,401.19	-115.64	2,630.00	2,573.06	56.94	46.187		
6,600.00	6,597.68	5,937.65	5,508.87	28.88	36.55	-85.84	-2,438.35	-117.67	2,670.59	2,612.74	57.86	46.158		
6,700.00	6,694.68	6,026.89	5,590.32	29.32	37.14	-82.38	-2,474.75	-119.67	2,710.20	2,651.42	58.77	46.112		
6,800.00	6,786.74	6,112.08	5,668.07	29.77	37.70	-79.45	-2,509.50	-121.57	2,748.18	2,688.50	59.68	46.050		
6,900.00	6,871.61	6,208.88	5,740.21	30.24	38.34	-76.96	-2,541.75	-123.34	2,784.16	2,723.49	60.67	45.890		
7,000.00	6,947.19	6,262.07	5,804.97	30.74	38.70	-74.83	-2,570.69	-124.92	2,817.93	2,756.47	61.46	45.847		
7,100.00	7,011.62	6,323.17	5,860.74	31.32	39.10	-72.95	-2,595.62	-126.29	2,849.43	2,787.04	62.39	45.672		
7,200.00	7,063.31	6,372.94	5,906.16	32.03	39.43	-71.22	-2,615.92	-127.40	2,878.62	2,815.25	63.37	45.424		
7,300.00	7,101.00	6,410.13	5,940.11	32.89	39.68	-69.56	-2,631.10	-128.23	2,905.49	2,841.05	64.44	45.091		
7,400.00	7,123.74	6,433.83	5,961.75	33.93	39.83	-67.91	-2,640.77	-128.76	2,929.93	2,864.35	65.58	44.679		
7,500.00	7,131.00	6,443.47	5,970.54	35.10	39.90	-66.27	-2,644.70	-128.97	2,951.74	2,884.98	66.76	44.212		
7,600.00	7,130.63	6,446.17	5,973.00	36.44	39.92	-66.32	-2,645.80	-129.03	2,973.83	2,905.80	68.04	43.709		
7,700.00	7,130.26	6,448.87	5,975.47	37.94	39.93	-66.38	-2,646.90	-129.09	2,999.09	2,929.67	69.43	43.197		
7,800.00	7,129.90	6,451.56	5,977.93	39.59	39.95	-66.43	-2,648.00	-129.15	3,027.45	2,956.53	70.91	42.692		
7,900.00	7,129.53	6,454.26	5,980.39	41.37	39.97	-66.48	-2,649.10	-129.21	3,058.81	2,986.34	72.46	42.211		
8,000.00	7,129.17	6,456.96	5,982.85	43.27	39.99	-66.54	-2,650.20	-129.27	3,093.08	3,019.02	74.06	41.764		
8,100.00	7,128.80	6,459.65	5,985.31	45.27	40.01	-66.59	-2,651.30	-129.33	3,130.17	3,054.49	75.68	41.359		
8,200.00	7,128.43	6,462.35	5,987.77	47.36	40.03	-66.64	-2,652.40	-129.39	3,167.26	3,091.58	77.34	40.949		
8,300.00	7,128.07	6,465.04	5,990.22	49.52	40.05	-66.69	-2,653.50	-129.45	3,204.35	3,128.67	79.04	40.544		
8,400.00	7,127.70	6,467.73	5,992.67	51.75	40.07	-66.74	-2,654.60	-129.51	3,241.44	3,165.76	80.78	40.144		
8,500.00	7,127.33	6,470.42	5,995.12	54.04	40.09	-66.79	-2,655.70	-129.57	3,278.53	3,202.85	82.56	39.749		
8,600.00	7,126.97	6,473.11	5,997.57	56.38	40.11	-66.84	-2,656.80	-129.63	3,315.62	3,239.94	84.38	39.359		
8,700.00	7,126.60	6,475.80	5,999.99	58.77	40.13	-66.89	-2,657.90	-129.69	3,352.71	3,277.03	86.24	38.974		
8,800.00	7,126.24	6,478.49	6,002.40	61.19	40.15	-66.94	-2,659.00	-129.75	3,389.80	3,314.12	88.14	38.594		
8,900.00	7,125.87	6,481.18	6,004.81	63.65	40.17	-66.99	-2,660.10	-129.81	3,426.89	3,351.21	90.08	38.219		
9,000.00	7,125.50	6,483.87	6,007.22	66.15	40.19	-67.04	-2,661.20	-129.87	3,463.98	3,388.30	92.06	37.849		
9,100.00	7,125.14	6,486.56	6,009.63	68.67	40.21	-67.09	-2,662.30	-129.93	3,501.07	3,425.39	94.08	37.484		
9,200.00	7,124.77	6,489.25	6,012.04	71.21	40.23	-67.14	-2,663.40	-130.00	3,538.16	3,462.48	96.14	37.124		
9,300.00	7,124.41	6,491.94	6,014.45	73.78	40.25	-67.19	-2,664.50	-130.06	3,575.25	3,499.57	98.24	36.769		
9,400.00	7,124.04	6,494.63	6,016.86	76.37	40.27	-67.24	-2,665.60	-130.12	3,612.34	3,536.66	100.38	36.419		
9,500.00	7,123.67	6,497.32	6,019.27	78.98	40.29	-67.29	-2,666.70	-130.18	3,649.43	3,573.75	102.56	36.074		
9,600.00	7,123.31	6,499.99	6,021.68	81.60	40.31	-67.34	-2,667.80	-130.24	3,686.52	3,610.84	104.78	35.734		
9,700.00	7,122.94	6,502.68	6,024.09	84.24	40.33	-67.39	-2,668.90	-130.30	3,723.61	3,647.93	107.04	35.399		
9,800.00	7,122.57	6,505.37	6,026.50	86.90	40.35	-67.44	-2,670.00	-130.36	3,760.70	3,685.02	109.34	35.069		
9,900.00	7,122.21	6,508.06	6,028.91	89.56	40.37	-67.49	-2,671.10	-130.42	3,797.79	3,722.11	111.68	34.744		
10,000.00	7,121.84	6,510.75	6,031.32	92.24	40.39	-67.54	-2,672.20	-130.48	3,834.88	3,759.20	114.06	34.424		
10,100.00	7,121.48	6,513.44	6,033.73	94.92	40.41	-67.59	-2,673.30	-130.54	3,871.97	3,796.29	116.48	34.109		
10,200.00	7,121.11	6,516.13	6,036.14	97.62	40.43	-67.64	-2,674.40	-130.60	3,909.06	3,833.38	118.94	33.799		
10,300.00	7,120.74	6,518.82	6,038.55	100.32	40.45	-67.69	-2,675.50	-130.66	3,946.15	3,870.47	121.44	33.494		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 34N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,120.38	10,986.94	7,130.37	103.04	104.86	-90.19	-3,192.24	-3,670.51	3,123.39	2,916.01	207.38	15.061		
10,500.00	7,120.01	11,086.93	7,129.83	105.76	107.51	-90.18	-3,192.83	-3,770.49	3,122.02	2,909.25	212.77	14.673		
10,600.00	7,119.64	11,186.92	7,129.29	108.48	110.16	-90.18	-3,193.42	-3,870.48	3,120.65	2,902.48	218.17	14.304		
10,700.00	7,119.28	11,286.91	7,128.75	111.22	112.83	-90.18	-3,194.01	-3,970.47	3,119.28	2,895.70	223.59	13.951		
10,800.00	7,118.91	11,386.90	7,128.21	113.96	115.51	-90.17	-3,194.60	-4,070.46	3,117.92	2,888.90	229.02	13.614		
10,900.00	7,118.55	11,486.89	7,127.67	116.70	118.20	-90.17	-3,195.18	-4,170.44	3,116.55	2,882.09	234.46	13.292		
11,000.00	7,118.18	11,586.88	7,127.13	119.45	120.89	-90.17	-3,195.77	-4,270.43	3,115.18	2,875.26	239.92	12.984		
11,100.00	7,117.81	11,686.87	7,126.59	122.21	123.60	-90.16	-3,196.36	-4,370.42	3,113.81	2,868.43	245.39	12.689		
11,200.00	7,117.45	11,786.86	7,126.05	124.97	126.30	-90.16	-3,196.95	-4,470.40	3,112.44	2,861.58	250.87	12.407		
11,300.00	7,117.08	11,886.85	7,125.50	127.73	129.02	-90.16	-3,197.54	-4,570.39	3,111.07	2,854.72	256.35	12.136		
11,400.00	7,116.72	11,986.85	7,124.96	130.50	131.74	-90.15	-3,198.12	-4,670.38	3,109.71	2,847.85	261.85	11.876		
11,500.00	7,116.35	12,086.84	7,124.42	133.27	134.47	-90.15	-3,198.71	-4,770.37	3,108.34	2,840.98	267.36	11.626		
11,600.00	7,115.98	12,186.83	7,123.88	136.04	137.20	-90.15	-3,199.30	-4,870.35	3,106.97	2,834.09	272.88	11.386		
11,700.00	7,115.62	12,286.82	7,123.34	138.82	139.94	-90.15	-3,199.89	-4,970.34	3,105.60	2,827.20	278.40	11.155		
11,800.00	7,115.25	12,386.81	7,122.80	141.60	142.69	-90.14	-3,200.47	-5,070.33	3,104.23	2,820.30	283.93	10.933		
11,900.00	7,114.88	12,486.80	7,122.26	144.39	145.43	-90.14	-3,201.06	-5,170.32	3,102.87	2,813.39	289.47	10.719		
12,000.00	7,114.52	12,586.79	7,121.72	147.17	148.18	-90.14	-3,201.65	-5,270.30	3,101.50	2,806.48	295.02	10.513		
12,100.00	7,114.15	12,686.78	7,121.18	149.96	150.94	-90.13	-3,202.24	-5,370.29	3,100.13	2,799.56	300.57	10.314		
12,200.00	7,113.79	12,786.77	7,120.64	152.75	153.70	-90.13	-3,202.83	-5,470.28	3,098.76	2,792.63	306.13	10.122		
12,300.00	7,113.42	12,886.76	7,120.09	155.55	156.46	-90.13	-3,203.41	-5,570.27	3,097.39	2,785.70	311.69	9.937		
12,400.00	7,113.05	12,986.75	7,119.55	158.34	159.23	-90.12	-3,204.00	-5,670.25	3,096.03	2,778.77	317.26	9.759		
12,500.00	7,112.69	13,086.74	7,119.01	161.14	162.00	-90.12	-3,204.59	-5,770.24	3,094.66	2,771.82	322.83	9.586		
12,600.00	7,112.32	13,186.73	7,118.47	163.94	164.77	-90.12	-3,205.18	-5,870.23	3,093.29	2,764.88	328.41	9.419		
12,700.00	7,111.96	13,286.72	7,117.93	166.74	167.55	-90.11	-3,205.77	-5,970.21	3,091.92	2,757.93	333.99	9.257		
12,800.00	7,111.59	13,386.71	7,117.39	169.54	170.33	-90.11	-3,206.35	-6,070.20	3,090.55	2,750.97	339.58	9.101		
12,900.00	7,111.22	13,486.70	7,116.85	172.35	173.11	-90.11	-3,206.94	-6,170.19	3,089.19	2,744.01	345.17	8.950		
13,000.00	7,110.86	13,586.69	7,116.31	175.16	175.89	-90.10	-3,207.53	-6,270.18	3,087.82	2,737.05	350.77	8.803		
13,100.00	7,110.49	13,686.68	7,115.77	177.96	178.68	-90.10	-3,208.12	-6,370.16	3,086.45	2,730.08	356.37	8.661		
13,200.00	7,110.12	13,786.67	7,115.23	180.77	181.47	-90.10	-3,208.70	-6,470.15	3,085.08	2,723.11	361.97	8.523		
13,300.00	7,109.76	13,886.66	7,114.68	183.58	184.26	-90.09	-3,209.29	-6,570.14	3,083.71	2,716.14	367.58	8.389		
13,400.00	7,109.39	13,986.65	7,114.14	186.40	187.05	-90.09	-3,209.88	-6,670.13	3,082.35	2,709.16	373.19	8.260		
13,500.00	7,109.03	14,086.65	7,113.60	189.21	189.84	-90.09	-3,210.47	-6,770.11	3,080.98	2,702.18	378.80	8.134		
13,600.00	7,108.66	14,186.64	7,113.06	192.03	192.64	-90.08	-3,211.06	-6,870.10	3,079.61	2,695.20	384.41	8.011		
13,700.00	7,108.29	14,286.63	7,112.52	194.84	195.44	-90.08	-3,211.64	-6,970.09	3,078.24	2,688.21	390.03	7.892		
13,800.00	7,107.93	14,386.62	7,111.98	197.66	198.24	-90.08	-3,212.23	-7,070.07	3,076.87	2,681.22	395.65	7.777		
13,900.00	7,107.56	14,486.61	7,111.44	200.48	201.04	-90.08	-3,212.82	-7,170.06	3,075.51	2,674.23	401.28	7.664		
14,000.00	7,107.19	14,586.60	7,110.90	203.30	203.84	-90.07	-3,213.41	-7,270.05	3,074.14	2,667.24	406.90	7.555		
14,100.00	7,106.83	14,686.59	7,110.36	206.12	206.65	-90.07	-3,214.00	-7,370.04	3,072.77	2,660.24	412.53	7.449		
14,200.00	7,106.46	14,786.58	7,109.81	208.94	209.46	-90.07	-3,214.58	-7,470.02	3,071.40	2,653.24	418.16	7.345		
14,300.00	7,106.10	14,886.57	7,109.27	211.76	212.26	-90.06	-3,215.17	-7,570.01	3,070.03	2,646.24	423.79	7.244		
14,400.00	7,105.73	14,986.56	7,108.73	214.58	215.07	-90.06	-3,215.76	-7,670.00	3,068.67	2,639.24	429.43	7.146		
14,500.00	7,105.36	15,086.55	7,108.19	217.40	217.88	-90.06	-3,216.35	-7,769.99	3,067.30	2,632.23	435.07	7.050		
14,600.00	7,105.00	15,186.54	7,107.65	220.23	220.69	-90.05	-3,216.94	-7,869.97	3,065.93	2,625.23	440.70	6.957		
14,700.00	7,104.63	15,286.53	7,107.11	223.05	223.51	-90.05	-3,217.52	-7,969.96	3,064.56	2,618.22	446.34	6.866		
14,800.00	7,104.27	15,386.52	7,106.57	225.88	226.32	-90.05	-3,218.11	-8,069.95	3,063.19	2,611.21	451.99	6.777		
14,872.41	7,104.00	15,458.93	7,106.18	227.93	228.36	-90.04	-3,218.54	-8,142.35	3,062.20	2,606.13	456.07	6.714 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.00	0.00	3.28	3.28	0.60	80.14	0.83	80.15					
100.00	100.00	100.00	100.00	3.28	3.28	0.60	80.14	0.83	80.15	73.58	6.57	12.200		
200.00	200.00	200.00	200.00	3.34	3.34	0.60	80.14	0.83	80.15	73.47	6.67	12.009		
300.00	300.00	300.00	300.00	3.44	3.44	0.60	80.14	0.83	80.15	73.26	6.89	11.633		
400.00	400.00	400.00	400.00	3.60	3.60	0.60	80.14	0.83	80.15	72.94	7.21	11.121		
500.00	500.00	500.00	500.00	3.81	3.81	0.60	80.14	0.83	80.15	72.54	7.61	10.529 CC		
600.00	599.98	599.98	599.98	4.04	4.05	91.74	80.14	0.83	80.18	72.09	8.09	9.917 ES		
700.00	699.95	697.31	697.29	4.30	4.31	93.14	81.75	0.45	81.92	73.30	8.62	9.508		
800.00	799.92	794.44	794.29	4.59	4.60	93.81	86.56	-0.70	86.94	77.74	9.20	9.447		
900.00	899.89	891.17	890.67	4.90	4.91	93.79	94.52	-2.61	95.19	85.36	9.83	9.682		
1,000.00	999.86	989.19	988.06	5.23	5.24	93.32	105.29	-5.19	106.14	95.65	10.49	10.119		
1,100.00	1,099.83	1,088.55	1,086.75	5.58	5.59	92.90	116.51	-7.88	117.41	106.23	11.18	10.505		
1,200.00	1,199.80	1,187.91	1,185.44	5.94	5.95	92.54	127.73	-10.56	128.68	116.79	11.89	10.823		
1,300.00	1,299.77	1,287.27	1,284.13	6.30	6.32	92.25	138.95	-13.25	139.95	127.33	12.62	11.086		
1,400.00	1,399.73	1,386.63	1,382.81	6.68	6.70	91.99	150.17	-15.94	151.23	137.85	13.38	11.305		
1,500.00	1,499.70	1,485.99	1,481.50	7.07	7.09	91.78	161.39	-18.63	162.51	148.36	14.15	11.488		
1,600.00	1,599.67	1,585.35	1,580.19	7.46	7.49	91.59	172.61	-21.32	173.79	158.86	14.93	11.643		
1,700.00	1,699.64	1,684.71	1,678.88	7.85	7.89	91.42	183.84	-24.00	185.07	169.35	15.72	11.773		
1,800.00	1,799.61	1,784.07	1,777.56	8.25	8.30	91.28	195.06	-26.69	196.36	179.84	16.52	11.885		
1,900.00	1,899.58	1,883.43	1,876.25	8.66	8.71	91.15	206.28	-29.38	207.65	190.31	17.33	11.981		
2,000.00	1,999.55	1,982.79	1,974.94	9.06	9.13	91.03	217.50	-32.07	218.93	200.78	18.15	12.063		
2,100.00	2,099.52	2,082.15	2,073.63	9.47	9.55	90.92	228.72	-34.75	230.22	211.25	18.97	12.135		
2,200.00	2,199.48	2,181.51	2,172.32	9.89	9.97	90.83	239.94	-37.44	241.51	221.71	19.80	12.197		
2,300.00	2,299.45	2,280.87	2,271.00	10.30	10.39	90.74	251.16	-40.13	252.80	232.16	20.63	12.252		
2,400.00	2,399.42	2,380.23	2,369.69	10.72	10.82	90.66	262.38	-42.82	264.09	242.62	21.47	12.300		
2,500.00	2,499.39	2,479.59	2,468.38	11.14	11.25	90.59	273.60	-45.51	275.38	253.07	22.31	12.342		
2,600.00	2,599.36	2,578.95	2,567.07	11.56	11.68	90.52	284.82	-48.19	286.67	263.51	23.16	12.380		
2,700.00	2,699.33	2,678.31	2,665.75	11.98	12.11	90.46	296.04	-50.88	297.96	273.96	24.00	12.413		
2,800.00	2,799.30	2,777.67	2,764.44	12.41	12.54	90.40	307.27	-53.57	309.25	284.40	24.85	12.443		
2,900.00	2,899.27	2,877.03	2,863.13	12.83	12.97	90.34	318.49	-56.26	320.54	294.84	25.71	12.470		
3,000.00	2,999.23	2,976.39	2,961.82	13.26	13.41	90.29	329.71	-58.94	331.83	305.27	26.56	12.494		
3,100.00	3,099.20	3,075.75	3,060.51	13.68	13.84	90.25	340.93	-61.63	343.13	315.71	27.42	12.515		
3,200.00	3,199.17	3,175.11	3,159.19	14.11	14.28	90.20	352.15	-64.32	354.42	326.14	28.27	12.535		
3,300.00	3,299.14	3,274.47	3,257.88	14.54	14.72	90.16	363.37	-67.01	365.71	336.58	29.13	12.553		
3,400.00	3,399.11	3,373.83	3,356.57	14.97	15.16	90.12	374.59	-69.70	377.00	347.01	30.00	12.569		
3,500.00	3,499.08	3,473.19	3,455.26	15.40	15.59	90.09	385.81	-72.38	388.30	357.44	30.86	12.583		
3,600.00	3,599.05	3,572.55	3,553.94	15.83	16.03	90.05	397.03	-75.07	399.59	367.87	31.72	12.597		
3,700.00	3,699.02	3,671.91	3,652.63	16.26	16.47	90.02	408.25	-77.76	410.88	378.29	32.59	12.609		
3,800.00	3,798.98	3,771.27	3,751.32	16.69	16.91	89.99	419.47	-80.45	422.18	388.72	33.45	12.620		
3,900.00	3,898.95	3,870.63	3,850.01	17.12	17.36	89.96	430.70	-83.13	433.47	399.15	34.32	12.630		
4,000.00	3,998.92	3,969.99	3,948.70	17.55	17.80	89.93	441.92	-85.82	444.76	409.57	35.19	12.639		
4,100.00	4,098.89	4,069.35	4,047.38	17.98	18.24	89.91	453.14	-88.51	456.06	420.00	36.06	12.648		
4,200.00	4,198.86	4,168.71	4,146.07	18.42	18.68	89.88	464.36	-91.20	467.35	430.42	36.93	12.656		
4,300.00	4,298.83	4,268.07	4,244.76	18.85	19.12	89.86	475.58	-93.89	478.64	440.85	37.80	12.663		
4,400.00	4,398.80	4,367.43	4,343.45	19.28	19.57	89.84	486.80	-96.57	489.94	451.27	38.67	12.670		
4,500.00	4,498.77	4,466.79	4,442.13	19.72	20.01	89.81	498.02	-99.26	501.23	461.69	39.54	12.677		
4,600.00	4,598.73	4,566.15	4,540.82	20.15	20.45	89.79	509.24	-101.95	512.52	472.11	40.41	12.682		
4,700.00	4,698.70	4,665.51	4,639.51	20.58	20.90	89.77	520.46	-104.64	523.82	482.53	41.28	12.688		
4,800.00	4,798.67	4,764.87	4,738.20	21.02	21.34	89.75	531.68	-107.32	535.11	492.95	42.16	12.693		
4,900.00	4,898.64	4,864.23	4,836.89	21.45	21.78	89.74	542.90	-110.01	546.41	503.37	43.03	12.698		
5,000.00	4,998.61	4,963.59	4,935.57	21.89	22.23	89.72	554.13	-112.70	557.70	513.79	43.91	12.702		
5,100.00	5,098.58	5,062.95	5,034.26	22.32	22.67	89.70	565.35	-115.39	568.99	524.21	44.78	12.706		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16A-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,162.31	5,132.95	22.76	23.12	89.68	576.57	-118.08	580.29	534.63	45.66	12.710		
5,300.00	5,298.52	5,261.67	5,231.64	23.20	23.56	89.67	587.79	-120.76	591.58	545.05	46.53	12.714		
5,400.00	5,398.49	5,361.03	5,330.33	23.63	24.01	89.65	599.01	-123.45	602.88	555.47	47.41	12.717		
5,500.00	5,498.45	5,460.39	5,429.01	24.07	24.46	89.64	610.23	-126.14	614.17	565.89	48.28	12.720		
5,600.00	5,598.42	5,559.75	5,527.70	24.50	24.90	89.63	621.45	-128.83	625.47	576.31	49.16	12.723		
5,700.00	5,698.39	5,659.11	5,626.39	24.94	25.35	89.61	632.67	-131.52	636.76	586.72	50.04	12.726		
5,800.00	5,798.36	5,758.47	5,725.08	25.38	25.79	89.60	643.89	-134.20	648.05	597.14	50.91	12.728		
5,900.00	5,898.33	5,857.83	5,823.76	25.81	26.24	89.59	655.11	-136.89	659.35	607.56	51.79	12.731		
6,000.00	5,998.30	5,957.19	5,922.45	26.25	26.68	89.58	666.33	-139.58	670.64	617.97	52.67	12.733		
6,100.00	6,098.27	6,056.55	6,021.14	26.69	27.13	89.56	677.56	-142.27	681.94	628.39	53.55	12.735		
6,200.00	6,198.24	6,155.91	6,119.83	27.12	27.58	89.55	688.78	-144.95	693.23	638.81	54.43	12.737		
6,300.00	6,298.20	6,255.27	6,218.52	27.56	28.02	89.54	700.00	-147.64	704.53	649.22	55.30	12.739		
6,400.00	6,398.17	6,354.63	6,317.20	28.00	28.47	89.53	711.22	-150.33	715.82	659.64	56.18	12.741		
6,500.00	6,498.14	6,453.69	6,415.24	28.43	28.92	89.11	722.33	-158.16	727.13	670.07	57.06	12.743		
6,600.00	6,597.68	6,550.33	6,508.65	28.88	29.35	88.06	732.81	-180.19	738.66	680.76	57.91	12.755		
6,700.00	6,694.68	6,645.03	6,595.95	29.32	29.76	86.12	742.51	-215.33	750.34	691.60	58.74	12.774		
6,800.00	6,786.74	6,738.06	6,675.77	29.77	30.17	84.26	751.27	-262.16	761.81	702.26	59.55	12.792		
6,900.00	6,871.61	6,829.68	6,746.93	30.24	30.60	82.55	758.97	-319.22	772.74	712.36	60.38	12.797		
7,000.00	6,947.19	6,920.13	6,808.51	30.74	31.09	81.05	765.52	-385.05	782.81	721.52	61.29	12.772		
7,100.00	7,011.62	7,009.64	6,859.72	31.32	31.68	79.77	770.84	-458.18	791.72	729.36	62.35	12.697		
7,200.00	7,063.31	7,098.42	6,899.97	32.03	32.38	78.73	774.87	-537.13	799.21	735.56	63.65	12.557		
7,300.00	7,101.00	7,186.67	6,928.78	32.89	33.21	77.94	777.56	-620.42	805.07	739.84	65.24	12.341		
7,400.00	7,123.74	7,274.57	6,945.85	33.93	34.16	77.42	778.90	-706.56	809.15	742.01	67.14	12.052		
7,500.00	7,131.00	7,362.91	6,950.99	35.10	35.23	77.18	778.87	-794.69	811.32	742.00	69.32	11.703		
7,600.00	7,130.63	7,462.90	6,950.69	36.44	36.59	77.20	778.13	-894.68	812.49	740.50	71.99	11.286		
7,700.00	7,130.26	7,562.89	6,950.39	37.94	38.11	77.22	777.39	-994.67	813.67	738.70	74.96	10.854		
7,800.00	7,129.90	7,662.89	6,950.09	39.59	39.77	77.25	776.65	-1,094.66	814.84	736.61	78.22	10.417		
7,900.00	7,129.53	7,762.88	6,949.79	41.37	41.57	77.27	775.92	-1,194.65	816.01	734.27	81.74	9.983		
8,000.00	7,129.17	7,862.87	6,949.49	43.27	43.47	77.30	775.18	-1,294.64	817.18	731.71	85.48	9.560		
8,100.00	7,128.80	7,962.86	6,949.20	45.27	45.48	77.32	774.44	-1,394.63	818.36	728.95	89.41	9.153		
8,200.00	7,128.43	8,062.86	6,948.90	47.36	47.58	77.34	773.70	-1,494.61	819.53	726.02	93.51	8.764		
8,300.00	7,128.07	8,162.85	6,948.60	49.52	49.75	77.37	772.96	-1,594.60	820.70	722.94	97.77	8.395		
8,400.00	7,127.70	8,262.84	6,948.30	51.75	51.98	77.39	772.23	-1,694.59	821.88	719.73	102.15	8.046		
8,500.00	7,127.33	8,362.83	6,948.00	54.04	54.28	77.41	771.49	-1,794.58	823.05	716.41	106.65	7.718		
8,600.00	7,126.97	8,462.83	6,947.70	56.38	56.62	77.43	770.75	-1,894.57	824.23	712.98	111.24	7.409		
8,700.00	7,126.60	8,562.82	6,947.41	58.77	59.02	77.46	770.01	-1,994.56	825.40	709.47	115.93	7.120		
8,800.00	7,126.24	8,662.81	6,947.11	61.19	61.45	77.48	769.28	-2,094.55	826.57	705.88	120.70	6.848		
8,900.00	7,125.87	8,762.81	6,946.81	63.65	63.91	77.50	768.54	-2,194.54	827.75	702.22	125.53	6.594		
9,000.00	7,125.50	8,862.80	6,946.51	66.15	66.41	77.53	767.80	-2,294.53	828.92	698.49	130.43	6.355		
9,100.00	7,125.14	8,962.79	6,946.21	68.67	68.94	77.55	767.06	-2,394.52	830.10	694.71	135.38	6.131		
9,200.00	7,124.77	9,062.78	6,945.91	71.21	71.49	77.57	766.33	-2,494.51	831.27	690.89	140.39	5.921		
9,300.00	7,124.41	9,162.78	6,945.62	73.78	74.06	77.59	765.59	-2,594.50	832.45	687.01	145.43	5.724		
9,400.00	7,124.04	9,262.77	6,945.32	76.37	76.66	77.62	764.85	-2,694.49	833.62	683.10	150.52	5.538		
9,500.00	7,123.67	9,362.76	6,945.02	78.98	79.27	77.64	764.11	-2,794.48	834.80	679.15	155.65	5.363		
9,600.00	7,123.31	9,462.75	6,944.72	81.60	81.90	77.66	763.37	-2,894.47	835.97	675.17	160.80	5.199		
9,700.00	7,122.94	9,562.75	6,944.42	84.24	84.54	77.68	762.64	-2,994.46	837.15	671.16	165.99	5.043		
9,800.00	7,122.57	9,662.74	6,944.12	86.90	87.20	77.71	761.90	-3,094.45	838.32	667.12	171.21	4.897		
9,900.00	7,122.21	9,762.73	6,943.82	89.56	89.87	77.73	761.16	-3,194.43	839.50	663.05	176.45	4.758		
10,000.00	7,121.84	9,862.72	6,943.53	92.24	92.55	77.75	760.42	-3,294.42	840.67	658.97	181.71	4.627		
10,100.00	7,121.48	9,962.72	6,943.23	94.92	95.24	77.77	759.69	-3,394.41	841.85	654.86	186.99	4.502		
10,200.00	7,121.11	10,062.71	6,942.93	97.62	97.94	77.79	758.95	-3,494.40	843.03	650.73	192.29	4.384		
10,300.00	7,120.74	10,162.70	6,942.63	100.32	100.65	77.82	758.21	-3,594.39	844.20	646.59	197.61	4.272		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	10,262.69	6,942.33	103.04	103.37	77.84	757.47	-3,694.38	845.38	642.43	202.95	4.165		
10,500.00	7,120.01	10,362.69	6,942.03	105.76	106.09	77.86	756.73	-3,794.37	846.55	638.25	208.30	4.064		
10,600.00	7,119.64	10,462.68	6,941.74	108.48	108.82	77.88	756.00	-3,894.36	847.73	634.06	213.67	3.967		
10,700.00	7,119.28	10,562.67	6,941.44	111.22	111.56	77.90	755.26	-3,994.35	848.91	629.86	219.05	3.875		
10,800.00	7,118.91	10,662.66	6,941.14	113.96	114.30	77.93	754.52	-4,094.34	850.08	625.64	224.44	3.788		
10,900.00	7,118.55	10,762.66	6,940.84	116.70	117.05	77.95	753.78	-4,194.33	851.26	621.41	229.85	3.704		
11,000.00	7,118.18	10,862.65	6,940.54	119.45	119.81	77.97	753.05	-4,294.32	852.44	617.18	235.26	3.623		
11,100.00	7,117.81	10,962.64	6,940.24	122.21	122.57	77.99	752.31	-4,394.31	853.62	612.93	240.69	3.547		
11,200.00	7,117.45	11,062.63	6,939.95	124.97	125.33	78.01	751.57	-4,494.30	854.79	608.67	246.12	3.473		
11,300.00	7,117.08	11,162.63	6,939.65	127.73	128.10	78.03	750.83	-4,594.29	855.97	604.41	251.56	3.403		
11,400.00	7,116.72	11,262.62	6,939.35	130.50	130.87	78.05	750.10	-4,694.28	857.15	600.13	257.01	3.335		
11,500.00	7,116.35	11,362.61	6,939.05	133.27	133.64	78.08	749.36	-4,794.26	858.32	595.85	262.47	3.270		
11,600.00	7,115.98	11,462.60	6,938.75	136.04	136.42	78.10	748.62	-4,894.25	859.50	591.56	267.94	3.208		
11,700.00	7,115.62	11,562.60	6,938.45	138.82	139.20	78.12	747.88	-4,994.24	860.68	587.27	273.41	3.148		
11,800.00	7,115.25	11,662.59	6,938.16	141.60	141.99	78.14	747.14	-5,094.23	861.86	582.97	278.89	3.090		
11,900.00	7,114.88	11,762.58	6,937.86	144.39	144.78	78.16	746.41	-5,194.22	863.04	578.66	284.38	3.035		
12,000.00	7,114.52	11,862.57	6,937.56	147.17	147.57	78.18	745.67	-5,294.21	864.21	574.34	289.87	2.981		
12,100.00	7,114.15	11,962.57	6,937.26	149.96	150.36	78.20	744.93	-5,394.20	865.39	570.02	295.37	2.930		
12,200.00	7,113.79	12,062.56	6,936.96	152.75	153.16	78.22	744.19	-5,494.19	866.57	565.70	300.87	2.880		
12,300.00	7,113.42	12,162.55	6,936.66	155.55	155.95	78.24	743.46	-5,594.18	867.75	561.37	306.38	2.832		
12,400.00	7,113.05	12,262.54	6,936.37	158.34	158.75	78.26	742.72	-5,694.17	868.93	557.03	311.89	2.786		
12,500.00	7,112.69	12,362.54	6,936.07	161.14	161.56	78.28	741.98	-5,794.16	870.11	552.69	317.41	2.741		
12,600.00	7,112.32	12,462.53	6,935.77	163.94	164.36	78.31	741.24	-5,894.15	871.29	548.35	322.94	2.698		
12,700.00	7,111.96	12,562.52	6,935.47	166.74	167.16	78.33	740.51	-5,994.14	872.46	544.00	328.46	2.656		
12,800.00	7,111.59	12,662.52	6,935.17	169.54	169.97	78.35	739.77	-6,094.13	873.64	539.65	333.99	2.616		
12,900.00	7,111.22	12,762.51	6,934.87	172.35	172.78	78.37	739.03	-6,194.12	874.82	535.29	339.53	2.577		
13,000.00	7,110.86	12,862.50	6,934.58	175.16	175.59	78.39	738.29	-6,294.11	876.00	530.94	345.07	2.539		
13,100.00	7,110.49	12,962.49	6,934.28	177.96	178.40	78.41	737.55	-6,394.10	877.18	526.57	350.61	2.502		
13,200.00	7,110.12	13,062.49	6,933.98	180.77	181.22	78.43	736.82	-6,494.08	878.36	522.21	356.15	2.466		
13,300.00	7,109.76	13,162.48	6,933.68	183.58	184.03	78.45	736.08	-6,594.07	879.54	517.84	361.70	2.432		
13,400.00	7,109.39	13,262.47	6,933.38	186.40	186.85	78.47	735.34	-6,694.06	880.72	513.46	367.26	2.398		
13,500.00	7,109.03	13,362.46	6,933.08	189.21	189.67	78.49	734.60	-6,794.05	881.90	509.09	372.81	2.366		
13,600.00	7,108.66	13,462.46	6,932.79	192.03	192.48	78.51	733.87	-6,894.04	883.08	504.71	378.37	2.334		
13,700.00	7,108.29	13,562.45	6,932.49	194.84	195.30	78.53	733.13	-6,994.03	884.26	500.33	383.93	2.303		
13,800.00	7,107.93	13,662.44	6,932.19	197.66	198.13	78.55	732.39	-7,094.02	885.44	495.95	389.49	2.273		
13,900.00	7,107.56	13,762.43	6,931.89	200.48	200.95	78.57	731.65	-7,194.01	886.62	491.56	395.06	2.244		
14,000.00	7,107.19	13,862.43	6,931.59	203.30	203.77	78.59	730.92	-7,294.00	887.80	487.17	400.63	2.216		
14,100.00	7,106.83	13,962.42	6,931.29	206.12	206.59	78.61	730.18	-7,393.99	888.98	482.78	406.20	2.189		
14,200.00	7,106.46	14,062.41	6,931.00	208.94	209.42	78.63	729.44	-7,493.98	890.16	478.39	411.77	2.162		
14,300.00	7,106.10	14,162.40	6,930.70	211.76	212.25	78.65	728.70	-7,593.97	891.34	473.99	417.35	2.136		
14,400.00	7,105.73	14,262.40	6,930.40	214.58	215.07	78.67	727.96	-7,693.96	892.52	469.59	422.93	2.110		
14,500.00	7,105.36	14,362.39	6,930.10	217.40	217.90	78.69	727.23	-7,793.95	893.70	465.20	428.51	2.086		
14,600.00	7,105.00	14,462.38	6,929.80	220.23	220.73	78.71	726.49	-7,893.94	894.89	460.79	434.09	2.062		
14,700.00	7,104.63	14,562.37	6,929.50	223.05	223.56	78.73	725.75	-7,993.93	896.07	456.39	439.68	2.038		
14,800.00	7,104.27	14,662.37	6,929.21	225.88	226.39	78.75	725.01	-8,093.91	897.25	451.98	445.26	2.015		
14,872.41	7,104.00	14,732.12	6,929.00	227.93	228.36	78.76	724.50	-8,163.67	898.11	448.87	449.23	1.999 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.00	0.00	3.28	3.28	0.48	100.19	0.83	100.19					
100.00	100.00	100.00	100.00	3.28	3.28	0.48	100.19	0.83	100.19	93.62	6.57	15.251		
200.00	200.00	200.00	200.00	3.34	3.34	0.48	100.19	0.83	100.19	93.52	6.67	15.012		
300.00	300.00	300.00	300.00	3.44	3.44	0.48	100.19	0.83	100.19	93.30	6.89	14.542		
400.00	400.00	400.00	400.00	3.60	3.60	0.48	100.19	0.83	100.19	92.98	7.21	13.903		
500.00	500.00	500.00	500.00	3.81	3.81	0.48	100.19	0.83	100.19	92.58	7.61	13.162 CC		
600.00	599.98	599.98	599.98	4.04	4.05	91.39	100.19	0.83	100.22	92.13	8.09	12.395 ES		
700.00	699.95	696.61	696.59	4.30	4.31	92.58	101.80	0.58	101.96	93.34	8.61	11.836		
800.00	799.92	793.03	792.89	4.59	4.60	93.34	106.61	-0.20	107.03	97.83	9.20	11.634		
900.00	899.89	889.05	888.56	4.90	4.90	93.66	114.57	-1.48	115.38	105.56	9.83	11.743		
1,000.00	999.86	984.45	983.29	5.23	5.23	93.61	125.62	-3.26	126.98	116.50	10.48	12.116		
1,100.00	1,099.83	1,079.67	1,077.44	5.58	5.57	93.28	139.71	-5.53	141.75	130.59	11.15	12.708		
1,200.00	1,199.80	1,178.39	1,174.86	5.94	5.92	92.91	155.47	-8.07	157.69	145.84	11.86	13.301		
1,300.00	1,299.77	1,277.10	1,272.27	6.30	6.29	92.61	171.24	-10.61	173.64	161.06	12.59	13.797		
1,400.00	1,399.73	1,375.82	1,369.69	6.68	6.68	92.36	187.01	-13.15	189.59	176.26	13.33	14.220		
1,500.00	1,499.70	1,474.54	1,467.10	7.07	7.07	92.14	202.77	-15.69	205.55	191.45	14.10	14.581		
1,600.00	1,599.67	1,573.25	1,564.52	7.46	7.47	91.96	218.54	-18.23	221.51	206.63	14.88	14.891		
1,700.00	1,699.64	1,671.97	1,661.93	7.85	7.88	91.80	234.31	-20.77	237.47	221.80	15.67	15.159		
1,800.00	1,799.61	1,770.69	1,759.35	8.25	8.29	91.67	250.07	-23.31	253.43	236.96	16.47	15.392		
1,900.00	1,899.58	1,869.40	1,856.77	8.66	8.71	91.54	265.84	-25.85	269.39	252.12	17.27	15.595		
2,000.00	1,999.55	1,968.12	1,954.18	9.06	9.14	91.44	281.61	-28.39	285.36	267.27	18.09	15.774		
2,100.00	2,099.52	2,066.83	2,051.60	9.47	9.56	91.34	297.37	-30.93	301.32	282.41	18.91	15.931		
2,200.00	2,199.48	2,165.55	2,149.01	9.89	9.99	91.25	313.14	-33.47	317.29	297.54	19.74	16.071		
2,300.00	2,299.45	2,264.27	2,246.43	10.30	10.43	91.18	328.91	-36.01	333.25	312.68	20.58	16.196		
2,400.00	2,399.42	2,362.98	2,343.85	10.72	10.86	91.10	344.67	-38.54	349.22	327.80	21.42	16.307		
2,500.00	2,499.39	2,461.70	2,441.26	11.14	11.30	91.04	360.44	-41.08	365.19	342.93	22.26	16.407		
2,600.00	2,599.36	2,560.42	2,538.68	11.56	11.74	90.98	376.21	-43.62	381.15	358.05	23.10	16.497		
2,700.00	2,699.33	2,659.13	2,636.09	11.98	12.18	90.93	391.98	-46.16	397.12	373.17	23.95	16.579		
2,800.00	2,799.30	2,757.85	2,733.51	12.41	12.62	90.87	407.74	-48.70	413.09	388.28	24.81	16.653		
2,900.00	2,899.27	2,856.56	2,830.93	12.83	13.07	90.83	423.51	-51.24	429.06	403.40	25.66	16.721		
3,000.00	2,999.23	2,955.28	2,928.34	13.26	13.51	90.78	439.28	-53.78	445.03	418.51	26.52	16.782		
3,100.00	3,099.20	3,054.00	3,025.76	13.68	13.96	90.74	455.04	-56.32	461.00	433.62	27.38	16.839		
3,200.00	3,199.17	3,152.71	3,123.17	14.11	14.41	90.71	470.81	-58.86	476.97	448.73	28.24	16.891		
3,300.00	3,299.14	3,251.43	3,220.59	14.54	14.86	90.67	486.58	-61.40	492.93	463.83	29.10	16.939		
3,400.00	3,399.11	3,350.14	3,318.00	14.97	15.30	90.64	502.34	-63.94	508.90	478.94	29.97	16.983		
3,500.00	3,499.08	3,448.86	3,415.42	15.40	15.75	90.61	518.11	-66.48	524.87	494.04	30.83	17.024		
3,600.00	3,599.05	3,547.58	3,512.84	15.83	16.20	90.58	533.88	-69.02	540.84	509.15	31.70	17.062		
3,700.00	3,699.02	3,646.29	3,610.25	16.26	16.66	90.55	549.64	-71.56	556.81	524.25	32.57	17.098		
3,800.00	3,798.98	3,745.01	3,707.67	16.69	17.11	90.52	565.41	-74.10	572.78	539.35	33.44	17.131		
3,900.00	3,898.95	3,843.73	3,805.08	17.12	17.56	90.50	581.18	-76.64	588.75	554.45	34.31	17.161		
4,000.00	3,998.92	3,942.44	3,902.50	17.55	18.01	90.48	596.94	-79.18	604.72	569.55	35.18	17.190		
4,100.00	4,098.89	4,041.16	3,999.92	17.98	18.47	90.46	612.71	-81.72	620.70	584.64	36.05	17.217		
4,200.00	4,198.86	4,139.87	4,097.33	18.42	18.92	90.43	628.48	-84.26	636.67	599.74	36.92	17.242		
4,300.00	4,298.83	4,238.59	4,194.75	18.85	19.37	90.41	644.24	-86.80	652.64	614.84	37.80	17.266		
4,400.00	4,398.80	4,337.31	4,292.16	19.28	19.83	90.40	660.01	-89.34	668.61	629.93	38.67	17.288		
4,500.00	4,498.77	4,436.02	4,389.58	19.72	20.28	90.38	675.78	-91.88	684.58	645.03	39.55	17.309		
4,600.00	4,598.73	4,534.74	4,487.00	20.15	20.74	90.36	691.54	-94.41	700.55	660.12	40.43	17.329		
4,700.00	4,698.70	4,633.46	4,584.41	20.58	21.19	90.34	707.31	-96.95	716.52	675.22	41.30	17.348		
4,800.00	4,798.67	4,732.17	4,681.83	21.02	21.65	90.33	723.08	-99.49	732.49	690.31	42.18	17.366		
4,900.00	4,898.64	4,830.89	4,779.24	21.45	22.10	90.31	738.84	-102.03	748.46	705.40	43.06	17.383		
5,000.00	4,998.61	4,929.60	4,876.66	21.89	22.56	90.30	754.61	-104.57	764.43	720.50	43.94	17.399		
5,100.00	5,098.58	5,028.32	4,974.07	22.32	23.02	90.28	770.38	-107.11	780.40	735.59	44.82	17.414		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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+HFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,127.04	5,071.49	22.76	23.47	90.27	786.14	-109.65	796.37	750.68	45.69	17.428		
5,300.00	5,298.52	5,225.75	5,168.91	23.20	23.93	90.26	801.91	-112.19	812.35	765.77	46.57	17.442		
5,400.00	5,398.49	5,324.47	5,266.32	23.63	24.39	90.25	817.68	-114.73	828.32	780.86	47.45	17.455		
5,500.00	5,498.45	5,423.19	5,363.74	24.07	24.85	90.23	833.44	-117.27	844.29	795.95	48.34	17.467		
5,600.00	5,598.42	5,521.90	5,461.15	24.50	25.30	90.22	849.21	-119.81	860.26	811.04	49.22	17.479		
5,700.00	5,698.39	5,620.62	5,558.57	24.94	25.76	90.21	864.98	-122.35	876.23	826.13	50.10	17.490		
5,800.00	5,798.36	5,719.33	5,655.99	25.38	26.22	90.20	880.74	-124.89	892.20	841.22	50.98	17.501		
5,900.00	5,898.33	5,818.05	5,753.40	25.81	26.68	90.19	896.51	-127.43	908.17	856.31	51.86	17.512		
6,000.00	5,998.30	5,916.77	5,850.82	26.25	27.13	90.18	912.28	-129.97	924.14	871.40	52.74	17.521		
6,100.00	6,098.27	6,015.48	5,948.23	26.69	27.59	90.17	928.04	-132.51	940.12	886.49	53.63	17.531		
6,200.00	6,198.24	6,114.20	6,045.65	27.12	28.05	90.16	943.81	-135.05	956.09	901.58	54.51	17.540		
6,300.00	6,298.20	6,212.92	6,143.07	27.56	28.51	90.15	959.58	-137.59	972.06	916.67	55.39	17.549		
6,400.00	6,398.17	6,311.63	6,240.48	28.00	28.97	90.14	975.34	-140.13	988.03	931.75	56.28	17.557		
6,500.00	6,498.14	6,410.35	6,337.90	28.43	29.43	90.14	991.11	-142.67	1,004.00	946.84	57.16	17.565		
6,600.00	6,597.68	6,508.78	6,435.03	28.88	29.88	90.13	1,006.83	-145.20	1,020.08	962.03	58.05	17.574		
6,700.00	6,694.68	6,605.61	6,530.59	29.32	30.33	89.89	1,022.30	-147.71	1,036.46	977.53	58.94	17.586		
6,800.00	6,786.74	6,714.66	6,637.39	29.77	30.84	90.08	1,039.24	-160.70	1,052.84	992.87	59.96	17.558		
6,900.00	6,871.61	6,830.23	6,746.53	30.24	31.36	90.28	1,055.85	-194.36	1,068.35	1,007.30	61.05	17.499		
7,000.00	6,947.19	6,952.80	6,853.81	30.74	31.88	90.49	1,071.39	-251.18	1,082.42	1,020.23	62.19	17.404		
7,100.00	7,011.62	7,082.42	6,953.45	31.32	32.43	90.67	1,084.84	-332.61	1,094.40	1,030.96	63.44	17.251		
7,200.00	7,063.31	7,218.35	7,038.34	32.03	33.13	90.78	1,095.08	-437.96	1,103.70	1,038.78	64.92	17.002		
7,300.00	7,101.00	7,359.00	7,100.99	32.89	34.16	90.79	1,101.02	-563.42	1,109.78	1,043.00	66.78	16.618		
7,400.00	7,123.74	7,501.89	7,135.35	33.93	35.55	90.67	1,101.92	-701.81	1,112.31	1,043.16	69.15	16.085		
7,500.00	7,131.00	7,628.28	7,140.84	35.10	37.05	90.51	1,098.53	-827.89	1,111.46	1,039.65	71.81	15.479		
7,600.00	7,130.63	7,728.27	7,140.41	36.44	38.40	90.51	1,095.07	-927.82	1,109.95	1,035.46	74.50	14.899		
7,700.00	7,130.26	7,828.25	7,139.97	37.94	39.90	90.51	1,091.61	-1,027.75	1,108.45	1,030.93	77.52	14.300		
7,800.00	7,129.90	7,928.24	7,139.54	39.59	41.55	90.50	1,088.15	-1,127.68	1,106.94	1,026.12	80.83	13.695		
7,900.00	7,129.53	8,028.23	7,139.10	41.37	43.32	90.50	1,084.69	-1,227.60	1,105.44	1,021.05	84.39	13.099		
8,000.00	7,129.17	8,128.22	7,138.67	43.27	45.20	90.50	1,081.23	-1,327.53	1,103.93	1,015.75	88.18	12.519		
8,100.00	7,128.80	8,228.21	7,138.24	45.27	47.18	90.49	1,077.77	-1,427.46	1,102.42	1,010.26	92.17	11.961		
8,200.00	7,128.43	8,328.20	7,137.80	47.36	49.24	90.49	1,074.31	-1,527.39	1,100.92	1,004.59	96.33	11.429		
8,300.00	7,128.07	8,428.19	7,137.37	49.52	51.38	90.49	1,070.85	-1,627.31	1,099.41	998.77	100.64	10.924		
8,400.00	7,127.70	8,528.18	7,136.94	51.75	53.59	90.49	1,067.39	-1,727.24	1,097.91	992.82	105.08	10.448		
8,500.00	7,127.33	8,628.16	7,136.50	54.04	55.85	90.48	1,063.93	-1,827.17	1,096.40	986.76	109.65	10.000		
8,600.00	7,126.97	8,728.15	7,136.07	56.38	58.17	90.48	1,060.47	-1,927.10	1,094.90	980.59	114.31	9.578		
8,700.00	7,126.60	8,828.14	7,135.63	58.77	60.53	90.48	1,057.01	-2,027.03	1,093.39	974.33	119.06	9.183		
8,800.00	7,126.24	8,928.13	7,135.20	61.19	62.93	90.47	1,053.55	-2,126.95	1,091.88	967.99	123.90	8.813		
8,900.00	7,125.87	9,028.12	7,134.77	63.65	65.36	90.47	1,050.09	-2,226.88	1,090.38	961.58	128.80	8.466		
9,000.00	7,125.50	9,128.11	7,134.33	66.15	67.83	90.47	1,046.63	-2,326.81	1,088.87	955.10	133.77	8.140		
9,100.00	7,125.14	9,228.10	7,133.90	68.67	70.33	90.46	1,043.17	-2,426.74	1,087.37	948.57	138.79	7.834		
9,200.00	7,124.77	9,328.08	7,133.47	71.21	72.85	90.46	1,039.71	-2,526.66	1,085.86	941.99	143.87	7.548		
9,300.00	7,124.41	9,428.07	7,133.03	73.78	75.40	90.46	1,036.25	-2,626.59	1,084.35	935.36	148.99	7.278		
9,400.00	7,124.04	9,528.06	7,132.60	76.37	77.97	90.46	1,032.79	-2,726.52	1,082.85	928.70	154.15	7.025		
9,500.00	7,123.67	9,628.05	7,132.16	78.98	80.55	90.45	1,029.33	-2,826.45	1,081.34	921.99	159.35	6.786		
9,600.00	7,123.31	9,728.04	7,131.73	81.60	83.16	90.45	1,025.87	-2,926.38	1,079.84	915.26	164.58	6.561		
9,700.00	7,122.94	9,828.03	7,131.30	84.24	85.78	90.45	1,022.41	-3,026.30	1,078.33	908.49	169.84	6.349		
9,800.00	7,122.57	9,928.02	7,130.86	86.90	88.41	90.44	1,018.95	-3,126.23	1,076.83	901.69	175.13	6.149		
9,900.00	7,122.21	10,028.01	7,130.43	89.56	91.06	90.44	1,015.49	-3,226.16	1,075.32	894.87	180.45	5.959		
10,000.00	7,121.84	10,127.99	7,130.00	92.24	93.71	90.44	1,012.03	-3,326.09	1,073.81	888.03	185.78	5.780		
10,100.00	7,121.48	10,227.98	7,129.56	94.92	96.38	90.44	1,008.58	-3,426.02	1,072.31	881.16	191.14	5.610		
10,200.00	7,121.11	10,327.97	7,129.13	97.62	99.06	90.43	1,005.12	-3,525.94	1,070.80	874.28	196.52	5.449		
10,300.00	7,120.74	10,427.96	7,128.69	100.32	101.75	90.43	1,001.66	-3,625.87	1,069.30	867.38	201.92	5.296		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	10,527.95	7,128.26	103.04	104.45	90.43	998.20	-3,725.80	1,067.79	860.46	207.33	5.150		
10,500.00	7,120.01	10,627.94	7,127.83	105.76	107.15	90.42	994.74	-3,825.73	1,066.28	853.53	212.76	5.012		
10,600.00	7,119.64	10,727.93	7,127.39	108.48	109.86	90.42	991.28	-3,925.65	1,064.78	846.58	218.20	4.880		
10,700.00	7,119.28	10,827.91	7,126.96	111.22	112.58	90.42	987.82	-4,025.58	1,063.27	839.62	223.65	4.754		
10,800.00	7,118.91	10,927.90	7,126.53	113.96	115.31	90.41	984.36	-4,125.51	1,061.77	832.65	229.12	4.634		
10,900.00	7,118.55	11,027.89	7,126.09	116.70	118.04	90.41	980.90	-4,225.44	1,060.26	825.66	234.60	4.520		
11,000.00	7,118.18	11,127.88	7,125.66	119.45	120.77	90.41	977.44	-4,325.37	1,058.76	818.67	240.09	4.410		
11,100.00	7,117.81	11,227.87	7,125.22	122.21	123.51	90.40	973.98	-4,425.29	1,057.25	811.67	245.58	4.305		
11,200.00	7,117.45	11,327.86	7,124.79	124.97	126.26	90.40	970.52	-4,525.22	1,055.74	804.65	251.09	4.205		
11,300.00	7,117.08	11,427.85	7,124.36	127.73	129.01	90.40	967.06	-4,625.15	1,054.24	797.63	256.61	4.108		
11,400.00	7,116.72	11,527.83	7,123.92	130.50	131.76	90.40	963.60	-4,725.08	1,052.73	790.60	262.13	4.016		
11,500.00	7,116.35	11,627.82	7,123.49	133.27	134.52	90.39	960.14	-4,825.00	1,051.23	783.57	267.66	3.927		
11,600.00	7,115.98	11,727.81	7,123.06	136.04	137.28	90.39	956.68	-4,924.93	1,049.72	776.52	273.20	3.842		
11,700.00	7,115.62	11,827.80	7,122.62	138.82	140.05	90.39	953.22	-5,024.86	1,048.22	769.47	278.74	3.761		
11,800.00	7,115.25	11,927.79	7,122.19	141.60	142.82	90.38	949.76	-5,124.79	1,046.71	762.42	284.29	3.682		
11,900.00	7,114.88	12,027.78	7,121.75	144.39	145.59	90.38	946.30	-5,224.72	1,045.20	755.35	289.85	3.606		
12,000.00	7,114.52	12,127.77	7,121.32	147.17	148.37	90.38	942.84	-5,324.64	1,043.70	748.29	295.41	3.533		
12,100.00	7,114.15	12,227.76	7,120.89	149.96	151.14	90.37	939.38	-5,424.57	1,042.19	741.21	300.98	3.463		
12,200.00	7,113.79	12,327.74	7,120.45	152.75	153.92	90.37	935.92	-5,524.50	1,040.69	734.13	306.55	3.395		
12,300.00	7,113.42	12,427.73	7,120.02	155.55	156.71	90.37	932.46	-5,624.43	1,039.18	727.05	312.13	3.329		
12,400.00	7,113.05	12,527.72	7,119.59	158.34	159.49	90.36	929.00	-5,724.36	1,037.68	719.96	317.71	3.266		
12,500.00	7,112.69	12,627.71	7,119.15	161.14	162.28	90.36	925.54	-5,824.28	1,036.17	712.87	323.30	3.205		
12,600.00	7,112.32	12,727.70	7,118.72	163.94	165.07	90.36	922.08	-5,924.21	1,034.66	705.78	328.89	3.146		
12,700.00	7,111.96	12,827.69	7,118.29	166.74	167.86	90.35	918.62	-6,024.14	1,033.16	698.68	334.48	3.089		
12,800.00	7,111.59	12,927.68	7,117.85	169.54	170.65	90.35	915.16	-6,124.07	1,031.65	691.57	340.08	3.034		
12,900.00	7,111.22	13,027.66	7,117.42	172.35	173.45	90.35	911.70	-6,223.99	1,030.15	684.47	345.68	2.980		
13,000.00	7,110.86	13,127.65	7,116.98	175.16	176.24	90.34	908.24	-6,323.92	1,028.64	677.36	351.28	2.928		
13,100.00	7,110.49	13,227.64	7,116.55	177.96	179.04	90.34	904.78	-6,423.85	1,027.14	670.24	356.89	2.878		
13,200.00	7,110.12	13,327.63	7,116.12	180.77	181.84	90.34	901.32	-6,523.78	1,025.63	663.13	362.50	2.829		
13,300.00	7,109.76	13,427.62	7,115.68	183.58	184.64	90.33	897.86	-6,623.71	1,024.12	656.01	368.11	2.782		
13,400.00	7,109.39	13,527.61	7,115.25	186.40	187.44	90.33	894.40	-6,723.63	1,022.62	648.89	373.73	2.736		
13,500.00	7,109.03	13,627.60	7,114.82	189.21	190.25	90.33	890.94	-6,823.56	1,021.11	641.76	379.35	2.692		
13,600.00	7,108.66	13,727.59	7,114.38	192.03	193.05	90.32	887.48	-6,923.49	1,019.61	634.64	384.97	2.649		
13,700.00	7,108.29	13,827.57	7,113.95	194.84	195.86	90.32	884.02	-7,023.42	1,018.10	627.51	390.59	2.607		
13,800.00	7,107.93	13,927.56	7,113.51	197.66	198.67	90.32	880.56	-7,123.34	1,016.60	620.38	396.22	2.566		
13,900.00	7,107.56	14,027.55	7,113.08	200.48	201.48	90.31	877.10	-7,223.27	1,015.09	613.24	401.85	2.526		
14,000.00	7,107.19	14,127.54	7,112.65	203.30	204.29	90.31	873.64	-7,323.20	1,013.58	606.11	407.47	2.487		
14,100.00	7,106.83	14,227.53	7,112.21	206.12	207.10	90.31	870.18	-7,423.13	1,012.08	598.97	413.11	2.450		
14,200.00	7,106.46	14,327.52	7,111.78	208.94	209.91	90.30	866.72	-7,523.06	1,010.57	591.83	418.74	2.413		
14,300.00	7,106.10	14,427.51	7,111.35	211.76	212.72	90.30	863.26	-7,622.98	1,009.07	584.69	424.38	2.378		
14,400.00	7,105.73	14,527.49	7,110.91	214.58	215.54	90.30	859.80	-7,722.91	1,007.56	577.55	430.01	2.343		
14,500.00	7,105.36	14,627.48	7,110.48	217.40	218.35	90.29	856.34	-7,822.84	1,006.06	570.40	435.65	2.309		
14,600.00	7,105.00	14,727.47	7,110.04	220.23	221.17	90.29	852.88	-7,922.77	1,004.55	563.26	441.29	2.276		
14,700.00	7,104.63	14,827.46	7,109.61	223.05	223.98	90.29	849.42	-8,022.70	1,003.04	556.11	446.93	2.244		
14,800.00	7,104.27	14,927.45	7,109.18	225.88	226.80	90.28	845.96	-8,122.62	1,001.54	548.96	452.58	2.213		
14,856.79	7,104.06	14,969.16	7,109.00	227.48	227.97	90.28	844.51	-8,164.31	1,000.80	545.37	455.43	2.197		
14,872.41	7,104.00	14,969.16	7,109.00	227.93	227.97	90.28	844.51	-8,164.31	1,000.92	545.09	455.83	2.196 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.00	0.00	3.28	3.28	180.00	-20.03	0.00	20.03					
100.00	100.00	100.00	100.00	3.28	3.28	180.00	-20.03	0.00	20.03	13.46	6.57	3.049		
200.00	200.00	200.00	200.00	3.34	3.34	180.00	-20.03	0.00	20.03	13.36	6.67	3.002		
300.00	300.00	300.00	300.00	3.44	3.44	180.00	-20.03	0.00	20.03	13.14	6.89	2.908		
400.00	400.00	400.00	400.00	3.60	3.60	180.00	-20.03	0.00	20.03	12.83	7.21	2.780 CC		
500.00	500.00	499.41	499.39	3.81	3.80	-177.15	-21.39	-1.07	21.42	13.82	7.61	2.816		
600.00	599.98	600.74	599.16	4.04	4.02	-85.49	-24.50	-3.52	24.59	16.52	8.07	3.048		
700.00	699.95	700.79	699.03	4.30	4.28	-86.03	-27.66	-6.00	27.74	19.15	8.59	3.230		
800.00	799.92	800.84	798.90	4.59	4.57	-86.47	-30.81	-8.48	30.88	21.72	9.16	3.371		
900.00	899.89	900.89	898.77	4.90	4.88	-86.82	-33.96	-10.96	34.03	24.25	9.78	3.479		
1,000.00	999.86	1,000.94	998.64	5.23	5.21	-87.11	-37.11	-13.44	37.18	26.74	10.44	3.561		
1,100.00	1,099.83	1,100.99	1,098.51	5.58	5.55	-87.36	-40.26	-15.92	40.33	29.20	11.13	3.624		
1,200.00	1,199.80	1,201.04	1,198.38	5.94	5.91	-87.57	-43.42	-18.40	43.48	31.63	11.84	3.671		
1,300.00	1,299.77	1,301.09	1,298.25	6.30	6.28	-87.76	-46.57	-20.88	46.63	34.05	12.58	3.707		
1,400.00	1,399.73	1,401.14	1,398.12	6.68	6.66	-87.92	-49.72	-23.36	49.78	36.45	13.33	3.734		
1,500.00	1,499.70	1,501.19	1,497.99	7.07	7.05	-88.06	-52.87	-25.84	52.93	38.83	14.10	3.754		
1,600.00	1,599.67	1,601.24	1,597.86	7.46	7.44	-88.18	-56.03	-28.32	56.08	41.20	14.88	3.769		
1,700.00	1,699.64	1,701.29	1,697.73	7.85	7.84	-88.29	-59.18	-30.80	59.23	43.56	15.67	3.780		
1,800.00	1,799.61	1,801.34	1,797.60	8.25	8.24	-88.40	-62.33	-33.28	62.39	45.92	16.47	3.788		
1,900.00	1,899.58	1,901.39	1,897.47	8.66	8.65	-88.49	-65.48	-35.77	65.54	48.26	17.28	3.793		
2,000.00	1,999.55	2,001.43	1,997.34	9.06	9.06	-88.57	-68.63	-38.25	68.69	50.60	18.09	3.797		
2,100.00	2,099.52	2,101.48	2,097.21	9.47	9.47	-88.64	-71.79	-40.73	71.84	52.93	18.91	3.799		
2,200.00	2,199.48	2,201.53	2,197.08	9.89	9.88	-88.71	-74.94	-43.21	75.00	55.26	19.74	3.800		
2,300.00	2,299.45	2,301.58	2,296.95	10.30	10.30	-88.78	-78.09	-45.69	78.15	57.58	20.57	3.800		
2,400.00	2,399.42	2,401.63	2,396.82	10.72	10.72	-88.84	-81.24	-48.17	81.30	59.90	21.40	3.799		
2,500.00	2,499.39	2,501.68	2,496.69	11.14	11.14	-88.89	-84.40	-50.65	84.45	62.21	22.24	3.797		
2,600.00	2,599.36	2,601.73	2,596.56	11.56	11.57	-88.94	-87.55	-53.13	87.61	64.53	23.08	3.796		
2,700.00	2,699.33	2,701.78	2,696.43	11.98	11.99	-88.99	-90.70	-55.61	90.76	66.83	23.92	3.794		
2,800.00	2,799.30	2,801.83	2,796.30	12.41	12.42	-89.03	-93.85	-58.09	93.91	69.14	24.77	3.791		
2,900.00	2,899.27	2,901.88	2,896.17	12.83	12.85	-89.07	-97.00	-60.57	97.07	71.45	25.62	3.789		
3,000.00	2,999.23	3,001.93	2,996.04	13.26	13.27	-89.11	-100.16	-63.05	100.22	73.75	26.47	3.786		
3,100.00	3,099.20	3,101.98	3,095.91	13.68	13.70	-89.14	-103.31	-65.53	103.37	76.05	27.32	3.783		
3,200.00	3,199.17	3,202.03	3,195.78	14.11	14.13	-89.18	-106.46	-68.01	106.53	78.35	28.18	3.780		
3,300.00	3,299.14	3,302.08	3,295.65	14.54	14.56	-89.21	-109.61	-70.49	109.68	80.64	29.03	3.778		
3,400.00	3,399.11	3,402.13	3,395.52	14.97	15.00	-89.24	-112.77	-72.97	112.83	82.94	29.89	3.775		
3,500.00	3,499.08	3,502.18	3,495.39	15.40	15.43	-89.27	-115.92	-75.45	115.99	85.24	30.75	3.772		
3,600.00	3,599.05	3,602.23	3,595.25	15.83	15.86	-89.30	-119.07	-77.93	119.14	87.53	31.61	3.769		
3,700.00	3,699.02	3,702.28	3,695.12	16.26	16.29	-89.32	-122.22	-80.42	122.29	89.82	32.47	3.766		
3,800.00	3,798.98	3,802.33	3,794.99	16.69	16.73	-89.35	-125.37	-82.90	125.45	92.11	33.33	3.763		
3,900.00	3,898.95	3,902.38	3,894.86	17.12	17.16	-89.37	-128.53	-85.38	128.60	94.40	34.20	3.761		
4,000.00	3,998.92	4,002.43	3,994.73	17.55	17.60	-89.39	-131.68	-87.86	131.75	96.69	35.06	3.758		
4,100.00	4,098.89	4,097.52	4,094.60	17.98	18.01	-89.41	-134.83	-90.34	134.91	99.00	35.90	3.757		
4,200.00	4,198.86	4,202.53	4,194.47	18.42	18.47	-89.43	-137.98	-92.82	138.06	101.27	36.79	3.753		
4,300.00	4,298.83	4,302.58	4,294.34	18.85	18.91	-89.45	-141.14	-95.30	141.21	103.56	37.66	3.750		
4,400.00	4,398.80	4,402.63	4,394.21	19.28	19.34	-89.47	-144.29	-97.78	144.37	105.84	38.52	3.747		
4,500.00	4,498.77	4,502.68	4,494.08	19.72	19.78	-89.49	-147.44	-100.26	147.52	108.13	39.39	3.745		
4,600.00	4,598.73	4,602.73	4,593.95	20.15	20.22	-89.50	-150.59	-102.74	150.67	110.41	40.26	3.743		
4,700.00	4,698.70	4,702.78	4,693.82	20.58	20.65	-89.52	-153.74	-105.22	153.83	112.70	41.13	3.740		
4,800.00	4,798.67	4,802.83	4,793.69	21.02	21.09	-89.53	-156.90	-107.70	156.98	114.98	42.00	3.738		
4,900.00	4,898.64	4,902.88	4,893.56	21.45	21.53	-89.55	-160.05	-110.18	160.13	117.27	42.87	3.736		
5,000.00	4,998.61	5,002.93	4,993.43	21.89	21.97	-89.56	-163.20	-112.66	163.29	119.55	43.74	3.733		
5,100.00	5,098.58	5,102.98	5,093.30	22.32	22.40	-89.58	-166.35	-115.14	166.44	121.83	44.61	3.731		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16B-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,203.03	5,193.17	22.76	22.84	-89.59	-169.51	-117.62	169.59	124.12	45.48	3.729		
5,300.00	5,298.52	5,303.08	5,293.04	23.20	23.28	-89.60	-172.66	-120.10	172.75	126.40	46.35	3.727		
5,400.00	5,398.49	5,403.13	5,392.91	23.63	23.72	-89.61	-175.81	-122.58	175.90	128.68	47.22	3.725		
5,500.00	5,498.45	5,498.82	5,492.78	24.07	24.13	-89.63	-178.96	-125.07	179.06	130.99	48.06	3.725		
5,600.00	5,598.42	5,603.23	5,592.65	24.50	24.60	-89.64	-182.11	-127.55	182.21	133.25	48.96	3.721		
5,700.00	5,698.39	5,703.28	5,692.52	24.94	25.04	-89.65	-185.27	-130.03	185.36	135.53	49.84	3.719		
5,800.00	5,798.36	5,803.33	5,792.39	25.38	25.48	-89.66	-188.42	-132.51	188.52	137.81	50.71	3.718		
5,900.00	5,898.33	5,903.38	5,892.26	25.81	25.92	-89.67	-191.57	-134.99	191.67	140.09	51.58	3.716		
6,000.00	5,998.30	6,003.42	5,992.13	26.25	26.35	-89.68	-194.72	-137.47	194.82	142.37	52.46	3.714		
6,100.00	6,098.27	6,103.47	6,092.00	26.69	26.79	-89.69	-197.88	-139.95	197.98	144.65	53.33	3.712		
6,200.00	6,198.24	6,203.52	6,191.87	27.12	27.23	-89.70	-201.03	-142.43	201.13	146.93	54.20	3.711		
6,300.00	6,298.20	6,303.57	6,291.74	27.56	27.67	-89.71	-204.18	-144.91	204.28	149.21	55.08	3.709		
6,400.00	6,398.17	6,403.62	6,391.61	28.00	28.11	-89.72	-207.33	-147.39	207.44	151.49	55.95	3.708		
6,500.00	6,498.14	6,498.05	6,491.10	28.43	28.52	-89.18	-210.48	-151.87	210.62	153.83	56.79	3.709		
6,600.00	6,597.68	6,594.17	6,587.46	28.88	28.95	-85.45	-213.62	-169.56	214.08	156.46	57.62	3.715		
6,700.00	6,694.68	6,690.89	6,678.68	29.32	29.37	-82.72	-216.68	-201.28	217.64	159.23	58.41	3.726		
6,800.00	6,786.74	6,786.37	6,763.00	29.77	29.77	-80.31	-219.60	-245.78	221.12	162.00	59.12	3.740		
6,900.00	6,871.61	6,880.73	6,838.88	30.24	30.17	-78.19	-222.33	-301.66	224.36	164.60	59.76	3.755		
7,000.00	6,947.19	6,974.14	6,905.05	30.74	30.62	-76.39	-224.81	-367.43	227.19	166.81	60.37	3.763		
7,100.00	7,011.62	7,066.75	6,960.47	31.32	31.16	-74.91	-227.00	-441.49	229.46	168.39	61.07	3.757		
7,200.00	7,063.31	7,158.71	7,004.30	32.03	31.82	-73.76	-228.87	-522.22	231.05	169.08	61.97	3.728		
7,300.00	7,101.00	7,250.19	7,035.93	32.89	32.63	-72.95	-230.39	-607.96	231.87	168.67	63.19	3.669		
7,400.00	7,123.74	7,341.35	7,054.91	33.93	33.59	-72.48	-231.53	-697.04	231.84	167.01	64.83	3.576		
7,500.00	7,131.00	7,432.37	7,061.00	35.10	34.67	-72.36	-232.28	-787.77	230.94	164.06	66.88	3.453		
7,600.00	7,130.63	7,532.36	7,060.56	36.44	36.03	-72.24	-232.88	-887.76	229.66	160.23	69.43	3.308		
7,700.00	7,130.26	7,632.35	7,060.13	37.94	37.55	-72.12	-233.48	-987.74	228.39	156.10	72.29	3.159		
7,800.00	7,129.90	7,732.34	7,059.69	39.59	39.21	-72.00	-234.08	-1,087.73	227.12	151.69	75.43	3.011		
7,900.00	7,129.53	7,832.33	7,059.26	41.37	41.01	-71.87	-234.68	-1,187.72	225.85	147.04	78.81	2.866		
8,000.00	7,129.17	7,932.32	7,058.83	43.27	42.92	-71.75	-235.27	-1,287.71	224.59	142.18	82.41	2.725		
8,100.00	7,128.80	8,032.31	7,058.39	45.27	44.94	-71.62	-235.87	-1,387.70	223.32	137.13	86.19	2.591		
8,200.00	7,128.43	8,132.30	7,057.96	47.36	47.04	-71.50	-236.47	-1,487.68	222.05	131.92	90.14	2.464		
8,300.00	7,128.07	8,232.29	7,057.52	49.52	49.22	-71.37	-237.07	-1,587.67	220.79	126.57	94.22	2.343		
8,400.00	7,127.70	8,332.28	7,057.09	51.75	51.47	-71.24	-237.67	-1,687.66	219.53	121.11	98.42	2.230		
8,500.00	7,127.33	8,432.27	7,056.66	54.04	53.77	-71.11	-238.27	-1,787.65	218.26	115.54	102.73	2.125		
8,600.00	7,126.97	8,532.26	7,056.22	56.38	56.13	-70.97	-238.87	-1,887.64	217.00	109.88	107.12	2.026		
8,700.00	7,126.60	8,632.26	7,055.79	58.77	58.53	-70.84	-239.46	-1,987.62	215.74	104.15	111.60	1.933		
8,800.00	7,126.24	8,732.25	7,055.35	61.19	60.96	-70.70	-240.06	-2,087.61	214.48	98.35	116.14	1.847		
8,900.00	7,125.87	8,832.24	7,054.92	63.65	63.44	-70.57	-240.66	-2,187.60	213.23	92.49	120.73	1.766		
9,000.00	7,125.50	8,932.23	7,054.49	66.15	65.95	-70.43	-241.26	-2,287.59	211.97	86.59	125.38	1.691		
9,100.00	7,125.14	9,032.22	7,054.05	68.67	68.48	-70.29	-241.86	-2,387.58	210.71	80.64	130.08	1.620		
9,200.00	7,124.77	9,132.21	7,053.62	71.21	71.04	-70.14	-242.46	-2,487.56	209.46	74.65	134.81	1.554		
9,300.00	7,124.41	9,232.20	7,053.18	73.78	73.62	-70.00	-243.06	-2,587.55	208.21	68.64	139.57	1.492 Level 3		
9,400.00	7,124.04	9,332.19	7,052.75	76.37	76.22	-69.85	-243.66	-2,687.54	206.96	62.60	144.36	1.434 Level 3		
9,500.00	7,123.67	9,432.18	7,052.32	78.98	78.84	-69.70	-244.25	-2,787.53	205.71	56.53	149.18	1.379 Level 3		
9,600.00	7,123.31	9,532.17	7,051.88	81.60	81.47	-69.55	-244.85	-2,887.52	204.46	50.45	154.01	1.328 Level 3		
9,700.00	7,122.94	9,632.16	7,051.45	84.24	84.12	-69.40	-245.45	-2,987.51	203.21	44.35	158.86	1.279 Level 3		
9,800.00	7,122.57	9,732.15	7,051.01	86.90	86.78	-69.25	-246.05	-3,087.49	201.97	38.24	163.73	1.234 Level 2		
9,900.00	7,122.21	9,832.14	7,050.58	89.56	89.45	-69.09	-246.65	-3,187.48	200.72	32.12	168.60	1.191 Level 2		
10,000.00	7,121.84	9,932.14	7,050.15	92.24	92.14	-68.94	-247.25	-3,287.47	199.48	25.99	173.49	1.150 Level 2		
10,100.00	7,121.48	10,032.13	7,049.71	94.92	94.84	-68.78	-247.85	-3,387.46	198.24	19.86	178.38	1.111 Level 2		
10,200.00	7,121.11	10,132.12	7,049.28	97.62	97.54	-68.62	-248.45	-3,487.45	197.00	13.72	183.28	1.075 Level 2		
10,300.00	7,120.74	10,232.11	7,048.84	100.32	100.25	-68.45	-249.04	-3,587.43	195.76	7.59	188.17	1.040 Level 2		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	10,332.10	7,048.41	103.04	102.98	-68.29	-249.64	-3,687.42	194.52	1.45	193.08	1.008	Level 2	
10,500.00	7,120.01	10,432.09	7,047.98	105.76	105.70	-68.12	-250.24	-3,787.41	193.29	-4.68	197.97	0.976	Level 1	
10,600.00	7,119.64	10,532.08	7,047.54	108.48	108.44	-67.95	-250.84	-3,887.40	192.06	-10.82	202.87	0.947	Level 1	
10,700.00	7,119.28	10,632.07	7,047.11	111.22	111.18	-67.78	-251.44	-3,987.39	190.83	-16.94	207.77	0.918	Level 1	
10,800.00	7,118.91	10,732.06	7,046.67	113.96	113.93	-67.60	-252.04	-4,087.37	189.60	-23.06	212.66	0.892	Level 1	
10,900.00	7,118.55	10,832.05	7,046.24	116.70	116.68	-67.43	-252.64	-4,187.36	188.37	-29.17	217.54	0.866	Level 1	
11,000.00	7,118.18	10,932.04	7,045.81	119.45	119.44	-67.25	-253.24	-4,287.35	187.14	-35.27	222.42	0.841	Level 1	
11,100.00	7,117.81	11,032.03	7,045.37	122.21	122.20	-67.07	-253.83	-4,387.34	185.92	-41.37	227.28	0.818	Level 1	
11,200.00	7,117.45	11,132.02	7,044.94	124.97	124.97	-66.89	-254.43	-4,487.33	184.70	-47.45	232.14	0.796	Level 1	
11,300.00	7,117.08	11,232.02	7,044.51	127.73	127.74	-66.70	-255.03	-4,587.31	183.48	-53.52	236.99	0.774	Level 1	
11,400.00	7,116.72	11,332.01	7,044.07	130.50	130.51	-66.51	-255.63	-4,687.30	182.26	-59.57	241.83	0.754	Level 1	
11,500.00	7,116.35	11,432.00	7,043.64	133.27	133.29	-66.32	-256.23	-4,787.29	181.04	-65.61	246.65	0.734	Level 1	
11,600.00	7,115.98	11,531.99	7,043.20	136.04	136.07	-66.13	-256.83	-4,887.28	179.83	-71.64	251.46	0.715	Level 1	
11,700.00	7,115.62	11,631.98	7,042.77	138.82	138.85	-65.93	-257.43	-4,987.27	178.61	-77.64	256.26	0.697	Level 1	
11,800.00	7,115.25	11,731.97	7,042.34	141.60	141.64	-65.73	-258.02	-5,087.25	177.40	-83.63	261.04	0.680	Level 1	
11,900.00	7,114.88	11,831.96	7,041.90	144.39	144.43	-65.53	-258.62	-5,187.24	176.20	-89.61	265.80	0.663	Level 1	
12,000.00	7,114.52	11,931.95	7,041.47	147.17	147.23	-65.33	-259.22	-5,287.23	174.99	-95.56	270.55	0.647	Level 1	
12,100.00	7,114.15	12,031.94	7,041.03	149.96	150.02	-65.12	-259.82	-5,387.22	173.79	-101.49	275.28	0.631	Level 1	
12,200.00	7,113.79	12,131.93	7,040.60	152.75	152.82	-64.91	-260.42	-5,487.21	172.58	-107.40	279.99	0.616	Level 1	
12,300.00	7,113.42	12,231.92	7,040.17	155.55	155.62	-64.70	-261.02	-5,587.19	171.39	-113.29	284.67	0.602	Level 1	
12,400.00	7,113.05	12,331.91	7,039.73	158.34	158.42	-64.48	-261.62	-5,687.18	170.19	-119.15	289.34	0.588	Level 1	
12,500.00	7,112.69	12,431.90	7,039.30	161.14	161.22	-64.26	-262.22	-5,787.17	169.00	-124.99	293.98	0.575	Level 1	
12,600.00	7,112.32	12,531.90	7,038.86	163.94	164.03	-64.04	-262.81	-5,887.16	167.80	-130.80	298.61	0.562	Level 1	
12,700.00	7,111.96	12,631.89	7,038.43	166.74	166.84	-63.81	-263.41	-5,987.15	166.61	-136.59	303.20	0.550	Level 1	
12,800.00	7,111.59	12,731.88	7,038.00	169.54	169.65	-63.59	-264.01	-6,087.13	165.43	-142.35	307.77	0.537	Level 1	
12,900.00	7,111.22	12,831.87	7,037.56	172.35	172.46	-63.35	-264.61	-6,187.12	164.24	-148.07	312.32	0.526	Level 1	
13,000.00	7,110.86	12,931.86	7,037.13	175.16	175.27	-63.12	-265.21	-6,287.11	163.06	-153.77	316.84	0.515	Level 1	
13,100.00	7,110.49	13,031.85	7,036.69	177.96	178.08	-62.88	-265.81	-6,387.10	161.89	-159.44	321.33	0.504	Level 1	
13,200.00	7,110.12	13,131.84	7,036.26	180.77	180.90	-62.64	-266.41	-6,487.09	160.71	-165.07	325.78	0.493	Level 1	
13,300.00	7,109.76	13,231.83	7,035.83	183.58	183.72	-62.39	-267.01	-6,587.07	159.54	-170.67	330.21	0.483	Level 1	
13,400.00	7,109.39	13,331.82	7,035.39	186.40	186.53	-62.14	-267.60	-6,687.06	158.37	-176.24	334.61	0.473	Level 1	
13,500.00	7,109.03	13,431.81	7,034.96	189.21	189.35	-61.89	-268.20	-6,787.05	157.20	-181.77	338.97	0.464	Level 1	
13,600.00	7,108.66	13,531.80	7,034.52	192.03	192.17	-61.63	-268.80	-6,887.04	156.04	-187.26	343.30	0.455	Level 1	
13,700.00	7,108.29	13,631.79	7,034.09	194.84	194.99	-61.37	-269.40	-6,987.03	154.88	-192.71	347.59	0.446	Level 1	
13,800.00	7,107.93	13,731.78	7,033.66	197.66	197.82	-61.11	-270.00	-7,087.01	153.72	-198.13	351.85	0.437	Level 1	
13,900.00	7,107.56	13,831.78	7,033.22	200.48	200.64	-60.84	-270.60	-7,187.00	152.57	-203.50	356.07	0.428	Level 1	
14,000.00	7,107.19	13,931.77	7,032.79	203.30	203.46	-60.57	-271.20	-7,286.99	151.42	-208.83	360.24	0.420	Level 1	
14,100.00	7,106.83	14,031.76	7,032.35	206.12	206.29	-60.29	-271.79	-7,386.98	150.27	-214.11	364.38	0.412	Level 1	
14,200.00	7,106.46	14,131.75	7,031.92	208.94	209.12	-60.01	-272.39	-7,486.97	149.13	-219.35	368.47	0.405	Level 1	
14,300.00	7,106.10	14,231.74	7,031.49	211.76	211.94	-59.72	-272.99	-7,586.95	147.99	-224.53	372.52	0.397	Level 1	
14,400.00	7,105.73	14,331.73	7,031.05	214.58	214.77	-59.44	-273.59	-7,686.94	146.85	-229.68	376.53	0.390	Level 1	
14,500.00	7,105.36	14,431.72	7,030.62	217.40	217.60	-59.14	-274.19	-7,786.93	145.72	-234.76	380.49	0.383	Level 1	
14,600.00	7,105.00	14,531.71	7,030.18	220.23	220.43	-58.84	-274.79	-7,886.92	144.59	-239.80	384.39	0.376	Level 1	
14,700.00	7,104.63	14,631.70	7,029.75	223.05	223.26	-58.54	-275.39	-7,986.91	143.47	-244.78	388.25	0.370	Level 1	
14,800.00	7,104.27	14,731.69	7,029.32	225.88	226.09	-58.23	-275.99	-8,086.90	142.35	-249.71	392.06	0.363	Level 1	
14,872.41	7,104.00	14,804.10	7,029.00	227.93	228.14	-58.00	-276.42	-8,159.30	141.54	-253.24	394.78	0.359	Level 1, ES, SF	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	61.00	3.28	3.28	-115.42	-4,275.67	-8,994.87	9,959.56					
100.00	100.00	39.00	100.00	3.28	3.35	-115.42	-4,275.67	-8,994.87	9,959.37	9,952.73	6.63	1,501.121		
200.00	200.00	139.00	200.00	3.34	4.52	-115.42	-4,275.67	-8,994.87	9,959.37	9,951.51	7.85	1,267.907		
300.00	300.00	239.00	300.00	3.44	7.37	-115.42	-4,275.67	-8,994.87	9,959.37	9,948.56	10.81	921.037		
400.00	400.00	339.00	400.00	3.60	10.61	-115.42	-4,275.67	-8,994.87	9,959.37	9,945.16	14.21	700.766		
500.00	500.00	439.00	500.00	3.81	13.97	-115.42	-4,275.67	-8,994.87	9,959.37	9,941.59	17.78	560.255		
600.00	599.98	538.98	599.98	4.04	17.38	-25.43	-4,275.67	-8,994.87	9,957.92	9,936.50	21.42	464.841		
700.00	699.95	638.95	699.95	4.30	20.82	-25.44	-4,275.67	-8,994.87	9,955.66	9,930.54	25.12	396.309		
800.00	799.92	738.92	799.92	4.59	24.27	-25.45	-4,275.67	-8,994.87	9,953.41	9,924.55	28.86	344.865		
900.00	899.89	838.89	899.89	4.90	27.73	-25.45	-4,275.67	-8,994.87	9,951.15	9,918.52	32.63	304.929		
1,000.00	999.86	938.86	999.86	5.23	31.20	-25.46	-4,275.67	-8,994.87	9,948.89	9,912.46	36.43	273.085		
1,100.00	1,099.83	1,038.83	1,099.83	5.58	34.68	-25.47	-4,275.67	-8,994.87	9,946.64	9,906.39	40.25	247.132		
1,200.00	1,199.80	1,138.80	1,199.80	5.94	38.15	-25.47	-4,275.67	-8,994.87	9,944.38	9,900.30	44.08	225.595		
1,300.00	1,299.77	1,238.77	1,299.77	6.30	41.63	-25.48	-4,275.67	-8,994.87	9,942.13	9,894.20	47.93	207.448		
1,400.00	1,399.73	1,338.73	1,399.73	6.68	45.11	-25.48	-4,275.67	-8,994.87	9,939.87	9,888.09	51.78	191.958		
1,500.00	1,499.70	1,438.70	1,499.70	7.07	48.59	-25.49	-4,275.67	-8,994.87	9,937.61	9,881.97	55.65	178.587		
1,600.00	1,599.67	1,538.67	1,599.67	7.46	52.07	-25.50	-4,275.67	-8,994.87	9,935.36	9,875.84	59.52	166.932		
1,700.00	1,699.64	1,638.64	1,699.64	7.85	55.56	-25.50	-4,275.67	-8,994.87	9,933.10	9,869.71	63.40	156.685		
1,800.00	1,799.61	1,738.61	1,799.61	8.25	59.04	-25.51	-4,275.67	-8,994.87	9,930.85	9,863.57	67.28	147.608		
1,900.00	1,899.58	1,838.58	1,899.58	8.66	62.53	-25.52	-4,275.67	-8,994.87	9,928.59	9,857.43	71.17	139.513		
2,000.00	1,999.55	1,938.55	1,999.55	9.06	66.01	-25.52	-4,275.67	-8,994.87	9,926.34	9,851.28	75.06	132.250		
2,100.00	2,099.52	2,038.52	2,099.52	9.47	69.50	-25.53	-4,275.67	-8,994.87	9,924.08	9,845.13	78.95	125.697		
2,200.00	2,199.48	2,138.48	2,199.48	9.89	72.98	-25.53	-4,275.67	-8,994.87	9,921.83	9,838.98	82.85	119.756		
2,300.00	2,299.45	2,238.45	2,299.45	10.30	76.47	-25.54	-4,275.67	-8,994.87	9,919.57	9,832.82	86.75	114.346		
2,400.00	2,399.42	2,338.42	2,399.42	10.72	79.96	-25.55	-4,275.67	-8,994.87	9,917.32	9,826.67	90.65	109.398		
2,500.00	2,499.39	2,438.39	2,499.39	11.14	83.44	-25.55	-4,275.67	-8,994.87	9,915.06	9,820.51	94.56	104.857		
2,600.00	2,599.36	2,538.36	2,599.36	11.56	86.93	-25.56	-4,275.67	-8,994.87	9,912.81	9,814.35	98.46	100.674		
2,700.00	2,699.33	2,638.33	2,699.33	11.98	90.42	-25.57	-4,275.67	-8,994.87	9,910.56	9,808.18	102.37	96.809		
2,800.00	2,799.30	2,738.30	2,799.30	12.41	93.91	-25.57	-4,275.67	-8,994.87	9,908.30	9,802.02	106.28	93.226		
2,900.00	2,899.27	2,838.27	2,899.27	12.83	97.39	-25.58	-4,275.67	-8,994.87	9,906.05	9,795.85	110.19	89.897		
3,000.00	2,999.23	2,938.23	2,999.23	13.26	100.88	-25.58	-4,275.67	-8,994.87	9,903.79	9,789.69	114.11	86.795		
3,100.00	3,099.20	3,038.20	3,099.20	13.68	104.37	-25.59	-4,275.67	-8,994.87	9,901.54	9,783.52	118.02	83.898		
3,200.00	3,199.17	3,138.17	3,199.17	14.11	107.86	-25.60	-4,275.67	-8,994.87	9,899.29	9,777.35	121.93	81.187		
3,300.00	3,299.14	3,238.14	3,299.14	14.54	111.35	-25.60	-4,275.67	-8,994.87	9,897.03	9,771.19	125.85	78.643		
3,400.00	3,399.11	3,338.11	3,399.11	14.97	114.83	-25.61	-4,275.67	-8,994.87	9,894.78	9,765.02	129.76	76.253		
3,500.00	3,499.08	3,438.08	3,499.08	15.40	118.32	-25.61	-4,275.67	-8,994.87	9,892.53	9,758.85	133.68	74.002		
3,600.00	3,599.05	3,538.05	3,599.05	15.83	121.81	-25.62	-4,275.67	-8,994.87	9,890.27	9,752.68	137.60	71.879		
3,700.00	3,699.02	3,638.02	3,699.02	16.26	125.30	-25.63	-4,275.67	-8,994.87	9,888.02	9,746.51	141.51	69.873		
3,800.00	3,798.98	3,737.98	3,798.98	16.69	128.79	-25.63	-4,275.67	-8,994.87	9,885.77	9,740.33	145.43	67.975		
3,900.00	3,898.95	3,837.95	3,898.95	17.12	132.28	-25.64	-4,275.67	-8,994.87	9,883.51	9,734.16	149.35	66.176		
4,000.00	3,998.92	3,937.92	3,998.92	17.55	135.77	-25.65	-4,275.67	-8,994.87	9,881.26	9,727.99	153.27	64.469		
4,100.00	4,098.89	4,037.89	4,098.89	17.98	139.26	-25.65	-4,275.67	-8,994.87	9,879.01	9,721.82	157.19	62.847		
4,200.00	4,198.86	4,137.86	4,198.86	18.42	142.75	-25.66	-4,275.67	-8,994.87	9,876.76	9,715.65	161.11	61.304		
4,300.00	4,298.83	4,237.83	4,298.83	18.85	146.23	-25.67	-4,275.67	-8,994.87	9,874.50	9,709.47	165.03	59.834		
4,400.00	4,398.80	4,337.80	4,398.80	19.28	149.72	-25.67	-4,275.67	-8,994.87	9,872.25	9,703.30	168.95	58.432		
4,500.00	4,498.77	4,437.77	4,498.77	19.72	153.21	-25.68	-4,275.67	-8,994.87	9,870.00	9,697.13	172.87	57.094		
4,600.00	4,598.73	4,537.73	4,598.73	20.15	156.70	-25.68	-4,275.67	-8,994.87	9,867.75	9,690.95	176.80	55.814		
4,700.00	4,698.70	4,637.70	4,698.70	20.58	160.19	-25.69	-4,275.67	-8,994.87	9,865.50	9,684.78	180.72	54.591		
4,800.00	4,798.67	4,737.67	4,798.67	21.02	163.68	-25.70	-4,275.67	-8,994.87	9,863.24	9,678.60	184.64	53.419		
4,900.00	4,898.64	4,837.64	4,898.64	21.45	167.17	-25.70	-4,275.67	-8,994.87	9,860.99	9,672.43	188.56	52.296		
5,000.00	4,998.61	4,937.61	4,998.61	21.89	170.66	-25.71	-4,275.67	-8,994.87	9,858.74	9,666.26	192.49	51.218		
5,100.00	5,098.58	5,037.58	5,098.58	22.32	174.15	-25.72	-4,275.67	-8,994.87	9,856.49	9,660.08	196.41	50.184		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,198.55	5,137.55	5,198.55	22.76	177.64	-25.72	-4,275.67	-8,994.87	9,854.24	9,653.91	200.33	49.190		
5,300.00	5,298.52	5,237.52	5,298.52	23.20	181.13	-25.73	-4,275.67	-8,994.87	9,851.99	9,647.73	204.25	48.234		
5,400.00	5,398.49	5,337.49	5,398.49	23.63	184.62	-25.73	-4,275.67	-8,994.87	9,849.74	9,641.56	208.18	47.314		
5,500.00	5,498.45	5,437.45	5,498.45	24.07	188.10	-25.74	-4,275.67	-8,994.87	9,847.48	9,635.38	212.10	46.428		
5,600.00	5,598.42	5,537.42	5,598.42	24.50	191.59	-25.75	-4,275.67	-8,994.87	9,845.23	9,629.21	216.03	45.574		
5,700.00	5,698.39	5,637.39	5,698.39	24.94	195.08	-25.75	-4,275.67	-8,994.87	9,842.98	9,623.03	219.95	44.751		
5,800.00	5,798.36	5,737.36	5,798.36	25.38	198.57	-25.76	-4,275.67	-8,994.87	9,840.73	9,616.86	223.87	43.956		
5,900.00	5,898.33	5,837.33	5,898.33	25.81	202.06	-25.77	-4,275.67	-8,994.87	9,838.48	9,610.68	227.80	43.189		
6,000.00	5,998.30	5,937.30	5,998.30	26.25	205.55	-25.77	-4,275.67	-8,994.87	9,836.23	9,604.51	231.72	42.448		
6,100.00	6,098.27	6,037.27	6,098.27	26.69	209.04	-25.78	-4,275.67	-8,994.87	9,833.98	9,598.33	235.65	41.732		
6,200.00	6,198.24	6,137.24	6,198.24	27.12	212.53	-25.78	-4,275.67	-8,994.87	9,831.73	9,592.16	239.57	41.038		
6,300.00	6,298.20	6,237.20	6,298.20	27.56	216.02	-25.79	-4,275.67	-8,994.87	9,829.48	9,585.98	243.50	40.368		
6,400.00	6,398.17	6,337.17	6,398.17	28.00	219.51	-25.80	-4,275.67	-8,994.87	9,827.23	9,579.81	247.42	39.718		
6,500.00	6,498.14	6,437.14	6,498.14	28.43	223.00	-25.80	-4,275.67	-8,994.87	9,824.98	9,573.63	251.35	39.089		
6,600.00	6,597.68	6,536.68	6,597.68	28.88	226.47	-25.16	-4,275.67	-8,994.87	9,817.24	9,561.98	255.26	38.460		
6,700.00	6,694.68	6,633.68	6,694.68	29.32	229.86	-26.00	-4,275.67	-8,994.87	9,795.56	9,536.48	259.08	37.810		
6,800.00	6,786.74	6,725.74	6,786.74	29.77	233.07	-27.60	-4,275.67	-8,994.87	9,760.38	9,497.68	262.70	37.154		
6,900.00	6,871.61	6,810.61	6,871.61	30.24	236.04	-30.09	-4,275.67	-8,994.87	9,712.61	9,446.57	266.04	36.509		
7,000.00	6,947.19	6,886.19	6,947.19	30.74	238.67	-33.77	-4,275.67	-8,994.87	9,653.45	9,384.44	269.01	35.885		
7,100.00	7,011.62	6,950.62	7,011.62	31.32	240.92	-39.11	-4,275.67	-8,994.87	9,584.41	9,312.84	271.57	35.293		
7,200.00	7,063.31	7,002.31	7,063.31	32.03	242.73	-46.84	-4,275.67	-8,994.87	9,507.23	9,233.58	273.66	34.741		
7,300.00	7,101.00	7,040.00	7,101.00	32.89	244.04	-57.90	-4,275.67	-8,994.87	9,423.87	9,148.62	275.24	34.238		
7,400.00	7,123.74	7,062.74	7,123.74	33.93	244.84	-72.89	-4,275.67	-8,994.87	9,336.39	9,060.09	276.31	33.790		
7,500.00	7,131.00	7,070.00	7,131.00	35.10	245.09	-90.42	-4,275.67	-8,994.87	9,247.00	8,970.15	276.84	33.402		
7,600.00	7,130.63	7,069.63	7,130.63	36.44	245.08	-90.42	-4,275.67	-8,994.87	9,157.48	8,880.33	277.15	33.041		
7,700.00	7,130.26	7,069.26	7,130.26	37.94	245.06	-90.41	-4,275.67	-8,994.87	9,068.19	8,790.66	277.52	32.675		
7,800.00	7,129.90	7,068.90	7,129.90	39.59	245.05	-90.41	-4,275.67	-8,994.87	8,979.12	8,701.16	277.96	32.304		
7,900.00	7,129.53	7,068.53	7,129.53	41.37	245.04	-90.40	-4,275.67	-8,994.87	8,890.28	8,611.83	278.46	31.927		
8,000.00	7,129.17	7,068.17	7,129.17	43.27	245.03	-90.40	-4,275.67	-8,994.87	8,801.69	8,522.67	279.02	31.545		
8,100.00	7,128.80	7,067.80	7,128.80	45.27	245.01	-90.39	-4,275.67	-8,994.87	8,713.34	8,433.69	279.64	31.159		
8,200.00	7,128.43	7,067.43	7,128.43	47.36	245.00	-90.39	-4,275.67	-8,994.87	8,625.24	8,344.91	280.34	30.767		
8,300.00	7,128.07	7,067.07	7,128.07	49.52	244.99	-90.38	-4,275.67	-8,994.87	8,537.41	8,256.32	281.09	30.372		
8,400.00	7,127.70	7,066.70	7,127.70	51.75	244.98	-90.38	-4,275.67	-8,994.87	8,449.85	8,167.93	281.92	29.973		
8,500.00	7,127.33	7,066.33	7,127.33	54.04	244.96	-90.37	-4,275.67	-8,994.87	8,362.56	8,079.75	282.81	29.570		
8,600.00	7,126.97	7,065.97	7,126.97	56.38	244.95	-90.37	-4,275.67	-8,994.87	8,275.57	7,991.80	283.77	29.163		
8,700.00	7,126.60	7,065.60	7,126.60	58.77	244.94	-90.36	-4,275.67	-8,994.87	8,188.87	7,904.08	284.79	28.754		
8,800.00	7,126.24	7,065.24	7,126.24	61.19	244.92	-90.36	-4,275.67	-8,994.87	8,102.48	7,816.60	285.88	28.343		
8,900.00	7,125.87	7,064.87	7,125.87	63.65	244.91	-90.35	-4,275.67	-8,994.87	8,016.40	7,729.37	287.03	27.929		
9,000.00	7,125.50	7,064.50	7,125.50	66.15	244.90	-90.35	-4,275.67	-8,994.87	7,930.65	7,642.40	288.25	27.513		
9,100.00	7,125.14	7,064.14	7,125.14	68.67	244.89	-90.34	-4,275.67	-8,994.87	7,845.24	7,555.71	289.53	27.096		
9,200.00	7,124.77	7,063.77	7,124.77	71.21	244.87	-90.34	-4,275.67	-8,994.87	7,760.18	7,469.30	290.88	26.679		
9,300.00	7,124.41	7,063.41	7,124.41	73.78	244.86	-90.33	-4,275.67	-8,994.87	7,675.47	7,383.18	292.29	26.260		
9,400.00	7,124.04	7,063.04	7,124.04	76.37	244.85	-90.33	-4,275.67	-8,994.87	7,591.14	7,297.38	293.76	25.841		
9,500.00	7,123.67	7,062.67	7,123.67	78.98	244.83	-90.32	-4,275.67	-8,994.87	7,507.19	7,211.90	295.30	25.422		
9,600.00	7,123.31	7,062.31	7,123.31	81.60	244.82	-90.32	-4,275.67	-8,994.87	7,423.65	7,126.75	296.90	25.004		
9,700.00	7,122.94	7,061.94	7,122.94	84.24	244.81	-90.31	-4,275.67	-8,994.87	7,340.51	7,041.94	298.56	24.586		
9,800.00	7,122.57	7,061.57	7,122.57	86.90	244.80	-90.31	-4,275.67	-8,994.87	7,257.80	6,957.50	300.29	24.169		
9,900.00	7,122.21	7,061.21	7,122.21	89.56	244.78	-90.30	-4,275.67	-8,994.87	7,175.53	6,873.44	302.08	23.754		
10,000.00	7,121.84	7,060.84	7,121.84	92.24	244.77	-90.30	-4,275.67	-8,994.87	7,093.71	6,789.77	303.94	23.339		
10,100.00	7,121.48	7,060.48	7,121.48	94.92	244.76	-90.29	-4,275.67	-8,994.87	7,012.36	6,706.51	305.85	22.927		
10,200.00	7,121.11	7,060.11	7,121.11	97.62	244.75	-90.29	-4,275.67	-8,994.87	6,931.51	6,623.67	307.84	22.517		
10,300.00	7,120.74	7,059.74	7,120.74	100.32	244.73	-90.28	-4,275.67	-8,994.87	6,851.16	6,541.27	309.88	22.109		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	7,059.38	7,120.38	103.04	244.72	-90.28	-4,275.67	-8,994.87	6,771.33	6,459.34	311.99	21.704	
10,500.00	7,120.01	7,059.01	7,120.01	105.76	244.71	-90.27	-4,275.67	-8,994.87	6,692.04	6,377.88	314.17	21.301	
10,600.00	7,119.64	7,058.64	7,119.64	108.48	244.69	-90.27	-4,275.67	-8,994.87	6,613.32	6,296.91	316.41	20.901	
10,700.00	7,119.28	7,058.28	7,119.28	111.22	244.68	-90.26	-4,275.67	-8,994.87	6,535.18	6,216.46	318.71	20.505	
10,800.00	7,118.91	7,057.91	7,118.91	113.96	244.67	-90.26	-4,275.67	-8,994.87	6,457.64	6,136.55	321.08	20.112	
10,900.00	7,118.55	7,057.55	7,118.55	116.70	244.66	-90.25	-4,275.67	-8,994.87	6,380.72	6,057.20	323.52	19.723	
11,000.00	7,118.18	7,057.18	7,118.18	119.45	244.64	-90.24	-4,275.67	-8,994.87	6,304.46	5,978.43	326.03	19.337	
11,100.00	7,117.81	7,056.81	7,117.81	122.21	244.63	-90.24	-4,275.67	-8,994.87	6,228.86	5,900.26	328.60	18.956	
11,200.00	7,117.45	7,056.45	7,117.45	124.97	244.62	-90.23	-4,275.67	-8,994.87	6,153.96	5,822.73	331.24	18.579	
11,300.00	7,117.08	7,056.08	7,117.08	127.73	244.60	-90.23	-4,275.67	-8,994.87	6,079.79	5,745.84	333.95	18.206	
11,400.00	7,116.72	7,055.72	7,116.72	130.50	244.59	-90.22	-4,275.67	-8,994.87	6,006.36	5,669.64	336.72	17.838	
11,500.00	7,116.35	7,055.35	7,116.35	133.27	244.58	-90.22	-4,275.67	-8,994.87	5,933.71	5,594.14	339.57	17.474	
11,600.00	7,115.98	7,054.98	7,115.98	136.04	244.57	-90.21	-4,275.67	-8,994.87	5,861.86	5,519.38	342.48	17.116	
11,700.00	7,115.62	7,054.62	7,115.62	138.82	244.55	-90.21	-4,275.67	-8,994.87	5,790.85	5,445.39	345.47	16.762	
11,800.00	7,115.25	7,054.25	7,115.25	141.60	244.54	-90.20	-4,275.67	-8,994.87	5,720.71	5,372.19	348.52	16.414	
11,900.00	7,114.88	7,053.88	7,114.88	144.39	244.53	-90.20	-4,275.67	-8,994.87	5,651.46	5,299.82	351.64	16.072	
12,000.00	7,114.52	7,053.52	7,114.52	147.17	244.52	-90.19	-4,275.67	-8,994.87	5,583.15	5,228.32	354.84	15.734	
12,100.00	7,114.15	7,053.15	7,114.15	149.96	244.50	-90.19	-4,275.67	-8,994.87	5,515.81	5,157.71	358.10	15.403	
12,200.00	7,113.79	7,052.79	7,113.79	152.75	244.49	-90.18	-4,275.67	-8,994.87	5,449.47	5,088.04	361.43	15.078	
12,300.00	7,113.42	7,052.42	7,113.42	155.55	244.48	-90.18	-4,275.67	-8,994.87	5,384.16	5,019.34	364.83	14.758	
12,400.00	7,113.05	7,052.05	7,113.05	158.34	244.46	-90.17	-4,275.67	-8,994.87	5,319.94	4,951.65	368.29	14.445	
12,500.00	7,112.69	7,051.69	7,112.69	161.14	244.45	-90.17	-4,275.67	-8,994.87	5,256.83	4,885.01	371.83	14.138	
12,600.00	7,112.32	7,051.32	7,112.32	163.94	244.44	-90.16	-4,275.67	-8,994.87	5,194.89	4,819.46	375.42	13.837	
12,700.00	7,111.96	7,050.96	7,111.96	166.74	244.43	-90.16	-4,275.67	-8,994.87	5,134.14	4,755.05	379.09	13.543	
12,800.00	7,111.59	7,050.59	7,111.59	169.54	244.41	-90.15	-4,275.67	-8,994.87	5,074.63	4,691.83	382.81	13.256	
12,900.00	7,111.22	7,050.22	7,111.22	172.35	244.40	-90.15	-4,275.67	-8,994.87	5,016.42	4,629.83	386.59	12.976	
13,000.00	7,110.86	7,049.86	7,110.86	175.16	244.39	-90.14	-4,275.67	-8,994.87	4,959.54	4,569.11	390.43	12.703	
13,100.00	7,110.49	7,049.49	7,110.49	177.96	244.37	-90.14	-4,275.67	-8,994.87	4,904.03	4,509.71	394.32	12.437	
13,200.00	7,110.12	7,049.12	7,110.12	180.77	244.36	-90.13	-4,275.67	-8,994.87	4,849.96	4,451.69	398.26	12.178	
13,300.00	7,109.76	7,048.76	7,109.76	183.58	244.35	-90.13	-4,275.67	-8,994.87	4,797.35	4,395.10	402.25	11.926	
13,400.00	7,109.39	7,048.39	7,109.39	186.40	244.34	-90.12	-4,275.67	-8,994.87	4,746.28	4,339.99	406.29	11.682	
13,500.00	7,109.03	7,048.03	7,109.03	189.21	244.32	-90.12	-4,275.67	-8,994.87	4,696.77	4,286.41	410.36	11.445	
13,600.00	7,108.66	7,047.66	7,108.66	192.03	244.31	-90.11	-4,275.67	-8,994.87	4,648.90	4,234.43	414.47	11.217	
13,700.00	7,108.29	7,047.29	7,108.29	194.84	244.30	-90.11	-4,275.67	-8,994.87	4,602.69	4,184.09	418.60	10.995	
13,800.00	7,107.93	7,046.93	7,107.93	197.66	244.29	-90.10	-4,275.67	-8,994.87	4,558.21	4,135.46	422.75	10.782	
13,900.00	7,107.56	7,046.56	7,107.56	200.48	244.27	-90.10	-4,275.67	-8,994.87	4,515.51	4,088.59	426.93	10.577	
14,000.00	7,107.19	7,046.19	7,107.19	203.30	244.26	-90.09	-4,275.67	-8,994.87	4,474.64	4,043.53	431.10	10.379	
14,100.00	7,106.83	7,045.83	7,106.83	206.12	244.25	-90.09	-4,275.67	-8,994.87	4,435.64	4,000.35	435.29	10.190	
14,200.00	7,106.46	7,045.46	7,106.46	208.94	244.23	-90.08	-4,275.67	-8,994.87	4,398.57	3,959.11	439.46	10.009	
14,300.00	7,106.10	7,045.10	7,106.10	211.76	244.22	-90.08	-4,275.67	-8,994.87	4,363.48	3,919.86	443.62	9.836	
14,400.00	7,105.73	7,044.73	7,105.73	214.58	244.21	-90.07	-4,275.67	-8,994.87	4,330.42	3,882.66	447.76	9.671	
14,500.00	7,105.36	7,044.36	7,105.36	217.40	244.20	-90.07	-4,275.67	-8,994.87	4,299.42	3,847.56	451.87	9.515	
14,600.00	7,105.00	7,044.00	7,105.00	220.23	244.18	-90.06	-4,275.67	-8,994.87	4,270.55	3,814.62	455.93	9.367	
14,700.00	7,104.63	7,043.63	7,104.63	223.05	244.17	-90.06	-4,275.67	-8,994.87	4,243.83	3,783.89	459.95	9.227	
14,800.00	7,104.27	7,043.27	7,104.27	225.88	244.16	-90.05	-4,275.67	-8,994.87	4,219.32	3,755.42	463.90	9.095	
14,872.41	7,104.00	7,043.00	7,104.00	227.93	244.15	-90.05	-4,275.67	-8,994.87	4,202.96	3,736.24	466.73	9.005 CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 6-2-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	671.98	705.84	3.28	4.33	-108.26	-2,948.81	-8,936.80	9,437.17					
100.00	100.00	724.00	757.32	3.28	4.49	-108.30	-2,953.87	-8,931.28	9,430.01	9,422.27	7.75	1,217.031		
200.00	200.00	724.00	757.32	3.34	4.49	-108.30	-2,953.87	-8,931.28	9,423.57	9,415.78	7.79	1,209.812		
300.00	300.00	724.00	757.32	3.44	4.49	-108.30	-2,953.87	-8,931.28	9,418.19	9,410.30	7.89	1,193.968		
400.00	400.00	763.49	796.35	3.60	4.62	-108.33	-2,958.52	-8,927.50	9,413.29	9,405.13	8.17	1,152.309		
500.00	500.00	777.92	810.59	3.81	4.67	-108.35	-2,960.51	-8,926.27	9,409.54	9,401.12	8.41	1,118.237		
600.00	599.98	818.00	850.05	4.04	4.81	-18.41	-2,966.87	-8,923.32	9,405.41	9,396.63	8.78	1,070.710		
700.00	699.95	818.00	850.05	4.30	4.81	-18.41	-2,966.87	-8,923.32	9,400.91	9,391.87	9.04	1,039.663		
800.00	799.92	818.00	850.05	4.59	4.81	-18.41	-2,966.87	-8,923.32	9,397.48	9,388.15	9.33	1,007.330		
900.00	899.89	818.00	850.05	4.90	4.81	-18.41	-2,966.87	-8,923.32	9,395.11	9,385.47	9.64	974.641		
1,000.00	999.86	818.00	850.05	5.23	4.81	-18.41	-2,966.87	-8,923.32	9,393.80	9,383.83	9.97	942.274		
1,100.00	1,099.83	864.94	896.16	5.58	4.98	-18.47	-2,975.30	-8,920.85	9,392.77	9,382.28	10.48	895.866		
1,122.12	1,121.94	868.18	899.34	5.66	4.99	-18.47	-2,975.90	-8,920.72	9,392.75	9,382.17	10.57	888.233		
1,200.00	1,199.80	912.00	942.33	5.94	5.15	-18.52	-2,984.31	-8,919.60	9,393.40	9,382.38	11.02	852.528		
1,300.00	1,299.77	912.00	942.33	6.30	5.15	-18.52	-2,984.31	-8,919.60	9,394.30	9,382.92	11.39	825.136		
1,400.00	1,399.73	912.00	942.33	6.68	5.15	-18.52	-2,984.31	-8,919.60	9,396.27	9,384.51	11.76	798.977		
1,500.00	1,499.70	912.00	942.33	7.07	5.15	-18.52	-2,984.31	-8,919.60	9,399.30	9,387.16	12.14	774.093		
1,600.00	1,599.67	912.00	942.33	7.46	5.15	-18.52	-2,984.31	-8,919.60	9,403.40	9,390.87	12.53	750.488		
1,700.00	1,699.64	951.47	981.04	7.85	5.29	-18.57	-2,992.04	-8,919.61	9,407.98	9,394.91	13.07	719.640		
1,800.00	1,799.61	965.67	994.96	8.25	5.35	-18.59	-2,994.80	-8,919.88	9,413.71	9,400.19	13.52	696.116		
1,900.00	1,899.58	1,006.00	1,034.51	8.66	5.50	-18.63	-3,002.56	-8,921.38	9,420.60	9,406.52	14.08	669.095		
2,000.00	1,999.55	1,006.00	1,034.51	9.06	5.50	-18.63	-3,002.56	-8,921.38	9,427.95	9,413.47	14.48	651.179		
2,100.00	2,099.52	1,006.00	1,034.51	9.47	5.50	-18.63	-3,002.56	-8,921.38	9,436.36	9,421.48	14.88	634.240		
2,200.00	2,199.48	1,006.00	1,034.51	9.89	5.50	-18.63	-3,002.56	-8,921.38	9,445.81	9,430.53	15.28	618.226		
2,300.00	2,299.45	1,047.30	1,075.01	10.30	5.65	-18.67	-3,010.22	-8,923.97	9,455.85	9,440.01	15.84	596.910		
2,400.00	2,399.42	1,101.00	1,127.68	10.72	5.85	-18.72	-3,019.52	-8,928.75	9,467.20	9,450.74	16.46	575.280		
2,500.00	2,499.39	1,101.00	1,127.68	11.14	5.85	-18.72	-3,019.52	-8,928.75	9,478.80	9,461.95	16.86	562.304		
2,600.00	2,599.36	1,101.00	1,127.68	11.56	5.85	-18.72	-3,019.52	-8,928.75	9,491.45	9,474.19	17.26	550.014		
2,700.00	2,699.33	1,101.00	1,127.68	11.98	5.85	-18.72	-3,019.52	-8,928.75	9,505.13	9,487.47	17.66	538.372		
2,800.00	2,799.30	1,101.00	1,127.68	12.41	5.85	-18.72	-3,019.52	-8,928.75	9,519.84	9,501.79	18.05	527.339		
2,900.00	2,899.27	1,156.04	1,181.49	12.83	6.06	-18.76	-3,029.22	-8,935.06	9,534.67	9,516.00	18.67	510.586		
3,000.00	2,999.23	1,197.00	1,221.30	13.26	6.23	-18.80	-3,037.14	-8,940.50	9,550.95	9,531.71	19.24	496.418		
3,100.00	3,099.20	1,197.00	1,221.30	13.68	6.23	-18.80	-3,037.14	-8,940.50	9,567.75	9,548.11	19.63	487.351		
3,200.00	3,199.17	1,197.00	1,221.30	14.11	6.23	-18.80	-3,037.14	-8,940.50	9,585.55	9,565.53	20.02	478.742		
3,300.00	3,299.14	1,197.00	1,221.30	14.54	6.23	-18.80	-3,037.14	-8,940.50	9,604.37	9,583.96	20.41	470.565		
3,400.00	3,399.11	1,245.94	1,268.61	14.97	6.44	-18.85	-3,047.34	-8,947.79	9,623.55	9,602.53	21.01	457.948		
3,500.00	3,499.08	1,292.00	1,312.86	15.40	6.64	-18.89	-3,057.60	-8,955.39	9,643.98	9,622.37	21.61	446.299		
3,600.00	3,599.05	1,292.00	1,312.86	15.83	6.64	-18.89	-3,057.60	-8,955.39	9,664.84	9,642.85	21.99	439.520		
3,700.00	3,699.02	1,292.00	1,312.86	16.26	6.64	-18.89	-3,057.60	-8,955.39	9,686.68	9,664.32	22.37	433.073		
3,800.00	3,798.98	1,292.00	1,312.86	16.69	6.64	-18.89	-3,057.60	-8,955.39	9,709.51	9,686.77	22.74	426.940		
3,900.00	3,898.95	1,338.78	1,357.52	17.12	6.88	-18.94	-3,068.67	-8,963.83	9,732.72	9,709.39	23.34	417.076		
4,000.00	3,998.92	1,387.00	1,403.23	17.55	7.12	-19.00	-3,080.77	-8,973.28	9,757.18	9,733.23	23.95	407.373		
4,100.00	4,098.89	1,387.00	1,403.23	17.98	7.12	-19.00	-3,080.77	-8,973.28	9,781.98	9,757.66	24.32	402.259		
4,200.00	4,198.86	1,412.91	1,427.69	18.42	7.27	-19.03	-3,087.51	-8,978.55	9,807.69	9,782.87	24.82	395.122		
4,300.00	4,298.83	1,481.00	1,491.84	18.85	7.66	-19.11	-3,105.71	-8,992.32	9,833.80	9,808.26	25.54	385.017		
4,400.00	4,398.80	1,516.02	1,524.73	19.28	7.88	-19.15	-3,115.42	-8,999.41	9,860.37	9,834.27	26.10	377.742		
4,500.00	4,498.77	1,573.00	1,577.98	19.72	8.25	-19.22	-3,131.93	-9,011.16	9,887.65	9,860.87	26.78	369.243		
4,600.00	4,598.73	1,600.00	1,650.46	20.15	32.73	-19.33	-3,155.80	-9,026.66	9,915.09	9,861.40	53.69	184.685		
4,700.00	4,698.70	1,726.23	1,720.36	20.58	9.34	-19.44	-3,179.99	-9,041.08	9,942.50	9,914.06	28.44	349.602		
4,800.00	4,798.67	1,760.00	1,751.48	21.02	9.60	-19.50	-3,191.44	-9,047.45	9,970.48	9,941.47	29.01	343.717		
4,900.00	4,898.64	1,800.07	1,788.24	21.45	9.92	-19.56	-3,205.46	-9,055.05	9,999.02	9,969.39	29.63	337.462		
7,600.00	7,130.63	7,296.30	6,885.16	36.44	53.33	-87.41	-4,910.69	-9,552.76	9,954.42	9,877.89	76.53	130.079		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 6-2-20(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWDD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
7,700.00	7,130.26	7,298.24	6,887.11	37.94	53.34	-87.44	-4,910.72	-9,552.80	9,866.55	9,789.68	76.87	128.362		
7,800.00	7,129.90	7,300.19	6,889.05	39.59	53.35	-87.46	-4,910.74	-9,552.84	9,778.91	9,701.64	77.27	126.556		
7,900.00	7,129.53	7,302.13	6,891.00	41.37	53.35	-87.49	-4,910.77	-9,552.88	9,691.51	9,613.77	77.74	124.666		
8,000.00	7,129.17	7,304.08	6,892.95	43.27	53.36	-87.51	-4,910.80	-9,552.92	9,604.36	9,526.08	78.28	122.698		
8,100.00	7,128.80	7,306.04	6,894.90	45.27	53.36	-87.53	-4,910.83	-9,552.95	9,517.46	9,438.58	78.88	120.658		
8,200.00	7,128.43	7,307.99	6,896.85	47.36	53.37	-87.56	-4,910.86	-9,552.99	9,430.82	9,351.27	79.55	118.555		
8,300.00	7,128.07	7,309.95	6,898.81	49.52	53.37	-87.58	-4,910.89	-9,553.03	9,344.44	9,264.16	80.28	116.394		
8,400.00	7,127.70	7,311.91	6,900.77	51.75	53.38	-87.60	-4,910.92	-9,553.07	9,258.34	9,177.26	81.08	114.184		
8,500.00	7,127.33	7,313.87	6,902.73	54.04	53.39	-87.63	-4,910.94	-9,553.11	9,172.52	9,090.58	81.95	111.932		
8,600.00	7,126.97	7,315.83	6,904.69	56.38	53.39	-87.65	-4,910.97	-9,553.15	9,087.00	9,004.12	82.88	109.646		
8,700.00	7,126.60	7,317.79	6,906.65	58.77	53.40	-87.67	-4,911.00	-9,553.19	9,001.76	8,917.90	83.87	107.334		
8,800.00	7,126.24	7,319.76	6,908.62	61.19	53.40	-87.70	-4,911.03	-9,553.23	8,916.84	8,831.92	84.92	105.003		
8,900.00	7,125.87	7,321.73	6,910.59	63.65	53.41	-87.72	-4,911.05	-9,553.27	8,832.23	8,746.19	86.03	102.659		
9,000.00	7,125.50	7,323.70	6,912.56	66.15	53.41	-87.75	-4,911.08	-9,553.31	8,747.94	8,660.73	87.21	100.309		
9,100.00	7,125.14	7,325.68	6,914.53	68.67	53.42	-87.77	-4,911.11	-9,553.35	8,663.99	8,575.55	88.44	97.959		
9,200.00	7,124.77	7,327.65	6,916.51	71.21	53.42	-87.79	-4,911.14	-9,553.39	8,580.38	8,490.64	89.74	95.615		
9,300.00	7,124.41	7,329.63	6,918.49	73.78	53.43	-87.82	-4,911.16	-9,553.43	8,497.13	8,406.04	91.09	93.282		
9,400.00	7,124.04	7,331.61	6,920.47	76.37	53.44	-87.84	-4,911.19	-9,553.47	8,414.24	8,321.74	92.50	90.965		
9,500.00	7,123.67	7,333.59	6,922.45	78.98	53.44	-87.87	-4,911.22	-9,553.51	8,331.73	8,237.76	93.97	88.667		
9,600.00	7,123.31	7,335.58	6,924.43	81.60	53.45	-87.89	-4,911.24	-9,553.55	8,249.60	8,154.11	95.49	86.393		
9,700.00	7,122.94	7,337.56	6,926.42	84.24	53.45	-87.91	-4,911.27	-9,553.58	8,167.87	8,070.80	97.07	84.147		
9,800.00	7,122.57	7,339.55	6,928.41	86.90	53.46	-87.94	-4,911.30	-9,553.62	8,086.55	7,987.85	98.70	81.930		
9,900.00	7,122.21	7,341.54	6,930.40	89.56	53.46	-87.96	-4,911.32	-9,553.66	8,005.65	7,905.26	100.39	79.745		
10,000.00	7,121.84	7,343.54	6,932.39	92.24	53.47	-87.99	-4,911.35	-9,553.71	7,925.19	7,823.05	102.13	77.596		
10,100.00	7,121.48	7,345.53	6,934.38	94.92	53.48	-88.01	-4,911.37	-9,553.75	7,845.18	7,741.24	103.93	75.483		
10,200.00	7,121.11	7,347.53	6,936.38	97.62	53.48	-88.03	-4,911.40	-9,553.79	7,765.63	7,659.84	105.79	73.408		
10,300.00	7,120.74	7,349.53	6,938.38	100.32	53.49	-88.06	-4,911.43	-9,553.83	7,686.55	7,578.86	107.69	71.374		
10,400.00	7,120.38	7,351.53	6,940.38	103.04	53.49	-88.08	-4,911.45	-9,553.87	7,607.97	7,498.32	109.66	69.380		
10,500.00	7,120.01	7,353.54	6,942.39	105.76	53.50	-88.11	-4,911.48	-9,553.91	7,529.90	7,418.23	111.67	67.427		
10,600.00	7,119.64	7,355.54	6,944.39	108.48	53.51	-88.13	-4,911.50	-9,553.95	7,452.35	7,338.61	113.75	65.517		
10,700.00	7,119.28	7,357.55	6,946.40	111.22	53.51	-88.16	-4,911.53	-9,553.99	7,375.34	7,259.47	115.87	63.650		
10,800.00	7,118.91	7,359.56	6,948.41	113.96	53.52	-88.18	-4,911.55	-9,554.03	7,298.89	7,180.84	118.05	61.826		
10,900.00	7,118.55	7,361.58	6,950.42	116.70	53.52	-88.21	-4,911.58	-9,554.07	7,223.01	7,102.72	120.29	60.046		
11,000.00	7,118.18	7,363.59	6,952.44	119.45	53.53	-88.23	-4,911.60	-9,554.11	7,147.73	7,025.15	122.58	58.309		
11,100.00	7,117.81	7,365.61	6,954.45	122.21	53.53	-88.25	-4,911.63	-9,554.15	7,073.06	6,948.13	124.93	56.615		
11,200.00	7,117.45	7,367.63	6,956.47	124.97	53.54	-88.28	-4,911.65	-9,554.19	6,999.02	6,871.68	127.34	54.965		
11,300.00	7,117.08	7,369.65	6,958.50	127.73	53.55	-88.30	-4,911.68	-9,554.23	6,925.63	6,795.83	129.80	53.358		
11,400.00	7,116.72	7,371.67	6,960.52	130.50	53.55	-88.33	-4,911.70	-9,554.27	6,852.91	6,720.60	132.31	51.794		
11,500.00	7,116.35	7,373.70	6,962.54	133.27	53.56	-88.35	-4,911.72	-9,554.31	6,780.89	6,646.01	134.88	50.272		
11,600.00	7,115.98	7,375.73	6,964.57	136.04	53.56	-88.38	-4,911.75	-9,554.36	6,709.59	6,572.07	137.51	48.792		
11,700.00	7,115.62	7,377.75	6,966.59	138.82	53.57	-88.41	-4,911.77	-9,554.40	6,639.05	6,498.87	140.18	47.360		
11,800.00	7,115.25	7,379.78	6,968.61	141.60	53.57	-88.44	-4,911.79	-9,554.44	6,569.25	6,426.33	142.92	45.963		
11,900.00	7,114.88	7,381.80	6,970.63	144.39	53.58	-88.47	-4,911.81	-9,554.48	6,500.24	6,354.51	145.73	44.606		
12,000.00	7,114.52	7,383.83	6,972.65	147.17	53.58	-88.50	-4,911.83	-9,554.52	6,432.04	6,283.46	148.58	43.289		
12,100.00	7,114.15	7,385.86	6,974.67	149.96	53.59	-88.53	-4,911.85	-9,554.56	6,364.69	6,213.19	151.50	42.011		
12,200.00	7,113.79	7,387.89	6,976.69	152.75	53.59	-88.56	-4,911.87	-9,554.60	6,298.20	6,143.72	154.47	40.772		
12,300.00	7,113.42	7,389.92	6,978.71	155.55	53.60	-88.59	-4,911.89	-9,554.64	6,232.60	6,075.10	157.51	39.571		
12,400.00	7,113.05	7,391.95	6,980.73	158.34	53.60	-88.62	-4,911.91	-9,554.68	6,167.93	6,007.34	160.59	38.407		
12,500.00	7,112.69	7,393.98	6,982.75	161.14	53.61	-88.65	-4,911.93	-9,554.72	6,104.21	5,940.47	163.74	37.280		
12,600.00	7,112.32	7,395.99	6,984.77	163.94	53.61	-88.68	-4,911.95	-9,554.76	6,041.48	5,874.54	166.94	36.189		
12,700.00	7,111.96	7,398.01	6,986.79	166.74	53.62	-88.71	-4,911.97	-9,554.80	5,979.75	5,809.55	170.20	35.134		
12,800.00	7,111.59	7,399.99	6,988.81	169.54	53.62	-88.74	-4,911.99	-9,554.84	5,919.08	5,745.56	173.51	34.113		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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														
12,900.00	7,111.22	7,394.28	6,983.12	172.35	53.61	-88.60	-4,911.98	-9,554.78	5,859.48	5,682.60	176.88	33.127														
13,000.00	7,110.86	7,396.27	6,985.10	175.16	53.61	-88.63	-4,912.00	-9,554.82	5,800.99	5,620.69	180.30	32.174														
13,100.00	7,110.49	7,398.26	6,987.10	177.96	53.62	-88.65	-4,912.03	-9,554.86	5,743.64	5,559.87	183.78	31.253														
13,200.00	7,110.12	7,400.26	6,989.10	180.77	53.62	-88.67	-4,912.05	-9,554.90	5,687.48	5,500.18	187.30	30.365														
13,300.00	7,109.76	7,402.28	6,991.11	183.58	53.63	-88.70	-4,912.07	-9,554.95	5,632.53	5,441.65	190.88	29.508														
13,400.00	7,109.39	7,404.30	6,993.13	186.40	53.63	-88.72	-4,912.10	-9,554.99	5,578.83	5,384.33	194.50	28.682														
														13,500.00	7,109.03	7,406.32	6,995.16	189.21	53.64	-88.75	-4,912.12	-9,555.04	5,526.42	5,328.24	198.18	27.887
														13,600.00	7,108.66	7,408.36	6,997.20	192.03	53.64	-88.77	-4,912.14	-9,555.08	5,475.33	5,273.44	201.89	27.120
														13,700.00	7,108.29	7,410.41	6,999.24	194.84	53.65	-88.80	-4,912.16	-9,555.13	5,425.61	5,219.96	205.65	26.383
														13,800.00	7,107.93	7,412.46	7,001.30	197.66	53.66	-88.82	-4,912.19	-9,555.17	5,377.28	5,167.83	209.45	25.674
13,900.00	7,107.56	7,414.53	7,003.36	200.48	53.66	-88.85	-4,912.21	-9,555.22	5,330.39	5,117.11	213.28	24.992														
														14,000.00	7,107.19	7,416.60	7,005.43	203.30	53.67	-88.87	-4,912.23	-9,555.26	5,284.98	5,067.83	217.15	24.338
														14,100.00	7,106.83	7,418.69	7,007.52	206.12	53.67	-88.90	-4,912.25	-9,555.31	5,241.08	5,020.03	221.05	23.710
														14,200.00	7,106.46	7,420.78	7,009.61	208.94	53.68	-88.92	-4,912.28	-9,555.35	5,198.73	4,973.75	224.98	23.108
														14,300.00	7,106.10	7,422.88	7,011.71	211.76	53.68	-88.95	-4,912.30	-9,555.40	5,157.98	4,929.05	228.93	22.531
14,400.00	7,105.73	7,424.99	7,013.82	214.58	53.69	-88.97	-4,912.32	-9,555.45	5,118.85	4,885.95	232.90	21.979														
														14,500.00	7,105.36	7,427.11	7,015.94	217.40	53.70	-89.00	-4,912.34	-9,555.49	5,081.39	4,844.50	236.88	21.451
														14,600.00	7,105.00	7,429.24	7,018.07	220.23	53.70	-89.02	-4,912.37	-9,555.54	5,045.63	4,804.75	240.88	20.947
														14,700.00	7,104.63	7,431.38	7,020.21	223.05	53.71	-89.05	-4,912.39	-9,555.59	5,011.61	4,766.73	244.88	20.466
														14,800.00	7,104.27	7,433.53	7,022.35	225.88	53.71	-89.08	-4,912.41	-9,555.64	4,979.36	4,730.49	248.87	20.008
14,872.41	7,104.00	7,435.09	7,023.92	227.93	53.72	-89.10	-4,912.43	-9,555.67	4,957.15	4,705.38	251.77	19.690 CC, ES, SF														



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	64.00	3.28	3.28	-130.52	-4,202.86	-4,916.65	6,468.51					
100.00	100.00	48.21	112.21	3.28	3.28	-130.52	-4,202.71	-4,916.72	6,468.16	6,461.59	6.57	985.026		
200.00	200.00	181.79	245.77	3.34	3.33	-130.51	-4,200.85	-4,917.52	6,467.71	6,461.04	6.67	969.823		
300.00	300.00	277.26	341.23	3.44	3.43	-130.49	-4,199.00	-4,918.20	6,466.99	6,460.12	6.87	940.852		
400.00	400.00	375.04	438.99	3.60	3.57	-130.48	-4,197.44	-4,918.75	6,466.39	6,459.21	7.18	901.115		
500.00	500.00	478.55	542.48	3.81	3.77	-130.46	-4,195.99	-4,919.14	6,465.77	6,458.19	7.57	853.568		
600.00	599.98	597.28	661.20	4.04	4.04	-40.48	-4,194.39	-4,919.29	6,463.77	6,455.68	8.08	799.784		
700.00	699.95	685.67	749.59	4.30	4.27	-40.48	-4,193.27	-4,919.24	6,461.00	6,452.43	8.57	753.577		
800.00	799.92	787.54	851.46	4.59	4.56	-40.49	-4,192.20	-4,919.13	6,458.34	6,449.18	9.15	705.630		
900.00	899.89	876.67	940.58	4.90	4.84	-40.50	-4,191.27	-4,919.06	6,455.71	6,445.97	9.74	663.124		
1,000.00	999.86	970.52	1,034.42	5.23	5.14	-40.51	-4,190.38	-4,919.13	6,453.24	6,442.87	10.37	622.547		
1,100.00	1,099.83	1,078.73	1,142.63	5.58	5.50	-40.51	-4,189.32	-4,919.21	6,450.77	6,439.69	11.07	582.532		
1,200.00	1,199.80	1,171.73	1,235.62	5.94	5.83	-40.52	-4,188.37	-4,919.24	6,448.23	6,436.47	11.75	548.591		
1,300.00	1,299.77	1,257.81	1,321.70	6.30	6.14	-40.53	-4,187.55	-4,919.43	6,445.87	6,433.45	12.43	518.624		
1,400.00	1,399.73	1,344.93	1,408.82	6.68	6.45	-40.53	-4,186.99	-4,919.64	6,443.74	6,430.62	13.12	491.075		
1,500.00	1,499.70	1,443.57	1,507.46	7.07	6.82	-40.55	-4,186.59	-4,919.87	6,441.76	6,427.89	13.87	464.427		
1,600.00	1,599.67	1,547.66	1,611.54	7.46	7.22	-40.56	-4,186.11	-4,920.02	6,439.67	6,425.02	14.65	439.504		
1,700.00	1,699.64	1,648.06	1,711.95	7.85	7.60	-40.57	-4,185.85	-4,920.04	6,437.61	6,422.18	15.43	417.184		
1,800.00	1,799.61	1,748.26	1,812.14	8.25	7.99	-40.58	-4,185.47	-4,920.06	6,435.49	6,419.27	16.22	396.802		
1,900.00	1,899.58	1,833.65	1,897.53	8.66	8.33	-40.59	-4,185.28	-4,920.09	6,433.48	6,416.52	16.96	379.443		
2,000.00	1,999.55	1,911.03	1,974.91	9.06	8.63	-40.60	-4,185.29	-4,920.31	6,431.80	6,414.13	17.67	364.094		
2,100.00	2,099.52	1,999.75	2,063.64	9.47	8.98	-40.61	-4,185.40	-4,920.77	6,430.37	6,411.95	18.42	349.019		
2,200.00	2,199.48	2,095.07	2,158.95	9.89	9.36	-40.62	-4,185.63	-4,921.31	6,429.07	6,409.85	19.21	334.600		
2,300.00	2,299.45	2,195.09	2,258.97	10.30	9.76	-40.64	-4,185.89	-4,921.93	6,427.80	6,407.78	20.03	320.943		
2,400.00	2,399.42	2,286.38	2,350.26	10.72	10.13	-40.65	-4,186.05	-4,922.62	6,426.60	6,405.79	20.81	308.811		
2,500.00	2,499.39	2,387.76	2,451.63	11.14	10.54	-40.66	-4,186.23	-4,923.49	6,425.47	6,403.83	21.64	296.952		
2,600.00	2,599.36	2,482.07	2,545.94	11.56	10.92	-40.67	-4,186.40	-4,924.31	6,424.36	6,401.91	22.44	286.288		
2,700.00	2,699.33	2,575.56	2,639.43	11.98	11.31	-40.68	-4,186.57	-4,925.26	6,423.34	6,400.10	23.24	276.369		
2,800.00	2,799.30	2,661.74	2,725.59	12.41	11.66	-40.68	-4,186.64	-4,926.36	6,422.47	6,398.46	24.02	267.423		
2,900.00	2,899.27	2,749.15	2,813.00	12.83	12.02	-40.69	-4,186.84	-4,927.64	6,421.84	6,397.04	24.80	258.970		
3,000.00	2,999.23	2,840.07	2,903.91	13.26	12.39	-40.70	-4,187.20	-4,929.03	6,421.36	6,395.76	25.60	250.879		
3,100.00	3,099.20	2,931.75	2,995.57	13.68	12.77	-40.71	-4,187.79	-4,930.40	6,421.01	6,394.62	26.40	243.236		
3,200.00	3,199.17	3,029.78	3,093.59	14.11	13.18	-40.72	-4,188.45	-4,931.97	6,420.78	6,393.55	27.23	235.805		
3,300.00	3,299.14	3,300.00	3,236.99	14.54	14.30	-40.73	-4,189.20	-4,933.73	6,420.14	6,391.36	28.78	223.093		
3,400.00	3,399.11	3,293.17	3,356.96	14.97	14.27	-40.75	-4,189.49	-4,934.49	6,418.84	6,389.67	29.18	219.998		
3,500.00	3,499.08	3,415.13	3,478.92	15.40	14.78	-40.76	-4,189.57	-4,935.23	6,417.46	6,387.35	30.11	213.117		
3,600.00	3,599.05	3,501.71	3,565.50	15.83	15.14	-40.77	-4,189.70	-4,935.64	6,416.02	6,385.12	30.90	207.622		
3,700.00	3,699.02	3,579.71	3,643.49	16.26	15.47	-40.78	-4,189.89	-4,936.20	6,414.82	6,383.17	31.66	202.632		
3,800.00	3,798.98	3,659.10	3,722.88	16.69	15.80	-40.79	-4,190.06	-4,937.13	6,413.96	6,381.54	32.42	197.845		
3,900.00	3,898.95	3,743.13	3,806.90	17.12	16.15	-40.80	-4,190.25	-4,938.44	6,413.40	6,380.20	33.20	193.169		
4,000.00	3,998.92	3,831.90	3,895.66	17.55	16.53	-40.80	-4,190.59	-4,939.94	6,413.03	6,379.03	34.00	188.600		
4,100.00	4,098.89	3,916.05	3,979.79	17.98	16.88	-40.81	-4,191.15	-4,941.34	6,412.84	6,378.05	34.79	184.347		
4,106.74	4,105.63	3,920.61	3,984.35	18.01	16.90	-40.81	-4,191.19	-4,941.42	6,412.84	6,378.00	34.83	184.093		
4,200.00	4,198.86	3,983.67	4,047.39	18.42	17.16	-40.82	-4,191.85	-4,942.61	6,413.06	6,377.56	35.50	180.649		
4,300.00	4,298.83	4,054.76	4,118.47	18.85	17.46	-40.83	-4,192.89	-4,944.16	6,413.76	6,377.53	36.23	177.038		
4,400.00	4,398.80	4,126.11	4,189.78	19.28	17.76	-40.84	-4,194.28	-4,945.81	6,414.90	6,377.95	36.96	173.578		
4,500.00	4,498.77	4,200.01	4,263.63	19.72	18.08	-40.85	-4,196.02	-4,947.73	6,416.51	6,378.81	37.70	170.214		
4,600.00	4,598.73	4,339.74	4,403.28	20.15	18.67	-40.87	-4,199.07	-4,951.30	6,417.98	6,379.25	38.72	165.740		
4,700.00	4,698.70	4,457.95	4,521.45	20.58	19.17	-40.88	-4,200.91	-4,954.22	6,418.97	6,379.31	39.66	161.864		
4,800.00	4,798.67	4,608.25	4,671.69	21.02	19.80	-40.89	-4,202.55	-4,957.66	6,419.56	6,378.83	40.73	157.619		
4,900.00	4,898.64	4,749.65	4,813.07	21.45	20.40	-40.91	-4,203.52	-4,959.87	6,419.30	6,377.54	41.76	153.717		
5,000.00	4,998.61	4,859.70	4,923.12	21.89	20.86	-40.92	-4,204.24	-4,961.00	6,418.61	6,375.95	42.66	150.461		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 1 21-2(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,098.58	4,965.75	5,029.16	22.32	21.31	-40.93	-4,204.81	-4,962.13	6,417.88	6,374.33	43.54	147.394		
5,200.00	5,198.55	5,083.85	5,147.25	22.76	21.81	-40.95	-4,205.06	-4,963.40	6,416.94	6,372.47	44.48	144.279		
5,300.00	5,298.52	5,189.76	5,253.15	23.20	22.26	-40.95	-4,204.86	-4,964.60	6,415.79	6,370.43	45.36	141.447		
5,400.00	5,398.49	5,300.68	5,364.07	23.63	22.73	-40.96	-4,204.28	-4,966.03	6,414.53	6,368.27	46.26	138.658		
5,500.00	5,498.45	5,375.73	5,439.11	24.07	23.05	-40.96	-4,203.98	-4,967.02	6,413.38	6,366.36	47.01	136.412		
5,600.00	5,598.42	5,517.41	5,580.78	24.50	23.65	-40.97	-4,203.51	-4,968.77	6,412.26	6,364.21	48.05	133.456		
5,700.00	5,698.39	5,576.38	5,639.74	24.94	23.90	-40.97	-4,203.44	-4,969.42	6,411.06	6,362.32	48.73	131.551		
5,800.00	5,798.36	5,655.50	5,718.85	25.38	24.24	-40.98	-4,203.66	-4,970.39	6,410.27	6,360.77	49.51	129.487		
5,900.00	5,898.33	5,745.72	5,809.06	25.81	24.62	-40.99	-4,203.93	-4,971.76	6,409.73	6,359.40	50.32	127.371		
6,000.00	5,998.30	5,835.78	5,899.11	26.25	25.00	-40.99	-4,204.35	-4,973.11	6,409.28	6,358.14	51.14	125.326		
6,100.00	6,098.27	5,921.03	5,984.35	26.69	25.36	-41.00	-4,204.57	-4,974.83	6,409.08	6,357.14	51.94	123.399		
6,200.00	6,198.24	6,024.36	6,087.65	27.12	25.80	-41.00	-4,204.64	-4,977.19	6,408.97	6,356.15	52.81	121.352		
6,300.00	6,298.20	6,128.06	6,191.33	27.56	26.25	-41.00	-4,204.85	-4,979.27	6,408.72	6,355.04	53.69	119.367		
6,386.01	6,384.19	6,200.32	6,263.56	27.94	26.55	-41.00	-4,204.80	-4,981.02	6,408.63	6,354.26	54.37	117.869		
6,400.00	6,398.17	6,210.82	6,274.06	28.00	26.60	-41.00	-4,204.77	-4,981.31	6,408.63	6,354.16	54.48	117.641		
6,500.00	6,498.14	6,286.09	6,349.30	28.43	26.92	-41.00	-4,204.89	-4,983.33	6,408.88	6,353.65	55.23	116.039		
6,600.00	6,597.68	6,398.89	6,462.06	28.88	27.40	-40.35	-4,205.28	-4,986.38	6,404.62	6,348.47	56.15	114.065		
6,700.00	6,694.68	6,491.92	6,555.06	29.32	27.79	-41.35	-4,205.30	-4,989.01	6,388.44	6,331.46	56.98	112.122		
6,800.00	6,786.74	6,573.52	6,636.63	29.77	28.14	-43.24	-4,205.56	-4,991.24	6,360.93	6,303.19	57.74	110.160		
6,900.00	6,871.61	6,645.72	6,708.79	30.24	28.45	-46.08	-4,206.06	-4,993.17	6,322.94	6,264.49	58.45	108.176		
7,000.00	6,947.19	6,709.30	6,772.34	30.74	28.72	-49.98	-4,206.28	-4,995.27	6,275.52	6,216.41	59.11	106.166		
7,100.00	7,011.62	6,762.96	6,825.96	31.32	28.95	-55.10	-4,206.27	-4,997.37	6,219.95	6,160.22	59.74	104.126		
7,200.00	7,063.31	6,800.01	6,862.98	32.03	29.11	-61.49	-4,206.17	-4,999.00	6,157.71	6,097.39	60.32	102.086		
7,300.00	7,101.00	6,833.48	6,896.40	32.89	29.25	-69.26	-4,206.08	-5,000.57	6,090.44	6,029.49	60.94	99.935		
7,400.00	7,123.74	6,851.50	6,914.40	33.93	29.33	-78.07	-4,206.06	-5,001.44	6,019.88	5,958.30	61.58	97.759		
7,500.00	7,131.00	6,859.52	6,922.41	35.10	29.36	-87.31	-4,206.05	-5,001.84	5,947.82	5,885.56	62.26	95.539		
7,600.00	7,130.63	6,862.57	6,925.46	36.44	29.37	-87.36	-4,206.05	-5,001.99	5,876.02	5,813.00	63.02	93.237		
7,700.00	7,130.26	6,865.65	6,928.54	37.94	29.39	-87.40	-4,206.05	-5,002.15	5,805.06	5,741.13	63.93	90.809		
7,800.00	7,129.90	6,868.75	6,931.64	39.59	29.40	-87.44	-4,206.06	-5,002.30	5,734.96	5,670.00	64.97	88.277		
7,900.00	7,129.53	6,871.89	6,934.77	41.37	29.41	-87.49	-4,206.06	-5,002.46	5,665.76	5,599.62	66.14	85.663		
8,000.00	7,129.17	6,875.05	6,937.92	43.27	29.43	-87.53	-4,206.06	-5,002.62	5,597.48	5,530.04	67.45	82.993		
8,100.00	7,128.80	6,878.23	6,941.10	45.27	29.44	-87.57	-4,206.06	-5,002.78	5,530.17	5,461.29	68.88	80.288		
8,200.00	7,128.43	6,881.45	6,944.32	47.36	29.46	-87.62	-4,206.06	-5,002.94	5,463.85	5,393.41	70.44	77.569		
8,300.00	7,128.07	6,884.69	6,947.55	49.52	29.47	-87.66	-4,206.07	-5,003.11	5,398.57	5,326.45	72.12	74.857		
8,400.00	7,127.70	6,887.96	6,950.82	51.75	29.48	-87.71	-4,206.07	-5,003.28	5,334.37	5,260.45	73.91	72.169		
8,500.00	7,127.33	6,891.26	6,954.12	54.04	29.50	-87.76	-4,206.08	-5,003.45	5,271.27	5,195.45	75.82	69.521		
8,600.00	7,126.97	6,900.01	6,962.86	56.38	29.53	-87.88	-4,206.09	-5,003.90	5,209.33	5,131.47	77.86	66.904		
8,700.00	7,126.60	6,900.01	6,962.86	58.77	29.53	-87.88	-4,206.09	-5,003.90	5,148.58	5,068.61	79.97	64.383		
8,800.00	7,126.24	6,900.01	6,962.86	61.19	29.53	-87.88	-4,206.09	-5,003.90	5,089.07	5,006.90	82.17	61.931		
8,900.00	7,125.87	6,900.01	6,962.86	63.65	29.53	-87.88	-4,206.09	-5,003.90	5,030.84	4,946.37	84.47	59.555		
9,000.00	7,125.50	6,900.01	6,962.86	66.15	29.53	-87.88	-4,206.09	-5,003.90	4,973.94	4,887.08	86.86	57.261		
9,100.00	7,125.14	6,900.01	6,962.86	68.67	29.53	-87.88	-4,206.09	-5,003.90	4,918.42	4,829.08	89.34	55.051		
9,200.00	7,124.77	6,913.23	6,976.06	71.21	29.59	-88.06	-4,206.13	-5,004.60	4,864.29	4,772.33	91.96	52.896		
9,300.00	7,124.41	6,916.36	6,979.18	73.78	29.60	-88.10	-4,206.14	-5,004.77	4,811.64	4,717.03	94.61	50.856		
9,400.00	7,124.04	6,919.52	6,982.34	76.37	29.62	-88.15	-4,206.15	-5,004.94	4,760.51	4,663.17	97.34	48.905		
9,500.00	7,123.67	6,922.73	6,985.54	78.98	29.63	-88.19	-4,206.16	-5,005.12	4,710.94	4,610.80	100.14	47.044		
9,600.00	7,123.31	6,925.98	6,988.79	81.60	29.65	-88.24	-4,206.18	-5,005.30	4,662.99	4,559.98	103.00	45.270		
9,700.00	7,122.94	6,929.28	6,992.08	84.24	29.66	-88.28	-4,206.19	-5,005.48	4,616.70	4,510.77	105.93	43.582		
9,800.00	7,122.57	6,932.63	6,995.42	86.90	29.67	-88.33	-4,206.21	-5,005.67	4,572.13	4,463.21	108.92	41.979		
9,900.00	7,122.21	6,936.02	6,998.81	89.56	29.69	-88.38	-4,206.22	-5,005.85	4,529.32	4,417.37	111.95	40.458		
10,000.00	7,121.84	6,939.47	7,002.25	92.24	29.70	-88.43	-4,206.24	-5,006.05	4,488.33	4,373.29	115.04	39.017		
10,100.00	7,121.48	6,942.96	7,005.74	94.92	29.72	-88.47	-4,206.26	-5,006.25	4,449.20	4,331.04	118.16	37.654		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,200.00	7,121.11	6,946.50	7,009.28	97.62	29.73	-88.52	-4,206.28	-5,006.45	4,412.00	4,290.67	121.32	36.366		
10,300.00	7,120.74	6,950.10	7,012.87	100.32	29.75	-88.57	-4,206.30	-5,006.66	4,376.75	4,252.24	124.51	35.150		
10,400.00	7,120.38	6,953.75	7,016.51	103.04	29.76	-88.62	-4,206.33	-5,006.87	4,343.52	4,215.79	127.73	34.005		
10,500.00	7,120.01	6,957.45	7,020.21	105.76	29.78	-88.68	-4,206.35	-5,007.08	4,312.34	4,181.38	130.97	32.927		
10,600.00	7,119.64	6,961.21	7,023.96	108.48	29.80	-88.73	-4,206.38	-5,007.30	4,283.27	4,149.06	134.21	31.914		
10,700.00	7,119.28	6,965.03	7,027.77	111.22	29.81	-88.78	-4,206.41	-5,007.53	4,256.35	4,118.89	137.46	30.964		
10,800.00	7,118.91	6,968.91	7,031.64	113.96	29.83	-88.83	-4,206.44	-5,007.76	4,231.61	4,090.90	140.71	30.073		
10,900.00	7,118.55	6,972.84	7,035.57	116.70	29.85	-88.89	-4,206.47	-5,008.00	4,209.10	4,065.15	143.95	29.239		
11,000.00	7,118.18	6,976.84	7,039.56	119.45	29.86	-88.95	-4,206.50	-5,008.24	4,188.85	4,041.68	147.18	28.461		
11,100.00	7,117.81	6,980.90	7,043.61	122.21	29.88	-89.00	-4,206.54	-5,008.48	4,170.90	4,020.52	150.38	27.736		
11,200.00	7,117.45	6,985.02	7,047.72	124.97	29.90	-89.06	-4,206.57	-5,008.74	4,155.27	4,001.72	153.55	27.062		
11,300.00	7,117.08	6,989.21	7,051.90	127.73	29.92	-89.12	-4,206.61	-5,008.99	4,141.99	3,985.31	156.68	26.436		
11,400.00	7,116.72	6,993.46	7,056.15	130.50	29.93	-89.18	-4,206.65	-5,009.26	4,131.08	3,971.31	159.77	25.857		
11,500.00	7,116.35	7,000.01	7,062.69	133.27	29.96	-89.27	-4,206.72	-5,009.67	4,122.56	3,959.75	162.81	25.321		
11,600.00	7,115.98	7,002.41	7,065.08	136.04	29.97	-89.30	-4,206.74	-5,009.82	4,116.45	3,950.67	165.78	24.830		
11,700.00	7,115.62	7,007.29	7,069.95	138.82	29.99	-89.37	-4,206.80	-5,010.13	4,112.76	3,944.06	168.70	24.379		
11,800.00	7,115.25	7,012.17	7,074.82	141.60	30.01	-89.44	-4,206.85	-5,010.44	4,111.49	3,939.94	171.55	23.967		
11,802.45	7,115.24	7,012.29	7,074.94	141.67	30.01	-89.44	-4,206.85	-5,010.44	4,111.49	3,939.87	171.62	23.957 CC		
11,900.00	7,114.88	7,017.05	7,079.69	144.39	30.03	-89.50	-4,206.90	-5,010.74	4,112.64	3,938.32	174.32	23.593 ES		
12,000.00	7,114.52	7,021.94	7,084.57	147.17	30.05	-89.57	-4,206.96	-5,011.05	4,116.22	3,939.21	177.01	23.255		
12,100.00	7,114.15	7,026.84	7,089.46	149.96	30.08	-89.64	-4,207.02	-5,011.36	4,122.21	3,942.60	179.61	22.951		
12,200.00	7,113.79	7,031.74	7,094.35	152.75	30.10	-89.71	-4,207.08	-5,011.67	4,130.61	3,948.48	182.12	22.680		
12,300.00	7,113.42	7,036.64	7,099.24	155.55	30.12	-89.78	-4,207.14	-5,011.98	4,141.39	3,956.85	184.55	22.441		
12,400.00	7,113.05	7,041.55	7,104.14	158.34	30.14	-89.85	-4,207.20	-5,012.29	4,154.56	3,967.69	186.87	22.232		
12,500.00	7,112.69	7,046.46	7,109.04	161.14	30.16	-89.91	-4,207.26	-5,012.60	4,170.07	3,980.97	189.10	22.053		
12,600.00	7,112.32	7,051.38	7,113.95	163.94	30.18	-89.98	-4,207.32	-5,012.92	4,187.90	3,996.68	191.22	21.901		
12,700.00	7,111.96	7,056.30	7,118.86	166.74	30.20	-90.05	-4,207.39	-5,013.23	4,208.03	4,014.79	193.25	21.776		
12,800.00	7,111.59	7,061.23	7,123.78	169.54	30.22	-90.12	-4,207.46	-5,013.54	4,230.43	4,035.26	195.17	21.676		
12,900.00	7,111.22	7,066.16	7,128.70	172.35	30.24	-90.19	-4,207.52	-5,013.85	4,255.04	4,058.06	196.99	21.601		
13,000.00	7,110.86	7,071.10	7,133.63	175.16	30.27	-90.26	-4,207.59	-5,014.17	4,281.85	4,083.15	198.70	21.549		
13,100.00	7,110.49	7,076.04	7,138.56	177.96	30.29	-90.33	-4,207.66	-5,014.48	4,310.80	4,110.48	200.32	21.520		
13,200.00	7,110.12	7,080.99	7,143.49	180.77	30.31	-90.39	-4,207.74	-5,014.79	4,341.86	4,140.02	201.83	21.512 SF		
13,300.00	7,109.76	7,085.94	7,148.43	183.58	30.33	-90.46	-4,207.81	-5,015.11	4,374.97	4,171.72	203.25	21.525		
13,400.00	7,109.39	7,090.89	7,153.38	186.40	30.35	-90.53	-4,207.88	-5,015.42	4,410.10	4,205.53	204.57	21.558		
13,500.00	7,109.03	7,095.85	7,158.33	189.21	30.37	-90.60	-4,207.96	-5,015.74	4,447.19	4,241.40	205.79	21.610		
13,600.00	7,108.66	7,100.99	7,163.45	192.03	30.39	-90.67	-4,208.04	-5,016.06	4,486.20	4,279.27	206.93	21.680		
13,700.00	7,108.29	7,107.00	7,169.45	194.84	30.42	-90.76	-4,208.14	-5,016.44	4,527.08	4,319.10	207.98	21.767		
13,800.00	7,107.93	7,113.02	7,175.46	197.66	30.44	-90.84	-4,208.23	-5,016.83	4,569.76	4,360.82	208.94	21.871		
13,900.00	7,107.56	7,119.04	7,181.46	200.48	30.47	-90.92	-4,208.33	-5,017.21	4,614.22	4,404.39	209.82	21.991		
14,000.00	7,107.19	7,125.05	7,187.46	203.30	30.50	-91.01	-4,208.42	-5,017.59	4,660.39	4,449.76	210.63	22.126		
14,100.00	7,106.83	7,131.07	7,193.47	206.12	30.52	-91.09	-4,208.52	-5,017.97	4,708.22	4,496.87	211.35	22.277		
14,200.00	7,106.46	7,137.08	7,199.47	208.94	30.55	-91.17	-4,208.61	-5,018.36	4,757.66	4,545.66	212.01	22.441		
14,300.00	7,106.10	7,143.10	7,205.47	211.76	30.57	-91.26	-4,208.71	-5,018.74	4,808.67	4,596.09	212.59	22.620		
14,400.00	7,105.73	7,149.11	7,211.47	214.58	30.60	-91.34	-4,208.80	-5,019.12	4,861.20	4,648.09	213.11	22.811		
14,500.00	7,105.36	7,155.13	7,217.47	217.40	30.63	-91.42	-4,208.90	-5,019.50	4,915.19	4,701.63	213.56	23.015		
14,600.00	7,105.00	7,161.14	7,223.47	220.23	30.65	-91.51	-4,208.99	-5,019.88	4,970.60	4,756.64	213.96	23.232		
14,700.00	7,104.63	7,167.15	7,229.48	223.05	30.68	-91.59	-4,209.08	-5,020.27	5,027.38	4,813.08	214.30	23.460		
14,800.00	7,104.27	7,173.17	7,235.48	225.88	30.70	-91.67	-4,209.18	-5,020.65	5,085.48	4,870.90	214.59	23.699		
14,872.41	7,104.00	7,177.52	7,239.82	227.93	30.72	-91.74	-4,209.25	-5,020.92	5,128.36	4,913.60	214.76	23.879		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	73.00	3.28	3.28	-148.30	-5,333.15	-3,293.59	6,268.62					
100.00	100.00	90.12	138.12	3.28	3.28	-148.30	-5,333.00	-3,293.46	6,268.11	6,261.54	6.57	954.341		
200.00	200.00	192.93	240.92	3.34	3.33	-148.30	-5,332.24	-3,293.27	6,267.38	6,260.71	6.67	940.160		
300.00	300.00	263.16	311.15	3.44	3.39	-148.30	-5,331.74	-3,293.48	6,266.95	6,260.11	6.84	916.497		
400.00	400.00	1,470.61	1,505.58	3.60	7.49	-147.38	-5,193.77	-3,324.05	6,264.73	6,253.71	11.01	568.863		
500.00	500.00	1,529.18	1,562.58	3.81	7.80	-147.30	-5,180.47	-3,326.21	6,247.40	6,235.93	11.47	544.900		
600.00	599.98	1,606.01	1,637.43	4.04	8.22	-57.41	-5,163.40	-3,329.22	6,229.77	6,217.72	12.05	517.053		
700.00	699.95	1,677.84	1,707.36	4.30	8.62	-57.32	-5,147.34	-3,332.52	6,211.95	6,199.31	12.64	491.407		
800.00	799.92	1,792.22	1,818.82	4.59	9.26	-57.17	-5,122.21	-3,338.05	6,194.66	6,181.17	13.48	459.454		
900.00	899.89	1,889.62	1,913.59	4.90	9.81	-57.04	-5,100.27	-3,342.81	6,176.89	6,162.61	14.27	432.766		
1,000.00	999.86	1,987.02	2,008.36	5.23	10.38	-56.91	-5,078.32	-3,347.57	6,159.15	6,144.06	15.09	408.173		
1,100.00	1,099.83	2,084.42	2,103.13	5.58	10.95	-56.77	-5,056.37	-3,352.33	6,141.44	6,125.51	15.93	385.573		
1,200.00	1,199.80	2,181.81	2,197.91	5.94	11.53	-56.64	-5,034.43	-3,357.09	6,123.77	6,106.98	16.79	364.829		
1,300.00	1,299.77	2,279.21	2,292.68	6.30	12.11	-56.51	-5,012.48	-3,361.85	6,106.13	6,088.47	17.66	345.793		
1,400.00	1,399.73	2,376.61	2,387.45	6.68	12.70	-56.37	-4,990.53	-3,366.61	6,088.52	6,069.98	18.54	328.313		
1,500.00	1,499.70	2,474.00	2,482.23	7.07	13.29	-56.24	-4,968.58	-3,371.37	6,070.95	6,051.50	19.44	312.241		
1,600.00	1,599.67	2,571.40	2,577.00	7.46	13.88	-56.10	-4,946.64	-3,376.13	6,053.41	6,033.06	20.35	297.443		
1,700.00	1,699.64	2,668.80	2,671.77	7.85	14.47	-55.96	-4,924.69	-3,380.88	6,035.90	6,014.63	21.27	283.792		
1,800.00	1,799.61	2,766.20	2,766.54	8.25	15.07	-55.82	-4,902.74	-3,385.64	6,018.43	5,996.24	22.19	271.177		
1,900.00	1,899.58	2,863.59	2,861.32	8.66	15.67	-55.69	-4,880.79	-3,390.40	6,001.00	5,977.87	23.13	259.495		
2,000.00	1,999.55	2,960.99	2,956.09	9.06	16.27	-55.55	-4,858.85	-3,395.16	5,983.59	5,959.53	24.06	248.656		
2,100.00	2,099.52	3,058.39	3,050.86	9.47	16.87	-55.41	-4,836.90	-3,399.92	5,966.23	5,941.22	25.01	238.580		
2,200.00	2,199.48	3,155.78	3,145.63	9.89	17.48	-55.26	-4,814.95	-3,404.68	5,948.90	5,922.94	25.96	229.193		
2,300.00	2,299.45	3,253.18	3,240.41	10.30	18.08	-55.12	-4,793.00	-3,409.44	5,931.60	5,904.69	26.91	220.433		
2,400.00	2,399.42	3,353.44	3,335.18	10.72	18.70	-54.98	-4,771.06	-3,414.20	5,914.35	5,886.46	27.88	212.121		
2,500.00	2,499.39	3,456.04	3,429.95	11.14	19.34	-54.84	-4,749.11	-3,418.96	5,897.12	5,868.25	28.87	204.251		
2,600.00	2,599.36	3,545.37	3,524.73	11.56	19.90	-54.69	-4,727.16	-3,423.72	5,879.94	5,850.15	29.79	197.370		
2,700.00	2,699.33	3,642.77	3,619.50	11.98	20.51	-54.55	-4,705.21	-3,428.48	5,862.79	5,832.03	30.76	190.603		
2,800.00	2,799.30	3,740.17	3,714.27	12.41	21.12	-54.40	-4,683.27	-3,433.24	5,845.68	5,813.95	31.73	184.233		
2,900.00	2,899.27	10,711.28	7,245.43	12.83	120.56	-92.94	-3,851.93	30.26	5,808.14	5,710.75	97.39	59.638		
3,000.00	2,999.23	10,707.03	7,245.50	13.26	120.42	-92.88	-3,851.94	26.00	5,733.75	5,635.27	98.48	58.220		
3,100.00	3,099.20	10,702.77	7,245.58	13.68	120.29	-92.81	-3,851.96	21.75	5,660.16	5,560.55	99.60	56.826		
3,200.00	3,199.17	10,701.49	7,245.65	14.11	120.25	-92.75	-3,851.97	17.49	5,587.37	5,486.56	100.82	55.420		
3,300.00	3,299.14	10,694.25	7,245.73	14.54	120.02	-92.69	-3,851.99	13.23	5,515.44	5,413.52	101.92	54.114		
3,400.00	3,399.11	10,690.00	7,245.80	14.97	119.88	-92.63	-3,852.00	8.98	5,444.39	5,341.28	103.12	52.798		
3,500.00	3,499.08	10,685.74	7,245.88	15.40	119.75	-92.56	-3,852.02	4.72	5,374.26	5,269.93	104.34	51.509		
3,600.00	3,599.05	10,681.48	7,245.95	15.83	119.61	-92.50	-3,852.03	0.47	5,305.09	5,199.51	105.58	50.249		
3,700.00	3,699.02	10,677.23	7,246.02	16.26	119.48	-92.44	-3,852.04	-3.79	5,236.91	5,130.07	106.84	49.017		
3,800.00	3,798.98	10,672.97	7,246.10	16.69	119.34	-92.37	-3,852.06	-8.05	5,169.75	5,061.63	108.12	47.815		
3,900.00	3,898.95	10,668.71	7,246.17	17.12	119.21	-92.31	-3,852.07	-12.30	5,103.68	4,994.25	109.42	46.642		
4,000.00	3,998.92	10,664.46	7,246.25	17.55	119.07	-92.25	-3,852.09	-16.56	5,038.71	4,927.97	110.74	45.500		
4,100.00	4,098.89	10,660.20	7,246.32	17.98	118.94	-92.18	-3,852.10	-20.82	4,974.90	4,862.83	112.08	44.388		
4,200.00	4,198.86	10,655.94	7,246.40	18.42	118.80	-92.12	-3,852.11	-25.07	4,912.30	4,798.87	113.43	43.308		
4,300.00	4,298.83	10,652.36	7,246.47	18.85	118.69	-92.06	-3,852.13	-29.33	4,850.95	4,736.14	114.81	42.253		
4,400.00	4,398.80	10,656.62	7,246.55	19.28	118.83	-91.99	-3,852.14	-33.58	4,790.89	4,674.49	116.40	41.158		
4,500.00	4,498.77	10,643.17	7,246.62	19.72	118.40	-91.93	-3,852.16	-37.84	4,732.19	4,614.64	117.55	40.258		
4,600.00	4,598.73	10,638.91	7,246.70	20.15	118.27	-91.87	-3,852.17	-42.10	4,674.88	4,555.94	118.94	39.306		
4,700.00	4,698.70	10,634.66	7,246.77	20.58	118.13	-91.80	-3,852.19	-46.35	4,619.02	4,498.69	120.33	38.387		
4,800.00	4,798.67	10,630.40	7,246.85	21.02	118.00	-91.74	-3,852.20	-50.61	4,564.66	4,442.94	121.72	37.501		
4,900.00	4,898.64	10,626.14	7,246.92	21.45	117.86	-91.68	-3,852.21	-54.87	4,511.86	4,388.75	123.11	36.648		
5,000.00	4,998.61	10,621.89	7,247.00	21.89	117.73	-91.61	-3,852.23	-59.12	4,460.68	4,336.18	124.50	35.829		
5,100.00	5,098.58	10,617.63	7,247.07	22.32	117.59	-91.55	-3,852.24	-63.38	4,411.16	4,285.29	125.88	35.044		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,198.55	10,613.37	7,247.15	22.76	117.46	-91.49	-3,852.26	-67.63	4,363.38	4,236.13	127.24	34.292		
5,300.00	5,298.52	10,609.12	7,247.22	23.20	117.32	-91.43	-3,852.27	-71.89	4,317.37	4,188.78	128.59	33.575		
5,400.00	5,398.49	10,604.86	7,247.30	23.63	117.19	-91.36	-3,852.29	-76.15	4,273.20	4,143.29	129.92	32.891		
5,500.00	5,498.45	10,600.60	7,247.37	24.07	117.05	-91.30	-3,852.30	-80.40	4,230.94	4,099.72	131.22	32.242		
5,600.00	5,598.42	10,603.66	7,247.45	24.50	117.15	-91.24	-3,852.31	-84.66	4,190.63	4,057.91	132.71	31.577		
5,700.00	5,698.39	10,592.09	7,247.52	24.94	116.78	-91.17	-3,852.33	-88.92	4,152.33	4,018.59	133.74	31.048		
5,800.00	5,798.36	10,587.83	7,247.60	25.38	116.65	-91.11	-3,852.34	-93.17	4,116.10	3,981.16	134.95	30.502		
5,900.00	5,898.33	10,583.57	7,247.67	25.81	116.52	-91.05	-3,852.36	-97.43	4,082.00	3,945.89	136.11	29.991		
6,000.00	5,998.30	10,579.32	7,247.75	26.25	116.38	-90.98	-3,852.37	-101.68	4,050.07	3,912.85	137.22	29.515		
6,100.00	6,098.27	10,575.06	7,247.82	26.69	116.25	-90.92	-3,852.39	-105.94	4,020.38	3,882.09	138.28	29.073		
6,200.00	6,198.24	10,570.80	7,247.90	27.12	116.11	-90.86	-3,852.40	-110.20	3,992.96	3,853.67	139.29	28.666		
6,300.00	6,298.20	10,566.55	7,247.97	27.56	115.98	-90.79	-3,852.41	-114.45	3,967.87	3,827.64	140.23	28.294		
6,400.00	6,398.17	10,562.29	7,248.05	28.00	115.84	-90.73	-3,852.43	-118.71	3,945.16	3,804.04	141.11	27.957		
6,500.00	6,498.14	10,558.03	7,248.12	28.43	115.71	-90.67	-3,852.44	-122.97	3,924.85	3,782.93	141.92	27.655		
6,600.00	6,597.68	10,547.74	7,248.30	28.88	115.39	-90.99	-3,852.48	-133.25	3,906.99	3,764.52	142.47	27.423		
6,700.00	6,694.68	10,522.15	7,248.75	29.32	114.58	-91.93	-3,852.56	-158.84	3,891.73	3,749.28	142.45	27.319		
6,800.00	6,786.74	10,481.77	7,249.46	29.77	113.31	-92.49	-3,852.70	-199.22	3,879.20	3,737.31	141.89	27.340		
6,900.00	6,871.61	10,427.59	7,250.42	30.24	111.60	-92.70	-3,852.88	-253.39	3,869.27	3,728.46	140.81	27.478		
7,000.00	6,947.19	10,358.18	7,251.52	30.74	109.42	-92.61	-3,853.11	-322.78	3,861.67	3,722.45	139.22	27.738		
7,100.00	7,011.62	10,279.27	7,251.62	31.32	106.96	-92.37	-3,853.37	-401.70	3,855.93	3,718.57	137.36	28.072		
7,200.00	7,063.31	10,193.79	7,251.62	32.03	104.29	-92.10	-3,853.66	-487.17	3,851.70	3,716.30	135.39	28.448		
7,300.00	7,101.00	10,101.29	7,251.62	32.89	101.42	-91.86	-3,853.97	-579.68	3,848.56	3,715.20	133.35	28.860		
7,400.00	7,123.74	10,004.03	7,251.62	33.93	98.41	-91.74	-3,854.29	-676.94	3,846.17	3,714.83	131.34	29.284		
7,500.00	7,131.00	9,904.41	7,251.62	35.10	95.34	-91.80	-3,854.62	-776.56	3,844.32	3,714.91	129.41	29.705		
7,600.00	7,130.63	9,804.42	7,251.62	36.44	92.29	-91.81	-3,854.96	-876.54	3,842.72	3,715.06	127.66	30.102		
7,700.00	7,130.26	9,704.44	7,251.62	37.94	89.25	-91.81	-3,855.29	-976.53	3,841.11	3,715.02	126.08	30.465		
7,800.00	7,129.90	9,604.45	7,251.62	39.59	86.23	-91.82	-3,855.63	-1,076.51	3,839.50	3,714.82	124.68	30.795		
7,900.00	7,129.53	9,504.46	7,251.62	41.37	83.24	-91.83	-3,855.96	-1,176.50	3,837.89	3,714.46	123.43	31.094		
8,000.00	7,129.17	9,404.48	7,251.62	43.27	80.28	-91.83	-3,856.29	-1,276.49	3,836.28	3,713.96	122.31	31.364		
8,100.00	7,128.80	9,304.49	7,251.62	45.27	77.34	-91.84	-3,856.63	-1,376.47	3,834.67	3,713.34	121.33	31.606		
8,200.00	7,128.43	9,204.50	7,251.62	47.36	74.44	-91.85	-3,856.96	-1,476.46	3,833.06	3,712.60	120.46	31.821		
8,300.00	7,128.07	9,104.52	7,251.62	49.52	71.58	-91.85	-3,857.30	-1,576.44	3,831.45	3,711.75	119.70	32.009		
8,400.00	7,127.70	9,004.53	7,251.62	51.75	68.77	-91.86	-3,857.63	-1,676.43	3,829.84	3,710.80	119.05	32.171		
8,500.00	7,127.33	8,904.55	7,251.62	54.04	66.01	-91.86	-3,857.96	-1,776.41	3,828.23	3,709.74	118.50	32.307		
8,600.00	7,126.97	8,804.56	7,251.62	56.38	63.30	-91.87	-3,858.30	-1,876.40	3,826.62	3,708.58	118.05	32.417		
8,700.00	7,126.60	8,704.57	7,251.62	58.77	60.66	-91.88	-3,858.63	-1,976.38	3,825.02	3,707.32	117.70	32.499		
8,800.00	7,126.24	8,604.59	7,251.62	61.19	58.11	-91.88	-3,858.97	-2,076.37	3,823.41	3,705.95	117.45	32.553		
8,900.00	7,125.87	8,504.60	7,251.62	63.65	55.65	-91.89	-3,859.30	-2,176.36	3,821.80	3,704.48	117.32	32.577		
9,000.00	7,125.50	8,404.61	7,251.62	66.15	53.30	-91.90	-3,859.63	-2,276.34	3,820.19	3,702.89	117.30	32.568		
9,100.00	7,125.14	8,304.63	7,251.62	68.67	51.10	-91.90	-3,859.97	-2,376.33	3,818.58	3,701.17	117.41	32.524		
9,200.00	7,124.77	8,204.64	7,251.62	71.21	49.08	-91.91	-3,860.30	-2,476.31	3,816.97	3,699.32	117.66	32.442		
9,300.00	7,124.41	8,104.66	7,251.62	73.78	47.28	-91.91	-3,860.64	-2,576.30	3,815.36	3,697.31	118.06	32.318		
9,400.00	7,124.04	8,004.67	7,251.62	76.37	45.79	-91.92	-3,860.97	-2,676.28	3,813.76	3,695.13	118.63	32.149		
9,500.00	7,123.67	7,904.68	7,251.62	78.98	44.64	-91.93	-3,861.30	-2,776.27	3,812.15	3,692.76	119.39	31.930		
9,600.00	7,123.31	7,804.70	7,251.62	81.60	43.85	-91.93	-3,861.64	-2,876.26	3,810.54	3,690.16	120.38	31.655		
9,700.00	7,122.94	7,722.59	7,251.44	84.24	43.43	-91.94	-3,861.95	-2,958.36	3,809.01	3,687.15	121.86	31.258		
9,780.73	7,122.64	7,685.20	7,249.48	86.38	43.29	-91.91	-3,862.53	-2,995.69	3,808.55	3,685.00	123.55	30.826 CC		
9,800.00	7,122.57	7,676.31	7,248.70	86.90	43.25	-91.90	-3,862.74	-3,004.54	3,808.57	3,684.62	123.95	30.726		
9,900.00	7,122.21	7,630.63	7,242.81	89.56	43.11	-91.81	-3,864.26	-3,049.81	3,809.56	3,683.48	126.08	30.216 ES		
10,000.00	7,121.84	7,586.07	7,234.02	92.24	43.00	-91.68	-3,866.44	-3,093.43	3,812.01	3,683.77	128.23	29.728		
10,100.00	7,121.48	7,552.02	7,225.32	94.92	42.92	-91.55	-3,868.57	-3,126.28	3,815.97	3,685.45	130.52	29.237		
10,200.00	7,121.11	7,500.00	7,208.75	97.62	42.81	-91.30	-3,872.57	-3,175.41	3,821.44	3,688.81	132.63	28.813		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.74	7,452.02	7,190.05	100.32	42.71	-91.02	-3,877.05	-3,219.36	3,828.58	3,693.78	134.80	28.401	
10,400.00	7,120.38	7,424.38	7,177.83	103.04	42.65	-90.84	-3,879.97	-3,243.97	3,837.34	3,700.19	137.16	27.978	
10,500.00	7,120.01	7,400.00	7,166.20	105.76	42.61	-90.67	-3,882.73	-3,265.21	3,847.92	3,708.45	139.47	27.590	
10,600.00	7,119.64	7,352.01	7,141.03	108.48	42.51	-90.29	-3,888.70	-3,305.62	3,860.23	3,718.61	141.61	27.259	
10,700.00	7,119.28	7,317.32	7,121.02	111.22	42.43	-89.99	-3,893.43	-3,333.55	3,874.44	3,730.62	143.82	26.939	
10,800.00	7,118.91	7,300.00	7,110.48	113.96	42.39	-89.84	-3,895.92	-3,347.07	3,890.53	3,744.45	146.07	26.634	
10,900.00	7,118.55	7,269.66	7,091.17	116.70	42.31	-89.55	-3,900.47	-3,370.03	3,908.57	3,760.35	148.22	26.371	
11,000.00	7,118.18	7,252.01	7,079.46	119.45	42.27	-89.38	-3,903.23	-3,382.93	3,928.61	3,778.26	150.35	26.130	
11,100.00	7,117.81	7,208.36	7,049.03	122.21	42.16	-88.93	-3,910.38	-3,413.38	3,950.66	3,798.33	152.33	25.935	
11,200.00	7,117.45	7,200.00	7,042.96	124.97	42.13	-88.84	-3,911.81	-3,418.97	3,974.61	3,820.23	154.37	25.747	
11,300.00	7,117.08	7,179.95	7,028.15	127.73	42.07	-88.62	-3,915.28	-3,432.02	4,000.63	3,844.31	156.32	25.593	
11,400.00	7,116.72	7,152.01	7,006.86	130.50	41.99	-88.30	-3,920.27	-3,449.40	4,028.69	3,870.54	158.16	25.473	
11,500.00	7,116.35	7,152.01	7,006.86	133.27	41.99	-88.30	-3,920.27	-3,449.40	4,058.71	3,898.70	160.01	25.365	
11,600.00	7,115.98	7,127.72	6,987.75	136.04	41.91	-88.02	-3,924.75	-3,463.72	4,090.68	3,928.95	161.73	25.293	
11,700.00	7,115.62	7,100.00	6,965.32	138.82	41.82	-87.69	-3,930.00	-3,479.13	4,124.71	3,961.35	163.36	25.249	
11,800.00	7,115.25	7,100.00	6,965.32	141.60	41.82	-87.69	-3,930.00	-3,479.13	4,160.52	3,995.53	164.99	25.217	
11,900.00	7,114.88	7,100.00	6,965.32	144.39	41.82	-87.69	-3,930.00	-3,479.13	4,198.41	4,031.87	166.54	25.210 SF	
12,000.00	7,114.52	7,072.87	6,942.75	147.17	41.72	-87.37	-3,935.28	-3,493.22	4,237.95	4,069.99	167.96	25.232	
12,100.00	7,114.15	7,052.01	6,925.01	149.96	41.65	-87.11	-3,939.42	-3,503.38	4,279.47	4,110.15	169.32	25.274	
12,200.00	7,113.79	7,049.69	6,923.02	152.75	41.64	-87.08	-3,939.89	-3,504.47	4,322.69	4,152.04	170.65	25.331	
12,300.00	7,113.42	7,049.69	6,923.02	155.55	41.64	-87.08	-3,939.89	-3,504.47	4,367.75	4,195.84	171.91	25.408	
12,400.00	7,113.05	7,030.40	6,906.30	158.34	41.56	-86.83	-3,943.79	-3,513.27	4,414.41	4,241.35	173.06	25.507	
12,500.00	7,112.69	7,010.76	6,889.02	161.14	41.48	-86.58	-3,947.82	-3,521.69	4,462.84	4,288.69	174.15	25.626	
12,600.00	7,112.32	7,010.76	6,889.02	163.94	41.48	-86.58	-3,947.82	-3,521.69	4,512.76	4,337.55	175.21	25.756	
12,700.00	7,111.96	7,004.52	6,883.48	166.74	41.46	-86.50	-3,949.12	-3,524.25	4,564.31	4,388.11	176.19	25.905	
12,800.00	7,111.59	7,000.00	6,879.45	169.54	41.44	-86.45	-3,950.06	-3,526.07	4,617.38	4,440.26	177.12	26.070	
12,900.00	7,111.22	7,000.00	6,879.45	172.35	41.44	-86.45	-3,950.06	-3,526.07	4,671.98	4,493.99	177.99	26.249	
13,000.00	7,110.86	7,000.00	6,879.45	175.16	41.44	-86.45	-3,950.06	-3,526.07	4,728.06	4,549.27	178.80	26.444	
13,100.00	7,110.49	6,975.99	6,857.84	177.96	41.33	-86.13	-3,955.10	-3,535.24	4,785.23	4,605.70	179.53	26.654	
13,200.00	7,110.12	6,952.01	6,835.94	180.77	41.23	-85.82	-3,960.20	-3,543.55	4,844.11	4,663.90	180.21	26.880	
13,300.00	7,109.76	6,952.01	6,835.94	183.58	41.23	-85.82	-3,960.20	-3,543.55	4,903.98	4,723.11	180.87	27.113	
13,400.00	7,109.39	6,952.01	6,835.94	186.40	41.23	-85.82	-3,960.20	-3,543.55	4,965.14	4,783.66	181.48	27.359	
13,500.00	7,109.03	6,952.01	6,835.94	189.21	41.23	-85.82	-3,960.20	-3,543.55	5,027.55	4,845.50	182.04	27.617	
13,600.00	7,108.66	6,952.01	6,835.94	192.03	41.23	-85.82	-3,960.20	-3,543.55	5,091.15	4,908.59	182.56	27.887	
13,700.00	7,108.29	6,952.01	6,835.94	194.84	41.23	-85.82	-3,960.20	-3,543.55	5,155.92	4,972.88	183.04	28.168	
13,800.00	7,107.93	6,952.01	6,835.94	197.66	41.23	-85.82	-3,960.20	-3,543.55	5,221.79	5,038.31	183.48	28.460	
13,900.00	7,107.56	6,952.01	6,835.94	200.48	41.23	-85.82	-3,960.20	-3,543.55	5,288.73	5,104.86	183.88	28.762	
14,000.00	7,107.19	6,928.99	6,814.63	203.30	41.12	-85.51	-3,965.16	-3,550.73	5,356.36	5,172.12	184.24	29.073	
14,100.00	7,106.83	6,924.83	6,810.76	206.12	41.10	-85.46	-3,966.06	-3,551.94	5,425.18	5,240.61	184.57	29.393	
14,200.00	7,106.46	6,900.00	6,787.47	208.94	40.98	-85.12	-3,971.48	-3,558.64	5,495.23	5,310.37	184.86	29.726	
14,300.00	7,106.10	6,900.00	6,787.47	211.76	40.98	-85.12	-3,971.48	-3,558.64	5,565.80	5,380.66	185.14	30.063	
14,400.00	7,105.73	6,900.00	6,787.47	214.58	40.98	-85.12	-3,971.48	-3,558.64	5,637.25	5,451.86	185.39	30.408	
14,500.00	7,105.36	6,900.00	6,787.47	217.40	40.98	-85.12	-3,971.48	-3,558.64	5,709.57	5,523.95	185.61	30.761	
14,600.00	7,105.00	6,900.00	6,787.47	220.23	40.98	-85.12	-3,971.48	-3,558.64	5,782.71	5,596.89	185.81	31.121	
14,700.00	7,104.63	6,900.00	6,787.47	223.05	40.98	-85.12	-3,971.48	-3,558.64	5,856.64	5,670.65	185.99	31.490	
14,800.00	7,104.27	6,900.00	6,787.47	225.88	40.98	-85.12	-3,971.48	-3,558.64	5,931.33	5,745.20	186.14	31.865	
14,872.41	7,104.00	6,900.00	6,787.47	227.93	40.98	-85.12	-3,971.48	-3,558.64	5,985.88	5,799.65	186.24	32.141	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	73.00	3.28	3.28	-148.21	-5,313.12	-3,293.58	6,251.58					
100.00	100.00	1,245.34	1,275.61	3.28	7.01	-147.11	-5,145.55	-3,327.00	6,239.20	6,229.03	10.17	613.301		
200.00	200.00	1,384.37	1,409.60	3.34	7.84	-146.87	-5,109.31	-3,334.90	6,220.11	6,209.17	10.93	568.930		
300.00	300.00	1,457.32	1,480.01	3.44	8.28	-146.74	-5,090.55	-3,338.37	6,200.87	6,189.48	11.39	544.261		
400.00	400.00	1,570.87	1,589.74	3.60	8.97	-146.56	-5,061.71	-3,343.04	6,181.61	6,169.48	12.13	509.760		
500.00	500.00	1,627.73	1,644.77	3.81	9.32	-146.47	-5,047.58	-3,345.18	6,162.70	6,150.10	12.60	489.201		
600.00	599.98	600.00	1,771.48	4.04	3.97	-56.51	-5,015.37	-3,350.27	6,143.27	6,135.10	8.17	751.931		
700.00	699.95	1,882.91	1,891.40	4.30	10.93	-56.32	-4,983.01	-3,355.95	6,122.48	6,108.05	14.44	424.009		
800.00	799.92	1,979.39	1,984.42	4.59	11.56	-56.17	-4,957.76	-3,360.43	6,101.68	6,086.44	15.25	400.218		
900.00	899.89	2,075.88	2,077.43	4.90	12.19	-56.01	-4,932.50	-3,364.91	6,080.93	6,064.84	16.08	378.147		
1,000.00	999.86	2,172.37	2,170.45	5.23	12.83	-55.86	-4,907.25	-3,369.39	6,060.21	6,043.27	16.94	357.745		
1,100.00	1,099.83	2,268.86	2,263.46	5.58	13.47	-55.70	-4,881.99	-3,373.87	6,039.54	6,021.72	17.82	338.925		
1,200.00	1,199.80	2,365.35	2,356.48	5.94	14.12	-55.55	-4,856.74	-3,378.35	6,018.91	6,000.19	18.72	321.578		
1,300.00	1,299.77	2,461.83	2,449.50	6.30	14.76	-55.39	-4,831.49	-3,382.83	5,998.32	5,978.69	19.63	305.588		
1,400.00	1,399.73	2,558.32	2,542.51	6.68	15.41	-55.23	-4,806.23	-3,387.31	5,977.78	5,957.23	20.55	290.838		
1,500.00	1,499.70	2,654.81	2,635.53	7.07	16.06	-55.08	-4,780.98	-3,391.79	5,957.29	5,935.80	21.49	277.217		
1,600.00	1,599.67	2,751.30	2,728.55	7.46	16.71	-54.92	-4,755.72	-3,396.28	5,936.84	5,914.40	22.44	264.620		
1,700.00	1,699.64	2,847.79	2,821.56	7.85	17.36	-54.75	-4,730.47	-3,400.76	5,916.43	5,893.04	23.39	252.952		
1,800.00	1,799.61	2,944.27	2,914.58	8.25	18.02	-54.59	-4,705.21	-3,405.24	5,896.07	5,871.72	24.35	242.125		
1,900.00	1,899.58	3,040.76	3,007.60	8.66	18.67	-54.43	-4,679.96	-3,409.72	5,875.76	5,850.44	25.32	232.061		
2,000.00	1,999.55	3,137.25	3,100.61	9.06	19.33	-54.27	-4,654.70	-3,414.20	5,855.50	5,829.21	26.29	222.688		
2,100.00	2,099.52	3,233.74	3,193.63	9.47	19.98	-54.10	-4,629.45	-3,418.68	5,835.29	5,808.01	27.27	213.944		
2,200.00	2,199.48	3,330.23	3,286.65	9.89	20.71	-53.93	-4,604.20	-3,423.16	5,815.12	5,786.80	28.32	205.359		
2,300.00	2,299.45	3,426.71	3,379.66	10.30	21.30	-53.77	-4,578.94	-3,427.64	5,795.00	5,765.75	29.25	198.119		
2,400.00	2,399.42	3,523.20	3,472.68	10.72	21.96	-53.60	-4,553.69	-3,432.12	5,774.93	5,744.69	30.24	190.944		
2,500.00	2,499.39	3,619.69	3,565.70	11.14	22.62	-53.43	-4,528.43	-3,436.60	5,754.91	5,723.67	31.24	184.203		
2,600.00	2,599.36	3,716.18	3,658.71	11.56	23.28	-53.26	-4,503.18	-3,441.09	5,734.94	5,702.70	32.24	177.860		
2,700.00	2,699.33	3,812.67	3,751.72	11.98	23.94	-53.09	-4,477.93	-3,445.57	5,715.00	5,682.76	33.24	171.517		
2,800.00	2,799.30	3,909.16	3,844.73	12.41	24.60	-52.92	-4,452.68	-3,450.05	5,695.07	5,663.82	34.24	165.174		
2,900.00	2,899.27	4,005.65	3,939.74	12.83	25.26	-52.75	-4,427.43	-3,454.53	5,675.14	5,643.89	35.24	158.831		
3,000.00	2,999.23	4,102.14	4,035.75	13.26	25.92	-52.58	-4,402.18	-3,459.01	5,655.21	5,623.96	36.24	152.488		
3,100.00	3,099.20	4,198.63	4,131.76	13.68	26.58	-52.41	-4,376.93	-3,463.49	5,635.28	5,603.93	37.24	146.145		
3,200.00	3,199.17	4,295.12	4,227.77	14.11	27.24	-52.24	-4,351.68	-3,467.97	5,615.35	5,583.90	38.24	139.802		
3,300.00	3,299.14	4,391.61	4,323.78	14.54	27.90	-52.07	-4,326.43	-3,472.45	5,595.42	5,563.97	39.24	133.459		
3,400.00	3,399.11	4,488.10	4,419.79	14.97	28.56	-51.90	-4,301.18	-3,476.93	5,575.49	5,543.94	40.24	127.116		
3,500.00	3,499.08	4,584.59	4,515.80	15.40	29.22	-51.73	-4,275.93	-3,481.41	5,555.56	5,523.91	41.24	120.773		
3,600.00	3,599.05	4,681.08	4,611.81	15.83	29.88	-51.56	-4,250.68	-3,485.89	5,535.63	5,503.98	42.24	114.430		
3,700.00	3,699.02	4,777.57	4,707.82	16.26	30.54	-51.39	-4,225.43	-3,490.37	5,515.70	5,483.95	43.24	108.087		
3,800.00	3,798.99	4,874.06	4,804.33	16.69	31.20	-51.22	-4,200.18	-3,494.85	5,495.77	5,463.92	44.24	101.744		
3,900.00	3,898.95	4,970.55	4,900.80	17.12	31.86	-51.05	-4,174.93	-3,499.33	5,475.84	5,443.99	45.24	95.401		
4,000.00	3,998.92	5,067.04	5,000.81	17.55	32.52	-50.88	-4,149.68	-3,503.81	5,455.91	5,423.96	46.24	89.058		
4,100.00	4,098.89	5,163.53	5,097.82	17.98	33.18	-50.71	-4,124.43	-3,508.29	5,435.98	5,403.93	47.24	82.715		
4,200.00	4,198.86	5,260.02	5,193.83	18.42	33.84	-50.54	-4,099.18	-3,512.77	5,415.95	5,383.90	48.24	76.372		
4,300.00	4,298.83	5,356.51	5,289.84	18.85	34.50	-50.37	-4,073.93	-3,517.25	5,395.92	5,363.97	49.24	70.029		
4,400.00	4,398.80	5,453.00	5,385.85	19.28	35.16	-50.20	-4,048.68	-3,521.73	5,375.99	5,343.94	50.24	63.686		
4,500.00	4,498.77	5,549.49	5,481.86	19.72	35.82	-50.03	-4,023.43	-3,526.21	5,355.96	5,323.91	51.24	57.343		
4,600.00	4,598.73	5,645.98	5,577.87	20.15	36.48	-49.86	-4,000.18	-3,530.69	5,335.93	5,303.98	52.24	51.000		
4,700.00	4,698.70	5,742.47	5,673.88	20.58	37.14	-49.69	-3,974.93	-3,535.17	5,315.90	5,283.95	53.24	44.657		
4,800.00	4,798.67	5,838.96	5,769.89	21.02	37.80	-49.52	-3,949.68	-3,539.65	5,295.97	5,263.92	54.24	38.314		
4,900.00	4,898.64	5,935.45	5,865.90	21.45	38.46	-49.35	-3,924.43	-3,544.13	5,275.94	5,243.99	55.24	31.971		
5,000.00	4,998.61	6,031.94	5,961.91	21.89	39.12	-49.18	-3,899.18	-3,548.61	5,255.91	5,223.96	56.24	25.628		
5,100.00	5,098.58	6,128.43	6,057.92	22.32	39.78	-49.01	-3,873.93	-3,553.09	5,235.98	5,203.93	57.24	19.285		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,198.55	10,420.69	7,077.89	22.76	115.87	-90.58	-3,588.89	-127.29	4,051.19	3,924.92	126.28	32.082		
5,300.00	5,298.52	10,418.29	7,077.89	23.20	115.79	-90.54	-3,588.88	-129.69	4,005.79	3,878.08	127.71	31.366		
5,400.00	5,398.49	10,415.89	7,077.89	23.63	115.72	-90.50	-3,588.88	-132.09	3,962.39	3,833.27	129.12	30.688		
5,500.00	5,498.45	10,413.49	7,077.89	24.07	115.64	-90.46	-3,588.87	-134.48	3,921.06	3,790.56	130.50	30.047		
5,600.00	5,598.42	10,411.09	7,077.88	24.50	115.56	-90.43	-3,588.86	-136.88	3,881.86	3,750.02	131.84	29.443		
5,700.00	5,698.39	10,408.70	7,077.88	24.94	115.49	-90.39	-3,588.86	-139.28	3,844.87	3,711.72	133.15	28.877		
5,800.00	5,798.36	10,406.30	7,077.88	25.38	115.41	-90.35	-3,588.85	-141.68	3,810.14	3,675.73	134.40	28.348		
5,900.00	5,898.33	10,403.90	7,077.88	25.81	115.34	-90.31	-3,588.85	-144.08	3,777.73	3,642.12	135.61	27.858		
6,000.00	5,998.30	10,401.50	7,077.87	26.25	115.26	-90.27	-3,588.84	-146.48	3,747.71	3,610.96	136.76	27.404		
6,100.00	6,098.27	10,399.10	7,077.87	26.69	115.19	-90.23	-3,588.83	-148.88	3,720.14	3,582.30	137.84	26.989		
6,200.00	6,198.24	10,403.30	7,077.87	27.12	115.32	-90.20	-3,588.83	-151.28	3,695.07	3,556.01	139.06	26.573		
6,300.00	6,298.20	10,394.30	7,077.87	27.56	115.04	-90.16	-3,588.82	-153.68	3,672.55	3,532.76	139.79	26.272		
6,400.00	6,398.17	10,391.90	7,077.86	28.00	114.96	-90.12	-3,588.82	-156.08	3,652.63	3,511.98	140.65	25.970		
6,500.00	6,498.14	10,389.50	7,077.86	28.43	114.89	-90.08	-3,588.81	-158.48	3,635.34	3,493.92	141.42	25.705		
6,600.00	6,597.68	10,381.06	7,077.85	28.88	114.62	-90.16	-3,588.79	-166.92	3,620.67	3,478.74	141.92	25.512		
6,700.00	6,694.68	10,357.27	7,077.83	29.32	113.87	-90.80	-3,588.73	-190.71	3,608.60	3,466.76	141.84	25.441		
6,800.00	6,786.74	10,318.60	7,077.79	29.77	112.66	-91.06	-3,588.64	-229.38	3,599.18	3,457.98	141.20	25.490		
6,900.00	6,871.61	10,266.00	7,077.74	30.24	111.02	-90.96	-3,588.51	-281.98	3,592.20	3,452.15	140.04	25.650		
7,000.00	6,947.19	10,200.76	7,077.67	30.74	108.98	-90.61	-3,588.34	-347.22	3,587.25	3,448.78	138.47	25.907		
7,100.00	7,011.62	10,124.50	7,077.60	31.32	106.60	-90.13	-3,588.16	-423.48	3,583.83	3,447.25	136.58	26.240		
7,200.00	7,063.31	10,039.09	7,077.51	32.03	103.96	-89.64	-3,587.94	-508.89	3,581.40	3,446.88	134.52	26.623		
7,300.00	7,101.00	9,946.63	7,077.42	32.89	101.10	-89.26	-3,587.72	-601.35	3,579.43	3,447.02	132.41	27.033		
7,400.00	7,123.74	9,849.40	7,077.32	33.93	98.11	-89.08	-3,587.48	-698.57	3,577.52	3,447.17	130.35	27.445		
7,500.00	7,131.00	9,749.80	7,077.23	35.10	95.07	-89.14	-3,587.23	-798.17	3,575.43	3,447.01	128.42	27.843		
7,600.00	7,130.63	9,649.83	7,077.13	36.44	92.04	-89.15	-3,586.98	-898.15	3,573.22	3,446.56	126.66	28.211		
7,700.00	7,130.26	9,549.85	7,077.03	37.94	89.03	-89.15	-3,586.74	-998.12	3,571.02	3,445.93	125.09	28.548		
7,800.00	7,129.90	9,449.88	7,076.93	39.59	86.04	-89.15	-3,586.49	-1,098.10	3,568.81	3,445.12	123.69	28.854		
7,900.00	7,129.53	9,349.90	7,076.83	41.37	83.08	-89.16	-3,586.24	-1,198.07	3,566.60	3,444.17	122.44	29.130		
8,000.00	7,129.17	9,249.92	7,076.73	43.27	80.15	-89.16	-3,585.99	-1,298.05	3,564.40	3,443.07	121.33	29.378		
8,100.00	7,128.80	9,150.33	7,076.13	45.27	77.27	-89.16	-3,585.75	-1,397.64	3,562.20	3,441.84	120.36	29.597		
8,200.00	7,128.43	9,050.36	7,075.31	47.36	74.42	-89.15	-3,585.50	-1,497.61	3,560.00	3,440.51	119.49	29.793		
8,300.00	7,128.07	8,950.38	7,074.48	49.52	71.61	-89.14	-3,585.25	-1,597.58	3,557.81	3,439.07	118.73	29.965		
8,400.00	7,127.70	8,850.41	7,073.65	51.75	68.86	-89.13	-3,585.01	-1,697.55	3,555.61	3,437.53	118.08	30.111		
8,500.00	7,127.33	8,750.43	7,072.83	54.04	66.17	-89.13	-3,584.76	-1,797.52	3,553.42	3,435.88	117.54	30.232		
8,600.00	7,126.97	8,650.46	7,072.00	56.38	63.55	-89.12	-3,584.51	-1,897.50	3,551.22	3,434.13	117.09	30.328		
8,700.00	7,126.60	8,550.48	7,071.17	58.77	61.02	-89.11	-3,584.26	-1,997.47	3,549.03	3,432.27	116.75	30.397		
8,800.00	7,126.24	8,450.51	7,070.34	61.19	58.60	-89.10	-3,584.02	-2,097.44	3,546.83	3,430.31	116.52	30.440		
8,900.00	7,125.87	8,350.53	7,069.52	63.65	56.31	-89.09	-3,583.77	-2,197.41	3,544.64	3,428.24	116.40	30.452		
9,000.00	7,125.50	8,250.56	7,068.69	66.15	54.18	-89.09	-3,583.52	-2,297.38	3,542.44	3,426.04	116.40	30.434		
9,100.00	7,125.14	8,150.58	7,067.86	68.67	52.26	-89.08	-3,583.28	-2,397.35	3,540.25	3,423.72	116.53	30.381		
9,200.00	7,124.77	8,050.61	7,067.04	71.21	50.60	-89.07	-3,583.03	-2,497.32	3,538.05	3,421.25	116.80	30.291		
9,300.00	7,124.41	7,950.63	7,066.21	73.78	49.24	-89.06	-3,582.78	-2,597.29	3,535.86	3,418.62	117.24	30.160		
9,400.00	7,124.04	7,850.66	7,065.38	76.37	48.20	-89.05	-3,582.53	-2,697.26	3,533.66	3,415.81	117.85	29.985		
9,500.00	7,123.67	7,750.69	7,064.55	78.98	47.46	-89.05	-3,582.29	-2,797.23	3,531.47	3,412.81	118.66	29.761		
9,600.00	7,123.31	7,650.71	7,063.73	81.60	46.96	-89.04	-3,582.04	-2,897.21	3,529.27	3,409.58	119.70	29.485		
9,700.00	7,122.94	7,550.73	7,062.83	84.24	46.73	-89.03	-3,581.79	-2,997.18	3,527.07	3,406.88	121.45	29.044		
9,778.08	7,122.65	7,550.00	7,060.60	86.31	46.64	-88.99	-3,582.41	-2,997.83	3,526.88	3,403.75	123.12	28.645 CC		
9,800.00	7,122.57	7,544.52	7,060.07	86.90	46.63	-88.98	-3,582.53	-3,003.28	3,526.93	3,403.28	123.65	28.523		
9,900.00	7,122.21	7,500.00	7,054.13	89.56	46.52	-88.89	-3,583.93	-3,047.37	3,528.28	3,402.50	125.79	28.049 ES		
10,000.00	7,121.84	7,472.62	7,049.01	92.24	46.45	-88.81	-3,585.20	-3,074.24	3,531.38	3,403.23	128.15	27.557		
10,100.00	7,121.48	7,435.02	7,040.17	94.92	46.37	-88.67	-3,587.42	-3,110.71	3,536.26	3,405.89	130.37	27.125		
10,200.00	7,121.11	7,400.00	7,030.08	97.62	46.29	-88.51	-3,590.00	-3,144.14	3,542.97	3,410.37	132.60	26.718		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.74	7,350.00	7,012.63	100.32	46.19	-88.23	-3,594.51	-3,190.76	3,551.58	3,416.90	134.68	26.371		
10,400.00	7,120.38	7,335.01	7,006.72	103.04	46.16	-88.13	-3,596.05	-3,204.45	3,562.04	3,424.97	137.07	25.987		
10,500.00	7,120.01	7,300.00	6,991.71	105.76	46.08	-87.90	-3,599.98	-3,235.83	3,574.46	3,435.22	139.24	25.671		
10,600.00	7,119.64	7,265.66	6,975.40	108.48	46.01	-87.64	-3,604.26	-3,265.74	3,588.86	3,447.46	141.41	25.379		
10,700.00	7,119.28	7,235.01	6,959.54	111.22	45.94	-87.38	-3,608.44	-3,291.63	3,605.30	3,461.78	143.52	25.120		
10,800.00	7,118.91	7,210.35	6,945.92	113.96	45.88	-87.17	-3,612.04	-3,311.87	3,623.77	3,478.12	145.65	24.880		
10,900.00	7,118.55	7,183.10	6,930.01	116.70	45.81	-86.92	-3,616.25	-3,333.58	3,644.32	3,496.61	147.71	24.673		
11,000.00	7,118.18	7,161.12	6,916.53	119.45	45.75	-86.70	-3,619.83	-3,350.57	3,666.94	3,517.21	149.74	24.489		
11,100.00	7,117.81	7,135.01	6,899.79	122.21	45.68	-86.44	-3,624.28	-3,370.10	3,691.67	3,539.99	151.67	24.339		
11,200.00	7,117.45	7,121.76	6,891.01	124.97	45.64	-86.30	-3,626.62	-3,379.74	3,718.47	3,564.86	153.62	24.206		
11,300.00	7,117.08	7,100.00	6,876.16	127.73	45.57	-86.07	-3,630.57	-3,395.16	3,747.36	3,591.91	155.44	24.108		
11,400.00	7,116.72	7,078.97	6,861.35	130.50	45.51	-85.84	-3,634.52	-3,409.55	3,778.31	3,621.10	157.21	24.034		
11,500.00	7,116.35	7,050.00	6,840.20	133.27	45.42	-85.51	-3,640.17	-3,428.52	3,811.38	3,652.53	158.85	23.993		
11,600.00	7,115.98	7,050.00	6,840.20	136.04	45.42	-85.51	-3,640.17	-3,428.52	3,846.37	3,685.81	160.55	23.957		
11,700.00	7,115.62	7,035.01	6,828.94	138.82	45.36	-85.33	-3,643.18	-3,437.94	3,883.40	3,721.29	162.11	23.955 SF		
11,800.00	7,115.25	7,014.70	6,813.34	141.60	45.29	-85.09	-3,647.35	-3,450.27	3,922.37	3,758.80	163.58	23.979		
11,900.00	7,114.88	7,000.00	6,801.83	144.39	45.24	-84.91	-3,650.44	-3,458.86	3,963.29	3,798.31	164.98	24.022		
12,000.00	7,114.52	7,000.00	6,801.83	147.17	45.24	-84.91	-3,650.44	-3,458.86	4,006.17	3,839.81	166.36	24.081		
12,100.00	7,114.15	6,975.61	6,782.30	149.96	45.14	-84.61	-3,655.67	-3,472.51	4,050.73	3,883.13	167.60	24.169		
12,200.00	7,113.79	6,950.00	6,761.27	152.75	45.05	-84.29	-3,661.31	-3,486.00	4,097.28	3,928.52	168.75	24.280		
12,300.00	7,113.42	6,950.00	6,761.27	155.55	45.05	-84.29	-3,661.31	-3,486.00	4,145.35	3,975.43	169.91	24.397		
12,400.00	7,113.05	6,942.64	6,755.14	158.34	45.02	-84.20	-3,662.96	-3,489.71	4,195.22	4,024.24	170.98	24.536		
12,500.00	7,112.69	6,935.01	6,748.73	161.14	44.98	-84.10	-3,664.67	-3,493.48	4,246.75	4,074.77	171.99	24.692		
12,600.00	7,112.32	6,935.01	6,748.73	163.94	44.98	-84.10	-3,664.67	-3,493.48	4,299.96	4,127.02	172.94	24.864		
12,700.00	7,111.96	6,914.61	6,731.39	166.74	44.90	-83.83	-3,669.33	-3,503.17	4,354.55	4,180.76	173.79	25.057		
12,800.00	7,111.59	6,900.00	6,718.80	169.54	44.83	-83.64	-3,672.72	-3,509.75	4,410.74	4,236.16	174.58	25.264		
12,900.00	7,111.22	6,900.00	6,718.80	172.35	44.83	-83.64	-3,672.72	-3,509.75	4,468.34	4,292.99	175.36	25.482		
13,000.00	7,110.86	6,900.00	6,718.80	175.16	44.83	-83.64	-3,672.72	-3,509.75	4,527.42	4,351.35	176.07	25.714		
13,100.00	7,110.49	6,900.00	6,718.80	177.96	44.83	-83.64	-3,672.72	-3,509.75	4,587.91	4,411.19	176.72	25.961		
13,200.00	7,110.12	6,876.39	6,698.15	180.77	44.72	-83.33	-3,678.27	-3,519.75	4,649.40	4,472.10	177.30	26.223		
13,300.00	7,109.76	6,850.00	6,674.66	183.58	44.60	-82.97	-3,684.60	-3,529.98	4,712.59	4,534.76	177.82	26.501		
13,400.00	7,109.39	6,850.00	6,674.66	186.40	44.60	-82.97	-3,684.60	-3,529.98	4,776.59	4,598.24	178.34	26.783		
13,500.00	7,109.03	6,850.00	6,674.66	189.21	44.60	-82.97	-3,684.60	-3,529.98	4,841.80	4,662.99	178.82	27.077		
13,600.00	7,108.66	6,850.00	6,674.66	192.03	44.60	-82.97	-3,684.60	-3,529.98	4,908.19	4,728.94	179.25	27.382		
13,700.00	7,108.29	6,850.00	6,674.66	194.84	44.60	-82.97	-3,684.60	-3,529.98	4,975.71	4,796.07	179.64	27.698		
13,800.00	7,107.93	6,835.01	6,661.14	197.66	44.53	-82.77	-3,688.24	-3,535.34	5,044.26	4,864.28	179.98	28.026		
13,900.00	7,107.56	6,835.01	6,661.14	200.48	44.53	-82.77	-3,688.24	-3,535.34	5,113.78	4,933.48	180.30	28.362		
14,000.00	7,107.19	6,835.01	6,661.14	203.30	44.53	-82.77	-3,688.24	-3,535.34	5,184.30	5,003.71	180.59	28.707		
14,100.00	7,106.83	6,835.01	6,661.14	206.12	44.53	-82.77	-3,688.24	-3,535.34	5,255.78	5,074.93	180.85	29.062		
14,200.00	7,106.46	6,835.01	6,661.14	208.94	44.53	-82.77	-3,688.24	-3,535.34	5,328.17	5,147.10	181.07	29.425		
14,300.00	7,106.10	6,817.37	6,645.08	211.76	44.44	-82.53	-3,692.57	-3,541.22	5,401.22	5,219.95	181.27	29.796		
14,400.00	7,105.73	6,800.00	6,629.13	214.58	44.35	-82.29	-3,696.87	-3,546.56	5,475.35	5,293.90	181.45	30.176		
14,500.00	7,105.36	6,800.00	6,629.13	217.40	44.35	-82.29	-3,696.87	-3,546.56	5,550.07	5,368.47	181.60	30.562		
14,600.00	7,105.00	6,800.00	6,629.13	220.23	44.35	-82.29	-3,696.87	-3,546.56	5,625.58	5,443.85	181.73	30.955		
14,700.00	7,104.63	6,800.00	6,629.13	223.05	44.35	-82.29	-3,696.87	-3,546.56	5,701.85	5,520.00	181.85	31.355		
14,800.00	7,104.27	6,800.00	6,629.13	225.88	44.35	-82.29	-3,696.87	-3,546.56	5,778.84	5,596.90	181.94	31.762		
14,872.41	7,104.00	6,800.00	6,629.13	227.93	44.35	-82.29	-3,696.87	-3,546.56	5,835.02	5,653.03	182.00	32.061		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	66.00	3.28	3.28	-124.93	-4,430.59	-6,344.91	7,739.01				
100.00	100.00	34.00	100.00	3.28	3.33	-124.93	-4,430.59	-6,344.91	7,738.73	7,732.11	6.62	1,169.350	
200.00	200.00	134.00	200.00	3.34	4.40	-124.93	-4,430.59	-6,344.91	7,738.73	7,731.00	7.74	1,000.255	
300.00	300.00	234.00	300.00	3.44	7.21	-124.93	-4,430.59	-6,344.91	7,738.73	7,728.08	10.66	726.142	
400.00	400.00	334.00	400.00	3.60	10.44	-124.93	-4,430.59	-6,344.91	7,738.73	7,724.69	14.05	550.946	
500.00	500.00	434.00	500.00	3.81	13.80	-124.93	-4,430.59	-6,344.91	7,738.73	7,721.13	17.61	439.529	
600.00	599.98	533.98	599.98	4.04	17.21	-34.94	-4,430.59	-6,344.91	7,737.42	7,716.17	21.25	364.100	
700.00	699.95	633.95	699.95	4.30	20.65	-34.95	-4,430.59	-6,344.91	7,735.37	7,710.42	24.95	310.052	
800.00	799.92	733.92	799.92	4.59	24.10	-34.96	-4,430.59	-6,344.91	7,733.32	7,704.63	28.69	269.557	
900.00	899.89	833.89	899.89	4.90	27.56	-34.97	-4,430.59	-6,344.91	7,731.27	7,698.81	32.46	238.169	
1,000.00	999.86	933.86	999.86	5.23	31.03	-34.98	-4,430.59	-6,344.91	7,729.23	7,692.97	36.26	213.171	
1,100.00	1,099.83	1,033.83	1,099.83	5.58	34.50	-34.99	-4,430.59	-6,344.91	7,727.18	7,687.10	40.07	192.819	
1,200.00	1,199.80	1,133.80	1,199.80	5.94	37.98	-35.01	-4,430.59	-6,344.91	7,725.13	7,681.22	43.91	175.942	
1,300.00	1,299.77	1,233.77	1,299.77	6.30	41.46	-35.02	-4,430.59	-6,344.91	7,723.08	7,675.33	47.75	161.732	
1,400.00	1,399.73	1,333.73	1,399.73	6.68	44.94	-35.03	-4,430.59	-6,344.91	7,721.04	7,669.43	51.61	149.610	
1,500.00	1,499.70	1,433.70	1,499.70	7.07	48.42	-35.04	-4,430.59	-6,344.91	7,718.99	7,663.52	55.47	139.151	
1,600.00	1,599.67	1,533.67	1,599.67	7.46	51.90	-35.05	-4,430.59	-6,344.91	7,716.95	7,657.60	59.34	130.038	
1,700.00	1,699.64	1,633.64	1,699.64	7.85	55.38	-35.06	-4,430.59	-6,344.91	7,714.90	7,651.68	63.22	122.029	
1,800.00	1,799.61	1,733.61	1,799.61	8.25	58.87	-35.07	-4,430.59	-6,344.91	7,712.85	7,645.75	67.10	114.937	
1,900.00	1,899.58	1,833.58	1,899.58	8.66	62.35	-35.08	-4,430.59	-6,344.91	7,710.81	7,639.82	70.99	108.615	
2,000.00	1,999.55	1,933.55	1,999.55	9.06	65.84	-35.09	-4,430.59	-6,344.91	7,708.76	7,633.88	74.88	102.943	
2,100.00	2,099.52	2,033.52	2,099.52	9.47	69.32	-35.10	-4,430.59	-6,344.91	7,706.72	7,627.94	78.78	97.827	
2,200.00	2,199.48	2,133.48	2,199.48	9.89	72.81	-35.11	-4,430.59	-6,344.91	7,704.68	7,622.00	82.68	93.191	
2,300.00	2,299.45	2,233.45	2,299.45	10.30	76.30	-35.12	-4,430.59	-6,344.91	7,702.63	7,616.05	86.58	88.969	
2,400.00	2,399.42	2,333.42	2,399.42	10.72	79.78	-35.13	-4,430.59	-6,344.91	7,700.59	7,610.11	90.48	85.108	
2,500.00	2,499.39	2,433.39	2,499.39	11.14	83.27	-35.14	-4,430.59	-6,344.91	7,698.54	7,604.16	94.38	81.566	
2,600.00	2,599.36	2,533.36	2,599.36	11.56	86.76	-35.15	-4,430.59	-6,344.91	7,696.50	7,598.21	98.29	78.303	
2,700.00	2,699.33	2,633.33	2,699.33	11.98	90.24	-35.17	-4,430.59	-6,344.91	7,694.46	7,592.26	102.20	75.289	
2,800.00	2,799.30	2,733.30	2,799.30	12.41	93.73	-35.18	-4,430.59	-6,344.91	7,692.41	7,586.31	106.11	72.496	
2,900.00	2,899.27	2,833.27	2,899.27	12.83	97.22	-35.19	-4,430.59	-6,344.91	7,690.37	7,580.35	110.02	69.900	
3,000.00	2,999.23	2,933.23	2,999.23	13.26	100.71	-35.20	-4,430.59	-6,344.91	7,688.33	7,574.40	113.93	67.482	
3,100.00	3,099.20	3,033.20	3,099.20	13.68	104.20	-35.21	-4,430.59	-6,344.91	7,686.29	7,568.44	117.84	65.224	
3,200.00	3,199.17	3,133.17	3,199.17	14.11	107.68	-35.22	-4,430.59	-6,344.91	7,684.25	7,562.49	121.76	63.110	
3,300.00	3,299.14	3,233.14	3,299.14	14.54	111.17	-35.23	-4,430.59	-6,344.91	7,682.21	7,556.53	125.67	61.128	
3,400.00	3,399.11	3,333.11	3,399.11	14.97	114.66	-35.24	-4,430.59	-6,344.91	7,680.16	7,550.57	129.59	59.265	
3,500.00	3,499.08	3,433.08	3,499.08	15.40	118.15	-35.25	-4,430.59	-6,344.91	7,678.12	7,544.62	133.51	57.512	
3,600.00	3,599.05	3,533.05	3,599.05	15.83	121.64	-35.26	-4,430.59	-6,344.91	7,676.08	7,538.66	137.42	55.857	
3,700.00	3,699.02	3,633.02	3,699.02	16.26	125.13	-35.27	-4,430.59	-6,344.91	7,674.04	7,532.70	141.34	54.295	
3,800.00	3,798.98	3,732.98	3,798.98	16.69	128.62	-35.28	-4,430.59	-6,344.91	7,672.00	7,526.74	145.26	52.816	
3,900.00	3,898.95	3,832.95	3,898.95	17.12	132.10	-35.29	-4,430.59	-6,344.91	7,669.96	7,520.78	149.18	51.415	
4,000.00	3,998.92	3,932.92	3,998.92	17.55	135.59	-35.30	-4,430.59	-6,344.91	7,667.92	7,514.83	153.10	50.085	
4,100.00	4,098.89	4,032.89	4,098.89	17.98	139.08	-35.32	-4,430.59	-6,344.91	7,665.88	7,508.87	157.02	48.822	
4,200.00	4,198.86	4,132.86	4,198.86	18.42	142.57	-35.33	-4,430.59	-6,344.91	7,663.84	7,502.91	160.94	47.620	
4,300.00	4,298.83	4,232.83	4,298.83	18.85	146.06	-35.34	-4,430.59	-6,344.91	7,661.81	7,496.95	164.86	46.475	
4,400.00	4,398.80	4,332.80	4,398.80	19.28	149.55	-35.35	-4,430.59	-6,344.91	7,659.77	7,490.99	168.78	45.383	
4,500.00	4,498.77	4,432.77	4,498.77	19.72	153.04	-35.36	-4,430.59	-6,344.91	7,657.73	7,485.03	172.70	44.341	
4,600.00	4,598.73	4,532.73	4,598.73	20.15	156.53	-35.37	-4,430.59	-6,344.91	7,655.69	7,479.07	176.62	43.345	
4,700.00	4,698.70	4,632.70	4,698.70	20.58	160.02	-35.38	-4,430.59	-6,344.91	7,653.65	7,473.11	180.54	42.392	
4,800.00	4,798.67	4,732.67	4,798.67	21.02	163.51	-35.39	-4,430.59	-6,344.91	7,651.62	7,467.15	184.47	41.480	
4,900.00	4,898.64	4,832.64	4,898.64	21.45	166.99	-35.40	-4,430.59	-6,344.91	7,649.58	7,461.19	188.39	40.605	
5,000.00	4,998.61	4,932.61	4,998.61	21.89	170.48	-35.41	-4,430.59	-6,344.91	7,647.54	7,455.23	192.31	39.766	
5,100.00	5,098.58	5,032.58	5,098.58	22.32	173.97	-35.42	-4,430.59	-6,344.91	7,645.51	7,449.27	196.23	38.961	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER FARM 1-21(PA_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,132.55	5,198.55	22.76	177.46	-35.43	-4,430.59	-6,344.91	7,643.47	7,443.31	200.16	38.187		
5,300.00	5,298.52	5,232.52	5,298.52	23.20	180.95	-35.45	-4,430.59	-6,344.91	7,641.43	7,437.35	204.08	37.443		
5,400.00	5,398.49	5,332.49	5,398.49	23.63	184.44	-35.46	-4,430.59	-6,344.91	7,639.40	7,431.39	208.00	36.727		
5,500.00	5,498.45	5,432.45	5,498.45	24.07	187.93	-35.47	-4,430.59	-6,344.91	7,637.36	7,425.43	211.93	36.037		
5,600.00	5,598.42	5,532.42	5,598.42	24.50	191.42	-35.48	-4,430.59	-6,344.91	7,635.33	7,419.48	215.85	35.373		
5,700.00	5,698.39	5,632.39	5,698.39	24.94	194.91	-35.49	-4,430.59	-6,344.91	7,633.29	7,413.52	219.78	34.732		
5,800.00	5,798.36	5,732.36	5,798.36	25.38	198.40	-35.50	-4,430.59	-6,344.91	7,631.26	7,407.56	223.70	34.114		
5,900.00	5,898.33	5,832.33	5,898.33	25.81	201.89	-35.51	-4,430.59	-6,344.91	7,629.22	7,401.60	227.63	33.517		
6,000.00	5,998.30	5,932.30	5,998.30	26.25	205.38	-35.52	-4,430.59	-6,344.91	7,627.19	7,395.64	231.55	32.940		
6,100.00	6,098.27	6,032.27	6,098.27	26.69	208.87	-35.53	-4,430.59	-6,344.91	7,625.16	7,389.68	235.47	32.382		
6,200.00	6,198.24	6,132.24	6,198.24	27.12	212.36	-35.54	-4,430.59	-6,344.91	7,623.12	7,383.72	239.40	31.843		
6,300.00	6,298.20	6,232.20	6,298.20	27.56	215.85	-35.55	-4,430.59	-6,344.91	7,621.09	7,377.76	243.32	31.321		
6,400.00	6,398.17	6,332.17	6,398.17	28.00	219.34	-35.57	-4,430.59	-6,344.91	7,619.06	7,371.81	247.25	30.815		
6,500.00	6,498.14	6,432.14	6,498.14	28.43	222.83	-35.58	-4,430.59	-6,344.91	7,617.02	7,365.85	251.18	30.326		
6,600.00	6,597.68	6,531.68	6,597.68	28.88	226.30	-35.01	-4,430.59	-6,344.91	7,610.01	7,354.92	255.09	29.833		
6,700.00	6,694.68	6,628.68	6,694.68	29.32	229.69	-36.08	-4,430.59	-6,344.91	7,590.35	7,331.45	258.90	29.317		
6,800.00	6,786.74	6,720.74	6,786.74	29.77	232.90	-38.05	-4,430.59	-6,344.91	7,558.49	7,295.96	262.53	28.791		
6,900.00	6,871.61	6,805.61	6,871.61	30.24	235.86	-41.02	-4,430.59	-6,344.91	7,515.28	7,249.40	265.88	28.265		
7,000.00	6,947.19	6,881.19	6,947.19	30.74	238.50	-45.21	-4,430.59	-6,344.91	7,461.87	7,192.98	268.89	27.751		
7,100.00	7,011.62	6,945.62	7,011.62	31.32	240.75	-50.88	-4,430.59	-6,344.91	7,399.69	7,128.20	271.50	27.255		
7,200.00	7,063.31	7,002.69	7,063.31	32.03	242.74	-58.31	-4,430.59	-6,344.91	7,330.38	7,056.53	273.86	26.767		
7,300.00	7,101.00	7,035.00	7,101.00	32.89	243.87	-67.66	-4,430.59	-6,344.91	7,255.75	6,980.37	275.38	26.348		
7,400.00	7,123.74	7,057.74	7,123.74	33.93	244.66	-78.66	-4,430.59	-6,344.91	7,177.73	6,901.11	276.62	25.948		
7,500.00	7,131.00	7,065.00	7,131.00	35.10	244.92	-90.27	-4,430.59	-6,344.91	7,098.30	6,820.92	277.37	25.591		
7,600.00	7,130.63	7,064.63	7,130.63	36.44	244.90	-90.27	-4,430.59	-6,344.91	7,019.09	6,741.14	277.95	25.253		
7,700.00	7,130.26	7,064.26	7,130.26	37.94	244.89	-90.26	-4,430.59	-6,344.91	6,940.42	6,661.79	278.63	24.909		
7,800.00	7,129.90	7,063.90	7,129.90	39.59	244.88	-90.26	-4,430.59	-6,344.91	6,862.31	6,582.88	279.43	24.558		
7,900.00	7,129.53	7,063.53	7,129.53	41.37	244.86	-90.26	-4,430.59	-6,344.91	6,784.77	6,504.44	280.33	24.203		
8,000.00	7,129.17	7,063.17	7,129.17	43.27	244.85	-90.25	-4,430.59	-6,344.91	6,707.83	6,426.49	281.34	23.842		
8,100.00	7,128.80	7,062.80	7,128.80	45.27	244.84	-90.25	-4,430.59	-6,344.91	6,631.50	6,349.04	282.46	23.478		
8,200.00	7,128.43	7,062.43	7,128.43	47.36	244.83	-90.24	-4,430.59	-6,344.91	6,555.81	6,272.12	283.69	23.109		
8,300.00	7,128.07	7,062.07	7,128.07	49.52	244.81	-90.24	-4,430.59	-6,344.91	6,480.78	6,195.76	285.01	22.738		
8,400.00	7,127.70	7,061.70	7,127.70	51.75	244.80	-90.23	-4,430.59	-6,344.91	6,406.43	6,119.98	286.44	22.365		
8,500.00	7,127.33	7,061.33	7,127.33	54.04	244.79	-90.23	-4,430.59	-6,344.91	6,332.78	6,044.81	287.97	21.991		
8,600.00	7,126.97	7,060.97	7,126.97	56.38	244.78	-90.22	-4,430.59	-6,344.91	6,259.87	5,970.27	289.60	21.616		
8,700.00	7,126.60	7,060.60	7,126.60	58.77	244.76	-90.22	-4,430.59	-6,344.91	6,187.72	5,896.40	291.32	21.240		
8,800.00	7,126.24	7,060.24	7,126.24	61.19	244.75	-90.21	-4,430.59	-6,344.91	6,116.34	5,823.21	293.13	20.865		
8,900.00	7,125.87	7,059.87	7,125.87	63.65	244.74	-90.21	-4,430.59	-6,344.91	6,045.78	5,750.75	295.04	20.492		
9,000.00	7,125.50	7,059.50	7,125.50	66.15	244.72	-90.20	-4,430.59	-6,344.91	5,976.06	5,679.03	297.03	20.120		
9,100.00	7,125.14	7,059.14	7,125.14	68.67	244.71	-90.20	-4,430.59	-6,344.91	5,907.21	5,608.11	299.11	19.750		
9,200.00	7,124.77	7,058.77	7,124.77	71.21	244.70	-90.19	-4,430.59	-6,344.91	5,839.26	5,537.99	301.27	19.382		
9,300.00	7,124.41	7,058.41	7,124.41	73.78	244.69	-90.19	-4,430.59	-6,344.91	5,772.24	5,468.73	303.51	19.018		
9,400.00	7,124.04	7,058.04	7,124.04	76.37	244.67	-90.18	-4,430.59	-6,344.91	5,706.19	5,400.36	305.83	18.658		
9,500.00	7,123.67	7,057.67	7,123.67	78.98	244.66	-90.18	-4,430.59	-6,344.91	5,641.14	5,332.90	308.24	18.301		
9,600.00	7,123.31	7,057.31	7,123.31	81.60	244.65	-90.17	-4,430.59	-6,344.91	5,577.12	5,266.41	310.72	17.949		
9,700.00	7,122.94	7,056.94	7,122.94	84.24	244.63	-90.17	-4,430.59	-6,344.91	5,514.18	5,200.90	313.27	17.602		
9,800.00	7,122.57	7,056.57	7,122.57	86.90	244.62	-90.16	-4,430.59	-6,344.91	5,452.34	5,136.44	315.90	17.260		
9,900.00	7,122.21	7,056.21	7,122.21	89.56	244.61	-90.16	-4,430.59	-6,344.91	5,391.64	5,073.04	318.60	16.923		
10,000.00	7,121.84	7,055.84	7,121.84	92.24	244.60	-90.15	-4,430.59	-6,344.91	5,332.13	5,010.76	321.37	16.592		
10,100.00	7,121.48	7,055.48	7,121.48	94.92	244.58	-90.15	-4,430.59	-6,344.91	5,273.85	4,949.64	324.20	16.267		
10,200.00	7,121.11	7,055.11	7,121.11	97.62	244.57	-90.14	-4,430.59	-6,344.91	5,216.83	4,889.72	327.10	15.949		
10,300.00	7,120.74	7,054.74	7,120.74	100.32	244.56	-90.14	-4,430.59	-6,344.91	5,161.11	4,831.05	330.07	15.637		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	7,054.38	7,120.38	103.04	244.55	-90.13	-4,430.59	-6,344.91	5,106.75	4,773.66	333.09	15.331		
10,500.00	7,120.01	7,054.01	7,120.01	105.76	244.53	-90.13	-4,430.59	-6,344.91	5,053.79	4,717.61	336.18	15.033		
10,600.00	7,119.64	7,053.64	7,119.64	108.48	244.52	-90.12	-4,430.59	-6,344.91	5,002.26	4,662.94	339.31	14.742		
10,700.00	7,119.28	7,053.28	7,119.28	111.22	244.51	-90.12	-4,430.59	-6,344.91	4,952.21	4,609.71	342.51	14.459		
10,800.00	7,118.91	7,052.91	7,118.91	113.96	244.49	-90.11	-4,430.59	-6,344.91	4,903.70	4,557.95	345.74	14.183		
10,900.00	7,118.55	7,052.55	7,118.55	116.70	244.48	-90.11	-4,430.59	-6,344.91	4,856.75	4,507.72	349.03	13.915		
11,000.00	7,118.18	7,052.18	7,118.18	119.45	244.47	-90.10	-4,430.59	-6,344.91	4,811.43	4,459.08	352.36	13.655		
11,100.00	7,117.81	7,051.81	7,117.81	122.21	244.46	-90.10	-4,430.59	-6,344.91	4,767.78	4,412.06	355.72	13.403		
11,200.00	7,117.45	7,051.45	7,117.45	124.97	244.44	-90.09	-4,430.59	-6,344.91	4,725.84	4,366.72	359.12	13.160		
11,300.00	7,117.08	7,051.08	7,117.08	127.73	244.43	-90.09	-4,430.59	-6,344.91	4,685.65	4,323.11	362.54	12.925		
11,400.00	7,116.72	7,050.72	7,116.72	130.50	244.42	-90.08	-4,430.59	-6,344.91	4,647.28	4,281.29	365.99	12.698		
11,500.00	7,116.35	7,050.35	7,116.35	133.27	244.40	-90.08	-4,430.59	-6,344.91	4,610.75	4,241.30	369.45	12.480		
11,600.00	7,115.98	7,049.98	7,115.98	136.04	244.39	-90.08	-4,430.59	-6,344.91	4,576.12	4,203.19	372.93	12.271		
11,700.00	7,115.62	7,049.62	7,115.62	138.82	244.38	-90.07	-4,430.59	-6,344.91	4,543.42	4,167.01	376.41	12.070		
11,800.00	7,115.25	7,049.25	7,115.25	141.60	244.37	-90.07	-4,430.59	-6,344.91	4,512.70	4,132.81	379.90	11.879		
11,900.00	7,114.88	7,048.88	7,114.88	144.39	244.35	-90.06	-4,430.59	-6,344.91	4,484.01	4,100.63	383.37	11.696		
12,000.00	7,114.52	7,048.52	7,114.52	147.17	244.34	-90.06	-4,430.59	-6,344.91	4,457.37	4,070.53	386.84	11.523		
12,100.00	7,114.15	7,048.15	7,114.15	149.96	244.33	-90.05	-4,430.59	-6,344.91	4,432.83	4,042.54	390.28	11.358		
12,200.00	7,113.79	7,047.79	7,113.79	152.75	244.32	-90.05	-4,430.59	-6,344.91	4,410.42	4,016.72	393.70	11.202		
12,300.00	7,113.42	7,047.42	7,113.42	155.55	244.30	-90.04	-4,430.59	-6,344.91	4,390.17	3,993.08	397.09	11.056		
12,400.00	7,113.05	7,047.05	7,113.05	158.34	244.29	-90.04	-4,430.59	-6,344.91	4,372.12	3,971.69	400.43	10.919		
12,500.00	7,112.69	7,046.69	7,112.69	161.14	244.28	-90.03	-4,430.59	-6,344.91	4,356.29	3,952.56	403.73	10.790		
12,600.00	7,112.32	7,046.32	7,112.32	163.94	244.26	-90.03	-4,430.59	-6,344.91	4,342.70	3,935.73	406.97	10.671		
12,700.00	7,111.96	7,045.96	7,111.96	166.74	244.25	-90.02	-4,430.59	-6,344.91	4,331.38	3,921.23	410.15	10.560		
12,800.00	7,111.59	7,045.59	7,111.59	169.54	244.24	-90.02	-4,430.59	-6,344.91	4,322.35	3,909.08	413.27	10.459		
12,900.00	7,111.22	7,045.22	7,111.22	172.35	244.23	-90.01	-4,430.59	-6,344.91	4,315.61	3,899.30	416.31	10.366		
13,000.00	7,110.86	7,044.86	7,110.86	175.16	244.21	-90.01	-4,430.59	-6,344.91	4,311.19	3,891.91	419.28	10.282		
13,100.00	7,110.49	7,044.49	7,110.49	177.96	244.20	-90.00	-4,430.59	-6,344.91	4,309.08	3,886.92	422.16	10.207		
13,140.90	7,110.34	7,044.34	7,110.34	179.11	244.19	-90.00	-4,430.59	-6,344.91	4,308.89	3,885.58	423.31	10.179 CC		
13,200.00	7,110.12	7,044.12	7,110.12	180.77	244.19	-90.00	-4,430.59	-6,344.91	4,309.29	3,884.35	424.95	10.141		
13,300.00	7,109.76	7,043.76	7,109.76	183.58	244.17	-89.99	-4,430.59	-6,344.91	4,311.82	3,884.18	427.64	10.083 ES		
13,400.00	7,109.39	7,043.39	7,109.39	186.40	244.16	-89.99	-4,430.59	-6,344.91	4,316.67	3,886.43	430.24	10.033		
13,500.00	7,109.03	7,043.03	7,109.03	189.21	244.15	-89.98	-4,430.59	-6,344.91	4,323.82	3,891.09	432.73	9.992		
13,600.00	7,108.66	7,042.66	7,108.66	192.03	244.14	-89.98	-4,430.59	-6,344.91	4,333.27	3,898.16	435.12	9.959		
13,700.00	7,108.29	7,042.29	7,108.29	194.84	244.12	-89.97	-4,430.59	-6,344.91	4,345.01	3,907.61	437.40	9.934		
13,800.00	7,107.93	7,041.93	7,107.93	197.66	244.11	-89.97	-4,430.59	-6,344.91	4,359.00	3,919.43	439.57	9.917		
13,900.00	7,107.56	7,041.56	7,107.56	200.48	244.10	-89.96	-4,430.59	-6,344.91	4,375.24	3,933.61	441.63	9.907		
14,000.00	7,107.19	7,041.19	7,107.19	203.30	244.09	-89.96	-4,430.59	-6,344.91	4,393.69	3,950.12	443.58	9.905 SF		
14,100.00	7,106.83	7,040.83	7,106.83	206.12	244.07	-89.95	-4,430.59	-6,344.91	4,414.34	3,968.93	445.41	9.911		
14,200.00	7,106.46	7,040.46	7,106.46	208.94	244.06	-89.95	-4,430.59	-6,344.91	4,437.14	3,990.01	447.13	9.924		
14,300.00	7,106.10	7,040.10	7,106.10	211.76	244.05	-89.94	-4,430.59	-6,344.91	4,462.06	4,013.32	448.74	9.944		
14,400.00	7,105.73	7,039.73	7,105.73	214.58	244.03	-89.94	-4,430.59	-6,344.91	4,489.08	4,038.84	450.24	9.970		
14,500.00	7,105.36	7,039.36	7,105.36	217.40	244.02	-89.93	-4,430.59	-6,344.91	4,518.14	4,066.52	451.63	10.004		
14,600.00	7,105.00	7,039.00	7,105.00	220.23	244.01	-89.93	-4,430.59	-6,344.91	4,549.22	4,096.32	452.91	10.044		
14,700.00	7,104.63	7,038.63	7,104.63	223.05	244.00	-89.92	-4,430.59	-6,344.91	4,582.28	4,128.19	454.08	10.091		
14,800.00	7,104.27	7,038.27	7,104.27	225.88	243.98	-89.92	-4,430.59	-6,344.91	4,617.26	4,162.10	455.16	10.144		
14,872.41	7,104.00	7,038.00	7,104.00	227.93	243.97	-89.92	-4,430.59	-6,344.91	4,643.77	4,187.90	455.87	10.187		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	19.00	3.28	3.28	-69.57	2,368.44	-6,357.34	6,784.22					
100.00	100.00	81.00	100.00	3.28	3.57	-69.57	2,368.44	-6,357.34	6,784.20	6,777.34	6.86	989.461		
200.00	200.00	181.00	200.00	3.34	5.63	-69.57	2,368.44	-6,357.34	6,784.20	6,775.23	8.96	756.753		
300.00	300.00	281.00	300.00	3.44	8.71	-69.57	2,368.44	-6,357.34	6,784.20	6,772.05	12.15	558.340		
400.00	400.00	381.00	400.00	3.60	12.01	-69.57	2,368.44	-6,357.34	6,784.20	6,768.58	15.62	434.465		
500.00	500.00	481.00	500.00	3.81	15.40	-69.57	2,368.44	-6,357.34	6,784.20	6,764.99	19.21	353.241		
600.00	599.98	580.98	599.98	4.04	18.82	20.44	2,368.44	-6,357.34	6,782.69	6,759.83	22.86	296.652		
700.00	699.95	680.95	699.95	4.30	22.27	20.45	2,368.44	-6,357.34	6,780.35	6,753.78	26.57	255.187		
800.00	799.92	780.92	799.92	4.59	25.73	20.46	2,368.44	-6,357.34	6,778.01	6,747.70	30.32	223.581		
900.00	899.89	880.89	899.89	4.90	29.19	20.47	2,368.44	-6,357.34	6,775.67	6,741.58	34.09	198.749		
1,000.00	999.86	980.86	999.86	5.23	32.66	20.47	2,368.44	-6,357.34	6,773.33	6,735.44	37.89	178.757		
1,100.00	1,099.83	1,080.83	1,099.83	5.58	36.14	20.48	2,368.44	-6,357.34	6,770.99	6,729.28	41.71	162.335		
1,200.00	1,199.80	1,180.80	1,199.80	5.94	39.61	20.49	2,368.44	-6,357.34	6,768.65	6,723.10	45.54	148.618		
1,300.00	1,299.77	1,280.77	1,299.77	6.30	43.09	20.50	2,368.44	-6,357.34	6,766.31	6,716.92	49.39	136.996		
1,400.00	1,399.73	1,380.73	1,399.73	6.68	46.57	20.50	2,368.44	-6,357.34	6,763.97	6,710.72	53.25	127.028		
1,500.00	1,499.70	1,480.70	1,499.70	7.07	50.05	20.51	2,368.44	-6,357.34	6,761.63	6,704.51	57.11	118.390		
1,600.00	1,599.67	1,580.67	1,599.67	7.46	53.54	20.52	2,368.44	-6,357.34	6,759.29	6,698.30	60.99	110.833		
1,700.00	1,699.64	1,680.64	1,699.64	7.85	57.02	20.52	2,368.44	-6,357.34	6,756.95	6,692.08	64.87	104.169		
1,800.00	1,799.61	1,780.61	1,799.61	8.25	60.50	20.53	2,368.44	-6,357.34	6,754.61	6,685.86	68.75	98.250		
1,900.00	1,899.58	1,880.58	1,899.58	8.66	63.99	20.54	2,368.44	-6,357.34	6,752.27	6,679.63	72.64	92.958		
2,000.00	1,999.55	1,980.55	1,999.55	9.06	67.48	20.55	2,368.44	-6,357.34	6,749.93	6,673.40	76.53	88.199		
2,100.00	2,099.52	2,080.52	2,099.52	9.47	70.96	20.55	2,368.44	-6,357.34	6,747.59	6,667.16	80.43	83.898		
2,200.00	2,199.48	2,180.48	2,199.48	9.89	74.45	20.56	2,368.44	-6,357.34	6,745.25	6,660.92	84.33	79.991		
2,300.00	2,299.45	2,280.45	2,299.45	10.30	77.93	20.57	2,368.44	-6,357.34	6,742.91	6,654.68	88.23	76.427		
2,400.00	2,399.42	2,380.42	2,399.42	10.72	81.42	20.58	2,368.44	-6,357.34	6,740.57	6,648.44	92.13	73.163		
2,500.00	2,499.39	2,480.39	2,499.39	11.14	84.91	20.58	2,368.44	-6,357.34	6,738.23	6,642.19	96.04	70.163		
2,600.00	2,599.36	2,580.36	2,599.36	11.56	88.40	20.59	2,368.44	-6,357.34	6,735.89	6,635.95	99.94	67.397		
2,700.00	2,699.33	2,680.33	2,699.33	11.98	91.88	20.60	2,368.44	-6,357.34	6,733.55	6,629.70	103.85	64.838		
2,800.00	2,799.30	2,780.30	2,799.30	12.41	95.37	20.61	2,368.44	-6,357.34	6,731.21	6,623.45	107.76	62.463		
2,900.00	2,899.27	2,880.27	2,899.27	12.83	98.86	20.61	2,368.44	-6,357.34	6,728.87	6,617.20	111.68	60.254		
3,000.00	2,999.23	2,980.23	2,999.23	13.26	102.35	20.62	2,368.44	-6,357.34	6,726.53	6,610.95	115.59	58.194		
3,100.00	3,099.20	3,080.20	3,099.20	13.68	105.84	20.63	2,368.44	-6,357.34	6,724.19	6,604.69	119.50	56.268		
3,200.00	3,199.17	3,180.17	3,199.17	14.11	109.32	20.64	2,368.44	-6,357.34	6,721.86	6,598.44	123.42	54.465		
3,300.00	3,299.14	3,280.14	3,299.14	14.54	112.81	20.64	2,368.44	-6,357.34	6,719.52	6,592.18	127.33	52.771		
3,400.00	3,399.11	3,380.11	3,399.11	14.97	116.30	20.65	2,368.44	-6,357.34	6,717.18	6,585.93	131.25	51.179		
3,500.00	3,499.08	3,480.08	3,499.08	15.40	119.79	20.66	2,368.44	-6,357.34	6,714.84	6,579.67	135.17	49.678		
3,600.00	3,599.05	3,580.05	3,599.05	15.83	123.28	20.67	2,368.44	-6,357.34	6,712.50	6,573.42	139.09	48.262		
3,700.00	3,699.02	3,680.02	3,699.02	16.26	126.77	20.67	2,368.44	-6,357.34	6,710.17	6,567.16	143.00	46.923		
3,800.00	3,798.98	3,779.98	3,798.98	16.69	130.26	20.68	2,368.44	-6,357.34	6,707.83	6,560.90	146.92	45.655		
3,900.00	3,898.95	3,879.95	3,898.95	17.12	133.74	20.69	2,368.44	-6,357.34	6,705.49	6,554.65	150.84	44.453		
4,000.00	3,998.92	3,979.92	3,998.92	17.55	137.23	20.70	2,368.44	-6,357.34	6,703.15	6,548.39	154.76	43.312		
4,100.00	4,098.89	4,079.89	4,098.89	17.98	140.72	20.70	2,368.44	-6,357.34	6,700.81	6,542.13	158.68	42.227		
4,200.00	4,198.86	4,179.86	4,198.86	18.42	144.21	20.71	2,368.44	-6,357.34	6,698.48	6,535.87	162.61	41.195		
4,300.00	4,298.83	4,279.83	4,298.83	18.85	147.70	20.72	2,368.44	-6,357.34	6,696.14	6,529.61	166.53	40.211		
4,400.00	4,398.80	4,379.80	4,398.80	19.28	151.19	20.73	2,368.44	-6,357.34	6,693.80	6,523.35	170.45	39.272		
4,500.00	4,498.77	4,479.77	4,498.77	19.72	154.68	20.74	2,368.44	-6,357.34	6,691.47	6,517.10	174.37	38.375		
4,600.00	4,598.73	4,579.73	4,598.73	20.15	158.17	20.74	2,368.44	-6,357.34	6,689.13	6,510.84	178.29	37.518		
4,700.00	4,698.70	4,679.70	4,698.70	20.58	161.66	20.75	2,368.44	-6,357.34	6,686.79	6,504.58	182.22	36.697		
4,800.00	4,798.67	4,779.67	4,798.67	21.02	165.15	20.76	2,368.44	-6,357.34	6,684.46	6,498.32	186.14	35.911		
4,900.00	4,898.64	4,879.64	4,898.64	21.45	168.64	20.77	2,368.44	-6,357.34	6,682.12	6,492.06	190.06	35.157		
5,000.00	4,998.61	4,979.61	4,998.61	21.89	172.12	20.77	2,368.44	-6,357.34	6,679.78	6,485.80	193.99	34.434		
5,100.00	5,098.58	5,079.58	5,098.58	22.32	175.61	20.78	2,368.44	-6,357.34	6,677.45	6,479.54	197.91	33.740		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,179.55	5,198.55	22.76	179.10	20.79	2,368.44	-6,357.34	6,675.11	6,473.28	201.83	33.072		
5,300.00	5,298.52	5,279.52	5,298.52	23.20	182.59	20.80	2,368.44	-6,357.34	6,672.77	6,467.02	205.76	32.430		
5,400.00	5,398.49	5,379.49	5,398.49	23.63	186.08	20.80	2,368.44	-6,357.34	6,670.44	6,460.75	209.68	31.812		
5,500.00	5,498.45	5,479.45	5,498.45	24.07	189.57	20.81	2,368.44	-6,357.34	6,668.10	6,454.49	213.61	31.216		
5,600.00	5,598.42	5,579.42	5,598.42	24.50	193.06	20.82	2,368.44	-6,357.34	6,665.77	6,448.23	217.53	30.643		
5,700.00	5,698.39	5,679.39	5,698.39	24.94	196.55	20.83	2,368.44	-6,357.34	6,663.43	6,441.97	221.46	30.089		
5,800.00	5,798.36	5,779.36	5,798.36	25.38	200.04	20.83	2,368.44	-6,357.34	6,661.10	6,435.71	225.38	29.554		
5,900.00	5,898.33	5,879.33	5,898.33	25.81	203.53	20.84	2,368.44	-6,357.34	6,658.76	6,429.45	229.31	29.038		
6,000.00	5,998.30	5,979.30	5,998.30	26.25	207.02	20.85	2,368.44	-6,357.34	6,656.43	6,423.19	233.23	28.540		
6,100.00	6,098.27	6,079.27	6,098.27	26.69	210.51	20.86	2,368.44	-6,357.34	6,654.09	6,416.93	237.16	28.057		
6,200.00	6,198.24	6,179.24	6,198.24	27.12	214.00	20.86	2,368.44	-6,357.34	6,651.75	6,410.67	241.09	27.591		
6,300.00	6,298.20	6,279.20	6,298.20	27.56	217.49	20.87	2,368.44	-6,357.34	6,649.42	6,404.41	245.01	27.139		
6,400.00	6,398.17	6,379.17	6,398.17	28.00	220.98	20.88	2,368.44	-6,357.34	6,647.09	6,398.15	248.94	26.702		
6,500.00	6,498.14	6,479.14	6,498.14	28.43	224.47	20.89	2,368.44	-6,357.34	6,644.75	6,391.89	252.86	26.278		
6,600.00	6,597.68	6,578.68	6,597.68	28.88	227.94	22.12	2,368.44	-6,357.34	6,636.81	6,380.04	256.78	25.846		
6,700.00	6,694.68	6,675.68	6,694.68	29.32	231.33	23.08	2,368.44	-6,357.34	6,614.65	6,354.05	260.60	25.382		
6,800.00	6,786.74	6,767.74	6,786.74	29.77	234.54	24.65	2,368.44	-6,357.34	6,578.73	6,314.50	264.24	24.897		
6,900.00	6,871.61	6,852.61	6,871.61	30.24	237.50	27.06	2,368.44	-6,357.34	6,529.97	6,262.38	267.59	24.403		
7,000.00	6,947.19	6,928.19	6,947.19	30.74	240.14	30.63	2,368.44	-6,357.34	6,469.61	6,199.03	270.58	23.910		
7,100.00	7,011.62	7,007.38	7,011.62	31.32	242.90	35.89	2,368.44	-6,357.34	6,399.20	6,125.54	273.66	23.384		
7,200.00	7,063.31	7,044.31	7,063.31	32.03	244.19	43.66	2,368.44	-6,357.34	6,320.52	6,045.29	275.23	22.964		
7,300.00	7,101.00	7,082.00	7,101.00	32.89	245.51	55.12	2,368.44	-6,357.34	6,235.58	5,958.77	276.81	22.526		
7,400.00	7,123.74	7,104.74	7,123.74	33.93	246.30	71.22	2,368.44	-6,357.34	6,146.51	5,868.65	277.86	22.121		
7,500.00	7,131.00	7,112.00	7,131.00	35.10	246.56	90.47	2,368.44	-6,357.34	6,055.55	5,777.18	278.37	21.753		
7,600.00	7,130.63	7,111.63	7,130.63	36.44	246.54	90.46	2,368.44	-6,357.34	5,964.53	5,685.88	278.65	21.405		
7,700.00	7,130.26	7,111.26	7,130.26	37.94	246.53	90.45	2,368.44	-6,357.34	5,873.80	5,594.81	278.99	21.054		
7,800.00	7,129.90	7,110.90	7,129.90	39.59	246.52	90.44	2,368.44	-6,357.34	5,783.38	5,503.99	279.39	20.700		
7,900.00	7,129.53	7,110.53	7,129.53	41.37	246.51	90.43	2,368.44	-6,357.34	5,693.28	5,413.42	279.86	20.343		
8,000.00	7,129.17	7,110.17	7,129.17	43.27	246.49	90.42	2,368.44	-6,357.34	5,603.51	5,323.11	280.40	19.984		
8,100.00	7,128.80	7,109.80	7,128.80	45.27	246.48	90.41	2,368.44	-6,357.34	5,514.10	5,233.09	281.01	19.622		
8,200.00	7,128.43	7,109.43	7,128.43	47.36	246.47	90.41	2,368.44	-6,357.34	5,425.05	5,143.36	281.70	19.258		
8,300.00	7,128.07	7,109.07	7,128.07	49.52	246.45	90.40	2,368.44	-6,357.34	5,336.40	5,053.93	282.47	18.892		
8,400.00	7,127.70	7,108.70	7,127.70	51.75	246.44	90.39	2,368.44	-6,357.34	5,248.15	4,964.84	283.31	18.524		
8,500.00	7,127.33	7,108.33	7,127.33	54.04	246.43	90.38	2,368.44	-6,357.34	5,160.33	4,876.09	284.25	18.154		
8,600.00	7,126.97	7,107.97	7,126.97	56.38	246.42	90.37	2,368.44	-6,357.34	5,072.96	4,787.70	285.27	17.783		
8,700.00	7,126.60	7,107.60	7,126.60	58.77	246.40	90.36	2,368.44	-6,357.34	4,986.07	4,699.70	286.37	17.411		
8,800.00	7,126.24	7,107.24	7,126.24	61.19	246.39	90.36	2,368.44	-6,357.34	4,899.68	4,612.11	287.57	17.038		
8,900.00	7,125.87	7,106.87	7,125.87	63.65	246.38	90.35	2,368.44	-6,357.34	4,813.81	4,524.95	288.86	16.665		
9,000.00	7,125.50	7,106.50	7,125.50	66.15	246.36	90.34	2,368.44	-6,357.34	4,728.50	4,438.25	290.25	16.291		
9,100.00	7,125.14	7,106.14	7,125.14	68.67	246.35	90.33	2,368.44	-6,357.34	4,643.78	4,352.04	291.73	15.918		
9,200.00	7,124.77	7,105.77	7,124.77	71.21	246.34	90.32	2,368.44	-6,357.34	4,559.67	4,266.35	293.32	15.545		
9,300.00	7,124.41	7,105.41	7,124.41	73.78	246.33	90.31	2,368.44	-6,357.34	4,476.22	4,181.22	295.00	15.173		
9,400.00	7,124.04	7,105.04	7,124.04	76.37	246.31	90.31	2,368.44	-6,357.34	4,393.46	4,096.67	296.79	14.803		
9,500.00	7,123.67	7,104.67	7,123.67	78.98	246.30	90.30	2,368.44	-6,357.34	4,311.43	4,012.74	298.69	14.435		
9,600.00	7,123.31	7,104.31	7,123.31	81.60	246.29	90.29	2,368.44	-6,357.34	4,230.17	3,929.48	300.69	14.068		
9,700.00	7,122.94	7,103.94	7,122.94	84.24	246.28	90.28	2,368.44	-6,357.34	4,149.73	3,846.93	302.80	13.704		
9,800.00	7,122.57	7,103.57	7,122.57	86.90	246.26	90.27	2,368.44	-6,357.34	4,070.16	3,765.13	305.03	13.344		
9,900.00	7,122.21	7,103.21	7,122.21	89.56	246.25	90.26	2,368.44	-6,357.34	3,991.51	3,684.14	307.37	12.986		
10,000.00	7,121.84	7,102.84	7,121.84	92.24	246.24	90.25	2,368.44	-6,357.34	3,913.83	3,604.01	309.82	12.633		
10,100.00	7,121.48	7,102.48	7,121.48	94.92	246.22	90.25	2,368.44	-6,357.34	3,837.19	3,524.79	312.39	12.283		
10,200.00	7,121.11	7,102.11	7,121.11	97.62	246.21	90.24	2,368.44	-6,357.34	3,761.64	3,446.55	315.09	11.938		
10,300.00	7,120.74	7,101.74	7,120.74	100.32	246.20	90.23	2,368.44	-6,357.34	3,687.26	3,369.35	317.90	11.599		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	7,101.38	7,120.38	103.04	246.19	90.22	2,368.44	-6,357.34	3,614.11	3,293.27	320.84	11.264		
10,500.00	7,120.01	7,101.01	7,120.01	105.76	246.17	90.21	2,368.44	-6,357.34	3,542.28	3,218.37	323.90	10.936		
10,600.00	7,119.64	7,100.64	7,119.64	108.48	246.16	90.20	2,368.44	-6,357.34	3,471.84	3,144.75	327.09	10.614		
10,700.00	7,119.28	7,100.28	7,119.28	111.22	246.15	90.20	2,368.44	-6,357.34	3,402.88	3,072.48	330.40	10.299		
10,800.00	7,118.91	7,100.09	7,118.91	113.96	246.14	90.19	2,368.44	-6,357.34	3,335.50	3,001.65	333.84	9.991		
10,900.00	7,118.55	7,100.45	7,118.55	116.70	246.15	90.18	2,368.44	-6,357.34	3,269.78	2,932.36	337.42	9.690		
11,000.00	7,118.18	7,100.82	7,118.18	119.45	246.17	90.17	2,368.44	-6,357.34	3,205.84	2,864.71	341.12	9.398		
11,100.00	7,117.81	7,101.19	7,117.81	122.21	246.18	90.16	2,368.44	-6,357.34	3,143.78	2,798.84	344.94	9.114		
11,200.00	7,117.45	7,101.55	7,117.45	124.97	246.19	90.15	2,368.44	-6,357.34	3,083.71	2,734.84	348.87	8.839		
11,300.00	7,117.08	7,101.92	7,117.08	127.73	246.20	90.15	2,368.44	-6,357.34	3,025.75	2,672.86	352.90	8.574		
11,400.00	7,116.72	7,102.29	7,116.72	130.50	246.22	90.14	2,368.44	-6,357.34	2,970.04	2,613.01	357.02	8.319		
11,500.00	7,116.35	7,102.65	7,116.35	133.27	246.23	90.13	2,368.44	-6,357.34	2,916.68	2,555.45	361.23	8.074		
11,600.00	7,115.98	7,103.02	7,115.98	136.04	246.24	90.12	2,368.44	-6,357.34	2,865.83	2,500.31	365.51	7.841		
11,700.00	7,115.62	7,103.38	7,115.62	138.82	246.26	90.11	2,368.44	-6,357.34	2,817.61	2,447.75	369.86	7.618		
11,800.00	7,115.25	7,103.75	7,115.25	141.60	246.27	90.10	2,368.44	-6,357.34	2,772.15	2,397.92	374.24	7.407		
11,900.00	7,114.88	7,104.12	7,114.88	144.39	246.28	90.09	2,368.44	-6,357.34	2,729.61	2,350.97	378.64	7.209		
12,000.00	7,114.52	7,104.48	7,114.52	147.17	246.29	90.09	2,368.44	-6,357.34	2,690.11	2,307.06	383.05	7.023		
12,100.00	7,114.15	7,104.85	7,114.15	149.96	246.31	90.08	2,368.44	-6,357.34	2,653.79	2,266.36	387.44	6.850		
12,200.00	7,113.79	7,105.21	7,113.79	152.75	246.32	90.07	2,368.44	-6,357.34	2,620.79	2,229.02	391.77	6.690		
12,300.00	7,113.42	7,105.58	7,113.42	155.55	246.33	90.06	2,368.44	-6,357.34	2,591.23	2,195.19	396.04	6.543		
12,400.00	7,113.05	7,105.95	7,113.05	158.34	246.35	90.05	2,368.44	-6,357.34	2,565.23	2,165.02	400.21	6.410		
12,500.00	7,112.69	7,106.31	7,112.69	161.14	246.36	90.04	2,368.44	-6,357.34	2,542.90	2,138.66	404.24	6.291		
12,600.00	7,112.32	7,106.68	7,112.32	163.94	246.37	90.04	2,368.44	-6,357.34	2,524.33	2,116.21	408.12	6.185		
12,700.00	7,111.96	7,107.05	7,111.96	166.74	246.38	90.03	2,368.44	-6,357.34	2,509.62	2,097.80	411.82	6.094		
12,800.00	7,111.59	7,107.41	7,111.59	169.54	246.40	90.02	2,368.44	-6,357.34	2,498.82	2,083.51	415.31	6.017		
12,900.00	7,111.22	7,107.78	7,111.22	172.35	246.41	90.01	2,368.44	-6,357.34	2,491.99	2,073.43	418.57	5.954		
13,000.00	7,110.86	7,108.14	7,110.86	175.16	246.42	90.00	2,368.44	-6,357.34	2,489.17	2,067.60	421.57	5.904		
13,020.37	7,110.78	7,108.22	7,110.78	175.73	246.42	90.00	2,368.44	-6,357.34	2,489.09	2,066.93	422.15	5.896 CC		
13,100.00	7,110.49	7,108.51	7,110.49	177.96	246.43	89.99	2,368.44	-6,357.34	2,490.36	2,066.05	424.31	5.869 ES		
13,200.00	7,110.12	7,108.88	7,110.12	180.77	246.45	89.98	2,368.44	-6,357.34	2,495.56	2,068.79	426.76	5.848		
13,300.00	7,109.76	7,109.24	7,109.76	183.58	246.46	89.98	2,368.44	-6,357.34	2,504.74	2,075.81	428.93	5.840 SF		
13,400.00	7,109.39	7,109.61	7,109.39	186.40	246.47	89.97	2,368.44	-6,357.34	2,517.87	2,087.07	430.80	5.845		
13,500.00	7,109.03	7,109.97	7,109.03	189.21	246.49	89.96	2,368.44	-6,357.34	2,534.87	2,102.50	432.38	5.863		
13,600.00	7,108.66	7,089.66	7,108.66	192.03	245.78	89.95	2,368.44	-6,357.34	2,555.68	2,122.74	432.94	5.903		
13,700.00	7,108.29	7,089.29	7,108.29	194.84	245.76	89.94	2,368.44	-6,357.34	2,580.20	2,146.28	433.92	5.946		
13,800.00	7,107.93	7,088.93	7,107.93	197.66	245.75	89.93	2,368.44	-6,357.34	2,608.33	2,173.70	434.63	6.001		
13,900.00	7,107.56	7,088.56	7,107.56	200.48	245.74	89.93	2,368.44	-6,357.34	2,639.94	2,204.86	435.08	6.068		
14,000.00	7,107.19	7,088.19	7,107.19	203.30	245.73	89.92	2,368.44	-6,357.34	2,674.92	2,239.64	435.29	6.145		
14,100.00	7,106.83	7,087.83	7,106.83	206.12	245.71	89.91	2,368.44	-6,357.34	2,713.14	2,277.87	435.27	6.233		
14,200.00	7,106.46	7,087.46	7,106.46	208.94	245.70	89.90	2,368.44	-6,357.34	2,754.46	2,319.41	435.05	6.331		
14,300.00	7,106.10	7,087.10	7,106.10	211.76	245.69	89.89	2,368.44	-6,357.34	2,798.75	2,364.11	434.64	6.439		
14,400.00	7,105.73	7,086.73	7,105.73	214.58	245.67	89.88	2,368.44	-6,357.34	2,845.86	2,411.79	434.06	6.556		
14,500.00	7,105.36	7,086.36	7,105.36	217.40	245.66	89.88	2,368.44	-6,357.34	2,895.66	2,462.32	433.34	6.682		
14,600.00	7,105.00	7,086.00	7,105.00	220.23	245.65	89.87	2,368.44	-6,357.34	2,948.01	2,515.53	432.48	6.817		
14,700.00	7,104.63	7,085.63	7,104.63	223.05	245.64	89.86	2,368.44	-6,357.34	3,002.78	2,571.27	431.51	6.959		
14,800.00	7,104.27	7,085.27	7,104.27	225.88	245.62	89.85	2,368.44	-6,357.34	3,059.83	2,629.39	430.44	7.109		
14,872.41	7,104.00	7,085.00	7,104.00	227.93	245.61	89.84	2,368.44	-6,357.34	3,102.51	2,672.90	429.61	7.222		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	16.00	3.28	3.28	-73.65	2,303.30	-7,853.60	8,184.41					
100.00	100.00	84.00	100.00	3.28	3.59	-73.65	2,303.30	-7,853.60	8,184.39	8,177.51	6.88	1,190.023		
200.00	200.00	184.00	200.00	3.34	5.71	-73.65	2,303.30	-7,853.60	8,184.39	8,175.34	9.05	904.322		
300.00	300.00	284.00	300.00	3.44	8.80	-73.65	2,303.30	-7,853.60	8,184.39	8,172.14	12.25	668.236		
400.00	400.00	384.00	400.00	3.60	12.11	-73.65	2,303.30	-7,853.60	8,184.39	8,168.68	15.72	520.773		
500.00	500.00	484.00	500.00	3.81	15.50	-73.65	2,303.30	-7,853.60	8,184.39	8,165.08	19.31	423.887		
600.00	599.98	583.98	599.98	4.04	18.93	16.35	2,303.30	-7,853.60	8,182.85	8,159.89	22.97	356.283		
700.00	699.95	683.95	699.95	4.30	22.37	16.36	2,303.30	-7,853.60	8,180.45	8,153.78	26.67	306.686		
800.00	799.92	783.92	799.92	4.59	25.83	16.36	2,303.30	-7,853.60	8,178.06	8,147.64	30.42	268.843		
900.00	899.89	883.89	899.89	4.90	29.30	16.37	2,303.30	-7,853.60	8,175.66	8,141.46	34.20	239.086		
1,000.00	999.86	983.86	999.86	5.23	32.77	16.37	2,303.30	-7,853.60	8,173.26	8,135.27	38.00	215.113		
1,100.00	1,099.83	1,083.83	1,099.83	5.58	36.24	16.38	2,303.30	-7,853.60	8,170.86	8,129.05	41.81	195.410		
1,200.00	1,199.80	1,183.80	1,199.80	5.94	39.72	16.38	2,303.30	-7,853.60	8,168.47	8,122.82	45.65	178.945		
1,300.00	1,299.77	1,283.77	1,299.77	6.30	43.20	16.39	2,303.30	-7,853.60	8,166.07	8,116.58	49.49	164.989		
1,400.00	1,399.73	1,383.73	1,399.73	6.68	46.68	16.39	2,303.30	-7,853.60	8,163.67	8,110.32	53.35	153.017		
1,500.00	1,499.70	1,483.70	1,499.70	7.07	50.16	16.40	2,303.30	-7,853.60	8,161.28	8,104.06	57.22	142.637		
1,600.00	1,599.67	1,583.67	1,599.67	7.46	53.64	16.40	2,303.30	-7,853.60	8,158.88	8,097.79	61.09	133.555		
1,700.00	1,699.64	1,683.64	1,699.64	7.85	57.12	16.41	2,303.30	-7,853.60	8,156.48	8,091.51	64.97	125.545		
1,800.00	1,799.61	1,783.61	1,799.61	8.25	60.61	16.41	2,303.30	-7,853.60	8,154.08	8,085.23	68.85	118.428		
1,900.00	1,899.58	1,883.58	1,899.58	8.66	64.09	16.42	2,303.30	-7,853.60	8,151.69	8,078.95	72.74	112.064		
2,000.00	1,999.55	1,983.55	1,999.55	9.06	67.58	16.42	2,303.30	-7,853.60	8,149.29	8,072.66	76.63	106.340		
2,100.00	2,099.52	2,083.52	2,099.52	9.47	71.07	16.43	2,303.30	-7,853.60	8,146.89	8,066.36	80.53	101.166		
2,200.00	2,199.48	2,183.48	2,199.48	9.89	74.55	16.43	2,303.30	-7,853.60	8,144.50	8,060.07	84.43	96.466		
2,300.00	2,299.45	2,283.45	2,299.45	10.30	78.04	16.44	2,303.30	-7,853.60	8,142.10	8,053.77	88.33	92.178		
2,400.00	2,399.42	2,383.42	2,399.42	10.72	81.53	16.44	2,303.30	-7,853.60	8,139.70	8,047.47	92.23	88.251		
2,500.00	2,499.39	2,483.39	2,499.39	11.14	85.01	16.45	2,303.30	-7,853.60	8,137.31	8,041.17	96.14	84.641		
2,600.00	2,599.36	2,583.36	2,599.36	11.56	88.50	16.45	2,303.30	-7,853.60	8,134.91	8,034.86	100.05	81.311		
2,700.00	2,699.33	2,683.33	2,699.33	11.98	91.99	16.46	2,303.30	-7,853.60	8,132.51	8,028.56	103.96	78.231		
2,800.00	2,799.30	2,783.30	2,799.30	12.41	95.48	16.46	2,303.30	-7,853.60	8,130.12	8,022.25	107.87	75.373		
2,900.00	2,899.27	2,883.27	2,899.27	12.83	98.96	16.47	2,303.30	-7,853.60	8,127.72	8,015.94	111.78	72.713		
3,000.00	2,999.23	2,983.23	2,999.23	13.26	102.45	16.47	2,303.30	-7,853.60	8,125.33	8,009.64	115.69	70.233		
3,100.00	3,099.20	3,083.20	3,099.20	13.68	105.94	16.48	2,303.30	-7,853.60	8,122.93	8,003.33	119.60	67.915		
3,200.00	3,199.17	3,183.17	3,199.17	14.11	109.43	16.48	2,303.30	-7,853.60	8,120.53	7,997.01	123.52	65.743		
3,300.00	3,299.14	3,283.14	3,299.14	14.54	112.92	16.49	2,303.30	-7,853.60	8,118.14	7,990.70	127.43	63.704		
3,400.00	3,399.11	3,383.11	3,399.11	14.97	116.41	16.49	2,303.30	-7,853.60	8,115.74	7,984.39	131.35	61.786		
3,500.00	3,499.08	3,483.08	3,499.08	15.40	119.89	16.50	2,303.30	-7,853.60	8,113.35	7,978.08	135.27	59.979		
3,600.00	3,599.05	3,583.05	3,599.05	15.83	123.38	16.50	2,303.30	-7,853.60	8,110.95	7,971.76	139.19	58.274		
3,700.00	3,699.02	3,683.02	3,699.02	16.26	126.87	16.51	2,303.30	-7,853.60	8,108.55	7,965.45	143.11	56.661		
3,800.00	3,798.98	3,782.98	3,798.98	16.69	130.36	16.51	2,303.30	-7,853.60	8,106.16	7,959.13	147.02	55.135		
3,900.00	3,898.95	3,882.95	3,898.95	17.12	133.85	16.52	2,303.30	-7,853.60	8,103.76	7,952.82	150.94	53.687		
4,000.00	3,998.92	3,982.92	3,998.92	17.55	137.34	16.52	2,303.30	-7,853.60	8,101.37	7,946.50	154.86	52.313		
4,100.00	4,098.89	4,082.89	4,098.89	17.98	140.83	16.53	2,303.30	-7,853.60	8,098.97	7,940.19	158.79	51.006		
4,200.00	4,198.86	4,182.86	4,198.86	18.42	144.32	16.53	2,303.30	-7,853.60	8,096.58	7,933.87	162.71	49.762		
4,300.00	4,298.83	4,282.83	4,298.83	18.85	147.80	16.54	2,303.30	-7,853.60	8,094.18	7,927.55	166.63	48.576		
4,400.00	4,398.80	4,382.80	4,398.80	19.28	151.29	16.54	2,303.30	-7,853.60	8,091.78	7,921.24	170.55	47.445		
4,500.00	4,498.77	4,482.77	4,498.77	19.72	154.78	16.55	2,303.30	-7,853.60	8,089.39	7,914.92	174.47	46.365		
4,600.00	4,598.73	4,582.73	4,598.73	20.15	158.27	16.55	2,303.30	-7,853.60	8,086.99	7,908.60	178.39	45.332		
4,700.00	4,698.70	4,682.70	4,698.70	20.58	161.76	16.56	2,303.30	-7,853.60	8,084.60	7,902.28	182.32	44.344		
4,800.00	4,798.67	4,782.67	4,798.67	21.02	165.25	16.56	2,303.30	-7,853.60	8,082.20	7,895.96	186.24	43.397		
4,900.00	4,898.64	4,882.64	4,898.64	21.45	168.74	16.57	2,303.30	-7,853.60	8,079.81	7,889.65	190.16	42.489		
5,000.00	4,998.61	4,982.61	4,998.61	21.89	172.23	16.57	2,303.30	-7,853.60	8,077.41	7,883.33	194.09	41.618		
5,100.00	5,098.58	5,082.58	5,098.58	22.32	175.72	16.58	2,303.30	-7,853.60	8,075.02	7,877.01	198.01	40.781		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LOVELY 14-9(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,182.55	5,198.55	22.76	179.21	16.58	2,303.30	-7,853.60	8,072.62	7,870.69	201.93	39.976		
5,300.00	5,298.52	5,282.52	5,298.52	23.20	182.70	16.59	2,303.30	-7,853.60	8,070.23	7,864.37	205.86	39.203		
5,400.00	5,398.49	5,382.49	5,398.49	23.63	186.19	16.59	2,303.30	-7,853.60	8,067.83	7,858.05	209.78	38.458		
5,500.00	5,498.45	5,482.45	5,498.45	24.07	189.68	16.60	2,303.30	-7,853.60	8,065.44	7,851.73	213.71	37.740		
5,600.00	5,598.42	5,582.42	5,598.42	24.50	193.17	16.60	2,303.30	-7,853.60	8,063.05	7,845.41	217.63	37.049		
5,700.00	5,698.39	5,682.39	5,698.39	24.94	196.65	16.61	2,303.30	-7,853.60	8,060.65	7,839.09	221.56	36.382		
5,800.00	5,798.36	5,782.36	5,798.36	25.38	200.14	16.61	2,303.30	-7,853.60	8,058.26	7,832.77	225.48	35.738		
5,900.00	5,898.33	5,882.33	5,898.33	25.81	203.63	16.62	2,303.30	-7,853.60	8,055.86	7,826.45	229.41	35.116		
6,000.00	5,998.30	5,982.30	5,998.30	26.25	207.12	16.62	2,303.30	-7,853.60	8,053.47	7,820.13	233.33	34.515		
6,100.00	6,098.27	6,082.27	6,098.27	26.69	210.61	16.63	2,303.30	-7,853.60	8,051.07	7,813.81	237.26	33.934		
6,200.00	6,198.24	6,182.24	6,198.24	27.12	214.10	16.63	2,303.30	-7,853.60	8,048.68	7,807.49	241.18	33.371		
6,300.00	6,298.20	6,282.20	6,298.20	27.56	217.59	16.64	2,303.30	-7,853.60	8,046.28	7,801.17	245.11	32.827		
6,400.00	6,398.17	6,382.17	6,398.17	28.00	221.08	16.64	2,303.30	-7,853.60	8,043.89	7,794.85	249.04	32.300		
6,500.00	6,498.14	6,482.14	6,498.14	28.43	224.57	16.65	2,303.30	-7,853.60	8,041.50	7,788.53	252.96	31.789		
6,600.00	6,597.68	6,581.68	6,597.68	28.88	228.05	17.83	2,303.30	-7,853.60	8,033.35	7,776.47	256.88	31.273		
6,700.00	6,694.68	6,678.68	6,694.68	29.32	231.43	18.64	2,303.30	-7,853.60	8,010.59	7,749.89	260.70	30.727		
6,800.00	6,786.74	6,770.74	6,786.74	29.77	234.64	19.94	2,303.30	-7,853.60	7,973.67	7,709.34	264.33	30.166		
6,900.00	6,871.61	6,855.61	6,871.61	30.24	237.61	21.97	2,303.30	-7,853.60	7,923.53	7,655.86	267.67	29.601		
7,000.00	6,947.19	6,931.19	6,947.19	30.74	240.25	25.01	2,303.30	-7,853.60	7,861.43	7,590.78	270.65	29.046		
7,100.00	7,011.62	7,004.38	7,011.62	31.32	242.80	29.62	2,303.30	-7,853.60	7,788.93	7,515.42	273.51	28.478		
7,200.00	7,063.31	7,047.31	7,063.31	32.03	244.30	36.78	2,303.30	-7,853.60	7,707.84	7,432.58	275.26	28.002		
7,300.00	7,101.00	7,085.00	7,101.00	32.89	245.61	48.24	2,303.30	-7,853.60	7,620.18	7,343.39	276.79	27.530		
7,400.00	7,123.74	7,107.74	7,123.74	33.93	246.41	66.39	2,303.30	-7,853.60	7,528.15	7,250.37	277.78	27.102		
7,500.00	7,131.00	7,115.00	7,131.00	35.10	246.66	90.60	2,303.30	-7,853.60	7,434.02	7,155.82	278.20	26.721		
7,600.00	7,130.63	7,114.63	7,130.63	36.44	246.65	90.59	2,303.30	-7,853.60	7,339.70	7,061.32	278.38	26.366		
7,700.00	7,130.26	7,114.26	7,130.26	37.94	246.64	90.58	2,303.30	-7,853.60	7,245.53	6,966.93	278.60	26.007		
7,800.00	7,129.90	7,113.90	7,129.90	39.59	246.62	90.57	2,303.30	-7,853.60	7,151.52	6,872.66	278.85	25.646		
7,900.00	7,129.53	7,113.53	7,129.53	41.37	246.61	90.57	2,303.30	-7,853.60	7,057.67	6,778.52	279.15	25.283		
8,000.00	7,129.17	7,113.17	7,129.17	43.27	246.60	90.56	2,303.30	-7,853.60	6,963.99	6,684.50	279.49	24.917		
8,100.00	7,128.80	7,112.80	7,128.80	45.27	246.58	90.55	2,303.30	-7,853.60	6,870.49	6,590.61	279.88	24.548		
8,200.00	7,128.43	7,112.43	7,128.43	47.36	246.57	90.54	2,303.30	-7,853.60	6,777.18	6,496.86	280.32	24.177		
8,300.00	7,128.07	7,112.07	7,128.07	49.52	246.56	90.53	2,303.30	-7,853.60	6,684.06	6,403.26	280.80	23.803		
8,400.00	7,127.70	7,111.70	7,127.70	51.75	246.55	90.52	2,303.30	-7,853.60	6,591.14	6,309.80	281.34	23.427		
8,500.00	7,127.33	7,111.33	7,127.33	54.04	246.53	90.51	2,303.30	-7,853.60	6,498.43	6,216.50	281.93	23.049		
8,600.00	7,126.97	7,110.97	7,126.97	56.38	246.52	90.51	2,303.30	-7,853.60	6,405.94	6,123.36	282.58	22.669		
8,700.00	7,126.60	7,110.60	7,126.60	58.77	246.51	90.50	2,303.30	-7,853.60	6,313.68	6,030.40	283.29	22.287		
8,800.00	7,126.24	7,110.24	7,126.24	61.19	246.50	90.49	2,303.30	-7,853.60	6,221.66	5,937.61	284.05	21.903		
8,900.00	7,125.87	7,109.87	7,125.87	63.65	246.48	90.48	2,303.30	-7,853.60	6,129.89	5,845.02	284.87	21.518		
9,000.00	7,125.50	7,109.50	7,125.50	66.15	246.47	90.47	2,303.30	-7,853.60	6,038.38	5,752.62	285.76	21.131		
9,100.00	7,125.14	7,109.14	7,125.14	68.67	246.46	90.46	2,303.30	-7,853.60	5,947.15	5,660.44	286.71	20.743		
9,200.00	7,124.77	7,108.77	7,124.77	71.21	246.44	90.45	2,303.30	-7,853.60	5,856.20	5,568.47	287.73	20.353		
9,300.00	7,124.41	7,108.41	7,124.41	73.78	246.43	90.45	2,303.30	-7,853.60	5,765.55	5,476.73	288.81	19.963		
9,400.00	7,124.04	7,108.04	7,124.04	76.37	246.42	90.44	2,303.30	-7,853.60	5,675.21	5,385.25	289.97	19.572		
9,500.00	7,123.67	7,107.67	7,123.67	78.98	246.41	90.43	2,303.30	-7,853.60	5,585.21	5,294.01	291.19	19.181		
9,600.00	7,123.31	7,107.31	7,123.31	81.60	246.39	90.42	2,303.30	-7,853.60	5,495.54	5,203.06	292.49	18.789		
9,700.00	7,122.94	7,106.94	7,122.94	84.24	246.38	90.41	2,303.30	-7,853.60	5,406.25	5,112.39	293.86	18.397		
9,800.00	7,122.57	7,106.57	7,122.57	86.90	246.37	90.40	2,303.30	-7,853.60	5,317.33	5,022.02	295.31	18.006		
9,900.00	7,122.21	7,106.21	7,122.21	89.56	246.35	90.39	2,303.30	-7,853.60	5,228.81	4,931.98	296.83	17.615		
10,000.00	7,121.84	7,105.84	7,121.84	92.24	246.34	90.39	2,303.30	-7,853.60	5,140.72	4,842.27	298.44	17.225		
10,100.00	7,121.48	7,105.48	7,121.48	94.92	246.33	90.38	2,303.30	-7,853.60	5,053.06	4,752.93	300.13	16.836		
10,200.00	7,121.11	7,105.11	7,121.11	97.62	246.32	90.37	2,303.30	-7,853.60	4,965.88	4,663.97	301.91	16.448		
10,300.00	7,120.74	7,104.74	7,120.74	100.32	246.30	90.36	2,303.30	-7,853.60	4,879.18	4,575.41	303.77	16.062		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	7,104.38	7,120.38	103.04	246.29	90.35	2,303.30	-7,853.60	4,793.01	4,487.29	305.72	15.678		
10,500.00	7,120.01	7,104.01	7,120.01	105.76	246.28	90.34	2,303.30	-7,853.60	4,707.38	4,399.61	307.76	15.295		
10,600.00	7,119.64	7,103.64	7,119.64	108.48	246.27	90.34	2,303.30	-7,853.60	4,622.32	4,312.42	309.90	14.915		
10,700.00	7,119.28	7,103.28	7,119.28	111.22	246.25	90.33	2,303.30	-7,853.60	4,537.88	4,225.74	312.14	14.538		
10,800.00	7,118.91	7,102.91	7,118.91	113.96	246.24	90.32	2,303.30	-7,853.60	4,454.08	4,139.60	314.48	14.163		
10,900.00	7,118.55	7,102.55	7,118.55	116.70	246.23	90.31	2,303.30	-7,853.60	4,370.96	4,054.04	316.92	13.792		
11,000.00	7,118.18	7,102.18	7,118.18	119.45	246.21	90.30	2,303.30	-7,853.60	4,288.57	3,969.10	319.47	13.424		
11,100.00	7,117.81	7,101.81	7,117.81	122.21	246.20	90.29	2,303.30	-7,853.60	4,206.93	3,884.81	322.13	13.060		
11,200.00	7,117.45	7,101.45	7,117.45	124.97	246.19	90.28	2,303.30	-7,853.60	4,126.11	3,801.21	324.90	12.700		
11,300.00	7,117.08	7,101.08	7,117.08	127.73	246.18	90.28	2,303.30	-7,853.60	4,046.14	3,718.36	327.78	12.344		
11,400.00	7,116.72	7,100.72	7,116.72	130.50	246.16	90.27	2,303.30	-7,853.60	3,967.08	3,636.29	330.79	11.993		
11,500.00	7,116.35	7,100.35	7,116.35	133.27	246.15	90.26	2,303.30	-7,853.60	3,888.99	3,555.07	333.91	11.647		
11,600.00	7,115.98	7,100.02	7,115.98	136.04	246.14	90.25	2,303.30	-7,853.60	3,811.92	3,474.75	337.16	11.306		
11,700.00	7,115.62	7,100.38	7,115.62	138.82	246.15	90.24	2,303.30	-7,853.60	3,735.93	3,395.37	340.57	10.970		
11,800.00	7,115.25	7,100.75	7,115.25	141.60	246.16	90.23	2,303.30	-7,853.60	3,661.10	3,317.00	344.10	10.640		
11,900.00	7,114.88	7,101.12	7,114.88	144.39	246.18	90.22	2,303.30	-7,853.60	3,587.50	3,239.74	347.76	10.316		
12,000.00	7,114.52	7,101.48	7,114.52	147.17	246.19	90.22	2,303.30	-7,853.60	3,515.20	3,163.65	351.55	9.999		
12,100.00	7,114.15	7,101.85	7,114.15	149.96	246.20	90.21	2,303.30	-7,853.60	3,444.29	3,088.81	355.48	9.689		
12,200.00	7,113.79	7,102.21	7,113.79	152.75	246.22	90.20	2,303.30	-7,853.60	3,374.85	3,015.31	359.53	9.387		
12,300.00	7,113.42	7,102.58	7,113.42	155.55	246.23	90.19	2,303.30	-7,853.60	3,306.97	2,943.25	363.72	9.092		
12,400.00	7,113.05	7,102.95	7,113.05	158.34	246.24	90.18	2,303.30	-7,853.60	3,240.76	2,872.73	368.04	8.805		
12,500.00	7,112.69	7,103.31	7,112.69	161.14	246.25	90.17	2,303.30	-7,853.60	3,176.32	2,803.84	372.48	8.527		
12,600.00	7,112.32	7,103.68	7,112.32	163.94	246.27	90.16	2,303.30	-7,853.60	3,113.76	2,736.72	377.04	8.258		
12,700.00	7,111.96	7,104.05	7,111.96	166.74	246.28	90.16	2,303.30	-7,853.60	3,053.19	2,671.48	381.72	7.999		
12,800.00	7,111.59	7,104.41	7,111.59	169.54	246.29	90.15	2,303.30	-7,853.60	2,994.74	2,608.24	386.50	7.748		
12,900.00	7,111.22	7,104.78	7,111.22	172.35	246.30	90.14	2,303.30	-7,853.60	2,938.53	2,547.16	391.37	7.508		
13,000.00	7,110.86	7,105.14	7,110.86	175.16	246.32	90.13	2,303.30	-7,853.60	2,884.69	2,488.37	396.32	7.279		
13,100.00	7,110.49	7,105.51	7,110.49	177.96	246.33	90.12	2,303.30	-7,853.60	2,833.36	2,432.02	401.34	7.060		
13,200.00	7,110.12	7,105.88	7,110.12	180.77	246.34	90.11	2,303.30	-7,853.60	2,784.67	2,378.27	406.40	6.852		
13,300.00	7,109.76	7,106.24	7,109.76	183.58	246.36	90.10	2,303.30	-7,853.60	2,738.77	2,327.28	411.49	6.656		
13,400.00	7,109.39	7,106.61	7,109.39	186.40	246.37	90.10	2,303.30	-7,853.60	2,695.80	2,279.22	416.58	6.471		
13,500.00	7,109.03	7,106.97	7,109.03	189.21	246.38	90.09	2,303.30	-7,853.60	2,655.90	2,234.26	421.64	6.299		
13,600.00	7,108.66	7,107.34	7,108.66	192.03	246.39	90.08	2,303.30	-7,853.60	2,619.22	2,192.57	426.65	6.139		
13,700.00	7,108.29	7,107.71	7,108.29	194.84	246.41	90.07	2,303.30	-7,853.60	2,585.88	2,154.31	431.57	5.992		
13,800.00	7,107.93	7,108.07	7,107.93	197.66	246.42	90.06	2,303.30	-7,853.60	2,556.02	2,119.64	436.38	5.857		
13,900.00	7,107.56	7,108.44	7,107.56	200.48	246.43	90.05	2,303.30	-7,853.60	2,529.77	2,088.74	441.03	5.736		
14,000.00	7,107.19	7,108.81	7,107.19	203.30	246.45	90.04	2,303.30	-7,853.60	2,507.23	2,061.74	445.49	5.628		
14,100.00	7,106.83	7,109.17	7,106.83	206.12	246.46	90.04	2,303.30	-7,853.60	2,488.51	2,038.77	449.74	5.533		
14,200.00	7,106.46	7,109.54	7,106.46	208.94	246.47	90.03	2,303.30	-7,853.60	2,473.69	2,019.96	453.73	5.452		
14,300.00	7,106.10	7,109.90	7,106.10	211.76	246.48	90.02	2,303.30	-7,853.60	2,462.85	2,005.41	457.44	5.384		
14,400.00	7,105.73	7,089.73	7,105.73	214.58	245.78	90.01	2,303.30	-7,853.60	2,456.03	1,995.91	460.12	5.338		
14,500.00	7,105.36	7,089.36	7,105.36	217.40	245.77	90.00	2,303.30	-7,853.60	2,453.28	1,990.11	463.17	5.297		
14,517.63	7,105.30	7,089.30	7,105.30	217.90	245.76	90.00	2,303.30	-7,853.60	2,453.21	1,989.55	463.67	5.291 CC		
14,600.00	7,105.00	7,089.00	7,105.00	220.23	245.75	89.99	2,303.30	-7,853.60	2,454.60	1,988.74	465.86	5.269 ES		
14,700.00	7,104.63	7,088.63	7,104.63	223.05	245.74	89.98	2,303.30	-7,853.60	2,459.98	1,991.79	468.19	5.254		
14,800.00	7,104.27	7,088.27	7,104.27	225.88	245.73	89.98	2,303.30	-7,853.60	2,469.41	1,999.26	470.16	5.252 SF		
14,872.41	7,104.00	7,088.00	7,104.00	227.93	245.72	89.97	2,303.30	-7,853.60	2,478.74	2,007.39	471.35	5.259		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1.00	0.00	3.28	3.28	-56.32	2,418.89	-3,629.07	4,361.33				
100.00	100.00	101.00	100.00	3.28	3.73	-56.32	2,418.89	-3,629.07	4,361.33	4,354.31	7.02	621.559	
200.00	200.00	201.00	200.00	3.34	6.21	-56.32	2,418.89	-3,629.07	4,361.33	4,351.78	9.55	456.894	
300.00	300.00	301.00	300.00	3.44	9.36	-56.32	2,418.89	-3,629.07	4,361.33	4,348.52	12.80	340.699	
400.00	400.00	401.00	400.00	3.60	12.68	-56.32	2,418.89	-3,629.07	4,361.33	4,345.04	16.29	267.761	
500.00	500.00	501.00	500.00	3.81	16.08	-56.32	2,418.89	-3,629.07	4,361.33	4,341.44	19.89	219.289	
600.00	599.98	600.98	599.98	4.04	19.51	33.70	2,418.89	-3,629.07	4,359.99	4,336.44	23.55	185.122	
700.00	699.95	700.95	699.95	4.30	22.96	33.72	2,418.89	-3,629.07	4,357.91	4,330.65	27.26	159.858	
800.00	799.92	800.92	799.92	4.59	26.42	33.74	2,418.89	-3,629.07	4,355.83	4,324.82	31.01	140.471	
900.00	899.89	900.89	899.89	4.90	29.89	33.76	2,418.89	-3,629.07	4,353.76	4,318.97	34.79	125.158	
1,000.00	999.86	1,000.86	999.86	5.23	33.36	33.78	2,418.89	-3,629.07	4,351.68	4,313.09	38.59	112.776	
1,100.00	1,099.83	1,100.83	1,099.83	5.58	36.83	33.80	2,418.89	-3,629.07	4,349.60	4,307.19	42.41	102.569	
1,200.00	1,199.80	1,200.80	1,199.80	5.94	40.31	33.81	2,418.89	-3,629.07	4,347.52	4,301.28	46.24	94.018	
1,300.00	1,299.77	1,300.77	1,299.77	6.30	43.79	33.83	2,418.89	-3,629.07	4,345.45	4,295.36	50.09	86.755	
1,400.00	1,399.73	1,400.73	1,399.73	6.68	47.27	33.85	2,418.89	-3,629.07	4,343.37	4,289.43	53.95	80.513	
1,500.00	1,499.70	1,500.70	1,499.70	7.07	50.75	33.87	2,418.89	-3,629.07	4,341.30	4,283.49	57.81	75.093	
1,600.00	1,599.67	1,600.67	1,599.67	7.46	54.23	33.89	2,418.89	-3,629.07	4,339.22	4,277.54	61.69	70.344	
1,700.00	1,699.64	1,700.64	1,699.64	7.85	57.72	33.91	2,418.89	-3,629.07	4,337.15	4,271.58	65.57	66.150	
1,800.00	1,799.61	1,800.61	1,799.61	8.25	61.20	33.92	2,418.89	-3,629.07	4,335.08	4,265.63	69.45	62.420	
1,900.00	1,899.58	1,900.58	1,899.58	8.66	64.69	33.94	2,418.89	-3,629.07	4,333.00	4,259.66	73.34	59.082	
2,000.00	1,999.55	2,000.55	1,999.55	9.06	68.17	33.96	2,418.89	-3,629.07	4,330.93	4,253.70	77.23	56.077	
2,100.00	2,099.52	2,100.52	2,099.52	9.47	71.66	33.98	2,418.89	-3,629.07	4,328.86	4,247.73	81.13	53.358	
2,200.00	2,199.48	2,200.48	2,199.48	9.89	75.15	34.00	2,418.89	-3,629.07	4,326.78	4,241.76	85.03	50.887	
2,300.00	2,299.45	2,300.45	2,299.45	10.30	78.63	34.02	2,418.89	-3,629.07	4,324.71	4,235.78	88.93	48.631	
2,400.00	2,399.42	2,400.42	2,399.42	10.72	82.12	34.04	2,418.89	-3,629.07	4,322.64	4,229.81	92.83	46.563	
2,500.00	2,499.39	2,500.39	2,499.39	11.14	85.61	34.05	2,418.89	-3,629.07	4,320.57	4,223.83	96.74	44.662	
2,600.00	2,599.36	2,600.36	2,599.36	11.56	89.09	34.07	2,418.89	-3,629.07	4,318.50	4,217.85	100.65	42.907	
2,700.00	2,699.33	2,700.33	2,699.33	11.98	92.58	34.09	2,418.89	-3,629.07	4,316.43	4,211.88	104.56	41.283	
2,800.00	2,799.30	2,800.30	2,799.30	12.41	96.07	34.11	2,418.89	-3,629.07	4,314.36	4,205.89	108.47	39.776	
2,900.00	2,899.27	2,900.27	2,899.27	12.83	99.56	34.13	2,418.89	-3,629.07	4,312.29	4,199.91	112.38	38.373	
3,000.00	2,999.23	3,000.23	2,999.23	13.26	103.05	34.15	2,418.89	-3,629.07	4,310.23	4,193.93	116.29	37.063	
3,100.00	3,099.20	3,100.20	3,099.20	13.68	106.53	34.17	2,418.89	-3,629.07	4,308.16	4,187.95	120.21	35.839	
3,200.00	3,199.17	3,200.17	3,199.17	14.11	110.02	34.18	2,418.89	-3,629.07	4,306.09	4,181.97	124.12	34.692	
3,300.00	3,299.14	3,300.14	3,299.14	14.54	113.51	34.20	2,418.89	-3,629.07	4,304.02	4,175.98	128.04	33.615	
3,400.00	3,399.11	3,400.11	3,399.11	14.97	117.00	34.22	2,418.89	-3,629.07	4,301.96	4,170.00	131.96	32.601	
3,500.00	3,499.08	3,500.08	3,499.08	15.40	120.49	34.24	2,418.89	-3,629.07	4,299.89	4,164.02	135.87	31.646	
3,600.00	3,599.05	3,600.05	3,599.05	15.83	123.98	34.26	2,418.89	-3,629.07	4,297.82	4,158.03	139.79	30.744	
3,700.00	3,699.02	3,700.02	3,699.02	16.26	127.46	34.28	2,418.89	-3,629.07	4,295.76	4,152.05	143.71	29.892	
3,800.00	3,798.98	3,800.02	3,798.98	16.69	130.95	34.30	2,418.89	-3,629.07	4,293.69	4,146.06	147.63	29.084	
3,900.00	3,898.95	3,900.05	3,898.95	17.12	134.45	34.32	2,418.89	-3,629.07	4,291.63	4,140.08	151.55	28.317	
4,000.00	3,998.92	4,000.08	3,998.92	17.55	137.94	34.33	2,418.89	-3,629.07	4,289.57	4,134.09	155.48	27.590	
4,100.00	4,098.89	4,100.11	4,098.89	17.98	141.43	34.35	2,418.89	-3,629.07	4,287.50	4,128.10	159.40	26.898	
4,200.00	4,198.86	4,200.14	4,198.86	18.42	144.92	34.37	2,418.89	-3,629.07	4,285.44	4,122.12	163.32	26.239	
4,300.00	4,298.83	4,300.17	4,298.83	18.85	148.41	34.39	2,418.89	-3,629.07	4,283.38	4,116.13	167.25	25.611	
4,400.00	4,398.80	4,400.20	4,398.80	19.28	151.90	34.41	2,418.89	-3,629.07	4,281.32	4,110.14	171.17	25.012	
4,500.00	4,498.77	4,500.23	4,498.77	19.72	155.39	34.43	2,418.89	-3,629.07	4,279.26	4,104.16	175.10	24.439	
4,600.00	4,598.73	4,600.27	4,598.73	20.15	158.88	34.45	2,418.89	-3,629.07	4,277.19	4,098.17	179.02	23.892	
4,700.00	4,698.70	4,700.30	4,698.70	20.58	162.38	34.47	2,418.89	-3,629.07	4,275.13	4,092.19	182.95	23.368	
4,800.00	4,798.67	4,800.33	4,798.67	21.02	165.87	34.49	2,418.89	-3,629.07	4,273.07	4,086.20	186.87	22.866	
4,900.00	4,898.64	4,900.36	4,898.64	21.45	169.36	34.50	2,418.89	-3,629.07	4,271.01	4,080.21	190.80	22.385	
5,000.00	4,998.61	5,000.39	4,998.61	21.89	172.85	34.52	2,418.89	-3,629.07	4,268.95	4,074.23	194.73	21.923	
5,100.00	5,098.58	5,100.42	5,098.58	22.32	176.34	34.54	2,418.89	-3,629.07	4,266.90	4,068.24	198.65	21.479	

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 1(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,200.45	5,198.55	22.76	179.83	34.56	2,418.89	-3,629.07	4,264.84	4,062.26	202.58	21.053		
5,300.00	5,298.52	5,300.48	5,298.52	23.20	183.32	34.58	2,418.89	-3,629.07	4,262.78	4,056.27	206.51	20.642		
5,400.00	5,398.49	5,400.52	5,398.49	23.63	186.82	34.60	2,418.89	-3,629.07	4,260.72	4,050.29	210.43	20.247		
5,500.00	5,498.45	5,500.55	5,498.45	24.07	190.31	34.62	2,418.89	-3,629.07	4,258.67	4,044.31	214.36	19.867		
5,600.00	5,598.42	5,600.58	5,598.42	24.50	193.80	34.64	2,418.89	-3,629.07	4,256.61	4,038.32	218.29	19.500		
5,700.00	5,698.39	5,700.61	5,698.39	24.94	197.29	34.66	2,418.89	-3,629.07	4,254.55	4,032.34	222.21	19.146		
5,800.00	5,798.36	5,800.64	5,798.36	25.38	200.78	34.68	2,418.89	-3,629.07	4,252.50	4,026.36	226.14	18.804		
5,900.00	5,898.33	5,900.67	5,898.33	25.81	204.27	34.70	2,418.89	-3,629.07	4,250.44	4,020.37	230.07	18.475		
6,000.00	5,998.30	6,000.70	5,998.30	26.25	207.77	34.71	2,418.89	-3,629.07	4,248.39	4,014.39	234.00	18.156		
6,100.00	6,098.27	6,100.73	6,098.27	26.69	211.26	34.73	2,418.89	-3,629.07	4,246.34	4,008.41	237.93	17.847		
6,200.00	6,198.24	6,200.76	6,198.24	27.12	214.75	34.75	2,418.89	-3,629.07	4,244.28	4,002.43	241.86	17.549		
6,300.00	6,298.20	6,300.80	6,298.20	27.56	218.24	34.77	2,418.89	-3,629.07	4,242.23	3,996.45	245.78	17.260		
6,400.00	6,398.17	6,400.83	6,398.17	28.00	221.73	34.79	2,418.89	-3,629.07	4,240.18	3,990.46	249.71	16.980		
6,500.00	6,498.14	6,500.86	6,498.14	28.43	225.22	34.81	2,418.89	-3,629.07	4,238.13	3,984.48	253.64	16.709		
6,600.00	6,597.68	6,601.32	6,597.68	28.88	228.73	36.18	2,418.89	-3,629.07	4,231.18	3,973.59	257.59	16.426		
6,700.00	6,694.68	6,704.32	6,694.68	29.32	232.33	37.53	2,418.89	-3,629.07	4,211.85	3,950.22	261.63	16.099		
6,800.00	6,786.74	6,787.74	6,786.74	29.77	235.24	39.73	2,418.89	-3,629.07	4,180.59	3,915.62	264.97	15.778		
6,900.00	6,871.61	6,872.61	6,871.61	30.24	238.20	42.98	2,418.89	-3,629.07	4,138.32	3,869.97	268.35	15.422		
7,000.00	6,947.19	6,948.19	6,947.19	30.74	240.84	47.46	2,418.89	-3,629.07	4,086.26	3,814.88	271.38	15.057		
7,100.00	7,011.62	7,012.62	7,011.62	31.32	243.09	53.39	2,418.89	-3,629.07	4,025.92	3,751.89	274.03	14.691		
7,200.00	7,063.31	7,064.31	7,063.31	32.03	244.89	60.91	2,418.89	-3,629.07	3,959.02	3,682.77	276.26	14.331		
7,300.00	7,101.00	7,102.00	7,101.00	32.89	246.21	69.96	2,418.89	-3,629.07	3,887.45	3,609.41	278.04	13.982		
7,400.00	7,123.74	7,124.74	7,123.74	33.93	247.00	80.06	2,418.89	-3,629.07	3,813.17	3,533.80	279.37	13.649		
7,500.00	7,131.00	7,132.00	7,131.00	35.10	247.25	90.24	2,418.89	-3,629.07	3,738.19	3,457.95	280.24	13.339		
7,600.00	7,130.63	7,131.63	7,130.63	36.44	247.24	90.23	2,418.89	-3,629.07	3,664.11	3,383.15	280.97	13.041		
7,700.00	7,130.26	7,131.26	7,130.26	37.94	247.23	90.22	2,418.89	-3,629.07	3,591.30	3,309.45	281.85	12.742		
7,800.00	7,129.90	7,130.90	7,129.90	39.59	247.22	90.21	2,418.89	-3,629.07	3,519.81	3,236.93	282.88	12.443		
7,900.00	7,129.53	7,130.53	7,129.53	41.37	247.20	90.20	2,418.89	-3,629.07	3,449.75	3,165.67	284.08	12.144		
8,000.00	7,129.17	7,130.17	7,129.17	43.27	247.19	90.19	2,418.89	-3,629.07	3,381.19	3,095.75	285.44	11.846		
8,100.00	7,128.80	7,129.80	7,128.80	45.27	247.18	90.18	2,418.89	-3,629.07	3,314.23	3,027.27	286.96	11.549		
8,200.00	7,128.43	7,129.43	7,128.43	47.36	247.17	90.18	2,418.89	-3,629.07	3,248.97	2,960.32	288.65	11.256		
8,300.00	7,128.07	7,129.07	7,128.07	49.52	247.15	90.17	2,418.89	-3,629.07	3,185.52	2,895.01	290.50	10.965		
8,400.00	7,127.70	7,128.70	7,127.70	51.75	247.14	90.16	2,418.89	-3,629.07	3,123.97	2,831.46	292.51	10.680		
8,500.00	7,127.33	7,128.33	7,127.33	54.04	247.13	90.15	2,418.89	-3,629.07	3,064.45	2,769.78	294.68	10.399		
8,600.00	7,126.97	7,127.97	7,126.97	56.38	247.11	90.14	2,418.89	-3,629.07	3,007.09	2,710.10	296.99	10.125		
8,700.00	7,126.60	7,127.60	7,126.60	58.77	247.10	90.13	2,418.89	-3,629.07	2,951.99	2,652.55	299.44	9.858		
8,800.00	7,126.24	7,127.24	7,126.24	61.19	247.09	90.13	2,418.89	-3,629.07	2,899.30	2,597.27	302.03	9.599		
8,900.00	7,125.87	7,126.87	7,125.87	63.65	247.08	90.12	2,418.89	-3,629.07	2,849.14	2,544.41	304.74	9.350		
9,000.00	7,125.50	7,126.50	7,125.50	66.15	247.06	90.11	2,418.89	-3,629.07	2,801.66	2,494.10	307.56	9.109		
9,100.00	7,125.14	7,126.14	7,125.14	68.67	247.05	90.10	2,418.89	-3,629.07	2,756.99	2,446.50	310.48	8.880		
9,200.00	7,124.77	7,125.77	7,124.77	71.21	247.04	90.09	2,418.89	-3,629.07	2,715.26	2,401.77	313.49	8.661		
9,300.00	7,124.41	7,125.41	7,124.41	73.78	247.02	90.08	2,418.89	-3,629.07	2,676.63	2,360.05	316.57	8.455		
9,400.00	7,124.04	7,125.04	7,124.04	76.37	247.01	90.08	2,418.89	-3,629.07	2,641.21	2,321.50	319.71	8.261		
9,500.00	7,123.67	7,124.67	7,123.67	78.98	247.00	90.07	2,418.89	-3,629.07	2,609.16	2,286.27	322.89	8.081		
9,600.00	7,123.31	7,124.31	7,123.31	81.60	246.99	90.06	2,418.89	-3,629.07	2,580.58	2,254.50	326.08	7.914		
9,700.00	7,122.94	7,123.94	7,122.94	84.24	246.97	90.05	2,418.89	-3,629.07	2,555.59	2,226.32	329.27	7.761		
9,800.00	7,122.57	7,123.57	7,122.57	86.90	246.96	90.04	2,418.89	-3,629.07	2,534.31	2,201.87	332.44	7.623		
9,900.00	7,122.21	7,123.21	7,122.21	89.56	246.95	90.03	2,418.89	-3,629.07	2,516.83	2,181.26	335.57	7.500		
10,000.00	7,121.84	7,122.84	7,121.84	92.24	246.94	90.02	2,418.89	-3,629.07	2,503.22	2,164.59	338.63	7.392		
10,100.00	7,121.48	7,122.48	7,121.48	94.92	246.92	90.02	2,418.89	-3,629.07	2,493.55	2,151.94	341.60	7.300		
10,200.00	7,121.11	7,122.11	7,121.11	97.62	246.91	90.01	2,418.89	-3,629.07	2,487.86	2,143.39	344.47	7.222		
10,291.61	7,120.77	7,121.77	7,120.77	100.10	246.90	90.00	2,418.89	-3,629.07	2,486.17	2,139.18	346.99	7.165 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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 1(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,120.74	7,121.74	7,120.74	100.32	246.90	90.00	2,418.89	-3,629.07	2,486.19	2,138.97	347.22	7.160		
10,400.00	7,120.38	7,121.38	7,120.38	103.04	246.88	89.99	2,418.89	-3,629.07	2,488.54	2,138.71	349.83	7.114 ES		
10,500.00	7,120.01	7,121.01	7,120.01	105.76	246.87	89.98	2,418.89	-3,629.07	2,494.89	2,142.61	352.29	7.082		
10,600.00	7,119.64	7,120.64	7,119.64	108.48	246.86	89.97	2,418.89	-3,629.07	2,505.23	2,150.65	354.58	7.065		
10,700.00	7,119.28	7,120.28	7,119.28	111.22	246.85	89.97	2,418.89	-3,629.07	2,519.49	2,162.79	356.70	7.063 SF		
10,800.00	7,118.91	7,119.91	7,118.91	113.96	246.83	89.96	2,418.89	-3,629.07	2,537.62	2,178.97	358.65	7.076		
10,900.00	7,118.55	7,119.55	7,118.55	116.70	246.82	89.95	2,418.89	-3,629.07	2,559.53	2,199.12	360.41	7.102		
11,000.00	7,118.18	7,119.18	7,118.18	119.45	246.81	89.94	2,418.89	-3,629.07	2,585.12	2,223.12	362.00	7.141		
11,100.00	7,117.81	7,118.81	7,117.81	122.21	246.79	89.93	2,418.89	-3,629.07	2,614.30	2,250.88	363.41	7.194		
11,200.00	7,117.45	7,118.45	7,117.45	124.97	246.78	89.92	2,418.89	-3,629.07	2,646.93	2,282.28	364.65	7.259		
11,300.00	7,117.08	7,118.08	7,117.08	127.73	246.77	89.91	2,418.89	-3,629.07	2,682.89	2,317.17	365.72	7.336		
11,400.00	7,116.72	7,117.72	7,116.72	130.50	246.76	89.91	2,418.89	-3,629.07	2,722.05	2,355.42	366.64	7.424		
11,500.00	7,116.35	7,117.35	7,116.35	133.27	246.74	89.90	2,418.89	-3,629.07	2,764.28	2,396.88	367.40	7.524		
11,600.00	7,115.98	7,116.98	7,115.98	136.04	246.73	89.89	2,418.89	-3,629.07	2,809.43	2,441.41	368.03	7.634		
11,700.00	7,115.62	7,116.62	7,115.62	138.82	246.72	89.88	2,418.89	-3,629.07	2,857.38	2,488.85	368.52	7.754		
11,800.00	7,115.25	7,116.25	7,115.25	141.60	246.71	89.87	2,418.89	-3,629.07	2,907.97	2,539.07	368.90	7.883		
11,900.00	7,114.88	7,115.88	7,114.88	144.39	246.69	89.86	2,418.89	-3,629.07	2,961.07	2,591.91	369.16	8.021		
12,000.00	7,114.52	7,115.52	7,114.52	147.17	246.68	89.86	2,418.89	-3,629.07	3,016.56	2,647.22	369.33	8.168		
12,100.00	7,114.15	7,115.15	7,114.15	149.96	246.67	89.85	2,418.89	-3,629.07	3,074.30	2,704.88	369.41	8.322		
12,200.00	7,113.79	7,114.79	7,113.79	152.75	246.65	89.84	2,418.89	-3,629.07	3,134.16	2,764.75	369.41	8.484		
12,300.00	7,113.42	7,114.42	7,113.42	155.55	246.64	89.83	2,418.89	-3,629.07	3,196.03	2,826.70	369.34	8.653		
12,400.00	7,113.05	7,114.05	7,113.05	158.34	246.63	89.82	2,418.89	-3,629.07	3,259.80	2,890.60	369.20	8.829		
12,500.00	7,112.69	7,113.69	7,112.69	161.14	246.62	89.81	2,418.89	-3,629.07	3,325.35	2,956.34	369.01	9.012		
12,600.00	7,112.32	7,113.32	7,112.32	163.94	246.60	89.81	2,418.89	-3,629.07	3,392.59	3,023.82	368.77	9.200		
12,700.00	7,111.96	7,112.96	7,111.96	166.74	246.59	89.80	2,418.89	-3,629.07	3,461.40	3,092.91	368.49	9.393		
12,800.00	7,111.59	7,112.59	7,111.59	169.54	246.58	89.79	2,418.89	-3,629.07	3,531.71	3,163.54	368.17	9.592		
12,900.00	7,111.22	7,112.22	7,111.22	172.35	246.56	89.78	2,418.89	-3,629.07	3,603.42	3,235.60	367.83	9.797		
13,000.00	7,110.86	7,111.86	7,110.86	175.16	246.55	89.77	2,418.89	-3,629.07	3,676.46	3,309.00	367.45	10.005		
13,100.00	7,110.49	7,111.49	7,110.49	177.96	246.54	89.76	2,418.89	-3,629.07	3,750.73	3,383.67	367.06	10.218		
13,200.00	7,110.12	7,111.12	7,110.12	180.77	246.53	89.75	2,418.89	-3,629.07	3,826.18	3,459.54	366.65	10.436		
13,300.00	7,109.76	7,110.76	7,109.76	183.58	246.51	89.75	2,418.89	-3,629.07	3,902.74	3,536.52	366.22	10.657		
13,400.00	7,109.39	7,110.39	7,109.39	186.40	246.50	89.74	2,418.89	-3,629.07	3,980.33	3,614.55	365.78	10.882		
13,500.00	7,109.03	7,110.03	7,109.03	189.21	246.49	89.73	2,418.89	-3,629.07	4,058.90	3,693.57	365.33	11.110		
13,600.00	7,108.66	7,109.66	7,108.66	192.03	246.48	89.72	2,418.89	-3,629.07	4,138.40	3,773.52	364.88	11.342		
13,700.00	7,108.29	7,109.29	7,108.29	194.84	246.46	89.71	2,418.89	-3,629.07	4,218.77	3,854.35	364.42	11.577		
13,800.00	7,107.93	7,108.93	7,107.93	197.66	246.45	89.70	2,418.89	-3,629.07	4,299.96	3,936.00	363.96	11.814		
13,900.00	7,107.56	7,108.56	7,107.56	200.48	246.44	89.70	2,418.89	-3,629.07	4,381.94	4,018.44	363.50	12.055		
14,000.00	7,107.19	7,108.19	7,107.19	203.30	246.42	89.69	2,418.89	-3,629.07	4,464.64	4,101.60	363.04	12.298		
14,100.00	7,106.83	7,107.83	7,106.83	206.12	246.41	89.68	2,418.89	-3,629.07	4,548.04	4,185.46	362.58	12.544		
14,200.00	7,106.46	7,107.46	7,106.46	208.94	246.40	89.67	2,418.89	-3,629.07	4,632.10	4,269.98	362.12	12.792		
14,300.00	7,106.10	7,107.10	7,106.10	211.76	246.39	89.66	2,418.89	-3,629.07	4,716.78	4,355.11	361.67	13.042		
14,400.00	7,105.73	7,106.73	7,105.73	214.58	246.37	89.65	2,418.89	-3,629.07	4,802.05	4,440.83	361.22	13.294		
14,500.00	7,105.36	7,106.36	7,105.36	217.40	246.36	89.64	2,418.89	-3,629.07	4,887.88	4,527.10	360.78	13.548		
14,600.00	7,105.00	7,106.00	7,105.00	220.23	246.35	89.64	2,418.89	-3,629.07	4,974.24	4,613.90	360.34	13.804		
14,700.00	7,104.63	7,105.63	7,104.63	223.05	246.33	89.63	2,418.89	-3,629.07	5,061.10	4,701.19	359.90	14.062		
14,800.00	7,104.27	7,105.27	7,104.27	225.88	246.32	89.62	2,418.89	-3,629.07	5,148.43	4,788.96	359.48	14.322		
14,872.41	7,104.00	7,105.00	7,104.00	227.93	246.31	89.61	2,418.89	-3,629.07	5,211.96	4,852.79	359.17	14.511		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	39.00	3.28	3.28	-63.74	2,389.96	-4,844.42	5,402.02					
100.00	100.00	61.00	100.00	3.28	3.45	-63.74	2,389.96	-4,844.42	5,401.87	5,395.14	6.73	802.273		
200.00	200.00	161.00	200.00	3.34	5.08	-63.74	2,389.96	-4,844.42	5,401.87	5,393.46	8.41	642.022		
300.00	300.00	261.00	300.00	3.44	8.06	-63.74	2,389.96	-4,844.42	5,401.87	5,390.37	11.51	469.394		
400.00	400.00	361.00	400.00	3.60	11.34	-63.74	2,389.96	-4,844.42	5,401.87	5,386.93	14.94	361.450		
500.00	500.00	461.00	500.00	3.81	14.72	-63.74	2,389.96	-4,844.42	5,401.87	5,383.35	18.52	291.612		
600.00	599.98	560.98	599.98	4.04	18.14	26.27	2,389.96	-4,844.42	5,400.44	5,378.26	22.18	243.515		
700.00	699.95	660.95	699.95	4.30	21.58	26.29	2,389.96	-4,844.42	5,398.20	5,372.32	25.88	208.587		
800.00	799.92	760.92	799.92	4.59	25.03	26.30	2,389.96	-4,844.42	5,395.95	5,366.33	29.62	182.151		
900.00	899.89	860.89	899.89	4.90	28.50	26.31	2,389.96	-4,844.42	5,393.71	5,360.32	33.40	161.498		
1,000.00	999.86	960.86	999.86	5.23	31.97	26.32	2,389.96	-4,844.42	5,391.47	5,354.28	37.20	144.944		
1,100.00	1,099.83	1,060.83	1,099.83	5.58	35.44	26.33	2,389.96	-4,844.42	5,389.24	5,348.22	41.02	131.396		
1,200.00	1,199.80	1,160.80	1,199.80	5.94	38.92	26.34	2,389.96	-4,844.42	5,387.00	5,342.15	44.85	120.114		
1,300.00	1,299.77	1,260.77	1,299.77	6.30	42.39	26.36	2,389.96	-4,844.42	5,384.76	5,336.06	48.70	110.580		
1,400.00	1,399.73	1,360.73	1,399.73	6.68	45.88	26.37	2,389.96	-4,844.42	5,382.52	5,329.97	52.55	102.422		
1,500.00	1,499.70	1,460.70	1,499.70	7.07	49.36	26.38	2,389.96	-4,844.42	5,380.28	5,323.86	56.42	95.365		
1,600.00	1,599.67	1,560.67	1,599.67	7.46	52.84	26.39	2,389.96	-4,844.42	5,378.04	5,317.75	60.29	89.202		
1,700.00	1,699.64	1,660.64	1,699.64	7.85	56.32	26.40	2,389.96	-4,844.42	5,375.80	5,311.63	64.17	83.775		
1,800.00	1,799.61	1,760.61	1,799.61	8.25	59.81	26.42	2,389.96	-4,844.42	5,373.56	5,305.51	68.05	78.961		
1,900.00	1,899.58	1,860.58	1,899.58	8.66	63.29	26.43	2,389.96	-4,844.42	5,371.33	5,299.38	71.94	74.661		
2,000.00	1,999.55	1,960.55	1,999.55	9.06	66.78	26.44	2,389.96	-4,844.42	5,369.09	5,293.25	75.84	70.800		
2,100.00	2,099.52	2,060.52	2,099.52	9.47	70.26	26.45	2,389.96	-4,844.42	5,366.85	5,287.12	79.73	67.312		
2,200.00	2,199.48	2,160.48	2,199.48	9.89	73.75	26.46	2,389.96	-4,844.42	5,364.61	5,280.98	83.63	64.147		
2,300.00	2,299.45	2,260.45	2,299.45	10.30	77.24	26.47	2,389.96	-4,844.42	5,362.38	5,274.85	87.53	61.262		
2,400.00	2,399.42	2,360.42	2,399.42	10.72	80.72	26.49	2,389.96	-4,844.42	5,360.14	5,268.71	91.44	58.622		
2,500.00	2,499.39	2,460.39	2,499.39	11.14	84.21	26.50	2,389.96	-4,844.42	5,357.90	5,262.56	95.34	56.197		
2,600.00	2,599.36	2,560.36	2,599.36	11.56	87.70	26.51	2,389.96	-4,844.42	5,355.67	5,256.42	99.25	53.962		
2,700.00	2,699.33	2,660.33	2,699.33	11.98	91.19	26.52	2,389.96	-4,844.42	5,353.43	5,250.27	103.16	51.896		
2,800.00	2,799.30	2,760.30	2,799.30	12.41	94.67	26.53	2,389.96	-4,844.42	5,351.20	5,244.13	107.07	49.979		
2,900.00	2,899.27	2,860.27	2,899.27	12.83	98.16	26.55	2,389.96	-4,844.42	5,348.96	5,237.98	110.98	48.197		
3,000.00	2,999.23	2,960.23	2,999.23	13.26	101.65	26.56	2,389.96	-4,844.42	5,346.72	5,231.83	114.89	46.536		
3,100.00	3,099.20	3,060.20	3,099.20	13.68	105.14	26.57	2,389.96	-4,844.42	5,344.49	5,225.68	118.81	44.984		
3,200.00	3,199.17	3,160.17	3,199.17	14.11	108.63	26.58	2,389.96	-4,844.42	5,342.26	5,219.53	122.72	43.531		
3,300.00	3,299.14	3,260.14	3,299.14	14.54	112.11	26.59	2,389.96	-4,844.42	5,340.02	5,213.38	126.64	42.167		
3,400.00	3,399.11	3,360.11	3,399.11	14.97	115.60	26.61	2,389.96	-4,844.42	5,337.79	5,207.23	130.56	40.885		
3,500.00	3,499.08	3,460.08	3,499.08	15.40	119.09	26.62	2,389.96	-4,844.42	5,335.55	5,201.08	134.47	39.677		
3,600.00	3,599.05	3,560.05	3,599.05	15.83	122.58	26.63	2,389.96	-4,844.42	5,333.32	5,194.93	138.39	38.538		
3,700.00	3,699.02	3,660.02	3,699.02	16.26	126.07	26.64	2,389.96	-4,844.42	5,331.08	5,188.77	142.31	37.461		
3,800.00	3,798.98	3,759.98	3,798.98	16.69	129.56	26.65	2,389.96	-4,844.42	5,328.85	5,182.62	146.23	36.442		
3,900.00	3,898.95	3,859.95	3,898.95	17.12	133.05	26.67	2,389.96	-4,844.42	5,326.62	5,176.47	150.15	35.475		
4,000.00	3,998.92	3,959.92	3,998.92	17.55	136.54	26.68	2,389.96	-4,844.42	5,324.38	5,170.31	154.07	34.558		
4,100.00	4,098.89	4,059.89	4,098.89	17.98	140.02	26.69	2,389.96	-4,844.42	5,322.15	5,164.16	157.99	33.686		
4,200.00	4,198.86	4,159.86	4,198.86	18.42	143.51	26.70	2,389.96	-4,844.42	5,319.92	5,158.01	161.91	32.857		
4,300.00	4,298.83	4,259.83	4,298.83	18.85	147.00	26.71	2,389.96	-4,844.42	5,317.69	5,151.85	165.83	32.066		
4,400.00	4,398.80	4,359.80	4,398.80	19.28	150.49	26.73	2,389.96	-4,844.42	5,315.46	5,145.70	169.76	31.312		
4,500.00	4,498.77	4,459.77	4,498.77	19.72	153.98	26.74	2,389.96	-4,844.42	5,313.22	5,139.55	173.68	30.592		
4,600.00	4,598.73	4,559.73	4,598.73	20.15	157.47	26.75	2,389.96	-4,844.42	5,310.99	5,133.39	177.60	29.904		
4,700.00	4,698.70	4,659.70	4,698.70	20.58	160.96	26.76	2,389.96	-4,844.42	5,308.76	5,127.24	181.52	29.245		
4,800.00	4,798.67	4,759.67	4,798.67	21.02	164.45	26.78	2,389.96	-4,844.42	5,306.53	5,121.08	185.45	28.615		
4,900.00	4,898.64	4,859.64	4,898.64	21.45	167.94	26.79	2,389.96	-4,844.42	5,304.30	5,114.93	189.37	28.010		
5,000.00	4,998.61	4,959.61	4,998.61	21.89	171.43	26.80	2,389.96	-4,844.42	5,302.07	5,108.77	193.29	27.430		
5,100.00	5,098.58	5,059.58	5,098.58	22.32	174.92	26.81	2,389.96	-4,844.42	5,299.84	5,102.62	197.22	26.873		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LUCAS SCHOOL 34-9(TA_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,159.55	5,198.55	22.76	178.40	26.82	2,389.96	-4,844.42	5,297.61	5,096.46	201.14	26.337		
5,300.00	5,298.52	5,259.52	5,298.52	23.20	181.89	26.84	2,389.96	-4,844.42	5,295.38	5,090.31	205.07	25.823		
5,400.00	5,398.49	5,359.49	5,398.49	23.63	185.38	26.85	2,389.96	-4,844.42	5,293.15	5,084.16	208.99	25.327		
5,500.00	5,498.45	5,459.45	5,498.45	24.07	188.87	26.86	2,389.96	-4,844.42	5,290.92	5,078.00	212.92	24.850		
5,600.00	5,598.42	5,559.42	5,598.42	24.50	192.36	26.87	2,389.96	-4,844.42	5,288.69	5,071.85	216.84	24.390		
5,700.00	5,698.39	5,659.39	5,698.39	24.94	195.85	26.89	2,389.96	-4,844.42	5,286.46	5,065.69	220.77	23.946		
5,800.00	5,798.36	5,759.36	5,798.36	25.38	199.34	26.90	2,389.96	-4,844.42	5,284.23	5,059.54	224.69	23.518		
5,900.00	5,898.33	5,859.33	5,898.33	25.81	202.83	26.91	2,389.96	-4,844.42	5,282.00	5,053.39	228.62	23.104		
6,000.00	5,998.30	5,959.30	5,998.30	26.25	206.32	26.92	2,389.96	-4,844.42	5,279.78	5,047.23	232.54	22.704		
6,100.00	6,098.27	6,059.27	6,098.27	26.69	209.81	26.93	2,389.96	-4,844.42	5,277.55	5,041.08	236.47	22.318		
6,200.00	6,198.24	6,159.24	6,198.24	27.12	213.30	26.95	2,389.96	-4,844.42	5,275.32	5,034.92	240.40	21.944		
6,300.00	6,298.20	6,259.20	6,298.20	27.56	216.79	26.96	2,389.96	-4,844.42	5,273.09	5,028.77	244.32	21.583		
6,400.00	6,398.17	6,359.17	6,398.17	28.00	220.28	26.97	2,389.96	-4,844.42	5,270.87	5,022.62	248.25	21.232		
6,500.00	6,498.14	6,459.14	6,498.14	28.43	223.77	26.98	2,389.96	-4,844.42	5,268.64	5,016.46	252.17	20.893		
6,600.00	6,597.68	6,558.68	6,597.68	28.88	227.24	26.99	2,389.96	-4,844.42	5,266.41	5,010.29	256.09	20.544		
6,700.00	6,697.65	6,658.65	6,697.65	29.32	230.73	27.00	2,389.96	-4,844.42	5,264.18	5,004.12	259.92	20.195		
6,800.00	6,797.62	6,758.62	6,797.62	29.76	234.22	27.01	2,389.96	-4,844.42	5,261.95	5,000.00	263.84	19.846		
6,900.00	6,897.59	6,858.59	6,897.59	30.20	237.71	27.02	2,389.96	-4,844.42	5,259.72	5,000.00	267.76	19.497		
7,000.00	6,997.56	6,958.56	6,997.56	30.64	241.20	27.03	2,389.96	-4,844.42	5,257.49	5,000.00	271.68	19.148		
7,100.00	7,097.53	7,058.53	7,097.53	31.08	244.69	27.04	2,389.96	-4,844.42	5,255.26	5,000.00	275.60	18.799		
7,200.00	7,197.50	7,158.50	7,197.50	31.52	248.18	27.05	2,389.96	-4,844.42	5,253.03	5,000.00	279.52	18.450		
7,300.00	7,297.47	7,258.47	7,297.47	31.96	251.67	27.06	2,389.96	-4,844.42	5,250.80	5,000.00	283.44	18.101		
7,400.00	7,397.44	7,358.44	7,397.44	32.40	255.16	27.07	2,389.96	-4,844.42	5,248.57	5,000.00	287.36	17.752		
7,500.00	7,497.41	7,458.41	7,497.41	32.84	258.65	27.08	2,389.96	-4,844.42	5,246.34	5,000.00	291.28	17.403		
7,600.00	7,597.38	7,558.38	7,597.38	33.28	262.14	27.09	2,389.96	-4,844.42	5,244.11	5,000.00	295.20	17.054		
7,700.00	7,697.35	7,658.35	7,697.35	33.72	265.63	27.10	2,389.96	-4,844.42	5,241.88	5,000.00	299.12	16.705		
7,800.00	7,797.32	7,758.32	7,797.32	34.16	269.12	27.11	2,389.96	-4,844.42	5,239.65	5,000.00	303.04	16.356		
7,900.00	7,897.29	7,858.29	7,897.29	34.60	272.61	27.12	2,389.96	-4,844.42	5,237.42	5,000.00	306.96	16.007		
8,000.00	7,997.26	7,958.26	7,997.26	35.04	276.10	27.13	2,389.96	-4,844.42	5,235.19	5,000.00	310.88	15.658		
8,100.00	8,097.23	8,058.23	8,097.23	35.48	279.59	27.14	2,389.96	-4,844.42	5,232.96	5,000.00	314.80	15.309		
8,200.00	8,197.20	8,158.20	8,197.20	35.92	283.08	27.15	2,389.96	-4,844.42	5,230.73	5,000.00	318.72	14.960		
8,300.00	8,297.17	8,258.17	8,297.17	36.36	286.57	27.16	2,389.96	-4,844.42	5,228.50	5,000.00	322.64	14.611		
8,400.00	8,397.14	8,358.14	8,397.14	36.80	290.06	27.17	2,389.96	-4,844.42	5,226.27	5,000.00	326.56	14.262		
8,500.00	8,497.11	8,458.11	8,497.11	37.24	293.55	27.18	2,389.96	-4,844.42	5,224.04	5,000.00	330.48	13.913		
8,600.00	8,597.08	8,558.08	8,597.08	37.68	297.04	27.19	2,389.96	-4,844.42	5,221.81	5,000.00	334.40	13.564		
8,700.00	8,697.05	8,658.05	8,697.05	38.12	300.53	27.20	2,389.96	-4,844.42	5,219.58	5,000.00	338.32	13.215		
8,800.00	8,797.02	8,758.02	8,797.02	38.56	304.02	27.21	2,389.96	-4,844.42	5,217.35	5,000.00	342.24	12.866		
8,900.00	8,897.00	8,858.00	8,897.00	39.00	307.51	27.22	2,389.96	-4,844.42	5,215.12	5,000.00	346.16	12.517		
9,000.00	8,997.00	8,958.00	8,997.00	39.44	311.00	27.23	2,389.96	-4,844.42	5,212.89	5,000.00	350.08	12.168		
9,100.00	9,097.00	9,058.00	9,097.00	39.88	314.49	27.24	2,389.96	-4,844.42	5,210.66	5,000.00	354.00	11.819		
9,200.00	9,197.00	9,158.00	9,197.00	40.32	317.98	27.25	2,389.96	-4,844.42	5,208.43	5,000.00	357.92	11.470		
9,300.00	9,297.00	9,258.00	9,297.00	40.76	321.47	27.26	2,389.96	-4,844.42	5,206.20	5,000.00	361.84	11.121		
9,400.00	9,397.00	9,358.00	9,397.00	41.20	324.96	27.27	2,389.96	-4,844.42	5,203.97	5,000.00	365.76	10.772		
9,500.00	9,497.00	9,458.00	9,497.00	41.64	328.45	27.28	2,389.96	-4,844.42	5,201.74	5,000.00	369.68	10.423		
9,600.00	9,597.00	9,558.00	9,597.00	42.08	331.94	27.29	2,389.96	-4,844.42	5,199.51	5,000.00	373.60	10.074		
9,700.00	9,697.00	9,658.00	9,697.00	42.52	335.43	27.30	2,389.96	-4,844.42	5,197.28	5,000.00	377.52	9.725		
9,800.00	9,797.00	9,758.00	9,797.00	42.96	338.92	27.31	2,389.96	-4,844.42	5,195.05	5,000.00	381.44	9.376		
9,900.00	9,897.00	9,858.00	9,897.00	43.40	342.41	27.32	2,389.96	-4,844.42	5,192.82	5,000.00	385.36	9.027		
10,000.00	9,997.00	9,958.00	9,997.00	43.84	345.90	27.33	2,389.96	-4,844.42	5,190.59	5,000.00	389.28	8.678		
10,100.00	10,097.00	10,058.00	10,097.00	44.28	349.39	27.34	2,389.96	-4,844.42	5,188.36	5,000.00	393.20	8.329		
10,200.00	10,197.00	10,158.00	10,197.00	44.72	352.88	27.35	2,389.96	-4,844.42	5,186.13	5,000.00	397.12	7.980		
10,300.00	10,297.00	10,258.00	10,297.00	45.16	356.37	27.36	2,389.96	-4,844.42	5,183.90	5,000.00	401.04	7.631		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	7,081.38	7,120.38	103.04	245.49	90.09	2,389.96	-4,844.42	2,716.89	2,376.40	340.50	7.979		
10,500.00	7,120.01	7,081.01	7,120.01	105.76	245.47	90.09	2,389.96	-4,844.42	2,677.70	2,333.47	344.22	7.779		
10,600.00	7,119.64	7,080.64	7,119.64	108.48	245.46	90.08	2,389.96	-4,844.42	2,641.70	2,293.74	347.96	7.592		
10,700.00	7,119.28	7,080.28	7,119.28	111.22	245.45	90.07	2,389.96	-4,844.42	2,609.05	2,257.36	351.69	7.419		
10,800.00	7,118.91	7,079.91	7,118.91	113.96	245.44	90.06	2,389.96	-4,844.42	2,579.86	2,224.46	355.40	7.259		
10,900.00	7,118.55	7,079.55	7,118.55	116.70	245.42	90.05	2,389.96	-4,844.42	2,554.26	2,195.20	359.05	7.114		
11,000.00	7,118.18	7,079.18	7,118.18	119.45	245.41	90.04	2,389.96	-4,844.42	2,532.34	2,169.71	362.63	6.983		
11,100.00	7,117.81	7,078.81	7,117.81	122.21	245.40	90.03	2,389.96	-4,844.42	2,514.22	2,148.11	366.12	6.867		
11,200.00	7,117.45	7,078.45	7,117.45	124.97	245.39	90.03	2,389.96	-4,844.42	2,499.97	2,130.49	369.48	6.766		
11,300.00	7,117.08	7,078.08	7,117.08	127.73	245.37	90.02	2,389.96	-4,844.42	2,489.66	2,116.96	372.69	6.680		
11,400.00	7,116.72	7,077.72	7,116.72	130.50	245.36	90.01	2,389.96	-4,844.42	2,483.33	2,107.58	375.75	6.609		
11,500.00	7,116.35	7,077.35	7,116.35	133.27	245.35	90.00	2,389.96	-4,844.42	2,481.02	2,102.41	378.62	6.553		
11,507.30	7,116.32	7,077.32	7,116.32	133.47	245.35	90.00	2,389.96	-4,844.42	2,481.01	2,102.19	378.82	6.549 CC		
11,600.00	7,115.98	7,076.98	7,115.98	136.04	245.33	89.99	2,389.96	-4,844.42	2,482.74	2,101.46	381.29	6.511 ES		
11,700.00	7,115.62	7,076.62	7,115.62	138.82	245.32	89.98	2,389.96	-4,844.42	2,488.48	2,104.74	383.74	6.485		
11,800.00	7,115.25	7,076.25	7,115.25	141.60	245.31	89.98	2,389.96	-4,844.42	2,498.22	2,112.24	385.98	6.472 SF		
11,900.00	7,114.88	7,075.88	7,114.88	144.39	245.30	89.97	2,389.96	-4,844.42	2,511.90	2,123.91	387.99	6.474		
12,000.00	7,114.52	7,075.52	7,114.52	147.17	245.28	89.96	2,389.96	-4,844.42	2,529.46	2,139.70	389.76	6.490		
12,100.00	7,114.15	7,075.15	7,114.15	149.96	245.27	89.95	2,389.96	-4,844.42	2,550.82	2,159.51	391.31	6.519		
12,200.00	7,113.79	7,074.79	7,113.79	152.75	245.26	89.94	2,389.96	-4,844.42	2,575.90	2,183.27	392.63	6.561		
12,300.00	7,113.42	7,074.42	7,113.42	155.55	245.24	89.93	2,389.96	-4,844.42	2,604.57	2,210.84	393.73	6.615		
12,400.00	7,113.05	7,074.05	7,113.05	158.34	245.23	89.92	2,389.96	-4,844.42	2,636.72	2,242.11	394.62	6.682		
12,500.00	7,112.69	7,073.69	7,112.69	161.14	245.22	89.92	2,389.96	-4,844.42	2,672.24	2,276.93	395.30	6.760		
12,600.00	7,112.32	7,073.32	7,112.32	163.94	245.21	89.91	2,389.96	-4,844.42	2,710.98	2,315.17	395.80	6.849		
12,700.00	7,111.96	7,072.96	7,111.96	166.74	245.19	89.90	2,389.96	-4,844.42	2,752.80	2,356.68	396.13	6.949		
12,800.00	7,111.59	7,072.59	7,111.59	169.54	245.18	89.89	2,389.96	-4,844.42	2,797.58	2,401.29	396.29	7.059		
12,900.00	7,111.22	7,072.22	7,111.22	172.35	245.17	89.88	2,389.96	-4,844.42	2,845.17	2,448.87	396.30	7.179		
13,000.00	7,110.86	7,071.86	7,110.86	175.16	245.16	89.87	2,389.96	-4,844.42	2,895.43	2,499.25	396.18	7.308		
13,100.00	7,110.49	7,071.49	7,110.49	177.96	245.14	89.87	2,389.96	-4,844.42	2,948.23	2,552.28	395.95	7.446		
13,200.00	7,110.12	7,071.12	7,110.12	180.77	245.13	89.86	2,389.96	-4,844.42	3,003.43	2,607.83	395.61	7.592		
13,300.00	7,109.76	7,070.76	7,109.76	183.58	245.12	89.85	2,389.96	-4,844.42	3,060.91	2,665.74	395.17	7.746		
13,400.00	7,109.39	7,070.39	7,109.39	186.40	245.10	89.84	2,389.96	-4,844.42	3,120.52	2,725.87	394.65	7.907		
13,500.00	7,109.03	7,070.03	7,109.03	189.21	245.09	89.83	2,389.96	-4,844.42	3,182.17	2,788.10	394.07	8.075		
13,600.00	7,108.66	7,069.66	7,108.66	192.03	245.08	89.82	2,389.96	-4,844.42	3,245.73	2,852.31	393.42	8.250		
13,700.00	7,108.29	7,069.29	7,108.29	194.84	245.07	89.81	2,389.96	-4,844.42	3,311.08	2,918.36	392.72	8.431		
13,800.00	7,107.93	7,068.93	7,107.93	197.66	245.05	89.81	2,389.96	-4,844.42	3,378.14	2,986.16	391.98	8.618		
13,900.00	7,107.56	7,068.56	7,107.56	200.48	245.04	89.80	2,389.96	-4,844.42	3,446.79	3,055.58	391.21	8.811		
14,000.00	7,107.19	7,068.19	7,107.19	203.30	245.03	89.79	2,389.96	-4,844.42	3,516.94	3,126.54	390.41	9.008		
14,100.00	7,106.83	7,067.83	7,106.83	206.12	245.01	89.78	2,389.96	-4,844.42	3,588.51	3,198.93	389.58	9.211		
14,200.00	7,106.46	7,067.46	7,106.46	208.94	245.00	89.77	2,389.96	-4,844.42	3,661.41	3,272.67	388.74	9.419		
14,300.00	7,106.10	7,067.10	7,106.10	211.76	244.99	89.76	2,389.96	-4,844.42	3,735.57	3,347.68	387.89	9.630		
14,400.00	7,105.73	7,066.73	7,105.73	214.58	244.98	89.76	2,389.96	-4,844.42	3,810.91	3,423.87	387.03	9.846		
14,500.00	7,105.36	7,066.36	7,105.36	217.40	244.96	89.75	2,389.96	-4,844.42	3,887.36	3,501.19	386.17	10.066		
14,600.00	7,105.00	7,066.00	7,105.00	220.23	244.95	89.74	2,389.96	-4,844.42	3,964.85	3,579.55	385.31	10.290		
14,700.00	7,104.63	7,065.63	7,104.63	223.05	244.94	89.73	2,389.96	-4,844.42	4,043.34	3,658.89	384.45	10.517		
14,800.00	7,104.27	7,065.27	7,104.27	225.88	244.93	89.72	2,389.96	-4,844.42	4,122.76	3,739.17	383.59	10.748		
14,872.41	7,104.00	7,065.00	7,104.00	227.93	244.92	89.72	2,389.96	-4,844.42	4,180.82	3,797.84	382.98	10.917		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	66.00	3.28	3.28	-123.67	-4,231.68	-6,351.53	7,632.39				
100.00	100.00	34.00	100.00	3.28	3.33	-123.67	-4,231.68	-6,351.53	7,632.11	7,625.49	6.62	1,153.238	
200.00	200.00	134.00	200.00	3.34	4.40	-123.67	-4,231.68	-6,351.53	7,632.11	7,624.37	7.74	986.474	
300.00	300.00	234.00	300.00	3.44	7.21	-123.67	-4,231.68	-6,351.53	7,632.11	7,621.45	10.66	716.137	
400.00	400.00	334.00	400.00	3.60	10.44	-123.67	-4,231.68	-6,351.53	7,632.11	7,618.06	14.05	543.355	
500.00	500.00	434.00	500.00	3.81	13.80	-123.67	-4,231.68	-6,351.53	7,632.11	7,614.50	17.61	433.473	
600.00	599.98	533.98	599.98	4.04	17.21	-33.69	-4,231.68	-6,351.53	7,630.77	7,609.52	21.25	359.082	
700.00	699.95	633.95	699.95	4.30	20.65	-33.70	-4,231.68	-6,351.53	7,628.69	7,603.75	24.95	305.776	
800.00	799.92	733.92	799.92	4.59	24.10	-33.71	-4,231.68	-6,351.53	7,626.61	7,597.93	28.69	265.838	
900.00	899.89	833.89	899.89	4.90	27.56	-33.72	-4,231.68	-6,351.53	7,624.54	7,592.07	32.46	234.881	
1,000.00	999.86	933.86	999.86	5.23	31.03	-33.73	-4,231.68	-6,351.53	7,622.46	7,586.20	36.26	210.227	
1,100.00	1,099.83	1,033.83	1,099.83	5.58	34.50	-33.74	-4,231.68	-6,351.53	7,620.38	7,580.30	40.07	190.154	
1,200.00	1,199.80	1,133.80	1,199.80	5.94	37.98	-33.75	-4,231.68	-6,351.53	7,618.30	7,574.39	43.91	173.510	
1,300.00	1,299.77	1,233.77	1,299.77	6.30	41.46	-33.76	-4,231.68	-6,351.53	7,616.22	7,568.47	47.75	159.495	
1,400.00	1,399.73	1,333.73	1,399.73	6.68	44.94	-33.77	-4,231.68	-6,351.53	7,614.15	7,562.54	51.61	147.539	
1,500.00	1,499.70	1,433.70	1,499.70	7.07	48.42	-33.78	-4,231.68	-6,351.53	7,612.07	7,556.60	55.47	137.223	
1,600.00	1,599.67	1,533.67	1,599.67	7.46	51.90	-33.79	-4,231.68	-6,351.53	7,609.99	7,550.65	59.34	128.236	
1,700.00	1,699.64	1,633.64	1,699.64	7.85	55.38	-33.80	-4,231.68	-6,351.53	7,607.92	7,544.69	63.22	120.337	
1,800.00	1,799.61	1,733.61	1,799.61	8.25	58.87	-33.81	-4,231.68	-6,351.53	7,605.84	7,538.73	67.10	113.343	
1,900.00	1,899.58	1,833.58	1,899.58	8.66	62.35	-33.82	-4,231.68	-6,351.53	7,603.76	7,532.77	70.99	107.107	
2,000.00	1,999.55	1,933.55	1,999.55	9.06	65.84	-33.83	-4,231.68	-6,351.53	7,601.69	7,526.80	74.88	101.513	
2,100.00	2,099.52	2,033.52	2,099.52	9.47	69.32	-33.84	-4,231.68	-6,351.53	7,599.61	7,520.83	78.78	96.468	
2,200.00	2,199.48	2,133.48	2,199.48	9.89	72.81	-33.86	-4,231.68	-6,351.53	7,597.54	7,514.86	82.68	91.895	
2,300.00	2,299.45	2,233.45	2,299.45	10.30	76.30	-33.87	-4,231.68	-6,351.53	7,595.46	7,508.88	86.58	87.731	
2,400.00	2,399.42	2,333.42	2,399.42	10.72	79.78	-33.88	-4,231.68	-6,351.53	7,593.39	7,502.91	90.48	83.924	
2,500.00	2,499.39	2,433.39	2,499.39	11.14	83.27	-33.89	-4,231.68	-6,351.53	7,591.31	7,496.93	94.38	80.430	
2,600.00	2,599.36	2,533.36	2,599.36	11.56	86.76	-33.90	-4,231.68	-6,351.53	7,589.24	7,490.95	98.29	77.212	
2,700.00	2,699.33	2,633.33	2,699.33	11.98	90.24	-33.91	-4,231.68	-6,351.53	7,587.16	7,484.96	102.20	74.239	
2,800.00	2,799.30	2,733.30	2,799.30	12.41	93.73	-33.92	-4,231.68	-6,351.53	7,585.09	7,478.98	106.11	71.484	
2,900.00	2,899.27	2,833.27	2,899.27	12.83	97.22	-33.93	-4,231.68	-6,351.53	7,583.02	7,473.00	110.02	68.924	
3,000.00	2,999.23	2,933.23	2,999.23	13.26	100.71	-33.94	-4,231.68	-6,351.53	7,580.94	7,467.01	113.93	66.540	
3,100.00	3,099.20	3,033.20	3,099.20	13.68	104.20	-33.95	-4,231.68	-6,351.53	7,578.87	7,461.03	117.84	64.313	
3,200.00	3,199.17	3,133.17	3,199.17	14.11	107.68	-33.96	-4,231.68	-6,351.53	7,576.80	7,455.04	121.76	62.228	
3,300.00	3,299.14	3,233.14	3,299.14	14.54	111.17	-33.97	-4,231.68	-6,351.53	7,574.72	7,449.05	125.67	60.273	
3,400.00	3,399.11	3,333.11	3,399.11	14.97	114.66	-33.98	-4,231.68	-6,351.53	7,572.65	7,443.06	129.59	58.436	
3,500.00	3,499.08	3,433.08	3,499.08	15.40	118.15	-33.99	-4,231.68	-6,351.53	7,570.58	7,437.07	133.51	56.706	
3,600.00	3,599.05	3,533.05	3,599.05	15.83	121.64	-34.00	-4,231.68	-6,351.53	7,568.51	7,431.09	137.42	55.075	
3,700.00	3,699.02	3,633.02	3,699.02	16.26	125.13	-34.01	-4,231.68	-6,351.53	7,566.44	7,425.10	141.34	53.533	
3,800.00	3,798.98	3,732.98	3,798.98	16.69	128.62	-34.02	-4,231.68	-6,351.53	7,564.37	7,419.11	145.26	52.075	
3,900.00	3,898.95	3,832.95	3,898.95	17.12	132.10	-34.03	-4,231.68	-6,351.53	7,562.29	7,413.12	149.18	50.693	
4,000.00	3,998.92	3,932.92	3,998.92	17.55	135.59	-34.05	-4,231.68	-6,351.53	7,560.22	7,407.13	153.10	49.382	
4,100.00	4,098.89	4,032.89	4,098.89	17.98	139.08	-34.06	-4,231.68	-6,351.53	7,558.15	7,401.14	157.02	48.136	
4,200.00	4,198.86	4,132.86	4,198.86	18.42	142.57	-34.07	-4,231.68	-6,351.53	7,556.08	7,395.15	160.94	46.951	
4,300.00	4,298.83	4,232.83	4,298.83	18.85	146.06	-34.08	-4,231.68	-6,351.53	7,554.01	7,389.16	164.86	45.821	
4,400.00	4,398.80	4,332.80	4,398.80	19.28	149.55	-34.09	-4,231.68	-6,351.53	7,551.94	7,383.16	168.78	44.745	
4,500.00	4,498.77	4,432.77	4,498.77	19.72	153.04	-34.10	-4,231.68	-6,351.53	7,549.87	7,377.17	172.70	43.717	
4,600.00	4,598.73	4,452.00	4,518.00	20.15	153.71	-34.10	-4,231.68	-6,351.53	7,548.24	7,374.44	173.80	43.431	
4,675.46	4,674.17	4,452.00	4,518.00	20.48	153.71	-34.10	-4,231.68	-6,351.53	7,547.86	7,373.76	174.10	43.353	
4,700.00	4,698.70	4,452.00	4,518.00	20.58	153.71	-34.10	-4,231.68	-6,351.53	7,547.90	7,373.70	174.20	43.330	
4,800.00	4,798.67	4,452.00	4,518.00	21.02	153.71	-34.10	-4,231.68	-6,351.53	7,548.89	7,374.32	174.56	43.244	
4,900.00	4,898.64	4,452.00	4,518.00	21.45	153.71	-34.10	-4,231.68	-6,351.53	7,551.20	7,376.30	174.90	43.174	
5,000.00	4,998.61	4,452.00	4,518.00	21.89	153.71	-34.10	-4,231.68	-6,351.53	7,554.83	7,379.63	175.21	43.120	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	5,098.58	4,452.00	4,518.00	22.32	153.71	-34.10	-4,231.68	-6,351.53	7,559.79	7,384.31	175.48	43.080		
5,200.00	5,198.55	4,452.00	4,518.00	22.76	153.71	-34.10	-4,231.68	-6,351.53	7,566.06	7,390.34	175.73	43.056		
5,300.00	5,298.52	4,452.00	4,518.00	23.20	153.71	-34.10	-4,231.68	-6,351.53	7,573.65	7,397.71	175.94	43.046		
5,400.00	5,398.49	4,452.00	4,518.00	23.63	153.71	-34.10	-4,231.68	-6,351.53	7,582.56	7,406.43	176.13	43.052		
5,500.00	5,498.45	4,452.00	4,518.00	24.07	153.71	-34.10	-4,231.68	-6,351.53	7,592.76	7,416.48	176.28	43.073		
5,600.00	5,598.42	4,452.00	4,518.00	24.50	153.71	-34.10	-4,231.68	-6,351.53	7,604.27	7,427.87	176.40	43.108		
5,700.00	5,698.39	4,452.00	4,518.00	24.94	153.71	-34.10	-4,231.68	-6,351.53	7,617.08	7,440.58	176.49	43.158		
5,800.00	5,798.36	4,452.00	4,518.00	25.38	153.71	-34.10	-4,231.68	-6,351.53	7,631.17	7,454.61	176.56	43.222		
5,900.00	5,898.33	4,452.00	4,518.00	25.81	153.71	-34.10	-4,231.68	-6,351.53	7,646.55	7,469.96	176.59	43.301		
6,000.00	5,998.30	4,452.00	4,518.00	26.25	153.71	-34.10	-4,231.68	-6,351.53	7,663.20	7,486.60	176.59	43.394		
6,100.00	6,098.27	4,452.00	4,518.00	26.69	153.71	-34.10	-4,231.68	-6,351.53	7,681.11	7,504.54	176.57	43.502		
6,200.00	6,198.24	4,452.00	4,518.00	27.12	153.71	-34.10	-4,231.68	-6,351.53	7,700.29	7,523.77	176.52	43.624		
6,300.00	6,298.20	4,452.00	4,518.00	27.56	153.71	-34.10	-4,231.68	-6,351.53	7,720.71	7,544.27	176.44	43.759		
6,400.00	6,398.17	4,452.00	4,518.00	28.00	153.71	-34.10	-4,231.68	-6,351.53	7,742.37	7,566.04	176.33	43.909		
6,500.00	6,498.14	4,452.00	4,518.00	28.43	153.71	-34.10	-4,231.68	-6,351.53	7,765.25	7,589.06	176.19	44.072		
6,600.00	6,597.68	4,452.00	4,518.00	28.88	153.71	-32.35	-4,231.68	-6,351.53	7,784.37	7,608.34	176.03	44.223		
6,700.00	6,694.68	4,452.00	4,518.00	29.32	153.71	-31.92	-4,231.68	-6,351.53	7,791.68	7,615.85	175.83	44.313		
6,800.00	6,786.74	4,452.00	4,518.00	29.77	153.71	-32.11	-4,231.68	-6,351.53	7,786.96	7,611.34	175.61	44.342		
6,900.00	6,871.61	4,452.00	4,518.00	30.24	153.71	-32.92	-4,231.68	-6,351.53	7,770.28	7,594.90	175.38	44.306		
7,000.00	6,947.19	4,452.00	4,518.00	30.74	153.71	-34.38	-4,231.68	-6,351.53	7,742.00	7,566.85	175.15	44.203		
7,100.00	7,011.62	4,452.00	4,518.00	31.32	153.71	-36.61	-4,231.68	-6,351.53	7,702.67	7,527.72	174.95	44.029		
7,200.00	7,063.31	4,452.00	4,518.00	32.03	153.71	-39.79	-4,231.68	-6,351.53	7,653.12	7,478.31	174.81	43.781		
7,300.00	7,101.00	4,452.00	4,518.00	32.89	153.71	-44.16	-4,231.68	-6,351.53	7,594.36	7,419.61	174.75	43.457		
7,400.00	7,123.74	4,452.00	4,518.00	33.93	153.71	-50.07	-4,231.68	-6,351.53	7,527.66	7,352.84	174.82	43.059		
7,500.00	7,131.00	4,452.00	4,518.00	35.10	153.71	-57.76	-4,231.68	-6,351.53	7,454.47	7,279.44	175.03	42.590		
7,600.00	7,130.63	4,452.00	4,518.00	36.44	153.71	-57.76	-4,231.68	-6,351.53	7,378.92	7,203.57	175.34	42.083		
7,700.00	7,130.26	4,452.00	4,518.00	37.94	153.71	-57.76	-4,231.68	-6,351.53	7,303.96	7,128.21	175.75	41.560		
7,800.00	7,129.90	4,452.00	4,518.00	39.59	153.71	-57.76	-4,231.68	-6,351.53	7,229.60	7,053.36	176.24	41.021		
7,900.00	7,129.53	4,452.00	4,518.00	41.37	153.71	-57.76	-4,231.68	-6,351.53	7,155.88	6,979.05	176.82	40.469		
8,000.00	7,129.17	4,452.00	4,518.00	43.27	153.71	-57.76	-4,231.68	-6,351.53	7,082.79	6,905.29	177.50	39.904		
8,100.00	7,128.80	4,452.00	4,518.00	45.27	153.71	-57.76	-4,231.68	-6,351.53	7,010.37	6,832.11	178.26	39.327		
8,200.00	7,128.43	4,452.00	4,518.00	47.36	153.71	-57.76	-4,231.68	-6,351.53	6,938.64	6,759.53	179.11	38.740		
8,300.00	7,128.07	4,452.00	4,518.00	49.52	153.71	-57.76	-4,231.68	-6,351.53	6,867.61	6,687.57	180.04	38.145		
8,400.00	7,127.70	4,452.00	4,518.00	51.75	153.71	-57.76	-4,231.68	-6,351.53	6,797.31	6,616.26	181.05	37.544		
8,500.00	7,127.33	4,452.00	4,518.00	54.04	153.71	-57.76	-4,231.68	-6,351.53	6,727.76	6,545.62	182.14	36.936		
8,600.00	7,126.97	4,452.00	4,518.00	56.38	153.71	-57.76	-4,231.68	-6,351.53	6,658.99	6,475.68	183.32	36.325		
8,700.00	7,126.60	4,452.00	4,518.00	58.77	153.71	-57.76	-4,231.68	-6,351.53	6,591.02	6,406.46	184.56	35.712		
8,800.00	7,126.24	4,452.00	4,518.00	61.19	153.71	-57.76	-4,231.68	-6,351.53	6,523.87	6,337.99	185.88	35.097		
8,900.00	7,125.87	4,452.00	4,518.00	63.65	153.71	-57.76	-4,231.68	-6,351.53	6,457.58	6,270.31	187.27	34.483		
9,000.00	7,125.50	4,452.00	4,518.00	66.15	153.71	-57.76	-4,231.68	-6,351.53	6,392.16	6,203.43	188.73	33.869		
9,100.00	7,125.14	4,452.00	4,518.00	68.67	153.71	-57.76	-4,231.68	-6,351.53	6,327.64	6,137.39	190.25	33.259		
9,200.00	7,124.77	4,452.00	4,518.00	71.21	153.71	-57.76	-4,231.68	-6,351.53	6,264.06	6,072.22	191.84	32.652		
9,300.00	7,124.41	4,452.00	4,518.00	73.78	153.71	-57.76	-4,231.68	-6,351.53	6,201.44	6,007.94	193.49	32.050		
9,400.00	7,124.04	4,452.00	4,518.00	76.37	153.71	-57.76	-4,231.68	-6,351.53	6,139.80	5,944.60	195.21	31.453		
9,500.00	7,123.67	4,452.00	4,518.00	78.98	153.71	-57.76	-4,231.68	-6,351.53	6,079.19	5,882.21	196.98	30.863		
9,600.00	7,123.31	4,452.00	4,518.00	81.60	153.71	-57.76	-4,231.68	-6,351.53	6,019.63	5,820.82	198.80	30.279		
9,700.00	7,122.94	4,452.00	4,518.00	84.24	153.71	-57.76	-4,231.68	-6,351.53	5,961.15	5,760.46	200.69	29.704		
9,800.00	7,122.57	4,452.00	4,518.00	86.90	153.71	-57.76	-4,231.68	-6,351.53	5,903.78	5,701.16	202.62	29.137		
9,900.00	7,122.21	4,452.00	4,518.00	89.56	153.71	-57.76	-4,231.68	-6,351.53	5,847.57	5,642.96	204.61	28.579		
10,000.00	7,121.84	4,452.00	4,518.00	92.24	153.71	-57.76	-4,231.68	-6,351.53	5,792.53	5,585.88	206.65	28.030		
10,100.00	7,121.48	4,452.00	4,518.00	94.92	153.71	-57.76	-4,231.68	-6,351.53	5,738.71	5,529.97	208.74	27.492		
10,200.00	7,121.11	4,452.00	4,518.00	97.62	153.71	-57.76	-4,231.68	-6,351.53	5,686.14	5,475.26	210.88	26.964		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.74	4,452.00	4,518.00	100.32	153.71	-57.76	-4,231.68	-6,351.53	5,634.85	5,421.79	213.06	26.447		
10,400.00	7,120.38	4,452.00	4,518.00	103.04	153.71	-57.76	-4,231.68	-6,351.53	5,584.88	5,369.60	215.29	25.942		
10,500.00	7,120.01	4,452.00	4,518.00	105.76	153.71	-57.76	-4,231.68	-6,351.53	5,536.27	5,318.72	217.55	25.448		
10,600.00	7,119.64	4,452.00	4,518.00	108.48	153.71	-57.76	-4,231.68	-6,351.53	5,489.05	5,269.19	219.86	24.966		
10,700.00	7,119.28	4,452.00	4,518.00	111.22	153.71	-57.76	-4,231.68	-6,351.53	5,443.26	5,221.05	222.21	24.496		
10,800.00	7,118.91	4,452.00	4,518.00	113.96	153.71	-57.76	-4,231.68	-6,351.53	5,398.93	5,174.33	224.60	24.038		
10,900.00	7,118.55	4,452.00	4,518.00	116.70	153.71	-57.76	-4,231.68	-6,351.53	5,356.10	5,129.08	227.02	23.594		
11,000.00	7,118.18	4,452.00	4,518.00	119.45	153.71	-57.76	-4,231.68	-6,351.53	5,314.81	5,085.34	229.47	23.161		
11,100.00	7,117.81	4,452.00	4,518.00	122.21	153.71	-57.76	-4,231.68	-6,351.53	5,275.09	5,043.14	231.95	22.742		
11,200.00	7,117.45	4,452.00	4,518.00	124.97	153.71	-57.76	-4,231.68	-6,351.53	5,236.98	5,002.52	234.46	22.336		
11,300.00	7,117.08	4,452.00	4,518.00	127.73	153.71	-57.76	-4,231.68	-6,351.53	5,200.51	4,963.51	237.00	21.943		
11,400.00	7,116.72	4,452.00	4,518.00	130.50	153.71	-57.76	-4,231.68	-6,351.53	5,165.72	4,926.17	239.55	21.564		
11,500.00	7,116.35	4,452.00	4,518.00	133.27	153.71	-57.76	-4,231.68	-6,351.53	5,132.65	4,890.51	242.13	21.198		
11,600.00	7,115.98	4,452.00	4,518.00	136.04	153.71	-57.76	-4,231.68	-6,351.53	5,101.32	4,856.59	244.73	20.845		
11,700.00	7,115.62	4,452.00	4,518.00	138.82	153.71	-57.76	-4,231.68	-6,351.53	5,071.76	4,824.42	247.34	20.505		
11,800.00	7,115.25	4,452.00	4,518.00	141.60	153.71	-57.76	-4,231.68	-6,351.53	5,044.02	4,794.06	249.96	20.179		
11,900.00	7,114.88	4,452.00	4,518.00	144.39	153.71	-57.76	-4,231.68	-6,351.53	5,018.12	4,765.53	252.59	19.867		
12,000.00	7,114.52	4,452.00	4,518.00	147.17	153.71	-57.76	-4,231.68	-6,351.53	4,994.09	4,738.86	255.23	19.567		
12,100.00	7,114.15	4,452.00	4,518.00	149.96	153.71	-57.76	-4,231.68	-6,351.53	4,971.95	4,714.09	257.86	19.281		
12,200.00	7,113.79	4,452.00	4,518.00	152.75	153.71	-57.76	-4,231.68	-6,351.53	4,951.73	4,691.24	260.50	19.009		
12,300.00	7,113.42	4,452.00	4,518.00	155.55	153.71	-57.76	-4,231.68	-6,351.53	4,933.46	4,670.34	263.12	18.750		
12,400.00	7,113.05	4,452.00	4,518.00	158.34	153.71	-57.76	-4,231.68	-6,351.53	4,917.16	4,651.41	265.74	18.503		
12,500.00	7,112.69	4,452.00	4,518.00	161.14	153.71	-57.76	-4,231.68	-6,351.53	4,902.84	4,634.49	268.35	18.270		
12,600.00	7,112.32	4,452.00	4,518.00	163.94	153.71	-57.76	-4,231.68	-6,351.53	4,890.52	4,619.58	270.94	18.050		
12,700.00	7,111.96	4,452.00	4,518.00	166.74	153.71	-57.76	-4,231.68	-6,351.53	4,880.22	4,606.71	273.51	17.843		
12,800.00	7,111.59	4,452.00	4,518.00	169.54	153.71	-57.76	-4,231.68	-6,351.53	4,871.95	4,595.90	276.06	17.648		
12,900.00	7,111.22	4,452.00	4,518.00	172.35	153.71	-57.76	-4,231.68	-6,351.53	4,865.73	4,587.15	278.58	17.466		
13,000.00	7,110.86	4,452.00	4,518.00	175.16	153.71	-57.76	-4,231.68	-6,351.53	4,861.55	4,580.49	281.06	17.297		
13,100.00	7,110.49	4,452.00	4,518.00	177.96	153.71	-57.76	-4,231.68	-6,351.53	4,859.43	4,575.91	283.52	17.140		
13,153.13	7,110.30	4,452.00	4,518.00	179.46	153.71	-57.76	-4,231.68	-6,351.53	4,859.14	4,574.33	284.81	17.061 CC		
13,200.00	7,110.12	4,452.00	4,518.00	180.77	153.71	-57.76	-4,231.68	-6,351.53	4,859.36	4,573.43	285.93	16.995		
13,300.00	7,109.76	4,452.00	4,518.00	183.58	153.71	-57.76	-4,231.68	-6,351.53	4,861.36	4,573.05	288.31	16.862 ES		
13,400.00	7,109.39	4,452.00	4,518.00	186.40	153.71	-57.76	-4,231.68	-6,351.53	4,865.41	4,574.76	290.64	16.740		
13,500.00	7,109.03	4,452.00	4,518.00	189.21	153.71	-57.76	-4,231.68	-6,351.53	4,871.50	4,578.58	292.93	16.630		
13,600.00	7,108.66	4,452.00	4,518.00	192.03	153.71	-57.76	-4,231.68	-6,351.53	4,879.64	4,584.48	295.16	16.532		
13,700.00	7,108.29	4,452.00	4,518.00	194.84	153.71	-57.76	-4,231.68	-6,351.53	4,889.82	4,592.47	297.34	16.445		
13,800.00	7,107.93	4,452.00	4,518.00	197.66	153.71	-57.76	-4,231.68	-6,351.53	4,902.01	4,602.53	299.47	16.369		
13,900.00	7,107.56	4,452.00	4,518.00	200.48	153.71	-57.76	-4,231.68	-6,351.53	4,916.20	4,614.66	301.54	16.303		
14,000.00	7,107.19	4,452.00	4,518.00	203.30	153.71	-57.76	-4,231.68	-6,351.53	4,932.38	4,628.83	303.56	16.249		
14,100.00	7,106.83	4,452.00	4,518.00	206.12	153.71	-57.76	-4,231.68	-6,351.53	4,950.53	4,645.03	305.51	16.204		
14,200.00	7,106.46	4,452.00	4,518.00	208.94	153.71	-57.76	-4,231.68	-6,351.53	4,970.63	4,663.23	307.40	16.170		
14,300.00	7,106.10	4,452.00	4,518.00	211.76	153.71	-57.76	-4,231.68	-6,351.53	4,992.65	4,683.43	309.22	16.146		
14,400.00	7,105.73	4,452.00	4,518.00	214.58	153.71	-57.76	-4,231.68	-6,351.53	5,016.56	4,705.58	310.99	16.131		
14,500.00	7,105.36	4,452.00	4,518.00	217.40	153.71	-57.76	-4,231.68	-6,351.53	5,042.35	4,729.67	312.68	16.126 SF		
14,600.00	7,105.00	4,452.00	4,518.00	220.23	153.71	-57.76	-4,231.68	-6,351.53	5,069.98	4,755.66	314.31	16.130		
14,700.00	7,104.63	4,452.00	4,518.00	223.05	153.71	-57.76	-4,231.68	-6,351.53	5,099.42	4,783.54	315.88	16.144		
14,800.00	7,104.27	4,452.00	4,518.00	225.88	153.71	-57.76	-4,231.68	-6,351.53	5,130.63	4,813.26	317.38	16.166		
14,872.41	7,104.00	4,452.00	4,518.00	227.93	153.71	-57.76	-4,231.68	-6,351.53	5,154.33	4,835.91	318.42	16.187		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1,377.00	1,307.28	3.28	7.39	-107.67	-2,809.02	-8,815.17	9,343.81					
100.00	100.00	1,409.59	1,339.47	3.28	7.55	-107.66	-2,805.27	-8,811.74	9,330.20	9,319.93	10.27	908.635		
200.00	200.00	1,471.00	1,400.14	3.34	7.85	-107.63	-2,797.75	-8,805.92	9,317.30	9,306.73	10.57	881.655		
300.00	300.00	1,511.88	1,440.54	3.44	8.04	-107.60	-2,792.62	-8,802.31	9,304.85	9,294.02	10.83	858.836		
400.00	400.00	1,660.00	1,586.91	3.60	8.77	-107.53	-2,775.21	-8,787.83	9,291.74	9,280.11	11.63	798.830		
500.00	500.00	1,705.90	1,632.29	3.81	8.99	-107.51	-2,770.26	-8,783.01	9,278.89	9,266.87	12.02	772.264		
600.00	599.98	1,755.00	1,680.96	4.04	9.23	-17.54	-2,765.29	-8,778.91	9,265.87	9,253.42	12.45	744.178		
700.00	699.95	1,929.03	1,853.15	4.30	10.09	-17.46	-2,745.40	-8,763.56	9,251.77	9,238.29	13.48	686.360		
800.00	799.92	2,270.24	2,189.57	4.59	11.88	-17.27	-2,699.72	-8,729.73	9,236.48	9,221.13	15.35	601.704		
900.00	899.89	2,337.05	2,255.32	4.90	12.24	-17.23	-2,690.44	-8,722.31	9,219.31	9,203.35	15.96	577.610		
1,000.00	999.86	2,510.00	2,425.38	5.23	13.19	-17.13	-2,666.54	-8,701.81	9,201.21	9,184.11	17.10	538.152		
1,100.00	1,099.83	2,564.57	2,479.05	5.58	13.49	-17.10	-2,659.40	-8,695.02	9,183.30	9,165.62	17.68	519.277		
1,200.00	1,199.80	2,747.36	2,659.03	5.94	14.49	-17.01	-2,636.35	-8,673.00	9,165.86	9,146.98	18.89	485.318		
1,300.00	1,299.77	2,792.00	2,702.94	6.30	14.74	-16.99	-2,630.50	-8,667.46	9,147.83	9,128.37	19.46	470.178		
1,400.00	1,399.73	2,792.00	2,702.94	6.68	14.74	-16.99	-2,630.50	-8,667.46	9,130.66	9,110.83	19.83	460.520		
1,500.00	1,499.70	2,829.90	2,740.29	7.07	14.94	-16.97	-2,625.81	-8,663.13	9,114.11	9,093.73	20.38	447.206		
1,600.00	1,599.67	2,847.10	2,757.29	7.46	15.03	-16.96	-2,623.85	-8,661.37	9,098.57	9,077.73	20.85	436.462		
1,700.00	1,699.64	2,887.00	2,796.81	7.85	15.23	-16.94	-2,619.68	-8,657.77	9,084.09	9,062.67	21.42	424.043		
1,800.00	1,799.61	3,041.04	2,949.15	8.25	16.03	-16.87	-2,601.91	-8,643.49	9,069.52	9,046.99	22.53	402.558		
1,900.00	1,899.58	3,186.72	3,092.99	8.66	16.80	-16.79	-2,583.51	-8,629.55	9,054.32	9,030.71	23.61	383.430		
2,000.00	1,999.55	3,246.15	3,151.67	9.06	17.11	-16.76	-2,576.14	-8,623.76	9,038.99	9,014.69	24.30	371.968		
2,100.00	2,099.52	3,380.44	3,284.32	9.47	17.82	-16.69	-2,559.99	-8,610.44	9,023.61	8,998.27	25.34	356.169		
2,200.00	2,199.48	3,449.00	3,352.04	9.89	18.19	-16.65	-2,551.68	-8,603.76	9,008.35	8,982.28	26.07	345.539		
2,300.00	2,299.45	2,300.00	3,453.08	10.30	12.16	-16.60	-2,539.26	-8,593.82	8,993.14	8,972.05	21.10	426.281		
2,400.00	2,399.42	4,488.00	4,368.51	10.72	24.30	-15.95	-2,391.89	-8,468.12	8,973.34	8,941.48	31.86	281.676		
2,500.00	2,499.39	4,532.13	4,411.31	11.14	24.58	-15.92	-2,384.66	-8,460.14	8,949.19	8,916.68	32.51	275.282		
2,600.00	2,599.36	4,583.00	4,460.81	11.56	24.90	-15.89	-2,376.67	-8,451.55	8,925.98	8,892.79	33.20	268.893		
2,700.00	2,699.33	4,583.00	4,460.81	11.98	24.90	-15.89	-2,376.67	-8,451.55	8,903.31	8,869.67	33.65	264.618		
2,800.00	2,799.30	4,583.00	4,460.81	12.41	24.90	-15.89	-2,376.67	-8,451.55	8,881.71	8,847.62	34.10	260.483		
2,900.00	2,899.27	4,583.00	4,460.81	12.83	24.90	-15.89	-2,376.67	-8,451.55	8,861.19	8,826.64	34.55	256.488		
3,000.00	2,999.23	4,634.54	4,511.22	13.26	25.21	-15.86	-2,369.24	-8,443.79	8,840.87	8,805.64	35.24	250.912		
3,100.00	3,099.20	4,678.00	4,553.95	13.68	25.46	-15.83	-2,363.71	-8,438.19	8,822.09	8,786.21	35.89	245.837		
3,200.00	3,199.17	4,678.00	4,553.95	14.11	25.46	-15.83	-2,363.71	-8,438.19	8,803.78	8,767.45	36.34	242.277		
3,300.00	3,299.14	4,678.00	4,553.95	14.54	25.46	-15.83	-2,363.71	-8,438.19	8,786.58	8,749.79	36.79	238.842		
3,400.00	3,399.11	4,732.57	4,607.80	14.97	25.75	-15.81	-2,357.48	-8,431.89	8,770.04	8,732.56	37.48	233.987		
3,500.00	3,499.08	4,772.00	4,646.77	15.40	25.96	-15.79	-2,353.31	-8,427.58	8,754.22	8,716.11	38.11	229.731		
3,600.00	3,599.05	4,822.51	4,696.75	15.83	26.22	-15.77	-2,348.28	-8,422.28	8,739.01	8,700.23	38.78	225.370		
3,700.00	3,699.02	4,867.00	4,740.81	16.26	26.45	-15.75	-2,344.07	-8,417.77	8,724.34	8,684.92	39.42	221.318		
3,800.00	3,798.98	4,907.56	4,781.02	16.69	26.65	-15.74	-2,340.41	-8,413.89	8,710.31	8,670.27	40.04	217.524		
3,900.00	3,898.95	4,961.00	4,834.06	17.12	26.92	-15.72	-2,335.86	-8,409.22	8,697.06	8,656.34	40.72	213.572		
4,000.00	3,998.92	4,991.40	4,864.25	17.55	27.06	-15.71	-2,333.38	-8,406.74	8,684.40	8,643.10	41.30	210.287		
4,100.00	4,098.89	5,056.00	4,928.46	17.98	27.37	-15.69	-2,328.35	-8,401.63	8,672.27	8,630.25	42.02	206.379		
4,200.00	4,198.86	5,056.00	4,928.46	18.42	27.37	-15.69	-2,328.35	-8,401.63	8,660.88	8,618.42	42.46	203.965		
4,300.00	4,298.83	5,107.61	4,979.81	18.85	27.61	-15.67	-2,324.64	-8,398.03	8,650.07	8,606.94	43.12	200.586		
4,400.00	4,398.80	5,150.00	5,022.04	19.28	27.80	-15.66	-2,321.87	-8,395.63	8,640.27	8,596.52	43.74	197.516		
4,500.00	4,498.77	5,178.24	5,050.19	19.72	27.92	-15.66	-2,320.16	-8,394.22	8,631.16	8,586.86	44.30	194.836		
4,600.00	4,598.73	5,243.00	5,114.77	20.15	28.20	-15.64	-2,316.64	-8,391.03	8,622.56	8,577.55	45.01	191.570		
4,700.00	4,698.70	5,275.82	5,147.53	20.58	28.34	-15.64	-2,315.07	-8,389.56	8,614.56	8,568.98	45.58	189.004		
4,800.00	4,798.67	5,336.00	5,207.61	21.02	28.59	-15.63	-2,312.55	-8,387.47	8,607.48	8,561.22	46.26	186.059		
4,900.00	4,898.64	5,336.00	5,207.61	21.45	28.59	-15.63	-2,312.55	-8,387.47	8,600.91	8,554.22	46.69	184.227		
5,000.00	4,998.61	5,393.61	5,265.18	21.89	28.81	-15.62	-2,310.70	-8,385.95	8,595.12	8,547.77	47.35	181.525		
5,100.00	5,098.58	5,430.00	5,301.54	22.32	28.95	-15.62	-2,309.88	-8,385.08	8,589.92	8,542.00	47.92	179.250		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 82-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,517.87	5,389.37	22.76	29.28	-15.61	-2,308.00	-8,383.35	8,585.07	8,536.36	48.71	176.249		
5,300.00	5,298.52	5,585.51	5,456.98	23.20	29.54	-15.61	-2,306.26	-8,382.41	8,580.63	8,531.22	49.41	173.653		
5,400.00	5,398.49	5,653.15	5,524.60	23.63	29.79	-15.60	-2,304.25	-8,381.81	8,576.57	8,526.45	50.11	171.139		
5,500.00	5,498.45	5,711.00	5,582.41	24.07	30.01	-15.59	-2,302.33	-8,381.56	8,572.89	8,522.11	50.77	168.843		
5,600.00	5,598.42	5,791.23	5,662.60	24.50	30.31	-15.57	-2,299.60	-8,381.53	8,569.55	8,518.02	51.53	166.299		
5,700.00	5,698.39	5,861.33	5,732.66	24.94	30.57	-15.56	-2,297.31	-8,381.75	8,566.57	8,514.32	52.24	163.974		
5,800.00	5,798.36	5,931.44	5,802.73	25.38	30.83	-15.55	-2,295.11	-8,382.20	8,563.93	8,510.98	52.96	161.719		
5,900.00	5,898.33	6,005.31	5,876.57	25.81	31.11	-15.54	-2,292.90	-8,382.91	8,561.65	8,507.96	53.68	159.485		
6,000.00	5,998.30	6,115.57	5,986.77	26.25	31.51	-15.52	-2,289.76	-8,384.01	8,559.43	8,504.87	54.57	156.858		
6,100.00	6,098.27	6,225.83	6,096.99	26.69	31.92	-15.50	-2,286.79	-8,384.91	8,557.10	8,501.65	55.45	154.315		
6,200.00	6,198.24	6,331.27	6,202.40	27.12	32.31	-15.49	-2,283.99	-8,385.66	8,554.66	8,498.34	56.32	151.890		
6,300.00	6,298.20	6,432.36	6,303.42	27.56	32.69	-15.47	-2,280.55	-8,386.55	8,552.20	8,495.02	57.18	149.574		
6,400.00	6,398.17	6,533.40	6,404.36	28.00	33.08	-15.45	-2,276.28	-8,387.66	8,549.72	8,491.69	58.03	147.326		
6,500.00	6,498.14	6,631.13	6,501.85	28.43	33.71	-15.39	-2,267.79	-8,389.44	8,547.00	8,487.84	59.17	144.458		
6,600.00	6,597.68	6,727.27	6,601.54	28.88	34.44	-14.59	-2,255.14	-8,390.65	8,537.53	8,477.12	60.41	141.334		
6,700.00	6,694.68	6,826.99	6,707.09	29.32	34.68	-15.08	-2,250.80	-8,391.10	8,531.08	8,452.00	61.08	139.374		
6,800.00	6,786.74	6,994.42	6,864.30	29.77	34.96	-16.07	-2,245.42	-8,391.84	8,474.53	8,412.75	61.78	137.172		
6,900.00	6,871.61	7,056.91	6,926.57	30.24	35.22	-17.67	-2,240.30	-8,392.74	8,422.80	8,360.39	62.42	134.942		
7,000.00	6,947.19	7,129.00	6,998.40	30.74	35.52	-20.16	-2,234.26	-8,394.04	8,359.14	8,296.08	63.05	132.570		
7,100.00	7,011.62	7,163.92	7,033.20	31.32	35.67	-23.98	-2,231.37	-8,394.73	8,284.97	8,221.50	63.46	130.547		
7,200.00	7,063.31	7,206.27	7,075.40	32.03	35.84	-30.22	-2,228.08	-8,395.56	8,202.12	8,138.26	63.86	128.443		
7,300.00	7,101.00	7,237.58	7,106.63	32.89	35.96	-41.02	-2,225.80	-8,396.17	8,112.58	8,048.42	64.16	126.446		
7,400.00	7,123.74	7,257.09	7,126.09	33.93	36.04	-60.56	-2,224.44	-8,396.55	8,018.54	7,954.17	64.37	124.569		
7,500.00	7,131.00	7,264.30	7,133.27	35.10	36.07	-90.84	-2,223.95	-8,396.69	7,922.30	7,857.79	64.51	122.816		
7,600.00	7,130.63	7,265.44	7,134.42	36.44	36.08	-90.87	-2,223.87	-8,396.71	7,825.79	7,761.17	64.62	121.108		
7,700.00	7,130.26	7,266.59	7,135.56	37.94	36.08	-90.90	-2,223.79	-8,396.74	7,729.37	7,664.62	64.76	119.363		
7,800.00	7,129.90	7,267.74	7,136.71	39.59	36.09	-90.94	-2,223.72	-8,396.76	7,633.05	7,568.13	64.92	117.580		
7,900.00	7,129.53	7,268.88	7,137.85	41.37	36.09	-90.97	-2,223.64	-8,396.78	7,536.81	7,471.71	65.11	115.760		
8,000.00	7,129.17	7,270.03	7,138.99	43.27	36.10	-91.00	-2,223.56	-8,396.80	7,440.68	7,375.36	65.33	113.902		
8,100.00	7,128.80	7,271.17	7,140.13	45.27	36.10	-91.03	-2,223.49	-8,396.83	7,344.65	7,279.08	65.57	112.008		
8,200.00	7,128.43	7,272.32	7,141.28	47.36	36.11	-91.06	-2,223.41	-8,396.85	7,248.73	7,182.88	65.85	110.077		
8,300.00	7,128.07	7,273.46	7,142.42	49.52	36.11	-91.10	-2,223.33	-8,396.87	7,152.92	7,086.76	66.16	108.111		
8,400.00	7,127.70	7,274.61	7,143.56	51.75	36.12	-91.13	-2,223.26	-8,396.89	7,057.22	6,990.72	66.51	106.111		
8,500.00	7,127.33	7,275.75	7,144.70	54.04	36.12	-91.16	-2,223.18	-8,396.91	6,961.65	6,894.76	66.89	104.077		
8,600.00	7,126.97	7,276.90	7,145.84	56.38	36.12	-91.19	-2,223.11	-8,396.94	6,866.20	6,798.89	67.31	102.012		
8,700.00	7,126.60	7,278.04	7,146.98	58.77	36.13	-91.22	-2,223.03	-8,396.96	6,770.89	6,703.12	67.77	99.917		
8,800.00	7,126.24	7,279.18	7,148.13	61.19	36.13	-91.25	-2,222.96	-8,396.98	6,675.71	6,607.44	68.26	97.794		
8,900.00	7,125.87	7,280.33	7,149.27	63.65	36.14	-91.29	-2,222.88	-8,397.00	6,580.67	6,511.87	68.80	95.646		
9,000.00	7,125.50	7,281.47	7,150.41	66.15	36.14	-91.32	-2,222.81	-8,397.02	6,485.78	6,416.39	69.39	93.474		
9,100.00	7,125.14	7,282.61	7,151.55	68.67	36.15	-91.35	-2,222.73	-8,397.05	6,391.05	6,321.03	70.01	91.282		
9,200.00	7,124.77	7,283.76	7,152.69	71.21	36.15	-91.38	-2,222.66	-8,397.07	6,296.48	6,225.79	70.69	89.072		
9,300.00	7,124.41	7,284.90	7,153.83	73.78	36.16	-91.41	-2,222.58	-8,397.09	6,202.08	6,130.66	71.41	86.847		
9,400.00	7,124.04	7,286.04	7,154.96	76.37	36.16	-91.44	-2,222.51	-8,397.11	6,107.85	6,035.67	72.19	84.611		
9,500.00	7,123.67	7,287.18	7,156.10	78.98	36.17	-91.48	-2,222.43	-8,397.13	6,013.82	5,940.80	73.01	82.366		
9,600.00	7,123.31	7,288.32	7,157.24	81.60	36.17	-91.51	-2,222.36	-8,397.16	5,919.98	5,846.08	73.89	80.115		
9,700.00	7,122.94	7,289.46	7,158.38	84.24	36.18	-91.54	-2,222.29	-8,397.18	5,826.34	5,751.51	74.83	77.862		
9,800.00	7,122.57	7,290.60	7,159.52	86.90	36.18	-91.57	-2,222.21	-8,397.20	5,732.92	5,657.10	75.82	75.610		
9,900.00	7,122.21	7,291.75	7,160.66	89.56	36.18	-91.60	-2,222.14	-8,397.22	5,639.72	5,562.85	76.87	73.362		
10,000.00	7,121.84	7,292.89	7,161.80	92.24	36.19	-91.63	-2,222.07	-8,397.24	5,546.76	5,468.78	77.99	71.122		
10,100.00	7,121.48	7,294.03	7,162.93	94.92	36.19	-91.67	-2,221.99	-8,397.27	5,454.05	5,374.89	79.17	68.893		
10,200.00	7,121.11	7,295.17	7,164.07	97.62	36.20	-91.70	-2,221.92	-8,397.29	5,361.61	5,281.19	80.41	66.678		
10,300.00	7,120.74	7,296.31	7,165.21	100.32	36.20	-91.73	-2,221.85	-8,397.31	5,269.43	5,187.71	81.72	64.479		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 82-MWDD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,400.00	7,120.38	7,297.45	7,166.35	103.04	36.21	-91.76	-2,221.78	-8,397.33	5,177.55	5,094.44	83.11	62.300	
10,500.00	7,120.01	7,298.58	7,167.48	105.76	36.21	-91.79	-2,221.71	-8,397.35	5,085.97	5,001.41	84.56	60.145	
10,600.00	7,119.64	7,299.72	7,168.62	108.48	36.22	-91.82	-2,221.63	-8,397.38	4,994.72	4,908.62	86.09	58.014	
10,700.00	7,119.28	7,300.86	7,169.75	111.22	36.22	-91.86	-2,221.56	-8,397.40	4,903.80	4,816.10	87.71	55.912	
10,800.00	7,118.91	7,302.00	7,170.89	113.96	36.23	-91.89	-2,221.49	-8,397.42	4,813.25	4,723.85	89.40	53.840	
10,900.00	7,118.55	7,303.14	7,172.03	116.70	36.23	-91.92	-2,221.42	-8,397.44	4,723.08	4,631.90	91.18	51.801	
11,000.00	7,118.18	7,304.28	7,173.16	119.45	36.24	-91.95	-2,221.35	-8,397.46	4,633.31	4,540.26	93.04	49.797	
11,100.00	7,117.81	7,305.41	7,174.30	122.21	36.24	-91.98	-2,221.28	-8,397.49	4,543.96	4,448.96	95.00	47.830	
11,200.00	7,117.45	7,306.55	7,175.43	124.97	36.25	-92.01	-2,221.21	-8,397.51	4,455.07	4,358.02	97.06	45.902	
11,300.00	7,117.08	7,307.69	7,176.57	127.73	36.25	-92.05	-2,221.14	-8,397.53	4,366.66	4,267.45	99.21	44.014	
11,400.00	7,116.72	7,308.82	7,177.70	130.50	36.25	-92.08	-2,221.07	-8,397.55	4,278.76	4,177.30	101.47	42.169	
11,500.00	7,116.35	7,309.96	7,178.83	133.27	36.26	-92.11	-2,220.99	-8,397.57	4,191.41	4,087.57	103.83	40.367	
11,600.00	7,115.98	7,311.10	7,179.97	136.04	36.26	-92.14	-2,220.92	-8,397.59	4,104.62	3,998.31	106.31	38.610	
11,700.00	7,115.62	7,312.23	7,181.10	138.82	36.27	-92.17	-2,220.85	-8,397.62	4,018.46	3,909.55	108.91	36.898	
11,800.00	7,115.25	7,313.37	7,182.24	141.60	36.27	-92.20	-2,220.79	-8,397.64	3,932.94	3,821.32	111.62	35.234	
11,900.00	7,114.88	7,314.51	7,183.37	144.39	36.28	-92.24	-2,220.72	-8,397.66	3,848.13	3,733.66	114.47	33.617	
12,000.00	7,114.52	7,315.64	7,184.50	147.17	36.28	-92.27	-2,220.65	-8,397.68	3,764.06	3,646.61	117.45	32.049	
12,100.00	7,114.15	7,316.78	7,185.63	149.96	36.29	-92.30	-2,220.58	-8,397.70	3,680.79	3,560.22	120.56	30.530	
12,200.00	7,113.79	7,317.91	7,186.77	152.75	36.29	-92.33	-2,220.51	-8,397.72	3,598.36	3,474.54	123.82	29.061	
12,300.00	7,113.42	7,319.04	7,187.90	155.55	36.30	-92.36	-2,220.44	-8,397.75	3,516.85	3,389.62	127.23	27.642	
12,400.00	7,113.05	7,320.18	7,189.03	158.34	36.30	-92.39	-2,220.37	-8,397.77	3,436.32	3,305.53	130.79	26.273	
12,500.00	7,112.69	7,321.31	7,190.16	161.14	36.31	-92.42	-2,220.30	-8,397.79	3,356.83	3,222.32	134.52	24.955	
12,600.00	7,112.32	7,322.45	7,191.29	163.94	36.31	-92.46	-2,220.23	-8,397.81	3,278.47	3,140.07	138.40	23.688	
12,700.00	7,111.96	7,323.58	7,192.43	166.74	36.31	-92.49	-2,220.17	-8,397.83	3,201.31	3,058.85	142.46	22.472	
12,800.00	7,111.59	7,324.71	7,193.56	169.54	36.32	-92.52	-2,220.10	-8,397.85	3,125.44	2,978.75	146.69	21.306	
12,900.00	7,111.22	7,325.85	7,194.69	172.35	36.32	-92.55	-2,220.03	-8,397.88	3,050.97	2,899.87	151.10	20.192	
13,000.00	7,110.86	7,326.98	7,195.82	175.16	36.33	-92.58	-2,219.96	-8,397.90	2,977.99	2,822.31	155.68	19.128	
13,100.00	7,110.49	7,328.11	7,196.95	177.96	36.33	-92.61	-2,219.90	-8,397.92	2,906.62	2,746.17	160.45	18.115	
13,200.00	7,110.12	7,329.24	7,198.08	180.77	36.34	-92.65	-2,219.83	-8,397.94	2,836.98	2,671.58	165.40	17.152	
13,300.00	7,109.76	7,330.38	7,199.21	183.58	36.34	-92.68	-2,219.76	-8,397.96	2,769.20	2,598.67	170.53	16.239	
13,400.00	7,109.39	7,331.51	7,200.34	186.40	36.35	-92.71	-2,219.69	-8,397.98	2,703.41	2,527.58	175.83	15.375	
13,500.00	7,109.03	7,332.64	7,201.47	189.21	36.35	-92.74	-2,219.63	-8,398.01	2,639.78	2,458.49	181.30	14.561	
13,600.00	7,108.66	7,333.77	7,202.60	192.03	36.36	-92.77	-2,219.56	-8,398.03	2,578.46	2,391.54	186.92	13.795	
13,700.00	7,108.29	7,334.90	7,203.72	194.84	36.36	-92.80	-2,219.49	-8,398.05	2,519.61	2,326.93	192.68	13.077	
13,800.00	7,107.93	7,336.03	7,204.85	197.66	36.37	-92.83	-2,219.43	-8,398.07	2,463.42	2,264.86	198.56	12.406	
13,900.00	7,107.56	7,337.16	7,205.98	200.48	36.37	-92.87	-2,219.36	-8,398.09	2,410.06	2,205.53	204.54	11.783	
14,000.00	7,107.19	7,338.29	7,207.11	203.30	36.37	-92.90	-2,219.30	-8,398.11	2,359.74	2,149.16	210.58	11.206	
14,100.00	7,106.83	7,339.42	7,208.24	206.12	36.38	-92.93	-2,219.23	-8,398.14	2,312.65	2,095.99	216.66	10.674	
14,200.00	7,106.46	7,340.55	7,209.36	208.94	36.38	-92.96	-2,219.17	-8,398.16	2,269.00	2,046.27	222.73	10.187	
14,300.00	7,106.10	7,341.68	7,210.49	211.76	36.39	-92.99	-2,219.10	-8,398.18	2,228.97	2,000.23	228.74	9.745	
14,400.00	7,105.73	7,342.81	7,211.62	214.58	36.39	-93.02	-2,219.04	-8,398.20	2,192.78	1,958.14	234.64	9.345	
14,500.00	7,105.36	7,343.94	7,212.75	217.40	36.40	-93.05	-2,218.97	-8,398.22	2,160.61	1,920.23	240.38	8.988	
14,600.00	7,105.00	7,345.07	7,213.87	220.23	36.40	-93.09	-2,218.91	-8,398.24	2,132.65	1,886.76	245.90	8.673	
14,700.00	7,104.63	7,346.20	7,215.00	223.05	36.41	-93.12	-2,218.84	-8,398.26	2,109.07	1,857.94	251.13	8.398	
14,800.00	7,104.27	7,347.32	7,216.12	225.88	36.41	-93.15	-2,218.78	-8,398.29	2,090.01	1,833.98	256.02	8.163	
14,872.41	7,104.00	7,348.14	7,216.94	227.93	36.41	-93.17	-2,218.73	-8,398.30	2,079.10	1,819.78	259.32	8.018 CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	30.00	3.28	3.28	-82.66	1,178.04	-9,144.46	9,220.08					
100.00	100.00	70.00	100.00	3.28	3.50	-82.66	1,178.04	-9,144.46	9,220.03	9,213.24	6.78	1,358.903		
200.00	200.00	170.00	200.00	3.34	5.32	-82.66	1,178.04	-9,144.46	9,220.03	9,211.37	8.66	1,064.971		
300.00	300.00	270.00	300.00	3.44	8.35	-82.66	1,178.04	-9,144.46	9,220.03	9,208.23	11.80	781.611		
400.00	400.00	370.00	400.00	3.60	11.64	-82.66	1,178.04	-9,144.46	9,220.03	9,204.78	15.25	604.746		
500.00	500.00	470.00	500.00	3.81	15.02	-82.66	1,178.04	-9,144.46	9,220.03	9,201.20	18.83	489.630		
600.00	599.98	569.98	599.98	4.04	18.45	7.34	1,178.04	-9,144.46	9,218.44	9,195.95	22.49	409.960		
700.00	699.95	669.95	699.95	4.30	21.89	7.35	1,178.04	-9,144.46	9,215.96	9,189.77	26.19	351.884		
800.00	799.92	769.92	799.92	4.59	25.35	7.35	1,178.04	-9,144.46	9,213.48	9,183.55	29.93	307.788		
900.00	899.89	869.89	899.89	4.90	28.81	7.35	1,178.04	-9,144.46	9,211.00	9,177.29	33.71	273.247		
1,000.00	999.86	969.86	999.86	5.23	32.28	7.35	1,178.04	-9,144.46	9,208.52	9,171.02	37.51	245.506		
1,100.00	1,099.83	1,069.83	1,099.83	5.58	35.75	7.35	1,178.04	-9,144.46	9,206.05	9,164.72	41.33	222.764		
1,200.00	1,199.80	1,169.80	1,199.80	5.94	39.23	7.36	1,178.04	-9,144.46	9,203.57	9,158.41	45.16	203.799		
1,300.00	1,299.77	1,269.77	1,299.77	6.30	42.71	7.36	1,178.04	-9,144.46	9,201.09	9,152.08	49.01	187.754		
1,400.00	1,399.73	1,369.73	1,399.73	6.68	46.19	7.36	1,178.04	-9,144.46	9,198.61	9,145.75	52.86	174.009		
1,500.00	1,499.70	1,469.70	1,499.70	7.07	49.67	7.36	1,178.04	-9,144.46	9,196.13	9,139.41	56.73	162.109		
1,600.00	1,599.67	1,569.67	1,599.67	7.46	53.15	7.36	1,178.04	-9,144.46	9,193.66	9,133.06	60.60	151.710		
1,700.00	1,699.64	1,669.64	1,699.64	7.85	56.64	7.37	1,178.04	-9,144.46	9,191.18	9,126.70	64.48	142.545		
1,800.00	1,799.61	1,769.61	1,799.61	8.25	60.12	7.37	1,178.04	-9,144.46	9,188.70	9,120.34	68.36	134.411		
1,900.00	1,899.58	1,869.58	1,899.58	8.66	63.61	7.37	1,178.04	-9,144.46	9,186.22	9,113.97	72.25	127.143		
2,000.00	1,999.55	1,969.55	1,999.55	9.06	67.09	7.37	1,178.04	-9,144.46	9,183.74	9,107.60	76.14	120.611		
2,100.00	2,099.52	2,069.52	2,099.52	9.47	70.58	7.37	1,178.04	-9,144.46	9,181.27	9,101.23	80.04	114.710		
2,200.00	2,199.48	2,169.48	2,199.48	9.89	74.06	7.38	1,178.04	-9,144.46	9,178.79	9,094.85	83.94	109.353		
2,300.00	2,299.45	2,269.45	2,299.45	10.30	77.55	7.38	1,178.04	-9,144.46	9,176.31	9,088.47	87.84	104.468		
2,400.00	2,399.42	2,369.42	2,399.42	10.72	81.04	7.38	1,178.04	-9,144.46	9,173.83	9,082.09	91.74	99.997		
2,500.00	2,499.39	2,469.39	2,499.39	11.14	84.52	7.38	1,178.04	-9,144.46	9,171.35	9,075.71	95.65	95.888		
2,600.00	2,599.36	2,569.36	2,599.36	11.56	88.01	7.38	1,178.04	-9,144.46	9,168.88	9,069.32	99.55	92.100		
2,700.00	2,699.33	2,669.33	2,699.33	11.98	91.50	7.39	1,178.04	-9,144.46	9,166.40	9,062.93	103.46	88.596		
2,800.00	2,799.30	2,769.30	2,799.30	12.41	94.99	7.39	1,178.04	-9,144.46	9,163.92	9,056.55	107.37	85.347		
2,900.00	2,899.27	2,869.27	2,899.27	12.83	98.48	7.39	1,178.04	-9,144.46	9,161.44	9,050.16	111.28	82.325		
3,000.00	2,999.23	2,969.23	2,999.23	13.26	101.96	7.39	1,178.04	-9,144.46	9,158.96	9,043.77	115.20	79.507		
3,100.00	3,099.20	3,069.20	3,099.20	13.68	105.45	7.39	1,178.04	-9,144.46	9,156.49	9,037.38	119.11	76.874		
3,200.00	3,199.17	3,169.17	3,199.17	14.11	108.94	7.40	1,178.04	-9,144.46	9,154.01	9,030.98	123.03	74.408		
3,300.00	3,299.14	3,269.14	3,299.14	14.54	112.43	7.40	1,178.04	-9,144.46	9,151.53	9,024.59	126.94	72.093		
3,400.00	3,399.11	3,369.11	3,399.11	14.97	115.92	7.40	1,178.04	-9,144.46	9,149.05	9,018.19	130.86	69.916		
3,500.00	3,499.08	3,469.08	3,499.08	15.40	119.41	7.40	1,178.04	-9,144.46	9,146.57	9,011.80	134.77	67.866		
3,600.00	3,599.05	3,569.05	3,599.05	15.83	122.89	7.40	1,178.04	-9,144.46	9,144.10	9,005.40	138.69	65.931		
3,700.00	3,699.02	3,669.02	3,699.02	16.26	126.38	7.41	1,178.04	-9,144.46	9,141.62	8,999.01	142.61	64.102		
3,800.00	3,798.98	3,768.98	3,798.98	16.69	129.87	7.41	1,178.04	-9,144.46	9,139.14	8,992.61	146.53	62.371		
3,900.00	3,898.95	3,868.95	3,898.95	17.12	133.36	7.41	1,178.04	-9,144.46	9,136.66	8,986.21	150.45	60.729		
4,000.00	3,998.92	3,968.92	3,998.92	17.55	136.85	7.41	1,178.04	-9,144.46	9,134.18	8,979.82	154.37	59.171		
4,100.00	4,098.89	4,068.89	4,098.89	17.98	140.34	7.41	1,178.04	-9,144.46	9,131.71	8,973.42	158.29	57.690		
4,200.00	4,198.86	4,168.86	4,198.86	18.42	143.83	7.42	1,178.04	-9,144.46	9,129.23	8,967.02	162.21	56.280		
4,300.00	4,298.83	4,268.83	4,298.83	18.85	147.32	7.42	1,178.04	-9,144.46	9,126.75	8,960.62	166.13	54.937		
4,400.00	4,398.80	4,368.80	4,398.80	19.28	150.81	7.42	1,178.04	-9,144.46	9,124.27	8,954.22	170.05	53.656		
4,500.00	4,498.77	4,468.77	4,498.77	19.72	154.29	7.42	1,178.04	-9,144.46	9,121.80	8,947.82	173.97	52.432		
4,600.00	4,598.73	4,568.73	4,598.73	20.15	157.78	7.42	1,178.04	-9,144.46	9,119.32	8,941.42	177.90	51.262		
4,700.00	4,698.70	4,668.70	4,698.70	20.58	161.27	7.43	1,178.04	-9,144.46	9,116.84	8,935.02	181.82	50.142		
4,800.00	4,798.67	4,768.67	4,798.67	21.02	164.76	7.43	1,178.04	-9,144.46	9,114.36	8,928.62	185.74	49.070		
4,900.00	4,898.64	4,868.64	4,898.64	21.45	168.25	7.43	1,178.04	-9,144.46	9,111.88	8,922.22	189.67	48.042		
5,000.00	4,998.61	4,968.61	4,998.61	21.89	171.74	7.43	1,178.04	-9,144.46	9,109.41	8,915.82	193.59	47.056		
5,100.00	5,098.58	5,068.58	5,098.58	22.32	175.23	7.43	1,178.04	-9,144.46	9,106.93	8,909.42	197.51	46.108		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 17-11(PR_75CC) - OH - OH													Offset Site Error: 0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error: 3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	5,198.55	5,168.55	5,198.55	22.76	178.72	7.44	1,178.04	-9,144.46	9,104.45	8,903.02	201.44	45.198	
5,300.00	5,298.52	5,268.52	5,298.52	23.20	182.21	7.44	1,178.04	-9,144.46	9,101.97	8,896.61	205.36	44.322	
5,400.00	5,398.49	5,368.49	5,398.49	23.63	185.70	7.44	1,178.04	-9,144.46	9,099.50	8,890.21	209.28	43.479	
5,500.00	5,498.45	5,468.45	5,498.45	24.07	189.19	7.44	1,178.04	-9,144.46	9,097.02	8,883.81	213.21	42.667	
5,600.00	5,598.42	5,568.42	5,598.42	24.50	192.68	7.44	1,178.04	-9,144.46	9,094.54	8,877.41	217.13	41.885	
5,700.00	5,698.39	5,668.39	5,698.39	24.94	196.17	7.45	1,178.04	-9,144.46	9,092.06	8,871.01	221.06	41.130	
5,800.00	5,798.36	5,768.36	5,798.36	25.38	199.66	7.45	1,178.04	-9,144.46	9,089.59	8,864.60	224.98	40.401	
5,900.00	5,898.33	5,868.33	5,898.33	25.81	203.14	7.45	1,178.04	-9,144.46	9,087.11	8,858.20	228.91	39.698	
6,000.00	5,998.30	5,968.30	5,998.30	26.25	206.63	7.45	1,178.04	-9,144.46	9,084.63	8,851.80	232.83	39.018	
6,100.00	6,098.27	6,068.27	6,098.27	26.69	210.12	7.46	1,178.04	-9,144.46	9,082.15	8,845.39	236.76	38.360	
6,200.00	6,198.24	6,168.24	6,198.24	27.12	213.61	7.46	1,178.04	-9,144.46	9,079.68	8,838.99	240.68	37.725	
6,300.00	6,298.20	6,268.20	6,298.20	27.56	217.10	7.46	1,178.04	-9,144.46	9,077.20	8,832.59	244.61	37.109	
6,400.00	6,398.17	6,368.17	6,398.17	28.00	220.59	7.46	1,178.04	-9,144.46	9,074.72	8,826.19	248.53	36.513	
6,500.00	6,498.14	6,468.14	6,498.14	28.43	224.08	7.46	1,178.04	-9,144.46	9,072.24	8,819.78	252.46	35.935	
6,600.00	6,597.68	6,567.68	6,597.68	28.88	227.56	8.53	1,178.04	-9,144.46	9,069.79	8,813.37	256.37	35.354	
6,700.00	6,697.65	6,667.65	6,697.65	29.32	231.04	8.98	1,178.04	-9,144.46	9,067.31	8,806.96	260.29	34.774	
6,800.00	6,797.62	6,767.62	6,797.62	29.77	234.52	9.66	1,178.04	-9,144.46	9,064.83	8,800.55	264.22	34.193	
6,900.00	6,897.59	6,867.59	6,897.59	30.21	238.00	10.71	1,178.04	-9,144.46	9,062.35	8,794.14	268.15	33.612	
7,000.00	6,997.56	6,967.56	6,997.56	30.65	241.48	12.33	1,178.04	-9,144.46	9,059.87	8,787.73	272.08	33.031	
7,100.00	7,097.53	7,067.53	7,097.53	31.09	244.96	14.90	1,178.04	-9,144.46	9,057.39	8,781.32	276.01	32.450	
7,200.00	7,197.50	7,167.50	7,197.50	31.53	248.44	19.26	1,178.04	-9,144.46	9,054.91	8,774.91	280.00	31.869	
7,300.00	7,297.47	7,267.47	7,297.47	31.97	251.92	27.59	1,178.04	-9,144.46	9,052.43	8,768.50	284.00	31.288	
7,400.00	7,397.44	7,367.44	7,397.44	32.41	255.40	46.82	1,178.04	-9,144.46	9,049.95	8,762.09	288.00	30.707	
7,500.00	7,497.41	7,467.41	7,497.41	32.85	258.88	91.29	1,178.04	-9,144.46	9,047.47	8,755.68	292.00	30.126	
7,600.00	7,597.38	7,567.38	7,597.38	33.29	262.36	91.28	1,178.04	-9,144.46	9,044.99	8,749.27	296.00	29.545	
7,700.00	7,697.35	7,667.35	7,697.35	33.73	265.84	91.26	1,178.04	-9,144.46	9,042.51	8,742.86	300.00	28.964	
7,800.00	7,797.32	7,767.32	7,797.32	34.17	269.32	91.24	1,178.04	-9,144.46	9,039.99	8,736.45	304.00	28.383	
7,900.00	7,897.29	7,867.29	7,897.29	34.61	272.80	91.23	1,178.04	-9,144.46	9,037.51	8,730.04	308.00	27.802	
8,000.00	7,997.26	7,967.26	7,997.26	35.05	276.28	91.21	1,178.04	-9,144.46	9,035.03	8,723.63	312.00	27.221	
8,100.00	8,097.23	8,067.23	8,097.23	35.49	279.76	91.20	1,178.04	-9,144.46	9,032.55	8,717.22	316.00	26.640	
8,200.00	8,197.20	8,167.20	8,197.20	35.93	283.24	91.18	1,178.04	-9,144.46	9,030.07	8,710.81	320.00	26.059	
8,300.00	8,297.17	8,267.17	8,297.17	36.37	286.72	91.17	1,178.04	-9,144.46	9,027.59	8,704.40	324.00	25.478	
8,400.00	8,397.14	8,367.14	8,397.14	36.81	290.20	91.15	1,178.04	-9,144.46	9,025.11	8,697.99	328.00	24.897	
8,500.00	8,497.11	8,467.11	8,497.11	37.25	293.68	91.14	1,178.04	-9,144.46	9,022.63	8,691.58	332.00	24.316	
8,600.00	8,597.08	8,567.08	8,597.08	37.69	297.16	91.12	1,178.04	-9,144.46	9,020.15	8,685.17	336.00	23.735	
8,700.00	8,697.05	8,667.05	8,697.05	38.13	300.64	91.11	1,178.04	-9,144.46	9,017.67	8,678.76	340.00	23.154	
8,800.00	8,797.02	8,767.02	8,797.02	38.57	304.12	91.09	1,178.04	-9,144.46	9,015.19	8,672.35	344.00	22.573	
8,900.00	8,897.00	8,867.00	8,897.00	39.01	307.60	91.07	1,178.04	-9,144.46	9,012.71	8,665.94	348.00	21.992	
9,000.00	8,997.00	8,967.00	8,997.00	39.45	311.08	91.06	1,178.04	-9,144.46	9,010.23	8,659.53	352.00	21.411	
9,100.00	9,097.00	9,067.00	9,097.00	39.89	314.56	91.04	1,178.04	-9,144.46	9,007.75	8,653.12	356.00	20.830	
9,200.00	9,197.00	9,167.00	9,197.00	40.33	318.04	91.03	1,178.04	-9,144.46	9,005.27	8,646.71	360.00	20.249	
9,300.00	9,297.00	9,267.00	9,297.00	40.77	321.52	91.01	1,178.04	-9,144.46	9,002.79	8,640.30	364.00	19.668	
9,400.00	9,397.00	9,367.00	9,397.00	41.21	325.00	91.00	1,178.04	-9,144.46	9,000.31	8,633.89	368.00	19.087	
9,500.00	9,497.00	9,467.00	9,497.00	41.65	328.48	90.98	1,178.04	-9,144.46	8,997.83	8,627.48	372.00	18.506	
9,600.00	9,597.00	9,567.00	9,597.00	42.09	331.96	90.97	1,178.04	-9,144.46	8,995.35	8,621.07	376.00	17.925	
9,700.00	9,697.00	9,667.00	9,697.00	42.53	335.44	90.95	1,178.04	-9,144.46	8,992.87	8,614.66	380.00	17.344	
9,800.00	9,797.00	9,767.00	9,797.00	42.97	338.92	90.93	1,178.04	-9,144.46	8,990.39	8,608.25	384.00	16.763	
9,900.00	9,897.00	9,867.00	9,897.00	43.41	342.40	90.92	1,178.04	-9,144.46	8,987.91	8,601.84	388.00	16.182	
10,000.00	9,997.00	9,967.00	9,997.00	43.85	345.88	90.90	1,178.04	-9,144.46	8,985.43	8,595.43	392.00	15.601	
10,100.00	10,097.00	10,067.00	10,097.00	44.29	349.36	90.89	1,178.04	-9,144.46	8,982.95	8,589.02	396.00	15.020	
10,200.00	10,197.00	10,167.00	10,197.00	44.73	352.84	90.87	1,178.04	-9,144.46	8,980.47	8,582.61	400.00	14.439	
10,300.00	10,297.00	10,267.00	10,297.00	45.17	356.32	90.86	1,178.04	-9,144.46	8,977.99	8,576.20	404.00	13.858	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MCGLOTHLIN 17-11(PR_75CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	Centre +E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
10,400.00	7,120.38	7,109.62	7,120.38	103.04	246.47	90.84	1,178.04	-9,144.46	5,596.34	5,310.20	286.13	19.558		
10,500.00	7,120.01	7,109.99	7,120.01	105.76	246.49	90.83	1,178.04	-9,144.46	5,499.36	5,212.50	286.86	19.171		
10,600.00	7,119.64	7,089.64	7,119.64	108.48	245.78	90.81	1,178.04	-9,144.46	5,402.49	5,115.59	286.90	18.830		
10,700.00	7,119.28	7,089.28	7,119.28	111.22	245.76	90.80	1,178.04	-9,144.46	5,305.74	5,018.05	287.69	18.442		
10,800.00	7,118.91	7,088.91	7,118.91	113.96	245.75	90.78	1,178.04	-9,144.46	5,209.11	4,920.58	288.53	18.054		
10,900.00	7,118.55	7,088.55	7,118.55	116.70	245.74	90.76	1,178.04	-9,144.46	5,112.61	4,823.19	289.42	17.665		
11,000.00	7,118.18	7,088.18	7,118.18	119.45	245.73	90.75	1,178.04	-9,144.46	5,016.25	4,725.88	290.36	17.276		
11,100.00	7,117.81	7,087.81	7,117.81	122.21	245.71	90.73	1,178.04	-9,144.46	4,920.03	4,628.67	291.36	16.886		
11,200.00	7,117.45	7,087.45	7,117.45	124.97	245.70	90.72	1,178.04	-9,144.46	4,823.97	4,531.55	292.42	16.496		
11,300.00	7,117.08	7,087.08	7,117.08	127.73	245.69	90.70	1,178.04	-9,144.46	4,728.07	4,434.52	293.55	16.107		
11,400.00	7,116.72	7,086.72	7,116.72	130.50	245.67	90.69	1,178.04	-9,144.46	4,632.34	4,337.61	294.74	15.717		
11,500.00	7,116.35	7,086.35	7,116.35	133.27	245.66	90.67	1,178.04	-9,144.46	4,536.80	4,240.81	295.99	15.327		
11,600.00	7,115.98	7,085.98	7,115.98	136.04	245.65	90.66	1,178.04	-9,144.46	4,441.46	4,144.13	297.33	14.938		
11,700.00	7,115.62	7,085.62	7,115.62	138.82	245.64	90.64	1,178.04	-9,144.46	4,346.32	4,047.58	298.74	14.549		
11,800.00	7,115.25	7,085.25	7,115.25	141.60	245.62	90.62	1,178.04	-9,144.46	4,251.41	3,951.18	300.23	14.161		
11,900.00	7,114.88	7,084.88	7,114.88	144.39	245.61	90.61	1,178.04	-9,144.46	4,156.73	3,854.92	301.81	13.773		
12,000.00	7,114.52	7,084.52	7,114.52	147.17	245.60	90.59	1,178.04	-9,144.46	4,062.31	3,758.83	303.48	13.386		
12,100.00	7,114.15	7,084.15	7,114.15	149.96	245.58	90.58	1,178.04	-9,144.46	3,968.16	3,662.91	305.25	13.000		
12,200.00	7,113.79	7,083.79	7,113.79	152.75	245.57	90.56	1,178.04	-9,144.46	3,874.31	3,567.18	307.13	12.615		
12,300.00	7,113.42	7,083.42	7,113.42	155.55	245.56	90.55	1,178.04	-9,144.46	3,780.77	3,471.66	309.12	12.231		
12,400.00	7,113.05	7,083.05	7,113.05	158.34	245.55	90.53	1,178.04	-9,144.46	3,687.57	3,376.35	311.22	11.849		
12,500.00	7,112.69	7,082.69	7,112.69	161.14	245.53	90.52	1,178.04	-9,144.46	3,594.74	3,281.29	313.45	11.468		
12,600.00	7,112.32	7,082.32	7,112.32	163.94	245.52	90.50	1,178.04	-9,144.46	3,502.30	3,186.49	315.81	11.090		
12,700.00	7,111.96	7,081.96	7,111.96	166.74	245.51	90.49	1,178.04	-9,144.46	3,410.29	3,091.97	318.32	10.713		
12,800.00	7,111.59	7,081.59	7,111.59	169.54	245.50	90.47	1,178.04	-9,144.46	3,318.74	2,997.77	320.97	10.340		
12,900.00	7,111.22	7,081.22	7,111.22	172.35	245.48	90.45	1,178.04	-9,144.46	3,227.69	2,903.90	323.79	9.968		
13,000.00	7,110.86	7,080.86	7,110.86	175.16	245.47	90.44	1,178.04	-9,144.46	3,137.19	2,810.40	326.79	9.600		
13,100.00	7,110.49	7,080.49	7,110.49	177.96	245.46	90.42	1,178.04	-9,144.46	3,047.28	2,717.31	329.96	9.235		
13,200.00	7,110.12	7,080.12	7,110.12	180.77	245.44	90.41	1,178.04	-9,144.46	2,958.02	2,624.68	333.34	8.874		
13,300.00	7,109.76	7,079.76	7,109.76	183.58	245.43	90.39	1,178.04	-9,144.46	2,869.46	2,532.54	336.93	8.517		
13,400.00	7,109.39	7,079.39	7,109.39	186.40	245.42	90.38	1,178.04	-9,144.46	2,781.69	2,440.94	340.74	8.164		
13,500.00	7,109.03	7,079.03	7,109.03	189.21	245.41	90.36	1,178.04	-9,144.46	2,694.76	2,349.96	344.80	7.815		
13,600.00	7,108.66	7,078.66	7,108.66	192.03	245.39	90.35	1,178.04	-9,144.46	2,608.77	2,259.66	349.11	7.473		
13,700.00	7,108.29	7,078.29	7,108.29	194.84	245.38	90.33	1,178.04	-9,144.46	2,523.82	2,170.12	353.70	7.135		
13,800.00	7,107.93	7,077.93	7,107.93	197.66	245.37	90.31	1,178.04	-9,144.46	2,440.00	2,081.42	358.58	6.805		
13,900.00	7,107.56	7,077.56	7,107.56	200.48	245.35	90.30	1,178.04	-9,144.46	2,357.45	1,993.68	363.77	6.481		
14,000.00	7,107.19	7,077.19	7,107.19	203.30	245.34	90.28	1,178.04	-9,144.46	2,276.29	1,907.01	369.29	6.164		
14,100.00	7,106.83	7,076.83	7,106.83	206.12	245.33	90.27	1,178.04	-9,144.46	2,196.69	1,821.55	375.14	5.856		
14,200.00	7,106.46	7,076.46	7,106.46	208.94	245.32	90.25	1,178.04	-9,144.46	2,118.82	1,737.47	381.36	5.556		
14,300.00	7,106.10	7,076.10	7,106.10	211.76	245.30	90.24	1,178.04	-9,144.46	2,042.88	1,654.95	387.94	5.266		
14,400.00	7,105.73	7,075.73	7,105.73	214.58	245.29	90.22	1,178.04	-9,144.46	1,969.09	1,574.20	394.89	4.986		
14,500.00	7,105.36	7,075.36	7,105.36	217.40	245.28	90.21	1,178.04	-9,144.46	1,897.70	1,495.49	402.21	4.718		
14,600.00	7,105.00	7,075.00	7,105.00	220.23	245.27	90.19	1,178.04	-9,144.46	1,829.00	1,419.11	409.89	4.462		
14,700.00	7,104.63	7,074.63	7,104.63	223.05	245.25	90.18	1,178.04	-9,144.46	1,763.29	1,345.38	417.90	4.219		
14,800.00	7,104.27	7,074.27	7,104.27	225.88	245.24	90.16	1,178.04	-9,144.46	1,700.92	1,274.71	426.21	3.991		
14,872.41	7,104.00	7,074.00	7,104.00	227.93	245.23	90.15	1,178.04	-9,144.46	1,658.06	1,225.69	432.37	3.835 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	14.19	1.19	3.28	3.28	3.03	2,224.44	117.64	2,227.55					
100.00	100.00	124.04	111.04	3.28	3.30	3.02	2,224.17	117.26	2,227.29	2,220.71	6.58	338.480		
200.00	200.00	232.67	219.67	3.34	3.37	3.02	2,223.37	117.12	2,226.54	2,219.83	6.71	331.829		
300.00	300.00	330.20	317.19	3.44	3.49	3.02	2,222.51	117.10	2,225.66	2,218.73	6.94	320.771		
400.00	400.00	421.17	408.16	3.60	3.65	3.00	2,222.02	116.56	2,225.09	2,217.84	7.25	306.948		
478.93	478.93	491.95	478.93	3.76	3.79	2.99	2,221.92	115.95	2,224.94	2,217.39	7.55	294.781		
500.00	500.00	511.14	498.13	3.81	3.83	2.98	2,221.94	115.77	2,224.95	2,217.32	7.64	291.394		
600.00	599.98	603.31	590.29	4.04	4.05	92.99	2,222.22	114.89	2,225.30	2,217.21	8.09	275.195		
700.00	699.95	693.91	680.89	4.30	4.29	93.04	2,222.83	114.46	2,226.07	2,217.49	8.59	259.280		
800.00	799.92	814.05	801.03	4.59	4.63	93.12	2,223.36	114.50	2,226.66	2,217.44	9.22	241.503		
900.00	899.89	896.70	883.67	4.90	4.89	93.17	2,223.73	114.67	2,227.24	2,217.45	9.79	227.569		
1,000.00	999.86	1,017.25	1,004.22	5.23	5.28	93.26	2,224.07	115.01	2,227.67	2,217.16	10.51	211.963		
1,003.36	1,003.22	1,017.35	1,004.32	5.24	5.28	93.26	2,224.08	115.01	2,227.68	2,217.16	10.52	211.727		
1,100.00	1,099.83	1,112.39	1,099.36	5.58	5.60	93.33	2,224.03	115.48	2,227.80	2,216.62	11.18	199.281		
1,200.00	1,199.80	1,207.89	1,194.86	5.94	5.94	93.41	2,224.13	116.24	2,228.09	2,216.22	11.87	187.666		
1,300.00	1,299.77	1,318.28	1,305.25	6.30	6.34	93.50	2,223.99	116.89	2,228.16	2,215.52	12.64	176.287		
1,328.51	1,328.26	1,344.72	1,331.68	6.41	6.43	93.52	2,223.94	116.96	2,228.14	2,215.30	12.84	173.492		
1,400.00	1,399.73	1,413.38	1,400.35	6.68	6.69	93.56	2,223.91	116.97	2,228.22	2,214.85	13.37	166.695		
1,500.00	1,499.70	1,524.94	1,511.90	7.07	7.11	93.64	2,223.55	117.22	2,228.07	2,213.90	14.17	157.237		
1,600.00	1,599.67	1,630.19	1,617.15	7.46	7.51	93.72	2,222.80	117.35	2,227.52	2,212.56	14.96	148.878		
1,700.00	1,699.64	1,731.48	1,718.44	7.85	7.90	93.77	2,222.03	116.93	2,226.90	2,211.15	15.75	141.396		
1,800.00	1,799.61	1,830.95	1,817.91	8.25	8.29	93.82	2,221.16	116.12	2,226.14	2,209.60	16.54	134.605		
1,900.00	1,899.58	1,924.69	1,911.64	8.66	8.66	93.86	2,220.68	115.33	2,225.73	2,208.42	17.31	128.565		
2,000.00	1,999.55	2,030.71	2,017.65	9.06	9.08	93.90	2,219.88	114.52	2,225.09	2,206.95	18.14	122.658		
2,100.00	2,099.52	2,120.86	2,107.79	9.47	9.44	93.94	2,219.44	113.43	2,224.69	2,205.77	18.91	117.636		
2,168.17	2,167.67	2,184.57	2,171.50	9.76	9.70	93.96	2,219.31	112.67	2,224.62	2,205.17	19.45	114.383 CC		
2,200.00	2,199.48	2,212.65	2,199.57	9.89	9.81	93.97	2,219.30	112.39	2,224.64	2,204.94	19.69	112.963		
2,300.00	2,299.45	2,295.17	2,282.09	10.30	10.14	94.00	2,219.67	111.71	2,225.20	2,204.76	20.44	108.863 ES		
2,400.00	2,399.42	2,385.10	2,372.02	10.72	10.51	94.03	2,220.65	110.79	2,226.39	2,205.17	21.22	104.917		
2,500.00	2,499.39	2,471.92	2,458.81	11.14	10.86	94.05	2,222.06	109.50	2,228.08	2,206.09	21.99	101.321		
2,600.00	2,599.36	2,560.01	2,546.87	11.56	11.22	94.07	2,224.01	108.18	2,230.36	2,207.59	22.77	97.961		
2,700.00	2,699.33	2,668.04	2,654.85	11.98	11.67	94.09	2,226.68	106.48	2,232.90	2,209.27	23.63	94.480		
2,800.00	2,799.30	2,768.70	2,755.48	12.41	12.08	94.11	2,228.65	104.89	2,234.93	2,210.46	24.47	91.332		
2,900.00	2,899.27	2,875.31	2,862.05	12.83	12.52	94.12	2,230.85	102.75	2,237.02	2,211.69	25.34	88.295		
3,000.00	2,999.23	2,981.05	2,967.75	13.26	12.96	94.13	2,232.62	100.33	2,238.70	2,212.50	26.20	85.448		
3,100.00	3,099.20	3,071.39	3,058.05	13.68	13.34	94.13	2,234.16	98.52	2,240.45	2,213.45	27.00	82.984		
3,200.00	3,199.17	3,174.71	3,161.33	14.11	13.77	94.15	2,236.24	96.62	2,242.51	2,214.65	27.86	80.506		
3,300.00	3,299.14	3,262.65	3,249.25	14.54	14.14	94.17	2,237.95	95.23	2,244.53	2,215.88	28.65	78.354		
3,400.00	3,399.11	3,344.81	3,331.36	14.97	14.48	94.18	2,240.21	93.97	2,247.34	2,217.93	29.41	76.412		
3,500.00	3,499.08	3,445.78	3,432.28	15.40	14.90	94.21	2,243.58	92.91	2,250.78	2,220.52	30.26	74.380		
3,600.00	3,599.05	3,553.85	3,540.30	15.83	15.35	94.27	2,246.37	92.61	2,253.50	2,222.36	31.14	72.358		
3,700.00	3,699.02	3,678.78	3,665.20	16.26	15.87	94.32	2,249.42	91.80	2,256.15	2,224.05	32.10	70.280		
3,800.00	3,798.98	3,780.79	3,767.19	16.69	16.30	94.36	2,250.80	90.83	2,257.62	2,224.66	32.96	68.495		
3,900.00	3,898.95	3,890.62	3,876.99	17.12	16.76	94.39	2,252.31	89.29	2,259.08	2,225.22	33.85	66.732		
4,000.00	3,998.92	4,013.74	4,000.08	17.55	17.28	94.39	2,253.12	86.31	2,259.74	2,224.94	34.80	64.930		
4,100.00	4,098.89	4,111.76	4,098.06	17.98	17.69	94.38	2,253.34	83.58	2,259.95	2,224.30	35.65	63.397		
4,200.00	4,198.86	4,199.26	4,185.53	18.42	18.06	94.38	2,253.78	81.48	2,260.45	2,224.00	36.45	62.018		
4,300.00	4,298.83	4,296.61	4,282.87	18.85	18.47	94.40	2,254.55	79.68	2,261.29	2,224.00	37.29	60.640		
4,400.00	4,398.80	4,382.11	4,368.35	19.28	18.83	94.42	2,255.51	78.54	2,262.50	2,224.42	38.08	59.412		
4,500.00	4,498.77	4,475.90	4,462.13	19.72	19.22	94.45	2,257.01	77.69	2,264.22	2,225.31	38.91	58.194		
4,600.00	4,598.73	4,563.28	4,549.48	20.15	19.59	94.48	2,258.72	76.54	2,266.26	2,226.55	39.71	57.075		
4,700.00	4,698.70	4,670.33	4,656.49	20.58	20.05	94.49	2,261.24	74.72	2,268.69	2,228.10	40.59	55.886		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
4,800.00	4,798.67	4,784.30	4,770.42	21.02	20.53	94.50	2,263.14	72.51	2,270.38	2,228.87	41.51	54.690		
4,900.00	4,898.64	4,904.93	4,891.01	21.45	21.04	94.50	2,264.35	69.59	2,271.40	2,228.94	42.46	53.495		
5,000.00	4,998.61	4,990.32	4,976.36	21.89	21.40	94.50	2,265.14	67.21	2,272.29	2,229.03	43.26	52.532		
5,100.00	5,098.58	5,100.62	5,086.62	22.32	21.87	94.49	2,266.26	64.28	2,273.30	2,229.14	44.16	51.481		
5,200.00	5,198.55	5,190.03	5,176.01	22.76	22.25	94.51	2,267.06	62.75	2,274.25	2,229.28	44.97	50.573		
5,300.00	5,298.52	5,284.28	5,270.24	23.20	22.64	94.53	2,268.22	61.60	2,275.58	2,229.78	45.80	49.682		
5,400.00	5,398.49	5,383.45	5,369.40	23.63	23.06	94.57	2,269.57	60.56	2,277.05	2,230.40	46.66	48.803		
5,500.00	5,498.45	5,481.56	5,467.50	24.07	23.48	94.62	2,270.89	60.22	2,278.56	2,231.06	47.51	47.961		
5,600.00	5,598.42	5,569.86	5,555.79	24.50	23.85	94.67	2,272.29	60.14	2,280.34	2,232.03	48.31	47.198		
5,700.00	5,698.39	5,674.45	5,660.36	24.94	24.30	94.74	2,274.24	60.70	2,282.46	2,233.26	49.19	46.396		
5,800.00	5,798.36	5,796.57	5,782.46	25.38	24.81	94.84	2,275.64	61.67	2,283.89	2,233.73	50.15	45.539		
5,900.00	5,898.33	5,908.96	5,894.86	25.81	25.29	94.91	2,276.13	61.78	2,284.54	2,233.47	51.07	44.738		
6,000.00	5,998.30	6,030.39	6,016.28	26.25	25.80	94.98	2,275.69	61.40	2,284.35	2,232.34	52.01	43.920		
6,100.00	6,098.27	6,136.20	6,122.09	26.69	26.25	95.04	2,274.74	60.86	2,283.63	2,230.73	52.89	43.174		
6,200.00	6,198.24	6,235.81	6,221.69	27.12	26.67	95.09	2,273.71	60.34	2,282.77	2,229.02	53.75	42.470		
6,300.00	6,298.20	6,330.56	6,316.44	27.56	27.08	95.13	2,272.90	59.57	2,282.08	2,227.49	54.59	41.805		
6,400.00	6,398.17	6,421.35	6,407.22	28.00	27.46	95.16	2,272.41	58.43	2,281.65	2,226.24	55.41	41.177		
6,421.47	6,419.64	6,438.90	6,424.77	28.09	27.54	95.16	2,272.38	58.19	2,281.63	2,226.05	55.58	41.051		
6,500.00	6,498.14	6,504.41	6,490.27	28.43	27.81	95.18	2,272.52	57.25	2,281.88	2,225.68	56.20	40.602		
6,600.00	6,597.68	6,618.31	6,604.16	28.88	28.30	96.26	2,272.65	55.87	2,282.78	2,225.66	57.12	39.962		
6,700.00	6,694.68	6,720.74	6,706.58	29.32	28.73	96.70	2,272.39	54.32	2,285.15	2,227.15	58.00	39.399		
6,800.00	6,786.74	6,816.63	6,802.45	29.77	29.14	97.22	2,271.97	52.77	2,289.60	2,230.75	58.85	38.904		
6,900.00	6,871.61	6,901.87	6,887.67	30.24	29.51	97.67	2,271.55	51.41	2,296.86	2,237.19	59.67	38.492		
7,000.00	6,947.19	6,975.21	6,961.01	30.74	29.82	97.87	2,271.21	50.48	2,307.70	2,247.23	60.47	38.162		
7,100.00	7,011.62	7,041.17	7,026.97	31.32	30.10	97.76	2,270.89	50.03	2,322.82	2,261.51	61.31	37.888		
7,200.00	7,063.31	7,095.71	7,081.51	32.03	30.33	97.11	2,270.53	49.86	2,342.64	2,280.44	62.20	37.666		
7,300.00	7,101.00	7,145.34	7,131.14	32.89	30.54	95.97	2,270.02	49.81	2,367.40	2,304.23	63.18	37.472		
7,400.00	7,123.74	7,176.08	7,161.87	33.93	30.67	93.93	2,269.57	49.79	2,397.10	2,332.90	64.19	37.342		
7,500.00	7,131.00	7,185.97	7,171.76	35.10	30.71	90.95	2,269.40	49.78	2,431.38	2,366.19	65.20	37.292		
7,600.00	7,130.63	7,185.62	7,171.41	36.44	30.71	90.94	2,269.41	49.78	2,469.49	2,403.25	66.24	37.282		
7,700.00	7,130.26	7,185.27	7,171.06	37.94	30.71	90.93	2,269.41	49.78	2,511.00	2,443.65	67.35	37.280 SF		
7,800.00	7,129.90	7,184.92	7,170.71	39.59	30.71	90.92	2,269.42	49.78	2,555.76	2,487.23	68.52	37.298		
7,900.00	7,129.53	7,184.57	7,170.36	41.37	30.71	90.91	2,269.42	49.78	2,603.58	2,533.87	69.72	37.345		
8,000.00	7,129.17	7,184.22	7,170.01	43.27	30.71	90.91	2,269.43	49.78	2,654.32	2,583.39	70.92	37.426		
8,100.00	7,128.80	7,183.87	7,169.66	45.27	30.70	90.90	2,269.44	49.78	2,707.79	2,635.67	72.12	37.544		
8,200.00	7,128.43	7,183.52	7,169.31	47.36	30.70	90.89	2,269.44	49.78	2,763.86	2,690.55	73.31	37.703		
8,300.00	7,128.07	7,183.17	7,168.96	49.52	30.70	90.88	2,269.45	49.78	2,822.35	2,747.89	74.46	37.902		
8,400.00	7,127.70	7,182.82	7,168.62	51.75	30.70	90.87	2,269.45	49.78	2,883.13	2,807.54	75.59	38.142		
8,500.00	7,127.33	7,182.48	7,168.27	54.04	30.70	90.86	2,269.46	49.78	2,946.04	2,869.36	76.68	38.422		
8,600.00	7,126.97	7,182.13	7,167.92	56.38	30.70	90.85	2,269.47	49.78	3,010.97	2,933.24	77.72	38.739		
8,700.00	7,126.60	7,181.78	7,167.57	58.77	30.69	90.84	2,269.47	49.78	3,077.77	2,999.04	78.73	39.092		
8,800.00	7,126.24	7,181.43	7,167.22	61.19	30.69	90.83	2,269.48	49.78	3,146.33	3,066.64	79.69	39.480		
8,900.00	7,125.87	7,181.08	7,166.87	63.65	30.69	90.83	2,269.48	49.78	3,216.55	3,135.93	80.61	39.900		
9,000.00	7,125.50	7,180.73	7,166.53	66.15	30.69	90.82	2,269.49	49.78	3,288.30	3,206.81	81.49	40.351		
9,100.00	7,125.14	7,180.39	7,166.18	68.67	30.69	90.81	2,269.50	49.78	3,361.50	3,279.17	82.33	40.830		
9,200.00	7,124.77	7,180.04	7,165.83	71.21	30.69	90.80	2,269.50	49.78	3,436.05	3,352.92	83.13	41.336		
9,300.00	7,124.41	7,179.69	7,165.48	73.78	30.69	90.79	2,269.51	49.78	3,511.86	3,427.98	83.88	41.866		
9,400.00	7,124.04	7,179.34	7,165.14	76.37	30.68	90.78	2,269.51	49.78	3,588.86	3,504.26	84.60	42.420		
9,500.00	7,123.67	7,179.00	7,164.79	78.98	30.68	90.77	2,269.52	49.78	3,666.97	3,581.68	85.29	42.995		
9,600.00	7,123.31	7,178.65	7,164.44	81.60	30.68	90.76	2,269.53	49.79	3,746.12	3,660.18	85.94	43.591		
9,700.00	7,122.94	7,178.31	7,164.10	84.24	30.68	90.76	2,269.53	49.79	3,826.25	3,739.69	86.56	44.205		
9,800.00	7,122.57	7,177.96	7,163.75	86.90	30.68	90.75	2,269.54	49.79	3,907.29	3,820.15	87.15	44.836		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
9,900.00	7,122.21	7,177.61	7,163.40	89.56	30.68	90.74	2,269.54	49.79	3,989.20	3,901.49	87.71	45.484		
10,000.00	7,121.84	7,177.27	7,163.06	92.24	30.68	90.73	2,269.55	49.79	4,071.91	3,983.67	88.24	46.147		
10,100.00	7,121.48	7,176.92	7,162.71	94.92	30.67	90.72	2,269.55	49.79	4,155.38	4,066.63	88.74	46.824		
10,200.00	7,121.11	7,176.58	7,162.37	97.62	30.67	90.71	2,269.56	49.79	4,239.57	4,150.34	89.23	47.514		
10,300.00	7,120.74	7,176.23	7,162.02	100.32	30.67	90.70	2,269.57	49.79	4,324.43	4,234.74	89.69	48.217		
10,400.00	7,120.38	7,175.89	7,161.68	103.04	30.67	90.69	2,269.57	49.79	4,409.92	4,319.80	90.13	48.931		
10,500.00	7,120.01	7,175.54	7,161.33	105.76	30.67	90.69	2,269.58	49.79	4,496.02	4,405.47	90.54	49.655		
10,600.00	7,119.64	7,175.20	7,160.99	108.48	30.67	90.68	2,269.58	49.79	4,582.68	4,491.73	90.94	50.390		
10,700.00	7,119.28	7,174.85	7,160.64	111.22	30.67	90.67	2,269.59	49.79	4,669.87	4,578.54	91.33	51.134		
10,800.00	7,118.91	7,174.51	7,160.30	113.96	30.66	90.66	2,269.59	49.79	4,757.56	4,665.87	91.69	51.887		
10,900.00	7,118.55	7,174.16	7,159.96	116.70	30.66	90.65	2,269.60	49.79	4,845.74	4,753.70	92.04	52.648		
11,000.00	7,118.18	7,173.82	7,159.61	119.45	30.66	90.64	2,269.60	49.79	4,934.36	4,841.99	92.38	53.417		
11,100.00	7,117.81	7,173.48	7,159.27	122.21	30.66	90.63	2,269.61	49.79	5,023.41	4,930.72	92.70	54.192		
11,200.00	7,117.45	7,173.13	7,158.93	124.97	30.66	90.62	2,269.62	49.79	5,112.87	5,019.86	93.00	54.975		
11,300.00	7,117.08	7,172.79	7,158.58	127.73	30.66	90.62	2,269.62	49.79	5,202.71	5,109.41	93.30	55.764		
11,400.00	7,116.72	7,172.45	7,158.24	130.50	30.66	90.61	2,269.63	49.79	5,292.91	5,199.33	93.58	56.559		
11,500.00	7,116.35	7,172.10	7,157.90	133.27	30.65	90.60	2,269.63	49.79	5,383.46	5,289.61	93.86	57.359		
11,600.00	7,115.98	7,171.76	7,157.55	136.04	30.65	90.59	2,269.64	49.79	5,474.34	5,380.22	94.12	58.164		
11,700.00	7,115.62	7,171.42	7,157.21	138.82	30.65	90.58	2,269.64	49.79	5,565.53	5,471.16	94.37	58.975		
11,800.00	7,115.25	7,171.08	7,156.87	141.60	30.65	90.57	2,269.65	49.79	5,657.02	5,562.41	94.61	59.790		
11,900.00	7,114.88	7,170.74	7,156.53	144.39	30.65	90.56	2,269.65	49.79	5,748.79	5,653.94	94.85	60.609		
12,000.00	7,114.52	7,170.39	7,156.19	147.17	30.65	90.56	2,269.66	49.79	5,840.84	5,745.76	95.08	61.433		
12,100.00	7,114.15	7,170.05	7,155.84	149.96	30.65	90.55	2,269.67	49.79	5,933.14	5,837.84	95.30	62.260		
12,200.00	7,113.79	7,169.71	7,155.50	152.75	30.64	90.54	2,269.67	49.79	6,025.68	5,930.18	95.51	63.090		
12,300.00	7,113.42	7,169.37	7,155.16	155.55	30.64	90.53	2,269.68	49.79	6,118.47	6,022.75	95.71	63.924		
12,400.00	7,113.05	7,169.03	7,154.82	158.34	30.64	90.52	2,269.68	49.79	6,211.47	6,115.56	95.91	64.762		
12,500.00	7,112.69	7,168.69	7,154.48	161.14	30.64	90.51	2,269.69	49.79	6,304.69	6,208.58	96.11	65.602		
12,600.00	7,112.32	7,168.35	7,154.14	163.94	30.64	90.50	2,269.69	49.79	6,398.11	6,301.82	96.29	66.445		
12,700.00	7,111.96	7,168.01	7,153.80	166.74	30.64	90.49	2,269.70	49.79	6,491.73	6,395.26	96.47	67.290		
12,800.00	7,111.59	7,167.67	7,153.46	169.54	30.63	90.49	2,269.70	49.79	6,585.54	6,488.89	96.65	68.138		
12,900.00	7,111.22	7,167.33	7,153.12	172.35	30.63	90.48	2,269.71	49.79	6,679.53	6,582.71	96.82	68.988		
13,000.00	7,110.86	7,166.99	7,152.78	175.16	30.63	90.47	2,269.71	49.79	6,773.69	6,676.70	96.99	69.840		
13,100.00	7,110.49	7,166.65	7,152.44	177.96	30.63	90.46	2,269.72	49.79	6,868.01	6,770.86	97.15	70.694		
13,200.00	7,110.12	7,166.31	7,152.10	180.77	30.63	90.45	2,269.72	49.79	6,962.49	6,865.19	97.31	71.550		
13,300.00	7,109.76	7,165.97	7,151.76	183.58	30.63	90.44	2,269.73	49.79	7,057.13	6,959.67	97.46	72.408		
13,400.00	7,109.39	7,165.63	7,151.42	186.40	30.63	90.43	2,269.73	49.80	7,151.91	7,054.30	97.61	73.267		
13,500.00	7,109.03	7,165.29	7,151.08	189.21	30.62	90.43	2,269.74	49.80	7,246.83	7,149.07	97.76	74.128		
13,600.00	7,108.66	7,164.95	7,150.75	192.03	30.62	90.42	2,269.74	49.80	7,341.89	7,243.98	97.90	74.990		
13,700.00	7,108.29	7,164.61	7,150.41	194.84	30.62	90.41	2,269.75	49.80	7,437.07	7,339.03	98.05	75.854		
13,800.00	7,107.93	7,164.28	7,150.07	197.66	30.62	90.40	2,269.75	49.80	7,532.38	7,434.20	98.18	76.718		
13,900.00	7,107.56	7,163.94	7,149.73	200.48	30.62	90.39	2,269.76	49.80	7,627.81	7,529.50	98.32	77.584		
14,000.00	7,107.19	7,163.60	7,149.39	203.30	30.62	90.38	2,269.76	49.80	7,723.36	7,624.91	98.45	78.450		
14,100.00	7,106.83	7,163.26	7,149.06	206.12	30.62	90.37	2,269.77	49.80	7,819.02	7,720.44	98.58	79.318		
14,200.00	7,106.46	7,162.93	7,148.72	208.94	30.61	90.37	2,269.77	49.80	7,914.78	7,816.08	98.71	80.186		
14,300.00	7,106.10	7,162.59	7,148.38	211.76	30.61	90.36	2,269.78	49.80	8,010.65	7,911.82	98.83	81.055		
14,400.00	7,105.73	7,162.25	7,148.04	214.58	30.61	90.35	2,269.78	49.80	8,106.62	8,007.67	98.95	81.925		
14,500.00	7,105.36	7,161.91	7,147.71	217.40	30.61	90.34	2,269.79	49.80	8,202.68	8,103.61	99.07	82.795		
14,600.00	7,105.00	7,161.58	7,147.37	220.23	30.61	90.33	2,269.79	49.80	8,298.84	8,199.65	99.19	83.666		
14,700.00	7,104.63	7,161.24	7,147.03	223.05	30.61	90.32	2,269.80	49.80	8,395.09	8,295.78	99.31	84.537		
14,800.00	7,104.27	7,160.90	7,146.70	225.88	30.61	90.32	2,269.80	49.80	8,491.42	8,392.00	99.42	85.409		
14,872.41	7,104.00	7,160.66	7,146.46	227.93	30.61	90.31	2,269.81	49.80	8,561.23	8,461.73	99.50	86.040		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	60.00	3.28	3.28	-166.01	-4,199.68	-1,046.25	4,328.46				
100.00	100.00	40.00	100.00	3.28	3.35	-166.01	-4,199.68	-1,046.25	4,328.05	4,321.41	6.64	651.990	
200.00	200.00	140.00	200.00	3.34	4.54	-166.01	-4,199.68	-1,046.25	4,328.05	4,320.17	7.88	549.311	
300.00	300.00	240.00	300.00	3.44	7.40	-166.01	-4,199.68	-1,046.25	4,328.05	4,317.20	10.84	399.101	
400.00	400.00	340.00	400.00	3.60	10.64	-166.01	-4,199.68	-1,046.25	4,328.05	4,313.80	14.25	303.822	
500.00	500.00	440.00	500.00	3.81	14.00	-166.01	-4,199.68	-1,046.25	4,328.05	4,310.24	17.81	243.006	
600.00	599.98	539.98	599.98	4.04	17.42	-76.04	-4,199.68	-1,046.25	4,327.66	4,306.20	21.46	201.697	
700.00	699.95	639.95	699.95	4.30	20.85	-76.07	-4,199.68	-1,046.25	4,327.06	4,301.90	25.16	172.010	
800.00	799.92	739.92	799.92	4.59	24.31	-76.10	-4,199.68	-1,046.25	4,326.46	4,297.56	28.90	149.717	
900.00	899.89	839.89	899.89	4.90	27.77	-76.13	-4,199.68	-1,046.25	4,325.86	4,293.19	32.67	132.407	
1,000.00	999.86	939.86	999.86	5.23	31.24	-76.16	-4,199.68	-1,046.25	4,325.26	4,288.79	36.47	118.601	
1,100.00	1,099.83	1,039.83	1,099.83	5.58	34.71	-76.20	-4,199.68	-1,046.25	4,324.66	4,284.37	40.29	107.347	
1,200.00	1,199.80	1,139.80	1,199.80	5.94	38.19	-76.23	-4,199.68	-1,046.25	4,324.07	4,279.95	44.12	98.007	
1,300.00	1,299.77	1,239.77	1,299.77	6.30	41.66	-76.26	-4,199.68	-1,046.25	4,323.47	4,275.50	47.97	90.136	
1,400.00	1,399.73	1,339.73	1,399.73	6.68	45.14	-76.29	-4,199.68	-1,046.25	4,322.88	4,271.06	51.82	83.417	
1,500.00	1,499.70	1,439.70	1,499.70	7.07	48.63	-76.32	-4,199.68	-1,046.25	4,322.29	4,266.60	55.69	77.616	
1,600.00	1,599.67	1,539.67	1,599.67	7.46	52.11	-76.36	-4,199.68	-1,046.25	4,321.70	4,262.14	59.56	72.560	
1,700.00	1,699.64	1,639.64	1,699.64	7.85	55.59	-76.39	-4,199.68	-1,046.25	4,321.11	4,257.67	63.44	68.114	
1,800.00	1,799.61	1,739.61	1,799.61	8.25	59.08	-76.42	-4,199.68	-1,046.25	4,320.52	4,253.20	67.32	64.176	
1,900.00	1,899.58	1,839.58	1,899.58	8.66	62.56	-76.45	-4,199.68	-1,046.25	4,319.93	4,248.72	71.21	60.664	
2,000.00	1,999.55	1,939.55	1,999.55	9.06	66.05	-76.49	-4,199.68	-1,046.25	4,319.35	4,244.25	75.10	57.512	
2,100.00	2,099.52	2,039.52	2,099.52	9.47	69.53	-76.52	-4,199.68	-1,046.25	4,318.77	4,239.77	79.00	54.668	
2,200.00	2,199.48	2,139.48	2,199.48	9.89	73.02	-76.55	-4,199.68	-1,046.25	4,318.18	4,235.29	82.90	52.090	
2,300.00	2,299.45	2,239.45	2,299.45	10.30	76.50	-76.58	-4,199.68	-1,046.25	4,317.60	4,230.80	86.80	49.742	
2,400.00	2,399.42	2,339.42	2,399.42	10.72	79.99	-76.61	-4,199.68	-1,046.25	4,317.02	4,226.32	90.70	47.595	
2,500.00	2,499.39	2,439.39	2,499.39	11.14	83.48	-76.65	-4,199.68	-1,046.25	4,316.45	4,221.84	94.61	45.624	
2,600.00	2,599.36	2,539.36	2,599.36	11.56	86.97	-76.68	-4,199.68	-1,046.25	4,315.87	4,217.35	98.52	43.809	
2,700.00	2,699.33	2,639.33	2,699.33	11.98	90.45	-76.71	-4,199.68	-1,046.25	4,315.29	4,212.87	102.42	42.131	
2,800.00	2,799.30	2,739.30	2,799.30	12.41	93.94	-76.74	-4,199.68	-1,046.25	4,314.72	4,208.38	106.33	40.577	
2,900.00	2,899.27	2,839.27	2,899.27	12.83	97.43	-76.78	-4,199.68	-1,046.25	4,314.15	4,203.90	110.25	39.132	
3,000.00	2,999.23	2,939.23	2,999.23	13.26	100.92	-76.81	-4,199.68	-1,046.25	4,313.58	4,199.42	114.16	37.786	
3,100.00	3,099.20	3,039.20	3,099.20	13.68	104.40	-76.84	-4,199.68	-1,046.25	4,313.01	4,194.93	118.07	36.528	
3,200.00	3,199.17	3,139.17	3,199.17	14.11	107.89	-76.87	-4,199.68	-1,046.25	4,312.44	4,190.45	121.99	35.351	
3,300.00	3,299.14	3,239.14	3,299.14	14.54	111.38	-76.91	-4,199.68	-1,046.25	4,311.87	4,185.97	125.90	34.247	
3,400.00	3,399.11	3,339.11	3,399.11	14.97	114.87	-76.94	-4,199.68	-1,046.25	4,311.31	4,181.49	129.82	33.210	
3,500.00	3,499.08	3,439.08	3,499.08	15.40	118.36	-76.97	-4,199.68	-1,046.25	4,310.74	4,177.00	133.74	32.233	
3,600.00	3,599.05	3,539.05	3,599.05	15.83	121.85	-77.00	-4,199.68	-1,046.25	4,310.18	4,172.52	137.66	31.311	
3,700.00	3,699.02	3,639.02	3,699.02	16.26	125.34	-77.03	-4,199.68	-1,046.25	4,309.62	4,168.04	141.57	30.441	
3,800.00	3,798.98	3,738.98	3,798.98	16.69	128.82	-77.07	-4,199.68	-1,046.25	4,309.06	4,163.56	145.49	29.617	
3,900.00	3,898.95	3,838.95	3,898.95	17.12	132.31	-77.10	-4,199.68	-1,046.25	4,308.50	4,159.09	149.41	28.836	
4,000.00	3,998.92	3,938.92	3,998.92	17.55	135.80	-77.13	-4,199.68	-1,046.25	4,307.94	4,154.61	153.33	28.095	
4,100.00	4,098.89	4,038.89	4,098.89	17.98	139.29	-77.16	-4,199.68	-1,046.25	4,307.39	4,150.13	157.25	27.391	
4,200.00	4,198.86	4,138.86	4,198.86	18.42	142.78	-77.20	-4,199.68	-1,046.25	4,306.83	4,145.66	161.18	26.721	
4,300.00	4,298.83	4,238.83	4,298.83	18.85	146.27	-77.23	-4,199.68	-1,046.25	4,306.28	4,141.18	165.10	26.083	
4,400.00	4,398.80	4,338.80	4,398.80	19.28	149.76	-77.26	-4,199.68	-1,046.25	4,305.73	4,136.71	169.02	25.475	
4,500.00	4,498.77	4,438.77	4,498.77	19.72	153.25	-77.29	-4,199.68	-1,046.25	4,305.18	4,132.23	172.94	24.894	
4,600.00	4,598.73	4,538.73	4,598.73	20.15	156.74	-77.33	-4,199.68	-1,046.25	4,304.63	4,127.76	176.86	24.339	
4,700.00	4,698.70	4,638.70	4,698.70	20.58	160.23	-77.36	-4,199.68	-1,046.25	4,304.08	4,123.29	180.79	23.808	
4,800.00	4,798.67	4,738.67	4,798.67	21.02	163.71	-77.39	-4,199.68	-1,046.25	4,303.53	4,118.82	184.71	23.299	
4,900.00	4,898.64	4,838.64	4,898.64	21.45	167.20	-77.42	-4,199.68	-1,046.25	4,302.99	4,114.36	188.63	22.812	
5,000.00	4,998.61	4,938.61	4,998.61	21.89	170.69	-77.46	-4,199.68	-1,046.25	4,302.44	4,109.89	192.56	22.344	
5,100.00	5,098.58	5,038.58	5,098.58	22.32	174.18	-77.49	-4,199.68	-1,046.25	4,301.90	4,105.42	196.48	21.895	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - RUTT-ADAMS HEIRS 2-22 - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	5,198.55	5,138.55	5,198.55	22.76	177.67	-77.52	-4,199.68	-1,046.25	4,301.36	4,100.96	200.40	21.463	
5,300.00	5,298.52	5,238.52	5,298.52	23.20	181.16	-77.55	-4,199.68	-1,046.25	4,300.82	4,096.49	204.33	21.049	
5,400.00	5,398.49	5,338.49	5,398.49	23.63	184.65	-77.59	-4,199.68	-1,046.25	4,300.28	4,092.03	208.25	20.649	
5,500.00	5,498.45	5,438.45	5,498.45	24.07	188.14	-77.62	-4,199.68	-1,046.25	4,299.75	4,087.57	212.18	20.265	
5,600.00	5,598.42	5,538.42	5,598.42	24.50	191.63	-77.65	-4,199.68	-1,046.25	4,299.21	4,083.11	216.10	19.894	
5,700.00	5,698.39	5,638.39	5,698.39	24.94	195.12	-77.68	-4,199.68	-1,046.25	4,298.68	4,078.65	220.03	19.537	
5,800.00	5,798.36	5,738.36	5,798.36	25.38	198.61	-77.72	-4,199.68	-1,046.25	4,298.15	4,074.19	223.95	19.192	
5,900.00	5,898.33	5,838.33	5,898.33	25.81	202.10	-77.75	-4,199.68	-1,046.25	4,297.61	4,069.74	227.88	18.859	
6,000.00	5,998.30	5,938.30	5,998.30	26.25	205.59	-77.78	-4,199.68	-1,046.25	4,297.08	4,065.28	231.80	18.538	
6,100.00	6,098.27	6,038.27	6,098.27	26.69	209.08	-77.81	-4,199.68	-1,046.25	4,296.56	4,060.83	235.73	18.227	
6,200.00	6,198.24	6,138.24	6,198.24	27.12	212.57	-77.85	-4,199.68	-1,046.25	4,296.03	4,056.38	239.65	17.926	
6,300.00	6,298.20	6,238.20	6,298.20	27.56	216.06	-77.88	-4,199.68	-1,046.25	4,295.50	4,051.92	243.58	17.635	
6,400.00	6,398.17	6,338.17	6,398.17	28.00	219.55	-77.91	-4,199.68	-1,046.25	4,294.98	4,047.47	247.51	17.353	
6,500.00	6,498.14	6,438.14	6,498.14	28.43	223.03	-77.94	-4,199.68	-1,046.25	4,294.46	4,043.03	251.43	17.080	
6,600.00	6,597.68	6,537.68	6,597.68	28.88	226.51	-77.97	-4,199.68	-1,046.25	4,293.94	4,038.59	255.35	16.811	
6,700.00	6,697.65	6,637.65	6,697.65	29.32	229.99	-77.99	-4,199.68	-1,046.25	4,293.42	4,034.15	259.27	16.542	
6,800.00	6,797.62	6,737.62	6,797.62	29.77	233.47	-78.02	-4,199.68	-1,046.25	4,292.90	4,029.71	263.19	16.273	
6,900.00	6,897.59	6,837.59	6,897.59	30.21	236.95	-78.05	-4,199.68	-1,046.25	4,292.38	4,025.28	267.11	16.004	
7,000.00	6,997.56	6,937.56	6,997.56	30.65	240.43	-78.08	-4,199.68	-1,046.25	4,291.86	4,020.85	271.03	15.735	
7,100.00	7,097.53	7,037.53	7,097.53	31.09	243.91	-78.11	-4,199.68	-1,046.25	4,291.34	4,016.42	274.95	15.466	
7,200.00	7,197.50	7,137.50	7,197.50	31.53	247.39	-78.14	-4,199.68	-1,046.25	4,290.82	4,011.99	278.87	15.197	
7,300.00	7,297.47	7,237.47	7,297.47	31.97	250.87	-78.17	-4,199.68	-1,046.25	4,290.30	4,007.56	282.79	14.928	
7,400.00	7,397.44	7,337.44	7,397.44	32.41	254.35	-78.20	-4,199.68	-1,046.25	4,289.78	4,003.13	286.71	14.659	
7,500.00	7,497.41	7,437.41	7,497.41	32.85	257.83	-78.23	-4,199.68	-1,046.25	4,289.26	4,000.00	290.63	14.390	
7,600.00	7,597.38	7,537.38	7,597.38	33.29	261.31	-78.26	-4,199.68	-1,046.25	4,288.74	3,996.87	294.55	14.121	
7,700.00	7,697.35	7,637.35	7,697.35	33.73	264.79	-78.29	-4,199.68	-1,046.25	4,288.22	3,993.74	298.47	13.852	
7,800.00	7,797.32	7,737.32	7,797.32	34.17	268.27	-78.32	-4,199.68	-1,046.25	4,287.70	3,990.61	302.39	13.583	
7,900.00	7,897.29	7,837.29	7,897.29	34.61	271.75	-78.35	-4,199.68	-1,046.25	4,287.18	3,987.48	306.31	13.314	
8,000.00	7,997.26	7,937.26	7,997.26	35.05	275.23	-78.38	-4,199.68	-1,046.25	4,286.66	3,984.35	310.23	13.045	
8,100.00	8,097.23	8,037.23	8,097.23	35.49	278.71	-78.41	-4,199.68	-1,046.25	4,286.14	3,981.22	314.15	12.776	
8,200.00	8,197.20	8,137.20	8,197.20	35.93	282.19	-78.44	-4,199.68	-1,046.25	4,285.62	3,978.09	318.07	12.507	
8,300.00	8,297.17	8,237.17	8,297.17	36.37	285.67	-78.47	-4,199.68	-1,046.25	4,285.10	3,974.96	321.99	12.238	
8,400.00	8,397.14	8,337.14	8,397.14	36.81	289.15	-78.50	-4,199.68	-1,046.25	4,284.58	3,971.83	325.91	11.969	
8,500.00	8,497.11	8,437.11	8,497.11	37.25	292.63	-78.53	-4,199.68	-1,046.25	4,284.06	3,968.70	329.83	11.700	
8,600.00	8,597.08	8,537.08	8,597.08	37.69	296.11	-78.56	-4,199.68	-1,046.25	4,283.54	3,965.57	333.75	11.431	
8,700.00	8,697.05	8,637.05	8,697.05	38.13	299.59	-78.59	-4,199.68	-1,046.25	4,283.02	3,962.44	337.67	11.162	
8,800.00	8,797.02	8,737.02	8,797.02	38.57	303.07	-78.62	-4,199.68	-1,046.25	4,282.50	3,959.31	341.59	10.893	
8,900.00	8,897.00	8,837.00	8,897.00	39.01	306.55	-78.65	-4,199.68	-1,046.25	4,281.98	3,956.18	345.51	10.624	
9,000.00	8,997.00	8,937.00	8,997.00	39.45	310.03	-78.68	-4,199.68	-1,046.25	4,281.46	3,953.05	349.43	10.355	
9,100.00	9,097.00	9,037.00	9,097.00	39.89	313.51	-78.71	-4,199.68	-1,046.25	4,280.94	3,949.92	353.35	10.086	
9,200.00	9,197.00	9,137.00	9,197.00	40.33	316.99	-78.74	-4,199.68	-1,046.25	4,280.42	3,946.79	357.27	9.817	
9,300.00	9,297.00	9,237.00	9,297.00	40.77	320.47	-78.77	-4,199.68	-1,046.25	4,279.90	3,943.66	361.19	9.548	
9,400.00	9,397.00	9,337.00	9,397.00	41.21	323.95	-78.80	-4,199.68	-1,046.25	4,279.38	3,940.53	365.11	9.279	
9,500.00	9,497.00	9,437.00	9,497.00	41.65	327.43	-78.83	-4,199.68	-1,046.25	4,278.86	3,937.40	369.03	9.010	
9,600.00	9,597.00	9,537.00	9,597.00	42.09	330.91	-78.86	-4,199.68	-1,046.25	4,278.34	3,934.27	372.95	8.741	
9,700.00	9,697.00	9,637.00	9,697.00	42.53	334.39	-78.89	-4,199.68	-1,046.25	4,277.82	3,931.14	376.87	8.472	
9,800.00	9,797.00	9,737.00	9,797.00	42.97	337.87	-78.92	-4,199.68	-1,046.25	4,277.30	3,928.01	380.79	8.203	
9,900.00	9,897.00	9,837.00	9,897.00	43.41	341.35	-78.95	-4,199.68	-1,046.25	4,276.78	3,924.88	384.71	7.934	
10,000.00	9,997.00	9,937.00	9,997.00	43.85	344.83	-78.98	-4,199.68	-1,046.25	4,276.26	3,921.75	388.63	7.665	
10,100.00	10,097.00	10,037.00	10,097.00	44.29	348.31	-79.01	-4,199.68	-1,046.25	4,275.74	3,918.62	392.55	7.396	
10,200.00	10,197.00	10,137.00	10,197.00	44.73	351.79	-79.04	-4,199.68	-1,046.25	4,275.22	3,915.49	396.47	7.127	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.74	7,060.74	7,120.74	100.32	244.77	-89.88	-4,199.68	-1,046.25	4,852.22	4,519.47	332.75	14.582		
10,400.00	7,120.38	7,060.38	7,120.38	103.04	244.75	-89.87	-4,199.68	-1,046.25	4,903.70	4,569.49	334.21	14.672		
10,500.00	7,120.01	7,060.01	7,120.01	105.76	244.74	-89.87	-4,199.68	-1,046.25	4,956.67	4,621.04	335.62	14.769		
10,600.00	7,119.64	7,059.64	7,119.64	108.48	244.73	-89.86	-4,199.68	-1,046.25	5,011.07	4,674.08	336.98	14.870		
10,700.00	7,119.28	7,059.28	7,119.28	111.22	244.72	-89.86	-4,199.68	-1,046.25	5,066.86	4,728.56	338.29	14.978		
10,800.00	7,118.91	7,058.91	7,118.91	113.96	244.70	-89.85	-4,199.68	-1,046.25	5,123.99	4,784.43	339.56	15.090		
10,900.00	7,118.55	7,058.55	7,118.55	116.70	244.69	-89.85	-4,199.68	-1,046.25	5,182.43	4,841.65	340.77	15.208		
11,000.00	7,118.18	7,058.18	7,118.18	119.45	244.68	-89.84	-4,199.68	-1,046.25	5,242.12	4,900.17	341.94	15.330		
11,100.00	7,117.81	7,057.81	7,117.81	122.21	244.67	-89.84	-4,199.68	-1,046.25	5,303.02	4,959.95	343.07	15.458		
11,200.00	7,117.45	7,057.45	7,117.45	124.97	244.65	-89.83	-4,199.68	-1,046.25	5,365.10	5,020.95	344.15	15.589		
11,300.00	7,117.08	7,057.08	7,117.08	127.73	244.64	-89.83	-4,199.68	-1,046.25	5,428.31	5,083.12	345.19	15.725		
11,400.00	7,116.72	7,056.72	7,116.72	130.50	244.63	-89.82	-4,199.68	-1,046.25	5,492.61	5,146.42	346.19	15.866		
11,500.00	7,116.35	7,056.35	7,116.35	133.27	244.61	-89.82	-4,199.68	-1,046.25	5,557.97	5,210.82	347.15	16.010		
11,600.00	7,115.98	7,055.98	7,115.98	136.04	244.60	-89.81	-4,199.68	-1,046.25	5,624.35	5,276.27	348.07	16.159		
11,700.00	7,115.62	7,055.62	7,115.62	138.82	244.59	-89.81	-4,199.68	-1,046.25	5,691.71	5,342.75	348.96	16.311		
11,800.00	7,115.25	7,055.25	7,115.25	141.60	244.58	-89.80	-4,199.68	-1,046.25	5,760.02	5,410.21	349.81	16.466		
11,900.00	7,114.88	7,054.88	7,114.88	144.39	244.56	-89.80	-4,199.68	-1,046.25	5,829.24	5,478.62	350.62	16.625		
12,000.00	7,114.52	7,054.52	7,114.52	147.17	244.55	-89.79	-4,199.68	-1,046.25	5,899.35	5,547.94	351.41	16.788		
12,100.00	7,114.15	7,054.15	7,114.15	149.96	244.54	-89.79	-4,199.68	-1,046.25	5,970.30	5,618.15	352.16	16.953		
12,200.00	7,113.79	7,053.79	7,113.79	152.75	244.52	-89.78	-4,199.68	-1,046.25	6,042.08	5,689.20	352.88	17.122		
12,300.00	7,113.42	7,053.42	7,113.42	155.55	244.51	-89.78	-4,199.68	-1,046.25	6,114.66	5,761.08	353.57	17.294		
12,400.00	7,113.05	7,053.05	7,113.05	158.34	244.50	-89.77	-4,199.68	-1,046.25	6,187.99	5,833.76	354.24	17.469		
12,500.00	7,112.69	7,052.69	7,112.69	161.14	244.49	-89.77	-4,199.68	-1,046.25	6,262.07	5,907.20	354.87	17.646		
12,600.00	7,112.32	7,052.32	7,112.32	163.94	244.47	-89.76	-4,199.68	-1,046.25	6,336.86	5,981.37	355.49	17.826		
12,700.00	7,111.96	7,051.96	7,111.96	166.74	244.46	-89.76	-4,199.68	-1,046.25	6,412.33	6,056.26	356.07	18.008		
12,800.00	7,111.59	7,051.59	7,111.59	169.54	244.45	-89.75	-4,199.68	-1,046.25	6,488.47	6,131.83	356.64	18.194		
12,900.00	7,111.22	7,051.22	7,111.22	172.35	244.44	-89.75	-4,199.68	-1,046.25	6,565.25	6,208.07	357.18	18.381		
13,000.00	7,110.86	7,050.86	7,110.86	175.16	244.42	-89.74	-4,199.68	-1,046.25	6,642.65	6,284.95	357.70	18.571		
13,100.00	7,110.49	7,050.49	7,110.49	177.96	244.41	-89.74	-4,199.68	-1,046.25	6,720.64	6,362.44	358.20	18.762		
13,200.00	7,110.12	7,050.12	7,110.12	180.77	244.40	-89.73	-4,199.68	-1,046.25	6,799.21	6,440.53	358.68	18.956		
13,300.00	7,109.76	7,049.76	7,109.76	183.58	244.38	-89.73	-4,199.68	-1,046.25	6,878.33	6,519.20	359.14	19.152		
13,400.00	7,109.39	7,049.39	7,109.39	186.40	244.37	-89.72	-4,199.68	-1,046.25	6,958.00	6,598.42	359.58	19.350		
13,500.00	7,109.03	7,049.03	7,109.03	189.21	244.36	-89.72	-4,199.68	-1,046.25	7,038.18	6,678.18	360.00	19.550		
13,600.00	7,108.66	7,048.66	7,108.66	192.03	244.35	-89.71	-4,199.68	-1,046.25	7,118.86	6,758.45	360.41	19.752		
13,700.00	7,108.29	7,048.29	7,108.29	194.84	244.33	-89.71	-4,199.68	-1,046.25	7,200.03	6,839.23	360.80	19.956		
13,800.00	7,107.93	7,047.93	7,107.93	197.66	244.32	-89.70	-4,199.68	-1,046.25	7,281.67	6,920.49	361.18	20.161		
13,900.00	7,107.56	7,047.56	7,107.56	200.48	244.31	-89.70	-4,199.68	-1,046.25	7,363.76	7,002.22	361.54	20.368		
14,000.00	7,107.19	7,047.19	7,107.19	203.30	244.29	-89.69	-4,199.68	-1,046.25	7,446.29	7,084.39	361.89	20.576		
14,100.00	7,106.83	7,046.83	7,106.83	206.12	244.28	-89.69	-4,199.68	-1,046.25	7,529.24	7,167.01	362.23	20.786		
14,200.00	7,106.46	7,046.46	7,106.46	208.94	244.27	-89.68	-4,199.68	-1,046.25	7,612.60	7,250.05	362.55	20.997		
14,300.00	7,106.10	7,046.10	7,106.10	211.76	244.26	-89.68	-4,199.68	-1,046.25	7,696.36	7,333.49	362.86	21.210		
14,400.00	7,105.73	7,045.73	7,105.73	214.58	244.24	-89.67	-4,199.68	-1,046.25	7,780.50	7,417.34	363.16	21.424		
14,500.00	7,105.36	7,045.36	7,105.36	217.40	244.23	-89.67	-4,199.68	-1,046.25	7,865.01	7,501.56	363.45	21.640		
14,600.00	7,105.00	7,045.00	7,105.00	220.23	244.22	-89.66	-4,199.68	-1,046.25	7,949.88	7,586.16	363.73	21.857		
14,700.00	7,104.63	7,044.63	7,104.63	223.05	244.21	-89.66	-4,199.68	-1,046.25	8,035.10	7,671.11	363.99	22.075		
14,800.00	7,104.27	7,044.27	7,104.27	225.88	244.19	-89.65	-4,199.68	-1,046.25	8,120.66	7,756.41	364.25	22.294		
14,872.41	7,104.00	7,044.00	7,104.00	227.93	244.18	-89.65	-4,199.68	-1,046.25	8,182.82	7,818.38	364.43	22.454		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5.00	0.00	3.28	3.28	-44.30	1,190.94	-1,162.28	1,664.10					
100.00	100.00	105.00	100.00	3.28	3.80	-44.30	1,190.94	-1,162.28	1,664.10	1,657.02	7.09	234.865		
200.00	200.00	205.00	200.00	3.34	6.33	-44.30	1,190.94	-1,162.28	1,664.10	1,654.44	9.66	172.186		
300.00	300.00	305.00	300.00	3.44	9.49	-44.30	1,190.94	-1,162.28	1,664.10	1,651.17	12.93	128.681		
400.00	400.00	405.00	400.00	3.60	12.82	-44.30	1,190.94	-1,162.28	1,664.10	1,647.68	16.42	101.327		
500.00	500.00	505.00	500.00	3.81	16.22	-44.30	1,190.94	-1,162.28	1,664.10	1,644.08	20.03	83.101		
600.00	599.98	605.02	599.98	4.04	19.65	45.75	1,190.94	-1,162.28	1,662.98	1,639.29	23.69	70.196		
700.00	699.95	705.05	699.95	4.30	23.10	45.81	1,190.94	-1,162.28	1,661.24	1,633.84	27.40	60.623		
800.00	799.92	805.08	799.92	4.59	26.56	45.87	1,190.94	-1,162.28	1,659.50	1,628.35	31.15	53.269		
900.00	899.89	905.11	899.89	4.90	30.03	45.93	1,190.94	-1,162.28	1,657.76	1,622.83	34.93	47.455		
1,000.00	999.86	1,005.14	999.86	5.23	33.50	45.99	1,190.94	-1,162.28	1,656.02	1,617.29	38.74	42.751		
1,100.00	1,099.83	1,105.17	1,099.83	5.58	36.98	46.06	1,190.94	-1,162.28	1,654.29	1,611.73	42.56	38.871		
1,200.00	1,199.80	1,205.20	1,199.80	5.94	40.46	46.12	1,190.94	-1,162.28	1,652.56	1,606.16	46.40	35.618		
1,300.00	1,299.77	1,305.23	1,299.77	6.30	43.94	46.18	1,190.94	-1,162.28	1,650.82	1,600.58	50.25	32.855		
1,400.00	1,399.73	1,405.27	1,399.73	6.68	47.43	46.24	1,190.94	-1,162.28	1,649.09	1,594.99	54.11	30.479		
1,500.00	1,499.70	1,505.30	1,499.70	7.07	50.91	46.31	1,190.94	-1,162.28	1,647.37	1,589.39	57.97	28.415		
1,600.00	1,599.67	1,605.33	1,599.67	7.46	54.40	46.37	1,190.94	-1,162.28	1,645.64	1,583.79	61.85	26.607		
1,700.00	1,699.64	1,705.36	1,699.64	7.85	57.88	46.43	1,190.94	-1,162.28	1,643.92	1,578.19	65.73	25.009		
1,800.00	1,799.61	1,805.39	1,799.61	8.25	61.37	46.50	1,190.94	-1,162.28	1,642.20	1,572.58	69.62	23.588		
1,900.00	1,899.58	1,905.42	1,899.58	8.66	64.86	46.56	1,190.94	-1,162.28	1,640.48	1,566.97	73.51	22.316		
2,000.00	1,999.55	2,005.45	1,999.55	9.06	68.34	46.62	1,190.94	-1,162.28	1,638.76	1,561.35	77.41	21.171		
2,100.00	2,099.52	2,105.48	2,099.52	9.47	71.83	46.69	1,190.94	-1,162.28	1,637.04	1,555.74	81.30	20.135		
2,200.00	2,199.48	2,205.52	2,199.48	9.89	75.32	46.75	1,190.94	-1,162.28	1,635.33	1,550.12	85.21	19.193		
2,300.00	2,299.45	2,305.55	2,299.45	10.30	78.81	46.81	1,190.94	-1,162.28	1,633.62	1,544.51	89.11	18.332		
2,400.00	2,399.42	2,405.58	2,399.42	10.72	82.30	46.88	1,190.94	-1,162.28	1,631.91	1,538.89	93.02	17.544		
2,500.00	2,499.39	2,505.61	2,499.39	11.14	85.79	46.94	1,190.94	-1,162.28	1,630.20	1,533.28	96.93	16.819		
2,600.00	2,599.36	2,605.64	2,599.36	11.56	89.28	47.01	1,190.94	-1,162.28	1,628.50	1,527.66	100.84	16.150		
2,700.00	2,699.33	2,705.67	2,699.33	11.98	92.77	47.07	1,190.94	-1,162.28	1,626.79	1,522.05	104.75	15.531		
2,800.00	2,799.30	2,805.70	2,799.30	12.41	96.26	47.13	1,190.94	-1,162.28	1,625.09	1,516.43	108.66	14.956		
2,900.00	2,899.27	2,905.73	2,899.27	12.83	99.75	47.20	1,190.94	-1,162.28	1,623.39	1,510.82	112.58	14.420		
3,000.00	2,999.23	3,005.77	2,999.23	13.26	103.24	47.26	1,190.94	-1,162.28	1,621.70	1,505.21	116.49	13.921		
3,100.00	3,099.20	3,105.80	3,099.20	13.68	106.73	47.33	1,190.94	-1,162.28	1,620.00	1,499.59	120.41	13.454		
3,200.00	3,199.17	3,205.83	3,199.17	14.11	110.22	47.39	1,190.94	-1,162.28	1,618.31	1,493.98	124.33	13.017		
3,300.00	3,299.14	3,305.86	3,299.14	14.54	113.71	47.46	1,190.94	-1,162.28	1,616.62	1,488.37	128.24	12.606		
3,400.00	3,399.11	3,405.89	3,399.11	14.97	117.20	47.52	1,190.94	-1,162.28	1,614.93	1,482.77	132.16	12.219		
3,500.00	3,499.08	3,505.92	3,499.08	15.40	120.69	47.59	1,190.94	-1,162.28	1,613.24	1,477.16	136.08	11.855		
3,600.00	3,599.05	3,605.95	3,599.05	15.83	124.18	47.66	1,190.94	-1,162.28	1,611.56	1,471.55	140.00	11.511		
3,700.00	3,699.02	3,705.98	3,699.02	16.26	127.67	47.72	1,190.94	-1,162.28	1,609.88	1,465.95	143.93	11.185		
3,800.00	3,798.98	3,806.02	3,798.98	16.69	131.16	47.79	1,190.94	-1,162.28	1,608.20	1,460.35	147.85	10.877		
3,900.00	3,898.95	3,906.05	3,898.95	17.12	134.65	47.85	1,190.94	-1,162.28	1,606.52	1,454.75	151.77	10.585		
4,000.00	3,998.92	4,006.08	3,998.92	17.55	138.15	47.92	1,190.94	-1,162.28	1,604.84	1,449.15	155.69	10.308		
4,100.00	4,098.89	4,106.11	4,098.89	17.98	141.64	47.99	1,190.94	-1,162.28	1,603.17	1,443.55	159.62	10.044		
4,200.00	4,198.86	4,206.14	4,198.86	18.42	145.13	48.05	1,190.94	-1,162.28	1,601.50	1,437.96	163.54	9.793		
4,300.00	4,298.83	4,306.17	4,298.83	18.85	148.62	48.12	1,190.94	-1,162.28	1,599.83	1,432.36	167.47	9.553		
4,400.00	4,398.80	4,406.20	4,398.80	19.28	152.11	48.18	1,190.94	-1,162.28	1,598.16	1,426.77	171.39	9.325		
4,500.00	4,498.77	4,506.23	4,498.77	19.72	155.60	48.25	1,190.94	-1,162.28	1,596.50	1,421.18	175.32	9.106		
4,600.00	4,598.73	4,606.27	4,598.73	20.15	159.09	48.32	1,190.94	-1,162.28	1,594.83	1,415.59	179.24	8.898		
4,700.00	4,698.70	4,706.30	4,698.70	20.58	162.58	48.39	1,190.94	-1,162.28	1,593.17	1,410.01	183.17	8.698		
4,800.00	4,798.67	4,806.33	4,798.67	21.02	166.08	48.45	1,190.94	-1,162.28	1,591.51	1,404.42	187.09	8.507		
4,900.00	4,898.64	4,906.36	4,898.64	21.45	169.57	48.52	1,190.94	-1,162.28	1,589.86	1,398.84	191.02	8.323		
5,000.00	4,998.61	5,006.39	4,998.61	21.89	173.06	48.59	1,190.94	-1,162.28	1,588.20	1,393.26	194.94	8.147		
5,100.00	5,098.58	5,106.42	5,098.58	22.32	176.55	48.66	1,190.94	-1,162.28	1,586.55	1,387.68	198.87	7.978		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,198.55	5,206.45	5,198.55	22.76	180.04	48.72	1,190.94	-1,162.28	1,584.90	1,382.10	202.80	7.815	
5,300.00	5,298.52	5,306.48	5,298.52	23.20	183.53	48.79	1,190.94	-1,162.28	1,583.25	1,376.53	206.73	7.659	
5,400.00	5,398.49	5,406.52	5,398.49	23.63	187.03	48.86	1,190.94	-1,162.28	1,581.61	1,370.95	210.65	7.508	
5,500.00	5,498.45	5,506.55	5,498.45	24.07	190.52	48.93	1,190.94	-1,162.28	1,579.96	1,365.38	214.58	7.363	
5,600.00	5,598.42	5,606.58	5,598.42	24.50	194.01	49.00	1,190.94	-1,162.28	1,578.32	1,359.82	218.51	7.223	
5,700.00	5,698.39	5,706.61	5,698.39	24.94	197.50	49.06	1,190.94	-1,162.28	1,576.69	1,354.25	222.44	7.088	
5,800.00	5,798.36	5,806.64	5,798.36	25.38	200.99	49.13	1,190.94	-1,162.28	1,575.05	1,348.69	226.36	6.958	
5,900.00	5,898.33	5,906.67	5,898.33	25.81	204.48	49.20	1,190.94	-1,162.28	1,573.41	1,343.12	230.29	6.832	
6,000.00	5,998.30	6,006.70	5,998.30	26.25	207.97	49.27	1,190.94	-1,162.28	1,571.78	1,337.56	234.22	6.711	
6,100.00	6,098.27	6,106.73	6,098.27	26.69	211.47	49.34	1,190.94	-1,162.28	1,570.15	1,332.00	238.15	6.593	
6,200.00	6,198.24	6,206.76	6,198.24	27.12	214.96	49.41	1,190.94	-1,162.28	1,568.53	1,326.45	242.08	6.479	
6,300.00	6,298.20	6,306.80	6,298.20	27.56	218.45	49.48	1,190.94	-1,162.28	1,566.90	1,320.90	246.01	6.369	
6,400.00	6,398.17	6,406.83	6,398.17	28.00	221.94	49.55	1,190.94	-1,162.28	1,565.28	1,315.34	249.93	6.263	
6,500.00	6,498.14	6,506.86	6,498.14	28.43	225.43	49.62	1,190.94	-1,162.28	1,563.66	1,309.79	253.86	6.159	
6,600.00	6,597.68	6,607.32	6,597.68	28.88	228.94	51.17	1,190.94	-1,162.28	1,558.23	1,300.42	257.81	6.044	
6,700.00	6,694.68	6,689.68	6,694.68	29.32	231.81	53.02	1,190.94	-1,162.28	1,543.26	1,282.12	261.13	5.910	
6,800.00	6,786.74	6,781.74	6,786.74	29.77	235.03	55.96	1,190.94	-1,162.28	1,519.47	1,254.68	264.79	5.738	
6,900.00	6,871.61	6,866.61	6,871.61	30.24	237.99	60.01	1,190.94	-1,162.28	1,488.17	1,219.98	268.20	5.549	
7,000.00	6,947.19	6,942.19	6,947.19	30.74	240.63	65.04	1,190.94	-1,162.28	1,451.11	1,179.81	271.30	5.349	
7,100.00	7,011.62	7,006.62	7,011.62	31.32	242.88	70.75	1,190.94	-1,162.28	1,410.40	1,136.33	274.07	5.146	
7,200.00	7,063.31	7,058.31	7,063.31	32.03	244.68	76.67	1,190.94	-1,162.28	1,368.45	1,091.94	276.52	4.949	
7,300.00	7,101.00	7,104.00	7,101.00	32.89	246.28	82.20	1,190.94	-1,162.28	1,327.78	1,048.86	278.92	4.760	
7,400.00	7,123.74	7,118.74	7,123.74	33.93	246.79	86.80	1,190.94	-1,162.28	1,290.80	1,010.36	280.44	4.603	
7,500.00	7,131.00	7,126.00	7,131.00	35.10	247.05	90.06	1,190.94	-1,162.28	1,259.62	977.71	281.90	4.468	
7,600.00	7,130.63	7,125.63	7,130.63	36.44	247.03	90.04	1,190.94	-1,162.28	1,235.63	952.32	283.30	4.362	
7,700.00	7,130.26	7,125.26	7,130.26	37.94	247.02	90.03	1,190.94	-1,162.28	1,219.39	934.50	284.89	4.280	
7,800.00	7,129.90	7,124.90	7,129.90	39.59	247.01	90.01	1,190.94	-1,162.28	1,211.22	924.63	286.59	4.226	
7,849.30	7,129.72	7,124.72	7,129.72	40.47	247.00	90.00	1,190.94	-1,162.28	1,210.22	922.75	287.47	4.210 CC, ES	
7,900.00	7,129.53	7,124.53	7,129.53	41.37	246.99	89.99	1,190.94	-1,162.28	1,211.28	922.94	288.34	4.201 SF	
8,000.00	7,129.17	7,124.17	7,129.17	43.27	246.98	89.97	1,190.94	-1,162.28	1,219.57	929.49	290.07	4.204	
8,100.00	7,128.80	7,123.80	7,128.80	45.27	246.97	89.96	1,190.94	-1,162.28	1,235.91	944.20	291.71	4.237	
8,200.00	7,128.43	7,123.43	7,128.43	47.36	246.96	89.94	1,190.94	-1,162.28	1,260.01	966.80	293.21	4.297	
8,300.00	7,128.07	7,123.07	7,128.07	49.52	246.94	89.92	1,190.94	-1,162.28	1,291.42	996.87	294.55	4.384	
8,400.00	7,127.70	7,122.70	7,127.70	51.75	246.93	89.90	1,190.94	-1,162.28	1,329.62	1,033.92	295.70	4.496	
8,500.00	7,127.33	7,122.33	7,127.33	54.04	246.92	89.89	1,190.94	-1,162.28	1,374.06	1,077.38	296.68	4.631	
8,600.00	7,126.97	7,121.97	7,126.97	56.38	246.90	89.87	1,190.94	-1,162.28	1,424.14	1,126.66	297.48	4.787	
8,700.00	7,126.60	7,121.60	7,126.60	58.77	246.89	89.85	1,190.94	-1,162.28	1,479.30	1,181.16	298.13	4.962	
8,800.00	7,126.24	7,121.24	7,126.24	61.19	246.88	89.84	1,190.94	-1,162.28	1,538.98	1,240.34	298.64	5.153	
8,900.00	7,125.87	7,120.87	7,125.87	63.65	246.87	89.82	1,190.94	-1,162.28	1,602.68	1,303.65	299.04	5.360	
9,000.00	7,125.50	7,120.50	7,125.50	66.15	246.85	89.80	1,190.94	-1,162.28	1,669.95	1,370.62	299.33	5.579	
9,100.00	7,125.14	7,120.14	7,125.14	68.67	246.84	89.78	1,190.94	-1,162.28	1,740.37	1,440.82	299.54	5.810	
9,200.00	7,124.77	7,119.77	7,124.77	71.21	246.83	89.77	1,190.94	-1,162.28	1,813.56	1,513.87	299.69	6.052	
9,300.00	7,124.41	7,119.41	7,124.41	73.78	246.82	89.75	1,190.94	-1,162.28	1,889.22	1,589.44	299.78	6.302	
9,400.00	7,124.04	7,119.04	7,124.04	76.37	246.80	89.73	1,190.94	-1,162.28	1,967.05	1,667.22	299.83	6.561	
9,500.00	7,123.67	7,118.67	7,123.67	78.98	246.79	89.71	1,190.94	-1,162.28	2,046.81	1,746.97	299.84	6.826	
9,600.00	7,123.31	7,118.31	7,123.31	81.60	246.78	89.70	1,190.94	-1,162.28	2,128.28	1,828.45	299.82	7.098	
9,700.00	7,122.94	7,117.94	7,122.94	84.24	246.76	89.68	1,190.94	-1,162.28	2,211.26	1,911.48	299.79	7.376	
9,800.00	7,122.57	7,117.57	7,122.57	86.90	246.75	89.66	1,190.94	-1,162.28	2,295.61	1,995.87	299.74	7.659	
9,900.00	7,122.21	7,117.21	7,122.21	89.56	246.74	89.64	1,190.94	-1,162.28	2,381.17	2,081.49	299.67	7.946	
10,000.00	7,121.84	7,116.84	7,121.84	92.24	246.73	89.63	1,190.94	-1,162.28	2,467.81	2,168.21	299.60	8.237	
10,100.00	7,121.48	7,116.48	7,121.48	94.92	246.71	89.61	1,190.94	-1,162.28	2,555.43	2,255.91	299.52	8.532	
10,200.00	7,121.11	7,116.11	7,121.11	97.62	246.70	89.59	1,190.94	-1,162.28	2,643.93	2,344.49	299.44	8.830	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.74	7,115.74	7,120.74	100.32	246.69	89.58	1,190.94	-1,162.28	2,733.22	2,433.87	299.36	9.130		
10,400.00	7,120.38	7,115.38	7,120.38	103.04	246.67	89.56	1,190.94	-1,162.28	2,823.23	2,523.96	299.27	9.434		
10,500.00	7,120.01	7,115.01	7,120.01	105.76	246.66	89.54	1,190.94	-1,162.28	2,913.89	2,614.71	299.18	9.740		
10,600.00	7,119.64	7,114.64	7,119.64	108.48	246.65	89.52	1,190.94	-1,162.28	3,005.15	2,706.05	299.09	10.048		
10,700.00	7,119.28	7,114.28	7,119.28	111.22	246.64	89.51	1,190.94	-1,162.28	3,096.94	2,797.93	299.01	10.357		
10,800.00	7,118.91	7,113.91	7,118.91	113.96	246.62	89.49	1,190.94	-1,162.28	3,189.23	2,890.30	298.92	10.669		
10,900.00	7,118.55	7,113.55	7,118.55	116.70	246.61	89.47	1,190.94	-1,162.28	3,281.97	2,983.13	298.84	10.982		
11,000.00	7,118.18	7,113.18	7,118.18	119.45	246.60	89.45	1,190.94	-1,162.28	3,375.12	3,076.36	298.76	11.297		
11,100.00	7,117.81	7,112.81	7,117.81	122.21	246.59	89.44	1,190.94	-1,162.28	3,468.66	3,169.97	298.68	11.613		
11,200.00	7,117.45	7,112.45	7,117.45	124.97	246.57	89.42	1,190.94	-1,162.28	3,562.54	3,263.93	298.61	11.930		
11,300.00	7,117.08	7,112.08	7,117.08	127.73	246.56	89.40	1,190.94	-1,162.28	3,656.75	3,358.21	298.54	12.249		
11,400.00	7,116.72	7,111.72	7,116.72	130.50	246.55	89.38	1,190.94	-1,162.28	3,751.26	3,452.79	298.47	12.568		
11,500.00	7,116.35	7,111.35	7,116.35	133.27	246.53	89.37	1,190.94	-1,162.28	3,846.05	3,547.65	298.40	12.889		
11,600.00	7,115.98	7,110.98	7,115.98	136.04	246.52	89.35	1,190.94	-1,162.28	3,941.09	3,642.75	298.34	13.210		
11,700.00	7,115.62	7,110.62	7,115.62	138.82	246.51	89.33	1,190.94	-1,162.28	4,036.38	3,738.10	298.28	13.532		
11,800.00	7,115.25	7,110.25	7,115.25	141.60	246.50	89.32	1,190.94	-1,162.28	4,131.89	3,833.66	298.22	13.855		
11,900.00	7,114.88	7,109.88	7,114.88	144.39	246.48	89.30	1,190.94	-1,162.28	4,227.60	3,929.43	298.17	14.178		
12,000.00	7,114.52	7,109.52	7,114.52	147.17	246.47	89.28	1,190.94	-1,162.28	4,323.51	4,025.39	298.12	14.503		
12,100.00	7,114.15	7,109.15	7,114.15	149.96	246.46	89.26	1,190.94	-1,162.28	4,419.60	4,121.53	298.07	14.827		
12,200.00	7,113.79	7,108.79	7,113.79	152.75	246.44	89.25	1,190.94	-1,162.28	4,515.86	4,217.84	298.03	15.153		
12,300.00	7,113.42	7,108.42	7,113.42	155.55	246.43	89.23	1,190.94	-1,162.28	4,612.28	4,314.30	297.98	15.478		
12,400.00	7,113.05	7,108.05	7,113.05	158.34	246.42	89.21	1,190.94	-1,162.28	4,708.85	4,410.91	297.94	15.805		
12,500.00	7,112.69	7,107.69	7,112.69	161.14	246.41	89.19	1,190.94	-1,162.28	4,805.56	4,507.65	297.91	16.131		
12,600.00	7,112.32	7,107.32	7,112.32	163.94	246.39	89.18	1,190.94	-1,162.28	4,902.40	4,604.53	297.87	16.458		
12,700.00	7,111.96	7,106.96	7,111.96	166.74	246.38	89.16	1,190.94	-1,162.28	4,999.37	4,701.53	297.84	16.786		
12,800.00	7,111.59	7,106.59	7,111.59	169.54	246.37	89.14	1,190.94	-1,162.28	5,096.45	4,798.64	297.81	17.113		
12,900.00	7,111.22	7,106.22	7,111.22	172.35	246.36	89.12	1,190.94	-1,162.28	5,193.64	4,895.86	297.78	17.441		
13,000.00	7,110.86	7,105.86	7,110.86	175.16	246.34	89.11	1,190.94	-1,162.28	5,290.94	4,993.18	297.76	17.769		
13,100.00	7,110.49	7,105.49	7,110.49	177.96	246.33	89.09	1,190.94	-1,162.28	5,388.34	5,090.60	297.73	18.098		
13,200.00	7,110.12	7,105.12	7,110.12	180.77	246.32	89.07	1,190.94	-1,162.28	5,485.83	5,188.11	297.71	18.427		
13,300.00	7,109.76	7,104.76	7,109.76	183.58	246.30	89.06	1,190.94	-1,162.28	5,583.41	5,285.71	297.69	18.756		
13,400.00	7,109.39	7,104.39	7,109.39	186.40	246.29	89.04	1,190.94	-1,162.28	5,681.07	5,383.39	297.68	19.085		
13,500.00	7,109.03	7,104.03	7,109.03	189.21	246.28	89.02	1,190.94	-1,162.28	5,778.81	5,481.15	297.66	19.414		
13,600.00	7,108.66	7,103.66	7,108.66	192.03	246.27	89.00	1,190.94	-1,162.28	5,876.63	5,578.98	297.65	19.743		
13,700.00	7,108.29	7,103.29	7,108.29	194.84	246.25	88.99	1,190.94	-1,162.28	5,974.52	5,676.88	297.64	20.073		
13,800.00	7,107.93	7,102.93	7,107.93	197.66	246.24	88.97	1,190.94	-1,162.28	6,072.48	5,774.85	297.63	20.403		
13,900.00	7,107.56	7,102.56	7,107.56	200.48	246.23	88.95	1,190.94	-1,162.28	6,170.51	5,872.88	297.63	20.732		
14,000.00	7,107.19	7,102.19	7,107.19	203.30	246.21	88.93	1,190.94	-1,162.28	6,268.60	5,970.98	297.62	21.062		
14,100.00	7,106.83	7,101.83	7,106.83	206.12	246.20	88.92	1,190.94	-1,162.28	6,366.74	6,069.13	297.62	21.392		
14,200.00	7,106.46	7,101.46	7,106.46	208.94	246.19	88.90	1,190.94	-1,162.28	6,464.95	6,167.33	297.62	21.722		
14,300.00	7,106.10	7,101.10	7,106.10	211.76	246.18	88.88	1,190.94	-1,162.28	6,563.21	6,265.59	297.62	22.052		
14,400.00	7,105.73	7,100.73	7,105.73	214.58	246.16	88.86	1,190.94	-1,162.28	6,661.52	6,363.90	297.62	22.383		
14,500.00	7,105.36	7,100.36	7,105.36	217.40	246.15	88.85	1,190.94	-1,162.28	6,759.88	6,462.25	297.62	22.713		
14,600.00	7,105.00	7,100.00	7,105.00	220.23	246.14	88.83	1,190.94	-1,162.28	6,858.28	6,560.65	297.63	23.043		
14,700.00	7,104.63	7,100.37	7,104.63	223.05	246.15	88.81	1,190.94	-1,162.28	6,956.73	6,659.07	297.66	23.371		
14,800.00	7,104.27	7,100.74	7,104.27	225.88	246.16	88.80	1,190.94	-1,162.28	7,055.23	6,757.53	297.70	23.699		
14,872.41	7,104.00	7,101.00	7,104.00	227.93	246.17	88.78	1,190.94	-1,162.28	7,126.58	6,828.86	297.72	23.937		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	19.00	3.28	3.28	-95.86	-113.27	-1,103.93	1,109.89				
100.00	100.00	81.00	100.00	3.28	3.57	-95.86	-113.27	-1,103.93	1,109.73	1,102.87	6.86	161.852	
200.00	200.00	181.00	200.00	3.34	5.63	-95.86	-113.27	-1,103.93	1,109.73	1,100.77	8.96	123.786	
300.00	300.00	281.00	300.00	3.44	8.71	-95.86	-113.27	-1,103.93	1,109.73	1,097.58	12.15	91.331	
400.00	400.00	381.00	400.00	3.60	12.01	-95.86	-113.27	-1,103.93	1,109.73	1,094.12	15.62	71.068	
500.00	500.00	481.00	500.00	3.81	15.40	-95.86	-113.27	-1,103.93	1,109.73	1,090.53	19.21	57.782	
600.00	599.98	580.98	599.98	4.04	18.82	-5.87	-113.27	-1,103.93	1,108.13	1,085.27	22.86	48.466	
700.00	699.95	680.95	699.95	4.30	22.27	-5.88	-113.27	-1,103.93	1,105.65	1,079.08	26.57	41.613	
800.00	799.92	780.92	799.92	4.59	25.73	-5.90	-113.27	-1,103.93	1,103.16	1,072.85	30.32	36.390	
900.00	899.89	880.89	899.89	4.90	29.19	-5.91	-113.27	-1,103.93	1,100.68	1,066.59	34.09	32.287	
1,000.00	999.86	980.86	999.86	5.23	32.66	-5.92	-113.27	-1,103.93	1,098.19	1,060.30	37.89	28.984	
1,100.00	1,099.83	1,080.83	1,099.83	5.58	36.14	-5.94	-113.27	-1,103.93	1,095.71	1,054.00	41.71	26.271	
1,200.00	1,199.80	1,180.80	1,199.80	5.94	39.61	-5.95	-113.27	-1,103.93	1,093.22	1,047.68	45.54	24.005	
1,300.00	1,299.77	1,280.77	1,299.77	6.30	43.09	-5.96	-113.27	-1,103.93	1,090.74	1,041.35	49.39	22.085	
1,400.00	1,399.73	1,380.73	1,399.73	6.68	46.57	-5.98	-113.27	-1,103.93	1,088.25	1,035.01	53.24	20.439	
1,500.00	1,499.70	1,480.70	1,499.70	7.07	50.05	-5.99	-113.27	-1,103.93	1,085.77	1,028.66	57.11	19.012	
1,600.00	1,599.67	1,580.67	1,599.67	7.46	53.54	-6.00	-113.27	-1,103.93	1,083.28	1,022.30	60.98	17.764	
1,700.00	1,699.64	1,680.64	1,699.64	7.85	57.02	-6.02	-113.27	-1,103.93	1,080.80	1,015.94	64.86	16.664	
1,800.00	1,799.61	1,780.61	1,799.61	8.25	60.50	-6.03	-113.27	-1,103.93	1,078.31	1,009.57	68.74	15.686	
1,900.00	1,899.58	1,880.58	1,899.58	8.66	63.99	-6.05	-113.27	-1,103.93	1,075.83	1,003.20	72.63	14.812	
2,000.00	1,999.55	1,980.55	1,999.55	9.06	67.48	-6.06	-113.27	-1,103.93	1,073.34	996.82	76.52	14.026	
2,100.00	2,099.52	2,080.52	2,099.52	9.47	70.96	-6.07	-113.27	-1,103.93	1,070.86	990.44	80.42	13.316	
2,200.00	2,199.48	2,180.48	2,199.48	9.89	74.45	-6.09	-113.27	-1,103.93	1,068.37	984.06	84.32	12.671	
2,300.00	2,299.45	2,280.45	2,299.45	10.30	77.93	-6.10	-113.27	-1,103.93	1,065.89	977.67	88.22	12.082	
2,400.00	2,399.42	2,380.42	2,399.42	10.72	81.42	-6.12	-113.27	-1,103.93	1,063.40	971.28	92.12	11.544	
2,500.00	2,499.39	2,480.39	2,499.39	11.14	84.91	-6.13	-113.27	-1,103.93	1,060.92	964.89	96.03	11.048	
2,600.00	2,599.36	2,580.36	2,599.36	11.56	88.40	-6.15	-113.27	-1,103.93	1,058.43	958.50	99.93	10.591	
2,700.00	2,699.33	2,680.33	2,699.33	11.98	91.88	-6.16	-113.27	-1,103.93	1,055.95	952.11	103.84	10.169	
2,800.00	2,799.30	2,780.30	2,799.30	12.41	95.37	-6.17	-113.27	-1,103.93	1,053.47	945.72	107.75	9.777	
2,900.00	2,899.27	2,880.27	2,899.27	12.83	98.86	-6.19	-113.27	-1,103.93	1,050.98	939.32	111.66	9.412	
3,000.00	2,999.23	2,980.23	2,999.23	13.26	102.35	-6.20	-113.27	-1,103.93	1,048.50	932.92	115.57	9.072	
3,100.00	3,099.20	3,080.20	3,099.20	13.68	105.84	-6.22	-113.27	-1,103.93	1,046.01	926.53	119.49	8.754	
3,200.00	3,199.17	3,180.17	3,199.17	14.11	109.32	-6.23	-113.27	-1,103.93	1,043.53	920.13	123.40	8.456	
3,300.00	3,299.14	3,280.14	3,299.14	14.54	112.81	-6.25	-113.27	-1,103.93	1,041.05	913.73	127.32	8.177	
3,400.00	3,399.11	3,380.11	3,399.11	14.97	116.30	-6.26	-113.27	-1,103.93	1,038.56	907.33	131.23	7.914	
3,500.00	3,499.08	3,480.08	3,499.08	15.40	119.79	-6.28	-113.27	-1,103.93	1,036.08	900.93	135.15	7.666	
3,600.00	3,599.05	3,580.05	3,599.05	15.83	123.28	-6.29	-113.27	-1,103.93	1,033.59	894.53	139.07	7.432	
3,700.00	3,699.02	3,680.02	3,699.02	16.26	126.77	-6.31	-113.27	-1,103.93	1,031.11	888.13	142.99	7.211	
3,800.00	3,798.98	3,779.98	3,798.98	16.69	130.26	-6.32	-113.27	-1,103.93	1,028.63	881.72	146.90	7.002	
3,900.00	3,898.95	3,879.95	3,898.95	17.12	133.74	-6.34	-113.27	-1,103.93	1,026.14	875.32	150.82	6.804	
4,000.00	3,998.92	3,979.92	3,998.92	17.55	137.23	-6.36	-113.27	-1,103.93	1,023.66	868.92	154.74	6.615	
4,100.00	4,098.89	4,079.89	4,098.89	17.98	140.72	-6.37	-113.27	-1,103.93	1,021.18	862.51	158.66	6.436	
4,200.00	4,198.86	4,179.86	4,198.86	18.42	144.21	-6.39	-113.27	-1,103.93	1,018.69	856.11	162.58	6.266	
4,300.00	4,298.83	4,279.83	4,298.83	18.85	147.70	-6.40	-113.27	-1,103.93	1,016.21	849.71	166.50	6.103	
4,400.00	4,398.80	4,379.80	4,398.80	19.28	151.19	-6.42	-113.27	-1,103.93	1,013.73	843.30	170.43	5.948	
4,500.00	4,498.77	4,479.77	4,498.77	19.72	154.68	-6.43	-113.27	-1,103.93	1,011.24	836.90	174.35	5.800	
4,600.00	4,598.73	4,579.73	4,598.73	20.15	158.17	-6.45	-113.27	-1,103.93	1,008.76	830.49	178.27	5.659	
4,700.00	4,698.70	4,679.70	4,698.70	20.58	161.66	-6.47	-113.27	-1,103.93	1,006.28	824.09	182.19	5.523	
4,800.00	4,798.67	4,779.67	4,798.67	21.02	165.15	-6.48	-113.27	-1,103.93	1,003.80	817.68	186.11	5.393	
4,900.00	4,898.64	4,879.64	4,898.64	21.45	168.64	-6.50	-113.27	-1,103.93	1,001.31	811.28	190.04	5.269	
5,000.00	4,998.61	4,979.61	4,998.61	21.89	172.12	-6.51	-113.27	-1,103.93	998.83	804.87	193.96	5.150	
5,100.00	5,098.58	5,079.58	5,098.58	22.32	175.61	-6.53	-113.27	-1,103.93	996.35	798.47	197.88	5.035	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-24(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,179.55	5,198.55	22.76	179.10	-6.55	-113.27	-1,103.93	993.87	792.06	201.81	4.925		
5,300.00	5,298.52	5,279.52	5,298.52	23.20	182.59	-6.56	-113.27	-1,103.93	991.38	785.65	205.73	4.819		
5,400.00	5,398.49	5,379.49	5,398.49	23.63	186.08	-6.58	-113.27	-1,103.93	988.90	779.25	209.65	4.717		
5,500.00	5,498.45	5,479.45	5,498.45	24.07	189.57	-6.60	-113.27	-1,103.93	986.42	772.84	213.58	4.619		
5,600.00	5,598.42	5,579.42	5,598.42	24.50	193.06	-6.61	-113.27	-1,103.93	983.94	766.43	217.50	4.524		
5,700.00	5,698.39	5,679.39	5,698.39	24.94	196.55	-6.63	-113.27	-1,103.93	981.45	760.03	221.43	4.432		
5,800.00	5,798.36	5,779.36	5,798.36	25.38	200.04	-6.65	-113.27	-1,103.93	978.97	753.62	225.35	4.344		
5,900.00	5,898.33	5,879.33	5,898.33	25.81	203.53	-6.66	-113.27	-1,103.93	976.49	747.22	229.28	4.259		
6,000.00	5,998.30	5,979.30	5,998.30	26.25	207.02	-6.68	-113.27	-1,103.93	974.01	740.81	233.20	4.177		
6,100.00	6,098.27	6,079.27	6,098.27	26.69	210.51	-6.70	-113.27	-1,103.93	971.53	734.40	237.13	4.097		
6,200.00	6,198.24	6,179.24	6,198.24	27.12	214.00	-6.71	-113.27	-1,103.93	969.05	728.00	241.05	4.020		
6,300.00	6,298.20	6,279.20	6,298.20	27.56	217.49	-6.73	-113.27	-1,103.93	966.56	721.59	244.98	3.946		
6,400.00	6,398.17	6,379.17	6,398.17	28.00	220.98	-6.75	-113.27	-1,103.93	964.08	715.18	248.90	3.873		
6,500.00	6,498.14	6,479.14	6,498.14	28.43	224.47	-6.77	-113.27	-1,103.93	961.60	708.78	252.83	3.803		
6,600.00	6,597.68	6,578.68	6,597.68	28.88	227.94	-6.79	-113.27	-1,103.93	959.11	702.37	256.74	3.712		
6,700.00	6,697.65	6,678.65	6,697.65	29.32	231.33	-6.81	-113.27	-1,103.93	956.62	695.96	260.66	3.621		
6,800.00	6,797.62	6,778.62	6,797.62	29.77	234.54	-6.83	-113.27	-1,103.93	954.13	689.55	264.57	3.530		
6,900.00	6,897.59	6,878.59	6,897.59	30.21	237.50	-6.85	-113.27	-1,103.93	951.64	683.14	268.48	3.439		
7,000.00	6,997.56	6,978.56	6,997.56	30.65	240.14	-6.87	-113.27	-1,103.93	949.15	676.73	272.39	3.348		
7,100.00	7,097.53	7,078.53	7,097.53	31.09	242.90	-6.89	-113.27	-1,103.93	946.66	670.32	276.30	3.257		
7,200.00	7,197.50	7,178.50	7,197.50	31.53	245.19	-6.91	-113.27	-1,103.93	944.17	663.91	280.21	3.166		
7,300.00	7,297.47	7,278.47	7,297.47	31.97	247.49	-6.93	-113.27	-1,103.93	941.68	657.50	284.12	3.075		
7,400.00	7,397.44	7,378.44	7,397.44	32.41	249.79	-6.95	-113.27	-1,103.93	939.19	651.09	288.03	2.984		
7,500.00	7,497.41	7,478.41	7,497.41	32.85	252.09	-6.97	-113.27	-1,103.93	936.70	644.68	291.94	2.893		
7,600.00	7,597.38	7,578.38	7,597.38	33.29	254.39	-6.99	-113.27	-1,103.93	934.21	638.27	295.85	2.802		
7,700.00	7,697.35	7,678.35	7,697.35	33.73	256.69	-7.01	-113.27	-1,103.93	931.72	631.86	299.76	2.711		
7,800.00	7,797.32	7,778.32	7,797.32	34.17	258.99	-7.03	-113.27	-1,103.93	929.23	625.45	303.67	2.620		
7,900.00	7,897.29	7,878.29	7,897.29	34.61	261.29	-7.05	-113.27	-1,103.93	926.74	619.04	307.58	2.529		
8,000.00	7,997.26	7,978.26	7,997.26	35.05	263.59	-7.07	-113.27	-1,103.93	924.25	612.63	311.49	2.438		
8,100.00	8,097.23	8,078.23	8,097.23	35.49	265.89	-7.09	-113.27	-1,103.93	921.76	606.22	315.40	2.347		
8,200.00	8,197.20	8,178.20	8,197.20	35.93	268.19	-7.11	-113.27	-1,103.93	919.27	600.00	319.31	2.256		
8,300.00	8,297.17	8,278.17	8,297.17	36.37	270.49	-7.13	-113.27	-1,103.93	916.78	593.59	323.22	2.165		
8,400.00	8,397.14	8,378.14	8,397.14	36.81	272.79	-7.15	-113.27	-1,103.93	914.29	587.18	327.13	2.074		
8,500.00	8,497.11	8,478.11	8,497.11	37.25	275.09	-7.17	-113.27	-1,103.93	911.80	580.77	331.04	1.983		
8,600.00	8,597.08	8,578.08	8,597.08	37.69	277.39	-7.19	-113.27	-1,103.93	909.31	574.36	334.95	1.892		
8,700.00	8,697.05	8,678.05	8,697.05	38.13	279.69	-7.21	-113.27	-1,103.93	906.82	567.95	338.86	1.801		
8,800.00	8,797.02	8,778.02	8,797.02	38.57	281.99	-7.23	-113.27	-1,103.93	904.33	561.54	342.77	1.710		
8,900.00	8,897.00	8,878.00	8,897.00	39.01	284.29	-7.25	-113.27	-1,103.93	901.84	555.13	346.68	1.619		
9,000.00	8,997.00	8,978.00	8,997.00	39.45	286.59	-7.27	-113.27	-1,103.93	899.35	548.72	350.59	1.528		
9,100.00	9,097.00	9,078.00	9,097.00	39.89	288.89	-7.29	-113.27	-1,103.93	896.86	542.31	354.50	1.437		
9,200.00	9,197.00	9,178.00	9,197.00	40.33	291.19	-7.31	-113.27	-1,103.93	894.37	535.90	358.41	1.346		
9,300.00	9,297.00	9,278.00	9,297.00	40.77	293.49	-7.33	-113.27	-1,103.93	891.88	529.49	362.32	1.255		
9,400.00	9,397.00	9,378.00	9,397.00	41.21	295.79	-7.35	-113.27	-1,103.93	889.39	523.08	366.23	1.164		
9,500.00	9,497.00	9,478.00	9,497.00	41.65	298.09	-7.37	-113.27	-1,103.93	886.90	516.67	370.14	1.073		
9,600.00	9,597.00	9,578.00	9,597.00	42.09	300.39	-7.39	-113.27	-1,103.93	884.41	510.26	374.05	0.982		
9,700.00	9,697.00	9,678.00	9,697.00	42.53	302.69	-7.41	-113.27	-1,103.93	881.92	503.85	377.96	0.891		
9,800.00	9,797.00	9,778.00	9,797.00	42.97	304.99	-7.43	-113.27	-1,103.93	879.43	497.44	381.87	0.800		
9,900.00	9,897.00	9,878.00	9,897.00	43.41	307.29	-7.45	-113.27	-1,103.93	876.94	491.03	385.78	0.709		
10,000.00	9,997.00	9,978.00	9,997.00	43.85	309.59	-7.47	-113.27	-1,103.93	874.45	484.62	389.69	0.618		
10,100.00	10,097.00	10,078.00	10,097.00	44.29	311.89	-7.49	-113.27	-1,103.93	871.96	478.21	393.60	0.527		
10,200.00	10,197.00	10,178.00	10,197.00	44.73	314.19	-7.51	-113.27	-1,103.93	869.47	471.80	397.51	0.436		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.74	7,101.74	7,120.74	100.32	246.20	-84.53	-113.27	-1,103.93	2,485.33	2,207.23	278.11	8.937		
10,400.00	7,120.38	7,101.38	7,120.38	103.04	246.19	-84.31	-113.27	-1,103.93	2,585.26	2,307.13	278.13	9.295		
10,500.00	7,120.01	7,101.01	7,120.01	105.76	246.17	-84.09	-113.27	-1,103.93	2,685.20	2,407.04	278.15	9.654		
10,600.00	7,119.64	7,100.64	7,119.64	108.48	246.16	-83.87	-113.27	-1,103.93	2,785.14	2,506.95	278.18	10.012		
10,700.00	7,119.28	7,100.28	7,119.28	111.22	246.15	-83.65	-113.27	-1,103.93	2,885.08	2,606.87	278.21	10.370		
10,800.00	7,118.91	7,100.09	7,118.91	113.96	246.14	-83.43	-113.27	-1,103.93	2,985.03	2,706.78	278.24	10.728		
10,900.00	7,118.55	7,100.45	7,118.55	116.70	246.15	-83.21	-113.27	-1,103.93	3,084.98	2,806.68	278.30	11.085		
11,000.00	7,118.18	7,100.82	7,118.18	119.45	246.17	-83.00	-113.27	-1,103.93	3,184.93	2,906.57	278.36	11.442		
11,100.00	7,117.81	7,101.19	7,117.81	122.21	246.18	-82.78	-113.27	-1,103.93	3,284.89	3,006.47	278.42	11.798		
11,200.00	7,117.45	7,101.55	7,117.45	124.97	246.19	-82.56	-113.27	-1,103.93	3,384.84	3,106.37	278.48	12.155		
11,300.00	7,117.08	7,101.92	7,117.08	127.73	246.20	-82.34	-113.27	-1,103.93	3,484.81	3,206.27	278.54	12.511		
11,400.00	7,116.72	7,102.29	7,116.72	130.50	246.22	-82.13	-113.27	-1,103.93	3,584.77	3,306.17	278.60	12.867		
11,500.00	7,116.35	7,102.65	7,116.35	133.27	246.23	-81.91	-113.27	-1,103.93	3,684.73	3,406.07	278.66	13.223		
11,600.00	7,115.98	7,103.02	7,115.98	136.04	246.24	-81.69	-113.27	-1,103.93	3,784.70	3,505.98	278.73	13.579		
11,700.00	7,115.62	7,103.38	7,115.62	138.82	246.26	-81.48	-113.27	-1,103.93	3,884.67	3,605.88	278.79	13.934		
11,800.00	7,115.25	7,103.75	7,115.25	141.60	246.27	-81.26	-113.27	-1,103.93	3,984.64	3,705.78	278.86	14.289		
11,900.00	7,114.88	7,104.12	7,114.88	144.39	246.28	-81.04	-113.27	-1,103.93	4,084.61	3,805.69	278.93	14.644		
12,000.00	7,114.52	7,104.48	7,114.52	147.17	246.29	-80.83	-113.27	-1,103.93	4,184.58	3,905.59	278.99	14.999		
12,100.00	7,114.15	7,104.85	7,114.15	149.96	246.31	-80.61	-113.27	-1,103.93	4,284.56	4,005.49	279.06	15.353		
12,200.00	7,113.79	7,105.21	7,113.79	152.75	246.32	-80.40	-113.27	-1,103.93	4,384.53	4,105.40	279.14	15.708		
12,300.00	7,113.42	7,105.58	7,113.42	155.55	246.33	-80.18	-113.27	-1,103.93	4,484.51	4,205.30	279.21	16.062		
12,400.00	7,113.05	7,105.95	7,113.05	158.34	246.35	-79.97	-113.27	-1,103.93	4,584.49	4,305.21	279.28	16.415		
12,500.00	7,112.69	7,106.31	7,112.69	161.14	246.36	-79.76	-113.27	-1,103.93	4,684.47	4,405.11	279.35	16.769		
12,600.00	7,112.32	7,106.68	7,112.32	163.94	246.37	-79.54	-113.27	-1,103.93	4,784.45	4,505.02	279.43	17.122		
12,700.00	7,111.96	7,107.05	7,111.96	166.74	246.38	-79.33	-113.27	-1,103.93	4,884.43	4,604.92	279.51	17.475		
12,800.00	7,111.59	7,107.41	7,111.59	169.54	246.40	-79.11	-113.27	-1,103.93	4,984.41	4,704.82	279.58	17.828		
12,900.00	7,111.22	7,107.78	7,111.22	172.35	246.41	-78.90	-113.27	-1,103.93	5,084.39	4,804.73	279.66	18.180		
13,000.00	7,110.86	7,108.14	7,110.86	175.16	246.42	-78.69	-113.27	-1,103.93	5,184.37	4,904.63	279.74	18.533		
13,100.00	7,110.49	7,108.51	7,110.49	177.96	246.43	-78.48	-113.27	-1,103.93	5,284.35	5,004.53	279.82	18.885		
13,200.00	7,110.12	7,108.88	7,110.12	180.77	246.45	-78.26	-113.27	-1,103.93	5,384.34	5,104.44	279.90	19.237		
13,300.00	7,109.76	7,109.24	7,109.76	183.58	246.46	-78.05	-113.27	-1,103.93	5,484.32	5,204.34	279.98	19.588		
13,400.00	7,109.39	7,109.61	7,109.39	186.40	246.47	-77.84	-113.27	-1,103.93	5,584.31	5,304.24	280.07	19.939		
13,500.00	7,109.03	7,109.97	7,109.03	189.21	246.49	-77.63	-113.27	-1,103.93	5,684.29	5,404.14	280.15	20.290		
13,600.00	7,108.66	7,089.66	7,108.66	192.03	245.78	-77.42	-113.27	-1,103.93	5,784.28	5,504.76	279.51	20.694		
13,700.00	7,108.29	7,089.29	7,108.29	194.84	245.76	-77.21	-113.27	-1,103.93	5,884.26	5,604.69	279.57	21.047		
13,800.00	7,107.93	7,088.93	7,107.93	197.66	245.75	-77.00	-113.27	-1,103.93	5,984.25	5,704.61	279.64	21.400		
13,900.00	7,107.56	7,088.56	7,107.56	200.48	245.74	-76.79	-113.27	-1,103.93	6,084.24	5,804.54	279.70	21.753		
14,000.00	7,107.19	7,088.19	7,107.19	203.30	245.73	-76.58	-113.27	-1,103.93	6,184.22	5,904.46	279.76	22.105		
14,100.00	7,106.83	7,087.83	7,106.83	206.12	245.71	-76.37	-113.27	-1,103.93	6,284.21	6,004.39	279.83	22.458		
14,200.00	7,106.46	7,087.46	7,106.46	208.94	245.70	-76.16	-113.27	-1,103.93	6,384.20	6,104.31	279.89	22.810		
14,300.00	7,106.10	7,087.10	7,106.10	211.76	245.69	-75.95	-113.27	-1,103.93	6,484.19	6,204.23	279.96	23.161		
14,400.00	7,105.73	7,086.73	7,105.73	214.58	245.67	-75.75	-113.27	-1,103.93	6,584.18	6,304.15	280.02	23.513		
14,500.00	7,105.36	7,086.36	7,105.36	217.40	245.66	-75.54	-113.27	-1,103.93	6,684.17	6,404.08	280.09	23.864		
14,600.00	7,105.00	7,086.00	7,105.00	220.23	245.65	-75.33	-113.27	-1,103.93	6,784.16	6,504.00	280.16	24.215		
14,700.00	7,104.63	7,085.63	7,104.63	223.05	245.64	-75.12	-113.27	-1,103.93	6,884.14	6,603.92	280.23	24.566		
14,800.00	7,104.27	7,085.27	7,104.27	225.88	245.62	-74.92	-113.27	-1,103.93	6,984.13	6,703.84	280.30	24.917		
14,872.41	7,104.00	7,085.00	7,104.00	227.93	245.61	-74.77	-113.27	-1,103.93	7,056.54	6,776.19	280.35	25.171		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-25(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	12.00	3.28	3.28	-69.03	568.00	-1,482.16	1,587.32					
100.00	100.00	88.00	100.00	3.28	3.62	-69.03	568.00	-1,482.16	1,587.27	1,580.36	6.91	229.821		
200.00	200.00	188.00	200.00	3.34	5.83	-69.03	568.00	-1,482.16	1,587.27	1,578.11	9.17	173.185		
300.00	300.00	288.00	300.00	3.44	8.93	-69.03	568.00	-1,482.16	1,587.27	1,574.89	12.38	128.238		
400.00	400.00	388.00	400.00	3.60	12.25	-69.03	568.00	-1,482.16	1,587.27	1,571.42	15.85	100.141		
500.00	500.00	488.00	500.00	3.81	15.64	-69.03	568.00	-1,482.16	1,587.27	1,567.83	19.44	81.631		
600.00	599.98	587.98	599.98	4.04	19.07	20.99	568.00	-1,482.16	1,585.77	1,562.67	23.10	68.634		
700.00	699.95	687.95	699.95	4.30	22.51	21.03	568.00	-1,482.16	1,583.44	1,556.63	26.81	59.057		
800.00	799.92	787.92	799.92	4.59	25.97	21.06	568.00	-1,482.16	1,581.11	1,550.55	30.56	51.741		
900.00	899.89	887.89	899.89	4.90	29.43	21.09	568.00	-1,482.16	1,578.78	1,544.44	34.33	45.982		
1,000.00	999.86	987.86	999.86	5.23	32.90	21.12	568.00	-1,482.16	1,576.44	1,538.31	38.13	41.339		
1,100.00	1,099.83	1,087.83	1,099.83	5.58	36.38	21.16	568.00	-1,482.16	1,574.11	1,532.16	41.95	37.521		
1,200.00	1,199.80	1,187.80	1,199.80	5.94	39.86	21.19	568.00	-1,482.16	1,571.78	1,526.00	45.79	34.328		
1,300.00	1,299.77	1,287.77	1,299.77	6.30	43.33	21.22	568.00	-1,482.16	1,569.45	1,519.82	49.63	31.620		
1,400.00	1,399.73	1,387.73	1,399.73	6.68	46.82	21.26	568.00	-1,482.16	1,567.13	1,513.63	53.49	29.297		
1,500.00	1,499.70	1,487.70	1,499.70	7.07	50.30	21.29	568.00	-1,482.16	1,564.80	1,507.44	57.36	27.282		
1,600.00	1,599.67	1,587.67	1,599.67	7.46	53.78	21.32	568.00	-1,482.16	1,562.47	1,501.24	61.23	25.518		
1,700.00	1,699.64	1,687.64	1,699.64	7.85	57.26	21.36	568.00	-1,482.16	1,560.14	1,495.03	65.11	23.962		
1,800.00	1,799.61	1,787.61	1,799.61	8.25	60.75	21.39	568.00	-1,482.16	1,557.81	1,488.82	68.99	22.579		
1,900.00	1,899.58	1,887.58	1,899.58	8.66	64.23	21.42	568.00	-1,482.16	1,555.49	1,482.61	72.88	21.342		
2,000.00	1,999.55	1,987.55	1,999.55	9.06	67.72	21.46	568.00	-1,482.16	1,553.16	1,476.39	76.78	20.230		
2,100.00	2,099.52	2,087.52	2,099.52	9.47	71.21	21.49	568.00	-1,482.16	1,550.84	1,470.17	80.67	19.224		
2,200.00	2,199.48	2,187.48	2,199.48	9.89	74.69	21.52	568.00	-1,482.16	1,548.51	1,463.94	84.57	18.310		
2,300.00	2,299.45	2,287.45	2,299.45	10.30	78.18	21.56	568.00	-1,482.16	1,546.19	1,457.72	88.47	17.477		
2,400.00	2,399.42	2,387.42	2,399.42	10.72	81.67	21.59	568.00	-1,482.16	1,543.86	1,451.49	92.38	16.713		
2,500.00	2,499.39	2,487.39	2,499.39	11.14	85.15	21.63	568.00	-1,482.16	1,541.54	1,445.26	96.28	16.011		
2,600.00	2,599.36	2,587.36	2,599.36	11.56	88.64	21.66	568.00	-1,482.16	1,539.22	1,439.03	100.19	15.363		
2,700.00	2,699.33	2,687.33	2,699.33	11.98	92.13	21.70	568.00	-1,482.16	1,536.90	1,432.80	104.10	14.764		
2,800.00	2,799.30	2,787.30	2,799.30	12.41	95.62	21.73	568.00	-1,482.16	1,534.57	1,426.57	108.01	14.208		
2,900.00	2,899.27	2,887.27	2,899.27	12.83	99.10	21.76	568.00	-1,482.16	1,532.25	1,420.33	111.92	13.691		
3,000.00	2,999.23	2,987.23	2,999.23	13.26	102.59	21.80	568.00	-1,482.16	1,529.93	1,414.10	115.83	13.208		
3,100.00	3,099.20	3,087.20	3,099.20	13.68	106.08	21.83	568.00	-1,482.16	1,527.61	1,407.87	119.75	12.757		
3,200.00	3,199.17	3,187.17	3,199.17	14.11	109.57	21.87	568.00	-1,482.16	1,525.29	1,401.63	123.66	12.334		
3,300.00	3,299.14	3,287.14	3,299.14	14.54	113.06	21.90	568.00	-1,482.16	1,522.98	1,395.40	127.58	11.938		
3,400.00	3,399.11	3,387.11	3,399.11	14.97	116.54	21.94	568.00	-1,482.16	1,520.66	1,389.16	131.49	11.564		
3,500.00	3,499.08	3,487.08	3,499.08	15.40	120.03	21.97	568.00	-1,482.16	1,518.34	1,382.93	135.41	11.213		
3,600.00	3,599.05	3,587.05	3,599.05	15.83	123.52	22.01	568.00	-1,482.16	1,516.02	1,376.69	139.33	10.881		
3,700.00	3,699.02	3,687.02	3,699.02	16.26	127.01	22.05	568.00	-1,482.16	1,513.71	1,370.46	143.25	10.567		
3,800.00	3,798.98	3,786.98	3,798.98	16.69	130.50	22.08	568.00	-1,482.16	1,511.39	1,364.22	147.17	10.270		
3,900.00	3,898.95	3,886.95	3,898.95	17.12	133.99	22.12	568.00	-1,482.16	1,509.08	1,357.99	151.09	9.988		
4,000.00	3,998.92	3,986.92	3,998.92	17.55	137.48	22.15	568.00	-1,482.16	1,506.76	1,351.75	155.01	9.720		
4,100.00	4,098.89	4,086.89	4,098.89	17.98	140.97	22.19	568.00	-1,482.16	1,504.45	1,345.52	158.93	9.466		
4,200.00	4,198.86	4,186.86	4,198.86	18.42	144.46	22.22	568.00	-1,482.16	1,502.13	1,339.28	162.85	9.224		
4,300.00	4,298.83	4,286.83	4,298.83	18.85	147.94	22.26	568.00	-1,482.16	1,499.82	1,333.05	166.77	8.993		
4,400.00	4,398.80	4,386.80	4,398.80	19.28	151.43	22.30	568.00	-1,482.16	1,497.51	1,326.81	170.69	8.773		
4,500.00	4,498.77	4,486.77	4,498.77	19.72	154.92	22.33	568.00	-1,482.16	1,495.20	1,320.58	174.62	8.563		
4,600.00	4,598.73	4,586.73	4,598.73	20.15	158.41	22.37	568.00	-1,482.16	1,492.88	1,314.35	178.54	8.362		
4,700.00	4,698.70	4,686.70	4,698.70	20.58	161.90	22.41	568.00	-1,482.16	1,490.57	1,308.11	182.46	8.169		
4,800.00	4,798.67	4,786.67	4,798.67	21.02	165.39	22.44	568.00	-1,482.16	1,488.26	1,301.88	186.39	7.985		
4,900.00	4,898.64	4,886.64	4,898.64	21.45	168.88	22.48	568.00	-1,482.16	1,485.96	1,295.65	190.31	7.808		
5,000.00	4,998.61	4,986.61	4,998.61	21.89	172.37	22.52	568.00	-1,482.16	1,483.65	1,289.41	194.23	7.638		
5,100.00	5,098.58	5,086.58	5,098.58	22.32	175.86	22.55	568.00	-1,482.16	1,481.34	1,283.18	198.16	7.476		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - SENA 15-25(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,186.55	5,198.55	22.76	179.35	22.59	568.00	-1,482.16	1,479.03	1,276.95	202.08	7.319		
5,300.00	5,298.52	5,286.52	5,298.52	23.20	182.84	22.63	568.00	-1,482.16	1,476.72	1,270.72	206.01	7.168		
5,400.00	5,398.49	5,386.49	5,398.49	23.63	186.33	22.66	568.00	-1,482.16	1,474.42	1,264.49	209.93	7.023		
5,500.00	5,498.45	5,486.45	5,498.45	24.07	189.82	22.70	568.00	-1,482.16	1,472.11	1,258.26	213.85	6.884		
5,600.00	5,598.42	5,586.42	5,598.42	24.50	193.30	22.74	568.00	-1,482.16	1,469.81	1,252.03	217.78	6.749		
5,700.00	5,698.39	5,686.39	5,698.39	24.94	196.79	22.78	568.00	-1,482.16	1,467.50	1,245.80	221.71	6.619		
5,800.00	5,798.36	5,786.36	5,798.36	25.38	200.28	22.82	568.00	-1,482.16	1,465.20	1,239.57	225.63	6.494		
5,900.00	5,898.33	5,886.33	5,898.33	25.81	203.77	22.85	568.00	-1,482.16	1,462.90	1,233.34	229.56	6.373		
6,000.00	5,998.30	5,986.30	5,998.30	26.25	207.26	22.89	568.00	-1,482.16	1,460.59	1,227.11	233.48	6.256		
6,100.00	6,098.27	6,086.27	6,098.27	26.69	210.75	22.93	568.00	-1,482.16	1,458.29	1,220.89	237.41	6.143		
6,200.00	6,198.24	6,186.24	6,198.24	27.12	214.24	22.97	568.00	-1,482.16	1,455.99	1,214.66	241.33	6.033		
6,300.00	6,298.20	6,286.20	6,298.20	27.56	217.73	23.01	568.00	-1,482.16	1,453.69	1,208.43	245.26	5.927		
6,400.00	6,398.17	6,386.17	6,398.17	28.00	221.22	23.04	568.00	-1,482.16	1,451.39	1,202.21	249.19	5.825		
6,500.00	6,498.14	6,486.14	6,498.14	28.43	224.71	23.08	568.00	-1,482.16	1,449.09	1,195.98	253.11	5.725		
6,600.00	6,597.68	6,585.68	6,597.68	28.88	228.18	24.45	568.00	-1,482.16	1,441.29	1,184.26	257.03	5.608		
6,700.00	6,694.68	6,682.68	6,694.68	29.32	231.57	25.80	568.00	-1,482.16	1,419.53	1,158.68	260.85	5.442		
6,800.00	6,786.74	6,774.74	6,786.74	29.77	234.78	28.07	568.00	-1,482.16	1,384.39	1,119.90	264.49	5.234		
6,900.00	6,871.61	6,859.61	6,871.61	30.24	237.75	31.56	568.00	-1,482.16	1,336.96	1,069.11	267.85	4.991		
7,000.00	6,947.19	6,935.19	6,947.19	30.74	240.38	36.68	568.00	-1,482.16	1,278.74	1,007.88	270.86	4.721		
7,100.00	7,011.62	7,000.38	7,011.62	31.32	242.66	43.93	568.00	-1,482.16	1,211.63	938.14	273.49	4.430		
7,200.00	7,063.31	7,051.31	7,063.31	32.03	244.44	53.72	568.00	-1,482.16	1,137.87	862.23	275.64	4.128		
7,300.00	7,101.00	7,089.00	7,101.00	32.89	245.75	65.82	568.00	-1,482.16	1,060.03	782.64	277.39	3.821		
7,400.00	7,123.74	7,111.74	7,123.74	33.93	246.55	78.79	568.00	-1,482.16	980.95	702.22	278.74	3.519		
7,500.00	7,131.00	7,119.00	7,131.00	35.10	246.80	90.24	568.00	-1,482.16	903.65	623.90	279.74	3.230		
7,600.00	7,130.63	7,118.63	7,130.63	36.44	246.79	90.21	568.00	-1,482.16	830.86	550.07	280.78	2.959		
7,700.00	7,130.26	7,118.26	7,130.26	37.94	246.78	90.17	568.00	-1,482.16	764.24	482.01	282.23	2.708		
7,800.00	7,129.90	7,117.90	7,129.90	39.59	246.76	90.13	568.00	-1,482.16	705.55	421.40	284.15	2.483		
7,900.00	7,129.53	7,117.53	7,129.53	41.37	246.75	90.10	568.00	-1,482.16	656.92	370.42	286.50	2.293		
8,000.00	7,129.17	7,117.17	7,129.17	43.27	246.74	90.06	568.00	-1,482.16	620.71	331.56	289.15	2.147		
8,100.00	7,128.80	7,116.80	7,128.80	45.27	246.72	90.03	568.00	-1,482.16	599.19	307.39	291.80	2.053		
8,181.30	7,128.50	7,116.50	7,128.50	46.97	246.71	90.00	568.00	-1,482.16	593.65	299.97	293.68	2.021 CC		
8,200.00	7,128.43	7,116.43	7,128.43	47.36	246.71	89.99	568.00	-1,482.16	593.94	299.89	294.05	2.020 ES, SF		
8,300.00	7,128.07	7,116.07	7,128.07	49.52	246.70	89.96	568.00	-1,482.16	605.40	309.79	295.61	2.048		
8,400.00	7,127.70	7,115.70	7,127.70	51.75	246.69	89.92	568.00	-1,482.16	632.65	336.28	296.37	2.135		
8,500.00	7,127.33	7,115.33	7,127.33	54.04	246.67	89.89	568.00	-1,482.16	673.79	377.34	296.45	2.273		
8,600.00	7,126.97	7,114.97	7,126.97	56.38	246.66	89.85	568.00	-1,482.16	726.45	430.41	296.04	2.454		
8,700.00	7,126.60	7,114.60	7,126.60	58.77	246.65	89.82	568.00	-1,482.16	788.33	492.98	295.35	2.669		
8,800.00	7,126.24	7,114.24	7,126.24	61.19	246.63	89.78	568.00	-1,482.16	857.44	562.91	294.53	2.911		
8,900.00	7,125.87	7,113.87	7,125.87	63.65	246.62	89.75	568.00	-1,482.16	932.17	638.48	293.69	3.174		
9,000.00	7,125.50	7,113.50	7,125.50	66.15	246.61	89.71	568.00	-1,482.16	1,011.28	718.40	292.87	3.453		
9,100.00	7,125.14	7,113.14	7,125.14	68.67	246.60	89.68	568.00	-1,482.16	1,093.81	801.69	292.12	3.744		
9,200.00	7,124.77	7,112.77	7,124.77	71.21	246.58	89.64	568.00	-1,482.16	1,179.05	887.63	291.42	4.046		
9,300.00	7,124.41	7,112.41	7,124.41	73.78	246.57	89.60	568.00	-1,482.16	1,266.45	975.65	290.80	4.355		
9,400.00	7,124.04	7,112.04	7,124.04	76.37	246.56	89.57	568.00	-1,482.16	1,355.59	1,065.36	290.23	4.671		
9,500.00	7,123.67	7,111.67	7,123.67	78.98	246.55	89.53	568.00	-1,482.16	1,446.16	1,156.43	289.73	4.991		
9,600.00	7,123.31	7,111.31	7,123.31	81.60	246.53	89.50	568.00	-1,482.16	1,537.89	1,248.61	289.28	5.316		
9,700.00	7,122.94	7,110.94	7,122.94	84.24	246.52	89.46	568.00	-1,482.16	1,630.60	1,341.72	288.87	5.645		
9,800.00	7,122.57	7,110.57	7,122.57	86.90	246.51	89.43	568.00	-1,482.16	1,724.12	1,435.60	288.51	5.976		
9,900.00	7,122.21	7,110.21	7,122.21	89.56	246.49	89.39	568.00	-1,482.16	1,818.33	1,530.14	288.19	6.310		
10,000.00	7,121.84	7,109.84	7,121.84	92.24	246.48	89.36	568.00	-1,482.16	1,913.13	1,625.23	287.90	6.645		
10,100.00	7,121.48	7,109.48	7,121.48	94.92	246.47	89.32	568.00	-1,482.16	2,008.43	1,720.80	287.63	6.983		
10,200.00	7,121.11	7,109.11	7,121.11	97.62	246.46	89.29	568.00	-1,482.16	2,104.17	1,816.77	287.39	7.322		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.74	7,108.74	7,120.74	100.32	246.44	89.25	568.00	-1,482.16	2,200.28	1,913.11	287.18	7.662		
10,400.00	7,120.38	7,108.38	7,120.38	103.04	246.43	89.22	568.00	-1,482.16	2,296.73	2,009.75	286.98	8.003		
10,500.00	7,120.01	7,108.01	7,120.01	105.76	246.42	89.18	568.00	-1,482.16	2,393.47	2,106.67	286.81	8.345		
10,600.00	7,119.64	7,107.64	7,119.64	108.48	246.40	89.15	568.00	-1,482.16	2,490.47	2,203.83	286.65	8.688		
10,700.00	7,119.28	7,107.28	7,119.28	111.22	246.39	89.11	568.00	-1,482.16	2,587.70	2,301.20	286.50	9.032		
10,800.00	7,118.91	7,106.91	7,118.91	113.96	246.38	89.07	568.00	-1,482.16	2,685.13	2,398.76	286.37	9.376		
10,900.00	7,118.55	7,106.55	7,118.55	116.70	246.37	89.04	568.00	-1,482.16	2,782.74	2,496.49	286.25	9.721		
11,000.00	7,118.18	7,106.18	7,118.18	119.45	246.35	89.00	568.00	-1,482.16	2,880.52	2,594.38	286.14	10.067		
11,100.00	7,117.81	7,105.81	7,117.81	122.21	246.34	88.97	568.00	-1,482.16	2,978.44	2,692.40	286.04	10.413		
11,200.00	7,117.45	7,105.45	7,117.45	124.97	246.33	88.93	568.00	-1,482.16	3,076.50	2,790.55	285.95	10.759		
11,300.00	7,117.08	7,105.08	7,117.08	127.73	246.32	88.90	568.00	-1,482.16	3,174.68	2,888.81	285.87	11.105		
11,400.00	7,116.72	7,104.72	7,116.72	130.50	246.30	88.86	568.00	-1,482.16	3,272.97	2,987.17	285.80	11.452		
11,500.00	7,116.35	7,104.35	7,116.35	133.27	246.29	88.83	568.00	-1,482.16	3,371.36	3,085.63	285.73	11.799		
11,600.00	7,115.98	7,103.98	7,115.98	136.04	246.28	88.79	568.00	-1,482.16	3,469.84	3,184.17	285.67	12.146		
11,700.00	7,115.62	7,103.62	7,115.62	138.82	246.26	88.76	568.00	-1,482.16	3,568.40	3,282.79	285.62	12.494		
11,800.00	7,115.25	7,103.25	7,115.25	141.60	246.25	88.72	568.00	-1,482.16	3,667.05	3,381.48	285.57	12.841		
11,900.00	7,114.88	7,102.88	7,114.88	144.39	246.24	88.69	568.00	-1,482.16	3,765.76	3,480.24	285.53	13.189		
12,000.00	7,114.52	7,102.52	7,114.52	147.17	246.23	88.65	568.00	-1,482.16	3,864.54	3,579.05	285.49	13.537		
12,100.00	7,114.15	7,102.15	7,114.15	149.96	246.21	88.62	568.00	-1,482.16	3,963.39	3,677.93	285.46	13.884		
12,200.00	7,113.79	7,101.79	7,113.79	152.75	246.20	88.58	568.00	-1,482.16	4,062.29	3,776.86	285.43	14.232		
12,300.00	7,113.42	7,101.42	7,113.42	155.55	246.19	88.54	568.00	-1,482.16	4,161.24	3,875.83	285.41	14.580		
12,400.00	7,113.05	7,101.05	7,113.05	158.34	246.17	88.51	568.00	-1,482.16	4,260.24	3,974.85	285.39	14.928		
12,500.00	7,112.69	7,100.69	7,112.69	161.14	246.16	88.47	568.00	-1,482.16	4,359.28	4,073.91	285.37	15.276		
12,600.00	7,112.32	7,100.32	7,112.32	163.94	246.15	88.44	568.00	-1,482.16	4,458.37	4,173.01	285.36	15.624		
12,700.00	7,111.96	7,100.05	7,111.96	166.74	246.14	88.40	568.00	-1,482.16	4,557.50	4,272.15	285.35	15.972		
12,800.00	7,111.59	7,100.41	7,111.59	169.54	246.15	88.37	568.00	-1,482.16	4,656.67	4,371.29	285.37	16.318		
12,900.00	7,111.22	7,100.78	7,111.22	172.35	246.16	88.33	568.00	-1,482.16	4,755.87	4,470.47	285.39	16.664		
13,000.00	7,110.86	7,101.14	7,110.86	175.16	246.18	88.30	568.00	-1,482.16	4,855.10	4,569.68	285.42	17.010		
13,100.00	7,110.49	7,101.51	7,110.49	177.96	246.19	88.26	568.00	-1,482.16	4,954.36	4,668.92	285.45	17.357		
13,200.00	7,110.12	7,101.88	7,110.12	180.77	246.20	88.23	568.00	-1,482.16	5,053.66	4,768.18	285.48	17.702		
13,300.00	7,109.76	7,102.24	7,109.76	183.58	246.22	88.19	568.00	-1,482.16	5,152.98	4,867.47	285.51	18.048		
13,400.00	7,109.39	7,102.61	7,109.39	186.40	246.23	88.16	568.00	-1,482.16	5,252.32	4,966.78	285.55	18.394		
13,500.00	7,109.03	7,102.97	7,109.03	189.21	246.24	88.12	568.00	-1,482.16	5,351.69	5,066.11	285.59	18.739		
13,600.00	7,108.66	7,103.34	7,108.66	192.03	246.25	88.09	568.00	-1,482.16	5,451.09	5,165.46	285.63	19.085		
13,700.00	7,108.29	7,103.71	7,108.29	194.84	246.27	88.05	568.00	-1,482.16	5,550.50	5,264.83	285.67	19.430		
13,800.00	7,107.93	7,104.07	7,107.93	197.66	246.28	88.02	568.00	-1,482.16	5,649.94	5,364.22	285.71	19.775		
13,900.00	7,107.56	7,104.44	7,107.56	200.48	246.29	87.98	568.00	-1,482.16	5,749.39	5,463.63	285.76	20.120		
14,000.00	7,107.19	7,104.81	7,107.19	203.30	246.31	87.94	568.00	-1,482.16	5,848.87	5,563.06	285.81	20.464		
14,100.00	7,106.83	7,105.17	7,106.83	206.12	246.32	87.91	568.00	-1,482.16	5,948.36	5,662.50	285.86	20.809		
14,200.00	7,106.46	7,105.54	7,106.46	208.94	246.33	87.87	568.00	-1,482.16	6,047.87	5,761.95	285.91	21.153		
14,300.00	7,106.10	7,105.90	7,106.10	211.76	246.34	87.84	568.00	-1,482.16	6,147.39	5,861.42	285.97	21.497		
14,400.00	7,105.73	7,106.27	7,105.73	214.58	246.36	87.80	568.00	-1,482.16	6,246.93	5,960.91	286.02	21.841		
14,500.00	7,105.36	7,106.64	7,105.36	217.40	246.37	87.77	568.00	-1,482.16	6,346.48	6,060.40	286.08	22.184		
14,600.00	7,105.00	7,107.00	7,105.00	220.23	246.38	87.73	568.00	-1,482.16	6,446.05	6,159.91	286.14	22.527		
14,700.00	7,104.63	7,107.37	7,104.63	223.05	246.40	87.70	568.00	-1,482.16	6,545.63	6,259.43	286.20	22.871		
14,800.00	7,104.27	7,107.74	7,104.27	225.88	246.41	87.66	568.00	-1,482.16	6,645.23	6,358.96	286.27	23.213		
14,872.41	7,104.00	7,108.00	7,104.00	227.93	246.42	87.64	568.00	-1,482.16	6,717.35	6,431.04	286.31	23.462		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	49.00	3.28	3.28	-77.83	1,075.93	-4,990.13	5,105.04					
100.00	100.00	51.00	100.00	3.28	3.40	-77.83	1,075.93	-4,990.13	5,104.81	5,098.12	6.68	763.806		
200.00	200.00	151.00	200.00	3.34	4.82	-77.83	1,075.93	-4,990.13	5,104.81	5,096.66	8.15	626.151		
300.00	300.00	251.00	300.00	3.44	7.75	-77.83	1,075.93	-4,990.13	5,104.81	5,093.62	11.19	456.170		
400.00	400.00	351.00	400.00	3.60	11.01	-77.83	1,075.93	-4,990.13	5,104.81	5,090.20	14.61	349.375		
500.00	500.00	451.00	500.00	3.81	14.38	-77.83	1,075.93	-4,990.13	5,104.81	5,086.62	18.18	280.730		
600.00	599.98	550.98	599.98	4.04	17.79	12.17	1,075.93	-4,990.13	5,103.24	5,081.41	21.83	233.731		
700.00	699.95	650.95	699.95	4.30	21.23	12.18	1,075.93	-4,990.13	5,100.80	5,075.26	25.53	199.759		
800.00	799.92	750.92	799.92	4.59	24.69	12.19	1,075.93	-4,990.13	5,098.35	5,069.08	29.28	174.142		
900.00	899.89	850.89	899.89	4.90	28.15	12.19	1,075.93	-4,990.13	5,095.91	5,062.86	33.05	154.184		
1,000.00	999.86	950.86	999.86	5.23	31.62	12.20	1,075.93	-4,990.13	5,093.47	5,056.62	36.85	138.226		
1,100.00	1,099.83	1,050.83	1,099.83	5.58	35.09	12.20	1,075.93	-4,990.13	5,091.03	5,050.36	40.67	125.190		
1,200.00	1,199.80	1,150.80	1,199.80	5.94	38.57	12.21	1,075.93	-4,990.13	5,088.59	5,044.09	44.50	114.351		
1,300.00	1,299.77	1,250.77	1,299.77	6.30	42.05	12.22	1,075.93	-4,990.13	5,086.14	5,037.80	48.35	105.204		
1,400.00	1,399.73	1,350.73	1,399.73	6.68	45.53	12.22	1,075.93	-4,990.13	5,083.70	5,031.50	52.20	97.386		
1,500.00	1,499.70	1,450.70	1,499.70	7.07	49.01	12.23	1,075.93	-4,990.13	5,081.26	5,025.19	56.07	90.629		
1,600.00	1,599.67	1,550.67	1,599.67	7.46	52.49	12.23	1,075.93	-4,990.13	5,078.82	5,018.88	59.94	84.733		
1,700.00	1,699.64	1,650.64	1,699.64	7.85	55.97	12.24	1,075.93	-4,990.13	5,076.37	5,012.56	63.82	79.545		
1,800.00	1,799.61	1,750.61	1,799.61	8.25	59.46	12.25	1,075.93	-4,990.13	5,073.93	5,006.23	67.70	74.946		
1,900.00	1,899.58	1,850.58	1,899.58	8.66	62.94	12.25	1,075.93	-4,990.13	5,071.49	4,999.90	71.59	70.841		
2,000.00	1,999.55	1,950.55	1,999.55	9.06	66.43	12.26	1,075.93	-4,990.13	5,069.05	4,993.57	75.48	67.156		
2,100.00	2,099.52	2,050.52	2,099.52	9.47	69.92	12.26	1,075.93	-4,990.13	5,066.61	4,987.23	79.38	63.829		
2,200.00	2,199.48	2,150.48	2,199.48	9.89	73.40	12.27	1,075.93	-4,990.13	5,064.17	4,980.89	83.28	60.812		
2,300.00	2,299.45	2,250.45	2,299.45	10.30	76.89	12.28	1,075.93	-4,990.13	5,061.72	4,974.55	87.18	58.062		
2,400.00	2,399.42	2,350.42	2,399.42	10.72	80.37	12.28	1,075.93	-4,990.13	5,059.28	4,968.20	91.08	55.547		
2,500.00	2,499.39	2,450.39	2,499.39	11.14	83.86	12.29	1,075.93	-4,990.13	5,056.84	4,961.86	94.99	53.238		
2,600.00	2,599.36	2,550.36	2,599.36	11.56	87.35	12.29	1,075.93	-4,990.13	5,054.40	4,955.51	98.89	51.110		
2,700.00	2,699.33	2,650.33	2,699.33	11.98	90.84	12.30	1,075.93	-4,990.13	5,051.96	4,949.16	102.80	49.143		
2,800.00	2,799.30	2,750.30	2,799.30	12.41	94.32	12.31	1,075.93	-4,990.13	5,049.52	4,942.80	106.71	47.319		
2,900.00	2,899.27	2,850.27	2,899.27	12.83	97.81	12.31	1,075.93	-4,990.13	5,047.08	4,936.45	110.62	45.624		
3,000.00	2,999.23	2,950.23	2,999.23	13.26	101.30	12.32	1,075.93	-4,990.13	5,044.63	4,930.10	114.54	44.044		
3,100.00	3,099.20	3,050.20	3,099.20	13.68	104.79	12.32	1,075.93	-4,990.13	5,042.19	4,923.74	118.45	42.568		
3,200.00	3,199.17	3,150.17	3,199.17	14.11	108.28	12.33	1,075.93	-4,990.13	5,039.75	4,917.39	122.37	41.186		
3,300.00	3,299.14	3,250.14	3,299.14	14.54	111.77	12.34	1,075.93	-4,990.13	5,037.31	4,911.03	126.28	39.890		
3,400.00	3,399.11	3,350.11	3,399.11	14.97	115.25	12.34	1,075.93	-4,990.13	5,034.87	4,904.67	130.20	38.671		
3,500.00	3,499.08	3,450.08	3,499.08	15.40	118.74	12.35	1,075.93	-4,990.13	5,032.43	4,898.31	134.11	37.523		
3,600.00	3,599.05	3,550.05	3,599.05	15.83	122.23	12.35	1,075.93	-4,990.13	5,029.99	4,891.96	138.03	36.441		
3,700.00	3,699.02	3,650.02	3,699.02	16.26	125.72	12.36	1,075.93	-4,990.13	5,027.55	4,885.60	141.95	35.418		
3,800.00	3,798.98	3,749.98	3,798.98	16.69	129.21	12.37	1,075.93	-4,990.13	5,025.11	4,879.24	145.87	34.449		
3,900.00	3,898.95	3,849.95	3,898.95	17.12	132.70	12.37	1,075.93	-4,990.13	5,022.67	4,872.88	149.79	33.532		
4,000.00	3,998.92	3,949.92	3,998.92	17.55	136.19	12.38	1,075.93	-4,990.13	5,020.23	4,866.52	153.71	32.661		
4,100.00	4,098.89	4,049.89	4,098.89	17.98	139.67	12.39	1,075.93	-4,990.13	5,017.78	4,860.15	157.63	31.833		
4,200.00	4,198.86	4,149.86	4,198.86	18.42	143.16	12.39	1,075.93	-4,990.13	5,015.34	4,853.79	161.55	31.045		
4,300.00	4,298.83	4,249.83	4,298.83	18.85	146.65	12.40	1,075.93	-4,990.13	5,012.90	4,847.43	165.47	30.295		
4,400.00	4,398.80	4,349.80	4,398.80	19.28	150.14	12.40	1,075.93	-4,990.13	5,010.46	4,841.07	169.39	29.579		
4,500.00	4,498.77	4,449.77	4,498.77	19.72	153.63	12.41	1,075.93	-4,990.13	5,008.02	4,834.71	173.32	28.895		
4,600.00	4,598.73	4,549.73	4,598.73	20.15	157.12	12.42	1,075.93	-4,990.13	5,005.58	4,828.34	177.24	28.242		
4,700.00	4,698.70	4,649.70	4,698.70	20.58	160.61	12.42	1,075.93	-4,990.13	5,003.14	4,821.98	181.16	27.617		
4,800.00	4,798.67	4,749.67	4,798.67	21.02	164.10	12.43	1,075.93	-4,990.13	5,000.70	4,815.62	185.08	27.019		
4,900.00	4,898.64	4,849.64	4,898.64	21.45	167.59	12.43	1,075.93	-4,990.13	4,998.26	4,809.25	189.01	26.445		
5,000.00	4,998.61	4,949.61	4,998.61	21.89	171.08	12.44	1,075.93	-4,990.13	4,995.82	4,802.89	192.93	25.894		
5,100.00	5,098.58	5,049.58	5,098.58	22.32	174.57	12.45	1,075.93	-4,990.13	4,993.38	4,796.53	196.85	25.366		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design													HARVESTERS STATE 7-15 PAD - STATE 1(AB_150CC) - OH - OH		Offset Site Error: 0.00 ft	
Survey Program: 100-2" Cone@2.448 Sigma															Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor				
5,200.00	5,198.55	5,149.55	5,198.55	22.76	178.06	12.45	1,075.93	-4,990.13	4,990.94	4,790.16	200.78	24.858				
5,300.00	5,298.52	5,249.52	5,298.52	23.20	181.55	12.46	1,075.93	-4,990.13	4,988.50	4,783.80	204.70	24.370				
5,400.00	5,398.49	5,349.49	5,398.49	23.63	185.03	12.47	1,075.93	-4,990.13	4,986.06	4,777.44	208.63	23.899				
5,500.00	5,498.45	5,449.45	5,498.45	24.07	188.52	12.47	1,075.93	-4,990.13	4,983.62	4,771.07	212.55	23.447				
5,600.00	5,598.42	5,549.42	5,598.42	24.50	192.01	12.48	1,075.93	-4,990.13	4,981.18	4,764.71	216.48	23.010				
5,700.00	5,698.39	5,649.39	5,698.39	24.94	195.50	12.48	1,075.93	-4,990.13	4,978.74	4,758.34	220.40	22.590				
5,800.00	5,798.36	5,749.36	5,798.36	25.38	198.99	12.49	1,075.93	-4,990.13	4,976.30	4,751.98	224.33	22.183				
5,900.00	5,898.33	5,849.33	5,898.33	25.81	202.48	12.50	1,075.93	-4,990.13	4,973.86	4,745.61	228.25	21.791				
6,000.00	5,998.30	5,949.30	5,998.30	26.25	205.97	12.50	1,075.93	-4,990.13	4,971.42	4,739.25	232.18	21.412				
6,100.00	6,098.27	6,049.27	6,098.27	26.69	209.46	12.51	1,075.93	-4,990.13	4,968.98	4,732.88	236.10	21.046				
6,200.00	6,198.24	6,149.24	6,198.24	27.12	212.95	12.52	1,075.93	-4,990.13	4,966.55	4,726.52	240.03	20.692				
6,300.00	6,298.20	6,249.20	6,298.20	27.56	216.44	12.52	1,075.93	-4,990.13	4,964.11	4,720.15	243.95	20.349				
6,400.00	6,398.17	6,349.17	6,398.17	28.00	219.93	12.53	1,075.93	-4,990.13	4,961.67	4,713.79	247.88	20.017				
6,500.00	6,498.14	6,449.14	6,498.14	28.43	223.42	12.53	1,075.93	-4,990.13	4,959.23	4,707.42	251.80	19.695				
6,600.00	6,597.68	6,548.68	6,597.68	28.88	226.89	13.68	1,075.93	-4,990.13	4,950.92	4,695.20	255.72	19.361				
6,700.00	6,694.68	6,645.68	6,694.68	29.32	230.28	14.36	1,075.93	-4,990.13	4,927.69	4,668.15	259.54	18.986				
6,800.00	6,786.74	6,737.74	6,786.74	29.77	233.49	15.45	1,075.93	-4,990.13	4,890.03	4,626.86	263.17	18.581				
6,900.00	6,871.61	6,822.61	6,871.61	30.24	236.46	17.15	1,075.93	-4,990.13	4,838.87	4,572.36	266.51	18.157				
7,000.00	6,947.19	6,901.81	6,947.19	30.74	239.22	19.74	1,075.93	-4,990.13	4,775.50	4,505.89	269.60	17.713				
7,100.00	7,011.62	6,962.62	7,011.62	31.32	241.34	23.76	1,075.93	-4,990.13	4,701.51	4,429.50	272.01	17.284				
7,200.00	7,063.31	7,014.31	7,063.31	32.03	243.15	30.24	1,075.93	-4,990.13	4,618.76	4,344.71	274.05	16.854				
7,300.00	7,101.00	7,052.00	7,101.00	32.89	244.46	41.37	1,075.93	-4,990.13	4,529.32	4,253.77	275.55	16.437				
7,400.00	7,123.74	7,074.74	7,123.74	33.93	245.26	61.15	1,075.93	-4,990.13	4,435.42	4,158.92	276.50	16.041				
7,500.00	7,131.00	7,082.00	7,131.00	35.10	245.51	90.75	1,075.93	-4,990.13	4,339.39	4,062.51	276.88	15.672				
7,600.00	7,130.63	7,081.63	7,130.63	36.44	245.50	90.73	1,075.93	-4,990.13	4,243.18	3,966.17	277.01	15.318				
7,700.00	7,130.26	7,081.26	7,130.26	37.94	245.48	90.71	1,075.93	-4,990.13	4,147.15	3,869.98	277.17	14.962				
7,800.00	7,129.90	7,080.90	7,129.90	39.59	245.47	90.70	1,075.93	-4,990.13	4,051.31	3,773.95	277.37	14.606				
7,900.00	7,129.53	7,080.53	7,129.53	41.37	245.46	90.68	1,075.93	-4,990.13	3,955.68	3,678.08	277.60	14.249				
8,000.00	7,129.17	7,080.17	7,129.17	43.27	245.45	90.66	1,075.93	-4,990.13	3,860.27	3,582.39	277.88	13.892				
8,100.00	7,128.80	7,079.80	7,128.80	45.27	245.43	90.64	1,075.93	-4,990.13	3,765.10	3,486.88	278.21	13.533				
8,200.00	7,128.43	7,079.43	7,128.43	47.36	245.42	90.62	1,075.93	-4,990.13	3,670.18	3,391.58	278.60	13.174				
8,300.00	7,128.07	7,079.07	7,128.07	49.52	245.41	90.61	1,075.93	-4,990.13	3,575.54	3,296.50	279.04	12.814				
8,400.00	7,127.70	7,078.70	7,127.70	51.75	245.39	90.59	1,075.93	-4,990.13	3,481.20	3,201.65	279.55	12.453				
8,500.00	7,127.33	7,078.33	7,127.33	54.04	245.38	90.57	1,075.93	-4,990.13	3,387.19	3,107.05	280.13	12.091				
8,600.00	7,126.97	7,077.97	7,126.97	56.38	245.37	90.55	1,075.93	-4,990.13	3,293.52	3,012.73	280.79	11.729				
8,700.00	7,126.60	7,077.60	7,126.60	58.77	245.36	90.53	1,075.93	-4,990.13	3,200.25	2,918.70	281.54	11.367				
8,800.00	7,126.24	7,077.24	7,126.24	61.19	245.34	90.52	1,075.93	-4,990.13	3,107.39	2,825.00	282.39	11.004				
8,900.00	7,125.87	7,076.87	7,125.87	63.65	245.33	90.50	1,075.93	-4,990.13	3,014.98	2,731.65	283.34	10.641				
9,000.00	7,125.50	7,076.50	7,125.50	66.15	245.32	90.48	1,075.93	-4,990.13	2,923.08	2,638.68	284.40	10.278				
9,100.00	7,125.14	7,076.14	7,125.14	68.67	245.30	90.46	1,075.93	-4,990.13	2,831.72	2,546.14	285.59	9.915				
9,200.00	7,124.77	7,075.77	7,124.77	71.21	245.29	90.44	1,075.93	-4,990.13	2,740.97	2,454.06	286.91	9.553				
9,300.00	7,124.41	7,075.41	7,124.41	73.78	245.28	90.43	1,075.93	-4,990.13	2,650.89	2,362.50	288.38	9.192				
9,400.00	7,124.04	7,075.04	7,124.04	76.37	245.27	90.41	1,075.93	-4,990.13	2,561.53	2,271.52	290.02	8.832				
9,500.00	7,123.67	7,074.67	7,123.67	78.98	245.25	90.39	1,075.93	-4,990.13	2,473.00	2,181.18	291.82	8.474				
9,600.00	7,123.31	7,074.31	7,123.31	81.60	245.24	90.37	1,075.93	-4,990.13	2,385.37	2,091.55	293.82	8.119				
9,700.00	7,122.94	7,073.94	7,122.94	84.24	245.23	90.35	1,075.93	-4,990.13	2,298.75	2,002.74	296.02	7.766				
9,800.00	7,122.57	7,073.57	7,122.57	86.90	245.22	90.34	1,075.93	-4,990.13	2,213.26	1,914.82	298.44	7.416				
9,900.00	7,122.21	7,073.21	7,122.21	89.56	245.20	90.32	1,075.93	-4,990.13	2,129.04	1,827.94	301.10	7.071				
10,000.00	7,121.84	7,072.84	7,121.84	92.24	245.19	90.30	1,075.93	-4,990.13	2,046.23	1,742.22	304.02	6.731				
10,100.00	7,121.48	7,072.48	7,121.48	94.92	245.18	90.28	1,075.93	-4,990.13	1,965.03	1,657.82	307.21	6.396				
10,200.00	7,121.11	7,072.11	7,121.11	97.62	245.16	90.27	1,075.93	-4,990.13	1,885.63	1,574.94	310.69	6.069				
10,300.00	7,120.74	7,071.74	7,120.74	100.32	245.15	90.25	1,075.93	-4,990.13	1,808.28	1,493.80	314.48	5.750				

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	7,071.38	7,120.38	103.04	245.14	90.23	1,075.93	-4,990.13	1,733.24	1,414.65	318.59	5.440		
10,500.00	7,120.01	7,071.01	7,120.01	105.76	245.13	90.21	1,075.93	-4,990.13	1,660.84	1,337.82	323.03	5.142		
10,600.00	7,119.64	7,070.64	7,119.64	108.48	245.11	90.19	1,075.93	-4,990.13	1,591.43	1,263.64	327.79	4.855		
10,700.00	7,119.28	7,070.28	7,119.28	111.22	245.10	90.18	1,075.93	-4,990.13	1,525.43	1,192.55	332.87	4.583		
10,800.00	7,118.91	7,069.91	7,118.91	113.96	245.09	90.16	1,075.93	-4,990.13	1,463.28	1,125.03	338.25	4.326		
10,900.00	7,118.55	7,069.55	7,118.55	116.70	245.07	90.14	1,075.93	-4,990.13	1,405.51	1,061.64	343.87	4.087		
11,000.00	7,118.18	7,069.18	7,118.18	119.45	245.06	90.12	1,075.93	-4,990.13	1,352.67	1,003.00	349.67	3.868		
11,100.00	7,117.81	7,068.81	7,117.81	122.21	245.05	90.10	1,075.93	-4,990.13	1,305.37	949.83	355.54	3.671		
11,200.00	7,117.45	7,068.45	7,117.45	124.97	245.04	90.09	1,075.93	-4,990.13	1,264.22	902.86	361.36	3.498		
11,300.00	7,117.08	7,068.08	7,117.08	127.73	245.02	90.07	1,075.93	-4,990.13	1,229.84	862.87	366.97	3.351		
11,400.00	7,116.72	7,067.72	7,116.72	130.50	245.01	90.05	1,075.93	-4,990.13	1,202.82	830.63	372.19	3.232		
11,500.00	7,116.35	7,067.35	7,116.35	133.27	245.00	90.03	1,075.93	-4,990.13	1,183.65	806.81	376.84	3.141		
11,600.00	7,115.98	7,066.98	7,115.98	136.04	244.99	90.01	1,075.93	-4,990.13	1,172.73	791.99	380.74	3.080		
11,678.69	7,115.69	7,066.69	7,115.69	138.23	244.98	90.00	1,075.93	-4,990.13	1,170.09	786.88	383.20	3.053 CC		
11,700.00	7,115.62	7,066.62	7,115.62	138.82	244.97	90.00	1,075.93	-4,990.13	1,170.28	786.51	383.77	3.049 ES		
11,800.00	7,115.25	7,066.25	7,115.25	141.60	244.96	89.98	1,075.93	-4,990.13	1,176.36	790.52	385.84	3.049 SF		
11,900.00	7,114.88	7,065.88	7,114.88	144.39	244.95	89.96	1,075.93	-4,990.13	1,190.83	803.90	386.93	3.078		
12,000.00	7,114.52	7,065.52	7,114.52	147.17	244.93	89.94	1,075.93	-4,990.13	1,213.40	826.31	387.10	3.135		
12,100.00	7,114.15	7,065.15	7,114.15	149.96	244.92	89.92	1,075.93	-4,990.13	1,243.63	857.20	386.43	3.218		
12,200.00	7,113.79	7,064.79	7,113.79	152.75	244.91	89.91	1,075.93	-4,990.13	1,280.97	895.92	385.05	3.327		
12,300.00	7,113.42	7,064.42	7,113.42	155.55	244.90	89.89	1,075.93	-4,990.13	1,324.81	941.71	383.10	3.458		
12,400.00	7,113.05	7,064.05	7,113.05	158.34	244.88	89.87	1,075.93	-4,990.13	1,374.55	993.82	380.73	3.610		
12,500.00	7,112.69	7,063.69	7,112.69	161.14	244.87	89.85	1,075.93	-4,990.13	1,429.56	1,051.49	378.07	3.781		
12,600.00	7,112.32	7,063.32	7,112.32	163.94	244.86	89.83	1,075.93	-4,990.13	1,489.27	1,114.04	375.23	3.969		
12,700.00	7,111.96	7,062.96	7,111.96	166.74	244.84	89.82	1,075.93	-4,990.13	1,553.12	1,180.83	372.28	4.172		
12,800.00	7,111.59	7,062.59	7,111.59	169.54	244.83	89.80	1,075.93	-4,990.13	1,620.63	1,251.31	369.32	4.388		
12,900.00	7,111.22	7,062.22	7,111.22	172.35	244.82	89.78	1,075.93	-4,990.13	1,691.36	1,324.97	366.38	4.616		
13,000.00	7,110.86	7,061.86	7,110.86	175.16	244.81	89.76	1,075.93	-4,990.13	1,764.92	1,401.41	363.51	4.855		
13,100.00	7,110.49	7,061.49	7,110.49	177.96	244.79	89.75	1,075.93	-4,990.13	1,840.98	1,480.24	360.74	5.103		
13,200.00	7,110.12	7,061.12	7,110.12	180.77	244.78	89.73	1,075.93	-4,990.13	1,919.24	1,561.17	358.07	5.360		
13,300.00	7,109.76	7,060.76	7,109.76	183.58	244.77	89.71	1,075.93	-4,990.13	1,999.43	1,643.91	355.52	5.624		
13,400.00	7,109.39	7,060.39	7,109.39	186.40	244.76	89.69	1,075.93	-4,990.13	2,081.34	1,728.25	353.09	5.895		
13,500.00	7,109.03	7,060.03	7,109.03	189.21	244.74	89.67	1,075.93	-4,990.13	2,164.77	1,813.98	350.79	6.171		
13,600.00	7,108.66	7,059.66	7,108.66	192.03	244.73	89.66	1,075.93	-4,990.13	2,249.56	1,900.95	348.61	6.453		
13,700.00	7,108.29	7,059.29	7,108.29	194.84	244.72	89.64	1,075.93	-4,990.13	2,335.54	1,989.00	346.55	6.740		
13,800.00	7,107.93	7,058.93	7,107.93	197.66	244.70	89.62	1,075.93	-4,990.13	2,422.60	2,078.01	344.60	7.030		
13,900.00	7,107.56	7,058.56	7,107.56	200.48	244.69	89.60	1,075.93	-4,990.13	2,510.63	2,167.87	342.76	7.325		
14,000.00	7,107.19	7,058.19	7,107.19	203.30	244.68	89.58	1,075.93	-4,990.13	2,599.52	2,258.50	341.02	7.623		
14,100.00	7,106.83	7,057.83	7,106.83	206.12	244.67	89.57	1,075.93	-4,990.13	2,689.20	2,349.82	339.38	7.924		
14,200.00	7,106.46	7,057.46	7,106.46	208.94	244.65	89.55	1,075.93	-4,990.13	2,779.57	2,441.74	337.83	8.228		
14,300.00	7,106.10	7,057.10	7,106.10	211.76	244.64	89.53	1,075.93	-4,990.13	2,870.59	2,534.22	336.37	8.534		
14,400.00	7,105.73	7,056.73	7,105.73	214.58	244.63	89.51	1,075.93	-4,990.13	2,962.19	2,627.20	334.99	8.843		
14,500.00	7,105.36	7,056.36	7,105.36	217.40	244.61	89.49	1,075.93	-4,990.13	3,054.31	2,720.63	333.68	9.153		
14,600.00	7,105.00	7,056.00	7,105.00	220.23	244.60	89.48	1,075.93	-4,990.13	3,146.91	2,814.47	332.45	9.466		
14,700.00	7,104.63	7,055.63	7,104.63	223.05	244.59	89.46	1,075.93	-4,990.13	3,239.96	2,908.68	331.28	9.780		
14,800.00	7,104.27	7,055.27	7,104.27	225.88	244.58	89.44	1,075.93	-4,990.13	3,333.40	3,003.23	330.17	10.096		
14,872.41	7,104.00	7,055.00	7,104.00	227.93	244.57	89.43	1,075.93	-4,990.13	3,401.30	3,071.90	329.40	10.326		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	47.00	3.28	3.28	-77.91	1,096.72	-5,120.01	5,236.37					
100.00	100.00	53.00	100.00	3.28	3.41	-77.91	1,096.72	-5,120.01	5,236.16	5,229.46	6.69	782.369		
200.00	200.00	153.00	200.00	3.34	4.87	-77.91	1,096.72	-5,120.01	5,236.16	5,227.95	8.20	638.242		
300.00	300.00	253.00	300.00	3.44	7.81	-77.91	1,096.72	-5,120.01	5,236.16	5,224.90	11.25	465.275		
400.00	400.00	353.00	400.00	3.60	11.07	-77.91	1,096.72	-5,120.01	5,236.16	5,221.48	14.68	356.736		
500.00	500.00	453.00	500.00	3.81	14.45	-77.91	1,096.72	-5,120.01	5,236.16	5,217.90	18.25	286.881		
600.00	599.98	552.98	599.98	4.04	17.86	12.10	1,096.72	-5,120.01	5,234.59	5,212.69	21.90	238.995		
700.00	699.95	652.95	699.95	4.30	21.30	12.10	1,096.72	-5,120.01	5,232.14	5,206.54	25.60	204.351		
800.00	799.92	752.92	799.92	4.59	24.76	12.11	1,096.72	-5,120.01	5,229.70	5,200.36	29.35	178.207		
900.00	899.89	852.89	899.89	4.90	28.22	12.11	1,096.72	-5,120.01	5,227.26	5,194.14	33.12	157.827		
1,000.00	999.86	952.86	999.86	5.23	31.69	12.12	1,096.72	-5,120.01	5,224.82	5,187.90	36.92	141.524		
1,100.00	1,099.83	1,052.83	1,099.83	5.58	35.16	12.13	1,096.72	-5,120.01	5,222.37	5,181.64	40.74	128.201		
1,200.00	1,199.80	1,152.80	1,199.80	5.94	38.64	12.13	1,096.72	-5,120.01	5,219.93	5,175.36	44.57	117.120		
1,300.00	1,299.77	1,252.77	1,299.77	6.30	42.12	12.14	1,096.72	-5,120.01	5,217.49	5,169.07	48.42	107.766		
1,400.00	1,399.73	1,352.73	1,399.73	6.68	45.60	12.14	1,096.72	-5,120.01	5,215.04	5,162.77	52.27	99.768		
1,500.00	1,499.70	1,452.70	1,499.70	7.07	49.08	12.15	1,096.72	-5,120.01	5,212.60	5,156.46	56.14	92.856		
1,600.00	1,599.67	1,552.67	1,599.67	7.46	52.56	12.16	1,096.72	-5,120.01	5,210.16	5,150.15	60.01	86.823		
1,700.00	1,699.64	1,652.64	1,699.64	7.85	56.04	12.16	1,096.72	-5,120.01	5,207.72	5,143.83	63.89	81.514		
1,800.00	1,799.61	1,752.61	1,799.61	8.25	59.53	12.17	1,096.72	-5,120.01	5,205.27	5,137.50	67.77	76.806		
1,900.00	1,899.58	1,852.58	1,899.58	8.66	63.01	12.17	1,096.72	-5,120.01	5,202.83	5,131.17	71.66	72.605		
2,000.00	1,999.55	1,952.55	1,999.55	9.06	66.50	12.18	1,096.72	-5,120.01	5,200.39	5,124.84	75.55	68.832		
2,100.00	2,099.52	2,052.52	2,099.52	9.47	69.98	12.18	1,096.72	-5,120.01	5,197.95	5,118.50	79.45	65.426		
2,200.00	2,199.48	2,152.48	2,199.48	9.89	73.47	12.19	1,096.72	-5,120.01	5,195.50	5,112.16	83.35	62.337		
2,300.00	2,299.45	2,252.45	2,299.45	10.30	76.96	12.20	1,096.72	-5,120.01	5,193.06	5,105.81	87.25	59.521		
2,400.00	2,399.42	2,352.42	2,399.42	10.72	80.44	12.20	1,096.72	-5,120.01	5,190.62	5,099.47	91.15	56.946		
2,500.00	2,499.39	2,452.39	2,499.39	11.14	83.93	12.21	1,096.72	-5,120.01	5,188.18	5,093.12	95.06	54.580		
2,600.00	2,599.36	2,552.36	2,599.36	11.56	87.42	12.21	1,096.72	-5,120.01	5,185.73	5,086.77	98.96	52.401		
2,700.00	2,699.33	2,652.33	2,699.33	11.98	90.91	12.22	1,096.72	-5,120.01	5,183.29	5,080.42	102.87	50.386		
2,800.00	2,799.30	2,752.30	2,799.30	12.41	94.39	12.22	1,096.72	-5,120.01	5,180.85	5,074.07	106.78	48.518		
2,900.00	2,899.27	2,852.27	2,899.27	12.83	97.88	12.23	1,096.72	-5,120.01	5,178.41	5,067.71	110.69	46.781		
3,000.00	2,999.23	2,952.23	2,999.23	13.26	101.37	12.24	1,096.72	-5,120.01	5,175.97	5,061.36	114.61	45.163		
3,100.00	3,099.20	3,052.20	3,099.20	13.68	104.86	12.24	1,096.72	-5,120.01	5,173.52	5,055.00	118.52	43.651		
3,200.00	3,199.17	3,152.17	3,199.17	14.11	108.35	12.25	1,096.72	-5,120.01	5,171.08	5,048.65	122.43	42.235		
3,300.00	3,299.14	3,252.14	3,299.14	14.54	111.84	12.25	1,096.72	-5,120.01	5,168.64	5,042.29	126.35	40.907		
3,400.00	3,399.11	3,352.11	3,399.11	14.97	115.32	12.26	1,096.72	-5,120.01	5,166.20	5,035.93	130.27	39.659		
3,500.00	3,499.08	3,452.08	3,499.08	15.40	118.81	12.27	1,096.72	-5,120.01	5,163.76	5,029.57	134.18	38.483		
3,600.00	3,599.05	3,552.05	3,599.05	15.83	122.30	12.27	1,096.72	-5,120.01	5,161.31	5,023.21	138.10	37.373		
3,700.00	3,699.02	3,652.02	3,699.02	16.26	125.79	12.28	1,096.72	-5,120.01	5,158.87	5,016.85	142.02	36.325		
3,800.00	3,798.98	3,751.98	3,798.98	16.69	129.28	12.28	1,096.72	-5,120.01	5,156.43	5,010.49	145.94	35.333		
3,900.00	3,898.95	3,851.95	3,898.95	17.12	132.77	12.29	1,096.72	-5,120.01	5,153.99	5,004.13	149.86	34.392		
4,000.00	3,998.92	3,951.92	3,998.92	17.55	136.26	12.30	1,096.72	-5,120.01	5,151.55	4,997.77	153.78	33.500		
4,100.00	4,098.89	4,051.89	4,098.89	17.98	139.74	12.30	1,096.72	-5,120.01	5,149.11	4,991.41	157.70	32.651		
4,200.00	4,198.86	4,151.86	4,198.86	18.42	143.23	12.31	1,096.72	-5,120.01	5,146.67	4,985.05	161.62	31.844		
4,300.00	4,298.83	4,251.83	4,298.83	18.85	146.72	12.31	1,096.72	-5,120.01	5,144.22	4,978.68	165.54	31.075		
4,400.00	4,398.80	4,351.80	4,398.80	19.28	150.21	12.32	1,096.72	-5,120.01	5,141.78	4,972.32	169.46	30.342		
4,500.00	4,498.77	4,451.77	4,498.77	19.72	153.70	12.33	1,096.72	-5,120.01	5,139.34	4,965.96	173.39	29.641		
4,600.00	4,598.73	4,551.73	4,598.73	20.15	157.19	12.33	1,096.72	-5,120.01	5,136.90	4,959.59	177.31	28.972		
4,700.00	4,698.70	4,651.70	4,698.70	20.58	160.68	12.34	1,096.72	-5,120.01	5,134.46	4,953.23	181.23	28.331		
4,800.00	4,798.67	4,751.67	4,798.67	21.02	164.17	12.34	1,096.72	-5,120.01	5,132.02	4,946.87	185.15	27.718		
4,900.00	4,898.64	4,851.64	4,898.64	21.45	167.66	12.35	1,096.72	-5,120.01	5,129.58	4,940.50	189.08	27.130		
5,000.00	4,998.61	4,951.61	4,998.61	21.89	171.15	12.36	1,096.72	-5,120.01	5,127.14	4,934.14	193.00	26.565		
5,100.00	5,098.58	5,051.58	5,098.58	22.32	174.64	12.36	1,096.72	-5,120.01	5,124.70	4,927.77	196.92	26.024		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 16-1(AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,151.55	5,198.55	22.76	178.13	12.37	1,096.72	-5,120.01	5,122.26	4,921.41	200.85	25.503		
5,300.00	5,298.52	5,251.52	5,298.52	23.20	181.61	12.37	1,096.72	-5,120.01	5,119.81	4,915.04	204.77	25.003		
5,400.00	5,398.49	5,351.49	5,398.49	23.63	185.10	12.38	1,096.72	-5,120.01	5,117.37	4,908.68	208.70	24.521		
5,500.00	5,498.45	5,451.45	5,498.45	24.07	188.59	12.39	1,096.72	-5,120.01	5,114.93	4,902.31	212.62	24.057		
5,600.00	5,598.42	5,551.42	5,598.42	24.50	192.08	12.39	1,096.72	-5,120.01	5,112.49	4,895.95	216.55	23.609		
5,700.00	5,698.39	5,651.39	5,698.39	24.94	195.57	12.40	1,096.72	-5,120.01	5,110.05	4,889.58	220.47	23.178		
5,800.00	5,798.36	5,751.36	5,798.36	25.38	199.06	12.40	1,096.72	-5,120.01	5,107.61	4,883.22	224.40	22.762		
5,900.00	5,898.33	5,851.33	5,898.33	25.81	202.55	12.41	1,096.72	-5,120.01	5,105.17	4,876.85	228.32	22.360		
6,000.00	5,998.30	5,951.30	5,998.30	26.25	206.04	12.42	1,096.72	-5,120.01	5,102.73	4,870.49	232.25	21.971		
6,100.00	6,098.27	6,051.27	6,098.27	26.69	209.53	12.42	1,096.72	-5,120.01	5,100.29	4,864.12	236.17	21.596		
6,200.00	6,198.24	6,151.24	6,198.24	27.12	213.02	12.43	1,096.72	-5,120.01	5,097.85	4,857.75	240.10	21.232		
6,300.00	6,298.20	6,251.20	6,298.20	27.56	216.51	12.43	1,096.72	-5,120.01	5,095.41	4,851.39	244.02	20.881		
6,400.00	6,398.17	6,351.17	6,398.17	28.00	220.00	12.44	1,096.72	-5,120.01	5,092.97	4,845.02	247.95	20.540		
6,500.00	6,498.14	6,451.14	6,498.14	28.43	223.49	12.45	1,096.72	-5,120.01	5,090.53	4,838.66	251.87	20.211		
6,600.00	6,597.68	6,550.68	6,597.68	28.88	226.96	13.59	1,096.72	-5,120.01	5,082.22	4,826.43	255.79	19.869		
6,700.00	6,694.68	6,647.68	6,694.68	29.32	230.35	14.26	1,096.72	-5,120.01	5,058.98	4,799.37	259.61	19.487		
6,800.00	6,786.74	6,739.74	6,786.74	29.77	233.56	15.34	1,096.72	-5,120.01	5,021.30	4,758.07	263.24	19.075		
6,900.00	6,871.61	6,824.61	6,871.61	30.24	236.52	17.03	1,096.72	-5,120.01	4,970.12	4,703.55	266.58	18.644		
7,000.00	6,947.19	6,900.19	6,947.19	30.74	239.16	19.60	1,096.72	-5,120.01	4,906.73	4,637.18	269.55	18.204		
7,100.00	7,011.62	6,964.62	7,011.62	31.32	241.41	23.58	1,096.72	-5,120.01	4,832.70	4,560.62	272.08	17.762		
7,200.00	7,063.31	7,016.31	7,063.31	32.03	243.22	30.02	1,096.72	-5,120.01	4,749.91	4,475.79	274.12	17.328		
7,300.00	7,101.00	7,054.00	7,101.00	32.89	244.53	41.11	1,096.72	-5,120.01	4,660.41	4,384.79	275.62	16.909		
7,400.00	7,123.74	7,076.74	7,123.74	33.93	245.33	60.91	1,096.72	-5,120.01	4,566.45	4,289.88	276.57	16.511		
7,500.00	7,131.00	7,084.00	7,131.00	35.10	245.58	90.76	1,096.72	-5,120.01	4,470.35	4,193.40	276.95	16.142		
7,600.00	7,130.63	7,083.63	7,130.63	36.44	245.57	90.74	1,096.72	-5,120.01	4,374.06	4,096.99	277.07	15.787		
7,700.00	7,130.26	7,083.26	7,130.26	37.94	245.55	90.72	1,096.72	-5,120.01	4,277.94	4,000.72	277.23	15.431		
7,800.00	7,129.90	7,082.90	7,129.90	39.59	245.54	90.70	1,096.72	-5,120.01	4,182.01	3,904.59	277.42	15.075		
7,900.00	7,129.53	7,082.53	7,129.53	41.37	245.53	90.69	1,096.72	-5,120.01	4,086.27	3,808.62	277.65	14.718		
8,000.00	7,129.17	7,082.17	7,129.17	43.27	245.52	90.67	1,096.72	-5,120.01	3,990.73	3,712.82	277.92	14.359		
8,100.00	7,128.80	7,081.80	7,128.80	45.27	245.50	90.65	1,096.72	-5,120.01	3,895.43	3,617.19	278.24	14.000		
8,200.00	7,128.43	7,081.43	7,128.43	47.36	245.49	90.63	1,096.72	-5,120.01	3,800.36	3,521.75	278.61	13.641		
8,300.00	7,128.07	7,081.07	7,128.07	49.52	245.48	90.62	1,096.72	-5,120.01	3,705.55	3,426.52	279.04	13.280		
8,400.00	7,127.70	7,080.70	7,127.70	51.75	245.46	90.60	1,096.72	-5,120.01	3,611.02	3,331.50	279.53	12.918		
8,500.00	7,127.33	7,080.33	7,127.33	54.04	245.45	90.58	1,096.72	-5,120.01	3,516.80	3,236.71	280.08	12.556		
8,600.00	7,126.97	7,079.97	7,126.97	56.38	245.44	90.56	1,096.72	-5,120.01	3,422.90	3,142.18	280.72	12.193		
8,700.00	7,126.60	7,079.60	7,126.60	58.77	245.43	90.55	1,096.72	-5,120.01	3,329.36	3,047.93	281.43	11.830		
8,800.00	7,126.24	7,079.24	7,126.24	61.19	245.41	90.53	1,096.72	-5,120.01	3,236.20	2,953.96	282.24	11.466		
8,900.00	7,125.87	7,078.87	7,125.87	63.65	245.40	90.51	1,096.72	-5,120.01	3,143.47	2,860.33	283.14	11.102		
9,000.00	7,125.50	7,078.50	7,125.50	66.15	245.39	90.49	1,096.72	-5,120.01	3,051.19	2,767.04	284.15	10.738		
9,100.00	7,125.14	7,078.14	7,125.14	68.67	245.37	90.48	1,096.72	-5,120.01	2,959.42	2,674.14	285.28	10.374		
9,200.00	7,124.77	7,077.77	7,124.77	71.21	245.36	90.46	1,096.72	-5,120.01	2,868.19	2,581.66	286.53	10.010		
9,300.00	7,124.41	7,077.41	7,124.41	73.78	245.35	90.44	1,096.72	-5,120.01	2,777.57	2,489.65	287.92	9.647		
9,400.00	7,124.04	7,077.04	7,124.04	76.37	245.34	90.42	1,096.72	-5,120.01	2,687.62	2,398.16	289.46	9.285		
9,500.00	7,123.67	7,076.67	7,123.67	78.98	245.32	90.41	1,096.72	-5,120.01	2,598.40	2,307.24	291.16	8.924		
9,600.00	7,123.31	7,076.31	7,123.31	81.60	245.31	90.39	1,096.72	-5,120.01	2,509.99	2,216.96	293.03	8.566		
9,700.00	7,122.94	7,075.94	7,122.94	84.24	245.30	90.37	1,096.72	-5,120.01	2,422.48	2,127.39	295.09	8.209		
9,800.00	7,122.57	7,075.57	7,122.57	86.90	245.29	90.35	1,096.72	-5,120.01	2,335.98	2,038.62	297.36	7.856		
9,900.00	7,122.21	7,075.21	7,122.21	89.56	245.27	90.34	1,096.72	-5,120.01	2,250.60	1,950.75	299.84	7.506		
10,000.00	7,121.84	7,074.84	7,121.84	92.24	245.26	90.32	1,096.72	-5,120.01	2,166.46	1,863.90	302.56	7.160		
10,100.00	7,121.48	7,074.48	7,121.48	94.92	245.25	90.30	1,096.72	-5,120.01	2,083.73	1,778.19	305.54	6.820		
10,200.00	7,121.11	7,074.11	7,121.11	97.62	245.23	90.28	1,096.72	-5,120.01	2,002.58	1,693.79	308.78	6.485		
10,300.00	7,120.74	7,073.74	7,120.74	100.32	245.22	90.27	1,096.72	-5,120.01	1,923.20	1,610.88	312.31	6.158		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	7,073.38	7,120.38	103.04	245.21	90.25	1,096.72	-5,120.01	1,845.82	1,529.68	316.15	5.838		
10,500.00	7,120.01	7,073.01	7,120.01	105.76	245.20	90.23	1,096.72	-5,120.01	1,770.72	1,450.42	320.30	5.528		
10,600.00	7,119.64	7,072.64	7,119.64	108.48	245.18	90.21	1,096.72	-5,120.01	1,698.18	1,373.41	324.76	5.229		
10,700.00	7,119.28	7,072.28	7,119.28	111.22	245.17	90.19	1,096.72	-5,120.01	1,628.55	1,299.00	329.56	4.942		
10,800.00	7,118.91	7,071.91	7,118.91	113.96	245.16	90.18	1,096.72	-5,120.01	1,562.23	1,227.57	334.66	4.668		
10,900.00	7,118.55	7,071.55	7,118.55	116.70	245.14	90.16	1,096.72	-5,120.01	1,499.65	1,159.59	340.05	4.410		
11,000.00	7,118.18	7,071.18	7,118.18	119.45	245.13	90.14	1,096.72	-5,120.01	1,441.29	1,095.59	345.70	4.169		
11,100.00	7,117.81	7,070.81	7,117.81	122.21	245.12	90.12	1,096.72	-5,120.01	1,387.69	1,036.17	351.52	3.948		
11,200.00	7,117.45	7,070.45	7,117.45	124.97	245.11	90.11	1,096.72	-5,120.01	1,339.43	981.99	357.43	3.747		
11,300.00	7,117.08	7,070.08	7,117.08	127.73	245.09	90.09	1,096.72	-5,120.01	1,297.09	933.77	363.31	3.570		
11,400.00	7,116.72	7,069.72	7,116.72	130.50	245.08	90.07	1,096.72	-5,120.01	1,261.27	892.25	369.02	3.418		
11,500.00	7,116.35	7,069.35	7,116.35	133.27	245.07	90.05	1,096.72	-5,120.01	1,232.55	858.18	374.37	3.292		
11,600.00	7,115.98	7,068.98	7,115.98	136.04	245.06	90.04	1,096.72	-5,120.01	1,211.43	832.23	379.20	3.195		
11,700.00	7,115.62	7,068.62	7,115.62	138.82	245.04	90.02	1,096.72	-5,120.01	1,198.30	814.97	383.33	3.126		
11,800.00	7,115.25	7,068.25	7,115.25	141.60	245.03	90.00	1,096.72	-5,120.01	1,193.44	806.81	386.63	3.087		
11,808.14	7,115.22	7,068.22	7,115.22	141.83	245.03	90.00	1,096.72	-5,120.01	1,193.41	806.56	386.86	3.085 CC, ES		
11,900.00	7,114.88	7,067.88	7,114.88	144.39	245.02	89.98	1,096.72	-5,120.01	1,196.94	807.95	388.99	3.077 SF		
12,000.00	7,114.52	7,067.52	7,114.52	147.17	245.00	89.97	1,096.72	-5,120.01	1,208.74	818.34	390.39	3.096		
12,100.00	7,114.15	7,067.15	7,114.15	149.96	244.99	89.95	1,096.72	-5,120.01	1,228.58	837.73	390.85	3.143		
12,200.00	7,113.79	7,066.79	7,113.79	152.75	244.98	89.93	1,096.72	-5,120.01	1,256.10	865.65	390.45	3.217		
12,300.00	7,113.42	7,066.42	7,113.42	155.55	244.97	89.91	1,096.72	-5,120.01	1,290.80	901.50	389.29	3.316		
12,400.00	7,113.05	7,066.05	7,113.05	158.34	244.95	89.90	1,096.72	-5,120.01	1,332.12	944.59	387.53	3.437		
12,500.00	7,112.69	7,065.69	7,112.69	161.14	244.94	89.88	1,096.72	-5,120.01	1,379.46	994.17	385.29	3.580		
12,600.00	7,112.32	7,065.32	7,112.32	163.94	244.93	89.86	1,096.72	-5,120.01	1,432.23	1,049.52	382.71	3.742		
12,700.00	7,111.96	7,064.96	7,111.96	166.74	244.91	89.84	1,096.72	-5,120.01	1,489.85	1,109.95	379.90	3.922		
12,800.00	7,111.59	7,064.59	7,111.59	169.54	244.90	89.83	1,096.72	-5,120.01	1,551.78	1,174.82	376.96	4.117		
12,900.00	7,111.22	7,064.22	7,111.22	172.35	244.89	89.81	1,096.72	-5,120.01	1,617.52	1,243.56	373.96	4.325		
13,000.00	7,110.86	7,063.86	7,110.86	175.16	244.88	89.79	1,096.72	-5,120.01	1,686.64	1,315.67	370.97	4.547		
13,100.00	7,110.49	7,063.49	7,110.49	177.96	244.86	89.77	1,096.72	-5,120.01	1,758.73	1,390.70	368.03	4.779		
13,200.00	7,110.12	7,063.12	7,110.12	180.77	244.85	89.76	1,096.72	-5,120.01	1,833.44	1,468.27	365.17	5.021		
13,300.00	7,109.76	7,062.76	7,109.76	183.58	244.84	89.74	1,096.72	-5,120.01	1,910.46	1,548.06	362.40	5.272		
13,400.00	7,109.39	7,062.39	7,109.39	186.40	244.83	89.72	1,096.72	-5,120.01	1,989.53	1,629.78	359.75	5.530		
13,500.00	7,109.03	7,062.03	7,109.03	189.21	244.81	89.70	1,096.72	-5,120.01	2,070.41	1,713.19	357.22	5.796		
13,600.00	7,108.66	7,061.66	7,108.66	192.03	244.80	89.68	1,096.72	-5,120.01	2,152.90	1,798.08	354.81	6.068		
13,700.00	7,108.29	7,061.29	7,108.29	194.84	244.79	89.67	1,096.72	-5,120.01	2,236.81	1,884.28	352.53	6.345		
13,800.00	7,107.93	7,060.93	7,107.93	197.66	244.77	89.65	1,096.72	-5,120.01	2,322.00	1,971.64	350.36	6.627		
13,900.00	7,107.56	7,060.56	7,107.56	200.48	244.76	89.63	1,096.72	-5,120.01	2,408.33	2,060.02	348.31	6.914		
14,000.00	7,107.19	7,060.19	7,107.19	203.30	244.75	89.61	1,096.72	-5,120.01	2,495.68	2,149.30	346.38	7.205		
14,100.00	7,106.83	7,059.83	7,106.83	206.12	244.74	89.60	1,096.72	-5,120.01	2,583.95	2,239.40	344.55	7.500		
14,200.00	7,106.46	7,059.46	7,106.46	208.94	244.72	89.58	1,096.72	-5,120.01	2,673.04	2,330.23	342.81	7.797		
14,300.00	7,106.10	7,059.10	7,106.10	211.76	244.71	89.56	1,096.72	-5,120.01	2,762.88	2,421.71	341.18	8.098		
14,400.00	7,105.73	7,058.73	7,105.73	214.58	244.70	89.54	1,096.72	-5,120.01	2,853.40	2,513.77	339.63	8.401		
14,500.00	7,105.36	7,058.36	7,105.36	217.40	244.68	89.53	1,096.72	-5,120.01	2,944.53	2,606.36	338.17	8.707		
14,600.00	7,105.00	7,058.00	7,105.00	220.23	244.67	89.51	1,096.72	-5,120.01	3,036.22	2,699.43	336.78	9.015		
14,700.00	7,104.63	7,057.63	7,104.63	223.05	244.66	89.49	1,096.72	-5,120.01	3,128.42	2,792.94	335.47	9.325		
14,800.00	7,104.27	7,057.27	7,104.27	225.88	244.65	89.47	1,096.72	-5,120.01	3,221.08	2,886.84	334.23	9.637		
14,872.41	7,104.00	7,057.00	7,104.00	227.93	244.64	89.46	1,096.72	-5,120.01	3,288.44	2,955.07	333.38	9.864		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 32-16(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	54.00	3.28	3.28	-94.36	-375.11	-4,917.28	4,931.86					
100.00	100.00	46.00	100.00	3.28	3.38	-94.36	-375.11	-4,917.28	4,931.56	4,924.90	6.66	740.300		
200.00	200.00	146.00	200.00	3.34	4.69	-94.36	-375.11	-4,917.28	4,931.56	4,923.54	8.03	614.419		
300.00	300.00	246.00	300.00	3.44	7.59	-94.36	-375.11	-4,917.28	4,931.56	4,920.53	11.03	446.990		
400.00	400.00	346.00	400.00	3.60	10.84	-94.36	-375.11	-4,917.28	4,931.56	4,917.12	14.44	341.408		
500.00	500.00	446.00	500.00	3.81	14.21	-94.36	-375.11	-4,917.28	4,931.56	4,913.55	18.01	273.760		
600.00	599.98	545.98	599.98	4.04	17.62	-4.37	-375.11	-4,917.28	4,929.96	4,908.30	21.66	227.582		
700.00	699.95	645.95	699.95	4.30	21.06	-4.37	-375.11	-4,917.28	4,927.47	4,902.11	25.36	194.284		
800.00	799.92	745.92	799.92	4.59	24.52	-4.37	-375.11	-4,917.28	4,924.98	4,895.88	29.10	169.221		
900.00	899.89	845.89	899.89	4.90	27.98	-4.37	-375.11	-4,917.28	4,922.49	4,889.61	32.88	149.725		
1,000.00	999.86	945.86	999.86	5.23	31.45	-4.37	-375.11	-4,917.28	4,920.00	4,883.32	36.67	134.153		
1,100.00	1,099.83	1,045.83	1,099.83	5.58	34.92	-4.38	-375.11	-4,917.28	4,917.50	4,877.01	40.49	121.445		
1,200.00	1,199.80	1,145.80	1,199.80	5.94	38.39	-4.38	-375.11	-4,917.28	4,915.01	4,870.69	44.32	110.887		
1,300.00	1,299.77	1,245.77	1,299.77	6.30	41.87	-4.38	-375.11	-4,917.28	4,912.52	4,864.35	48.17	101.983		
1,400.00	1,399.73	1,345.73	1,399.73	6.68	45.35	-4.38	-375.11	-4,917.28	4,910.03	4,858.00	52.03	94.377		
1,500.00	1,499.70	1,445.70	1,499.70	7.07	48.83	-4.39	-375.11	-4,917.28	4,907.54	4,851.65	55.89	87.806		
1,600.00	1,599.67	1,545.67	1,599.67	7.46	52.32	-4.39	-375.11	-4,917.28	4,905.05	4,845.29	59.76	82.076		
1,700.00	1,699.64	1,645.64	1,699.64	7.85	55.80	-4.39	-375.11	-4,917.28	4,902.56	4,838.92	63.64	77.035		
1,800.00	1,799.61	1,745.61	1,799.61	8.25	59.28	-4.39	-375.11	-4,917.28	4,900.07	4,832.54	67.52	72.568		
1,900.00	1,899.58	1,845.58	1,899.58	8.66	62.77	-4.39	-375.11	-4,917.28	4,897.57	4,826.16	71.41	68.582		
2,000.00	1,999.55	1,945.55	1,999.55	9.06	66.25	-4.40	-375.11	-4,917.28	4,895.08	4,819.78	75.30	65.005		
2,100.00	2,099.52	2,045.52	2,099.52	9.47	69.74	-4.40	-375.11	-4,917.28	4,892.59	4,813.39	79.20	61.776		
2,200.00	2,199.48	2,145.48	2,199.48	9.89	73.23	-4.40	-375.11	-4,917.28	4,890.10	4,807.00	83.10	58.848		
2,300.00	2,299.45	2,245.45	2,299.45	10.30	76.71	-4.40	-375.11	-4,917.28	4,887.61	4,800.61	87.00	56.181		
2,400.00	2,399.42	2,345.42	2,399.42	10.72	80.20	-4.41	-375.11	-4,917.28	4,885.12	4,794.22	90.90	53.741		
2,500.00	2,499.39	2,445.39	2,499.39	11.14	83.69	-4.41	-375.11	-4,917.28	4,882.63	4,787.82	94.81	51.502		
2,600.00	2,599.36	2,545.36	2,599.36	11.56	87.17	-4.41	-375.11	-4,917.28	4,880.13	4,781.42	98.71	49.438		
2,700.00	2,699.33	2,645.33	2,699.33	11.98	90.66	-4.41	-375.11	-4,917.28	4,877.64	4,775.02	102.62	47.531		
2,800.00	2,799.30	2,745.30	2,799.30	12.41	94.15	-4.41	-375.11	-4,917.28	4,875.15	4,768.62	106.53	45.763		
2,900.00	2,899.27	2,845.27	2,899.27	12.83	97.64	-4.42	-375.11	-4,917.28	4,872.66	4,762.22	110.44	44.120		
3,000.00	2,999.23	2,945.23	2,999.23	13.26	101.13	-4.42	-375.11	-4,917.28	4,870.17	4,755.82	114.35	42.589		
3,100.00	3,099.20	3,045.20	3,099.20	13.68	104.61	-4.42	-375.11	-4,917.28	4,867.68	4,749.41	118.27	41.158		
3,200.00	3,199.17	3,145.17	3,199.17	14.11	108.10	-4.42	-375.11	-4,917.28	4,865.19	4,743.01	122.18	39.819		
3,300.00	3,299.14	3,245.14	3,299.14	14.54	111.59	-4.43	-375.11	-4,917.28	4,862.70	4,736.60	126.10	38.563		
3,400.00	3,399.11	3,345.11	3,399.11	14.97	115.08	-4.43	-375.11	-4,917.28	4,860.20	4,730.19	130.01	37.382		
3,500.00	3,499.08	3,445.08	3,499.08	15.40	118.57	-4.43	-375.11	-4,917.28	4,857.71	4,723.78	133.93	36.271		
3,600.00	3,599.05	3,545.05	3,599.05	15.83	122.06	-4.43	-375.11	-4,917.28	4,855.22	4,717.37	137.85	35.222		
3,700.00	3,699.02	3,645.02	3,699.02	16.26	125.55	-4.43	-375.11	-4,917.28	4,852.73	4,710.97	141.77	34.231		
3,800.00	3,798.98	3,744.98	3,798.98	16.69	129.03	-4.44	-375.11	-4,917.28	4,850.24	4,704.56	145.68	33.293		
3,900.00	3,898.95	3,844.95	3,898.95	17.12	132.52	-4.44	-375.11	-4,917.28	4,847.75	4,698.15	149.60	32.404		
4,000.00	3,998.92	3,944.92	3,998.92	17.55	136.01	-4.44	-375.11	-4,917.28	4,845.26	4,691.73	153.52	31.561		
4,100.00	4,098.89	4,044.89	4,098.89	17.98	139.50	-4.44	-375.11	-4,917.28	4,842.77	4,685.32	157.44	30.759		
4,200.00	4,198.86	4,144.86	4,198.86	18.42	142.99	-4.45	-375.11	-4,917.28	4,840.27	4,678.91	161.36	29.996		
4,300.00	4,298.83	4,244.83	4,298.83	18.85	146.48	-4.45	-375.11	-4,917.28	4,837.78	4,672.50	165.28	29.269		
4,400.00	4,398.80	4,344.80	4,398.80	19.28	149.97	-4.45	-375.11	-4,917.28	4,835.29	4,666.09	169.21	28.576		
4,500.00	4,498.77	4,444.77	4,498.77	19.72	153.46	-4.45	-375.11	-4,917.28	4,832.80	4,659.67	173.13	27.915		
4,600.00	4,598.73	4,544.73	4,598.73	20.15	156.95	-4.46	-375.11	-4,917.28	4,830.31	4,653.26	177.05	27.282		
4,700.00	4,698.70	4,644.70	4,698.70	20.58	160.43	-4.46	-375.11	-4,917.28	4,827.82	4,646.85	180.97	26.677		
4,800.00	4,798.67	4,744.67	4,798.67	21.02	163.92	-4.46	-375.11	-4,917.28	4,825.33	4,640.43	184.89	26.098		
4,900.00	4,898.64	4,844.64	4,898.64	21.45	167.41	-4.46	-375.11	-4,917.28	4,822.84	4,634.02	188.82	25.542		
5,000.00	4,998.61	4,944.61	4,998.61	21.89	170.90	-4.46	-375.11	-4,917.28	4,820.35	4,627.61	192.74	25.010		
5,100.00	5,098.58	5,044.58	5,098.58	22.32	174.39	-4.47	-375.11	-4,917.28	4,817.85	4,621.19	196.66	24.498		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 32-16(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,144.55	5,198.55	22.76	177.88	-4.47	-375.11	-4,917.28	4,815.36	4,614.78	200.59	24.006		
5,300.00	5,298.52	5,244.52	5,298.52	23.20	181.37	-4.47	-375.11	-4,917.28	4,812.87	4,608.36	204.51	23.534		
5,400.00	5,398.49	5,344.49	5,398.49	23.63	184.86	-4.47	-375.11	-4,917.28	4,810.38	4,601.95	208.43	23.079		
5,500.00	5,498.45	5,444.45	5,498.45	24.07	188.35	-4.48	-375.11	-4,917.28	4,807.89	4,595.53	212.36	22.640		
5,600.00	5,598.42	5,544.42	5,598.42	24.50	191.84	-4.48	-375.11	-4,917.28	4,805.40	4,589.12	216.28	22.218		
5,700.00	5,698.39	5,644.39	5,698.39	24.94	195.33	-4.48	-375.11	-4,917.28	4,802.91	4,582.70	220.21	21.811		
5,800.00	5,798.36	5,744.36	5,798.36	25.38	198.82	-4.48	-375.11	-4,917.28	4,800.42	4,576.29	224.13	21.418		
5,900.00	5,898.33	5,844.33	5,898.33	25.81	202.31	-4.49	-375.11	-4,917.28	4,797.93	4,569.87	228.06	21.038		
6,000.00	5,998.30	5,944.30	5,998.30	26.25	205.80	-4.49	-375.11	-4,917.28	4,795.43	4,563.45	231.98	20.672		
6,100.00	6,098.27	6,044.27	6,098.27	26.69	209.29	-4.49	-375.11	-4,917.28	4,792.94	4,557.04	235.91	20.317		
6,200.00	6,198.24	6,144.24	6,198.24	27.12	212.78	-4.49	-375.11	-4,917.28	4,790.45	4,550.62	239.83	19.974		
6,300.00	6,298.20	6,244.20	6,298.20	27.56	216.26	-4.49	-375.11	-4,917.28	4,787.96	4,544.20	243.76	19.642		
6,400.00	6,398.17	6,344.17	6,398.17	28.00	219.75	-4.50	-375.11	-4,917.28	4,785.47	4,537.79	247.68	19.321		
6,500.00	6,498.14	6,444.14	6,498.14	28.43	223.24	-4.50	-375.11	-4,917.28	4,782.98	4,531.37	251.61	19.010		
6,600.00	6,597.68	6,543.68	6,597.68	28.88	226.72	-3.60	-375.11	-4,917.28	4,774.46	4,518.94	255.52	18.685		
6,700.00	6,694.68	6,640.68	6,694.68	29.32	230.10	-3.67	-375.11	-4,917.28	4,750.61	4,491.27	259.34	18.318		
6,800.00	6,786.74	6,732.74	6,786.74	29.77	233.32	-3.92	-375.11	-4,917.28	4,711.91	4,448.95	262.96	17.919		
6,900.00	6,871.61	6,817.61	6,871.61	30.24	236.28	-4.35	-375.11	-4,917.28	4,659.31	4,393.02	266.28	17.497		
7,000.00	6,947.19	6,906.81	6,947.19	30.74	239.39	-5.04	-375.11	-4,917.28	4,594.11	4,324.39	269.71	17.033		
7,100.00	7,011.62	6,957.62	7,011.62	31.32	241.17	-6.16	-375.11	-4,917.28	4,517.91	4,246.17	271.74	16.626		
7,200.00	7,063.31	7,009.31	7,063.31	32.03	242.97	-8.12	-375.11	-4,917.28	4,432.60	4,158.86	273.74	16.193		
7,300.00	7,101.00	7,047.00	7,101.00	32.89	244.29	-12.14	-375.11	-4,917.28	4,340.28	4,065.10	275.18	15.772		
7,400.00	7,123.74	7,069.74	7,123.74	33.93	245.08	-23.89	-375.11	-4,917.28	4,243.21	3,967.16	276.05	15.371		
7,500.00	7,131.00	7,077.00	7,131.00	35.10	245.33	-93.07	-375.11	-4,917.28	4,143.81	3,867.47	276.34	14.996		
7,600.00	7,130.63	7,076.63	7,130.63	36.44	245.32	-93.00	-375.11	-4,917.28	4,044.04	3,767.70	276.34	14.634		
7,700.00	7,130.26	7,076.26	7,130.26	37.94	245.31	-92.92	-375.11	-4,917.28	3,944.30	3,667.95	276.35	14.273		
7,800.00	7,129.90	7,075.90	7,129.90	39.59	245.30	-92.85	-375.11	-4,917.28	3,844.56	3,568.20	276.36	13.911		
7,900.00	7,129.53	7,075.53	7,129.53	41.37	245.28	-92.78	-375.11	-4,917.28	3,744.84	3,468.46	276.37	13.550		
8,000.00	7,129.17	7,075.17	7,129.17	43.27	245.27	-92.70	-375.11	-4,917.28	3,645.13	3,368.73	276.39	13.188		
8,100.00	7,128.80	7,074.80	7,128.80	45.27	245.26	-92.63	-375.11	-4,917.28	3,545.44	3,269.02	276.42	12.826		
8,200.00	7,128.43	7,074.43	7,128.43	47.36	245.25	-92.55	-375.11	-4,917.28	3,445.76	3,169.32	276.45	12.464		
8,300.00	7,128.07	7,074.07	7,128.07	49.52	245.23	-92.48	-375.11	-4,917.28	3,346.11	3,069.63	276.48	12.102		
8,400.00	7,127.70	7,073.70	7,127.70	51.75	245.22	-92.40	-375.11	-4,917.28	3,246.48	2,969.95	276.53	11.740		
8,500.00	7,127.33	7,073.33	7,127.33	54.04	245.21	-92.33	-375.11	-4,917.28	3,146.87	2,870.29	276.58	11.378		
8,600.00	7,126.97	7,072.97	7,126.97	56.38	245.19	-92.26	-375.11	-4,917.28	3,047.29	2,770.65	276.64	11.016		
8,700.00	7,126.60	7,072.60	7,126.60	58.77	245.18	-92.18	-375.11	-4,917.28	2,947.73	2,671.03	276.70	10.653		
8,800.00	7,126.24	7,072.24	7,126.24	61.19	245.17	-92.11	-375.11	-4,917.28	2,848.21	2,571.42	276.78	10.290		
8,900.00	7,125.87	7,071.87	7,125.87	63.65	245.16	-92.03	-375.11	-4,917.28	2,748.72	2,471.84	276.88	9.928		
9,000.00	7,125.50	7,071.50	7,125.50	66.15	245.14	-91.96	-375.11	-4,917.28	2,649.27	2,372.28	276.98	9.565		
9,100.00	7,125.14	7,071.14	7,125.14	68.67	245.13	-91.88	-375.11	-4,917.28	2,549.86	2,272.75	277.11	9.202		
9,200.00	7,124.77	7,070.77	7,124.77	71.21	245.12	-91.81	-375.11	-4,917.28	2,450.50	2,173.24	277.25	8.838		
9,300.00	7,124.41	7,070.41	7,124.41	73.78	245.10	-91.74	-375.11	-4,917.28	2,351.19	2,073.77	277.42	8.475		
9,400.00	7,124.04	7,070.04	7,124.04	76.37	245.09	-91.66	-375.11	-4,917.28	2,251.94	1,974.32	277.62	8.112		
9,500.00	7,123.67	7,069.67	7,123.67	78.98	245.08	-91.59	-375.11	-4,917.28	2,152.77	1,874.92	277.85	7.748		
9,600.00	7,123.31	7,069.31	7,123.31	81.60	245.07	-91.51	-375.11	-4,917.28	2,053.67	1,775.55	278.12	7.384		
9,700.00	7,122.94	7,068.94	7,122.94	84.24	245.05	-91.44	-375.11	-4,917.28	1,954.67	1,676.23	278.44	7.020		
9,800.00	7,122.57	7,068.57	7,122.57	86.90	245.04	-91.36	-375.11	-4,917.28	1,855.77	1,576.95	278.83	6.656		
9,900.00	7,122.21	7,068.21	7,122.21	89.56	245.03	-91.29	-375.11	-4,917.28	1,757.00	1,477.73	279.28	6.291		
10,000.00	7,121.84	7,067.84	7,121.84	92.24	245.02	-91.22	-375.11	-4,917.28	1,658.38	1,378.56	279.82	5.927		
10,100.00	7,121.48	7,067.48	7,121.48	94.92	245.00	-91.14	-375.11	-4,917.28	1,559.93	1,279.46	280.47	5.562		
10,200.00	7,121.11	7,067.11	7,121.11	97.62	244.99	-91.07	-375.11	-4,917.28	1,461.69	1,180.42	281.27	5.197		
10,300.00	7,120.74	7,066.74	7,120.74	100.32	244.98	-90.99	-375.11	-4,917.28	1,363.71	1,081.47	282.24	4.832		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE BEATRICE 32-16(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,120.38	7,066.38	7,120.38	103.04	244.96	-90.92	-375.11	-4,917.28	1,266.04	982.60	283.44	4.467		
10,500.00	7,120.01	7,066.01	7,120.01	105.76	244.95	-90.84	-375.11	-4,917.28	1,168.77	883.84	284.93	4.102		
10,600.00	7,119.64	7,065.64	7,119.64	108.48	244.94	-90.77	-375.11	-4,917.28	1,072.00	785.19	286.81	3.738		
10,700.00	7,119.28	7,065.28	7,119.28	111.22	244.93	-90.69	-375.11	-4,917.28	975.88	686.69	289.19	3.375		
10,800.00	7,118.91	7,064.91	7,118.91	113.96	244.91	-90.62	-375.11	-4,917.28	880.62	588.37	292.25	3.013		
10,900.00	7,118.55	7,064.55	7,118.55	116.70	244.90	-90.55	-375.11	-4,917.28	786.55	490.31	296.24	2.655		
11,000.00	7,118.18	7,064.18	7,118.18	119.45	244.89	-90.47	-375.11	-4,917.28	694.13	392.62	301.50	2.302		
11,100.00	7,117.81	7,063.81	7,117.81	122.21	244.87	-90.40	-375.11	-4,917.28	604.13	295.59	308.53	1.958		
11,200.00	7,117.45	7,063.45	7,117.45	124.97	244.86	-90.32	-375.11	-4,917.28	517.81	199.79	318.02	1.628		
11,300.00	7,117.08	7,063.08	7,117.08	127.73	244.85	-90.25	-375.11	-4,917.28	437.36	106.59	330.77	1.322 Level 3		
11,400.00	7,116.72	7,062.72	7,116.72	130.50	244.84	-90.17	-375.11	-4,917.28	366.66	19.38	347.28	1.056 Level 2		
11,500.00	7,116.35	7,062.35	7,116.35	133.27	244.82	-90.10	-375.11	-4,917.28	312.40	-53.53	365.93	0.854 Level 1		
11,600.00	7,115.98	7,061.98	7,115.98	136.04	244.81	-90.03	-375.11	-4,917.28	284.17	-95.74	379.91	0.748 Level 1		
11,634.22	7,115.86	7,061.86	7,115.86	136.99	244.81	-90.00	-375.11	-4,917.28	282.10	-99.70	381.80	0.739 Level 1, CC, ES, SF		
11,700.00	7,115.62	7,061.62	7,115.62	138.82	244.80	-89.95	-375.11	-4,917.28	289.67	-90.54	380.21	0.762 Level 1		
11,800.00	7,115.25	7,061.25	7,115.25	141.60	244.79	-89.88	-375.11	-4,917.28	327.21	-40.79	368.00	0.889 Level 1		
11,900.00	7,114.88	7,060.88	7,114.88	144.39	244.77	-89.80	-375.11	-4,917.28	387.58	35.34	352.24	1.100 Level 2		
12,000.00	7,114.52	7,060.52	7,114.52	147.17	244.76	-89.73	-375.11	-4,917.28	461.92	123.62	338.30	1.365 Level 3		
12,100.00	7,114.15	7,060.15	7,114.15	149.96	244.75	-89.65	-375.11	-4,917.28	544.54	217.21	327.33	1.664		
12,200.00	7,113.79	7,059.79	7,113.79	152.75	244.73	-89.58	-375.11	-4,917.28	632.21	313.26	318.94	1.982		
12,300.00	7,113.42	7,059.42	7,113.42	155.55	244.72	-89.50	-375.11	-4,917.28	723.07	410.56	312.52	2.314		
12,400.00	7,113.05	7,059.05	7,113.05	158.34	244.71	-89.43	-375.11	-4,917.28	816.08	508.54	307.54	2.654		
12,500.00	7,112.69	7,058.69	7,112.69	161.14	244.70	-89.36	-375.11	-4,917.28	910.57	606.95	303.62	2.999		
12,600.00	7,112.32	7,058.32	7,112.32	163.94	244.68	-89.28	-375.11	-4,917.28	1,006.13	705.63	300.50	3.348		
12,700.00	7,111.96	7,057.96	7,111.96	166.74	244.67	-89.21	-375.11	-4,917.28	1,102.48	804.51	297.97	3.700		
12,800.00	7,111.59	7,057.59	7,111.59	169.54	244.66	-89.13	-375.11	-4,917.28	1,199.42	903.53	295.89	4.054		
12,900.00	7,111.22	7,057.22	7,111.22	172.35	244.64	-89.06	-375.11	-4,917.28	1,296.83	1,002.65	294.17	4.408		
13,000.00	7,110.86	7,056.86	7,110.86	175.16	244.63	-88.98	-375.11	-4,917.28	1,394.60	1,101.86	292.74	4.764		
13,100.00	7,110.49	7,056.49	7,110.49	177.96	244.62	-88.91	-375.11	-4,917.28	1,492.67	1,201.15	291.52	5.120		
13,200.00	7,110.12	7,056.12	7,110.12	180.77	244.61	-88.84	-375.11	-4,917.28	1,590.98	1,300.49	290.49	5.477		
13,300.00	7,109.76	7,055.76	7,109.76	183.58	244.59	-88.76	-375.11	-4,917.28	1,689.49	1,399.89	289.60	5.834		
13,400.00	7,109.39	7,055.39	7,109.39	186.40	244.58	-88.69	-375.11	-4,917.28	1,788.16	1,499.33	288.83	6.191		
13,500.00	7,109.03	7,055.03	7,109.03	189.21	244.57	-88.61	-375.11	-4,917.28	1,886.97	1,598.80	288.17	6.548		
13,600.00	7,108.66	7,054.66	7,108.66	192.03	244.56	-88.54	-375.11	-4,917.28	1,985.90	1,698.31	287.59	6.905		
13,700.00	7,108.29	7,054.29	7,108.29	194.84	244.54	-88.46	-375.11	-4,917.28	2,084.94	1,797.85	287.09	7.262		
13,800.00	7,107.93	7,053.93	7,107.93	197.66	244.53	-88.39	-375.11	-4,917.28	2,184.06	1,897.42	286.64	7.619		
13,900.00	7,107.56	7,053.56	7,107.56	200.48	244.52	-88.32	-375.11	-4,917.28	2,283.26	1,997.01	286.25	7.976		
14,000.00	7,107.19	7,053.19	7,107.19	203.30	244.50	-88.24	-375.11	-4,917.28	2,382.52	2,096.62	285.91	8.333		
14,100.00	7,106.83	7,052.83	7,106.83	206.12	244.49	-88.17	-375.11	-4,917.28	2,481.85	2,196.25	285.60	8.690		
14,200.00	7,106.46	7,052.46	7,106.46	208.94	244.48	-88.09	-375.11	-4,917.28	2,581.22	2,295.89	285.33	9.046		
14,300.00	7,106.10	7,052.10	7,106.10	211.76	244.47	-88.02	-375.11	-4,917.28	2,680.65	2,395.56	285.09	9.403		
14,400.00	7,105.73	7,051.73	7,105.73	214.58	244.45	-87.94	-375.11	-4,917.28	2,780.11	2,495.23	284.88	9.759		
14,500.00	7,105.36	7,051.36	7,105.36	217.40	244.44	-87.87	-375.11	-4,917.28	2,879.61	2,594.92	284.69	10.115		
14,600.00	7,105.00	7,051.00	7,105.00	220.23	244.43	-87.80	-375.11	-4,917.28	2,979.15	2,694.62	284.52	10.471		
14,700.00	7,104.63	7,050.63	7,104.63	223.05	244.41	-87.72	-375.11	-4,917.28	3,078.71	2,794.34	284.37	10.826		
14,800.00	7,104.27	7,050.27	7,104.27	225.88	244.40	-87.65	-375.11	-4,917.28	3,178.30	2,894.06	284.24	11.182		
14,872.41	7,104.00	7,050.00	7,104.00	227.93	244.39	-87.59	-375.11	-4,917.28	3,250.43	2,966.28	284.16	11.439		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	57.00	3.28	3.28	-111.93	-3,082.65	-7,655.03	8,252.61					
100.00	100.00	43.00	100.00	3.28	3.36	-111.93	-3,082.65	-7,655.03	8,252.41	8,245.76	6.65	1,241.057		
200.00	200.00	143.00	200.00	3.34	4.62	-111.93	-3,082.65	-7,655.03	8,252.41	8,244.46	7.95	1,037.763		
300.00	300.00	243.00	300.00	3.44	7.49	-111.93	-3,082.65	-7,655.03	8,252.41	8,241.47	10.94	754.437		
400.00	400.00	343.00	400.00	3.60	10.74	-111.93	-3,082.65	-7,655.03	8,252.41	8,238.07	14.34	575.281		
500.00	500.00	443.00	500.00	3.81	14.11	-111.93	-3,082.65	-7,655.03	8,252.41	8,234.50	17.91	460.713		
600.00	599.98	542.98	599.98	4.04	17.52	-21.94	-3,082.65	-7,655.03	8,250.92	8,229.36	21.56	382.707		
700.00	699.95	642.95	699.95	4.30	20.96	-21.95	-3,082.65	-7,655.03	8,248.61	8,223.35	25.26	326.563		
800.00	799.92	742.92	799.92	4.59	24.41	-21.96	-3,082.65	-7,655.03	8,246.29	8,217.29	29.00	284.354		
900.00	899.89	842.89	899.89	4.90	27.87	-21.96	-3,082.65	-7,655.03	8,243.97	8,211.20	32.77	251.548		
1,000.00	999.86	942.86	999.86	5.23	31.34	-21.97	-3,082.65	-7,655.03	8,241.65	8,205.08	36.57	225.365		
1,100.00	1,099.83	1,042.83	1,099.83	5.58	34.81	-21.98	-3,082.65	-7,655.03	8,239.34	8,198.95	40.39	204.009		
1,200.00	1,199.80	1,142.80	1,199.80	5.94	38.29	-21.98	-3,082.65	-7,655.03	8,237.02	8,192.80	44.22	186.275		
1,300.00	1,299.77	1,242.77	1,299.77	6.30	41.77	-21.99	-3,082.65	-7,655.03	8,234.70	8,186.64	48.06	171.325		
1,400.00	1,399.73	1,342.73	1,399.73	6.68	45.25	-22.00	-3,082.65	-7,655.03	8,232.39	8,180.46	51.92	158.557		
1,500.00	1,499.70	1,442.70	1,499.70	7.07	48.73	-22.00	-3,082.65	-7,655.03	8,230.07	8,174.28	55.79	147.532		
1,600.00	1,599.67	1,542.67	1,599.67	7.46	52.21	-22.01	-3,082.65	-7,655.03	8,227.75	8,168.09	59.66	137.918		
1,700.00	1,699.64	1,642.64	1,699.64	7.85	55.70	-22.02	-3,082.65	-7,655.03	8,225.43	8,161.90	63.53	129.464		
1,800.00	1,799.61	1,742.61	1,799.61	8.25	59.18	-22.02	-3,082.65	-7,655.03	8,223.12	8,155.70	67.42	121.972		
1,900.00	1,899.58	1,842.58	1,899.58	8.66	62.66	-22.03	-3,082.65	-7,655.03	8,220.80	8,149.50	71.31	115.290		
2,000.00	1,999.55	1,942.55	1,999.55	9.06	66.15	-22.04	-3,082.65	-7,655.03	8,218.49	8,143.29	75.20	109.293		
2,100.00	2,099.52	2,042.52	2,099.52	9.47	69.64	-22.04	-3,082.65	-7,655.03	8,216.17	8,137.08	79.09	103.881		
2,200.00	2,199.48	2,142.48	2,199.48	9.89	73.12	-22.05	-3,082.65	-7,655.03	8,213.85	8,130.86	82.99	98.974		
2,300.00	2,299.45	2,242.45	2,299.45	10.30	76.61	-22.06	-3,082.65	-7,655.03	8,211.54	8,124.65	86.89	94.505		
2,400.00	2,399.42	2,342.42	2,399.42	10.72	80.10	-22.06	-3,082.65	-7,655.03	8,209.22	8,118.43	90.79	90.417		
2,500.00	2,499.39	2,442.39	2,499.39	11.14	83.58	-22.07	-3,082.65	-7,655.03	8,206.91	8,112.21	94.70	86.664		
2,600.00	2,599.36	2,542.36	2,599.36	11.56	87.07	-22.08	-3,082.65	-7,655.03	8,204.59	8,105.99	98.60	83.207		
2,700.00	2,699.33	2,642.33	2,699.33	11.98	90.56	-22.08	-3,082.65	-7,655.03	8,202.27	8,099.76	102.51	80.012		
2,800.00	2,799.30	2,742.30	2,799.30	12.41	94.05	-22.09	-3,082.65	-7,655.03	8,199.96	8,093.54	106.42	77.051		
2,900.00	2,899.27	2,842.27	2,899.27	12.83	97.53	-22.09	-3,082.65	-7,655.03	8,197.64	8,087.31	110.33	74.299		
3,000.00	2,999.23	2,942.23	2,999.23	13.26	101.02	-22.10	-3,082.65	-7,655.03	8,195.33	8,081.08	114.24	71.735		
3,100.00	3,099.20	3,042.20	3,099.20	13.68	104.51	-22.11	-3,082.65	-7,655.03	8,193.01	8,074.86	118.16	69.339		
3,200.00	3,199.17	3,142.17	3,199.17	14.11	108.00	-22.11	-3,082.65	-7,655.03	8,190.70	8,068.63	122.07	67.097		
3,300.00	3,299.14	3,242.14	3,299.14	14.54	111.49	-22.12	-3,082.65	-7,655.03	8,188.38	8,062.40	125.99	64.994		
3,400.00	3,399.11	3,342.11	3,399.11	14.97	114.97	-22.13	-3,082.65	-7,655.03	8,186.07	8,056.17	129.90	63.017		
3,500.00	3,499.08	3,442.08	3,499.08	15.40	118.46	-22.13	-3,082.65	-7,655.03	8,183.75	8,049.93	133.82	61.155		
3,600.00	3,599.05	3,542.05	3,599.05	15.83	121.95	-22.14	-3,082.65	-7,655.03	8,181.44	8,043.70	137.74	59.399		
3,700.00	3,699.02	3,642.02	3,699.02	16.26	125.44	-22.15	-3,082.65	-7,655.03	8,179.12	8,037.47	141.65	57.740		
3,800.00	3,798.98	3,741.98	3,798.98	16.69	128.93	-22.15	-3,082.65	-7,655.03	8,176.81	8,031.24	145.57	56.170		
3,900.00	3,898.95	3,841.95	3,898.95	17.12	132.42	-22.16	-3,082.65	-7,655.03	8,174.50	8,025.00	149.49	54.682		
4,000.00	3,998.92	3,941.92	3,998.92	17.55	135.91	-22.17	-3,082.65	-7,655.03	8,172.18	8,018.77	153.41	53.270		
4,100.00	4,098.89	4,041.89	4,098.89	17.98	139.40	-22.17	-3,082.65	-7,655.03	8,169.87	8,012.54	157.33	51.928		
4,200.00	4,198.86	4,141.86	4,198.86	18.42	142.88	-22.18	-3,082.65	-7,655.03	8,167.55	8,006.30	161.25	50.651		
4,300.00	4,298.83	4,241.83	4,298.83	18.85	146.37	-22.19	-3,082.65	-7,655.03	8,165.24	8,000.07	165.17	49.435		
4,400.00	4,398.80	4,341.80	4,398.80	19.28	149.86	-22.19	-3,082.65	-7,655.03	8,162.93	7,993.83	169.09	48.275		
4,500.00	4,498.77	4,441.77	4,498.77	19.72	153.35	-22.20	-3,082.65	-7,655.03	8,160.61	7,987.60	173.01	47.167		
4,600.00	4,598.73	4,541.73	4,598.73	20.15	156.84	-22.21	-3,082.65	-7,655.03	8,158.30	7,981.36	176.94	46.109		
4,700.00	4,698.70	4,641.70	4,698.70	20.58	160.33	-22.21	-3,082.65	-7,655.03	8,155.99	7,975.13	180.86	45.096		
4,800.00	4,798.67	4,741.67	4,798.67	21.02	163.82	-22.22	-3,082.65	-7,655.03	8,153.67	7,968.89	184.78	44.126		
4,900.00	4,898.64	4,841.64	4,898.64	21.45	167.31	-22.23	-3,082.65	-7,655.03	8,151.36	7,962.66	188.70	43.197		
5,000.00	4,998.61	4,941.61	4,998.61	21.89	170.80	-22.23	-3,082.65	-7,655.03	8,149.05	7,956.42	192.63	42.305		
5,100.00	5,098.58	5,041.58	5,098.58	22.32	174.29	-22.24	-3,082.65	-7,655.03	8,146.73	7,950.18	196.55	41.449		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-1(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,141.55	5,198.55	22.76	177.78	-22.25	-3,082.65	-7,655.03	8,144.42	7,943.95	200.47	40.626		
5,300.00	5,298.52	5,241.52	5,298.52	23.20	181.27	-22.25	-3,082.65	-7,655.03	8,142.11	7,937.71	204.40	39.835		
5,400.00	5,398.49	5,341.49	5,398.49	23.63	184.76	-22.26	-3,082.65	-7,655.03	8,139.79	7,931.48	208.32	39.074		
5,500.00	5,498.45	5,441.45	5,498.45	24.07	188.24	-22.27	-3,082.65	-7,655.03	8,137.48	7,925.24	212.24	38.340		
5,600.00	5,598.42	5,541.42	5,598.42	24.50	191.73	-22.27	-3,082.65	-7,655.03	8,135.17	7,919.00	216.17	37.634		
5,700.00	5,698.39	5,641.39	5,698.39	24.94	195.22	-22.28	-3,082.65	-7,655.03	8,132.86	7,912.77	220.09	36.952		
5,800.00	5,798.36	5,741.36	5,798.36	25.38	198.71	-22.29	-3,082.65	-7,655.03	8,130.55	7,906.53	224.02	36.295		
5,900.00	5,898.33	5,841.33	5,898.33	25.81	202.20	-22.29	-3,082.65	-7,655.03	8,128.23	7,900.29	227.94	35.660		
6,000.00	5,998.30	5,941.30	5,998.30	26.25	205.69	-22.30	-3,082.65	-7,655.03	8,125.92	7,894.06	231.86	35.046		
6,100.00	6,098.27	6,041.27	6,098.27	26.69	209.18	-22.31	-3,082.65	-7,655.03	8,123.61	7,887.82	235.79	34.453		
6,200.00	6,198.24	6,141.24	6,198.24	27.12	212.67	-22.31	-3,082.65	-7,655.03	8,121.30	7,881.58	239.71	33.879		
6,300.00	6,298.20	6,241.20	6,298.20	27.56	216.16	-22.32	-3,082.65	-7,655.03	8,118.99	7,875.35	243.64	33.324		
6,400.00	6,398.17	6,341.17	6,398.17	28.00	219.65	-22.33	-3,082.65	-7,655.03	8,116.67	7,869.11	247.56	32.786		
6,500.00	6,498.14	6,441.14	6,498.14	28.43	223.14	-22.33	-3,082.65	-7,655.03	8,114.36	7,862.87	251.49	32.265		
6,600.00	6,597.68	6,540.68	6,597.68	28.88	226.61	-21.66	-3,082.65	-7,655.03	8,106.42	7,851.02	255.40	31.740		
6,700.00	6,694.68	6,637.68	6,694.68	29.32	230.00	-22.41	-3,082.65	-7,655.03	8,084.17	7,824.95	259.22	31.187		
6,800.00	6,786.74	6,729.74	6,786.74	29.77	233.21	-23.86	-3,082.65	-7,655.03	8,048.07	7,785.23	262.84	30.620		
6,900.00	6,871.61	6,814.61	6,871.61	30.24	236.18	-26.14	-3,082.65	-7,655.03	7,999.04	7,732.87	266.17	30.052		
7,000.00	6,947.19	6,909.81	6,947.19	30.74	239.50	-29.55	-3,082.65	-7,655.03	7,938.33	7,668.50	269.83	29.420		
7,100.00	7,011.62	6,954.62	7,011.62	31.32	241.06	-34.63	-3,082.65	-7,655.03	7,867.46	7,595.77	271.69	28.958		
7,200.00	7,063.31	7,006.31	7,063.31	32.03	242.87	-42.22	-3,082.65	-7,655.03	7,788.22	7,514.47	273.75	28.450		
7,300.00	7,101.00	7,044.00	7,101.00	32.89	244.18	-53.66	-3,082.65	-7,655.03	7,702.61	7,427.31	275.30	27.979		
7,400.00	7,123.74	7,066.74	7,123.74	33.93	244.98	-70.19	-3,082.65	-7,655.03	7,612.78	7,336.46	276.32	27.551		
7,500.00	7,131.00	7,074.00	7,131.00	35.10	245.23	-90.49	-3,082.65	-7,655.03	7,520.95	7,244.15	276.80	27.171		
7,600.00	7,130.63	7,073.63	7,130.63	36.44	245.22	-90.49	-3,082.65	-7,655.03	7,428.98	7,151.94	277.05	26.815		
7,700.00	7,130.26	7,073.26	7,130.26	37.94	245.20	-90.48	-3,082.65	-7,655.03	7,337.23	7,059.89	277.34	26.455		
7,800.00	7,129.90	7,072.90	7,129.90	39.59	245.19	-90.47	-3,082.65	-7,655.03	7,245.69	6,968.00	277.69	26.092		
7,900.00	7,129.53	7,072.53	7,129.53	41.37	245.18	-90.47	-3,082.65	-7,655.03	7,154.38	6,876.28	278.10	25.726		
8,000.00	7,129.17	7,072.17	7,129.17	43.27	245.17	-90.46	-3,082.65	-7,655.03	7,063.31	6,784.74	278.56	25.356		
8,100.00	7,128.80	7,071.80	7,128.80	45.27	245.15	-90.45	-3,082.65	-7,655.03	6,972.48	6,693.39	279.09	24.983		
8,200.00	7,128.43	7,071.43	7,128.43	47.36	245.14	-90.44	-3,082.65	-7,655.03	6,881.90	6,602.23	279.67	24.607		
8,300.00	7,128.07	7,071.07	7,128.07	49.52	245.13	-90.44	-3,082.65	-7,655.03	6,791.59	6,511.27	280.32	24.228		
8,400.00	7,127.70	7,070.70	7,127.70	51.75	245.12	-90.43	-3,082.65	-7,655.03	6,701.56	6,420.52	281.04	23.846		
8,500.00	7,127.33	7,070.33	7,127.33	54.04	245.10	-90.42	-3,082.65	-7,655.03	6,611.81	6,329.99	281.82	23.461		
8,600.00	7,126.97	7,069.97	7,126.97	56.38	245.09	-90.42	-3,082.65	-7,655.03	6,522.36	6,239.69	282.67	23.074		
8,700.00	7,126.60	7,069.60	7,126.60	58.77	245.08	-90.41	-3,082.65	-7,655.03	6,433.22	6,149.63	283.58	22.686		
8,800.00	7,126.24	7,069.24	7,126.24	61.19	245.06	-90.40	-3,082.65	-7,655.03	6,344.40	6,059.83	284.57	22.295		
8,900.00	7,125.87	7,068.87	7,125.87	63.65	245.05	-90.39	-3,082.65	-7,655.03	6,255.92	5,970.29	285.62	21.903		
9,000.00	7,125.50	7,068.50	7,125.50	66.15	245.04	-90.39	-3,082.65	-7,655.03	6,167.79	5,881.04	286.75	21.509		
9,100.00	7,125.14	7,068.14	7,125.14	68.67	245.03	-90.38	-3,082.65	-7,655.03	6,080.03	5,792.08	287.95	21.115		
9,200.00	7,124.77	7,067.77	7,124.77	71.21	245.01	-90.37	-3,082.65	-7,655.03	5,992.65	5,703.42	289.23	20.719		
9,300.00	7,124.41	7,067.41	7,124.41	73.78	245.00	-90.37	-3,082.65	-7,655.03	5,905.68	5,615.10	290.58	20.324		
9,400.00	7,124.04	7,067.04	7,124.04	76.37	244.99	-90.36	-3,082.65	-7,655.03	5,819.12	5,527.11	292.01	19.928		
9,500.00	7,123.67	7,066.67	7,123.67	78.98	244.97	-90.35	-3,082.65	-7,655.03	5,733.00	5,439.49	293.51	19.532		
9,600.00	7,123.31	7,066.31	7,123.31	81.60	244.96	-90.34	-3,082.65	-7,655.03	5,647.34	5,352.25	295.09	19.138		
9,700.00	7,122.94	7,065.94	7,122.94	84.24	244.95	-90.34	-3,082.65	-7,655.03	5,562.15	5,265.40	296.75	18.743		
9,800.00	7,122.57	7,065.57	7,122.57	86.90	244.94	-90.33	-3,082.65	-7,655.03	5,477.47	5,178.98	298.50	18.350		
9,900.00	7,122.21	7,065.21	7,122.21	89.56	244.92	-90.32	-3,082.65	-7,655.03	5,393.31	5,092.99	300.32	17.959		
10,000.00	7,121.84	7,064.84	7,121.84	92.24	244.91	-90.32	-3,082.65	-7,655.03	5,309.70	5,007.48	302.22	17.569		
10,100.00	7,121.48	7,064.48	7,121.48	94.92	244.90	-90.31	-3,082.65	-7,655.03	5,226.67	4,922.45	304.22	17.181		
10,200.00	7,121.11	7,064.11	7,121.11	97.62	244.89	-90.30	-3,082.65	-7,655.03	5,144.24	4,837.95	306.29	16.795		
10,300.00	7,120.74	7,063.74	7,120.74	100.32	244.87	-90.29	-3,082.65	-7,655.03	5,062.44	4,753.99	308.46	16.412		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,120.38	7,063.38	7,120.38	103.04	244.86	-90.29	-3,082.65	-7,655.03	4,981.31	4,670.60	310.71	16.032		
10,500.00	7,120.01	7,063.01	7,120.01	105.76	244.85	-90.28	-3,082.65	-7,655.03	4,900.87	4,587.82	313.05	15.655		
10,600.00	7,119.64	7,062.64	7,119.64	108.48	244.83	-90.27	-3,082.65	-7,655.03	4,821.17	4,505.68	315.49	15.282		
10,700.00	7,119.28	7,062.28	7,119.28	111.22	244.82	-90.27	-3,082.65	-7,655.03	4,742.24	4,424.22	318.02	14.912		
10,800.00	7,118.91	7,061.91	7,118.91	113.96	244.81	-90.26	-3,082.65	-7,655.03	4,664.11	4,343.47	320.64	14.546		
10,900.00	7,118.55	7,061.55	7,118.55	116.70	244.80	-90.25	-3,082.65	-7,655.03	4,586.84	4,263.47	323.36	14.185		
11,000.00	7,118.18	7,061.18	7,118.18	119.45	244.78	-90.24	-3,082.65	-7,655.03	4,510.45	4,184.27	326.18	13.828		
11,100.00	7,117.81	7,060.81	7,117.81	122.21	244.77	-90.24	-3,082.65	-7,655.03	4,435.01	4,105.91	329.10	13.476		
11,200.00	7,117.45	7,060.45	7,117.45	124.97	244.76	-90.23	-3,082.65	-7,655.03	4,360.56	4,028.44	332.12	13.129		
11,300.00	7,117.08	7,060.08	7,117.08	127.73	244.74	-90.22	-3,082.65	-7,655.03	4,287.14	3,951.90	335.24	12.788		
11,400.00	7,116.72	7,059.72	7,116.72	130.50	244.73	-90.22	-3,082.65	-7,655.03	4,214.82	3,876.35	338.47	12.453		
11,500.00	7,116.35	7,059.35	7,116.35	133.27	244.72	-90.21	-3,082.65	-7,655.03	4,143.65	3,801.85	341.79	12.123		
11,600.00	7,115.98	7,058.98	7,115.98	136.04	244.71	-90.20	-3,082.65	-7,655.03	4,073.69	3,728.46	345.22	11.800		
11,700.00	7,115.62	7,058.62	7,115.62	138.82	244.69	-90.19	-3,082.65	-7,655.03	4,005.00	3,656.25	348.76	11.484		
11,800.00	7,115.25	7,058.25	7,115.25	141.60	244.68	-90.19	-3,082.65	-7,655.03	3,937.66	3,585.27	352.39	11.174		
11,900.00	7,114.88	7,057.88	7,114.88	144.39	244.67	-90.18	-3,082.65	-7,655.03	3,871.73	3,515.60	356.13	10.872		
12,000.00	7,114.52	7,057.52	7,114.52	147.17	244.65	-90.17	-3,082.65	-7,655.03	3,807.29	3,447.32	359.97	10.577		
12,100.00	7,114.15	7,057.15	7,114.15	149.96	244.64	-90.17	-3,082.65	-7,655.03	3,744.40	3,380.50	363.90	10.290		
12,200.00	7,113.79	7,056.79	7,113.79	152.75	244.63	-90.16	-3,082.65	-7,655.03	3,683.16	3,315.23	367.93	10.011		
12,300.00	7,113.42	7,056.42	7,113.42	155.55	244.62	-90.15	-3,082.65	-7,655.03	3,623.64	3,251.60	372.04	9.740		
12,400.00	7,113.05	7,056.05	7,113.05	158.34	244.60	-90.14	-3,082.65	-7,655.03	3,565.94	3,189.69	376.24	9.478		
12,500.00	7,112.69	7,055.69	7,112.69	161.14	244.59	-90.14	-3,082.65	-7,655.03	3,510.13	3,129.61	380.52	9.225		
12,600.00	7,112.32	7,055.32	7,112.32	163.94	244.58	-90.13	-3,082.65	-7,655.03	3,456.32	3,071.45	384.87	8.981		
12,700.00	7,111.96	7,054.96	7,111.96	166.74	244.57	-90.12	-3,082.65	-7,655.03	3,404.60	3,015.32	389.28	8.746		
12,800.00	7,111.59	7,054.59	7,111.59	169.54	244.55	-90.12	-3,082.65	-7,655.03	3,355.06	2,961.32	393.73	8.521		
12,900.00	7,111.22	7,054.22	7,111.22	172.35	244.54	-90.11	-3,082.65	-7,655.03	3,307.80	2,909.57	398.23	8.306		
13,000.00	7,110.86	7,053.86	7,110.86	175.16	244.53	-90.10	-3,082.65	-7,655.03	3,262.92	2,860.17	402.75	8.102		
13,100.00	7,110.49	7,053.49	7,110.49	177.96	244.51	-90.09	-3,082.65	-7,655.03	3,220.52	2,813.23	407.29	7.907		
13,200.00	7,110.12	7,053.12	7,110.12	180.77	244.50	-90.09	-3,082.65	-7,655.03	3,180.70	2,768.89	411.82	7.724		
13,300.00	7,109.76	7,052.76	7,109.76	183.58	244.49	-90.08	-3,082.65	-7,655.03	3,143.56	2,727.24	416.32	7.551		
13,400.00	7,109.39	7,052.39	7,109.39	186.40	244.48	-90.07	-3,082.65	-7,655.03	3,109.20	2,688.40	420.79	7.389		
13,500.00	7,109.03	7,052.03	7,109.03	189.21	244.46	-90.07	-3,082.65	-7,655.03	3,077.70	2,652.50	425.20	7.238		
13,600.00	7,108.66	7,051.66	7,108.66	192.03	244.45	-90.06	-3,082.65	-7,655.03	3,049.16	2,619.62	429.53	7.099		
13,700.00	7,108.29	7,051.29	7,108.29	194.84	244.44	-90.05	-3,082.65	-7,655.03	3,023.65	2,589.89	433.76	6.971		
13,800.00	7,107.93	7,050.93	7,107.93	197.66	244.42	-90.04	-3,082.65	-7,655.03	3,001.26	2,563.39	437.88	6.854		
13,900.00	7,107.56	7,050.56	7,107.56	200.48	244.41	-90.04	-3,082.65	-7,655.03	2,982.06	2,540.22	441.85	6.749		
14,000.00	7,107.19	7,050.19	7,107.19	203.30	244.40	-90.03	-3,082.65	-7,655.03	2,966.11	2,520.46	445.65	6.656		
14,100.00	7,106.83	7,049.83	7,106.83	206.12	244.39	-90.02	-3,082.65	-7,655.03	2,953.46	2,504.18	449.28	6.574		
14,200.00	7,106.46	7,049.46	7,106.46	208.94	244.37	-90.02	-3,082.65	-7,655.03	2,944.16	2,491.44	452.71	6.503		
14,300.00	7,106.10	7,049.10	7,106.10	211.76	244.36	-90.01	-3,082.65	-7,655.03	2,938.22	2,482.29	455.93	6.444		
14,400.00	7,105.73	7,048.73	7,105.73	214.58	244.35	-90.00	-3,082.65	-7,655.03	2,935.69	2,476.77	458.92	6.397		
14,424.42	7,105.64	7,048.64	7,105.64	215.27	244.35	-90.00	-3,082.65	-7,655.03	2,935.59	2,475.97	459.62	6.387 CC		
14,500.00	7,105.36	7,048.36	7,105.36	217.40	244.34	-89.99	-3,082.65	-7,655.03	2,936.56	2,474.89	461.67	6.361 ES		
14,600.00	7,105.00	7,048.00	7,105.00	220.23	244.32	-89.99	-3,082.65	-7,655.03	2,940.84	2,476.66	464.17	6.336		
14,700.00	7,104.63	7,047.63	7,104.63	223.05	244.31	-89.98	-3,082.65	-7,655.03	2,948.50	2,482.08	466.41	6.322		
14,800.00	7,104.27	7,047.27	7,104.27	225.88	244.30	-89.97	-3,082.65	-7,655.03	2,959.52	2,491.12	468.40	6.318 SF		
14,872.41	7,104.00	7,047.00	7,104.00	227.93	244.29	-89.97	-3,082.65	-7,655.03	2,969.57	2,499.90	469.67	6.323		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	44.00	3.28	3.28	-103.71	-1,590.79	-6,519.42	6,710.84					
100.00	100.00	56.00	100.00	3.28	3.42	-103.71	-1,590.79	-6,519.42	6,710.69	6,703.99	6.71	1,000.509		
200.00	200.00	156.00	200.00	3.34	4.94	-103.71	-1,590.79	-6,519.42	6,710.69	6,702.41	8.28	810.284		
300.00	300.00	256.00	300.00	3.44	7.90	-103.71	-1,590.79	-6,519.42	6,710.69	6,699.34	11.35	591.300		
400.00	400.00	356.00	400.00	3.60	11.17	-103.71	-1,590.79	-6,519.42	6,710.69	6,695.92	14.78	454.100		
500.00	500.00	456.00	500.00	3.81	14.55	-103.71	-1,590.79	-6,519.42	6,710.69	6,692.34	18.35	365.625		
600.00	599.98	555.98	599.98	4.04	17.97	-13.72	-1,590.79	-6,519.42	6,709.13	6,687.13	22.01	304.885		
700.00	699.95	655.95	699.95	4.30	21.41	-13.73	-1,590.79	-6,519.42	6,706.71	6,681.00	25.71	260.889		
800.00	799.92	755.92	799.92	4.59	24.86	-13.73	-1,590.79	-6,519.42	6,704.28	6,674.83	29.45	227.651		
900.00	899.89	855.89	899.89	4.90	28.32	-13.74	-1,590.79	-6,519.42	6,701.85	6,668.63	33.22	201.720		
1,000.00	999.86	955.86	999.86	5.23	31.79	-13.74	-1,590.79	-6,519.42	6,699.43	6,662.40	37.02	180.960		
1,100.00	1,099.83	1,055.83	1,099.83	5.58	35.27	-13.75	-1,590.79	-6,519.42	6,697.00	6,656.16	40.84	163.985		
1,200.00	1,199.80	1,155.80	1,199.80	5.94	38.74	-13.75	-1,590.79	-6,519.42	6,694.57	6,649.90	44.67	149.861		
1,300.00	1,299.77	1,255.77	1,299.77	6.30	42.22	-13.76	-1,590.79	-6,519.42	6,692.14	6,643.63	48.52	137.933		
1,400.00	1,399.73	1,355.73	1,399.73	6.68	45.70	-13.76	-1,590.79	-6,519.42	6,689.72	6,637.34	52.37	127.731		
1,500.00	1,499.70	1,455.70	1,499.70	7.07	49.18	-13.77	-1,590.79	-6,519.42	6,687.29	6,631.05	56.24	118.910		
1,600.00	1,599.67	1,555.67	1,599.67	7.46	52.67	-13.77	-1,590.79	-6,519.42	6,684.86	6,624.75	60.11	111.211		
1,700.00	1,699.64	1,655.64	1,699.64	7.85	56.15	-13.78	-1,590.79	-6,519.42	6,682.44	6,618.45	63.99	104.433		
1,800.00	1,799.61	1,755.61	1,799.61	8.25	59.63	-13.78	-1,590.79	-6,519.42	6,680.01	6,612.14	67.87	98.422		
1,900.00	1,899.58	1,855.58	1,899.58	8.66	63.12	-13.79	-1,590.79	-6,519.42	6,677.58	6,605.82	71.76	93.055		
2,000.00	1,999.55	1,955.55	1,999.55	9.06	66.60	-13.79	-1,590.79	-6,519.42	6,675.16	6,599.50	75.65	88.236		
2,100.00	2,099.52	2,055.52	2,099.52	9.47	70.09	-13.80	-1,590.79	-6,519.42	6,672.73	6,593.18	79.55	83.885		
2,200.00	2,199.48	2,155.48	2,199.48	9.89	73.58	-13.80	-1,590.79	-6,519.42	6,670.30	6,586.86	83.44	79.938		
2,300.00	2,299.45	2,255.45	2,299.45	10.30	77.06	-13.81	-1,590.79	-6,519.42	6,667.88	6,580.53	87.34	76.340		
2,400.00	2,399.42	2,355.42	2,399.42	10.72	80.55	-13.81	-1,590.79	-6,519.42	6,665.45	6,574.20	91.25	73.048		
2,500.00	2,499.39	2,455.39	2,499.39	11.14	84.04	-13.82	-1,590.79	-6,519.42	6,663.02	6,567.87	95.15	70.025		
2,600.00	2,599.36	2,555.36	2,599.36	11.56	87.52	-13.82	-1,590.79	-6,519.42	6,660.60	6,561.54	99.06	67.239		
2,700.00	2,699.33	2,655.33	2,699.33	11.98	91.01	-13.83	-1,590.79	-6,519.42	6,658.17	6,555.20	102.97	64.663		
2,800.00	2,799.30	2,755.30	2,799.30	12.41	94.50	-13.83	-1,590.79	-6,519.42	6,655.74	6,548.87	106.88	62.275		
2,900.00	2,899.27	2,855.27	2,899.27	12.83	97.99	-13.84	-1,590.79	-6,519.42	6,653.32	6,542.53	110.79	60.055		
3,000.00	2,999.23	2,955.23	2,999.23	13.26	101.47	-13.84	-1,590.79	-6,519.42	6,650.89	6,536.19	114.70	57.985		
3,100.00	3,099.20	3,055.20	3,099.20	13.68	104.96	-13.85	-1,590.79	-6,519.42	6,648.47	6,529.85	118.61	56.052		
3,200.00	3,199.17	3,155.17	3,199.17	14.11	108.45	-13.85	-1,590.79	-6,519.42	6,646.04	6,523.51	122.53	54.241		
3,300.00	3,299.14	3,255.14	3,299.14	14.54	111.94	-13.86	-1,590.79	-6,519.42	6,643.61	6,517.17	126.44	52.543		
3,400.00	3,399.11	3,355.11	3,399.11	14.97	115.43	-13.86	-1,590.79	-6,519.42	6,641.19	6,510.83	130.36	50.946		
3,500.00	3,499.08	3,455.08	3,499.08	15.40	118.92	-13.87	-1,590.79	-6,519.42	6,638.76	6,504.49	134.27	49.442		
3,600.00	3,599.05	3,555.05	3,599.05	15.83	122.41	-13.87	-1,590.79	-6,519.42	6,636.34	6,498.14	138.19	48.023		
3,700.00	3,699.02	3,655.02	3,699.02	16.26	125.89	-13.88	-1,590.79	-6,519.42	6,633.91	6,491.80	142.11	46.682		
3,800.00	3,798.98	3,754.98	3,798.98	16.69	129.38	-13.88	-1,590.79	-6,519.42	6,631.48	6,485.46	146.03	45.412		
3,900.00	3,898.95	3,854.95	3,898.95	17.12	132.87	-13.89	-1,590.79	-6,519.42	6,629.06	6,479.11	149.95	44.209		
4,000.00	3,998.92	3,954.92	3,998.92	17.55	136.36	-13.89	-1,590.79	-6,519.42	6,626.63	6,472.77	153.87	43.067		
4,100.00	4,098.89	4,054.89	4,098.89	17.98	139.85	-13.90	-1,590.79	-6,519.42	6,624.21	6,466.42	157.79	41.982		
4,200.00	4,198.86	4,154.86	4,198.86	18.42	143.34	-13.90	-1,590.79	-6,519.42	6,621.78	6,460.07	161.71	40.949		
4,300.00	4,298.83	4,254.83	4,298.83	18.85	146.83	-13.91	-1,590.79	-6,519.42	6,619.36	6,453.73	165.63	39.965		
4,400.00	4,398.80	4,354.80	4,398.80	19.28	150.32	-13.92	-1,590.79	-6,519.42	6,616.93	6,447.38	169.55	39.027		
4,500.00	4,498.77	4,454.77	4,498.77	19.72	153.81	-13.92	-1,590.79	-6,519.42	6,614.50	6,441.03	173.47	38.130		
4,600.00	4,598.73	4,554.73	4,598.73	20.15	157.29	-13.93	-1,590.79	-6,519.42	6,612.08	6,434.69	177.39	37.274		
4,700.00	4,698.70	4,654.70	4,698.70	20.58	160.78	-13.93	-1,590.79	-6,519.42	6,609.65	6,428.34	181.31	36.454		
4,800.00	4,798.67	4,754.67	4,798.67	21.02	164.27	-13.94	-1,590.79	-6,519.42	6,607.23	6,421.99	185.24	35.669		
4,900.00	4,898.64	4,854.64	4,898.64	21.45	167.76	-13.94	-1,590.79	-6,519.42	6,604.80	6,415.64	189.16	34.917		
5,000.00	4,998.61	4,954.61	4,998.61	21.89	171.25	-13.95	-1,590.79	-6,519.42	6,602.38	6,409.30	193.08	34.195		
5,100.00	5,098.58	5,054.58	5,098.58	22.32	174.74	-13.95	-1,590.79	-6,519.42	6,599.95	6,402.95	197.01	33.501		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-2(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,154.55	5,198.55	22.76	178.23	-13.96	-1,590.79	-6,519.42	6,597.53	6,396.60	200.93	32.835		
5,300.00	5,298.52	5,254.52	5,298.52	23.20	181.72	-13.96	-1,590.79	-6,519.42	6,595.10	6,390.25	204.85	32.194		
5,400.00	5,398.49	5,354.49	5,398.49	23.63	185.21	-13.97	-1,590.79	-6,519.42	6,592.68	6,383.90	208.78	31.578		
5,500.00	5,498.45	5,454.45	5,498.45	24.07	188.70	-13.97	-1,590.79	-6,519.42	6,590.25	6,377.55	212.70	30.984		
5,600.00	5,598.42	5,554.42	5,598.42	24.50	192.19	-13.98	-1,590.79	-6,519.42	6,587.83	6,371.21	216.62	30.411		
5,700.00	5,698.39	5,654.39	5,698.39	24.94	195.68	-13.98	-1,590.79	-6,519.42	6,585.40	6,364.86	220.55	29.859		
5,800.00	5,798.36	5,754.36	5,798.36	25.38	199.17	-13.99	-1,590.79	-6,519.42	6,582.98	6,358.51	224.47	29.326		
5,900.00	5,898.33	5,854.33	5,898.33	25.81	202.66	-13.99	-1,590.79	-6,519.42	6,580.56	6,352.16	228.40	28.812		
6,000.00	5,998.30	5,954.30	5,998.30	26.25	206.15	-14.00	-1,590.79	-6,519.42	6,578.13	6,345.81	232.32	28.315		
6,100.00	6,098.27	6,054.27	6,098.27	26.69	209.64	-14.00	-1,590.79	-6,519.42	6,575.71	6,339.46	236.25	27.834		
6,200.00	6,198.24	6,154.24	6,198.24	27.12	213.12	-14.01	-1,590.79	-6,519.42	6,573.28	6,333.11	240.17	27.369		
6,300.00	6,298.20	6,254.20	6,298.20	27.56	216.61	-14.01	-1,590.79	-6,519.42	6,570.86	6,326.76	244.10	26.919		
6,400.00	6,398.17	6,354.17	6,398.17	28.00	220.10	-14.02	-1,590.79	-6,519.42	6,568.43	6,320.41	248.02	26.483		
6,500.00	6,498.14	6,454.14	6,498.14	28.43	223.59	-14.03	-1,590.79	-6,519.42	6,566.01	6,314.06	251.95	26.061		
6,600.00	6,597.68	6,553.68	6,597.68	28.88	227.07	-13.26	-1,590.79	-6,519.42	6,557.69	6,301.84	255.86	25.630		
6,700.00	6,694.68	6,650.68	6,694.68	29.32	230.45	-13.72	-1,590.79	-6,519.42	6,534.42	6,274.74	259.68	25.164		
6,800.00	6,786.74	6,742.74	6,786.74	29.77	233.67	-14.68	-1,590.79	-6,519.42	6,496.65	6,233.36	263.29	24.674		
6,900.00	6,871.61	6,827.61	6,871.61	30.24	236.63	-16.22	-1,590.79	-6,519.42	6,445.33	6,178.71	266.62	24.174		
7,000.00	6,947.19	6,903.19	6,947.19	30.74	239.27	-18.60	-1,590.79	-6,519.42	6,381.75	6,112.17	269.58	23.673		
7,100.00	7,011.62	6,967.62	7,011.62	31.32	241.52	-22.32	-1,590.79	-6,519.42	6,307.48	6,035.38	272.10	23.181		
7,200.00	7,063.31	7,019.31	7,063.31	32.03	243.32	-28.40	-1,590.79	-6,519.42	6,224.37	5,950.26	274.12	22.707		
7,300.00	7,101.00	7,057.00	7,101.00	32.89	244.64	-39.07	-1,590.79	-6,519.42	6,134.50	5,858.90	275.60	22.259		
7,400.00	7,123.74	7,079.74	7,123.74	33.93	245.43	-58.97	-1,590.79	-6,519.42	6,040.10	5,763.57	276.53	21.843		
7,500.00	7,131.00	7,087.00	7,131.00	35.10	245.68	-90.82	-1,590.79	-6,519.42	5,943.49	5,666.60	276.89	21.465		
7,600.00	7,130.63	7,086.63	7,130.63	36.44	245.67	-90.81	-1,590.79	-6,519.42	5,846.64	5,569.65	276.99	21.108		
7,700.00	7,130.26	7,086.26	7,130.26	37.94	245.66	-90.80	-1,590.79	-6,519.42	5,749.89	5,472.78	277.11	20.749		
7,800.00	7,129.90	7,085.90	7,129.90	39.59	245.65	-90.78	-1,590.79	-6,519.42	5,653.25	5,375.99	277.26	20.390		
7,900.00	7,129.53	7,085.53	7,129.53	41.37	245.63	-90.77	-1,590.79	-6,519.42	5,556.73	5,279.29	277.44	20.029		
8,000.00	7,129.17	7,085.17	7,129.17	43.27	245.62	-90.75	-1,590.79	-6,519.42	5,460.34	5,182.69	277.65	19.666		
8,100.00	7,128.80	7,084.80	7,128.80	45.27	245.61	-90.74	-1,590.79	-6,519.42	5,364.08	5,086.19	277.89	19.303		
8,200.00	7,128.43	7,084.43	7,128.43	47.36	245.59	-90.72	-1,590.79	-6,519.42	5,267.96	4,989.79	278.17	18.938		
8,300.00	7,128.07	7,084.07	7,128.07	49.52	245.58	-90.71	-1,590.79	-6,519.42	5,171.99	4,893.51	278.48	18.572		
8,400.00	7,127.70	7,083.70	7,127.70	51.75	245.57	-90.70	-1,590.79	-6,519.42	5,076.17	4,797.33	278.84	18.205		
8,500.00	7,127.33	7,083.33	7,127.33	54.04	245.56	-90.68	-1,590.79	-6,519.42	4,980.52	4,701.28	279.24	17.836		
8,600.00	7,126.97	7,082.97	7,126.97	56.38	245.54	-90.67	-1,590.79	-6,519.42	4,885.04	4,605.36	279.68	17.466		
8,700.00	7,126.60	7,082.60	7,126.60	58.77	245.53	-90.65	-1,590.79	-6,519.42	4,789.75	4,509.57	280.18	17.095		
8,800.00	7,126.24	7,082.24	7,126.24	61.19	245.52	-90.64	-1,590.79	-6,519.42	4,694.65	4,413.92	280.72	16.723		
8,900.00	7,125.87	7,081.87	7,125.87	63.65	245.50	-90.62	-1,590.79	-6,519.42	4,599.75	4,318.43	281.33	16.350		
9,000.00	7,125.50	7,081.50	7,125.50	66.15	245.49	-90.61	-1,590.79	-6,519.42	4,505.08	4,223.10	281.99	15.976		
9,100.00	7,125.14	7,081.14	7,125.14	68.67	245.48	-90.60	-1,590.79	-6,519.42	4,410.65	4,127.93	282.72	15.601		
9,200.00	7,124.77	7,080.77	7,124.77	71.21	245.47	-90.58	-1,590.79	-6,519.42	4,316.47	4,032.96	283.51	15.225		
9,300.00	7,124.41	7,080.41	7,124.41	73.78	245.45	-90.57	-1,590.79	-6,519.42	4,222.55	3,938.17	284.38	14.849		
9,400.00	7,124.04	7,080.04	7,124.04	76.37	245.44	-90.55	-1,590.79	-6,519.42	4,128.92	3,843.60	285.32	14.471		
9,500.00	7,123.67	7,079.67	7,123.67	78.98	245.43	-90.54	-1,590.79	-6,519.42	4,035.59	3,749.25	286.34	14.094		
9,600.00	7,123.31	7,079.31	7,123.31	81.60	245.42	-90.52	-1,590.79	-6,519.42	3,942.59	3,655.15	287.45	13.716		
9,700.00	7,122.94	7,078.94	7,122.94	84.24	245.40	-90.51	-1,590.79	-6,519.42	3,849.95	3,561.30	288.65	13.338		
9,800.00	7,122.57	7,078.57	7,122.57	86.90	245.39	-90.50	-1,590.79	-6,519.42	3,757.68	3,467.73	289.94	12.960		
9,900.00	7,122.21	7,078.21	7,122.21	89.56	245.38	-90.48	-1,590.79	-6,519.42	3,665.81	3,374.47	291.34	12.583		
10,000.00	7,121.84	7,077.84	7,121.84	92.24	245.36	-90.47	-1,590.79	-6,519.42	3,574.38	3,281.54	292.84	12.206		
10,100.00	7,121.48	7,077.48	7,121.48	94.92	245.35	-90.45	-1,590.79	-6,519.42	3,483.42	3,188.96	294.46	11.830		
10,200.00	7,121.11	7,077.11	7,121.11	97.62	245.34	-90.44	-1,590.79	-6,519.42	3,392.98	3,096.77	296.21	11.455		
10,300.00	7,120.74	7,076.74	7,120.74	100.32	245.33	-90.42	-1,590.79	-6,519.42	3,303.08	3,005.00	298.08	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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-2(PR_75CC) - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,400.00	7,120.38	7,076.38	7,120.38	103.04	245.31	-90.41	-1,590.79	-6,519.42	3,213.78	2,913.69	300.09	10.709	
10,500.00	7,120.01	7,076.01	7,120.01	105.76	245.30	-90.39	-1,590.79	-6,519.42	3,125.13	2,822.88	302.24	10.340	
10,600.00	7,119.64	7,075.64	7,119.64	108.48	245.29	-90.38	-1,590.79	-6,519.42	3,037.18	2,732.63	304.55	9.973	
10,700.00	7,119.28	7,075.28	7,119.28	111.22	245.27	-90.37	-1,590.79	-6,519.42	2,950.00	2,642.98	307.02	9.608	
10,800.00	7,118.91	7,074.91	7,118.91	113.96	245.26	-90.35	-1,590.79	-6,519.42	2,863.66	2,553.99	309.67	9.248	
10,900.00	7,118.55	7,074.55	7,118.55	116.70	245.25	-90.34	-1,590.79	-6,519.42	2,778.23	2,465.73	312.50	8.890	
11,000.00	7,118.18	7,074.18	7,118.18	119.45	245.24	-90.32	-1,590.79	-6,519.42	2,693.81	2,378.29	315.52	8.538	
11,100.00	7,117.81	7,073.81	7,117.81	122.21	245.22	-90.31	-1,590.79	-6,519.42	2,610.49	2,291.73	318.75	8.190	
11,200.00	7,117.45	7,073.45	7,117.45	124.97	245.21	-90.29	-1,590.79	-6,519.42	2,528.37	2,206.17	322.20	7.847	
11,300.00	7,117.08	7,073.08	7,117.08	127.73	245.20	-90.28	-1,590.79	-6,519.42	2,447.59	2,121.72	325.88	7.511	
11,400.00	7,116.72	7,072.72	7,116.72	130.50	245.19	-90.27	-1,590.79	-6,519.42	2,368.28	2,038.49	329.79	7.181	
11,500.00	7,116.35	7,072.35	7,116.35	133.27	245.17	-90.25	-1,590.79	-6,519.42	2,290.59	1,956.63	333.96	6.859	
11,600.00	7,115.98	7,071.98	7,115.98	136.04	245.16	-90.24	-1,590.79	-6,519.42	2,214.68	1,876.31	338.38	6.545	
11,700.00	7,115.62	7,071.62	7,115.62	138.82	245.15	-90.22	-1,590.79	-6,519.42	2,140.76	1,797.70	343.06	6.240	
11,800.00	7,115.25	7,071.25	7,115.25	141.60	245.13	-90.21	-1,590.79	-6,519.42	2,069.03	1,721.02	348.01	5.945	
11,900.00	7,114.88	7,070.88	7,114.88	144.39	245.12	-90.19	-1,590.79	-6,519.42	1,999.73	1,646.51	353.22	5.661	
12,000.00	7,114.52	7,070.52	7,114.52	147.17	245.11	-90.18	-1,590.79	-6,519.42	1,933.12	1,574.43	358.69	5.389	
12,100.00	7,114.15	7,070.15	7,114.15	149.96	245.10	-90.17	-1,590.79	-6,519.42	1,869.49	1,505.10	364.40	5.130	
12,200.00	7,113.79	7,069.79	7,113.79	152.75	245.08	-90.15	-1,590.79	-6,519.42	1,809.15	1,438.84	370.31	4.885	
12,300.00	7,113.42	7,069.42	7,113.42	155.55	245.07	-90.14	-1,590.79	-6,519.42	1,752.45	1,376.04	376.41	4.656	
12,400.00	7,113.05	7,069.05	7,113.05	158.34	245.06	-90.12	-1,590.79	-6,519.42	1,699.74	1,317.12	382.62	4.442	
12,500.00	7,112.69	7,068.69	7,112.69	161.14	245.04	-90.11	-1,590.79	-6,519.42	1,651.41	1,262.52	388.88	4.247	
12,600.00	7,112.32	7,068.32	7,112.32	163.94	245.03	-90.09	-1,590.79	-6,519.42	1,607.85	1,212.73	395.12	4.069	
12,700.00	7,111.96	7,067.96	7,111.96	166.74	245.02	-90.08	-1,590.79	-6,519.42	1,569.46	1,168.25	401.21	3.912	
12,800.00	7,111.59	7,067.59	7,111.59	169.54	245.01	-90.07	-1,590.79	-6,519.42	1,536.63	1,129.57	407.07	3.775	
12,900.00	7,111.22	7,067.22	7,111.22	172.35	244.99	-90.05	-1,590.79	-6,519.42	1,509.73	1,097.18	412.55	3.660	
13,000.00	7,110.86	7,066.86	7,110.86	175.16	244.98	-90.04	-1,590.79	-6,519.42	1,489.06	1,071.52	417.54	3.566	
13,100.00	7,110.49	7,066.49	7,110.49	177.96	244.97	-90.02	-1,590.79	-6,519.42	1,474.90	1,052.99	421.92	3.496	
13,200.00	7,110.12	7,066.12	7,110.12	180.77	244.96	-90.01	-1,590.79	-6,519.42	1,467.44	1,041.86	425.58	3.448	
13,259.84	7,109.91	7,065.91	7,109.91	182.46	244.95	-90.00	-1,590.79	-6,519.42	1,466.22	1,038.81	427.40	3.431 CC	
13,300.00	7,109.76	7,065.76	7,109.76	183.58	244.94	-89.99	-1,590.79	-6,519.42	1,466.77	1,038.30	428.46	3.423 ES	
13,400.00	7,109.39	7,065.39	7,109.39	186.40	244.93	-89.98	-1,590.79	-6,519.42	1,472.90	1,042.39	430.51	3.421 SF	
13,500.00	7,109.03	7,065.03	7,109.03	189.21	244.92	-89.97	-1,590.79	-6,519.42	1,485.75	1,054.03	431.73	3.441	
13,600.00	7,108.66	7,064.66	7,108.66	192.03	244.90	-89.95	-1,590.79	-6,519.42	1,505.16	1,073.03	432.13	3.483	
13,700.00	7,108.29	7,064.29	7,108.29	194.84	244.89	-89.94	-1,590.79	-6,519.42	1,530.86	1,099.09	431.77	3.546	
13,800.00	7,107.93	7,063.93	7,107.93	197.66	244.88	-89.92	-1,590.79	-6,519.42	1,562.55	1,131.81	430.73	3.628	
13,900.00	7,107.56	7,063.56	7,107.56	200.48	244.87	-89.91	-1,590.79	-6,519.42	1,599.87	1,170.76	429.11	3.728	
14,000.00	7,107.19	7,063.19	7,107.19	203.30	244.85	-89.89	-1,590.79	-6,519.42	1,642.44	1,215.44	427.00	3.846	
14,100.00	7,106.83	7,062.83	7,106.83	206.12	244.84	-89.88	-1,590.79	-6,519.42	1,689.87	1,265.37	424.50	3.981	
14,200.00	7,106.46	7,062.46	7,106.46	208.94	244.83	-89.87	-1,590.79	-6,519.42	1,741.75	1,320.05	421.69	4.130	
14,300.00	7,106.10	7,062.10	7,106.10	211.76	244.81	-89.85	-1,590.79	-6,519.42	1,797.70	1,379.02	418.68	4.294	
14,400.00	7,105.73	7,061.73	7,105.73	214.58	244.80	-89.84	-1,590.79	-6,519.42	1,857.35	1,441.83	415.52	4.470	
14,500.00	7,105.36	7,061.36	7,105.36	217.40	244.79	-89.82	-1,590.79	-6,519.42	1,920.36	1,508.08	412.28	4.658	
14,600.00	7,105.00	7,061.00	7,105.00	220.23	244.78	-89.81	-1,590.79	-6,519.42	1,986.40	1,577.39	409.01	4.857	
14,700.00	7,104.63	7,060.63	7,104.63	223.05	244.76	-89.79	-1,590.79	-6,519.42	2,055.19	1,649.45	405.75	5.065	
14,800.00	7,104.27	7,060.27	7,104.27	225.88	244.75	-89.78	-1,590.79	-6,519.42	2,126.46	1,723.94	402.52	5.283	
14,872.41	7,104.00	7,060.00	7,104.00	227.93	244.74	-89.77	-1,590.79	-6,519.42	2,179.48	1,779.25	400.23	5.446	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	39.00	3.28	3.28	-93.39	-454.20	-7,658.11	7,671.67					
100.00	100.00	100.00	126.45	3.28	3.29	-93.39	-453.91	-7,657.83	7,671.31	7,664.74	6.57	1,167.299		
200.00	200.00	181.82	220.82	3.34	3.33	-93.39	-453.31	-7,657.43	7,670.86	7,664.19	6.67	1,150.782		
277.35	277.35	238.35	277.35	3.42	3.38	-93.39	-452.94	-7,657.37	7,670.76	7,663.96	6.79	1,129.023		
300.00	300.00	255.04	294.04	3.44	3.40	-93.38	-452.85	-7,657.38	7,670.77	7,663.92	6.84	1,121.294		
400.00	400.00	330.15	369.15	3.60	3.49	-93.38	-452.65	-7,657.58	7,671.01	7,663.92	7.10	1,080.989		
500.00	500.00	411.04	450.03	3.81	3.63	-93.38	-452.72	-7,658.03	7,671.56	7,664.13	7.43	1,032.209		
600.00	599.98	519.85	558.84	4.04	3.85	-3.39	-452.99	-7,658.63	7,670.52	7,662.64	7.89	972.592		
700.00	699.95	609.83	648.82	4.30	4.06	-3.39	-453.64	-7,659.13	7,668.63	7,660.27	8.36	917.030		
800.00	799.92	698.36	737.34	4.59	4.30	-3.40	-454.53	-7,659.74	7,666.88	7,657.99	8.89	862.829		
900.00	899.89	800.37	839.34	4.90	4.59	-3.41	-455.57	-7,660.50	7,665.19	7,655.70	9.49	807.618		
1,000.00	999.86	905.32	944.29	5.23	4.92	-3.42	-456.60	-7,661.23	7,663.45	7,653.31	10.15	755.359		
1,100.00	1,099.83	1,010.59	1,049.55	5.58	5.26	-3.42	-457.48	-7,661.91	7,661.65	7,650.81	10.83	707.175		
1,200.00	1,199.80	1,111.62	1,150.58	5.94	5.61	-3.43	-458.02	-7,662.53	7,659.80	7,648.27	11.54	664.008		
1,300.00	1,299.77	1,210.04	1,248.99	6.30	5.95	-3.43	-458.38	-7,663.17	7,657.97	7,645.72	12.25	625.145		
1,400.00	1,399.73	1,319.85	1,358.80	6.68	6.35	-3.44	-458.64	-7,663.78	7,656.05	7,643.02	13.02	587.857		
1,500.00	1,499.70	1,412.29	1,451.24	7.07	6.69	-3.44	-458.93	-7,664.31	7,654.14	7,640.39	13.75	556.694		
1,600.00	1,599.67	1,512.05	1,550.99	7.46	7.07	-3.44	-459.33	-7,664.92	7,652.28	7,637.76	14.51	527.219		
1,700.00	1,699.64	1,605.61	1,644.55	7.85	7.43	-3.45	-459.65	-7,665.54	7,650.47	7,635.20	15.27	501.121		
1,800.00	1,799.61	1,714.32	1,753.27	8.25	7.85	-3.45	-459.82	-7,666.25	7,648.64	7,632.55	16.09	475.465		
1,900.00	1,899.58	1,810.66	1,849.60	8.66	8.22	-3.45	-459.94	-7,666.86	7,646.79	7,629.92	16.87	453.361		
2,000.00	1,999.55	1,912.76	1,951.69	9.06	8.63	-3.45	-460.16	-7,667.50	7,644.92	7,627.24	17.68	432.491		
2,100.00	2,099.52	2,006.54	2,045.48	9.47	9.00	-3.45	-460.37	-7,668.13	7,643.11	7,624.65	18.46	414.054		
2,200.00	2,199.48	2,143.69	2,182.63	9.89	9.55	-3.46	-460.44	-7,668.66	7,640.98	7,621.56	19.42	393.458		
2,300.00	2,299.45	2,255.40	2,294.34	10.30	10.00	-3.46	-460.95	-7,668.83	7,638.67	7,618.38	20.28	376.594		
2,400.00	2,399.42	2,360.24	2,399.17	10.72	10.43	-3.47	-461.60	-7,668.78	7,636.16	7,615.04	21.12	361.510		
2,500.00	2,499.39	2,459.33	2,498.26	11.14	10.83	-3.47	-462.07	-7,668.77	7,633.69	7,611.75	21.94	347.890		
2,600.00	2,599.36	2,584.44	2,623.37	11.56	11.34	-3.48	-462.50	-7,668.62	7,631.11	7,608.24	22.87	333.671		
2,700.00	2,699.33	2,708.92	2,747.85	11.98	11.85	-3.48	-462.61	-7,668.01	7,628.13	7,604.33	23.80	320.553		
2,800.00	2,799.30	2,801.99	2,840.91	12.41	12.23	-3.48	-462.36	-7,667.49	7,625.06	7,600.46	24.60	309.966		
2,900.00	2,899.27	2,855.79	2,894.71	12.83	12.45	-3.48	-462.04	-7,667.37	7,622.32	7,597.08	25.25	301.919		
3,000.00	2,999.23	2,900.01	2,938.93	13.26	12.63	-3.47	-461.65	-7,667.54	7,620.20	7,594.35	25.85	294.738		
3,100.00	3,099.20	2,971.81	3,010.72	13.68	12.92	-3.47	-460.88	-7,668.20	7,618.59	7,592.02	26.58	286.661		
3,200.00	3,199.17	3,048.08	3,086.98	14.11	13.24	-3.46	-459.93	-7,669.31	7,617.46	7,590.14	27.32	278.828		
3,300.00	3,299.14	3,123.94	3,162.82	14.54	13.56	-3.45	-458.84	-7,670.56	7,616.55	7,588.49	28.06	271.422		
3,400.00	3,399.11	3,180.24	3,219.10	14.97	13.79	-3.45	-457.94	-7,671.79	7,616.13	7,587.41	28.72	265.161		
3,429.72	3,428.82	3,200.01	3,238.86	15.09	13.87	-3.44	-457.60	-7,672.29	7,616.12	7,587.18	28.93	263.243		
3,500.00	3,499.08	3,248.53	3,287.35	15.40	14.08	-3.44	-456.73	-7,673.65	7,616.23	7,586.80	29.43	258.751		
3,600.00	3,599.05	3,332.46	3,371.23	15.83	14.43	-3.43	-455.08	-7,676.21	7,616.67	7,586.45	30.21	252.095		
3,700.00	3,699.02	3,447.73	3,486.41	16.26	14.91	-3.40	-452.24	-7,679.77	7,617.11	7,585.98	31.13	244.711		
3,800.00	3,798.98	3,577.63	3,616.21	16.69	15.46	-3.38	-448.69	-7,683.34	7,617.20	7,585.09	32.10	237.267		
3,900.00	3,898.95	3,682.20	3,720.72	17.12	15.90	-3.36	-446.15	-7,685.94	7,617.05	7,584.07	32.97	231.002		
4,000.00	3,998.92	3,785.91	3,824.38	17.55	16.33	-3.34	-443.98	-7,688.48	7,616.87	7,583.03	33.84	225.079		
4,100.00	4,098.89	3,887.79	3,926.21	17.98	16.76	-3.33	-442.08	-7,690.91	7,616.66	7,581.96	34.70	219.495		
4,200.00	4,198.86	3,992.37	4,030.75	18.42	17.20	-3.32	-440.47	-7,693.35	7,616.40	7,580.83	35.57	214.108		
4,300.00	4,298.83	4,115.56	4,153.89	18.85	17.72	-3.30	-438.69	-7,696.00	7,615.97	7,579.45	36.52	208.519		
4,400.00	4,398.80	4,204.66	4,242.97	19.28	18.09	-3.29	-437.49	-7,697.87	7,615.48	7,578.15	37.33	203.995		
4,500.00	4,498.77	4,312.76	4,351.04	19.72	18.55	-3.28	-436.31	-7,700.09	7,614.98	7,576.76	38.22	199.238		
4,600.00	4,598.73	4,419.04	4,457.30	20.15	19.00	-3.28	-435.56	-7,702.17	7,614.40	7,575.30	39.10	194.731		
4,700.00	4,698.70	4,552.56	4,590.80	20.58	19.56	-3.27	-434.93	-7,704.47	7,613.62	7,573.52	40.10	189.868		
4,800.00	4,798.67	4,671.06	4,709.28	21.02	20.06	-3.27	-434.58	-7,705.93	7,612.32	7,571.29	41.03	185.515		
4,900.00	4,898.64	4,766.69	4,804.91	21.45	20.47	-3.27	-434.28	-7,707.10	7,611.03	7,569.16	41.87	181.770		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STATE-HOPPE 16-3(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.00	4,998.61	4,874.23	4,912.44	21.89	20.92	-3.27	-433.95	-7,708.42	7,609.74	7,566.98	42.76	177.962		
5,100.00	5,098.58	4,977.23	5,015.43	22.32	21.36	-3.27	-433.56	-7,709.57	7,608.34	7,564.71	43.63	174.381		
5,200.00	5,198.55	5,087.47	5,125.66	22.76	21.82	-3.26	-433.07	-7,710.75	7,606.89	7,562.36	44.53	170.820		
5,300.00	5,298.52	5,184.95	5,223.14	23.20	22.23	-3.26	-432.67	-7,711.71	7,605.36	7,559.98	45.38	167.596		
5,400.00	5,398.49	5,289.83	5,328.01	23.63	22.68	-3.26	-432.36	-7,712.75	7,603.83	7,557.58	46.26	164.378		
5,500.00	5,498.45	5,460.46	5,498.64	24.07	23.40	-3.25	-431.43	-7,713.45	7,601.67	7,554.26	47.41	160.340		
5,600.00	5,598.42	5,547.88	5,586.05	24.50	23.77	-3.25	-430.83	-7,713.49	7,599.18	7,550.97	48.22	157.609		
5,700.00	5,698.39	5,628.40	5,666.57	24.94	24.11	-3.25	-430.54	-7,713.78	7,597.02	7,548.03	48.99	155.063		
5,800.00	5,798.36	5,728.11	5,766.28	25.38	24.53	-3.25	-430.23	-7,714.20	7,594.93	7,545.07	49.85	152.352		
5,900.00	5,898.33	5,819.26	5,857.43	25.81	24.92	-3.25	-429.88	-7,714.67	7,592.92	7,542.25	50.67	149.838		
6,000.00	5,998.30	5,913.64	5,951.81	26.25	25.32	-3.24	-429.47	-7,715.21	7,590.98	7,539.47	51.51	147.367		
6,100.00	6,098.27	5,989.71	6,027.88	26.69	25.64	-3.24	-429.22	-7,715.81	7,589.25	7,536.98	52.27	145.191		
6,200.00	6,198.24	6,103.14	6,141.30	27.12	26.13	-3.24	-429.03	-7,716.81	7,587.63	7,534.44	53.19	142.656		
6,300.00	6,298.20	6,171.64	6,209.80	27.56	26.42	-3.24	-428.96	-7,717.48	7,586.10	7,532.19	53.92	140.700		
6,400.00	6,398.17	6,258.40	6,296.55	28.00	26.79	-3.24	-428.95	-7,718.62	7,584.91	7,530.18	54.72	138.607		
6,500.00	6,498.14	6,357.14	6,395.28	28.43	27.21	-3.24	-429.16	-7,719.94	7,583.76	7,528.18	55.58	136.451		
6,600.00	6,597.68	6,475.80	6,513.93	28.88	27.71	-2.33	-429.50	-7,721.44	7,576.51	7,519.99	56.52	134.047		
6,700.00	6,694.68	6,587.28	6,625.41	29.32	28.19	-2.34	-430.05	-7,722.51	7,553.60	7,496.17	57.43	131.533		
6,800.00	6,786.74	6,670.47	6,708.58	29.77	28.54	-2.47	-430.65	-7,723.28	7,515.74	7,457.55	58.19	129.160		
6,900.00	6,871.61	6,739.85	6,777.96	30.24	28.84	-2.72	-431.49	-7,724.02	7,464.05	7,405.19	58.85	126.823		
7,000.00	6,947.19	6,800.01	6,838.11	30.74	29.09	-3.12	-432.32	-7,724.80	7,399.81	7,340.39	59.43	124.517		
7,100.00	7,011.62	6,858.82	6,896.91	31.32	29.34	-3.78	-433.11	-7,725.65	7,324.52	7,264.58	59.94	122.202		
7,200.00	7,063.31	6,900.01	6,938.09	32.03	29.52	-4.89	-433.58	-7,726.28	7,239.95	7,179.64	60.31	120.045		
7,300.00	7,101.00	6,932.09	6,970.16	32.89	29.65	-7.14	-433.91	-7,726.82	7,148.17	7,087.59	60.58	117.993		
7,400.00	7,123.74	6,948.81	6,986.88	33.93	29.73	-13.47	-434.07	-7,727.12	7,051.42	6,990.69	60.73	116.110		
7,500.00	7,131.00	6,955.09	6,993.16	35.10	29.75	-68.55	-434.13	-7,727.24	6,952.04	6,891.24	60.79	114.360		
7,600.00	7,130.63	6,956.18	6,994.25	36.44	29.76	-68.74	-434.14	-7,727.26	6,852.13	6,791.33	60.81	112.682		
7,700.00	7,130.26	6,957.28	6,995.35	37.94	29.76	-68.94	-434.15	-7,727.28	6,752.24	6,691.41	60.83	111.001		
7,800.00	7,129.90	6,958.39	6,996.46	39.59	29.77	-69.13	-434.16	-7,727.31	6,652.34	6,591.49	60.85	109.318		
7,900.00	7,129.53	6,959.51	6,997.58	41.37	29.77	-69.33	-434.17	-7,727.33	6,552.45	6,491.57	60.88	107.632		
8,000.00	7,129.17	6,960.64	6,998.71	43.27	29.78	-69.53	-434.18	-7,727.35	6,452.56	6,391.65	60.90	105.945		
8,100.00	7,128.80	6,961.79	6,999.85	45.27	29.78	-69.73	-434.19	-7,727.37	6,352.67	6,291.74	60.93	104.256		
8,200.00	7,128.43	6,962.94	7,001.01	47.36	29.79	-69.93	-434.20	-7,727.40	6,252.79	6,191.83	60.96	102.564		
8,300.00	7,128.07	6,964.11	7,002.17	49.52	29.79	-70.14	-434.21	-7,727.42	6,152.91	6,091.91	61.00	100.871		
8,400.00	7,127.70	6,965.28	7,003.35	51.75	29.80	-70.35	-434.22	-7,727.44	6,053.03	5,992.00	61.03	99.176		
8,500.00	7,127.33	6,966.47	7,004.53	54.04	29.80	-70.56	-434.23	-7,727.47	5,953.16	5,892.09	61.07	97.479		
8,600.00	7,126.97	6,967.67	7,005.73	56.38	29.81	-70.77	-434.24	-7,727.49	5,853.30	5,792.18	61.11	95.780		
8,700.00	7,126.60	6,968.88	7,006.94	58.77	29.81	-70.99	-434.25	-7,727.51	5,753.43	5,692.28	61.16	94.079		
8,800.00	7,126.24	6,970.10	7,008.17	61.19	29.82	-71.21	-434.26	-7,727.54	5,653.57	5,592.37	61.20	92.377		
8,900.00	7,125.87	6,971.34	7,009.40	63.65	29.82	-71.43	-434.27	-7,727.56	5,553.72	5,492.47	61.25	90.673		
9,000.00	7,125.50	6,972.58	7,010.65	66.15	29.83	-71.66	-434.28	-7,727.59	5,453.87	5,392.57	61.30	88.967		
9,100.00	7,125.14	6,973.84	7,011.91	68.67	29.83	-71.89	-434.29	-7,727.62	5,354.02	5,292.67	61.36	87.260		
9,200.00	7,124.77	6,975.11	7,013.18	71.21	29.84	-72.12	-434.30	-7,727.64	5,254.19	5,192.77	61.42	85.551		
9,300.00	7,124.41	6,976.40	7,014.46	73.78	29.84	-72.35	-434.31	-7,727.67	5,154.35	5,092.87	61.48	83.841		
9,400.00	7,124.04	6,977.70	7,015.76	76.37	29.85	-72.59	-434.32	-7,727.70	5,054.53	4,992.98	61.54	82.129		
9,500.00	7,123.67	6,979.01	7,017.07	78.98	29.85	-72.83	-434.33	-7,727.72	4,954.71	4,893.09	61.61	80.415		
9,600.00	7,123.31	6,980.33	7,018.39	81.60	29.86	-73.07	-434.35	-7,727.75	4,854.89	4,793.20	61.69	78.700		
9,700.00	7,122.94	6,981.67	7,019.73	84.24	29.87	-73.32	-434.36	-7,727.78	4,755.09	4,693.32	61.77	76.984		
9,800.00	7,122.57	6,983.02	7,021.08	86.90	29.87	-73.56	-434.37	-7,727.81	4,655.29	4,593.44	61.85	75.265		
9,900.00	7,122.21	6,984.39	7,022.45	89.56	29.88	-73.82	-434.38	-7,727.84	4,555.50	4,493.56	61.94	73.546		
10,000.00	7,121.84	6,985.77	7,023.83	92.24	29.88	-74.07	-434.39	-7,727.87	4,455.72	4,393.68	62.04	71.824		
10,100.00	7,121.48	6,987.16	7,025.22	94.92	29.89	-74.33	-434.40	-7,727.90	4,355.95	4,293.81	62.14	70.101		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,200.00	7,121.11	6,988.57	7,026.63	97.62	29.90	-74.59	-434.41	-7,727.93	4,256.18	4,193.94	62.25	68.377		
10,300.00	7,120.74	6,989.99	7,028.05	100.32	29.90	-74.86	-434.42	-7,727.96	4,156.43	4,094.07	62.36	66.650		
10,400.00	7,120.38	6,991.43	7,029.49	103.04	29.91	-75.13	-434.44	-7,727.99	4,056.69	3,994.21	62.49	64.922		
10,500.00	7,120.01	6,992.89	7,030.95	105.76	29.91	-75.40	-434.45	-7,728.02	3,956.97	3,894.35	62.62	63.192		
10,600.00	7,119.64	6,994.36	7,032.42	108.48	29.92	-75.68	-434.46	-7,728.05	3,857.26	3,794.49	62.76	61.460		
10,700.00	7,119.28	6,995.84	7,033.90	111.22	29.93	-75.96	-434.47	-7,728.09	3,757.56	3,694.64	62.91	59.725		
10,800.00	7,118.91	6,997.35	7,035.40	113.96	29.93	-76.24	-434.48	-7,728.12	3,657.87	3,594.80	63.08	57.989		
10,900.00	7,118.55	7,000.01	7,038.07	116.70	29.94	-76.75	-434.50	-7,728.18	3,558.21	3,494.95	63.26	56.248		
11,000.00	7,118.18	7,000.48	7,038.54	119.45	29.95	-76.83	-434.51	-7,728.19	3,458.56	3,395.11	63.45	54.509		
11,100.00	7,117.81	7,002.36	7,040.41	122.21	29.95	-77.19	-434.52	-7,728.23	3,358.93	3,295.28	63.66	52.765		
11,200.00	7,117.45	7,004.23	7,042.29	124.97	29.96	-77.55	-434.53	-7,728.27	3,259.33	3,195.44	63.89	51.018		
11,300.00	7,117.08	7,006.11	7,044.16	127.73	29.97	-77.91	-434.55	-7,728.31	3,159.75	3,095.61	64.13	49.268		
11,400.00	7,116.72	7,007.99	7,046.04	130.50	29.98	-78.27	-434.56	-7,728.36	3,060.19	2,995.79	64.40	47.515		
11,500.00	7,116.35	7,009.87	7,047.92	133.27	29.99	-78.63	-434.58	-7,728.40	2,960.67	2,895.96	64.70	45.759		
11,600.00	7,115.98	7,011.75	7,049.80	136.04	29.99	-78.99	-434.59	-7,728.44	2,861.17	2,796.14	65.03	44.000		
11,700.00	7,115.62	7,013.64	7,051.69	138.82	30.00	-79.35	-434.60	-7,728.48	2,761.71	2,696.33	65.39	42.238		
11,800.00	7,115.25	7,015.52	7,053.58	141.60	30.01	-79.72	-434.62	-7,728.53	2,662.29	2,596.51	65.78	40.471		
11,900.00	7,114.88	7,017.41	7,055.47	144.39	30.02	-80.09	-434.63	-7,728.57	2,562.91	2,496.69	66.22	38.702		
12,000.00	7,114.52	7,019.31	7,057.36	147.17	30.03	-80.45	-434.64	-7,728.61	2,463.59	2,396.87	66.71	36.928		
12,100.00	7,114.15	7,021.20	7,059.25	149.96	30.03	-80.82	-434.65	-7,728.65	2,364.31	2,297.05	67.26	35.151		
12,200.00	7,113.79	7,023.10	7,061.15	152.75	30.04	-81.19	-434.67	-7,728.70	2,265.10	2,197.22	67.88	33.370		
12,300.00	7,113.42	7,025.00	7,063.05	155.55	30.05	-81.56	-434.68	-7,728.74	2,165.96	2,097.39	68.57	31.586		
12,400.00	7,113.05	7,026.90	7,064.95	158.34	30.06	-81.94	-434.69	-7,728.78	2,066.90	1,997.54	69.36	29.799		
12,500.00	7,112.69	7,028.80	7,066.85	161.14	30.07	-82.31	-434.70	-7,728.82	1,967.94	1,897.68	70.26	28.010		
12,600.00	7,112.32	7,030.70	7,068.75	163.94	30.08	-82.68	-434.72	-7,728.87	1,869.08	1,797.80	71.28	26.220		
12,700.00	7,111.96	7,032.61	7,070.66	166.74	30.08	-83.06	-434.73	-7,728.91	1,770.35	1,697.89	72.47	24.430		
12,800.00	7,111.59	7,034.52	7,072.57	169.54	30.09	-83.44	-434.74	-7,728.95	1,671.77	1,597.94	73.83	22.643		
12,900.00	7,111.22	7,036.43	7,074.48	172.35	30.10	-83.81	-434.75	-7,729.00	1,573.37	1,497.94	75.42	20.860		
13,000.00	7,110.86	7,038.35	7,076.39	175.16	30.11	-84.19	-434.76	-7,729.04	1,475.17	1,397.88	77.29	19.086		
13,100.00	7,110.49	7,040.26	7,078.31	177.96	30.12	-84.57	-434.77	-7,729.08	1,377.24	1,297.75	79.49	17.326		
13,200.00	7,110.12	7,042.18	7,080.23	180.77	30.12	-84.95	-434.78	-7,729.13	1,279.62	1,197.51	82.11	15.584		
13,300.00	7,109.76	7,044.10	7,082.15	183.58	30.13	-85.33	-434.80	-7,729.17	1,182.40	1,097.14	85.26	13.869		
13,400.00	7,109.39	7,046.02	7,084.07	186.40	30.14	-85.71	-434.81	-7,729.21	1,085.67	996.61	89.07	12.190		
13,500.00	7,109.03	7,047.95	7,085.99	189.21	30.15	-86.10	-434.82	-7,729.26	989.60	895.87	93.73	10.558		
13,600.00	7,108.66	7,049.88	7,087.92	192.03	30.16	-86.48	-434.83	-7,729.30	894.38	794.87	99.51	8.988		
13,700.00	7,108.29	7,051.81	7,089.85	194.84	30.17	-86.86	-434.84	-7,729.34	800.33	693.56	106.77	7.496		
13,800.00	7,107.93	7,053.74	7,091.78	197.66	30.17	-87.25	-434.85	-7,729.39	707.90	591.88	116.01	6.102		
13,900.00	7,107.56	7,055.67	7,093.71	200.48	30.18	-87.64	-434.86	-7,729.43	617.82	489.86	127.96	4.828		
14,000.00	7,107.19	7,057.61	7,095.65	203.30	30.19	-88.02	-434.87	-7,729.48	531.31	387.73	143.58	3.700		
14,100.00	7,106.83	7,059.54	7,097.58	206.12	30.20	-88.41	-434.88	-7,729.52	450.40	286.37	164.03	2.746		
14,200.00	7,106.46	7,061.49	7,099.52	208.94	30.21	-88.80	-434.89	-7,729.56	378.72	188.75	189.98	1.994		
14,300.00	7,106.10	7,063.43	7,101.47	211.76	30.21	-89.18	-434.90	-7,729.61	322.48	103.30	219.18	1.471	Level 3	
14,400.00	7,105.73	7,065.37	7,103.41	214.58	30.22	-89.57	-434.91	-7,729.65	290.76	48.81	241.95	1.202	Level 2	
14,447.27	7,105.56	7,066.29	7,104.33	215.92	30.23	-89.76	-434.91	-7,729.67	286.90	40.82	246.08	1.166	Level 2, CC, ES, SF	
14,500.00	7,105.36	7,067.32	7,105.36	217.40	30.23	-89.96	-434.92	-7,729.70	291.70	47.60	244.10	1.195	Level 2	
14,600.00	7,105.00	7,069.27	7,107.31	220.23	30.24	-90.35	-434.93	-7,729.74	325.00	99.69	225.31	1.442	Level 3	
14,700.00	7,104.63	7,071.22	7,109.26	223.05	30.25	-90.74	-434.93	-7,729.79	382.30	183.09	199.21	1.919		
14,800.00	7,104.27	7,073.17	7,111.21	225.88	30.26	-91.13	-434.94	-7,729.83	454.62	279.26	175.36	2.592		
14,872.41	7,104.00	7,074.59	7,112.63	227.93	30.26	-91.41	-434.95	-7,729.86	512.82	351.78	161.04	3.184		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	62.00	3.28	3.28	-113.42	-1,545.12	-3,567.90	3,888.59				
100.00	100.00	38.00	100.00	3.28	3.35	-113.42	-1,545.12	-3,567.90	3,888.10	3,881.47	6.63	586.341	
200.00	200.00	138.00	200.00	3.34	4.49	-113.42	-1,545.12	-3,567.90	3,888.10	3,880.27	7.83	496.499	
300.00	300.00	238.00	300.00	3.44	7.34	-113.42	-1,545.12	-3,567.90	3,888.10	3,877.32	10.78	360.611	
400.00	400.00	338.00	400.00	3.60	10.58	-113.42	-1,545.12	-3,567.90	3,888.10	3,873.92	14.18	274.217	
500.00	500.00	438.00	500.00	3.81	13.94	-113.42	-1,545.12	-3,567.90	3,888.10	3,870.36	17.74	219.140	
600.00	599.98	537.98	599.98	4.04	17.35	-23.43	-1,545.12	-3,567.90	3,886.63	3,865.24	21.39	181.720	
700.00	699.95	637.95	699.95	4.30	20.79	-23.45	-1,545.12	-3,567.90	3,884.33	3,859.25	25.09	154.838	
800.00	799.92	737.92	799.92	4.59	24.24	-23.46	-1,545.12	-3,567.90	3,882.04	3,853.21	28.83	134.666	
900.00	899.89	837.89	899.89	4.90	27.70	-23.48	-1,545.12	-3,567.90	3,879.75	3,847.15	32.60	119.012	
1,000.00	999.86	937.86	999.86	5.23	31.17	-23.49	-1,545.12	-3,567.90	3,877.46	3,841.06	36.40	106.533	
1,100.00	1,099.83	1,037.83	1,099.83	5.58	34.64	-23.51	-1,545.12	-3,567.90	3,875.17	3,834.95	40.21	96.365	
1,200.00	1,199.80	1,137.80	1,199.80	5.94	38.12	-23.52	-1,545.12	-3,567.90	3,872.87	3,828.83	44.05	87.928	
1,300.00	1,299.77	1,237.77	1,299.77	6.30	41.59	-23.53	-1,545.12	-3,567.90	3,870.58	3,822.69	47.89	80.821	
1,400.00	1,399.73	1,337.73	1,399.73	6.68	45.07	-23.55	-1,545.12	-3,567.90	3,868.29	3,816.55	51.75	74.755	
1,500.00	1,499.70	1,437.70	1,499.70	7.07	48.56	-23.56	-1,545.12	-3,567.90	3,866.00	3,810.39	55.61	69.519	
1,600.00	1,599.67	1,537.67	1,599.67	7.46	52.04	-23.58	-1,545.12	-3,567.90	3,863.71	3,804.23	59.48	64.955	
1,700.00	1,699.64	1,637.64	1,699.64	7.85	55.52	-23.59	-1,545.12	-3,567.90	3,861.42	3,798.06	63.36	60.944	
1,800.00	1,799.61	1,737.61	1,799.61	8.25	59.01	-23.61	-1,545.12	-3,567.90	3,859.13	3,791.89	67.24	57.390	
1,900.00	1,899.58	1,837.58	1,899.58	8.66	62.49	-23.62	-1,545.12	-3,567.90	3,856.84	3,785.71	71.13	54.222	
2,000.00	1,999.55	1,937.55	1,999.55	9.06	65.98	-23.64	-1,545.12	-3,567.90	3,854.55	3,779.53	75.02	51.378	
2,100.00	2,099.52	2,037.52	2,099.52	9.47	69.46	-23.65	-1,545.12	-3,567.90	3,852.26	3,773.35	78.92	48.814	
2,200.00	2,199.48	2,137.48	2,199.48	9.89	72.95	-23.67	-1,545.12	-3,567.90	3,849.97	3,767.16	82.82	46.489	
2,300.00	2,299.45	2,237.45	2,299.45	10.30	76.43	-23.68	-1,545.12	-3,567.90	3,847.69	3,760.97	86.72	44.371	
2,400.00	2,399.42	2,337.42	2,399.42	10.72	79.92	-23.70	-1,545.12	-3,567.90	3,845.40	3,754.78	90.62	42.435	
2,500.00	2,499.39	2,437.39	2,499.39	11.14	83.41	-23.71	-1,545.12	-3,567.90	3,843.11	3,748.59	94.52	40.658	
2,600.00	2,599.36	2,537.36	2,599.36	11.56	86.90	-23.73	-1,545.12	-3,567.90	3,840.82	3,742.39	98.43	39.021	
2,700.00	2,699.33	2,637.33	2,699.33	11.98	90.38	-23.74	-1,545.12	-3,567.90	3,838.54	3,736.20	102.34	37.508	
2,800.00	2,799.30	2,737.30	2,799.30	12.41	93.87	-23.76	-1,545.12	-3,567.90	3,836.25	3,730.00	106.25	36.107	
2,900.00	2,899.27	2,837.27	2,899.27	12.83	97.36	-23.77	-1,545.12	-3,567.90	3,833.96	3,723.80	110.16	34.804	
3,000.00	2,999.23	2,937.23	2,999.23	13.26	100.85	-23.79	-1,545.12	-3,567.90	3,831.67	3,717.60	114.07	33.590	
3,100.00	3,099.20	3,037.20	3,099.20	13.68	104.34	-23.80	-1,545.12	-3,567.90	3,829.39	3,711.40	117.98	32.457	
3,200.00	3,199.17	3,137.17	3,199.17	14.11	107.82	-23.82	-1,545.12	-3,567.90	3,827.10	3,705.20	121.90	31.396	
3,300.00	3,299.14	3,237.14	3,299.14	14.54	111.31	-23.83	-1,545.12	-3,567.90	3,824.82	3,699.00	125.81	30.401	
3,400.00	3,399.11	3,337.11	3,399.11	14.97	114.80	-23.85	-1,545.12	-3,567.90	3,822.53	3,692.80	129.73	29.466	
3,500.00	3,499.08	3,437.08	3,499.08	15.40	118.29	-23.86	-1,545.12	-3,567.90	3,820.24	3,686.60	133.64	28.585	
3,600.00	3,599.05	3,537.05	3,599.05	15.83	121.78	-23.88	-1,545.12	-3,567.90	3,817.96	3,680.40	137.56	27.754	
3,700.00	3,699.02	3,637.02	3,699.02	16.26	125.27	-23.89	-1,545.12	-3,567.90	3,815.68	3,674.20	141.48	26.970	
3,800.00	3,798.98	3,736.98	3,798.98	16.69	128.75	-23.91	-1,545.12	-3,567.90	3,813.39	3,667.99	145.40	26.227	
3,900.00	3,898.95	3,836.95	3,898.95	17.12	132.24	-23.92	-1,545.12	-3,567.90	3,811.11	3,661.79	149.32	25.524	
4,000.00	3,998.92	3,936.92	3,998.92	17.55	135.73	-23.94	-1,545.12	-3,567.90	3,808.82	3,655.59	153.24	24.856	
4,100.00	4,098.89	4,036.89	4,098.89	17.98	139.22	-23.96	-1,545.12	-3,567.90	3,806.54	3,649.38	157.16	24.221	
4,200.00	4,198.86	4,136.86	4,198.86	18.42	142.71	-23.97	-1,545.12	-3,567.90	3,804.26	3,643.18	161.08	23.618	
4,300.00	4,298.83	4,236.83	4,298.83	18.85	146.20	-23.99	-1,545.12	-3,567.90	3,801.97	3,636.97	165.00	23.043	
4,400.00	4,398.80	4,336.80	4,398.80	19.28	149.69	-24.00	-1,545.12	-3,567.90	3,799.69	3,630.77	168.92	22.494	
4,500.00	4,498.77	4,436.77	4,498.77	19.72	153.18	-24.02	-1,545.12	-3,567.90	3,797.41	3,624.57	172.84	21.971	
4,600.00	4,598.73	4,536.73	4,598.73	20.15	156.67	-24.03	-1,545.12	-3,567.90	3,795.12	3,618.36	176.76	21.470	
4,700.00	4,698.70	4,636.70	4,698.70	20.58	160.16	-24.05	-1,545.12	-3,567.90	3,792.84	3,612.16	180.68	20.992	
4,800.00	4,798.67	4,736.67	4,798.67	21.02	163.64	-24.06	-1,545.12	-3,567.90	3,790.56	3,605.95	184.61	20.533	
4,900.00	4,898.64	4,836.64	4,898.64	21.45	167.13	-24.08	-1,545.12	-3,567.90	3,788.28	3,599.75	188.53	20.094	
5,000.00	4,998.61	4,936.61	4,998.61	21.89	170.62	-24.09	-1,545.12	-3,567.90	3,786.00	3,593.55	192.45	19.673	
5,100.00	5,098.58	5,036.58	5,098.58	22.32	174.11	-24.11	-1,545.12	-3,567.90	3,783.72	3,587.34	196.37	19.268	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STOCKOVER 16-1(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,198.55	5,136.55	5,198.55	22.76	177.60	-24.12	-1,545.12	-3,567.90	3,781.44	3,581.14	200.30	18.879		
5,300.00	5,298.52	5,236.52	5,298.52	23.20	181.09	-24.14	-1,545.12	-3,567.90	3,779.15	3,574.93	204.22	18.505		
5,400.00	5,398.49	5,336.49	5,398.49	23.63	184.58	-24.16	-1,545.12	-3,567.90	3,776.87	3,568.73	208.14	18.146		
5,500.00	5,498.45	5,436.45	5,498.45	24.07	188.07	-24.17	-1,545.12	-3,567.90	3,774.59	3,562.53	212.07	17.799		
5,600.00	5,598.42	5,536.42	5,598.42	24.50	191.56	-24.19	-1,545.12	-3,567.90	3,772.32	3,556.32	215.99	17.465		
5,700.00	5,698.39	5,636.39	5,698.39	24.94	195.05	-24.20	-1,545.12	-3,567.90	3,770.04	3,550.12	219.92	17.143		
5,800.00	5,798.36	5,736.36	5,798.36	25.38	198.54	-24.22	-1,545.12	-3,567.90	3,767.76	3,543.92	223.84	16.832		
5,900.00	5,898.33	5,836.33	5,898.33	25.81	202.03	-24.23	-1,545.12	-3,567.90	3,765.48	3,537.71	227.76	16.532		
6,000.00	5,998.30	5,936.30	5,998.30	26.25	205.52	-24.25	-1,545.12	-3,567.90	3,763.20	3,531.51	231.69	16.242		
6,100.00	6,098.27	6,036.27	6,098.27	26.69	209.01	-24.26	-1,545.12	-3,567.90	3,760.92	3,525.31	235.61	15.962		
6,200.00	6,198.24	6,136.24	6,198.24	27.12	212.50	-24.28	-1,545.12	-3,567.90	3,758.64	3,519.10	239.54	15.691		
6,300.00	6,298.20	6,236.20	6,298.20	27.56	215.99	-24.30	-1,545.12	-3,567.90	3,756.37	3,512.90	243.46	15.429		
6,400.00	6,398.17	6,336.17	6,398.17	28.00	219.48	-24.31	-1,545.12	-3,567.90	3,754.09	3,506.70	247.39	15.175		
6,500.00	6,498.14	6,436.14	6,498.14	28.43	222.96	-24.33	-1,545.12	-3,567.90	3,751.81	3,500.50	251.31	14.929		
6,600.00	6,597.68	6,535.68	6,597.68	28.88	226.44	-23.70	-1,545.12	-3,567.90	3,743.98	3,488.76	255.23	14.669		
6,700.00	6,694.68	6,632.68	6,694.68	29.32	229.83	-24.59	-1,545.12	-3,567.90	3,722.06	3,463.02	259.04	14.369		
6,800.00	6,786.74	6,724.74	6,786.74	29.77	233.04	-26.29	-1,545.12	-3,567.90	3,686.53	3,423.86	262.66	14.035		
6,900.00	6,871.61	6,809.61	6,871.61	30.24	236.00	-28.94	-1,545.12	-3,567.90	3,638.33	3,372.33	266.00	13.678		
7,000.00	6,947.19	6,885.19	6,947.19	30.74	238.64	-32.86	-1,545.12	-3,567.90	3,578.75	3,309.77	268.98	13.305		
7,100.00	7,011.62	6,949.62	7,011.62	31.32	240.89	-38.57	-1,545.12	-3,567.90	3,509.38	3,237.85	271.53	12.924		
7,200.00	7,063.31	7,001.31	7,063.31	32.03	242.69	-46.78	-1,545.12	-3,567.90	3,432.05	3,158.43	273.62	12.543		
7,300.00	7,101.00	7,039.00	7,101.00	32.89	244.01	-58.35	-1,545.12	-3,567.90	3,348.80	3,073.58	275.22	12.168		
7,400.00	7,123.74	7,061.74	7,123.74	33.93	244.80	-73.50	-1,545.12	-3,567.90	3,261.81	2,985.50	276.31	11.805		
7,500.00	7,131.00	7,069.00	7,131.00	35.10	245.06	-90.40	-1,545.12	-3,567.90	3,173.31	2,896.42	276.89	11.461		
7,600.00	7,130.63	7,068.63	7,130.63	36.44	245.04	-90.38	-1,545.12	-3,567.90	3,085.18	2,807.90	277.28	11.127		
7,700.00	7,130.26	7,068.26	7,130.26	37.94	245.03	-90.37	-1,545.12	-3,567.90	2,997.79	2,720.03	277.77	10.793		
7,800.00	7,129.90	7,067.90	7,129.90	39.59	245.02	-90.36	-1,545.12	-3,567.90	2,911.21	2,632.85	278.36	10.458		
7,900.00	7,129.53	7,067.53	7,129.53	41.37	245.00	-90.34	-1,545.12	-3,567.90	2,825.52	2,546.44	279.09	10.124		
8,000.00	7,129.17	7,067.17	7,129.17	43.27	244.99	-90.33	-1,545.12	-3,567.90	2,740.80	2,460.86	279.94	9.791		
8,100.00	7,128.80	7,066.80	7,128.80	45.27	244.98	-90.31	-1,545.12	-3,567.90	2,657.14	2,376.19	280.95	9.458		
8,200.00	7,128.43	7,066.43	7,128.43	47.36	244.97	-90.30	-1,545.12	-3,567.90	2,574.65	2,292.53	282.11	9.126		
8,300.00	7,128.07	7,066.07	7,128.07	49.52	244.95	-90.28	-1,545.12	-3,567.90	2,493.44	2,209.99	283.45	8.797		
8,400.00	7,127.70	7,065.70	7,127.70	51.75	244.94	-90.27	-1,545.12	-3,567.90	2,413.63	2,128.66	284.97	8.470		
8,500.00	7,127.33	7,065.33	7,127.33	54.04	244.93	-90.26	-1,545.12	-3,567.90	2,335.39	2,048.70	286.68	8.146		
8,600.00	7,126.97	7,064.97	7,126.97	56.38	244.91	-90.24	-1,545.12	-3,567.90	2,258.86	1,970.26	288.60	7.827		
8,700.00	7,126.60	7,064.60	7,126.60	58.77	244.90	-90.23	-1,545.12	-3,567.90	2,184.23	1,893.49	290.74	7.513		
8,800.00	7,126.24	7,064.24	7,126.24	61.19	244.89	-90.21	-1,545.12	-3,567.90	2,111.70	1,818.60	293.09	7.205		
8,900.00	7,125.87	7,063.87	7,125.87	63.65	244.88	-90.20	-1,545.12	-3,567.90	2,041.49	1,745.81	295.68	6.904		
9,000.00	7,125.50	7,063.50	7,125.50	66.15	244.86	-90.19	-1,545.12	-3,567.90	1,973.85	1,675.37	298.48	6.613		
9,100.00	7,125.14	7,063.14	7,125.14	68.67	244.85	-90.17	-1,545.12	-3,567.90	1,909.06	1,607.54	301.52	6.331		
9,200.00	7,124.77	7,062.77	7,124.77	71.21	244.84	-90.16	-1,545.12	-3,567.90	1,847.40	1,542.63	304.77	6.062		
9,300.00	7,124.41	7,062.41	7,124.41	73.78	244.83	-90.14	-1,545.12	-3,567.90	1,789.22	1,480.99	308.23	5.805		
9,400.00	7,124.04	7,062.04	7,124.04	76.37	244.81	-90.13	-1,545.12	-3,567.90	1,734.85	1,422.98	311.87	5.563		
9,500.00	7,123.67	7,061.67	7,123.67	78.98	244.80	-90.11	-1,545.12	-3,567.90	1,684.67	1,369.00	315.67	5.337		
9,600.00	7,123.31	7,061.31	7,123.31	81.60	244.79	-90.10	-1,545.12	-3,567.90	1,639.07	1,319.48	319.58	5.129		
9,700.00	7,122.94	7,060.94	7,122.94	84.24	244.77	-90.09	-1,545.12	-3,567.90	1,598.42	1,274.86	323.56	4.940		
9,800.00	7,122.57	7,060.57	7,122.57	86.90	244.76	-90.07	-1,545.12	-3,567.90	1,563.12	1,235.58	327.54	4.772		
9,900.00	7,122.21	7,060.21	7,122.21	89.56	244.75	-90.06	-1,545.12	-3,567.90	1,533.54	1,202.08	331.46	4.627		
10,000.00	7,121.84	7,059.84	7,121.84	92.24	244.74	-90.04	-1,545.12	-3,567.90	1,510.02	1,174.78	335.24	4.504		
10,100.00	7,121.48	7,059.48	7,121.48	94.92	244.72	-90.03	-1,545.12	-3,567.90	1,492.84	1,154.03	338.81	4.406		
10,200.00	7,121.11	7,059.11	7,121.11	97.62	244.71	-90.02	-1,545.12	-3,567.90	1,482.22	1,140.13	342.09	4.333		
10,300.00	7,120.74	7,058.74	7,120.74	100.32	244.70	-90.00	-1,545.12	-3,567.90	1,478.30	1,133.28	345.02	4.285		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,307.97	7,120.71	7,058.71	7,120.71	100.54	244.70	-90.00	-1,545.12	-3,567.90	1,478.28	1,133.04	345.24	4.282 CC, ES		
10,400.00	7,120.38	7,058.38	7,120.38	103.04	244.68	-89.99	-1,545.12	-3,567.90	1,481.14	1,133.60	347.55	4.262 SF		
10,500.00	7,120.01	7,058.01	7,120.01	105.76	244.67	-89.97	-1,545.12	-3,567.90	1,490.70	1,141.06	349.64	4.264		
10,600.00	7,119.64	7,057.64	7,119.64	108.48	244.66	-89.96	-1,545.12	-3,567.90	1,506.85	1,155.57	351.28	4.290		
10,700.00	7,119.28	7,057.28	7,119.28	111.22	244.65	-89.94	-1,545.12	-3,567.90	1,529.38	1,176.90	352.48	4.339		
10,800.00	7,118.91	7,056.91	7,118.91	113.96	244.63	-89.93	-1,545.12	-3,567.90	1,558.01	1,204.76	353.25	4.410		
10,900.00	7,118.55	7,056.55	7,118.55	116.70	244.62	-89.92	-1,545.12	-3,567.90	1,592.42	1,238.79	353.64	4.503		
11,000.00	7,118.18	7,056.18	7,118.18	119.45	244.61	-89.90	-1,545.12	-3,567.90	1,632.24	1,278.57	353.67	4.615		
11,100.00	7,117.81	7,055.81	7,117.81	122.21	244.60	-89.89	-1,545.12	-3,567.90	1,677.08	1,323.68	353.41	4.745		
11,200.00	7,117.45	7,055.45	7,117.45	124.97	244.58	-89.87	-1,545.12	-3,567.90	1,726.56	1,373.67	352.89	4.893		
11,300.00	7,117.08	7,055.08	7,117.08	127.73	244.57	-89.86	-1,545.12	-3,567.90	1,780.29	1,428.11	352.17	5.055		
11,400.00	7,116.72	7,054.72	7,116.72	130.50	244.56	-89.85	-1,545.12	-3,567.90	1,837.88	1,486.59	351.29	5.232		
11,500.00	7,116.35	7,054.35	7,116.35	133.27	244.54	-89.83	-1,545.12	-3,567.90	1,899.01	1,548.72	350.29	5.421		
11,600.00	7,115.98	7,053.98	7,115.98	136.04	244.53	-89.82	-1,545.12	-3,567.90	1,963.32	1,614.13	349.19	5.622		
11,700.00	7,115.62	7,053.62	7,115.62	138.82	244.52	-89.80	-1,545.12	-3,567.90	2,030.52	1,682.49	348.03	5.834		
11,800.00	7,115.25	7,053.25	7,115.25	141.60	244.51	-89.79	-1,545.12	-3,567.90	2,100.34	1,753.50	346.84	6.056		
11,900.00	7,114.88	7,052.88	7,114.88	144.39	244.49	-89.77	-1,545.12	-3,567.90	2,172.52	1,826.89	345.63	6.286		
12,000.00	7,114.52	7,052.52	7,114.52	147.17	244.48	-89.76	-1,545.12	-3,567.90	2,246.83	1,902.42	344.41	6.524		
12,100.00	7,114.15	7,052.15	7,114.15	149.96	244.47	-89.75	-1,545.12	-3,567.90	2,323.06	1,979.87	343.20	6.769		
12,200.00	7,113.79	7,051.79	7,113.79	152.75	244.45	-89.73	-1,545.12	-3,567.90	2,401.05	2,059.04	342.00	7.021		
12,300.00	7,113.42	7,051.42	7,113.42	155.55	244.44	-89.72	-1,545.12	-3,567.90	2,480.61	2,139.78	340.83	7.278		
12,400.00	7,113.05	7,051.05	7,113.05	158.34	244.43	-89.70	-1,545.12	-3,567.90	2,561.61	2,221.92	339.69	7.541		
12,500.00	7,112.69	7,050.69	7,112.69	161.14	244.42	-89.69	-1,545.12	-3,567.90	2,643.90	2,305.32	338.58	7.809		
12,600.00	7,112.32	7,050.32	7,112.32	163.94	244.40	-89.67	-1,545.12	-3,567.90	2,727.39	2,389.88	337.51	8.081		
12,700.00	7,111.96	7,049.96	7,111.96	166.74	244.39	-89.66	-1,545.12	-3,567.90	2,811.94	2,475.47	336.47	8.357		
12,800.00	7,111.59	7,049.59	7,111.59	169.54	244.38	-89.65	-1,545.12	-3,567.90	2,897.49	2,562.02	335.47	8.637		
12,900.00	7,111.22	7,049.22	7,111.22	172.35	244.37	-89.63	-1,545.12	-3,567.90	2,983.93	2,649.42	334.50	8.920		
13,000.00	7,110.86	7,048.86	7,110.86	175.16	244.35	-89.62	-1,545.12	-3,567.90	3,071.19	2,737.62	333.58	9.207		
13,100.00	7,110.49	7,048.49	7,110.49	177.96	244.34	-89.60	-1,545.12	-3,567.90	3,159.21	2,826.53	332.69	9.496		
13,200.00	7,110.12	7,048.12	7,110.12	180.77	244.33	-89.59	-1,545.12	-3,567.90	3,247.93	2,916.10	331.83	9.788		
13,300.00	7,109.76	7,047.76	7,109.76	183.58	244.31	-89.58	-1,545.12	-3,567.90	3,337.28	3,006.27	331.01	10.082		
13,400.00	7,109.39	7,047.39	7,109.39	186.40	244.30	-89.56	-1,545.12	-3,567.90	3,427.22	3,097.00	330.22	10.379		
13,500.00	7,109.03	7,047.03	7,109.03	189.21	244.29	-89.55	-1,545.12	-3,567.90	3,517.70	3,188.24	329.46	10.677		
13,600.00	7,108.66	7,046.66	7,108.66	192.03	244.28	-89.53	-1,545.12	-3,567.90	3,608.69	3,279.95	328.74	10.977		
13,700.00	7,108.29	7,046.29	7,108.29	194.84	244.26	-89.52	-1,545.12	-3,567.90	3,700.14	3,372.09	328.04	11.279		
13,800.00	7,107.93	7,045.93	7,107.93	197.66	244.25	-89.50	-1,545.12	-3,567.90	3,792.02	3,464.64	327.38	11.583		
13,900.00	7,107.56	7,045.56	7,107.56	200.48	244.24	-89.49	-1,545.12	-3,567.90	3,884.30	3,557.57	326.74	11.888		
14,000.00	7,107.19	7,045.19	7,107.19	203.30	244.22	-89.48	-1,545.12	-3,567.90	3,976.96	3,650.84	326.12	12.195		
14,100.00	7,106.83	7,044.83	7,106.83	206.12	244.21	-89.46	-1,545.12	-3,567.90	4,069.96	3,744.43	325.53	12.502		
14,200.00	7,106.46	7,044.46	7,106.46	208.94	244.20	-89.45	-1,545.12	-3,567.90	4,163.29	3,838.32	324.97	12.811		
14,300.00	7,106.10	7,044.10	7,106.10	211.76	244.19	-89.43	-1,545.12	-3,567.90	4,256.92	3,932.50	324.42	13.121		
14,400.00	7,105.73	7,043.73	7,105.73	214.58	244.17	-89.42	-1,545.12	-3,567.90	4,350.84	4,026.93	323.90	13.432		
14,500.00	7,105.36	7,043.36	7,105.36	217.40	244.16	-89.41	-1,545.12	-3,567.90	4,445.02	4,121.61	323.40	13.744		
14,600.00	7,105.00	7,043.00	7,105.00	220.23	244.15	-89.39	-1,545.12	-3,567.90	4,539.44	4,216.52	322.92	14.057		
14,700.00	7,104.63	7,042.63	7,104.63	223.05	244.14	-89.38	-1,545.12	-3,567.90	4,634.11	4,311.64	322.46	14.371		
14,800.00	7,104.27	7,042.27	7,104.27	225.88	244.12	-89.36	-1,545.12	-3,567.90	4,728.99	4,406.97	322.02	14.685		
14,872.41	7,104.00	7,042.00	7,104.00	227.93	244.11	-89.35	-1,545.12	-3,567.90	4,797.82	4,476.11	321.71	14.914		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	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	59.92	3.28	3.28	-92.09	-333.59	-9,144.81	9,151.09					
100.00	100.00	185.51	211.49	3.28	3.34	-92.08	-332.14	-9,143.24	9,149.95	9,143.33	6.62	1,381.665		
200.00	200.00	289.27	315.25	3.34	3.45	-92.08	-331.63	-9,141.92	9,148.65	9,141.87	6.79	1,347.909		
300.00	300.00	369.12	395.09	3.44	3.58	-92.08	-331.46	-9,141.01	9,147.51	9,140.49	7.02	1,303.334		
400.00	400.00	465.01	490.97	3.60	3.76	-92.08	-331.22	-9,140.04	9,146.49	9,139.13	7.36	1,242.157		
500.00	500.00	547.72	573.68	3.81	3.95	-92.07	-331.00	-9,139.29	9,145.58	9,137.82	7.75	1,179.360		
600.00	599.98	624.05	650.00	4.04	4.15	-2.08	-331.12	-9,138.76	9,143.29	9,135.11	8.18	1,117.441		
700.00	699.95	738.86	764.82	4.30	4.47	-2.08	-331.27	-9,138.18	9,140.32	9,131.55	8.77	1,042.743		
800.00	799.92	849.77	875.72	4.59	4.81	-2.08	-331.12	-9,137.33	9,137.05	9,127.65	9.40	972.356		
900.00	899.89	931.04	956.99	4.90	5.08	-2.08	-331.00	-9,136.74	9,133.82	9,123.84	9.97	915.866		
1,000.00	999.86	984.00	1,009.95	5.23	5.26	-2.08	-331.05	-9,136.44	9,130.85	9,120.37	10.48	871.194		
1,100.00	1,099.83	984.00	1,009.95	5.58	5.26	-2.08	-331.05	-9,136.44	9,128.79	9,117.97	10.83	843.213		
1,200.00	1,199.80	1,050.13	1,076.07	5.94	5.47	-2.08	-331.06	-9,136.74	9,126.98	9,115.58	11.40	800.478		
1,300.00	1,299.77	1,112.00	1,137.93	6.30	5.68	-2.08	-330.83	-9,138.11	9,126.45	9,114.47	11.98	761.903		
1,366.07	1,365.82	1,112.00	1,137.93	6.55	5.68	-2.08	-330.83	-9,138.11	9,126.21	9,113.99	12.23	746.425		
1,400.00	1,399.73	1,112.00	1,137.93	6.68	5.68	-2.08	-330.83	-9,138.11	9,126.28	9,113.92	12.36	738.661		
1,500.00	1,499.70	1,112.00	1,137.93	7.07	5.68	-2.08	-330.83	-9,138.11	9,127.20	9,114.46	12.74	716.493		
1,600.00	1,599.67	1,157.40	1,183.29	7.46	5.83	-2.08	-330.60	-9,139.85	9,128.76	9,115.48	13.28	687.480		
1,700.00	1,699.64	1,182.37	1,208.23	7.85	5.92	-2.08	-330.49	-9,141.10	9,131.23	9,117.48	13.76	663.800		
1,800.00	1,799.61	1,241.00	1,266.74	8.25	6.12	-2.07	-330.31	-9,144.83	9,134.78	9,120.43	14.35	636.441		
1,900.00	1,899.58	1,241.00	1,266.74	8.66	6.12	-2.07	-330.31	-9,144.83	9,138.67	9,123.91	14.75	619.470		
2,000.00	1,999.55	1,241.00	1,266.74	9.06	6.12	-2.07	-330.31	-9,144.83	9,143.64	9,128.49	15.15	603.391		
2,100.00	2,099.52	1,241.00	1,266.74	9.47	6.12	-2.07	-330.31	-9,144.83	9,149.71	9,134.15	15.56	588.164		
2,200.00	2,199.48	1,303.37	1,328.89	9.89	6.34	-2.07	-330.15	-9,150.08	9,155.96	9,139.78	16.18	565.840		
2,300.00	2,299.45	1,369.00	1,394.14	10.30	6.58	-2.07	-329.99	-9,157.09	9,163.81	9,146.99	16.82	544.748		
2,400.00	2,399.42	1,369.00	1,394.14	10.72	6.58	-2.07	-329.99	-9,157.09	9,171.74	9,154.52	17.23	532.420		
2,500.00	2,499.39	1,369.00	1,394.14	11.14	6.58	-2.07	-329.99	-9,157.09	9,180.76	9,163.13	17.63	520.735		
2,600.00	2,599.36	1,369.00	1,394.14	11.56	6.58	-2.07	-329.99	-9,157.09	9,190.86	9,172.82	18.03	509.658		
2,700.00	2,699.33	1,425.65	1,450.33	11.98	6.79	-2.07	-330.02	-9,164.29	9,201.35	9,182.70	18.65	493.445		
2,800.00	2,799.30	1,451.31	1,475.74	12.41	6.89	-2.07	-330.14	-9,167.87	9,212.84	9,193.70	19.15	481.192		
2,900.00	2,899.27	1,498.00	1,521.90	12.83	7.07	-2.07	-330.55	-9,174.91	9,225.23	9,205.50	19.73	467.653		
3,000.00	2,999.23	1,498.00	1,521.90	13.26	7.07	-2.07	-330.55	-9,174.91	9,238.22	9,218.09	20.13	459.039		
3,100.00	3,099.20	1,498.00	1,521.90	13.68	7.07	-2.07	-330.55	-9,174.91	9,252.27	9,231.75	20.52	450.859		
3,200.00	3,199.17	1,549.87	1,573.04	14.11	7.28	-2.07	-331.17	-9,183.54	9,266.77	9,245.65	21.12	438.725		
3,300.00	3,299.14	1,573.63	1,596.42	14.54	7.38	-2.07	-331.49	-9,187.80	9,282.26	9,260.65	21.61	429.530		
3,400.00	3,399.11	1,626.00	1,647.80	14.97	7.60	-2.08	-332.23	-9,197.84	9,298.72	9,276.51	22.21	418.589		
3,500.00	3,499.08	1,626.00	1,647.80	15.40	7.60	-2.08	-332.23	-9,197.84	9,315.62	9,293.02	22.60	412.148		
3,600.00	3,599.05	1,626.00	1,647.80	15.83	7.60	-2.08	-332.23	-9,197.84	9,333.56	9,310.57	22.99	406.023		
3,700.00	3,699.02	1,626.00	1,647.80	16.26	7.60	-2.08	-332.23	-9,197.84	9,352.53	9,329.16	23.37	400.199		
3,800.00	3,798.98	1,687.87	1,708.27	16.69	7.89	-2.08	-333.28	-9,210.93	9,371.63	9,347.62	24.01	390.288		
3,900.00	3,898.95	1,754.00	1,772.54	17.12	8.19	-2.08	-334.65	-9,226.42	9,392.35	9,367.68	24.68	380.630		
4,000.00	3,998.92	1,754.00	1,772.54	17.55	8.19	-2.08	-334.65	-9,226.42	9,413.06	9,388.01	25.05	375.765		
4,100.00	4,098.89	1,754.00	1,772.54	17.98	8.19	-2.08	-334.65	-9,226.42	9,434.79	9,409.37	25.42	371.136		
4,200.00	4,198.86	1,754.00	1,772.54	18.42	8.19	-2.08	-334.65	-9,226.42	9,457.52	9,431.73	25.79	366.733		
4,300.00	4,298.83	1,810.13	1,826.82	18.85	8.48	-2.09	-335.82	-9,240.62	9,480.68	9,454.27	26.41	359.023		
4,400.00	4,398.80	1,838.14	1,853.84	19.28	8.63	-2.09	-336.33	-9,248.01	9,504.69	9,477.79	26.90	353.378		
4,500.00	4,498.77	1,883.00	1,896.99	19.72	8.86	-2.09	-337.05	-9,260.26	9,529.45	9,501.99	27.46	346.993		
4,600.00	4,598.73	1,883.00	1,896.99	20.15	8.86	-2.09	-337.05	-9,260.26	9,554.84	9,527.02	27.82	343.478		
4,700.00	4,698.70	1,926.56	1,938.76	20.58	9.11	-2.09	-337.70	-9,272.59	9,580.89	9,552.51	28.38	337.625		
4,800.00	4,798.67	1,957.72	1,968.57	21.02	9.29	-2.10	-338.19	-9,281.66	9,607.62	9,578.75	28.88	332.717		
4,900.00	4,898.64	2,011.00	2,019.39	21.45	9.60	-2.10	-339.06	-9,297.62	9,635.09	9,605.61	29.48	326.812		
5,000.00	4,998.61	2,011.00	2,019.39	21.89	9.60	-2.10	-339.06	-9,297.62	9,663.06	9,633.24	29.82	324.003		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-07D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,098.58	2,067.38	2,073.01	22.32	9.95	-2.10	-340.01	-9,315.02	9,691.62	9,661.18	30.45	318.320		
5,200.00	5,198.55	2,140.00	2,141.90	22.76	10.41	-2.10	-341.23	-9,337.96	9,720.81	9,689.65	31.15	312.038		
5,300.00	5,298.52	5,300.00	2,383.54	23.20	32.19	-2.11	-344.72	-9,415.48	9,748.83	9,702.31	46.51	209.585		
5,400.00	5,398.49	2,466.50	2,452.94	23.63	12.60	-2.11	-345.87	-9,437.09	9,776.26	9,742.72	33.54	291.465		
5,500.00	5,498.45	2,525.00	2,508.67	24.07	13.01	-2.11	-346.65	-9,454.88	9,804.26	9,770.07	34.19	286.735		
5,600.00	5,598.42	2,567.90	2,549.48	24.50	13.32	-2.11	-347.10	-9,468.12	9,832.68	9,797.92	34.76	282.867		
5,700.00	5,698.39	2,625.66	2,604.35	24.94	13.74	-2.11	-347.44	-9,486.13	9,861.49	9,826.08	35.41	278.500		
5,800.00	5,798.36	2,653.00	2,630.30	25.38	13.94	-2.11	-347.50	-9,494.74	9,890.75	9,854.86	35.89	275.593		
5,900.00	5,898.33	2,701.52	2,676.27	25.81	14.30	-2.11	-347.53	-9,510.28	9,920.50	9,884.02	36.49	271.892		
6,000.00	5,998.30	2,733.16	2,706.16	26.25	14.54	-2.10	-347.54	-9,520.66	9,950.92	9,913.93	36.99	269.030		
6,100.00	6,098.27	3,008.05	2,966.64	26.69	16.63	-2.10	-350.29	-9,608.32	9,979.84	9,940.96	38.88	256.709		
7,000.00	6,947.19	6,824.31	6,676.36	30.74	38.98	-1.40	-369.08	-10,299.99	9,972.15	9,911.59	60.56	164.658		
7,100.00	7,011.62	6,883.98	6,736.00	31.32	39.19	-1.68	-370.20	-10,301.59	9,897.62	9,836.55	61.07	162.058		
7,200.00	7,063.31	6,927.23	6,779.22	32.03	39.34	-2.15	-371.05	-10,302.79	9,813.65	9,752.19	61.46	159.680		
7,300.00	7,101.00	6,959.00	6,810.97	32.89	39.46	-3.11	-371.75	-10,303.70	9,722.30	9,660.57	61.73	157.496		
7,400.00	7,123.74	6,979.21	6,831.17	33.93	39.53	-5.74	-372.22	-10,304.29	9,625.77	9,563.87	61.90	155.515		
7,500.00	7,131.00	6,987.31	6,839.27	35.10	39.56	-34.12	-372.41	-10,304.53	9,526.42	9,464.46	61.96	153.741		
7,600.00	7,130.63	6,989.41	6,841.37	36.44	39.57	-34.35	-372.46	-10,304.59	9,426.47	9,364.49	61.99	152.073		
7,700.00	7,130.26	6,991.53	6,843.48	37.94	39.57	-34.58	-372.52	-10,304.65	9,326.53	9,264.52	62.01	150.403		
7,800.00	7,129.90	6,993.65	6,845.60	39.59	39.58	-34.81	-372.57	-10,304.72	9,226.58	9,164.55	62.04	148.732		
7,900.00	7,129.53	6,995.78	6,847.73	41.37	39.59	-35.05	-372.62	-10,304.78	9,126.64	9,064.58	62.06	147.058		
8,000.00	7,129.17	6,997.92	6,849.87	43.27	39.60	-35.29	-372.67	-10,304.84	9,026.69	8,964.60	62.09	145.382		
8,100.00	7,128.80	7,000.07	6,852.02	45.27	39.60	-35.54	-372.73	-10,304.91	8,926.75	8,864.63	62.12	143.705		
8,200.00	7,128.43	7,002.23	6,854.17	47.36	39.61	-35.79	-372.78	-10,304.97	8,826.81	8,764.66	62.15	142.027		
8,300.00	7,128.07	7,004.39	6,856.34	49.52	39.62	-36.04	-372.84	-10,305.04	8,726.86	8,664.68	62.18	140.347		
8,400.00	7,127.70	7,006.57	6,858.51	51.75	39.63	-36.30	-372.89	-10,305.10	8,626.92	8,564.71	62.21	138.665		
8,500.00	7,127.33	7,008.76	6,860.70	54.04	39.64	-36.56	-372.95	-10,305.17	8,526.98	8,464.73	62.25	136.982		
8,600.00	7,126.97	7,010.95	6,862.89	56.38	39.64	-36.82	-373.00	-10,305.24	8,427.04	8,364.75	62.28	135.298		
8,700.00	7,126.60	7,013.16	6,865.09	58.77	39.65	-37.09	-373.06	-10,305.30	8,327.10	8,264.78	62.32	133.613		
8,800.00	7,126.24	7,015.37	6,867.31	61.19	39.66	-37.37	-373.12	-10,305.37	8,227.16	8,164.80	62.36	131.927		
8,900.00	7,125.87	7,017.60	6,869.53	63.65	39.67	-37.65	-373.17	-10,305.44	8,127.22	8,064.82	62.40	130.240		
9,000.00	7,125.50	7,020.21	6,872.14	66.15	39.68	-37.98	-373.24	-10,305.52	8,027.28	7,964.84	62.45	128.550		
9,100.00	7,125.14	7,023.46	6,875.39	68.67	39.69	-38.40	-373.33	-10,305.62	7,927.35	7,864.86	62.49	126.855		
9,200.00	7,124.77	7,026.69	6,878.62	71.21	39.70	-38.82	-373.41	-10,305.72	7,827.41	7,764.87	62.54	125.160		
9,300.00	7,124.41	7,029.91	6,881.84	73.78	39.71	-39.25	-373.49	-10,305.81	7,727.47	7,664.89	62.59	123.464		
9,400.00	7,124.04	7,033.12	6,885.04	76.37	39.72	-39.69	-373.57	-10,305.91	7,627.54	7,564.90	62.64	121.769		
9,500.00	7,123.67	7,036.32	6,888.23	78.98	39.73	-40.13	-373.65	-10,306.01	7,527.60	7,464.91	62.69	120.074		
9,600.00	7,123.31	7,039.50	6,891.41	81.60	39.75	-40.58	-373.72	-10,306.10	7,427.67	7,364.92	62.74	118.379		
9,700.00	7,122.94	7,042.66	6,894.58	84.24	39.76	-41.03	-373.80	-10,306.20	7,327.74	7,264.94	62.80	116.684		
9,800.00	7,122.57	7,045.82	6,897.73	86.90	39.77	-41.49	-373.87	-10,306.29	7,227.80	7,164.95	62.86	114.989		
9,900.00	7,122.21	7,048.96	6,900.87	89.56	39.78	-41.96	-373.95	-10,306.39	7,127.87	7,064.96	62.91	113.295		
10,000.00	7,121.84	7,052.09	6,904.00	92.24	39.79	-42.43	-374.02	-10,306.48	7,027.94	6,964.96	62.97	111.601		
10,100.00	7,121.48	7,055.21	6,907.11	94.92	39.80	-42.91	-374.09	-10,306.58	6,928.01	6,864.97	63.03	109.908		
10,200.00	7,121.11	7,058.31	6,910.21	97.62	39.81	-43.39	-374.16	-10,306.67	6,828.08	6,764.98	63.10	108.215		
10,300.00	7,120.74	7,061.40	6,913.30	100.32	39.83	-43.88	-374.22	-10,306.76	6,728.15	6,664.99	63.16	106.523		
10,400.00	7,120.38	7,064.48	6,916.37	103.04	39.84	-44.38	-374.29	-10,306.85	6,628.22	6,564.99	63.23	104.832		
10,500.00	7,120.01	7,067.54	6,919.44	105.76	39.85	-44.88	-374.36	-10,306.94	6,528.29	6,465.00	63.29	103.142		
10,600.00	7,119.64	7,070.59	6,922.49	108.48	39.86	-45.39	-374.42	-10,307.04	6,428.36	6,365.00	63.36	101.452		
10,700.00	7,119.28	7,073.64	6,925.53	111.22	39.87	-45.91	-374.48	-10,307.13	6,328.44	6,265.00	63.43	99.763		
10,800.00	7,118.91	7,076.66	6,928.55	113.96	39.88	-46.43	-374.55	-10,307.22	6,228.52	6,165.01	63.51	98.075		
10,900.00	7,118.55	7,079.68	6,931.57	116.70	39.89	-46.96	-374.61	-10,307.30	6,128.59	6,065.01	63.58	96.388		
11,000.00	7,118.18	7,082.68	6,934.57	119.45	39.90	-47.49	-374.67	-10,307.39	6,028.67	5,965.01	63.66	94.703		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-07D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
11,100.00	7,117.81	7,085.67	6,937.56	122.21	39.91	-48.03	-374.72	-10,307.48	5,928.75	5,865.01	63.74	93.018		
11,200.00	7,117.45	7,088.65	6,940.54	124.97	39.92	-48.58	-374.78	-10,307.57	5,828.83	5,765.01	63.82	91.335		
11,300.00	7,117.08	7,091.62	6,943.50	127.73	39.93	-49.14	-374.84	-10,307.66	5,728.91	5,665.01	63.90	89.652		
11,400.00	7,116.72	7,094.58	6,946.46	130.50	39.94	-49.70	-374.89	-10,307.74	5,629.00	5,565.01	63.99	87.971		
11,500.00	7,116.35	7,097.52	6,949.40	133.27	39.96	-50.27	-374.95	-10,307.83	5,529.08	5,465.01	64.07	86.292		
11,600.00	7,115.98	7,100.45	6,952.33	136.04	39.97	-50.84	-375.00	-10,307.92	5,429.17	5,365.00	64.16	84.613		
11,700.00	7,115.62	7,103.37	6,955.25	138.82	39.98	-51.42	-375.05	-10,308.00	5,329.26	5,265.00	64.26	82.936		
11,800.00	7,115.25	7,106.28	6,958.16	141.60	39.99	-52.01	-375.10	-10,308.09	5,229.35	5,165.00	64.35	81.261		
11,900.00	7,114.88	7,109.18	6,961.05	144.39	40.00	-52.61	-375.15	-10,308.17	5,129.44	5,064.99	64.45	79.587		
12,000.00	7,114.52	7,112.07	6,963.94	147.17	40.01	-53.21	-375.20	-10,308.25	5,029.54	4,964.98	64.55	77.914		
12,100.00	7,114.15	7,114.94	6,966.81	149.96	40.02	-53.82	-375.25	-10,308.34	4,929.63	4,864.98	64.66	76.243		
12,200.00	7,113.79	7,117.81	6,969.67	152.75	40.03	-54.44	-375.29	-10,308.42	4,829.73	4,764.97	64.77	74.573		
12,300.00	7,113.42	7,120.66	6,972.52	155.55	40.04	-55.06	-375.34	-10,308.50	4,729.84	4,664.96	64.88	72.905		
12,400.00	7,113.05	7,123.50	6,975.36	158.34	40.05	-55.69	-375.38	-10,308.59	4,629.94	4,564.95	64.99	71.238		
12,500.00	7,112.69	7,126.33	6,978.19	161.14	40.06	-56.32	-375.43	-10,308.67	4,530.05	4,464.94	65.11	69.573		
12,600.00	7,112.32	7,129.15	6,981.01	163.94	40.07	-56.97	-375.47	-10,308.75	4,430.16	4,364.93	65.24	67.909		
12,700.00	7,111.96	7,131.95	6,983.81	166.74	40.08	-57.62	-375.51	-10,308.83	4,330.28	4,264.91	65.37	66.247		
12,800.00	7,111.59	7,134.75	6,986.61	169.54	40.09	-58.27	-375.55	-10,308.91	4,230.40	4,164.90	65.50	64.586		
12,900.00	7,111.22	7,137.54	6,989.39	172.35	40.10	-58.93	-375.59	-10,308.99	4,130.52	4,064.88	65.64	62.926		
13,000.00	7,110.86	7,140.31	6,992.17	175.16	40.11	-59.60	-375.63	-10,309.07	4,030.65	3,964.86	65.79	61.268		
13,100.00	7,110.49	7,143.08	6,994.93	177.96	40.12	-60.27	-375.67	-10,309.15	3,930.78	3,864.84	65.94	59.611		
13,200.00	7,110.12	7,145.83	6,997.68	180.77	40.13	-60.96	-375.71	-10,309.23	3,830.92	3,764.82	66.10	57.956		
13,300.00	7,109.76	7,148.86	7,000.71	183.58	40.14	-61.71	-375.75	-10,309.31	3,731.06	3,664.79	66.27	56.301		
13,400.00	7,109.39	7,152.06	7,003.91	186.40	40.15	-62.53	-375.79	-10,309.40	3,631.21	3,564.76	66.45	54.648		
13,500.00	7,109.03	7,155.22	7,007.06	189.21	40.16	-63.34	-375.83	-10,309.49	3,531.36	3,464.73	66.64	52.996		
13,600.00	7,108.66	7,158.32	7,010.17	192.03	40.18	-64.15	-375.87	-10,309.58	3,431.53	3,364.69	66.83	51.344		
13,700.00	7,108.29	7,161.38	7,013.23	194.84	40.19	-64.96	-375.91	-10,309.66	3,331.70	3,264.65	67.04	49.694		
13,800.00	7,107.93	7,164.40	7,016.24	197.66	40.20	-65.77	-375.94	-10,309.75	3,231.87	3,164.60	67.27	48.044		
13,900.00	7,107.56	7,167.38	7,019.22	200.48	40.21	-66.58	-375.98	-10,309.83	3,132.06	3,064.55	67.51	46.395		
14,000.00	7,107.19	7,170.31	7,022.15	203.30	40.22	-67.38	-376.02	-10,309.91	3,032.25	2,964.49	67.77	44.747		
14,100.00	7,106.83	7,173.19	7,025.03	206.12	40.23	-68.19	-376.05	-10,309.99	2,932.46	2,864.42	68.04	43.098		
14,200.00	7,106.46	7,176.04	7,027.88	208.94	40.24	-68.99	-376.09	-10,310.06	2,832.68	2,764.34	68.34	41.450		
14,300.00	7,106.10	7,178.85	7,030.69	211.76	40.25	-69.78	-376.12	-10,310.14	2,732.91	2,664.25	68.66	39.801		
14,400.00	7,105.73	7,181.62	7,033.45	214.58	40.26	-70.57	-376.15	-10,310.21	2,633.16	2,564.14	69.02	38.152		
14,500.00	7,105.36	7,184.35	7,036.18	217.40	40.27	-71.36	-376.19	-10,310.28	2,533.43	2,464.02	69.40	36.503		
14,600.00	7,105.00	7,187.04	7,038.87	220.23	40.28	-72.15	-376.22	-10,310.36	2,433.71	2,363.88	69.83	34.852		
14,700.00	7,104.63	7,189.70	7,041.53	223.05	40.29	-72.93	-376.25	-10,310.43	2,334.02	2,263.72	70.30	33.201		
14,800.00	7,104.27	7,192.32	7,044.15	225.88	40.30	-73.71	-376.28	-10,310.49	2,234.35	2,163.53	70.82	31.549		
14,872.41	7,104.00	7,194.19	7,046.02	227.93	40.30	-74.27	-376.30	-10,310.54	2,162.20	2,090.96	71.24	30.351 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	39.00	3.28	3.28	-91.75	-279.18	-9,147.78	9,152.12					
100.00	100.00	61.00	100.00	3.28	3.45	-91.75	-279.18	-9,147.78	9,152.04	9,145.31	6.73	1,359.238		
200.00	200.00	161.00	200.00	3.34	5.08	-91.75	-279.18	-9,147.78	9,152.04	9,143.63	8.41	1,087.735		
300.00	300.00	261.00	300.00	3.44	8.06	-91.75	-279.18	-9,147.78	9,152.04	9,140.53	11.51	795.263		
400.00	400.00	361.00	400.00	3.60	11.34	-91.75	-279.18	-9,147.78	9,152.04	9,137.10	14.94	612.382		
500.00	500.00	461.00	500.00	3.81	14.72	-91.75	-279.18	-9,147.78	9,152.04	9,133.52	18.52	494.060		
600.00	599.98	560.98	599.98	4.04	18.14	-1.75	-279.18	-9,147.78	9,150.44	9,128.26	22.18	412.608		
700.00	699.95	660.95	699.95	4.30	21.58	-1.75	-279.18	-9,147.78	9,147.94	9,122.06	25.88	353.480		
800.00	799.92	760.92	799.92	4.59	25.03	-1.75	-279.18	-9,147.78	9,145.44	9,115.82	29.62	308.729		
900.00	899.89	860.89	899.89	4.90	28.50	-1.75	-279.18	-9,147.78	9,142.95	9,109.55	33.40	273.765		
1,000.00	999.86	960.86	999.86	5.23	31.97	-1.75	-279.18	-9,147.78	9,140.45	9,103.25	37.20	245.741		
1,100.00	1,099.83	1,060.83	1,099.83	5.58	35.44	-1.75	-279.18	-9,147.78	9,137.95	9,096.94	41.01	222.805		
1,200.00	1,199.80	1,160.80	1,199.80	5.94	38.92	-1.75	-279.18	-9,147.78	9,135.45	9,090.61	44.85	203.706		
1,300.00	1,299.77	1,260.77	1,299.77	6.30	42.39	-1.75	-279.18	-9,147.78	9,132.96	9,084.26	48.69	187.565		
1,400.00	1,399.73	1,360.73	1,399.73	6.68	45.88	-1.75	-279.18	-9,147.78	9,130.46	9,077.91	52.55	173.754		
1,500.00	1,499.70	1,460.70	1,499.70	7.07	49.36	-1.75	-279.18	-9,147.78	9,127.96	9,071.55	56.41	161.805		
1,600.00	1,599.67	1,560.67	1,599.67	7.46	52.84	-1.75	-279.18	-9,147.78	9,125.46	9,065.18	60.29	151.371		
1,700.00	1,699.64	1,660.64	1,699.64	7.85	56.32	-1.75	-279.18	-9,147.78	9,122.96	9,058.80	64.16	142.183		
1,800.00	1,799.61	1,760.61	1,799.61	8.25	59.81	-1.75	-279.18	-9,147.78	9,120.47	9,052.42	68.05	134.032		
1,900.00	1,899.58	1,860.58	1,899.58	8.66	63.29	-1.76	-279.18	-9,147.78	9,117.97	9,046.03	71.94	126.753		
2,000.00	1,999.55	1,960.55	1,999.55	9.06	66.78	-1.76	-279.18	-9,147.78	9,115.47	9,039.65	75.83	120.214		
2,100.00	2,099.52	2,060.52	2,099.52	9.47	70.26	-1.76	-279.18	-9,147.78	9,112.97	9,033.25	79.72	114.309		
2,200.00	2,199.48	2,160.48	2,199.48	9.89	73.75	-1.76	-279.18	-9,147.78	9,110.48	9,026.86	83.62	108.950		
2,300.00	2,299.45	2,260.45	2,299.45	10.30	77.24	-1.76	-279.18	-9,147.78	9,107.98	9,020.46	87.52	104.066		
2,400.00	2,399.42	2,360.42	2,399.42	10.72	80.72	-1.76	-279.18	-9,147.78	9,105.48	9,014.06	91.42	99.596		
2,500.00	2,499.39	2,460.39	2,499.39	11.14	84.21	-1.76	-279.18	-9,147.78	9,102.98	9,007.66	95.33	95.490		
2,600.00	2,599.36	2,560.36	2,599.36	11.56	87.70	-1.76	-279.18	-9,147.78	9,100.49	9,001.25	99.24	91.705		
2,700.00	2,699.33	2,660.33	2,699.33	11.98	91.19	-1.76	-279.18	-9,147.78	9,097.99	8,994.84	103.14	88.206		
2,800.00	2,799.30	2,760.30	2,799.30	12.41	94.67	-1.76	-279.18	-9,147.78	9,095.49	8,988.44	107.05	84.961		
2,900.00	2,899.27	2,860.27	2,899.27	12.83	98.16	-1.76	-279.18	-9,147.78	9,092.99	8,982.03	110.97	81.944		
3,000.00	2,999.23	2,960.23	2,999.23	13.26	101.65	-1.76	-279.18	-9,147.78	9,090.50	8,975.62	114.88	79.131		
3,100.00	3,099.20	3,060.20	3,099.20	13.68	105.14	-1.76	-279.18	-9,147.78	9,088.00	8,969.21	118.79	76.504		
3,200.00	3,199.17	3,160.17	3,199.17	14.11	108.63	-1.76	-279.18	-9,147.78	9,085.50	8,962.80	122.71	74.043		
3,300.00	3,299.14	3,260.14	3,299.14	14.54	112.11	-1.76	-279.18	-9,147.78	9,083.00	8,956.38	126.62	71.733		
3,400.00	3,399.11	3,360.11	3,399.11	14.97	115.60	-1.76	-279.18	-9,147.78	9,080.51	8,949.97	130.54	69.562		
3,500.00	3,499.08	3,460.08	3,499.08	15.40	119.09	-1.76	-279.18	-9,147.78	9,078.01	8,943.55	134.45	67.517		
3,600.00	3,599.05	3,560.05	3,599.05	15.83	122.58	-1.76	-279.18	-9,147.78	9,075.51	8,937.14	138.37	65.588		
3,700.00	3,699.02	3,660.02	3,699.02	16.26	126.07	-1.76	-279.18	-9,147.78	9,073.01	8,930.72	142.29	63.764		
3,800.00	3,798.98	3,759.98	3,798.98	16.69	129.56	-1.76	-279.18	-9,147.78	9,070.52	8,924.31	146.21	62.038		
3,900.00	3,898.95	3,859.95	3,898.95	17.12	133.05	-1.76	-279.18	-9,147.78	9,068.02	8,917.89	150.13	60.402		
4,000.00	3,998.92	3,959.92	3,998.92	17.55	136.54	-1.77	-279.18	-9,147.78	9,065.52	8,911.47	154.05	58.849		
4,100.00	4,098.89	4,059.89	4,098.89	17.98	140.02	-1.77	-279.18	-9,147.78	9,063.02	8,905.06	157.97	57.373		
4,200.00	4,198.86	4,159.86	4,198.86	18.42	143.51	-1.77	-279.18	-9,147.78	9,060.53	8,898.64	161.89	55.968		
4,300.00	4,298.83	4,259.83	4,298.83	18.85	147.00	-1.77	-279.18	-9,147.78	9,058.03	8,892.22	165.81	54.629		
4,400.00	4,398.80	4,359.80	4,398.80	19.28	150.49	-1.77	-279.18	-9,147.78	9,055.53	8,885.80	169.73	53.352		
4,500.00	4,498.77	4,459.77	4,498.77	19.72	153.98	-1.77	-279.18	-9,147.78	9,053.03	8,879.38	173.65	52.133		
4,600.00	4,598.73	4,559.73	4,598.73	20.15	157.47	-1.77	-279.18	-9,147.78	9,050.54	8,872.96	177.57	50.968		
4,700.00	4,698.70	4,659.70	4,698.70	20.58	160.96	-1.77	-279.18	-9,147.78	9,048.04	8,866.54	181.50	49.852		
4,800.00	4,798.67	4,759.67	4,798.67	21.02	164.45	-1.77	-279.18	-9,147.78	9,045.54	8,860.12	185.42	48.784		
4,900.00	4,898.64	4,859.64	4,898.64	21.45	167.94	-1.77	-279.18	-9,147.78	9,043.04	8,853.70	189.34	47.760		
5,000.00	4,998.61	4,959.61	4,998.61	21.89	171.43	-1.77	-279.18	-9,147.78	9,040.55	8,847.28	193.27	46.778		
5,100.00	5,098.58	5,059.58	5,098.58	22.32	174.92	-1.77	-279.18	-9,147.78	9,038.05	8,840.86	197.19	45.834		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,200.00	5,198.55	5,159.55	5,198.55	22.76	178.40	-1.77	-279.18	-9,147.78	9,035.55	8,834.44	201.11	44.928		
5,300.00	5,298.52	5,259.52	5,298.52	23.20	181.89	-1.77	-279.18	-9,147.78	9,033.05	8,828.02	205.04	44.056		
5,400.00	5,398.49	5,359.49	5,398.49	23.63	185.38	-1.77	-279.18	-9,147.78	9,030.56	8,821.60	208.96	43.217		
5,500.00	5,498.45	5,459.45	5,498.45	24.07	188.87	-1.77	-279.18	-9,147.78	9,028.06	8,815.17	212.88	42.408		
5,600.00	5,598.42	5,559.42	5,598.42	24.50	192.36	-1.77	-279.18	-9,147.78	9,025.56	8,808.75	216.81	41.629		
5,700.00	5,698.39	5,659.39	5,698.39	24.94	195.85	-1.77	-279.18	-9,147.78	9,023.06	8,802.33	220.73	40.878		
5,800.00	5,798.36	5,759.36	5,798.36	25.38	199.34	-1.77	-279.18	-9,147.78	9,020.57	8,795.91	224.66	40.152		
5,900.00	5,898.33	5,859.33	5,898.33	25.81	202.83	-1.77	-279.18	-9,147.78	9,018.07	8,789.49	228.58	39.452		
6,000.00	5,998.30	5,959.30	5,998.30	26.25	206.32	-1.78	-279.18	-9,147.78	9,015.57	8,783.06	232.51	38.775		
6,100.00	6,098.27	6,059.27	6,098.27	26.69	209.81	-1.78	-279.18	-9,147.78	9,013.07	8,776.64	236.43	38.121		
6,200.00	6,198.24	6,159.24	6,198.24	27.12	213.30	-1.78	-279.18	-9,147.78	9,010.58	8,770.22	240.36	37.488		
6,300.00	6,298.20	6,259.20	6,298.20	27.56	216.79	-1.78	-279.18	-9,147.78	9,008.08	8,763.80	244.28	36.876		
6,400.00	6,398.17	6,359.17	6,398.17	28.00	220.28	-1.78	-279.18	-9,147.78	9,005.58	8,757.37	248.21	36.282		
6,500.00	6,498.14	6,459.14	6,498.14	28.43	223.77	-1.78	-279.18	-9,147.78	9,003.08	8,750.95	252.13	35.708		
6,600.00	6,597.68	6,558.68	6,597.68	28.88	227.24	-0.84	-279.18	-9,147.78	8,994.54	8,738.50	256.05	35.129		
6,700.00	6,694.68	6,655.68	6,694.68	29.32	230.63	-0.78	-279.18	-9,147.78	8,970.65	8,710.79	259.86	34.521		
6,800.00	6,786.74	6,747.74	6,786.74	29.77	233.84	-0.81	-279.18	-9,147.78	8,931.88	8,668.40	263.48	33.899		
6,900.00	6,871.61	6,832.61	6,871.61	30.24	236.80	-0.88	-279.18	-9,147.78	8,879.19	8,612.38	266.81	33.279		
7,000.00	6,947.19	6,908.19	6,947.19	30.74	239.44	-1.00	-279.18	-9,147.78	8,813.87	8,544.10	269.77	32.672		
7,100.00	7,011.62	6,972.62	7,011.62	31.32	241.69	-1.20	-279.18	-9,147.78	8,737.53	8,465.26	272.27	32.091		
7,200.00	7,063.31	7,024.31	7,063.31	32.03	243.50	-1.56	-279.18	-9,147.78	8,652.06	8,377.79	274.26	31.546		
7,300.00	7,101.00	7,062.00	7,101.00	32.89	244.81	-2.31	-279.18	-9,147.78	8,559.55	8,283.84	275.71	31.046		
7,400.00	7,123.74	7,084.74	7,123.74	33.93	245.61	-4.67	-279.18	-9,147.78	8,462.28	8,185.71	276.57	30.597		
7,500.00	7,131.00	7,108.00	7,131.00	35.10	246.42	-106.49	-279.18	-9,147.78	8,362.65	8,085.24	277.41	30.145		
7,600.00	7,130.63	7,108.37	7,130.63	36.44	246.43	-106.30	-279.18	-9,147.78	8,262.66	7,985.23	277.43	29.782		
7,700.00	7,130.26	7,108.74	7,130.26	37.94	246.44	-106.11	-279.18	-9,147.78	8,162.67	7,885.21	277.46	29.420		
7,800.00	7,129.90	7,109.10	7,129.90	39.59	246.46	-105.93	-279.18	-9,147.78	8,062.68	7,785.20	277.48	29.057		
7,900.00	7,129.53	7,109.47	7,129.53	41.37	246.47	-105.74	-279.18	-9,147.78	7,962.69	7,685.18	277.51	28.694		
8,000.00	7,129.17	7,109.84	7,129.17	43.27	246.48	-105.55	-279.18	-9,147.78	7,862.70	7,585.16	277.53	28.330		
8,100.00	7,128.80	7,089.80	7,128.80	45.27	245.78	-105.36	-279.18	-9,147.78	7,762.71	7,485.86	276.85	28.039		
8,200.00	7,128.43	7,089.43	7,128.43	47.36	245.77	-105.17	-279.18	-9,147.78	7,662.72	7,385.86	276.86	27.678		
8,300.00	7,128.07	7,089.07	7,128.07	49.52	245.76	-104.98	-279.18	-9,147.78	7,562.73	7,285.87	276.86	27.316		
8,400.00	7,127.70	7,088.70	7,127.70	51.75	245.74	-104.79	-279.18	-9,147.78	7,462.74	7,185.87	276.87	26.954		
8,500.00	7,127.33	7,088.33	7,127.33	54.04	245.73	-104.60	-279.18	-9,147.78	7,362.75	7,085.87	276.87	26.592		
8,600.00	7,126.97	7,087.97	7,126.97	56.38	245.72	-104.41	-279.18	-9,147.78	7,262.76	6,985.88	276.88	26.230		
8,700.00	7,126.60	7,087.60	7,126.60	58.77	245.71	-104.22	-279.18	-9,147.78	7,162.77	6,885.88	276.89	25.868		
8,800.00	7,126.24	7,087.24	7,126.24	61.19	245.69	-104.03	-279.18	-9,147.78	7,062.78	6,785.88	276.91	25.506		
8,900.00	7,125.87	7,086.87	7,125.87	63.65	245.68	-103.84	-279.18	-9,147.78	6,962.79	6,685.87	276.92	25.144		
9,000.00	7,125.50	7,086.50	7,125.50	66.15	245.67	-103.65	-279.18	-9,147.78	6,862.80	6,585.87	276.93	24.782		
9,100.00	7,125.14	7,086.14	7,125.14	68.67	245.65	-103.46	-279.18	-9,147.78	6,762.82	6,485.87	276.95	24.419		
9,200.00	7,124.77	7,085.77	7,124.77	71.21	245.64	-103.27	-279.18	-9,147.78	6,662.83	6,385.87	276.96	24.057		
9,300.00	7,124.41	7,085.41	7,124.41	73.78	245.63	-103.07	-279.18	-9,147.78	6,562.84	6,285.86	276.98	23.694		
9,400.00	7,124.04	7,085.04	7,124.04	76.37	245.62	-102.88	-279.18	-9,147.78	6,462.86	6,185.85	277.00	23.332		
9,500.00	7,123.67	7,084.67	7,123.67	78.98	245.60	-102.69	-279.18	-9,147.78	6,362.87	6,085.85	277.02	22.969		
9,600.00	7,123.31	7,084.31	7,123.31	81.60	245.59	-102.50	-279.18	-9,147.78	6,262.88	5,985.84	277.04	22.606		
9,700.00	7,122.94	7,083.94	7,122.94	84.24	245.58	-102.30	-279.18	-9,147.78	6,162.90	5,885.83	277.07	22.243		
9,800.00	7,122.57	7,083.57	7,122.57	86.90	245.56	-102.11	-279.18	-9,147.78	6,062.91	5,785.82	277.09	21.881		
9,900.00	7,122.21	7,083.21	7,122.21	89.56	245.55	-101.92	-279.18	-9,147.78	5,962.93	5,685.81	277.12	21.518		
10,000.00	7,121.84	7,082.84	7,121.84	92.24	245.54	-101.72	-279.18	-9,147.78	5,862.94	5,585.80	277.14	21.155		
10,100.00	7,121.48	7,082.48	7,121.48	94.92	245.53	-101.53	-279.18	-9,147.78	5,762.96	5,485.79	277.17	20.792		
10,200.00	7,121.11	7,082.11	7,121.11	97.62	245.51	-101.33	-279.18	-9,147.78	5,662.98	5,385.77	277.20	20.429		
10,300.00	7,120.74	7,081.74	7,120.74	100.32	245.50	-101.14	-279.18	-9,147.78	5,563.00	5,285.76	277.23	20.066		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
10,400.00	7,120.38	7,081.38	7,120.38	103.04	245.49	-100.94	-279.18	-9,147.78	5,463.01	5,185.75	277.27	19.703	
10,500.00	7,120.01	7,081.01	7,120.01	105.76	245.47	-100.75	-279.18	-9,147.78	5,363.03	5,085.73	277.30	19.340	
10,600.00	7,119.64	7,080.64	7,119.64	108.48	245.46	-100.55	-279.18	-9,147.78	5,263.05	4,985.71	277.34	18.977	
10,700.00	7,119.28	7,080.28	7,119.28	111.22	245.45	-100.35	-279.18	-9,147.78	5,163.07	4,885.70	277.38	18.614	
10,800.00	7,118.91	7,079.91	7,118.91	113.96	245.44	-100.16	-279.18	-9,147.78	5,063.09	4,785.68	277.42	18.251	
10,900.00	7,118.55	7,079.55	7,118.55	116.70	245.42	-99.96	-279.18	-9,147.78	4,963.12	4,685.66	277.46	17.888	
11,000.00	7,118.18	7,079.18	7,118.18	119.45	245.41	-99.76	-279.18	-9,147.78	4,863.14	4,585.64	277.50	17.525	
11,100.00	7,117.81	7,078.81	7,117.81	122.21	245.40	-99.57	-279.18	-9,147.78	4,763.16	4,485.62	277.54	17.162	
11,200.00	7,117.45	7,078.45	7,117.45	124.97	245.39	-99.37	-279.18	-9,147.78	4,663.19	4,385.60	277.59	16.799	
11,300.00	7,117.08	7,078.08	7,117.08	127.73	245.37	-99.17	-279.18	-9,147.78	4,563.21	4,285.58	277.64	16.436	
11,400.00	7,116.72	7,077.72	7,116.72	130.50	245.36	-98.97	-279.18	-9,147.78	4,463.24	4,185.55	277.69	16.073	
11,500.00	7,116.35	7,077.35	7,116.35	133.27	245.35	-98.78	-279.18	-9,147.78	4,363.27	4,085.53	277.74	15.710	
11,600.00	7,115.98	7,076.98	7,115.98	136.04	245.33	-98.58	-279.18	-9,147.78	4,263.30	3,985.50	277.79	15.347	
11,700.00	7,115.62	7,076.62	7,115.62	138.82	245.32	-98.38	-279.18	-9,147.78	4,163.33	3,885.48	277.85	14.984	
11,800.00	7,115.25	7,076.25	7,115.25	141.60	245.31	-98.18	-279.18	-9,147.78	4,063.36	3,785.45	277.91	14.621	
11,900.00	7,114.88	7,075.88	7,114.88	144.39	245.30	-97.98	-279.18	-9,147.78	3,963.39	3,685.43	277.97	14.258	
12,000.00	7,114.52	7,075.52	7,114.52	147.17	245.28	-97.78	-279.18	-9,147.78	3,863.43	3,585.40	278.03	13.896	
12,100.00	7,114.15	7,075.15	7,114.15	149.96	245.27	-97.58	-279.18	-9,147.78	3,763.47	3,485.37	278.10	13.533	
12,200.00	7,113.79	7,074.79	7,113.79	152.75	245.26	-97.38	-279.18	-9,147.78	3,663.51	3,385.34	278.17	13.170	
12,300.00	7,113.42	7,074.42	7,113.42	155.55	245.24	-97.19	-279.18	-9,147.78	3,563.55	3,285.30	278.24	12.807	
12,400.00	7,113.05	7,074.05	7,113.05	158.34	245.23	-96.99	-279.18	-9,147.78	3,463.59	3,185.27	278.32	12.445	
12,500.00	7,112.69	7,073.69	7,112.69	161.14	245.22	-96.79	-279.18	-9,147.78	3,363.64	3,085.24	278.40	12.082	
12,600.00	7,112.32	7,073.32	7,112.32	163.94	245.21	-96.59	-279.18	-9,147.78	3,263.69	2,985.20	278.49	11.719	
12,700.00	7,111.96	7,072.96	7,111.96	166.74	245.19	-96.39	-279.18	-9,147.78	3,163.74	2,885.16	278.58	11.357	
12,800.00	7,111.59	7,072.59	7,111.59	169.54	245.18	-96.19	-279.18	-9,147.78	3,063.80	2,785.12	278.68	10.994	
12,900.00	7,111.22	7,072.22	7,111.22	172.35	245.17	-95.98	-279.18	-9,147.78	2,963.86	2,685.08	278.78	10.632	
13,000.00	7,110.86	7,071.86	7,110.86	175.16	245.16	-95.78	-279.18	-9,147.78	2,863.92	2,585.03	278.89	10.269	
13,100.00	7,110.49	7,071.49	7,110.49	177.96	245.14	-95.58	-279.18	-9,147.78	2,763.99	2,484.99	279.00	9.907	
13,200.00	7,110.12	7,071.12	7,110.12	180.77	245.13	-95.38	-279.18	-9,147.78	2,664.06	2,384.93	279.13	9.544	
13,300.00	7,109.76	7,070.76	7,109.76	183.58	245.12	-95.18	-279.18	-9,147.78	2,564.14	2,284.88	279.26	9.182	
13,400.00	7,109.39	7,070.39	7,109.39	186.40	245.10	-94.98	-279.18	-9,147.78	2,464.23	2,184.82	279.41	8.819	
13,500.00	7,109.03	7,070.03	7,109.03	189.21	245.09	-94.78	-279.18	-9,147.78	2,364.32	2,084.75	279.57	8.457	
13,600.00	7,108.66	7,069.66	7,108.66	192.03	245.08	-94.58	-279.18	-9,147.78	2,264.42	1,984.67	279.75	8.094	
13,700.00	7,108.29	7,069.29	7,108.29	194.84	245.07	-94.38	-279.18	-9,147.78	2,164.53	1,884.59	279.94	7.732	
13,800.00	7,107.93	7,068.93	7,107.93	197.66	245.05	-94.17	-279.18	-9,147.78	2,064.65	1,784.49	280.16	7.369	
13,900.00	7,107.56	7,068.56	7,107.56	200.48	245.04	-93.97	-279.18	-9,147.78	1,964.78	1,684.38	280.41	7.007	
14,000.00	7,107.19	7,068.19	7,107.19	203.30	245.03	-93.77	-279.18	-9,147.78	1,864.93	1,584.25	280.68	6.644	
14,100.00	7,106.83	7,067.83	7,106.83	206.12	245.01	-93.57	-279.18	-9,147.78	1,765.09	1,484.10	281.00	6.282	
14,200.00	7,106.46	7,067.46	7,106.46	208.94	245.00	-93.37	-279.18	-9,147.78	1,665.28	1,383.91	281.36	5.919	
14,300.00	7,106.10	7,067.10	7,106.10	211.76	244.99	-93.16	-279.18	-9,147.78	1,565.48	1,283.69	281.79	5.556	
14,400.00	7,105.73	7,066.73	7,105.73	214.58	244.98	-92.96	-279.18	-9,147.78	1,465.72	1,183.43	282.29	5.192	
14,500.00	7,105.36	7,066.36	7,105.36	217.40	244.96	-92.76	-279.18	-9,147.78	1,365.99	1,083.09	282.89	4.829	
14,600.00	7,105.00	7,066.00	7,105.00	220.23	244.95	-92.56	-279.18	-9,147.78	1,266.30	982.67	283.62	4.465	
14,700.00	7,104.63	7,065.63	7,104.63	223.05	244.94	-92.36	-279.18	-9,147.78	1,166.66	882.13	284.53	4.100	
14,800.00	7,104.27	7,065.27	7,104.27	225.88	244.93	-92.15	-279.18	-9,147.78	1,067.09	781.43	285.66	3.736	
14,872.41	7,104.00	7,065.00	7,104.00	227.93	244.92	-92.01	-279.18	-9,147.78	995.05	708.37	286.67	3.471 CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I17-17D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	26.00	3.28	3.28	-91.93	-308.33	-9,145.01	9,150.24					
100.00	100.00	110.44	136.44	3.28	3.29	-91.93	-308.61	-9,144.65	9,149.93	9,143.35	6.58	1,391.201		
200.00	200.00	185.32	211.32	3.34	3.34	-91.93	-308.53	-9,144.46	9,149.67	9,143.00	6.67	1,371.321		
243.32	243.32	217.32	243.32	3.38	3.36	-91.93	-308.48	-9,144.44	9,149.64	9,142.90	6.74	1,357.619		
300.00	300.00	259.41	285.41	3.44	3.41	-91.93	-308.48	-9,144.47	9,149.69	9,142.84	6.85	1,335.567		
400.00	400.00	346.38	372.37	3.60	3.52	-91.93	-308.57	-9,144.67	9,149.92	9,142.79	7.13	1,283.826		
500.00	500.00	434.78	460.78	3.81	3.68	-91.93	-308.69	-9,144.99	9,150.29	9,142.80	7.49	1,222.277		
600.00	599.98	608.96	634.95	4.04	4.08	-1.94	-309.17	-9,145.30	9,148.99	9,140.88	8.11	1,127.487		
700.00	699.95	678.74	704.74	4.30	4.26	-1.94	-309.53	-9,145.11	9,146.24	9,137.68	8.56	1,068.414		
800.00	799.92	727.00	752.99	4.59	4.40	-1.94	-309.76	-9,145.15	9,143.91	9,134.93	8.98	1,017.725		
900.00	899.89	767.60	793.59	4.90	4.51	-1.94	-309.80	-9,145.43	9,142.20	9,132.79	9.41	971.092		
1,000.00	999.86	800.37	826.36	5.23	4.61	-1.94	-309.63	-9,145.94	9,141.23	9,131.39	9.84	928.740		
1,100.00	1,099.83	856.00	881.96	5.58	4.78	-1.94	-308.92	-9,147.37	9,141.09	9,130.73	10.36	882.430		
1,110.42	1,110.24	856.00	881.96	5.61	4.78	-1.94	-308.92	-9,147.37	9,141.08	9,130.69	10.40	879.303		
1,200.00	1,199.80	856.00	881.96	5.94	4.78	-1.94	-308.92	-9,147.37	9,141.52	9,130.80	10.72	852.952		
1,300.00	1,299.77	856.00	881.96	6.30	4.78	-1.94	-308.92	-9,147.37	9,143.05	9,131.96	11.09	824.710		
1,400.00	1,399.73	913.19	939.09	6.68	4.97	-1.93	-307.65	-9,149.75	9,144.95	9,133.30	11.64	785.422		
1,500.00	1,499.70	938.01	963.86	7.07	5.05	-1.92	-306.95	-9,151.13	9,147.90	9,135.79	12.11	755.589		
1,600.00	1,599.67	984.00	1,009.72	7.46	5.20	-1.91	-305.41	-9,154.22	9,151.77	9,139.13	12.65	723.634		
1,700.00	1,699.64	984.00	1,009.72	7.85	5.20	-1.91	-305.41	-9,154.22	9,156.27	9,143.23	13.04	702.166		
1,800.00	1,799.61	984.00	1,009.72	8.25	5.20	-1.91	-305.41	-9,154.22	9,161.86	9,148.42	13.44	681.865		
1,900.00	1,899.58	1,044.54	1,069.98	8.66	5.41	-1.90	-302.62	-9,159.28	9,167.82	9,153.78	14.04	652.860		
2,000.00	1,999.55	1,112.00	1,136.95	9.06	5.65	-1.87	-298.26	-9,166.15	9,175.07	9,160.39	14.68	624.986		
2,100.00	2,099.52	1,112.00	1,136.95	9.47	5.65	-1.87	-298.26	-9,166.15	9,182.53	9,167.44	15.08	608.814		
2,200.00	2,199.48	1,112.00	1,136.95	9.89	5.65	-1.87	-298.26	-9,166.15	9,191.06	9,175.58	15.49	593.524		
2,300.00	2,299.45	1,177.84	1,202.11	10.30	5.90	-1.83	-292.79	-9,173.82	9,200.11	9,183.98	16.13	570.288		
2,400.00	2,399.42	1,241.00	1,264.44	10.72	6.15	-1.79	-286.49	-9,181.82	9,209.93	9,193.16	16.78	548.970		
2,500.00	2,499.39	1,275.49	1,298.40	11.14	6.30	-1.77	-282.53	-9,186.39	9,220.23	9,202.91	17.32	532.391		
2,600.00	2,599.36	1,350.32	1,371.84	11.56	6.62	-1.70	-272.31	-9,196.45	9,230.91	9,212.88	18.03	512.045		
2,700.00	2,699.33	1,401.69	1,422.05	11.98	6.85	-1.65	-264.08	-9,203.54	9,241.96	9,223.31	18.65	495.495		
2,800.00	2,799.30	1,445.14	1,464.39	12.41	7.05	-1.60	-256.58	-9,209.79	9,253.60	9,234.36	19.25	480.762		
2,900.00	2,899.27	1,498.00	1,515.73	12.83	7.31	-1.54	-246.83	-9,217.74	9,265.87	9,245.98	19.89	465.911		
3,000.00	2,999.23	1,498.00	1,515.73	13.26	7.31	-1.54	-246.83	-9,217.74	9,278.86	9,258.57	20.29	457.365		
3,100.00	3,099.20	1,568.63	1,584.05	13.68	7.67	-1.45	-232.93	-9,229.00	9,292.25	9,271.22	21.03	441.860		
3,200.00	3,199.17	1,626.00	1,639.33	14.11	7.98	-1.38	-221.04	-9,238.70	9,306.45	9,284.74	21.71	428.667		
3,300.00	3,299.14	1,626.00	1,639.33	14.54	7.98	-1.38	-221.04	-9,238.70	9,321.26	9,299.16	22.11	421.675		
3,400.00	3,399.11	1,696.11	1,706.54	14.97	8.38	-1.28	-205.45	-9,251.14	9,336.57	9,313.70	22.87	408.176		
3,500.00	3,499.08	1,754.00	1,761.70	15.40	8.72	-1.19	-191.49	-9,261.83	9,352.55	9,328.97	23.58	396.648		
3,600.00	3,599.05	1,754.00	1,761.70	15.83	8.72	-1.19	-191.49	-9,261.83	9,369.18	9,345.21	23.97	390.906		
3,700.00	3,699.02	1,801.87	1,807.06	16.26	9.03	-1.11	-179.34	-9,271.10	9,386.44	9,361.80	24.64	380.996		
3,800.00	3,798.98	1,829.69	1,833.32	16.69	9.21	-1.07	-172.08	-9,276.75	9,404.52	9,379.33	25.19	373.408		
3,900.00	3,898.95	1,883.00	1,883.40	17.12	9.56	-0.98	-157.79	-9,288.10	9,423.46	9,397.57	25.89	364.037		
4,000.00	3,998.92	1,912.25	1,910.81	17.55	9.77	-0.93	-149.78	-9,294.48	9,442.90	9,416.45	26.45	357.005		
4,100.00	4,098.89	2,092.94	2,080.25	17.98	11.06	-0.62	-99.93	-9,332.57	9,461.89	9,433.89	28.00	337.929		
4,200.00	4,198.86	2,178.95	2,161.20	18.42	11.69	-0.47	-77.06	-9,350.49	9,480.82	9,451.87	28.95	327.526		
4,300.00	4,298.83	2,248.86	2,227.12	18.85	12.20	-0.36	-59.03	-9,365.24	9,500.02	9,470.23	29.79	318.914		
4,400.00	4,398.80	2,375.20	2,346.54	19.28	13.14	-0.17	-27.63	-9,391.99	9,519.33	9,488.33	31.01	306.994		
4,500.00	4,498.77	2,447.51	2,414.99	19.72	13.69	-0.06	-9.99	-9,407.19	9,538.54	9,506.66	31.87	299.273		
4,600.00	4,598.73	2,507.07	2,471.18	20.15	14.14	0.03	5.11	-9,419.90	9,558.15	9,525.49	32.65	292.738		
4,700.00	4,698.70	2,611.06	2,569.04	20.58	14.95	0.20	32.31	-9,442.25	9,578.02	9,544.27	33.75	283.789		
4,800.00	4,798.67	2,653.00	2,608.50	21.02	15.28	0.26	43.36	-9,451.18	9,597.97	9,563.55	34.41	278.900		
4,900.00	4,898.64	2,721.76	2,673.03	21.45	15.83	0.38	61.84	-9,466.09	9,618.28	9,583.00	35.28	272.635		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I17-17D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.00	4,998.61	2,782.00	2,729.29	21.89	16.32	0.48	78.61	-9,479.61	9,639.32	9,603.24	36.08	267.161		
5,100.00	5,098.58	2,900.41	2,839.92	22.32	17.30	0.68	111.34	-9,506.25	9,660.62	9,623.30	37.32	258.857		
5,200.00	5,198.55	3,075.10	3,004.15	22.76	18.72	0.95	157.41	-9,543.92	9,680.68	9,641.71	38.96	248.454		
5,300.00	5,298.52	3,118.28	3,044.72	23.20	19.08	1.02	168.87	-9,553.28	9,701.19	9,661.55	39.64	244.726		
5,400.00	5,398.49	3,167.00	3,090.36	23.63	19.48	1.10	182.04	-9,564.10	9,722.27	9,681.91	40.36	240.905		
5,500.00	5,498.45	3,460.80	3,367.31	24.07	21.86	1.54	257.01	-9,627.25	9,742.63	9,699.76	42.86	227.298		
5,600.00	5,598.42	3,532.57	3,435.27	24.50	22.43	1.64	274.70	-9,642.10	9,762.20	9,718.46	43.74	223.195		
5,700.00	5,698.39	5,855.23	5,701.32	24.94	34.61	3.16	538.63	-9,878.59	9,764.42	9,708.82	55.61	175.602		
5,800.00	5,798.36	5,968.71	5,814.78	25.38	34.93	3.15	536.54	-9,878.59	9,761.82	9,705.43	56.39	173.098		
5,900.00	5,898.33	6,135.24	5,981.28	25.81	35.40	3.13	533.29	-9,877.98	9,758.88	9,701.55	57.33	170.218		
6,000.00	5,998.30	6,242.46	6,088.47	26.25	35.70	3.12	531.23	-9,877.17	9,755.53	9,697.42	58.11	167.888		
6,100.00	6,098.27	6,334.99	6,180.99	26.69	35.97	3.12	529.67	-9,876.43	9,752.14	9,693.29	58.85	165.721		
6,200.00	6,198.24	6,468.59	6,314.57	27.12	36.36	3.10	527.67	-9,875.27	9,748.72	9,689.02	59.71	163.280		
6,300.00	6,298.20	6,572.10	6,418.07	27.56	36.66	3.10	526.54	-9,874.00	9,744.95	9,684.46	60.48	161.117		
6,400.00	6,398.17	6,655.32	6,501.27	28.00	36.91	3.10	525.99	-9,873.07	9,741.30	9,680.09	61.21	159.156		
6,500.00	6,498.14	6,732.55	6,578.50	28.43	37.15	3.10	525.48	-9,872.37	9,737.86	9,675.95	61.91	157.280		
6,600.00	6,597.68	6,818.82	6,664.76	28.88	37.42	4.10	524.87	-9,871.77	9,728.61	9,665.95	62.65	155.278		
6,700.00	6,694.68	6,904.84	6,750.79	29.32	37.69	4.37	524.50	-9,871.23	9,704.15	9,640.76	63.38	153.099		
6,800.00	6,786.74	6,973.17	6,819.11	29.77	37.91	4.72	524.36	-9,870.92	9,665.06	9,601.02	64.04	150.926		
6,900.00	6,871.61	7,190.37	7,036.30	30.24	38.60	5.30	523.97	-9,868.85	9,611.77	9,546.68	65.09	147.660		
7,000.00	6,947.19	7,261.29	7,107.21	30.74	38.82	6.15	523.19	-9,867.69	9,545.35	9,479.70	65.65	145.393		
7,100.00	7,011.62	7,310.12	7,156.02	31.32	38.97	7.50	522.41	-9,866.95	9,468.19	9,402.11	66.08	143.283		
7,200.00	7,063.31	7,346.25	7,192.14	32.03	39.09	9.85	521.82	-9,866.45	9,382.21	9,315.81	66.40	141.296		
7,300.00	7,101.00	7,372.46	7,218.35	32.89	39.17	14.73	521.40	-9,866.13	9,289.47	9,222.85	66.62	139.432		
7,400.00	7,123.74	7,388.04	7,233.92	33.93	39.22	29.19	521.15	-9,865.95	9,192.21	9,125.46	66.75	137.709		
7,500.00	7,131.00	7,392.50	7,238.38	35.10	39.23	101.19	521.07	-9,865.91	9,092.80	9,026.01	66.80	136.130		
7,600.00	7,130.63	7,391.47	7,237.35	36.44	39.23	101.11	521.09	-9,865.92	8,993.12	8,926.32	66.80	134.621		
7,700.00	7,130.26	7,390.43	7,236.32	37.94	39.22	101.03	521.11	-9,865.93	8,893.45	8,826.64	66.81	133.107		
7,800.00	7,129.90	7,389.39	7,235.28	39.59	39.22	100.95	521.12	-9,865.94	8,793.79	8,726.96	66.83	131.587		
7,900.00	7,129.53	7,388.34	7,234.23	41.37	39.22	100.87	521.14	-9,865.95	8,694.13	8,627.29	66.85	130.061		
8,000.00	7,129.17	7,387.28	7,233.17	43.27	39.21	100.78	521.16	-9,865.96	8,594.48	8,527.61	66.87	128.530		
8,100.00	7,128.80	7,386.22	7,232.11	45.27	39.21	100.70	521.17	-9,865.97	8,494.84	8,427.95	66.89	126.993		
8,200.00	7,128.43	7,385.15	7,231.04	47.36	39.21	100.62	521.19	-9,865.99	8,395.21	8,328.29	66.92	125.449		
8,300.00	7,128.07	7,384.08	7,229.96	49.52	39.20	100.53	521.21	-9,866.00	8,295.59	8,228.63	66.95	123.900		
8,400.00	7,127.70	7,382.99	7,228.88	51.75	39.20	100.45	521.23	-9,866.01	8,195.97	8,128.98	66.99	122.345		
8,500.00	7,127.33	7,381.91	7,227.79	54.04	39.20	100.36	521.24	-9,866.02	8,096.36	8,029.33	67.03	120.784		
8,600.00	7,126.97	7,380.81	7,226.70	56.38	39.19	100.28	521.26	-9,866.04	7,996.77	7,929.69	67.08	119.217		
8,700.00	7,126.60	7,379.71	7,225.59	58.77	39.19	100.19	521.28	-9,866.05	7,897.18	7,830.05	67.13	117.643		
8,800.00	7,126.24	7,378.60	7,224.48	61.19	39.19	100.10	521.30	-9,866.06	7,797.61	7,730.42	67.18	116.064		
8,900.00	7,125.87	7,377.48	7,223.37	63.65	39.18	100.02	521.32	-9,866.07	7,698.04	7,630.80	67.24	114.479		
9,000.00	7,125.50	7,376.35	7,222.24	66.15	39.18	99.93	521.33	-9,866.09	7,598.49	7,531.18	67.31	112.887		
9,100.00	7,125.14	7,375.22	7,221.11	68.67	39.18	99.84	521.35	-9,866.10	7,498.95	7,431.56	67.38	111.289		
9,200.00	7,124.77	7,374.08	7,219.97	71.21	39.17	99.75	521.37	-9,866.11	7,399.42	7,331.96	67.46	109.685		
9,300.00	7,124.41	7,372.94	7,218.82	73.78	39.17	99.66	521.39	-9,866.13	7,299.90	7,232.35	67.55	108.074		
9,400.00	7,124.04	7,371.78	7,217.67	76.37	39.17	99.57	521.41	-9,866.14	7,200.40	7,132.76	67.64	106.457		
9,500.00	7,123.67	7,370.62	7,216.51	78.98	39.16	99.48	521.43	-9,866.15	7,100.91	7,033.17	67.73	104.834		
9,600.00	7,123.31	7,369.45	7,215.34	81.60	39.16	99.39	521.45	-9,866.17	7,001.43	6,933.59	67.84	103.204		
9,700.00	7,122.94	7,368.28	7,214.16	84.24	39.15	99.29	521.46	-9,866.18	6,901.97	6,834.01	67.95	101.568		
9,800.00	7,122.57	7,367.09	7,212.98	86.90	39.15	99.20	521.48	-9,866.20	6,802.52	6,734.45	68.08	99.925		
9,900.00	7,122.21	7,365.90	7,211.79	89.56	39.15	99.11	521.50	-9,866.21	6,703.09	6,634.89	68.21	98.276		
10,000.00	7,121.84	7,364.70	7,210.59	92.24	39.14	99.01	521.52	-9,866.22	6,603.68	6,535.33	68.35	96.620		
10,100.00	7,121.48	7,363.49	7,209.38	94.92	39.14	98.92	521.54	-9,866.24	6,504.29	6,435.79	68.50	94.958		

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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I17-17D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,121.11	7,362.28	7,208.17	97.62	39.14	98.82	521.56	-9,866.25	6,404.91	6,336.25	68.66	93.289		
10,300.00	7,120.74	7,361.05	7,206.94	100.32	39.13	98.72	521.58	-9,866.27	6,305.55	6,236.72	68.83	91.614		
10,400.00	7,120.38	7,359.82	7,205.71	103.04	39.13	98.63	521.60	-9,866.28	6,206.22	6,137.21	69.01	89.932		
10,500.00	7,120.01	7,358.58	7,204.47	105.76	39.12	98.53	521.62	-9,866.30	6,106.90	6,037.69	69.21	88.243		
10,600.00	7,119.64	7,357.33	7,203.22	108.48	39.12	98.43	521.64	-9,866.31	6,007.61	5,938.19	69.41	86.548		
10,700.00	7,119.28	7,356.07	7,201.96	111.22	39.12	98.33	521.66	-9,866.33	5,908.34	5,838.70	69.64	84.846		
10,800.00	7,118.91	7,354.81	7,200.70	113.96	39.11	98.23	521.68	-9,866.35	5,809.09	5,739.22	69.87	83.138		
10,900.00	7,118.55	7,353.53	7,199.42	116.70	39.11	98.13	521.70	-9,866.36	5,709.88	5,639.75	70.13	81.424		
11,000.00	7,118.18	7,352.25	7,198.14	119.45	39.10	98.03	521.72	-9,866.38	5,610.68	5,540.29	70.40	79.703		
11,100.00	7,117.81	7,350.96	7,196.85	122.21	39.10	97.93	521.75	-9,866.39	5,511.52	5,440.84	70.68	77.976		
11,200.00	7,117.45	7,349.65	7,195.55	124.97	39.10	97.82	521.77	-9,866.41	5,412.39	5,341.40	70.99	76.243		
11,300.00	7,117.08	7,348.34	7,194.24	127.73	39.09	97.72	521.79	-9,866.43	5,313.29	5,241.98	71.32	74.504		
11,400.00	7,116.72	7,347.03	7,192.92	130.50	39.09	97.62	521.81	-9,866.44	5,214.23	5,142.56	71.66	72.760		
11,500.00	7,116.35	7,345.70	7,191.59	133.27	39.08	97.51	521.83	-9,866.46	5,115.20	5,043.16	72.03	71.010		
11,600.00	7,115.98	7,344.36	7,190.25	136.04	39.08	97.40	521.85	-9,866.48	5,016.20	4,943.77	72.43	69.256		
11,700.00	7,115.62	7,343.01	7,188.91	138.82	39.08	97.30	521.87	-9,866.50	4,917.25	4,844.40	72.85	67.496		
11,800.00	7,115.25	7,341.66	7,187.55	141.60	39.07	97.19	521.90	-9,866.51	4,818.34	4,745.04	73.30	65.732		
11,900.00	7,114.88	7,340.29	7,186.18	144.39	39.07	97.08	521.92	-9,866.53	4,719.48	4,645.70	73.78	63.964		
12,000.00	7,114.52	7,338.91	7,184.81	147.17	39.06	96.97	521.94	-9,866.55	4,620.67	4,546.37	74.30	62.192		
12,100.00	7,114.15	7,337.53	7,183.42	149.96	39.06	96.86	521.96	-9,866.57	4,521.90	4,447.06	74.85	60.417		
12,200.00	7,113.79	7,336.13	7,182.03	152.75	39.05	96.75	521.99	-9,866.59	4,423.20	4,347.77	75.43	58.639		
12,300.00	7,113.42	7,334.73	7,180.62	155.55	39.05	96.64	522.01	-9,866.60	4,324.55	4,248.49	76.06	56.860		
12,400.00	7,113.05	7,333.31	7,179.21	158.34	39.05	96.53	522.03	-9,866.62	4,225.96	4,149.24	76.73	55.079		
12,500.00	7,112.69	7,331.89	7,177.78	161.14	39.04	96.41	522.05	-9,866.64	4,127.44	4,050.00	77.44	53.298		
12,600.00	7,112.32	7,330.45	7,176.35	163.94	39.04	96.30	522.08	-9,866.66	4,029.00	3,950.79	78.21	51.518		
12,700.00	7,111.96	7,329.00	7,174.90	166.74	39.03	96.18	522.10	-9,866.68	3,930.63	3,851.60	79.03	49.738		
12,800.00	7,111.59	7,327.55	7,173.45	169.54	39.03	96.07	522.12	-9,866.70	3,832.34	3,752.44	79.90	47.961		
12,900.00	7,111.22	7,326.08	7,171.98	172.35	39.02	95.95	522.15	-9,866.72	3,734.15	3,653.30	80.85	46.188		
13,000.00	7,110.86	7,324.60	7,170.50	175.16	39.02	95.83	522.17	-9,866.74	3,636.05	3,554.20	81.86	44.419		
13,100.00	7,110.49	7,323.11	7,169.01	177.96	39.01	95.71	522.20	-9,866.76	3,538.06	3,455.12	82.94	42.657		
13,200.00	7,110.12	7,321.61	7,167.51	180.77	39.01	95.59	522.22	-9,866.78	3,440.19	3,356.08	84.11	40.901		
13,300.00	7,109.76	7,320.10	7,166.00	183.58	39.00	95.47	522.25	-9,866.80	3,342.44	3,257.07	85.36	39.155		
13,400.00	7,109.39	7,318.58	7,164.48	186.40	39.00	95.35	522.27	-9,866.83	3,244.82	3,158.11	86.72	37.419		
13,500.00	7,109.03	7,317.04	7,162.94	189.21	38.99	95.23	522.29	-9,866.85	3,147.36	3,059.19	88.17	35.696		
13,600.00	7,108.66	7,315.50	7,161.40	192.03	38.99	95.10	522.32	-9,866.87	3,050.06	2,960.31	89.74	33.987		
13,700.00	7,108.29	7,313.94	7,159.84	194.84	38.98	94.98	522.35	-9,866.89	2,952.93	2,861.49	91.44	32.294		
13,800.00	7,107.93	7,312.37	7,158.27	197.66	38.98	94.85	522.37	-9,866.91	2,856.01	2,762.73	93.28	30.619		
13,900.00	7,107.56	7,310.79	7,156.69	200.48	38.97	94.73	522.40	-9,866.94	2,759.30	2,664.04	95.27	28.964		
14,000.00	7,107.19	7,309.20	7,155.10	203.30	38.97	94.60	522.42	-9,866.96	2,662.84	2,565.41	97.42	27.333		
14,100.00	7,106.83	7,307.59	7,153.50	206.12	38.96	94.47	522.45	-9,866.98	2,566.64	2,466.88	99.77	25.727		
14,200.00	7,106.46	7,305.98	7,151.88	208.94	38.96	94.34	522.47	-9,867.01	2,470.75	2,368.43	102.32	24.148		
14,300.00	7,106.10	7,304.35	7,150.25	211.76	38.95	94.21	522.50	-9,867.03	2,375.19	2,270.09	105.10	22.600		
14,400.00	7,105.73	7,302.70	7,148.61	214.58	38.95	94.08	522.53	-9,867.05	2,280.02	2,171.88	108.14	21.085		
14,500.00	7,105.36	7,301.05	7,146.95	217.40	38.94	93.95	522.55	-9,867.08	2,185.27	2,073.81	111.46	19.606		
14,600.00	7,105.00	7,299.38	7,145.29	220.23	38.94	93.81	522.58	-9,867.10	2,091.01	1,975.90	115.11	18.166		
14,700.00	7,104.63	7,297.70	7,143.60	223.05	38.93	93.68	522.61	-9,867.13	1,997.31	1,878.19	119.12	16.768		
14,800.00	7,104.27	7,296.01	7,141.91	225.88	38.93	93.54	522.64	-9,867.15	1,904.24	1,780.71	123.54	15.415		
14,872.41	7,104.00	7,294.77	7,140.68	227.93	38.92	93.44	522.66	-9,867.17	1,837.31	1,710.29	127.02	14.465 CC, ES, SF		

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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 @ 4821.00ft

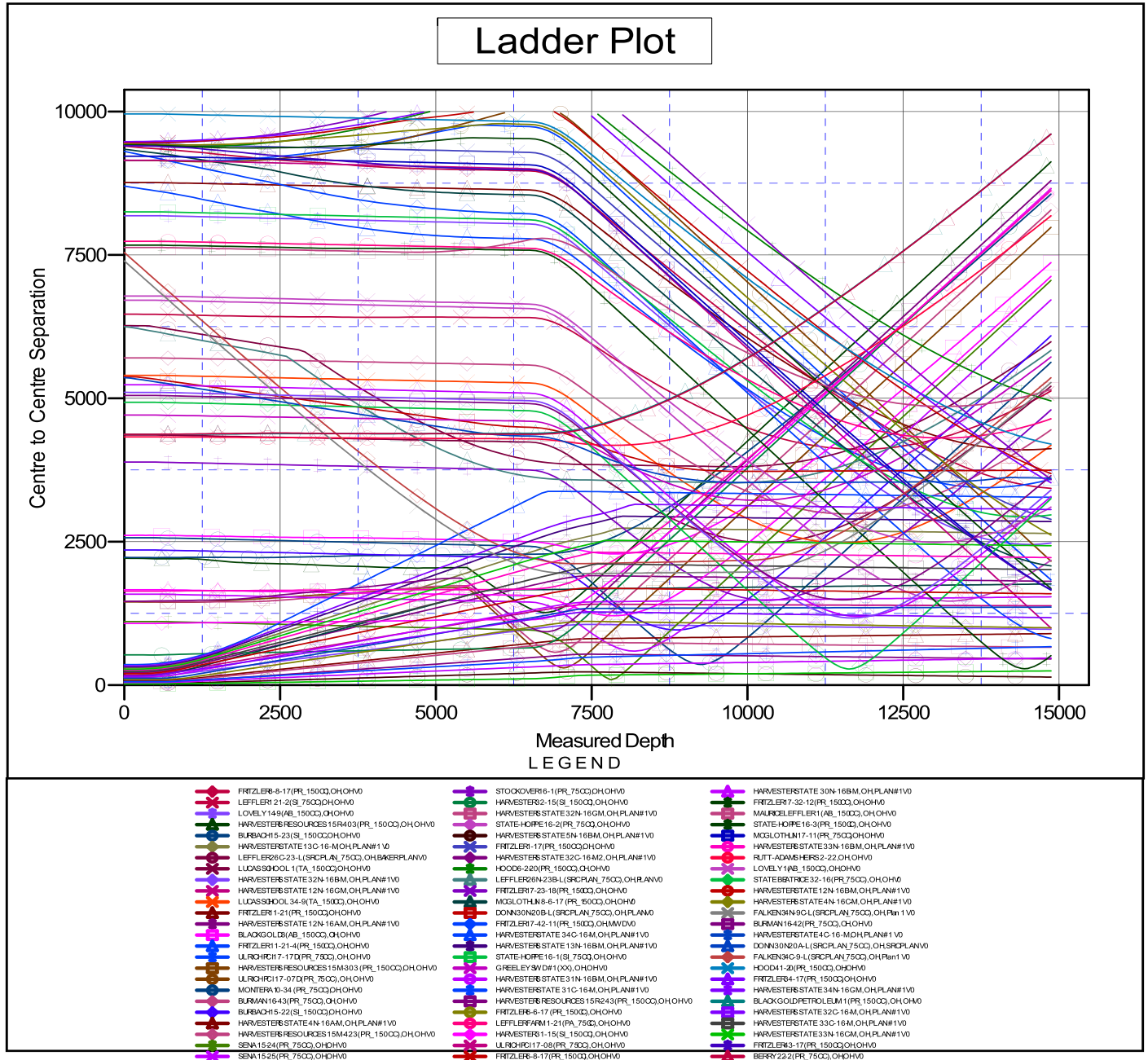
Offset Depths are relative to Offset Datum

Central Meridian is -105.5000000

Coordinates are relative to: HARVESTERS STATE 5N-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 5N-16C-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
Site Error:	3.28 ft	North Reference:	True
Reference Well:	HARVESTERS STATE 5N-16C-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
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Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to KB @ 4821.00ft

Offset Depths are relative to Offset Datum

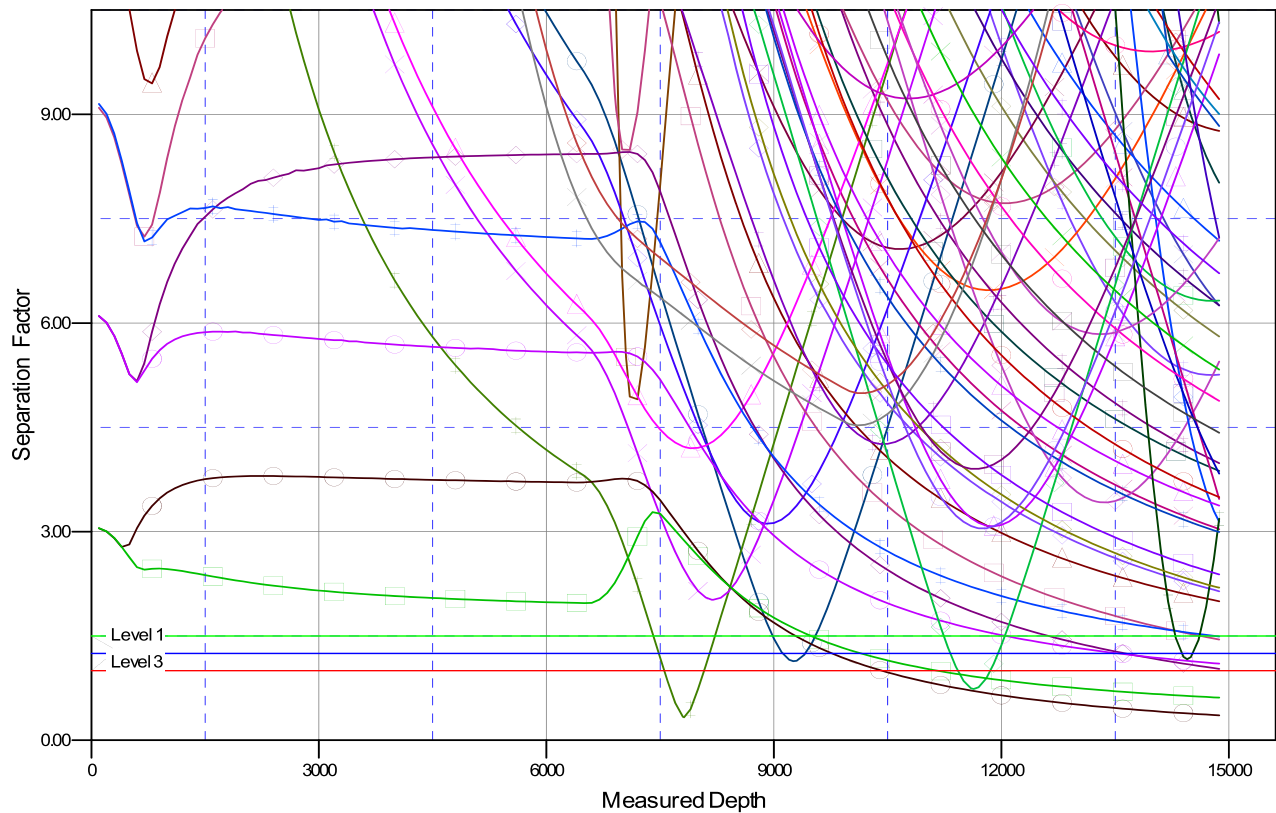
Central Meridian is -105.5000000

Coordinates are relative to: HARVESTERS STATE 5N-16C-M

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.48°

Separation Factor Plot



LEGEND

FRITZLER-8-17 (PR, 1500Q, OH, OHV)	STOCKOVER-6-1 (PR, 750Q, OH, OHV)	HARVESTERSTATE 30N-16BM, OH, PLAN#1V0
LEFFLER-21-2 (SL, 750Q, OH, OHV)	HARVESTER-2-5 (SL, 150Q, OH, OHV)	FRITZLER-7-32-12 (PR, 150Q, OH, OHV)
LOVELY-149/AB, 1500Q, OH, OHV)	HARVESTERSTATE 32N-16BM, OH, PLAN#1V0	MAURZELLEFLER-1AB, 150Q, OH, OHV)
HARVESTERRESOURCES 15R403 (PR, 150Q, OH, OHV)	STATE-HOPE-16-2 (PR, 750Q, OH, OHV)	STATE-HOPE-16-3 (PR, 150Q, OH, OHV)
BURBACH-15-23 (SL, 150Q, OH, OHV)	HARVESTERSTATE 5N-16BM, OH, PLAN#1V0	MOGLOTHLN-17-11 (PR, 750Q, OH, OHV)
HARVESTERSTATE 13C-16-MOH, PLAN#1V0	FRITZLER-17 (PR, 150Q, OH, OHV)	HARVESTERSTATE 33N-16BM, OH, PLAN#1V0
LEFFLER-26C-23-L (SRCPLAN, 750Q, OH, BAKERPLANV0	HARVESTERSTATE 32C-16M2, OH, PLAN#1V0	RUIT-ADAMSHERS-22-22, OH, OHV)
LUCAS-SDOOL-1TA, 150Q, OH, OHV)	HOOD-220 (PR, 150Q, OH, OHV)	LOVELY-1AB, 150Q, OH, OHV)
HARVESTERSTATE 32N-16BM, OH, PLAN#1V0	LEFFLER-20N-23B-L (SRCPLAN, 750Q, OH, PLANV0	STATE-EBBATES-32-16 (PR, 750Q, OH, OHV)
HARVESTERSTATE 12N-16GM, OH, PLAN#1V0	FRITZLER-23-18 (PR, 150Q, OH, OHV)	HARVESTERSTATE 12N-16BM, OH, PLAN#1V0
LUCAS-SDOOL-34-9 (TA, 150Q, OH, OHV)	MOGLOTHLN-6-17 (PR, 150Q, OH, OHV)	HARVESTERSTATE 4N-16GM, OH, PLAN#1V0
FRITZLER-11-21 (PR, 150Q, OH, OHV)	DONN3ON20B-L (SRCPLAN, 750Q, OH, PLANV0	FALKEN3N-9C-L (SRCPLAN, 750Q, OH, Plan 1V0
HARVESTERSTATE 12N-16AM, OH, PLAN#1V0	FRITZLER-42-11 (PR, 150Q, OH, OHV)	BURMAN-1642 (PR, 750Q, OH, OHV)
BLACKGOLD/AB, 150Q, OH, OHV)	HARVESTERSTATE 34C-16M, OH, PLAN#1V0	HARVESTERSTATE 4C-16-MOH, PLAN#1V0
FRITZLER-1-21-4 (PR, 150Q, OH, OHV)	HARVESTERSTATE 13N-16BM, OH, PLAN#1V0	DONN3ON20A-L (SRCPLAN, 750Q, OH, SRCPLANV0
ULRICH-17-17 (PR, 750Q, OH, OHV)	STATE-HOPE-16-1 (SL, 750Q, OH, OHV)	FALKEN3C-9-L (SRCPLAN, 750Q, OH, Plan 1V0
HARVESTERRESOURCES 15M303 (PR, 150Q, OH, OHV)	GRIELEY-SW-100X, OH, OHV)	HOOD-1-2 (PR, 150Q, OH, OHV)
ULRICH-17-07 (PR, 750Q, OH, OHV)	HARVESTERSTATE 31N-16BM, OH, PLAN#1V0	FRITZLER-84-17 (PR, 150Q, OH, OHV)
MONTERA-10-34 (PR, 750Q, OH, OHV)	HARVESTERSTATE 31C-16M, OH, PLAN#1V0	HARVESTERSTATE 34N-16GM, OH, PLAN#1V0
BURMAN-1643 (PR, 750Q, OH, OHV)	HARVESTERRESOURCES 15R423 (PR, 150Q, OH, OHV)	BLACKGOLD/PETROLEUM 1 (PR, 150Q, OH, OHV)
BURBACH-15-22 (SL, 150Q, OH, OHV)	FRITZLER-6-17 (PR, 150Q, OH, OHV)	HARVESTERSTATE 32C-16M, OH, PLAN#1V0
HARVESTERSTATE 4N-16AM, OH, PLAN#1V0	LEFFLER-14M-1-2 (PR, 750Q, OH, OHV)	HARVESTERSTATE 33C-16M, OH, PLAN#1V0
HARVESTERRESOURCES 15M423 (PR, 150Q, OH, OHV)	HARVESTER-115 (SL, 150Q, OH, OHV)	HARVESTERSTATE 33N-16GM, OH, PLAN#1V0
SENA-1524 (PR, 750Q, OH, OHV)	ULRICH-17-08 (PR, 750Q, OH, OHV)	FRITZLER-3-17 (PR, 150Q, OH, OHV)
SENA-1525 (PR, 750Q, OH, OHV)	FRITZLER-8-17 (PR, 150Q, OH, OHV)	BERRY-23-2 (PR, 750Q, OH, OHV)