



SRC ENERGY

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

**OH
PLAN #1**

Anticollision Report

03 October, 2017





Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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	14,804.66	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	6,500.00	6,434.53	1,475.10	1,419.16	26.368	CC, ES
BERG 33-15 (AB_150CC) - OH - OH	6,800.00	6,780.39	1,507.07	1,448.34	25.660	SF
BERRY 22-2(PR_75CC) - OH - OH	6,586.85	6,544.03	4,164.72	4,107.96	73.374	CC
BERRY 22-2(PR_75CC) - OH - OH	6,600.00	6,556.96	4,164.75	4,107.87	73.230	ES
BERRY 22-2(PR_75CC) - OH - OH	9,900.00	7,000.01	5,538.17	5,436.89	54.679	SF
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	6,589.15	6,643.37	4,181.85	4,124.68	73.147	CC
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	6,600.00	6,653.64	4,181.87	4,124.60	73.031	ES
BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH	9,900.00	7,267.05	5,550.69	5,448.18	54.152	SF
BLACKGOLD 3(AB_150CC) - OH - OH	7,832.66	7,067.11	2,502.98	2,431.77	35.151	CC
BLACKGOLD 3(AB_150CC) - OH - OH	7,900.00	7,067.66	2,503.88	2,431.44	34.562	ES
BLACKGOLD 3(AB_150CC) - OH - OH	9,000.00	7,076.59	2,761.79	2,669.25	29.843	SF
BURBACH 15-22(SI_150CC) - OH - OH	8,803.99	7,034.04	1,165.58	859.02	3.802	CC, ES
BURBACH 15-22(SI_150CC) - OH - OH	8,900.00	7,033.63	1,169.53	860.84	3.789	SF
BURBACH 15-23(SI_150CC) - OH - OH	9,182.02	7,017.40	165.50	-150.06	0.524	Level 1, CC, ES, SF
BURMAN 16-42(PR_75CC) - OH - OH	11,450.53	7,003.44	1,321.02	944.46	3.508	CC
BURMAN 16-42(PR_75CC) - OH - OH	11,500.00	7,003.66	1,321.95	944.05	3.498	ES, SF
BURMAN 16-43(PR_75CC) - OH - OH	11,465.37	7,006.51	2,821.90	2,444.81	7.483	CC
BURMAN 16-43(PR_75CC) - OH - OH	11,500.00	7,006.66	2,822.11	2,444.05	7.465	ES
BURMAN 16-43(PR_75CC) - OH - OH	11,900.00	7,008.39	2,855.17	2,467.36	7.362	SF
DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN	9,752.60	7,264.55	3,342.29	3,220.09	27.351	CC
DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN	14,805.04	12,345.04	3,484.68	3,075.55	8.517	ES, SF
DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN	9,683.75	7,308.84	3,538.79	3,418.74	29.479	CC
DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN	14,805.04	12,368.54	3,626.98	3,220.10	8.914	ES, SF
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	7,328.56	16,509.17	2,344.25	2,043.17	7.786	CC
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	10,000.00	19,118.26	2,366.44	1,931.35	5.439	ES
FALKEN 34C-9-L(SRC PLAN_75CC) - OH - Plan 1	10,100.00	19,118.26	2,371.22	1,934.11	5.425	SF
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	9,937.07	19,018.34	2,158.94	1,725.23	4.978	CC
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	10,000.00	19,018.34	2,159.85	1,724.62	4.963	ES
FALKEN 34N-9C-L(SRC PLAN_75CC) - OH - Plan 1	10,100.00	19,018.34	2,165.08	1,728.15	4.955	SF
FRITZLER 11-21-4(PR_150CC) - OH - OH	13,731.97	7,088.59	3,310.86	3,079.69	14.322	CC
FRITZLER 11-21-4(PR_150CC) - OH - OH	13,800.00	7,091.26	3,311.56	3,078.39	14.202	ES
FRITZLER 11-21-4(PR_150CC) - OH - OH	14,500.00	7,119.56	3,398.68	3,150.07	13.671	SF
FRITZLER 11-21(PR_150CC) - OH - OH	14,331.51	6,963.05	3,977.10	3,520.98	8.719	CC
FRITZLER 11-21(PR_150CC) - OH - OH	14,400.00	6,962.76	3,977.69	3,519.65	8.684	ES
FRITZLER 11-21(PR_150CC) - OH - OH	14,805.04	6,961.00	4,005.19	3,537.18	8.558	SF
FRITZLER 1-17(PR_150CC) - OH - OH	14,805.04	6,976.00	2,775.48	2,315.73	6.037	CC, ES, SF
FRITZLER 17-23-18(PR_150CC) - OH - OH	14,805.04	7,286.61	3,510.17	3,326.02	19.061	CC, ES, SF

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

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
HARVESTERS STATE 7-15 PAD						
FRITZLER 17-32-12(PR_150CC) - OH - OH	14,805.04	7,396.63	1,631.49	1,478.29	10.650	CC, ES, SF
FRITZLER 17-42-11(PR_150CC) - OH - MWD	14,805.04	7,379.37	696.69	439.15	2.705	CC, ES, SF
FRITZLER 34-17(PR_150CC) - OH - OH	14,805.04	7,040.33	3,430.83	3,212.99	15.750	CC, ES, SF
FRITZLER 43-17(PR_150CC) - OH - OH	14,805.04	7,184.95	1,567.24	1,339.67	6.887	CC, ES, SF
FRITZLER 6-6-17 (PR_150CC) - OH - OH	14,805.04	7,037.91	2,518.28	2,299.60	11.516	CC, ES, SF
FRITZLER 6-8-17(PR_150CC) - OH - OH	14,805.04	7,120.26	3,579.08	3,339.21	14.921	CC, ES, SF
FRITZLER 8-8-17(PR_150CC) - OH - OH	14,805.04	7,011.58	3,310.24	3,049.75	12.708	CC, ES, SF
GREELEY SWD #1(XX) - OH - OH	10,034.06	6,984.70	3,038.37	2,701.37	9.016	CC
GREELEY SWD #1(XX) - OH - OH	10,100.00	6,984.42	3,039.08	2,700.31	8.971	ES
GREELEY SWD #1(XX) - OH - OH	10,600.00	6,982.25	3,090.62	2,739.82	8.810	SF
HARVESTER 31-15(SI_150CC) - OH - OH	0.00	0.00	1,093.65			
HARVESTER 31-15(SI_150CC) - OH - OH	400.00	382.84	1,094.25	1,087.07	152.418	ES
HARVESTER 31-15(SI_150CC) - OH - OH	6,700.00	6,697.33	1,353.32	1,295.52	23.411	SF
HARVESTER 32-15(SI_150CC) - OH - OH	409.33	389.23	524.33	517.12	72.697	CC, ES
HARVESTER 32-15(SI_150CC) - OH - OH	6,500.00	6,475.97	660.70	604.55	11.767	SF
HARVESTER STATE 30C-16-M - OH - PLAN #1	200.00	201.00	179.96	173.29	26.961	CC, ES
HARVESTER STATE 30C-16-M - OH - PLAN #1	14,805.04	15,216.01	1,889.85	1,435.83	4.162	SF
HARVESTER STATE 30N-16B-M - OH - PLAN #1	300.00	301.00	160.30	153.41	23.261	CC, ES
HARVESTER STATE 30N-16B-M - OH - PLAN #1	14,805.04	14,942.37	1,660.09	1,203.24	3.634	SF
HARVESTER STATE 31C-16-M - OH - PLAN #1	400.00	400.00	80.14	72.93	11.120	CC, ES
HARVESTER STATE 31C-16-M - OH - PLAN #1	14,805.04	14,999.45	803.57	359.76	1.811	SF
HARVESTER STATE 33C-16-M - OH - PLAN #1	200.00	199.00	219.70	213.02	32.922	CC, ES
HARVESTER STATE 33C-16-M - OH - PLAN #1	14,805.04	15,240.60	1,899.13	1,445.17	4.184	SF
HARVESTER STATE 34C-16-M - OH - PLAN #1	200.00	198.00	339.91	333.24	50.943	CC, ES
HARVESTER STATE 34C-16-M - OH - PLAN #1	14,805.04	15,759.51	3,158.39	2,703.01	6.936	SF
HARVESTER STATE 5C-16-M - OH - PLAN #1	400.00	400.00	40.07	32.86	5.560	CC
HARVESTER STATE 5C-16-M - OH - PLAN #1	14,805.04	14,988.98	390.57	-12.31	0.969	Level 1, ES, SF
HARVESTER STATE 12N-16B-M - OH - PLAN #1	200.00	199.00	179.99	173.31	26.971	CC, ES
HARVESTER STATE 12N-16B-M - OH - PLAN #1	14,805.04	14,966.45	1,472.06	1,016.09	3.228	SF
HARVESTER STATE 13C-16-M - OH - PLAN #1	200.00	198.00	279.81	273.14	41.935	CC, ES
HARVESTER STATE 13C-16-M - OH - PLAN #1	14,805.04	15,411.16	2,528.65	2,073.92	5.561	SF
HARVESTER STATE 33N-16C-M - OH - PLAN #1	200.00	198.00	259.77	253.10	38.932	CC, ES
HARVESTER STATE 33N-16C-M - OH - PLAN #1	14,805.04	15,250.74	2,312.08	1,856.30	5.073	SF
HARVESTER STATE 4C-16-M - OH - PLAN #1	400.00	401.00	140.26	135.16	27.504	CC, ES
HARVESTER STATE 4C-16-M - OH - PLAN #1	14,805.04	15,116.21	1,488.29	1,035.89	3.290	SF
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	7,011.28	8,803.03	352.70	297.29	6.365	CC, ES
HARVESTERS RESOURCES 15M-303 (PR_150CC) - O	7,100.00	8,803.86	369.60	302.49	5.507	SF
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	6,888.97	8,916.93	598.34	534.55	9.379	CC
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	6,900.00	8,918.34	598.54	533.86	9.254	ES
HARVESTERS RESOURCES 15M-423(PR_150CC) - O	7,000.00	8,928.24	617.83	546.20	8.625	SF
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	6,720.13	8,752.80	975.42	904.81	13.815	CC, ES
HARVESTERS RESOURCES 15R-243(PR_150CC) - OH	6,900.00	8,752.20	1,016.28	940.31	13.378	SF
HARVESTERS RESOURCES 15R-403(PR_150CC) - OH	6,708.89	8,892.33	1,295.85	1,221.43	17.414	CC, ES
HARVESTERS RESOURCES 15R-403(PR_150CC) - OH	6,800.00	8,893.39	1,305.52	1,229.11	17.087	SF
HARVESTERS STATE 12N-16A-M - OH - PLAN #1	200.00	199.00	200.02	193.35	29.973	CC, ES
HARVESTERS STATE 12N-16A-M - OH - PLAN #1	14,805.04	14,899.66	1,684.36	1,228.77	3.697	SF
HARVESTERS STATE 12N-16C-M - OH - PLAN #1	200.00	199.00	159.94	153.27	23.967	CC, ES
HARVESTERS STATE 12N-16C-M - OH - PLAN #1	14,805.04	14,977.93	1,264.73	809.97	2.781	SF
HARVESTERS STATE 13N-16B-M - OH - PLAN #1	200.00	198.00	299.84	293.17	44.937	CC, ES
HARVESTERS STATE 13N-16B-M - OH - PLAN #1	14,805.04	15,314.11	2,732.05	2,275.92	5.990	SF
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	400.00	400.00	60.11	52.91	8.341	CC, ES
HARVESTERS STATE 31N-16B-M - OH - PLAN #1	14,805.04	14,818.93	569.18	118.21	1.262	Level 3, SF
HARVESTERS STATE 32C-16-M - OH - PLAN #1	200.00	199.00	139.90	133.23	20.965	CC, ES

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Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
HARVESTERS STATE 7-15 PAD						
HARVESTERS STATE 32C-16-M - OH - PLAN #1	14,805.04	15,075.92	1,067.04	578.15	2.183	SF
HARVESTERS STATE 32C-16-M2 - OH - PLAN #1	600.00	599.38	17.41	9.35	2.160	CC
HARVESTERS STATE 32C-16-M2 - OH - PLAN #1	14,805.04	15,001.51	371.56	-30.68	0.924	Level 1, ES, SF
HARVESTERS STATE 32N-16B-M - OH - PLAN #1	300.00	299.00	119.87	112.98	17.401	CC, ES
HARVESTERS STATE 32N-16B-M - OH - PLAN #1	14,805.04	14,865.68	852.67	396.67	1.870	SF
HARVESTERS STATE 32N-16C-M - OH - PLAN #1	666.80	665.69	34.68	26.28	4.129	CC, ES
HARVESTERS STATE 34N-16C-M - OH - PLAN #1	14,805.04	14,907.42	544.60	92.06	1.203	Level 2, SF
HARVESTERS STATE 33N-16B-M - OH - PLAN #1	200.00	199.00	239.72	233.05	35.923	CC, ES
HARVESTERS STATE 33N-16B-M - OH - PLAN #1	14,805.04	15,122.53	2,104.06	1,648.09	4.614	SF
HARVESTERS STATE 34N-16C-M - OH - PLAN #1	200.00	198.00	319.88	313.20	47.940	CC, ES
HARVESTERS STATE 34N-16C-M - OH - PLAN #1	14,805.04	15,459.94	2,943.18	2,487.21	6.455	SF
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	400.00	400.00	100.18	92.97	13.901	CC, ES
HARVESTERS STATE 4N-16A-M - OH - PLAN #1	14,803.49	14,734.23	1,005.91	551.09	2.212	SF
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	400.00	400.00	120.22	113.02	16.682	CC, ES
HARVESTERS STATE 4N-16C-M - OH - PLAN #1	14,805.04	14,969.16	1,123.80	669.00	2.471	SF
HARVESTERS STATE 5N-16C-M - OH - PLAN #1	400.00	400.00	20.03	12.83	2.780	CC
HARVESTERS STATE 5N-16C-M - OH - PLAN #1	14,805.04	14,874.93	141.52	-253.31	0.358	Level 1, ES, SF
HOOD 41-20(PR_150CC) - OH - OH	14,805.04	6,968.00	4,085.41	3,620.91	8.795	CC, ES, SF
HOOD 6-2-20(PR_150CC) - OH - OH	14,805.04	7,353.33	4,840.82	4,588.94	19.219	CC, ES, SF
LEFFLER 1 21-2(SI_75CC) - OH - OH	11,675.40	6,954.88	3,948.80	3,779.03	23.260	CC
LEFFLER 1 21-2(SI_75CC) - OH - OH	11,800.00	6,960.01	3,950.76	3,777.53	22.806	ES
LEFFLER 1 21-2(SI_75CC) - OH - OH	13,000.00	7,015.13	4,164.53	3,965.86	20.963	SF
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	7,300.00	10,036.77	3,628.86	3,497.37	27.597	ES
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	9,617.22	7,729.18	3,622.13	3,500.70	29.829	CC
LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER P	11,600.00	7,100.00	3,959.08	3,796.89	24.411	SF
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	9,628.27	7,584.22	3,336.62	3,215.19	27.478	CC
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	9,800.00	7,511.96	3,339.17	3,214.00	26.676	ES
LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN	11,400.00	7,044.17	3,640.60	3,482.77	23.066	SF
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,014.60	6,970.77	4,164.96	3,745.74	9.935	CC
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,100.00	6,970.40	4,165.83	3,744.24	9.881	ES
LEFFLER FARM 1-21(PA_75CC) - OH - OH	13,800.00	6,967.36	4,238.36	3,800.28	9.675	SF
LOVELY 1(AB_150CC) - OH - OH	12,986.32	7,017.89	2,634.02	2,213.95	6.270	CC
LOVELY 1(AB_150CC) - OH - OH	13,100.00	7,017.40	2,636.48	2,213.43	6.232	ES
LOVELY 1(AB_150CC) - OH - OH	13,300.00	7,016.53	2,652.64	2,225.16	6.205	SF
LOVELY 14-9(AB_150CC) - OH - OH	14,482.96	7,014.40	2,577.84	2,115.64	5.577	CC
LOVELY 14-9(AB_150CC) - OH - OH	14,500.00	7,014.32	2,577.90	2,115.23	5.572	ES
LOVELY 14-9(AB_150CC) - OH - OH	14,800.00	7,013.02	2,597.26	2,127.93	5.534	SF
LUCAS SCHOOL 1(TA_150CC) - OH - OH	10,257.77	7,049.73	2,668.14	2,322.81	7.726	CC
LUCAS SCHOOL 1(TA_150CC) - OH - OH	10,300.00	7,049.55	2,668.47	2,322.03	7.702	ES
LUCAS SCHOOL 1(TA_150CC) - OH - OH	10,700.00	7,047.81	2,704.54	2,348.75	7.602	SF
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	11,473.28	7,004.46	2,646.48	2,269.24	7.015	CC
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	11,500.00	7,004.34	2,646.61	2,268.66	7.002	ES
LUCAS SCHOOL 34-9(TA_150CC) - OH - OH	11,800.00	7,003.04	2,666.57	2,281.44	6.924	SF
MAURICE LEFFLER 1(AB_150CC) - OH - OH	13,030.96	4,452.00	4,698.21	4,414.70	16.571	CC
MAURICE LEFFLER 1(AB_150CC) - OH - OH	13,100.00	4,452.00	4,698.72	4,413.53	16.476	ES
MAURICE LEFFLER 1(AB_150CC) - OH - OH	14,300.00	4,452.00	4,866.58	4,556.48	15.694	SF
MCGLOTHLIN 8-6-17 (PR_150CC) - OH - OH	14,805.04	7,282.73	1,964.49	1,705.25	7.578	CC, ES, SF
MCGLOTHLIN 17-11(PR_75CC) - OH - OH	14,805.04	7,001.00	1,756.18	1,322.24	4.047	CC, ES, SF
MONTERA 10-34 (PR_75CC) - OH - OH	411.04	431.12	2,245.07	2,237.78	308.077	CC, ES
MONTERA 10-34 (PR_75CC) - OH - OH	8,100.00	7,093.57	2,924.10	2,851.54	40.297	SF
RUTT-ADAMS HEIRS 2-22 - OH - OH	7,714.61	7,000.23	3,965.78	3,684.25	14.086	CC
RUTT-ADAMS HEIRS 2-22 - OH - OH	7,800.00	7,000.60	3,966.70	3,683.64	14.013	ES
RUTT-ADAMS HEIRS 2-22 - OH - OH	8,900.00	7,005.37	4,139.15	3,833.00	13.520	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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
HARVESTERS STATE 7-15 PAD						
SENA 15-21(PR_75CC) - OH - OH	7,798.36	7,054.41	1,425.44	1,140.54	5.003	CC
SENA 15-21(PR_75CC) - OH - OH	7,800.00	7,054.40	1,425.44	1,140.51	5.003	ES
SENA 15-21(PR_75CC) - OH - OH	7,900.00	7,053.97	1,429.06	1,142.38	4.985	SF
SENA 15-24(PR_75CC) - OH - OH	7,747.82	7,040.63	120.90	-162.63	0.426	Level 1, CC, ES, SF
SENA 15-25(PR_75CC) - OH - OH	8,121.96	7,046.00	804.42	513.37	2.764	CC, ES
SENA 15-25(PR_75CC) - OH - OH	8,200.00	7,045.66	808.20	515.70	2.763	SF
STATE 1(AB_150CC) - OH - OH	11,626.86	7,006.21	1,333.35	951.78	3.494	CC, ES
STATE 1(AB_150CC) - OH - OH	11,700.00	7,006.53	1,335.36	951.99	3.483	SF
STATE BEATRICE 16-1(AB_150CC) - OH - OH	11,756.62	7,004.77	1,354.92	969.78	3.518	CC
STATE BEATRICE 16-1(AB_150CC) - OH - OH	11,800.00	7,004.96	1,355.61	969.36	3.510	ES
STATE BEATRICE 16-1(AB_150CC) - OH - OH	11,900.00	7,005.39	1,362.48	974.20	3.509	SF
STATE BEATRICE 32-16(PR_75CC) - OH - OH	11,562.69	6,989.07	118.10	-261.09	0.311	Level 1, CC, ES, SF
STATE-HOPPE 16-1(SI_75CC) - OH - OH	14,316.64	6,974.12	2,809.20	2,353.12	6.159	CC
STATE-HOPPE 16-1(SI_75CC) - OH - OH	14,400.00	6,973.76	2,810.44	2,352.07	6.131	ES
STATE-HOPPE 16-1(SI_75CC) - OH - OH	14,600.00	6,972.89	2,823.46	2,360.39	6.097	SF
STATE-HOPPE 16-2(PR_75CC) - OH - OH	13,172.10	7,007.91	1,324.16	899.21	3.116	CC
STATE-HOPPE 16-2(PR_75CC) - OH - OH	13,200.00	7,008.04	1,324.46	898.73	3.111	ES
STATE-HOPPE 16-2(PR_75CC) - OH - OH	13,300.00	7,008.47	1,330.33	902.48	3.109	SF
STATE-HOPPE 16-3(PR_150CC) - OH - OH	14,373.75	6,991.56	160.60	-85.20	0.653	Level 1, CC, ES, SF
STOCKOVER 16-1(PR_75CC) - OH - OH	10,220.33	6,986.90	1,296.17	954.06	3.789	CC, ES
STOCKOVER 16-1(PR_75CC) - OH - OH	10,300.00	6,986.55	1,298.62	954.46	3.773	SF
ULRICH PC I 17-07D(PR_75CC) - OH - OH	14,805.04	7,113.05	2,151.27	2,084.23	32.088	CC, ES, SF
ULRICH PC I 17-08(PR_75CC) - OH - OH	14,805.04	6,990.00	987.55	710.82	3.569	CC, ES, SF
ULRICH PC I17-17D(PR_75CC) - OH - OH	14,805.04	7,219.42	1,886.60	1,750.49	13.861	CC, ES, SF

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH														
Reference Measured Depth (ft)	Vertical Depth (ft)	Offset Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Toolface (°)	Highside	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	38.00	3.28	3.28	167.51		-1,580.00	349.92	1,618.73				
100.00	100.00	58.76	96.76	3.28	3.28	167.51		-1,580.06	349.93	1,618.35	1,611.78	6.57	246.431	
200.00	200.00	156.94	194.94	3.34	3.31	167.52		-1,580.37	349.90	1,618.65	1,612.00	6.65	243.442	
300.00	300.00	259.48	297.47	3.44	3.40	167.53		-1,580.68	349.70	1,618.91	1,612.06	6.85	236.489	
400.00	400.00	360.45	398.45	3.60	3.54	167.53		-1,580.80	349.62	1,619.00	1,611.86	7.14	226.661	
500.00	499.98	460.11	498.11	3.80	3.72	-50.73		-1,580.91	349.64	1,618.01	1,610.49	7.52	215.210	
600.00	599.90	556.10	594.10	4.02	3.93	-50.85		-1,581.06	349.78	1,615.68	1,607.73	7.95	203.127	
700.00	699.82	652.67	690.67	4.28	4.18	-50.95		-1,581.54	349.88	1,613.66	1,605.20	8.45	190.858	
800.00	799.74	754.89	792.89	4.57	4.46	-51.06		-1,582.14	349.72	1,611.67	1,602.64	9.03	178.572	
900.00	899.66	858.15	896.15	4.88	4.77	-51.15		-1,582.59	349.17	1,609.45	1,599.80	9.65	166.868	
1,000.00	999.58	960.01	998.00	5.21	5.10	-51.24		-1,582.87	348.64	1,607.09	1,596.79	10.30	156.055	
1,100.00	1,099.50	1,057.90	1,095.89	5.55	5.42	-51.33		-1,583.14	347.96	1,604.69	1,593.72	10.97	146.292	
1,200.00	1,199.42	1,156.17	1,194.15	5.91	5.76	-51.41		-1,583.60	347.39	1,602.50	1,590.84	11.67	137.360	
1,300.00	1,299.34	1,256.18	1,294.16	6.28	6.12	-51.50		-1,584.08	346.71	1,600.32	1,587.93	12.39	129.154	
1,400.00	1,399.26	1,357.93	1,395.91	6.66	6.49	-51.58		-1,584.59	345.89	1,598.12	1,584.98	13.14	121.632	
1,500.00	1,499.18	1,461.79	1,499.76	7.04	6.88	-51.67		-1,584.88	345.08	1,595.72	1,581.81	13.91	114.722	
1,600.00	1,599.10	1,564.25	1,602.22	7.43	7.27	-51.75		-1,584.92	344.30	1,593.09	1,578.41	14.69	108.469	
1,700.00	1,699.01	1,662.52	1,700.49	7.83	7.65	-51.83		-1,585.00	343.23	1,590.43	1,574.97	15.46	102.875	
1,800.00	1,798.93	1,759.60	1,797.56	8.23	8.03	-51.90		-1,585.22	342.32	1,587.95	1,571.72	16.24	97.797	
1,900.00	1,898.85	1,859.08	1,897.03	8.64	8.42	-51.98		-1,585.59	341.37	1,585.60	1,568.57	17.03	93.098	

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
2,000.00	1,998.77	1,957.53	1,995.48	9.05	8.81	-52.06	-1,585.96	340.36	1,583.26	1,565.44	17.83	88.803		
2,100.00	2,098.69	2,056.47	2,094.41	9.46	9.20	-52.12	-1,586.53	339.18	1,581.07	1,562.43	18.63	84.848		
2,200.00	2,198.61	2,155.78	2,193.71	9.88	9.60	-52.20	-1,587.06	338.19	1,578.88	1,559.43	19.45	81.194		
2,300.00	2,298.53	2,254.15	2,292.08	10.30	10.00	-52.28	-1,587.59	337.53	1,576.78	1,556.52	20.26	77.834		
2,400.00	2,398.45	2,357.43	2,395.36	10.72	10.42	-52.37	-1,588.20	336.64	1,574.70	1,553.60	21.09	74.651		
2,500.00	2,498.37	2,461.01	2,498.93	11.14	10.84	-52.45	-1,588.49	335.64	1,572.28	1,550.35	21.93	71.682		
2,600.00	2,598.29	2,562.34	2,600.25	11.56	11.26	-52.54	-1,588.59	334.96	1,569.76	1,546.99	22.77	68.945		
2,700.00	2,698.21	2,660.10	2,698.02	11.98	11.66	-52.64	-1,588.62	334.45	1,567.22	1,543.63	23.59	66.432		
2,800.00	2,798.13	2,757.94	2,795.85	12.41	12.06	-52.73	-1,588.86	333.94	1,564.89	1,540.48	24.42	64.090		
2,900.00	2,898.05	2,858.67	2,896.58	12.84	12.48	-52.83	-1,589.14	333.41	1,562.60	1,537.34	25.26	61.868		
3,000.00	2,997.97	2,957.47	2,995.38	13.27	12.89	-52.93	-1,589.34	332.99	1,560.27	1,534.18	26.09	59.800		
3,100.00	3,097.89	3,054.57	3,092.48	13.69	13.29	-53.02	-1,589.73	332.52	1,558.11	1,531.19	26.92	57.877		
3,200.00	3,197.81	3,155.42	3,193.32	14.12	13.71	-53.12	-1,590.23	332.06	1,556.07	1,528.30	27.77	56.039		
3,300.00	3,297.73	3,261.86	3,299.77	14.56	14.15	-53.23	-1,590.42	331.84	1,553.78	1,525.14	28.64	54.257		
3,400.00	3,397.65	3,369.07	3,406.97	14.99	14.60	-53.34	-1,590.17	331.19	1,551.00	1,521.49	29.51	52.558		
3,500.00	3,497.56	3,467.42	3,505.32	15.42	15.01	-53.44	-1,589.71	330.54	1,547.97	1,517.62	30.35	51.004		
3,600.00	3,597.48	3,562.52	3,600.42	15.85	15.41	-53.53	-1,589.57	329.79	1,545.24	1,514.06	31.18	49.561		
3,700.00	3,697.40	3,654.68	3,692.58	16.28	15.79	-53.61	-1,589.77	329.11	1,542.88	1,510.88	32.00	48.220		
3,800.00	3,797.32	3,749.15	3,787.04	16.72	16.19	-53.69	-1,590.54	328.33	1,541.06	1,508.23	32.82	46.948		
3,900.00	3,897.24	3,851.38	3,889.26	17.15	16.62	-53.77	-1,591.45	327.53	1,539.34	1,505.65	33.69	45.697		
4,000.00	3,997.16	3,954.53	3,992.41	17.59	17.06	-53.87	-1,592.05	326.83	1,537.34	1,502.79	34.55	44.495		
4,100.00	4,097.08	4,054.94	4,092.82	18.02	17.48	-53.96	-1,592.57	326.06	1,535.26	1,499.85	35.41	43.362		
4,200.00	4,197.00	4,156.63	4,194.49	18.46	17.91	-54.05	-1,593.05	325.25	1,533.14	1,496.88	36.27	42.274		
4,300.00	4,296.92	4,269.60	4,307.47	18.89	18.38	-54.16	-1,593.10	324.51	1,530.66	1,493.49	37.17	41.179		
4,400.00	4,396.84	4,371.34	4,409.20	19.33	18.81	-54.25	-1,592.40	323.61	1,527.41	1,489.38	38.03	40.162		
4,500.00	4,496.76	4,471.34	4,509.19	19.77	19.23	-54.35	-1,591.85	322.77	1,524.30	1,485.42	38.89	39.199		
4,600.00	4,596.68	4,583.59	4,621.44	20.20	19.71	-54.46	-1,590.87	321.55	1,520.84	1,481.05	39.79	38.225		
4,700.00	4,696.60	4,677.66	4,715.50	20.64	20.10	-54.56	-1,589.53	320.93	1,516.97	1,476.35	40.62	37.344		
4,800.00	4,796.52	4,779.47	4,817.29	21.08	20.53	-54.70	-1,588.26	320.86	1,513.43	1,471.94	41.48	36.482		
4,900.00	4,896.44	4,885.36	4,903.17	21.51	20.89	-54.78	-1,587.63	319.81	1,510.07	1,467.78	42.29	35.708		
5,000.00	4,996.36	4,953.03	4,990.84	21.95	21.26	-54.85	-1,587.98	318.83	1,507.81	1,464.71	43.10	34.984		
5,100.00	5,096.28	5,062.33	5,100.13	22.39	21.72	-54.98	-1,588.31	318.93	1,505.84	1,461.85	44.00	34.227		
5,200.00	5,196.19	5,175.61	5,213.41	22.83	22.20	-55.15	-1,587.22	319.32	1,502.71	1,457.80	44.90	33.465		
5,300.00	5,296.11	5,276.35	5,314.13	23.27	22.62	-55.32	-1,585.69	320.11	1,499.19	1,453.43	45.77	32.758		
5,400.00	5,396.03	5,366.05	5,403.82	23.71	23.00	-55.49	-1,584.50	321.12	1,495.98	1,449.39	46.59	32.111		
5,500.00	5,495.95	5,455.33	5,493.09	24.14	23.37	-55.65	-1,583.99	322.35	1,493.58	1,446.17	47.41	31.505		
5,600.00	5,595.87	5,557.47	5,595.23	24.58	23.80	-55.81	-1,584.06	323.13	1,491.62	1,443.34	48.28	30.897		
5,700.00	5,695.79	5,659.89	5,697.64	25.02	24.23	-55.98	-1,583.57	324.11	1,489.19	1,440.05	49.15	30.301		
5,800.00	5,795.71	5,762.13	5,799.87	25.46	24.66	-56.16	-1,583.06	325.30	1,486.84	1,436.82	50.02	29.727		
5,900.00	5,895.63	5,861.20	5,898.94	25.90	25.08	-56.30	-1,582.67	325.40	1,484.26	1,433.39	50.87	29.175		
6,000.00	5,995.55	5,955.24	5,992.97	26.34	25.47	-56.45	-1,582.39	326.15	1,482.00	1,430.29	51.71	28.658		
6,100.00	6,095.47	6,046.53	6,084.25	26.78	25.86	-56.64	-1,582.21	327.93	1,480.22	1,427.68	52.54	28.173		
6,200.00	6,195.39	6,146.11	6,183.81	27.22	26.28	-56.83	-1,582.58	329.88	1,479.00	1,425.60	53.40	27.696		
6,300.00	6,295.31	6,252.60	6,290.29	27.66	26.73	-57.03	-1,582.58	331.34	1,477.24	1,422.94	54.29	27.209		
6,400.00	6,395.23	6,347.74	6,385.40	28.10	27.13	-57.22	-1,582.37	333.23	1,475.50	1,420.36	55.13	26.762		
6,467.09	6,462.18	6,408.00	6,445.66	28.39	27.38	-88.03	-1,582.54	334.33	1,475.24	1,419.56	55.69	26.492		
6,500.00	6,495.02	6,434.53	6,472.18	28.54	27.50	-93.05	-1,582.75	334.81	1,475.10	1,419.16	55.94	26.368 CC, ES		
6,600.00	6,593.09	6,519.55	6,557.17	28.98	27.86	-102.36	-1,584.12	336.49	1,480.53	1,423.79	56.74	26.094		
6,700.00	6,687.01	6,632.44	6,670.04	29.41	28.34	-105.31	-1,585.95	337.55	1,491.30	1,433.64	57.66	25.863		
6,800.00	6,774.46	6,780.39	6,757.21	29.83	28.97	-106.54	-1,586.46	337.28	1,507.07	1,448.34	58.73	25.660 SF		
6,900.00	6,853.31	6,798.28	6,835.88	30.26	29.04	-106.89	-1,587.33	337.54	1,530.43	1,471.16	59.27	25.821		
7,000.00	6,921.60	6,866.37	6,903.96	30.76	29.33	-106.34	-1,588.09	337.76	1,561.34	1,501.27	60.07	25.994		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
7,100.00	6,977.66	6,922.18	6,959.76	31.38	29.57	-104.71	-1,588.70	337.94	1,600.07	1,539.20	60.87	26.288		
7,200.00	7,020.10	6,964.34	7,001.93	32.17	29.75	-101.78	-1,589.17	338.08	1,646.45	1,584.78	61.67	26.697		
7,300.00	7,047.88	6,991.83	7,029.41	33.13	29.87	-97.34	-1,589.48	338.17	1,699.83	1,637.36	62.46	27.214		
7,400.00	7,060.32	7,003.95	7,041.53	34.27	29.92	-91.30	-1,589.61	338.20	1,759.00	1,695.80	63.20	27.831		
7,500.00	7,060.70	7,004.02	7,041.60	35.56	29.92	-89.00	-1,589.61	338.21	1,822.38	1,758.49	63.89	28.525		
7,600.00	7,060.27	7,003.27	7,040.85	37.02	29.91	-88.97	-1,589.60	338.20	1,888.95	1,824.36	64.58	29.248		
7,700.00	7,059.83	7,002.51	7,040.10	38.64	29.91	-88.93	-1,589.59	338.20	1,958.36	1,893.08	65.28	29.999		
7,800.00	7,059.40	7,001.76	7,039.35	40.40	29.91	-88.90	-1,589.59	338.20	2,030.32	1,964.36	65.96	30.780		
7,900.00	7,058.97	7,001.01	7,038.60	42.28	29.90	-88.87	-1,589.58	338.20	2,104.58	2,037.96	66.63	31.588		
8,000.00	7,058.53	7,000.26	7,037.84	44.27	29.90	-88.84	-1,589.57	338.19	2,180.89	2,113.63	67.26	32.424		
8,100.00	7,058.10	6,999.51	7,037.09	46.35	29.90	-88.81	-1,589.56	338.19	2,259.06	2,191.19	67.87	33.286		
8,200.00	7,057.66	6,998.76	7,036.34	48.50	29.90	-88.78	-1,589.55	338.19	2,338.89	2,270.44	68.44	34.172		
8,300.00	7,057.23	6,998.01	7,035.59	50.73	29.89	-88.75	-1,589.54	338.19	2,420.21	2,351.22	68.99	35.080		
8,400.00	7,056.80	6,997.26	7,034.84	53.02	29.89	-88.72	-1,589.54	338.18	2,502.89	2,433.39	69.51	36.010		
8,500.00	7,056.36	6,996.50	7,034.09	55.36	29.89	-88.69	-1,589.53	338.18	2,586.79	2,516.80	69.99	36.958		
8,600.00	7,055.93	6,995.75	7,033.34	57.74	29.88	-88.65	-1,589.52	338.18	2,671.80	2,601.35	70.45	37.925		
8,700.00	7,055.49	6,995.00	7,032.59	60.17	29.88	-88.62	-1,589.51	338.18	2,757.82	2,686.94	70.88	38.907		
8,800.00	7,055.06	6,994.25	7,031.83	62.63	29.88	-88.59	-1,589.50	338.17	2,844.75	2,773.46	71.29	39.905		
8,900.00	7,054.63	6,993.50	7,031.08	65.13	29.87	-88.56	-1,589.49	338.17	2,932.52	2,860.84	71.67	40.916		
9,000.00	7,054.19	6,992.75	7,030.33	67.66	29.87	-88.53	-1,589.49	338.17	3,021.04	2,949.01	72.03	41.939		
9,100.00	7,053.76	6,992.00	7,029.58	70.21	29.87	-88.50	-1,589.48	338.17	3,110.26	3,037.88	72.38	42.974		
9,200.00	7,053.32	6,991.25	7,028.83	72.78	29.86	-88.47	-1,589.47	338.16	3,200.12	3,127.42	72.70	44.019		
9,300.00	7,052.89	6,990.49	7,028.08	75.38	29.86	-88.44	-1,589.46	338.16	3,290.56	3,217.55	73.00	45.074		
9,400.00	7,052.46	6,989.74	7,027.33	77.99	29.86	-88.41	-1,589.45	338.16	3,381.54	3,308.24	73.29	46.137		
9,500.00	7,052.02	6,988.99	7,026.58	80.62	29.85	-88.37	-1,589.44	338.16	3,473.01	3,399.45	73.57	47.209		
9,600.00	7,051.59	6,988.24	7,025.83	83.26	29.85	-88.34	-1,589.44	338.15	3,564.95	3,491.12	73.83	48.287		
9,700.00	7,051.15	6,987.49	7,025.07	85.92	29.85	-88.31	-1,589.43	338.15	3,657.30	3,583.23	74.08	49.372		
9,800.00	7,050.72	6,986.74	7,024.32	88.59	29.84	-88.28	-1,589.42	338.15	3,750.05	3,675.74	74.31	50.464		
9,900.00	7,050.29	6,985.99	7,023.57	91.28	29.84	-88.25	-1,589.41	338.15	3,843.17	3,768.63	74.54	51.560		
10,000.00	7,049.85	6,985.24	7,022.82	93.97	29.84	-88.22	-1,589.40	338.14	3,936.62	3,861.86	74.75	52.662		
10,100.00	7,049.42	6,984.48	7,022.07	96.67	29.83	-88.19	-1,589.39	338.14	4,030.38	3,955.42	74.96	53.768		
10,200.00	7,048.98	6,983.73	7,021.32	99.38	29.83	-88.16	-1,589.39	338.14	4,124.44	4,049.28	75.16	54.879		
10,300.00	7,048.55	6,982.98	7,020.57	102.10	29.83	-88.13	-1,589.38	338.14	4,218.77	4,143.42	75.34	55.993		
10,400.00	7,048.12	6,982.23	7,019.82	104.83	29.82	-88.09	-1,589.37	338.13	4,313.35	4,237.83	75.53	57.111		
10,500.00	7,047.68	6,981.48	7,019.06	107.56	29.82	-88.06	-1,589.36	338.13	4,408.18	4,332.48	75.70	58.232		
10,600.00	7,047.25	6,980.73	7,018.31	110.30	29.82	-88.03	-1,589.35	338.13	4,503.23	4,427.36	75.87	59.356		
10,700.00	7,046.81	6,979.98	7,017.56	113.05	29.82	-88.00	-1,589.34	338.13	4,598.48	4,522.45	76.03	60.482		
10,800.00	7,046.38	6,979.23	7,016.81	115.80	29.81	-87.97	-1,589.34	338.12	4,693.94	4,617.75	76.19	61.611		
10,900.00	7,045.95	6,978.47	7,016.06	118.55	29.81	-87.94	-1,589.33	338.12	4,789.58	4,713.24	76.34	62.742		
11,000.00	7,045.51	6,977.72	7,015.31	121.31	29.81	-87.91	-1,589.32	338.12	4,885.40	4,808.91	76.48	63.874		
11,100.00	7,045.08	6,976.97	7,014.56	124.08	29.80	-87.88	-1,589.31	338.12	4,981.38	4,904.75	76.63	65.009		
11,200.00	7,044.64	6,976.22	7,013.81	126.85	29.80	-87.85	-1,589.30	338.12	5,077.51	5,000.75	76.76	66.144		
11,300.00	7,044.21	6,975.47	7,013.05	129.62	29.80	-87.82	-1,589.29	338.11	5,173.79	5,096.89	76.90	67.281		
11,400.00	7,043.78	6,974.72	7,012.30	132.40	29.79	-87.78	-1,589.29	338.11	5,270.21	5,193.18	77.03	68.419		
11,500.00	7,043.34	6,973.97	7,011.55	135.18	29.79	-87.75	-1,589.28	338.11	5,366.76	5,289.61	77.16	69.558		
11,600.00	7,042.91	6,973.22	7,010.80	137.96	29.79	-87.72	-1,589.27	338.11	5,463.44	5,386.16	77.28	70.698		
11,700.00	7,042.47	6,972.46	7,010.05	140.75	29.78	-87.69	-1,589.26	338.10	5,560.23	5,482.83	77.40	71.838		
11,800.00	7,042.04	6,971.71	7,009.30	143.54	29.78	-87.66	-1,589.25	338.10	5,657.13	5,579.61	77.52	72.979		
11,900.00	7,041.61	6,970.96	7,008.55	146.33	29.78	-87.63	-1,589.24	338.10	5,754.14	5,676.51	77.63	74.120		
12,000.00	7,041.17	6,970.21	7,007.80	149.13	29.77	-87.60	-1,589.24	338.10	5,851.25	5,773.50	77.75	75.261		
12,100.00	7,040.74	6,969.46	7,007.04	151.92	29.77	-87.57	-1,589.23	338.09	5,948.46	5,870.60	77.86	76.403		
12,200.00	7,040.30	6,968.71	7,006.29	154.72	29.77	-87.54	-1,589.22	338.09	6,045.75	5,967.79	77.97	77.544		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERG 33-15 (AB_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
12,300.00	7,039.87	6,967.96	7,005.54	157.52	29.76	-87.50	-1,589.21	338.09	6,143.14	6,065.06	78.07	78.686		
12,400.00	7,039.44	6,967.21	7,004.79	160.33	29.76	-87.47	-1,589.20	338.09	6,240.60	6,162.43	78.18	79.827		
12,500.00	7,039.00	6,966.45	7,004.04	163.13	29.76	-87.44	-1,589.19	338.08	6,338.15	6,259.87	78.28	80.968		
12,600.00	7,038.57	6,965.70	7,003.29	165.94	29.75	-87.41	-1,589.19	338.08	6,435.77	6,357.39	78.38	82.108		
12,700.00	7,038.13	6,964.95	7,002.54	168.75	29.75	-87.38	-1,589.18	338.08	6,533.46	6,454.98	78.48	83.248		
12,800.00	7,037.70	6,964.20	7,001.79	171.56	29.75	-87.35	-1,589.17	338.08	6,631.22	6,552.64	78.58	84.388		
12,900.00	7,037.27	6,963.45	7,001.03	174.37	29.74	-87.32	-1,589.16	338.07	6,729.05	6,650.37	78.68	85.527		
13,000.00	7,036.83	6,962.70	7,000.28	177.19	29.74	-87.29	-1,589.15	338.07	6,826.94	6,748.16	78.77	86.665		
13,100.00	7,036.40	6,961.95	6,999.53	180.00	29.74	-87.26	-1,589.14	338.07	6,924.89	6,846.02	78.87	87.803		
13,200.00	7,035.96	6,961.20	6,998.78	182.82	29.74	-87.23	-1,589.14	338.07	7,022.89	6,943.93	78.96	88.939		
13,300.00	7,035.53	6,960.44	6,998.03	185.64	29.73	-87.19	-1,589.13	338.06	7,120.96	7,041.90	79.06	90.075		
13,400.00	7,035.10	6,959.69	6,997.28	188.46	29.73	-87.16	-1,589.12	338.06	7,219.07	7,139.92	79.15	91.210		
13,500.00	7,034.66	6,958.94	6,996.53	191.28	29.73	-87.13	-1,589.11	338.06	7,317.24	7,238.00	79.24	92.344		
13,600.00	7,034.23	6,958.19	6,995.78	194.10	29.72	-87.10	-1,589.10	338.06	7,415.45	7,336.12	79.33	93.477		
13,700.00	7,033.79	6,957.44	6,995.03	196.92	29.72	-87.07	-1,589.09	338.05	7,513.72	7,434.30	79.42	94.608		
13,800.00	7,033.36	6,956.69	6,994.27	199.74	29.72	-87.04	-1,589.09	338.05	7,612.02	7,532.52	79.51	95.739		
13,900.00	7,032.93	6,955.94	6,993.52	202.57	29.71	-87.01	-1,589.08	338.05	7,710.38	7,630.78	79.60	96.868		
14,000.00	7,032.49	6,955.19	6,992.77	205.39	29.71	-86.98	-1,589.07	338.05	7,808.77	7,729.08	79.68	97.996		
14,100.00	7,032.06	6,954.43	6,992.02	208.22	29.71	-86.95	-1,589.06	338.04	7,907.20	7,827.43	79.77	99.122		
14,200.00	7,031.62	6,953.68	6,991.27	211.05	29.70	-86.91	-1,589.05	338.04	8,005.67	7,925.82	79.86	100.247		
14,300.00	7,031.19	6,952.93	6,990.52	213.87	29.70	-86.88	-1,589.05	338.04	8,104.18	8,024.24	79.95	101.371		
14,400.00	7,030.76	6,952.18	6,989.77	216.70	29.70	-86.85	-1,589.04	338.04	8,202.73	8,122.70	80.03	102.493		
14,500.00	7,030.32	6,951.43	6,989.02	219.53	29.69	-86.82	-1,589.03	338.03	8,301.31	8,221.19	80.12	103.614		
14,600.00	7,029.89	6,950.68	6,988.26	222.36	29.69	-86.79	-1,589.02	338.03	8,399.92	8,319.72	80.20	104.733		
14,700.00	7,029.45	6,949.93	6,987.51	225.19	29.69	-86.76	-1,589.01	338.03	8,498.57	8,418.28	80.29	105.851		
14,800.00	7,029.02	6,949.18	6,986.76	228.03	29.68	-86.73	-1,589.00	338.03	8,597.25	8,516.87	80.37	106.967		
14,805.04	7,029.00	6,949.14	6,986.72	228.17	29.68	-86.73	-1,589.00	338.03	8,602.22	8,521.84	80.38	107.023		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	172.80	-4,319.20	545.52	4,354.08					
100.00	100.00	29.33	99.33	3.28	3.28	172.80	-4,319.21	545.51	4,353.52	4,346.95	6.57	663.111		
200.00	200.00	124.82	194.82	3.34	3.30	172.80	-4,319.28	545.30	4,353.57	4,346.94	6.63	656.385		
300.00	300.00	215.01	285.01	3.44	3.36	172.81	-4,319.53	545.03	4,353.81	4,347.01	6.80	640.248		
400.00	400.00	309.77	379.77	3.60	3.46	172.81	-4,319.94	544.94	4,354.22	4,347.15	7.07	616.143		
500.00	499.98	412.41	482.41	3.80	3.63	-45.42	-4,320.37	544.98	4,353.42	4,346.00	7.43	586.239		
600.00	599.90	510.91	580.91	4.02	3.83	-45.46	-4,320.80	544.99	4,351.06	4,343.21	7.85	554.229		
700.00	699.82	614.29	684.29	4.28	4.08	-45.49	-4,321.25	544.74	4,348.65	4,340.29	8.35	520.499		
800.00	799.74	718.10	788.09	4.57	4.35	-45.53	-4,321.61	544.24	4,346.12	4,337.20	8.92	487.282		
900.00	899.66	811.07	881.06	4.88	4.63	-45.55	-4,322.04	543.53	4,343.67	4,334.17	9.50	457.240		
1,000.00	999.58	911.32	981.31	5.21	4.94	-45.57	-4,322.58	542.46	4,341.25	4,331.11	10.14	428.119		
1,100.00	1,099.50	992.69	1,062.66	5.55	5.21	-45.59	-4,323.25	541.32	4,339.07	4,328.32	10.75	403.608		
1,200.00	1,199.42	1,081.80	1,151.75	5.91	5.51	-45.60	-4,324.32	539.83	4,337.25	4,325.84	11.41	380.103		
1,300.00	1,299.34	1,177.73	1,247.65	6.28	5.84	-45.61	-4,325.67	538.12	4,335.60	4,323.48	12.12	357.866		
1,400.00	1,399.26	1,286.98	1,356.87	6.66	6.24	-45.62	-4,327.17	536.03	4,333.91	4,321.02	12.89	336.322		
1,500.00	1,499.18	1,393.76	1,463.62	7.04	6.63	-45.63	-4,328.42	533.77	4,331.99	4,318.32	13.67	317.009		
1,600.00	1,599.10	1,492.96	1,562.80	7.43	7.01	-45.64	-4,329.51	531.73	4,330.01	4,315.58	14.43	300.087		
1,700.00	1,699.01	1,585.02	1,654.84	7.83	7.36	-45.65	-4,330.60	529.95	4,328.12	4,312.95	15.18	285.186		
1,800.00	1,798.93	1,707.02	1,776.81	8.23	7.83	-45.67	-4,331.90	527.65	4,326.14	4,310.09	16.05	269.575		
1,900.00	1,898.85	1,790.75	1,860.52	8.64	8.16	-45.68	-4,332.71	526.18	4,324.06	4,307.28	16.78	257.696		
2,000.00	1,998.77	1,885.19	1,954.94	9.05	8.53	-45.69	-4,333.83	524.65	4,322.22	4,304.66	17.56	246.147		
2,100.00	2,098.69	1,977.97	2,047.70	9.46	8.90	-45.70	-4,335.06	523.04	4,320.51	4,302.17	18.34	235.595		
2,200.00	2,198.61	2,068.10	2,137.80	9.88	9.26	-45.71	-4,336.45	521.36	4,318.99	4,299.88	19.11	225.976		
2,300.00	2,298.53	2,165.80	2,235.47	10.30	9.65	-45.72	-4,338.15	519.48	4,317.66	4,297.74	19.92	216.734		
2,400.00	2,398.45	2,307.51	2,377.14	10.72	10.23	-45.74	-4,340.05	516.84	4,315.99	4,295.08	20.91	206.398		
2,500.00	2,498.37	2,483.02	2,552.62	11.14	10.94	-45.77	-4,339.83	514.18	4,312.91	4,290.88	22.03	195.733		
2,600.00	2,598.29	2,592.71	2,662.30	11.56	11.39	-45.79	-4,338.44	512.55	4,308.65	4,285.75	22.90	188.152		
2,700.00	2,698.21	2,693.65	2,763.22	11.98	11.80	-45.81	-4,337.13	510.93	4,304.36	4,280.62	23.73	181.359		
2,800.00	2,798.13	2,787.98	2,857.52	12.41	12.19	-45.83	-4,335.97	509.29	4,300.11	4,275.56	24.54	175.196		
2,900.00	2,898.05	2,886.51	2,956.03	12.84	12.60	-45.85	-4,334.86	507.50	4,295.95	4,270.58	25.37	169.303		
3,000.00	2,997.97	2,979.71	3,049.21	13.27	12.99	-45.86	-4,333.89	505.75	4,291.88	4,265.69	26.19	163.904		
3,100.00	3,097.89	3,084.13	3,153.61	13.69	13.42	-45.87	-4,332.88	503.68	4,287.87	4,260.82	27.04	158.558		
3,200.00	3,197.81	3,192.68	3,262.12	14.12	13.87	-45.89	-4,331.64	501.51	4,283.67	4,255.75	27.92	153.434		
3,300.00	3,297.73	3,279.57	3,348.99	14.56	14.23	-45.90	-4,330.67	499.83	4,279.51	4,250.80	28.71	149.061		
3,400.00	3,397.65	3,366.63	3,436.04	14.99	14.60	-45.91	-4,329.99	498.02	4,275.67	4,246.17	29.50	144.923		
3,500.00	3,497.56	3,457.64	3,527.01	15.42	14.98	-45.92	-4,329.58	495.82	4,272.10	4,241.79	30.31	140.929		
3,600.00	3,597.48	3,550.20	3,619.55	15.85	15.37	-45.92	-4,329.35	493.35	4,268.70	4,237.57	31.13	137.116		
3,700.00	3,697.40	3,646.20	3,715.51	16.28	15.77	-45.93	-4,329.23	490.99	4,265.46	4,233.50	31.97	133.441		
3,800.00	3,797.32	3,742.28	3,811.58	16.72	16.17	-45.94	-4,329.10	489.08	4,262.27	4,229.47	32.80	129.950		
3,900.00	3,897.24	3,838.11	3,907.38	17.15	16.57	-45.95	-4,329.13	487.06	4,259.22	4,225.59	33.63	126.638		
4,000.00	3,997.16	3,941.59	4,010.84	17.59	17.01	-45.97	-4,329.09	485.20	4,256.15	4,221.65	34.50	123.371		
4,100.00	4,097.08	4,043.14	4,112.38	18.02	17.44	-45.98	-4,328.96	483.53	4,253.01	4,217.65	35.36	120.287		
4,200.00	4,197.00	4,148.48	4,217.72	18.46	17.88	-46.01	-4,328.68	482.47	4,249.83	4,213.60	36.23	117.298		
4,300.00	4,296.92	4,266.04	4,335.27	18.89	18.37	-46.07	-4,327.83	482.92	4,246.38	4,209.23	37.15	114.289		
4,400.00	4,396.84	4,415.32	4,484.53	19.33	18.99	-46.14	-4,325.53	484.02	4,242.20	4,204.00	38.20	111.042		
4,500.00	4,496.76	4,504.86	4,574.04	19.77	19.37	-46.19	-4,323.75	484.76	4,237.55	4,198.54	39.02	108.608		
4,600.00	4,596.68	4,577.48	4,646.65	20.20	19.67	-46.23	-4,322.58	485.30	4,233.29	4,193.52	39.76	106.461		
4,700.00	4,696.60	4,647.08	4,716.25	20.64	19.96	-46.26	-4,321.94	485.65	4,229.67	4,189.17	40.50	104.444		
4,800.00	4,796.52	4,722.16	4,791.33	21.08	20.28	-46.30	-4,321.83	486.01	4,226.79	4,185.54	41.25	102.464		
4,900.00	4,896.44	4,822.71	4,891.88	21.51	20.70	-46.34	-4,321.87	486.54	4,224.13	4,182.02	42.11	100.310		
5,000.00	4,996.36	4,921.80	4,990.97	21.95	21.11	-46.39	-4,321.94	486.82	4,221.48	4,178.52	42.96	98.256		
5,100.00	5,096.28	5,022.15	5,091.31	22.39	21.53	-46.43	-4,322.03	487.17	4,218.85	4,175.02	43.82	96.270		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERRY 22-2(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,196.19	5,129.65	5,198.82	22.83	21.98	-46.48	-4,321.99	487.81	4,216.13	4,171.42	44.71	94.296		
5,300.00	5,296.11	5,260.12	5,329.28	23.27	22.53	-46.55	-4,321.41	488.74	4,213.06	4,167.37	45.69	92.202		
5,400.00	5,396.03	5,395.66	5,464.80	23.71	23.10	-46.63	-4,319.45	490.38	4,209.03	4,162.33	46.69	90.141		
5,500.00	5,495.95	5,552.86	5,621.84	24.14	23.77	-46.76	-4,314.24	494.93	4,203.10	4,155.33	47.77	87.978		
5,600.00	5,595.87	5,618.30	5,687.23	24.58	24.05	-46.81	-4,312.26	496.71	4,197.77	4,149.27	48.50	86.546		
5,700.00	5,695.79	5,684.78	5,753.67	25.02	24.33	-46.86	-4,310.86	498.07	4,193.25	4,144.01	49.23	85.171		
5,800.00	5,795.71	5,758.95	5,827.83	25.46	24.64	-46.91	-4,309.93	499.03	4,189.45	4,139.46	49.99	83.805		
5,900.00	5,895.63	5,843.03	5,911.91	25.90	25.00	-46.95	-4,309.42	499.46	4,186.18	4,135.39	50.79	82.426		
6,000.00	5,995.55	5,947.27	6,016.14	26.34	25.44	-46.99	-4,309.00	499.72	4,183.08	4,131.42	51.66	80.966		
6,100.00	6,095.47	6,052.59	6,121.46	26.78	25.89	-47.04	-4,308.33	499.68	4,179.70	4,127.15	52.55	79.542		
6,200.00	6,195.39	6,157.23	6,226.11	27.22	26.33	-47.08	-4,307.71	499.49	4,176.36	4,122.93	53.43	78.169		
6,300.00	6,295.31	6,271.20	6,340.07	27.66	26.81	-47.12	-4,306.70	499.23	4,172.71	4,118.36	54.34	76.782		
6,400.00	6,395.23	6,366.01	6,434.87	28.10	27.22	-47.16	-4,305.71	498.97	4,168.91	4,113.73	55.19	75.543		
6,500.00	6,495.02	6,459.38	6,528.24	28.54	27.61	-47.27	-4,304.95	498.72	4,165.69	4,109.67	56.02	74.359		
6,586.85	6,580.38	6,544.03	6,612.89	28.92	27.97	-91.81	-4,304.37	498.19	4,164.72	4,107.96	56.76	73.374 CC		
6,600.00	6,593.09	6,556.96	6,625.81	28.98	28.03	-92.40	-4,304.27	498.13	4,164.75	4,107.87	56.87	73.230 ES		
6,700.00	6,687.01	6,661.59	6,730.45	29.41	28.47	-95.16	-4,303.38	497.93	4,166.40	4,108.65	57.75	72.149		
6,800.00	6,774.46	6,758.48	6,827.32	29.83	28.88	-96.50	-4,302.18	498.17	4,170.77	4,112.18	58.60	71.178		
6,900.00	6,853.31	6,838.70	6,907.54	30.26	29.22	-97.09	-4,301.15	497.97	4,178.42	4,119.01	59.41	70.337		
7,000.00	6,921.60	6,905.15	6,973.98	30.76	29.51	-97.10	-4,300.32	497.79	4,189.79	4,129.57	60.22	69.570		
7,100.00	6,977.66	6,960.86	7,029.69	31.38	29.74	-96.59	-4,299.58	497.95	4,205.13	4,144.02	61.10	68.821		
7,200.00	7,020.10	7,001.71	7,070.52	32.17	29.92	-95.49	-4,298.96	498.37	4,224.51	4,162.46	62.06	68.073		
7,300.00	7,047.88	7,019.26	7,088.07	33.13	29.99	-93.66	-4,298.70	498.62	4,247.88	4,184.81	63.07	67.354		
7,400.00	7,060.32	7,026.77	7,095.58	34.27	30.02	-91.28	-4,298.60	498.72	4,274.83	4,210.66	64.16	66.623		
7,500.00	7,060.70	7,026.06	7,094.87	35.56	30.02	-90.40	-4,298.61	498.71	4,304.63	4,239.29	65.33	65.887		
7,600.00	7,060.27	7,024.79	7,093.61	37.02	30.02	-90.38	-4,298.62	498.69	4,336.56	4,269.93	66.63	65.084		
7,700.00	7,059.83	7,023.53	7,092.35	38.64	30.01	-90.36	-4,298.64	498.68	4,370.55	4,302.52	68.03	64.243		
7,800.00	7,059.40	7,022.28	7,091.09	40.40	30.00	-90.34	-4,298.66	498.66	4,406.55	4,337.03	69.52	63.387		
7,900.00	7,058.97	7,021.03	7,089.85	42.28	30.00	-90.33	-4,298.67	498.64	4,444.50	4,373.43	71.07	62.539		
8,000.00	7,058.53	7,019.79	7,088.60	44.27	29.99	-90.31	-4,298.69	498.62	4,484.36	4,411.70	72.66	61.713		
8,100.00	7,058.10	7,018.55	7,087.37	46.35	29.99	-90.29	-4,298.71	498.61	4,526.08	4,451.79	74.29	60.921		
8,200.00	7,057.66	7,017.32	7,086.13	48.50	29.98	-90.28	-4,298.73	498.59	4,569.61	4,493.67	75.94	60.171		
8,300.00	7,057.23	7,016.09	7,084.91	50.73	29.98	-90.26	-4,298.74	498.57	4,614.90	4,537.29	77.60	59.468		
8,400.00	7,056.80	7,014.87	7,083.68	53.02	29.97	-90.24	-4,298.76	498.55	4,661.89	4,582.62	79.26	58.816		
8,500.00	7,056.36	7,013.65	7,082.47	55.36	29.97	-90.22	-4,298.78	498.54	4,710.53	4,629.62	80.91	58.216		
8,600.00	7,055.93	7,012.44	7,081.25	57.74	29.96	-90.21	-4,298.80	498.52	4,760.78	4,678.22	82.55	57.669		
8,700.00	7,055.49	7,011.23	7,080.05	60.17	29.96	-90.19	-4,298.81	498.50	4,812.58	4,728.40	84.17	57.174		
8,800.00	7,055.06	7,000.01	7,068.83	62.63	29.91	-90.03	-4,298.98	498.35	4,865.90	4,780.17	85.73	56.758		
8,900.00	7,054.63	7,000.01	7,068.83	65.13	29.91	-90.03	-4,298.98	498.35	4,920.65	4,833.34	87.31	56.360		
9,000.00	7,054.19	7,000.01	7,068.83	67.66	29.91	-90.03	-4,298.98	498.35	4,976.81	4,887.96	88.86	56.010		
9,100.00	7,053.76	7,000.01	7,068.83	70.21	29.91	-90.03	-4,298.98	498.35	5,034.33	4,943.96	90.37	55.706		
9,200.00	7,053.32	7,000.01	7,068.83	72.78	29.91	-90.03	-4,298.98	498.35	5,093.17	5,001.31	91.86	55.446		
9,300.00	7,052.89	7,000.01	7,068.83	75.38	29.91	-90.03	-4,298.98	498.35	5,153.27	5,059.96	93.31	55.227		
9,400.00	7,052.46	7,000.01	7,068.83	77.99	29.91	-90.03	-4,298.98	498.35	5,214.60	5,119.88	94.73	55.048		
9,500.00	7,052.02	7,000.01	7,068.83	80.62	29.91	-90.03	-4,298.98	498.35	5,277.11	5,181.01	96.11	54.907		
9,600.00	7,051.59	7,000.01	7,068.83	83.26	29.91	-90.03	-4,298.98	498.35	5,340.77	5,243.31	97.46	54.802		
9,700.00	7,051.15	7,000.01	7,068.83	85.92	29.91	-90.03	-4,298.98	498.35	5,405.52	5,306.75	98.77	54.729		
9,800.00	7,050.72	7,000.01	7,068.83	88.59	29.91	-90.03	-4,298.98	498.35	5,471.34	5,371.29	100.04	54.689		
9,900.00	7,050.29	7,000.01	7,068.83	91.28	29.91	-90.03	-4,298.98	498.35	5,538.17	5,436.89	101.29	54.679 SF		
10,000.00	7,049.85	7,000.01	7,068.83	93.97	29.91	-90.03	-4,298.98	498.35	5,606.00	5,503.51	102.49	54.697		
10,100.00	7,049.42	7,000.01	7,068.83	96.67	29.91	-90.03	-4,298.98	498.35	5,674.78	5,571.11	103.66	54.742		
10,200.00	7,048.98	7,000.01	7,068.83	99.38	29.91	-90.03	-4,298.98	498.35	5,744.47	5,639.67	104.80	54.812		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BERRY 22-2(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,048.55	7,000.01	7,068.83	102.10	29.91	-90.03	-4,298.98	498.35	5,815.05	5,709.14	105.91	54.905		
10,400.00	7,048.12	7,000.01	7,068.83	104.83	29.91	-90.03	-4,298.98	498.35	5,886.48	5,779.50	106.98	55.022		
10,500.00	7,047.68	7,000.01	7,068.83	107.56	29.91	-90.03	-4,298.98	498.35	5,958.73	5,850.71	108.03	55.160		
10,600.00	7,047.25	7,000.01	7,068.83	110.30	29.91	-90.03	-4,298.98	498.35	6,031.78	5,922.74	109.04	55.318		
10,700.00	7,046.81	7,000.01	7,068.83	113.05	29.91	-90.03	-4,298.98	498.35	6,105.59	5,995.57	110.02	55.495		
10,800.00	7,046.38	6,987.12	7,055.94	115.80	29.86	-89.85	-4,299.18	498.19	6,180.11	6,069.19	110.92	55.717		
10,900.00	7,045.95	6,986.14	7,054.96	118.55	29.85	-89.84	-4,299.20	498.18	6,255.37	6,143.53	111.84	55.931		
11,000.00	7,045.51	6,985.17	7,054.00	121.31	29.85	-89.83	-4,299.21	498.17	6,331.31	6,218.57	112.73	56.162		
11,100.00	7,045.08	6,984.23	7,053.05	124.08	29.84	-89.81	-4,299.23	498.16	6,407.90	6,294.30	113.60	56.407		
11,200.00	7,044.64	6,983.30	7,052.12	126.85	29.84	-89.80	-4,299.24	498.15	6,485.14	6,370.70	114.44	56.667		
11,300.00	7,044.21	6,982.39	7,051.21	129.62	29.84	-89.79	-4,299.26	498.14	6,562.99	6,447.73	115.26	56.942		
11,400.00	7,043.78	6,981.50	7,050.32	132.40	29.83	-89.77	-4,299.27	498.13	6,641.43	6,525.38	116.05	57.229		
11,500.00	7,043.34	6,980.62	7,049.45	135.18	29.83	-89.76	-4,299.28	498.12	6,720.45	6,603.63	116.82	57.528		
11,600.00	7,042.91	6,979.76	7,048.59	137.96	29.82	-89.75	-4,299.30	498.11	6,800.02	6,682.45	117.57	57.840		
11,700.00	7,042.47	6,978.92	7,047.74	140.75	29.82	-89.74	-4,299.31	498.10	6,880.12	6,761.83	118.29	58.162		
11,800.00	7,042.04	6,978.09	7,046.91	143.54	29.82	-89.73	-4,299.32	498.10	6,960.73	6,841.74	119.00	58.496		
11,900.00	7,041.61	6,977.28	7,046.10	146.33	29.81	-89.71	-4,299.33	498.09	7,041.85	6,922.17	119.68	58.840		
12,000.00	7,041.17	6,976.48	7,045.30	149.13	29.81	-89.70	-4,299.35	498.08	7,123.44	7,003.10	120.34	59.193		
12,100.00	7,040.74	6,975.69	7,044.52	151.92	29.81	-89.69	-4,299.36	498.07	7,205.49	7,084.51	120.99	59.556		
12,200.00	7,040.30	6,974.92	7,043.74	154.72	29.80	-89.68	-4,299.37	498.07	7,288.00	7,166.38	121.61	59.927		
12,300.00	7,039.87	6,974.16	7,042.99	157.52	29.80	-89.67	-4,299.38	498.06	7,370.94	7,248.71	122.22	60.307		
12,400.00	7,039.44	6,973.42	7,042.24	160.33	29.80	-89.66	-4,299.39	498.05	7,454.29	7,331.48	122.82	60.695		
12,500.00	7,039.00	6,972.68	7,041.51	163.13	29.79	-89.65	-4,299.40	498.04	7,538.05	7,414.66	123.39	61.091		
12,600.00	7,038.57	6,971.96	7,040.79	165.94	29.79	-89.64	-4,299.41	498.04	7,622.21	7,498.25	123.95	61.494		
12,700.00	7,038.13	6,971.25	7,040.08	168.75	29.79	-89.63	-4,299.42	498.03	7,706.74	7,582.24	124.50	61.904		
12,800.00	7,037.70	6,970.56	7,039.38	171.56	29.78	-89.62	-4,299.43	498.03	7,791.63	7,666.61	125.03	62.321		
12,900.00	7,037.27	6,969.87	7,038.70	174.37	29.78	-89.61	-4,299.44	498.02	7,876.88	7,751.34	125.54	62.744		
13,000.00	7,036.83	6,969.20	7,038.02	177.19	29.78	-89.60	-4,299.45	498.01	7,962.48	7,836.44	126.04	63.173		
13,100.00	7,036.40	6,968.54	7,037.36	180.00	29.78	-89.59	-4,299.46	498.01	8,048.41	7,921.88	126.53	63.608		
13,200.00	7,035.96	6,967.88	7,036.71	182.82	29.77	-89.58	-4,299.47	498.00	8,134.65	8,007.65	127.01	64.049		
13,300.00	7,035.53	6,967.24	7,036.07	185.64	29.77	-89.57	-4,299.48	498.00	8,221.21	8,093.74	127.47	64.495		
13,400.00	7,035.10	6,966.61	7,035.43	188.46	29.77	-89.57	-4,299.49	497.99	8,308.08	8,180.15	127.92	64.947		
13,500.00	7,034.66	6,965.99	7,034.81	191.28	29.77	-89.56	-4,299.50	497.99	8,395.23	8,266.87	128.36	65.403		
13,600.00	7,034.23	6,965.37	7,034.20	194.10	29.76	-89.55	-4,299.51	497.98	8,482.67	8,353.88	128.79	65.864		
13,700.00	7,033.79	6,964.77	7,033.60	196.92	29.76	-89.54	-4,299.52	497.98	8,570.38	8,441.17	129.21	66.330		
13,800.00	7,033.36	6,964.18	7,033.00	199.74	29.76	-89.53	-4,299.53	497.97	8,658.36	8,528.74	129.62	66.800		
13,900.00	7,032.93	6,963.59	7,032.42	202.57	29.76	-89.52	-4,299.54	497.97	8,746.59	8,616.58	130.01	67.274		
14,000.00	7,032.49	6,963.02	7,031.84	205.39	29.75	-89.52	-4,299.54	497.96	8,835.08	8,704.68	130.40	67.752		
14,100.00	7,032.06	6,962.45	7,031.28	208.22	29.75	-89.51	-4,299.55	497.96	8,923.81	8,793.03	130.78	68.235		
14,200.00	7,031.62	6,961.89	7,030.72	211.05	29.75	-89.50	-4,299.56	497.96	9,012.77	8,881.62	131.15	68.720		
14,300.00	7,031.19	6,961.34	7,030.17	213.87	29.75	-89.49	-4,299.57	497.95	9,101.97	8,970.46	131.51	69.210		
14,400.00	7,030.76	6,960.80	7,029.62	216.70	29.74	-89.48	-4,299.58	497.95	9,191.39	9,059.52	131.87	69.703		
14,500.00	7,030.32	6,960.26	7,029.09	219.53	29.74	-89.48	-4,299.58	497.94	9,281.02	9,148.81	132.21	70.199		
14,600.00	7,029.89	6,959.74	7,028.56	222.36	29.74	-89.47	-4,299.59	497.94	9,370.86	9,238.32	132.55	70.698		
14,700.00	7,029.45	6,959.22	7,028.04	225.19	29.74	-89.46	-4,299.60	497.94	9,460.91	9,328.03	132.88	71.201		
14,800.00	7,029.02	6,958.71	7,027.53	228.03	29.73	-89.46	-4,299.61	497.93	9,551.15	9,417.96	133.20	71.706		
14,805.04	7,029.00	6,958.68	7,027.51	228.17	29.73	-89.45	-4,299.61	497.93	9,555.71	9,422.49	133.21	71.732		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	20.23	-1.77	3.28	3.28	172.80	-4,319.21	545.52	4,353.52					
100.00	100.00	112.96	90.96	3.28	3.29	172.80	-4,319.34	545.42	4,353.65	4,347.08	6.58	662.072		
200.00	200.00	211.81	189.81	3.34	3.35	172.81	-4,319.59	545.30	4,353.89	4,347.20	6.69	650.848		
300.00	300.00	318.22	296.22	3.44	3.48	172.81	-4,319.77	545.10	4,354.03	4,347.11	6.92	629.173		
400.00	400.00	418.44	396.44	3.60	3.64	172.81	-4,319.91	544.75	4,354.12	4,346.88	7.24	601.172		
500.00	499.98	520.82	498.82	3.80	3.85	-45.42	-4,319.99	544.44	4,352.94	4,345.29	7.65	569.280		
600.00	599.90	618.99	596.98	4.02	4.09	-45.45	-4,320.10	544.08	4,350.21	4,342.10	8.11	536.640		
700.00	699.82	720.70	698.70	4.28	4.36	-45.49	-4,320.17	543.78	4,347.42	4,338.79	8.64	503.338		
800.00	799.74	817.15	795.14	4.57	4.65	-45.52	-4,320.27	543.58	4,344.69	4,335.48	9.20	472.001		
900.00	899.66	918.33	896.32	4.88	4.96	-45.56	-4,320.39	543.25	4,341.96	4,332.13	9.83	441.738		
1,000.00	999.58	1,016.94	994.93	5.21	5.29	-45.59	-4,320.53	542.97	4,339.25	4,328.77	10.48	414.022		
1,100.00	1,099.50	1,119.35	1,097.34	5.55	5.64	-45.62	-4,320.63	542.68	4,336.50	4,325.33	11.17	388.089		
1,200.00	1,199.42	1,214.05	1,192.05	5.91	5.97	-45.65	-4,320.78	542.33	4,333.80	4,321.93	11.86	365.278		
1,300.00	1,299.34	1,305.92	1,283.91	6.28	6.31	-45.68	-4,321.08	541.93	4,331.26	4,318.70	12.56	344.742		
1,400.00	1,399.26	1,408.64	1,386.63	6.66	6.69	-45.72	-4,321.49	541.43	4,328.79	4,315.47	13.32	325.004		
1,500.00	1,499.18	1,515.30	1,493.29	7.04	7.09	-45.75	-4,321.79	540.77	4,326.18	4,312.08	14.10	306.741		
1,600.00	1,599.10	1,613.55	1,591.53	7.43	7.47	-45.78	-4,322.03	540.11	4,323.54	4,308.67	14.87	290.781		
1,700.00	1,699.01	1,712.39	1,690.38	7.83	7.85	-45.80	-4,322.30	539.49	4,320.92	4,305.28	15.65	276.167		
1,800.00	1,798.93	1,807.53	1,785.51	8.23	8.22	-45.83	-4,322.63	538.83	4,318.38	4,301.96	16.42	263.033		
1,900.00	1,898.85	1,901.66	1,879.64	8.64	8.60	-45.86	-4,323.09	538.04	4,315.96	4,298.77	17.19	251.034		
2,000.00	1,998.77	2,000.62	1,978.59	9.05	8.99	-45.88	-4,323.69	536.99	4,313.62	4,295.63	17.99	239.735		
2,100.00	2,098.69	2,111.87	2,089.83	9.46	9.44	-45.90	-4,324.25	535.65	4,311.17	4,292.32	18.85	228.729		
2,200.00	2,198.61	2,217.87	2,195.82	9.88	9.86	-45.92	-4,324.61	534.25	4,308.53	4,288.84	19.69	218.845		
2,300.00	2,298.53	2,331.58	2,309.52	10.30	10.32	-45.95	-4,324.69	532.74	4,305.63	4,285.07	20.56	209.397		
2,400.00	2,398.45	2,437.15	2,415.08	10.72	10.75	-45.97	-4,324.49	531.45	4,302.49	4,281.08	21.41	200.979		
2,500.00	2,498.37	2,537.63	2,515.56	11.14	11.17	-46.00	-4,324.25	530.43	4,299.32	4,277.08	22.24	193.349		
2,600.00	2,598.29	2,639.85	2,617.77	11.56	11.58	-46.03	-4,323.91	529.56	4,296.09	4,273.02	23.07	186.184		
2,700.00	2,698.21	2,736.46	2,714.38	11.98	11.98	-46.05	-4,323.60	528.73	4,292.87	4,268.98	23.89	179.669		
2,800.00	2,798.13	2,832.68	2,810.60	12.41	12.38	-46.08	-4,323.42	527.94	4,289.79	4,265.07	24.71	173.586		
2,900.00	2,898.05	2,930.49	2,908.40	12.84	12.78	-46.11	-4,323.19	527.25	4,286.67	4,261.13	25.54	167.836		
3,000.00	2,997.97	3,015.50	2,993.41	13.27	13.14	-46.14	-4,323.21	526.80	4,283.84	4,257.52	26.32	162.766		
3,100.00	3,097.89	3,108.67	3,086.58	13.69	13.52	-46.17	-4,323.46	526.35	4,281.25	4,254.12	27.13	157.792		
3,200.00	3,197.81	3,211.43	3,189.34	14.12	13.95	-46.20	-4,323.75	525.80	4,278.68	4,250.70	27.99	152.885		
3,300.00	3,297.73	3,299.01	3,276.91	14.56	14.32	-46.22	-4,324.13	525.30	4,276.25	4,247.47	28.78	148.586		
3,400.00	3,397.65	3,389.93	3,367.83	14.99	14.70	-46.25	-4,324.75	524.72	4,274.06	4,244.47	29.59	144.452		
3,500.00	3,497.56	3,543.78	3,521.68	15.42	15.34	-46.30	-4,324.94	523.97	4,271.33	4,240.68	30.65	139.337		
3,600.00	3,597.48	3,664.48	3,642.38	15.85	15.84	-46.35	-4,323.92	523.84	4,267.70	4,236.11	31.59	135.116		
3,700.00	3,697.40	3,777.14	3,755.03	16.28	16.31	-46.39	-4,322.59	523.58	4,263.72	4,231.24	32.48	131.253		
3,800.00	3,797.32	3,869.18	3,847.05	16.72	16.70	-46.43	-4,321.39	523.39	4,259.65	4,226.34	33.30	127.908		
3,900.00	3,897.24	3,958.83	3,936.70	17.15	17.07	-46.46	-4,320.51	523.05	4,255.85	4,221.73	34.11	124.762		
4,000.00	3,997.16	4,051.45	4,029.32	17.59	17.46	-46.49	-4,319.79	522.64	4,252.25	4,217.31	34.93	121.723		
4,100.00	4,097.08	4,138.98	4,116.84	18.02	17.83	-46.52	-4,319.28	522.11	4,248.83	4,213.10	35.74	118.896		
4,200.00	4,197.00	4,225.40	4,203.26	18.46	18.19	-46.55	-4,319.14	521.59	4,245.82	4,209.28	36.53	116.216		
4,300.00	4,296.92	4,326.27	4,304.13	18.89	18.62	-46.58	-4,319.04	521.02	4,242.87	4,205.48	37.39	113.471		
4,400.00	4,396.84	4,421.80	4,399.66	19.33	19.02	-46.61	-4,319.01	520.53	4,240.01	4,201.78	38.23	110.914		
4,500.00	4,496.76	4,523.92	4,501.78	19.77	19.45	-46.64	-4,318.99	520.08	4,237.16	4,198.07	39.09	108.389		
4,600.00	4,596.68	4,623.91	4,601.77	20.20	19.88	-46.68	-4,318.91	519.61	4,234.26	4,194.31	39.95	105.995		
4,700.00	4,696.60	4,714.51	4,692.37	20.64	20.26	-46.71	-4,318.97	519.13	4,231.49	4,190.73	40.77	103.800		
4,800.00	4,796.52	4,803.94	4,781.79	21.08	20.64	-46.74	-4,319.20	518.95	4,228.97	4,187.39	41.58	101.709		
4,900.00	4,896.44	4,904.67	4,882.52	21.51	21.06	-46.78	-4,319.54	518.99	4,226.56	4,184.12	42.44	99.591		
5,000.00	4,996.36	5,004.52	4,982.37	21.95	21.48	-46.82	-4,319.87	519.02	4,224.14	4,180.85	43.30	97.563		
5,100.00	5,096.28	5,100.04	5,077.89	22.39	21.88	-46.86	-4,320.24	519.05	4,221.78	4,177.65	44.14	95.653		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,196.19	5,197.94	5,175.79	22.83	22.30	-46.90	-4,320.68	519.13	4,219.50	4,174.51	44.99	93.795		
5,300.00	5,296.11	5,303.78	5,281.63	23.27	22.74	-46.94	-4,321.13	519.13	4,217.17	4,171.30	45.87	91.938		
5,400.00	5,396.03	5,404.72	5,382.57	23.71	23.17	-46.98	-4,321.48	519.04	4,214.76	4,168.03	46.73	90.188		
5,500.00	5,495.95	5,498.64	5,476.49	24.14	23.57	-47.01	-4,321.86	518.99	4,212.42	4,164.85	47.57	88.556		
5,600.00	5,595.87	5,648.26	5,626.11	24.58	24.20	-47.08	-4,321.37	519.26	4,209.30	4,160.67	48.63	86.558		
5,700.00	5,695.79	5,739.06	5,716.90	25.02	24.58	-47.12	-4,320.71	519.44	4,205.89	4,156.44	49.45	85.048		
5,800.00	5,795.71	5,820.47	5,798.32	25.46	24.93	-47.15	-4,320.51	519.43	4,202.90	4,152.66	50.24	83.660		
5,900.00	5,895.63	5,913.76	5,891.61	25.90	25.32	-47.18	-4,320.56	519.34	4,200.21	4,149.14	51.07	82.242		
6,000.00	5,995.55	6,017.05	5,994.90	26.34	25.76	-47.22	-4,320.65	519.01	4,197.52	4,145.57	51.95	80.806		
6,100.00	6,095.47	6,112.49	6,090.34	26.78	26.17	-47.25	-4,320.79	518.56	4,194.87	4,142.08	52.79	79.466		
6,200.00	6,195.39	6,217.02	6,194.86	27.22	26.61	-47.29	-4,321.00	517.98	4,192.25	4,138.58	53.67	78.114		
6,300.00	6,295.31	6,339.05	6,316.88	27.66	27.13	-47.32	-4,320.80	517.03	4,189.23	4,134.61	54.62	76.698		
6,400.00	6,395.23	6,444.56	6,422.39	28.10	27.58	-47.35	-4,320.30	515.94	4,185.89	4,130.38	55.50	75.417		
6,500.00	6,495.02	6,549.84	6,527.67	28.54	28.03	-83.16	-4,319.77	514.87	4,182.87	4,126.48	56.39	74.182		
6,589.15	6,582.60	6,643.37	6,621.18	28.93	28.43	-92.11	-4,319.12	513.64	4,181.85	4,124.68	57.17	73.147 CC		
6,600.00	6,593.09	6,653.64	6,631.45	28.98	28.47	-92.59	-4,319.05	513.49	4,181.87	4,124.60	57.26	73.031 ES		
6,700.00	6,687.01	6,745.72	6,723.52	29.41	28.86	-95.26	-4,318.44	512.17	4,183.59	4,125.51	58.09	72.023		
6,800.00	6,774.46	6,839.29	6,817.08	29.83	29.26	-96.53	-4,317.90	510.43	4,188.34	4,129.42	58.92	71.082		
6,900.00	6,853.31	6,933.76	6,911.51	30.26	29.66	-97.19	-4,317.22	507.92	4,196.17	4,136.38	59.79	70.184		
7,000.00	6,921.60	7,013.15	6,990.86	30.76	30.00	-97.32	-4,316.48	505.56	4,207.47	4,146.82	60.66	69.365		
7,100.00	6,977.66	7,080.99	7,058.65	31.38	30.29	-96.94	-4,315.78	503.20	4,222.56	4,160.98	61.58	68.567		
7,200.00	7,020.10	7,129.56	7,107.19	32.17	30.50	-95.95	-4,315.25	501.28	4,241.61	4,179.04	62.57	67.790		
7,300.00	7,047.88	7,161.13	7,138.73	33.13	30.63	-94.33	-4,314.91	500.02	4,264.64	4,201.00	63.64	67.015		
7,400.00	7,060.32	7,177.50	7,155.08	34.27	30.70	-92.11	-4,314.73	499.36	4,291.34	4,226.57	64.77	66.254		
7,500.00	7,060.70	7,181.87	7,159.44	35.56	30.72	-91.30	-4,314.69	499.19	4,321.04	4,255.07	65.96	65.508		
7,600.00	7,060.27	7,185.42	7,162.99	37.02	30.74	-91.35	-4,314.65	499.05	4,352.86	4,285.58	67.28	64.698		
7,700.00	7,059.83	7,188.97	7,166.54	38.64	30.75	-91.39	-4,314.61	498.91	4,386.74	4,318.03	68.70	63.851		
7,800.00	7,059.40	7,192.52	7,170.08	40.40	30.77	-91.44	-4,314.57	498.77	4,422.61	4,352.40	70.21	62.991		
7,900.00	7,058.97	7,196.06	7,173.63	42.28	30.78	-91.49	-4,314.53	498.62	4,460.43	4,388.65	71.78	62.138		
8,000.00	7,058.53	7,199.61	7,177.18	44.27	30.80	-91.54	-4,314.49	498.48	4,500.16	4,426.76	73.40	61.308		
8,100.00	7,058.10	7,203.16	7,180.72	46.35	30.81	-91.59	-4,314.45	498.34	4,541.74	4,466.68	75.06	60.512		
8,200.00	7,057.66	7,206.71	7,184.27	48.50	30.83	-91.64	-4,314.42	498.20	4,585.12	4,508.39	76.73	59.758		
8,300.00	7,057.23	7,210.26	7,187.82	50.73	30.84	-91.69	-4,314.38	498.06	4,630.25	4,551.84	78.41	59.051		
8,400.00	7,056.80	7,213.81	7,191.36	53.02	30.86	-91.74	-4,314.34	497.92	4,677.08	4,596.99	80.10	58.394		
8,500.00	7,056.36	7,217.36	7,194.91	55.36	30.87	-91.79	-4,314.30	497.77	4,725.56	4,643.79	81.77	57.789		
8,600.00	7,055.93	7,220.91	7,198.45	57.74	30.89	-91.84	-4,314.26	497.63	4,775.64	4,692.20	83.44	57.237		
8,700.00	7,055.49	7,224.46	7,202.00	60.17	30.90	-91.89	-4,314.22	497.49	4,827.27	4,742.19	85.08	56.736		
8,800.00	7,055.06	7,228.01	7,205.55	62.63	30.92	-91.94	-4,314.18	497.35	4,880.40	4,793.69	86.71	56.287		
8,900.00	7,054.63	7,231.56	7,209.09	65.13	30.93	-91.99	-4,314.15	497.21	4,934.98	4,846.68	88.30	55.886		
9,000.00	7,054.19	7,235.11	7,212.64	67.66	30.95	-92.04	-4,314.11	497.07	4,990.97	4,901.10	89.87	55.533		
9,100.00	7,053.76	7,238.66	7,216.19	70.21	30.96	-92.09	-4,314.07	496.92	5,048.31	4,956.90	91.41	55.225		
9,200.00	7,053.32	7,242.21	7,219.73	72.78	30.98	-92.14	-4,314.03	496.78	5,106.97	5,014.05	92.92	54.961		
9,300.00	7,052.89	7,245.76	7,223.28	75.38	30.99	-92.19	-4,313.99	496.64	5,166.89	5,072.50	94.39	54.738		
9,400.00	7,052.46	7,249.31	7,226.83	77.99	31.01	-92.23	-4,313.95	496.50	5,228.04	5,132.21	95.83	54.554		
9,500.00	7,052.02	7,252.86	7,230.37	80.62	31.02	-92.28	-4,313.91	496.36	5,290.37	5,193.13	97.24	54.407		
9,600.00	7,051.59	7,256.40	7,233.92	83.26	31.04	-92.33	-4,313.88	496.22	5,353.84	5,255.23	98.61	54.296		
9,700.00	7,051.15	7,259.95	7,237.46	85.92	31.06	-92.38	-4,313.84	496.07	5,418.40	5,318.46	99.94	54.217		
9,800.00	7,050.72	7,263.50	7,241.01	88.59	31.07	-92.43	-4,313.80	495.93	5,484.03	5,382.79	101.24	54.170		
9,900.00	7,050.29	7,267.05	7,244.56	91.28	31.09	-92.48	-4,313.76	495.79	5,550.69	5,448.18	102.50	54.152 SF		
10,000.00	7,049.85	7,270.60	7,248.10	93.97	31.10	-92.53	-4,313.72	495.65	5,618.32	5,514.59	103.73	54.163		
10,100.00	7,049.42	7,274.15	7,251.65	96.67	31.12	-92.58	-4,313.68	495.51	5,686.92	5,581.99	104.93	54.199		
10,200.00	7,048.98	7,277.70	7,255.20	99.38	31.13	-92.63	-4,313.64	495.37	5,756.43	5,650.34	106.09	54.261		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BLACK GOLD PETROLEUM 1(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,048.55	7,281.25	7,258.74	102.10	31.15	-92.68	-4,313.61	495.23	5,826.82	5,719.60	107.22	54.347		
10,400.00	7,048.12	7,284.80	7,262.29	104.83	31.16	-92.73	-4,313.57	495.08	5,898.07	5,789.75	108.31	54.454		
10,500.00	7,047.68	7,288.35	7,265.84	107.56	31.18	-92.78	-4,313.53	494.94	5,970.14	5,860.76	109.38	54.583		
10,600.00	7,047.25	7,291.90	7,269.38	110.30	31.19	-92.83	-4,313.49	494.80	6,043.00	5,932.59	110.41	54.732		
10,700.00	7,046.81	7,295.45	7,272.93	113.05	31.21	-92.88	-4,313.45	494.66	6,116.63	6,005.21	111.42	54.899		
10,800.00	7,046.38	7,299.00	7,276.47	115.80	31.22	-92.93	-4,313.41	494.52	6,190.99	6,078.60	112.39	55.084		
10,900.00	7,045.95	7,302.55	7,280.02	118.55	31.24	-92.98	-4,313.37	494.38	6,266.07	6,152.73	113.34	55.286		
11,000.00	7,045.51	7,306.10	7,283.57	121.31	31.25	-93.02	-4,313.33	494.23	6,341.83	6,227.58	114.26	55.504		
11,100.00	7,045.08	7,309.65	7,287.11	124.08	31.27	-93.07	-4,313.30	494.09	6,418.26	6,303.11	115.15	55.738		
11,200.00	7,044.64	7,313.20	7,290.66	126.85	31.28	-93.12	-4,313.26	493.95	6,495.32	6,379.30	116.02	55.985		
11,300.00	7,044.21	7,316.74	7,294.21	129.62	31.30	-93.17	-4,313.22	493.81	6,573.00	6,456.14	116.86	56.246		
11,400.00	7,043.78	7,320.29	7,297.75	132.40	31.31	-93.22	-4,313.18	493.67	6,651.28	6,533.60	117.68	56.521		
11,500.00	7,043.34	7,323.84	7,301.30	135.18	31.33	-93.27	-4,313.14	493.53	6,730.12	6,611.65	118.47	56.807		
11,600.00	7,042.91	7,327.39	7,304.85	137.96	31.34	-93.32	-4,313.10	493.38	6,809.52	6,690.28	119.25	57.105		
11,700.00	7,042.47	7,330.94	7,308.39	140.75	31.36	-93.37	-4,313.06	493.24	6,889.46	6,769.46	120.00	57.414		
11,800.00	7,042.04	7,334.49	7,311.94	143.54	31.37	-93.42	-4,313.03	493.10	6,969.91	6,849.19	120.72	57.734		
11,900.00	7,041.61	7,338.04	7,315.48	146.33	31.39	-93.47	-4,312.99	492.96	7,050.86	6,929.43	121.43	58.064		
12,000.00	7,041.17	7,341.59	7,319.03	149.13	31.40	-93.52	-4,312.95	492.82	7,132.29	7,010.17	122.12	58.403		
12,100.00	7,040.74	7,345.14	7,322.58	151.92	31.42	-93.57	-4,312.91	492.68	7,214.19	7,091.40	122.79	58.752		
12,200.00	7,040.30	7,348.69	7,326.12	154.72	31.43	-93.62	-4,312.87	492.53	7,296.54	7,173.10	123.44	59.109		
12,300.00	7,039.87	7,352.24	7,329.67	157.52	31.45	-93.67	-4,312.83	492.39	7,379.32	7,255.24	124.08	59.474		
12,400.00	7,039.44	7,355.79	7,333.22	160.33	31.47	-93.72	-4,312.79	492.25	7,462.52	7,337.83	124.69	59.847		
12,500.00	7,039.00	7,359.34	7,336.76	163.13	31.48	-93.76	-4,312.76	492.11	7,546.13	7,420.84	125.29	60.228		
12,600.00	7,038.57	7,362.89	7,340.31	165.94	31.50	-93.81	-4,312.72	491.97	7,630.13	7,504.25	125.88	60.616		
12,700.00	7,038.13	7,366.44	7,343.86	168.75	31.51	-93.86	-4,312.68	491.83	7,714.51	7,588.06	126.44	61.011		
12,800.00	7,037.70	7,369.99	7,347.40	171.56	31.53	-93.91	-4,312.64	491.69	7,799.26	7,672.26	127.00	61.413		
12,900.00	7,037.27	7,373.54	7,350.95	174.37	31.54	-93.96	-4,312.60	491.54	7,884.36	7,756.82	127.54	61.820		
13,000.00	7,036.83	7,377.09	7,354.50	177.19	31.56	-94.01	-4,312.56	491.40	7,969.81	7,841.75	128.06	62.234		
13,100.00	7,036.40	7,380.63	7,358.04	180.00	31.57	-94.06	-4,312.52	491.26	8,055.59	7,927.02	128.57	62.653		
13,200.00	7,035.96	7,384.18	7,361.59	182.82	31.59	-94.11	-4,312.49	491.12	8,141.70	8,012.62	129.07	63.078		
13,300.00	7,035.53	7,387.73	7,365.13	185.64	31.60	-94.16	-4,312.45	490.98	8,228.11	8,098.55	129.56	63.508		
13,400.00	7,035.10	7,391.28	7,368.68	188.46	31.62	-94.21	-4,312.41	490.84	8,314.83	8,184.80	130.03	63.944		
13,500.00	7,034.66	7,394.83	7,372.23	191.28	31.63	-94.26	-4,312.37	490.69	8,401.85	8,271.35	130.50	64.384		
13,600.00	7,034.23	7,398.38	7,375.77	194.10	31.65	-94.31	-4,312.33	490.55	8,489.15	8,358.20	130.95	64.828		
13,700.00	7,033.79	7,401.93	7,379.32	196.92	31.66	-94.36	-4,312.29	490.41	8,576.72	8,445.33	131.39	65.277		
13,800.00	7,033.36	7,405.48	7,382.87	199.74	31.68	-94.41	-4,312.25	490.27	8,664.56	8,532.74	131.82	65.731		
13,900.00	7,032.93	7,409.03	7,386.41	202.57	31.69	-94.45	-4,312.22	490.13	8,752.66	8,620.42	132.24	66.188		
14,000.00	7,032.49	7,412.58	7,389.96	205.39	31.71	-94.50	-4,312.18	489.99	8,841.02	8,708.37	132.65	66.649		
14,100.00	7,032.06	7,416.13	7,393.51	208.22	31.72	-94.55	-4,312.14	489.84	8,929.61	8,796.56	133.05	67.114		
14,200.00	7,031.62	7,419.68	7,397.05	211.05	31.74	-94.60	-4,312.10	489.70	9,018.45	8,885.01	133.44	67.583		
14,300.00	7,031.19	7,423.23	7,400.60	213.87	31.75	-94.65	-4,312.06	489.56	9,107.51	8,973.69	133.83	68.055		
14,400.00	7,030.76	7,426.78	7,404.14	216.70	31.77	-94.70	-4,312.02	489.42	9,196.80	9,062.60	134.20	68.530		
14,500.00	7,030.32	7,430.33	7,407.69	219.53	31.65	-94.33	-4,312.31	490.49	9,286.36	9,151.92	134.43	69.077		
14,600.00	7,029.89	7,433.88	7,411.24	222.36	31.65	-94.33	-4,312.31	490.49	9,376.08	9,241.31	134.78	69.567		
14,700.00	7,029.45	7,437.43	7,414.79	225.19	31.65	-94.33	-4,312.31	490.49	9,466.02	9,330.91	135.11	70.060		
14,800.00	7,029.02	7,440.98	7,418.34	228.03	31.65	-94.33	-4,312.31	490.49	9,556.15	9,420.71	135.44	70.556		
14,805.04	7,029.00	7,440.00	7,377.39	228.17	31.65	-94.33	-4,312.31	490.49	9,560.70	9,425.24	135.46	70.581		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	22.83	-0.17	3.28	3.28	-26.07	2,362.90	-1,155.84	2,630.45					
100.00	100.00	120.87	97.87	3.28	3.29	-26.07	2,362.83	-1,156.04	2,630.48	2,623.90	6.58	399.847		
200.00	200.00	218.82	195.82	3.34	3.36	-26.07	2,362.99	-1,156.13	2,630.66	2,623.97	6.70	392.897		
300.00	300.00	328.29	305.29	3.44	3.49	-26.06	2,362.99	-1,155.78	2,630.51	2,623.57	6.93	379.362		
342.03	342.03	365.03	342.03	3.51	3.55	-26.06	2,362.99	-1,155.68	2,630.46	2,623.41	7.05	373.043		
400.00	400.00	419.98	396.98	3.60	3.64	-26.06	2,363.08	-1,155.66	2,630.53	2,623.28	7.24	363.098		
500.00	499.98	528.17	505.16	3.80	3.86	115.76	2,363.01	-1,155.59	2,631.21	2,623.54	7.66	343.432		
600.00	599.90	634.90	611.89	4.02	4.12	115.85	2,362.85	-1,155.32	2,632.70	2,624.55	8.15	323.215		
700.00	699.82	740.69	717.68	4.28	4.41	115.94	2,362.29	-1,154.72	2,633.71	2,625.02	8.69	302.981		
800.00	799.74	838.69	815.69	4.57	4.70	116.02	2,361.99	-1,154.23	2,634.98	2,625.71	9.27	284.246		
900.00	899.66	946.09	923.08	4.88	5.04	116.11	2,361.34	-1,153.41	2,635.85	2,625.93	9.92	265.715		
1,000.00	999.58	1,038.74	1,015.73	5.21	5.35	116.19	2,360.85	-1,152.83	2,636.87	2,626.32	10.56	249.790		
1,100.00	1,099.50	1,135.49	1,112.47	5.55	5.69	116.28	2,360.55	-1,152.32	2,638.14	2,626.91	11.23	234.834		
1,200.00	1,199.42	1,238.18	1,215.16	5.91	6.05	116.36	2,360.16	-1,151.80	2,639.36	2,627.41	11.96	220.750		
1,300.00	1,299.34	1,336.32	1,313.30	6.28	6.41	116.44	2,359.74	-1,151.35	2,640.56	2,627.88	12.68	208.212		
1,400.00	1,399.26	1,433.04	1,410.02	6.66	6.77	116.53	2,359.57	-1,150.71	2,641.91	2,628.49	13.42	196.887		
1,500.00	1,499.18	1,536.56	1,513.54	7.04	7.16	116.62	2,359.34	-1,150.11	2,643.26	2,629.07	14.19	186.220		
1,600.00	1,599.10	1,639.63	1,616.60	7.43	7.55	116.70	2,358.76	-1,149.75	2,644.40	2,629.42	14.98	176.520		
1,700.00	1,699.01	1,733.73	1,710.70	7.83	7.92	116.77	2,358.06	-1,149.97	2,645.64	2,629.90	15.74	168.061		
1,800.00	1,798.93	1,834.16	1,811.13	8.23	8.31	116.83	2,357.58	-1,150.22	2,647.12	2,630.58	16.54	160.077		
1,900.00	1,898.85	1,941.13	1,918.09	8.64	8.73	116.91	2,356.63	-1,150.37	2,648.17	2,630.81	17.36	152.504		
2,000.00	1,998.77	2,033.83	2,010.78	9.05	9.10	116.96	2,355.86	-1,150.87	2,649.46	2,631.32	18.14	146.039		
2,100.00	2,098.69	2,139.19	2,116.14	9.46	9.52	117.03	2,355.04	-1,151.32	2,650.76	2,631.79	18.98	139.690		
2,200.00	2,198.61	2,242.04	2,218.99	9.88	9.94	117.09	2,354.03	-1,151.57	2,651.79	2,631.99	19.81	133.894		
2,300.00	2,298.53	2,338.68	2,315.63	10.30	10.33	117.15	2,353.13	-1,151.98	2,652.96	2,632.34	20.61	128.702		
2,400.00	2,398.45	2,438.75	2,415.68	10.72	10.74	117.20	2,352.07	-1,152.68	2,654.12	2,632.68	21.44	123.799		
2,500.00	2,498.37	2,535.78	2,512.71	11.14	11.13	117.25	2,351.03	-1,153.58	2,655.36	2,633.11	22.26	119.313		
2,600.00	2,598.29	2,631.00	2,607.91	11.56	11.52	117.30	2,350.11	-1,154.51	2,656.73	2,633.66	23.07	115.174		
2,700.00	2,698.21	2,722.13	2,699.04	11.98	11.90	117.35	2,349.55	-1,155.28	2,658.37	2,634.50	23.86	111.398		
2,800.00	2,798.13	2,812.83	2,789.74	12.41	12.27	117.40	2,349.32	-1,156.18	2,660.39	2,635.73	24.66	107.883		
2,900.00	2,898.05	2,915.95	2,892.85	12.84	12.69	117.45	2,349.11	-1,157.24	2,662.48	2,636.97	25.51	104.369		
3,000.00	2,997.97	3,014.42	2,991.31	13.27	13.10	117.50	2,348.73	-1,158.63	2,664.56	2,638.21	26.34	101.146		
3,100.00	3,097.89	3,113.26	3,090.14	13.69	13.51	117.54	2,348.31	-1,160.18	2,666.66	2,639.48	27.18	98.110		
3,200.00	3,197.81	3,206.11	3,182.97	14.12	13.90	117.58	2,347.99	-1,161.84	2,668.95	2,640.95	27.99	95.343		
3,300.00	3,297.73	3,300.22	3,277.06	14.56	14.29	117.60	2,347.73	-1,163.96	2,671.47	2,642.66	28.81	92.718		
3,400.00	3,397.65	3,398.69	3,375.50	14.99	14.70	117.63	2,347.50	-1,166.40	2,674.14	2,644.48	29.65	90.181		
3,500.00	3,497.56	3,505.58	3,482.35	15.42	15.15	117.66	2,347.18	-1,168.92	2,676.70	2,646.17	30.53	87.672		
3,600.00	3,597.48	3,599.82	3,576.58	15.85	15.54	117.69	2,346.96	-1,171.02	2,679.25	2,647.90	31.35	85.449		
3,700.00	3,697.40	3,736.07	3,712.78	16.28	16.11	117.72	2,345.60	-1,174.06	2,681.08	2,648.72	32.36	82.847		
3,800.00	3,797.32	3,843.98	3,820.65	16.72	16.57	117.74	2,343.70	-1,176.29	2,682.18	2,648.93	33.25	80.672		
3,900.00	3,897.24	3,944.46	3,921.09	17.15	16.99	117.76	2,341.82	-1,178.29	2,683.15	2,649.05	34.10	78.677		
4,000.00	3,997.16	4,044.47	4,021.07	17.59	17.41	117.78	2,339.91	-1,180.43	2,684.15	2,649.19	34.96	76.782		
4,100.00	4,097.08	4,146.28	4,122.83	18.02	17.84	117.80	2,337.90	-1,182.63	2,685.09	2,649.27	35.82	74.959		
4,200.00	4,197.00	4,248.21	4,224.72	18.46	18.27	117.81	2,335.83	-1,184.78	2,685.98	2,649.29	36.68	73.217		
4,300.00	4,296.92	4,348.71	4,325.17	18.89	18.69	117.83	2,333.75	-1,186.85	2,686.79	2,649.25	37.54	71.564		
4,400.00	4,396.84	4,448.53	4,424.95	19.33	19.11	117.85	2,331.69	-1,188.93	2,687.63	2,649.23	38.40	69.990		
4,500.00	4,496.76	4,549.77	4,526.14	19.77	19.54	117.86	2,329.52	-1,191.16	2,688.44	2,649.17	39.26	68.472		
4,600.00	4,596.68	4,649.30	4,625.62	20.20	19.96	117.88	2,327.35	-1,193.36	2,689.21	2,649.09	40.12	67.030		
4,700.00	4,696.60	4,756.64	4,732.91	20.64	20.42	117.89	2,324.97	-1,195.73	2,689.97	2,648.96	41.01	65.594		
4,800.00	4,796.52	4,865.11	4,841.32	21.08	20.88	117.91	2,322.12	-1,197.96	2,690.27	2,648.37	41.90	64.201		
4,900.00	4,896.44	4,962.72	4,938.87	21.51	21.29	117.92	2,319.49	-1,199.91	2,690.50	2,647.74	42.75	62.929		
5,000.00	4,996.36	5,058.77	5,034.88	21.95	21.70	117.93	2,317.10	-1,201.77	2,690.88	2,647.28	43.60	61.720		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,096.28	5,153.43	5,129.50	22.39	22.10	117.95	2,314.94	-1,203.49	2,691.41	2,646.98	44.44	60.568		
5,200.00	5,196.19	5,247.60	5,223.64	22.83	22.50	117.97	2,313.03	-1,205.20	2,692.18	2,646.91	45.27	59.467		
5,300.00	5,296.11	5,341.98	5,317.98	23.27	22.90	118.00	2,311.38	-1,206.78	2,693.14	2,647.03	46.11	58.409		
5,400.00	5,396.03	5,437.65	5,413.64	23.71	23.30	118.04	2,310.16	-1,207.90	2,694.32	2,647.37	46.95	57.387		
5,500.00	5,495.95	5,534.92	5,510.90	24.14	23.72	118.08	2,309.00	-1,208.99	2,695.58	2,647.78	47.80	56.394		
5,600.00	5,595.87	5,626.60	5,602.57	24.58	24.11	118.12	2,308.07	-1,210.15	2,697.05	2,648.42	48.62	55.468		
5,700.00	5,695.79	5,723.32	5,699.28	25.02	24.52	118.17	2,307.62	-1,211.04	2,698.88	2,649.41	49.47	54.556		
5,800.00	5,795.71	5,843.88	5,819.84	25.46	25.03	118.26	2,306.79	-1,210.99	2,700.10	2,649.68	50.42	53.552		
5,900.00	5,895.63	5,947.82	5,923.77	25.90	25.47	118.33	2,305.84	-1,210.74	2,701.07	2,649.78	51.30	52.653		
6,000.00	5,995.55	6,104.31	6,080.23	26.34	26.13	118.47	2,303.68	-1,208.57	2,701.32	2,648.93	52.39	51.561		
6,100.00	6,095.47	6,212.65	6,188.50	26.78	26.59	118.58	2,301.07	-1,206.04	2,700.10	2,646.82	53.29	50.672		
6,200.00	6,195.39	6,358.42	6,334.10	27.22	27.22	118.74	2,295.63	-1,201.37	2,697.15	2,642.84	54.32	49.657		
6,300.00	6,295.31	6,433.32	6,408.91	27.66	27.54	118.80	2,292.40	-1,199.60	2,694.24	2,639.15	55.09	48.906		
6,400.00	6,395.23	6,500.00	6,475.55	28.10	27.82	118.85	2,290.28	-1,198.83	2,692.72	2,636.90	55.83	48.233		
6,500.00	6,495.02	6,560.70	6,536.23	28.54	28.08	83.38	2,289.04	-1,198.60	2,691.65	2,635.12	56.53	47.612		
6,600.00	6,593.09	6,638.08	6,613.61	28.98	28.41	75.04	2,288.17	-1,198.63	2,686.33	2,629.03	57.30	46.883		
6,700.00	6,687.01	6,723.62	6,699.14	29.41	28.77	74.10	2,287.48	-1,198.92	2,675.89	2,617.80	58.09	46.061		
6,800.00	6,774.46	6,801.57	6,777.09	29.83	29.10	75.07	2,287.04	-1,199.47	2,660.97	2,602.11	58.86	45.209		
6,900.00	6,853.31	6,860.17	6,835.69	30.26	29.35	76.82	2,286.98	-1,200.12	2,642.71	2,583.15	59.56	44.371		
7,000.00	6,921.60	6,916.59	6,892.10	30.76	29.59	79.15	2,287.29	-1,200.94	2,622.31	2,561.99	60.31	43.478		
7,100.00	6,977.66	6,977.12	6,952.62	31.38	29.85	81.98	2,287.68	-1,201.80	2,600.60	2,539.40	61.20	42.494		
7,200.00	7,020.10	7,021.32	6,996.82	32.17	30.03	84.71	2,287.94	-1,202.38	2,578.82	2,516.65	62.17	41.482		
7,300.00	7,047.88	7,049.49	7,024.99	33.13	30.15	87.11	2,288.12	-1,202.74	2,558.29	2,495.05	63.25	40.449		
7,400.00	7,060.32	7,062.79	7,038.29	34.27	30.21	89.04	2,288.20	-1,202.91	2,540.06	2,475.62	64.44	39.418		
7,500.00	7,060.70	7,064.40	7,039.90	35.56	30.22	89.56	2,288.21	-1,202.93	2,524.98	2,459.24	65.74	38.409		
7,600.00	7,060.27	7,065.22	7,040.71	37.02	30.22	89.58	2,288.22	-1,202.94	2,513.77	2,446.55	67.22	37.398		
7,700.00	7,059.83	7,066.03	7,041.53	38.64	30.22	89.59	2,288.23	-1,202.95	2,506.49	2,437.64	68.85	36.407		
7,800.00	7,059.40	7,066.84	7,042.34	40.40	30.23	89.61	2,288.23	-1,202.96	2,503.19	2,432.59	70.60	35.456		
7,832.66	7,059.26	7,067.11	7,042.61	41.02	30.23	89.62	2,288.23	-1,202.97	2,502.98	2,431.77	71.21	35.151 CC		
7,900.00	7,058.97	7,067.66	7,043.15	42.28	30.23	89.63	2,288.24	-1,202.97	2,503.88	2,431.44	72.45	34.562 ES		
8,000.00	7,058.53	7,068.47	7,043.97	44.27	30.23	89.65	2,288.24	-1,202.99	2,508.56	2,434.21	74.36	33.736		
8,100.00	7,058.10	7,069.28	7,044.78	46.35	30.24	89.67	2,288.25	-1,203.00	2,517.21	2,440.90	76.31	32.987		
8,200.00	7,057.66	7,070.10	7,045.59	48.50	30.24	89.69	2,288.25	-1,203.01	2,529.79	2,451.51	78.27	32.320		
8,300.00	7,057.23	7,070.91	7,046.40	50.73	30.24	89.71	2,288.26	-1,203.02	2,546.23	2,466.00	80.23	31.736		
8,400.00	7,056.80	7,071.72	7,047.22	53.02	30.25	89.72	2,288.26	-1,203.03	2,566.46	2,484.30	82.16	31.236		
8,500.00	7,056.36	7,072.53	7,048.03	55.36	30.25	89.74	2,288.27	-1,203.04	2,590.41	2,506.35	84.06	30.817		
8,600.00	7,055.93	7,073.34	7,048.84	57.74	30.25	89.76	2,288.27	-1,203.05	2,617.95	2,532.05	85.90	30.478		
8,700.00	7,055.49	7,074.15	7,049.65	60.17	30.26	89.78	2,288.28	-1,203.06	2,648.98	2,561.31	87.67	30.215		
8,800.00	7,055.06	7,074.97	7,050.46	62.63	30.26	89.80	2,288.28	-1,203.07	2,683.39	2,594.01	89.37	30.024		
8,900.00	7,054.63	7,075.78	7,051.27	65.13	30.27	89.82	2,288.29	-1,203.08	2,721.03	2,630.03	91.00	29.902		
9,000.00	7,054.19	7,076.59	7,052.08	67.66	30.27	89.84	2,288.29	-1,203.09	2,761.79	2,669.25	92.54	29.843 SF		
9,100.00	7,053.76	7,077.39	7,052.89	70.21	30.27	89.85	2,288.30	-1,203.10	2,805.52	2,711.51	94.00	29.845		
9,200.00	7,053.32	7,078.20	7,053.70	72.78	30.28	89.87	2,288.31	-1,203.11	2,852.08	2,756.70	95.38	29.902		
9,300.00	7,052.89	7,079.01	7,054.51	75.38	30.28	89.89	2,288.31	-1,203.12	2,901.35	2,804.67	96.67	30.012		
9,400.00	7,052.46	7,079.82	7,055.31	77.99	30.28	89.91	2,288.32	-1,203.13	2,953.18	2,855.29	97.89	30.170		
9,500.00	7,052.02	7,080.63	7,056.12	80.62	30.29	89.93	2,288.32	-1,203.14	3,007.44	2,908.43	99.02	30.373		
9,600.00	7,051.59	7,081.44	7,056.93	83.26	30.29	89.95	2,288.33	-1,203.15	3,064.01	2,963.94	100.07	30.618		
9,700.00	7,051.15	7,082.24	7,057.74	85.92	30.29	89.97	2,288.33	-1,203.16	3,122.76	3,021.70	101.06	30.901		
9,800.00	7,050.72	7,083.05	7,058.54	88.59	30.30	89.98	2,288.34	-1,203.17	3,183.56	3,081.59	101.97	31.221		
9,900.00	7,050.29	7,083.86	7,059.35	91.28	30.30	90.00	2,288.34	-1,203.18	3,246.30	3,143.49	102.81	31.574		
10,000.00	7,049.85	7,084.66	7,060.16	93.97	30.30	90.02	2,288.35	-1,203.19	3,310.88	3,207.28	103.60	31.958		
10,100.00	7,049.42	7,085.47	7,060.96	96.67	30.31	90.04	2,288.35	-1,203.20	3,377.18	3,272.86	104.33	32.371		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.98	7,086.27	7,061.77	99.38	30.31	90.06	2,288.36	-1,203.21	3,445.11	3,340.11	105.00	32.811	
10,300.00	7,048.55	7,087.08	7,062.57	102.10	30.31	90.08	2,288.37	-1,203.22	3,514.57	3,408.96	105.62	33.276	
10,400.00	7,048.12	7,087.88	7,063.38	104.83	30.32	90.09	2,288.37	-1,203.23	3,585.48	3,479.29	106.19	33.764	
10,500.00	7,047.68	7,088.69	7,064.18	107.56	30.32	90.11	2,288.38	-1,203.24	3,657.75	3,551.02	106.72	34.273	
10,600.00	7,047.25	7,089.49	7,064.99	110.30	30.32	90.13	2,288.38	-1,203.25	3,731.29	3,624.08	107.21	34.803	
10,700.00	7,046.81	7,090.30	7,065.79	113.05	30.33	90.15	2,288.39	-1,203.26	3,806.04	3,698.38	107.66	35.351	
10,800.00	7,046.38	7,091.10	7,066.59	115.80	30.33	90.17	2,288.39	-1,203.27	3,881.93	3,773.85	108.08	35.917	
10,900.00	7,045.95	7,091.90	7,067.40	118.55	30.33	90.19	2,288.40	-1,203.28	3,958.89	3,850.42	108.47	36.499	
11,000.00	7,045.51	7,092.71	7,068.20	121.31	30.34	90.20	2,288.40	-1,203.29	4,036.86	3,928.04	108.82	37.096	
11,100.00	7,045.08	7,093.51	7,069.00	124.08	30.34	90.22	2,288.41	-1,203.30	4,115.78	4,006.63	109.15	37.708	
11,200.00	7,044.64	7,094.31	7,069.80	126.85	30.34	90.24	2,288.42	-1,203.31	4,195.60	4,086.15	109.45	38.333	
11,300.00	7,044.21	7,095.11	7,070.60	129.62	30.35	90.26	2,288.42	-1,203.32	4,276.27	4,166.54	109.73	38.970	
11,400.00	7,043.78	7,095.91	7,071.41	132.40	30.35	90.28	2,288.43	-1,203.33	4,357.74	4,247.75	109.99	39.619	
11,500.00	7,043.34	7,096.71	7,072.21	135.18	30.35	90.30	2,288.43	-1,203.34	4,439.97	4,329.74	110.23	40.279	
11,600.00	7,042.91	7,097.52	7,073.01	137.96	30.36	90.31	2,288.44	-1,203.35	4,522.92	4,412.46	110.45	40.949	
11,700.00	7,042.47	7,098.32	7,073.81	140.75	30.36	90.33	2,288.44	-1,203.37	4,606.54	4,495.88	110.66	41.629	
11,800.00	7,042.04	7,099.12	7,074.61	143.54	30.36	90.35	2,288.45	-1,203.38	4,690.80	4,579.95	110.85	42.318	
11,900.00	7,041.61	7,099.92	7,075.41	146.33	30.37	90.37	2,288.45	-1,203.39	4,775.67	4,664.65	111.02	43.015	
12,000.00	7,041.17	7,100.71	7,076.21	149.13	30.37	90.39	2,288.46	-1,203.40	4,861.11	4,749.93	111.19	43.721	
12,100.00	7,040.74	7,101.51	7,077.00	151.92	30.37	90.41	2,288.47	-1,203.41	4,947.10	4,835.77	111.34	44.434	
12,200.00	7,040.30	7,102.31	7,077.80	154.72	30.38	90.42	2,288.47	-1,203.42	5,033.61	4,922.13	111.48	45.154	
12,300.00	7,039.87	7,103.11	7,078.60	157.52	30.38	90.44	2,288.48	-1,203.43	5,120.61	5,009.00	111.61	45.880	
12,400.00	7,039.44	7,103.91	7,079.40	160.33	30.38	90.46	2,288.48	-1,203.44	5,208.08	5,096.35	111.73	46.613	
12,500.00	7,039.00	7,104.71	7,080.20	163.13	30.39	90.48	2,288.49	-1,203.45	5,295.99	5,184.14	111.84	47.352	
12,600.00	7,038.57	7,105.50	7,080.99	165.94	30.39	90.50	2,288.49	-1,203.46	5,384.32	5,272.37	111.95	48.097	
12,700.00	7,038.13	7,106.30	7,081.79	168.75	30.39	90.52	2,288.50	-1,203.47	5,473.05	5,361.00	112.05	48.846	
12,800.00	7,037.70	7,107.10	7,082.59	171.56	30.40	90.53	2,288.50	-1,203.48	5,562.16	5,450.03	112.14	49.601	
12,900.00	7,037.27	7,106.35	7,081.85	174.37	30.39	90.52	2,288.50	-1,203.47	5,651.64	5,539.43	112.22	50.364	
13,000.00	7,036.83	7,106.97	7,082.46	177.19	30.40	90.53	2,288.50	-1,203.47	5,741.47	5,629.17	112.30	51.128	
13,100.00	7,036.40	7,107.58	7,083.07	180.00	30.40	90.55	2,288.51	-1,203.48	5,831.63	5,719.26	112.37	51.896	
13,200.00	7,035.96	7,108.19	7,083.68	182.82	30.40	90.56	2,288.51	-1,203.49	5,922.10	5,809.66	112.44	52.669	
13,300.00	7,035.53	7,108.79	7,084.28	185.64	30.41	90.57	2,288.52	-1,203.50	6,012.88	5,900.37	112.51	53.445	
13,400.00	7,035.10	7,109.39	7,084.88	188.46	30.41	90.59	2,288.52	-1,203.50	6,103.94	5,991.37	112.57	54.224	
13,500.00	7,034.66	7,109.98	7,085.47	191.28	30.41	90.60	2,288.53	-1,203.51	6,195.28	6,082.65	112.63	55.007	
13,600.00	7,034.23	7,110.57	7,086.06	194.10	30.41	90.61	2,288.53	-1,203.52	6,286.88	6,174.20	112.68	55.793	
13,700.00	7,033.79	7,111.15	7,086.64	196.92	30.42	90.63	2,288.53	-1,203.52	6,378.74	6,266.00	112.73	56.582	
13,800.00	7,033.36	7,111.73	7,087.22	199.74	30.42	90.64	2,288.54	-1,203.53	6,470.83	6,358.05	112.78	57.374	
13,900.00	7,032.93	7,112.31	7,087.80	202.57	30.42	90.65	2,288.54	-1,203.54	6,563.16	6,450.33	112.83	58.168	
14,000.00	7,032.49	7,112.88	7,088.37	205.39	30.42	90.67	2,288.55	-1,203.55	6,655.71	6,542.83	112.87	58.965	
14,100.00	7,032.06	7,113.45	7,088.94	208.22	30.42	90.68	2,288.55	-1,203.55	6,748.47	6,635.55	112.92	59.765	
14,200.00	7,031.62	7,114.01	7,089.50	211.05	30.43	90.69	2,288.55	-1,203.56	6,841.44	6,728.48	112.96	60.566	
14,300.00	7,031.19	7,114.57	7,090.06	213.87	30.43	90.70	2,288.56	-1,203.57	6,934.60	6,821.60	113.00	61.369	
14,400.00	7,030.76	7,115.12	7,090.61	216.70	30.43	90.72	2,288.56	-1,203.57	7,027.95	6,914.91	113.04	62.175	
14,500.00	7,030.32	7,115.67	7,091.16	219.53	30.43	90.73	2,288.57	-1,203.58	7,121.47	7,008.40	113.07	62.982	
14,600.00	7,029.89	7,116.22	7,091.71	222.36	30.44	90.74	2,288.57	-1,203.59	7,215.18	7,102.07	113.11	63.791	
14,700.00	7,029.45	7,116.76	7,092.25	225.19	30.44	90.76	2,288.57	-1,203.59	7,309.05	7,195.91	113.14	64.602	
14,800.00	7,029.02	7,117.30	7,092.79	228.03	30.44	90.77	2,288.58	-1,203.60	7,403.08	7,289.90	113.17	65.414	
14,805.04	7,029.00	7,117.33	7,092.82	228.17	30.44	90.77	2,288.58	-1,203.60	7,407.82	7,294.65	113.17	65.455	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	21.00	3.28	3.28	-66.43	945.10	-2,166.34	2,363.61					
100.00	100.00	79.00	100.00	3.28	3.56	-66.43	945.10	-2,166.34	2,363.52	2,356.68	6.84	345.403		
200.00	200.00	179.00	200.00	3.34	5.57	-66.43	945.10	-2,166.34	2,363.52	2,354.61	8.91	265.317		
300.00	300.00	279.00	300.00	3.44	8.64	-66.43	945.10	-2,166.34	2,363.52	2,351.43	12.09	195.558		
400.00	400.00	379.00	400.00	3.60	11.94	-66.43	945.10	-2,166.34	2,363.52	2,347.97	15.55	152.015		
500.00	499.98	478.98	499.98	3.80	15.33	75.42	945.10	-2,166.34	2,363.08	2,343.95	19.13	123.544		
600.00	599.90	578.90	599.90	4.02	18.75	75.52	945.10	-2,166.34	2,362.08	2,339.31	22.77	103.719		
700.00	699.82	678.82	699.82	4.28	22.20	75.61	945.10	-2,166.34	2,361.08	2,334.60	26.47	89.182		
800.00	799.74	778.74	799.74	4.57	25.65	75.70	945.10	-2,166.34	2,360.08	2,329.87	30.22	78.106		
900.00	899.66	878.66	899.66	4.88	29.11	75.80	945.10	-2,166.34	2,359.10	2,325.11	33.99	69.406		
1,000.00	999.58	978.58	999.58	5.21	32.58	75.89	945.10	-2,166.34	2,358.11	2,320.33	37.79	62.405		
1,100.00	1,099.50	1,078.50	1,099.50	5.55	36.05	75.99	945.10	-2,166.34	2,357.14	2,315.53	41.60	56.655		
1,200.00	1,199.42	1,178.42	1,199.42	5.91	39.53	76.08	945.10	-2,166.34	2,356.17	2,310.73	45.44	51.854		
1,300.00	1,299.34	1,278.34	1,299.34	6.28	43.01	76.18	945.10	-2,166.34	2,355.21	2,305.92	49.28	47.788		
1,400.00	1,399.26	1,378.26	1,399.26	6.66	46.49	76.27	945.10	-2,166.34	2,354.25	2,301.11	53.14	44.302		
1,500.00	1,499.18	1,478.18	1,499.18	7.04	49.97	76.37	945.10	-2,166.34	2,353.30	2,296.29	57.01	41.281		
1,600.00	1,599.10	1,578.10	1,599.10	7.43	53.45	76.46	945.10	-2,166.34	2,352.36	2,291.48	60.88	38.639		
1,700.00	1,699.01	1,678.01	1,699.01	7.83	56.93	76.56	945.10	-2,166.34	2,351.42	2,286.66	64.76	36.310		
1,800.00	1,798.93	1,777.93	1,798.93	8.23	60.41	76.65	945.10	-2,166.34	2,350.49	2,281.84	68.65	34.241		
1,900.00	1,898.85	1,877.85	1,898.85	8.64	63.89	76.75	945.10	-2,166.34	2,349.56	2,277.03	72.53	32.392		
2,000.00	1,998.77	1,977.77	1,998.77	9.05	67.38	76.84	945.10	-2,166.34	2,348.65	2,272.22	76.43	30.730		
2,100.00	2,098.69	2,077.69	2,098.69	9.46	70.86	76.94	945.10	-2,166.34	2,347.74	2,267.41	80.33	29.228		
2,200.00	2,198.61	2,177.61	2,198.61	9.88	74.35	77.03	945.10	-2,166.34	2,346.83	2,262.61	84.23	27.864		
2,300.00	2,298.53	2,277.53	2,298.53	10.30	77.83	77.13	945.10	-2,166.34	2,345.93	2,257.81	88.13	26.620		
2,400.00	2,398.45	2,377.45	2,398.45	10.72	81.32	77.22	945.10	-2,166.34	2,345.04	2,253.01	92.03	25.481		
2,500.00	2,498.37	2,477.37	2,498.37	11.14	84.80	77.32	945.10	-2,166.34	2,344.16	2,248.22	95.94	24.434		
2,600.00	2,598.29	2,577.29	2,598.29	11.56	88.29	77.41	945.10	-2,166.34	2,343.28	2,243.43	99.85	23.468		
2,700.00	2,698.21	2,677.21	2,698.21	11.98	91.77	77.51	945.10	-2,166.34	2,342.41	2,238.65	103.76	22.575		
2,800.00	2,798.13	2,777.13	2,798.13	12.41	95.26	77.61	945.10	-2,166.34	2,341.54	2,233.87	107.67	21.747		
2,900.00	2,898.05	2,877.05	2,898.05	12.84	98.75	77.70	945.10	-2,166.34	2,340.68	2,229.10	111.58	20.977		
3,000.00	2,997.97	2,976.97	2,997.97	13.27	102.23	77.80	945.10	-2,166.34	2,339.83	2,224.33	115.50	20.259		
3,100.00	3,097.89	3,076.89	3,097.89	13.69	105.72	77.89	945.10	-2,166.34	2,338.99	2,219.57	119.41	19.587		
3,200.00	3,197.81	3,176.81	3,197.81	14.12	109.21	77.99	945.10	-2,166.34	2,338.15	2,214.82	123.33	18.958		
3,300.00	3,297.73	3,276.73	3,297.73	14.56	112.69	78.09	945.10	-2,166.34	2,337.31	2,210.07	127.25	18.368		
3,400.00	3,397.65	3,376.65	3,397.65	14.99	116.18	78.18	945.10	-2,166.34	2,336.49	2,205.32	131.17	17.813		
3,500.00	3,497.56	3,476.56	3,497.56	15.42	119.67	78.28	945.10	-2,166.34	2,335.67	2,200.58	135.08	17.290		
3,600.00	3,597.48	3,576.48	3,597.48	15.85	123.15	78.37	945.10	-2,166.34	2,334.86	2,195.85	139.00	16.797		
3,700.00	3,697.40	3,676.40	3,697.40	16.28	126.64	78.47	945.10	-2,166.34	2,334.05	2,191.13	142.92	16.331		
3,800.00	3,797.32	3,776.32	3,797.32	16.72	130.13	78.57	945.10	-2,166.34	2,333.25	2,186.41	146.85	15.889		
3,900.00	3,897.24	3,876.24	3,897.24	17.15	133.61	78.66	945.10	-2,166.34	2,332.46	2,181.69	150.77	15.471		
4,000.00	3,997.16	3,976.16	3,997.16	17.59	137.10	78.76	945.10	-2,166.34	2,331.67	2,176.98	154.69	15.073		
4,100.00	4,097.08	4,076.08	4,097.08	18.02	140.59	78.86	945.10	-2,166.34	2,330.89	2,172.28	158.61	14.696		
4,200.00	4,197.00	4,176.00	4,197.00	18.46	144.08	78.95	945.10	-2,166.34	2,330.12	2,167.59	162.53	14.336		
4,300.00	4,296.92	4,275.92	4,296.92	18.89	147.56	79.05	945.10	-2,166.34	2,329.35	2,162.90	166.46	13.994		
4,400.00	4,396.84	4,375.84	4,396.84	19.33	151.05	79.15	945.10	-2,166.34	2,328.59	2,158.21	170.38	13.667		
4,500.00	4,496.76	4,475.76	4,496.76	19.77	154.54	79.25	945.10	-2,166.34	2,327.84	2,153.54	174.30	13.355		
4,600.00	4,596.68	4,575.68	4,596.68	20.20	158.03	79.34	945.10	-2,166.34	2,327.09	2,148.87	178.23	13.057		
4,700.00	4,696.60	4,675.60	4,696.60	20.64	161.51	79.44	945.10	-2,166.34	2,326.36	2,144.20	182.15	12.771		
4,800.00	4,796.52	4,775.52	4,796.52	21.08	165.00	79.54	945.10	-2,166.34	2,325.62	2,139.54	186.08	12.498		
4,900.00	4,896.44	4,875.44	4,896.44	21.51	168.49	79.63	945.10	-2,166.34	2,324.90	2,134.89	190.00	12.236		
5,000.00	4,996.36	4,975.36	4,996.36	21.95	171.98	79.73	945.10	-2,166.34	2,324.18	2,130.25	193.93	11.985		
5,100.00	5,096.28	5,075.28	5,096.28	22.39	175.46	79.83	945.10	-2,166.34	2,323.46	2,125.61	197.85	11.743		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	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	5,196.19	5,175.19	5,196.19	22.83	178.95	79.93	945.10	-2,166.34	2,322.76	2,120.98	201.78	11.511	
5,300.00	5,296.11	5,275.11	5,296.11	23.27	182.44	80.02	945.10	-2,166.34	2,322.06	2,116.35	205.71	11.288	
5,400.00	5,396.03	5,375.03	5,396.03	23.71	185.93	80.12	945.10	-2,166.34	2,321.37	2,111.74	209.63	11.074	
5,500.00	5,495.95	5,474.95	5,495.95	24.14	189.41	80.22	945.10	-2,166.34	2,320.68	2,107.12	213.56	10.867	
5,600.00	5,595.87	5,574.87	5,595.87	24.58	192.90	80.32	945.10	-2,166.34	2,320.00	2,102.52	217.48	10.667	
5,700.00	5,695.79	5,674.79	5,695.79	25.02	196.39	80.41	945.10	-2,166.34	2,319.33	2,097.92	221.41	10.475	
5,800.00	5,795.71	5,774.71	5,795.71	25.46	199.88	80.51	945.10	-2,166.34	2,318.66	2,093.33	225.34	10.290	
5,900.00	5,895.63	5,874.63	5,895.63	25.90	203.36	80.61	945.10	-2,166.34	2,318.01	2,088.74	229.27	10.111	
6,000.00	5,995.55	5,974.55	5,995.55	26.34	206.85	80.71	945.10	-2,166.34	2,317.35	2,084.16	233.19	9.938	
6,100.00	6,095.47	6,074.47	6,095.47	26.78	210.34	80.80	945.10	-2,166.34	2,316.71	2,079.59	237.12	9.770	
6,200.00	6,195.39	6,174.39	6,195.39	27.22	213.83	80.90	945.10	-2,166.34	2,316.07	2,075.02	241.05	9.608	
6,300.00	6,295.31	6,274.31	6,295.31	27.66	217.32	81.00	945.10	-2,166.34	2,315.44	2,070.46	244.97	9.452	
6,400.00	6,395.23	6,374.23	6,395.23	28.10	220.80	81.10	945.10	-2,166.34	2,314.81	2,065.91	248.90	9.300	
6,500.00	6,495.02	6,474.02	6,495.02	28.54	224.29	45.72	945.10	-2,166.34	2,312.17	2,059.34	252.83	9.145	
6,600.00	6,593.09	6,572.09	6,593.09	28.98	227.71	37.61	945.10	-2,166.34	2,297.41	2,040.72	256.69	8.950	
6,700.00	6,687.01	6,666.01	6,687.01	29.41	230.99	37.07	945.10	-2,166.34	2,269.62	2,009.23	260.40	8.716	
6,800.00	6,774.46	6,753.46	6,774.46	29.83	234.04	38.92	945.10	-2,166.34	2,229.68	1,965.82	263.86	8.450	
6,900.00	6,853.31	6,832.31	6,853.31	30.26	236.79	42.52	945.10	-2,166.34	2,178.83	1,911.83	267.01	8.160	
7,000.00	6,921.60	6,900.60	6,921.60	30.76	239.18	47.94	945.10	-2,166.34	2,118.66	1,848.88	269.78	7.853	
7,100.00	6,977.66	6,956.66	6,977.66	31.38	241.13	55.34	945.10	-2,166.34	2,051.02	1,778.88	272.14	7.537	
7,200.00	7,020.10	7,000.90	7,020.10	32.17	242.68	64.72	945.10	-2,166.34	1,977.99	1,703.86	274.13	7.216	
7,300.00	7,047.88	7,026.88	7,047.88	33.13	243.59	75.59	945.10	-2,166.34	1,901.80	1,626.24	275.56	6.902	
7,400.00	7,060.32	7,039.32	7,060.32	34.27	244.02	86.82	945.10	-2,166.34	1,824.73	1,548.10	276.63	6.596	
7,500.00	7,060.70	7,039.70	7,060.70	35.56	244.03	90.28	945.10	-2,166.34	1,748.98	1,471.56	277.42	6.304	
7,600.00	7,060.27	7,039.27	7,060.27	37.02	244.02	90.26	945.10	-2,166.34	1,675.75	1,397.35	278.40	6.019	
7,700.00	7,059.83	7,038.83	7,059.83	38.64	244.00	90.24	945.10	-2,166.34	1,605.41	1,325.80	279.61	5.742	
7,800.00	7,059.40	7,038.40	7,059.40	40.40	243.99	90.21	945.10	-2,166.34	1,538.36	1,257.28	281.09	5.473	
7,900.00	7,058.97	7,037.97	7,058.97	42.28	243.97	90.19	945.10	-2,166.34	1,475.05	1,192.22	282.83	5.215	
8,000.00	7,058.53	7,037.53	7,058.53	44.27	243.96	90.17	945.10	-2,166.34	1,415.97	1,131.12	284.85	4.971	
8,100.00	7,058.10	7,037.10	7,058.10	46.35	243.94	90.15	945.10	-2,166.34	1,361.68	1,074.54	287.14	4.742	
8,200.00	7,057.66	7,036.66	7,057.66	48.50	243.93	90.13	945.10	-2,166.34	1,312.77	1,023.09	289.68	4.532	
8,300.00	7,057.23	7,036.23	7,057.23	50.73	243.91	90.11	945.10	-2,166.34	1,269.87	977.45	292.42	4.343	
8,400.00	7,056.80	7,035.80	7,056.80	53.02	243.90	90.09	945.10	-2,166.34	1,233.61	938.30	295.31	4.177	
8,500.00	7,056.36	7,035.36	7,056.36	55.36	243.88	90.06	945.10	-2,166.34	1,204.57	906.32	298.25	4.039	
8,600.00	7,055.93	7,034.93	7,055.93	57.74	243.87	90.04	945.10	-2,166.34	1,183.30	882.14	301.15	3.929	
8,700.00	7,055.49	7,034.49	7,055.49	60.17	243.85	90.02	945.10	-2,166.34	1,170.21	866.29	303.92	3.850	
8,800.00	7,055.06	7,034.06	7,055.06	62.63	243.84	90.00	945.10	-2,166.34	1,165.59	859.12	306.46	3.803	
8,803.99	7,055.04	7,034.04	7,055.04	62.73	243.84	90.00	945.10	-2,166.34	1,165.58	859.02	306.56	3.802 CC, ES	
8,900.00	7,054.63	7,033.63	7,054.63	65.13	243.82	89.98	945.10	-2,166.34	1,169.53	860.84	308.69	3.789 SF	
9,000.00	7,054.19	7,033.19	7,054.19	67.66	243.81	89.96	945.10	-2,166.34	1,181.95	871.40	310.55	3.806	
9,100.00	7,053.76	7,032.76	7,053.76	70.21	243.79	89.94	945.10	-2,166.34	1,202.58	890.57	312.01	3.854	
9,200.00	7,053.32	7,032.32	7,053.32	72.78	243.78	89.92	945.10	-2,166.34	1,231.02	917.94	313.08	3.932	
9,300.00	7,052.89	7,031.89	7,052.89	75.38	243.76	89.89	945.10	-2,166.34	1,266.73	952.95	313.78	4.037	
9,400.00	7,052.46	7,031.46	7,052.46	77.99	243.75	89.87	945.10	-2,166.34	1,309.12	994.97	314.15	4.167	
9,500.00	7,052.02	7,031.02	7,052.02	80.62	243.73	89.85	945.10	-2,166.34	1,357.57	1,043.32	314.25	4.320	
9,600.00	7,051.59	7,030.59	7,051.59	83.26	243.71	89.83	945.10	-2,166.34	1,411.45	1,097.33	314.12	4.493	
9,700.00	7,051.15	7,030.15	7,051.15	85.92	243.70	89.81	945.10	-2,166.34	1,470.17	1,156.34	313.82	4.685	
9,800.00	7,050.72	7,029.72	7,050.72	88.59	243.68	89.79	945.10	-2,166.34	1,533.16	1,219.77	313.39	4.892	
9,900.00	7,050.29	7,029.29	7,050.29	91.28	243.67	89.77	945.10	-2,166.34	1,599.93	1,287.07	312.87	5.114	
10,000.00	7,049.85	7,028.85	7,049.85	93.97	243.65	89.74	945.10	-2,166.34	1,670.03	1,357.75	312.28	5.348	
10,100.00	7,049.42	7,028.42	7,049.42	96.67	243.64	89.72	945.10	-2,166.34	1,743.04	1,431.39	311.65	5.593	
10,200.00	7,048.98	7,027.98	7,048.98	99.38	243.62	89.70	945.10	-2,166.34	1,818.62	1,507.62	311.00	5.848	

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,048.55	7,027.55	7,048.55	102.10	243.61	89.68	945.10	-2,166.34	1,896.46	1,586.13	310.34	6.111		
10,400.00	7,048.12	7,027.12	7,048.12	104.83	243.59	89.66	945.10	-2,166.34	1,976.30	1,666.62	309.68	6.382		
10,500.00	7,047.68	7,026.68	7,047.68	107.56	243.58	89.64	945.10	-2,166.34	2,057.90	1,748.86	309.04	6.659		
10,600.00	7,047.25	7,026.25	7,047.25	110.30	243.56	89.62	945.10	-2,166.34	2,141.07	1,832.65	308.41	6.942		
10,700.00	7,046.81	7,025.81	7,046.81	113.05	243.55	89.60	945.10	-2,166.34	2,225.61	1,917.81	307.81	7.231		
10,800.00	7,046.38	7,025.38	7,046.38	115.80	243.53	89.57	945.10	-2,166.34	2,311.40	2,004.18	307.22	7.524		
10,900.00	7,045.95	7,024.95	7,045.95	118.55	243.52	89.55	945.10	-2,166.34	2,398.28	2,091.62	306.66	7.821		
11,000.00	7,045.51	7,024.51	7,045.51	121.31	243.50	89.53	945.10	-2,166.34	2,486.15	2,180.03	306.12	8.121		
11,100.00	7,045.08	7,024.08	7,045.08	124.08	243.49	89.51	945.10	-2,166.34	2,574.90	2,269.30	305.61	8.426		
11,200.00	7,044.64	7,023.64	7,044.64	126.85	243.47	89.49	945.10	-2,166.34	2,664.46	2,359.34	305.12	8.733		
11,300.00	7,044.21	7,023.21	7,044.21	129.62	243.46	89.47	945.10	-2,166.34	2,754.73	2,450.07	304.65	9.042		
11,400.00	7,043.78	7,022.78	7,043.78	132.40	243.44	89.45	945.10	-2,166.34	2,845.65	2,541.44	304.21	9.354		
11,500.00	7,043.34	7,022.34	7,043.34	135.18	243.43	89.42	945.10	-2,166.34	2,937.16	2,633.37	303.79	9.668		
11,600.00	7,042.91	7,021.91	7,042.91	137.96	243.41	89.40	945.10	-2,166.34	3,029.21	2,725.82	303.39	9.985		
11,700.00	7,042.47	7,021.47	7,042.47	140.75	243.40	89.38	945.10	-2,166.34	3,121.74	2,818.74	303.00	10.303		
11,800.00	7,042.04	7,021.04	7,042.04	143.54	243.38	89.36	945.10	-2,166.34	3,214.73	2,912.09	302.64	10.622		
11,900.00	7,041.61	7,020.61	7,041.61	146.33	243.37	89.34	945.10	-2,166.34	3,308.12	3,005.82	302.30	10.943		
12,000.00	7,041.17	7,020.17	7,041.17	149.13	243.35	89.32	945.10	-2,166.34	3,401.89	3,099.92	301.97	11.266		
12,100.00	7,040.74	7,019.74	7,040.74	151.92	243.34	89.30	945.10	-2,166.34	3,496.00	3,194.34	301.66	11.589		
12,200.00	7,040.30	7,019.30	7,040.30	154.72	243.32	89.28	945.10	-2,166.34	3,590.44	3,289.07	301.36	11.914		
12,300.00	7,039.87	7,018.87	7,039.87	157.52	243.31	89.25	945.10	-2,166.34	3,685.16	3,384.08	301.08	12.240		
12,400.00	7,039.44	7,018.44	7,039.44	160.33	243.29	89.23	945.10	-2,166.34	3,780.16	3,479.34	300.82	12.566		
12,500.00	7,039.00	7,018.00	7,039.00	163.13	243.28	89.21	945.10	-2,166.34	3,875.41	3,574.85	300.56	12.894		
12,600.00	7,038.57	7,017.57	7,038.57	165.94	243.26	89.19	945.10	-2,166.34	3,970.89	3,670.57	300.32	13.222		
12,700.00	7,038.13	7,017.13	7,038.13	168.75	243.25	89.17	945.10	-2,166.34	4,066.59	3,766.50	300.09	13.551		
12,800.00	7,037.70	7,016.70	7,037.70	171.56	243.23	89.15	945.10	-2,166.34	4,162.49	3,862.62	299.88	13.881		
12,900.00	7,037.27	7,016.27	7,037.27	174.37	243.21	89.13	945.10	-2,166.34	4,258.59	3,958.92	299.67	14.211		
13,000.00	7,036.83	7,015.83	7,036.83	177.19	243.20	89.10	945.10	-2,166.34	4,354.85	4,055.38	299.47	14.542		
13,100.00	7,036.40	7,015.40	7,036.40	180.00	243.18	89.08	945.10	-2,166.34	4,451.28	4,152.00	299.28	14.873		
13,200.00	7,035.96	7,014.96	7,035.96	182.82	243.17	89.06	945.10	-2,166.34	4,547.87	4,248.76	299.10	15.205		
13,300.00	7,035.53	7,014.53	7,035.53	185.64	243.15	89.04	945.10	-2,166.34	4,644.60	4,345.66	298.93	15.537		
13,400.00	7,035.10	7,014.10	7,035.10	188.46	243.14	89.02	945.10	-2,166.34	4,741.46	4,442.69	298.77	15.870		
13,500.00	7,034.66	7,013.66	7,034.66	191.28	243.12	89.00	945.10	-2,166.34	4,838.46	4,539.84	298.62	16.203		
13,600.00	7,034.23	7,013.23	7,034.23	194.10	243.11	88.98	945.10	-2,166.34	4,935.57	4,637.10	298.47	16.536		
13,700.00	7,033.79	7,012.79	7,033.79	196.92	243.09	88.96	945.10	-2,166.34	5,032.80	4,734.46	298.33	16.870		
13,800.00	7,033.36	7,012.36	7,033.36	199.74	243.08	88.93	945.10	-2,166.34	5,130.13	4,831.93	298.20	17.204		
13,900.00	7,032.93	7,011.93	7,032.93	202.57	243.06	88.91	945.10	-2,166.34	5,227.56	4,929.49	298.07	17.538		
14,000.00	7,032.49	7,011.49	7,032.49	205.39	243.05	88.89	945.10	-2,166.34	5,325.09	5,027.13	297.96	17.872		
14,100.00	7,032.06	7,011.06	7,032.06	208.22	243.03	88.87	945.10	-2,166.34	5,422.71	5,124.87	297.84	18.207		
14,200.00	7,031.62	7,010.62	7,031.62	211.05	243.02	88.85	945.10	-2,166.34	5,520.41	5,222.68	297.73	18.541		
14,300.00	7,031.19	7,010.19	7,031.19	213.87	243.00	88.83	945.10	-2,166.34	5,618.20	5,320.56	297.63	18.876		
14,400.00	7,030.76	7,009.76	7,030.76	216.70	242.99	88.81	945.10	-2,166.34	5,716.06	5,418.52	297.53	19.211		
14,500.00	7,030.32	7,009.32	7,030.32	219.53	242.97	88.79	945.10	-2,166.34	5,813.99	5,516.55	297.44	19.547		
14,600.00	7,029.89	7,008.89	7,029.89	222.36	242.96	88.76	945.10	-2,166.34	5,911.99	5,614.64	297.36	19.882		
14,700.00	7,029.45	7,008.45	7,029.45	225.19	242.94	88.74	945.10	-2,166.34	6,010.06	5,712.79	297.27	20.217		
14,800.00	7,029.02	7,008.02	7,029.02	228.03	242.93	88.72	945.10	-2,166.34	6,108.19	5,811.00	297.20	20.553		
14,805.04	7,029.00	7,008.00	7,029.00	228.17	242.93	88.72	945.10	-2,166.34	6,113.14	5,815.95	297.19	20.570		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-98.70	-388.22	-2,536.38	2,566.17				
100.00	100.00	64.00	100.00	3.28	3.47	-98.70	-388.22	-2,536.38	2,565.92	2,559.17	6.75	380.151	
200.00	200.00	164.00	200.00	3.34	5.16	-98.70	-388.22	-2,536.38	2,565.92	2,557.43	8.49	302.078	
300.00	300.00	264.00	300.00	3.44	8.16	-98.70	-388.22	-2,536.38	2,565.92	2,554.32	11.60	221.124	
400.00	400.00	364.00	400.00	3.60	11.44	-98.70	-388.22	-2,536.38	2,565.92	2,550.88	15.05	170.546	
500.00	499.98	463.98	499.98	3.80	14.82	43.14	-388.22	-2,536.38	2,564.65	2,546.03	18.62	137.762	
600.00	599.90	563.90	599.90	4.02	18.24	43.21	-388.22	-2,536.38	2,561.75	2,539.49	22.26	115.088	
700.00	699.82	663.82	699.82	4.28	21.68	43.27	-388.22	-2,536.38	2,558.82	2,532.87	25.96	98.580	
800.00	799.74	763.74	799.74	4.57	25.13	43.33	-388.22	-2,536.38	2,555.90	2,526.20	29.70	86.068	
900.00	899.66	863.66	899.66	4.88	28.59	43.39	-388.22	-2,536.38	2,552.98	2,519.51	33.47	76.282	
1,000.00	999.58	963.58	999.58	5.21	32.06	43.46	-388.22	-2,536.38	2,550.07	2,512.80	37.26	68.433	
1,100.00	1,099.50	1,063.50	1,099.50	5.55	35.53	43.52	-388.22	-2,536.38	2,547.15	2,506.07	41.08	62.006	
1,200.00	1,199.42	1,163.42	1,199.42	5.91	39.01	43.58	-388.22	-2,536.38	2,544.24	2,499.33	44.91	56.650	
1,300.00	1,299.34	1,263.34	1,299.34	6.28	42.48	43.64	-388.22	-2,536.38	2,541.34	2,492.58	48.76	52.123	
1,400.00	1,399.26	1,363.26	1,399.26	6.66	45.96	43.70	-388.22	-2,536.38	2,538.43	2,485.82	52.61	48.248	
1,500.00	1,499.18	1,463.18	1,499.18	7.04	49.44	43.77	-388.22	-2,536.38	2,535.53	2,479.06	56.48	44.896	
1,600.00	1,599.10	1,563.10	1,599.10	7.43	52.92	43.83	-388.22	-2,536.38	2,532.63	2,472.29	60.35	41.967	
1,700.00	1,699.01	1,663.01	1,699.01	7.83	56.41	43.89	-388.22	-2,536.38	2,529.74	2,465.51	64.23	39.388	
1,800.00	1,798.93	1,762.93	1,798.93	8.23	59.89	43.96	-388.22	-2,536.38	2,526.85	2,458.74	68.11	37.099	
1,900.00	1,898.85	1,862.85	1,898.85	8.64	63.37	44.02	-388.22	-2,536.38	2,523.96	2,451.96	72.00	35.056	
2,000.00	1,998.77	1,962.77	1,998.77	9.05	66.86	44.08	-388.22	-2,536.38	2,521.07	2,445.18	75.89	33.220	
2,100.00	2,098.69	2,062.69	2,098.69	9.46	70.34	44.15	-388.22	-2,536.38	2,518.19	2,438.41	79.79	31.562	
2,200.00	2,198.61	2,162.61	2,198.61	9.88	73.82	44.21	-388.22	-2,536.38	2,515.31	2,431.63	83.69	30.057	
2,300.00	2,298.53	2,262.53	2,298.53	10.30	77.31	44.27	-388.22	-2,536.38	2,512.44	2,424.85	87.59	28.685	
2,400.00	2,398.45	2,362.45	2,398.45	10.72	80.79	44.34	-388.22	-2,536.38	2,509.56	2,418.07	91.49	27.430	
2,500.00	2,498.37	2,462.37	2,498.37	11.14	84.28	44.40	-388.22	-2,536.38	2,506.69	2,411.30	95.40	26.277	
2,600.00	2,598.29	2,562.29	2,598.29	11.56	87.77	44.47	-388.22	-2,536.38	2,503.83	2,404.52	99.30	25.214	
2,700.00	2,698.21	2,662.21	2,698.21	11.98	91.25	44.53	-388.22	-2,536.38	2,500.96	2,397.75	103.21	24.231	
2,800.00	2,798.13	2,762.13	2,798.13	12.41	94.74	44.59	-388.22	-2,536.38	2,498.10	2,390.98	107.12	23.320	
2,900.00	2,898.05	2,862.05	2,898.05	12.84	98.22	44.66	-388.22	-2,536.38	2,495.24	2,384.21	111.04	22.472	
3,000.00	2,997.97	2,961.97	2,997.97	13.27	101.71	44.72	-388.22	-2,536.38	2,492.39	2,377.44	114.95	21.683	
3,100.00	3,097.89	3,061.89	3,097.89	13.69	105.20	44.79	-388.22	-2,536.38	2,489.54	2,370.68	118.86	20.944	
3,200.00	3,197.81	3,161.81	3,197.81	14.12	108.68	44.85	-388.22	-2,536.38	2,486.69	2,363.91	122.78	20.253	
3,300.00	3,297.73	3,261.73	3,297.73	14.56	112.17	44.92	-388.22	-2,536.38	2,483.85	2,357.15	126.70	19.605	
3,400.00	3,397.65	3,361.65	3,397.65	14.99	115.66	44.98	-388.22	-2,536.38	2,481.01	2,350.39	130.61	18.995	
3,500.00	3,497.56	3,461.56	3,497.56	15.42	119.14	45.05	-388.22	-2,536.38	2,478.17	2,343.64	134.53	18.421	
3,600.00	3,597.48	3,561.48	3,597.48	15.85	122.63	45.12	-388.22	-2,536.38	2,475.33	2,336.88	138.45	17.879	
3,700.00	3,697.40	3,661.40	3,697.40	16.28	126.12	45.18	-388.22	-2,536.38	2,472.50	2,330.13	142.37	17.367	
3,800.00	3,797.32	3,761.32	3,797.32	16.72	129.60	45.25	-388.22	-2,536.38	2,469.67	2,323.39	146.29	16.882	
3,900.00	3,897.24	3,861.24	3,897.24	17.15	133.09	45.31	-388.22	-2,536.38	2,466.85	2,316.64	150.21	16.423	
4,000.00	3,997.16	3,961.16	3,997.16	17.59	136.58	45.38	-388.22	-2,536.38	2,464.03	2,309.90	154.13	15.987	
4,100.00	4,097.08	4,061.08	4,097.08	18.02	140.07	45.45	-388.22	-2,536.38	2,461.21	2,303.16	158.05	15.572	
4,200.00	4,197.00	4,161.00	4,197.00	18.46	143.55	45.51	-388.22	-2,536.38	2,458.39	2,296.42	161.97	15.178	
4,300.00	4,296.92	4,260.92	4,296.92	18.89	147.04	45.58	-388.22	-2,536.38	2,455.58	2,289.69	165.89	14.802	
4,400.00	4,396.84	4,360.84	4,396.84	19.33	150.53	45.65	-388.22	-2,536.38	2,452.77	2,282.96	169.82	14.444	
4,500.00	4,496.76	4,460.76	4,496.76	19.77	154.01	45.71	-388.22	-2,536.38	2,449.97	2,276.23	173.74	14.101	
4,600.00	4,596.68	4,560.68	4,596.68	20.20	157.50	45.78	-388.22	-2,536.38	2,447.17	2,269.50	177.66	13.774	
4,700.00	4,696.60	4,660.60	4,696.60	20.64	160.99	45.85	-388.22	-2,536.38	2,444.37	2,262.78	181.59	13.461	
4,800.00	4,796.52	4,760.52	4,796.52	21.08	164.48	45.92	-388.22	-2,536.38	2,441.57	2,256.06	185.51	13.161	
4,900.00	4,896.44	4,860.44	4,896.44	21.51	167.96	45.98	-388.22	-2,536.38	2,438.78	2,249.35	189.43	12.874	
5,000.00	4,996.36	4,960.36	4,996.36	21.95	171.45	46.05	-388.22	-2,536.38	2,435.99	2,242.64	193.36	12.598	
5,100.00	5,096.28	5,060.28	5,096.28	22.39	174.94	46.12	-388.22	-2,536.38	2,433.21	2,235.93	197.28	12.334	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - BURBACH 15-23(SI_150CC - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	5,196.19	5,160.19	5,196.19	22.83	178.43	46.19	-388.22	-2,536.38	2,430.43	2,229.22	201.21	12.079	
5,300.00	5,296.11	5,260.11	5,296.11	23.27	181.92	46.26	-388.22	-2,536.38	2,427.65	2,222.52	205.13	11.835	
5,400.00	5,396.03	5,360.03	5,396.03	23.71	185.40	46.32	-388.22	-2,536.38	2,424.88	2,215.82	209.06	11.599	
5,500.00	5,495.95	5,459.95	5,495.95	24.14	188.89	46.39	-388.22	-2,536.38	2,422.11	2,209.12	212.98	11.372	
5,600.00	5,595.87	5,559.87	5,595.87	24.58	192.38	46.46	-388.22	-2,536.38	2,419.34	2,202.43	216.91	11.154	
5,700.00	5,695.79	5,659.79	5,695.79	25.02	195.87	46.53	-388.22	-2,536.38	2,416.57	2,195.74	220.83	10.943	
5,800.00	5,795.71	5,759.71	5,795.71	25.46	199.35	46.60	-388.22	-2,536.38	2,413.81	2,189.05	224.76	10.739	
5,900.00	5,895.63	5,859.63	5,895.63	25.90	202.84	46.67	-388.22	-2,536.38	2,411.06	2,182.37	228.69	10.543	
6,000.00	5,995.55	5,959.55	5,995.55	26.34	206.33	46.74	-388.22	-2,536.38	2,408.30	2,175.69	232.61	10.353	
6,100.00	6,095.47	6,059.47	6,095.47	26.78	209.82	46.81	-388.22	-2,536.38	2,405.55	2,169.01	236.54	10.170	
6,200.00	6,195.39	6,159.39	6,195.39	27.22	213.30	46.88	-388.22	-2,536.38	2,402.81	2,162.34	240.47	9.992	
6,300.00	6,295.31	6,259.31	6,295.31	27.66	216.79	46.95	-388.22	-2,536.38	2,400.07	2,155.67	244.39	9.821	
6,400.00	6,395.23	6,359.23	6,395.23	28.10	220.28	47.02	-388.22	-2,536.38	2,397.33	2,149.01	248.32	9.654	
6,500.00	6,495.02	6,459.02	6,495.02	28.54	223.76	11.45	-388.22	-2,536.38	2,392.26	2,140.02	252.24	9.484	
6,600.00	6,593.09	6,557.09	6,593.09	28.98	227.19	2.26	-388.22	-2,536.38	2,373.29	2,117.19	256.10	9.267	
6,700.00	6,687.01	6,651.01	6,687.01	29.41	230.46	-0.41	-388.22	-2,536.38	2,339.25	2,079.46	259.79	9.004	
6,800.00	6,774.46	6,738.46	6,774.46	29.83	233.52	-1.95	-388.22	-2,536.38	2,290.98	2,027.76	263.22	8.704	
6,900.00	6,853.31	6,817.31	6,853.31	30.26	236.27	-3.31	-388.22	-2,536.38	2,229.68	1,963.38	266.30	8.373	
7,000.00	6,921.60	6,885.60	6,921.60	30.76	238.65	-4.91	-388.22	-2,536.38	2,156.86	1,887.91	268.95	8.019	
7,100.00	6,977.66	6,941.66	6,977.66	31.38	240.61	-7.29	-388.22	-2,536.38	2,074.31	1,803.20	271.12	7.651	
7,200.00	7,020.10	6,984.10	7,020.10	32.17	242.09	-11.59	-388.22	-2,536.38	1,984.09	1,711.35	272.74	7.275	
7,300.00	7,047.88	7,011.88	7,047.88	33.13	243.06	-21.99	-388.22	-2,536.38	1,888.41	1,614.62	273.80	6.897	
7,400.00	7,060.32	7,024.32	7,060.32	34.27	243.50	-63.11	-388.22	-2,536.38	1,789.66	1,515.39	274.27	6.525	
7,500.00	7,060.70	7,024.70	7,060.70	35.56	243.51	-92.53	-388.22	-2,536.38	1,690.13	1,415.82	274.30	6.162	
7,600.00	7,060.27	7,024.27	7,060.27	37.02	243.49	-92.38	-388.22	-2,536.38	1,590.64	1,316.33	274.31	5.799	
7,700.00	7,059.83	7,023.83	7,059.83	38.64	243.48	-92.23	-388.22	-2,536.38	1,491.22	1,216.90	274.32	5.436	
7,800.00	7,059.40	7,023.40	7,059.40	40.40	243.46	-92.08	-388.22	-2,536.38	1,391.88	1,117.53	274.35	5.073	
7,900.00	7,058.97	7,022.97	7,058.97	42.28	243.45	-91.93	-388.22	-2,536.38	1,292.65	1,018.26	274.39	4.711	
8,000.00	7,058.53	7,022.53	7,058.53	44.27	243.43	-91.78	-388.22	-2,536.38	1,193.54	919.08	274.45	4.349	
8,100.00	7,058.10	7,022.10	7,058.10	46.35	243.42	-91.63	-388.22	-2,536.38	1,094.59	820.04	274.55	3.987	
8,200.00	7,057.66	7,021.66	7,057.66	48.50	243.40	-91.48	-388.22	-2,536.38	995.86	721.16	274.70	3.625	
8,300.00	7,057.23	7,021.23	7,057.23	50.73	243.39	-91.32	-388.22	-2,536.38	897.40	622.48	274.92	3.264	
8,400.00	7,056.80	7,020.80	7,056.80	53.02	243.37	-91.17	-388.22	-2,536.38	799.33	524.07	275.26	2.904	
8,500.00	7,056.36	7,020.36	7,056.36	55.36	243.36	-91.02	-388.22	-2,536.38	701.81	426.02	275.78	2.545	
8,600.00	7,055.93	7,019.93	7,055.93	57.74	243.34	-90.87	-388.22	-2,536.38	605.09	328.46	276.63	2.187	
8,700.00	7,055.49	7,019.49	7,055.49	60.17	243.33	-90.72	-388.22	-2,536.38	509.64	231.59	278.04	1.833	
8,800.00	7,055.06	7,019.06	7,055.06	62.63	243.31	-90.57	-388.22	-2,536.38	416.32	135.80	280.53	1.484 Level 3	
8,900.00	7,054.63	7,018.63	7,054.63	65.13	243.30	-90.42	-388.22	-2,536.38	326.99	41.90	285.09	1.147 Level 2	
9,000.00	7,054.19	7,018.19	7,054.19	67.66	243.28	-90.27	-388.22	-2,536.38	246.01	-47.59	293.60	0.838 Level 1	
9,100.00	7,053.76	7,017.76	7,053.76	70.21	243.27	-90.12	-388.22	-2,536.38	184.71	-122.51	307.22	0.601 Level 1	
9,182.02	7,053.40	7,017.40	7,053.40	72.32	243.25	-90.00	-388.22	-2,536.38	165.50	-150.06	315.56	0.524 Level 1, CC, ES, SF	
9,200.00	7,053.32	7,017.32	7,053.32	72.78	243.25	-89.97	-388.22	-2,536.38	166.48	-149.31	315.79	0.527 Level 1	
9,300.00	7,052.89	7,016.89	7,052.89	75.38	243.24	-89.82	-388.22	-2,536.38	203.25	-104.54	307.79	0.660 Level 1	
9,400.00	7,052.46	7,016.46	7,052.46	77.99	243.22	-89.67	-388.22	-2,536.38	273.69	-23.56	297.25	0.921 Level 1	
9,500.00	7,052.02	7,016.02	7,052.02	80.62	243.21	-89.52	-388.22	-2,536.38	358.47	68.13	290.34	1.235 Level 2	
9,600.00	7,051.59	7,015.59	7,051.59	83.26	243.19	-89.37	-388.22	-2,536.38	449.55	163.41	286.14	1.571	
9,700.00	7,051.15	7,015.15	7,051.15	85.92	243.18	-89.22	-388.22	-2,536.38	543.77	260.29	283.49	1.918	
9,800.00	7,050.72	7,014.72	7,050.72	88.59	243.16	-89.07	-388.22	-2,536.38	639.75	358.02	281.74	2.271	
9,900.00	7,050.29	7,014.29	7,050.29	91.28	243.15	-88.92	-388.22	-2,536.38	736.80	456.28	280.52	2.627	
10,000.00	7,049.85	7,013.85	7,049.85	93.97	243.13	-88.77	-388.22	-2,536.38	834.55	554.90	279.65	2.984	
10,100.00	7,049.42	7,013.42	7,049.42	96.67	243.12	-88.62	-388.22	-2,536.38	932.77	653.77	279.00	3.343	
10,200.00	7,048.98	7,012.98	7,048.98	99.38	243.10	-88.47	-388.22	-2,536.38	1,031.34	752.83	278.51	3.703	

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.55	7,012.55	7,048.55	102.10	243.09	-88.32	-388.22	-2,536.38	1,130.15	852.03	278.12	4.064		
10,400.00	7,048.12	7,012.12	7,048.12	104.83	243.07	-88.17	-388.22	-2,536.38	1,229.16	951.34	277.82	4.424		
10,500.00	7,047.68	7,011.68	7,047.68	107.56	243.05	-88.02	-388.22	-2,536.38	1,328.32	1,050.74	277.58	4.785		
10,600.00	7,047.25	7,011.25	7,047.25	110.30	243.04	-87.87	-388.22	-2,536.38	1,427.59	1,150.22	277.38	5.147		
10,700.00	7,046.81	7,010.81	7,046.81	113.05	243.02	-87.72	-388.22	-2,536.38	1,526.96	1,249.75	277.22	5.508		
10,800.00	7,046.38	7,010.38	7,046.38	115.80	243.01	-87.57	-388.22	-2,536.38	1,626.41	1,349.32	277.09	5.870		
10,900.00	7,045.95	7,009.95	7,045.95	118.55	242.99	-87.42	-388.22	-2,536.38	1,725.92	1,448.94	276.98	6.231		
11,000.00	7,045.51	7,009.51	7,045.51	121.31	242.98	-87.27	-388.22	-2,536.38	1,825.48	1,548.59	276.89	6.593		
11,100.00	7,045.08	7,009.08	7,045.08	124.08	242.96	-87.12	-388.22	-2,536.38	1,925.09	1,648.28	276.82	6.954		
11,200.00	7,044.64	7,008.64	7,044.64	126.85	242.95	-86.97	-388.22	-2,536.38	2,024.74	1,747.98	276.76	7.316		
11,300.00	7,044.21	7,008.21	7,044.21	129.62	242.93	-86.82	-388.22	-2,536.38	2,124.42	1,847.71	276.71	7.677		
11,400.00	7,043.78	7,007.78	7,043.78	132.40	242.92	-86.67	-388.22	-2,536.38	2,224.13	1,947.46	276.67	8.039		
11,500.00	7,043.34	7,007.34	7,043.34	135.18	242.90	-86.52	-388.22	-2,536.38	2,323.86	2,047.22	276.64	8.400		
11,600.00	7,042.91	7,006.91	7,042.91	137.96	242.89	-86.37	-388.22	-2,536.38	2,423.62	2,147.00	276.62	8.762		
11,700.00	7,042.47	7,006.47	7,042.47	140.75	242.87	-86.22	-388.22	-2,536.38	2,523.39	2,246.79	276.60	9.123		
11,800.00	7,042.04	7,006.04	7,042.04	143.54	242.86	-86.07	-388.22	-2,536.38	2,623.18	2,346.59	276.59	9.484		
11,900.00	7,041.61	7,005.61	7,041.61	146.33	242.84	-85.92	-388.22	-2,536.38	2,722.99	2,446.40	276.59	9.845		
12,000.00	7,041.17	7,005.17	7,041.17	149.13	242.83	-85.77	-388.22	-2,536.38	2,822.81	2,546.22	276.59	10.206		
12,100.00	7,040.74	7,004.74	7,040.74	151.92	242.81	-85.62	-388.22	-2,536.38	2,922.64	2,646.05	276.59	10.567		
12,200.00	7,040.30	7,004.30	7,040.30	154.72	242.80	-85.48	-388.22	-2,536.38	3,022.49	2,745.89	276.60	10.927		
12,300.00	7,039.87	7,003.87	7,039.87	157.52	242.78	-85.33	-388.22	-2,536.38	3,122.34	2,845.73	276.61	11.288		
12,400.00	7,039.44	7,003.44	7,039.44	160.33	242.77	-85.18	-388.22	-2,536.38	3,222.20	2,945.58	276.63	11.648		
12,500.00	7,039.00	7,003.00	7,039.00	163.13	242.75	-85.03	-388.22	-2,536.38	3,322.08	3,045.43	276.65	12.008		
12,600.00	7,038.57	7,002.57	7,038.57	165.94	242.74	-84.88	-388.22	-2,536.38	3,421.95	3,145.29	276.67	12.368		
12,700.00	7,038.13	7,002.13	7,038.13	168.75	242.72	-84.73	-388.22	-2,536.38	3,521.84	3,245.15	276.69	12.728		
12,800.00	7,037.70	7,001.70	7,037.70	171.56	242.71	-84.58	-388.22	-2,536.38	3,621.73	3,345.01	276.72	13.088		
12,900.00	7,037.27	7,001.27	7,037.27	174.37	242.69	-84.43	-388.22	-2,536.38	3,721.63	3,444.88	276.75	13.448		
13,000.00	7,036.83	7,000.83	7,036.83	177.19	242.68	-84.28	-388.22	-2,536.38	3,821.53	3,544.75	276.78	13.807		
13,100.00	7,036.40	7,000.40	7,036.40	180.00	242.66	-84.13	-388.22	-2,536.38	3,921.44	3,644.63	276.81	14.166		
13,200.00	7,035.96	7,000.04	7,035.96	182.82	242.65	-83.99	-388.22	-2,536.38	4,021.35	3,744.50	276.85	14.525		
13,300.00	7,035.53	7,000.47	7,035.53	185.64	242.66	-83.84	-388.22	-2,536.38	4,121.27	3,844.35	276.92	14.883		
13,400.00	7,035.10	7,000.90	7,035.10	188.46	242.68	-83.69	-388.22	-2,536.38	4,221.19	3,944.20	276.99	15.240		
13,500.00	7,034.66	7,001.34	7,034.66	191.28	242.69	-83.54	-388.22	-2,536.38	4,321.11	4,044.05	277.06	15.596		
13,600.00	7,034.23	7,001.77	7,034.23	194.10	242.71	-83.39	-388.22	-2,536.38	4,421.04	4,143.91	277.13	15.953		
13,700.00	7,033.79	7,002.21	7,033.79	196.92	242.72	-83.24	-388.22	-2,536.38	4,520.97	4,243.76	277.21	16.309		
13,800.00	7,033.36	7,002.64	7,033.36	199.74	242.74	-83.10	-388.22	-2,536.38	4,620.90	4,343.62	277.28	16.665		
13,900.00	7,032.93	7,003.07	7,032.93	202.57	242.75	-82.95	-388.22	-2,536.38	4,720.84	4,443.48	277.36	17.021		
14,000.00	7,032.49	7,003.51	7,032.49	205.39	242.77	-82.80	-388.22	-2,536.38	4,820.78	4,543.34	277.44	17.376		
14,100.00	7,032.06	7,003.94	7,032.06	208.22	242.78	-82.65	-388.22	-2,536.38	4,920.72	4,643.20	277.52	17.731		
14,200.00	7,031.62	7,004.38	7,031.62	211.05	242.80	-82.50	-388.22	-2,536.38	5,020.66	4,743.06	277.60	18.086		
14,300.00	7,031.19	7,004.81	7,031.19	213.87	242.82	-82.36	-388.22	-2,536.38	5,120.61	4,842.93	277.68	18.440		
14,400.00	7,030.76	7,005.24	7,030.76	216.70	242.83	-82.21	-388.22	-2,536.38	5,220.56	4,942.79	277.77	18.795		
14,500.00	7,030.32	7,005.68	7,030.32	219.53	242.85	-82.06	-388.22	-2,536.38	5,320.51	5,042.65	277.85	19.149		
14,600.00	7,029.89	7,006.11	7,029.89	222.36	242.86	-81.91	-388.22	-2,536.38	5,420.46	5,142.52	277.94	19.502		
14,700.00	7,029.45	7,006.55	7,029.45	225.19	242.88	-81.77	-388.22	-2,536.38	5,520.41	5,242.38	278.03	19.856		
14,800.00	7,029.02	7,006.98	7,029.02	228.03	242.89	-81.62	-388.22	-2,536.38	5,620.37	5,342.25	278.12	20.209		
14,805.04	7,029.00	7,007.00	7,029.00	228.17	242.89	-81.61	-388.22	-2,536.38	5,625.40	5,347.28	278.12	20.226		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-107.98	-1,557.31	-4,797.91	5,044.53				
100.00	100.00	53.00	100.00	3.28	3.41	-107.98	-1,557.31	-4,797.91	5,044.32	5,037.62	6.69	753.705	
200.00	200.00	153.00	200.00	3.34	4.87	-107.98	-1,557.31	-4,797.91	5,044.32	5,036.11	8.20	614.858	
300.00	300.00	253.00	300.00	3.44	7.81	-107.98	-1,557.31	-4,797.91	5,044.32	5,033.06	11.25	448.229	
400.00	400.00	353.00	400.00	3.60	11.07	-107.98	-1,557.31	-4,797.91	5,044.32	5,029.64	14.68	343.666	
500.00	499.98	452.98	499.98	3.80	14.45	33.84	-1,557.31	-4,797.91	5,042.87	5,024.62	18.24	276.437	
600.00	599.90	552.90	599.90	4.02	17.86	33.88	-1,557.31	-4,797.91	5,039.57	5,017.68	21.88	230.310	
700.00	699.82	652.82	699.82	4.28	21.30	33.90	-1,557.31	-4,797.91	5,036.23	5,010.66	25.58	196.901	
800.00	799.74	752.74	799.74	4.57	24.75	33.93	-1,557.31	-4,797.91	5,032.90	5,003.59	29.32	171.681	
900.00	899.66	852.66	899.66	4.88	28.21	33.95	-1,557.31	-4,797.91	5,029.57	4,996.49	33.09	152.017	
1,000.00	999.58	952.58	999.58	5.21	31.68	33.98	-1,557.31	-4,797.91	5,026.24	4,989.36	36.88	136.284	
1,100.00	1,099.50	1,052.50	1,099.50	5.55	35.15	34.00	-1,557.31	-4,797.91	5,022.91	4,982.22	40.70	123.426	
1,200.00	1,199.42	1,152.42	1,199.42	5.91	38.62	34.03	-1,557.31	-4,797.91	5,019.59	4,975.06	44.53	112.732	
1,300.00	1,299.34	1,252.34	1,299.34	6.28	42.10	34.05	-1,557.31	-4,797.91	5,016.26	4,967.89	48.37	103.704	
1,400.00	1,399.26	1,352.26	1,399.26	6.66	45.58	34.08	-1,557.31	-4,797.91	5,012.93	4,960.71	52.23	95.986	
1,500.00	1,499.18	1,452.18	1,499.18	7.04	49.06	34.11	-1,557.31	-4,797.91	5,009.61	4,953.52	56.09	89.314	
1,600.00	1,599.10	1,552.10	1,599.10	7.43	52.54	34.13	-1,557.31	-4,797.91	5,006.29	4,946.33	59.96	83.492	
1,700.00	1,699.01	1,652.01	1,699.01	7.83	56.02	34.16	-1,557.31	-4,797.91	5,002.97	4,939.13	63.84	78.369	
1,800.00	1,798.93	1,751.93	1,798.93	8.23	59.51	34.18	-1,557.31	-4,797.91	4,999.64	4,931.92	67.72	73.826	
1,900.00	1,898.85	1,851.85	1,898.85	8.64	62.99	34.21	-1,557.31	-4,797.91	4,996.32	4,924.71	71.61	69.772	
2,000.00	1,998.77	1,951.77	1,998.77	9.05	66.47	34.23	-1,557.31	-4,797.91	4,993.00	4,917.50	75.50	66.131	
2,100.00	2,098.69	2,051.69	2,098.69	9.46	69.96	34.26	-1,557.31	-4,797.91	4,989.69	4,910.29	79.40	62.845	
2,200.00	2,198.61	2,151.61	2,198.61	9.88	73.44	34.29	-1,557.31	-4,797.91	4,986.37	4,903.07	83.29	59.864	
2,300.00	2,298.53	2,251.53	2,298.53	10.30	76.93	34.31	-1,557.31	-4,797.91	4,983.05	4,895.86	87.20	57.148	
2,400.00	2,398.45	2,351.45	2,398.45	10.72	80.41	34.34	-1,557.31	-4,797.91	4,979.74	4,888.64	91.10	54.663	
2,500.00	2,498.37	2,451.37	2,498.37	11.14	83.90	34.36	-1,557.31	-4,797.91	4,976.42	4,881.42	95.00	52.382	
2,600.00	2,598.29	2,551.29	2,598.29	11.56	87.38	34.39	-1,557.31	-4,797.91	4,973.11	4,874.20	98.91	50.279	
2,700.00	2,698.21	2,651.21	2,698.21	11.98	90.87	34.42	-1,557.31	-4,797.91	4,969.80	4,866.98	102.82	48.335	
2,800.00	2,798.13	2,751.13	2,798.13	12.41	94.35	34.44	-1,557.31	-4,797.91	4,966.49	4,859.76	106.73	46.534	
2,900.00	2,898.05	2,851.05	2,898.05	12.84	97.84	34.47	-1,557.31	-4,797.91	4,963.18	4,852.54	110.64	44.859	
3,000.00	2,997.97	2,950.97	2,997.97	13.27	101.33	34.50	-1,557.31	-4,797.91	4,959.87	4,845.32	114.55	43.297	
3,100.00	3,097.89	3,050.89	3,097.89	13.69	104.81	34.52	-1,557.31	-4,797.91	4,956.56	4,838.09	118.47	41.839	
3,200.00	3,197.81	3,150.81	3,197.81	14.12	108.30	34.55	-1,557.31	-4,797.91	4,953.25	4,830.87	122.38	40.474	
3,300.00	3,297.73	3,250.73	3,297.73	14.56	111.79	34.57	-1,557.31	-4,797.91	4,949.95	4,823.65	126.30	39.193	
3,400.00	3,397.65	3,350.65	3,397.65	14.99	115.27	34.60	-1,557.31	-4,797.91	4,946.64	4,816.43	130.21	37.989	
3,500.00	3,497.56	3,450.56	3,497.56	15.42	118.76	34.63	-1,557.31	-4,797.91	4,943.34	4,809.21	134.13	36.855	
3,600.00	3,597.48	3,550.48	3,597.48	15.85	122.25	34.65	-1,557.31	-4,797.91	4,940.04	4,801.99	138.05	35.785	
3,700.00	3,697.40	3,650.40	3,697.40	16.28	125.73	34.68	-1,557.31	-4,797.91	4,936.74	4,794.77	141.97	34.774	
3,800.00	3,797.32	3,750.32	3,797.32	16.72	129.22	34.71	-1,557.31	-4,797.91	4,933.43	4,787.55	145.89	33.817	
3,900.00	3,897.24	3,850.24	3,897.24	17.15	132.71	34.73	-1,557.31	-4,797.91	4,930.14	4,780.33	149.81	32.910	
4,000.00	3,997.16	3,950.16	3,997.16	17.59	136.19	34.76	-1,557.31	-4,797.91	4,926.84	4,773.11	153.73	32.049	
4,100.00	4,097.08	4,050.08	4,097.08	18.02	139.68	34.79	-1,557.31	-4,797.91	4,923.54	4,765.89	157.65	31.231	
4,200.00	4,197.00	4,150.00	4,197.00	18.46	143.17	34.81	-1,557.31	-4,797.91	4,920.24	4,758.68	161.57	30.453	
4,300.00	4,296.92	4,249.92	4,296.92	18.89	146.66	34.84	-1,557.31	-4,797.91	4,916.95	4,751.46	165.49	29.712	
4,400.00	4,396.84	4,349.84	4,396.84	19.33	150.14	34.87	-1,557.31	-4,797.91	4,913.65	4,744.24	169.41	29.004	
4,500.00	4,496.76	4,449.76	4,496.76	19.77	153.63	34.89	-1,557.31	-4,797.91	4,910.36	4,737.03	173.33	28.329	
4,600.00	4,596.68	4,549.68	4,596.68	20.20	157.12	34.92	-1,557.31	-4,797.91	4,907.07	4,729.81	177.26	27.684	
4,700.00	4,696.60	4,649.60	4,696.60	20.64	160.61	34.95	-1,557.31	-4,797.91	4,903.78	4,722.60	181.18	27.066	
4,800.00	4,796.52	4,749.52	4,796.52	21.08	164.09	34.97	-1,557.31	-4,797.91	4,900.49	4,715.39	185.10	26.475	
4,900.00	4,896.44	4,849.44	4,896.44	21.51	167.58	35.00	-1,557.31	-4,797.91	4,897.20	4,708.17	189.03	25.908	
5,000.00	4,996.36	4,949.36	4,996.36	21.95	171.07	35.03	-1,557.31	-4,797.91	4,893.91	4,700.96	192.95	25.364	
5,100.00	5,096.28	5,049.28	5,096.28	22.39	174.56	35.05	-1,557.31	-4,797.91	4,890.62	4,693.75	196.87	24.842	

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,149.19	5,196.19	22.83	178.04	35.08	-1,557.31	-4,797.91	4,887.34	4,686.54	200.80	24.340		
5,300.00	5,296.11	5,249.11	5,296.11	23.27	181.53	35.11	-1,557.31	-4,797.91	4,884.05	4,679.33	204.72	23.857		
5,400.00	5,396.03	5,349.03	5,396.03	23.71	185.02	35.14	-1,557.31	-4,797.91	4,880.77	4,672.13	208.65	23.393		
5,500.00	5,495.95	5,448.95	5,495.95	24.14	188.51	35.16	-1,557.31	-4,797.91	4,877.49	4,664.92	212.57	22.945		
5,600.00	5,595.87	5,548.87	5,595.87	24.58	191.99	35.19	-1,557.31	-4,797.91	4,874.21	4,657.71	216.49	22.514		
5,700.00	5,695.79	5,648.79	5,695.79	25.02	195.48	35.22	-1,557.31	-4,797.91	4,870.93	4,650.51	220.42	22.098		
5,800.00	5,795.71	5,748.71	5,795.71	25.46	198.97	35.24	-1,557.31	-4,797.91	4,867.65	4,643.30	224.35	21.697		
5,900.00	5,895.63	5,848.63	5,895.63	25.90	202.46	35.27	-1,557.31	-4,797.91	4,864.37	4,636.10	228.27	21.310		
6,000.00	5,995.55	5,948.55	5,995.55	26.34	205.94	35.30	-1,557.31	-4,797.91	4,861.09	4,628.90	232.20	20.935		
6,100.00	6,095.47	6,048.47	6,095.47	26.78	209.43	35.33	-1,557.31	-4,797.91	4,857.82	4,621.70	236.12	20.573		
6,200.00	6,195.39	6,148.39	6,195.39	27.22	212.92	35.35	-1,557.31	-4,797.91	4,854.54	4,614.50	240.05	20.223		
6,300.00	6,295.31	6,248.31	6,295.31	27.66	216.41	35.38	-1,557.31	-4,797.91	4,851.27	4,607.30	243.97	19.884		
6,400.00	6,395.23	6,348.23	6,395.23	28.10	219.90	35.41	-1,557.31	-4,797.91	4,848.00	4,600.10	247.90	19.556		
6,500.00	6,495.02	6,448.02	6,495.02	28.54	223.38	-0.28	-1,557.31	-4,797.91	4,844.72	4,592.82	251.82	19.230		
6,600.00	6,593.09	6,546.09	6,593.09	28.98	226.80	-9.89	-1,557.31	-4,797.91	4,823.57	4,567.89	255.67	18.866		
6,700.00	6,687.01	6,640.01	6,687.01	29.41	230.08	-13.33	-1,557.31	-4,797.91	4,790.17	4,530.81	259.36	18.469		
6,800.00	6,774.46	6,727.46	6,774.46	29.83	233.13	-16.10	-1,557.31	-4,797.91	4,743.12	4,480.33	262.79	18.049		
6,900.00	6,853.31	6,806.31	6,853.31	30.26	235.89	-19.28	-1,557.31	-4,797.91	4,683.62	4,417.75	265.86	17.617		
7,000.00	6,921.60	6,874.60	6,921.60	30.76	238.27	-23.59	-1,557.31	-4,797.91	4,613.16	4,344.63	268.52	17.180		
7,100.00	6,977.66	6,930.66	6,977.66	31.38	240.23	-30.02	-1,557.31	-4,797.91	4,533.52	4,262.81	270.71	16.747		
7,200.00	7,020.10	6,973.10	7,020.10	32.17	241.71	-40.24	-1,557.31	-4,797.91	4,446.71	4,174.35	272.37	16.326		
7,300.00	7,047.88	7,000.88	7,047.88	33.13	242.68	-57.02	-1,557.31	-4,797.91	4,354.93	4,081.44	273.49	15.924		
7,400.00	7,060.32	7,013.32	7,060.32	34.27	243.11	-81.88	-1,557.31	-4,797.91	4,260.46	3,986.41	274.05	15.546		
7,500.00	7,060.70	7,013.70	7,060.70	35.56	243.13	-90.74	-1,557.31	-4,797.91	4,165.51	3,891.30	274.20	15.191		
7,600.00	7,060.27	7,013.27	7,060.27	37.02	243.11	-90.72	-1,557.31	-4,797.91	4,070.79	3,796.43	274.37	14.837		
7,700.00	7,059.83	7,012.83	7,059.83	38.64	243.10	-90.71	-1,557.31	-4,797.91	3,976.34	3,701.76	274.58	14.482		
7,800.00	7,059.40	7,012.40	7,059.40	40.40	243.08	-90.69	-1,557.31	-4,797.91	3,882.16	3,607.32	274.84	14.125		
7,900.00	7,058.97	7,011.97	7,058.97	42.28	243.06	-90.67	-1,557.31	-4,797.91	3,788.28	3,513.13	275.16	13.768		
8,000.00	7,058.53	7,011.53	7,058.53	44.27	243.05	-90.65	-1,557.31	-4,797.91	3,694.73	3,419.19	275.54	13.409		
8,100.00	7,058.10	7,011.10	7,058.10	46.35	243.03	-90.63	-1,557.31	-4,797.91	3,601.52	3,325.53	275.98	13.050		
8,200.00	7,057.66	7,010.66	7,057.66	48.50	243.02	-90.61	-1,557.31	-4,797.91	3,508.68	3,232.17	276.51	12.689		
8,300.00	7,057.23	7,010.23	7,057.23	50.73	243.00	-90.59	-1,557.31	-4,797.91	3,416.24	3,139.13	277.11	12.328		
8,400.00	7,056.80	7,009.80	7,056.80	53.02	242.99	-90.57	-1,557.31	-4,797.91	3,324.25	3,046.44	277.81	11.966		
8,500.00	7,056.36	7,009.36	7,056.36	55.36	242.97	-90.56	-1,557.31	-4,797.91	3,232.73	2,954.12	278.61	11.603		
8,600.00	7,055.93	7,008.93	7,055.93	57.74	242.96	-90.54	-1,557.31	-4,797.91	3,141.73	2,862.21	279.51	11.240		
8,700.00	7,055.49	7,008.49	7,055.49	60.17	242.94	-90.52	-1,557.31	-4,797.91	3,051.29	2,770.75	280.53	10.877		
8,800.00	7,055.06	7,008.06	7,055.06	62.63	242.93	-90.50	-1,557.31	-4,797.91	2,961.46	2,679.78	281.68	10.514		
8,900.00	7,054.63	7,007.63	7,054.63	65.13	242.91	-90.48	-1,557.31	-4,797.91	2,872.31	2,589.35	282.96	10.151		
9,000.00	7,054.19	7,007.19	7,054.19	67.66	242.90	-90.46	-1,557.31	-4,797.91	2,783.89	2,499.50	284.39	9.789		
9,100.00	7,053.76	7,006.76	7,053.76	70.21	242.88	-90.44	-1,557.31	-4,797.91	2,696.29	2,410.31	285.98	9.428		
9,200.00	7,053.32	7,006.32	7,053.32	72.78	242.87	-90.42	-1,557.31	-4,797.91	2,609.57	2,321.83	287.74	9.069		
9,300.00	7,052.89	7,005.89	7,052.89	75.38	242.85	-90.40	-1,557.31	-4,797.91	2,523.84	2,234.16	289.68	8.713		
9,400.00	7,052.46	7,005.46	7,052.46	77.99	242.84	-90.39	-1,557.31	-4,797.91	2,439.20	2,147.38	291.81	8.359		
9,500.00	7,052.02	7,005.02	7,052.02	80.62	242.82	-90.37	-1,557.31	-4,797.91	2,355.75	2,061.60	294.15	8.009		
9,600.00	7,051.59	7,004.59	7,051.59	83.26	242.81	-90.35	-1,557.31	-4,797.91	2,273.65	1,976.93	296.72	7.663		
9,700.00	7,051.15	7,004.15	7,051.15	85.92	242.79	-90.33	-1,557.31	-4,797.91	2,193.03	1,893.52	299.51	7.322		
9,800.00	7,050.72	7,003.72	7,050.72	88.59	242.78	-90.31	-1,557.31	-4,797.91	2,114.07	1,811.52	302.55	6.987		
9,900.00	7,050.29	7,003.29	7,050.29	91.28	242.76	-90.29	-1,557.31	-4,797.91	2,036.96	1,731.10	305.85	6.660		
10,000.00	7,049.85	7,002.85	7,049.85	93.97	242.75	-90.27	-1,557.31	-4,797.91	1,961.91	1,652.49	309.42	6.341		
10,100.00	7,049.42	7,002.42	7,049.42	96.67	242.73	-90.25	-1,557.31	-4,797.91	1,889.18	1,575.92	313.26	6.031		
10,200.00	7,048.98	7,001.98	7,048.98	99.38	242.72	-90.24	-1,557.31	-4,797.91	1,819.03	1,501.66	317.37	5.732		
10,300.00	7,048.55	7,001.55	7,048.55	102.10	242.70	-90.22	-1,557.31	-4,797.91	1,751.80	1,430.03	321.76	5.444		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	7,001.12	7,048.12	104.83	242.69	-90.20	-1,557.31	-4,797.91	1,687.80	1,361.39	326.42	5.171		
10,500.00	7,047.68	7,000.68	7,047.68	107.56	242.67	-90.18	-1,557.31	-4,797.91	1,627.45	1,296.14	331.31	4.912		
10,600.00	7,047.25	7,000.25	7,047.25	110.30	242.66	-90.16	-1,557.31	-4,797.91	1,571.14	1,234.73	336.41	4.670		
10,700.00	7,046.81	7,000.19	7,046.81	113.05	242.65	-90.14	-1,557.31	-4,797.91	1,519.34	1,177.67	341.67	4.447		
10,800.00	7,046.38	7,000.62	7,046.38	115.80	242.67	-90.12	-1,557.31	-4,797.91	1,472.51	1,125.47	347.03	4.243		
10,900.00	7,045.95	7,001.05	7,045.95	118.55	242.68	-90.10	-1,557.31	-4,797.91	1,431.14	1,078.75	352.39	4.061		
11,000.00	7,045.51	7,001.49	7,045.51	121.31	242.70	-90.08	-1,557.31	-4,797.91	1,395.73	1,038.10	357.64	3.903		
11,100.00	7,045.08	7,001.92	7,045.08	124.08	242.71	-90.07	-1,557.31	-4,797.91	1,366.74	1,004.09	362.65	3.769		
11,200.00	7,044.64	7,002.36	7,044.64	126.85	242.73	-90.05	-1,557.31	-4,797.91	1,344.57	977.27	367.30	3.661		
11,300.00	7,044.21	7,002.79	7,044.21	129.62	242.74	-90.03	-1,557.31	-4,797.91	1,329.57	958.11	371.46	3.579		
11,400.00	7,043.78	7,003.22	7,043.78	132.40	242.76	-90.01	-1,557.31	-4,797.91	1,321.99	946.96	375.02	3.525		
11,450.53	7,043.56	7,003.44	7,043.56	133.80	242.77	-90.00	-1,557.31	-4,797.91	1,321.02	944.46	376.57	3.508 CC		
11,500.00	7,043.34	7,003.66	7,043.34	135.18	242.77	-89.99	-1,557.31	-4,797.91	1,321.95	944.05	377.90	3.498 ES, SF		
11,600.00	7,042.91	7,004.09	7,042.91	137.96	242.79	-89.97	-1,557.31	-4,797.91	1,329.45	949.41	380.04	3.498		
11,700.00	7,042.47	7,004.53	7,042.47	140.75	242.81	-89.95	-1,557.31	-4,797.91	1,344.37	962.94	381.43	3.525		
11,800.00	7,042.04	7,004.96	7,042.04	143.54	242.82	-89.93	-1,557.31	-4,797.91	1,366.47	984.37	382.09	3.576		
11,900.00	7,041.61	7,005.39	7,041.61	146.33	242.84	-89.92	-1,557.31	-4,797.91	1,395.39	1,013.30	382.09	3.652		
12,000.00	7,041.17	7,005.83	7,041.17	149.13	242.85	-89.90	-1,557.31	-4,797.91	1,430.74	1,049.24	381.50	3.750		
12,100.00	7,040.74	7,006.26	7,040.74	151.92	242.87	-89.88	-1,557.31	-4,797.91	1,472.04	1,091.64	380.41	3.870		
12,200.00	7,040.30	7,006.70	7,040.30	154.72	242.88	-89.86	-1,557.31	-4,797.91	1,518.82	1,139.90	378.91	4.008		
12,300.00	7,039.87	7,007.13	7,039.87	157.52	242.90	-89.84	-1,557.31	-4,797.91	1,570.57	1,193.46	377.11	4.165		
12,400.00	7,039.44	7,007.56	7,039.44	160.33	242.91	-89.82	-1,557.31	-4,797.91	1,626.83	1,251.75	375.08	4.337		
12,500.00	7,039.00	7,008.00	7,039.00	163.13	242.93	-89.80	-1,557.31	-4,797.91	1,687.15	1,314.25	372.90	4.524		
12,600.00	7,038.57	7,008.43	7,038.57	165.94	242.94	-89.78	-1,557.31	-4,797.91	1,751.10	1,380.48	370.63	4.725		
12,700.00	7,038.13	7,008.87	7,038.13	168.75	242.96	-89.76	-1,557.31	-4,797.91	1,818.31	1,450.00	368.31	4.937		
12,800.00	7,037.70	7,009.30	7,037.70	171.56	242.97	-89.75	-1,557.31	-4,797.91	1,888.43	1,522.44	365.99	5.160		
12,900.00	7,037.27	7,009.73	7,037.27	174.37	242.99	-89.73	-1,557.31	-4,797.91	1,961.13	1,597.44	363.69	5.392		
13,000.00	7,036.83	6,989.83	7,036.83	177.19	242.29	-89.71	-1,557.31	-4,797.91	2,036.16	1,675.43	360.73	5.645		
13,100.00	7,036.40	6,989.40	7,036.40	180.00	242.28	-89.69	-1,557.31	-4,797.91	2,113.25	1,754.74	358.51	5.895		
13,200.00	7,035.96	6,988.96	7,035.96	182.82	242.26	-89.67	-1,557.31	-4,797.91	2,192.19	1,835.83	356.36	6.152		
13,300.00	7,035.53	6,988.53	7,035.53	185.64	242.25	-89.65	-1,557.31	-4,797.91	2,272.79	1,918.50	354.29	6.415		
13,400.00	7,035.10	6,988.10	7,035.10	188.46	242.23	-89.63	-1,557.31	-4,797.91	2,354.88	2,002.57	352.31	6.684		
13,500.00	7,034.66	6,987.66	7,034.66	191.28	242.22	-89.61	-1,557.31	-4,797.91	2,438.31	2,087.90	350.41	6.958		
13,600.00	7,034.23	6,987.23	7,034.23	194.10	242.20	-89.60	-1,557.31	-4,797.91	2,522.95	2,174.35	348.59	7.237		
13,700.00	7,033.79	6,986.79	7,033.79	196.92	242.19	-89.58	-1,557.31	-4,797.91	2,608.67	2,261.80	346.86	7.521		
13,800.00	7,033.36	6,986.36	7,033.36	199.74	242.17	-89.56	-1,557.31	-4,797.91	2,695.37	2,350.16	345.21	7.808		
13,900.00	7,032.93	6,985.93	7,032.93	202.57	242.16	-89.54	-1,557.31	-4,797.91	2,782.97	2,439.33	343.64	8.099		
14,000.00	7,032.49	6,985.49	7,032.49	205.39	242.14	-89.52	-1,557.31	-4,797.91	2,871.38	2,529.23	342.14	8.392		
14,100.00	7,032.06	6,985.06	7,032.06	208.22	242.13	-89.50	-1,557.31	-4,797.91	2,960.52	2,619.80	340.72	8.689		
14,200.00	7,031.62	6,984.62	7,031.62	211.05	242.11	-89.48	-1,557.31	-4,797.91	3,050.34	2,710.98	339.36	8.988		
14,300.00	7,031.19	6,984.19	7,031.19	213.87	242.10	-89.46	-1,557.31	-4,797.91	3,140.77	2,802.70	338.07	9.290		
14,400.00	7,030.76	6,983.76	7,030.76	216.70	242.08	-89.44	-1,557.31	-4,797.91	3,231.77	2,894.93	336.84	9.594		
14,500.00	7,030.32	6,983.32	7,030.32	219.53	242.06	-89.43	-1,557.31	-4,797.91	3,323.28	2,987.61	335.67	9.900		
14,600.00	7,029.89	6,982.89	7,029.89	222.36	242.05	-89.41	-1,557.31	-4,797.91	3,415.28	3,080.72	334.56	10.208		
14,700.00	7,029.45	6,982.45	7,029.45	225.19	242.03	-89.39	-1,557.31	-4,797.91	3,507.70	3,174.21	333.49	10.518		
14,800.00	7,029.02	6,982.02	7,029.02	228.03	242.02	-89.37	-1,557.31	-4,797.91	3,600.54	3,268.06	332.48	10.829		
14,805.04	7,029.00	6,982.00	7,029.00	228.17	242.02	-89.37	-1,557.31	-4,797.91	3,605.23	3,272.79	332.43	10.845		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-122.48	-3,058.24	-4,803.76	5,694.86					
100.00	100.00	50.00	100.00	3.28	3.39	-122.48	-3,058.24	-4,803.76	5,694.64	5,687.97	6.68	852.638		
200.00	200.00	150.00	200.00	3.34	4.79	-122.48	-3,058.24	-4,803.76	5,694.64	5,686.52	8.13	700.692		
300.00	300.00	250.00	300.00	3.44	7.71	-122.48	-3,058.24	-4,803.76	5,694.64	5,683.49	11.16	510.320		
400.00	400.00	350.00	400.00	3.60	10.97	-122.48	-3,058.24	-4,803.76	5,694.64	5,680.07	14.58	390.634		
500.00	499.98	449.98	499.98	3.80	14.34	19.33	-3,058.24	-4,803.76	5,693.00	5,674.86	18.14	313.826		
600.00	599.90	549.90	599.90	4.02	17.76	19.35	-3,058.24	-4,803.76	5,689.25	5,667.47	21.78	261.224		
700.00	699.82	649.82	699.82	4.28	21.20	19.36	-3,058.24	-4,803.76	5,685.46	5,659.99	25.47	223.184		
800.00	799.74	749.74	799.74	4.57	24.65	19.38	-3,058.24	-4,803.76	5,681.67	5,652.46	29.21	194.500		
900.00	899.66	849.66	899.66	4.88	28.11	19.39	-3,058.24	-4,803.76	5,677.89	5,644.91	32.98	172.156		
1,000.00	999.58	949.58	999.58	5.21	31.58	19.40	-3,058.24	-4,803.76	5,674.10	5,637.33	36.78	154.290		
1,100.00	1,099.50	1,049.50	1,099.50	5.55	35.05	19.42	-3,058.24	-4,803.76	5,670.32	5,629.73	40.59	139.698		
1,200.00	1,199.42	1,149.42	1,199.42	5.91	38.52	19.43	-3,058.24	-4,803.76	5,666.53	5,622.11	44.42	127.566		
1,300.00	1,299.34	1,249.34	1,299.34	6.28	42.00	19.45	-3,058.24	-4,803.76	5,662.75	5,614.48	48.26	117.329		
1,400.00	1,399.26	1,349.26	1,399.26	6.66	45.48	19.46	-3,058.24	-4,803.76	5,658.96	5,606.85	52.12	108.580		
1,500.00	1,499.18	1,449.18	1,499.18	7.04	48.96	19.47	-3,058.24	-4,803.76	5,655.18	5,599.20	55.98	101.020		
1,600.00	1,599.10	1,549.10	1,599.10	7.43	52.44	19.49	-3,058.24	-4,803.76	5,651.40	5,591.54	59.85	94.424		
1,700.00	1,699.01	1,649.01	1,699.01	7.83	55.92	19.50	-3,058.24	-4,803.76	5,647.61	5,583.88	63.73	88.620		
1,800.00	1,798.93	1,748.93	1,798.93	8.23	59.40	19.51	-3,058.24	-4,803.76	5,643.83	5,576.22	67.61	83.475		
1,900.00	1,898.85	1,848.85	1,898.85	8.64	62.88	19.53	-3,058.24	-4,803.76	5,640.05	5,568.55	71.50	78.884		
2,000.00	1,998.77	1,948.77	1,998.77	9.05	66.37	19.54	-3,058.24	-4,803.76	5,636.26	5,560.88	75.39	74.763		
2,100.00	2,098.69	2,048.69	2,098.69	9.46	69.85	19.55	-3,058.24	-4,803.76	5,632.48	5,553.20	79.28	71.043		
2,200.00	2,198.61	2,148.61	2,198.61	9.88	73.34	19.57	-3,058.24	-4,803.76	5,628.70	5,545.52	83.18	67.669		
2,300.00	2,298.53	2,248.53	2,298.53	10.30	76.82	19.58	-3,058.24	-4,803.76	5,624.92	5,537.84	87.08	64.595		
2,400.00	2,398.45	2,348.45	2,398.45	10.72	80.31	19.60	-3,058.24	-4,803.76	5,621.14	5,530.15	90.98	61.783		
2,500.00	2,498.37	2,448.37	2,498.37	11.14	83.79	19.61	-3,058.24	-4,803.76	5,617.36	5,522.47	94.89	59.201		
2,600.00	2,598.29	2,548.29	2,598.29	11.56	87.28	19.62	-3,058.24	-4,803.76	5,613.57	5,514.78	98.79	56.822		
2,700.00	2,698.21	2,648.21	2,698.21	11.98	90.76	19.64	-3,058.24	-4,803.76	5,609.79	5,507.09	102.70	54.623		
2,800.00	2,798.13	2,748.13	2,798.13	12.41	94.25	19.65	-3,058.24	-4,803.76	5,606.01	5,499.40	106.61	52.584		
2,900.00	2,898.05	2,848.05	2,898.05	12.84	97.74	19.66	-3,058.24	-4,803.76	5,602.24	5,491.71	110.52	50.690		
3,000.00	2,997.97	2,947.97	2,997.97	13.27	101.22	19.68	-3,058.24	-4,803.76	5,598.46	5,484.02	114.43	48.924		
3,100.00	3,097.89	3,047.89	3,097.89	13.69	104.71	19.69	-3,058.24	-4,803.76	5,594.68	5,476.33	118.35	47.274		
3,200.00	3,197.81	3,147.81	3,197.81	14.12	108.19	19.71	-3,058.24	-4,803.76	5,590.90	5,468.64	122.26	45.730		
3,300.00	3,297.73	3,247.73	3,297.73	14.56	111.68	19.72	-3,058.24	-4,803.76	5,587.12	5,460.95	126.17	44.281		
3,400.00	3,397.65	3,347.65	3,397.65	14.99	115.17	19.73	-3,058.24	-4,803.76	5,583.34	5,453.25	130.09	42.919		
3,500.00	3,497.56	3,447.56	3,497.56	15.42	118.65	19.75	-3,058.24	-4,803.76	5,579.56	5,445.56	134.01	41.637		
3,600.00	3,597.48	3,547.48	3,597.48	15.85	122.14	19.76	-3,058.24	-4,803.76	5,575.79	5,437.86	137.92	40.427		
3,700.00	3,697.40	3,647.40	3,697.40	16.28	125.63	19.78	-3,058.24	-4,803.76	5,572.01	5,430.17	141.84	39.284		
3,800.00	3,797.32	3,747.32	3,797.32	16.72	129.12	19.79	-3,058.24	-4,803.76	5,568.23	5,422.47	145.76	38.202		
3,900.00	3,897.24	3,847.24	3,897.24	17.15	132.60	19.80	-3,058.24	-4,803.76	5,564.46	5,414.78	149.68	37.176		
4,000.00	3,997.16	3,947.16	3,997.16	17.59	136.09	19.82	-3,058.24	-4,803.76	5,560.68	5,407.08	153.60	36.203		
4,100.00	4,097.08	4,047.08	4,097.08	18.02	139.58	19.83	-3,058.24	-4,803.76	5,556.90	5,399.39	157.52	35.278		
4,200.00	4,197.00	4,147.00	4,197.00	18.46	143.06	19.85	-3,058.24	-4,803.76	5,553.13	5,391.69	161.44	34.398		
4,300.00	4,296.92	4,246.92	4,296.92	18.89	146.55	19.86	-3,058.24	-4,803.76	5,549.35	5,384.00	165.36	33.560		
4,400.00	4,396.84	4,346.84	4,396.84	19.33	150.04	19.87	-3,058.24	-4,803.76	5,545.58	5,376.30	169.28	32.760		
4,500.00	4,496.76	4,446.76	4,496.76	19.77	153.53	19.89	-3,058.24	-4,803.76	5,541.81	5,368.61	173.20	31.997		
4,600.00	4,596.68	4,546.68	4,596.68	20.20	157.01	19.90	-3,058.24	-4,803.76	5,538.03	5,360.91	177.12	31.267		
4,700.00	4,696.60	4,646.60	4,696.60	20.64	160.50	19.92	-3,058.24	-4,803.76	5,534.26	5,353.21	181.04	30.569		
4,800.00	4,796.52	4,746.52	4,796.52	21.08	163.99	19.93	-3,058.24	-4,803.76	5,530.48	5,345.52	184.97	29.900		
4,900.00	4,896.44	4,846.44	4,896.44	21.51	167.48	19.94	-3,058.24	-4,803.76	5,526.71	5,337.82	188.89	29.259		
5,000.00	4,996.36	4,946.36	4,996.36	21.95	170.96	19.96	-3,058.24	-4,803.76	5,522.94	5,330.13	192.81	28.644		
5,100.00	5,096.28	5,046.28	5,096.28	22.39	174.45	19.97	-3,058.24	-4,803.76	5,519.17	5,322.43	196.73	28.054		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,146.19	5,196.19	22.83	177.94	19.99	-3,058.24	-4,803.76	5,515.39	5,314.74	200.66	27.487		
5,300.00	5,296.11	5,246.11	5,296.11	23.27	181.43	20.00	-3,058.24	-4,803.76	5,511.62	5,307.04	204.58	26.941		
5,400.00	5,396.03	5,346.03	5,396.03	23.71	184.91	20.02	-3,058.24	-4,803.76	5,507.85	5,299.35	208.50	26.416		
5,500.00	5,495.95	5,445.95	5,495.95	24.14	188.40	20.03	-3,058.24	-4,803.76	5,504.08	5,291.65	212.43	25.910		
5,600.00	5,595.87	5,545.87	5,595.87	24.58	191.89	20.04	-3,058.24	-4,803.76	5,500.31	5,283.96	216.35	25.423		
5,700.00	5,695.79	5,645.79	5,695.79	25.02	195.38	20.06	-3,058.24	-4,803.76	5,496.54	5,276.26	220.28	24.953		
5,800.00	5,795.71	5,745.71	5,795.71	25.46	198.86	20.07	-3,058.24	-4,803.76	5,492.77	5,268.57	224.20	24.499		
5,900.00	5,895.63	5,845.63	5,895.63	25.90	202.35	20.09	-3,058.24	-4,803.76	5,489.00	5,260.88	228.12	24.061		
6,000.00	5,995.55	5,945.55	5,995.55	26.34	205.84	20.10	-3,058.24	-4,803.76	5,485.23	5,253.18	232.05	23.638		
6,100.00	6,095.47	6,045.47	6,095.47	26.78	209.33	20.12	-3,058.24	-4,803.76	5,481.46	5,245.49	235.97	23.229		
6,200.00	6,195.39	6,145.39	6,195.39	27.22	212.82	20.13	-3,058.24	-4,803.76	5,477.69	5,237.79	239.90	22.833		
6,300.00	6,295.31	6,245.31	6,295.31	27.66	216.30	20.14	-3,058.24	-4,803.76	5,473.92	5,230.10	243.82	22.450		
6,400.00	6,395.23	6,345.23	6,395.23	28.10	219.79	20.16	-3,058.24	-4,803.76	5,470.16	5,222.41	247.75	22.079		
6,500.00	6,495.02	6,445.02	6,495.02	28.54	223.27	-15.64	-3,058.24	-4,803.76	5,464.40	5,212.73	251.67	21.713		
6,600.00	6,593.09	6,543.09	6,593.09	28.98	226.70	-25.67	-3,058.24	-4,803.76	5,446.74	5,191.22	255.52	21.316		
6,700.00	6,687.01	6,637.01	6,687.01	29.41	229.98	-29.83	-3,058.24	-4,803.76	5,416.27	5,157.07	259.20	20.896		
6,800.00	6,774.46	6,724.46	6,774.46	29.83	233.03	-33.63	-3,058.24	-4,803.76	5,373.81	5,111.17	262.63	20.461		
6,900.00	6,853.31	6,803.31	6,853.31	30.26	235.78	-38.16	-3,058.24	-4,803.76	5,320.49	5,054.76	265.73	20.022		
7,000.00	6,921.60	6,871.60	6,921.60	30.76	238.17	-43.98	-3,058.24	-4,803.76	5,257.75	4,989.32	268.43	19.587		
7,100.00	6,977.66	6,927.66	6,977.66	31.38	240.12	-51.60	-3,058.24	-4,803.76	5,187.26	4,916.58	270.69	19.163		
7,200.00	7,020.10	6,970.10	7,020.10	32.17	241.60	-61.36	-3,058.24	-4,803.76	5,110.92	4,838.43	272.48	18.757		
7,300.00	7,047.88	7,002.12	7,047.88	33.13	242.72	-73.18	-3,058.24	-4,803.76	5,030.71	4,756.77	273.94	18.364		
7,400.00	7,060.32	7,010.32	7,060.32	34.27	243.01	-86.17	-3,058.24	-4,803.76	4,948.74	4,674.11	274.63	18.020		
7,500.00	7,060.70	7,010.70	7,060.70	35.56	243.02	-90.35	-3,058.24	-4,803.76	4,866.92	4,591.80	275.12	17.690		
7,600.00	7,060.27	7,010.27	7,060.27	37.02	243.01	-90.34	-3,058.24	-4,803.76	4,785.80	4,510.11	275.69	17.359		
7,700.00	7,059.83	7,009.83	7,059.83	38.64	242.99	-90.33	-3,058.24	-4,803.76	4,705.40	4,429.02	276.38	17.025		
7,800.00	7,059.40	7,009.40	7,059.40	40.40	242.98	-90.32	-3,058.24	-4,803.76	4,625.77	4,348.58	277.20	16.688		
7,900.00	7,058.97	7,008.97	7,058.97	42.28	242.96	-90.31	-3,058.24	-4,803.76	4,546.94	4,268.81	278.14	16.348		
8,000.00	7,058.53	7,008.53	7,058.53	44.27	242.94	-90.31	-3,058.24	-4,803.76	4,468.96	4,189.76	279.20	16.006		
8,100.00	7,058.10	7,008.10	7,058.10	46.35	242.93	-90.30	-3,058.24	-4,803.76	4,391.88	4,111.48	280.40	15.663		
8,200.00	7,057.66	7,007.66	7,057.66	48.50	242.91	-90.29	-3,058.24	-4,803.76	4,315.73	4,034.00	281.73	15.319		
8,300.00	7,057.23	7,007.23	7,057.23	50.73	242.90	-90.28	-3,058.24	-4,803.76	4,240.57	3,957.38	283.19	14.974		
8,400.00	7,056.80	7,006.80	7,056.80	53.02	242.88	-90.27	-3,058.24	-4,803.76	4,166.46	3,881.68	284.78	14.630		
8,500.00	7,056.36	7,006.36	7,056.36	55.36	242.87	-90.26	-3,058.24	-4,803.76	4,093.45	3,806.94	286.51	14.287		
8,600.00	7,055.93	7,005.93	7,055.93	57.74	242.85	-90.25	-3,058.24	-4,803.76	4,021.60	3,733.24	288.36	13.946		
8,700.00	7,055.49	7,005.49	7,055.49	60.17	242.84	-90.24	-3,058.24	-4,803.76	3,950.98	3,660.63	290.35	13.608		
8,800.00	7,055.06	7,005.06	7,055.06	62.63	242.82	-90.23	-3,058.24	-4,803.76	3,881.64	3,589.18	292.46	13.272		
8,900.00	7,054.63	7,004.63	7,054.63	65.13	242.81	-90.23	-3,058.24	-4,803.76	3,813.67	3,518.97	294.70	12.941		
9,000.00	7,054.19	7,004.19	7,054.19	67.66	242.79	-90.22	-3,058.24	-4,803.76	3,747.13	3,450.07	297.06	12.614		
9,100.00	7,053.76	7,003.76	7,053.76	70.21	242.78	-90.21	-3,058.24	-4,803.76	3,682.11	3,382.56	299.55	12.292		
9,200.00	7,053.32	7,003.32	7,053.32	72.78	242.76	-90.20	-3,058.24	-4,803.76	3,618.69	3,316.53	302.16	11.976		
9,300.00	7,052.89	7,002.89	7,052.89	75.38	242.75	-90.19	-3,058.24	-4,803.76	3,556.94	3,252.06	304.88	11.667		
9,400.00	7,052.46	7,002.46	7,052.46	77.99	242.73	-90.18	-3,058.24	-4,803.76	3,496.96	3,189.25	307.71	11.364		
9,500.00	7,052.02	7,002.02	7,052.02	80.62	242.72	-90.17	-3,058.24	-4,803.76	3,438.85	3,128.19	310.66	11.070		
9,600.00	7,051.59	7,001.59	7,051.59	83.26	242.70	-90.16	-3,058.24	-4,803.76	3,382.70	3,068.99	313.71	10.783		
9,700.00	7,051.15	7,001.15	7,051.15	85.92	242.69	-90.16	-3,058.24	-4,803.76	3,328.60	3,011.74	316.85	10.505		
9,800.00	7,050.72	7,000.72	7,050.72	88.59	242.67	-90.15	-3,058.24	-4,803.76	3,276.66	2,956.57	320.09	10.237		
9,900.00	7,050.29	7,000.29	7,050.29	91.28	242.66	-90.14	-3,058.24	-4,803.76	3,226.98	2,903.57	323.41	9.978		
10,000.00	7,049.85	7,000.15	7,049.85	93.97	242.65	-90.13	-3,058.24	-4,803.76	3,179.68	2,852.86	326.81	9.729		
10,100.00	7,049.42	7,000.58	7,049.42	96.67	242.67	-90.12	-3,058.24	-4,803.76	3,134.85	2,804.55	330.30	9.491		
10,200.00	7,048.98	7,001.02	7,048.98	99.38	242.68	-90.11	-3,058.24	-4,803.76	3,092.61	2,758.76	333.85	9.264		
10,300.00	7,048.55	7,001.45	7,048.55	102.10	242.70	-90.10	-3,058.24	-4,803.76	3,053.06	2,715.63	337.43	9.048		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	7,001.88	7,048.12	104.83	242.71	-90.09	-3,058.24	-4,803.76	3,016.30	2,675.26	341.04	8.844		
10,500.00	7,047.68	7,002.32	7,047.68	107.56	242.73	-90.09	-3,058.24	-4,803.76	2,982.45	2,637.78	344.67	8.653		
10,600.00	7,047.25	7,002.75	7,047.25	110.30	242.74	-90.08	-3,058.24	-4,803.76	2,951.60	2,603.31	348.29	8.474		
10,700.00	7,046.81	7,003.19	7,046.81	113.05	242.76	-90.07	-3,058.24	-4,803.76	2,923.85	2,571.95	351.90	8.309		
10,800.00	7,046.38	7,003.62	7,046.38	115.80	242.77	-90.06	-3,058.24	-4,803.76	2,899.28	2,543.81	355.47	8.156		
10,900.00	7,045.95	7,004.05	7,045.95	118.55	242.79	-90.05	-3,058.24	-4,803.76	2,877.97	2,518.98	358.99	8.017		
11,000.00	7,045.51	7,004.49	7,045.51	121.31	242.80	-90.04	-3,058.24	-4,803.76	2,860.01	2,497.57	362.44	7.891		
11,100.00	7,045.08	7,004.92	7,045.08	124.08	242.82	-90.03	-3,058.24	-4,803.76	2,845.45	2,479.65	365.80	7.779		
11,200.00	7,044.64	7,005.36	7,044.64	126.85	242.83	-90.02	-3,058.24	-4,803.76	2,834.35	2,465.29	369.06	7.680		
11,300.00	7,044.21	7,005.79	7,044.21	129.62	242.85	-90.01	-3,058.24	-4,803.76	2,826.74	2,454.54	372.20	7.595		
11,400.00	7,043.78	7,006.22	7,043.78	132.40	242.86	-90.01	-3,058.24	-4,803.76	2,822.65	2,447.45	375.20	7.523		
11,465.37	7,043.49	7,006.51	7,043.49	134.22	242.87	-90.00	-3,058.24	-4,803.76	2,821.90	2,444.81	377.09	7.483 CC		
11,500.00	7,043.34	7,006.66	7,043.34	135.18	242.88	-90.00	-3,058.24	-4,803.76	2,822.11	2,444.05	378.06	7.465 ES		
11,600.00	7,042.91	7,007.09	7,042.91	137.96	242.89	-89.99	-3,058.24	-4,803.76	2,825.11	2,444.35	380.76	7.420		
11,700.00	7,042.47	7,007.53	7,042.47	140.75	242.91	-89.98	-3,058.24	-4,803.76	2,831.63	2,448.35	383.28	7.388		
11,800.00	7,042.04	7,007.96	7,042.04	143.54	242.93	-89.97	-3,058.24	-4,803.76	2,841.67	2,456.03	385.64	7.369		
11,900.00	7,041.61	7,008.39	7,041.61	146.33	242.94	-89.96	-3,058.24	-4,803.76	2,855.17	2,467.36	387.81	7.362 SF		
12,000.00	7,041.17	7,008.83	7,041.17	149.13	242.96	-89.95	-3,058.24	-4,803.76	2,872.09	2,482.30	389.79	7.368		
12,100.00	7,040.74	7,009.26	7,040.74	151.92	242.97	-89.94	-3,058.24	-4,803.76	2,892.38	2,500.79	391.59	7.386		
12,200.00	7,040.30	7,009.70	7,040.30	154.72	242.99	-89.94	-3,058.24	-4,803.76	2,915.95	2,522.75	393.20	7.416		
12,300.00	7,039.87	6,989.87	7,039.87	157.52	242.29	-89.93	-3,058.24	-4,803.76	2,942.74	2,548.81	393.92	7.470		
12,400.00	7,039.44	6,989.44	7,039.44	160.33	242.28	-89.92	-3,058.24	-4,803.76	2,972.64	2,577.50	395.14	7.523		
12,500.00	7,039.00	6,989.00	7,039.00	163.13	242.26	-89.91	-3,058.24	-4,803.76	3,005.58	2,609.39	396.19	7.586		
12,600.00	7,038.57	6,988.57	7,038.57	165.94	242.25	-89.90	-3,058.24	-4,803.76	3,041.46	2,644.38	397.08	7.660		
12,700.00	7,038.13	6,988.13	7,038.13	168.75	242.23	-89.89	-3,058.24	-4,803.76	3,080.16	2,682.36	397.80	7.743		
12,800.00	7,037.70	6,987.70	7,037.70	171.56	242.22	-89.88	-3,058.24	-4,803.76	3,121.59	2,723.20	398.38	7.836		
12,900.00	7,037.27	6,987.27	7,037.27	174.37	242.20	-89.87	-3,058.24	-4,803.76	3,165.63	2,766.81	398.82	7.937		
13,000.00	7,036.83	6,986.83	7,036.83	177.19	242.19	-89.86	-3,058.24	-4,803.76	3,212.19	2,813.05	399.13	8.048		
13,100.00	7,036.40	6,986.40	7,036.40	180.00	242.17	-89.86	-3,058.24	-4,803.76	3,261.14	2,861.82	399.32	8.167		
13,200.00	7,035.96	6,985.96	7,035.96	182.82	242.16	-89.85	-3,058.24	-4,803.76	3,312.40	2,912.99	399.40	8.293		
13,300.00	7,035.53	6,985.53	7,035.53	185.64	242.14	-89.84	-3,058.24	-4,803.76	3,365.84	2,966.46	399.39	8.428		
13,400.00	7,035.10	6,985.10	7,035.10	188.46	242.13	-89.83	-3,058.24	-4,803.76	3,421.38	3,022.10	399.28	8.569		
13,500.00	7,034.66	6,984.66	7,034.66	191.28	242.11	-89.82	-3,058.24	-4,803.76	3,478.90	3,079.82	399.08	8.717		
13,600.00	7,034.23	6,984.23	7,034.23	194.10	242.10	-89.81	-3,058.24	-4,803.76	3,538.31	3,139.49	398.82	8.872		
13,700.00	7,033.79	6,983.79	7,033.79	196.92	242.08	-89.80	-3,058.24	-4,803.76	3,599.53	3,201.04	398.49	9.033		
13,800.00	7,033.36	6,983.36	7,033.36	199.74	242.07	-89.79	-3,058.24	-4,803.76	3,662.44	3,264.34	398.10	9.200		
13,900.00	7,032.93	6,982.93	7,032.93	202.57	242.05	-89.79	-3,058.24	-4,803.76	3,726.98	3,329.33	397.66	9.372		
14,000.00	7,032.49	6,982.49	7,032.49	205.39	242.04	-89.78	-3,058.24	-4,803.76	3,793.06	3,395.89	397.18	9.550		
14,100.00	7,032.06	6,982.06	7,032.06	208.22	242.02	-89.77	-3,058.24	-4,803.76	3,860.60	3,463.95	396.65	9.733		
14,200.00	7,031.62	6,981.62	7,031.62	211.05	242.01	-89.76	-3,058.24	-4,803.76	3,929.52	3,533.43	396.10	9.921		
14,300.00	7,031.19	6,981.19	7,031.19	213.87	241.99	-89.75	-3,058.24	-4,803.76	3,999.76	3,604.25	395.51	10.113		
14,400.00	7,030.76	6,980.76	7,030.76	216.70	241.98	-89.74	-3,058.24	-4,803.76	4,071.24	3,676.34	394.90	10.309		
14,500.00	7,030.32	6,980.32	7,030.32	219.53	241.96	-89.73	-3,058.24	-4,803.76	4,143.90	3,749.63	394.28	10.510		
14,600.00	7,029.89	6,979.89	7,029.89	222.36	241.95	-89.72	-3,058.24	-4,803.76	4,217.68	3,824.05	393.63	10.715		
14,700.00	7,029.45	6,979.45	7,029.45	225.19	241.93	-89.71	-3,058.24	-4,803.76	4,292.52	3,899.55	392.97	10.923		
14,800.00	7,029.02	6,979.02	7,029.02	228.03	241.91	-89.71	-3,058.24	-4,803.76	4,368.37	3,976.06	392.31	11.135		
14,805.04	7,029.00	6,979.00	7,029.00	228.17	241.91	-89.71	-3,058.24	-4,803.76	4,372.22	3,979.94	392.27	11.146		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	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	68.00	3.28	3.28	-142.30	-4,229.36	-3,268.41	5,345.52					
100.00	100.00	911.84	949.49	3.28	5.20	-142.49	-4,179.94	-3,208.10	5,337.17	5,328.67	8.50	627.870		
200.00	200.00	1,010.50	1,046.82	3.34	5.61	-142.53	-4,169.72	-3,195.64	5,321.26	5,312.37	8.89	598.470		
300.00	300.00	1,109.16	1,144.15	3.44	6.05	-142.57	-4,159.51	-3,183.17	5,305.34	5,295.99	9.35	567.361		
400.00	400.00	1,207.81	1,241.48	3.60	6.51	-142.61	-4,149.29	-3,170.71	5,289.43	5,279.56	9.87	535.800		
500.00	499.98	1,306.17	1,338.52	3.80	6.97	-0.86	-4,139.11	-3,158.28	5,271.81	5,261.36	10.44	504.854		
600.00	599.90	1,404.12	1,435.15	4.02	7.44	-0.90	-4,128.97	-3,145.91	5,251.99	5,240.94	11.05	475.284		
700.00	699.82	1,502.05	1,531.77	4.28	7.93	-0.95	-4,118.83	-3,133.53	5,232.14	5,220.45	11.69	447.566		
800.00	799.74	1,600.01	1,628.40	4.57	8.41	-0.99	-4,108.69	-3,121.16	5,212.29	5,199.93	12.36	421.540		
900.00	899.66	1,702.07	1,725.02	4.88	8.93	-1.03	-4,098.55	-3,108.79	5,192.45	5,179.36	13.09	396.792		
1,000.00	999.58	1,795.87	1,821.64	5.21	9.41	-1.07	-4,088.41	-3,096.41	5,172.60	5,158.81	13.80	374.920		
1,100.00	1,099.50	1,893.80	1,918.26	5.55	9.91	-1.12	-4,078.27	-3,084.04	5,152.76	5,138.22	14.54	354.264		
1,200.00	1,199.42	1,991.74	2,014.88	5.91	10.42	-1.16	-4,068.13	-3,071.67	5,132.93	5,117.62	15.31	335.254		
1,300.00	1,299.34	2,089.68	2,111.51	6.28	10.93	-1.20	-4,057.99	-3,059.29	5,113.09	5,097.00	16.09	317.769		
1,400.00	1,399.26	2,187.62	2,208.13	6.66	11.44	-1.25	-4,047.85	-3,046.92	5,093.26	5,076.38	16.88	301.682		
1,500.00	1,499.18	2,285.55	2,304.75	7.04	11.95	-1.29	-4,037.71	-3,034.55	5,073.43	5,055.75	17.69	286.867		
1,600.00	1,599.10	2,383.49	2,401.37	7.43	12.47	-1.34	-4,027.57	-3,022.17	5,053.61	5,035.11	18.50	273.206		
1,700.00	1,699.01	2,481.43	2,497.99	7.83	12.99	-1.38	-4,017.43	-3,009.80	5,033.79	5,014.47	19.32	260.590		
1,800.00	1,798.93	2,579.37	2,594.62	8.23	13.51	-1.43	-4,007.29	-2,997.43	5,013.97	4,993.82	20.14	248.917		
1,900.00	1,898.85	2,677.30	2,691.24	8.64	14.03	-1.48	-3,997.15	-2,985.06	4,994.15	4,973.18	20.98	238.098		
2,000.00	1,998.77	2,775.24	2,787.86	9.05	14.55	-1.52	-3,987.01	-2,972.68	4,974.34	4,952.53	21.81	228.051		
2,100.00	2,098.69	2,873.18	2,884.48	9.46	15.07	-1.57	-3,976.87	-2,960.31	4,954.53	4,931.87	22.65	218.703		
2,200.00	2,198.61	2,971.12	2,981.10	9.88	15.60	-1.62	-3,966.73	-2,947.94	4,934.72	4,911.22	23.50	209.989		
2,300.00	2,298.53	3,069.05	3,077.73	10.30	16.12	-1.66	-3,956.59	-2,935.56	4,914.92	4,890.57	24.35	201.851		
2,400.00	2,398.45	3,166.99	3,174.35	10.72	16.65	-1.71	-3,946.45	-2,923.19	4,895.12	4,869.92	25.20	194.237		
2,500.00	2,498.37	3,264.93	3,270.97	11.14	17.18	-1.76	-3,936.31	-2,910.82	4,875.32	4,849.26	26.06	187.101		
2,600.00	2,598.29	3,362.86	3,367.59	11.56	17.71	-1.81	-3,926.17	-2,898.44	4,855.53	4,828.61	26.92	180.401		
2,700.00	2,698.21	3,460.80	3,464.21	11.98	18.23	-1.86	-3,916.03	-2,886.07	4,835.74	4,807.96	27.78	174.101		
2,800.00	2,798.13	3,558.74	3,560.84	12.41	18.76	-1.91	-3,905.89	-2,873.70	4,815.95	4,787.31	28.64	168.166		
2,900.00	2,898.05	3,656.68	3,657.46	12.84	19.29	-1.96	-3,895.75	-2,861.32	4,796.17	4,766.67	29.50	162.568		
3,000.00	2,997.97	3,754.61	3,754.08	13.27	19.82	-2.01	-3,885.61	-2,848.95	4,776.39	4,746.02	30.37	157.280		
3,100.00	3,097.89	3,852.55	3,850.70	13.69	20.35	-2.06	-3,875.47	-2,836.58	4,756.61	4,725.38	31.24	152.277		
3,200.00	3,197.81	3,950.49	3,947.32	14.12	20.88	-2.11	-3,865.33	-2,824.20	4,736.84	4,704.74	32.11	147.538		
3,300.00	3,297.73	4,048.43	4,043.95	14.56	21.41	-2.16	-3,855.19	-2,811.83	4,717.07	4,684.10	32.98	143.043		
3,400.00	3,397.65	4,146.36	4,140.57	14.99	21.95	-2.21	-3,845.05	-2,799.46	4,697.31	4,663.46	33.85	138.773		
3,500.00	3,497.56	4,244.30	4,237.19	15.42	22.48	-2.27	-3,834.91	-2,787.08	4,677.55	4,642.83	34.72	134.714		
3,600.00	3,597.48	4,342.24	4,333.81	15.85	23.01	-2.32	-3,824.77	-2,774.71	4,657.79	4,622.19	35.60	130.850		
3,700.00	3,697.40	4,440.18	4,430.43	16.28	23.54	-2.37	-3,814.63	-2,762.34	4,638.04	4,601.56	36.47	127.167		
3,800.00	3,797.32	4,538.11	4,527.06	16.72	24.08	-2.43	-3,804.49	-2,749.97	4,618.29	4,580.94	37.35	123.654		
3,900.00	3,897.24	4,636.05	4,623.68	17.15	24.61	-2.48	-3,794.35	-2,737.59	4,598.54	4,560.32	38.23	120.300		
4,000.00	3,997.16	4,733.99	4,720.30	17.59	25.14	-2.54	-3,784.20	-2,725.22	4,578.80	4,539.70	39.10	117.093		
4,100.00	4,097.08	4,831.93	4,816.92	18.02	25.67	-2.59	-3,774.06	-2,712.85	4,559.06	4,519.08	39.98	114.025		
4,200.00	4,197.00	4,929.86	4,913.54	18.46	26.21	-2.65	-3,763.92	-2,700.47	4,539.33	4,498.47	40.86	111.087		
4,300.00	4,296.92	5,027.80	5,010.17	18.89	26.74	-2.70	-3,753.78	-2,688.10	4,519.60	4,477.86	41.74	108.271		
4,400.00	4,396.84	5,125.74	5,106.79	19.33	27.28	-2.76	-3,743.64	-2,675.73	4,499.88	4,457.25	42.62	105.570		
4,500.00	4,496.76	5,223.68	5,203.41	19.77	27.82	-2.82	-3,733.50	-2,663.35	4,480.15	4,436.64	43.52	102.947		
4,600.00	4,596.68	5,321.62	5,300.03	20.20	28.38	-2.87	-3,723.36	-2,650.98	4,460.44	4,416.02	44.42	100.413		
4,700.00	4,696.60	5,419.56	5,396.65	20.64	28.94	-2.93	-3,713.22	-2,638.61	4,440.73	4,395.40	45.32	97.979		
4,800.00	4,796.52	5,517.49	5,493.28	21.08	29.41	-2.99	-3,703.08	-2,626.23	4,421.02	4,374.86	46.16	95.783		
4,900.00	4,896.44	5,615.42	5,589.90	21.51	29.95	-3.05	-3,692.94	-2,613.86	4,401.32	4,354.28	47.04	93.564		
5,000.00	4,996.36	5,713.36	5,686.52	21.95	30.48	-3.11	-3,682.80	-2,601.49	4,381.62	4,333.69	47.93	91.425		
5,100.00	5,096.28	5,811.30	5,783.14	22.39	31.02	-3.17	-3,672.66	-2,589.11	4,361.92	4,313.11	48.81	89.363		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,909.24	5,879.76	22.83	31.55	-3.23	-3,662.52	-2,576.74	4,342.24	4,292.54	49.70	87.373		
5,300.00	5,296.11	6,007.17	5,976.39	23.27	32.09	-3.29	-3,652.38	-2,564.37	4,322.55	4,271.97	50.58	85.453		
5,400.00	5,396.03	6,105.11	6,073.01	23.71	32.62	-3.36	-3,642.24	-2,551.99	4,302.87	4,251.40	51.47	83.598		
5,500.00	5,495.95	6,203.05	6,169.63	24.14	33.16	-3.42	-3,632.10	-2,539.62	4,283.20	4,230.84	52.36	81.805		
5,600.00	5,595.87	6,260.38	6,226.19	24.58	33.47	-3.45	-3,626.17	-2,532.38	4,263.72	4,210.62	53.10	80.292		
5,700.00	5,695.79	6,300.00	6,265.41	25.02	33.68	-3.47	-3,622.08	-2,528.60	4,245.74	4,191.97	53.77	78.960		
5,800.00	5,795.71	6,300.00	6,265.41	25.46	33.68	-3.47	-3,622.08	-2,528.60	4,229.51	4,175.23	54.28	77.918		
5,900.00	5,895.63	6,325.01	6,290.27	25.90	33.79	-3.46	-3,619.52	-2,527.48	4,215.11	4,160.25	54.86	76.832		
6,000.00	5,995.55	6,350.00	6,315.12	26.34	33.90	-3.44	-3,616.98	-2,527.34	4,202.60	4,147.17	55.42	75.829		
6,100.00	6,095.47	6,369.65	6,334.66	26.78	33.97	-3.42	-3,615.00	-2,527.92	4,191.96	4,136.02	55.94	74.938		
6,200.00	6,195.39	6,400.00	6,364.79	27.22	34.08	-3.37	-3,611.97	-2,530.00	4,183.26	4,126.78	56.48	74.067		
6,300.00	6,295.31	6,410.20	6,374.89	27.66	34.11	-3.36	-3,610.97	-2,531.03	4,176.34	4,119.42	56.92	73.373		
6,400.00	6,395.23	6,425.01	6,389.52	28.10	34.16	-3.32	-3,609.52	-2,532.80	4,171.40	4,114.05	57.35	72.732		
6,500.00	6,495.02	6,450.00	6,414.10	28.54	34.23	-39.08	-3,607.09	-2,536.57	4,167.00	4,109.20	57.80	72.088		
6,600.00	6,593.09	6,470.52	6,434.17	28.98	34.28	-48.94	-3,605.13	-2,540.39	4,156.48	4,098.26	58.22	71.399		
6,700.00	6,687.01	6,500.00	6,462.76	29.41	34.34	-52.69	-3,602.37	-2,547.01	4,139.14	4,080.49	58.65	70.579		
6,800.00	6,774.46	6,510.20	6,472.58	29.83	34.37	-55.69	-3,601.43	-2,549.61	4,115.19	4,056.21	58.98	69.774		
6,900.00	6,853.31	6,525.01	6,486.76	30.26	34.39	-58.79	-3,600.07	-2,553.67	4,085.32	4,025.98	59.34	68.846		
7,000.00	6,921.60	6,550.00	6,510.46	30.76	34.44	-62.31	-3,597.83	-2,561.25	4,050.14	3,990.35	59.79	67.738		
7,100.00	6,977.66	6,550.00	6,510.46	31.38	34.44	-66.09	-3,597.83	-2,561.25	4,010.60	3,950.38	60.22	66.595		
7,200.00	7,020.10	6,580.15	6,538.64	32.17	34.48	-70.58	-3,595.19	-2,571.64	3,967.31	3,906.37	60.93	65.110		
7,300.00	7,047.88	6,600.00	6,556.91	33.13	34.51	-75.35	-3,593.50	-2,579.21	3,921.70	3,859.92	61.78	63.481		
7,400.00	7,060.32	6,600.00	6,556.91	34.27	34.51	-80.09	-3,593.50	-2,579.21	3,874.79	3,812.05	62.74	61.760		
7,500.00	7,060.70	6,615.49	6,571.00	35.56	34.52	-81.86	-3,592.20	-2,585.51	3,828.11	3,764.15	63.96	59.853		
7,600.00	7,060.27	6,625.01	6,579.58	37.02	34.53	-82.00	-3,591.42	-2,589.55	3,783.32	3,717.97	65.36	57.887		
7,700.00	7,059.83	6,637.04	6,590.34	38.64	34.54	-82.18	-3,590.44	-2,594.84	3,740.55	3,673.59	66.96	55.865		
7,800.00	7,059.40	6,650.00	6,601.82	40.40	34.55	-82.37	-3,589.41	-2,600.77	3,699.84	3,631.10	68.74	53.824		
7,900.00	7,058.97	6,650.00	6,601.82	42.28	34.55	-82.37	-3,589.41	-2,600.77	3,661.33	3,590.68	70.65	51.823		
8,000.00	7,058.53	6,675.99	6,624.47	44.27	34.57	-82.74	-3,587.39	-2,613.35	3,624.85	3,552.06	72.79	49.800		
8,100.00	7,058.10	6,700.00	6,644.92	46.35	34.58	-83.08	-3,585.58	-2,625.80	3,590.69	3,515.64	75.05	47.844		
8,200.00	7,057.66	6,700.00	6,644.92	48.50	34.58	-83.08	-3,585.58	-2,625.80	3,558.73	3,481.35	77.38	45.990		
8,300.00	7,057.23	6,725.01	6,665.72	50.73	34.59	-83.43	-3,583.78	-2,639.57	3,529.04	3,449.17	79.87	44.185		
8,400.00	7,056.80	6,750.00	6,686.94	53.02	34.59	-83.77	-3,582.05	-2,654.14	3,501.69	3,419.24	82.45	42.471		
8,500.00	7,056.36	6,766.23	6,698.77	55.36	34.59	-83.98	-3,580.96	-2,664.03	3,476.64	3,391.54	85.09	40.857		
8,600.00	7,055.93	6,800.00	6,724.63	57.74	34.59	-84.42	-3,578.82	-2,685.63	3,453.96	3,366.13	87.83	39.328		
8,700.00	7,055.49	6,814.97	6,735.72	60.17	34.59	-84.60	-3,577.91	-2,695.64	3,433.49	3,342.91	90.59	37.902		
8,800.00	7,055.06	6,842.89	6,755.78	62.63	34.59	-84.94	-3,576.31	-2,715.00	3,415.36	3,321.94	93.41	36.563		
8,900.00	7,054.63	6,873.51	6,776.78	65.13	34.58	-85.30	-3,574.68	-2,737.22	3,399.45	3,303.18	96.27	35.310		
9,000.00	7,054.19	6,907.07	6,798.54	67.66	34.58	-85.67	-3,573.04	-2,762.70	3,385.73	3,286.57	99.16	34.143		
9,100.00	7,053.76	6,943.80	6,820.81	70.21	34.57	-86.05	-3,571.43	-2,791.87	3,374.11	3,272.03	102.08	33.052		
9,200.00	7,053.32	6,983.90	6,843.16	72.78	34.58	-86.43	-3,569.91	-2,825.12	3,364.50	3,259.47	105.04	32.031		
9,300.00	7,052.89	7,025.01	6,863.87	75.38	34.60	-86.78	-3,568.61	-2,860.60	3,356.80	3,248.79	108.01	31.079		
9,400.00	7,052.46	7,074.55	6,885.73	77.99	34.65	-87.16	-3,567.39	-2,905.02	3,350.86	3,239.81	111.05	30.174		
9,500.00	7,052.02	7,125.01	6,904.41	80.62	34.74	-87.48	-3,566.56	-2,951.88	3,346.58	3,232.46	114.12	29.324		
9,600.00	7,051.59	7,178.42	6,920.09	83.26	34.91	-87.75	-3,566.12	-3,002.91	3,343.82	3,226.55	117.27	28.513		
9,700.00	7,051.15	7,234.37	6,931.90	85.92	35.18	-87.96	-3,566.16	-3,057.58	3,342.47	3,221.99	120.48	27.743		
9,752.60	7,050.93	7,264.55	6,936.27	87.33	35.37	-88.03	-3,566.40	-3,087.44	3,342.29	3,220.09	122.20	27.351 CC		
9,800.00	7,050.72	7,292.07	6,939.03	88.59	35.58	-88.08	-3,566.74	-3,114.81	3,342.43	3,218.67	123.76	27.007		
9,900.00	7,050.29	7,354.49	6,940.97	91.28	36.14	-88.12	-3,567.97	-3,177.17	3,343.65	3,216.51	127.14	26.299		
10,000.00	7,049.85	7,454.47	6,940.55	93.97	37.33	-88.12	-3,570.29	-3,277.13	3,345.37	3,214.26	131.11	25.515		
10,100.00	7,049.42	7,554.46	6,940.14	96.67	38.82	-88.12	-3,572.62	-3,377.09	3,347.10	3,211.77	135.33	24.732		
10,200.00	7,048.98	7,654.44	6,939.72	99.38	40.57	-88.13	-3,574.94	-3,477.04	3,348.82	3,209.05	139.78	23.958		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N 20A-L(SRC PLAN_75CC) - OH - SRC PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,048.55	7,754.43	6,939.30	102.10	42.51	-88.13	-3,577.27	-3,577.00	3,350.55	3,206.13	144.42	23.200		
10,400.00	7,048.12	7,854.41	6,938.88	104.83	44.62	-88.13	-3,579.59	-3,676.96	3,352.27	3,203.04	149.24	22.463		
10,500.00	7,047.68	7,954.40	6,938.47	107.56	46.87	-88.13	-3,581.92	-3,776.91	3,354.00	3,199.80	154.20	21.751		
10,600.00	7,047.25	8,054.38	6,938.05	110.30	49.25	-88.13	-3,584.24	-3,876.87	3,355.72	3,196.43	159.30	21.066		
10,700.00	7,046.81	8,154.37	6,937.63	113.05	51.73	-88.13	-3,586.57	-3,976.83	3,357.45	3,192.94	164.51	20.409		
10,800.00	7,046.38	8,254.35	6,937.22	115.80	54.30	-88.13	-3,588.89	-4,076.79	3,359.18	3,189.36	169.81	19.781		
10,900.00	7,045.95	8,354.34	6,936.80	118.55	56.94	-88.13	-3,591.22	-4,176.74	3,360.90	3,185.69	175.21	19.182		
11,000.00	7,045.51	8,454.32	6,936.38	121.31	59.65	-88.14	-3,593.54	-4,276.70	3,362.63	3,181.95	180.67	18.612		
11,100.00	7,045.08	8,554.31	6,935.96	124.08	62.43	-88.14	-3,595.87	-4,376.66	3,364.35	3,178.15	186.20	18.068		
11,200.00	7,044.64	8,654.29	6,935.55	126.85	65.25	-88.14	-3,598.19	-4,476.61	3,366.08	3,174.29	191.79	17.551		
11,300.00	7,044.21	8,754.28	6,935.13	129.62	68.12	-88.14	-3,600.52	-4,576.57	3,367.80	3,170.38	197.43	17.059		
11,400.00	7,043.78	8,854.26	6,934.71	132.40	71.02	-88.14	-3,602.84	-4,676.53	3,369.53	3,166.42	203.11	16.590		
11,500.00	7,043.34	8,954.25	6,934.30	135.18	73.97	-88.14	-3,605.17	-4,776.49	3,371.25	3,162.43	208.83	16.144		
11,600.00	7,042.91	9,054.23	6,933.88	137.96	76.94	-88.14	-3,607.49	-4,876.44	3,372.98	3,158.40	214.58	15.719		
11,700.00	7,042.47	9,154.22	6,933.46	140.75	79.94	-88.14	-3,609.82	-4,976.40	3,374.70	3,154.34	220.36	15.314		
11,800.00	7,042.04	9,254.20	6,933.04	143.54	82.96	-88.15	-3,612.14	-5,076.36	3,376.43	3,150.25	226.18	14.928		
11,900.00	7,041.61	9,354.19	6,932.63	146.33	86.01	-88.15	-3,614.47	-5,176.31	3,378.15	3,146.14	232.01	14.560		
12,000.00	7,041.17	9,454.17	6,932.21	149.13	89.08	-88.15	-3,616.79	-5,276.27	3,379.88	3,142.00	237.87	14.209		
12,100.00	7,040.74	9,554.16	6,931.79	151.92	92.16	-88.15	-3,619.12	-5,376.23	3,381.60	3,137.85	243.75	13.873		
12,200.00	7,040.30	9,654.14	6,931.38	154.72	95.26	-88.15	-3,621.44	-5,476.19	3,383.33	3,133.67	249.65	13.552		
12,300.00	7,039.87	9,754.13	6,930.96	157.52	98.38	-88.15	-3,623.77	-5,576.14	3,385.05	3,129.48	255.57	13.245		
12,400.00	7,039.44	9,854.11	6,930.54	160.33	101.51	-88.15	-3,626.09	-5,676.10	3,386.78	3,125.28	261.50	12.951		
12,500.00	7,039.00	9,954.10	6,930.13	163.13	104.65	-88.15	-3,628.42	-5,776.06	3,388.50	3,121.06	267.45	12.670		
12,600.00	7,038.57	10,054.08	6,929.71	165.94	107.80	-88.16	-3,630.74	-5,876.02	3,390.23	3,116.82	273.40	12.400		
12,700.00	7,038.13	10,154.07	6,929.29	168.75	110.96	-88.16	-3,633.07	-5,975.97	3,391.95	3,112.58	279.37	12.141		
12,800.00	7,037.70	10,254.05	6,928.87	171.56	114.13	-88.16	-3,635.39	-6,075.93	3,393.68	3,108.32	285.35	11.893		
12,900.00	7,037.27	10,354.04	6,928.46	174.37	117.31	-88.16	-3,637.72	-6,175.89	3,395.40	3,104.06	291.34	11.654		
13,000.00	7,036.83	10,454.02	6,928.04	177.19	120.50	-88.16	-3,640.04	-6,275.84	3,397.13	3,099.78	297.34	11.425		
13,100.00	7,036.40	10,500.00	6,927.85	180.00	121.97	-88.16	-3,641.34	-6,321.80	3,399.52	3,098.04	301.48	11.276		
13,200.00	7,035.96	10,555.47	6,927.62	182.82	123.73	-88.16	-3,644.07	-6,377.20	3,403.67	3,097.79	305.88	11.127		
13,300.00	7,035.53	10,655.36	6,927.20	185.64	126.92	-88.17	-3,649.28	-6,476.96	3,408.29	3,096.41	311.88	10.928		
13,400.00	7,035.10	10,725.53	6,926.91	188.46	129.16	-88.17	-3,652.95	-6,547.03	3,413.04	3,096.25	316.79	10.774		
13,500.00	7,034.66	10,772.00	6,926.71	191.28	130.64	-88.17	-3,655.94	-6,593.40	3,419.11	3,098.35	320.76	10.659		
13,600.00	7,034.23	10,807.71	6,926.56	194.10	131.77	-88.17	-3,659.00	-6,628.98	3,427.09	3,102.87	324.22	10.570		
13,700.00	7,033.79	10,825.02	6,926.49	196.92	132.32	-88.17	-3,660.73	-6,646.20	3,437.06	3,110.28	326.78	10.518		
13,800.00	7,033.36	10,900.00	6,926.18	199.74	134.68	-88.18	-3,670.00	-6,720.60	3,448.80	3,117.11	331.69	10.398		
13,900.00	7,032.93	10,914.03	6,926.12	202.57	135.12	-88.18	-3,672.05	-6,734.48	3,462.13	3,128.29	333.85	10.370		
14,000.00	7,032.49	10,949.12	6,925.97	205.39	136.21	-88.18	-3,677.65	-6,769.12	3,477.48	3,140.68	336.80	10.325		
14,100.00	7,032.06	11,640.01	6,923.09	208.22	158.20	-88.21	-3,739.47	-7,455.23	3,489.00	3,122.83	366.16	9.528		
14,200.00	7,031.62	11,740.01	6,922.67	211.05	161.46	-88.21	-3,739.45	-7,555.22	3,488.39	3,116.14	372.25	9.371		
14,300.00	7,031.19	11,840.01	6,922.25	213.87	164.72	-88.21	-3,739.44	-7,655.22	3,487.77	3,109.44	378.34	9.219		
14,400.00	7,030.76	11,940.01	6,921.84	216.70	167.99	-88.21	-3,739.43	-7,755.22	3,487.16	3,102.74	384.43	9.071		
14,500.00	7,030.32	12,040.01	6,921.42	219.53	171.25	-88.21	-3,739.41	-7,855.22	3,486.55	3,096.03	390.52	8.928		
14,600.00	7,029.89	12,140.00	6,921.00	222.36	174.52	-88.21	-3,739.40	-7,955.21	3,485.94	3,089.32	396.62	8.789		
14,700.00	7,029.45	12,240.00	6,920.58	225.19	177.80	-88.21	-3,739.39	-8,055.21	3,485.33	3,082.61	402.72	8.654		
14,800.00	7,029.02	12,340.00	6,920.17	228.03	181.07	-88.21	-3,739.37	-8,155.21	3,484.71	3,075.89	408.82	8.524		
14,805.04	7,029.00	12,345.04	6,920.15	228.17	181.24	-88.21	-3,739.37	-8,160.25	3,484.68	3,075.55	409.13	8.517 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-142.43	-4,249.40	-3,268.41	5,361.39					
100.00	100.00	57.00	100.00	3.28	0.07	-142.43	-4,249.40	-3,268.41	5,360.96	5,357.60	3.36	1,597.884		
200.00	200.00	892.96	932.59	3.34	3.80	-142.65	-4,220.40	-3,220.36	5,359.03	5,351.83	7.20	744.494		
300.00	300.00	991.88	1,030.44	3.44	4.30	-142.71	-4,212.90	-3,207.94	5,345.36	5,337.62	7.74	690.269		
400.00	400.00	1,090.80	1,128.28	3.60	4.81	-142.77	-4,205.40	-3,195.51	5,331.70	5,323.36	8.34	639.175		
500.00	499.98	1,189.46	1,225.87	3.80	5.32	-1.03	-4,197.92	-3,183.11	5,316.32	5,307.34	8.98	592.036		
600.00	599.90	1,287.75	1,323.10	4.02	5.83	-1.09	-4,190.47	-3,170.76	5,298.74	5,289.09	9.65	549.159		
700.00	699.82	1,386.04	1,420.32	4.28	6.34	-1.15	-4,183.01	-3,158.41	5,281.13	5,270.79	10.35	510.498		
800.00	799.74	1,484.32	1,517.55	4.57	6.86	-1.21	-4,175.56	-3,146.06	5,263.53	5,252.46	11.07	475.441		
900.00	899.66	1,582.61	1,614.77	4.88	7.37	-1.28	-4,168.11	-3,133.71	5,245.93	5,234.11	11.82	443.772		
1,000.00	999.58	1,680.90	1,711.99	5.21	7.89	-1.34	-4,160.65	-3,121.36	5,228.34	5,215.75	12.59	415.210		
1,100.00	1,099.50	1,779.18	1,809.21	5.55	8.40	-1.40	-4,153.20	-3,109.01	5,210.75	5,197.37	13.38	389.448		
1,200.00	1,199.42	1,877.47	1,906.43	5.91	8.92	-1.46	-4,145.75	-3,096.66	5,193.17	5,178.99	14.18	366.185		
1,300.00	1,299.34	1,975.76	2,003.66	6.28	9.44	-1.52	-4,138.30	-3,084.31	5,175.60	5,160.60	15.00	345.141		
1,400.00	1,399.26	2,074.04	2,100.88	6.66	9.95	-1.58	-4,130.84	-3,071.96	5,158.03	5,142.21	15.82	326.058		
1,500.00	1,499.18	2,172.33	2,198.10	7.04	10.47	-1.65	-4,123.39	-3,059.61	5,140.46	5,123.81	16.65	308.708		
1,600.00	1,599.10	2,270.62	2,295.32	7.43	10.99	-1.71	-4,115.94	-3,047.26	5,122.91	5,105.42	17.49	292.890		
1,700.00	1,699.01	2,368.90	2,392.55	7.83	11.51	-1.78	-4,108.49	-3,034.91	5,105.36	5,087.02	18.34	278.428		
1,800.00	1,798.93	2,467.19	2,489.77	8.23	12.03	-1.84	-4,101.03	-3,022.56	5,087.81	5,068.62	19.19	265.167		
1,900.00	1,898.85	2,565.48	2,586.99	8.64	12.55	-1.90	-4,093.58	-3,010.21	5,070.27	5,050.23	20.04	252.976		
2,000.00	1,998.77	2,663.76	2,684.21	9.05	13.07	-1.97	-4,086.13	-2,997.87	5,052.74	5,031.84	20.90	241.736		
2,100.00	2,098.69	2,762.05	2,781.44	9.46	13.59	-2.04	-4,078.67	-2,985.52	5,035.22	5,013.45	21.76	231.347		
2,200.00	2,198.61	2,860.34	2,878.66	9.88	14.11	-2.10	-4,071.22	-2,973.17	5,017.70	4,995.07	22.63	221.720		
2,300.00	2,298.53	2,958.62	2,975.88	10.30	14.63	-2.17	-4,063.77	-2,960.82	5,000.19	4,976.69	23.50	212.778		
2,400.00	2,398.45	3,056.91	3,073.10	10.72	15.15	-2.24	-4,056.32	-2,948.47	4,982.68	4,958.31	24.37	204.453		
2,500.00	2,498.37	3,155.20	3,170.33	11.14	15.67	-2.30	-4,048.86	-2,936.12	4,965.18	4,939.94	25.24	196.686		
2,600.00	2,598.29	3,253.48	3,267.55	11.56	16.19	-2.37	-4,041.41	-2,923.77	4,947.69	4,921.57	26.12	189.424		
2,700.00	2,698.21	3,351.77	3,364.77	11.98	16.71	-2.44	-4,033.96	-2,911.42	4,930.20	4,903.21	27.00	182.621		
2,800.00	2,798.13	3,450.06	3,461.99	12.41	17.23	-2.51	-4,026.50	-2,899.07	4,912.73	4,884.85	27.88	176.237		
2,900.00	2,898.05	3,548.34	3,559.22	12.84	17.75	-2.58	-4,019.05	-2,886.72	4,895.25	4,866.50	28.76	170.234		
3,000.00	2,997.97	3,646.63	3,656.44	13.27	18.27	-2.65	-4,011.60	-2,874.37	4,877.79	4,848.15	29.64	164.580		
3,100.00	3,097.89	3,744.92	3,753.66	13.69	18.79	-2.72	-4,004.15	-2,862.02	4,860.33	4,829.81	30.52	159.247		
3,200.00	3,197.81	3,843.20	3,850.88	14.12	19.31	-2.79	-3,996.69	-2,849.67	4,842.88	4,811.48	31.40	154.208		
3,300.00	3,297.73	3,941.49	3,948.11	14.56	19.83	-2.86	-3,989.24	-2,837.32	4,825.44	4,793.15	32.29	149.441		
3,400.00	3,397.65	4,039.78	4,045.33	14.99	20.35	-2.93	-3,981.79	-2,824.97	4,808.00	4,774.83	33.18	144.923		
3,500.00	3,497.56	4,138.06	4,142.55	15.42	20.87	-3.01	-3,974.33	-2,812.62	4,790.58	4,756.51	34.06	140.637		
3,600.00	3,597.48	4,236.35	4,239.77	15.85	21.39	-3.08	-3,966.88	-2,800.27	4,773.16	4,738.21	34.95	136.565		
3,700.00	3,697.40	4,334.64	4,337.00	16.28	21.91	-3.15	-3,959.43	-2,787.92	4,755.74	4,719.90	35.84	132.693		
3,800.00	3,797.32	4,432.92	4,434.22	16.72	22.43	-3.23	-3,951.98	-2,775.57	4,738.34	4,701.61	36.73	129.005		
3,900.00	3,897.24	4,531.21	4,531.44	17.15	22.95	-3.30	-3,944.52	-2,763.22	4,720.94	4,683.32	37.62	125.489		
4,000.00	3,997.16	4,629.49	4,628.66	17.59	23.47	-3.38	-3,937.07	-2,750.87	4,703.55	4,665.04	38.51	122.134		
4,100.00	4,097.08	4,727.78	4,725.89	18.02	23.99	-3.45	-3,929.62	-2,738.52	4,686.17	4,646.77	39.40	118.928		
4,200.00	4,197.00	4,826.07	4,823.11	18.46	24.51	-3.53	-3,922.16	-2,726.17	4,668.80	4,628.50	40.30	115.863		
4,300.00	4,296.92	4,925.67	4,920.33	18.89	25.04	-3.61	-3,914.71	-2,713.82	4,651.43	4,610.24	41.19	112.913		
4,400.00	4,396.84	5,027.38	5,017.55	19.33	25.58	-3.68	-3,907.26	-2,701.47	4,634.08	4,591.97	42.10	110.061		
4,500.00	4,496.76	5,129.09	5,114.77	19.77	26.12	-3.76	-3,899.81	-2,689.13	4,616.73	4,573.71	43.02	107.328		
4,600.00	4,596.68	5,219.21	5,212.00	20.20	26.60	-3.84	-3,892.35	-2,676.78	4,599.39	4,555.52	43.87	104.838		
4,700.00	4,696.60	5,317.50	5,309.22	20.64	27.12	-3.92	-3,884.90	-2,664.43	4,582.06	4,537.29	44.77	102.354		
4,800.00	4,796.52	5,415.79	5,406.44	21.08	27.64	-4.00	-3,877.45	-2,652.08	4,564.73	4,519.07	45.66	99.967		
4,900.00	4,896.44	5,514.07	5,503.66	21.51	28.16	-4.08	-3,870.00	-2,639.73	4,547.42	4,500.86	46.56	97.670		
5,000.00	4,996.36	5,612.36	5,600.89	21.95	28.68	-4.16	-3,862.54	-2,627.38	4,530.11	4,482.66	47.46	95.460		
5,100.00	5,096.28	5,710.65	5,698.11	22.39	29.20	-4.24	-3,855.09	-2,615.03	4,512.82	4,464.46	48.35	93.331		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - DONN 30N-20B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWVD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,196.19	5,808.93	5,795.33	22.83	29.72	-4.33	-3,847.64	-2,602.68	4,495.53	4,446.28	49.25	91.278		
5,300.00	5,296.11	5,907.22	5,892.55	23.27	30.24	-4.41	-3,840.18	-2,590.33	4,478.25	4,428.10	50.15	89.299		
5,400.00	5,396.03	6,005.51	5,989.78	23.71	30.77	-4.49	-3,832.73	-2,577.98	4,460.98	4,409.94	51.05	87.389		
5,500.00	5,495.95	6,103.79	6,087.00	24.14	31.29	-4.58	-3,825.28	-2,565.63	4,443.72	4,391.78	51.95	85.544		
5,600.00	5,595.87	6,202.08	6,184.22	24.58	31.81	-4.66	-3,817.83	-2,553.28	4,426.47	4,373.63	52.85	83.761		
5,700.00	5,695.79	6,300.37	6,281.44	25.02	32.33	-4.75	-3,810.37	-2,540.93	4,409.23	4,355.49	53.75	82.038		
5,800.00	5,795.71	6,374.99	6,355.26	25.46	32.72	-4.81	-3,804.71	-2,531.55	4,392.07	4,337.51	54.56	80.502		
5,900.00	5,895.63	6,400.00	6,380.05	25.90	32.85	-4.83	-3,802.82	-2,528.90	4,376.13	4,320.96	55.17	79.316		
6,000.00	5,995.55	6,425.01	6,404.94	26.34	32.97	-4.84	-3,800.95	-2,527.22	4,362.01	4,306.24	55.77	78.215		
6,100.00	6,095.47	6,440.36	6,420.23	26.78	33.04	-4.84	-3,799.81	-2,526.68	4,349.65	4,293.34	56.31	77.245		
6,200.00	6,195.39	6,450.00	6,429.85	27.22	33.08	-4.83	-3,799.10	-2,526.53	4,339.17	4,282.36	56.81	76.383		
6,300.00	6,295.31	6,481.14	6,460.89	27.66	33.19	-4.81	-3,796.82	-2,527.03	4,330.37	4,273.01	57.36	75.492		
6,400.00	6,395.23	6,500.00	6,479.68	28.10	33.26	-4.79	-3,795.46	-2,528.08	4,323.47	4,265.62	57.85	74.732		
6,500.00	6,495.02	6,525.01	6,504.52	28.54	33.34	-40.66	-3,793.68	-2,530.33	4,317.12	4,258.77	58.34	73.995		
6,600.00	6,593.09	6,550.00	6,529.24	28.98	33.41	-50.69	-3,791.94	-2,533.55	4,304.90	4,246.08	58.81	73.195		
6,700.00	6,687.01	6,550.00	6,529.24	29.41	33.41	-54.56	-3,791.94	-2,533.55	4,286.17	4,227.00	59.17	72.441		
6,800.00	6,774.46	6,600.00	6,578.23	29.83	33.53	-57.81	-3,788.54	-2,542.90	4,261.37	4,201.67	59.70	71.378		
6,900.00	6,853.31	6,600.00	6,578.23	30.26	33.53	-60.98	-3,788.54	-2,542.90	4,230.74	4,170.68	60.05	70.452		
7,000.00	6,921.60	6,625.01	6,602.42	30.76	33.58	-64.60	-3,786.90	-2,549.01	4,195.47	4,134.93	60.54	69.299		
7,100.00	6,977.66	6,635.03	6,612.04	31.38	33.60	-68.50	-3,786.25	-2,551.73	4,156.16	4,095.10	61.07	68.061		
7,200.00	7,020.10	6,650.00	6,626.34	32.17	33.63	-72.81	-3,785.30	-2,556.07	4,113.85	4,052.10	61.75	66.620		
7,300.00	7,047.88	6,650.00	6,626.34	33.13	33.63	-77.22	-3,785.30	-2,556.07	4,069.67	4,007.11	62.56	65.053		
7,400.00	7,060.32	6,673.24	6,648.31	34.27	33.66	-82.06	-3,783.85	-2,563.47	4,024.51	3,960.87	63.64	63.235		
7,500.00	7,060.70	6,681.70	6,656.25	35.56	33.67	-83.64	-3,783.33	-2,566.36	3,980.04	3,915.17	64.87	61.359		
7,600.00	7,060.27	6,700.00	6,673.28	37.02	33.70	-83.91	-3,782.23	-2,572.98	3,937.50	3,871.19	66.32	59.373		
7,700.00	7,059.83	6,700.00	6,673.28	38.64	33.70	-83.91	-3,782.23	-2,572.98	3,896.90	3,828.99	67.90	57.388		
7,800.00	7,059.40	6,710.65	6,683.10	40.40	33.71	-84.06	-3,781.60	-2,577.06	3,858.41	3,788.71	69.70	55.358		
7,900.00	7,058.97	6,725.01	6,696.23	42.28	33.73	-84.27	-3,780.76	-2,582.81	3,822.04	3,750.37	71.66	53.333		
8,000.00	7,058.53	6,734.22	6,704.58	44.27	33.74	-84.40	-3,780.24	-2,586.66	3,787.83	3,714.07	73.76	51.353		
8,100.00	7,058.10	6,750.00	6,718.75	46.35	33.75	-84.63	-3,779.35	-2,593.53	3,755.83	3,679.83	76.00	49.417		
8,200.00	7,057.66	6,750.00	6,718.75	48.50	33.75	-84.63	-3,779.35	-2,593.53	3,726.13	3,647.80	78.33	47.569		
8,300.00	7,057.23	6,778.38	6,743.80	50.73	33.78	-85.03	-3,777.81	-2,606.76	3,698.59	3,617.78	80.81	45.769		
8,400.00	7,056.80	6,800.00	6,762.49	53.02	33.79	-85.33	-3,776.68	-2,617.59	3,673.41	3,590.05	83.36	44.066		
8,500.00	7,056.36	6,815.68	6,775.80	55.36	33.80	-85.54	-3,775.89	-2,625.84	3,650.53	3,564.56	85.97	42.461		
8,600.00	7,055.93	6,837.38	6,793.88	57.74	33.81	-85.83	-3,774.84	-2,637.78	3,629.96	3,541.31	88.65	40.945		
8,700.00	7,055.49	6,850.00	6,804.21	60.17	33.82	-85.99	-3,774.24	-2,645.02	3,611.73	3,520.36	91.37	39.528		
8,800.00	7,055.06	6,888.41	6,834.73	62.63	33.83	-86.48	-3,772.53	-2,668.26	3,595.69	3,501.54	94.15	38.192		
8,900.00	7,054.63	6,918.48	6,857.62	65.13	33.84	-86.85	-3,771.29	-2,687.72	3,581.91	3,484.97	96.94	36.948		
9,000.00	7,054.19	6,950.00	6,880.60	67.66	33.85	-87.22	-3,770.10	-2,709.25	3,570.29	3,470.53	99.76	35.789		
9,100.00	7,053.76	6,989.89	6,908.12	70.21	33.87	-87.67	-3,768.74	-2,738.09	3,560.74	3,458.14	102.60	34.705		
9,200.00	7,053.32	7,032.16	6,935.25	72.78	33.90	-88.11	-3,767.48	-2,770.47	3,553.14	3,447.68	105.46	33.693		
9,300.00	7,052.89	7,079.38	6,962.96	75.38	33.95	-88.56	-3,766.33	-2,808.68	3,547.35	3,439.00	108.35	32.740		
9,400.00	7,052.46	7,131.86	6,990.34	77.99	34.04	-89.00	-3,765.34	-2,853.42	3,543.22	3,431.94	111.28	31.842		
9,500.00	7,052.02	7,189.71	7,016.16	80.62	34.20	-89.42	-3,764.64	-2,905.15	3,540.54	3,426.26	114.28	30.982		
9,600.00	7,051.59	7,250.00	7,037.98	83.26	34.44	-89.78	-3,764.33	-2,961.34	3,539.13	3,421.79	117.35	30.160		
9,683.75	7,051.22	7,308.84	7,054.06	85.49	34.78	-90.05	-3,764.45	-3,017.91	3,538.79	3,418.74	120.04	29.479 CC		
9,700.00	7,051.15	7,320.05	7,056.53	85.92	34.86	-90.09	-3,764.52	-3,028.85	3,538.80	3,418.23	120.57	29.350		
9,800.00	7,050.72	7,390.73	7,067.66	88.59	35.42	-90.27	-3,765.32	-3,098.61	3,539.39	3,415.47	123.91	28.563		
9,900.00	7,050.29	7,464.27	7,070.98	91.28	36.14	-90.33	-3,766.77	-3,172.02	3,540.79	3,413.40	127.38	27.797		
10,000.00	7,049.85	7,564.25	7,070.38	93.97	37.38	-90.33	-3,769.12	-3,271.97	3,542.54	3,411.19	131.35	26.970		
10,100.00	7,049.42	7,664.24	7,069.78	96.67	38.88	-90.32	-3,771.48	-3,371.92	3,544.30	3,408.74	135.56	26.145		
10,200.00	7,048.98	7,764.22	7,069.18	99.38	40.61	-90.32	-3,773.84	-3,471.88	3,546.06	3,406.06	140.00	25.330		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.55	7,864.21	7,068.58	102.10	42.53	-90.32	-3,776.19	-3,571.83	3,547.81	3,403.18	144.63	24.530		
10,400.00	7,048.12	7,964.19	7,067.97	104.83	44.63	-90.32	-3,778.55	-3,671.79	3,549.57	3,400.13	149.44	23.753		
10,500.00	7,047.68	8,064.18	7,067.37	107.56	46.86	-90.31	-3,780.91	-3,771.74	3,551.33	3,396.93	154.39	23.002		
10,600.00	7,047.25	8,164.16	7,066.77	110.30	49.22	-90.31	-3,783.26	-3,871.70	3,553.09	3,393.60	159.48	22.279		
10,700.00	7,046.81	8,264.14	7,066.17	113.05	51.68	-90.31	-3,785.62	-3,971.65	3,554.84	3,390.16	164.69	21.586		
10,800.00	7,046.38	8,364.13	7,065.57	115.80	54.24	-90.30	-3,787.97	-4,071.61	3,556.60	3,386.61	169.99	20.923		
10,900.00	7,045.95	8,464.11	7,064.96	118.55	56.87	-90.30	-3,790.33	-4,171.56	3,558.36	3,382.98	175.37	20.290		
11,000.00	7,045.51	8,564.10	7,064.36	121.31	59.58	-90.30	-3,792.69	-4,271.52	3,560.11	3,379.28	180.83	19.687		
11,100.00	7,045.08	8,664.08	7,063.76	124.08	62.34	-90.30	-3,795.04	-4,371.47	3,561.87	3,375.51	186.36	19.113		
11,200.00	7,044.64	8,764.07	7,063.16	126.85	65.16	-90.29	-3,797.40	-4,471.43	3,563.63	3,371.69	191.94	18.566		
11,300.00	7,044.21	8,864.05	7,062.55	129.62	68.02	-90.29	-3,799.76	-4,571.38	3,565.39	3,367.81	197.58	18.046		
11,400.00	7,043.78	8,964.04	7,061.95	132.40	70.92	-90.29	-3,802.11	-4,671.34	3,567.14	3,363.89	203.25	17.550		
11,500.00	7,043.34	9,064.02	7,061.35	135.18	73.86	-90.28	-3,804.47	-4,771.29	3,568.90	3,359.93	208.97	17.078		
11,600.00	7,042.91	9,164.00	7,060.75	137.96	76.83	-90.28	-3,806.82	-4,871.25	3,570.66	3,355.93	214.72	16.629		
11,700.00	7,042.47	9,263.99	7,060.15	140.75	79.83	-90.28	-3,809.18	-4,971.20	3,572.41	3,351.91	220.51	16.201		
11,800.00	7,042.04	9,363.97	7,059.54	143.54	82.85	-90.28	-3,811.54	-5,071.16	3,574.17	3,347.85	226.32	15.793		
11,900.00	7,041.61	9,463.96	7,058.94	146.33	85.89	-90.27	-3,813.89	-5,171.11	3,575.93	3,343.77	232.16	15.403		
12,000.00	7,041.17	9,563.94	7,058.34	149.13	88.96	-90.27	-3,816.25	-5,271.07	3,577.69	3,339.67	238.01	15.031		
12,100.00	7,040.74	9,663.93	7,057.74	151.92	92.04	-90.27	-3,818.61	-5,371.02	3,579.44	3,335.55	243.89	14.676		
12,200.00	7,040.30	9,763.91	7,057.14	154.72	95.14	-90.26	-3,820.96	-5,470.98	3,581.20	3,331.41	249.79	14.337		
12,300.00	7,039.87	9,863.90	7,056.53	157.52	98.25	-90.26	-3,823.32	-5,570.93	3,582.96	3,327.25	255.71	14.012		
12,400.00	7,039.44	9,963.88	7,055.93	160.33	101.38	-90.26	-3,825.68	-5,670.89	3,584.71	3,323.07	261.64	13.701		
12,500.00	7,039.00	10,063.86	7,055.33	163.13	104.52	-90.26	-3,828.03	-5,770.84	3,586.47	3,318.89	267.59	13.403		
12,600.00	7,038.57	10,163.85	7,054.73	165.94	107.67	-90.25	-3,830.39	-5,870.80	3,588.23	3,314.68	273.54	13.118		
12,700.00	7,038.13	10,263.83	7,054.13	168.75	110.83	-90.25	-3,832.74	-5,970.75	3,589.99	3,310.47	279.51	12.844		
12,800.00	7,037.70	10,363.82	7,053.52	171.56	114.00	-90.25	-3,835.10	-6,070.71	3,591.74	3,306.25	285.50	12.581		
12,900.00	7,037.27	10,463.80	7,052.92	174.37	117.18	-90.25	-3,837.46	-6,170.66	3,593.50	3,302.01	291.49	12.328		
13,000.00	7,036.83	10,563.79	7,052.32	177.19	120.37	-90.24	-3,839.81	-6,270.61	3,595.26	3,297.77	297.49	12.085		
13,100.00	7,036.40	10,663.77	7,051.72	180.00	123.56	-90.24	-3,842.17	-6,370.57	3,597.02	3,293.52	303.50	11.852		
13,200.00	7,035.96	10,763.76	7,051.12	182.82	126.76	-90.24	-3,844.53	-6,470.52	3,598.77	3,289.26	309.52	11.627		
13,300.00	7,035.53	10,863.74	7,050.51	185.64	129.97	-90.23	-3,846.88	-6,570.48	3,600.53	3,284.99	315.54	11.411		
13,400.00	7,035.10	10,963.72	7,049.91	188.46	133.19	-90.23	-3,849.24	-6,670.43	3,602.29	3,280.71	321.58	11.202		
13,500.00	7,034.66	11,063.71	7,049.31	191.28	136.40	-90.23	-3,851.59	-6,770.39	3,604.04	3,276.43	327.61	11.001		
13,600.00	7,034.23	11,163.69	7,048.71	194.10	139.63	-90.23	-3,853.95	-6,870.34	3,605.80	3,272.14	333.66	10.807		
13,700.00	7,033.79	11,263.68	7,048.11	196.92	142.86	-90.22	-3,856.31	-6,970.30	3,607.56	3,267.85	339.71	10.619		
13,800.00	7,033.36	11,363.66	7,047.50	199.74	146.09	-90.22	-3,858.66	-7,070.25	3,609.32	3,263.55	345.77	10.439		
13,900.00	7,032.93	11,463.65	7,046.90	202.57	149.33	-90.22	-3,861.02	-7,170.21	3,611.07	3,259.24	351.83	10.264		
14,000.00	7,032.49	11,563.63	7,046.30	205.39	152.57	-90.21	-3,863.38	-7,270.16	3,612.83	3,254.94	357.90	10.095		
14,100.00	7,032.06	11,663.61	7,045.70	208.22	155.81	-90.21	-3,865.73	-7,370.12	3,614.59	3,250.62	363.97	9.931		
14,200.00	7,031.62	11,763.60	7,045.10	211.05	159.06	-90.21	-3,868.09	-7,470.07	3,616.35	3,246.30	370.04	9.773		
14,300.00	7,031.19	11,863.58	7,044.49	213.87	162.31	-90.21	-3,870.44	-7,570.03	3,618.10	3,241.98	376.12	9.620		
14,400.00	7,030.76	11,963.57	7,043.89	216.70	165.56	-90.20	-3,872.80	-7,669.98	3,619.86	3,237.66	382.20	9.471		
14,500.00	7,030.32	12,063.55	7,043.29	219.53	168.82	-90.20	-3,875.16	-7,769.94	3,621.62	3,233.33	388.29	9.327		
14,600.00	7,029.89	12,163.54	7,042.69	222.36	172.08	-90.20	-3,877.51	-7,869.89	3,623.38	3,228.99	394.38	9.188		
14,700.00	7,029.45	12,263.52	7,042.09	225.19	175.34	-90.20	-3,879.87	-7,969.85	3,625.13	3,224.66	400.47	9.052		
14,800.00	7,029.02	12,363.51	7,041.48	228.03	178.61	-90.19	-3,882.23	-8,069.80	3,626.89	3,220.32	406.57	8.921		
14,805.04	7,029.00	12,368.54	7,041.45	228.17	178.77	-90.19	-3,882.34	-8,074.84	3,626.98	3,220.10	406.88	8.914 ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	15,789.65	7,243.40	3.28	247.79	0.58	2,123.74	21.51	7,548.35					
100.00	100.00	15,789.90	7,243.40	3.28	247.79	0.57	2,123.74	21.27	7,452.44	7,334.19	118.25	63.023		
200.00	200.00	15,809.92	7,243.40	3.34	248.36	0.57	2,123.74	21.02	7,356.65	7,237.73	118.92	61.864		
300.00	300.00	15,809.68	7,243.40	3.44	248.35	0.56	2,123.74	20.78	7,260.96	7,141.60	119.36	60.832		
400.00	400.00	15,809.44	7,243.40	3.60	248.35	0.55	2,123.74	20.53	7,165.39	7,045.57	119.83	59.798		
500.00	499.98	15,808.11	7,243.41	3.80	248.31	145.89	2,123.74	19.21	7,070.38	6,950.06	120.33	58.760		
600.00	599.90	15,805.42	7,243.41	4.02	248.23	146.30	2,123.75	16.52	6,976.11	6,855.24	120.87	57.717		
700.00	699.82	15,802.70	7,243.42	4.28	248.16	146.24	2,123.75	13.80	6,882.00	6,760.56	121.45	56.667		
800.00	799.74	15,800.09	7,243.43	4.57	248.08	146.17	2,123.76	11.08	6,788.07	6,666.01	122.06	55.615		
900.00	899.66	15,802.81	7,243.43	4.88	248.16	146.11	2,123.76	8.36	6,694.30	6,571.54	122.77	54.529		
1,000.00	999.58	15,805.53	7,243.44	5.21	248.24	146.04	2,123.77	5.64	6,600.72	6,477.21	123.51	53.443		
1,100.00	1,099.50	15,808.25	7,243.45	5.55	248.31	145.97	2,123.77	2.92	6,507.33	6,383.04	124.29	52.356		
1,200.00	1,199.42	15,810.97	7,243.45	5.91	248.39	145.91	2,123.78	0.19	6,414.14	6,289.03	125.11	51.268		
1,300.00	1,299.34	15,813.69	7,243.46	6.28	248.47	145.84	2,123.78	-2.53	6,321.15	6,195.18	125.97	50.179		
1,400.00	1,399.26	15,816.41	7,243.47	6.66	248.54	145.77	2,123.79	-5.25	6,228.38	6,101.51	126.87	49.091		
1,500.00	1,499.18	15,819.13	7,243.47	7.04	248.62	145.71	2,123.79	-7.97	6,135.84	6,008.02	127.82	48.003		
1,600.00	1,599.10	15,821.85	7,243.48	7.43	248.70	145.64	2,123.80	-10.69	6,043.53	5,914.71	128.82	46.916		
1,700.00	1,699.01	15,824.57	7,243.49	7.83	248.77	145.57	2,123.80	-13.41	5,951.47	5,821.61	129.86	45.829		
1,800.00	1,798.93	15,827.29	7,243.49	8.23	248.85	145.51	2,123.81	-16.13	5,859.67	5,728.71	130.96	44.745		
1,900.00	1,898.85	15,830.01	7,243.50	8.64	248.93	145.44	2,123.81	-18.85	5,768.14	5,636.03	132.11	43.663		
2,000.00	1,998.77	15,832.73	7,243.51	9.05	249.00	145.38	2,123.82	-21.57	5,676.89	5,543.58	133.31	42.583		
2,100.00	2,098.69	15,835.45	7,243.51	9.46	249.08	145.31	2,123.82	-24.29	5,585.95	5,451.37	134.58	41.508		
2,200.00	2,198.61	15,838.17	7,243.52	9.88	249.16	145.24	2,123.83	-27.01	5,495.31	5,359.41	135.90	40.436		
2,300.00	2,298.53	15,840.89	7,243.53	10.30	249.24	145.18	2,123.83	-29.73	5,405.01	5,267.72	137.29	39.369		
2,400.00	2,398.45	15,843.61	7,243.53	10.72	249.31	145.11	2,123.84	-32.45	5,315.05	5,176.30	138.74	38.308		
2,500.00	2,498.37	15,846.33	7,243.54	11.14	249.39	145.04	2,123.84	-35.17	5,225.45	5,085.18	140.27	37.253		
2,600.00	2,598.29	15,849.05	7,243.55	11.56	249.47	144.98	2,123.85	-37.89	5,136.24	4,994.38	141.86	36.206		
2,700.00	2,698.21	15,851.77	7,243.55	11.98	249.54	144.91	2,123.85	-40.61	5,047.43	4,903.90	143.53	35.167		
2,800.00	2,798.13	15,854.49	7,243.56	12.41	249.62	144.84	2,123.85	-43.33	4,959.04	4,813.77	145.27	34.137		
2,900.00	2,898.05	15,857.21	7,243.57	12.84	249.70	144.78	2,123.86	-46.05	4,871.10	4,724.02	147.09	33.117		
3,000.00	2,997.97	15,859.93	7,243.57	13.27	249.77	144.71	2,123.86	-48.77	4,783.64	4,634.65	148.99	32.108		
3,100.00	3,097.89	15,862.65	7,243.58	13.69	249.85	144.64	2,123.87	-51.49	4,696.67	4,545.70	150.97	31.110		
3,200.00	3,197.81	15,865.37	7,243.59	14.12	249.93	144.58	2,123.87	-54.21	4,610.23	4,457.19	153.04	30.124		
3,300.00	3,297.73	15,868.09	7,243.59	14.56	250.01	144.51	2,123.88	-56.93	4,524.35	4,369.15	155.20	29.152		
3,400.00	3,397.65	15,870.81	7,243.60	14.99	250.08	144.44	2,123.88	-59.65	4,439.06	4,281.61	157.45	28.194		
3,500.00	3,497.56	15,873.53	7,243.61	15.42	250.16	144.38	2,123.89	-62.37	4,354.39	4,194.60	159.79	27.251		
3,600.00	3,597.48	15,876.25	7,243.61	15.85	250.24	144.31	2,123.89	-65.09	4,270.38	4,108.15	162.23	26.323		
3,700.00	3,697.40	15,878.97	7,243.62	16.28	250.31	144.25	2,123.90	-67.81	4,187.08	4,022.31	164.77	25.412		
3,800.00	3,797.32	15,881.69	7,243.63	16.72	250.39	144.18	2,123.90	-70.53	4,104.51	3,937.11	167.41	24.518		
3,900.00	3,897.24	15,884.41	7,243.63	17.15	250.47	144.11	2,123.91	-73.25	4,022.74	3,852.59	170.15	23.642		
4,000.00	3,997.16	15,887.13	7,243.64	17.59	250.54	144.05	2,123.91	-75.97	3,941.81	3,768.80	173.00	22.784		
4,100.00	4,097.08	15,889.86	7,243.65	18.02	250.62	143.98	2,123.92	-78.69	3,861.76	3,685.80	175.97	21.946		
4,200.00	4,197.00	15,907.49	7,243.65	18.46	251.12	143.91	2,123.92	-81.41	3,782.67	3,603.35	179.31	21.095		
4,300.00	4,296.92	15,904.77	7,243.66	18.89	251.04	143.85	2,123.93	-84.13	3,704.58	3,522.18	182.40	20.310		
4,400.00	4,396.84	15,902.05	7,243.67	19.33	250.97	143.78	2,123.93	-86.85	3,627.57	3,441.96	185.61	19.545		
4,500.00	4,496.76	15,900.74	7,243.67	19.77	250.93	143.71	2,123.94	-89.57	3,551.70	3,362.76	188.95	18.797		
4,600.00	4,596.68	15,903.46	7,243.68	20.20	251.01	143.65	2,123.94	-92.29	3,477.05	3,284.57	192.48	18.065		
4,700.00	4,696.60	15,906.18	7,243.69	20.64	251.08	143.58	2,123.95	-95.01	3,403.70	3,207.58	196.13	17.355		
4,800.00	4,796.52	15,908.90	7,243.69	21.08	251.16	143.51	2,123.95	-97.73	3,331.74	3,131.85	199.88	16.668		
4,900.00	4,896.44	15,911.62	7,243.70	21.51	251.24	143.45	2,123.96	-100.45	3,261.25	3,057.49	203.75	16.006		
5,000.00	4,996.36	15,914.34	7,243.71	21.95	251.31	143.38	2,123.96	-103.17	3,192.33	2,984.60	207.73	15.368		
5,100.00	5,096.28	15,917.06	7,243.71	22.39	251.39	143.31	2,123.97	-105.89	3,125.09	2,913.29	211.81	14.754		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	15,919.78	7,243.72	22.83	251.47	143.25	2,123.97	-108.62	3,059.64	2,843.67	215.97	14.167		
5,300.00	5,296.11	15,922.50	7,243.73	23.27	251.54	143.18	2,123.98	-111.34	2,996.10	2,775.88	220.22	13.605		
5,400.00	5,396.03	15,925.22	7,243.73	23.71	251.62	143.11	2,123.98	-114.06	2,934.59	2,710.05	224.54	13.069		
5,500.00	5,495.95	15,927.94	7,243.74	24.14	251.70	143.05	2,123.99	-116.78	2,875.24	2,646.32	228.92	12.560		
5,600.00	5,595.87	15,930.66	7,243.75	24.58	251.77	142.98	2,123.99	-119.50	2,818.18	2,584.85	233.33	12.078		
5,700.00	5,695.79	15,933.38	7,243.75	25.02	251.85	142.91	2,124.00	-122.22	2,763.57	2,525.80	237.76	11.623		
5,800.00	5,795.71	15,936.10	7,243.76	25.46	251.93	142.85	2,124.00	-124.94	2,711.53	2,469.35	242.19	11.196		
5,900.00	5,895.63	15,938.82	7,243.77	25.90	252.01	142.78	2,124.01	-127.66	2,662.24	2,415.67	246.58	10.797		
6,000.00	5,995.55	15,941.54	7,243.77	26.34	252.08	142.71	2,124.01	-130.38	2,615.84	2,364.94	250.90	10.426		
6,100.00	6,095.47	15,944.26	7,243.78	26.78	252.16	142.65	2,124.02	-133.10	2,572.49	2,317.36	255.13	10.083		
6,200.00	6,195.39	15,946.98	7,243.79	27.22	252.24	142.58	2,124.02	-135.82	2,532.35	2,273.12	259.23	9.769		
6,300.00	6,295.31	15,949.70	7,243.79	27.66	252.31	142.51	2,124.03	-138.54	2,495.57	2,232.41	263.15	9.483		
6,400.00	6,395.23	15,952.42	7,243.80	28.10	252.39	142.45	2,124.03	-141.26	2,462.29	2,195.43	266.87	9.227		
6,500.00	6,495.02	15,957.48	7,243.81	28.54	252.53	108.19	2,124.04	-146.31	2,432.73	2,162.34	270.39	8.997		
6,600.00	6,593.09	15,976.49	7,243.86	28.98	253.07	100.98	2,124.07	-165.33	2,407.48	2,133.52	273.95	8.788		
6,700.00	6,687.01	16,010.61	7,243.94	29.41	254.04	99.67	2,124.14	-199.44	2,386.96	2,109.42	277.53	8.601		
6,800.00	6,774.46	16,058.99	7,244.06	29.83	255.41	98.99	2,124.22	-247.83	2,371.17	2,090.08	281.08	8.436		
6,900.00	6,853.31	16,120.45	7,244.21	30.26	257.15	98.25	2,124.33	-309.29	2,359.76	2,075.16	284.61	8.291		
7,000.00	6,921.60	16,206.59	7,244.39	30.76	259.58	97.36	2,124.46	-382.31	2,352.14	2,063.62	288.52	8.153		
7,100.00	6,977.66	16,276.27	7,244.59	31.38	261.56	96.41	2,124.61	-465.10	2,347.53	2,055.76	291.76	8.046		
7,200.00	7,020.10	16,366.78	7,244.81	32.17	264.12	95.55	2,124.77	-555.61	2,345.14	2,049.63	295.51	7.936		
7,300.00	7,047.88	16,462.79	7,245.05	33.13	266.84	94.89	2,124.95	-651.62	2,344.29	2,044.88	299.41	7.830		
7,328.56	7,053.02	16,509.17	7,245.11	33.46	268.15	94.76	2,125.00	-679.73	2,344.25	2,043.17	301.08	7.786 CC		
7,400.00	7,060.32	16,561.93	7,245.29	34.27	269.65	94.55	2,125.12	-750.77	2,344.47	2,041.03	303.43	7.727		
7,500.00	7,060.70	16,661.92	7,245.53	35.56	272.48	94.52	2,125.30	-850.75	2,345.26	2,037.71	307.55	7.626		
7,600.00	7,060.27	16,761.91	7,245.78	37.02	275.31	94.53	2,125.48	-950.75	2,346.09	2,034.25	311.83	7.524		
7,700.00	7,059.83	16,861.91	7,246.02	38.64	278.15	94.55	2,125.66	-1,050.74	2,346.91	2,030.64	316.27	7.421		
7,800.00	7,059.40	16,961.90	7,246.27	40.40	280.98	94.56	2,125.84	-1,150.73	2,347.74	2,026.89	320.85	7.317		
7,900.00	7,058.97	17,061.90	7,246.51	42.28	283.82	94.58	2,126.02	-1,250.73	2,348.57	2,023.03	325.55	7.214		
8,000.00	7,058.53	17,161.89	7,246.75	44.27	286.65	94.59	2,126.20	-1,350.72	2,349.40	2,019.05	330.35	7.112		
8,100.00	7,058.10	17,261.89	7,247.00	46.35	289.49	94.61	2,126.38	-1,450.72	2,350.23	2,014.99	335.24	7.011		
8,200.00	7,057.66	17,361.88	7,247.24	48.50	292.33	94.62	2,126.56	-1,550.71	2,351.06	2,010.85	340.22	6.910		
8,300.00	7,057.23	17,461.88	7,247.49	50.73	295.16	94.64	2,126.74	-1,650.71	2,351.90	2,006.64	345.26	6.812		
8,400.00	7,056.80	17,561.87	7,247.73	53.02	298.00	94.65	2,126.92	-1,750.70	2,352.73	2,002.36	350.36	6.715		
8,500.00	7,056.36	17,661.87	7,247.98	55.36	300.84	94.67	2,127.10	-1,850.69	2,353.56	1,998.04	355.52	6.620		
8,600.00	7,055.93	17,761.86	7,248.22	57.74	303.68	94.68	2,127.28	-1,950.69	2,354.39	1,993.67	360.72	6.527		
8,700.00	7,055.49	17,861.85	7,248.46	60.17	306.52	94.70	2,127.46	-2,050.68	2,355.22	1,989.25	365.97	6.436		
8,800.00	7,055.06	17,961.85	7,248.71	62.63	309.36	94.71	2,127.64	-2,150.68	2,356.05	1,984.80	371.25	6.346		
8,900.00	7,054.63	18,061.84	7,248.95	65.13	312.20	94.73	2,127.82	-2,250.67	2,356.88	1,980.32	376.56	6.259		
9,000.00	7,054.19	18,161.84	7,249.20	67.66	315.04	94.74	2,128.00	-2,350.67	2,357.71	1,975.81	381.90	6.174		
9,100.00	7,053.76	18,261.83	7,249.44	70.21	317.88	94.76	2,128.18	-2,450.66	2,358.54	1,971.28	387.27	6.090		
9,200.00	7,053.32	18,361.83	7,249.69	72.78	320.72	94.77	2,128.36	-2,550.65	2,359.38	1,966.72	392.66	6.009		
9,300.00	7,052.89	18,461.82	7,249.93	75.38	323.56	94.79	2,128.53	-2,650.65	2,360.21	1,962.14	398.07	5.929		
9,400.00	7,052.46	18,561.82	7,250.17	77.99	326.40	94.80	2,128.71	-2,750.64	2,361.04	1,957.54	403.50	5.851		
9,500.00	7,052.02	18,661.81	7,250.42	80.62	329.24	94.82	2,128.89	-2,850.64	2,361.87	1,952.93	408.94	5.776		
9,600.00	7,051.59	18,761.81	7,250.66	83.26	332.09	94.83	2,129.07	-2,950.63	2,362.71	1,948.30	414.40	5.701		
9,700.00	7,051.15	18,861.80	7,250.91	85.92	334.93	94.85	2,129.25	-3,050.62	2,363.54	1,943.66	419.88	5.629		
9,800.00	7,050.72	18,961.80	7,251.15	88.59	337.77	94.86	2,129.43	-3,150.62	2,364.37	1,939.01	425.37	5.558		
9,900.00	7,050.29	19,061.79	7,251.40	91.28	340.61	94.88	2,129.61	-3,250.61	2,365.20	1,934.34	430.87	5.489		
10,000.00	7,049.85	19,118.26	7,251.53	93.97	342.22	94.88	2,129.71	-3,307.08	2,366.44	1,931.35	435.09	5.439 ES		
10,100.00	7,049.42	19,118.26	7,251.53	96.67	342.22	94.88	2,129.71	-3,307.08	2,371.22	1,934.11	437.11	5.425 SF		
10,200.00	7,048.98	19,118.26	7,251.53	99.38	342.22	94.88	2,129.71	-3,307.08	2,380.19	1,941.82	438.38	5.430		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.55	19,118.26	7,251.53	102.10	342.22	94.88	2,129.71	-3,307.08	2,393.32	1,954.41	438.91	5.453		
10,400.00	7,048.12	19,118.26	7,251.53	104.83	342.22	94.88	2,129.71	-3,307.08	2,410.52	1,971.80	438.73	5.494		
10,500.00	7,047.68	19,118.26	7,251.53	107.56	342.22	94.88	2,129.71	-3,307.08	2,431.72	1,993.87	437.85	5.554		
10,600.00	7,047.25	19,118.26	7,251.53	110.30	342.22	94.88	2,129.71	-3,307.08	2,456.81	2,020.48	436.33	5.631		
10,700.00	7,046.81	19,118.26	7,251.53	113.05	342.22	94.88	2,129.71	-3,307.08	2,485.67	2,051.47	434.20	5.725		
10,800.00	7,046.38	19,118.26	7,251.53	115.80	342.22	94.88	2,129.71	-3,307.08	2,518.18	2,086.66	431.52	5.836		
10,900.00	7,045.95	19,118.26	7,251.53	118.55	342.22	94.88	2,129.71	-3,307.08	2,554.19	2,125.84	428.34	5.963		
11,000.00	7,045.51	19,118.26	7,251.53	121.31	342.22	94.88	2,129.71	-3,307.08	2,593.55	2,168.83	424.72	6.106		
11,100.00	7,045.08	19,118.26	7,251.53	124.08	342.22	94.88	2,129.71	-3,307.08	2,636.13	2,215.41	420.72	6.266		
11,200.00	7,044.64	19,118.26	7,251.53	126.85	342.22	94.88	2,129.71	-3,307.08	2,681.75	2,265.36	416.39	6.440		
11,300.00	7,044.21	19,118.26	7,251.53	129.62	342.22	94.88	2,129.71	-3,307.08	2,730.28	2,318.50	411.79	6.630		
11,400.00	7,043.78	19,118.26	7,251.53	132.40	342.22	94.88	2,129.71	-3,307.08	2,781.56	2,374.61	406.96	6.835		
11,500.00	7,043.34	19,118.26	7,251.53	135.18	342.22	94.88	2,129.71	-3,307.08	2,835.45	2,433.49	401.95	7.054		
11,600.00	7,042.91	19,118.26	7,251.53	137.96	342.22	94.88	2,129.71	-3,307.08	2,891.78	2,494.97	396.81	7.288		
11,700.00	7,042.47	19,118.26	7,251.53	140.75	342.22	94.88	2,129.71	-3,307.08	2,950.43	2,558.86	391.57	7.535		
11,800.00	7,042.04	19,118.26	7,251.53	143.54	342.22	94.88	2,129.71	-3,307.08	3,011.26	2,624.98	386.28	7.796		
11,900.00	7,041.61	19,118.26	7,251.53	146.33	342.22	94.88	2,129.71	-3,307.08	3,074.14	2,693.19	380.95	8.070		
12,000.00	7,041.17	19,118.26	7,251.53	149.13	342.22	94.88	2,129.71	-3,307.08	3,138.95	2,763.33	375.62	8.357		
12,100.00	7,040.74	19,118.26	7,251.53	151.92	342.22	94.88	2,129.71	-3,307.08	3,205.56	2,835.26	370.31	8.657		
12,200.00	7,040.30	19,118.26	7,251.53	154.72	342.22	94.88	2,129.71	-3,307.08	3,273.88	2,908.85	365.03	8.969		
12,300.00	7,039.87	19,118.26	7,251.53	157.52	342.22	94.88	2,129.71	-3,307.08	3,343.79	2,983.97	359.82	9.293		
12,400.00	7,039.44	19,118.26	7,251.53	160.33	342.22	94.88	2,129.71	-3,307.08	3,415.20	3,060.53	354.67	9.629		
12,500.00	7,039.00	19,118.26	7,251.53	163.13	342.22	94.88	2,129.71	-3,307.08	3,488.01	3,138.41	349.60	9.977		
12,600.00	7,038.57	19,118.26	7,251.53	165.94	342.22	94.88	2,129.71	-3,307.08	3,562.14	3,217.52	344.62	10.336		
12,700.00	7,038.13	19,118.26	7,251.53	168.75	342.22	94.88	2,129.71	-3,307.08	3,637.52	3,297.77	339.74	10.707		
12,800.00	7,037.70	19,118.26	7,251.53	171.56	342.22	94.88	2,129.71	-3,307.08	3,714.05	3,379.08	334.97	11.088		
12,900.00	7,037.27	19,118.26	7,251.53	174.37	342.22	94.88	2,129.71	-3,307.08	3,791.68	3,461.38	330.30	11.480		
13,000.00	7,036.83	19,118.26	7,251.53	177.19	342.22	94.88	2,129.71	-3,307.08	3,870.33	3,544.59	325.74	11.882		
13,100.00	7,036.40	19,118.26	7,251.53	180.00	342.22	94.88	2,129.71	-3,307.08	3,949.95	3,628.66	321.29	12.294		
13,200.00	7,035.96	19,118.26	7,251.53	182.82	342.22	94.88	2,129.71	-3,307.08	4,030.48	3,713.52	316.96	12.716		
13,300.00	7,035.53	19,118.26	7,251.53	185.64	342.22	94.88	2,129.71	-3,307.08	4,111.86	3,799.12	312.74	13.148		
13,400.00	7,035.10	19,118.26	7,251.53	188.46	342.22	94.88	2,129.71	-3,307.08	4,194.05	3,885.42	308.63	13.589		
13,500.00	7,034.66	19,118.26	7,251.53	191.28	342.22	94.88	2,129.71	-3,307.08	4,277.00	3,972.36	304.63	14.040		
13,600.00	7,034.23	19,118.26	7,251.53	194.10	342.22	94.88	2,129.71	-3,307.08	4,360.66	4,059.91	300.75	14.499		
13,700.00	7,033.79	19,118.26	7,251.53	196.92	342.22	94.88	2,129.71	-3,307.08	4,445.00	4,148.03	296.97	14.968		
13,800.00	7,033.36	19,118.26	7,251.53	199.74	342.22	94.88	2,129.71	-3,307.08	4,529.97	4,236.67	293.30	15.445		
13,900.00	7,032.93	19,118.26	7,251.53	202.57	342.22	94.88	2,129.71	-3,307.08	4,615.55	4,325.81	289.74	15.930		
14,000.00	7,032.49	19,118.26	7,251.53	205.39	342.22	94.88	2,129.71	-3,307.08	4,701.70	4,415.42	286.27	16.424		
14,100.00	7,032.06	19,118.26	7,251.53	208.22	342.22	94.88	2,129.71	-3,307.08	4,788.38	4,505.47	282.91	16.926		
14,200.00	7,031.62	19,118.26	7,251.53	211.05	342.22	94.88	2,129.71	-3,307.08	4,875.58	4,595.93	279.64	17.435		
14,300.00	7,031.19	19,118.26	7,251.53	213.87	342.22	94.88	2,129.71	-3,307.08	4,963.25	4,686.79	276.47	17.952		
14,400.00	7,030.76	19,118.26	7,251.53	216.70	342.22	94.88	2,129.71	-3,307.08	5,051.39	4,778.00	273.39	18.477		
14,500.00	7,030.32	19,118.26	7,251.53	219.53	342.22	94.88	2,129.71	-3,307.08	5,139.96	4,869.56	270.40	19.009		
14,600.00	7,029.89	19,118.26	7,251.53	222.36	342.22	94.88	2,129.71	-3,307.08	5,228.94	4,961.45	267.49	19.548		
14,700.00	7,029.45	19,118.26	7,251.53	225.19	342.22	94.88	2,129.71	-3,307.08	5,318.32	5,053.65	264.67	20.094		
14,800.00	7,029.02	19,118.26	7,251.53	228.03	342.22	94.88	2,129.71	-3,307.08	5,408.06	5,146.13	261.93	20.647		
14,805.04	7,029.00	19,118.26	7,251.53	228.17	342.22	94.88	2,129.71	-3,307.08	5,412.59	5,150.80	261.79	20.675		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	15,715.11	7,135.45	3.28	248.00	-0.08	1,963.48	-2.69	7,400.67					
100.00	100.00	15,715.36	7,135.45	3.28	248.00	-0.09	1,963.48	-2.93	7,304.30	7,187.91	116.39	62.758		
200.00	200.00	15,715.60	7,135.45	3.34	248.01	-0.09	1,963.47	-3.17	7,208.03	7,091.25	116.78	61.724		
300.00	300.00	15,715.85	7,135.45	3.44	248.02	-0.10	1,963.47	-3.42	7,111.86	6,994.67	117.19	60.686		
400.00	400.00	15,716.09	7,135.45	3.60	248.02	-0.11	1,963.47	-3.66	7,015.80	6,898.18	117.63	59.645		
500.00	499.98	15,717.43	7,135.45	3.80	248.06	145.50	1,963.46	-5.00	6,920.27	6,802.15	118.12	58.588		
600.00	599.90	15,720.16	7,135.46	4.02	248.14	145.94	1,963.43	-7.73	6,825.41	6,706.73	118.69	57.508		
700.00	699.82	15,722.92	7,135.47	4.28	248.22	145.87	1,963.40	-10.49	6,730.72	6,611.43	119.29	56.423		
800.00	799.74	15,725.68	7,135.47	4.57	248.29	145.79	1,963.37	-13.25	6,636.18	6,516.25	119.93	55.335		
900.00	899.66	15,728.44	7,135.48	4.88	248.37	145.72	1,963.34	-16.01	6,541.80	6,421.21	120.59	54.246		
1,000.00	999.58	15,731.19	7,135.49	5.21	248.45	145.65	1,963.32	-18.77	6,447.60	6,326.30	121.30	53.155		
1,100.00	1,099.50	15,733.95	7,135.49	5.55	248.53	145.58	1,963.29	-21.52	6,353.56	6,231.53	122.03	52.064		
1,200.00	1,199.42	15,736.71	7,135.50	5.91	248.61	145.50	1,963.26	-24.28	6,259.71	6,136.90	122.81	50.970		
1,300.00	1,299.34	15,739.47	7,135.51	6.28	248.68	145.43	1,963.23	-27.04	6,166.05	6,042.43	123.63	49.877		
1,400.00	1,399.26	15,742.23	7,135.51	6.66	248.76	145.36	1,963.20	-29.80	6,072.60	5,948.11	124.48	48.782		
1,500.00	1,499.18	15,744.99	7,135.52	7.04	248.84	145.29	1,963.17	-32.56	5,979.35	5,853.97	125.39	47.687		
1,600.00	1,599.10	15,747.74	7,135.53	7.43	248.92	145.22	1,963.15	-35.31	5,886.33	5,759.99	126.34	46.593		
1,700.00	1,699.01	15,750.50	7,135.53	7.83	249.00	145.14	1,963.12	-38.07	5,793.53	5,666.20	127.33	45.499		
1,800.00	1,798.93	15,753.26	7,135.54	8.23	249.07	145.07	1,963.09	-40.83	5,700.98	5,572.60	128.38	44.406		
1,900.00	1,898.85	15,756.02	7,135.55	8.64	249.15	145.00	1,963.06	-43.59	5,608.68	5,479.20	129.49	43.315		
2,000.00	1,998.77	15,758.78	7,135.55	9.05	249.23	144.93	1,963.03	-46.35	5,516.65	5,386.01	130.65	42.226		
2,100.00	2,098.69	15,761.53	7,135.56	9.46	249.31	144.85	1,963.00	-49.10	5,424.90	5,293.04	131.86	41.140		
2,200.00	2,198.61	15,764.29	7,135.57	9.88	249.39	144.78	1,962.98	-51.86	5,333.45	5,200.30	133.14	40.057		
2,300.00	2,298.53	15,767.05	7,135.57	10.30	249.46	144.71	1,962.95	-54.62	5,242.30	5,107.81	134.49	38.979		
2,400.00	2,398.45	15,769.81	7,135.58	10.72	249.54	144.64	1,962.92	-57.38	5,151.49	5,015.58	135.90	37.906		
2,500.00	2,498.37	15,772.57	7,135.59	11.14	249.62	144.56	1,962.89	-60.14	5,061.01	4,923.63	137.39	36.838		
2,600.00	2,598.29	15,775.32	7,135.59	11.56	249.70	144.49	1,962.86	-62.89	4,970.90	4,831.96	138.94	35.777		
2,700.00	2,698.21	15,778.08	7,135.60	11.98	249.78	144.42	1,962.83	-65.65	4,881.18	4,740.61	140.57	34.724		
2,800.00	2,798.13	15,780.84	7,135.61	12.41	249.85	144.35	1,962.81	-68.41	4,791.86	4,649.58	142.28	33.678		
2,900.00	2,898.05	15,783.60	7,135.62	12.84	249.93	144.27	1,962.78	-71.17	4,702.97	4,558.89	144.07	32.643		
3,000.00	2,997.97	15,786.36	7,135.62	13.27	250.01	144.20	1,962.75	-73.93	4,614.53	4,468.58	145.95	31.617		
3,100.00	3,097.89	15,789.12	7,135.63	13.69	250.09	144.13	1,962.72	-76.68	4,526.57	4,378.66	147.91	30.603		
3,200.00	3,197.81	15,791.88	7,135.64	14.12	250.17	144.06	1,962.69	-79.44	4,439.12	4,288.90	150.22	29.551		
3,300.00	3,297.73	15,794.64	7,135.64	14.56	250.25	143.98	1,962.66	-82.20	4,352.21	4,199.92	152.29	28.579		
3,400.00	3,397.65	15,797.40	7,135.65	14.99	250.33	143.91	1,962.64	-84.96	4,265.87	4,111.42	154.45	27.620		
3,500.00	3,497.56	15,800.15	7,135.66	15.42	250.40	143.84	1,962.61	-87.72	4,180.14	4,023.42	156.71	26.674		
3,600.00	3,597.48	15,802.91	7,135.66	15.85	250.48	143.76	1,962.58	-90.47	4,095.05	3,935.88	159.16	25.729		
3,700.00	3,697.40	15,805.66	7,135.67	16.28	250.55	143.69	1,962.55	-93.23	4,010.65	3,848.92	161.72	24.799		
3,800.00	3,797.32	15,808.42	7,135.68	16.72	250.63	143.62	1,962.52	-95.99	3,926.98	3,762.58	164.40	23.887		
3,900.00	3,897.24	15,811.18	7,135.68	17.15	250.71	143.55	1,962.50	-98.75	3,844.08	3,676.90	167.18	22.993		
4,000.00	3,997.16	15,813.94	7,135.69	17.59	250.79	143.47	1,962.47	-101.50	3,762.02	3,591.94	170.09	22.118		
4,100.00	4,097.08	15,816.70	7,135.70	18.02	250.87	143.40	1,962.44	-104.26	3,680.84	3,507.73	173.11	21.263		
4,200.00	4,197.00	15,819.45	7,135.70	18.46	250.94	143.33	1,962.41	-107.02	3,600.61	3,424.35	176.26	20.428		
4,300.00	4,296.92	15,822.21	7,135.71	18.89	251.02	143.26	1,962.38	-109.78	3,521.39	3,341.85	179.54	19.613		
4,400.00	4,396.84	15,824.97	7,135.72	19.33	251.10	143.18	1,962.35	-112.54	3,443.25	3,260.30	182.95	18.821		
4,500.00	4,496.76	15,827.73	7,135.72	19.77	251.18	143.11	1,962.33	-115.29	3,366.26	3,179.77	186.49	18.051		
4,600.00	4,596.68	15,830.49	7,135.73	20.20	251.26	143.04	1,962.30	-118.05	3,290.51	3,100.35	190.16	17.304		
4,700.00	4,696.60	15,833.25	7,135.74	20.64	251.33	142.97	1,962.27	-120.81	3,216.08	3,022.12	193.96	16.581		
4,800.00	4,796.52	15,836.00	7,135.74	21.08	251.41	142.89	1,962.24	-123.57	3,143.06	2,945.17	197.89	15.883		
4,900.00	4,896.44	15,838.76	7,135.75	21.51	251.49	142.82	1,962.21	-126.33	3,071.57	2,869.61	201.95	15.209		
5,000.00	4,996.36	15,841.52	7,135.76	21.95	251.57	142.75	1,962.18	-129.08	3,001.70	2,795.56	206.14	14.561		
5,100.00	5,096.28	15,844.28	7,135.76	22.39	251.65	142.67	1,962.16	-131.84	2,933.57	2,723.13	210.44	13.940		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	15,847.04	7,135.77	22.83	251.72	142.60	1,962.13	-134.60	2,867.32	2,652.46	214.86	13.345		
5,300.00	5,296.11	15,849.79	7,135.78	23.27	251.80	142.53	1,962.10	-137.36	2,803.06	2,583.69	219.37	12.778		
5,400.00	5,396.03	15,852.55	7,135.78	23.71	251.88	142.46	1,962.07	-140.12	2,740.94	2,516.97	223.96	12.238		
5,500.00	5,495.95	15,855.31	7,135.79	24.14	251.96	142.38	1,962.04	-142.87	2,681.11	2,452.48	228.63	11.727		
5,600.00	5,595.87	15,858.07	7,135.80	24.58	252.04	142.31	1,962.01	-145.63	2,623.72	2,390.38	233.34	11.244		
5,700.00	5,695.79	15,860.83	7,135.80	25.02	252.11	142.24	1,961.99	-148.39	2,568.94	2,330.88	238.07	10.791		
5,800.00	5,795.71	15,863.58	7,135.81	25.46	252.19	142.17	1,961.96	-151.15	2,516.95	2,274.16	242.79	10.367		
5,900.00	5,895.63	15,866.34	7,135.82	25.90	252.27	142.09	1,961.93	-153.91	2,467.91	2,220.44	247.46	9.973		
6,000.00	5,995.55	15,869.10	7,135.82	26.34	252.35	142.02	1,961.90	-156.66	2,422.00	2,169.94	252.06	9.609		
6,100.00	6,095.47	15,871.86	7,135.83	26.78	252.42	141.95	1,961.87	-159.42	2,379.41	2,122.87	256.54	9.275		
6,200.00	6,195.39	15,874.62	7,135.84	27.22	252.50	141.88	1,961.85	-162.18	2,340.31	2,079.47	260.84	8.972		
6,300.00	6,295.31	15,877.37	7,135.84	27.66	252.58	141.80	1,961.82	-164.94	2,304.90	2,039.96	264.94	8.700		
6,400.00	6,395.23	15,880.13	7,135.85	28.10	252.66	141.73	1,961.79	-167.70	2,273.32	2,004.56	268.76	8.459		
6,500.00	6,495.02	15,885.23	7,135.86	28.54	252.80	107.34	1,961.74	-172.79	2,245.79	1,973.46	272.33	8.247		
6,600.00	6,593.09	15,904.28	7,135.91	28.98	253.34	99.89	1,961.54	-191.84	2,222.72	1,946.84	275.87	8.057		
6,700.00	6,687.01	15,938.43	7,135.99	29.41	254.31	98.31	1,961.19	-225.99	2,204.43	1,925.07	279.36	7.891		
6,800.00	6,774.46	15,986.85	7,136.11	29.83	255.67	97.35	1,960.70	-274.41	2,190.83	1,908.07	282.76	7.748		
6,900.00	6,853.31	16,048.34	7,136.26	30.26	257.41	96.33	1,960.07	-335.90	2,181.43	1,895.34	286.09	7.625		
7,000.00	6,921.60	16,121.39	7,136.44	30.76	259.48	95.19	1,959.32	-408.94	2,175.48	1,886.06	289.41	7.517		
7,100.00	6,977.66	16,204.20	7,136.64	31.38	261.82	94.04	1,958.47	-491.75	2,172.09	1,879.27	292.82	7.418		
7,200.00	7,020.10	16,305.33	7,136.86	32.17	264.68	93.04	1,957.54	-582.28	2,170.36	1,873.67	296.69	7.315		
7,300.00	7,047.88	16,409.31	7,137.10	33.13	267.62	92.34	1,956.56	-678.29	2,169.53	1,868.84	300.70	7.215		
7,400.00	7,060.32	16,489.91	7,137.34	34.27	269.90	92.03	1,955.54	-777.44	2,169.05	1,864.90	304.14	7.132		
7,500.00	7,060.70	16,589.90	7,137.59	35.56	272.73	92.03	1,954.52	-877.42	2,168.64	1,860.38	308.26	7.035		
7,600.00	7,060.27	16,689.90	7,137.83	37.02	275.56	92.05	1,953.49	-977.41	2,168.24	1,855.68	312.56	6.937		
7,700.00	7,059.83	16,789.89	7,138.07	38.64	278.39	92.07	1,952.47	-1,077.40	2,167.84	1,850.83	317.01	6.838		
7,800.00	7,059.40	16,889.89	7,138.32	40.40	281.23	92.09	1,951.44	-1,177.40	2,167.44	1,845.84	321.60	6.740		
7,900.00	7,058.97	16,989.89	7,138.56	42.28	284.06	92.11	1,950.42	-1,277.39	2,167.04	1,840.73	326.31	6.641		
8,000.00	7,058.53	17,089.88	7,138.81	44.27	286.89	92.12	1,949.39	-1,377.38	2,166.64	1,835.51	331.12	6.543		
8,100.00	7,058.10	17,189.88	7,139.05	46.35	289.72	92.14	1,948.37	-1,477.37	2,166.24	1,830.21	336.03	6.447		
8,200.00	7,057.66	17,289.88	7,139.30	48.50	292.56	92.16	1,947.34	-1,577.36	2,165.84	1,824.82	341.01	6.351		
8,300.00	7,057.23	17,389.87	7,139.54	50.73	295.39	92.18	1,946.32	-1,677.35	2,165.44	1,819.37	346.07	6.257		
8,400.00	7,056.80	17,489.87	7,139.78	53.02	298.22	92.20	1,945.29	-1,777.34	2,165.04	1,813.85	351.19	6.165		
8,500.00	7,056.36	17,589.87	7,140.03	55.36	301.06	92.22	1,944.27	-1,877.33	2,164.64	1,808.28	356.35	6.074		
8,600.00	7,055.93	17,689.86	7,140.27	57.74	303.89	92.23	1,943.24	-1,977.33	2,164.24	1,802.67	361.57	5.986		
8,700.00	7,055.49	17,789.86	7,140.52	60.17	306.73	92.25	1,942.22	-2,077.32	2,163.84	1,797.01	366.83	5.899		
8,800.00	7,055.06	17,889.86	7,140.76	62.63	309.57	92.27	1,941.19	-2,177.31	2,163.44	1,791.32	372.12	5.814		
8,900.00	7,054.63	17,989.85	7,141.01	65.13	312.40	92.29	1,940.17	-2,277.30	2,163.04	1,785.59	377.45	5.731		
9,000.00	7,054.19	18,089.85	7,141.25	67.66	315.24	92.31	1,939.14	-2,377.29	2,162.64	1,779.84	382.80	5.649		
9,100.00	7,053.76	18,189.85	7,141.49	70.21	318.08	92.33	1,938.12	-2,477.28	2,162.24	1,774.06	388.18	5.570		
9,200.00	7,053.32	18,289.84	7,141.74	72.78	320.91	92.34	1,937.09	-2,577.27	2,161.85	1,768.26	393.59	5.493		
9,300.00	7,052.89	18,389.84	7,141.98	75.38	323.75	92.36	1,936.07	-2,677.26	2,161.45	1,762.44	399.01	5.417		
9,400.00	7,052.46	18,489.84	7,142.23	77.99	326.59	92.38	1,935.05	-2,777.25	2,161.05	1,756.60	404.46	5.343		
9,500.00	7,052.02	18,589.83	7,142.47	80.62	329.43	92.40	1,934.02	-2,877.25	2,160.65	1,750.74	409.92	5.271		
9,600.00	7,051.59	18,689.83	7,142.72	83.26	332.27	92.42	1,933.00	-2,977.24	2,160.26	1,744.87	415.39	5.201		
9,700.00	7,051.15	18,789.83	7,142.96	85.92	335.11	92.44	1,931.97	-3,077.23	2,159.86	1,738.98	420.88	5.132		
9,800.00	7,050.72	18,889.82	7,143.20	88.59	337.95	92.46	1,930.95	-3,177.22	2,159.46	1,733.08	426.38	5.065		
9,900.00	7,050.29	18,989.82	7,143.45	91.28	340.79	92.47	1,929.92	-3,277.21	2,159.07	1,727.17	431.89	4.999		
9,937.07	7,050.13	19,018.34	7,143.52	92.27	341.60	92.48	1,929.63	-3,305.73	2,158.94	1,725.23	433.70	4.978 CC		
10,000.00	7,049.85	19,018.34	7,143.52	93.97	341.60	92.48	1,929.63	-3,305.73	2,159.85	1,724.62	435.23	4.963 ES		
10,100.00	7,049.42	19,018.34	7,143.52	96.67	341.60	92.48	1,929.63	-3,305.73	2,165.08	1,728.15	436.92	4.955 SF		
10,200.00	7,048.98	19,018.34	7,143.52	99.38	341.60	92.48	1,929.63	-3,305.73	2,174.89	1,737.16	437.72	4.969		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.55	19,018.34	7,143.52	102.10	341.60	92.48	1,929.63	-3,305.73	2,189.23	1,751.58	437.65	5.002		
10,400.00	7,048.12	19,018.34	7,143.52	104.83	341.60	92.48	1,929.63	-3,305.73	2,208.01	1,771.28	436.73	5.056		
10,500.00	7,047.68	19,018.34	7,143.52	107.56	341.60	92.48	1,929.63	-3,305.73	2,231.12	1,796.11	435.01	5.129		
10,600.00	7,047.25	19,018.34	7,143.52	110.30	341.60	92.48	1,929.63	-3,305.73	2,258.42	1,825.87	432.56	5.221		
10,700.00	7,046.81	19,018.34	7,143.52	113.05	341.60	92.48	1,929.63	-3,305.73	2,289.77	1,860.35	429.43	5.332		
10,800.00	7,046.38	19,018.34	7,143.52	115.80	341.60	92.48	1,929.63	-3,305.73	2,325.01	1,899.30	425.70	5.462		
10,900.00	7,045.95	19,018.34	7,143.52	118.55	341.60	92.48	1,929.63	-3,305.73	2,363.94	1,942.49	421.45	5.609		
11,000.00	7,045.51	19,018.34	7,143.52	121.31	341.60	92.48	1,929.63	-3,305.73	2,406.41	1,989.66	416.75	5.774		
11,100.00	7,045.08	19,018.34	7,143.52	124.08	341.60	92.48	1,929.63	-3,305.73	2,452.22	2,040.55	411.67	5.957		
11,200.00	7,044.64	19,018.34	7,143.52	126.85	341.60	92.48	1,929.63	-3,305.73	2,501.20	2,094.91	406.29	6.156		
11,300.00	7,044.21	19,018.34	7,143.52	129.62	341.60	92.48	1,929.63	-3,305.73	2,553.15	2,152.48	400.67	6.372		
11,400.00	7,043.78	19,018.34	7,143.52	132.40	341.60	92.48	1,929.63	-3,305.73	2,607.90	2,213.04	394.87	6.605		
11,500.00	7,043.34	19,018.34	7,143.52	135.18	341.60	92.48	1,929.63	-3,305.73	2,665.29	2,276.35	388.94	6.853		
11,600.00	7,042.91	19,018.34	7,143.52	137.96	341.60	92.48	1,929.63	-3,305.73	2,725.13	2,342.20	382.93	7.117		
11,700.00	7,042.47	19,018.34	7,143.52	140.75	341.60	92.48	1,929.63	-3,305.73	2,787.28	2,410.39	376.89	7.396		
11,800.00	7,042.04	19,018.34	7,143.52	143.54	341.60	92.48	1,929.63	-3,305.73	2,851.58	2,480.73	370.84	7.689		
11,900.00	7,041.61	19,018.34	7,143.52	146.33	341.60	92.48	1,929.63	-3,305.73	2,917.89	2,553.06	364.83	7.998		
12,000.00	7,041.17	19,018.34	7,143.52	149.13	341.60	92.48	1,929.63	-3,305.73	2,986.08	2,627.20	358.88	8.321		
12,100.00	7,040.74	19,018.34	7,143.52	151.92	341.60	92.48	1,929.63	-3,305.73	3,056.02	2,703.02	353.00	8.657		
12,200.00	7,040.30	19,018.34	7,143.52	154.72	341.60	92.48	1,929.63	-3,305.73	3,127.59	2,780.38	347.22	9.008		
12,300.00	7,039.87	19,018.34	7,143.52	157.52	341.60	92.48	1,929.63	-3,305.73	3,200.69	2,859.15	341.54	9.371		
12,400.00	7,039.44	19,018.34	7,143.52	160.33	341.60	92.48	1,929.63	-3,305.73	3,275.21	2,939.22	335.99	9.748		
12,500.00	7,039.00	19,018.34	7,143.52	163.13	341.60	92.48	1,929.63	-3,305.73	3,351.06	3,020.49	330.57	10.137		
12,600.00	7,038.57	19,018.34	7,143.52	165.94	341.60	92.48	1,929.63	-3,305.73	3,428.15	3,102.87	325.28	10.539		
12,700.00	7,038.13	19,018.34	7,143.52	168.75	341.60	92.48	1,929.63	-3,305.73	3,506.39	3,186.26	320.13	10.953		
12,800.00	7,037.70	19,018.34	7,143.52	171.56	341.60	92.48	1,929.63	-3,305.73	3,585.72	3,270.60	315.12	11.379		
12,900.00	7,037.27	19,018.34	7,143.52	174.37	341.60	92.48	1,929.63	-3,305.73	3,666.05	3,355.80	310.25	11.816		
13,000.00	7,036.83	19,018.34	7,143.52	177.19	341.60	92.48	1,929.63	-3,305.73	3,747.34	3,441.81	305.52	12.265		
13,100.00	7,036.40	19,018.34	7,143.52	180.00	341.60	92.48	1,929.63	-3,305.73	3,829.51	3,528.57	300.94	12.725		
13,200.00	7,035.96	19,018.34	7,143.52	182.82	341.60	92.48	1,929.63	-3,305.73	3,912.51	3,616.01	296.49	13.196		
13,300.00	7,035.53	19,018.34	7,143.52	185.64	341.60	92.48	1,929.63	-3,305.73	3,996.28	3,704.10	292.18	13.677		
13,400.00	7,035.10	19,018.34	7,143.52	188.46	341.60	92.48	1,929.63	-3,305.73	4,080.79	3,792.78	288.01	14.169		
13,500.00	7,034.66	19,018.34	7,143.52	191.28	341.60	92.48	1,929.63	-3,305.73	4,165.99	3,882.02	283.97	14.671		
13,600.00	7,034.23	19,018.34	7,143.52	194.10	341.60	92.48	1,929.63	-3,305.73	4,251.83	3,971.77	280.06	15.182		
13,700.00	7,033.79	19,018.34	7,143.52	196.92	341.60	92.48	1,929.63	-3,305.73	4,338.27	4,062.01	276.27	15.703		
13,800.00	7,033.36	19,018.34	7,143.52	199.74	341.60	92.48	1,929.63	-3,305.73	4,425.29	4,152.69	272.60	16.234		
13,900.00	7,032.93	19,018.34	7,143.52	202.57	341.60	92.48	1,929.63	-3,305.73	4,512.85	4,243.80	269.05	16.773		
14,000.00	7,032.49	19,018.34	7,143.52	205.39	341.60	92.48	1,929.63	-3,305.73	4,600.91	4,335.30	265.61	17.322		
14,100.00	7,032.06	19,018.34	7,143.52	208.22	341.60	92.48	1,929.63	-3,305.73	4,689.45	4,427.17	262.28	17.879		
14,200.00	7,031.62	19,018.34	7,143.52	211.05	341.60	92.48	1,929.63	-3,305.73	4,778.45	4,519.38	259.06	18.445		
14,300.00	7,031.19	19,018.34	7,143.52	213.87	341.60	92.48	1,929.63	-3,305.73	4,867.87	4,611.92	255.95	19.019		
14,400.00	7,030.76	19,018.34	7,143.52	216.70	341.60	92.48	1,929.63	-3,305.73	4,957.69	4,704.77	252.93	19.601		
14,500.00	7,030.32	19,018.34	7,143.52	219.53	341.60	92.48	1,929.63	-3,305.73	5,047.90	4,797.90	250.00	20.191		
14,600.00	7,029.89	19,018.34	7,143.52	222.36	341.60	92.48	1,929.63	-3,305.73	5,138.47	4,891.30	247.17	20.789		
14,700.00	7,029.45	19,018.34	7,143.52	225.19	341.60	92.48	1,929.63	-3,305.73	5,229.39	4,984.96	244.43	21.394		
14,800.00	7,029.02	19,018.34	7,143.52	228.03	341.60	92.48	1,929.63	-3,305.73	5,320.63	5,078.85	241.77	22.007		
14,805.04	7,029.00	19,018.34	7,143.52	228.17	341.60	92.48	1,929.63	-3,305.73	5,325.23	5,083.59	241.64	22.038		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	1,501.87	1,550.23	3.28	8.07	-118.46	-4,075.30	-7,519.54	8,692.22					
100.00	100.00	1,584.00	1,631.02	3.28	8.51	-118.42	-4,064.18	-7,509.88	8,675.25	8,664.16	11.09	782.452		
200.00	200.00	1,584.00	1,631.02	3.34	8.51	-118.42	-4,064.18	-7,509.88	8,658.16	8,647.05	11.11	779.603		
300.00	300.00	1,663.95	1,709.75	3.44	8.92	-118.38	-4,053.23	-7,501.24	8,642.03	8,630.49	11.54	748.960		
400.00	400.00	1,726.04	1,770.84	3.60	9.25	-118.35	-4,044.42	-7,494.60	8,625.86	8,613.92	11.94	722.215		
500.00	499.98	1,781.07	1,825.08	3.80	9.53	23.61	-4,037.08	-7,488.83	8,608.67	8,596.31	12.36	696.561		
600.00	599.90	1,868.00	1,910.81	4.02	9.98	23.68	-4,026.11	-7,479.49	8,589.62	8,576.68	12.95	663.355		
700.00	699.82	1,937.01	1,978.88	4.28	10.34	23.72	-4,017.38	-7,472.26	8,570.81	8,557.32	13.49	635.450		
800.00	799.74	2,234.49	2,272.02	4.57	11.92	23.87	-3,979.65	-7,438.62	8,551.38	8,536.29	15.09	566.669		
900.00	899.66	2,478.83	2,512.02	4.88	13.27	23.99	-3,947.45	-7,406.03	8,529.88	8,513.39	16.49	517.346		
1,000.00	999.58	2,534.85	2,566.98	5.21	13.59	24.01	-3,940.00	-7,398.16	8,507.62	8,490.57	17.05	499.045		
1,100.00	1,099.50	1,100.00	2,769.97	5.55	5.65	24.12	-3,911.70	-7,368.90	8,485.26	8,474.19	11.07	766.747		
1,200.00	1,199.42	2,914.44	2,938.49	5.91	15.81	24.21	-3,885.49	-7,342.85	8,460.91	8,441.46	19.46	434.877		
1,300.00	1,299.34	2,960.72	2,983.72	6.28	16.09	24.24	-3,878.59	-7,335.90	8,437.08	8,417.06	20.02	421.351		
1,400.00	1,399.26	1,400.00	3,111.29	6.66	7.14	24.30	-3,860.24	-7,316.00	8,413.45	8,400.11	13.33	631.155		
1,500.00	1,499.18	3,160.76	3,179.35	7.04	17.28	24.33	-3,850.71	-7,304.80	8,389.37	8,367.70	21.68	386.997		
1,600.00	1,599.10	3,200.00	3,217.79	7.43	17.52	24.35	-3,845.58	-7,298.83	8,366.16	8,343.92	22.24	376.149		
1,700.00	1,699.01	3,327.77	3,342.95	7.83	18.26	24.41	-3,828.82	-7,279.38	8,342.97	8,319.76	23.21	359.479		
1,800.00	1,798.93	3,391.00	3,404.90	8.23	18.64	24.44	-3,820.53	-7,269.83	8,319.92	8,296.02	23.89	348.211		
1,900.00	1,898.85	3,391.00	3,404.90	8.64	18.64	24.44	-3,820.53	-7,269.83	8,297.61	8,273.31	24.30	341.443		
2,000.00	1,998.77	3,440.13	3,453.13	9.05	18.92	24.46	-3,814.13	-7,262.98	8,275.89	8,250.96	24.93	331.916		
2,100.00	2,098.69	3,486.00	3,498.27	9.46	19.18	24.48	-3,808.17	-7,257.42	8,255.25	8,229.70	25.56	323.029		
2,200.00	2,198.61	2,200.00	3,558.58	9.88	12.09	24.52	-3,799.99	-7,250.29	8,235.06	8,215.02	20.05	410.808		
2,300.00	2,298.53	3,581.00	3,591.77	10.30	19.70	24.54	-3,795.49	-7,246.36	8,215.21	8,188.38	26.83	306.229		
2,400.00	2,398.45	3,635.02	3,644.94	10.72	20.00	24.57	-3,787.97	-7,240.49	8,195.79	8,168.29	27.50	298.049		
2,500.00	2,498.37	4,082.04	4,083.25	11.14	22.57	24.92	-3,716.23	-7,190.90	8,174.97	8,144.99	29.98	272.710		
2,600.00	2,598.29	2,600.00	4,197.30	11.56	13.88	24.98	-3,700.44	-7,173.92	8,152.28	8,128.81	23.47	347.390		
2,700.00	2,698.21	4,283.63	4,280.70	11.98	23.77	25.02	-3,689.05	-7,160.79	8,128.93	8,097.19	31.75	256.068		
2,800.00	2,798.13	4,307.83	4,304.44	12.41	23.91	25.03	-3,685.88	-7,157.24	8,106.35	8,074.05	32.30	250.984		
2,900.00	2,898.05	4,343.00	4,338.99	12.84	24.11	25.05	-3,681.39	-7,152.46	8,084.67	8,051.77	32.90	245.732		
3,000.00	2,997.97	4,425.02	4,419.62	13.27	24.58	25.10	-3,670.75	-7,141.82	8,063.60	8,029.89	33.71	239.217		
3,100.00	3,097.89	4,480.45	4,474.08	13.69	24.90	25.13	-3,663.28	-7,134.78	8,042.60	8,008.20	34.40	233.779		
3,200.00	3,197.81	4,534.00	4,526.77	14.12	25.20	25.16	-3,656.20	-7,128.33	8,022.25	7,987.15	35.09	228.617		
3,300.00	3,297.73	4,590.44	4,582.37	14.56	25.51	25.19	-3,649.12	-7,121.68	8,002.42	7,966.63	35.79	223.603		
3,400.00	3,397.65	4,629.00	4,620.39	14.99	25.72	25.21	-3,644.62	-7,117.07	7,983.05	7,946.64	36.41	219.256		
3,500.00	3,497.56	4,670.61	4,661.47	15.42	25.94	25.23	-3,640.01	-7,112.31	7,964.39	7,927.35	37.04	215.015		
3,600.00	3,597.48	4,724.00	4,714.28	15.85	26.23	25.26	-3,634.38	-7,106.89	7,946.75	7,909.02	37.72	210.656		
3,700.00	3,697.40	4,755.91	4,745.88	16.28	26.39	25.27	-3,631.15	-7,103.83	7,929.68	7,891.37	38.31	206.976		
3,800.00	3,797.32	4,819.00	4,808.35	16.72	26.71	25.30	-3,625.03	-7,097.44	7,912.83	7,873.80	39.03	202.716		
3,900.00	3,897.24	4,879.43	4,868.23	17.15	27.02	25.32	-3,619.46	-7,091.49	7,896.46	7,856.71	39.74	198.690		
4,000.00	3,997.16	4,915.00	4,903.51	17.59	27.19	25.34	-3,616.32	-7,088.33	7,880.95	7,840.61	40.34	195.340		
4,100.00	4,097.08	4,965.12	4,953.28	18.02	27.43	25.36	-3,612.00	-7,084.21	7,866.16	7,825.15	41.01	191.826		
4,200.00	4,197.00	5,014.06	5,001.90	18.46	27.67	25.38	-3,607.87	-7,080.50	7,851.99	7,810.32	41.66	188.462		
4,300.00	4,296.92	5,063.07	5,050.63	18.89	27.90	25.40	-3,603.82	-7,077.09	7,838.45	7,796.13	42.32	185.217		
4,400.00	4,396.84	5,104.00	5,091.34	19.33	28.09	25.42	-3,600.51	-7,074.47	7,825.56	7,782.62	42.94	182.239		
4,500.00	4,496.76	5,104.00	5,091.34	19.77	28.09	25.42	-3,600.51	-7,074.47	7,813.71	7,770.33	43.38	180.121		
4,600.00	4,596.68	5,188.88	5,175.86	20.20	28.46	25.46	-3,594.33	-7,069.72	7,801.95	7,757.77	44.18	176.583		
4,700.00	4,696.60	5,228.20	5,215.06	20.64	28.64	25.47	-3,591.91	-7,067.84	7,791.30	7,746.51	44.79	173.959		
4,800.00	4,796.52	5,294.00	5,280.71	21.08	28.92	25.49	-3,588.47	-7,065.13	7,781.53	7,736.02	45.51	170.995		
4,900.00	4,896.44	5,294.00	5,280.71	21.51	28.92	25.49	-3,588.47	-7,065.13	7,772.33	7,726.40	45.94	169.198		
5,000.00	4,996.36	5,374.95	5,361.54	21.95	29.24	25.52	-3,584.95	-7,062.33	7,763.72	7,717.01	46.71	166.213		
5,100.00	5,096.28	5,435.85	5,422.36	22.39	29.48	25.54	-3,582.62	-7,060.46	7,755.65	7,708.26	47.40	163.635		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,496.80	5,483.25	22.83	29.73	25.55	-3,580.56	-7,058.78	7,748.08	7,700.00	48.08	161.143		
5,300.00	5,296.11	5,579.00	5,565.40	23.27	30.05	25.57	-3,578.21	-7,056.85	7,741.06	7,692.20	48.86	158.435		
5,400.00	5,396.03	5,619.32	5,605.70	23.71	30.20	25.58	-3,577.23	-7,056.05	7,734.43	7,684.98	49.45	156.408		
5,500.00	5,495.95	5,681.13	5,667.48	24.14	30.43	25.59	-3,575.90	-7,055.01	7,728.35	7,678.22	50.13	154.159		
5,600.00	5,595.87	5,742.97	5,729.31	24.58	30.66	25.61	-3,574.78	-7,054.20	7,722.76	7,671.95	50.81	151.984		
5,700.00	5,695.79	5,804.86	5,791.19	25.02	30.89	25.62	-3,573.87	-7,053.63	7,717.66	7,666.17	51.49	149.878		
5,800.00	5,795.71	5,864.00	5,850.32	25.46	31.11	25.63	-3,573.19	-7,053.30	7,713.05	7,660.89	52.16	147.874		
5,900.00	5,895.63	5,942.04	5,928.36	25.90	31.38	25.64	-3,572.45	-7,053.15	7,708.84	7,655.94	52.90	145.725		
6,000.00	5,995.55	6,016.75	6,003.07	26.34	31.64	25.66	-3,571.77	-7,053.26	7,704.97	7,651.34	53.63	143.681		
6,100.00	6,095.47	6,091.48	6,077.79	26.78	31.90	25.67	-3,571.14	-7,053.63	7,701.41	7,647.06	54.35	141.699		
6,200.00	6,195.39	6,174.14	6,160.45	27.22	32.19	25.69	-3,570.47	-7,054.32	7,698.18	7,643.07	55.11	139.689		
6,300.00	6,295.31	6,287.80	6,274.10	27.66	32.59	25.72	-3,569.43	-7,055.29	7,694.93	7,638.92	56.00	137.404		
6,400.00	6,395.23	6,401.44	6,387.73	28.10	32.99	25.74	-3,568.19	-7,056.13	7,691.50	7,634.60	56.89	135.189		
6,500.00	6,495.02	6,497.67	6,483.95	28.54	33.33	-10.01	-3,567.00	-7,056.80	7,685.86	7,628.15	57.71	133.170		
6,600.00	6,593.09	6,584.61	6,570.88	28.98	33.64	-19.86	-3,565.86	-7,057.57	7,667.81	7,609.32	58.49	131.104		
6,700.00	6,687.01	6,668.09	6,654.35	29.41	33.94	-23.72	-3,564.72	-7,058.46	7,636.32	7,577.10	59.22	128.949		
6,800.00	6,774.46	6,723.00	6,709.25	29.83	34.14	-27.05	-3,563.95	-7,059.13	7,592.23	7,532.44	59.79	126.972		
6,900.00	6,853.31	6,793.63	6,779.86	30.26	34.39	-31.02	-3,563.02	-7,060.18	7,536.68	7,476.28	60.40	124.786		
7,000.00	6,921.60	6,840.21	6,826.44	30.76	34.55	-36.17	-3,562.50	-7,061.03	7,471.14	7,410.28	60.86	122.760		
7,100.00	6,977.66	6,878.98	6,865.19	31.38	34.68	-43.25	-3,562.12	-7,061.83	7,397.15	7,335.89	61.26	120.745		
7,200.00	7,020.10	6,908.94	6,895.14	32.17	34.79	-53.09	-3,561.85	-7,062.50	7,316.51	7,254.90	61.61	118.747		
7,300.00	7,047.88	6,929.27	6,915.47	33.13	34.86	-66.35	-3,561.69	-7,062.99	7,231.20	7,169.27	61.93	116.767		
7,400.00	7,060.32	6,939.38	6,925.57	34.27	34.90	-82.62	-3,561.62	-7,063.24	7,143.29	7,081.07	62.22	114.810		
7,500.00	7,060.70	6,941.36	6,927.55	35.56	34.90	-88.16	-3,561.60	-7,063.29	7,054.87	6,992.35	62.51	112.852		
7,600.00	7,060.27	6,942.79	6,928.99	37.02	34.91	-88.19	-3,561.59	-7,063.33	6,966.74	6,903.86	62.88	110.799		
7,700.00	7,059.83	6,944.24	6,930.43	38.64	34.91	-88.21	-3,561.58	-7,063.37	6,878.94	6,815.62	63.31	108.647		
7,800.00	7,059.40	6,945.70	6,931.89	40.40	34.92	-88.24	-3,561.57	-7,063.40	6,791.47	6,727.65	63.83	106.402		
7,900.00	7,058.97	6,947.17	6,933.36	42.28	34.92	-88.27	-3,561.56	-7,063.44	6,704.36	6,639.94	64.42	104.072		
8,000.00	7,058.53	6,948.65	6,934.84	44.27	34.93	-88.29	-3,561.55	-7,063.48	6,617.61	6,552.51	65.09	101.663		
8,100.00	7,058.10	6,950.14	6,936.33	46.35	34.93	-88.32	-3,561.54	-7,063.52	6,531.23	6,465.39	65.85	99.185		
8,200.00	7,057.66	6,951.65	6,937.84	48.50	34.94	-88.34	-3,561.53	-7,063.56	6,445.25	6,378.57	66.69	96.649		
8,300.00	7,057.23	6,953.17	6,939.35	50.73	34.94	-88.37	-3,561.52	-7,063.60	6,359.68	6,292.07	67.61	94.063		
8,400.00	7,056.80	6,954.70	6,940.88	53.02	34.95	-88.40	-3,561.51	-7,063.64	6,274.54	6,205.92	68.62	91.441		
8,500.00	7,056.36	6,956.24	6,942.43	55.36	34.95	-88.42	-3,561.50	-7,063.68	6,189.84	6,120.13	69.71	88.791		
8,600.00	7,055.93	6,957.79	6,943.98	57.74	34.96	-88.45	-3,561.49	-7,063.72	6,105.60	6,034.71	70.89	86.124		
8,700.00	7,055.49	6,959.36	6,945.55	60.17	34.97	-88.48	-3,561.48	-7,063.76	6,021.85	5,949.69	72.16	83.451		
8,800.00	7,055.06	6,960.94	6,947.13	62.63	34.97	-88.50	-3,561.47	-7,063.80	5,938.59	5,865.08	73.51	80.782		
8,900.00	7,054.63	6,962.54	6,948.72	65.13	34.98	-88.53	-3,561.46	-7,063.84	5,855.86	5,780.91	74.96	78.125		
9,000.00	7,054.19	6,964.14	6,950.33	67.66	34.98	-88.56	-3,561.45	-7,063.89	5,773.68	5,697.20	76.48	75.489		
9,100.00	7,053.76	6,965.77	6,951.95	70.21	34.99	-88.59	-3,561.44	-7,063.93	5,692.06	5,613.97	78.10	72.882		
9,200.00	7,053.32	6,967.40	6,953.58	72.78	34.99	-88.61	-3,561.43	-7,063.97	5,611.04	5,531.24	79.80	70.311		
9,300.00	7,052.89	6,969.05	6,955.23	75.38	35.00	-88.64	-3,561.42	-7,064.02	5,530.65	5,449.05	81.60	67.781		
9,400.00	7,052.46	6,970.71	6,956.89	77.99	35.00	-88.67	-3,561.41	-7,064.06	5,450.89	5,367.42	83.48	65.299		
9,500.00	7,052.02	6,972.39	6,958.57	80.62	35.01	-88.70	-3,561.40	-7,064.11	5,371.82	5,286.37	85.45	62.869		
9,600.00	7,051.59	6,974.08	6,960.26	83.26	35.02	-88.73	-3,561.39	-7,064.15	5,293.45	5,205.95	87.50	60.494		
9,700.00	7,051.15	6,975.78	6,961.96	85.92	35.02	-88.76	-3,561.38	-7,064.20	5,215.82	5,126.17	89.65	58.179		
9,800.00	7,050.72	6,977.50	6,963.68	88.59	35.03	-88.79	-3,561.37	-7,064.25	5,138.97	5,047.08	91.89	55.925		
9,900.00	7,050.29	6,979.24	6,965.41	91.28	35.03	-88.82	-3,561.35	-7,064.29	5,062.92	4,968.70	94.22	53.736		
10,000.00	7,049.85	6,980.99	6,967.16	93.97	35.04	-88.85	-3,561.34	-7,064.34	4,987.72	4,891.08	96.64	51.612		
10,100.00	7,049.42	6,982.75	6,968.93	96.67	35.05	-88.88	-3,561.33	-7,064.39	4,913.40	4,814.25	99.15	49.555		
10,200.00	7,048.98	6,984.53	6,970.71	99.38	35.05	-88.91	-3,561.32	-7,064.44	4,840.00	4,738.25	101.75	47.566		
10,300.00	7,048.55	6,986.33	6,972.50	102.10	35.06	-88.94	-3,561.31	-7,064.49	4,767.57	4,663.12	104.45	45.645		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	6,988.14	6,974.32	104.83	35.07	-88.97	-3,561.30	-7,064.54	4,696.15	4,588.92	107.24	43.792		
10,500.00	7,047.68	6,989.97	6,976.14	107.56	35.07	-89.00	-3,561.29	-7,064.59	4,625.79	4,515.67	110.12	42.007		
10,600.00	7,047.25	6,991.81	6,977.99	110.30	35.08	-89.04	-3,561.28	-7,064.64	4,556.54	4,443.45	113.10	40.289		
10,700.00	7,046.81	6,993.67	6,979.85	113.05	35.09	-89.07	-3,561.27	-7,064.70	4,488.45	4,372.29	116.16	38.639		
10,800.00	7,046.38	6,995.55	6,981.72	115.80	35.09	-89.10	-3,561.26	-7,064.75	4,421.57	4,302.24	119.32	37.055		
10,900.00	7,045.95	6,997.45	6,983.62	118.55	35.10	-89.13	-3,561.25	-7,064.80	4,355.96	4,233.38	122.58	35.537		
11,000.00	7,045.51	6,999.36	6,985.53	121.31	35.11	-89.17	-3,561.24	-7,064.86	4,291.67	4,165.75	125.92	34.083		
11,100.00	7,045.08	7,001.29	6,987.46	124.08	35.11	-89.20	-3,561.23	-7,064.91	4,228.77	4,099.42	129.35	32.692		
11,200.00	7,044.64	7,003.24	6,989.41	126.85	35.12	-89.23	-3,561.22	-7,064.97	4,167.32	4,034.44	132.87	31.363		
11,300.00	7,044.21	7,010.00	6,996.17	129.62	35.14	-89.35	-3,561.19	-7,065.17	4,107.38	3,970.89	136.50	30.091		
11,400.00	7,043.78	7,010.00	6,996.17	132.40	35.14	-89.35	-3,561.19	-7,065.17	4,049.03	3,908.85	140.18	28.885		
11,500.00	7,043.34	7,010.00	6,996.17	135.18	35.14	-89.35	-3,561.19	-7,065.17	3,992.32	3,848.38	143.94	27.736		
11,600.00	7,042.91	7,011.97	6,998.13	137.96	35.15	-89.39	-3,561.18	-7,065.22	3,937.34	3,789.56	147.78	26.643		
11,700.00	7,042.47	7,015.29	7,001.45	140.75	35.16	-89.44	-3,561.16	-7,065.32	3,884.15	3,732.46	151.70	25.604		
11,800.00	7,042.04	7,018.63	7,004.80	143.54	35.17	-89.50	-3,561.14	-7,065.42	3,832.84	3,677.15	155.68	24.620		
11,900.00	7,041.61	7,022.00	7,008.16	146.33	35.18	-89.56	-3,561.12	-7,065.52	3,783.46	3,623.74	159.72	23.688		
12,000.00	7,041.17	7,025.40	7,011.56	149.13	35.20	-89.62	-3,561.10	-7,065.62	3,736.11	3,572.30	163.81	22.807		
12,100.00	7,040.74	7,028.82	7,014.98	151.92	35.21	-89.68	-3,561.08	-7,065.72	3,690.86	3,522.92	167.95	21.977		
12,200.00	7,040.30	7,032.27	7,018.42	154.72	35.22	-89.74	-3,561.05	-7,065.83	3,647.79	3,475.68	172.11	21.194		
12,300.00	7,039.87	7,035.74	7,021.90	157.52	35.23	-89.80	-3,561.03	-7,065.93	3,606.97	3,430.67	176.30	20.459		
12,400.00	7,039.44	7,039.24	7,025.40	160.33	35.25	-89.86	-3,561.00	-7,066.03	3,568.49	3,387.99	180.50	19.770		
12,500.00	7,039.00	7,042.77	7,028.92	163.13	35.26	-89.92	-3,560.97	-7,066.14	3,532.42	3,347.71	184.71	19.124		
12,600.00	7,038.57	7,046.33	7,032.48	165.94	35.27	-89.98	-3,560.95	-7,066.25	3,498.83	3,309.94	188.90	18.522		
12,700.00	7,038.13	7,049.91	7,036.06	168.75	35.28	-90.04	-3,560.92	-7,066.36	3,467.80	3,274.74	193.06	17.962		
12,800.00	7,037.70	7,053.52	7,039.67	171.56	35.30	-90.10	-3,560.88	-7,066.47	3,439.40	3,242.21	197.19	17.442		
12,900.00	7,037.27	7,057.16	7,043.31	174.37	35.31	-90.17	-3,560.85	-7,066.58	3,413.69	3,212.42	201.26	16.961		
13,000.00	7,036.83	7,060.83	7,046.97	177.19	35.32	-90.23	-3,560.82	-7,066.69	3,390.72	3,185.46	205.27	16.519		
13,100.00	7,036.40	7,064.53	7,050.67	180.00	35.33	-90.29	-3,560.78	-7,066.80	3,370.57	3,161.38	209.19	16.112		
13,200.00	7,035.96	7,068.26	7,054.39	182.82	35.35	-90.36	-3,560.74	-7,066.92	3,353.28	3,140.26	213.02	15.742		
13,300.00	7,035.53	7,072.01	7,058.15	185.64	35.36	-90.42	-3,560.70	-7,067.04	3,338.89	3,122.16	216.73	15.406		
13,400.00	7,035.10	7,075.80	7,061.93	188.46	35.37	-90.49	-3,560.66	-7,067.15	3,327.44	3,107.12	220.32	15.103		
13,500.00	7,034.66	7,079.62	7,065.75	191.28	35.39	-90.56	-3,560.62	-7,067.27	3,318.97	3,095.20	223.77	14.832		
13,600.00	7,034.23	7,083.47	7,069.59	194.10	35.40	-90.62	-3,560.57	-7,067.39	3,313.48	3,086.42	227.07	14.593		
13,700.00	7,033.79	7,087.35	7,073.47	196.92	35.41	-90.69	-3,560.53	-7,067.52	3,311.01	3,080.81	230.20	14.383		
13,731.97	7,033.66	7,088.59	7,074.72	197.82	35.42	-90.71	-3,560.51	-7,067.55	3,310.86	3,079.69	231.17	14.322 CC		
13,800.00	7,033.36	7,091.26	7,077.38	199.74	35.43	-90.76	-3,560.48	-7,067.64	3,311.56	3,078.39	233.17	14.202 ES		
13,900.00	7,032.93	7,095.20	7,081.32	202.57	35.44	-90.82	-3,560.43	-7,067.76	3,315.11	3,079.16	235.95	14.050		
14,000.00	7,032.49	7,099.18	7,085.30	205.39	35.46	-90.89	-3,560.38	-7,067.89	3,321.68	3,083.13	238.55	13.924		
14,100.00	7,032.06	7,103.18	7,089.30	208.22	35.47	-90.96	-3,560.32	-7,068.02	3,331.23	3,090.27	240.96	13.825		
14,200.00	7,031.62	7,107.23	7,093.34	211.05	35.48	-91.03	-3,560.27	-7,068.15	3,343.74	3,100.58	243.16	13.751		
14,300.00	7,031.19	7,111.30	7,097.41	213.87	35.50	-91.10	-3,560.21	-7,068.28	3,359.18	3,114.00	245.18	13.701		
14,400.00	7,030.76	7,115.41	7,101.52	216.70	35.51	-91.17	-3,560.15	-7,068.41	3,377.51	3,130.52	246.99	13.675		
14,500.00	7,030.32	7,119.56	7,105.66	219.53	35.53	-91.25	-3,560.09	-7,068.54	3,398.68	3,150.07	248.60	13.671 SF		
14,600.00	7,029.89	7,123.73	7,109.84	222.36	35.54	-91.32	-3,560.03	-7,068.68	3,422.64	3,172.61	250.03	13.689		
14,700.00	7,029.45	7,127.95	7,114.05	225.19	35.56	-91.39	-3,559.96	-7,068.82	3,449.32	3,198.07	251.26	13.728		
14,800.00	7,029.02	7,132.20	7,118.30	228.03	35.57	-91.46	-3,559.89	-7,068.96	3,478.68	3,226.38	252.30	13.788		
14,805.04	7,029.00	7,132.41	7,118.51	228.17	35.57	-91.47	-3,559.89	-7,068.96	3,480.23	3,227.88	252.35	13.791		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 11-21(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	68.00	3.28	3.28	-118.90	-4,230.58	-7,662.91	8,753.43					
100.00	100.00	32.00	100.00	3.28	3.33	-118.90	-4,230.58	-7,662.91	8,753.17	8,746.56	6.61	1,323.843		
200.00	200.00	132.00	200.00	3.34	4.35	-118.90	-4,230.58	-7,662.91	8,753.17	8,745.48	7.69	1,138.175		
300.00	300.00	232.00	300.00	3.44	7.15	-118.90	-4,230.58	-7,662.91	8,753.17	8,742.57	10.60	826.144		
400.00	400.00	332.00	400.00	3.60	10.38	-118.90	-4,230.58	-7,662.91	8,753.17	8,739.19	13.98	626.121		
500.00	499.98	431.98	499.98	3.80	13.73	22.91	-4,230.58	-7,662.91	8,751.56	8,734.03	17.53	499.245		
600.00	599.90	531.90	599.90	4.02	17.14	22.93	-4,230.58	-7,662.91	8,747.90	8,726.74	21.16	413.379		
700.00	699.82	631.82	699.82	4.28	20.57	22.94	-4,230.58	-7,662.91	8,744.21	8,719.35	24.85	351.828		
800.00	799.74	731.74	799.74	4.57	24.02	22.95	-4,230.58	-7,662.91	8,740.51	8,711.92	28.59	305.730		
900.00	899.66	831.66	899.66	4.88	27.48	22.96	-4,230.58	-7,662.91	8,736.81	8,704.46	32.36	270.012		
1,000.00	999.58	931.58	999.58	5.21	30.95	22.97	-4,230.58	-7,662.91	8,733.12	8,696.97	36.15	241.575		
1,100.00	1,099.50	1,031.50	1,099.50	5.55	34.42	22.98	-4,230.58	-7,662.91	8,729.42	8,689.46	39.96	218.429		
1,200.00	1,199.42	1,131.42	1,199.42	5.91	37.89	22.99	-4,230.58	-7,662.91	8,725.73	8,681.93	43.79	199.242		
1,300.00	1,299.34	1,231.34	1,299.34	6.28	41.37	23.00	-4,230.58	-7,662.91	8,722.03	8,674.39	47.64	183.090		
1,400.00	1,399.26	1,331.26	1,399.26	6.66	44.85	23.01	-4,230.58	-7,662.91	8,718.34	8,666.85	51.49	169.315		
1,500.00	1,499.18	1,431.18	1,499.18	7.04	48.33	23.02	-4,230.58	-7,662.91	8,714.64	8,659.29	55.35	157.432		
1,600.00	1,599.10	1,531.10	1,599.10	7.43	51.81	23.03	-4,230.58	-7,662.91	8,710.95	8,651.72	59.23	147.081		
1,700.00	1,699.01	1,631.01	1,699.01	7.83	55.29	23.04	-4,230.58	-7,662.91	8,707.26	8,644.15	63.10	137.986		
1,800.00	1,798.93	1,730.93	1,798.93	8.23	58.77	23.05	-4,230.58	-7,662.91	8,703.56	8,636.58	66.98	129.934		
1,900.00	1,898.85	1,830.85	1,898.85	8.64	62.26	23.06	-4,230.58	-7,662.91	8,699.87	8,629.00	70.87	122.755		
2,000.00	1,998.77	1,930.77	1,998.77	9.05	65.74	23.07	-4,230.58	-7,662.91	8,696.18	8,621.42	74.76	116.317		
2,100.00	2,098.69	2,030.69	2,098.69	9.46	69.22	23.08	-4,230.58	-7,662.91	8,692.49	8,613.83	78.66	110.511		
2,200.00	2,198.61	2,130.61	2,198.61	9.88	72.71	23.09	-4,230.58	-7,662.91	8,688.79	8,606.24	82.55	105.249		
2,300.00	2,298.53	2,230.53	2,298.53	10.30	76.19	23.10	-4,230.58	-7,662.91	8,685.10	8,598.65	86.45	100.459		
2,400.00	2,398.45	2,330.45	2,398.45	10.72	79.68	23.11	-4,230.58	-7,662.91	8,681.41	8,591.05	90.36	96.079		
2,500.00	2,498.37	2,430.37	2,498.37	11.14	83.16	23.12	-4,230.58	-7,662.91	8,677.72	8,583.46	94.26	92.060		
2,600.00	2,598.29	2,530.29	2,598.29	11.56	86.65	23.14	-4,230.58	-7,662.91	8,674.03	8,575.86	98.17	88.359		
2,700.00	2,698.21	2,630.21	2,698.21	11.98	90.13	23.15	-4,230.58	-7,662.91	8,670.34	8,568.26	102.08	84.940		
2,800.00	2,798.13	2,730.13	2,798.13	12.41	93.62	23.16	-4,230.58	-7,662.91	8,666.65	8,560.66	105.99	81.772		
2,900.00	2,898.05	2,830.05	2,898.05	12.84	97.11	23.17	-4,230.58	-7,662.91	8,662.96	8,553.06	109.90	78.829		
3,000.00	2,997.97	2,929.97	2,997.97	13.27	100.59	23.18	-4,230.58	-7,662.91	8,659.27	8,545.46	113.81	76.087		
3,100.00	3,097.89	3,029.89	3,097.89	13.69	104.08	23.19	-4,230.58	-7,662.91	8,655.58	8,537.86	117.72	73.526		
3,200.00	3,197.81	3,129.81	3,197.81	14.12	107.57	23.20	-4,230.58	-7,662.91	8,651.89	8,530.25	121.63	71.130		
3,300.00	3,297.73	3,229.73	3,297.73	14.56	111.05	23.21	-4,230.58	-7,662.91	8,648.20	8,522.65	125.55	68.883		
3,400.00	3,397.65	3,329.65	3,397.65	14.99	114.54	23.22	-4,230.58	-7,662.91	8,644.51	8,515.04	129.47	66.771		
3,500.00	3,497.56	3,429.56	3,497.56	15.42	118.03	23.23	-4,230.58	-7,662.91	8,640.82	8,507.44	133.38	64.782		
3,600.00	3,597.48	3,529.48	3,597.48	15.85	121.51	23.24	-4,230.58	-7,662.91	8,637.13	8,499.83	137.30	62.907		
3,700.00	3,697.40	3,629.40	3,697.40	16.28	125.00	23.25	-4,230.58	-7,662.91	8,633.44	8,492.23	141.22	61.136		
3,800.00	3,797.32	3,729.32	3,797.32	16.72	128.49	23.26	-4,230.58	-7,662.91	8,629.76	8,484.62	145.14	59.460		
3,900.00	3,897.24	3,829.24	3,897.24	17.15	131.97	23.27	-4,230.58	-7,662.91	8,626.07	8,477.02	149.05	57.872		
4,000.00	3,997.16	3,929.16	3,997.16	17.59	135.46	23.28	-4,230.58	-7,662.91	8,622.38	8,469.41	152.97	56.365		
4,100.00	4,097.08	4,029.08	4,097.08	18.02	138.95	23.29	-4,230.58	-7,662.91	8,618.70	8,461.80	156.89	54.933		
4,200.00	4,197.00	4,129.00	4,197.00	18.46	142.44	23.30	-4,230.58	-7,662.91	8,615.01	8,454.20	160.81	53.571		
4,300.00	4,296.92	4,228.92	4,296.92	18.89	145.92	23.31	-4,230.58	-7,662.91	8,611.32	8,446.59	164.73	52.274		
4,400.00	4,396.84	4,328.84	4,396.84	19.33	149.41	23.32	-4,230.58	-7,662.91	8,607.64	8,438.98	168.66	51.037		
4,500.00	4,496.76	4,428.76	4,496.76	19.77	152.90	23.33	-4,230.58	-7,662.91	8,603.95	8,431.37	172.58	49.856		
4,600.00	4,596.68	4,528.68	4,596.68	20.20	156.39	23.35	-4,230.58	-7,662.91	8,600.27	8,423.77	176.50	48.727		
4,700.00	4,696.60	4,628.60	4,696.60	20.64	159.87	23.36	-4,230.58	-7,662.91	8,596.58	8,416.16	180.42	47.647		
4,800.00	4,796.52	4,728.52	4,796.52	21.08	163.36	23.37	-4,230.58	-7,662.91	8,592.90	8,408.55	184.34	46.613		
4,900.00	4,896.44	4,828.44	4,896.44	21.51	166.85	23.38	-4,230.58	-7,662.91	8,589.21	8,400.95	188.27	45.623		
5,000.00	4,996.36	4,928.36	4,996.36	21.95	170.34	23.39	-4,230.58	-7,662.91	8,585.53	8,393.34	192.19	44.672		
5,100.00	5,096.28	5,028.28	5,096.28	22.39	173.82	23.40	-4,230.58	-7,662.91	8,581.85	8,385.73	196.11	43.760		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,128.19	5,196.19	22.83	177.31	23.41	-4,230.58	-7,662.91	8,578.16	8,378.13	200.04	42.883		
5,300.00	5,296.11	5,228.11	5,296.11	23.27	180.80	23.42	-4,230.58	-7,662.91	8,574.48	8,370.52	203.96	42.040		
5,400.00	5,396.03	5,328.03	5,396.03	23.71	184.29	23.43	-4,230.58	-7,662.91	8,570.80	8,362.91	207.88	41.229		
5,500.00	5,495.95	5,427.95	5,495.95	24.14	187.77	23.44	-4,230.58	-7,662.91	8,567.11	8,355.31	211.81	40.448		
5,600.00	5,595.87	5,527.87	5,595.87	24.58	191.26	23.45	-4,230.58	-7,662.91	8,563.43	8,347.70	215.73	39.695		
5,700.00	5,695.79	5,627.79	5,695.79	25.02	194.75	23.46	-4,230.58	-7,662.91	8,559.75	8,340.09	219.66	38.969		
5,800.00	5,795.71	5,727.71	5,795.71	25.46	198.24	23.47	-4,230.58	-7,662.91	8,556.07	8,332.49	223.58	38.268		
5,900.00	5,895.63	5,827.63	5,895.63	25.90	201.72	23.48	-4,230.58	-7,662.91	8,552.39	8,324.88	227.50	37.592		
6,000.00	5,995.55	5,927.55	5,995.55	26.34	205.21	23.49	-4,230.58	-7,662.91	8,548.70	8,317.27	231.43	36.939		
6,100.00	6,095.47	6,027.47	6,095.47	26.78	208.70	23.51	-4,230.58	-7,662.91	8,545.02	8,309.67	235.35	36.307		
6,200.00	6,195.39	6,127.39	6,195.39	27.22	212.19	23.52	-4,230.58	-7,662.91	8,541.34	8,302.06	239.28	35.696		
6,300.00	6,295.31	6,227.31	6,295.31	27.66	215.68	23.53	-4,230.58	-7,662.91	8,537.66	8,294.46	243.20	35.105		
6,400.00	6,395.23	6,327.23	6,395.23	28.10	219.16	23.54	-4,230.58	-7,662.91	8,533.98	8,286.85	247.13	34.532		
6,500.00	6,495.02	6,427.02	6,495.02	28.54	222.65	-12.24	-4,230.58	-7,662.91	8,528.24	8,277.19	251.05	33.970		
6,600.00	6,593.09	6,525.09	6,593.09	28.98	226.07	-22.17	-4,230.58	-7,662.91	8,510.19	8,255.29	254.90	33.386		
6,700.00	6,687.01	6,619.01	6,687.01	29.41	229.35	-26.15	-4,230.58	-7,662.91	8,478.87	8,220.28	258.59	32.789		
6,800.00	6,774.46	6,706.46	6,774.46	29.83	232.40	-29.70	-4,230.58	-7,662.91	8,435.07	8,173.05	262.01	32.193		
6,900.00	6,853.31	6,785.31	6,853.31	30.26	235.15	-33.90	-4,230.58	-7,662.91	8,379.92	8,114.82	265.10	31.610		
7,000.00	6,921.60	6,853.60	6,921.60	30.76	237.54	-39.42	-4,230.58	-7,662.91	8,314.85	8,047.06	267.79	31.050		
7,100.00	6,977.66	6,909.66	6,977.66	31.38	239.49	-46.89	-4,230.58	-7,662.91	8,241.51	7,971.49	270.02	30.521		
7,200.00	7,020.10	6,952.10	7,020.10	32.17	240.98	-56.99	-4,230.58	-7,662.91	8,161.79	7,890.02	271.77	30.032		
7,300.00	7,047.88	6,979.88	7,047.88	33.13	241.94	-70.08	-4,230.58	-7,662.91	8,077.71	7,804.69	273.02	29.586		
7,400.00	7,060.32	7,007.68	7,060.32	34.27	242.92	-85.37	-4,230.58	-7,662.91	7,991.39	7,717.09	274.29	29.135		
7,500.00	7,060.70	7,007.30	7,060.70	35.56	242.90	-90.43	-4,230.58	-7,662.91	7,904.80	7,630.18	274.63	28.784		
7,600.00	7,060.27	7,007.73	7,060.27	37.02	242.92	-90.42	-4,230.58	-7,662.91	7,818.54	7,543.48	275.06	28.424		
7,700.00	7,059.83	7,008.17	7,059.83	38.64	242.93	-90.41	-4,230.58	-7,662.91	7,732.62	7,457.03	275.58	28.059		
7,800.00	7,059.40	7,008.60	7,059.40	40.40	242.95	-90.41	-4,230.58	-7,662.91	7,647.03	7,370.85	276.19	27.688		
7,900.00	7,058.97	7,009.03	7,058.97	42.28	242.96	-90.40	-4,230.58	-7,662.91	7,561.80	7,284.93	276.87	27.312		
8,000.00	7,058.53	7,009.47	7,058.53	44.27	242.98	-90.40	-4,230.58	-7,662.91	7,476.93	7,199.29	277.64	26.930		
8,100.00	7,058.10	7,009.90	7,058.10	46.35	242.99	-90.39	-4,230.58	-7,662.91	7,392.45	7,113.95	278.50	26.544		
8,200.00	7,057.66	6,989.66	7,057.66	48.50	242.29	-90.38	-4,230.58	-7,662.91	7,308.35	7,029.64	278.71	26.222		
8,300.00	7,057.23	6,989.23	7,057.23	50.73	242.27	-90.38	-4,230.58	-7,662.91	7,224.66	6,944.95	279.70	25.830		
8,400.00	7,056.80	6,988.80	7,056.80	53.02	242.26	-90.37	-4,230.58	-7,662.91	7,141.39	6,860.61	280.78	25.434		
8,500.00	7,056.36	6,988.36	7,056.36	55.36	242.24	-90.36	-4,230.58	-7,662.91	7,058.55	6,776.61	281.94	25.035		
8,600.00	7,055.93	6,987.93	7,055.93	57.74	242.23	-90.36	-4,230.58	-7,662.91	6,976.16	6,692.98	283.18	24.635		
8,700.00	7,055.49	6,987.49	7,055.49	60.17	242.21	-90.35	-4,230.58	-7,662.91	6,894.24	6,609.73	284.51	24.232		
8,800.00	7,055.06	6,987.06	7,055.06	62.63	242.20	-90.35	-4,230.58	-7,662.91	6,812.80	6,526.89	285.92	23.828		
8,900.00	7,054.63	6,986.63	7,054.63	65.13	242.18	-90.34	-4,230.58	-7,662.91	6,731.87	6,444.46	287.40	23.423		
9,000.00	7,054.19	6,986.19	7,054.19	67.66	242.17	-90.33	-4,230.58	-7,662.91	6,651.45	6,362.47	288.97	23.018		
9,100.00	7,053.76	6,985.76	7,053.76	70.21	242.15	-90.33	-4,230.58	-7,662.91	6,571.56	6,280.95	290.62	22.612		
9,200.00	7,053.32	6,985.32	7,053.32	72.78	242.13	-90.32	-4,230.58	-7,662.91	6,492.24	6,199.90	292.34	22.208		
9,300.00	7,052.89	6,984.89	7,052.89	75.38	242.12	-90.31	-4,230.58	-7,662.91	6,413.49	6,119.35	294.15	21.804		
9,400.00	7,052.46	6,984.46	7,052.46	77.99	242.10	-90.31	-4,230.58	-7,662.91	6,335.35	6,039.32	296.03	21.401		
9,500.00	7,052.02	6,984.02	7,052.02	80.62	242.09	-90.30	-4,230.58	-7,662.91	6,257.82	5,959.84	297.99	21.000		
9,600.00	7,051.59	6,983.59	7,051.59	83.26	242.07	-90.30	-4,230.58	-7,662.91	6,180.94	5,880.92	300.02	20.602		
9,700.00	7,051.15	6,983.15	7,051.15	85.92	242.06	-90.29	-4,230.58	-7,662.91	6,104.73	5,802.60	302.13	20.206		
9,800.00	7,050.72	6,982.72	7,050.72	88.59	242.04	-90.28	-4,230.58	-7,662.91	6,029.22	5,724.90	304.32	19.812		
9,900.00	7,050.29	6,982.29	7,050.29	91.28	242.03	-90.28	-4,230.58	-7,662.91	5,954.43	5,647.84	306.58	19.422		
10,000.00	7,049.85	6,981.85	7,049.85	93.97	242.01	-90.27	-4,230.58	-7,662.91	5,880.38	5,571.46	308.92	19.035		
10,100.00	7,049.42	6,981.42	7,049.42	96.67	242.00	-90.26	-4,230.58	-7,662.91	5,807.12	5,495.78	311.33	18.652		
10,200.00	7,048.98	6,980.98	7,048.98	99.38	241.98	-90.26	-4,230.58	-7,662.91	5,734.66	5,420.84	313.82	18.274		
10,300.00	7,048.55	6,980.55	7,048.55	102.10	241.97	-90.25	-4,230.58	-7,662.91	5,663.04	5,346.65	316.39	17.899		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	6,980.12	7,048.12	104.83	241.95	-90.25	-4,230.58	-7,662.91	5,592.29	5,273.27	319.03	17.529		
10,500.00	7,047.68	6,979.68	7,047.68	107.56	241.94	-90.24	-4,230.58	-7,662.91	5,522.45	5,200.71	321.74	17.164		
10,600.00	7,047.25	6,979.25	7,047.25	110.30	241.92	-90.23	-4,230.58	-7,662.91	5,453.55	5,129.02	324.53	16.804		
10,700.00	7,046.81	6,978.81	7,046.81	113.05	241.91	-90.23	-4,230.58	-7,662.91	5,385.62	5,058.23	327.39	16.450		
10,800.00	7,046.38	6,978.38	7,046.38	115.80	241.89	-90.22	-4,230.58	-7,662.91	5,318.70	4,988.37	330.33	16.101		
10,900.00	7,045.95	6,977.95	7,045.95	118.55	241.88	-90.21	-4,230.58	-7,662.91	5,252.84	4,919.50	333.34	15.758		
11,000.00	7,045.51	6,977.51	7,045.51	121.31	241.86	-90.21	-4,230.58	-7,662.91	5,188.07	4,851.64	336.42	15.421		
11,100.00	7,045.08	6,977.08	7,045.08	124.08	241.85	-90.20	-4,230.58	-7,662.91	5,124.43	4,784.85	339.57	15.091		
11,200.00	7,044.64	6,976.64	7,044.64	126.85	241.83	-90.20	-4,230.58	-7,662.91	5,061.96	4,719.16	342.80	14.767		
11,300.00	7,044.21	6,976.21	7,044.21	129.62	241.82	-90.19	-4,230.58	-7,662.91	5,000.72	4,654.63	346.09	14.449		
11,400.00	7,043.78	6,975.78	7,043.78	132.40	241.80	-90.18	-4,230.58	-7,662.91	4,940.74	4,591.29	349.45	14.139		
11,500.00	7,043.34	6,975.34	7,043.34	135.18	241.79	-90.18	-4,230.58	-7,662.91	4,882.07	4,529.20	352.87	13.835		
11,600.00	7,042.91	6,974.91	7,042.91	137.96	241.77	-90.17	-4,230.58	-7,662.91	4,824.76	4,468.40	356.36	13.539		
11,700.00	7,042.47	6,974.47	7,042.47	140.75	241.76	-90.16	-4,230.58	-7,662.91	4,768.86	4,408.95	359.90	13.250		
11,800.00	7,042.04	6,974.04	7,042.04	143.54	241.74	-90.16	-4,230.58	-7,662.91	4,714.42	4,350.91	363.51	12.969		
11,900.00	7,041.61	6,973.61	7,041.61	146.33	241.73	-90.15	-4,230.58	-7,662.91	4,661.48	4,294.32	367.16	12.696		
12,000.00	7,041.17	6,973.17	7,041.17	149.13	241.71	-90.15	-4,230.58	-7,662.91	4,610.11	4,239.24	370.87	12.430		
12,100.00	7,040.74	6,972.74	7,040.74	151.92	241.70	-90.14	-4,230.58	-7,662.91	4,560.35	4,185.73	374.63	12.173		
12,200.00	7,040.30	6,972.30	7,040.30	154.72	241.68	-90.13	-4,230.58	-7,662.91	4,512.27	4,133.84	378.42	11.924		
12,300.00	7,039.87	6,971.87	7,039.87	157.52	241.67	-90.13	-4,230.58	-7,662.91	4,465.90	4,083.64	382.25	11.683		
12,400.00	7,039.44	6,971.44	7,039.44	160.33	241.65	-90.12	-4,230.58	-7,662.91	4,421.31	4,035.19	386.12	11.451		
12,500.00	7,039.00	6,971.00	7,039.00	163.13	241.63	-90.11	-4,230.58	-7,662.91	4,378.55	3,988.54	390.00	11.227		
12,600.00	7,038.57	6,970.57	7,038.57	165.94	241.62	-90.11	-4,230.58	-7,662.91	4,337.67	3,943.76	393.91	11.012		
12,700.00	7,038.13	6,970.13	7,038.13	168.75	241.60	-90.10	-4,230.58	-7,662.91	4,298.73	3,900.90	397.83	10.805		
12,800.00	7,037.70	6,969.70	7,037.70	171.56	241.59	-90.10	-4,230.58	-7,662.91	4,261.78	3,860.03	401.75	10.608		
12,900.00	7,037.27	6,969.27	7,037.27	174.37	241.57	-90.09	-4,230.58	-7,662.91	4,226.88	3,821.21	405.67	10.420		
13,000.00	7,036.83	6,968.83	7,036.83	177.19	241.56	-90.08	-4,230.58	-7,662.91	4,194.06	3,784.49	409.57	10.240		
13,100.00	7,036.40	6,968.40	7,036.40	180.00	241.54	-90.08	-4,230.58	-7,662.91	4,163.40	3,749.94	413.46	10.070		
13,200.00	7,035.96	6,967.96	7,035.96	182.82	241.53	-90.07	-4,230.58	-7,662.91	4,134.92	3,717.61	417.32	9.908		
13,300.00	7,035.53	6,967.53	7,035.53	185.64	241.51	-90.06	-4,230.58	-7,662.91	4,108.68	3,687.55	421.14	9.756		
13,400.00	7,035.10	6,967.10	7,035.10	188.46	241.50	-90.06	-4,230.58	-7,662.91	4,084.73	3,659.82	424.91	9.613		
13,500.00	7,034.66	6,966.66	7,034.66	191.28	241.48	-90.05	-4,230.58	-7,662.91	4,063.09	3,634.47	428.62	9.479		
13,600.00	7,034.23	6,966.23	7,034.23	194.10	241.47	-90.05	-4,230.58	-7,662.91	4,043.81	3,611.54	432.27	9.355		
13,700.00	7,033.79	6,965.79	7,033.79	196.92	241.45	-90.04	-4,230.58	-7,662.91	4,026.92	3,591.08	435.84	9.239		
13,800.00	7,033.36	6,965.36	7,033.36	199.74	241.44	-90.03	-4,230.58	-7,662.91	4,012.45	3,573.12	439.33	9.133		
13,900.00	7,032.93	6,964.93	7,032.93	202.57	241.42	-90.03	-4,230.58	-7,662.91	4,000.44	3,557.71	442.73	9.036		
14,000.00	7,032.49	6,964.49	7,032.49	205.39	241.41	-90.02	-4,230.58	-7,662.91	3,990.89	3,544.87	446.02	8.948		
14,100.00	7,032.06	6,964.06	7,032.06	208.22	241.39	-90.01	-4,230.58	-7,662.91	3,983.83	3,534.62	449.21	8.869		
14,200.00	7,031.62	6,963.62	7,031.62	211.05	241.38	-90.01	-4,230.58	-7,662.91	3,979.27	3,527.00	452.27	8.798		
14,300.00	7,031.19	6,963.19	7,031.19	213.87	241.36	-90.00	-4,230.58	-7,662.91	3,977.22	3,522.00	455.22	8.737		
14,331.51	7,031.05	6,963.05	7,031.05	214.77	241.36	-90.00	-4,230.58	-7,662.91	3,977.10	3,520.98	456.12	8.719 CC		
14,400.00	7,030.76	6,962.76	7,030.76	216.70	241.35	-90.00	-4,230.58	-7,662.91	3,977.69	3,519.65	458.03	8.684 ES		
14,500.00	7,030.32	6,962.32	7,030.32	219.53	241.33	-89.99	-4,230.58	-7,662.91	3,980.66	3,519.95	460.71	8.640		
14,600.00	7,029.89	6,961.89	7,029.89	222.36	241.32	-89.98	-4,230.58	-7,662.91	3,986.15	3,522.90	463.25	8.605		
14,700.00	7,029.45	6,961.45	7,029.45	225.19	241.30	-89.98	-4,230.58	-7,662.91	3,994.13	3,528.48	465.65	8.578		
14,800.00	7,029.02	6,961.02	7,029.02	228.03	241.29	-89.97	-4,230.58	-7,662.91	4,004.59	3,536.69	467.90	8.559		
14,805.04	7,029.00	6,961.00	7,029.00	228.17	241.29	-89.97	-4,230.58	-7,662.91	4,005.19	3,537.18	468.01	8.558 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-108.00	-2,913.18	-8,963.23	9,424.91					
100.00	100.00	47.00	100.00	3.28	3.38	-108.00	-2,913.18	-8,963.23	9,424.76	9,418.09	6.67	1,413.905		
200.00	200.00	147.00	200.00	3.34	4.71	-108.00	-2,913.18	-8,963.23	9,424.76	9,416.71	8.05	1,170.575		
300.00	300.00	247.00	300.00	3.44	7.62	-108.00	-2,913.18	-8,963.23	9,424.76	9,413.69	11.06	851.816		
400.00	400.00	347.00	400.00	3.60	10.87	-108.00	-2,913.18	-8,963.23	9,424.76	9,410.28	14.48	650.968		
500.00	499.98	446.98	499.98	3.80	14.24	33.82	-2,913.18	-8,963.23	9,423.31	9,405.27	18.04	522.400		
600.00	599.90	546.90	599.90	4.02	17.65	33.84	-2,913.18	-8,963.23	9,420.00	9,398.33	21.68	434.586		
700.00	699.82	646.82	699.82	4.28	21.09	33.85	-2,913.18	-8,963.23	9,416.67	9,391.30	25.37	371.165		
800.00	799.74	746.74	799.74	4.57	24.54	33.86	-2,913.18	-8,963.23	9,413.34	9,384.23	29.11	323.395		
900.00	899.66	846.66	899.66	4.88	28.00	33.88	-2,913.18	-8,963.23	9,410.00	9,377.13	32.88	286.214		
1,000.00	999.58	946.58	999.58	5.21	31.47	33.89	-2,913.18	-8,963.23	9,406.67	9,370.00	36.67	256.506		
1,100.00	1,099.50	1,046.50	1,099.50	5.55	34.94	33.90	-2,913.18	-8,963.23	9,403.34	9,362.85	40.49	232.255		
1,200.00	1,199.42	1,146.42	1,199.42	5.91	38.42	33.92	-2,913.18	-8,963.23	9,400.01	9,355.69	44.32	212.103		
1,300.00	1,299.34	1,246.34	1,299.34	6.28	41.89	33.93	-2,913.18	-8,963.23	9,396.68	9,348.52	48.16	195.105		
1,400.00	1,399.26	1,346.26	1,399.26	6.66	45.37	33.94	-2,913.18	-8,963.23	9,393.35	9,341.33	52.02	180.582		
1,500.00	1,499.18	1,446.18	1,499.18	7.04	48.85	33.96	-2,913.18	-8,963.23	9,390.02	9,334.14	55.88	168.037		
1,600.00	1,599.10	1,546.10	1,599.10	7.43	52.33	33.97	-2,913.18	-8,963.23	9,386.69	9,326.94	59.75	157.094		
1,700.00	1,699.01	1,646.01	1,699.01	7.83	55.81	33.99	-2,913.18	-8,963.23	9,383.36	9,319.73	63.63	147.468		
1,800.00	1,798.93	1,745.93	1,798.93	8.23	59.30	34.00	-2,913.18	-8,963.23	9,380.03	9,312.52	67.51	138.937		
1,900.00	1,898.85	1,845.85	1,898.85	8.64	62.78	34.01	-2,913.18	-8,963.23	9,376.70	9,305.30	71.40	131.326		
2,000.00	1,998.77	1,945.77	1,998.77	9.05	66.26	34.03	-2,913.18	-8,963.23	9,373.38	9,298.08	75.29	124.494		
2,100.00	2,098.69	2,045.69	2,098.69	9.46	69.75	34.04	-2,913.18	-8,963.23	9,370.05	9,290.86	79.19	118.328		
2,200.00	2,198.61	2,145.61	2,198.61	9.88	73.23	34.05	-2,913.18	-8,963.23	9,366.72	9,283.64	83.08	112.737		
2,300.00	2,298.53	2,245.53	2,298.53	10.30	76.72	34.07	-2,913.18	-8,963.23	9,363.40	9,276.41	86.99	107.643		
2,400.00	2,398.45	2,345.45	2,398.45	10.72	80.20	34.08	-2,913.18	-8,963.23	9,360.07	9,269.18	90.89	102.984		
2,500.00	2,498.37	2,445.37	2,498.37	11.14	83.69	34.10	-2,913.18	-8,963.23	9,356.75	9,261.95	94.79	98.706		
2,600.00	2,598.29	2,545.29	2,598.29	11.56	87.17	34.11	-2,913.18	-8,963.23	9,353.42	9,254.72	98.70	94.765		
2,700.00	2,698.21	2,645.21	2,698.21	11.98	90.66	34.12	-2,913.18	-8,963.23	9,350.10	9,247.49	102.61	91.123		
2,800.00	2,798.13	2,745.13	2,798.13	12.41	94.14	34.14	-2,913.18	-8,963.23	9,346.78	9,240.26	106.52	87.747		
2,900.00	2,898.05	2,845.05	2,898.05	12.84	97.63	34.15	-2,913.18	-8,963.23	9,343.46	9,233.03	110.43	84.609		
3,000.00	2,997.97	2,944.97	2,997.97	13.27	101.12	34.16	-2,913.18	-8,963.23	9,340.13	9,225.79	114.34	81.685		
3,100.00	3,097.89	3,044.89	3,097.89	13.69	104.60	34.18	-2,913.18	-8,963.23	9,336.81	9,218.56	118.26	78.953		
3,200.00	3,197.81	3,144.81	3,197.81	14.12	108.09	34.19	-2,913.18	-8,963.23	9,333.49	9,211.32	122.17	76.396		
3,300.00	3,297.73	3,244.73	3,297.73	14.56	111.58	34.21	-2,913.18	-8,963.23	9,330.17	9,204.09	126.09	73.998		
3,400.00	3,397.65	3,344.65	3,397.65	14.99	115.06	34.22	-2,913.18	-8,963.23	9,326.85	9,196.85	130.00	71.743		
3,500.00	3,497.56	3,444.56	3,497.56	15.42	118.55	34.23	-2,913.18	-8,963.23	9,323.53	9,189.61	133.92	69.620		
3,600.00	3,597.48	3,544.48	3,597.48	15.85	122.04	34.25	-2,913.18	-8,963.23	9,320.22	9,182.38	137.84	67.617		
3,700.00	3,697.40	3,644.40	3,697.40	16.28	125.52	34.26	-2,913.18	-8,963.23	9,316.90	9,175.14	141.76	65.724		
3,800.00	3,797.32	3,744.32	3,797.32	16.72	129.01	34.28	-2,913.18	-8,963.23	9,313.58	9,167.90	145.68	63.933		
3,900.00	3,897.24	3,844.24	3,897.24	17.15	132.50	34.29	-2,913.18	-8,963.23	9,310.26	9,160.67	149.60	62.236		
4,000.00	3,997.16	3,944.16	3,997.16	17.59	135.99	34.30	-2,913.18	-8,963.23	9,306.95	9,153.43	153.52	60.625		
4,100.00	4,097.08	4,044.08	4,097.08	18.02	139.47	34.32	-2,913.18	-8,963.23	9,303.63	9,146.20	157.44	59.094		
4,200.00	4,197.00	4,144.00	4,197.00	18.46	142.96	34.33	-2,913.18	-8,963.23	9,300.32	9,138.96	161.36	57.638		
4,300.00	4,296.92	4,243.92	4,296.92	18.89	146.45	34.35	-2,913.18	-8,963.23	9,297.00	9,131.72	165.28	56.250		
4,400.00	4,396.84	4,343.84	4,396.84	19.33	149.93	34.36	-2,913.18	-8,963.23	9,293.69	9,124.49	169.20	54.927		
4,500.00	4,496.76	4,443.76	4,496.76	19.77	153.42	34.37	-2,913.18	-8,963.23	9,290.37	9,117.25	173.12	53.663		
4,600.00	4,596.68	4,543.68	4,596.68	20.20	156.91	34.39	-2,913.18	-8,963.23	9,287.06	9,110.02	177.05	52.456		
4,700.00	4,696.60	4,643.60	4,696.60	20.64	160.40	34.40	-2,913.18	-8,963.23	9,283.75	9,102.78	180.97	51.301		
4,800.00	4,796.52	4,743.52	4,796.52	21.08	163.88	34.42	-2,913.18	-8,963.23	9,280.44	9,095.55	184.89	50.194		
4,900.00	4,896.44	4,843.44	4,896.44	21.51	167.37	34.43	-2,913.18	-8,963.23	9,277.13	9,088.31	188.81	49.134		
5,000.00	4,996.36	4,943.36	4,996.36	21.95	170.86	34.44	-2,913.18	-8,963.23	9,273.81	9,081.08	192.74	48.116		
5,100.00	5,096.28	5,043.28	5,096.28	22.39	174.35	34.46	-2,913.18	-8,963.23	9,270.50	9,073.84	196.66	47.139		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 1-17(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,196.19	5,143.19	5,196.19	22.83	177.83	34.47	-2,913.18	-8,963.23	9,267.20	9,066.61	200.59	46.201		
5,300.00	5,296.11	5,243.11	5,296.11	23.27	181.32	34.49	-2,913.18	-8,963.23	9,263.89	9,059.38	204.51	45.298		
5,400.00	5,396.03	5,343.03	5,396.03	23.71	184.81	34.50	-2,913.18	-8,963.23	9,260.58	9,052.14	208.43	44.429		
5,500.00	5,495.95	5,442.95	5,495.95	24.14	188.30	34.51	-2,913.18	-8,963.23	9,257.27	9,044.91	212.36	43.593		
5,600.00	5,595.87	5,542.87	5,595.87	24.58	191.78	34.53	-2,913.18	-8,963.23	9,253.96	9,037.68	216.28	42.786		
5,700.00	5,695.79	5,642.79	5,695.79	25.02	195.27	34.54	-2,913.18	-8,963.23	9,250.66	9,030.45	220.21	42.009		
5,800.00	5,795.71	5,742.71	5,795.71	25.46	198.76	34.56	-2,913.18	-8,963.23	9,247.35	9,023.22	224.13	41.258		
5,900.00	5,895.63	5,842.63	5,895.63	25.90	202.25	34.57	-2,913.18	-8,963.23	9,244.04	9,015.98	228.06	40.534		
6,000.00	5,995.55	5,942.55	5,995.55	26.34	205.74	34.58	-2,913.18	-8,963.23	9,240.74	9,008.75	231.98	39.833		
6,100.00	6,095.47	6,042.47	6,095.47	26.78	209.22	34.60	-2,913.18	-8,963.23	9,237.43	9,001.52	235.91	39.157		
6,200.00	6,195.39	6,142.39	6,195.39	27.22	212.71	34.61	-2,913.18	-8,963.23	9,234.13	8,994.29	239.84	38.502		
6,300.00	6,295.31	6,242.31	6,295.31	27.66	216.20	34.63	-2,913.18	-8,963.23	9,230.83	8,987.06	243.76	37.868		
6,400.00	6,395.23	6,342.23	6,395.23	28.10	219.69	34.64	-2,913.18	-8,963.23	9,227.52	8,979.84	247.69	37.255		
6,500.00	6,495.02	6,442.02	6,495.02	28.54	223.17	-1.06	-2,913.18	-8,963.23	9,221.99	8,970.38	251.61	36.652		
6,600.00	6,593.09	6,540.09	6,593.09	28.98	226.59	-10.69	-2,913.18	-8,963.23	9,203.10	8,947.64	255.46	36.025		
6,700.00	6,687.01	6,634.01	6,687.01	29.41	229.87	-14.13	-2,913.18	-8,963.23	9,169.79	8,910.64	259.15	35.384		
6,800.00	6,774.46	6,721.46	6,774.46	29.83	232.92	-16.88	-2,913.18	-8,963.23	9,122.88	8,860.31	262.57	34.744		
6,900.00	6,853.31	6,800.31	6,853.31	30.26	235.68	-20.03	-2,913.18	-8,963.23	9,063.54	8,797.89	265.65	34.118		
7,000.00	6,921.60	6,868.60	6,921.60	30.76	238.06	-24.29	-2,913.18	-8,963.23	8,993.26	8,724.95	268.31	33.518		
7,100.00	6,977.66	6,924.66	6,977.66	31.38	240.02	-30.59	-2,913.18	-8,963.23	8,913.79	8,643.29	270.50	32.953		
7,200.00	7,020.10	6,967.10	7,020.10	32.17	241.50	-40.59	-2,913.18	-8,963.23	8,827.11	8,554.95	272.16	32.434		
7,300.00	7,047.88	7,005.12	7,047.88	33.13	242.83	-57.04	-2,913.18	-8,963.23	8,735.37	8,461.74	273.63	31.924		
7,400.00	7,060.32	7,007.32	7,060.32	34.27	242.90	-81.79	-2,913.18	-8,963.23	8,640.86	8,367.02	273.84	31.555		
7,500.00	7,060.70	7,007.70	7,060.70	35.56	242.92	-90.76	-2,913.18	-8,963.23	8,545.74	8,271.76	273.98	31.191		
7,600.00	7,060.27	7,007.27	7,060.27	37.02	242.90	-90.75	-2,913.18	-8,963.23	8,450.74	8,176.61	274.12	30.828		
7,700.00	7,059.83	7,006.83	7,059.83	38.64	242.89	-90.74	-2,913.18	-8,963.23	8,355.85	8,081.55	274.30	30.463		
7,800.00	7,059.40	7,006.40	7,059.40	40.40	242.87	-90.73	-2,913.18	-8,963.23	8,261.08	7,986.57	274.51	30.094		
7,900.00	7,058.97	7,005.97	7,058.97	42.28	242.86	-90.72	-2,913.18	-8,963.23	8,166.44	7,891.68	274.76	29.722		
8,000.00	7,058.53	7,005.53	7,058.53	44.27	242.84	-90.71	-2,913.18	-8,963.23	8,071.92	7,796.87	275.05	29.347		
8,100.00	7,058.10	7,005.10	7,058.10	46.35	242.83	-90.71	-2,913.18	-8,963.23	7,977.54	7,702.17	275.37	28.970		
8,200.00	7,057.66	7,004.66	7,057.66	48.50	242.81	-90.70	-2,913.18	-8,963.23	7,883.30	7,607.56	275.74	28.589		
8,300.00	7,057.23	7,004.23	7,057.23	50.73	242.79	-90.69	-2,913.18	-8,963.23	7,789.20	7,513.05	276.15	28.206		
8,400.00	7,056.80	7,003.80	7,056.80	53.02	242.78	-90.68	-2,913.18	-8,963.23	7,695.25	7,418.64	276.61	27.820		
8,500.00	7,056.36	7,003.36	7,056.36	55.36	242.76	-90.67	-2,913.18	-8,963.23	7,601.46	7,324.34	277.11	27.431		
8,600.00	7,055.93	7,002.93	7,055.93	57.74	242.75	-90.66	-2,913.18	-8,963.23	7,507.82	7,230.16	277.66	27.040		
8,700.00	7,055.49	7,002.49	7,055.49	60.17	242.73	-90.65	-2,913.18	-8,963.23	7,414.35	7,136.10	278.25	26.646		
8,800.00	7,055.06	7,002.06	7,055.06	62.63	242.72	-90.64	-2,913.18	-8,963.23	7,321.06	7,042.16	278.90	26.250		
8,900.00	7,054.63	7,001.63	7,054.63	65.13	242.70	-90.63	-2,913.18	-8,963.23	7,227.94	6,948.34	279.60	25.851		
9,000.00	7,054.19	7,001.19	7,054.19	67.66	242.69	-90.62	-2,913.18	-8,963.23	7,135.01	6,854.67	280.34	25.451		
9,100.00	7,053.76	7,000.76	7,053.76	70.21	242.67	-90.61	-2,913.18	-8,963.23	7,042.27	6,761.13	281.14	25.049		
9,200.00	7,053.32	7,000.32	7,053.32	72.78	242.66	-90.60	-2,913.18	-8,963.23	6,949.73	6,667.74	281.99	24.645		
9,300.00	7,052.89	7,000.11	7,052.89	75.38	242.65	-90.59	-2,913.18	-8,963.23	6,857.41	6,574.50	282.91	24.239		
9,400.00	7,052.46	7,000.54	7,052.46	77.99	242.67	-90.58	-2,913.18	-8,963.23	6,765.30	6,481.39	283.90	23.829		
9,500.00	7,052.02	7,000.98	7,052.02	80.62	242.68	-90.57	-2,913.18	-8,963.23	6,673.42	6,388.46	284.96	23.419		
9,600.00	7,051.59	7,001.41	7,051.59	83.26	242.70	-90.56	-2,913.18	-8,963.23	6,581.77	6,295.71	286.07	23.008		
9,700.00	7,051.15	7,001.85	7,051.15	85.92	242.71	-90.56	-2,913.18	-8,963.23	6,490.38	6,203.14	287.23	22.596		
9,800.00	7,050.72	7,002.28	7,050.72	88.59	242.73	-90.55	-2,913.18	-8,963.23	6,399.24	6,110.77	288.46	22.184		
9,900.00	7,050.29	7,002.71	7,050.29	91.28	242.74	-90.54	-2,913.18	-8,963.23	6,308.36	6,018.61	289.76	21.771		
10,000.00	7,049.85	7,003.15	7,049.85	93.97	242.76	-90.53	-2,913.18	-8,963.23	6,217.77	5,926.66	291.11	21.359		
10,100.00	7,049.42	7,003.58	7,049.42	96.67	242.77	-90.52	-2,913.18	-8,963.23	6,127.47	5,834.95	292.53	20.947		
10,200.00	7,048.98	7,004.02	7,048.98	99.38	242.79	-90.51	-2,913.18	-8,963.23	6,037.48	5,743.47	294.01	20.535		
10,300.00	7,048.55	7,004.45	7,048.55	102.10	242.80	-90.50	-2,913.18	-8,963.23	5,947.81	5,652.24	295.56	20.124		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)				Between Centres (ft)	Between Ellipses (ft)				
10,400.00	7,048.12	7,004.88	7,048.12	104.83	242.82	-90.49	-2,913.18	-8,963.23	5,858.47	5,561.28	297.19	19.713		
10,500.00	7,047.68	7,005.32	7,047.68	107.56	242.83	-90.48	-2,913.18	-8,963.23	5,769.48	5,470.60	298.88	19.304		
10,600.00	7,047.25	7,005.75	7,047.25	110.30	242.85	-90.47	-2,913.18	-8,963.23	5,680.85	5,380.21	300.64	18.896		
10,700.00	7,046.81	7,006.19	7,046.81	113.05	242.86	-90.46	-2,913.18	-8,963.23	5,592.62	5,290.14	302.48	18.489		
10,800.00	7,046.38	7,006.62	7,046.38	115.80	242.88	-90.45	-2,913.18	-8,963.23	5,504.78	5,200.39	304.39	18.084		
10,900.00	7,045.95	7,007.05	7,045.95	118.55	242.89	-90.44	-2,913.18	-8,963.23	5,417.36	5,110.98	306.38	17.682		
11,000.00	7,045.51	7,007.49	7,045.51	121.31	242.91	-90.43	-2,913.18	-8,963.23	5,330.39	5,021.93	308.46	17.281		
11,100.00	7,045.08	7,007.92	7,045.08	124.08	242.92	-90.42	-2,913.18	-8,963.23	5,243.88	4,933.27	310.61	16.883		
11,200.00	7,044.64	7,008.36	7,044.64	126.85	242.94	-90.41	-2,913.18	-8,963.23	5,157.86	4,845.01	312.85	16.487		
11,300.00	7,044.21	7,008.79	7,044.21	129.62	242.95	-90.41	-2,913.18	-8,963.23	5,072.35	4,757.17	315.18	16.094		
11,400.00	7,043.78	7,009.22	7,043.78	132.40	242.97	-90.40	-2,913.18	-8,963.23	4,987.38	4,669.79	317.59	15.704		
11,500.00	7,043.34	7,009.66	7,043.34	135.18	242.98	-90.39	-2,913.18	-8,963.23	4,902.98	4,582.88	320.10	15.317		
11,600.00	7,042.91	6,989.91	7,042.91	137.96	242.29	-90.38	-2,913.18	-8,963.23	4,819.17	4,497.18	322.00	14.967		
11,700.00	7,042.47	6,989.47	7,042.47	140.75	242.28	-90.37	-2,913.18	-8,963.23	4,736.00	4,411.33	324.67	14.587		
11,800.00	7,042.04	6,989.04	7,042.04	143.54	242.26	-90.36	-2,913.18	-8,963.23	4,653.48	4,326.05	327.44	14.212		
11,900.00	7,041.61	6,988.61	7,041.61	146.33	242.25	-90.35	-2,913.18	-8,963.23	4,571.66	4,241.36	330.31	13.841		
12,000.00	7,041.17	6,988.17	7,041.17	149.13	242.23	-90.34	-2,913.18	-8,963.23	4,490.58	4,157.30	333.29	13.474		
12,100.00	7,040.74	6,987.74	7,040.74	151.92	242.22	-90.33	-2,913.18	-8,963.23	4,410.28	4,073.91	336.37	13.111		
12,200.00	7,040.30	6,987.30	7,040.30	154.72	242.20	-90.32	-2,913.18	-8,963.23	4,330.80	3,991.22	339.57	12.754		
12,300.00	7,039.87	6,986.87	7,039.87	157.52	242.19	-90.31	-2,913.18	-8,963.23	4,252.18	3,909.30	342.88	12.401		
12,400.00	7,039.44	6,986.44	7,039.44	160.33	242.17	-90.30	-2,913.18	-8,963.23	4,174.48	3,828.16	346.31	12.054		
12,500.00	7,039.00	6,986.00	7,039.00	163.13	242.16	-90.29	-2,913.18	-8,963.23	4,097.74	3,747.88	349.86	11.713		
12,600.00	7,038.57	6,985.57	7,038.57	165.94	242.14	-90.28	-2,913.18	-8,963.23	4,022.03	3,668.50	353.53	11.377		
12,700.00	7,038.13	6,985.13	7,038.13	168.75	242.13	-90.27	-2,913.18	-8,963.23	3,947.40	3,590.08	357.32	11.047		
12,800.00	7,037.70	6,984.70	7,037.70	171.56	242.11	-90.26	-2,913.18	-8,963.23	3,873.91	3,512.67	361.23	10.724		
12,900.00	7,037.27	6,984.27	7,037.27	174.37	242.10	-90.26	-2,913.18	-8,963.23	3,801.63	3,436.36	365.27	10.408		
13,000.00	7,036.83	6,983.83	7,036.83	177.19	242.08	-90.25	-2,913.18	-8,963.23	3,730.63	3,361.19	369.44	10.098		
13,100.00	7,036.40	6,983.40	7,036.40	180.00	242.07	-90.24	-2,913.18	-8,963.23	3,660.99	3,287.26	373.73	9.796		
13,200.00	7,035.96	6,982.96	7,035.96	182.82	242.05	-90.23	-2,913.18	-8,963.23	3,592.78	3,214.63	378.14	9.501		
13,300.00	7,035.53	6,982.53	7,035.53	185.64	242.04	-90.22	-2,913.18	-8,963.23	3,526.09	3,143.40	382.68	9.214		
13,400.00	7,035.10	6,982.10	7,035.10	188.46	242.02	-90.21	-2,913.18	-8,963.23	3,461.00	3,073.66	387.34	8.935		
13,500.00	7,034.66	6,981.66	7,034.66	191.28	242.01	-90.20	-2,913.18	-8,963.23	3,397.61	3,005.50	392.11	8.665		
13,600.00	7,034.23	6,981.23	7,034.23	194.10	241.99	-90.19	-2,913.18	-8,963.23	3,336.01	2,939.02	396.99	8.403		
13,700.00	7,033.79	6,980.79	7,033.79	196.92	241.98	-90.18	-2,913.18	-8,963.23	3,276.30	2,874.33	401.97	8.151		
13,800.00	7,033.36	6,980.36	7,033.36	199.74	241.96	-90.17	-2,913.18	-8,963.23	3,218.60	2,811.55	407.05	7.907		
13,900.00	7,032.93	6,979.93	7,032.93	202.57	241.95	-90.16	-2,913.18	-8,963.23	3,163.01	2,750.80	412.21	7.673		
14,000.00	7,032.49	6,979.49	7,032.49	205.39	241.93	-90.15	-2,913.18	-8,963.23	3,109.64	2,692.20	417.44	7.449		
14,100.00	7,032.06	6,979.06	7,032.06	208.22	241.92	-90.14	-2,913.18	-8,963.23	3,058.60	2,635.88	422.72	7.236		
14,200.00	7,031.62	6,978.62	7,031.62	211.05	241.90	-90.13	-2,913.18	-8,963.23	3,010.03	2,581.99	428.04	7.032		
14,300.00	7,031.19	6,978.19	7,031.19	213.87	241.89	-90.12	-2,913.18	-8,963.23	2,964.03	2,530.65	433.38	6.839		
14,400.00	7,030.76	6,977.76	7,030.76	216.70	241.87	-90.11	-2,913.18	-8,963.23	2,920.74	2,482.03	438.71	6.658		
14,500.00	7,030.32	6,977.32	7,030.32	219.53	241.86	-90.11	-2,913.18	-8,963.23	2,880.27	2,436.25	444.02	6.487		
14,600.00	7,029.89	6,976.89	7,029.89	222.36	241.84	-90.10	-2,913.18	-8,963.23	2,842.74	2,393.47	449.27	6.327		
14,700.00	7,029.45	6,976.45	7,029.45	225.19	241.83	-90.09	-2,913.18	-8,963.23	2,808.27	2,353.83	454.44	6.180		
14,800.00	7,029.02	6,976.02	7,029.02	228.03	241.81	-90.08	-2,913.18	-8,963.23	2,776.97	2,317.48	459.50	6.043		
14,805.04	7,029.00	6,976.00	7,029.00	228.17	241.81	-90.08	-2,913.18	-8,963.23	2,775.48	2,315.73	459.75	6.037 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-107.75	-2,880.02	-8,995.48	9,445.34					
100.00	100.00	28.68	64.68	3.28	3.28	-107.75	-2,880.09	-8,995.52	9,445.40	9,438.83	6.57	1,438.687		
200.00	200.00	73.49	109.49	3.34	3.28	-107.76	-2,880.42	-8,995.72	9,446.06	9,439.44	6.62	1,426.766		
300.00	300.00	121.00	156.99	3.44	3.29	-107.76	-2,881.11	-8,996.14	9,447.31	9,440.58	6.73	1,402.899		
400.00	400.00	163.61	199.59	3.60	3.31	-107.76	-2,881.85	-8,996.73	9,449.14	9,442.23	6.91	1,367.037		
500.00	499.98	208.00	243.97	3.80	3.34	34.03	-2,882.56	-8,997.62	9,450.11	9,442.97	7.14	1,324.188		
567.96	567.90	208.00	243.97	3.95	3.34	34.03	-2,882.56	-8,997.62	9,450.13	9,442.84	7.29	1,296.837		
600.00	599.90	208.00	243.97	4.02	3.34	34.03	-2,882.56	-8,997.62	9,450.05	9,442.69	7.36	1,283.449		
700.00	699.82	256.60	292.53	4.28	3.39	34.03	-2,883.16	-8,999.21	9,450.50	9,442.83	7.67	1,232.527		
800.00	799.74	300.00	335.88	4.57	3.44	34.04	-2,883.46	-9,001.41	9,451.97	9,443.97	8.01	1,180.502		
900.00	899.66	300.00	335.88	4.88	3.44	34.04	-2,883.46	-9,001.41	9,454.08	9,445.76	8.32	1,136.317		
1,000.00	999.58	300.00	335.88	5.21	3.44	34.04	-2,883.46	-9,001.41	9,457.25	9,448.60	8.65	1,092.972		
1,100.00	1,099.50	355.34	391.08	5.55	3.52	34.06	-2,883.37	-9,005.29	9,460.84	9,451.76	9.08	1,042.314		
1,200.00	1,199.42	391.00	426.60	5.91	3.59	34.07	-2,882.98	-9,008.42	9,465.43	9,455.93	9.49	997.017		
1,300.00	1,299.34	391.00	426.60	6.28	3.59	34.07	-2,882.98	-9,008.42	9,470.80	9,460.94	9.86	960.065		
1,400.00	1,399.26	431.99	467.37	6.66	3.67	34.09	-2,882.20	-9,012.63	9,476.89	9,466.57	10.32	918.530		
1,500.00	1,499.18	481.00	516.00	7.04	3.78	34.11	-2,880.76	-9,018.50	9,483.91	9,473.11	10.80	878.087		
1,600.00	1,599.10	481.00	516.00	7.43	3.78	34.11	-2,880.76	-9,018.50	9,491.49	9,480.30	11.19	848.066		
1,700.00	1,699.01	511.54	546.24	7.83	3.86	34.13	-2,879.64	-9,022.60	9,499.94	9,488.29	11.66	815.053		
1,800.00	1,798.93	539.24	573.63	8.23	3.93	34.15	-2,878.52	-9,026.58	9,509.15	9,497.03	12.12	784.615		
1,900.00	1,898.85	572.00	605.97	8.64	4.02	34.17	-2,877.06	-9,031.60	9,519.12	9,506.52	12.60	755.392		
2,000.00	1,998.77	572.00	605.97	9.05	4.02	34.17	-2,877.06	-9,031.60	9,529.93	9,516.92	13.01	732.778		
2,100.00	2,098.69	572.00	605.97	9.46	4.02	34.17	-2,877.06	-9,031.60	9,541.77	9,528.36	13.41	711.520		
2,200.00	2,198.61	635.06	668.04	9.88	4.23	34.22	-2,874.04	-9,042.35	9,553.73	9,539.74	13.99	682.868		
2,300.00	2,298.53	693.00	724.80	10.30	4.44	34.26	-2,871.07	-9,053.57	9,567.16	9,552.59	14.57	656.644		
2,400.00	2,398.45	693.00	724.80	10.72	4.44	34.26	-2,871.07	-9,053.57	9,580.85	9,565.87	14.98	639.743		
2,500.00	2,498.37	693.00	724.80	11.14	4.44	34.26	-2,871.07	-9,053.57	9,595.55	9,580.17	15.38	623.811		
2,600.00	2,598.29	728.16	759.13	11.56	4.58	34.29	-2,869.31	-9,060.93	9,611.03	9,595.13	15.90	604.389		
2,700.00	2,698.21	761.00	791.15	11.98	4.72	34.32	-2,867.84	-9,068.09	9,627.29	9,610.88	16.42	586.412		
2,800.00	2,798.13	787.43	816.87	12.41	4.84	34.34	-2,866.61	-9,074.07	9,644.26	9,627.34	16.92	569.970		
2,900.00	2,898.05	825.33	853.65	12.84	5.02	34.37	-2,864.50	-9,082.93	9,661.86	9,644.40	17.46	553.303		
3,000.00	2,997.97	855.00	882.38	13.27	5.16	34.40	-2,862.56	-9,090.11	9,680.10	9,662.13	17.97	538.690		
3,100.00	3,097.89	855.00	882.38	13.69	5.16	34.40	-2,862.56	-9,090.11	9,699.21	9,680.84	18.37	528.038		
3,200.00	3,197.81	906.65	932.19	14.12	5.44	34.45	-2,858.90	-9,103.26	9,718.75	9,699.78	18.97	512.269		
3,300.00	3,297.73	949.00	972.84	14.56	5.67	34.50	-2,855.81	-9,114.72	9,739.29	9,719.74	19.55	498.169		
3,400.00	3,397.65	949.00	972.84	14.99	5.67	34.50	-2,855.81	-9,114.72	9,760.43	9,740.49	19.94	489.423		
3,500.00	3,497.56	1,014.17	1,035.13	15.42	6.07	34.57	-2,850.44	-9,133.11	9,782.18	9,761.55	20.63	474.183		
3,600.00	3,597.48	1,044.00	1,063.55	15.85	6.25	34.60	-2,847.61	-9,141.73	9,804.41	9,783.26	21.16	463.376		
3,700.00	3,697.40	1,080.78	1,098.47	16.28	6.50	34.65	-2,843.93	-9,152.64	9,827.28	9,805.55	21.73	452.307		
3,800.00	3,797.32	1,105.79	1,122.15	16.72	6.67	34.68	-2,841.36	-9,160.30	9,850.90	9,828.66	22.24	442.998		
3,900.00	3,897.24	1,139.00	1,153.47	17.15	6.90	34.72	-2,837.86	-9,170.75	9,875.24	9,852.45	22.79	433.336		
4,000.00	3,997.16	1,139.00	1,153.47	17.59	6.90	34.72	-2,837.86	-9,170.75	9,900.32	9,877.15	23.17	427.368		
4,100.00	4,097.08	1,183.74	1,195.46	18.02	7.24	34.78	-2,832.87	-9,185.37	9,925.99	9,902.20	23.79	417.294		
4,200.00	4,197.00	1,234.00	1,242.31	18.46	7.62	34.85	-2,826.71	-9,202.50	9,952.50	9,928.06	24.44	407.192		
4,300.00	4,296.92	1,234.00	1,242.31	18.89	7.62	34.85	-2,826.71	-9,202.50	9,979.50	9,954.69	24.81	402.244		
7,800.00	7,059.40	3,844.59	3,615.00	40.40	34.64	-33.40	-2,513.70	-10,243.99	9,987.64	9,933.10	54.54	183.126		
7,900.00	7,058.97	3,862.88	3,631.79	42.28	34.83	-33.50	-2,511.54	-10,250.92	9,996.41	9,941.53	54.88	180.330		
8,000.00	7,058.53	3,887.00	3,653.90	44.27	35.07	-33.64	-2,508.62	-10,260.12	9,805.28	9,750.00	55.28	177.362		
8,100.00	7,058.10	3,887.00	3,653.90	46.35	35.07	-33.64	-2,508.62	-10,260.12	9,714.26	9,658.73	55.53	174.923		
8,200.00	7,057.66	3,887.00	3,653.90	48.50	35.07	-33.64	-2,508.62	-10,260.12	9,623.43	9,567.62	55.81	172.433		
8,300.00	7,057.23	3,922.62	3,686.47	50.73	35.45	-33.84	-2,504.30	-10,273.87	9,532.58	9,476.21	56.37	169.095		
8,400.00	7,056.80	3,936.11	3,698.79	53.02	35.59	-33.92	-2,502.68	-10,279.13	9,441.94	9,385.14	56.80	166.235		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
8,500.00	7,056.36	3,949.78	3,711.25	55.36	35.73	-34.00	-2,501.05	-10,284.50	9,351.44	9,294.19	57.25	163.344		
8,600.00	7,055.93	3,982.00	3,740.58	57.74	36.07	-34.20	-2,497.25	-10,297.28	9,261.12	9,203.26	57.86	160.055		
8,700.00	7,055.49	3,982.00	3,740.58	60.17	36.07	-34.20	-2,497.25	-10,297.28	9,170.85	9,112.58	58.27	157.397		
8,800.00	7,055.06	3,998.74	3,755.80	62.63	36.25	-34.30	-2,495.29	-10,303.98	9,080.75	9,021.93	58.82	154.384		
8,900.00	7,054.63	4,023.19	3,778.00	65.13	36.52	-34.44	-2,492.40	-10,313.80	8,990.76	8,931.31	59.46	151.219		
9,000.00	7,054.19	7,196.00	6,816.82	67.66	57.37	-84.39	-2,306.14	-11,004.08	8,899.55	8,825.31	74.24	119.879		
9,100.00	7,053.76	7,196.00	6,816.82	70.21	57.37	-84.39	-2,306.14	-11,004.08	8,802.25	8,727.61	74.64	117.929		
9,200.00	7,053.32	7,196.00	6,816.82	72.78	57.37	-84.39	-2,306.14	-11,004.08	8,705.01	8,629.94	75.07	115.960		
9,300.00	7,052.89	7,196.00	6,816.82	75.38	57.37	-84.39	-2,306.14	-11,004.08	8,607.83	8,532.31	75.52	113.975		
9,400.00	7,052.46	7,196.00	6,816.82	77.99	57.37	-84.39	-2,306.14	-11,004.08	8,510.72	8,434.71	76.01	111.974		
9,500.00	7,052.02	7,196.00	6,816.82	80.62	57.37	-84.39	-2,306.14	-11,004.08	8,413.68	8,337.16	76.52	109.958		
9,600.00	7,051.59	7,196.00	6,816.82	83.26	57.37	-84.39	-2,306.14	-11,004.08	8,316.70	8,239.65	77.06	107.929		
9,700.00	7,051.15	7,196.00	6,816.82	85.92	57.37	-84.39	-2,306.14	-11,004.08	8,219.80	8,142.18	77.63	105.888		
9,800.00	7,050.72	7,237.50	6,858.30	88.59	57.47	-85.55	-2,306.86	-11,004.79	8,122.75	8,044.46	78.30	103.743		
9,900.00	7,050.29	7,238.22	6,859.03	91.28	57.47	-85.57	-2,306.87	-11,004.80	8,026.00	7,947.07	78.93	101.685		
10,000.00	7,049.85	7,238.95	6,859.76	93.97	57.47	-85.59	-2,306.89	-11,004.82	7,929.32	7,849.72	79.60	99.619		
10,100.00	7,049.42	7,239.69	6,860.49	96.67	57.47	-85.61	-2,306.90	-11,004.83	7,832.73	7,752.43	80.30	97.547		
10,200.00	7,048.98	7,240.44	6,861.24	99.38	57.47	-85.63	-2,306.91	-11,004.85	7,736.22	7,655.19	81.03	95.472		
10,300.00	7,048.55	7,241.19	6,862.00	102.10	57.48	-85.65	-2,306.93	-11,004.86	7,639.80	7,558.00	81.80	93.394		
10,400.00	7,048.12	7,241.95	6,862.76	104.83	57.48	-85.67	-2,306.94	-11,004.88	7,543.48	7,460.87	82.61	91.315		
10,500.00	7,047.68	7,242.72	6,863.53	107.56	57.48	-85.70	-2,306.96	-11,004.89	7,447.25	7,363.80	83.45	89.237		
10,600.00	7,047.25	7,243.50	6,864.31	110.30	57.48	-85.72	-2,306.98	-11,004.91	7,351.12	7,266.78	84.34	87.162		
10,700.00	7,046.81	7,244.29	6,865.10	113.05	57.48	-85.74	-2,306.99	-11,004.92	7,255.10	7,169.84	85.26	85.091		
10,800.00	7,046.38	7,245.09	6,865.89	115.80	57.48	-85.76	-2,307.01	-11,004.94	7,159.19	7,072.96	86.23	83.026		
10,900.00	7,045.95	7,245.90	6,866.70	118.55	57.49	-85.78	-2,307.02	-11,004.96	7,063.39	6,976.15	87.24	80.968		
11,000.00	7,045.51	7,246.71	6,867.52	121.31	57.49	-85.81	-2,307.04	-11,004.97	6,967.70	6,879.41	88.29	78.919		
11,100.00	7,045.08	7,247.54	6,868.34	124.08	57.49	-85.83	-2,307.06	-11,004.99	6,872.14	6,782.76	89.39	76.881		
11,200.00	7,044.64	7,248.37	6,869.18	126.85	57.49	-85.85	-2,307.07	-11,005.01	6,776.71	6,686.18	90.53	74.856		
11,300.00	7,044.21	7,249.22	6,870.02	129.62	57.49	-85.88	-2,307.09	-11,005.02	6,681.41	6,589.69	91.72	72.844		
11,400.00	7,043.78	7,250.07	6,870.87	132.40	57.50	-85.90	-2,307.11	-11,005.04	6,586.25	6,493.29	92.96	70.847		
11,500.00	7,043.34	7,250.94	6,871.74	135.18	57.50	-85.93	-2,307.13	-11,005.06	6,491.24	6,396.98	94.26	68.868		
11,600.00	7,042.91	7,251.81	6,872.61	137.96	57.50	-85.95	-2,307.15	-11,005.08	6,396.38	6,300.77	95.60	66.906		
11,700.00	7,042.47	7,252.70	6,873.50	140.75	57.50	-85.98	-2,307.16	-11,005.10	6,301.67	6,204.67	97.00	64.963		
11,800.00	7,042.04	7,253.59	6,874.39	143.54	57.51	-86.00	-2,307.18	-11,005.12	6,207.13	6,108.67	98.46	63.041		
11,900.00	7,041.61	7,254.50	6,875.30	146.33	57.51	-86.03	-2,307.20	-11,005.14	6,112.77	6,012.79	99.98	61.141		
12,000.00	7,041.17	7,255.42	6,876.21	149.13	57.51	-86.05	-2,307.22	-11,005.15	6,018.59	5,917.03	101.55	59.265		
12,100.00	7,040.74	7,256.34	6,877.14	151.92	57.51	-86.08	-2,307.24	-11,005.17	5,924.60	5,821.40	103.19	57.412		
12,200.00	7,040.30	7,257.28	6,878.08	154.72	57.51	-86.10	-2,307.26	-11,005.19	5,830.80	5,725.90	104.90	55.584		
12,300.00	7,039.87	7,258.24	6,879.03	157.52	57.52	-86.13	-2,307.28	-11,005.22	5,737.22	5,630.55	106.67	53.783		
12,400.00	7,039.44	7,259.20	6,880.00	160.33	57.52	-86.16	-2,307.30	-11,005.24	5,643.86	5,535.34	108.52	52.009		
12,500.00	7,039.00	7,260.18	6,880.97	163.13	57.52	-86.18	-2,307.33	-11,005.26	5,550.72	5,440.29	110.43	50.262		
12,600.00	7,038.57	7,261.16	6,881.96	165.94	57.52	-86.21	-2,307.35	-11,005.28	5,457.83	5,345.41	112.43	48.545		
12,700.00	7,038.13	7,262.16	6,882.96	168.75	57.53	-86.24	-2,307.37	-11,005.30	5,365.20	5,250.70	114.50	46.857		
12,800.00	7,037.70	7,263.18	6,883.97	171.56	57.53	-86.27	-2,307.39	-11,005.32	5,272.83	5,156.18	116.66	45.200		
12,900.00	7,037.27	7,264.20	6,885.00	174.37	57.53	-86.30	-2,307.41	-11,005.35	5,180.75	5,061.86	118.90	43.574		
13,000.00	7,036.83	7,265.24	6,886.04	177.19	57.53	-86.33	-2,307.44	-11,005.37	5,088.97	4,967.74	121.23	41.979		
13,100.00	7,036.40	7,266.29	6,887.09	180.00	57.54	-86.36	-2,307.46	-11,005.39	4,997.50	4,873.85	123.65	40.416		
13,200.00	7,035.96	7,267.36	6,888.15	182.82	57.54	-86.39	-2,307.49	-11,005.42	4,906.36	4,780.19	126.17	38.886		
13,300.00	7,035.53	7,268.44	6,889.23	185.64	57.54	-86.42	-2,307.51	-11,005.44	4,815.58	4,686.78	128.79	37.389		
13,400.00	7,035.10	7,269.54	6,890.33	188.46	57.54	-86.45	-2,307.53	-11,005.47	4,725.16	4,593.64	131.52	35.926		
13,500.00	7,034.66	7,270.65	6,891.44	191.28	57.55	-86.48	-2,307.56	-11,005.49	4,635.14	4,500.78	134.36	34.497		
13,600.00	7,034.23	7,271.77	6,892.56	194.10	57.55	-86.51	-2,307.59	-11,005.52	4,545.54	4,408.22	137.32	33.102		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
13,700.00	7,033.79	7,272.91	6,893.70	196.92	57.55	-86.54	-2,307.61	-11,005.55	4,456.38	4,315.98	140.39	31.742	
13,800.00	7,033.36	7,274.06	6,894.85	199.74	57.55	-86.58	-2,307.64	-11,005.57	4,367.69	4,224.09	143.60	30.416	
13,900.00	7,032.93	7,275.24	6,896.02	202.57	57.56	-86.61	-2,307.67	-11,005.60	4,279.49	4,132.56	146.93	29.126	
14,000.00	7,032.49	7,276.42	6,897.21	205.39	57.56	-86.64	-2,307.70	-11,005.63	4,191.83	4,041.42	150.40	27.871	
14,100.00	7,032.06	7,277.63	6,898.41	208.22	57.56	-86.68	-2,307.72	-11,005.66	4,104.72	3,950.71	154.02	26.651	
14,200.00	7,031.62	7,278.85	6,899.63	211.05	57.57	-86.71	-2,307.75	-11,005.69	4,018.22	3,860.44	157.78	25.467	
14,300.00	7,031.19	7,280.08	6,900.87	213.87	57.57	-86.74	-2,307.78	-11,005.72	3,932.36	3,770.65	161.71	24.318	
14,400.00	7,030.76	7,281.34	6,902.12	216.70	57.57	-86.78	-2,307.81	-11,005.75	3,847.18	3,681.39	165.79	23.205	
14,500.00	7,030.32	7,282.61	6,903.40	219.53	57.57	-86.82	-2,307.84	-11,005.78	3,762.73	3,592.68	170.05	22.127	
14,600.00	7,029.89	7,283.90	6,904.69	222.36	57.58	-86.85	-2,307.88	-11,005.81	3,679.06	3,504.58	174.48	21.086	
14,700.00	7,029.45	7,285.21	6,906.00	225.19	57.58	-86.89	-2,307.91	-11,005.84	3,596.22	3,417.12	179.10	20.080	
14,800.00	7,029.02	7,286.54	6,907.32	228.03	57.58	-86.93	-2,307.94	-11,005.87	3,514.27	3,330.37	183.90	19.109	
14,805.04	7,029.00	7,286.61	6,907.39	228.17	57.58	-86.93	-2,307.94	-11,005.88	3,510.17	3,326.02	184.15	19.061 CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-107.76	-2,870.93	-8,962.93	9,411.57					
100.00	100.00	0.00	36.00	3.28	3.28	-107.76	-2,870.93	-8,962.93	9,411.72	9,405.16	6.56	1,433.645		
200.00	200.00	56.97	92.96	3.34	3.28	-107.76	-2,871.29	-8,963.16	9,412.44	9,405.82	6.62	1,421.886		
300.00	300.00	577.00	612.23	3.44	3.96	-107.68	-2,856.72	-8,962.02	9,411.49	9,404.08	7.42	1,269.166		
400.00	400.00	577.00	612.23	3.60	3.96	-107.68	-2,856.72	-8,962.02	9,408.71	9,401.14	7.57	1,243.404		
500.00	499.98	636.21	670.96	3.80	4.12	34.21	-2,849.28	-8,962.89	9,404.99	9,397.08	7.92	1,187.614		
600.00	599.90	678.56	712.89	4.02	4.24	34.26	-2,843.43	-8,964.13	9,400.24	9,391.98	8.27	1,137.321		
700.00	699.82	874.91	906.52	4.28	4.93	34.48	-2,811.62	-8,970.83	9,395.36	9,386.14	9.22	1,019.554		
800.00	799.74	988.14	1,017.52	4.57	5.41	34.63	-2,789.69	-8,974.97	9,389.74	9,379.76	9.98	941.026		
900.00	899.66	1,088.89	1,115.57	4.88	5.89	34.79	-2,767.02	-8,979.62	9,384.16	9,373.39	10.77	871.717		
1,000.00	999.58	1,173.80	1,197.60	5.21	6.34	34.93	-2,745.57	-8,984.22	9,378.60	9,367.06	11.54	812.839		
1,100.00	1,099.50	1,245.27	1,266.17	5.55	6.75	35.06	-2,725.95	-8,988.79	9,373.39	9,361.11	12.29	762.944		
1,200.00	1,199.42	1,336.63	1,353.05	5.91	7.31	35.25	-2,698.48	-8,995.46	9,368.39	9,355.19	13.21	709.427		
1,300.00	1,299.34	1,417.82	1,429.46	6.28	7.85	35.43	-2,671.89	-9,002.13	9,363.60	9,349.49	14.11	663.393		
1,400.00	1,399.26	1,451.64	1,461.10	6.66	8.09	35.51	-2,660.33	-9,005.19	9,359.31	9,344.58	14.73	635.258		
1,500.00	1,499.18	1,512.00	1,517.35	7.04	8.53	35.65	-2,639.33	-9,011.30	9,355.85	9,340.29	15.55	601.557		
1,600.00	1,599.10	1,527.39	1,531.66	7.43	8.64	35.69	-2,633.90	-9,012.97	9,352.91	9,336.85	16.06	582.391		
1,700.00	1,699.01	1,594.86	1,594.18	7.83	9.16	35.85	-2,609.71	-9,020.53	9,350.57	9,333.60	16.97	550.997		
1,800.00	1,798.93	1,647.72	1,642.95	8.23	9.58	35.98	-2,580.29	-9,026.75	9,348.70	9,330.91	17.79	525.485		
1,900.00	1,898.85	1,701.00	1,691.87	8.64	10.01	36.12	-2,570.24	-9,033.41	9,347.42	9,328.79	18.62	501.875		
2,000.00	1,998.77	1,745.72	1,732.72	9.05	10.39	36.23	-2,553.03	-9,039.31	9,346.72	9,327.31	19.41	481.506		
2,064.59	2,063.31	1,776.90	1,761.09	9.32	10.65	36.32	-2,540.82	-9,043.59	9,346.60	9,326.66	19.94	468.701		
2,100.00	2,098.69	1,796.00	1,778.41	9.46	10.81	36.37	-2,533.25	-9,046.28	9,346.64	9,326.39	20.25	461.562		
2,200.00	2,198.61	1,952.30	1,919.42	9.88	12.23	36.80	-2,469.43	-9,068.06	9,346.38	9,324.30	22.08	423.328		
2,251.39	2,249.96	1,994.93	1,957.66	10.09	12.62	36.92	-2,451.57	-9,074.02	9,346.30	9,323.62	22.69	411.989		
2,300.00	2,298.53	2,014.79	1,975.47	10.30	12.81	36.98	-2,443.23	-9,076.85	9,346.35	9,323.28	23.08	405.041		
2,400.00	2,398.45	2,061.02	2,016.89	10.72	13.25	37.11	-2,423.85	-9,083.56	9,346.92	9,322.99	23.93	390.650		
2,500.00	2,498.37	2,185.80	2,128.58	11.14	14.44	37.47	-2,371.33	-9,101.95	9,347.94	9,322.40	25.54	365.992		
2,600.00	2,598.29	2,243.86	2,180.46	11.56	15.01	37.64	-2,346.70	-9,110.47	9,348.99	9,322.47	26.52	352.463		
2,700.00	2,698.21	2,301.47	2,231.90	11.98	15.57	37.80	-2,322.22	-9,119.09	9,350.53	9,323.03	27.51	339.945		
2,800.00	2,798.13	2,355.00	2,279.72	12.41	16.10	37.95	-2,299.62	-9,127.27	9,352.63	9,324.19	28.45	328.746		
2,900.00	2,898.05	2,397.80	2,318.00	12.84	16.52	38.08	-2,281.66	-9,133.95	9,355.33	9,326.05	29.29	319.437		
3,000.00	2,997.97	2,436.83	2,352.91	13.27	16.91	38.19	-2,265.40	-9,140.24	9,358.73	9,328.64	30.09	311.060		
3,100.00	3,097.89	2,494.11	2,404.18	13.69	17.48	38.35	-2,241.67	-9,149.76	9,362.80	9,331.73	31.07	301.364		
3,200.00	3,197.81	2,579.75	2,480.88	14.12	18.33	38.59	-2,206.34	-9,163.98	9,367.15	9,334.82	32.33	289.715		
3,300.00	3,297.73	2,641.30	2,536.14	14.56	18.94	38.77	-2,181.27	-9,174.28	9,371.92	9,338.56	33.35	280.986		
3,400.00	3,397.65	2,877.84	2,747.31	14.99	21.33	39.44	-2,081.82	-9,212.41	9,375.90	9,339.73	36.17	259.202		
3,500.00	3,497.56	2,937.00	2,799.61	15.42	21.95	39.62	-2,055.84	-9,221.90	9,380.02	9,342.82	37.20	252.124		
3,600.00	3,597.48	3,600.00	2,926.44	15.85	28.66	40.02	-1,996.10	-9,244.24	9,384.51	9,340.24	44.27	211.990		
3,700.00	3,697.40	3,219.02	3,051.64	16.28	24.83	40.42	-1,936.88	-9,265.03	9,388.23	9,347.33	40.91	229.507		
3,800.00	3,797.32	3,265.75	3,093.25	16.72	25.31	40.56	-1,916.83	-9,272.06	9,392.37	9,350.58	41.80	224.722		
3,900.00	3,897.24	3,316.00	3,138.23	17.15	25.82	40.70	-1,895.79	-9,279.78	9,397.14	9,354.42	42.72	219.972		
4,000.00	3,997.16	3,446.77	3,255.78	17.59	27.14	41.07	-1,841.95	-9,299.38	9,401.83	9,357.39	44.44	211.542		
4,100.00	4,097.08	3,503.00	3,306.45	18.02	27.70	41.22	-1,819.11	-9,307.89	9,407.00	9,361.58	45.41	207.143		
4,200.00	4,197.00	3,563.23	3,360.71	18.46	28.30	41.39	-1,794.67	-9,317.19	9,412.67	9,366.25	46.42	202.764		
4,300.00	4,296.92	3,684.16	3,469.45	18.89	29.52	41.72	-1,745.20	-9,335.95	9,418.63	9,370.59	48.05	196.037		
4,400.00	4,396.84	3,770.86	3,547.58	19.33	30.39	41.96	-1,710.02	-9,349.13	9,424.53	9,375.22	49.32	191.109		
4,500.00	4,496.76	4,500.00	3,643.03	19.77	37.71	42.25	-1,667.07	-9,365.09	9,430.53	9,373.60	56.94	165.630		
4,600.00	4,596.68	3,927.45	3,688.43	20.20	31.98	42.39	-1,645.84	-9,372.85	9,436.86	9,385.16	51.70	182.518		
4,700.00	4,696.60	3,976.00	3,731.52	20.64	32.49	42.53	-1,624.87	-9,380.65	9,443.89	9,391.28	52.60	179.525		
4,800.00	4,796.52	4,007.84	3,759.59	21.08	32.83	42.62	-1,610.81	-9,385.96	9,451.57	9,398.23	53.34	177.182		
4,900.00	4,896.44	4,048.34	3,795.09	21.51	33.28	42.75	-1,592.60	-9,392.92	9,459.95	9,405.77	54.17	174.620		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,000.00	4,996.36	4,094.90	3,835.61	21.95	33.80	42.89	-1,571.22	-9,401.19	9,468.99	9,413.91	55.08	171.919		
5,100.00	5,096.28	4,149.26	3,882.59	22.39	34.42	43.06	-1,545.72	-9,411.07	9,478.61	9,422.53	56.08	169.026		
5,200.00	5,196.19	4,191.97	3,919.28	22.83	34.91	43.20	-1,525.34	-9,419.01	9,488.82	9,431.87	56.95	166.626		
5,300.00	5,296.11	4,229.99	3,951.87	23.27	35.36	43.32	-1,507.16	-9,426.27	9,499.72	9,441.96	57.76	164.466		
5,400.00	5,396.03	4,262.05	4,295.97	23.71	39.57	44.45	-1,337.29	-9,494.84	9,510.18	9,447.81	62.37	152.492		
5,500.00	5,495.95	4,755.33	4,419.51	24.14	40.88	44.79	-1,286.14	-9,515.42	9,518.74	9,454.69	64.05	148.612		
5,600.00	5,595.87	5,563.71	5,186.35	24.58	47.11	46.40	-1,049.50	-9,600.93	9,523.57	9,452.92	70.66	134.787		
5,700.00	5,695.79	5,970.00	5,587.57	25.02	49.05	46.84	-989.45	-9,616.53	9,522.77	9,449.80	72.97	130.506		
5,800.00	5,795.71	6,067.83	5,685.12	25.46	49.38	46.90	-982.25	-9,618.32	9,521.22	9,447.49	73.73	129.133		
5,900.00	5,895.63	6,191.28	5,808.35	25.90	49.76	46.97	-975.21	-9,620.16	9,519.46	9,444.92	74.55	127.699		
6,000.00	5,995.55	6,336.54	5,953.45	26.34	50.19	47.03	-968.83	-9,621.86	9,517.58	9,442.18	75.40	126.231		
6,100.00	6,095.47	6,430.04	6,046.89	26.78	50.45	47.07	-965.39	-9,622.56	9,515.29	9,439.19	76.10	125.040		
6,200.00	6,195.39	6,506.22	6,123.03	27.22	50.66	47.10	-963.08	-9,623.23	9,513.18	9,436.44	76.74	123.962		
6,300.00	6,295.31	6,580.69	6,197.47	27.66	50.86	47.12	-961.24	-9,624.05	9,511.34	9,433.96	77.38	122.914		
6,400.00	6,395.23	6,663.16	6,279.92	28.10	51.07	47.14	-959.67	-9,625.13	9,509.76	9,431.72	78.04	121.864		
6,500.00	6,495.02	6,763.18	6,379.92	28.54	51.33	11.54	-958.25	-9,626.46	9,505.91	9,427.19	78.72	120.749		
6,600.00	6,593.09	6,860.40	6,477.13	28.98	51.57	2.34	-957.31	-9,627.72	9,488.13	9,408.73	79.40	119.499		
6,700.00	6,687.01	6,952.00	6,568.72	29.41	51.79	-0.32	-956.66	-9,628.91	9,455.25	9,375.21	80.04	118.134		
6,800.00	6,774.46	7,038.35	6,655.06	29.83	52.00	-1.82	-956.21	-9,630.04	9,408.10	9,327.47	80.63	116.682		
6,900.00	6,853.31	7,117.97	6,734.68	30.26	52.20	-3.07	-955.83	-9,631.08	9,347.80	9,266.64	81.16	115.179		
7,000.00	6,921.60	7,212.80	6,803.90	30.76	52.43	-4.49	-955.50	-9,631.99	9,275.84	9,194.17	81.67	113.577		
7,100.00	6,977.66	7,244.33	6,861.02	31.38	52.51	-6.49	-955.22	-9,632.74	9,193.99	9,112.02	81.97	112.170		
7,200.00	7,020.10	7,287.94	6,904.63	32.17	52.62	-9.98	-955.02	-9,633.31	9,104.27	9,022.04	82.23	110.720		
7,300.00	7,047.88	7,316.97	6,933.66	33.13	52.69	-18.13	-954.88	-9,633.70	9,008.89	8,926.49	82.40	109.335		
7,400.00	7,060.32	7,330.70	6,947.39	34.27	52.73	-52.19	-954.81	-9,633.88	8,910.19	8,827.72	82.48	108.029		
7,500.00	7,060.70	7,332.39	6,949.08	35.56	52.73	-83.92	-954.80	-9,633.90	8,810.52	8,728.01	82.50	106.788		
7,600.00	7,060.27	7,333.27	6,949.95	37.02	52.73	-83.99	-954.80	-9,633.91	8,710.83	8,628.30	82.53	105.549		
7,700.00	7,059.83	7,334.14	6,950.83	38.64	52.74	-84.06	-954.79	-9,633.92	8,611.15	8,528.60	82.56	104.306		
7,800.00	7,059.40	7,335.02	6,951.70	40.40	52.74	-84.13	-954.79	-9,633.93	8,511.48	8,428.90	82.59	103.061		
7,900.00	7,058.97	7,335.89	6,952.58	42.28	52.74	-84.20	-954.79	-9,633.94	8,411.82	8,329.20	82.62	101.811		
8,000.00	7,058.53	7,336.77	6,953.45	44.27	52.74	-84.27	-954.78	-9,633.95	8,312.16	8,229.50	82.66	100.559		
8,100.00	7,058.10	7,337.64	6,954.33	46.35	52.74	-84.35	-954.78	-9,633.97	8,212.52	8,129.81	82.70	99.303		
8,200.00	7,057.66	7,338.52	6,955.20	48.50	52.75	-84.42	-954.77	-9,633.98	8,112.88	8,030.13	82.75	98.043		
8,300.00	7,057.23	7,339.39	6,956.08	50.73	52.75	-84.49	-954.77	-9,633.99	8,013.25	7,930.45	82.80	96.780		
8,400.00	7,056.80	7,340.27	6,956.95	53.02	52.75	-84.56	-954.77	-9,634.00	7,913.63	7,830.77	82.85	95.513		
8,500.00	7,056.36	7,341.14	6,957.83	55.36	52.75	-84.63	-954.76	-9,634.01	7,814.01	7,731.10	82.91	94.243		
8,600.00	7,055.93	7,342.02	6,958.70	57.74	52.75	-84.71	-954.76	-9,634.02	7,714.41	7,631.43	82.98	92.969		
8,700.00	7,055.49	7,342.89	6,959.58	60.17	52.76	-84.78	-954.75	-9,634.04	7,614.82	7,531.77	83.05	91.692		
8,800.00	7,055.06	7,343.77	6,960.45	62.63	52.76	-84.85	-954.75	-9,634.05	7,515.24	7,432.12	83.12	90.410		
8,900.00	7,054.63	7,344.64	6,961.33	65.13	52.76	-84.92	-954.74	-9,634.06	7,415.67	7,332.47	83.20	89.126		
9,000.00	7,054.19	7,345.52	6,962.20	67.66	52.76	-85.00	-954.74	-9,634.07	7,316.11	7,232.82	83.29	87.837		
9,100.00	7,053.76	7,346.39	6,963.08	70.21	52.77	-85.07	-954.74	-9,634.08	7,216.57	7,133.18	83.39	86.545		
9,200.00	7,053.32	7,347.27	6,963.95	72.78	52.77	-85.14	-954.73	-9,634.09	7,117.04	7,033.55	83.49	85.249		
9,300.00	7,052.89	7,348.14	6,964.83	75.38	52.77	-85.21	-954.73	-9,634.10	7,017.52	6,933.92	83.59	83.949		
9,400.00	7,052.46	7,349.02	6,965.70	77.99	52.77	-85.28	-954.72	-9,634.12	6,918.01	6,834.30	83.71	82.645		
9,500.00	7,052.02	7,349.89	6,966.58	80.62	52.77	-85.36	-954.72	-9,634.13	6,818.52	6,734.69	83.83	81.338		
9,600.00	7,051.59	7,350.77	6,967.45	83.26	52.78	-85.43	-954.72	-9,634.14	6,719.04	6,635.08	83.96	80.026		
9,700.00	7,051.15	7,351.64	6,968.33	85.92	52.78	-85.50	-954.71	-9,634.15	6,619.58	6,535.48	84.10	78.711		
9,800.00	7,050.72	7,352.52	6,969.20	88.59	52.78	-85.57	-954.71	-9,634.16	6,520.14	6,435.89	84.25	77.392		
9,900.00	7,050.29	7,353.39	6,970.08	91.28	52.78	-85.65	-954.70	-9,634.17	6,420.71	6,336.30	84.41	76.068		
10,000.00	7,049.85	7,354.27	6,970.95	93.97	52.79	-85.72	-954.70	-9,634.18	6,321.30	6,236.73	84.58	74.741		
10,100.00	7,049.42	7,355.14	6,971.83	96.67	52.79	-85.79	-954.69	-9,634.20	6,221.91	6,137.16	84.76	73.410		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 17-32-12(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 120-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,048.98	7,356.02	6,972.70	99.38	52.79	-85.86	-954.69	-9,634.21	6,122.54	6,037.59	84.95	72.074		
10,300.00	7,048.55	7,356.89	6,973.58	102.10	52.79	-85.93	-954.69	-9,634.22	6,023.19	5,938.04	85.15	70.735		
10,400.00	7,048.12	7,357.77	6,974.45	104.83	52.79	-86.01	-954.68	-9,634.23	5,923.86	5,838.49	85.37	69.391		
10,500.00	7,047.68	7,358.64	6,975.33	107.56	52.80	-86.08	-954.68	-9,634.24	5,824.56	5,738.96	85.60	68.043		
10,600.00	7,047.25	7,359.52	6,976.20	110.30	52.80	-86.15	-954.67	-9,634.25	5,725.28	5,639.43	85.85	66.692		
10,700.00	7,046.81	7,360.39	6,977.08	113.05	52.80	-86.22	-954.67	-9,634.26	5,626.02	5,539.91	86.11	65.336		
10,800.00	7,046.38	7,361.27	6,977.95	115.80	52.80	-86.30	-954.67	-9,634.28	5,526.79	5,440.40	86.39	63.976		
10,900.00	7,045.95	7,362.14	6,978.83	118.55	52.81	-86.37	-954.66	-9,634.29	5,427.59	5,340.90	86.69	62.613		
11,000.00	7,045.51	7,363.02	6,979.70	121.31	52.81	-86.44	-954.66	-9,634.30	5,328.42	5,241.41	87.00	61.245		
11,100.00	7,045.08	7,363.89	6,980.58	124.08	52.81	-86.51	-954.65	-9,634.31	5,229.28	5,141.94	87.34	59.873		
11,200.00	7,044.64	7,364.77	6,981.45	126.85	52.81	-86.59	-954.65	-9,634.32	5,130.17	5,042.47	87.70	58.498		
11,300.00	7,044.21	7,365.64	6,982.32	129.62	52.81	-86.66	-954.64	-9,634.33	5,031.10	4,943.02	88.08	57.119		
11,400.00	7,043.78	7,366.52	6,983.20	132.40	52.82	-86.73	-954.64	-9,634.35	4,932.06	4,843.57	88.49	55.737		
11,500.00	7,043.34	7,367.39	6,984.07	135.18	52.82	-86.80	-954.64	-9,634.36	4,833.07	4,744.14	88.92	54.351		
11,600.00	7,042.91	7,368.27	6,984.95	137.96	52.82	-86.88	-954.63	-9,634.37	4,734.12	4,644.73	89.39	52.961		
11,700.00	7,042.47	7,369.14	6,985.82	140.75	52.82	-86.95	-954.63	-9,634.38	4,635.21	4,545.32	89.88	51.569		
11,800.00	7,042.04	7,370.02	6,986.70	143.54	52.82	-87.02	-954.62	-9,634.39	4,536.35	4,445.94	90.41	50.174		
11,900.00	7,041.61	7,370.89	6,987.57	146.33	52.83	-87.09	-954.62	-9,634.40	4,437.54	4,346.56	90.98	48.777		
12,000.00	7,041.17	7,371.77	6,988.45	149.13	52.83	-87.17	-954.62	-9,634.41	4,338.78	4,247.20	91.58	47.377		
12,100.00	7,040.74	7,372.64	6,989.32	151.92	52.83	-87.24	-954.61	-9,634.43	4,240.09	4,147.86	92.22	45.976		
12,200.00	7,040.30	7,373.52	6,990.20	154.72	52.83	-87.31	-954.61	-9,634.44	4,141.45	4,048.54	92.91	44.573		
12,300.00	7,039.87	7,374.39	6,991.07	157.52	52.84	-87.38	-954.60	-9,634.45	4,042.88	3,949.23	93.65	43.169		
12,400.00	7,039.44	7,375.27	6,991.95	160.33	52.84	-87.46	-954.60	-9,634.46	3,944.39	3,849.95	94.44	41.765		
12,500.00	7,039.00	7,376.14	6,992.82	163.13	52.84	-87.53	-954.59	-9,634.47	3,845.97	3,750.68	95.29	40.361		
12,600.00	7,038.57	7,377.02	6,993.70	165.94	52.84	-87.60	-954.59	-9,634.48	3,747.64	3,651.44	96.20	38.958		
12,700.00	7,038.13	7,377.89	6,994.57	168.75	52.84	-87.67	-954.59	-9,634.49	3,649.39	3,552.22	97.17	37.556		
12,800.00	7,037.70	7,378.77	6,995.45	171.56	52.85	-87.75	-954.58	-9,634.51	3,551.25	3,453.03	98.22	36.157		
12,900.00	7,037.27	7,379.64	6,996.32	174.37	52.85	-87.82	-954.58	-9,634.52	3,453.21	3,353.86	99.34	34.760		
13,000.00	7,036.83	7,380.52	6,997.20	177.19	52.85	-87.89	-954.57	-9,634.53	3,355.28	3,254.73	100.55	33.368		
13,100.00	7,036.40	7,381.39	6,998.07	180.00	52.85	-87.96	-954.57	-9,634.54	3,257.48	3,155.62	101.86	31.981		
13,200.00	7,035.96	7,382.27	6,998.95	182.82	52.86	-88.04	-954.56	-9,634.55	3,159.82	3,056.56	103.26	30.600		
13,300.00	7,035.53	7,383.14	6,999.82	185.64	52.86	-88.11	-954.56	-9,634.56	3,062.31	2,957.53	104.78	29.227		
13,400.00	7,035.10	7,384.02	7,000.70	188.46	52.86	-88.18	-954.56	-9,634.57	2,964.96	2,858.55	106.42	27.862		
13,500.00	7,034.66	7,384.89	7,001.57	191.28	52.86	-88.25	-954.55	-9,634.59	2,867.80	2,759.61	108.19	26.508		
13,600.00	7,034.23	7,385.77	7,002.45	194.10	52.86	-88.33	-954.55	-9,634.60	2,770.84	2,660.73	110.11	25.165		
13,700.00	7,033.79	7,386.64	7,003.32	196.92	52.87	-88.40	-954.54	-9,634.61	2,674.10	2,561.92	112.19	23.836		
13,800.00	7,033.36	7,387.52	7,004.20	199.74	52.87	-88.47	-954.54	-9,634.62	2,577.61	2,463.17	114.45	22.523		
13,900.00	7,032.93	7,388.39	7,005.07	202.57	52.87	-88.54	-954.54	-9,634.63	2,481.40	2,364.50	116.90	21.226		
14,000.00	7,032.49	7,389.29	7,005.97	205.39	52.87	-88.62	-954.53	-9,634.64	2,385.50	2,265.92	119.58	19.948		
14,100.00	7,032.06	7,390.22	7,006.90	208.22	52.88	-88.70	-954.53	-9,634.66	2,289.95	2,167.44	122.51	18.692		
14,200.00	7,031.62	7,391.15	7,007.83	211.05	52.88	-88.77	-954.52	-9,634.67	2,194.80	2,069.09	125.71	17.459		
14,300.00	7,031.19	7,392.07	7,008.75	213.87	52.88	-88.85	-954.52	-9,634.68	2,100.09	1,970.88	129.22	16.253		
14,400.00	7,030.76	7,392.98	7,009.66	216.70	52.88	-88.93	-954.51	-9,634.69	2,005.91	1,872.84	133.07	15.074		
14,500.00	7,030.32	7,393.89	7,010.57	219.53	52.88	-89.00	-954.51	-9,634.70	1,912.31	1,775.00	137.31	13.927		
14,600.00	7,029.89	7,394.80	7,011.47	222.36	52.89	-89.08	-954.50	-9,634.72	1,819.39	1,677.40	141.98	12.814		
14,700.00	7,029.45	7,395.70	7,012.37	225.19	52.89	-89.15	-954.50	-9,634.73	1,727.26	1,580.10	147.16	11.738		
14,800.00	7,029.02	7,396.59	7,013.27	228.03	52.89	-89.23	-954.50	-9,634.74	1,636.05	1,483.16	152.89	10.701		
14,805.04	7,029.00	7,396.63	7,013.31	228.17	52.89	-89.23	-954.50	-9,634.74	1,631.49	1,478.29	153.19	10.650	CC, ES, SF	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-104.83	-2,317.05	-8,750.66	9,301.95					
100.00	100.00	2,263.57	2,192.64	3.28	15.90	-104.71	-2,295.29	-8,743.71	9,279.00	9,260.88	18.12	512.046		
200.00	200.00	2,302.00	2,227.88	3.34	16.24	-104.63	-2,280.61	-8,739.26	9,256.79	9,238.33	18.46	501.481		
300.00	300.00	2,514.65	2,422.81	3.44	18.14	-104.17	-2,199.44	-8,714.14	9,234.73	9,214.46	20.26	455.752		
400.00	400.00	2,556.43	2,460.88	3.60	18.52	-104.07	-2,182.97	-8,709.14	9,212.05	9,191.31	20.74	444.165		
500.00	499.98	2,610.61	2,510.16	3.80	19.02	38.15	-2,161.30	-8,703.07	9,188.62	9,167.26	21.37	430.043		
600.00	599.90	2,733.78	2,622.17	4.02	20.16	38.51	-2,111.91	-8,689.40	9,163.78	9,141.17	22.61	405.214		
700.00	699.82	2,904.61	2,776.77	4.28	21.76	38.94	-2,042.13	-8,669.12	9,137.95	9,113.64	24.31	375.903		
800.00	799.74	2,964.00	2,830.67	4.57	22.32	39.09	-2,018.26	-8,661.95	9,112.45	9,087.37	25.08	363.266		
900.00	899.66	3,028.03	2,889.15	4.88	22.90	39.25	-1,993.39	-8,654.14	9,087.38	9,061.47	25.91	350.749		
1,000.00	999.58	3,111.95	2,966.23	5.21	23.67	39.45	-1,961.91	-8,643.65	9,062.57	9,035.66	26.91	336.733		
1,100.00	1,099.50	3,207.77	3,054.01	5.55	24.54	39.68	-1,925.33	-8,631.88	9,037.90	9,009.87	28.04	322.360		
1,200.00	1,199.42	3,274.54	3,115.20	5.91	25.14	39.84	-1,899.90	-8,623.64	9,013.38	8,984.44	28.94	311.467		
1,300.00	1,299.34	3,319.01	3,158.19	6.28	25.53	39.95	-1,883.54	-8,618.20	8,989.42	8,959.75	29.67	302.989		
1,400.00	1,399.26	3,346.00	3,181.19	6.66	25.77	40.01	-1,873.91	-8,614.92	8,966.09	8,935.82	30.27	296.167		
1,500.00	1,499.18	3,396.83	3,228.44	7.04	26.21	40.12	-1,856.13	-8,608.96	8,943.37	8,912.31	31.06	287.911		
1,600.00	1,599.10	3,440.00	3,268.68	7.43	26.57	40.22	-1,841.26	-8,604.17	8,921.38	8,889.57	31.80	280.520		
1,700.00	1,699.01	3,474.00	3,303.70	7.83	27.00	40.30	-1,826.73	-8,599.40	8,899.61	8,880.46	32.46	274.333		
1,800.00	1,798.93	3,524.00	3,358.20	8.23	27.66	40.36	-1,813.41	-8,595.40	8,877.13	8,861.67	33.06	269.333		
1,900.00	1,898.85	3,599.60	3,433.66	8.64	28.40	40.40	-1,801.14	-8,591.84	8,853.38	8,838.61	33.57	265.217		
2,000.00	1,998.77	3,683.40	3,528.14	9.05	29.14	40.40	-1,789.41	-8,588.23	8,829.99	8,816.44	34.00	261.917		
2,100.00	2,098.69	3,777.08	3,632.68	9.46	30.00	40.40	-1,778.17	-8,584.57	8,807.21	8,793.79	34.37	259.193		
2,200.00	2,198.61	3,880.00	3,747.86	9.88	30.96	40.40	-1,767.44	-8,580.86	8,784.79	8,781.33	34.66	256.802		
2,300.00	2,298.53	3,992.96	3,873.31	10.30	32.00	40.40	-1,757.17	-8,577.13	8,762.72	8,762.23	34.88	254.449		
2,400.00	2,398.45	4,116.93	4,006.89	10.72	33.14	40.40	-1,747.44	-8,573.38	8,743.89	8,743.89	35.04	252.430		
2,500.00	2,498.37	4,251.16	4,141.40	11.14	34.30	40.40	-1,738.17	-8,569.61	8,725.47	8,725.47	35.16	250.611		
2,600.00	2,598.29	4,396.42	4,286.88	11.56	35.50	40.40	-1,729.44	-8,565.84	8,707.75	8,707.75	35.24	248.880		
2,700.00	2,698.21	4,552.00	4,442.17	11.98	36.70	40.40	-1,721.17	-8,562.07	8,690.61	8,690.61	35.29	247.227		
2,800.00	2,798.13	4,718.19	4,607.56	12.41	37.90	40.40	-1,713.44	-8,558.29	8,674.11	8,674.11	35.31	245.642		
2,900.00	2,898.05	4,894.00	4,783.16	12.84	39.10	40.40	-1,706.17	-8,554.50	8,658.11	8,658.11	35.31	244.115		
3,000.00	2,997.97	5,080.62	4,968.24	13.27	40.30	40.40	-1,699.44	-8,550.71	8,642.61	8,642.61	35.29	242.636		
3,100.00	3,097.89	5,278.82	5,162.08	13.69	41.50	40.40	-1,693.17	-8,546.92	8,627.11	8,627.11	35.24	241.205		
3,200.00	3,197.81	5,488.00	5,365.54	14.12	42.70	40.40	-1,687.44	-8,543.13	8,611.61	8,611.61	35.16	239.812		
3,300.00	3,297.73	5,708.60	5,579.99	14.56	43.90	40.40	-1,682.17	-8,539.34	8,596.11	8,596.11	35.04	238.457		
3,400.00	3,397.65	5,940.00	5,804.75	14.99	45.10	40.40	-1,677.44	-8,535.55	8,581.61	8,581.61	34.88	237.130		
3,500.00	3,497.56	6,182.38	6,039.51	15.42	46.30	40.40	-1,673.17	-8,531.76	8,567.11	8,567.11	34.69	235.831		
3,600.00	3,597.48	6,436.00	6,294.86	15.85	47.50	40.40	-1,669.44	-8,527.97	8,552.61	8,552.61	34.46	234.550		
3,700.00	3,697.40	6,700.00	6,560.17	16.28	48.70	40.40	-1,666.17	-8,524.18	8,538.11	8,538.11	34.19	233.287		
3,800.00	3,797.32	6,974.00	6,835.93	16.72	50.00	40.40	-1,663.44	-8,520.39	8,523.61	8,523.61	33.88	232.042		
3,900.00	3,897.24	7,258.00	7,111.93	17.15	51.30	40.40	-1,661.17	-8,516.60	8,509.11	8,509.11	33.53	230.805		
4,000.00	3,997.16	7,552.52	7,407.07	17.59	52.60	40.40	-1,659.44	-8,512.81	8,494.61	8,494.61	33.14	229.576		
4,100.00	4,097.08	7,857.00	7,712.25	18.02	53.90	40.40	-1,658.17	-8,509.02	8,480.11	8,480.11	32.71	228.355		
4,200.00	4,197.00	8,172.00	8,027.43	18.46	55.20	40.40	-1,657.44	-8,505.23	8,465.61	8,465.61	32.24	227.142		
4,300.00	4,296.92	8,497.55	8,352.99	18.89	56.50	40.40	-1,657.17	-8,501.44	8,451.11	8,451.11	31.74	225.937		
4,400.00	4,396.84	8,833.00	8,688.87	19.33	57.80	40.40	-1,657.44	-8,497.65	8,436.61	8,436.61	31.20	224.740		
4,500.00	4,496.76	9,178.28	9,034.10	19.77	59.10	40.40	-1,658.17	-8,493.86	8,422.11	8,422.11	30.62	223.551		
4,600.00	4,596.68	9,533.76	9,389.58	20.20	60.40	40.40	-1,659.44	-8,489.07	8,407.61	8,407.61	30.00	222.369		
4,700.00	4,696.60	9,900.00	9,755.06	20.64	61.70	40.40	-1,661.17	-8,484.28	8,393.11	8,393.11	29.34	221.194		
4,800.00	4,796.52	10,276.00	10,130.54	21.08	63.00	40.40	-1,663.44	-8,479.49	8,378.61	8,378.61	28.64	220.027		
4,900.00	4,896.44	10,662.25	10,516.02	21.51	64.30	40.40	-1,666.17	-8,474.70	8,364.11	8,364.11	27.90	218.868		
5,000.00	4,996.36	11,058.00	10,911.50	21.95	65.60	40.40	-1,669.44	-8,469.91	8,349.61	8,349.61	27.12	217.715		
5,100.00	5,096.28	11,463.54	11,317.02	22.39	66.90	40.40	-1,673.17	-8,465.12	8,335.11	8,335.11	26.30	216.568		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	6,003.00	5,662.98	22.83	47.53	45.97	-1,005.00	-8,326.57	8,266.52	8,198.73	67.78	121.954	
5,300.00	5,296.11	6,066.01	5,725.59	23.27	47.79	46.02	-998.47	-8,323.79	8,258.26	8,189.77	68.49	120.574	
5,400.00	5,396.03	6,117.95	5,777.26	23.71	48.00	46.07	-993.58	-8,321.72	8,250.55	8,181.40	69.15	119.316	
5,500.00	5,495.95	6,164.23	5,823.32	24.14	48.18	46.10	-989.46	-8,320.15	8,243.48	8,173.70	69.78	118.141	
5,600.00	5,595.87	6,218.35	5,877.22	24.58	48.38	46.14	-984.83	-8,318.64	8,237.03	8,166.60	70.43	116.950	
5,700.00	5,695.79	6,286.00	5,944.60	25.02	48.64	46.20	-978.87	-8,317.07	8,231.04	8,159.90	71.14	115.703	
5,800.00	5,795.71	6,358.81	6,017.13	25.46	48.91	46.25	-972.71	-8,315.61	8,225.42	8,153.56	71.86	114.462	
5,900.00	5,895.63	6,435.95	6,094.04	25.90	49.19	46.31	-966.96	-8,314.20	8,220.10	8,147.51	72.59	113.241	
6,000.00	5,995.55	6,515.42	6,173.32	26.34	49.46	46.36	-961.72	-8,312.89	8,215.04	8,141.73	73.31	112.052	
6,100.00	6,095.47	6,570.00	6,227.81	26.78	49.65	46.39	-958.52	-8,312.05	8,210.28	8,136.34	73.94	111.035	
6,200.00	6,195.39	6,637.85	6,295.56	27.22	49.86	46.43	-955.00	-8,311.29	8,205.96	8,131.35	74.61	109.990	
6,300.00	6,295.31	6,702.80	6,360.45	27.66	50.06	46.46	-952.11	-8,310.95	8,202.23	8,126.98	75.25	108.997	
6,400.00	6,395.23	6,793.23	6,450.81	28.10	50.33	46.51	-948.85	-8,310.63	8,198.77	8,122.80	75.97	107.918	
6,500.00	6,495.02	6,899.93	6,557.47	28.54	50.63	10.91	-945.95	-8,310.10	8,192.94	8,116.21	76.73	106.774	
6,600.00	6,593.09	6,997.13	6,654.65	28.98	50.91	1.68	-943.64	-8,309.58	8,173.21	8,095.76	77.45	105.529	
6,700.00	6,687.01	7,089.39	6,746.89	29.41	51.16	-1.02	-941.63	-8,309.07	8,138.47	8,060.34	78.13	104.169	
6,800.00	6,774.46	7,174.55	6,832.03	29.83	51.40	-2.61	-940.05	-8,308.60	8,089.58	8,010.84	78.74	102.733	
6,900.00	6,853.31	7,250.91	6,908.38	30.26	51.61	-4.00	-938.87	-8,308.17	8,027.75	7,948.47	79.28	101.254	
7,000.00	6,921.60	7,316.11	6,973.57	30.76	51.78	-5.63	-938.01	-8,307.81	7,954.50	7,874.78	79.73	99.770	
7,100.00	6,977.66	7,369.53	7,026.99	31.38	51.92	-8.02	-937.40	-8,307.52	7,871.64	7,791.56	80.08	98.302	
7,200.00	7,020.10	7,409.86	7,067.31	32.17	52.03	-12.33	-937.00	-8,307.31	7,781.18	7,700.86	80.32	96.875	
7,300.00	7,047.88	7,441.10	7,098.55	33.13	52.12	-22.80	-936.71	-8,307.14	7,685.35	7,604.87	80.48	95.489	
7,400.00	7,060.32	7,456.50	7,113.95	34.27	52.16	-66.06	-936.57	-8,307.05	7,586.51	7,505.95	80.55	94.179	
7,500.00	7,060.70	7,456.19	7,113.64	35.56	52.16	-97.16	-936.57	-8,307.05	7,486.92	7,406.37	80.55	92.944	
7,600.00	7,060.27	7,454.82	7,112.27	37.02	52.15	-97.04	-936.59	-8,307.06	7,387.35	7,306.80	80.55	91.710	
7,700.00	7,059.83	7,453.46	7,110.91	38.64	52.15	-96.93	-936.60	-8,307.07	7,287.78	7,207.23	80.55	90.473	
7,800.00	7,059.40	7,452.12	7,109.57	40.40	52.15	-96.82	-936.61	-8,307.08	7,188.23	7,107.67	80.56	89.231	
7,900.00	7,058.97	7,450.78	7,108.23	42.28	52.14	-96.71	-936.62	-8,307.09	7,088.69	7,008.12	80.57	87.985	
8,000.00	7,058.53	7,449.46	7,106.91	44.27	52.14	-96.60	-936.63	-8,307.10	6,989.16	6,908.58	80.58	86.735	
8,100.00	7,058.10	7,448.14	7,105.59	46.35	52.14	-96.49	-936.65	-8,307.10	6,889.65	6,809.05	80.60	85.481	
8,200.00	7,057.66	7,446.84	7,104.29	48.50	52.13	-96.38	-936.66	-8,307.11	6,790.15	6,709.53	80.62	84.222	
8,300.00	7,057.23	7,445.54	7,102.99	50.73	52.13	-96.27	-936.67	-8,307.12	6,690.67	6,610.02	80.65	82.959	
8,400.00	7,056.80	7,444.26	7,101.71	53.02	52.13	-96.16	-936.68	-8,307.13	6,591.20	6,510.51	80.68	81.691	
8,500.00	7,056.36	7,442.98	7,100.43	55.36	52.12	-96.06	-936.69	-8,307.13	6,491.75	6,411.02	80.72	80.419	
8,600.00	7,055.93	7,441.72	7,099.17	57.74	52.12	-95.95	-936.71	-8,307.14	6,392.31	6,311.54	80.77	79.142	
8,700.00	7,055.49	7,440.46	7,097.91	60.17	52.12	-95.85	-936.72	-8,307.15	6,292.89	6,212.07	80.82	77.861	
8,800.00	7,055.06	7,439.21	7,096.66	62.63	52.11	-95.74	-936.73	-8,307.16	6,193.49	6,112.61	80.88	76.574	
8,900.00	7,054.63	7,437.97	7,095.43	65.13	52.11	-95.64	-936.74	-8,307.16	6,094.11	6,013.16	80.95	75.283	
9,000.00	7,054.19	7,436.74	7,094.20	67.66	52.11	-95.54	-936.75	-8,307.17	5,994.75	5,913.73	81.03	73.986	
9,100.00	7,053.76	7,435.52	7,092.98	70.21	52.10	-95.43	-936.76	-8,307.18	5,895.41	5,814.30	81.11	72.685	
9,200.00	7,053.32	7,434.31	7,091.77	72.78	52.10	-95.33	-936.77	-8,307.18	5,796.10	5,714.89	81.20	71.378	
9,300.00	7,052.89	7,433.11	7,090.56	75.38	52.10	-95.23	-936.78	-8,307.19	5,696.80	5,615.50	81.31	70.066	
9,400.00	7,052.46	7,431.92	7,089.37	77.99	52.09	-95.13	-936.80	-8,307.20	5,597.54	5,516.12	81.42	68.749	
9,500.00	7,052.02	7,430.73	7,088.18	80.62	52.09	-95.03	-936.81	-8,307.20	5,498.30	5,416.75	81.55	67.426	
9,600.00	7,051.59	7,429.56	7,087.01	83.26	52.09	-94.93	-936.82	-8,307.21	5,399.08	5,317.40	81.68	66.097	
9,700.00	7,051.15	7,428.39	7,085.84	85.92	52.08	-94.84	-936.83	-8,307.22	5,299.90	5,218.06	81.83	64.763	
9,800.00	7,050.72	7,427.23	7,084.68	88.59	52.08	-94.74	-936.84	-8,307.22	5,200.75	5,118.74	82.00	63.423	
9,900.00	7,050.29	7,426.08	7,083.53	91.28	52.08	-94.64	-936.85	-8,307.23	5,101.63	5,019.44	82.18	62.078	
10,000.00	7,049.85	7,424.93	7,082.39	93.97	52.07	-94.55	-936.86	-8,307.23	5,002.54	4,920.16	82.38	60.726	
10,100.00	7,049.42	7,423.80	7,081.25	96.67	52.07	-94.45	-936.87	-8,307.24	4,903.49	4,820.90	82.59	59.369	
10,200.00	7,048.98	7,422.67	7,080.12	99.38	52.07	-94.36	-936.88	-8,307.25	4,804.48	4,721.65	82.83	58.005	
10,300.00	7,048.55	7,421.63	7,079.08	102.10	52.06	-94.27	-936.89	-8,307.25	4,705.52	4,622.43	83.08	56.636	

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	7,420.70	7,078.15	104.83	52.06	-94.19	-936.90	-8,307.26	4,606.59	4,523.23	83.36	55.260	
10,500.00	7,047.68	7,419.77	7,077.23	107.56	52.06	-94.11	-936.91	-8,307.26	4,507.72	4,424.05	83.66	53.878	
10,600.00	7,047.25	7,418.84	7,076.30	110.30	52.06	-94.04	-936.92	-8,307.27	4,408.89	4,324.90	83.99	52.491	
10,700.00	7,046.81	7,417.91	7,075.37	113.05	52.05	-93.96	-936.92	-8,307.27	4,310.12	4,225.77	84.35	51.097	
10,800.00	7,046.38	7,416.99	7,074.44	115.80	52.05	-93.88	-936.93	-8,307.27	4,211.41	4,126.67	84.74	49.698	
10,900.00	7,045.95	7,416.06	7,073.51	118.55	52.05	-93.80	-936.94	-8,307.28	4,112.76	4,027.59	85.16	48.293	
11,000.00	7,045.51	7,415.12	7,072.58	121.31	52.05	-93.72	-936.95	-8,307.28	4,014.17	3,928.55	85.62	46.883	
11,100.00	7,045.08	7,414.19	7,071.65	124.08	52.04	-93.65	-936.96	-8,307.29	3,915.66	3,829.54	86.12	45.467	
11,200.00	7,044.64	7,413.26	7,070.72	126.85	52.04	-93.57	-936.97	-8,307.29	3,817.22	3,730.56	86.66	44.047	
11,300.00	7,044.21	7,412.33	7,069.78	129.62	52.04	-93.49	-936.98	-8,307.30	3,718.87	3,631.62	87.25	42.622	
11,400.00	7,043.78	7,411.40	7,068.85	132.40	52.04	-93.41	-936.98	-8,307.30	3,620.60	3,532.71	87.89	41.193	
11,500.00	7,043.34	7,410.47	7,067.92	135.18	52.03	-93.33	-936.99	-8,307.31	3,522.44	3,433.85	88.59	39.761	
11,600.00	7,042.91	7,409.53	7,066.99	137.96	52.03	-93.25	-937.00	-8,307.31	3,424.38	3,335.03	89.35	38.326	
11,700.00	7,042.47	7,408.60	7,066.05	140.75	52.03	-93.18	-937.01	-8,307.32	3,326.44	3,236.26	90.17	36.889	
11,800.00	7,042.04	7,407.66	7,065.12	143.54	52.03	-93.10	-937.02	-8,307.32	3,228.62	3,137.54	91.07	35.450	
11,900.00	7,041.61	7,406.73	7,064.18	146.33	52.02	-93.02	-937.03	-8,307.33	3,130.94	3,038.88	92.06	34.011	
12,000.00	7,041.17	7,405.79	7,063.25	149.13	52.02	-92.94	-937.04	-8,307.33	3,033.40	2,940.28	93.13	32.573	
12,100.00	7,040.74	7,404.86	7,062.31	151.92	52.02	-92.86	-937.05	-8,307.34	2,936.04	2,841.75	94.29	31.137	
12,200.00	7,040.30	7,403.92	7,061.38	154.72	52.02	-92.78	-937.06	-8,307.34	2,838.86	2,743.29	95.57	29.705	
12,300.00	7,039.87	7,402.99	7,060.44	157.52	52.01	-92.70	-937.06	-8,307.35	2,741.88	2,644.91	96.96	28.277	
12,400.00	7,039.44	7,402.05	7,059.50	160.33	52.01	-92.62	-937.07	-8,307.35	2,645.12	2,546.63	98.49	26.856	
12,500.00	7,039.00	7,401.11	7,058.57	163.13	52.01	-92.55	-937.08	-8,307.36	2,548.62	2,448.45	100.17	25.444	
12,600.00	7,038.57	7,400.17	7,057.63	165.94	52.01	-92.47	-937.09	-8,307.36	2,452.40	2,350.39	102.01	24.042	
12,700.00	7,038.13	7,399.23	7,056.69	168.75	52.00	-92.39	-937.10	-8,307.37	2,356.49	2,252.46	104.02	22.653	
12,800.00	7,037.70	7,398.30	7,055.75	171.56	52.00	-92.31	-937.11	-8,307.37	2,260.93	2,154.68	106.25	21.280	
12,900.00	7,037.27	7,397.36	7,054.81	174.37	52.00	-92.23	-937.12	-8,307.38	2,165.77	2,057.07	108.70	19.925	
13,000.00	7,036.83	7,396.42	7,053.87	177.19	52.00	-92.15	-937.13	-8,307.38	2,071.07	1,959.67	111.40	18.591	
13,100.00	7,036.40	7,395.48	7,052.93	180.00	51.99	-92.07	-937.14	-8,307.39	1,976.90	1,862.50	114.40	17.281	
13,200.00	7,035.96	7,394.53	7,051.99	182.82	51.99	-91.99	-937.15	-8,307.39	1,883.32	1,765.60	117.72	15.998	
13,300.00	7,035.53	7,393.59	7,051.05	185.64	51.99	-91.91	-937.16	-8,307.40	1,790.43	1,669.02	121.41	14.747	
13,400.00	7,035.10	7,392.65	7,050.11	188.46	51.99	-91.83	-937.17	-8,307.40	1,698.36	1,572.84	125.52	13.531	
13,500.00	7,034.66	7,391.71	7,049.16	191.28	51.98	-91.75	-937.18	-8,307.41	1,607.23	1,477.12	130.10	12.353	
13,600.00	7,034.23	7,390.77	7,048.22	194.10	51.98	-91.67	-937.18	-8,307.41	1,517.21	1,381.98	135.23	11.219	
13,700.00	7,033.79	7,389.82	7,047.28	196.92	51.98	-91.60	-937.19	-8,307.42	1,428.53	1,287.55	140.98	10.133	
13,800.00	7,033.36	7,388.88	7,046.33	199.74	51.98	-91.52	-937.20	-8,307.42	1,341.44	1,194.01	147.43	9.099	
13,900.00	7,032.93	7,387.94	7,045.39	202.57	51.97	-91.44	-937.21	-8,307.43	1,256.27	1,101.59	154.68	8.122	
14,000.00	7,032.49	7,386.99	7,044.45	205.39	51.97	-91.36	-937.22	-8,307.43	1,173.44	1,010.62	162.82	7.207	
14,100.00	7,032.06	7,386.05	7,043.50	208.22	51.97	-91.28	-937.23	-8,307.44	1,093.49	921.53	171.96	6.359	
14,200.00	7,031.62	7,385.10	7,042.56	211.05	51.97	-91.20	-937.24	-8,307.44	1,017.09	834.93	182.15	5.584	
14,300.00	7,031.19	7,384.15	7,041.61	213.87	51.96	-91.12	-937.25	-8,307.45	945.10	751.66	193.44	4.886	
14,400.00	7,030.76	7,383.21	7,040.66	216.70	51.96	-91.04	-937.26	-8,307.45	878.61	672.86	205.75	4.270	
14,500.00	7,030.32	7,382.26	7,039.72	219.53	51.96	-90.96	-937.27	-8,307.46	818.96	600.10	218.87	3.742	
14,600.00	7,029.89	7,381.31	7,038.77	222.36	51.96	-90.88	-937.28	-8,307.46	767.75	535.41	232.34	3.304	
14,700.00	7,029.45	7,380.36	7,037.82	225.19	51.95	-90.80	-937.29	-8,307.47	726.76	481.35	245.41	2.961	
14,800.00	7,029.02	7,379.42	7,036.87	228.03	51.95	-90.72	-937.30	-8,307.47	697.80	440.79	257.01	2.715	
14,805.04	7,029.00	7,379.37	7,036.82	228.17	51.95	-90.71	-937.30	-8,307.47	696.69	439.15	257.54	2.705 CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-108.06	-2,936.85	-9,004.13	9,471.04					
100.00	100.00	37.00	73.00	3.28	3.28	-108.06	-2,936.77	-9,004.21	9,471.07	9,464.50	6.57	1,442.525		
200.00	200.00	94.81	130.80	3.34	3.29	-108.06	-2,936.33	-9,004.66	9,471.57	9,464.95	6.62	1,430.124		
300.00	300.00	168.00	203.98	3.44	3.30	-108.05	-2,935.21	-9,005.80	9,472.55	9,465.81	6.74	1,404.831		
400.00	400.00	168.00	203.98	3.60	3.30	-108.05	-2,935.21	-9,005.80	9,474.09	9,467.19	6.90	1,372.564		
500.00	499.98	212.67	248.62	3.80	3.33	33.75	-2,934.35	-9,007.01	9,474.83	9,467.70	7.12	1,330.132		
600.00	599.90	259.00	294.90	4.02	3.37	33.76	-2,933.46	-9,008.93	9,474.65	9,467.27	7.39	1,282.629		
611.12	611.01	259.00	294.90	4.05	3.37	33.76	-2,933.46	-9,008.93	9,474.65	9,467.23	7.41	1,277.856		
700.00	699.82	259.00	294.90	4.28	3.37	33.76	-2,933.46	-9,008.93	9,475.06	9,467.42	7.65	1,238.907		
800.00	799.74	292.63	328.49	4.57	3.40	33.77	-2,932.93	-9,010.71	9,476.32	9,468.35	7.97	1,188.659		
900.00	899.66	350.00	385.74	4.88	3.48	33.79	-2,932.45	-9,014.33	9,478.50	9,470.14	8.36	1,134.139		
1,000.00	999.58	350.00	385.74	5.21	3.48	33.79	-2,932.45	-9,014.33	9,481.11	9,472.42	8.69	1,091.067		
1,100.00	1,099.50	410.00	445.58	5.55	3.58	33.81	-2,932.28	-9,018.61	9,484.48	9,475.35	9.13	1,038.784		
1,200.00	1,199.42	487.46	522.82	5.91	3.74	33.83	-2,932.12	-9,024.41	9,488.21	9,478.57	9.64	984.741		
1,300.00	1,299.34	532.00	567.24	6.28	3.84	33.84	-2,931.97	-9,027.80	9,492.18	9,482.08	10.10	939.792		
1,400.00	1,399.26	587.58	622.64	6.66	3.98	33.86	-2,931.93	-9,032.30	9,496.65	9,486.04	10.61	895.194		
1,500.00	1,499.18	644.00	678.83	7.04	4.14	33.88	-2,932.25	-9,037.34	9,501.89	9,490.75	11.14	853.243		
1,600.00	1,599.10	674.76	709.45	7.43	4.23	33.88	-2,932.55	-9,040.24	9,507.65	9,496.04	11.61	818.974		
1,700.00	1,699.01	766.60	800.86	7.83	4.52	33.91	-2,933.66	-9,049.05	9,513.82	9,501.55	12.27	775.568		
1,800.00	1,798.93	872.50	906.28	8.23	4.88	33.93	-2,934.92	-9,059.03	9,519.84	9,506.85	12.99	732.587		
1,900.00	1,898.85	1,900.00	1,100.32	8.64	9.11	33.99	-2,935.39	-9,077.22	9,525.57	9,508.20	17.37	548.316		
2,000.00	1,998.77	1,129.63	1,162.31	9.05	5.85	34.01	-2,935.33	-9,082.68	9,530.68	9,515.98	14.69	648.708		
2,100.00	2,098.69	1,155.73	1,188.29	9.46	5.95	34.02	-2,935.22	-9,085.22	9,536.52	9,521.33	15.20	627.595		
2,200.00	2,198.61	1,190.00	1,222.36	9.88	6.09	34.03	-2,935.02	-9,088.90	9,543.15	9,527.42	15.73	606.615		
2,300.00	2,298.53	1,190.00	1,222.36	10.30	6.09	34.03	-2,935.02	-9,088.90	9,550.59	9,534.45	16.14	591.693		
2,400.00	2,398.45	1,245.00	1,276.97	10.72	6.33	34.05	-2,934.64	-9,095.45	9,558.59	9,541.82	16.76	570.250		
2,500.00	2,498.37	1,285.00	1,316.63	11.14	6.50	34.07	-2,934.39	-9,100.63	9,567.37	9,550.04	17.33	552.132		
2,600.00	2,598.29	1,285.00	1,316.63	11.56	6.50	34.07	-2,934.39	-9,100.63	9,576.94	9,559.20	17.74	539.928		
2,700.00	2,698.21	1,344.98	1,376.04	11.98	6.77	34.09	-2,934.42	-9,108.91	9,586.99	9,568.60	18.39	521.440		
2,800.00	2,798.13	1,379.00	1,409.70	12.41	6.92	34.10	-2,934.79	-9,113.83	9,597.82	9,578.89	18.93	506.975		
2,900.00	2,898.05	1,416.84	1,447.10	12.84	7.10	34.11	-2,935.22	-9,119.56	9,609.31	9,589.82	19.49	492.918		
3,000.00	2,997.97	1,475.00	1,504.49	13.27	7.38	34.14	-2,935.44	-9,128.98	9,621.50	9,601.35	20.14	477.640		
3,100.00	3,097.89	1,475.00	1,504.49	13.69	7.38	34.14	-2,935.44	-9,128.98	9,634.24	9,613.69	20.55	468.846		
3,200.00	3,197.81	1,530.41	1,559.07	14.12	7.65	34.16	-2,935.54	-9,138.53	9,647.59	9,626.40	21.19	455.295		
3,300.00	3,297.73	1,570.00	1,598.02	14.56	7.85	34.18	-2,935.80	-9,145.63	9,661.61	9,639.85	21.76	443.938		
3,400.00	3,397.65	1,614.49	1,641.74	14.99	8.08	34.20	-2,936.15	-9,153.86	9,676.22	9,653.86	22.36	432.751		
3,500.00	3,497.56	1,665.00	1,691.32	15.42	8.34	34.22	-2,936.46	-9,163.50	9,691.37	9,668.38	22.98	421.668		
3,600.00	3,597.48	1,665.00	1,691.32	15.85	8.34	34.22	-2,936.46	-9,163.50	9,707.24	9,683.86	23.38	415.194		
3,700.00	3,697.40	1,724.53	1,749.62	16.28	8.67	34.25	-2,936.74	-9,175.48	9,723.54	9,699.49	24.05	404.370		
3,800.00	3,797.32	1,759.00	1,783.31	16.72	8.85	34.26	-2,936.85	-9,182.80	9,740.66	9,716.06	24.60	396.002		
3,900.00	3,897.24	1,787.64	1,811.26	17.15	9.02	34.28	-2,937.06	-9,189.05	9,758.45	9,733.33	25.12	388.455		
4,000.00	3,997.16	1,820.02	1,842.83	17.59	9.20	34.29	-2,937.58	-9,196.23	9,776.92	9,751.25	25.66	381.003		
4,100.00	4,097.08	1,853.00	1,874.94	18.02	9.39	34.31	-2,938.44	-9,203.69	9,796.04	9,769.84	26.20	373.861		
4,200.00	4,197.00	1,909.73	1,930.12	18.46	9.72	34.33	-2,940.17	-9,216.74	9,815.70	9,788.84	26.86	365.486		
4,300.00	4,296.92	1,969.96	1,988.65	18.89	10.08	34.35	-2,941.98	-9,230.85	9,835.76	9,808.23	27.53	357.292		
4,400.00	4,396.84	2,042.00	2,058.58	19.33	10.52	34.38	-2,944.11	-9,248.01	9,856.17	9,827.91	28.26	348.763		
4,500.00	4,496.76	2,042.00	2,058.58	19.77	10.52	34.38	-2,944.11	-9,248.01	9,877.15	9,848.52	28.64	344.915		
4,600.00	4,596.68	2,042.00	2,058.58	20.20	10.52	34.38	-2,944.11	-9,248.01	9,899.10	9,870.09	29.01	341.246		
4,700.00	4,696.60	2,042.00	2,058.58	20.64	10.52	34.38	-2,944.11	-9,248.01	9,922.01	9,892.63	29.38	337.748		
4,800.00	4,796.52	2,094.87	2,109.65	21.08	10.86	34.40	-2,945.55	-9,261.61	9,944.86	9,914.85	30.01	331.352		
4,900.00	4,896.44	2,137.00	2,149.98	21.51	11.14	34.42	-2,946.53	-9,273.75	9,969.39	9,938.80	30.59	325.873		
5,000.00	4,996.36	2,513.00	2,512.26	21.95	13.64	34.62	-2,950.35	-9,373.93	9,991.01	9,958.07	32.94	303.322		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
7,300.00	7,047.88	6,956.91	6,841.65	33.13	40.49	-50.92	-2,974.06	-10,248.02	9,983.89	9,921.16	62.72	159.173		
7,400.00	7,060.32	6,974.00	6,858.74	34.27	40.55	-76.58	-2,974.36	-10,248.31	9,888.69	9,825.78	62.91	157.186		
7,500.00	7,060.70	6,974.00	6,858.74	35.56	40.55	-86.59	-2,974.36	-10,248.31	9,792.57	9,729.55	63.03	155.370		
7,600.00	7,060.27	6,974.00	6,858.74	37.02	40.55	-86.59	-2,974.36	-10,248.31	9,696.52	9,633.35	63.17	153.505		
7,700.00	7,059.83	6,974.00	6,858.74	38.64	40.55	-86.59	-2,974.36	-10,248.31	9,600.54	9,537.21	63.33	151.587		
7,800.00	7,059.40	6,974.00	6,858.74	40.40	40.55	-86.59	-2,974.36	-10,248.31	9,504.65	9,441.13	63.53	149.614		
7,900.00	7,058.97	6,974.00	6,858.74	42.28	40.55	-86.59	-2,974.36	-10,248.31	9,408.85	9,345.10	63.75	147.587		
8,000.00	7,058.53	6,974.00	6,858.74	44.27	40.55	-86.59	-2,974.36	-10,248.31	9,313.13	9,249.13	64.00	145.507		
8,100.00	7,058.10	6,974.00	6,858.74	46.35	40.55	-86.59	-2,974.36	-10,248.31	9,217.51	9,153.22	64.29	143.375		
8,200.00	7,057.66	6,974.00	6,858.74	48.50	40.55	-86.59	-2,974.36	-10,248.31	9,121.97	9,057.37	64.61	141.194		
8,300.00	7,057.23	6,974.00	6,858.74	50.73	40.55	-86.59	-2,974.36	-10,248.31	9,026.54	8,961.58	64.96	138.963		
8,400.00	7,056.80	6,977.89	6,862.64	53.02	40.56	-86.67	-2,974.42	-10,248.37	8,931.20	8,865.85	65.35	136.663		
8,500.00	7,056.36	6,978.92	6,863.66	55.36	40.56	-86.70	-2,974.44	-10,248.39	8,835.97	8,770.19	65.77	134.337		
8,600.00	7,055.93	6,979.95	6,864.69	57.74	40.57	-86.72	-2,974.46	-10,248.41	8,740.84	8,674.61	66.23	131.970		
8,700.00	7,055.49	6,980.97	6,865.71	60.17	40.57	-86.74	-2,974.48	-10,248.43	8,645.82	8,579.09	66.73	129.565		
8,800.00	7,055.06	6,982.00	6,866.74	62.63	40.57	-86.76	-2,974.50	-10,248.44	8,550.92	8,483.66	67.26	127.125		
8,900.00	7,054.63	6,983.02	6,867.76	65.13	40.58	-86.78	-2,974.52	-10,248.46	8,456.13	8,388.30	67.84	124.654		
9,000.00	7,054.19	6,984.04	6,868.78	67.66	40.58	-86.80	-2,974.54	-10,248.48	8,361.47	8,293.02	68.45	122.155		
9,100.00	7,053.76	6,985.05	6,869.79	70.21	40.58	-86.83	-2,974.56	-10,248.50	8,266.93	8,197.83	69.10	119.631		
9,200.00	7,053.32	6,986.07	6,870.81	72.78	40.59	-86.85	-2,974.58	-10,248.51	8,172.52	8,102.72	69.80	117.087		
9,300.00	7,052.89	6,987.09	6,871.82	75.38	40.59	-86.87	-2,974.59	-10,248.53	8,078.25	8,007.71	70.54	114.526		
9,400.00	7,052.46	6,988.10	6,872.84	77.99	40.59	-86.89	-2,974.61	-10,248.55	7,984.11	7,912.79	71.32	111.952		
9,500.00	7,052.02	6,989.11	6,873.85	80.62	40.60	-86.91	-2,974.63	-10,248.56	7,890.12	7,817.98	72.14	109.370		
9,600.00	7,051.59	6,990.12	6,874.86	83.26	40.60	-86.93	-2,974.65	-10,248.58	7,796.27	7,723.26	73.01	106.781		
9,700.00	7,051.15	6,991.12	6,875.86	85.92	40.60	-86.95	-2,974.67	-10,248.60	7,702.59	7,628.66	73.93	104.192		
9,800.00	7,050.72	6,992.13	6,876.87	88.59	40.61	-86.97	-2,974.69	-10,248.61	7,609.06	7,534.17	74.89	101.604		
9,900.00	7,050.29	6,993.13	6,877.87	91.28	40.61	-87.00	-2,974.71	-10,248.63	7,515.70	7,439.80	75.90	99.022		
10,000.00	7,049.85	6,994.14	6,878.87	93.97	40.61	-87.02	-2,974.73	-10,248.65	7,422.51	7,345.55	76.96	96.450		
10,100.00	7,049.42	6,995.14	6,879.87	96.67	40.62	-87.04	-2,974.75	-10,248.67	7,329.50	7,251.44	78.06	93.891		
10,200.00	7,048.98	6,996.13	6,880.87	99.38	40.62	-87.06	-2,974.77	-10,248.68	7,236.68	7,157.46	79.22	91.347		
10,300.00	7,048.55	6,997.13	6,881.87	102.10	40.62	-87.08	-2,974.79	-10,248.70	7,144.05	7,063.62	80.43	88.822		
10,400.00	7,048.12	6,998.13	6,882.86	104.83	40.63	-87.10	-2,974.81	-10,248.72	7,051.62	6,969.93	81.69	86.319		
10,500.00	7,047.68	6,999.12	6,883.86	107.56	40.63	-87.12	-2,974.83	-10,248.73	6,959.40	6,876.40	83.01	83.841		
10,600.00	7,047.25	7,000.11	6,884.85	110.30	40.63	-87.14	-2,974.85	-10,248.75	6,867.40	6,783.03	84.38	81.390		
10,700.00	7,046.81	7,001.10	6,885.84	113.05	40.64	-87.16	-2,974.87	-10,248.77	6,775.63	6,689.83	85.80	78.968		
10,800.00	7,046.38	7,002.09	6,886.82	115.80	40.64	-87.19	-2,974.89	-10,248.78	6,684.09	6,596.81	87.28	76.578		
10,900.00	7,045.95	7,003.08	6,887.81	118.55	40.64	-87.21	-2,974.92	-10,248.80	6,592.80	6,503.97	88.83	74.221		
11,000.00	7,045.51	7,004.06	6,888.80	121.31	40.65	-87.23	-2,974.94	-10,248.82	6,501.76	6,411.33	90.43	71.901		
11,100.00	7,045.08	7,005.05	6,889.78	124.08	40.65	-87.25	-2,974.96	-10,248.83	6,410.99	6,318.90	92.09	69.617		
11,200.00	7,044.64	7,006.03	6,890.76	126.85	40.65	-87.27	-2,974.98	-10,248.85	6,320.50	6,226.68	93.82	67.371		
11,300.00	7,044.21	7,007.01	6,891.74	129.62	40.66	-87.29	-2,975.00	-10,248.86	6,230.30	6,134.69	95.61	65.166		
11,400.00	7,043.78	7,007.99	6,892.72	132.40	40.66	-87.31	-2,975.02	-10,248.88	6,140.40	6,042.94	97.46	63.002		
11,500.00	7,043.34	7,008.96	6,893.69	135.18	40.66	-87.33	-2,975.04	-10,248.90	6,050.82	5,951.43	99.39	60.880		
11,600.00	7,042.91	7,009.94	6,894.67	137.96	40.67	-87.35	-2,975.06	-10,248.91	5,961.57	5,860.19	101.39	58.801		
11,700.00	7,042.47	7,010.91	6,895.64	140.75	40.67	-87.37	-2,975.08	-10,248.93	5,872.67	5,769.21	103.45	56.766		
11,800.00	7,042.04	7,011.88	6,896.61	143.54	40.67	-87.39	-2,975.11	-10,248.95	5,784.13	5,678.53	105.60	54.776		
11,900.00	7,041.61	7,012.85	6,897.58	146.33	40.68	-87.41	-2,975.13	-10,248.96	5,695.96	5,588.15	107.82	52.830		
12,000.00	7,041.17	7,013.82	6,898.55	149.13	40.68	-87.43	-2,975.15	-10,248.98	5,608.20	5,498.08	110.12	50.930		
12,100.00	7,040.74	7,014.79	6,899.52	151.92	40.68	-87.45	-2,975.17	-10,248.99	5,520.85	5,408.35	112.50	49.076		
12,200.00	7,040.30	7,015.75	6,900.48	154.72	40.69	-87.47	-2,975.19	-10,249.01	5,433.94	5,318.98	114.96	47.268		
12,300.00	7,039.87	7,016.71	6,901.44	157.52	40.69	-87.49	-2,975.21	-10,249.03	5,347.48	5,229.97	117.51	45.506		
12,400.00	7,039.44	7,017.68	6,902.40	160.33	40.69	-87.51	-2,975.24	-10,249.04	5,261.50	5,141.35	120.15	43.790		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
12,500.00	7,039.00	7,018.64	6,903.36	163.13	40.70	-87.54	-2,975.26	-10,249.06	5,176.03	5,053.14	122.89	42.120		
12,600.00	7,038.57	7,019.60	6,904.32	165.94	40.70	-87.56	-2,975.28	-10,249.07	5,091.09	4,965.37	125.72	40.497		
12,700.00	7,038.13	7,020.55	6,905.28	168.75	40.70	-87.58	-2,975.30	-10,249.09	5,006.70	4,878.06	128.64	38.920		
12,800.00	7,037.70	7,021.51	6,906.23	171.56	40.71	-87.60	-2,975.33	-10,249.11	4,922.90	4,791.23	131.67	37.388		
12,900.00	7,037.27	7,022.46	6,907.19	174.37	40.71	-87.62	-2,975.35	-10,249.12	4,839.71	4,704.91	134.80	35.902		
13,000.00	7,036.83	7,023.41	6,908.14	177.19	40.71	-87.64	-2,975.37	-10,249.14	4,757.17	4,619.13	138.04	34.462		
13,100.00	7,036.40	7,024.36	6,909.09	180.00	40.71	-87.66	-2,975.39	-10,249.15	4,675.31	4,533.92	141.39	33.066		
13,200.00	7,035.96	7,025.31	6,910.04	182.82	40.72	-87.68	-2,975.41	-10,249.17	4,594.17	4,449.31	144.85	31.716		
13,300.00	7,035.53	7,026.26	6,910.98	185.64	40.72	-87.70	-2,975.44	-10,249.18	4,513.78	4,365.35	148.44	30.409		
13,400.00	7,035.10	7,027.21	6,911.93	188.46	40.72	-87.72	-2,975.46	-10,249.20	4,434.19	4,282.06	152.14	29.146		
13,500.00	7,034.66	7,028.15	6,912.87	191.28	40.73	-87.74	-2,975.48	-10,249.21	4,355.45	4,199.49	155.96	27.927		
13,600.00	7,034.23	7,029.09	6,913.82	194.10	40.73	-87.76	-2,975.51	-10,249.23	4,277.59	4,117.68	159.91	26.751		
13,700.00	7,033.79	7,030.03	6,914.76	196.92	40.73	-87.78	-2,975.53	-10,249.25	4,200.67	4,036.69	163.98	25.617		
13,800.00	7,033.36	7,030.97	6,915.69	199.74	40.74	-87.80	-2,975.55	-10,249.26	4,124.74	3,956.55	168.19	24.525		
13,900.00	7,032.93	7,031.91	6,916.63	202.57	40.74	-87.82	-2,975.57	-10,249.28	4,049.85	3,877.33	172.53	23.474		
14,000.00	7,032.49	7,032.85	6,917.57	205.39	40.74	-87.84	-2,975.60	-10,249.29	3,976.07	3,799.07	177.00	22.464		
14,100.00	7,032.06	7,033.78	6,918.50	208.22	40.75	-87.86	-2,975.62	-10,249.31	3,903.46	3,721.85	181.61	21.494		
14,200.00	7,031.62	7,034.71	6,919.44	211.05	40.75	-87.88	-2,975.64	-10,249.32	3,832.08	3,645.73	186.35	20.564		
14,300.00	7,031.19	7,035.65	6,920.37	213.87	40.75	-87.89	-2,975.67	-10,249.34	3,762.00	3,570.78	191.22	19.673		
14,400.00	7,030.76	7,036.58	6,921.30	216.70	40.76	-87.91	-2,975.69	-10,249.35	3,693.31	3,497.07	196.24	18.821		
14,500.00	7,030.32	7,037.50	6,922.22	219.53	40.76	-87.93	-2,975.71	-10,249.37	3,626.06	3,424.69	201.38	18.006		
14,600.00	7,029.89	7,038.43	6,923.15	222.36	40.76	-87.95	-2,975.74	-10,249.38	3,560.36	3,353.71	206.65	17.229		
14,700.00	7,029.45	7,039.36	6,924.08	225.19	40.76	-87.97	-2,975.76	-10,249.40	3,496.28	3,284.24	212.04	16.489		
14,800.00	7,029.02	7,040.28	6,925.00	228.03	40.77	-87.99	-2,975.79	-10,249.41	3,433.92	3,216.37	217.55	15.784		
14,805.04	7,029.00	7,040.33	6,925.05	228.17	40.77	-87.99	-2,975.79	-10,249.41	3,430.83	3,212.99	217.83	15.750	CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-107.78	-2,869.11	-8,948.19	9,396.98					
100.00	100.00	37.00	73.00	3.28	3.28	-107.78	-2,869.03	-8,948.27	9,397.00	9,390.43	6.57	1,431.261		
200.00	200.00	94.81	130.81	3.34	3.29	-107.77	-2,868.60	-8,948.72	9,397.51	9,390.89	6.62	1,419.051		
300.00	300.00	466.58	502.42	3.44	3.72	-107.72	-2,859.02	-8,947.67	9,395.52	9,388.35	7.17	1,310.224		
400.00	400.00	731.53	767.18	3.60	4.39	-107.68	-2,850.59	-8,942.26	9,392.80	9,384.80	8.01	1,173.236		
500.00	499.98	793.69	829.26	3.80	4.58	34.19	-2,848.01	-8,940.58	9,387.57	9,379.19	8.38	1,119.657		
600.00	599.90	850.00	885.47	4.02	4.76	34.23	-2,844.90	-8,939.72	9,381.09	9,372.31	8.78	1,067.970		
700.00	699.82	886.39	921.78	4.28	4.88	34.25	-2,842.49	-8,939.51	9,375.12	9,365.96	9.16	1,023.731		
800.00	799.74	945.00	980.22	4.57	5.08	34.28	-2,838.00	-8,939.68	9,369.71	9,360.07	9.64	972.001		
900.00	899.66	1,012.64	1,047.54	4.88	5.32	34.33	-2,831.51	-8,940.56	9,364.71	9,354.52	10.19	919.154		
1,000.00	999.58	1,160.31	1,193.97	5.21	5.89	34.47	-2,812.69	-8,943.64	9,359.55	9,348.46	11.08	844.488		
1,100.00	1,099.50	1,568.43	1,594.72	5.55	7.77	34.98	-2,736.64	-8,951.63	9,352.56	9,339.27	13.29	703.613		
1,200.00	1,199.42	1,200.00	1,973.67	5.91	5.93	35.65	-2,634.12	-8,954.54	9,341.80	9,330.28	11.52	810.933		
1,300.00	1,299.34	2,044.66	2,053.80	6.28	10.54	35.80	-2,610.37	-8,954.34	9,330.13	9,313.40	16.73	557.524		
1,400.00	1,399.26	2,081.00	2,088.61	6.66	10.77	35.87	-2,599.94	-8,954.52	9,319.13	9,301.79	17.34	537.493		
1,500.00	1,499.18	2,129.39	2,134.91	7.04	11.09	35.96	-2,585.89	-8,955.09	9,308.76	9,290.72	18.03	516.200		
1,600.00	1,599.10	2,175.00	2,178.46	7.43	11.38	36.05	-2,572.35	-8,955.99	9,298.99	9,280.27	18.72	496.773		
1,700.00	1,699.01	2,408.29	2,400.49	7.83	12.97	36.51	-2,500.85	-8,959.52	9,288.34	9,267.67	20.67	449.331		
1,800.00	1,798.93	2,520.93	2,507.60	8.23	13.76	36.74	-2,466.03	-8,960.67	9,277.61	9,255.77	21.84	424.774		
1,900.00	1,898.85	2,621.16	2,603.14	8.64	14.46	36.94	-2,435.75	-8,961.22	9,266.74	9,243.80	22.93	404.050		
2,000.00	1,998.77	2,773.31	2,747.32	9.05	15.56	37.25	-2,387.13	-8,962.29	9,255.64	9,231.22	24.42	379.028		
2,100.00	2,098.69	2,838.00	2,808.42	9.46	16.04	37.39	-2,365.90	-8,962.81	9,244.55	9,219.25	25.31	365.298		
2,200.00	2,198.61	2,893.66	2,861.27	9.88	16.43	37.50	-2,348.45	-8,963.24	9,233.93	9,207.82	26.12	353.546		
2,300.00	2,298.53	2,950.12	2,915.33	10.30	16.83	37.61	-2,332.20	-8,963.53	9,223.84	9,196.91	26.93	342.454		
2,400.00	2,398.45	3,015.22	2,977.68	10.72	17.29	37.73	-2,313.48	-8,964.10	9,214.18	9,186.38	27.81	331.383		
2,500.00	2,498.37	3,194.03	3,149.07	11.14	18.53	38.07	-2,262.51	-8,964.57	9,203.93	9,174.49	29.44	312.622		
2,600.00	2,598.29	2,600.00	3,269.89	11.56	14.46	38.30	-2,227.57	-8,964.02	9,193.47	9,167.60	25.86	355.444		
2,700.00	2,698.21	3,375.07	3,322.89	11.98	19.78	38.40	-2,211.91	-8,963.83	9,183.17	9,151.64	31.53	291.291		
2,800.00	2,798.13	3,432.78	3,378.19	12.41	20.18	38.51	-2,195.39	-8,964.11	9,173.53	9,141.17	32.36	283.515		
2,900.00	2,898.05	3,530.90	3,472.33	12.84	20.87	38.70	-2,167.76	-8,964.50	9,164.06	9,130.60	33.46	273.852		
3,000.00	2,997.97	3,606.70	3,544.97	13.27	21.40	38.84	-2,146.09	-8,964.98	9,154.82	9,120.39	34.42	265.947		
3,100.00	3,097.89	3,681.40	3,616.45	13.69	21.93	38.99	-2,124.39	-8,965.71	9,145.88	9,110.49	35.38	258.469		
3,200.00	3,197.81	3,785.18	3,715.36	14.12	22.69	39.20	-2,093.04	-8,967.10	9,137.12	9,100.55	36.57	249.870		
3,300.00	3,297.73	3,882.94	3,808.04	14.56	23.42	39.41	-2,061.99	-8,968.69	9,128.39	9,090.66	37.73	241.931		
3,400.00	3,397.65	3,994.29	3,913.52	14.99	24.27	39.65	-2,026.33	-8,970.43	9,119.68	9,080.68	39.00	233.824		
3,500.00	3,497.56	4,053.98	3,970.14	15.42	24.72	39.77	-2,007.48	-8,971.41	9,111.22	9,071.33	39.89	228.412		
3,600.00	3,597.48	4,105.92	4,019.51	15.85	25.10	39.88	-1,991.36	-8,972.35	9,103.21	9,062.49	40.72	223.576		
3,700.00	3,697.40	4,166.00	4,076.76	16.28	25.55	40.00	-1,973.19	-8,973.70	9,095.81	9,054.21	41.60	218.649		
3,800.00	3,797.32	4,576.81	4,465.92	16.72	28.67	40.89	-1,841.82	-8,976.90	9,086.49	9,041.41	45.09	201.537		
3,900.00	3,897.24	4,639.00	4,524.56	17.15	29.16	41.03	-1,821.10	-8,976.78	9,076.47	9,030.45	46.02	197.240		
4,000.00	3,997.16	4,667.39	4,551.41	17.59	29.38	41.09	-1,811.89	-8,976.82	9,067.00	9,020.31	46.69	194.215		
4,100.00	4,097.08	4,716.07	4,597.67	18.02	29.74	41.19	-1,796.71	-8,976.97	9,058.16	9,010.66	47.50	190.698		
4,200.00	4,197.00	4,766.02	4,645.35	18.46	30.11	41.29	-1,781.85	-8,977.22	9,049.91	9,001.59	48.31	187.312		
4,300.00	4,296.92	4,830.00	4,706.59	18.89	30.57	41.42	-1,763.33	-8,977.80	9,042.24	8,993.02	49.22	183.705		
4,400.00	4,396.84	4,885.66	4,760.12	19.33	30.96	41.52	-1,748.10	-8,978.35	9,035.04	8,984.99	50.05	180.525		
4,500.00	4,496.76	4,955.79	4,828.04	19.77	31.42	41.64	-1,730.64	-8,978.85	9,028.18	8,977.22	50.96	177.163		
4,600.00	4,596.68	5,020.00	4,890.43	20.20	31.84	41.75	-1,715.47	-8,979.38	9,021.72	8,969.90	51.82	174.105		
4,700.00	4,696.60	5,086.43	4,955.14	20.64	32.25	41.86	-1,700.49	-8,980.03	9,015.67	8,963.00	52.67	171.158		
4,800.00	4,796.52	5,157.56	5,024.67	21.08	32.68	41.96	-1,685.47	-8,980.77	9,009.99	8,956.45	53.54	168.270		
4,900.00	4,896.44	5,231.44	5,097.22	21.51	33.10	42.06	-1,671.55	-8,981.43	9,004.63	8,950.22	54.41	165.497		
5,000.00	4,996.36	5,304.00	5,168.80	21.95	33.49	42.15	-1,659.68	-8,981.96	8,999.58	8,944.33	55.24	162.909		
5,100.00	5,096.28	5,375.16	5,239.21	22.39	33.85	42.23	-1,649.35	-8,982.46	8,994.85	8,938.81	56.04	160.500		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,444.34	5,307.79	22.83	34.18	42.30	-1,640.38	-8,982.99	8,990.46	8,933.65	56.81	158.245		
5,300.00	5,296.11	5,512.86	5,375.95	23.27	34.49	42.35	-1,633.36	-8,983.43	8,986.43	8,928.86	57.56	156.114		
5,400.00	5,396.03	5,588.00	5,450.80	23.71	34.81	42.41	-1,626.82	-8,984.00	8,982.76	8,924.43	58.32	154.023		
5,500.00	5,495.95	5,500.00	5,641.36	24.14	34.49	42.52	-1,613.69	-8,983.75	8,978.42	8,919.98	58.44	153.630		
5,600.00	5,595.87	5,841.57	5,703.84	24.58	35.78	42.55	-1,610.76	-8,983.21	8,973.93	8,913.76	60.17	149.136		
5,700.00	5,695.79	5,890.45	5,752.68	25.02	35.96	42.57	-1,608.77	-8,983.09	8,970.06	8,909.27	60.79	147.564		
5,800.00	5,795.71	5,942.01	5,804.21	25.46	36.13	42.59	-1,607.10	-8,983.17	8,966.74	8,905.34	61.40	146.027		
5,900.00	5,895.63	6,009.93	5,872.11	25.90	36.36	42.61	-1,605.46	-8,983.54	8,963.91	8,901.84	62.07	144.412		
6,000.00	5,995.55	6,103.73	5,965.89	26.34	36.67	42.64	-1,603.43	-8,984.19	8,961.29	8,898.47	62.82	142.646		
6,100.00	6,095.47	6,216.72	6,078.85	26.78	37.04	42.68	-1,601.21	-8,984.84	8,958.60	8,894.97	63.64	140.780		
6,200.00	6,195.39	6,296.18	6,158.29	27.22	37.31	42.70	-1,599.67	-8,985.32	8,955.94	8,891.60	64.34	139.196		
6,300.00	6,295.31	6,379.00	6,241.09	27.66	37.58	42.73	-1,597.91	-8,986.06	8,953.53	8,888.47	65.06	137.626		
6,400.00	6,395.23	6,454.97	6,317.04	28.10	37.84	42.75	-1,596.27	-8,986.92	8,951.35	8,885.60	65.75	136.136		
6,500.00	6,495.02	6,537.00	6,399.05	28.54	38.11	7.13	-1,594.59	-8,988.00	8,947.07	8,880.60	66.47	134.606		
6,600.00	6,593.09	6,644.54	6,506.56	28.98	38.48	-2.21	-1,592.48	-8,989.45	8,929.03	8,861.76	67.27	132.739		
6,700.00	6,687.01	6,733.82	6,595.82	29.41	38.78	-5.13	-1,590.78	-8,990.58	8,895.96	8,827.98	67.98	130.856		
6,800.00	6,774.46	6,804.13	6,666.10	29.83	39.02	-7.06	-1,589.47	-8,991.59	8,848.89	8,780.29	68.60	128.997		
6,900.00	6,853.31	6,871.76	6,733.71	30.26	39.25	-8.99	-1,588.25	-8,992.69	8,788.97	8,719.81	69.16	127.087		
7,000.00	6,921.60	6,940.91	6,802.84	30.76	39.49	-11.45	-1,586.82	-8,993.87	8,717.55	8,647.88	69.67	125.126		
7,100.00	6,977.66	6,998.12	6,860.02	31.38	39.68	-15.14	-1,585.46	-8,994.87	8,636.36	8,566.28	70.08	123.234		
7,200.00	7,020.10	7,047.80	6,909.67	32.17	39.86	-21.62	-1,584.19	-8,995.75	8,547.38	8,476.98	70.41	121.398		
7,300.00	7,047.88	7,082.34	6,944.21	33.13	39.98	-35.31	-1,583.33	-8,996.33	8,452.82	8,382.19	70.63	119.682		
7,400.00	7,060.32	7,098.82	6,960.67	34.27	40.04	-69.80	-1,582.92	-8,996.60	8,355.03	8,284.29	70.74	118.110		
7,500.00	7,060.70	7,101.14	6,962.99	35.56	40.05	-87.30	-1,582.86	-8,996.64	8,256.32	8,185.54	70.78	116.648		
7,600.00	7,060.27	7,102.50	6,964.35	37.02	40.05	-87.36	-1,582.83	-8,996.66	8,157.63	8,086.80	70.82	115.182		
7,700.00	7,059.83	7,103.85	6,965.71	38.64	40.06	-87.42	-1,582.80	-8,996.69	8,058.97	7,988.09	70.88	113.702		
7,800.00	7,059.40	7,105.20	6,967.05	40.40	40.06	-87.47	-1,582.77	-8,996.71	7,960.34	7,889.40	70.94	112.208		
7,900.00	7,058.97	7,106.54	6,968.39	42.28	40.07	-87.53	-1,582.73	-8,996.73	7,861.75	7,790.73	71.02	110.700		
8,000.00	7,058.53	7,107.87	6,969.73	44.27	40.07	-87.59	-1,582.70	-8,996.75	7,763.19	7,692.09	71.11	109.178		
8,100.00	7,058.10	7,109.20	6,971.05	46.35	40.08	-87.65	-1,582.67	-8,996.77	7,664.67	7,593.47	71.21	107.642		
8,200.00	7,057.66	7,110.53	6,972.38	48.50	40.08	-87.70	-1,582.63	-8,996.79	7,566.19	7,494.87	71.32	106.090		
8,300.00	7,057.23	7,111.84	6,973.69	50.73	40.09	-87.76	-1,582.60	-8,996.81	7,467.75	7,396.31	71.45	104.524		
8,400.00	7,056.80	7,113.15	6,975.00	53.02	40.09	-87.82	-1,582.57	-8,996.83	7,369.35	7,297.76	71.59	102.943		
8,500.00	7,056.36	7,114.46	6,976.31	55.36	40.10	-87.87	-1,582.54	-8,996.85	7,271.00	7,199.25	71.74	101.346		
8,600.00	7,055.93	7,115.75	6,977.60	57.74	40.10	-87.93	-1,582.51	-8,996.87	7,172.69	7,100.77	71.92	99.735		
8,700.00	7,055.49	7,117.05	6,978.90	60.17	40.10	-87.99	-1,582.48	-8,996.90	7,074.42	7,002.31	72.11	98.108		
8,800.00	7,055.06	7,118.33	6,980.18	62.63	40.11	-88.04	-1,582.44	-8,996.92	6,976.21	6,903.89	72.32	96.466		
8,900.00	7,054.63	7,119.61	6,981.46	65.13	40.11	-88.10	-1,582.41	-8,996.94	6,878.05	6,805.50	72.55	94.810		
9,000.00	7,054.19	7,120.89	6,982.74	67.66	40.12	-88.15	-1,582.38	-8,996.96	6,779.94	6,707.14	72.79	93.138		
9,100.00	7,053.76	7,122.16	6,984.00	70.21	40.12	-88.21	-1,582.35	-8,996.98	6,681.88	6,608.82	73.06	91.452		
9,200.00	7,053.32	7,123.42	6,985.27	72.78	40.13	-88.26	-1,582.32	-8,997.00	6,583.89	6,510.53	73.36	89.751		
9,300.00	7,052.89	7,124.68	6,986.52	75.38	40.13	-88.32	-1,582.29	-8,997.02	6,485.96	6,412.28	73.67	88.036		
9,400.00	7,052.46	7,125.93	6,987.78	77.99	40.14	-88.37	-1,582.26	-8,997.04	6,388.08	6,314.07	74.02	86.308		
9,500.00	7,052.02	7,127.18	6,989.02	80.62	40.14	-88.43	-1,582.23	-8,997.05	6,290.28	6,215.90	74.38	84.566		
9,600.00	7,051.59	7,128.42	6,990.26	83.26	40.15	-88.48	-1,582.20	-8,997.07	6,192.55	6,117.77	74.78	82.811		
9,700.00	7,051.15	7,129.65	6,991.50	85.92	40.15	-88.53	-1,582.17	-8,997.09	6,094.89	6,019.68	75.20	81.045		
9,800.00	7,050.72	7,130.88	6,992.73	88.59	40.15	-88.59	-1,582.14	-8,997.11	5,997.30	5,921.64	75.66	79.267		
9,900.00	7,050.29	7,132.11	6,993.95	91.28	40.16	-88.64	-1,582.11	-8,997.13	5,899.80	5,823.65	76.15	77.478		
10,000.00	7,049.85	7,133.33	6,995.17	93.97	40.16	-88.69	-1,582.08	-8,997.15	5,802.38	5,725.71	76.67	75.680		
10,100.00	7,049.42	7,134.54	6,996.38	96.67	40.17	-88.74	-1,582.05	-8,997.17	5,705.06	5,627.83	77.23	73.873		
10,200.00	7,048.98	7,135.75	6,997.59	99.38	40.17	-88.80	-1,582.02	-8,997.19	5,607.82	5,530.00	77.82	72.058		
10,300.00	7,048.55	7,136.95	6,998.79	102.10	40.18	-88.85	-1,581.99	-8,997.21	5,510.68	5,432.23	78.46	70.236		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	7,138.15	6,999.99	104.83	40.18	-88.90	-1,581.96	-8,997.22	5,413.65	5,334.52	79.14	68.409		
10,500.00	7,047.68	7,139.34	7,001.18	107.56	40.18	-88.95	-1,581.94	-8,997.24	5,316.73	5,236.87	79.86	66.578		
10,600.00	7,047.25	7,140.53	7,002.37	110.30	40.19	-89.00	-1,581.91	-8,997.26	5,219.92	5,139.30	80.62	64.743		
10,700.00	7,046.81	7,141.71	7,003.55	113.05	40.19	-89.05	-1,581.88	-8,997.28	5,123.24	5,041.80	81.44	62.908		
10,800.00	7,046.38	7,142.89	7,004.73	115.80	40.20	-89.11	-1,581.85	-8,997.30	5,026.68	4,944.38	82.31	61.072		
10,900.00	7,045.95	7,144.06	7,005.90	118.55	40.20	-89.16	-1,581.82	-8,997.32	4,930.27	4,847.04	83.23	59.238		
11,000.00	7,045.51	7,145.23	7,007.06	121.31	40.20	-89.21	-1,581.79	-8,997.33	4,834.00	4,749.79	84.21	57.407		
11,100.00	7,045.08	7,146.39	7,008.22	124.08	40.21	-89.26	-1,581.77	-8,997.35	4,737.88	4,652.63	85.24	55.581		
11,200.00	7,044.64	7,147.55	7,009.38	126.85	40.21	-89.31	-1,581.74	-8,997.37	4,641.92	4,555.58	86.34	53.761		
11,300.00	7,044.21	7,148.70	7,010.53	129.62	40.22	-89.36	-1,581.71	-8,997.39	4,546.14	4,458.63	87.51	51.950		
11,400.00	7,043.78	7,149.84	7,011.68	132.40	40.22	-89.41	-1,581.68	-8,997.40	4,450.55	4,361.80	88.75	50.149		
11,500.00	7,043.34	7,150.99	7,012.82	135.18	40.22	-89.46	-1,581.66	-8,997.42	4,355.15	4,265.09	90.06	48.359		
11,600.00	7,042.91	7,152.12	7,013.96	137.96	40.23	-89.51	-1,581.63	-8,997.44	4,259.96	4,168.52	91.45	46.583		
11,700.00	7,042.47	7,153.25	7,015.09	140.75	40.23	-89.56	-1,581.60	-8,997.45	4,165.00	4,072.08	92.92	44.823		
11,800.00	7,042.04	7,154.38	7,016.22	143.54	40.24	-89.60	-1,581.58	-8,997.47	4,070.28	3,975.80	94.48	43.080		
11,900.00	7,041.61	7,155.50	7,017.34	146.33	40.24	-89.65	-1,581.55	-8,997.49	3,975.82	3,879.69	96.14	41.356		
12,000.00	7,041.17	7,156.62	7,018.45	149.13	40.24	-89.70	-1,581.52	-8,997.51	3,881.64	3,783.75	97.89	39.653		
12,100.00	7,040.74	7,157.74	7,019.57	151.92	40.25	-89.75	-1,581.50	-8,997.52	3,787.75	3,688.00	99.75	37.973		
12,200.00	7,040.30	7,158.84	7,020.67	154.72	40.25	-89.80	-1,581.47	-8,997.54	3,694.18	3,592.47	101.72	36.318		
12,300.00	7,039.87	7,159.95	7,021.78	157.52	40.26	-89.85	-1,581.44	-8,997.56	3,600.96	3,497.16	103.81	34.689		
12,400.00	7,039.44	7,161.05	7,022.88	160.33	40.26	-89.89	-1,581.42	-8,997.57	3,508.12	3,402.09	106.02	33.089		
12,500.00	7,039.00	7,162.14	7,023.97	163.13	40.26	-89.94	-1,581.39	-8,997.59	3,415.67	3,307.30	108.37	31.518		
12,600.00	7,038.57	7,163.23	7,025.06	165.94	40.27	-89.99	-1,581.36	-8,997.60	3,323.67	3,212.80	110.87	29.979		
12,700.00	7,038.13	7,164.32	7,026.15	168.75	40.27	-90.04	-1,581.34	-8,997.62	3,232.13	3,118.62	113.51	28.473		
12,800.00	7,037.70	7,165.40	7,027.23	171.56	40.28	-90.08	-1,581.31	-8,997.64	3,141.12	3,024.79	116.33	27.003		
12,900.00	7,037.27	7,166.47	7,028.30	174.37	40.28	-90.13	-1,581.29	-8,997.65	3,050.66	2,931.35	119.31	25.568		
13,000.00	7,036.83	7,167.54	7,029.37	177.19	40.28	-90.18	-1,581.26	-8,997.67	2,960.82	2,838.33	122.49	24.172		
13,100.00	7,036.40	7,168.61	7,030.44	180.00	40.29	-90.22	-1,581.24	-8,997.68	2,871.65	2,745.79	125.87	22.815		
13,200.00	7,035.96	7,169.68	7,031.50	182.82	40.29	-90.27	-1,581.21	-8,997.70	2,783.22	2,653.76	129.46	21.499		
13,300.00	7,035.53	7,170.73	7,032.56	185.64	40.29	-90.31	-1,581.19	-8,997.72	2,695.59	2,562.32	133.28	20.226		
13,400.00	7,035.10	7,171.79	7,033.61	188.46	40.30	-90.36	-1,581.16	-8,997.73	2,608.86	2,471.52	137.34	18.995		
13,500.00	7,034.66	7,172.84	7,034.66	191.28	40.30	-90.41	-1,581.14	-8,997.75	2,523.11	2,381.44	141.67	17.810		
13,600.00	7,034.23	7,173.88	7,035.71	194.10	40.31	-90.45	-1,581.11	-8,997.76	2,438.44	2,292.16	146.27	16.671		
13,700.00	7,033.79	7,174.92	7,036.75	196.92	40.31	-90.50	-1,581.09	-8,997.78	2,354.97	2,203.80	151.17	15.578		
13,800.00	7,033.36	7,175.96	7,037.79	199.74	40.31	-90.54	-1,581.06	-8,997.79	2,272.84	2,116.45	156.38	14.534		
13,900.00	7,032.93	7,176.99	7,038.82	202.57	40.32	-90.59	-1,581.04	-8,997.81	2,192.19	2,030.27	161.92	13.538		
14,000.00	7,032.49	7,178.02	7,039.85	205.39	40.32	-90.63	-1,581.02	-8,997.82	2,113.20	1,945.39	167.81	12.593		
14,100.00	7,032.06	7,179.05	7,040.87	208.22	40.32	-90.67	-1,580.99	-8,997.84	2,036.05	1,862.01	174.05	11.698		
14,200.00	7,031.62	7,180.07	7,041.89	211.05	40.33	-90.72	-1,580.97	-8,997.85	1,960.97	1,780.33	180.65	10.855		
14,300.00	7,031.19	7,181.08	7,042.91	213.87	40.33	-90.76	-1,580.94	-8,997.87	1,888.20	1,700.59	187.61	10.065		
14,400.00	7,030.76	7,182.10	7,043.92	216.70	40.34	-90.81	-1,580.92	-8,997.88	1,818.02	1,623.09	194.93	9.327		
14,500.00	7,030.32	7,183.10	7,044.93	219.53	40.34	-90.85	-1,580.90	-8,997.90	1,750.74	1,548.15	202.59	8.642		
14,600.00	7,029.89	7,184.11	7,045.93	222.36	40.34	-90.89	-1,580.87	-8,997.91	1,686.71	1,476.16	210.55	8.011		
14,700.00	7,029.45	7,185.12	7,046.94	225.19	40.34	-90.93	-1,580.85	-8,997.92	1,626.31	1,407.56	218.76	7.434		
14,800.00	7,029.02	7,186.13	7,047.95	228.03	40.34	-90.97	-1,580.83	-8,997.93	1,569.96	1,342.82	227.14	6.912		
14,900.00	7,028.59	7,187.14	7,048.96	230.87	40.34	-91.01	-1,580.81	-8,997.94	1,514.57	1,282.82	236.14	6.434		
14,805.04	7,029.00	7,184.95	7,046.77	228.17	40.34	-90.93	-1,580.86	-8,997.93	1,567.24	1,339.67	227.57	6.887 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-107.75	-2,874.93	-8,979.07	9,428.16					
100.00	100.00	182.68	218.65	3.28	3.33	-107.74	-2,872.05	-8,978.74	9,427.64	9,421.03	6.62	1,424.989		
200.00	200.00	309.00	344.93	3.34	3.47	-107.72	-2,869.07	-8,977.76	9,426.17	9,419.36	6.81	1,384.494		
300.00	300.00	415.40	451.28	3.44	3.65	-107.71	-2,865.82	-8,977.09	9,424.64	9,417.55	7.10	1,328.082		
400.00	400.00	498.53	534.35	3.60	3.83	-107.69	-2,862.74	-8,976.68	9,423.06	9,415.63	7.43	1,268.238		
500.00	499.98	542.00	577.78	3.80	3.93	34.15	-2,860.87	-8,976.68	9,420.41	9,412.69	7.73	1,219.342		
600.00	599.90	592.34	628.07	4.02	4.06	34.18	-2,858.60	-8,977.01	9,416.47	9,408.39	8.08	1,165.797		
700.00	699.82	648.00	683.67	4.28	4.21	34.21	-2,856.13	-8,977.91	9,413.23	9,404.75	8.48	1,109.478		
800.00	799.74	667.87	703.52	4.57	4.26	34.21	-2,855.28	-8,978.35	9,410.56	9,401.73	8.83	1,066.213		
900.00	899.66	721.25	756.84	4.88	4.42	34.24	-2,853.21	-8,979.78	9,408.56	9,399.28	9.29	1,012.834		
1,000.00	999.58	790.00	825.51	5.21	4.62	34.26	-2,850.70	-8,981.70	9,406.85	9,397.02	9.83	957.315		
1,100.00	1,099.50	841.36	876.80	5.55	4.79	34.29	-2,848.63	-8,983.43	9,405.58	9,395.25	10.33	910.142		
1,200.00	1,199.42	884.00	919.35	5.91	4.93	34.31	-2,846.54	-8,985.28	9,404.94	9,394.11	10.83	868.300		
1,231.73	1,231.12	884.00	919.35	6.03	4.93	34.31	-2,846.54	-8,985.28	9,404.89	9,393.94	10.95	859.084		
1,300.00	1,299.34	884.00	919.35	6.28	4.93	34.31	-2,846.54	-8,985.28	9,405.14	9,393.94	11.20	839.702		
1,400.00	1,399.26	938.49	973.68	6.66	5.11	34.34	-2,843.65	-8,988.33	9,405.82	9,394.06	11.76	799.675		
1,500.00	1,499.18	979.00	1,014.03	7.04	5.25	34.36	-2,841.51	-8,991.16	9,407.45	9,395.17	12.29	765.659		
1,600.00	1,599.10	1,005.79	1,040.69	7.43	5.35	34.38	-2,840.01	-8,993.25	9,409.76	9,396.98	12.77	736.715		
1,700.00	1,699.01	1,074.00	1,108.50	7.83	5.60	34.42	-2,835.47	-8,999.14	9,412.67	9,399.26	13.42	701.597		
1,800.00	1,798.93	1,134.02	1,168.05	8.23	5.84	34.47	-2,830.55	-9,004.84	9,415.96	9,401.91	14.05	670.388		
1,900.00	1,898.85	1,168.00	1,201.70	8.64	5.97	34.50	-2,827.35	-9,008.21	9,419.60	9,405.02	14.58	646.050		
2,000.00	1,998.77	1,227.87	1,260.89	9.05	6.22	34.56	-2,821.06	-9,014.68	9,423.72	9,408.49	15.23	618.750		
2,100.00	2,098.69	1,263.00	1,295.53	9.46	6.37	34.59	-2,817.02	-9,018.89	9,428.59	9,412.80	15.78	597.389		
2,200.00	2,198.61	1,297.42	1,329.39	9.88	6.53	34.63	-2,812.77	-9,023.34	9,434.15	9,417.81	16.34	577.317		
2,300.00	2,298.53	1,358.00	1,388.78	10.30	6.80	34.70	-2,804.53	-9,032.03	9,440.55	9,423.53	17.02	554.677		
2,400.00	2,398.45	1,373.08	1,403.52	10.72	6.88	34.72	-2,802.36	-9,034.32	9,447.42	9,429.92	17.50	539.904		
2,500.00	2,498.37	1,475.81	1,504.01	11.14	7.38	34.85	-2,787.72	-9,049.89	9,454.67	9,436.28	18.39	514.035		
2,600.00	2,598.29	1,547.00	1,573.77	11.56	7.73	34.93	-2,778.22	-9,060.44	9,461.93	9,442.78	19.15	494.197		
2,700.00	2,698.21	1,608.86	1,634.40	11.98	8.04	35.00	-2,770.24	-9,069.74	9,469.57	9,449.71	19.86	476.847		
2,800.00	2,798.13	1,670.57	1,694.81	12.41	8.36	35.07	-2,762.21	-9,079.46	9,477.80	9,457.23	20.57	460.661		
2,900.00	2,898.05	1,831.00	1,852.05	12.84	9.21	35.25	-2,742.06	-9,104.08	9,485.82	9,464.02	21.80	435.211		
3,000.00	2,997.97	1,889.87	1,909.70	13.27	9.53	35.32	-2,734.21	-9,113.05	9,493.67	9,471.15	22.51	421.710		
3,100.00	3,097.89	3,100.00	2,006.69	13.69	10.33	35.44	-2,721.42	-9,128.55	9,501.98	9,472.71	29.27	324.645		
3,200.00	3,197.81	2,079.26	2,095.27	14.12	10.56	35.54	-2,710.22	-9,142.34	9,510.10	9,485.78	24.32	390.966		
3,300.00	3,297.73	2,346.79	2,356.93	14.56	12.07	35.86	-2,672.34	-9,182.95	9,517.95	9,491.76	26.19	363.421		
3,400.00	3,397.65	2,401.00	2,410.05	14.99	12.38	35.93	-2,664.92	-9,190.83	9,525.00	9,498.09	26.90	354.063		
3,500.00	3,497.56	2,434.30	2,442.71	15.42	12.57	35.96	-2,660.76	-9,195.77	9,532.58	9,505.09	27.49	346.716		
3,600.00	3,597.48	2,495.00	2,502.21	15.85	12.92	36.03	-2,652.91	-9,204.90	9,540.55	9,512.32	28.23	337.906		
3,700.00	3,697.40	2,555.05	2,560.98	16.28	13.26	36.10	-2,644.87	-9,214.26	9,548.94	9,519.97	28.98	329.531		
3,800.00	3,797.32	2,632.51	2,636.66	16.72	13.72	36.20	-2,634.18	-9,226.84	9,557.85	9,528.03	29.82	320.515		
3,900.00	3,897.24	2,731.17	2,733.08	17.15	14.30	36.32	-2,620.59	-9,242.74	9,566.70	9,535.91	30.79	310.748		
4,000.00	3,997.16	4,000.00	2,850.09	17.59	21.77	36.45	-2,604.86	-9,261.81	9,575.58	9,537.47	38.11	251.238		
4,100.00	4,097.08	2,911.45	2,909.58	18.02	15.35	36.52	-2,597.52	-9,271.24	9,584.44	9,551.83	32.61	293.940		
4,200.00	4,197.00	2,969.00	2,966.02	18.46	15.68	36.58	-2,591.25	-9,280.60	9,594.08	9,560.75	33.33	287.877		
4,300.00	4,296.92	2,988.30	2,984.93	18.89	15.80	36.60	-2,589.20	-9,283.85	9,604.21	9,570.37	33.84	283.844		
4,400.00	4,396.84	3,213.39	3,205.72	19.33	17.09	36.83	-2,564.80	-9,320.04	9,613.72	9,578.24	35.48	270.998		
4,500.00	4,496.76	4,500.00	3,303.03	19.77	24.23	36.92	-2,556.03	-9,335.02	9,623.01	9,580.63	42.38	227.044		
4,600.00	4,596.68	3,713.57	3,699.13	20.20	19.80	37.26	-2,520.13	-9,388.53	9,630.16	9,591.26	38.89	247.609		
4,700.00	4,696.60	3,757.26	3,742.24	20.64	20.04	37.30	-2,515.53	-9,393.97	9,636.55	9,597.01	39.54	243.715		
4,800.00	4,796.52	3,790.99	3,775.45	21.08	20.23	37.34	-2,511.70	-9,398.48	9,643.61	9,603.48	40.13	240.282		
4,900.00	4,896.44	3,824.00	3,807.87	21.51	20.41	37.37	-2,507.70	-9,403.18	9,651.37	9,610.65	40.72	237.001		
5,000.00	4,996.36	3,864.60	3,847.69	21.95	20.65	37.41	-2,502.58	-9,409.27	9,659.78	9,618.42	41.36	233.560		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-6-17 (PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 89-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,096.28	3,916.00	3,898.01	22.39	20.96	37.47	-2,495.97	-9,417.37	9,668.83	9,626.78	42.05	229.910		
5,200.00	5,196.19	3,968.33	3,949.20	22.83	21.27	37.53	-2,489.19	-9,425.89	9,678.39	9,635.63	42.76	226.357		
5,300.00	5,296.11	4,171.16	4,148.06	23.27	22.47	37.75	-2,464.55	-9,457.25	9,687.28	9,642.97	44.31	218.625		
5,400.00	5,396.03	4,265.83	4,240.85	23.71	23.03	37.85	-2,452.60	-9,471.71	9,696.09	9,650.83	45.25	214.263		
5,500.00	5,495.95	4,400.88	4,372.81	24.14	23.85	38.01	-2,432.86	-9,492.57	9,704.66	9,658.21	46.45	208.922		
5,600.00	5,595.87	4,476.46	4,446.39	24.58	24.32	38.11	-2,420.38	-9,504.51	9,713.23	9,665.91	47.31	205.294		
5,700.00	5,695.79	4,531.12	4,499.47	25.02	24.67	38.19	-2,410.87	-9,513.42	9,722.15	9,674.09	48.05	202.317		
5,800.00	5,795.71	5,800.00	4,610.44	25.46	32.71	38.34	-2,391.71	-9,532.15	9,731.35	9,675.44	55.91	174.039		
5,900.00	5,895.63	4,757.03	4,719.52	25.90	26.09	38.48	-2,374.87	-9,549.56	9,740.12	9,689.90	50.23	193.923		
6,000.00	5,995.55	5,776.93	5,729.77	26.34	31.18	39.24	-2,290.57	-9,645.33	9,743.97	9,688.37	55.61	175.233		
6,100.00	6,095.47	6,065.39	6,018.15	26.78	32.25	39.30	-2,288.00	-9,651.04	9,742.56	9,685.46	57.10	170.611		
6,200.00	6,195.39	6,200.00	6,264.86	27.22	32.74	39.35	-2,285.65	-9,651.24	9,739.09	9,681.08	58.01	167.896		
6,300.00	6,295.31	6,430.52	6,383.25	27.66	33.56	39.38	-2,284.15	-9,650.41	9,734.99	9,675.69	59.30	164.159		
6,400.00	6,395.23	6,475.32	6,428.05	28.10	33.72	39.39	-2,283.43	-9,650.28	9,731.27	9,671.34	59.93	162.380		
6,500.00	6,495.02	6,520.09	6,472.81	28.54	33.89	3.72	-2,282.66	-9,650.43	9,725.83	9,665.28	60.55	160.616		
6,600.00	6,593.09	6,566.00	6,518.71	28.98	34.06	-5.74	-2,281.82	-9,650.86	9,707.30	9,646.13	61.18	158.681		
6,700.00	6,687.01	6,617.06	6,569.75	29.41	34.25	-8.86	-2,280.91	-9,651.59	9,674.46	9,612.67	61.80	156.545		
6,800.00	6,774.46	6,667.06	6,619.74	29.83	34.45	-11.09	-2,280.14	-9,652.48	9,628.00	9,565.62	62.39	154.332		
6,900.00	6,853.31	6,712.53	6,665.20	30.26	34.62	-13.47	-2,279.53	-9,653.45	9,568.98	9,506.08	62.91	152.113		
7,000.00	6,921.60	6,755.00	6,707.65	30.76	34.79	-16.58	-2,279.04	-9,654.48	9,498.77	9,435.41	63.36	149.909		
7,100.00	6,977.66	6,794.92	6,747.56	31.38	34.94	-21.22	-2,278.64	-9,655.54	9,418.98	9,355.22	63.75	147.741		
7,200.00	7,020.10	6,828.42	6,781.05	32.17	35.07	-28.96	-2,278.32	-9,656.47	9,331.47	9,267.41	64.06	145.660		
7,300.00	7,047.88	6,851.23	6,803.85	33.13	35.16	-43.46	-2,278.11	-9,657.13	9,238.36	9,174.08	64.28	143.712		
7,400.00	7,060.32	6,862.72	6,815.33	34.27	35.21	-71.79	-2,278.01	-9,657.47	9,141.93	9,077.51	64.42	141.903		
7,500.00	7,060.70	6,865.23	6,817.84	35.56	35.22	-84.19	-2,277.99	-9,657.54	9,044.46	8,979.95	64.51	140.196		
7,600.00	7,060.27	6,867.13	6,819.74	37.02	35.22	-84.25	-2,277.97	-9,657.60	8,947.02	8,882.41	64.61	138.467		
7,700.00	7,059.83	6,869.05	6,821.65	38.64	35.23	-84.30	-2,277.96	-9,657.66	8,849.64	8,784.91	64.73	136.707		
7,800.00	7,059.40	6,870.97	6,823.57	40.40	35.24	-84.36	-2,277.94	-9,657.71	8,752.32	8,687.44	64.87	134.914		
7,900.00	7,058.97	6,872.90	6,825.50	42.28	35.25	-84.41	-2,277.92	-9,657.77	8,655.05	8,590.02	65.03	133.089		
8,000.00	7,058.53	6,874.84	6,827.45	44.27	35.25	-84.47	-2,277.91	-9,657.83	8,557.85	8,492.64	65.21	131.231		
8,100.00	7,058.10	6,876.80	6,829.40	46.35	35.26	-84.52	-2,277.89	-9,657.89	8,460.72	8,395.30	65.41	129.341		
8,200.00	7,057.66	6,878.76	6,831.36	48.50	35.27	-84.58	-2,277.87	-9,657.95	8,363.65	8,298.01	65.64	127.418		
8,300.00	7,057.23	6,880.73	6,833.33	50.73	35.28	-84.63	-2,277.85	-9,658.01	8,266.65	8,200.76	65.89	125.464		
8,400.00	7,056.80	6,882.72	6,835.31	53.02	35.29	-84.69	-2,277.84	-9,658.07	8,169.72	8,103.56	66.16	123.479		
8,500.00	7,056.36	6,884.71	6,837.31	55.36	35.29	-84.74	-2,277.82	-9,658.13	8,072.87	8,006.40	66.46	121.463		
8,600.00	7,055.93	6,886.71	6,839.31	57.74	35.30	-84.80	-2,277.80	-9,658.19	7,976.09	7,909.30	66.79	119.418		
8,700.00	7,055.49	6,888.73	6,841.32	60.17	35.31	-84.86	-2,277.79	-9,658.25	7,879.39	7,812.24	67.15	117.345		
8,800.00	7,055.06	6,890.76	6,843.35	62.63	35.32	-84.91	-2,277.77	-9,658.31	7,782.78	7,715.24	67.53	115.244		
8,900.00	7,054.63	6,892.79	6,845.38	65.13	35.32	-84.97	-2,277.75	-9,658.37	7,686.25	7,618.30	67.95	113.118		
9,000.00	7,054.19	6,894.84	6,847.43	67.66	35.33	-85.03	-2,277.74	-9,658.43	7,589.81	7,521.41	68.40	110.967		
9,100.00	7,053.76	6,896.90	6,849.49	70.21	35.34	-85.09	-2,277.72	-9,658.50	7,493.46	7,424.59	68.88	108.794		
9,200.00	7,053.32	6,898.97	6,851.56	72.78	35.35	-85.15	-2,277.70	-9,658.56	7,397.21	7,327.82	69.39	106.600		
9,300.00	7,052.89	6,901.05	6,853.63	75.38	35.36	-85.20	-2,277.69	-9,658.63	7,301.06	7,231.12	69.94	104.388		
9,400.00	7,052.46	6,903.14	6,855.72	77.99	35.37	-85.26	-2,277.67	-9,658.69	7,205.02	7,134.49	70.53	102.158		
9,500.00	7,052.02	6,905.24	6,857.83	80.62	35.37	-85.32	-2,277.65	-9,658.75	7,109.08	7,037.93	71.15	99.914		
9,600.00	7,051.59	6,907.35	6,859.94	83.26	35.38	-85.38	-2,277.63	-9,658.82	7,013.25	6,941.44	71.81	97.658		
9,700.00	7,051.15	6,909.48	6,862.06	85.92	35.39	-85.44	-2,277.62	-9,658.89	6,917.54	6,845.03	72.52	95.391		
9,800.00	7,050.72	6,911.61	6,864.20	88.59	35.40	-85.50	-2,277.60	-9,658.95	6,821.96	6,748.70	73.26	93.118		
9,900.00	7,050.29	6,913.76	6,866.34	91.28	35.41	-85.56	-2,277.58	-9,659.02	6,726.50	6,652.45	74.05	90.839		
10,000.00	7,049.85	6,915.92	6,868.50	93.97	35.42	-85.63	-2,277.57	-9,659.09	6,631.18	6,556.30	74.88	88.557		
10,100.00	7,049.42	6,918.09	6,870.67	96.67	35.42	-85.69	-2,277.55	-9,659.16	6,535.99	6,460.23	75.76	86.276		
10,200.00	7,048.98	6,920.28	6,872.86	99.38	35.43	-85.75	-2,277.53	-9,659.22	6,440.95	6,364.27	76.68	83.997		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (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	7,048.55	6,922.47	6,875.05	102.10	35.44	-85.81	-2,277.51	-9,659.29	6,346.06	6,268.41	77.65	81.723		
10,400.00	7,048.12	6,924.68	6,877.26	104.83	35.45	-85.87	-2,277.50	-9,659.36	6,251.33	6,172.65	78.68	79.457		
10,500.00	7,047.68	6,926.90	6,879.48	107.56	35.46	-85.94	-2,277.48	-9,659.43	6,156.76	6,077.01	79.75	77.201		
10,600.00	7,047.25	6,929.13	6,881.71	110.30	35.47	-86.00	-2,277.46	-9,659.50	6,062.37	5,981.49	80.88	74.958		
10,700.00	7,046.81	6,931.38	6,883.95	113.05	35.48	-86.06	-2,277.44	-9,659.58	5,968.16	5,886.10	82.06	72.729		
10,800.00	7,046.38	6,933.63	6,886.21	115.80	35.48	-86.13	-2,277.43	-9,659.65	5,874.14	5,790.84	83.30	70.518		
10,900.00	7,045.95	6,935.90	6,888.47	118.55	35.49	-86.19	-2,277.41	-9,659.72	5,780.32	5,695.72	84.60	68.326		
11,000.00	7,045.51	6,938.19	6,890.75	121.31	35.50	-86.26	-2,277.39	-9,659.79	5,686.70	5,600.74	85.96	66.155		
11,100.00	7,045.08	6,940.48	6,893.05	124.08	35.51	-86.32	-2,277.37	-9,659.87	5,593.31	5,505.93	87.38	64.008		
11,200.00	7,044.64	6,942.79	6,895.36	126.85	35.52	-86.39	-2,277.36	-9,659.94	5,500.15	5,411.28	88.87	61.887		
11,300.00	7,044.21	6,944.00	6,896.57	129.62	35.52	-86.42	-2,277.35	-9,659.98	5,407.24	5,316.81	90.43	59.796		
11,400.00	7,043.78	6,944.00	6,896.57	132.40	35.52	-86.42	-2,277.35	-9,659.98	5,314.58	5,222.53	92.05	57.736		
11,500.00	7,043.34	6,944.00	6,896.57	135.18	35.52	-86.42	-2,277.35	-9,659.98	5,222.19	5,128.44	93.75	55.706		
11,600.00	7,042.91	6,944.00	6,896.57	137.96	35.52	-86.42	-2,277.35	-9,659.98	5,130.08	5,034.57	95.52	53.709		
11,700.00	7,042.47	6,944.00	6,896.57	140.75	35.52	-86.42	-2,277.35	-9,659.98	5,038.28	4,940.91	97.37	51.745		
11,800.00	7,042.04	6,955.44	6,908.00	143.54	35.57	-86.74	-2,277.26	-9,660.36	4,946.78	4,847.44	99.33	49.799		
11,900.00	7,041.61	6,957.62	6,910.18	146.33	35.58	-86.81	-2,277.24	-9,660.43	4,855.62	4,754.26	101.36	47.905		
12,000.00	7,041.17	6,959.83	6,912.39	149.13	35.59	-86.87	-2,277.22	-9,660.50	4,764.82	4,661.34	103.48	46.048		
12,100.00	7,040.74	6,962.08	6,914.63	151.92	35.60	-86.93	-2,277.21	-9,660.58	4,674.39	4,568.70	105.68	44.230		
12,200.00	7,040.30	6,964.36	6,916.91	154.72	35.61	-87.00	-2,277.19	-9,660.66	4,584.35	4,476.37	107.99	42.452		
12,300.00	7,039.87	6,966.67	6,919.22	157.52	35.62	-87.06	-2,277.17	-9,660.74	4,494.74	4,384.34	110.40	40.714		
12,400.00	7,039.44	6,969.01	6,921.56	160.33	35.63	-87.13	-2,277.15	-9,660.82	4,405.57	4,292.66	112.91	39.018		
12,500.00	7,039.00	6,971.39	6,923.94	163.13	35.64	-87.20	-2,277.13	-9,660.90	4,316.88	4,201.34	115.53	37.364		
12,600.00	7,038.57	6,973.81	6,926.35	165.94	35.65	-87.27	-2,277.10	-9,660.98	4,228.69	4,110.41	118.27	35.753		
12,700.00	7,038.13	6,976.26	6,928.80	168.75	35.66	-87.34	-2,277.08	-9,661.07	4,141.03	4,019.90	121.13	34.186		
12,800.00	7,037.70	6,978.74	6,931.29	171.56	35.67	-87.41	-2,277.06	-9,661.16	4,053.94	3,929.82	124.12	32.662		
12,900.00	7,037.27	6,981.27	6,933.81	174.37	35.68	-87.48	-2,277.04	-9,661.25	3,967.46	3,840.23	127.24	31.182		
13,000.00	7,036.83	6,983.83	6,936.37	177.19	35.69	-87.55	-2,277.01	-9,661.34	3,881.63	3,751.14	130.49	29.747		
13,100.00	7,036.40	6,986.44	6,938.98	180.00	35.70	-87.62	-2,276.99	-9,661.44	3,796.49	3,662.60	133.89	28.356		
13,200.00	7,035.96	6,989.08	6,941.62	182.82	35.71	-87.70	-2,276.97	-9,661.53	3,712.08	3,574.65	137.43	27.010		
13,300.00	7,035.53	6,991.76	6,944.30	185.64	35.72	-87.78	-2,276.94	-9,661.63	3,628.47	3,487.34	141.13	25.710		
13,400.00	7,035.10	6,994.49	6,947.02	188.46	35.73	-87.85	-2,276.91	-9,661.73	3,545.71	3,400.71	144.99	24.454		
13,500.00	7,034.66	6,997.26	6,949.79	191.28	35.74	-87.93	-2,276.89	-9,661.83	3,463.85	3,314.82	149.02	23.244		
13,600.00	7,034.23	7,000.08	6,952.61	194.10	35.75	-88.01	-2,276.86	-9,661.94	3,382.96	3,229.73	153.22	22.078		
13,700.00	7,033.79	7,002.94	6,955.46	196.92	35.76	-88.09	-2,276.83	-9,662.05	3,303.12	3,145.51	157.61	20.958		
13,800.00	7,033.36	7,005.84	6,958.37	199.74	35.77	-88.18	-2,276.80	-9,662.16	3,224.40	3,062.23	162.17	19.883		
13,900.00	7,032.93	7,008.80	6,961.32	202.57	35.79	-88.26	-2,276.77	-9,662.27	3,146.88	2,979.96	166.92	18.852		
14,000.00	7,032.49	7,011.80	6,964.32	205.39	35.80	-88.35	-2,276.74	-9,662.39	3,070.66	2,898.79	171.87	17.866		
14,100.00	7,032.06	7,014.85	6,967.37	208.22	35.81	-88.43	-2,276.71	-9,662.50	2,995.84	2,818.82	177.01	16.924		
14,200.00	7,031.62	7,017.95	6,970.47	211.05	35.82	-88.52	-2,276.68	-9,662.63	2,922.52	2,740.16	182.35	16.027		
14,300.00	7,031.19	7,021.11	6,973.62	213.87	35.84	-88.61	-2,276.64	-9,662.75	2,850.82	2,662.93	187.89	15.173		
14,400.00	7,030.76	7,024.32	6,976.83	216.70	35.85	-88.70	-2,276.61	-9,662.88	2,780.86	2,587.24	193.62	14.362		
14,500.00	7,030.32	7,027.59	6,980.10	219.53	35.86	-88.79	-2,276.57	-9,663.01	2,712.78	2,513.24	199.54	13.595		
14,600.00	7,029.89	7,030.91	6,983.42	222.36	35.88	-88.89	-2,276.53	-9,663.14	2,646.72	2,441.08	205.65	12.870		
14,700.00	7,029.45	7,034.29	6,986.79	225.19	35.89	-88.99	-2,276.50	-9,663.28	2,582.84	2,370.93	211.92	12.188		
14,800.00	7,029.02	7,037.73	6,990.23	228.03	35.90	-89.08	-2,276.46	-9,663.42	2,521.31	2,302.97	218.35	11.547		
14,805.04	7,029.00	7,037.91	6,990.41	228.17	35.90	-89.09	-2,276.46	-9,663.43	2,518.28	2,299.60	218.67	11.516 CC, ES, SF		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-108.08	-2,933.21	-8,987.43	9,454.05					
100.00	100.00	43.05	79.05	3.28	3.28	-108.07	-2,933.10	-8,987.52	9,454.05	9,447.48	6.57	1,439.924		
200.00	200.00	113.39	149.38	3.34	3.29	-108.07	-2,932.46	-8,988.02	9,454.44	9,447.81	6.63	1,426.035		
300.00	300.00	171.00	206.98	3.44	3.33	-108.06	-2,931.51	-8,988.72	9,455.13	9,448.36	6.77	1,396.693		
400.00	400.00	209.68	245.65	3.60	3.36	-108.06	-2,930.82	-8,989.43	9,456.39	9,449.43	6.96	1,358.472		
500.00	499.98	263.00	298.94	3.80	3.41	33.75	-2,930.13	-8,990.91	9,457.01	9,449.80	7.21	1,311.204		
600.00	599.90	263.00	298.94	4.02	3.41	33.75	-2,930.13	-8,990.91	9,456.36	9,448.92	7.44	1,271.089		
614.60	614.49	263.00	298.94	4.06	3.41	33.75	-2,930.13	-8,990.91	9,456.35	9,448.87	7.48	1,264.885		
700.00	699.82	263.00	298.94	4.28	3.41	33.75	-2,930.13	-8,990.91	9,456.74	9,449.03	7.70	1,227.871		
800.00	799.74	305.19	341.10	4.57	3.47	33.76	-2,930.02	-8,992.66	9,457.65	9,449.61	8.05	1,175.574		
900.00	899.66	354.00	389.82	4.88	3.55	33.77	-2,930.69	-8,995.52	9,459.87	9,451.44	8.43	1,122.059		
1,000.00	999.58	354.00	389.82	5.21	3.55	33.77	-2,930.69	-8,995.52	9,462.45	9,453.69	8.76	1,079.696		
1,100.00	1,099.50	354.00	389.82	5.55	3.55	33.77	-2,930.69	-8,995.52	9,466.09	9,456.98	9.11	1,038.722		
1,200.00	1,199.42	386.77	422.49	5.91	3.61	33.77	-2,931.67	-8,997.84	9,470.56	9,461.03	9.53	993.948		
1,300.00	1,299.34	411.39	447.01	6.28	3.66	33.77	-2,932.72	-8,999.73	9,475.83	9,465.89	9.94	952.988		
1,400.00	1,399.26	445.00	480.46	6.66	3.73	33.77	-2,934.60	-9,002.49	9,481.91	9,471.52	10.39	912.914		
1,500.00	1,499.18	548.40	583.25	7.04	3.98	33.75	-2,942.34	-9,010.63	9,488.40	9,477.40	11.00	862.787		
1,600.00	1,599.10	617.95	652.31	7.43	4.17	33.74	-2,948.64	-9,015.75	9,494.89	9,483.32	11.56	821.025		
1,700.00	1,699.01	733.45	766.90	7.83	4.54	33.70	-2,960.60	-9,023.91	9,501.52	9,489.23	12.29	773.098		
1,800.00	1,798.93	1,340.14	1,371.10	8.23	6.84	33.63	-2,999.06	-9,058.97	9,507.23	9,492.40	14.84	640.698		
1,900.00	1,898.85	1,383.00	1,413.90	8.64	7.01	33.63	-2,999.86	-9,061.09	9,508.91	9,493.50	15.41	617.176		
2,000.00	1,998.77	1,383.00	1,413.90	9.05	7.01	33.63	-2,999.86	-9,061.09	9,511.20	9,495.38	15.82	601.367		
2,100.00	2,098.69	1,383.00	1,413.90	9.46	7.01	33.63	-2,999.86	-9,061.09	9,514.53	9,498.31	16.23	586.363		
2,200.00	2,198.61	1,383.00	1,413.90	9.88	7.01	33.63	-2,999.86	-9,061.09	9,518.92	9,502.28	16.64	572.127		
2,300.00	2,298.53	1,410.86	1,441.69	10.30	7.13	33.63	-3,000.47	-9,063.11	9,523.91	9,506.75	17.16	555.077		
2,400.00	2,398.45	1,445.00	1,475.62	10.72	7.27	33.63	-3,001.58	-9,066.61	9,530.41	9,512.70	17.70	538.337		
2,500.00	2,498.37	1,445.00	1,475.62	11.14	7.27	33.64	-3,001.58	-9,066.61	9,537.28	9,519.17	18.12	526.471		
2,600.00	2,598.29	1,445.00	1,475.62	11.56	7.27	33.64	-3,001.58	-9,066.61	9,545.20	9,526.67	18.53	515.206		
2,700.00	2,698.21	1,461.29	1,491.79	11.98	7.34	33.64	-3,002.22	-9,068.56	9,554.14	9,535.13	19.00	502.754		
2,800.00	2,798.13	1,525.27	1,555.23	12.41	7.63	33.65	-3,005.22	-9,076.20	9,563.63	9,543.96	19.68	486.075		
2,900.00	2,898.05	1,569.00	1,598.58	12.84	7.83	33.65	-3,007.68	-9,081.43	9,573.53	9,553.26	20.27	472.409		
3,000.00	2,997.97	1,606.96	1,636.17	13.27	8.01	33.65	-3,010.29	-9,086.06	9,584.04	9,563.21	20.84	459.973		
3,100.00	3,097.89	1,665.00	1,693.49	13.69	8.29	33.64	-3,015.52	-9,093.47	9,595.46	9,573.97	21.49	446.426		
3,200.00	3,197.81	1,665.00	1,693.49	14.12	8.29	33.64	-3,015.52	-9,093.47	9,607.30	9,585.40	21.90	438.694		
3,300.00	3,297.73	1,665.00	1,693.49	14.56	8.29	33.64	-3,015.52	-9,093.47	9,620.16	9,597.86	22.30	431.334		
3,400.00	3,397.65	1,703.67	1,731.56	14.99	8.48	33.63	-3,019.74	-9,098.79	9,633.65	9,610.78	22.88	421.063		
3,500.00	3,497.56	3,500.00	1,786.95	15.42	18.40	33.61	-3,026.66	-9,107.26	9,648.20	9,616.80	31.41	307.211		
3,600.00	3,597.48	1,901.50	1,925.79	15.85	9.52	33.57	-3,043.95	-9,127.46	9,662.28	9,637.68	24.59	392.872		
3,700.00	3,697.40	3,700.00	2,054.87	16.28	19.55	33.53	-3,061.19	-9,145.56	9,676.21	9,642.89	33.32	290.391		
3,800.00	3,797.32	2,093.11	2,113.97	16.72	10.55	33.51	-3,068.79	-9,153.58	9,689.76	9,663.45	26.30	368.367		
3,900.00	3,897.24	2,136.00	2,156.05	17.15	10.79	33.49	-3,074.21	-9,159.90	9,704.26	9,677.35	26.91	360.633		
4,000.00	3,997.16	2,164.41	2,183.88	17.59	10.95	33.48	-3,077.84	-9,164.27	9,719.36	9,691.92	27.44	354.164		
4,100.00	4,097.08	2,361.54	2,377.08	18.02	12.06	33.42	-3,103.99	-9,193.46	9,734.42	9,705.60	28.81	337.872		
4,200.00	4,197.00	2,419.00	2,433.42	18.46	12.38	33.39	-3,111.89	-9,201.53	9,748.89	9,719.40	29.49	330.548		
4,300.00	4,296.92	2,470.05	2,483.40	18.89	12.68	33.37	-3,119.25	-9,208.83	9,763.83	9,733.69	30.15	323.882		
4,400.00	4,396.84	2,517.00	2,529.27	19.33	12.95	33.35	-3,126.45	-9,215.78	9,779.43	9,748.65	30.78	317.745		
4,500.00	4,496.76	2,575.21	2,586.08	19.77	13.30	33.32	-3,135.64	-9,224.59	9,795.50	9,764.03	31.47	311.271		
4,600.00	4,596.68	2,607.00	2,617.09	20.20	13.49	33.31	-3,140.65	-9,229.45	9,811.96	9,779.93	32.02	306.410		
4,700.00	4,696.60	3,485.08	3,479.52	20.64	18.47	32.95	-3,261.68	-9,337.31	9,823.19	9,786.29	36.90	266.211		
4,800.00	4,796.52	3,521.42	3,515.39	21.08	18.67	32.93	-3,266.57	-9,340.51	9,832.56	9,795.06	37.50	262.235		
4,900.00	4,896.44	3,550.00	3,543.56	21.51	18.83	32.92	-3,270.56	-9,343.14	9,842.57	9,804.52	38.05	258.680		
5,000.00	4,996.36	3,593.52	3,586.44	21.95	19.07	32.90	-3,276.67	-9,347.43	9,853.21	9,814.53	38.68	254.745		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - FRITZLER 6-8-17(PR_150CC) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 82-MWD													Offset Well Error: 3.28 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,100.00	5,096.28	3,644.00	3,636.14	22.39	19.35	32.88	-3,283.60	-9,352.91	9,864.53	9,825.19	39.34	250.735		
5,200.00	5,196.19	3,644.00	3,636.14	22.83	19.35	32.88	-3,283.60	-9,352.91	9,876.49	9,836.75	39.74	248.505		
5,300.00	5,296.11	3,679.03	3,670.57	23.27	19.56	32.86	-3,288.49	-9,357.08	9,889.17	9,848.85	40.33	245.236		
5,400.00	5,396.03	3,700.95	3,692.08	23.71	19.68	32.85	-3,291.69	-9,359.87	9,902.66	9,861.83	40.83	242.506		
5,500.00	5,495.95	3,739.00	3,729.32	24.14	19.91	32.83	-3,297.50	-9,365.04	9,916.99	9,875.56	41.43	239.382		
5,600.00	5,595.87	3,739.00	3,729.32	24.58	19.91	32.83	-3,297.50	-9,365.04	9,931.97	9,890.16	41.81	237.531		
5,700.00	5,695.79	3,784.84	3,774.08	25.02	20.19	32.81	-3,304.86	-9,371.65	9,947.65	9,905.20	42.45	234.348		
5,800.00	5,795.71	4,305.00	4,283.41	25.46	23.29	32.56	-3,386.08	-9,437.56	9,961.05	9,915.40	45.65	218.189		
5,900.00	5,895.63	4,353.76	4,331.41	25.90	23.57	32.54	-3,392.58	-9,443.10	9,972.99	9,926.68	46.31	215.368		
6,000.00	5,995.55	4,399.00	4,375.88	26.34	23.83	32.52	-3,398.81	-9,448.66	9,985.70	9,938.76	46.94	212.733		
6,100.00	6,095.47	4,429.47	4,405.79	26.78	24.01	32.51	-3,402.99	-9,452.61	9,998.99	9,951.50	47.49	210.537		
6,200.00	6,195.39	4,459.94	4,435.11	27.22	24.19	32.50	-3,407.17	-9,456.56	10,012.28	9,964.81	48.04	208.342		
6,300.00	6,295.31	4,490.41	4,465.28	27.66	24.37	32.49	-3,411.35	-9,460.51	10,025.57	9,978.10	48.59	206.147		
6,400.00	6,395.23	4,520.88	4,495.45	28.10	24.55	32.48	-3,415.53	-9,464.46	10,038.86	9,991.39	49.14	203.952		
6,500.00	6,495.15	4,551.35	4,525.62	28.54	24.73	32.47	-3,419.71	-9,468.41	10,052.15	10,004.68	49.69	201.757		
6,600.00	6,595.07	4,581.82	4,555.79	28.98	24.91	32.46	-3,423.89	-9,472.36	10,065.44	10,017.97	50.24	199.562		
6,700.00	6,694.99	4,612.29	4,585.96	29.42	25.09	32.45	-3,428.07	-9,476.31	10,078.73	10,031.26	50.79	197.367		
6,800.00	6,794.91	4,642.76	4,616.13	29.86	25.27	32.44	-3,432.25	-9,480.26	10,092.02	10,044.55	51.34	195.172		
6,900.00	6,894.83	4,673.23	4,646.30	30.30	25.45	32.43	-3,436.43	-9,484.21	10,105.31	10,057.84	51.89	192.977		
7,000.00	6,994.75	4,703.70	4,676.47	30.74	25.63	32.42	-3,440.61	-9,488.16	10,118.60	10,071.13	52.44	190.782		
7,100.00	6,977.66	7,069.93	7,028.69	31.38	35.89	-34.43	-3,525.41	-9,618.41	9,731.62	9,669.06	62.56	155.550		
7,200.00	7,020.10	7,100.44	7,059.19	32.17	35.99	-44.77	-3,524.87	-9,618.46	9,645.83	9,582.96	62.87	153.433		
7,300.00	7,047.88	7,120.54	7,079.28	33.13	36.06	-60.82	-3,524.53	-9,618.50	9,555.18	9,492.08	63.10	151.427		
7,400.00	7,060.32	7,129.67	7,088.42	34.27	36.09	-83.26	-3,524.38	-9,618.53	9,461.89	9,398.61	63.28	149.531		
7,500.00	7,060.70	7,130.15	7,088.90	35.56	36.09	-91.17	-3,524.38	-9,618.53	9,368.07	9,304.64	63.43	147.701		
7,600.00	7,060.27	7,130.03	7,088.78	37.02	36.09	-91.16	-3,524.38	-9,618.53	9,274.39	9,210.78	63.61	145.800		
7,700.00	7,059.83	7,129.92	7,088.67	38.64	36.09	-91.16	-3,524.38	-9,618.53	9,180.83	9,117.00	63.83	143.822		
7,800.00	7,059.40	7,129.81	7,088.55	40.40	36.09	-91.16	-3,524.38	-9,618.53	9,087.42	9,023.32	64.10	141.767		
7,900.00	7,058.97	7,129.69	7,088.44	42.28	36.09	-91.16	-3,524.38	-9,618.53	8,994.15	8,929.74	64.41	139.638		
8,000.00	7,058.53	7,129.58	7,088.32	44.27	36.09	-91.16	-3,524.38	-9,618.53	8,901.02	8,836.25	64.76	137.436		
8,100.00	7,058.10	7,129.46	7,088.21	46.35	36.09	-91.15	-3,524.39	-9,618.53	8,808.04	8,742.88	65.16	135.165		
8,200.00	7,057.66	7,129.34	7,088.09	48.50	36.09	-91.15	-3,524.39	-9,618.53	8,715.22	8,649.61	65.61	132.830		
8,300.00	7,057.23	7,129.23	7,087.97	50.73	36.09	-91.15	-3,524.39	-9,618.53	8,622.56	8,556.46	66.11	130.434		
8,400.00	7,056.80	7,129.11	7,087.85	53.02	36.09	-91.15	-3,524.39	-9,618.53	8,530.07	8,463.42	66.65	127.982		
8,500.00	7,056.36	7,128.99	7,087.74	55.36	36.09	-91.15	-3,524.39	-9,618.53	8,437.75	8,370.50	67.24	125.479		
8,600.00	7,055.93	7,128.87	7,087.62	57.74	36.09	-91.14	-3,524.40	-9,618.53	8,345.60	8,277.71	67.89	122.931		
8,700.00	7,055.49	7,128.75	7,087.50	60.17	36.09	-91.14	-3,524.40	-9,618.53	8,253.64	8,185.05	68.58	120.344		
8,800.00	7,055.06	7,128.63	7,087.38	62.63	36.09	-91.14	-3,524.40	-9,618.53	8,161.86	8,092.53	69.33	117.723		
8,900.00	7,054.63	7,128.51	7,087.26	65.13	36.09	-91.14	-3,524.40	-9,618.53	8,070.28	8,000.15	70.13	115.075		
9,000.00	7,054.19	7,128.39	7,087.14	67.66	36.09	-91.13	-3,524.40	-9,618.53	7,978.91	7,907.92	70.98	112.405		
9,100.00	7,053.76	7,128.27	7,087.02	70.21	36.09	-91.13	-3,524.41	-9,618.52	7,887.74	7,815.85	71.89	109.720		
9,200.00	7,053.32	7,128.15	7,086.89	72.78	36.09	-91.13	-3,524.41	-9,618.52	7,796.79	7,723.94	72.85	107.025		
9,300.00	7,052.89	7,128.02	7,086.77	75.38	36.09	-91.13	-3,524.41	-9,618.52	7,706.06	7,632.20	73.86	104.327		
9,400.00	7,052.46	7,127.90	7,086.65	77.99	36.09	-91.13	-3,524.41	-9,618.52	7,615.57	7,540.63	74.93	101.629		
9,500.00	7,052.02	7,127.78	7,086.52	80.62	36.08	-91.12	-3,524.41	-9,618.52	7,525.31	7,449.25	76.06	98.939		
9,600.00	7,051.59	7,127.65	7,086.40	83.26	36.08	-91.12	-3,524.42	-9,618.52	7,435.31	7,358.07	77.24	96.260		
9,700.00	7,051.15	7,127.53	7,086.27	85.92	36.08	-91.12	-3,524.42	-9,618.52	7,345.56	7,267.08	78.48	93.598		
9,800.00	7,050.72	7,127.40	7,086.15	88.59	36.08	-91.12	-3,524.42	-9,618.52	7,256.09	7,176.31	79.77	90.957		
9,900.00	7,050.29	7,127.28	7,086.02	91.28	36.08	-91.12	-3,524.42	-9,618.52	7,166.89	7,085.76	81.13	88.340		
10,000.00	7,049.85	7,127.15	7,085.90	93.97	36.08	-91.11	-3,524.42	-9,618.52	7,077.98	6,995.44	82.54	85.753		
10,100.00	7,049.42	7,127.02	7,085.77	96.67	36.08	-91.11	-3,524.43	-9,618.52	6,989.37	6,905.36	84.01	83.197		
10,200.00	7,048.98	7,126.89	7,085.64	99.38	36.08	-91.11	-3,524.43	-9,618.52	6,901.07	6,815.52	85.54	80.676		
10,300.00	7,048.55	7,126.76	7,085.51	102.10	36.08	-91.11	-3,524.43	-9,618.52	6,813.09	6,725.96	87.13	78.193		
10,400.00	7,048.12	7,126.64	7,085.38	104.83	36.08	-91.10	-3,524.43	-9,618.52	6,725.45	6,636.66	88.79	75.750		
10,500.00	7,047.68	7,126.51	7,085.25	107.56	36.08	-91.10	-3,524.43	-9,618.52	6,638.16	6,547.66	90.50	73.349		
10,600.00	7,047.25	7,126.38	7,085.12	110.30	36.08	-91.10	-3,524.44	-9,618.52	6,551.23	6,458.95	92.28	70.993		
10,700.00	7,046.81	7,126.24	7,084.99	113.05	36.08	-91.10	-3,524.44	-9,618.52	6,464.68	6,370.56	94.12	68.683		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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-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		
10,800.00	7,046.38	7,126.11	7,084.86	115.80	36.08	-91.09	-3,524.44	-9,618.52	6,378.53	6,282.49	96.03	66.420		
10,900.00	7,045.95	7,125.98	7,084.73	118.55	36.08	-91.09	-3,524.44	-9,618.52	6,292.78	6,194.77	98.01	64.205		
11,000.00	7,045.51	7,125.85	7,084.60	121.31	36.08	-91.09	-3,524.45	-9,618.52	6,207.46	6,107.40	100.06	62.040		
11,100.00	7,045.08	7,125.71	7,084.46	124.08	36.08	-91.09	-3,524.45	-9,618.52	6,122.58	6,020.41	102.17	59.925		
11,200.00	7,044.64	7,125.58	7,084.33	126.85	36.08	-91.09	-3,524.45	-9,618.52	6,038.17	5,933.81	104.36	57.861		
11,300.00	7,044.21	7,125.44	7,084.19	129.62	36.08	-91.08	-3,524.45	-9,618.52	5,954.24	5,847.62	106.62	55.847		
11,400.00	7,043.78	7,125.31	7,084.06	132.40	36.08	-91.08	-3,524.45	-9,618.52	5,870.81	5,761.87	108.95	53.886		
11,500.00	7,043.34	7,125.17	7,083.92	135.18	36.08	-91.08	-3,524.46	-9,618.52	5,787.91	5,676.56	111.36	51.976		
11,600.00	7,042.91	7,125.04	7,083.78	137.96	36.08	-91.08	-3,524.46	-9,618.52	5,705.56	5,591.72	113.84	50.118		
11,700.00	7,042.47	7,124.90	7,083.65	140.75	36.08	-91.07	-3,524.46	-9,618.52	5,623.78	5,507.37	116.41	48.311		
11,800.00	7,042.04	7,124.76	7,083.51	143.54	36.07	-91.07	-3,524.46	-9,618.51	5,542.60	5,423.54	119.05	46.555		
11,900.00	7,041.61	7,124.62	7,083.37	146.33	36.07	-91.07	-3,524.46	-9,618.51	5,462.04	5,340.26	121.78	44.851		
12,000.00	7,041.17	7,124.48	7,083.23	149.13	36.07	-91.07	-3,524.47	-9,618.51	5,382.13	5,257.54	124.59	43.197		
12,100.00	7,040.74	7,124.34	7,083.09	151.92	36.07	-91.06	-3,524.47	-9,618.51	5,302.91	5,175.41	127.49	41.594		
12,200.00	7,040.30	7,124.20	7,082.95	154.72	36.07	-91.06	-3,524.47	-9,618.51	5,224.39	5,093.92	130.48	40.041		
12,300.00	7,039.87	7,124.06	7,082.81	157.52	36.07	-91.06	-3,524.47	-9,618.51	5,146.63	5,013.08	133.55	38.537		
12,400.00	7,039.44	7,123.92	7,082.66	160.33	36.07	-91.06	-3,524.48	-9,618.51	5,069.64	4,932.92	136.71	37.082		
12,500.00	7,039.00	7,123.77	7,082.52	163.13	36.07	-91.05	-3,524.48	-9,618.51	4,993.47	4,853.50	139.97	35.675		
12,600.00	7,038.57	7,123.63	7,082.38	165.94	36.07	-91.05	-3,524.48	-9,618.51	4,918.15	4,774.83	143.32	34.315		
12,700.00	7,038.13	7,123.48	7,082.23	168.75	36.07	-91.05	-3,524.48	-9,618.51	4,843.73	4,696.96	146.77	33.003		
12,800.00	7,037.70	7,123.34	7,082.09	171.56	36.07	-91.05	-3,524.49	-9,618.51	4,770.24	4,619.93	150.31	31.736		
12,900.00	7,037.27	7,123.19	7,081.94	174.37	36.07	-91.04	-3,524.49	-9,618.51	4,697.73	4,543.78	153.95	30.515		
13,000.00	7,036.83	7,123.05	7,081.79	177.19	36.07	-91.04	-3,524.49	-9,618.51	4,626.24	4,468.56	157.68	29.339		
13,100.00	7,036.40	7,122.90	7,081.65	180.00	36.07	-91.04	-3,524.49	-9,618.51	4,555.83	4,394.32	161.52	28.207		
13,200.00	7,035.96	7,122.75	7,081.50	182.82	36.07	-91.04	-3,524.50	-9,618.51	4,486.54	4,321.10	165.45	27.118		
13,300.00	7,035.53	7,122.60	7,081.35	185.64	36.07	-91.03	-3,524.50	-9,618.51	4,418.43	4,248.96	169.48	26.071		
13,400.00	7,035.10	7,122.45	7,081.20	188.46	36.07	-91.03	-3,524.50	-9,618.51	4,351.55	4,177.95	173.60	25.066		
13,500.00	7,034.66	7,122.30	7,081.05	191.28	36.07	-91.03	-3,524.50	-9,618.51	4,285.97	4,108.14	177.83	24.102		
13,600.00	7,034.23	7,122.15	7,080.90	194.10	36.07	-91.02	-3,524.51	-9,618.51	4,221.73	4,039.58	182.14	23.178		
13,700.00	7,033.79	7,122.00	7,080.75	196.92	36.07	-91.02	-3,524.51	-9,618.51	4,158.90	3,972.35	186.55	22.294		
13,800.00	7,033.36	7,121.84	7,080.59	199.74	36.06	-91.02	-3,524.51	-9,618.51	4,097.55	3,906.50	191.05	21.448		
13,900.00	7,032.93	7,121.69	7,080.44	202.57	36.06	-91.02	-3,524.51	-9,618.51	4,037.75	3,842.12	195.63	20.640		
14,000.00	7,032.49	7,121.54	7,080.28	205.39	36.06	-91.01	-3,524.52	-9,618.51	3,979.56	3,779.27	200.29	19.869		
14,100.00	7,032.06	7,121.38	7,080.13	208.22	36.06	-91.01	-3,524.52	-9,618.51	3,923.06	3,718.02	205.03	19.134		
14,200.00	7,031.62	7,121.22	7,079.97	211.05	36.06	-91.01	-3,524.52	-9,618.51	3,868.31	3,658.48	209.84	18.435		
14,300.00	7,031.19	7,121.07	7,079.82	213.87	36.06	-91.01	-3,524.52	-9,618.51	3,815.41	3,600.70	214.71	17.770		
14,400.00	7,030.76	7,120.91	7,079.66	216.70	36.06	-91.00	-3,524.53	-9,618.50	3,764.41	3,544.79	219.63	17.140		
14,500.00	7,030.32	7,120.75	7,079.50	219.53	36.06	-91.00	-3,524.53	-9,618.50	3,715.41	3,490.82	224.59	16.543		
14,600.00	7,029.89	7,120.59	7,079.34	222.36	36.06	-91.00	-3,524.53	-9,618.50	3,668.48	3,438.90	229.58	15.979		
14,700.00	7,029.45	7,120.43	7,079.18	225.19	36.06	-90.99	-3,524.53	-9,618.50	3,623.71	3,389.11	234.60	15.447		
14,800.00	7,029.02	7,120.27	7,079.02	228.03	36.06	-90.99	-3,524.54	-9,618.50	3,581.16	3,341.54	239.62	14.945		
14,805.04	7,029.00	7,120.26	7,079.01	228.17	36.06	-90.99	-3,524.54	-9,618.50	3,579.08	3,339.21	239.87	14.921 CC, ES, SF		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	914.95	3.28	3.38	-108.75	-3,004.72	-8,851.13	9,391.91					
100.00	100.00	998.18	1,023.19	3.28	5.89	-108.89	-3,022.13	-8,833.80	9,381.98	9,372.84	9.14	1,026.380		
200.00	200.00	1,046.53	1,070.26	3.34	6.15	-108.95	-3,030.23	-8,826.23	9,372.40	9,362.98	9.43	993.972		
300.00	300.00	1,098.00	1,120.48	3.44	6.43	-109.01	-3,038.50	-8,818.60	9,363.41	9,353.61	9.80	955.913		
400.00	400.00	1,129.27	1,151.06	3.60	6.60	-109.05	-3,043.32	-8,814.23	9,355.03	9,344.93	10.10	926.146		
500.00	499.98	1,164.41	1,185.51	3.80	6.78	32.81	-3,048.54	-8,809.62	9,345.89	9,335.42	10.47	892.872		
600.00	599.90	1,206.44	1,226.79	4.02	7.00	32.79	-3,054.52	-8,804.50	9,335.56	9,324.66	10.90	856.243		
700.00	699.82	1,277.00	1,295.99	4.28	7.38	32.72	-3,065.35	-8,795.93	9,325.64	9,314.12	11.52	809.316		
800.00	799.74	1,351.42	1,368.87	4.57	7.79	32.64	-3,077.40	-8,786.90	9,316.02	9,303.82	12.20	763.431		
900.00	899.66	1,425.84	1,441.92	4.88	8.19	32.57	-3,088.71	-8,778.31	9,306.68	9,293.78	12.90	721.324		
1,000.00	999.58	1,724.10	1,735.57	5.21	9.79	32.31	-3,126.45	-8,742.44	9,295.41	9,280.63	14.78	628.737		
1,100.00	1,099.50	1,757.00	1,767.95	5.55	9.97	32.28	-3,130.62	-8,738.36	9,284.48	9,269.18	15.30	606.866		
1,200.00	1,199.42	1,813.80	1,823.84	5.91	10.28	32.23	-3,138.10	-8,731.56	9,274.15	9,258.19	15.96	581.146		
1,300.00	1,299.34	2,227.92	2,230.18	6.28	12.66	31.84	-3,193.95	-8,675.09	9,262.49	9,243.88	18.61	497.754		
1,400.00	1,399.26	2,293.90	2,294.97	6.66	13.04	31.78	-3,201.80	-8,665.38	9,249.23	9,229.89	19.34	478.244		
1,500.00	1,499.18	2,321.00	2,321.65	7.04	13.19	31.76	-3,204.67	-8,661.58	9,236.46	9,216.58	19.87	464.790		
1,600.00	1,599.10	2,375.75	2,375.59	7.43	13.49	31.72	-3,210.51	-8,654.25	9,224.22	9,203.67	20.55	448.804		
1,700.00	1,699.01	2,416.00	2,415.25	7.83	13.72	31.69	-3,215.11	-8,649.16	9,212.76	9,191.60	21.16	435.304		
1,800.00	1,798.93	2,556.47	2,553.24	8.23	14.52	31.56	-3,233.44	-8,630.42	9,201.21	9,178.87	22.34	411.870		
1,900.00	1,898.85	1,900.00	2,666.17	8.64	10.72	31.45	-3,248.35	-8,614.91	9,189.57	9,170.49	19.07	481.788		
2,000.00	1,998.77	2,805.90	2,797.60	9.05	16.01	31.30	-3,268.65	-8,595.12	9,177.47	9,152.89	24.59	373.246		
2,100.00	2,098.69	2,890.00	2,879.83	9.46	16.53	31.21	-3,281.23	-8,582.75	9,165.42	9,139.92	25.50	359.419		
2,200.00	2,198.61	2,930.34	2,919.41	9.88	16.77	31.17	-3,286.72	-8,577.18	9,153.79	9,127.64	26.15	350.083		
2,300.00	2,298.53	2,984.00	2,972.18	10.30	17.08	31.12	-3,293.64	-8,570.36	9,142.86	9,115.99	26.87	340.254		
2,400.00	2,398.45	3,030.20	3,017.63	10.72	17.35	31.08	-3,299.71	-8,564.72	9,132.46	9,104.91	27.56	331.415		
2,500.00	2,498.37	3,078.00	3,064.54	11.14	17.63	31.03	-3,306.62	-8,558.71	9,122.44	9,094.19	28.25	322.892		
2,600.00	2,598.29	3,144.01	3,129.48	11.56	18.00	30.97	-3,315.55	-8,550.97	9,112.86	9,083.82	29.04	313.790		
2,700.00	2,698.21	3,191.65	3,176.59	11.98	18.25	30.94	-3,320.77	-8,546.17	9,103.88	9,074.16	29.72	306.303		
2,800.00	2,798.13	3,238.80	3,223.29	12.41	18.50	30.90	-3,325.63	-8,541.83	9,095.48	9,065.09	30.39	299.292		
2,900.00	2,898.05	3,294.22	3,278.21	12.84	18.78	30.87	-3,331.26	-8,537.08	9,087.63	9,056.53	31.10	292.193		
3,000.00	2,997.97	3,357.00	3,340.37	13.27	19.10	30.82	-3,338.30	-8,531.73	9,080.21	9,048.36	31.85	285.074		
3,100.00	3,097.89	3,100.00	3,485.26	13.69	17.79	30.72	-3,354.25	-8,519.59	9,072.99	9,042.01	30.97	292.921		
3,200.00	3,197.81	3,593.32	3,574.43	14.12	20.32	30.65	-3,363.95	-8,511.56	9,065.11	9,031.19	33.92	267.249		
3,300.00	3,297.73	4,062.82	4,036.36	14.56	22.99	30.22	-3,426.49	-8,457.90	9,056.92	9,019.99	36.93	245.247		
3,400.00	3,397.65	4,112.00	4,084.51	14.99	23.30	30.17	-3,433.70	-8,450.96	9,045.62	9,007.95	37.67	240.137		
3,500.00	3,497.56	4,161.66	4,133.28	15.42	23.59	30.12	-3,440.40	-8,444.46	9,034.86	8,996.47	38.39	235.337		
3,600.00	3,597.48	4,207.00	4,177.91	15.85	23.85	30.08	-3,446.11	-8,438.89	9,024.63	8,985.54	39.09	230.867		
3,700.00	3,697.40	4,271.35	4,241.19	16.28	24.23	30.02	-3,454.78	-8,431.09	9,014.87	8,974.97	39.90	225.938		
3,800.00	3,797.32	4,322.53	4,291.35	16.72	24.53	29.96	-3,462.73	-8,424.77	9,005.63	8,964.99	40.64	221.607		
3,900.00	3,897.24	4,369.44	4,337.40	17.15	24.81	29.91	-3,469.82	-8,419.33	8,996.97	8,955.62	41.35	217.562		
4,000.00	3,997.16	4,425.80	4,392.87	17.59	25.13	29.86	-3,477.86	-8,413.33	8,988.88	8,946.76	42.12	213.430		
4,100.00	4,097.08	4,491.00	4,457.11	18.02	25.50	29.80	-3,486.82	-8,406.77	8,981.18	8,938.26	42.92	209.245		
4,200.00	4,197.00	4,538.94	4,504.43	18.46	25.76	29.75	-3,493.11	-8,402.30	8,973.97	8,930.35	43.62	205.725		
4,300.00	4,296.92	4,585.00	4,549.97	18.89	26.01	29.72	-3,498.83	-8,398.44	8,967.36	8,923.05	44.31	202.379		
4,400.00	4,396.84	4,623.98	4,588.58	19.33	26.21	29.69	-3,503.37	-8,395.56	8,961.40	8,916.45	44.95	199.383		
4,500.00	4,496.76	4,680.00	4,644.17	19.77	26.49	29.65	-3,509.31	-8,392.14	8,956.15	8,910.49	45.67	196.122		
4,600.00	4,596.68	4,680.00	4,644.17	20.20	26.49	29.65	-3,509.31	-8,392.14	8,951.58	8,905.48	46.10	194.176		
4,700.00	4,696.60	4,744.80	4,708.60	20.64	26.79	29.61	-3,515.60	-8,389.13	8,947.55	8,900.71	46.84	191.013		
4,800.00	4,796.52	4,944.55	4,907.61	21.08	27.68	29.53	-3,530.58	-8,381.01	8,942.91	8,894.72	48.18	185.597		
4,900.00	4,896.44	5,000.08	4,962.99	21.51	27.91	29.51	-3,533.93	-8,379.04	8,938.41	8,889.55	48.86	182.942		
5,000.00	4,996.36	5,059.00	5,021.81	21.95	28.16	29.50	-3,537.18	-8,377.41	8,934.44	8,884.89	49.55	180.329		
5,100.00	5,096.28	5,180.53	5,143.28	22.39	28.61	29.49	-3,539.63	-8,375.80	8,930.47	8,880.04	50.43	177.081		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,249.00	5,211.75	22.83	28.83	29.50	-3,539.57	-8,375.57	8,926.63	8,875.54	51.10	174.700		
5,300.00	5,296.11	5,312.02	5,274.77	23.27	29.04	29.51	-3,539.61	-8,375.58	8,923.17	8,871.43	51.74	172.462		
5,400.00	5,396.03	5,389.78	5,352.53	23.71	29.29	29.52	-3,539.93	-8,375.79	8,920.08	8,867.65	52.44	170.116		
5,500.00	5,495.95	5,481.10	5,443.84	24.14	29.60	29.53	-3,540.41	-8,376.13	8,917.13	8,863.95	53.18	167.680		
5,600.00	5,595.87	5,572.42	5,535.17	24.58	29.90	29.54	-3,540.98	-8,376.52	8,914.27	8,860.34	53.92	165.311		
5,700.00	5,695.79	5,674.92	5,637.66	25.02	30.23	29.55	-3,541.66	-8,377.01	8,911.48	8,856.77	54.70	162.901		
5,800.00	5,795.71	5,790.65	5,753.39	25.46	30.61	29.56	-3,542.14	-8,377.52	8,908.55	8,853.02	55.53	160.434		
5,900.00	5,895.63	5,906.37	5,869.10	25.90	30.99	29.58	-3,542.26	-8,377.96	8,905.44	8,849.09	56.35	158.035		
6,000.00	5,995.55	6,008.39	5,971.13	26.34	31.34	29.59	-3,542.45	-8,378.20	8,902.24	8,845.09	57.15	155.779		
6,100.00	6,095.47	6,110.70	6,073.44	26.78	31.69	29.60	-3,543.10	-8,378.22	8,899.01	8,841.07	57.94	153.582		
6,200.00	6,195.39	6,225.43	6,188.16	27.22	32.10	29.60	-3,544.35	-8,377.97	8,895.74	8,836.94	58.80	151.295		
6,300.00	6,295.31	6,376.50	6,339.21	27.66	32.68	29.61	-3,546.20	-8,376.88	8,892.04	8,832.22	59.82	148.652		
6,400.00	6,395.23	6,527.50	6,490.18	28.10	33.26	29.61	-3,548.11	-8,374.82	8,887.77	8,826.93	60.84	146.092		
6,500.00	6,495.02	6,571.93	6,534.60	28.54	33.44	-6.15	-3,548.99	-8,374.34	8,881.59	8,820.12	61.46	144.509		
6,600.00	6,593.09	6,644.34	6,607.00	28.98	33.72	-15.93	-3,550.52	-8,373.48	8,862.70	8,800.52	62.18	142.531		
6,700.00	6,687.01	6,713.62	6,676.25	29.41	34.00	-19.64	-3,552.28	-8,372.75	8,830.12	8,767.26	62.87	140.455		
6,800.00	6,774.46	6,790.20	6,752.79	29.83	34.30	-22.79	-3,554.50	-8,372.03	8,784.62	8,721.07	63.55	138.227		
6,900.00	6,853.31	6,877.46	6,840.02	30.26	34.65	-26.54	-3,556.77	-8,371.28	8,727.08	8,662.84	64.24	135.853		
7,000.00	6,921.60	6,952.94	6,915.48	30.76	34.95	-31.55	-3,558.42	-8,370.67	8,658.94	8,594.10	64.84	133.552		
7,100.00	6,977.66	7,014.79	6,977.32	31.38	35.19	-38.70	-3,559.57	-8,370.22	8,581.93	8,516.59	65.34	131.345		
7,200.00	7,020.10	7,070.48	7,033.00	32.17	35.41	-49.29	-3,560.46	-8,369.80	8,498.01	8,432.22	65.79	129.177		
7,300.00	7,047.88	7,109.90	7,072.41	33.13	35.57	-64.64	-3,561.09	-8,369.43	8,409.28	8,343.13	66.15	127.123		
7,400.00	7,060.32	7,126.53	7,089.04	34.27	35.64	-84.36	-3,561.36	-8,369.26	8,318.02	8,251.60	66.42	125.225		
7,500.00	7,060.70	7,125.54	7,088.05	35.56	35.63	-91.04	-3,561.34	-8,369.27	8,226.34	8,159.69	66.65	123.428		
7,600.00	7,060.27	7,123.40	7,085.90	37.02	35.62	-91.00	-3,561.31	-8,369.29	8,134.86	8,067.94	66.92	121.562		
7,700.00	7,059.83	7,121.27	7,083.78	38.64	35.62	-90.97	-3,561.27	-8,369.32	8,043.58	7,976.34	67.24	119.617		
7,800.00	7,059.40	7,119.17	7,081.68	40.40	35.61	-90.93	-3,561.24	-8,369.34	7,952.52	7,884.89	67.63	117.595		
7,900.00	7,058.97	7,117.10	7,079.61	42.28	35.60	-90.89	-3,561.21	-8,369.36	7,861.66	7,793.60	68.07	115.501		
8,000.00	7,058.53	7,115.05	7,077.56	44.27	35.59	-90.86	-3,561.17	-8,369.38	7,771.04	7,702.47	68.57	113.337		
8,100.00	7,058.10	7,113.02	7,075.53	46.35	35.58	-90.82	-3,561.14	-8,369.40	7,680.64	7,611.52	69.13	111.110		
8,200.00	7,057.66	7,111.01	7,073.52	48.50	35.57	-90.79	-3,561.11	-8,369.42	7,590.49	7,520.74	69.75	108.824		
8,300.00	7,057.23	7,109.03	7,071.54	50.73	35.57	-90.76	-3,561.08	-8,369.44	7,500.58	7,430.15	70.44	106.487		
8,400.00	7,056.80	7,107.07	7,069.58	53.02	35.56	-90.72	-3,561.05	-8,369.46	7,410.94	7,339.75	71.19	104.103		
8,500.00	7,056.36	7,105.13	7,067.64	55.36	35.55	-90.69	-3,561.02	-8,369.48	7,321.56	7,249.55	72.01	101.681		
8,600.00	7,055.93	7,103.21	7,065.72	57.74	35.54	-90.65	-3,560.98	-8,369.50	7,232.46	7,159.57	72.89	99.227		
8,700.00	7,055.49	7,101.31	7,063.82	60.17	35.54	-90.62	-3,560.95	-8,369.52	7,143.64	7,069.80	73.84	96.748		
8,800.00	7,055.06	7,099.43	7,061.94	62.63	35.53	-90.59	-3,560.92	-8,369.54	7,055.13	6,980.27	74.85	94.251		
8,900.00	7,054.63	7,097.58	7,060.09	65.13	35.52	-90.56	-3,560.90	-8,369.55	6,966.93	6,890.99	75.94	91.743		
9,000.00	7,054.19	7,095.74	7,058.25	67.66	35.51	-90.52	-3,560.87	-8,369.57	6,879.04	6,801.95	77.09	89.231		
9,100.00	7,053.76	7,093.92	7,056.43	70.21	35.51	-90.49	-3,560.84	-8,369.59	6,791.50	6,713.18	78.31	86.721		
9,200.00	7,053.32	7,092.12	7,054.64	72.78	35.50	-90.46	-3,560.81	-8,369.61	6,704.30	6,624.69	79.60	84.220		
9,300.00	7,052.89	7,090.34	7,052.86	75.38	35.49	-90.43	-3,560.78	-8,369.62	6,617.46	6,536.50	80.96	81.733		
9,400.00	7,052.46	7,088.58	7,051.10	77.99	35.49	-90.40	-3,560.75	-8,369.64	6,531.00	6,448.61	82.39	79.265		
9,500.00	7,052.02	7,086.84	7,049.36	80.62	35.48	-90.37	-3,560.72	-8,369.66	6,444.93	6,361.04	83.89	76.822		
9,600.00	7,051.59	7,085.12	7,047.63	83.26	35.47	-90.34	-3,560.70	-8,369.67	6,359.27	6,273.81	85.47	74.407		
9,700.00	7,051.15	7,083.41	7,045.93	85.92	35.46	-90.31	-3,560.67	-8,369.69	6,274.03	6,186.92	87.11	72.026		
9,800.00	7,050.72	7,081.72	7,044.24	88.59	35.46	-90.28	-3,560.64	-8,369.70	6,189.24	6,100.41	88.82	69.681		
9,900.00	7,050.29	7,080.05	7,042.57	91.28	35.45	-90.25	-3,560.62	-8,369.72	6,104.90	6,014.29	90.61	67.376		
10,000.00	7,049.85	7,078.40	7,040.91	93.97	35.44	-90.22	-3,560.59	-8,369.73	6,021.04	5,928.57	92.47	65.113		
10,100.00	7,049.42	7,076.76	7,039.28	96.67	35.44	-90.20	-3,560.56	-8,369.75	5,937.68	5,843.28	94.41	62.896		
10,200.00	7,048.98	7,075.14	7,037.66	99.38	35.43	-90.17	-3,560.54	-8,369.76	5,854.85	5,758.43	96.42	60.725		
10,300.00	7,048.55	7,073.54	7,036.05	102.10	35.43	-90.14	-3,560.51	-8,369.77	5,772.55	5,674.05	98.50	58.604		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	7,071.95	7,034.46	104.83	35.42	-90.11	-3,560.49	-8,369.79	5,690.83	5,590.16	100.66	56.533		
10,500.00	7,047.68	7,070.37	7,032.89	107.56	35.41	-90.08	-3,560.46	-8,369.80	5,609.69	5,506.79	102.91	54.513		
10,600.00	7,047.25	7,068.82	7,031.34	110.30	35.41	-90.06	-3,560.44	-8,369.81	5,529.17	5,423.95	105.22	52.546		
10,700.00	7,046.81	7,067.28	7,029.79	113.05	35.40	-90.03	-3,560.41	-8,369.83	5,449.30	5,341.68	107.62	50.632		
10,800.00	7,046.38	7,065.75	7,028.27	115.80	35.39	-90.00	-3,560.39	-8,369.84	5,370.10	5,260.00	110.11	48.772		
10,900.00	7,045.95	7,064.24	7,026.76	118.55	35.39	-89.98	-3,560.36	-8,369.85	5,291.61	5,178.94	112.67	46.966		
11,000.00	7,045.51	7,062.74	7,025.26	121.31	35.38	-89.95	-3,560.34	-8,369.86	5,213.85	5,098.54	115.31	45.214		
11,100.00	7,045.08	7,061.26	7,023.78	124.08	35.38	-89.93	-3,560.32	-8,369.88	5,136.86	5,018.82	118.05	43.516		
11,200.00	7,044.64	7,059.79	7,022.31	126.85	35.37	-89.90	-3,560.29	-8,369.89	5,060.68	4,939.82	120.86	41.872		
11,300.00	7,044.21	7,058.33	7,020.85	129.62	35.36	-89.88	-3,560.27	-8,369.90	4,985.33	4,861.57	123.76	40.281		
11,400.00	7,043.78	7,056.89	7,019.41	132.40	35.36	-89.85	-3,560.25	-8,369.91	4,910.87	4,784.12	126.75	38.744		
11,500.00	7,043.34	7,055.47	7,017.99	135.18	35.35	-89.83	-3,560.22	-8,369.92	4,837.33	4,707.50	129.83	37.260		
11,600.00	7,042.91	7,054.05	7,016.57	137.96	35.35	-89.80	-3,560.20	-8,369.93	4,764.75	4,631.76	132.99	35.827		
11,700.00	7,042.47	7,052.70	7,015.22	140.75	35.34	-89.78	-3,560.17	-8,369.95	4,693.18	4,556.93	136.24	34.447		
11,800.00	7,042.04	7,051.41	7,013.93	143.54	35.34	-89.76	-3,560.15	-8,369.96	4,622.66	4,483.07	139.59	33.117		
11,900.00	7,041.61	7,050.12	7,012.64	146.33	35.33	-89.73	-3,560.13	-8,369.97	4,553.25	4,410.23	143.02	31.837		
12,000.00	7,041.17	7,048.83	7,011.35	149.13	35.33	-89.71	-3,560.11	-8,369.98	4,484.99	4,338.46	146.53	30.607		
12,100.00	7,040.74	7,047.53	7,010.05	151.92	35.32	-89.69	-3,560.09	-8,369.99	4,417.94	4,267.80	150.14	29.426		
12,200.00	7,040.30	7,046.24	7,008.76	154.72	35.32	-89.67	-3,560.07	-8,370.00	4,352.16	4,198.33	153.83	28.292		
12,300.00	7,039.87	7,044.94	7,007.46	157.52	35.31	-89.64	-3,560.05	-8,370.01	4,287.70	4,130.09	157.61	27.205		
12,400.00	7,039.44	7,043.63	7,006.16	160.33	35.31	-89.62	-3,560.03	-8,370.02	4,224.62	4,063.15	161.47	26.164		
12,500.00	7,039.00	7,042.33	7,004.85	163.13	35.30	-89.60	-3,560.01	-8,370.02	4,162.99	3,997.59	165.40	25.169		
12,600.00	7,038.57	7,041.02	7,003.55	165.94	35.30	-89.58	-3,559.99	-8,370.03	4,102.87	3,933.45	169.42	24.218		
12,700.00	7,038.13	7,039.71	7,002.24	168.75	35.29	-89.55	-3,559.97	-8,370.04	4,044.33	3,870.82	173.50	23.310		
12,800.00	7,037.70	7,038.40	7,000.92	171.56	35.29	-89.53	-3,559.95	-8,370.05	3,987.43	3,809.78	177.66	22.444		
12,900.00	7,037.27	7,037.09	6,999.61	174.37	35.28	-89.51	-3,559.93	-8,370.06	3,932.26	3,750.39	181.87	21.621		
13,000.00	7,036.83	7,035.77	6,998.29	177.19	35.27	-89.48	-3,559.91	-8,370.07	3,878.88	3,692.74	186.15	20.838		
13,100.00	7,036.40	7,034.45	6,996.98	180.00	35.27	-89.46	-3,559.89	-8,370.08	3,827.37	3,636.90	190.47	20.095		
13,200.00	7,035.96	7,033.13	6,995.65	182.82	35.26	-89.44	-3,559.87	-8,370.09	3,777.81	3,582.98	194.83	19.390		
13,300.00	7,035.53	7,031.81	6,994.33	185.64	35.26	-89.42	-3,559.85	-8,370.10	3,730.26	3,531.04	199.22	18.724		
13,400.00	7,035.10	7,030.48	6,993.00	188.46	35.25	-89.39	-3,559.82	-8,370.11	3,684.82	3,481.18	203.64	18.095		
13,500.00	7,034.66	7,029.15	6,991.68	191.28	35.25	-89.37	-3,559.80	-8,370.12	3,641.55	3,433.49	208.06	17.502		
13,600.00	7,034.23	7,027.82	6,990.34	194.10	35.24	-89.35	-3,559.78	-8,370.13	3,600.55	3,388.06	212.49	16.945		
13,700.00	7,033.79	7,026.49	6,989.01	196.92	35.24	-89.32	-3,559.76	-8,370.14	3,561.88	3,344.98	216.90	16.422		
13,800.00	7,033.36	7,025.15	6,987.67	199.74	35.23	-89.30	-3,559.74	-8,370.14	3,525.62	3,304.33	221.29	15.932		
13,900.00	7,032.93	7,023.81	6,986.34	202.57	35.23	-89.28	-3,559.72	-8,370.15	3,491.85	3,266.22	225.63	15.476		
14,000.00	7,032.49	7,022.47	6,984.99	205.39	35.22	-89.25	-3,559.69	-8,370.16	3,460.64	3,230.73	229.91	15.052		
14,100.00	7,032.06	7,021.12	6,983.65	208.22	35.22	-89.23	-3,559.67	-8,370.17	3,432.06	3,197.93	234.13	14.659		
14,200.00	7,031.62	7,019.78	6,982.30	211.05	35.21	-89.21	-3,559.65	-8,370.18	3,406.18	3,167.92	238.26	14.296		
14,300.00	7,031.19	7,018.43	6,980.95	213.87	35.21	-89.18	-3,559.63	-8,370.19	3,383.05	3,140.77	242.28	13.963		
14,400.00	7,030.76	7,017.08	6,979.60	216.70	35.20	-89.16	-3,559.60	-8,370.20	3,362.75	3,116.56	246.19	13.659		
14,500.00	7,030.32	7,015.72	6,978.25	219.53	35.20	-89.14	-3,559.58	-8,370.21	3,345.30	3,095.35	249.96	13.383		
14,600.00	7,029.89	7,014.37	6,976.89	222.36	35.19	-89.11	-3,559.56	-8,370.22	3,330.77	3,077.19	253.58	13.135		
14,700.00	7,029.45	7,013.01	6,975.53	225.19	35.18	-89.09	-3,559.53	-8,370.23	3,319.19	3,062.15	257.04	12.913		
14,800.00	7,029.02	7,011.64	6,974.17	228.03	35.18	-89.07	-3,559.51	-8,370.24	3,310.60	3,050.27	260.33	12.717		
14,805.04	7,029.00	7,011.58	6,974.10	228.17	35.18	-89.06	-3,559.51	-8,370.24	3,310.24	3,049.75	260.49	12.708	CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-134.09	-3,266.14	-3,371.20	4,694.35					
100.00	100.00	35.00	100.00	3.28	3.34	-134.09	-3,266.14	-3,371.20	4,693.90	4,687.28	6.62	708.927		
200.00	200.00	135.00	200.00	3.34	4.42	-134.09	-3,266.14	-3,371.20	4,693.90	4,686.14	7.76	604.876		
300.00	300.00	235.00	300.00	3.44	7.24	-134.09	-3,266.14	-3,371.20	4,693.90	4,683.21	10.69	439.157		
400.00	400.00	335.00	400.00	3.60	10.48	-134.09	-3,266.14	-3,371.20	4,693.90	4,679.82	14.08	333.387		
500.00	499.98	434.98	499.98	3.80	13.83	7.71	-3,266.14	-3,371.20	4,692.17	4,674.54	17.63	266.125		
600.00	599.90	534.90	599.90	4.02	17.24	7.72	-3,266.14	-3,371.20	4,688.23	4,666.97	21.27	220.465		
700.00	699.82	634.82	699.82	4.28	20.68	7.73	-3,266.14	-3,371.20	4,684.25	4,659.30	24.96	187.690		
800.00	799.74	734.74	799.74	4.57	24.13	7.74	-3,266.14	-3,371.20	4,680.28	4,651.58	28.69	163.116		
900.00	899.66	834.66	899.66	4.88	27.59	7.74	-3,266.14	-3,371.20	4,676.30	4,643.84	32.46	144.059		
1,000.00	999.58	934.58	999.58	5.21	31.05	7.75	-3,266.14	-3,371.20	4,672.32	4,636.07	36.25	128.876		
1,100.00	1,099.50	1,034.50	1,099.50	5.55	34.53	7.76	-3,266.14	-3,371.20	4,668.35	4,628.28	40.07	116.511		
1,200.00	1,199.42	1,134.42	1,199.42	5.91	38.00	7.76	-3,266.14	-3,371.20	4,664.37	4,620.47	43.90	106.256		
1,300.00	1,299.34	1,234.34	1,299.34	6.28	41.48	7.77	-3,266.14	-3,371.20	4,660.39	4,612.65	47.74	97.620		
1,400.00	1,399.26	1,334.26	1,399.26	6.66	44.95	7.78	-3,266.14	-3,371.20	4,656.42	4,604.82	51.59	90.252		
1,500.00	1,499.18	1,434.18	1,499.18	7.04	48.43	7.78	-3,266.14	-3,371.20	4,652.44	4,596.99	55.46	83.894		
1,600.00	1,599.10	1,534.10	1,599.10	7.43	51.91	7.79	-3,266.14	-3,371.20	4,648.47	4,589.14	59.33	78.354		
1,700.00	1,699.01	1,634.01	1,699.01	7.83	55.40	7.80	-3,266.14	-3,371.20	4,644.49	4,581.29	63.20	73.486		
1,800.00	1,798.93	1,733.93	1,798.93	8.23	58.88	7.80	-3,266.14	-3,371.20	4,640.51	4,573.43	67.08	69.174		
1,900.00	1,898.85	1,833.85	1,898.85	8.64	62.36	7.81	-3,266.14	-3,371.20	4,636.54	4,565.57	70.97	65.330		
2,000.00	1,998.77	1,933.77	1,998.77	9.05	65.84	7.82	-3,266.14	-3,371.20	4,632.56	4,557.70	74.86	61.882		
2,100.00	2,098.69	2,033.69	2,098.69	9.46	69.33	7.82	-3,266.14	-3,371.20	4,628.58	4,549.83	78.75	58.772		
2,200.00	2,198.61	2,133.61	2,198.61	9.88	72.81	7.83	-3,266.14	-3,371.20	4,624.61	4,541.96	82.65	55.953		
2,300.00	2,298.53	2,233.53	2,298.53	10.30	76.30	7.84	-3,266.14	-3,371.20	4,620.63	4,534.08	86.55	53.386		
2,400.00	2,398.45	2,333.45	2,398.45	10.72	79.78	7.84	-3,266.14	-3,371.20	4,616.66	4,526.20	90.45	51.039		
2,500.00	2,498.37	2,433.37	2,498.37	11.14	83.27	7.85	-3,266.14	-3,371.20	4,612.68	4,518.33	94.36	48.886		
2,600.00	2,598.29	2,533.29	2,598.29	11.56	86.75	7.86	-3,266.14	-3,371.20	4,608.71	4,510.44	98.26	46.902		
2,700.00	2,698.21	2,633.21	2,698.21	11.98	90.24	7.86	-3,266.14	-3,371.20	4,604.73	4,502.56	102.17	45.070		
2,800.00	2,798.13	2,733.13	2,798.13	12.41	93.73	7.87	-3,266.14	-3,371.20	4,600.76	4,494.68	106.08	43.371		
2,900.00	2,898.05	2,833.05	2,898.05	12.84	97.21	7.88	-3,266.14	-3,371.20	4,596.78	4,486.79	109.99	41.793		
3,000.00	2,997.97	2,932.97	2,997.97	13.27	100.70	7.88	-3,266.14	-3,371.20	4,592.80	4,478.90	113.90	40.323		
3,100.00	3,097.89	3,032.89	3,097.89	13.69	104.18	7.89	-3,266.14	-3,371.20	4,588.83	4,471.02	117.81	38.950		
3,200.00	3,197.81	3,132.81	3,197.81	14.12	107.67	7.90	-3,266.14	-3,371.20	4,584.85	4,463.13	121.73	37.666		
3,300.00	3,297.73	3,232.73	3,297.73	14.56	111.16	7.90	-3,266.14	-3,371.20	4,580.88	4,455.24	125.64	36.460		
3,400.00	3,397.65	3,332.65	3,397.65	14.99	114.64	7.91	-3,266.14	-3,371.20	4,576.90	4,447.35	129.55	35.328		
3,500.00	3,497.56	3,432.56	3,497.56	15.42	118.13	7.92	-3,266.14	-3,371.20	4,572.93	4,439.46	133.47	34.262		
3,600.00	3,597.48	3,532.48	3,597.48	15.85	121.62	7.93	-3,266.14	-3,371.20	4,568.95	4,431.57	137.39	33.256		
3,700.00	3,697.40	3,632.40	3,697.40	16.28	125.10	7.93	-3,266.14	-3,371.20	4,564.98	4,423.67	141.30	32.306		
3,800.00	3,797.32	3,732.32	3,797.32	16.72	128.59	7.94	-3,266.14	-3,371.20	4,561.00	4,415.78	145.22	31.407		
3,900.00	3,897.24	3,832.24	3,897.24	17.15	132.08	7.95	-3,266.14	-3,371.20	4,557.03	4,407.89	149.14	30.555		
4,000.00	3,997.16	3,932.16	3,997.16	17.59	135.57	7.95	-3,266.14	-3,371.20	4,553.05	4,400.00	153.06	29.747		
4,100.00	4,097.08	4,032.08	4,097.08	18.02	139.05	7.96	-3,266.14	-3,371.20	4,549.08	4,392.10	156.98	28.979		
4,200.00	4,197.00	4,132.00	4,197.00	18.46	142.54	7.97	-3,266.14	-3,371.20	4,545.11	4,384.21	160.90	28.248		
4,300.00	4,296.92	4,231.92	4,296.92	18.89	146.03	7.97	-3,266.14	-3,371.20	4,541.13	4,376.31	164.82	27.552		
4,400.00	4,396.84	4,331.84	4,396.84	19.33	149.52	7.98	-3,266.14	-3,371.20	4,537.16	4,368.42	168.74	26.889		
4,500.00	4,496.76	4,431.76	4,496.76	19.77	153.00	7.99	-3,266.14	-3,371.20	4,533.18	4,360.52	172.66	26.255		
4,600.00	4,596.68	4,531.68	4,596.68	20.20	156.49	8.00	-3,266.14	-3,371.20	4,529.21	4,352.63	176.58	25.650		
4,700.00	4,696.60	4,631.60	4,696.60	20.64	159.98	8.00	-3,266.14	-3,371.20	4,525.23	4,344.73	180.50	25.070		
4,800.00	4,796.52	4,731.52	4,796.52	21.08	163.46	8.01	-3,266.14	-3,371.20	4,521.26	4,336.84	184.42	24.516		
4,900.00	4,896.44	4,831.44	4,896.44	21.51	166.95	8.02	-3,266.14	-3,371.20	4,517.29	4,328.94	188.35	23.984		
5,000.00	4,996.36	4,931.36	4,996.36	21.95	170.44	8.02	-3,266.14	-3,371.20	4,513.31	4,321.04	192.27	23.474		
5,100.00	5,096.28	5,031.28	5,096.28	22.39	173.93	8.03	-3,266.14	-3,371.20	4,509.34	4,313.15	196.19	22.985		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,131.19	5,196.19	22.83	177.42	8.04	-3,266.14	-3,371.20	4,505.36	4,305.25	200.11	22.514		
5,300.00	5,296.11	5,231.11	5,296.11	23.27	180.90	8.04	-3,266.14	-3,371.20	4,501.39	4,297.35	204.04	22.062		
5,400.00	5,396.03	5,331.03	5,396.03	23.71	184.39	8.05	-3,266.14	-3,371.20	4,497.42	4,289.46	207.96	21.626		
5,500.00	5,495.95	5,430.95	5,495.95	24.14	187.88	8.06	-3,266.14	-3,371.20	4,493.44	4,281.56	211.88	21.207		
5,600.00	5,595.87	5,530.87	5,595.87	24.58	191.37	8.07	-3,266.14	-3,371.20	4,489.47	4,273.66	215.81	20.803		
5,700.00	5,695.79	5,630.79	5,695.79	25.02	194.85	8.07	-3,266.14	-3,371.20	4,485.50	4,265.77	219.73	20.414		
5,800.00	5,795.71	5,730.71	5,795.71	25.46	198.34	8.08	-3,266.14	-3,371.20	4,481.52	4,257.87	223.65	20.038		
5,900.00	5,895.63	5,830.63	5,895.63	25.90	201.83	8.09	-3,266.14	-3,371.20	4,477.55	4,249.97	227.58	19.675		
6,000.00	5,995.55	5,930.55	5,995.55	26.34	205.32	8.10	-3,266.14	-3,371.20	4,473.58	4,242.07	231.50	19.324		
6,100.00	6,095.47	6,030.47	6,095.47	26.78	208.80	8.10	-3,266.14	-3,371.20	4,469.60	4,234.18	235.43	18.985		
6,200.00	6,195.39	6,130.39	6,195.39	27.22	212.29	8.11	-3,266.14	-3,371.20	4,465.63	4,226.28	239.35	18.657		
6,300.00	6,295.31	6,230.31	6,295.31	27.66	215.78	8.12	-3,266.14	-3,371.20	4,461.66	4,218.38	243.27	18.340		
6,400.00	6,395.23	6,330.23	6,395.23	28.10	219.27	8.12	-3,266.14	-3,371.20	4,457.68	4,210.48	247.20	18.033		
6,500.00	6,495.02	6,430.02	6,495.02	28.54	222.75	-27.74	-3,266.14	-3,371.20	4,452.01	4,200.90	251.12	17.729		
6,600.00	6,593.09	6,528.09	6,593.09	28.98	226.17	-37.97	-3,266.14	-3,371.20	4,436.24	4,181.27	254.97	17.399		
6,700.00	6,687.01	6,622.01	6,687.01	29.41	229.45	-42.45	-3,266.14	-3,371.20	4,409.66	4,151.00	258.65	17.048		
6,800.00	6,774.46	6,709.46	6,774.46	29.83	232.51	-46.59	-3,266.14	-3,371.20	4,373.06	4,110.97	262.09	16.685		
6,900.00	6,853.31	6,788.31	6,853.31	30.26	235.26	-51.36	-3,266.14	-3,371.20	4,327.56	4,062.35	265.21	16.317		
7,000.00	6,921.60	6,856.60	6,921.60	30.76	237.64	-57.06	-3,266.14	-3,371.20	4,274.55	4,006.59	267.96	15.952		
7,100.00	6,977.66	6,912.66	6,977.66	31.38	239.60	-63.79	-3,266.14	-3,371.20	4,215.62	3,945.30	270.32	15.595		
7,200.00	7,020.10	6,955.10	7,020.10	32.17	241.08	-71.42	-3,266.14	-3,371.20	4,152.53	3,880.26	272.27	15.251		
7,300.00	7,047.88	6,982.88	7,047.88	33.13	242.05	-79.57	-3,266.14	-3,371.20	4,087.10	3,813.29	273.81	14.927		
7,400.00	7,060.32	7,004.68	7,060.32	34.27	242.81	-87.69	-3,266.14	-3,371.20	4,021.19	3,745.92	275.27	14.608		
7,500.00	7,060.70	7,004.30	7,060.70	35.56	242.80	-90.21	-3,266.14	-3,371.20	3,956.39	3,680.30	276.09	14.330		
7,600.00	7,060.27	7,004.73	7,060.27	37.02	242.81	-90.20	-3,266.14	-3,371.20	3,893.10	3,615.98	277.12	14.049		
7,700.00	7,059.83	7,005.17	7,059.83	38.64	242.83	-90.19	-3,266.14	-3,371.20	3,831.38	3,553.05	278.33	13.766		
7,800.00	7,059.40	7,005.60	7,059.40	40.40	242.84	-90.18	-3,266.14	-3,371.20	3,771.29	3,491.58	279.71	13.483		
7,900.00	7,058.97	7,006.03	7,058.97	42.28	242.86	-90.17	-3,266.14	-3,371.20	3,712.93	3,431.66	281.27	13.201		
8,000.00	7,058.53	7,006.47	7,058.53	44.27	242.87	-90.17	-3,266.14	-3,371.20	3,656.37	3,373.37	283.00	12.920		
8,100.00	7,058.10	7,006.90	7,058.10	46.35	242.89	-90.16	-3,266.14	-3,371.20	3,601.70	3,316.82	284.88	12.643		
8,200.00	7,057.66	7,007.34	7,057.66	48.50	242.90	-90.15	-3,266.14	-3,371.20	3,549.00	3,262.08	286.92	12.369		
8,300.00	7,057.23	7,007.77	7,057.23	50.73	242.92	-90.14	-3,266.14	-3,371.20	3,498.37	3,209.27	289.10	12.101		
8,400.00	7,056.80	7,008.20	7,056.80	53.02	242.93	-90.13	-3,266.14	-3,371.20	3,449.90	3,158.48	291.42	11.838		
8,500.00	7,056.36	7,008.64	7,056.36	55.36	242.95	-90.13	-3,266.14	-3,371.20	3,403.67	3,109.82	293.85	11.583		
8,600.00	7,055.93	7,009.07	7,055.93	57.74	242.96	-90.12	-3,266.14	-3,371.20	3,359.79	3,063.38	296.41	11.335		
8,700.00	7,055.49	7,009.51	7,055.49	60.17	242.98	-90.11	-3,266.14	-3,371.20	3,318.34	3,019.28	299.06	11.096		
8,800.00	7,055.06	7,009.94	7,055.06	62.63	242.99	-90.10	-3,266.14	-3,371.20	3,279.42	2,977.61	301.80	10.866		
8,900.00	7,054.63	6,989.63	7,054.63	65.13	242.29	-90.09	-3,266.14	-3,371.20	3,243.11	2,939.21	303.90	10.672		
9,000.00	7,054.19	6,989.19	7,054.19	67.66	242.27	-90.08	-3,266.14	-3,371.20	3,209.51	2,902.75	306.76	10.463		
9,100.00	7,053.76	6,988.76	7,053.76	70.21	242.25	-90.08	-3,266.14	-3,371.20	3,178.70	2,869.03	309.67	10.265		
9,200.00	7,053.32	6,988.32	7,053.32	72.78	242.24	-90.07	-3,266.14	-3,371.20	3,150.77	2,838.14	312.63	10.078		
9,300.00	7,052.89	6,987.89	7,052.89	75.38	242.22	-90.06	-3,266.14	-3,371.20	3,125.78	2,810.18	315.61	9.904		
9,400.00	7,052.46	6,987.46	7,052.46	77.99	242.21	-90.05	-3,266.14	-3,371.20	3,103.82	2,785.22	318.60	9.742		
9,500.00	7,052.02	6,987.02	7,052.02	80.62	242.19	-90.04	-3,266.14	-3,371.20	3,084.95	2,763.36	321.59	9.593		
9,600.00	7,051.59	6,986.59	7,051.59	83.26	242.18	-90.04	-3,266.14	-3,371.20	3,069.22	2,744.65	324.57	9.456		
9,700.00	7,051.15	6,986.15	7,051.15	85.92	242.16	-90.03	-3,266.14	-3,371.20	3,056.68	2,729.16	327.52	9.333		
9,800.00	7,050.72	6,985.72	7,050.72	88.59	242.15	-90.02	-3,266.14	-3,371.20	3,047.37	2,716.95	330.43	9.223		
9,900.00	7,050.29	6,985.29	7,050.29	91.28	242.13	-90.01	-3,266.14	-3,371.20	3,041.32	2,708.05	333.28	9.125		
10,000.00	7,049.85	6,984.85	7,049.85	93.97	242.12	-90.00	-3,266.14	-3,371.20	3,038.56	2,702.50	336.06	9.042		
10,034.06	7,049.70	6,984.70	7,049.70	94.89	242.11	-90.00	-3,266.14	-3,371.20	3,038.37	2,701.37	337.00	9.016 CC		
10,100.00	7,049.42	6,984.42	7,049.42	96.67	242.10	-89.99	-3,266.14	-3,371.20	3,039.08	2,700.31	338.77	8.971 ES		
10,200.00	7,048.98	6,983.98	7,048.98	99.38	242.09	-89.99	-3,266.14	-3,371.20	3,042.90	2,701.51	341.39	8.913		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.55	6,983.55	7,048.55	102.10	242.07	-89.98	-3,266.14	-3,371.20	3,049.98	2,706.08	343.91	8.869		
10,400.00	7,048.12	6,983.12	7,048.12	104.83	242.06	-89.97	-3,266.14	-3,371.20	3,060.33	2,714.01	346.32	8.837		
10,500.00	7,047.68	6,982.68	7,047.68	107.56	242.04	-89.96	-3,266.14	-3,371.20	3,073.89	2,725.27	348.62	8.817		
10,600.00	7,047.25	6,982.25	7,047.25	110.30	242.03	-89.95	-3,266.14	-3,371.20	3,090.62	2,739.82	350.80	8.810 SF		
10,700.00	7,046.81	6,981.81	7,046.81	113.05	242.01	-89.95	-3,266.14	-3,371.20	3,110.49	2,757.63	352.86	8.815		
10,800.00	7,046.38	6,981.38	7,046.38	115.80	242.00	-89.94	-3,266.14	-3,371.20	3,133.42	2,778.62	354.80	8.832		
10,900.00	7,045.95	6,980.95	7,045.95	118.55	241.98	-89.93	-3,266.14	-3,371.20	3,159.35	2,802.75	356.61	8.859		
11,000.00	7,045.51	6,980.51	7,045.51	121.31	241.97	-89.92	-3,266.14	-3,371.20	3,188.21	2,829.92	358.29	8.898		
11,100.00	7,045.08	6,980.08	7,045.08	124.08	241.95	-89.91	-3,266.14	-3,371.20	3,219.92	2,860.07	359.85	8.948		
11,200.00	7,044.64	6,979.64	7,044.64	126.85	241.94	-89.90	-3,266.14	-3,371.20	3,254.39	2,893.11	361.28	9.008		
11,300.00	7,044.21	6,979.21	7,044.21	129.62	241.92	-89.90	-3,266.14	-3,371.20	3,291.54	2,928.94	362.60	9.078		
11,400.00	7,043.78	6,978.78	7,043.78	132.40	241.91	-89.89	-3,266.14	-3,371.20	3,331.28	2,967.48	363.80	9.157		
11,500.00	7,043.34	6,978.34	7,043.34	135.18	241.89	-89.88	-3,266.14	-3,371.20	3,373.52	3,008.63	364.88	9.245		
11,600.00	7,042.91	6,977.91	7,042.91	137.96	241.88	-89.87	-3,266.14	-3,371.20	3,418.16	3,052.29	365.86	9.343		
11,700.00	7,042.47	6,977.47	7,042.47	140.75	241.86	-89.86	-3,266.14	-3,371.20	3,465.11	3,098.37	366.74	9.448		
11,800.00	7,042.04	6,977.04	7,042.04	143.54	241.85	-89.86	-3,266.14	-3,371.20	3,514.28	3,146.76	367.52	9.562		
11,900.00	7,041.61	6,976.61	7,041.61	146.33	241.83	-89.85	-3,266.14	-3,371.20	3,565.58	3,197.37	368.20	9.684		
12,000.00	7,041.17	6,976.17	7,041.17	149.13	241.82	-89.84	-3,266.14	-3,371.20	3,618.91	3,250.11	368.80	9.813		
12,100.00	7,040.74	6,975.74	7,040.74	151.92	241.80	-89.83	-3,266.14	-3,371.20	3,674.19	3,304.87	369.33	9.948		
12,200.00	7,040.30	6,975.30	7,040.30	154.72	241.79	-89.82	-3,266.14	-3,371.20	3,731.34	3,361.57	369.77	10.091		
12,300.00	7,039.87	6,974.87	7,039.87	157.52	241.77	-89.81	-3,266.14	-3,371.20	3,790.26	3,420.11	370.15	10.240		
12,400.00	7,039.44	6,974.44	7,039.44	160.33	241.75	-89.81	-3,266.14	-3,371.20	3,850.87	3,480.41	370.46	10.395		
12,500.00	7,039.00	6,974.00	7,039.00	163.13	241.74	-89.80	-3,266.14	-3,371.20	3,913.11	3,542.39	370.71	10.556		
12,600.00	7,038.57	6,973.57	7,038.57	165.94	241.72	-89.79	-3,266.14	-3,371.20	3,976.88	3,605.97	370.91	10.722		
12,700.00	7,038.13	6,973.13	7,038.13	168.75	241.71	-89.78	-3,266.14	-3,371.20	4,042.12	3,671.06	371.06	10.893		
12,800.00	7,037.70	6,972.70	7,037.70	171.56	241.69	-89.77	-3,266.14	-3,371.20	4,108.76	3,737.60	371.16	11.070		
12,900.00	7,037.27	6,972.27	7,037.27	174.37	241.68	-89.77	-3,266.14	-3,371.20	4,176.74	3,805.51	371.22	11.251		
13,000.00	7,036.83	6,971.83	7,036.83	177.19	241.66	-89.76	-3,266.14	-3,371.20	4,245.97	3,874.73	371.25	11.437		
13,100.00	7,036.40	6,971.40	7,036.40	180.00	241.65	-89.75	-3,266.14	-3,371.20	4,316.42	3,945.18	371.23	11.627		
13,200.00	7,035.96	6,970.96	7,035.96	182.82	241.63	-89.74	-3,266.14	-3,371.20	4,388.01	4,016.82	371.19	11.821		
13,300.00	7,035.53	6,970.53	7,035.53	185.64	241.62	-89.73	-3,266.14	-3,371.20	4,460.70	4,089.57	371.12	12.019		
13,400.00	7,035.10	6,970.10	7,035.10	188.46	241.60	-89.72	-3,266.14	-3,371.20	4,534.42	4,163.40	371.03	12.221		
13,500.00	7,034.66	6,969.66	7,034.66	191.28	241.59	-89.72	-3,266.14	-3,371.20	4,609.14	4,238.23	370.91	12.427		
13,600.00	7,034.23	6,969.23	7,034.23	194.10	241.57	-89.71	-3,266.14	-3,371.20	4,684.80	4,314.03	370.77	12.635		
13,700.00	7,033.79	6,968.79	7,033.79	196.92	241.56	-89.70	-3,266.14	-3,371.20	4,761.36	4,390.74	370.62	12.847		
13,800.00	7,033.36	6,968.36	7,033.36	199.74	241.54	-89.69	-3,266.14	-3,371.20	4,838.77	4,468.32	370.45	13.062		
13,900.00	7,032.93	6,967.93	7,032.93	202.57	241.53	-89.68	-3,266.14	-3,371.20	4,917.00	4,546.74	370.26	13.280		
14,000.00	7,032.49	6,967.49	7,032.49	205.39	241.51	-89.68	-3,266.14	-3,371.20	4,996.00	4,625.94	370.06	13.500		
14,100.00	7,032.06	6,967.06	7,032.06	208.22	241.50	-89.67	-3,266.14	-3,371.20	5,075.75	4,705.89	369.85	13.724		
14,200.00	7,031.62	6,966.62	7,031.62	211.05	241.48	-89.66	-3,266.14	-3,371.20	5,156.20	4,786.56	369.64	13.949		
14,300.00	7,031.19	6,966.19	7,031.19	213.87	241.47	-89.65	-3,266.14	-3,371.20	5,237.32	4,867.91	369.41	14.178		
14,400.00	7,030.76	6,965.76	7,030.76	216.70	241.45	-89.64	-3,266.14	-3,371.20	5,319.09	4,949.91	369.18	14.408		
14,500.00	7,030.32	6,965.32	7,030.32	219.53	241.44	-89.63	-3,266.14	-3,371.20	5,401.47	5,032.53	368.94	14.641		
14,600.00	7,029.89	6,964.89	7,029.89	222.36	241.42	-89.63	-3,266.14	-3,371.20	5,484.44	5,115.74	368.70	14.875		
14,700.00	7,029.45	6,964.45	7,029.45	225.19	241.41	-89.62	-3,266.14	-3,371.20	5,567.96	5,199.52	368.45	15.112		
14,800.00	7,029.02	6,964.02	7,029.02	228.03	241.39	-89.61	-3,266.14	-3,371.20	5,652.03	5,283.83	368.20	15.351		
14,805.04	7,029.00	6,964.00	7,029.00	228.17	241.39	-89.61	-3,266.14	-3,371.20	5,656.28	5,288.09	368.19	15.363		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	26.61	977.79	489.78	1,093.65					
100.00	100.00	86.56	97.56	3.28	3.29	26.61	977.87	489.84	1,093.70	1,087.13	6.57	166.469		
200.00	200.00	186.65	197.65	3.34	3.33	26.61	978.03	490.04	1,093.93	1,087.27	6.67	164.033		
300.00	300.00	289.46	300.46	3.44	3.44	26.62	978.05	490.24	1,094.03	1,087.15	6.88	158.987		
321.72	321.72	311.87	322.87	3.48	3.47	26.62	978.02	490.25	1,094.02	1,087.08	6.94	157.609		
400.00	400.00	382.84	393.84	3.60	3.58	26.64	978.05	490.68	1,094.25	1,087.07	7.18	152.418 ES		
500.00	499.98	485.61	496.60	3.80	3.77	168.50	978.14	491.69	1,096.48	1,088.91	7.57	144.836		
600.00	599.90	580.99	591.98	4.02	3.99	168.58	978.15	492.63	1,100.83	1,092.82	8.01	137.358		
700.00	699.82	684.59	695.56	4.28	4.26	168.69	978.11	494.16	1,105.41	1,096.87	8.54	129.433		
800.00	799.74	786.28	797.24	4.57	4.55	168.80	977.77	495.46	1,109.62	1,100.50	9.12	121.723		
900.00	899.66	882.87	893.83	4.88	4.85	168.90	977.54	496.64	1,113.90	1,104.18	9.72	114.597		
1,000.00	999.58	985.84	996.78	5.21	5.18	169.02	977.29	498.13	1,118.29	1,107.91	10.38	107.728		
1,100.00	1,099.50	1,080.25	1,091.19	5.55	5.50	169.10	977.18	499.22	1,122.66	1,111.62	11.04	101.675		
1,200.00	1,199.42	1,181.30	1,192.23	5.91	5.86	169.21	977.30	500.69	1,127.37	1,115.62	11.75	95.944		
1,300.00	1,299.34	1,289.35	1,300.27	6.28	6.25	169.32	976.90	502.19	1,131.63	1,119.12	12.51	90.490		
1,400.00	1,399.26	1,389.58	1,400.50	6.66	6.62	169.41	976.30	503.05	1,135.44	1,122.19	13.25	85.702		
1,500.00	1,499.18	1,490.44	1,501.35	7.04	6.99	169.50	975.71	503.86	1,139.24	1,125.23	14.01	81.325		
1,600.00	1,599.10	1,589.43	1,600.33	7.43	7.37	169.61	974.92	505.01	1,143.03	1,128.26	14.77	77.369		
1,700.00	1,699.01	1,687.42	1,698.31	7.83	7.75	169.70	974.38	505.99	1,146.95	1,131.41	15.54	73.783		
1,800.00	1,798.93	1,789.36	1,800.25	8.23	8.15	169.78	973.96	506.76	1,150.90	1,134.56	16.34	70.432		
1,900.00	1,898.85	1,898.32	1,909.21	8.64	8.58	169.86	973.15	507.19	1,154.37	1,137.20	17.17	67.224		
2,000.00	1,998.77	1,992.92	2,003.80	9.05	8.95	169.89	972.55	506.94	1,157.65	1,139.69	17.95	64.488		
2,100.00	2,098.69	2,096.31	2,107.19	9.46	9.36	169.92	972.08	506.61	1,161.04	1,142.27	18.77	61.847		
2,200.00	2,198.61	2,188.81	2,199.69	9.88	9.73	169.95	971.76	506.37	1,164.57	1,145.01	19.55	59.556		
2,300.00	2,298.53	2,286.44	2,297.32	10.30	10.12	169.98	971.86	506.25	1,168.55	1,148.19	20.36	57.391		
2,400.00	2,398.45	2,384.88	2,395.76	10.72	10.52	170.02	971.93	506.48	1,172.67	1,151.50	21.18	55.378		
2,500.00	2,498.37	2,490.17	2,501.05	11.14	10.95	170.05	972.02	506.39	1,176.67	1,154.65	22.02	53.428		
2,600.00	2,598.29	2,585.80	2,596.68	11.56	11.34	170.06	972.16	505.95	1,180.53	1,157.70	22.83	51.705		
2,700.00	2,698.21	2,684.82	2,695.69	11.98	11.74	170.07	972.61	505.54	1,184.69	1,161.03	23.66	50.075		
2,800.00	2,798.13	2,788.31	2,799.18	12.41	12.16	170.07	973.04	504.93	1,188.73	1,164.22	24.51	48.505		
2,900.00	2,898.05	2,896.88	2,907.75	12.84	12.61	170.06	973.05	503.92	1,192.25	1,166.87	25.38	46.976		
3,000.00	2,997.97	2,992.65	3,003.51	13.27	13.00	170.05	972.93	502.82	1,195.55	1,169.35	26.20	45.633		
3,100.00	3,097.89	3,099.30	3,110.15	13.69	13.44	170.01	973.02	501.05	1,198.80	1,171.73	27.07	44.288		
3,200.00	3,197.81	3,193.55	3,204.38	14.12	13.83	169.96	973.10	499.33	1,201.96	1,174.08	27.89	43.104		
3,300.00	3,297.73	3,299.42	3,310.24	14.56	14.27	169.94	972.99	497.83	1,205.15	1,176.40	28.75	41.913		
3,400.00	3,397.65	3,400.48	3,411.29	14.99	14.70	169.92	972.52	496.38	1,208.02	1,178.42	29.60	40.808		
3,500.00	3,497.56	3,498.48	3,509.27	15.42	15.10	169.90	972.13	494.93	1,210.93	1,180.49	30.44	39.781		
3,600.00	3,597.48	3,592.30	3,603.10	15.85	15.50	169.90	971.87	493.98	1,214.16	1,182.90	31.26	38.842		
3,700.00	3,697.40	3,682.27	3,693.06	16.28	15.87	169.91	971.97	493.68	1,218.05	1,185.99	32.06	37.992		
3,800.00	3,797.32	3,782.36	3,793.15	16.72	16.29	169.93	972.51	493.59	1,222.43	1,189.52	32.91	37.146		
3,900.00	3,897.24	3,885.83	3,896.61	17.15	16.72	169.94	972.95	493.21	1,226.58	1,192.81	33.77	36.317		
4,000.00	3,997.16	3,985.29	3,996.07	17.59	17.14	169.94	973.35	492.55	1,230.58	1,195.96	34.62	35.543		
4,100.00	4,097.08	4,086.38	4,097.16	18.02	17.56	169.94	973.74	491.95	1,234.59	1,199.11	35.48	34.798		
4,200.00	4,197.00	4,188.30	4,199.08	18.46	17.99	169.94	973.92	491.42	1,238.46	1,202.12	36.34	34.080		
4,300.00	4,296.92	4,286.15	4,296.93	18.89	18.40	169.95	974.13	490.82	1,242.30	1,205.12	37.18	33.411		
4,400.00	4,396.84	4,385.85	4,396.62	19.33	18.82	169.95	974.40	490.36	1,246.28	1,208.24	38.03	32.767		
4,500.00	4,496.76	4,483.65	4,494.42	19.77	19.23	169.96	974.71	489.96	1,250.32	1,211.44	38.88	32.160		
4,600.00	4,596.68	4,579.25	4,590.02	20.20	19.63	169.98	975.14	489.86	1,254.62	1,214.91	39.71	31.594		
4,700.00	4,696.60	4,680.36	4,691.13	20.64	20.06	170.00	975.71	489.95	1,259.10	1,218.53	40.57	31.034		
4,800.00	4,796.52	4,774.85	4,785.62	21.08	20.46	170.03	976.26	490.07	1,263.64	1,222.24	41.40	30.523		
4,900.00	4,896.44	4,866.33	4,877.09	21.51	20.85	170.06	977.15	490.70	1,268.77	1,226.56	42.21	30.058		
5,000.00	4,996.36	4,966.25	4,976.99	21.95	21.27	170.10	978.56	491.56	1,274.38	1,231.31	43.07	29.591		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,096.28	5,075.66	5,086.40	22.39	21.73	170.11	979.88	491.88	1,279.53	1,235.56	43.97	29.098		
5,200.00	5,196.19	5,186.51	5,197.25	22.83	22.20	170.14	980.34	491.80	1,283.82	1,238.94	44.88	28.603		
5,300.00	5,296.11	5,286.71	5,297.45	23.27	22.62	170.14	980.53	491.16	1,287.63	1,241.89	45.74	28.150		
5,400.00	5,396.03	5,396.03	5,406.76	23.71	23.08	170.13	980.58	490.11	1,291.17	1,244.53	46.64	27.682		
5,500.00	5,495.95	5,500.43	5,511.15	24.14	23.52	170.11	980.18	488.62	1,294.12	1,246.60	47.52	27.232		
5,600.00	5,595.87	5,595.71	5,606.42	24.58	23.93	170.09	979.90	487.15	1,297.08	1,248.72	48.36	26.822		
5,700.00	5,695.79	5,696.49	5,707.19	25.02	24.35	170.08	979.62	485.89	1,300.20	1,250.98	49.22	26.415		
5,800.00	5,795.71	5,798.96	5,809.64	25.46	24.79	170.04	979.43	484.14	1,303.18	1,253.09	50.09	26.016		
5,900.00	5,895.63	5,895.17	5,905.84	25.90	25.20	170.00	979.43	482.26	1,306.21	1,255.27	50.93	25.645		
6,000.00	5,995.55	5,994.16	6,004.81	26.34	25.62	169.96	979.56	480.47	1,309.42	1,257.63	51.79	25.283		
6,100.00	6,095.47	6,096.37	6,106.99	26.78	26.05	169.90	979.78	478.36	1,312.59	1,259.93	52.66	24.925		
6,200.00	6,195.39	6,202.35	6,212.95	27.22	26.50	169.85	979.69	476.03	1,315.44	1,261.89	53.55	24.565		
6,300.00	6,295.31	6,297.56	6,308.14	27.66	26.90	169.80	979.61	473.88	1,318.24	1,263.85	54.39	24.238		
6,400.00	6,395.23	6,405.95	6,416.48	28.10	27.37	169.71	979.66	470.83	1,320.91	1,265.63	55.29	23.892		
6,500.00	6,495.02	6,496.95	6,507.44	28.54	27.75	169.63	979.87	468.03	1,324.73	1,268.62	56.11	23.610		
6,600.00	6,593.09	6,597.90	6,608.32	28.98	28.18	124.46	980.57	464.54	1,335.41	1,278.44	56.97	23.442		
6,700.00	6,687.01	6,697.33	6,707.67	29.41	28.61	121.66	981.28	460.51	1,353.32	1,295.52	57.81	23.411 SF		
6,800.00	6,774.46	6,787.64	6,797.91	29.83	28.99	119.95	981.68	456.93	1,378.79	1,320.20	58.59	23.532		
6,900.00	6,853.31	6,870.38	6,880.59	30.26	29.34	118.31	981.98	453.63	1,412.23	1,352.89	59.34	23.799		
7,000.00	6,921.60	6,942.96	6,953.08	30.76	29.65	116.16	982.46	450.26	1,453.79	1,393.74	60.06	24.207		
7,100.00	6,977.66	7,003.85	7,013.90	31.38	29.91	113.13	982.98	447.22	1,503.38	1,442.64	60.74	24.750		
7,200.00	7,020.10	7,054.11	7,064.09	32.17	30.13	108.93	983.39	444.62	1,560.46	1,499.05	61.41	25.410		
7,300.00	7,047.88	7,089.16	7,099.09	33.13	30.28	103.12	983.61	442.78	1,624.12	1,562.08	62.03	26.181		
7,400.00	7,060.32	7,109.11	7,119.01	34.27	30.36	95.51	983.72	441.72	1,693.04	1,630.45	62.59	27.049		
7,500.00	7,060.70	7,116.37	7,126.26	35.56	30.40	92.88	983.76	441.32	1,765.55	1,702.47	63.09	27.987		
7,600.00	7,060.27	7,122.98	7,132.86	37.02	30.42	93.20	983.80	440.94	1,840.64	1,777.05	63.59	28.946		
7,700.00	7,059.83	7,129.94	7,139.80	38.64	30.45	93.54	983.85	440.54	1,917.99	1,853.89	64.10	29.923		
7,800.00	7,059.40	7,137.28	7,147.14	40.40	30.49	93.89	983.90	440.10	1,997.33	1,932.73	64.60	30.919		
7,900.00	7,058.97	7,145.05	7,154.89	42.28	30.52	94.26	983.96	439.62	2,078.43	2,013.34	65.09	31.932		
8,000.00	7,058.53	7,153.27	7,163.09	44.27	30.55	94.65	984.03	439.11	2,161.10	2,095.53	65.57	32.960		
8,100.00	7,058.10	7,161.99	7,171.79	46.35	30.59	95.07	984.10	438.54	2,245.15	2,179.12	66.03	34.002		
8,200.00	7,057.66	7,171.26	7,181.04	48.50	30.63	95.51	984.19	437.93	2,330.44	2,263.97	66.48	35.057		
8,300.00	7,057.23	7,181.12	7,190.87	50.73	30.67	95.98	984.29	437.25	2,416.84	2,349.93	66.91	36.123		
8,400.00	7,056.80	7,191.63	7,201.36	53.02	30.72	96.48	984.40	436.51	2,504.22	2,436.90	67.32	37.199		
8,500.00	7,056.36	7,202.87	7,212.57	55.36	30.77	97.01	984.52	435.69	2,592.48	2,524.76	67.72	38.283		
8,600.00	7,055.93	7,214.91	7,224.58	57.74	30.82	97.58	984.66	434.78	2,681.54	2,613.43	68.11	39.373		
8,700.00	7,055.49	7,214.44	7,224.11	60.17	30.82	97.56	984.64	434.85	2,771.35	2,702.93	68.42	40.507		
8,800.00	7,055.06	7,220.72	7,230.38	62.63	30.84	97.85	984.70	434.39	2,861.81	2,793.07	68.74	41.630		
8,900.00	7,054.63	7,226.93	7,236.57	65.13	30.87	98.14	984.76	433.95	2,952.87	2,883.82	69.05	42.761		
9,000.00	7,054.19	7,233.06	7,242.68	67.66	30.90	98.43	984.82	433.51	3,044.48	2,975.13	69.35	43.899		
9,100.00	7,053.76	7,239.11	7,248.72	70.21	30.92	98.72	984.87	433.08	3,136.59	3,066.95	69.64	45.042		
9,200.00	7,053.32	7,276.55	7,253.04	72.78	31.08	98.92	984.91	432.77	3,229.15	3,159.11	70.04	46.103		
9,300.00	7,052.89	7,270.06	7,259.52	75.38	31.06	99.22	984.96	432.32	3,322.14	3,251.88	70.25	47.290		
9,400.00	7,052.46	7,263.57	7,265.99	77.99	31.03	99.53	985.00	431.87	3,415.51	3,345.06	70.45	48.482		
9,500.00	7,052.02	7,262.92	7,272.47	80.62	31.02	99.83	985.04	431.42	3,509.23	3,438.57	70.66	49.663		
9,600.00	7,051.59	7,269.42	7,278.95	83.26	31.05	100.13	985.08	430.97	3,603.28	3,532.38	70.90	50.825		
9,700.00	7,051.15	7,275.91	7,285.42	85.92	31.08	100.43	985.12	430.52	3,697.63	3,626.51	71.12	51.989		
9,800.00	7,050.72	7,282.40	7,291.90	88.59	31.11	100.73	985.16	430.07	3,792.26	3,720.92	71.34	53.156		
9,900.00	7,050.29	7,288.89	7,298.37	91.28	31.14	101.03	985.21	429.62	3,887.15	3,815.59	71.55	54.324		
10,000.00	7,049.85	7,295.38	7,304.85	93.97	31.17	101.33	985.25	429.17	3,982.28	3,910.51	71.76	55.494		
10,100.00	7,049.42	7,301.87	7,311.32	96.67	31.19	101.63	985.29	428.72	4,077.63	4,005.66	71.96	56.665		
10,200.00	7,048.98	7,308.36	7,317.80	99.38	31.22	101.93	985.33	428.27	4,173.18	4,101.03	72.15	57.837		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	
10,300.00	7,048.55	7,314.85	7,324.27	102.10	31.25	102.23	985.37	427.82	4,268.93	4,196.59	72.34	59.009	
10,400.00	7,048.12	7,321.35	7,330.75	104.83	31.28	102.53	985.42	427.37	4,364.87	4,292.34	72.53	60.182	
10,500.00	7,047.68	7,327.84	7,337.23	107.56	31.31	102.82	985.46	426.92	4,460.97	4,388.26	72.71	61.355	
10,600.00	7,047.25	7,334.33	7,343.70	110.30	31.34	103.12	985.50	426.47	4,557.23	4,484.34	72.88	62.527	
10,700.00	7,046.81	7,340.82	7,350.18	113.05	31.36	103.41	985.54	426.02	4,653.64	4,580.58	73.06	63.700	
10,800.00	7,046.38	7,347.31	7,356.65	115.80	31.39	103.71	985.58	425.57	4,750.18	4,676.96	73.22	64.872	
10,900.00	7,045.95	7,353.80	7,363.13	118.55	31.42	104.00	985.63	425.12	4,846.86	4,773.47	73.39	66.044	
11,000.00	7,045.51	7,360.29	7,369.60	121.31	31.45	104.29	985.67	424.67	4,943.67	4,870.12	73.55	67.214	
11,100.00	7,045.08	7,366.78	7,376.08	124.08	31.48	104.58	985.71	424.22	5,040.59	4,966.88	73.71	68.384	
11,200.00	7,044.64	7,373.28	7,382.55	126.85	31.51	104.87	985.75	423.77	5,137.62	5,063.75	73.87	69.553	
11,300.00	7,044.21	7,379.77	7,389.03	129.62	31.53	105.17	985.79	423.32	5,234.75	5,160.73	74.02	70.720	
11,400.00	7,043.78	7,386.26	7,395.51	132.40	31.56	105.45	985.83	422.87	5,331.98	5,257.81	74.17	71.886	
11,500.00	7,043.34	7,392.75	7,401.98	135.18	31.59	105.74	985.88	422.42	5,429.30	5,354.98	74.32	73.051	
11,600.00	7,042.91	7,399.24	7,408.46	137.96	31.62	106.03	985.92	421.97	5,526.72	5,452.25	74.47	74.214	
11,700.00	7,042.47	7,405.73	7,414.93	140.75	31.65	106.32	985.96	421.52	5,624.21	5,549.59	74.62	75.376	
11,800.00	7,042.04	7,412.22	7,421.41	143.54	31.68	106.60	986.00	421.07	5,721.78	5,647.02	74.76	76.535	
11,900.00	7,041.61	7,418.71	7,427.88	146.33	31.70	106.89	986.04	420.62	5,819.43	5,744.53	74.90	77.693	
12,000.00	7,041.17	7,425.21	7,434.36	149.13	31.73	107.17	986.09	420.17	5,917.16	5,842.11	75.04	78.849	
12,100.00	7,040.74	7,431.70	7,440.83	151.92	31.76	107.46	986.13	419.72	6,014.94	5,939.76	75.18	80.003	
12,200.00	7,040.30	7,438.19	7,447.31	154.72	31.79	107.74	986.17	419.27	6,112.80	6,037.48	75.32	81.155	
12,300.00	7,039.87	7,444.68	7,453.79	157.52	31.82	108.02	986.21	418.82	6,210.71	6,135.25	75.46	82.305	
12,400.00	7,039.44	7,451.17	7,460.26	160.33	31.85	108.30	986.25	418.37	6,308.69	6,233.09	75.60	83.452	
12,500.00	7,039.00	7,457.66	7,466.74	163.13	31.87	108.58	986.30	417.92	6,406.72	6,330.98	75.73	84.597	
12,600.00	7,038.57	7,443.00	7,452.11	165.94	31.81	107.95	986.20	418.94	6,504.83	6,429.08	75.75	85.871	
12,700.00	7,038.13	7,443.00	7,452.11	168.75	31.81	107.95	986.20	418.94	6,602.99	6,527.14	75.85	87.055	
12,800.00	7,037.70	7,443.00	7,452.11	171.56	31.81	107.95	986.20	418.94	6,701.20	6,625.26	75.95	88.237	
12,900.00	7,037.27	7,443.00	7,452.11	174.37	31.81	107.95	986.20	418.94	6,799.47	6,723.43	76.04	89.417	
13,000.00	7,036.83	7,443.00	7,452.11	177.19	31.81	107.95	986.20	418.94	6,897.78	6,821.65	76.14	90.596	
13,100.00	7,036.40	7,443.00	7,452.11	180.00	31.81	107.95	986.20	418.94	6,996.15	6,919.91	76.23	91.774	
13,200.00	7,035.96	7,443.00	7,452.11	182.82	31.81	107.95	986.20	418.94	7,094.55	7,018.23	76.33	92.951	
13,300.00	7,035.53	7,443.00	7,452.11	185.64	31.81	107.95	986.20	418.94	7,193.00	7,116.59	76.42	94.125	
13,400.00	7,035.10	7,443.00	7,452.11	188.46	31.81	107.95	986.20	418.94	7,291.50	7,214.99	76.51	95.298	
13,500.00	7,034.66	7,443.00	7,452.11	191.28	31.81	107.95	986.20	418.94	7,390.03	7,313.43	76.60	96.470	
13,600.00	7,034.23	7,443.00	7,452.11	194.10	31.81	107.95	986.20	418.94	7,488.61	7,411.91	76.70	97.639	
13,700.00	7,033.79	7,443.00	7,452.11	196.92	31.81	107.95	986.20	418.94	7,587.22	7,510.43	76.79	98.807	
13,800.00	7,033.36	7,443.00	7,452.11	199.74	31.81	107.95	986.20	418.94	7,685.86	7,608.98	76.88	99.973	
13,900.00	7,032.93	7,443.00	7,452.11	202.57	31.81	107.95	986.20	418.94	7,784.54	7,707.58	76.97	101.138	
14,000.00	7,032.49	7,443.00	7,452.11	205.39	31.81	107.95	986.20	418.94	7,883.26	7,806.20	77.06	102.300	
14,100.00	7,032.06	7,443.00	7,452.11	208.22	31.81	107.95	986.20	418.94	7,982.01	7,904.86	77.15	103.460	
14,200.00	7,031.62	7,443.00	7,452.11	211.05	31.81	107.95	986.20	418.94	8,080.78	8,003.54	77.24	104.618	
14,300.00	7,031.19	7,443.00	7,452.11	213.87	31.81	107.95	986.20	418.94	8,179.59	8,102.26	77.33	105.775	
14,400.00	7,030.76	7,443.00	7,452.11	216.70	31.81	107.95	986.20	418.94	8,278.43	8,201.01	77.42	106.929	
14,500.00	7,030.32	7,443.00	7,452.11	219.53	31.81	107.95	986.20	418.94	8,377.29	8,299.78	77.51	108.081	
14,600.00	7,029.89	7,443.00	7,452.11	222.36	31.81	107.95	986.20	418.94	8,476.18	8,398.58	77.60	109.230	
14,700.00	7,029.45	7,443.00	7,452.11	225.19	31.81	107.95	986.20	418.94	8,575.09	8,497.41	77.69	110.378	
14,800.00	7,029.02	7,443.00	7,452.11	228.03	31.81	107.95	986.20	418.94	8,674.03	8,596.26	77.78	111.523	
14,805.04	7,029.00	7,443.00	7,452.11	228.17	31.81	107.95	986.20	418.94	8,679.02	8,601.24	77.78	111.581	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	98.21	-75.05	520.40	526.20					
100.00	100.00	79.47	100.47	3.28	3.28	98.15	-74.51	520.44	525.75	519.18	6.57	80.026		
200.00	200.00	181.88	202.86	3.34	3.33	97.97	-72.90	520.38	525.47	518.80	6.67	78.798		
300.00	300.00	282.52	303.50	3.44	3.43	97.84	-71.60	519.90	524.82	517.94	6.88	76.309		
400.00	400.00	380.17	401.14	3.60	3.58	97.72	-70.46	519.58	524.34	517.16	7.18	73.023		
409.33	409.33	389.23	410.20	3.62	3.59	-120.49	-70.35	519.58	524.33	517.12	7.21	72.697 CC, ES		
500.00	499.98	477.99	498.95	3.80	3.76	-120.75	-69.29	519.74	525.23	517.67	7.56	69.475		
600.00	599.90	577.45	598.40	4.02	3.99	-121.26	-67.97	520.18	527.55	519.54	8.01	65.861		
700.00	699.82	676.55	697.48	4.28	4.24	-121.81	-66.41	520.71	530.00	521.47	8.52	62.179		
800.00	799.74	775.97	796.89	4.57	4.53	-122.33	-65.01	521.36	532.63	523.54	9.09	58.582		
900.00	899.66	874.70	895.60	4.88	4.83	-122.87	-63.35	522.14	535.42	525.72	9.70	55.181		
1,000.00	999.58	974.66	995.55	5.21	5.15	-123.40	-61.86	523.06	538.40	528.05	10.35	52.001		
1,100.00	1,099.50	1,074.94	1,095.82	5.55	5.49	-123.91	-60.40	523.89	541.34	530.30	11.04	49.053		
1,200.00	1,199.42	1,175.60	1,196.46	5.91	5.84	-124.43	-58.87	524.62	544.22	532.47	11.74	46.339		
1,300.00	1,299.34	1,277.02	1,297.87	6.28	6.21	-124.94	-57.43	525.14	546.92	534.44	12.48	43.837		
1,400.00	1,399.26	1,376.07	1,396.91	6.66	6.57	-125.45	-55.81	525.51	549.53	536.31	13.22	41.578		
1,500.00	1,499.18	1,477.96	1,498.79	7.04	6.95	-125.94	-54.39	525.91	552.20	538.22	13.98	39.492		
1,600.00	1,599.10	1,579.14	1,599.96	7.43	7.34	-126.41	-53.16	525.87	554.49	539.73	14.76	37.573		
1,700.00	1,699.01	1,681.54	1,702.35	7.83	7.73	-126.88	-51.86	525.55	556.54	540.99	15.55	35.796		
1,800.00	1,798.93	1,779.76	1,800.56	8.23	8.12	-127.29	-51.01	525.05	558.44	542.11	16.33	34.198		
1,900.00	1,898.85	1,879.13	1,899.93	8.64	8.51	-127.70	-50.17	524.86	560.69	543.56	17.12	32.742		
2,000.00	1,998.77	1,981.35	2,002.15	9.05	8.91	-128.13	-49.25	524.51	562.80	544.86	17.94	31.377		
2,100.00	2,098.69	2,082.80	2,103.59	9.46	9.32	-128.49	-48.85	523.74	564.53	545.78	18.75	30.105		
2,200.00	2,198.61	2,181.78	2,202.57	9.88	9.71	-128.81	-48.86	522.93	566.22	546.66	19.56	28.945		
2,300.00	2,298.53	2,281.67	2,302.46	10.30	10.12	-129.12	-48.93	522.26	568.07	547.69	20.38	27.873		
2,400.00	2,398.45	2,383.04	2,403.83	10.72	10.52	-129.39	-49.34	521.46	569.82	548.61	21.21	26.866		
2,500.00	2,498.37	2,481.79	2,502.57	11.14	10.92	-129.64	-49.94	520.60	571.49	549.46	22.03	25.940		
2,600.00	2,598.29	2,581.22	2,601.99	11.56	11.33	-129.86	-50.88	519.96	573.39	550.53	22.86	25.084		
2,700.00	2,698.21	2,678.59	2,699.35	11.98	11.72	-130.06	-51.88	519.54	575.50	551.82	23.68	24.303		
2,800.00	2,798.13	2,779.67	2,800.43	12.41	12.14	-130.26	-52.95	519.36	577.88	553.36	24.52	23.567		
2,900.00	2,898.05	2,880.71	2,901.47	12.84	12.55	-130.46	-54.02	518.88	579.96	554.60	25.36	22.866		
3,000.00	2,997.97	2,980.52	3,001.27	13.27	12.96	-130.70	-54.67	518.31	581.98	555.78	26.20	22.211		
3,100.00	3,097.89	3,081.55	3,102.30	13.69	13.38	-130.96	-55.10	517.69	583.97	556.92	27.05	21.590		
3,200.00	3,197.81	3,182.21	3,202.95	14.12	13.80	-131.25	-55.24	516.86	585.78	557.88	27.89	21.000		
3,300.00	3,297.73	3,282.09	3,302.83	14.56	14.21	-131.53	-55.43	515.99	587.55	558.81	28.74	20.444		
3,400.00	3,397.65	3,378.42	3,399.16	14.99	14.62	-131.80	-55.63	515.40	589.60	560.04	29.57	19.940		
3,500.00	3,497.56	3,478.09	3,498.82	15.42	15.03	-132.06	-55.93	515.27	592.13	561.72	30.42	19.468		
3,600.00	3,597.48	3,578.96	3,599.69	15.85	15.45	-132.31	-56.33	515.00	594.53	563.27	31.27	19.014		
3,700.00	3,697.40	3,679.84	3,700.57	16.28	15.88	-132.55	-56.84	514.58	596.79	564.67	32.12	18.578		
3,800.00	3,797.32	3,780.73	3,801.46	16.72	16.30	-132.78	-57.44	514.01	598.90	565.93	32.98	18.160		
3,900.00	3,897.24	3,881.63	3,902.35	17.15	16.72	-133.00	-58.15	513.29	600.87	567.03	33.84	17.759		
4,000.00	3,997.16	3,982.54	4,003.26	17.59	17.15	-133.22	-58.96	512.42	602.68	567.99	34.69	17.372		
4,100.00	4,097.08	4,083.46	4,104.17	18.02	17.57	-133.42	-59.88	511.39	604.34	568.79	35.55	16.999		
4,200.00	4,197.00	4,184.39	4,205.09	18.46	18.00	-133.61	-60.89	510.22	605.85	569.44	36.41	16.640		
4,300.00	4,296.92	4,283.14	4,303.82	18.89	18.41	-133.79	-61.94	509.06	607.36	570.10	37.26	16.301		
4,400.00	4,396.84	4,380.46	4,401.14	19.33	18.82	-133.98	-62.88	508.24	609.21	571.11	38.10	15.988		
4,500.00	4,496.76	4,480.66	4,501.33	19.77	19.24	-134.20	-63.51	507.63	611.33	572.37	38.96	15.691		
4,600.00	4,596.68	4,581.21	4,601.88	20.20	19.67	-134.46	-63.71	506.83	613.33	573.51	39.82	15.403		
4,700.00	4,696.60	4,679.65	4,700.32	20.64	20.08	-134.71	-63.89	506.10	615.39	574.72	40.67	15.131		
4,800.00	4,796.52	4,778.12	4,798.78	21.08	20.50	-134.96	-64.09	505.65	617.74	576.22	41.52	14.878		
4,900.00	4,896.44	4,876.73	4,897.39	21.51	20.91	-135.20	-64.30	505.42	620.32	577.95	42.37	14.640		
5,000.00	4,996.36	4,977.85	4,998.51	21.95	21.34	-135.48	-64.10	505.19	622.98	579.74	43.24	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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,096.28	5,078.30	5,098.96	22.39	21.76	-135.77	-63.84	504.74	625.44	581.34	44.10	14.183		
5,200.00	5,196.19	5,178.18	5,198.84	22.83	22.19	-136.05	-63.67	504.28	627.89	582.94	44.96	13.967		
5,300.00	5,296.11	5,280.82	5,301.48	23.27	22.62	-136.33	-63.45	503.64	630.20	584.37	45.83	13.751		
5,400.00	5,396.03	5,382.26	5,402.91	23.71	23.05	-136.61	-63.40	502.61	632.11	585.42	46.70	13.537		
5,500.00	5,495.95	5,480.82	5,501.46	24.14	23.47	-136.86	-63.49	501.62	634.02	586.47	47.55	13.334		
5,600.00	5,595.87	5,579.03	5,599.67	24.58	23.88	-137.11	-63.52	500.89	636.23	587.83	48.40	13.145		
5,700.00	5,695.79	5,679.12	5,699.77	25.02	24.31	-137.34	-63.76	500.35	638.60	589.33	49.26	12.963		
5,800.00	5,795.71	5,779.34	5,799.98	25.46	24.73	-137.54	-64.30	499.77	640.90	590.78	50.13	12.786		
5,900.00	5,895.63	5,877.36	5,898.00	25.90	25.15	-137.75	-64.70	499.29	643.32	592.34	50.98	12.619		
6,000.00	5,995.55	5,978.49	5,999.13	26.34	25.58	-138.00	-64.73	498.89	645.90	594.06	51.85	12.458		
6,100.00	6,095.47	6,080.04	6,100.67	26.78	26.01	-138.24	-64.79	498.19	648.20	595.48	52.72	12.296		
6,200.00	6,195.39	6,179.30	6,199.93	27.22	26.43	-138.47	-65.03	497.44	650.42	596.84	53.58	12.140		
6,300.00	6,295.31	6,277.06	6,297.69	27.66	26.85	-138.69	-65.16	496.92	652.88	598.45	54.43	11.996		
6,400.00	6,395.23	6,376.30	6,396.93	28.10	27.27	-138.93	-65.17	496.64	655.62	600.34	55.29	11.859		
6,500.00	6,495.02	6,475.97	6,496.60	28.54	27.69	-174.79	-65.18	496.39	660.70	604.55	56.15	11.767 SF		
6,600.00	6,593.09	6,573.94	6,594.57	28.98	28.11	175.82	-65.19	496.17	679.52	622.52	57.00	11.922		
6,700.00	6,687.01	6,667.79	6,688.42	29.41	28.51	173.07	-65.20	495.97	713.21	655.40	57.81	12.338		
6,800.00	6,774.46	6,755.21	6,775.83	29.83	28.88	171.50	-65.21	495.80	760.98	702.42	58.56	12.996		
6,900.00	6,853.31	6,834.03	6,854.65	30.26	29.22	170.15	-65.21	495.67	821.69	762.47	59.22	13.875		
7,000.00	6,921.60	6,902.31	6,922.94	30.76	29.51	168.53	-65.21	495.56	893.91	834.12	59.78	14.952		
7,100.00	6,977.66	6,958.37	6,979.00	31.38	29.75	166.05	-65.22	495.48	975.87	915.64	60.24	16.201		
7,200.00	7,020.10	7,000.84	7,021.47	32.17	29.93	161.48	-65.22	495.42	1,065.60	1,005.03	60.57	17.594		
7,300.00	7,047.88	7,028.68	7,049.31	33.13	30.05	150.73	-65.22	495.39	1,160.88	1,100.10	60.78	19.100		
7,400.00	7,060.32	7,041.20	7,061.83	34.27	30.10	113.41	-65.22	495.37	1,259.37	1,198.49	60.88	20.687		
7,500.00	7,060.70	7,041.70	7,062.33	35.56	30.10	88.26	-65.22	495.37	1,358.79	1,297.90	60.90	22.313		
7,600.00	7,060.27	7,041.39	7,062.02	37.02	30.10	88.13	-65.22	495.37	1,458.30	1,397.39	60.91	23.942		
7,700.00	7,059.83	7,041.08	7,061.71	38.64	30.10	88.00	-65.22	495.37	1,557.87	1,496.95	60.93	25.570		
7,800.00	7,059.40	7,040.77	7,061.39	40.40	30.10	87.87	-65.22	495.37	1,657.49	1,596.55	60.94	27.198		
7,900.00	7,058.97	7,040.45	7,061.08	42.28	30.10	87.75	-65.22	495.37	1,757.16	1,696.20	60.96	28.825		
8,000.00	7,058.53	7,040.14	7,060.77	44.27	30.10	87.62	-65.22	495.37	1,856.86	1,795.88	60.98	30.451		
8,100.00	7,058.10	7,039.83	7,060.46	46.35	30.09	87.49	-65.22	495.37	1,956.59	1,895.60	61.00	32.077		
8,200.00	7,057.66	7,039.52	7,060.15	48.50	30.09	87.36	-65.22	495.37	2,056.35	1,995.33	61.02	33.701		
8,300.00	7,057.23	7,039.21	7,059.83	50.73	30.09	87.23	-65.22	495.37	2,156.13	2,095.09	61.04	35.324		
8,400.00	7,056.80	7,038.89	7,059.52	53.02	30.09	87.11	-65.22	495.37	2,255.93	2,194.87	61.06	36.946		
8,500.00	7,056.36	7,038.58	7,059.21	55.36	30.09	86.98	-65.22	495.37	2,355.75	2,294.67	61.08	38.566		
8,600.00	7,055.93	7,038.27	7,058.90	57.74	30.09	86.85	-65.22	495.37	2,455.58	2,394.47	61.11	40.185		
8,700.00	7,055.49	7,037.96	7,058.59	60.17	30.09	86.72	-65.22	495.37	2,555.42	2,494.29	61.13	41.802		
8,800.00	7,055.06	7,037.65	7,058.28	62.63	30.08	86.59	-65.22	495.37	2,655.28	2,594.12	61.16	43.417		
8,900.00	7,054.63	7,037.34	7,057.96	65.13	30.08	86.47	-65.22	495.37	2,755.15	2,693.96	61.18	45.031		
9,000.00	7,054.19	7,037.03	7,057.65	67.66	30.08	86.34	-65.22	495.37	2,855.02	2,793.81	61.21	46.642		
9,100.00	7,053.76	7,036.72	7,057.34	70.21	30.08	86.21	-65.22	495.38	2,954.91	2,893.67	61.24	48.251		
9,200.00	7,053.32	7,036.40	7,057.03	72.78	30.08	86.09	-65.22	495.38	3,054.80	2,993.53	61.27	49.859		
9,300.00	7,052.89	7,036.09	7,056.72	75.38	30.08	85.96	-65.22	495.38	3,154.70	3,093.40	61.30	51.463		
9,400.00	7,052.46	7,035.78	7,056.41	77.99	30.08	85.83	-65.22	495.38	3,254.60	3,193.27	61.33	53.066		
9,500.00	7,052.02	7,035.47	7,056.10	80.62	30.08	85.70	-65.22	495.38	3,354.51	3,293.15	61.36	54.666		
9,600.00	7,051.59	7,035.16	7,055.79	83.26	30.07	85.58	-65.22	495.38	3,454.43	3,393.03	61.40	56.263		
9,700.00	7,051.15	7,034.85	7,055.48	85.92	30.07	85.45	-65.22	495.38	3,554.35	3,492.92	61.43	57.858		
9,800.00	7,050.72	7,034.54	7,055.17	88.59	30.07	85.32	-65.22	495.38	3,654.28	3,592.81	61.47	59.451		
9,900.00	7,050.29	7,034.23	7,054.86	91.28	30.07	85.20	-65.22	495.38	3,754.20	3,692.70	61.50	61.040		
10,000.00	7,049.85	7,033.92	7,054.55	93.97	30.07	85.07	-65.22	495.38	3,854.14	3,792.59	61.54	62.627		
10,100.00	7,049.42	7,033.61	7,054.24	96.67	30.07	84.95	-65.22	495.38	3,954.07	3,892.49	61.58	64.210		
10,200.00	7,048.98	7,033.31	7,053.93	99.38	30.07	84.82	-65.22	495.38	4,054.01	3,992.39	61.62	65.791		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.55	7,033.00	7,053.62	102.10	30.06	84.69	-65.22	495.38	4,153.95	4,092.29	61.66	67.368		
10,400.00	7,048.12	7,032.69	7,053.31	104.83	30.06	84.57	-65.22	495.38	4,253.90	4,192.20	61.70	68.943		
10,500.00	7,047.68	7,032.38	7,053.01	107.56	30.06	84.44	-65.22	495.38	4,353.84	4,292.10	61.74	70.514		
10,600.00	7,047.25	7,032.07	7,052.70	110.30	30.06	84.32	-65.22	495.38	4,453.79	4,392.01	61.79	72.081		
10,700.00	7,046.81	7,031.76	7,052.39	113.05	30.06	84.19	-65.22	495.38	4,553.75	4,491.91	61.83	73.646		
10,800.00	7,046.38	7,031.45	7,052.08	115.80	30.06	84.06	-65.22	495.38	4,653.70	4,591.82	61.88	75.207		
10,900.00	7,045.95	7,031.14	7,051.77	118.55	30.06	83.94	-65.22	495.38	4,753.66	4,691.73	61.93	76.764		
11,000.00	7,045.51	7,030.84	7,051.46	121.31	30.06	83.81	-65.22	495.38	4,853.61	4,791.64	61.97	78.318		
11,100.00	7,045.08	7,030.53	7,051.15	124.08	30.05	83.69	-65.22	495.38	4,953.57	4,891.55	62.02	79.868		
11,200.00	7,044.64	7,030.22	7,050.85	126.85	30.05	83.56	-65.22	495.38	5,053.53	4,991.46	62.07	81.415		
11,300.00	7,044.21	7,029.91	7,050.54	129.62	30.05	83.44	-65.22	495.38	5,153.49	5,091.37	62.12	82.957		
11,400.00	7,043.78	7,029.60	7,050.23	132.40	30.05	83.31	-65.22	495.38	5,253.46	5,191.28	62.17	84.496		
11,500.00	7,043.34	7,029.30	7,049.92	135.18	30.05	83.19	-65.22	495.38	5,353.42	5,291.20	62.23	86.031		
11,600.00	7,042.91	7,028.99	7,049.62	137.96	30.05	83.06	-65.22	495.38	5,453.39	5,391.11	62.28	87.562		
11,700.00	7,042.47	7,028.68	7,049.31	140.75	30.05	82.94	-65.22	495.39	5,553.36	5,491.02	62.33	89.089		
11,800.00	7,042.04	7,028.37	7,049.00	143.54	30.04	82.81	-65.22	495.39	5,653.33	5,590.93	62.39	90.612		
11,900.00	7,041.61	7,028.07	7,048.69	146.33	30.04	82.69	-65.22	495.39	5,753.30	5,690.85	62.45	92.131		
12,000.00	7,041.17	7,027.76	7,048.39	149.13	30.04	82.57	-65.22	495.39	5,853.27	5,790.76	62.50	93.645		
12,100.00	7,040.74	7,027.45	7,048.08	151.92	30.04	82.44	-65.22	495.39	5,953.24	5,890.67	62.56	95.155		
12,200.00	7,040.30	7,027.15	7,047.77	154.72	30.04	82.32	-65.22	495.39	6,053.21	5,990.59	62.62	96.661		
12,300.00	7,039.87	7,026.84	7,047.47	157.52	30.04	82.19	-65.22	495.39	6,153.18	6,090.50	62.68	98.163		
12,400.00	7,039.44	7,026.53	7,047.16	160.33	30.04	82.07	-65.22	495.39	6,253.16	6,190.41	62.74	99.660		
12,500.00	7,039.00	7,026.23	7,046.85	163.13	30.04	81.95	-65.22	495.39	6,353.13	6,290.33	62.81	101.153		
12,600.00	7,038.57	7,025.92	7,046.55	165.94	30.03	81.82	-65.22	495.39	6,453.11	6,390.24	62.87	102.641		
12,700.00	7,038.13	7,025.61	7,046.24	168.75	30.03	81.70	-65.22	495.39	6,553.09	6,490.15	62.93	104.125		
12,800.00	7,037.70	7,025.31	7,045.94	171.56	30.03	81.58	-65.22	495.39	6,653.06	6,590.06	63.00	105.604		
12,900.00	7,037.27	7,025.00	7,045.63	174.37	30.03	81.45	-65.22	495.39	6,753.04	6,689.97	63.07	107.079		
13,000.00	7,036.83	7,024.70	7,045.32	177.19	30.03	81.33	-65.22	495.39	6,853.02	6,789.89	63.13	108.549		
13,100.00	7,036.40	7,024.39	7,045.02	180.00	30.03	81.21	-65.22	495.39	6,953.00	6,889.80	63.20	110.014		
13,200.00	7,035.96	7,024.09	7,044.71	182.82	30.03	81.09	-65.22	495.39	7,052.98	6,989.71	63.27	111.474		
13,300.00	7,035.53	7,023.78	7,044.41	185.64	30.03	80.96	-65.22	495.39	7,152.96	7,089.62	63.34	112.930		
13,400.00	7,035.10	7,023.47	7,044.10	188.46	30.02	80.84	-65.22	495.39	7,252.94	7,189.53	63.41	114.381		
13,500.00	7,034.66	7,023.17	7,043.80	191.28	30.02	80.72	-65.22	495.39	7,352.92	7,289.44	63.48	115.827		
13,600.00	7,034.23	7,022.86	7,043.49	194.10	30.02	80.60	-65.22	495.39	7,452.90	7,389.35	63.55	117.268		
13,700.00	7,033.79	7,022.56	7,043.19	196.92	30.02	80.48	-65.22	495.39	7,552.88	7,489.26	63.63	118.704		
13,800.00	7,033.36	7,022.26	7,042.88	199.74	30.02	80.35	-65.22	495.39	7,652.87	7,589.17	63.70	120.135		
13,900.00	7,032.93	7,021.95	7,042.58	202.57	30.02	80.23	-65.22	495.39	7,752.85	7,689.07	63.78	121.561		
14,000.00	7,032.49	7,021.65	7,042.27	205.39	30.02	80.11	-65.22	495.39	7,852.83	7,788.98	63.85	122.982		
14,100.00	7,032.06	7,021.34	7,041.97	208.22	30.02	79.99	-65.22	495.39	7,952.82	7,888.89	63.93	124.399		
14,200.00	7,031.62	7,021.04	7,041.67	211.05	30.01	79.87	-65.22	495.39	8,052.80	7,988.79	64.01	125.810		
14,300.00	7,031.19	7,020.73	7,041.36	213.87	30.01	79.75	-65.22	495.39	8,152.79	8,088.70	64.09	127.216		
14,400.00	7,030.76	7,020.43	7,041.06	216.70	30.01	79.63	-65.22	495.40	8,252.77	8,188.61	64.17	128.616		
14,500.00	7,030.32	7,020.13	7,040.75	219.53	30.01	79.50	-65.22	495.40	8,352.76	8,288.51	64.25	130.012		
14,600.00	7,029.89	7,019.82	7,040.45	222.36	30.01	79.38	-65.22	495.40	8,452.74	8,388.42	64.33	131.402		
14,700.00	7,029.45	7,019.52	7,040.15	225.19	30.01	79.26	-65.22	495.40	8,552.73	8,488.32	64.41	132.788		
14,800.00	7,029.02	7,019.22	7,039.84	228.03	30.01	79.14	-65.22	495.40	8,652.72	8,588.22	64.49	134.168		
14,805.04	7,029.00	7,019.20	7,039.83	228.17	30.01	79.14	-65.22	495.40	8,657.75	8,593.26	64.50	134.237		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.44	179.96	1.39	179.96					
100.00	100.00	101.00	100.00	3.28	3.28	0.44	179.96	1.39	179.96	173.39	6.57	27.393		
200.00	200.00	201.00	200.00	3.34	3.34	0.44	179.96	1.39	179.96	173.29	6.67	26.961	CC, ES	
300.00	300.00	295.03	294.01	3.44	3.44	0.39	181.53	1.23	181.63	174.74	6.89	26.347		
400.00	400.00	388.91	387.77	3.60	3.59	0.24	186.15	0.77	186.56	179.33	7.22	25.826		
500.00	499.98	482.25	480.80	3.80	3.78	141.98	193.78	0.00	196.10	188.46	7.64	25.671		
600.00	599.90	574.67	572.61	4.02	4.00	142.28	204.30	-1.05	210.59	202.47	8.12	25.931		
700.00	699.82	666.14	663.09	4.28	4.25	142.47	217.61	-2.39	228.26	219.61	8.65	26.374		
800.00	799.74	756.49	751.99	4.57	4.53	142.56	233.57	-3.99	249.03	239.80	9.23	26.978		
900.00	899.66	845.56	839.11	4.88	4.82	142.57	252.03	-5.84	272.83	263.00	9.83	27.752		
1,000.00	999.58	933.22	924.24	5.21	5.12	142.51	272.81	-7.93	299.60	289.14	10.46	28.652		
1,100.00	1,099.50	1,019.33	1,007.20	5.55	5.45	142.40	295.74	-10.23	329.26	318.17	11.09	29.686		
1,200.00	1,199.42	1,111.02	1,094.96	5.91	5.82	142.27	322.18	-12.89	361.08	349.33	11.75	30.721		
1,300.00	1,299.34	1,205.77	1,185.61	6.28	6.23	142.15	349.62	-15.64	393.04	380.59	12.45	31.566		
1,400.00	1,399.26	1,300.52	1,276.26	6.66	6.65	142.05	377.07	-18.40	425.01	411.84	13.17	32.261		
1,500.00	1,499.18	1,395.27	1,366.90	7.04	7.08	141.97	404.51	-21.15	456.98	443.06	13.92	32.835		
1,600.00	1,599.10	1,509.98	1,457.55	7.43	7.62	141.89	431.95	-23.91	488.94	474.18	14.77	33.114		
1,700.00	1,699.01	1,584.77	1,548.20	7.83	7.98	141.83	459.40	-26.66	520.91	505.45	15.45	33.707		
1,800.00	1,798.93	1,679.52	1,638.85	8.23	8.43	141.77	486.84	-29.42	552.88	536.63	16.24	34.038		
1,900.00	1,898.85	1,774.28	1,729.50	8.64	8.90	141.72	514.28	-32.17	584.84	567.80	17.04	34.317		
2,000.00	1,998.77	1,869.03	1,820.14	9.05	9.36	141.67	541.72	-34.93	616.81	598.96	17.85	34.552		
2,100.00	2,098.69	1,963.78	1,910.79	9.46	9.84	141.63	569.17	-37.68	648.78	630.11	18.67	34.752		
2,200.00	2,198.61	2,058.53	2,001.44	9.88	10.31	141.59	596.61	-40.44	680.75	661.26	19.49	34.921		
2,300.00	2,298.53	2,153.28	2,092.09	10.30	10.79	141.56	624.05	-43.19	712.72	692.40	20.32	35.066		
2,400.00	2,398.45	2,248.03	2,182.74	10.72	11.27	141.53	651.50	-45.95	744.69	723.53	21.16	35.191		
2,500.00	2,498.37	2,342.78	2,273.39	11.14	11.75	141.50	678.94	-48.71	776.66	754.66	22.00	35.298		
2,600.00	2,598.29	2,437.53	2,364.03	11.56	12.24	141.47	706.38	-51.46	808.63	785.78	22.85	35.390		
2,700.00	2,698.21	2,532.29	2,454.68	11.98	12.73	141.45	733.83	-54.22	840.60	816.90	23.70	35.469		
2,800.00	2,798.13	2,627.04	2,545.33	12.41	13.22	141.42	761.27	-56.97	872.57	848.02	24.55	35.538		
2,900.00	2,898.05	2,721.79	2,635.98	12.84	13.71	141.40	788.71	-59.73	904.54	879.13	25.41	35.598		
3,000.00	2,997.97	2,816.54	2,726.63	13.27	14.20	141.38	816.15	-62.48	936.51	910.24	26.27	35.650		
3,100.00	3,097.89	2,911.29	2,817.27	13.69	14.70	141.36	843.60	-65.24	968.48	941.35	27.13	35.696		
3,200.00	3,197.81	3,006.04	2,907.92	14.12	15.19	141.35	871.04	-67.99	1,000.45	972.46	28.00	35.735		
3,300.00	3,297.73	3,100.79	2,998.57	14.56	15.69	141.33	898.48	-70.75	1,032.42	1,003.56	28.86	35.770		
3,400.00	3,397.65	3,204.46	3,089.22	14.99	16.23	141.32	925.93	-73.50	1,064.39	1,034.62	29.78	35.747		
3,500.00	3,497.56	3,290.30	3,179.87	15.42	16.68	141.30	953.37	-76.26	1,096.36	1,065.76	30.60	35.826		
3,600.00	3,597.48	3,385.05	3,270.52	15.85	17.18	141.29	980.81	-79.01	1,128.33	1,096.86	31.47	35.849		
3,700.00	3,697.40	3,479.80	3,361.16	16.28	17.68	141.27	1,008.26	-81.77	1,160.31	1,127.96	32.35	35.869		
3,800.00	3,797.32	3,574.55	3,451.81	16.72	18.18	141.26	1,035.70	-84.52	1,192.28	1,159.05	33.22	35.887		
3,900.00	3,897.24	3,669.30	3,542.46	17.15	18.68	141.25	1,063.14	-87.28	1,224.25	1,190.15	34.10	35.902		
4,000.00	3,997.16	3,764.05	3,633.11	17.59	19.18	141.24	1,090.59	-90.03	1,256.22	1,221.24	34.98	35.915		
4,100.00	4,097.08	3,858.80	3,723.76	18.02	19.68	141.23	1,118.03	-92.79	1,288.19	1,252.33	35.86	35.926		
4,200.00	4,197.00	3,953.56	3,814.40	18.46	20.18	141.22	1,145.47	-95.54	1,320.16	1,283.42	36.74	35.936		
4,300.00	4,296.92	4,048.31	3,905.05	18.89	20.68	141.21	1,172.91	-98.30	1,352.13	1,314.51	37.62	35.945		
4,400.00	4,396.84	4,143.06	3,995.70	19.33	21.18	141.20	1,200.36	-101.05	1,384.10	1,345.60	38.50	35.952		
4,500.00	4,496.76	4,237.81	4,086.35	19.77	21.68	141.19	1,227.80	-103.81	1,416.07	1,376.69	39.38	35.958		
4,600.00	4,596.68	4,332.56	4,177.00	20.20	22.19	141.19	1,255.24	-106.56	1,448.05	1,407.78	40.26	35.963		
4,700.00	4,696.60	4,427.31	4,267.65	20.64	22.69	141.18	1,282.69	-109.32	1,480.02	1,438.87	41.15	35.967		
4,800.00	4,796.52	4,522.06	4,358.29	21.08	23.19	141.17	1,310.13	-112.07	1,511.99	1,469.95	42.03	35.971		
4,900.00	4,896.44	4,616.81	4,448.94	21.51	23.70	141.16	1,337.57	-114.83	1,543.96	1,501.04	42.92	35.973		
5,000.00	4,996.36	4,711.57	4,539.59	21.95	24.20	141.16	1,365.02	-117.58	1,575.93	1,532.12	43.81	35.975		
5,100.00	5,096.28	4,806.32	4,630.24	22.39	24.71	141.15	1,392.46	-120.34	1,607.90	1,563.21	44.69	35.977		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	4,901.07	4,720.89	22.83	25.21	141.14	1,419.90	-123.09	1,639.87	1,594.29	45.58	35.978		
5,300.00	5,296.11	5,004.18	4,811.53	23.27	25.76	141.14	1,447.34	-125.85	1,671.84	1,625.33	46.51	35.946		
5,400.00	5,396.03	5,109.43	4,902.18	23.71	26.32	141.13	1,474.79	-128.60	1,703.82	1,656.37	47.45	35.907		
5,500.00	5,495.95	5,185.32	4,992.83	24.14	26.73	141.13	1,502.23	-131.36	1,735.79	1,687.54	48.25	35.978		
5,600.00	5,595.87	5,280.07	5,083.48	24.58	27.23	141.12	1,529.67	-134.12	1,767.76	1,718.62	49.13	35.978		
5,700.00	5,695.79	5,374.82	5,174.13	25.02	27.74	141.12	1,557.12	-136.87	1,799.73	1,749.71	50.02	35.977		
5,800.00	5,795.71	5,607.10	5,398.52	25.46	28.93	141.13	1,616.57	-142.84	1,828.74	1,776.65	52.09	35.108		
5,900.00	5,895.63	5,878.61	5,665.90	25.90	30.17	141.21	1,662.92	-147.49	1,848.93	1,794.95	53.99	34.249		
6,000.00	5,995.55	6,158.33	5,944.70	26.34	31.29	141.37	1,684.12	-149.62	1,859.66	1,804.33	55.33	33.610		
6,100.00	6,095.47	6,309.11	6,095.47	26.78	31.83	141.48	1,685.20	-149.73	1,863.18	1,806.99	56.19	33.160		
6,200.00	6,195.39	6,409.03	6,195.39	27.22	32.18	141.56	1,685.20	-149.73	1,866.32	1,809.31	57.01	32.738		
6,300.00	6,295.31	6,508.95	6,295.31	27.66	32.54	141.63	1,685.20	-149.73	1,869.46	1,811.64	57.83	32.328		
6,400.00	6,395.23	6,608.87	6,395.23	28.10	32.90	141.71	1,685.20	-149.73	1,872.61	1,813.96	58.65	31.929		
6,500.00	6,495.02	6,708.66	6,495.02	28.54	33.26	106.09	1,685.20	-149.73	1,875.78	1,816.31	59.47	31.540		
6,600.00	6,593.09	6,806.73	6,593.09	28.98	33.62	97.26	1,685.20	-149.73	1,879.09	1,818.80	60.29	31.167		
6,700.00	6,687.01	6,908.20	6,694.41	29.41	33.98	95.45	1,685.17	-153.70	1,882.81	1,821.73	61.09	30.823		
6,800.00	6,774.46	7,017.54	6,801.49	29.83	34.37	95.01	1,685.00	-175.15	1,886.78	1,824.91	61.87	30.496		
6,900.00	6,853.31	7,133.69	6,909.43	30.26	34.76	95.04	1,684.67	-217.61	1,890.81	1,828.14	62.67	30.170		
7,000.00	6,921.60	7,257.17	7,013.68	30.76	35.15	95.26	1,684.15	-283.41	1,894.66	1,831.11	63.55	29.815		
7,100.00	6,977.66	7,388.03	7,108.12	31.38	35.50	95.55	1,683.45	-373.66	1,898.07	1,833.46	64.61	29.378		
7,200.00	7,020.10	7,525.60	7,185.33	32.17	35.89	95.81	1,682.56	-487.19	1,900.74	1,834.71	66.03	28.787		
7,300.00	7,047.88	7,668.27	7,237.76	33.13	36.57	95.98	1,681.52	-619.55	1,902.41	1,834.44	67.97	27.990		
7,400.00	7,060.32	7,813.55	7,259.57	34.27	37.87	96.01	1,680.40	-762.86	1,902.91	1,832.42	70.49	26.995		
7,500.00	7,060.70	7,921.65	7,259.68	35.56	39.14	96.00	1,679.56	-870.95	1,902.71	1,829.62	73.08	26.034		
7,600.00	7,060.27	8,021.65	7,259.30	37.02	40.50	96.01	1,678.78	-970.95	1,902.53	1,826.61	75.93	25.058		
7,700.00	7,059.83	8,121.65	7,258.92	38.64	42.02	96.01	1,677.99	-1,070.95	1,902.35	1,823.28	79.07	24.058		
7,800.00	7,059.40	8,221.65	7,258.54	40.40	43.68	96.01	1,677.21	-1,170.94	1,902.18	1,819.68	82.49	23.058		
7,900.00	7,058.97	8,321.65	7,258.17	42.28	45.45	96.01	1,676.43	-1,270.94	1,902.00	1,815.85	86.15	22.077		
8,000.00	7,058.53	8,421.65	7,257.79	44.27	47.34	96.01	1,675.65	-1,370.93	1,901.83	1,811.80	90.03	21.125		
8,100.00	7,058.10	8,521.65	7,257.41	46.35	49.32	96.02	1,674.87	-1,470.93	1,901.65	1,807.57	94.08	20.213		
8,200.00	7,057.66	8,621.65	7,257.03	48.50	51.38	96.02	1,674.08	-1,570.93	1,901.47	1,803.17	98.30	19.344		
8,300.00	7,057.23	8,721.65	7,256.65	50.73	53.51	96.02	1,673.30	-1,670.92	1,901.30	1,798.64	102.66	18.521		
8,400.00	7,056.80	8,821.65	7,256.27	53.02	55.71	96.02	1,672.52	-1,770.92	1,901.12	1,793.98	107.14	17.744		
8,500.00	7,056.36	8,921.65	7,255.89	55.36	57.97	96.03	1,671.74	-1,870.91	1,900.94	1,789.21	111.73	17.013		
8,600.00	7,055.93	9,021.65	7,255.51	57.74	60.28	96.03	1,670.96	-1,970.91	1,900.77	1,784.34	116.42	16.326		
8,700.00	7,055.49	9,121.65	7,255.13	60.17	62.63	96.03	1,670.17	-2,070.91	1,900.59	1,779.39	121.20	15.682		
8,800.00	7,055.06	9,221.65	7,254.75	62.63	65.03	96.03	1,669.39	-2,170.90	1,900.41	1,774.36	126.05	15.077		
8,900.00	7,054.63	9,321.65	7,254.37	65.13	67.46	96.03	1,668.61	-2,270.90	1,900.24	1,769.27	130.97	14.509		
9,000.00	7,054.19	9,421.65	7,253.99	67.66	69.92	96.04	1,667.83	-2,370.89	1,900.06	1,764.12	135.94	13.977		
9,100.00	7,053.76	9,521.65	7,253.61	70.21	72.41	96.04	1,667.05	-2,470.89	1,899.88	1,758.91	140.98	13.477		
9,200.00	7,053.32	9,621.65	7,253.23	72.78	74.93	96.04	1,666.26	-2,570.89	1,899.71	1,753.65	146.05	13.007		
9,300.00	7,052.89	9,721.65	7,252.85	75.38	77.47	96.04	1,665.48	-2,670.88	1,899.53	1,748.35	151.18	12.565		
9,400.00	7,052.46	9,821.65	7,252.47	77.99	80.04	96.05	1,664.70	-2,770.88	1,899.35	1,743.02	156.34	12.149		
9,500.00	7,052.02	9,921.65	7,252.09	80.62	82.62	96.05	1,663.92	-2,870.87	1,899.18	1,737.64	161.54	11.757		
9,600.00	7,051.59	10,021.64	7,251.71	83.26	85.22	96.05	1,663.14	-2,970.87	1,899.00	1,732.24	166.76	11.387		
9,700.00	7,051.15	10,121.64	7,251.33	85.92	87.83	96.05	1,662.35	-3,070.87	1,898.82	1,726.80	172.02	11.038		
9,800.00	7,050.72	10,221.64	7,250.95	88.59	90.47	96.05	1,661.57	-3,170.86	1,898.65	1,721.34	177.31	10.708		
9,900.00	7,050.29	10,321.64	7,250.58	91.28	93.11	96.06	1,660.79	-3,270.86	1,898.47	1,715.86	182.61	10.396		
10,000.00	7,049.85	10,421.64	7,250.20	93.97	95.77	96.06	1,660.01	-3,370.85	1,898.30	1,710.35	187.94	10.100		
10,100.00	7,049.42	10,521.64	7,249.82	96.67	98.43	96.06	1,659.23	-3,470.85	1,898.12	1,704.82	193.29	9.820		
10,200.00	7,048.98	10,621.64	7,249.44	99.38	101.11	96.06	1,658.44	-3,570.85	1,897.94	1,699.28	198.66	9.554		
10,300.00	7,048.55	10,721.64	7,249.06	102.10	103.80	96.07	1,657.66	-3,670.84	1,897.77	1,693.72	204.05	9.301		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Reference Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,400.00	7,048.12	10,821.64	7,248.68	104.83	106.50	96.07		1,656.88	-3,770.84	1,897.59	1,688.14	209.45	9.060	
10,500.00	7,047.68	10,921.64	7,248.30	107.56	109.20	96.07		1,656.10	-3,870.83	1,897.41	1,682.54	214.87	8.831	
10,600.00	7,047.25	11,021.64	7,247.92	110.30	111.91	96.07		1,655.32	-3,970.83	1,897.24	1,676.94	220.30	8.612	
10,700.00	7,046.81	11,121.64	7,247.54	113.05	114.63	96.07		1,654.53	-4,070.83	1,897.06	1,671.32	225.74	8.404	
10,800.00	7,046.38	11,221.64	7,247.16	115.80	117.36	96.08		1,653.75	-4,170.82	1,896.88	1,665.69	231.20	8.205	
10,900.00	7,045.95	11,321.64	7,246.78	118.55	120.09	96.08		1,652.97	-4,270.82	1,896.71	1,660.05	236.66	8.014	
11,000.00	7,045.51	11,421.64	7,246.40	121.31	122.83	96.08		1,652.19	-4,370.81	1,896.53	1,654.39	242.14	7.832	
11,100.00	7,045.08	11,521.64	7,246.02	124.08	125.57	96.08		1,651.41	-4,470.81	1,896.35	1,648.73	247.62	7.658	
11,200.00	7,044.64	11,621.64	7,245.64	126.85	128.32	96.09		1,650.62	-4,570.81	1,896.18	1,643.06	253.11	7.491	
11,300.00	7,044.21	11,721.64	7,245.26	129.62	131.08	96.09		1,649.84	-4,670.80	1,896.00	1,637.38	258.62	7.331	
11,400.00	7,043.78	11,821.64	7,244.88	132.40	133.83	96.09		1,649.06	-4,770.80	1,895.82	1,631.70	264.13	7.178	
11,500.00	7,043.34	11,921.64	7,244.50	135.18	136.60	96.09		1,648.28	-4,870.80	1,895.65	1,626.00	269.64	7.030	
11,600.00	7,042.91	12,021.64	7,244.12	137.96	139.36	96.09		1,647.50	-4,970.79	1,895.47	1,620.30	275.17	6.888	
11,700.00	7,042.47	12,121.64	7,243.74	140.75	142.13	96.10		1,646.71	-5,070.79	1,895.30	1,614.60	280.70	6.752	
11,800.00	7,042.04	12,221.64	7,243.36	143.54	144.90	96.10		1,645.93	-5,170.78	1,895.12	1,608.89	286.23	6.621	
11,900.00	7,041.61	12,321.64	7,242.98	146.33	147.68	96.10		1,645.15	-5,270.78	1,894.94	1,603.17	291.78	6.495	
12,000.00	7,041.17	12,421.64	7,242.61	149.13	150.46	96.10		1,644.37	-5,370.78	1,894.77	1,597.44	297.32	6.373	
12,100.00	7,040.74	12,521.64	7,242.23	151.92	153.24	96.11		1,643.59	-5,470.77	1,894.59	1,591.71	302.87	6.255	
12,200.00	7,040.30	12,621.64	7,241.85	154.72	156.02	96.11		1,642.80	-5,570.77	1,894.41	1,585.98	308.43	6.142	
12,300.00	7,039.87	12,721.64	7,241.47	157.52	158.81	96.11		1,642.02	-5,670.76	1,894.24	1,580.24	313.99	6.033	
12,400.00	7,039.44	12,821.64	7,241.09	160.33	161.60	96.11		1,641.24	-5,770.76	1,894.06	1,574.50	319.56	5.927	
12,500.00	7,039.00	12,921.64	7,240.71	163.13	164.39	96.11		1,640.46	-5,870.76	1,893.88	1,568.75	325.13	5.825	
12,600.00	7,038.57	13,021.64	7,240.33	165.94	167.19	96.12		1,639.68	-5,970.75	1,893.71	1,563.00	330.70	5.726	
12,700.00	7,038.13	13,121.64	7,239.95	168.75	169.99	96.12		1,638.89	-6,070.75	1,893.53	1,557.25	336.28	5.631	
12,800.00	7,037.70	13,221.64	7,239.57	171.56	172.78	96.12		1,638.11	-6,170.74	1,893.35	1,551.49	341.86	5.538	
12,900.00	7,037.27	13,321.64	7,239.19	174.37	175.58	96.12		1,637.33	-6,270.74	1,893.18	1,545.73	347.45	5.449	
13,000.00	7,036.83	13,421.64	7,238.81	177.19	178.39	96.13		1,636.55	-6,370.74	1,893.00	1,539.97	353.03	5.362	
13,100.00	7,036.40	13,521.64	7,238.43	180.00	181.19	96.13		1,635.77	-6,470.73	1,892.83	1,534.20	358.62	5.278	
13,200.00	7,035.96	13,621.64	7,238.05	182.82	184.00	96.13		1,634.98	-6,570.73	1,892.65	1,528.43	364.22	5.196	
13,300.00	7,035.53	13,721.64	7,237.67	185.64	186.80	96.13		1,634.20	-6,670.72	1,892.47	1,522.66	369.81	5.117	
13,400.00	7,035.10	13,821.64	7,237.29	188.46	189.61	96.13		1,633.42	-6,770.72	1,892.30	1,516.88	375.41	5.041	
13,500.00	7,034.66	13,921.64	7,236.91	191.28	192.42	96.14		1,632.64	-6,870.72	1,892.12	1,511.10	381.01	4.966	
13,600.00	7,034.23	14,021.64	7,236.53	194.10	195.23	96.14		1,631.86	-6,970.71	1,891.94	1,505.32	386.62	4.894	
13,700.00	7,033.79	14,121.64	7,236.15	196.92	198.05	96.14		1,631.07	-7,070.71	1,891.77	1,499.54	392.22	4.823	
13,800.00	7,033.36	14,221.64	7,235.77	199.74	200.86	96.14		1,630.29	-7,170.70	1,891.59	1,493.76	397.83	4.755	
13,900.00	7,032.93	14,321.64	7,235.39	202.57	203.68	96.15		1,629.51	-7,270.70	1,891.41	1,487.97	403.44	4.688	
14,000.00	7,032.49	14,421.64	7,235.01	205.39	206.49	96.15		1,628.73	-7,370.70	1,891.24	1,482.18	409.06	4.623	
14,100.00	7,032.06	14,521.64	7,234.64	208.22	209.31	96.15		1,627.95	-7,470.69	1,891.06	1,476.39	414.67	4.560	
14,200.00	7,031.62	14,621.64	7,234.26	211.05	212.13	96.15		1,627.16	-7,570.69	1,890.89	1,470.60	420.29	4.499	
14,300.00	7,031.19	14,721.64	7,233.88	213.87	214.95	96.15		1,626.38	-7,670.68	1,890.71	1,464.81	425.90	4.439	
14,400.00	7,030.76	14,821.64	7,233.50	216.70	217.77	96.16		1,625.60	-7,770.68	1,890.53	1,459.01	431.52	4.381	
14,500.00	7,030.32	14,921.64	7,233.12	219.53	220.59	96.16		1,624.82	-7,870.68	1,890.36	1,453.21	437.14	4.324	
14,600.00	7,029.89	15,021.64	7,232.74	222.36	223.42	96.16		1,624.04	-7,970.67	1,890.18	1,447.41	442.77	4.269	
14,700.00	7,029.45	15,121.64	7,232.36	225.19	226.24	96.16		1,623.25	-8,070.67	1,890.00	1,441.61	448.39	4.215	
14,797.82	7,029.03	15,216.01	7,232.00	227.96	228.91	96.17		1,622.52	-8,165.04	1,889.83	1,436.03	453.81	4.164	
14,800.00	7,029.02	15,216.01	7,232.00	228.03	228.91	96.17		1,622.52	-8,165.04	1,889.84	1,435.96	453.87	4.164	
14,805.04	7,029.00	15,216.01	7,232.00	228.17	228.91	96.17		1,622.52	-8,165.04	1,889.85	1,435.83	454.02	4.162 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.50	160.29	1.39	160.30					
100.00	100.00	101.00	100.00	3.28	3.28	0.50	160.29	1.39	160.30	153.73	6.57	24.400		
200.00	200.00	201.00	200.00	3.34	3.34	0.50	160.29	1.39	160.30	153.62	6.67	24.015		
300.00	300.00	301.00	300.00	3.44	3.45	0.50	160.29	1.39	160.30	153.41	6.89	23.261 CC, ES		
400.00	400.00	395.66	394.64	3.60	3.60	0.42	161.87	1.19	161.97	154.76	7.21	22.470		
500.00	499.98	490.07	488.93	3.80	3.79	142.27	166.54	0.59	168.28	160.67	7.61	22.100		
600.00	599.90	583.79	582.32	4.02	4.01	142.65	174.22	-0.39	179.61	171.51	8.09	22.195		
700.00	699.82	676.73	674.64	4.28	4.27	142.87	184.82	-1.75	194.16	185.53	8.63	22.509		
800.00	799.74	768.70	765.62	4.57	4.55	142.93	198.24	-3.47	211.87	202.66	9.20	23.020		
900.00	899.66	859.55	855.00	4.88	4.84	142.87	214.32	-5.53	232.67	222.86	9.81	23.712		
1,000.00	999.58	955.87	949.41	5.21	5.17	142.76	233.26	-7.96	255.41	244.97	10.44	24.471		
1,100.00	1,099.50	1,053.24	1,044.84	5.55	5.52	142.66	252.44	-10.42	278.18	267.07	11.11	25.040		
1,200.00	1,199.42	1,150.61	1,140.27	5.91	5.89	142.58	271.62	-12.88	300.95	289.15	11.81	25.492		
1,300.00	1,299.34	1,247.99	1,235.71	6.28	6.28	142.50	290.79	-15.33	323.73	311.20	12.53	25.844		
1,400.00	1,399.26	1,345.36	1,331.14	6.66	6.68	142.44	309.97	-17.79	346.50	333.24	13.27	26.117		
1,500.00	1,499.18	1,442.73	1,426.57	7.04	7.08	142.39	329.15	-20.25	369.28	355.25	14.03	26.329		
1,600.00	1,599.10	1,540.10	1,522.00	7.43	7.50	142.34	348.32	-22.70	392.05	377.25	14.80	26.492		
1,700.00	1,699.01	1,637.47	1,617.44	7.83	7.92	142.29	367.50	-25.16	414.83	399.24	15.58	26.619		
1,800.00	1,798.93	1,734.84	1,712.87	8.23	8.35	142.26	386.68	-27.62	437.60	421.22	16.38	26.715		
1,900.00	1,898.85	1,832.21	1,808.30	8.64	8.78	142.22	405.86	-30.08	460.38	443.19	17.19	26.789		
2,000.00	1,998.77	1,929.59	1,903.73	9.05	9.21	142.19	425.03	-32.53	483.15	465.16	18.00	26.844		
2,100.00	2,098.69	2,026.96	1,999.17	9.46	9.65	142.16	444.21	-34.99	505.93	487.11	18.82	26.884		
2,200.00	2,198.61	2,124.33	2,094.60	9.88	10.09	142.13	463.39	-37.45	528.71	509.06	19.65	26.913		
2,300.00	2,298.53	2,221.70	2,190.03	10.30	10.54	142.11	482.56	-39.91	551.48	531.01	20.48	26.932		
2,400.00	2,398.45	2,319.07	2,285.47	10.72	10.98	142.09	501.74	-42.36	574.26	552.95	21.31	26.944		
2,500.00	2,498.37	2,416.44	2,380.90	11.14	11.43	142.07	520.92	-44.82	597.04	574.88	22.15	26.950		
2,600.00	2,598.29	2,513.81	2,476.33	11.56	11.88	142.05	540.10	-47.28	619.81	596.81	23.00	26.951		
2,700.00	2,698.21	2,611.19	2,571.76	11.98	12.33	142.03	559.27	-49.74	642.59	618.74	23.84	26.949		
2,800.00	2,798.13	2,708.56	2,667.20	12.41	12.79	142.02	578.45	-52.19	665.37	640.67	24.70	26.943		
2,900.00	2,898.05	2,805.93	2,762.63	12.84	13.24	142.00	597.63	-54.65	688.14	662.59	25.55	26.935		
3,000.00	2,997.97	2,903.30	2,858.06	13.27	13.70	141.99	616.80	-57.11	710.92	684.51	26.40	26.925		
3,100.00	3,097.89	3,000.67	2,953.49	13.69	14.15	141.97	635.98	-59.57	733.69	706.43	27.26	26.913		
3,200.00	3,197.81	3,101.96	3,048.93	14.12	14.63	141.96	655.16	-62.02	756.47	728.33	28.14	26.884		
3,300.00	3,297.73	3,204.59	3,144.36	14.56	15.11	141.95	674.34	-64.48	779.25	750.22	29.02	26.848		
3,400.00	3,397.65	3,307.21	3,239.79	14.99	15.60	141.94	693.51	-66.94	802.02	772.11	29.91	26.813		
3,500.00	3,497.56	3,409.84	3,335.23	15.42	16.08	141.93	712.69	-69.40	824.80	794.00	30.80	26.779		
3,600.00	3,597.48	3,487.53	3,430.66	15.85	16.45	141.92	731.87	-71.85	847.58	816.00	31.58	26.842		
3,700.00	3,697.40	3,584.90	3,526.09	16.28	16.91	141.91	751.04	-74.31	870.36	837.91	32.44	26.827		
3,800.00	3,797.32	3,682.27	3,621.52	16.72	17.37	141.90	770.22	-76.77	893.13	859.82	33.31	26.811		
3,900.00	3,897.24	3,779.64	3,716.96	17.15	17.84	141.89	789.40	-79.23	915.91	881.73	34.18	26.795		
4,000.00	3,997.16	3,877.01	3,812.39	17.59	18.30	141.88	808.58	-81.68	938.69	903.63	35.05	26.779		
4,100.00	4,097.08	3,974.39	3,907.82	18.02	18.76	141.87	827.75	-84.14	961.46	925.54	35.92	26.764		
4,200.00	4,197.00	4,071.76	4,003.25	18.46	19.23	141.87	846.93	-86.60	984.24	947.44	36.80	26.748		
4,300.00	4,296.92	4,169.13	4,098.69	18.89	19.69	141.86	866.11	-89.06	1,007.02	969.35	37.67	26.733		
4,400.00	4,396.84	4,266.50	4,194.12	19.33	20.15	141.85	885.29	-91.51	1,029.79	991.25	38.54	26.717		
4,500.00	4,496.76	4,363.87	4,289.55	19.77	20.62	141.85	904.46	-93.97	1,052.57	1,013.15	39.42	26.702		
4,600.00	4,596.68	4,461.24	4,384.98	20.20	21.08	141.84	923.64	-96.43	1,075.35	1,035.05	40.29	26.687		
4,700.00	4,696.60	4,558.61	4,480.42	20.64	21.55	141.83	942.82	-98.89	1,098.12	1,056.95	41.17	26.673		
4,800.00	4,796.52	4,655.99	4,575.85	21.08	22.01	141.83	961.99	-101.34	1,120.90	1,078.85	42.05	26.658		
4,900.00	4,896.44	4,753.36	4,671.28	21.51	22.48	141.82	981.17	-103.80	1,143.68	1,100.75	42.92	26.644		
5,000.00	4,996.36	4,850.73	4,766.72	21.95	22.95	141.82	1,000.35	-106.26	1,166.46	1,122.65	43.80	26.630		
5,100.00	5,096.28	4,948.10	4,862.15	22.39	23.41	141.81	1,019.53	-108.71	1,189.23	1,144.55	44.68	26.616		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,045.47	4,957.58	22.83	23.88	141.81	1,038.70	-111.17	1,212.01	1,166.45	45.56	26.603		
5,300.00	5,296.11	5,142.84	5,053.01	23.27	24.35	141.80	1,057.88	-113.63	1,234.79	1,188.35	46.44	26.590		
5,400.00	5,396.03	5,240.21	5,148.45	23.71	24.81	141.80	1,077.06	-116.09	1,257.56	1,210.25	47.32	26.577		
5,500.00	5,495.95	5,337.59	5,243.88	24.14	25.28	141.79	1,096.23	-118.54	1,280.34	1,232.14	48.20	26.564		
5,600.00	5,595.87	5,434.96	5,339.31	24.58	25.75	141.79	1,115.41	-121.00	1,303.12	1,254.04	49.08	26.552		
5,700.00	5,695.79	5,532.33	5,434.74	25.02	26.21	141.78	1,134.59	-123.46	1,325.89	1,275.94	49.96	26.539		
5,800.00	5,795.71	5,629.70	5,530.18	25.46	26.68	141.78	1,153.77	-125.92	1,348.67	1,297.83	50.84	26.527		
5,900.00	5,895.63	5,727.07	5,625.61	25.90	27.15	141.78	1,172.94	-128.37	1,371.45	1,319.73	51.72	26.516		
6,000.00	5,995.55	5,824.44	5,721.04	26.34	27.62	141.77	1,192.12	-130.83	1,394.23	1,341.62	52.60	26.504		
6,100.00	6,095.47	5,921.81	5,816.47	26.78	28.08	141.77	1,211.30	-133.29	1,417.00	1,363.52	53.49	26.493		
6,200.00	6,195.39	6,019.19	5,911.91	27.22	28.55	141.77	1,230.47	-135.75	1,439.78	1,385.41	54.37	26.482		
6,300.00	6,295.31	6,116.56	6,007.34	27.66	29.02	141.76	1,249.65	-138.20	1,462.56	1,407.31	55.25	26.471		
6,400.00	6,395.23	6,213.93	6,102.77	28.10	29.49	141.76	1,268.83	-140.66	1,485.33	1,429.20	56.13	26.460		
6,500.00	6,495.02	6,311.23	6,198.14	28.54	29.96	105.09	1,287.99	-143.12	1,508.11	1,451.09	57.02	26.450		
6,600.00	6,593.09	6,407.19	6,292.19	28.98	30.42	94.52	1,306.89	-145.54	1,530.75	1,472.86	57.89	26.442		
6,700.00	6,687.01	6,500.53	6,382.63	29.41	30.87	91.15	1,325.07	-147.87	1,553.18	1,494.43	58.75	26.438		
6,800.00	6,774.46	6,587.02	6,468.44	29.83	31.28	89.50	1,342.31	-150.11	1,575.72	1,516.14	59.58	26.446		
6,900.00	6,853.31	6,694.19	6,572.64	30.26	31.80	88.88	1,363.18	-162.94	1,598.15	1,537.50	60.65	26.349		
7,000.00	6,921.60	6,815.83	6,686.45	30.76	32.37	88.73	1,385.82	-198.80	1,619.52	1,557.62	61.90	26.162		
7,100.00	6,977.66	6,956.74	6,807.12	31.38	32.99	88.98	1,409.62	-266.96	1,638.88	1,575.53	63.35	25.870		
7,200.00	7,020.10	7,121.69	6,925.68	32.17	33.70	89.51	1,432.68	-378.62	1,654.98	1,589.90	65.08	25.430		
7,300.00	7,047.88	7,312.30	7,022.46	33.13	34.82	90.09	1,451.02	-540.97	1,666.24	1,598.91	67.33	24.746		
7,400.00	7,060.32	7,521.85	7,069.57	34.27	36.80	90.36	1,459.08	-744.03	1,671.18	1,600.73	70.44	23.724		
7,500.00	7,060.70	7,645.86	7,070.78	35.56	38.31	90.35	1,458.47	-868.00	1,671.20	1,597.94	73.26	22.812		
7,600.00	7,060.27	7,745.86	7,070.49	37.02	39.71	90.35	1,457.71	-968.00	1,671.04	1,594.89	76.15	21.944		
7,700.00	7,059.83	7,845.86	7,070.21	38.64	41.26	90.36	1,456.96	-1,068.00	1,670.89	1,591.54	79.35	21.057		
7,800.00	7,059.40	7,945.86	7,069.92	40.40	42.94	90.36	1,456.21	-1,167.99	1,670.74	1,587.91	82.82	20.172		
7,900.00	7,058.97	8,045.86	7,069.64	42.28	44.75	90.37	1,455.46	-1,267.99	1,670.58	1,584.05	86.53	19.306		
8,000.00	7,058.53	8,145.86	7,069.35	44.27	46.66	90.37	1,454.70	-1,367.99	1,670.43	1,579.98	90.45	18.467		
8,100.00	7,058.10	8,245.86	7,069.07	46.35	48.66	90.38	1,453.95	-1,467.98	1,670.28	1,575.72	94.56	17.665		
8,200.00	7,057.66	8,345.86	7,068.78	48.50	50.75	90.38	1,453.20	-1,567.98	1,670.13	1,571.31	98.82	16.901		
8,300.00	7,057.23	8,445.86	7,068.50	50.73	52.91	90.39	1,452.45	-1,667.98	1,669.97	1,566.75	103.22	16.178		
8,400.00	7,056.80	8,545.86	7,068.22	53.02	55.13	90.39	1,451.69	-1,767.97	1,669.82	1,562.07	107.75	15.497		
8,500.00	7,056.36	8,645.86	7,067.93	55.36	57.41	90.40	1,450.94	-1,867.97	1,669.67	1,557.28	112.39	14.857		
8,600.00	7,055.93	8,745.86	7,067.65	57.74	59.74	90.40	1,450.19	-1,967.97	1,669.52	1,552.40	117.12	14.255		
8,700.00	7,055.49	8,845.86	7,067.36	60.17	62.12	90.41	1,449.44	-2,067.96	1,669.36	1,547.43	121.93	13.691		
8,800.00	7,055.06	8,945.86	7,067.08	62.63	64.53	90.41	1,448.68	-2,167.96	1,669.21	1,542.39	126.82	13.162		
8,900.00	7,054.63	9,045.86	7,066.79	65.13	66.98	90.42	1,447.93	-2,267.96	1,669.06	1,537.28	131.78	12.665		
9,000.00	7,054.19	9,145.86	7,066.51	67.66	69.46	90.42	1,447.18	-2,367.95	1,668.91	1,532.11	136.80	12.200		
9,100.00	7,053.76	9,245.86	7,066.22	70.21	71.97	90.43	1,446.43	-2,467.95	1,668.75	1,526.89	141.87	11.763		
9,200.00	7,053.32	9,345.85	7,065.94	72.78	74.50	90.43	1,445.67	-2,567.94	1,668.60	1,521.62	146.98	11.352		
9,300.00	7,052.89	9,445.85	7,065.65	75.38	77.06	90.44	1,444.92	-2,667.94	1,668.45	1,516.31	152.14	10.966		
9,400.00	7,052.46	9,545.85	7,065.37	77.99	79.64	90.44	1,444.17	-2,767.94	1,668.30	1,510.96	157.34	10.603		
9,500.00	7,052.02	9,645.85	7,065.08	80.62	82.23	90.45	1,443.42	-2,867.93	1,668.14	1,505.57	162.57	10.261		
9,600.00	7,051.59	9,745.85	7,064.80	83.26	84.84	90.45	1,442.66	-2,967.93	1,667.99	1,500.15	167.84	9.938		
9,700.00	7,051.15	9,845.85	7,064.51	85.92	87.47	90.46	1,441.91	-3,067.93	1,667.84	1,494.71	173.13	9.633		
9,800.00	7,050.72	9,945.85	7,064.23	88.59	90.11	90.46	1,441.16	-3,167.92	1,667.69	1,489.24	178.45	9.345		
9,900.00	7,050.29	10,045.85	7,063.94	91.28	92.77	90.47	1,440.41	-3,267.92	1,667.53	1,483.74	183.79	9.073		
10,000.00	7,049.85	10,145.85	7,063.66	93.97	95.44	90.47	1,439.65	-3,367.92	1,667.38	1,478.22	189.16	8.815		
10,100.00	7,049.42	10,245.85	7,063.37	96.67	98.11	90.48	1,438.90	-3,467.91	1,667.23	1,472.69	194.54	8.570		
10,200.00	7,048.98	10,345.85	7,063.09	99.38	100.80	90.49	1,438.15	-3,567.91	1,667.08	1,467.13	199.94	8.338		
10,300.00	7,048.55	10,445.85	7,062.80	102.10	103.50	90.49	1,437.40	-3,667.91	1,666.92	1,461.56	205.36	8.117		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	10,545.85	7,062.52	104.83	106.20	90.50	1,436.64	-3,767.90	1,666.77	1,455.97	210.80	7.907		
10,500.00	7,047.68	10,645.85	7,062.24	107.56	108.92	90.50	1,435.89	-3,867.90	1,666.62	1,450.37	216.25	7.707		
10,600.00	7,047.25	10,745.85	7,061.95	110.30	111.64	90.51	1,435.14	-3,967.90	1,666.47	1,444.75	221.71	7.516		
10,700.00	7,046.81	10,845.85	7,061.67	113.05	114.36	90.51	1,434.39	-4,067.89	1,666.31	1,439.12	227.19	7.334		
10,800.00	7,046.38	10,945.85	7,061.38	115.80	117.10	90.52	1,433.63	-4,167.89	1,666.16	1,433.48	232.68	7.161		
10,900.00	7,045.95	11,045.85	7,061.10	118.55	119.83	90.52	1,432.88	-4,267.89	1,666.01	1,427.83	238.18	6.995		
11,000.00	7,045.51	11,145.85	7,060.81	121.31	122.58	90.53	1,432.13	-4,367.88	1,665.86	1,422.17	243.68	6.836		
11,100.00	7,045.08	11,245.85	7,060.53	124.08	125.33	90.53	1,431.38	-4,467.88	1,665.70	1,416.50	249.20	6.684		
11,200.00	7,044.64	11,345.85	7,060.24	126.85	128.08	90.54	1,430.62	-4,567.88	1,665.55	1,410.82	254.73	6.539		
11,300.00	7,044.21	11,445.85	7,059.96	129.62	130.84	90.54	1,429.87	-4,667.87	1,665.40	1,405.14	260.26	6.399		
11,400.00	7,043.78	11,545.85	7,059.67	132.40	133.60	90.55	1,429.12	-4,767.87	1,665.25	1,399.44	265.80	6.265		
11,500.00	7,043.34	11,645.85	7,059.39	135.18	136.37	90.55	1,428.37	-4,867.87	1,665.10	1,393.74	271.35	6.136		
11,600.00	7,042.91	11,745.85	7,059.10	137.96	139.14	90.56	1,427.62	-4,967.86	1,664.94	1,388.03	276.91	6.013		
11,700.00	7,042.47	11,845.85	7,058.82	140.75	141.92	90.56	1,426.86	-5,067.86	1,664.79	1,382.32	282.47	5.894		
11,800.00	7,042.04	11,945.85	7,058.53	143.54	144.69	90.57	1,426.11	-5,167.85	1,664.64	1,376.60	288.04	5.779		
11,900.00	7,041.61	12,045.85	7,058.25	146.33	147.47	90.57	1,425.36	-5,267.85	1,664.49	1,370.87	293.62	5.669		
12,000.00	7,041.17	12,145.85	7,057.96	149.13	150.26	90.58	1,424.61	-5,367.85	1,664.33	1,365.14	299.20	5.563		
12,100.00	7,040.74	12,245.85	7,057.68	151.92	153.04	90.58	1,423.85	-5,467.84	1,664.18	1,359.40	304.78	5.460		
12,200.00	7,040.30	12,345.85	7,057.39	154.72	155.83	90.59	1,423.10	-5,567.84	1,664.03	1,353.66	310.37	5.361		
12,300.00	7,039.87	12,445.85	7,057.11	157.52	158.62	90.59	1,422.35	-5,667.84	1,663.88	1,347.91	315.96	5.266		
12,400.00	7,039.44	12,545.85	7,056.82	160.33	161.42	90.60	1,421.60	-5,767.83	1,663.73	1,342.16	321.56	5.174		
12,500.00	7,039.00	12,645.85	7,056.54	163.13	164.21	90.60	1,420.84	-5,867.83	1,663.57	1,336.41	327.16	5.085		
12,600.00	7,038.57	12,745.85	7,056.26	165.94	167.01	90.61	1,420.09	-5,967.83	1,663.42	1,330.65	332.77	4.999		
12,700.00	7,038.13	12,845.85	7,055.97	168.75	169.81	90.61	1,419.34	-6,067.82	1,663.27	1,324.89	338.38	4.915		
12,800.00	7,037.70	12,945.85	7,055.69	171.56	172.61	90.62	1,418.59	-6,167.82	1,663.12	1,319.12	343.99	4.835		
12,900.00	7,037.27	13,045.85	7,055.40	174.37	175.42	90.63	1,417.83	-6,267.82	1,662.97	1,313.36	349.61	4.757		
13,000.00	7,036.83	13,145.85	7,055.12	177.19	178.22	90.63	1,417.08	-6,367.81	1,662.81	1,307.58	355.23	4.681		
13,100.00	7,036.40	13,245.85	7,054.83	180.00	181.03	90.64	1,416.33	-6,467.81	1,662.66	1,301.81	360.85	4.608		
13,200.00	7,035.96	13,345.85	7,054.55	182.82	183.84	90.64	1,415.58	-6,567.81	1,662.51	1,296.03	366.48	4.536		
13,300.00	7,035.53	13,445.85	7,054.26	185.64	186.65	90.65	1,414.82	-6,667.80	1,662.36	1,290.25	372.11	4.467		
13,400.00	7,035.10	13,545.85	7,053.98	188.46	189.46	90.65	1,414.07	-6,767.80	1,662.21	1,284.47	377.74	4.400		
13,500.00	7,034.66	13,645.85	7,053.69	191.28	192.27	90.66	1,413.32	-6,867.80	1,662.05	1,278.68	383.37	4.335		
13,600.00	7,034.23	13,745.84	7,053.41	194.10	195.09	90.66	1,412.57	-6,967.79	1,661.90	1,272.90	389.01	4.272		
13,700.00	7,033.79	13,845.84	7,053.12	196.92	197.90	90.67	1,411.81	-7,067.79	1,661.75	1,267.11	394.64	4.211		
13,800.00	7,033.36	13,945.84	7,052.84	199.74	200.72	90.67	1,411.06	-7,167.79	1,661.60	1,261.31	400.28	4.151		
13,900.00	7,032.93	14,045.84	7,052.55	202.57	203.54	90.68	1,410.31	-7,267.78	1,661.45	1,255.52	405.93	4.093		
14,000.00	7,032.49	14,145.84	7,052.27	205.39	206.36	90.68	1,409.56	-7,367.78	1,661.29	1,249.72	411.57	4.036		
14,100.00	7,032.06	14,245.84	7,051.98	208.22	209.18	90.69	1,408.80	-7,467.77	1,661.14	1,243.92	417.22	3.981		
14,200.00	7,031.62	14,345.84	7,051.70	211.05	212.00	90.69	1,408.05	-7,567.77	1,660.99	1,238.12	422.87	3.928		
14,300.00	7,031.19	14,445.84	7,051.41	213.87	214.82	90.70	1,407.30	-7,667.77	1,660.84	1,232.32	428.52	3.876		
14,400.00	7,030.76	14,545.84	7,051.13	216.70	217.64	90.70	1,406.55	-7,767.76	1,660.69	1,226.52	434.17	3.825		
14,500.00	7,030.32	14,645.84	7,050.84	219.53	220.47	90.71	1,405.79	-7,867.76	1,660.53	1,220.71	439.82	3.775		
14,600.00	7,029.89	14,745.84	7,050.56	222.36	223.29	90.71	1,405.04	-7,967.76	1,660.38	1,214.91	445.48	3.727		
14,700.00	7,029.45	14,845.84	7,050.28	225.19	226.12	90.72	1,404.29	-8,067.75	1,660.23	1,209.10	451.13	3.680		
14,800.00	7,029.02	14,945.84	7,049.99	228.03	228.94	90.72	1,403.54	-8,167.75	1,660.08	1,203.29	456.79	3.634		
14,800.76	7,029.02	14,946.61	7,049.99	228.05	228.96	90.72	1,403.53	-8,168.51	1,660.08	1,203.25	456.83	3.634		
14,805.04	7,029.00	14,942.37	7,050.00	228.17	228.85	90.72	1,403.56	-8,164.28	1,660.09	1,203.24	456.85	3.634 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.40	80.14	0.56	80.14					
100.00	100.00	100.00	100.00	3.28	3.28	0.40	80.14	0.56	80.14	73.57	6.57	12.199		
200.00	200.00	200.00	200.00	3.34	3.34	0.40	80.14	0.56	80.14	73.47	6.67	12.008		
300.00	300.00	300.00	300.00	3.44	3.44	0.40	80.14	0.56	80.14	73.25	6.89	11.632		
400.00	400.00	400.00	400.00	3.60	3.60	0.40	80.14	0.56	80.14	72.93	7.21	11.120 CC, ES		
500.00	499.98	500.02	499.98	3.80	3.81	142.93	80.14	0.56	81.53	73.92	7.60	10.722		
600.00	599.90	599.90	599.90	4.02	4.05	144.55	80.14	0.56	84.73	76.66	8.07	10.502		
700.00	699.82	697.13	697.11	4.28	4.31	145.54	81.66	-0.08	89.54	80.95	8.59	10.419		
800.00	799.74	794.18	794.03	4.57	4.60	145.54	86.19	-2.00	97.38	88.20	9.18	10.614		
900.00	899.66	906.24	893.40	4.88	4.96	145.17	92.21	-4.54	106.54	96.71	9.84	10.831		
1,000.00	999.58	1,006.66	992.76	5.21	5.29	144.87	98.22	-7.08	115.71	105.21	10.50	11.020		
1,100.00	1,099.50	1,092.91	1,092.12	5.55	5.60	144.61	104.24	-9.62	124.88	113.74	11.14	11.207		
1,200.00	1,199.42	1,207.51	1,191.49	5.91	6.01	144.38	110.25	-12.16	134.05	122.14	11.91	11.252		
1,300.00	1,299.34	1,307.93	1,290.85	6.28	6.39	144.19	116.27	-14.71	143.23	130.57	12.65	11.319		
1,400.00	1,399.26	1,391.64	1,390.21	6.66	6.71	144.01	122.29	-17.25	152.40	139.06	13.35	11.419		
1,500.00	1,499.18	1,508.78	1,489.57	7.04	7.16	143.86	128.30	-19.79	161.58	147.40	14.18	11.393		
1,600.00	1,599.10	1,590.80	1,588.94	7.43	7.49	143.72	134.32	-22.33	170.76	155.86	14.89	11.465		
1,700.00	1,699.01	1,690.38	1,688.30	7.83	7.88	143.60	140.33	-24.87	179.94	164.25	15.68	11.472		
1,800.00	1,798.93	1,789.95	1,787.66	8.23	8.29	143.49	146.35	-27.41	189.12	172.63	16.48	11.472		
1,900.00	1,898.85	1,889.53	1,887.02	8.64	8.69	143.39	152.36	-29.95	198.30	181.00	17.29	11.467		
2,000.00	1,998.77	1,989.11	1,986.39	9.05	9.10	143.30	158.38	-32.49	207.48	189.37	18.11	11.459		
2,100.00	2,098.69	2,088.69	2,085.75	9.46	9.51	143.21	164.39	-35.03	216.66	197.73	18.93	11.447		
2,200.00	2,198.61	2,188.26	2,185.11	9.88	9.93	143.14	170.41	-37.57	225.84	206.09	19.75	11.433		
2,300.00	2,298.53	2,287.84	2,284.48	10.30	10.34	143.07	176.42	-40.11	235.02	214.44	20.58	11.419		
2,400.00	2,398.45	2,387.42	2,383.84	10.72	10.76	143.00	182.44	-42.65	244.20	222.79	21.42	11.403		
2,500.00	2,498.37	2,486.99	2,483.20	11.14	11.18	142.94	188.45	-45.20	253.38	231.13	22.25	11.386		
2,600.00	2,598.29	2,586.57	2,582.56	11.56	11.60	142.88	194.47	-47.74	262.57	239.47	23.09	11.369		
2,700.00	2,698.21	2,686.15	2,681.93	11.98	12.03	142.83	200.49	-50.28	271.75	247.81	23.94	11.352		
2,800.00	2,798.13	2,785.73	2,781.29	12.41	12.45	142.78	206.50	-52.82	280.93	256.15	24.78	11.335		
2,900.00	2,898.05	2,885.30	2,880.65	12.84	12.88	142.73	212.52	-55.36	290.12	264.48	25.63	11.318		
3,000.00	2,997.97	2,984.88	2,980.02	13.27	13.30	142.69	218.53	-57.90	299.30	272.82	26.48	11.302		
3,100.00	3,097.89	3,084.46	3,079.38	13.69	13.73	142.65	224.55	-60.44	308.48	281.15	27.34	11.285		
3,200.00	3,197.81	3,184.03	3,178.74	14.12	14.16	142.61	230.56	-62.98	317.67	289.48	28.19	11.269		
3,300.00	3,297.73	3,283.61	3,278.10	14.56	14.59	142.58	236.58	-65.52	326.85	297.81	29.04	11.253		
3,400.00	3,397.65	3,383.19	3,377.47	14.99	15.02	142.54	242.59	-68.06	336.04	306.13	29.90	11.238		
3,500.00	3,497.56	3,482.77	3,476.83	15.42	15.45	142.51	248.61	-70.60	345.22	314.46	30.76	11.223		
3,600.00	3,597.48	3,582.34	3,576.19	15.85	15.88	142.48	254.62	-73.15	354.41	322.79	31.62	11.208		
3,700.00	3,697.40	3,681.92	3,675.56	16.28	16.31	142.45	260.64	-75.69	363.59	331.11	32.48	11.194		
3,800.00	3,797.32	3,781.50	3,774.92	16.72	16.74	142.42	266.65	-78.23	372.77	339.43	33.34	11.180		
3,900.00	3,897.24	3,881.07	3,874.28	17.15	17.18	142.39	272.67	-80.77	381.96	347.75	34.20	11.167		
4,000.00	3,997.16	3,980.65	3,973.64	17.59	17.61	142.37	278.69	-83.31	391.14	356.07	35.07	11.154		
4,100.00	4,097.08	4,080.23	4,073.01	18.02	18.04	142.35	284.70	-85.85	400.33	364.40	35.93	11.141		
4,200.00	4,197.00	4,179.81	4,172.37	18.46	18.47	142.32	290.72	-88.39	409.51	372.72	36.80	11.129		
4,300.00	4,296.92	4,279.38	4,271.73	18.89	18.91	142.30	296.73	-90.93	418.70	381.03	37.66	11.117		
4,400.00	4,396.84	4,378.96	4,371.10	19.33	19.34	142.28	302.75	-93.47	427.88	389.35	38.53	11.105		
4,500.00	4,496.76	4,478.54	4,470.46	19.77	19.78	142.26	308.76	-96.01	437.07	397.67	39.40	11.094		
4,600.00	4,596.68	4,578.11	4,569.82	20.20	20.21	142.24	314.78	-98.55	446.25	405.99	40.26	11.083		
4,700.00	4,696.60	4,677.69	4,669.18	20.64	20.65	142.22	320.79	-101.10	455.44	414.30	41.13	11.072		
4,800.00	4,796.52	4,777.27	4,768.55	21.08	21.08	142.20	326.81	-103.64	464.62	422.62	42.00	11.062		
4,900.00	4,896.44	4,876.85	4,867.91	21.51	21.52	142.19	332.82	-106.18	473.81	430.94	42.87	11.052		
5,000.00	4,996.36	4,976.42	4,967.27	21.95	21.95	142.17	338.84	-108.72	482.99	439.25	43.74	11.042		
5,100.00	5,096.28	5,076.00	5,066.64	22.39	22.39	142.15	344.85	-111.26	492.18	447.57	44.61	11.033		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,175.58	5,166.00	22.83	22.83	142.14	350.87	-113.80	501.36	455.88	45.48	11.024	
5,300.00	5,296.11	5,275.15	5,265.36	23.27	23.26	142.12	356.89	-116.34	510.55	464.20	46.35	11.015	
5,400.00	5,396.03	5,374.73	5,364.72	23.71	23.70	142.11	362.90	-118.88	519.73	472.51	47.22	11.006	
5,500.00	5,495.95	5,474.31	5,464.09	24.14	24.14	142.10	368.92	-121.42	528.92	480.83	48.09	10.998	
5,600.00	5,595.87	5,573.89	5,563.45	24.58	24.57	142.08	374.93	-123.96	538.11	489.14	48.97	10.989	
5,700.00	5,695.79	5,673.46	5,662.81	25.02	25.01	142.07	380.95	-126.50	547.29	497.45	49.84	10.981	
5,800.00	5,795.71	5,773.04	5,762.18	25.46	25.45	142.06	386.96	-129.04	556.48	505.77	50.71	10.974	
5,900.00	5,895.63	5,872.62	5,861.54	25.90	25.88	142.05	392.98	-131.59	565.66	514.08	51.58	10.966	
6,000.00	5,995.55	5,972.19	5,960.90	26.34	26.32	142.03	398.99	-134.13	574.85	522.39	52.46	10.959	
6,100.00	6,095.47	6,071.77	6,060.26	26.78	26.76	142.02	405.01	-136.67	584.03	530.70	53.33	10.951	
6,200.00	6,195.39	6,171.35	6,159.63	27.22	27.20	142.01	411.02	-139.21	593.22	539.02	54.20	10.944	
6,300.00	6,295.31	6,270.93	6,258.99	27.66	27.63	142.00	417.04	-141.75	602.40	547.33	55.08	10.938	
6,400.00	6,395.23	6,370.50	6,358.35	28.10	28.07	141.99	423.05	-144.29	611.59	555.64	55.95	10.931	
6,500.00	6,495.02	6,470.01	6,457.65	28.54	28.51	106.14	429.07	-146.83	620.79	563.97	56.82	10.925	
6,600.00	6,593.09	6,568.15	6,555.58	28.98	28.94	97.64	434.99	-149.33	630.26	572.58	57.68	10.926	
6,700.00	6,687.01	6,663.87	6,651.08	29.41	29.36	96.95	440.78	-152.01	640.91	582.38	58.53	10.950	
6,800.00	6,774.46	6,767.73	6,753.70	29.83	29.82	98.02	447.06	-165.87	653.22	593.77	59.45	10.987	
6,900.00	6,853.31	6,879.10	6,859.66	30.26	30.31	99.51	453.65	-199.06	666.56	606.17	60.40	11.036	
7,000.00	6,921.60	6,999.20	6,965.55	30.76	30.86	101.11	460.37	-254.96	680.23	618.93	61.31	11.096	
7,100.00	6,977.66	7,129.03	7,066.01	31.38	31.50	102.66	466.92	-336.56	693.32	631.14	62.18	11.150	
7,200.00	7,020.10	7,268.87	7,153.34	32.17	32.35	104.00	472.84	-445.27	704.75	641.59	63.16	11.158	
7,300.00	7,047.88	7,417.79	7,217.94	33.13	33.54	104.98	477.52	-578.99	713.45	648.88	64.56	11.051	
7,400.00	7,060.32	7,573.19	7,250.45	34.27	35.16	105.45	480.38	-730.52	718.47	651.73	66.74	10.765	
7,500.00	7,060.70	7,705.09	7,252.77	35.56	36.80	105.47	481.24	-852.17	719.99	650.48	69.51	10.358	
7,600.00	7,060.27	7,805.10	7,252.40	37.02	38.24	105.45	481.80	-952.16	721.13	648.80	72.33	9.970	
7,700.00	7,059.83	7,894.90	7,252.04	38.64	39.66	105.43	482.37	-1,052.15	722.27	646.98	75.29	9.593	
7,800.00	7,059.40	8,005.11	7,251.67	40.40	41.56	105.41	482.94	-1,152.14	723.41	644.57	78.84	9.175	
7,900.00	7,058.97	8,105.12	7,251.30	42.28	43.41	105.39	483.50	-1,252.13	724.55	642.09	82.47	8.786	
8,000.00	7,058.53	8,205.12	7,250.94	44.27	45.36	105.37	484.07	-1,352.12	725.70	639.40	86.30	8.409	
8,100.00	7,058.10	8,305.13	7,250.57	46.35	47.41	105.35	484.64	-1,452.12	726.84	636.54	90.30	8.049	
8,200.00	7,057.66	8,405.14	7,250.21	48.50	49.54	105.33	485.20	-1,552.11	727.98	633.52	94.46	7.707	
8,300.00	7,057.23	8,494.86	7,249.84	50.73	51.51	105.32	485.77	-1,652.10	729.12	630.58	98.54	7.399	
8,400.00	7,056.80	8,605.15	7,249.47	53.02	54.00	105.30	486.34	-1,752.09	730.26	627.09	103.18	7.078	
8,500.00	7,056.36	8,705.16	7,249.11	55.36	56.31	105.28	486.91	-1,852.08	731.41	623.70	107.70	6.791	
8,600.00	7,055.93	8,805.16	7,248.74	57.74	58.68	105.26	487.47	-1,952.07	732.55	620.23	112.32	6.522	
8,700.00	7,055.49	8,894.83	7,248.38	60.17	60.83	105.24	488.04	-2,052.06	733.69	616.92	116.77	6.283	
8,800.00	7,055.06	9,005.18	7,248.01	62.63	63.53	105.22	488.61	-2,152.05	734.83	613.05	121.78	6.034	
8,900.00	7,054.63	9,105.18	7,247.64	65.13	66.00	105.20	489.17	-2,252.04	735.98	609.36	126.62	5.813	
9,000.00	7,054.19	9,205.19	7,247.28	67.66	68.51	105.18	489.74	-2,352.03	737.12	605.61	131.51	5.605	
9,100.00	7,053.76	9,305.20	7,246.91	70.21	71.05	105.17	490.31	-2,452.02	738.26	601.81	136.45	5.411	
9,200.00	7,053.32	9,405.20	7,246.54	72.78	73.61	105.15	490.87	-2,552.02	739.40	597.97	141.44	5.228	
9,300.00	7,052.89	9,505.21	7,246.18	75.38	76.19	105.13	491.44	-2,652.01	740.55	594.08	146.46	5.056	
9,400.00	7,052.46	9,605.22	7,245.81	77.99	78.79	105.11	492.01	-2,752.00	741.69	590.16	151.53	4.895	
9,500.00	7,052.02	9,705.23	7,245.45	80.62	81.40	105.09	492.57	-2,851.99	742.83	586.20	156.63	4.743	
9,600.00	7,051.59	9,805.23	7,245.08	83.26	84.04	105.07	493.14	-2,951.98	743.98	582.22	161.76	4.599	
9,700.00	7,051.15	9,905.24	7,244.71	85.92	86.69	105.05	493.71	-3,051.97	745.12	578.20	166.92	4.464	
9,800.00	7,050.72	10,005.25	7,244.35	88.59	89.35	105.04	494.27	-3,151.96	746.26	574.16	172.10	4.336	
9,900.00	7,050.29	10,094.75	7,243.98	91.28	91.74	105.02	494.84	-3,251.95	747.41	570.37	177.04	4.222	
10,000.00	7,049.85	10,205.26	7,243.61	93.97	94.70	105.00	495.41	-3,351.94	748.55	566.01	182.54	4.101	
10,100.00	7,049.42	10,305.27	7,243.25	96.67	97.40	104.98	495.97	-3,451.93	749.69	561.91	187.78	3.992	
10,200.00	7,048.98	10,394.73	7,242.88	99.38	99.82	104.96	496.54	-3,551.92	750.84	558.06	192.77	3.895	
10,300.00	7,048.55	10,505.28	7,242.52	102.10	102.82	104.95	497.11	-3,651.92	751.98	553.65	198.33	3.791	

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	10,605.29	7,242.15	104.83	105.54	104.93	497.68	-3,751.91	753.12	549.49	203.63	3.698		
10,500.00	7,047.68	10,705.29	7,241.78	107.56	108.26	104.91	498.24	-3,851.90	754.27	545.32	208.94	3.610		
10,600.00	7,047.25	10,805.30	7,241.42	110.30	111.00	104.89	498.81	-3,951.89	755.41	541.14	214.27	3.526		
10,700.00	7,046.81	10,905.31	7,241.05	113.05	113.74	104.87	499.38	-4,051.88	756.56	536.95	219.61	3.445		
10,800.00	7,046.38	11,005.31	7,240.69	115.80	116.49	104.86	499.94	-4,151.87	757.70	532.74	224.96	3.368		
10,900.00	7,045.95	11,105.32	7,240.32	118.55	119.24	104.84	500.51	-4,251.86	758.84	528.53	230.32	3.295		
11,000.00	7,045.51	11,205.33	7,239.95	121.31	122.00	104.82	501.08	-4,351.85	759.99	524.30	235.69	3.225		
11,100.00	7,045.08	11,305.33	7,239.59	124.08	124.76	104.80	501.64	-4,451.84	761.13	520.06	241.07	3.157		
11,200.00	7,044.64	11,405.34	7,239.22	126.85	127.52	104.79	502.21	-4,551.83	762.28	515.82	246.46	3.093		
11,300.00	7,044.21	11,505.35	7,238.85	129.62	130.29	104.77	502.78	-4,651.82	763.42	511.56	251.86	3.031		
11,400.00	7,043.78	11,594.65	7,238.49	132.40	132.77	104.75	503.34	-4,751.82	764.57	507.59	256.97	2.975		
11,500.00	7,043.34	11,705.36	7,238.12	135.18	135.85	104.73	503.91	-4,851.81	765.71	503.03	262.68	2.915		
11,600.00	7,042.91	11,805.37	7,237.76	137.96	138.63	104.72	504.48	-4,951.80	766.85	498.76	268.10	2.860		
11,700.00	7,042.47	11,905.38	7,237.39	140.75	141.41	104.70	505.04	-5,051.79	768.00	494.48	273.52	2.808		
11,800.00	7,042.04	12,005.38	7,237.02	143.54	144.20	104.68	505.61	-5,151.78	769.14	490.19	278.96	2.757		
11,900.00	7,041.61	12,105.39	7,236.66	146.33	146.99	104.67	506.18	-5,251.77	770.29	485.89	284.39	2.709		
12,000.00	7,041.17	12,205.40	7,236.29	149.13	149.79	104.65	506.74	-5,351.76	771.43	481.59	289.84	2.662		
12,100.00	7,040.74	12,305.40	7,235.93	151.92	152.58	104.63	507.31	-5,451.75	772.58	477.29	295.29	2.616		
12,200.00	7,040.30	12,394.59	7,235.56	154.72	155.08	104.62	507.88	-5,551.74	773.72	473.27	300.45	2.575		
12,300.00	7,039.87	12,505.42	7,235.19	157.52	158.18	104.60	508.44	-5,651.73	774.87	468.66	306.20	2.531		
12,400.00	7,039.44	12,605.42	7,234.83	160.33	160.98	104.58	509.01	-5,751.72	776.01	464.34	311.67	2.490		
12,500.00	7,039.00	12,694.57	7,234.46	163.13	163.49	104.56	509.58	-5,851.72	777.16	460.32	316.84	2.453		
12,600.00	7,038.57	12,805.44	7,234.09	165.94	166.60	104.55	510.15	-5,951.71	778.30	455.69	322.61	2.412		
12,700.00	7,038.13	12,905.44	7,233.73	168.75	169.41	104.53	510.71	-6,051.70	779.45	451.36	328.09	2.376		
12,800.00	7,037.70	13,005.45	7,233.36	171.56	172.22	104.51	511.28	-6,151.69	780.59	447.02	333.57	2.340		
12,900.00	7,037.27	13,105.46	7,233.00	174.37	175.03	104.50	511.85	-6,251.68	781.74	442.68	339.06	2.306		
13,000.00	7,036.83	13,205.46	7,232.63	177.19	177.84	104.48	512.41	-6,351.67	782.89	438.34	344.55	2.272		
13,100.00	7,036.40	13,294.53	7,232.26	180.00	180.35	104.46	512.98	-6,451.66	784.03	434.29	349.74	2.242		
13,200.00	7,035.96	13,405.48	7,231.90	182.82	183.48	104.45	513.55	-6,551.65	785.18	429.64	355.54	2.208		
13,300.00	7,035.53	13,505.48	7,231.53	185.64	186.29	104.43	514.11	-6,651.64	786.32	425.29	361.03	2.178		
13,400.00	7,035.10	13,605.49	7,231.17	188.46	189.11	104.42	514.68	-6,751.63	787.47	420.93	366.54	2.148		
13,500.00	7,034.66	13,705.50	7,230.80	191.28	191.93	104.40	515.25	-6,851.62	788.61	416.57	372.04	2.120		
13,600.00	7,034.23	13,805.50	7,230.43	194.10	194.76	104.38	515.81	-6,951.62	789.76	412.21	377.55	2.092		
13,700.00	7,033.79	13,905.51	7,230.07	196.92	197.58	104.37	516.38	-7,051.61	790.91	407.84	383.06	2.065		
13,800.00	7,033.36	14,005.52	7,229.70	199.74	200.40	104.35	516.95	-7,151.60	792.05	403.48	388.57	2.038		
13,900.00	7,032.93	14,105.53	7,229.33	202.57	203.23	104.33	517.51	-7,251.59	793.20	399.11	394.09	2.013		
14,000.00	7,032.49	14,205.53	7,228.97	205.39	206.06	104.32	518.08	-7,351.58	794.34	394.73	399.61	1.988		
14,100.00	7,032.06	14,305.54	7,228.60	208.22	208.88	104.30	518.65	-7,451.57	795.49	390.36	405.13	1.964		
14,200.00	7,031.62	14,405.55	7,228.24	211.05	211.71	104.29	519.21	-7,551.56	796.64	385.98	410.65	1.940		
14,300.00	7,031.19	14,505.55	7,227.87	213.87	214.54	104.27	519.78	-7,651.55	797.78	381.60	416.18	1.917		
14,400.00	7,030.76	14,605.56	7,227.50	216.70	217.37	104.25	520.35	-7,751.54	798.93	377.22	421.71	1.895		
14,500.00	7,030.32	14,705.57	7,227.14	219.53	220.20	104.24	520.92	-7,851.53	800.08	372.84	427.24	1.873		
14,600.00	7,029.89	14,805.57	7,226.77	222.36	223.03	104.22	521.48	-7,951.52	801.22	368.45	432.77	1.851		
14,700.00	7,029.45	14,905.58	7,226.41	225.19	225.87	104.21	522.05	-8,051.52	802.37	364.07	438.30	1.831		
14,800.00	7,029.02	14,994.41	7,226.04	228.03	228.38	104.19	522.62	-8,151.51	803.52	359.98	443.53	1.812		
14,805.04	7,029.00	14,999.45	7,226.02	228.17	228.53	104.19	522.64	-8,156.54	803.57	359.76	443.81	1.811 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-179.49	-219.69	-1.95	219.70					
100.00	100.00	101.00	100.00	3.28	3.28	-179.49	-219.69	-1.95	219.70	213.13	6.57	33.441		
200.00	200.00	199.00	200.00	3.34	3.34	-179.49	-219.69	-1.95	219.70	213.02	6.67	32.922	CC, ES	
300.00	300.00	291.93	292.92	3.44	3.43	-179.46	-221.16	-2.07	221.28	214.40	6.88	32.143		
400.00	400.00	384.61	385.48	3.60	3.57	-179.38	-225.61	-2.44	226.09	218.89	7.20	31.398		
500.00	499.98	477.00	477.57	3.80	3.74	-37.61	-233.02	-3.06	232.74	225.14	7.60	30.628		
600.00	599.90	569.08	569.06	4.02	3.96	-37.95	-243.35	-3.91	240.84	232.77	8.06	29.864		
700.00	699.82	660.59	659.61	4.28	4.20	-38.22	-256.51	-5.01	252.09	243.50	8.59	29.333		
800.00	799.74	751.37	748.97	4.57	4.48	-38.42	-272.40	-6.33	266.49	257.32	9.17	29.058		
900.00	899.66	841.23	836.89	4.88	4.78	-38.54	-290.91	-7.87	283.99	274.21	9.78	29.042		
1,000.00	999.58	930.02	923.14	5.21	5.12	-38.60	-311.88	-9.61	304.54	294.13	10.41	29.248		
1,100.00	1,099.50	1,020.53	1,010.40	5.55	5.48	-38.60	-335.85	-11.61	327.96	316.89	11.07	29.639		
1,200.00	1,199.42	1,117.57	1,103.76	5.91	5.90	-38.60	-362.24	-13.80	352.10	340.35	11.75	29.954		
1,300.00	1,299.34	1,214.61	1,197.11	6.28	6.33	-38.59	-388.63	-16.00	376.25	363.77	12.47	30.166		
1,400.00	1,399.26	1,311.65	1,290.47	6.66	6.78	-38.59	-415.02	-18.19	400.39	387.18	13.21	30.298		
1,500.00	1,499.18	1,408.69	1,383.83	7.04	7.24	-38.59	-441.41	-20.39	424.54	410.56	13.98	30.373		
1,600.00	1,599.10	1,505.74	1,477.19	7.43	7.71	-38.58	-467.80	-22.58	448.68	433.92	14.76	30.404		
1,700.00	1,699.01	1,602.78	1,570.55	7.83	8.19	-38.58	-494.18	-24.77	472.83	457.27	15.55	30.404		
1,800.00	1,798.93	1,700.18	1,663.91	8.23	8.68	-38.58	-520.57	-26.97	496.97	480.61	16.36	30.378		
1,900.00	1,898.85	1,803.14	1,757.27	8.64	9.20	-38.58	-546.96	-29.16	521.11	503.91	17.20	30.290		
2,000.00	1,998.77	1,906.10	1,850.63	9.05	9.73	-38.57	-573.35	-31.36	545.26	527.20	18.06	30.195		
2,100.00	2,098.69	1,990.94	1,943.98	9.46	10.17	-38.57	-599.74	-33.55	569.40	550.57	18.84	30.228		
2,200.00	2,198.61	2,087.98	2,037.34	9.88	10.67	-38.57	-626.13	-35.75	593.55	573.87	19.68	30.162		
2,300.00	2,298.53	2,185.03	2,130.70	10.30	11.18	-38.57	-652.51	-37.94	617.69	597.17	20.53	30.093		
2,400.00	2,398.45	2,282.07	2,224.06	10.72	11.69	-38.57	-678.90	-40.14	641.84	620.46	21.38	30.021		
2,500.00	2,498.37	2,379.11	2,317.42	11.14	12.20	-38.57	-705.29	-42.33	665.98	643.75	22.24	29.949		
2,600.00	2,598.29	2,476.15	2,410.78	11.56	12.72	-38.56	-731.68	-44.53	690.13	667.03	23.10	29.876		
2,700.00	2,698.21	2,573.19	2,504.14	11.98	13.23	-38.56	-758.07	-46.72	714.27	690.31	23.97	29.804		
2,800.00	2,798.13	2,670.23	2,597.50	12.41	13.75	-38.56	-784.46	-48.91	738.42	713.58	24.83	29.733		
2,900.00	2,898.05	2,767.27	2,690.86	12.84	14.27	-38.56	-810.84	-51.11	762.56	736.85	25.71	29.664		
3,000.00	2,997.97	2,864.32	2,784.21	13.27	14.79	-38.56	-837.23	-53.30	786.71	760.12	26.58	29.595		
3,100.00	3,097.89	2,961.36	2,877.57	13.69	15.31	-38.56	-863.62	-55.50	810.85	783.39	27.46	29.529		
3,200.00	3,197.81	3,058.40	2,970.93	14.12	15.83	-38.56	-890.01	-57.69	835.00	806.66	28.34	29.464		
3,300.00	3,297.73	3,155.44	3,064.29	14.56	16.35	-38.56	-916.40	-59.89	859.14	829.92	29.22	29.401		
3,400.00	3,397.65	3,252.48	3,157.65	14.99	16.88	-38.56	-942.79	-62.08	883.29	853.18	30.10	29.340		
3,500.00	3,497.56	3,349.52	3,251.01	15.42	17.40	-38.55	-969.17	-64.28	907.43	876.44	30.99	29.281		
3,600.00	3,597.48	3,446.56	3,344.37	15.85	17.93	-38.55	-995.56	-66.47	931.57	899.70	31.88	29.224		
3,700.00	3,697.40	3,543.61	3,437.73	16.28	18.46	-38.55	-1,021.95	-68.66	955.72	922.95	32.77	29.168		
3,800.00	3,797.32	3,640.65	3,531.09	16.72	18.98	-38.55	-1,048.34	-70.86	979.86	946.21	33.66	29.114		
3,900.00	3,897.24	3,737.69	3,624.44	17.15	19.51	-38.55	-1,074.73	-73.05	1,004.01	969.46	34.55	29.062		
4,000.00	3,997.16	3,834.73	3,717.80	17.59	20.04	-38.55	-1,101.12	-75.25	1,028.15	992.71	35.44	29.012		
4,100.00	4,097.08	3,931.77	3,811.16	18.02	20.57	-38.55	-1,127.50	-77.44	1,052.30	1,015.97	36.33	28.963		
4,200.00	4,197.00	4,028.81	3,904.52	18.46	21.09	-38.55	-1,153.89	-79.64	1,076.44	1,039.22	37.23	28.916		
4,300.00	4,296.92	4,125.85	3,997.88	18.89	21.62	-38.55	-1,180.28	-81.83	1,100.59	1,062.47	38.12	28.871		
4,400.00	4,396.84	4,222.90	4,091.24	19.33	22.15	-38.55	-1,206.67	-84.03	1,124.73	1,085.72	39.02	28.826		
4,500.00	4,496.76	4,319.94	4,184.60	19.77	22.68	-38.55	-1,233.06	-86.22	1,148.88	1,108.96	39.91	28.784		
4,600.00	4,596.68	4,416.98	4,277.96	20.20	23.21	-38.55	-1,259.45	-88.42	1,173.02	1,132.21	40.81	28.742		
4,700.00	4,696.60	4,514.02	4,371.31	20.64	23.74	-38.55	-1,285.83	-90.61	1,197.17	1,155.46	41.71	28.702		
4,800.00	4,796.52	4,611.06	4,464.67	21.08	24.27	-38.55	-1,312.22	-92.80	1,221.31	1,178.70	42.61	28.663		
4,900.00	4,896.44	4,708.10	4,558.03	21.51	24.81	-38.55	-1,338.61	-95.00	1,245.46	1,201.95	43.51	28.626		
5,000.00	4,996.36	4,805.14	4,651.39	21.95	25.34	-38.55	-1,365.00	-97.19	1,269.60	1,225.19	44.41	28.589		
5,100.00	5,096.28	4,902.19	4,744.75	22.39	25.87	-38.55	-1,391.39	-99.39	1,293.75	1,248.44	45.31	28.554		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,000.77	4,838.11	22.83	26.41	-38.55	-1,417.78	-101.58	1,317.89	1,271.67	46.22	28.515		
5,300.00	5,296.11	5,096.27	4,931.47	23.27	26.93	-38.55	-1,444.16	-103.78	1,342.03	1,294.92	47.11	28.486		
5,400.00	5,396.03	5,206.69	5,024.83	23.71	27.54	-38.55	-1,470.55	-105.97	1,366.18	1,318.10	48.08	28.414		
5,500.00	5,495.95	5,290.35	5,118.19	24.14	28.00	-38.54	-1,496.94	-108.17	1,390.32	1,341.41	48.92	28.422		
5,600.00	5,595.87	5,387.39	5,211.54	24.58	28.53	-38.54	-1,523.33	-110.36	1,414.47	1,364.65	49.82	28.391		
5,700.00	5,695.79	5,484.43	5,304.90	25.02	29.06	-38.54	-1,549.72	-112.56	1,438.61	1,387.89	50.72	28.362		
5,800.00	5,795.71	5,581.48	5,398.26	25.46	29.59	-38.54	-1,576.11	-114.75	1,462.76	1,411.13	51.63	28.333		
5,900.00	5,895.63	5,678.52	5,491.62	25.90	30.13	-38.54	-1,602.49	-116.94	1,486.90	1,434.37	52.53	28.305		
6,000.00	5,995.55	5,775.56	5,584.98	26.34	30.66	-38.54	-1,628.88	-119.14	1,511.05	1,457.61	53.44	28.277		
6,100.00	6,095.47	5,872.60	5,678.34	26.78	31.19	-38.54	-1,655.27	-121.33	1,535.19	1,480.85	54.34	28.251		
6,200.00	6,195.39	5,969.64	5,771.70	27.22	31.73	-38.54	-1,681.66	-123.53	1,559.34	1,504.09	55.25	28.225		
6,300.00	6,295.31	6,066.68	5,865.06	27.66	32.26	-38.54	-1,708.05	-125.72	1,583.48	1,527.33	56.15	28.200		
6,400.00	6,395.23	6,163.72	5,958.42	28.10	32.79	-38.54	-1,734.44	-127.92	1,607.63	1,550.57	57.06	28.175		
6,500.00	6,495.02	6,260.70	6,051.71	28.54	33.33	-73.01	-1,760.81	-130.11	1,631.76	1,573.79	57.97	28.151		
6,600.00	6,593.09	6,356.34	6,143.72	28.98	33.85	-80.47	-1,786.81	-132.27	1,655.66	1,596.79	58.87	28.124		
6,700.00	6,687.01	6,448.32	6,232.21	29.41	34.36	-81.74	-1,811.82	-134.35	1,679.20	1,619.44	59.76	28.098		
6,800.00	6,774.46	6,534.37	6,315.00	29.83	34.83	-82.05	-1,835.23	-136.30	1,702.59	1,641.95	60.64	28.075		
6,900.00	6,853.31	6,612.39	6,390.05	30.26	35.26	-82.05	-1,856.44	-138.06	1,726.31	1,664.78	61.53	28.057		
7,000.00	6,921.60	6,680.44	6,455.53	30.76	35.64	-81.78	-1,874.95	-139.60	1,750.97	1,688.52	62.45	28.039		
7,100.00	6,977.66	6,736.86	6,509.80	31.38	35.95	-81.12	-1,890.29	-140.88	1,777.17	1,713.74	63.43	28.017		
7,200.00	7,020.10	6,780.25	6,551.54	32.17	36.19	-79.94	-1,902.09	-141.86	1,805.35	1,740.85	64.50	27.990		
7,300.00	7,047.88	6,809.54	6,579.72	33.13	36.35	-78.11	-1,910.05	-142.52	1,835.70	1,770.06	65.65	27.964		
7,400.00	7,060.32	6,824.02	6,593.65	34.27	36.43	-75.59	-1,913.99	-142.85	1,868.07	1,801.24	66.83	27.952		
7,500.00	7,060.70	7,935.57	7,249.63	35.56	41.11	-95.70	-2,104.57	-845.48	1,901.35	1,828.24	73.11	26.006		
7,600.00	7,060.27	8,035.57	7,249.03	37.02	41.97	-95.70	-2,105.16	-945.48	1,901.32	1,825.46	75.86	25.064		
7,700.00	7,059.83	8,135.57	7,248.44	38.64	43.11	-95.69	-2,105.74	-1,045.47	1,901.29	1,822.37	78.92	24.091		
7,800.00	7,059.40	8,235.57	7,247.84	40.40	44.48	-95.69	-2,106.32	-1,145.47	1,901.26	1,819.00	82.26	23.112		
7,900.00	7,058.97	8,335.57	7,247.24	42.28	46.05	-95.68	-2,106.91	-1,245.47	1,901.23	1,815.38	85.85	22.145		
8,000.00	7,058.53	8,435.57	7,246.65	44.27	47.76	-95.68	-2,107.49	-1,345.46	1,901.20	1,811.54	89.66	21.204		
8,100.00	7,058.10	8,535.57	7,246.05	46.35	49.60	-95.67	-2,108.07	-1,445.46	1,901.17	1,807.51	93.66	20.298		
8,200.00	7,057.66	8,635.57	7,245.46	48.50	51.55	-95.67	-2,108.66	-1,545.46	1,901.14	1,803.31	97.83	19.433		
8,300.00	7,057.23	8,735.57	7,244.86	50.73	53.59	-95.66	-2,109.24	-1,645.45	1,901.11	1,798.96	102.14	18.612		
8,400.00	7,056.80	8,835.57	7,244.27	53.02	55.70	-95.66	-2,109.83	-1,745.45	1,901.08	1,794.49	106.59	17.836		
8,500.00	7,056.36	8,935.57	7,243.67	55.36	57.89	-95.65	-2,110.41	-1,845.44	1,901.05	1,789.90	111.15	17.104		
8,600.00	7,055.93	9,035.57	7,243.07	57.74	60.13	-95.65	-2,110.99	-1,945.44	1,901.01	1,785.21	115.81	16.416		
8,700.00	7,055.49	9,135.57	7,242.48	60.17	62.42	-95.64	-2,111.58	-2,045.44	1,900.98	1,780.43	120.55	15.769		
8,800.00	7,055.06	9,235.57	7,241.88	62.63	64.77	-95.64	-2,112.16	-2,145.43	1,900.95	1,775.57	125.38	15.161		
8,900.00	7,054.63	9,335.57	7,241.29	65.13	67.15	-95.64	-2,112.74	-2,245.43	1,900.92	1,770.64	130.28	14.591		
9,000.00	7,054.19	9,435.57	7,240.69	67.66	69.57	-95.63	-2,113.33	-2,345.43	1,900.89	1,765.65	135.24	14.056		
9,100.00	7,053.76	9,535.57	7,240.09	70.21	72.02	-95.63	-2,113.91	-2,445.42	1,900.86	1,760.61	140.25	13.553		
9,200.00	7,053.32	9,635.57	7,239.50	72.78	74.50	-95.62	-2,114.50	-2,545.42	1,900.83	1,755.51	145.32	13.080		
9,300.00	7,052.89	9,735.57	7,238.90	75.38	77.01	-95.62	-2,115.08	-2,645.42	1,900.80	1,750.37	150.43	12.636		
9,400.00	7,052.46	9,835.57	7,238.31	77.99	79.54	-95.61	-2,115.66	-2,745.41	1,900.77	1,745.18	155.58	12.217		
9,500.00	7,052.02	9,935.57	7,237.71	80.62	82.10	-95.61	-2,116.25	-2,845.41	1,900.74	1,739.97	160.77	11.823		
9,600.00	7,051.59	10,035.57	7,237.12	83.26	84.67	-95.60	-2,116.83	-2,945.41	1,900.71	1,734.71	165.99	11.450		
9,700.00	7,051.15	10,135.57	7,236.52	85.92	87.27	-95.60	-2,117.41	-3,045.40	1,900.68	1,729.43	171.25	11.099		
9,800.00	7,050.72	10,235.57	7,235.92	88.59	89.87	-95.59	-2,118.00	-3,145.40	1,900.65	1,724.12	176.53	10.767		
9,900.00	7,050.29	10,335.57	7,235.33	91.28	92.50	-95.59	-2,118.58	-3,245.39	1,900.61	1,718.78	181.83	10.453		
10,000.00	7,049.85	10,435.57	7,234.73	93.97	95.14	-95.58	-2,119.17	-3,345.39	1,900.58	1,713.42	187.16	10.155		
10,100.00	7,049.42	10,535.57	7,234.14	96.67	97.79	-95.58	-2,119.75	-3,445.39	1,900.55	1,708.04	192.51	9.873		
10,200.00	7,048.98	10,635.57	7,233.54	99.38	100.45	-95.57	-2,120.33	-3,545.38	1,900.52	1,702.64	197.88	9.604		
10,300.00	7,048.55	10,735.57	7,232.94	102.10	103.12	-95.57	-2,120.92	-3,645.38	1,900.49	1,697.23	203.27	9.350		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	10,835.57	7,232.35	104.83	105.80	-95.56	-2,121.50	-3,745.38	1,900.46	1,691.79	208.67	9.108		
10,500.00	7,047.68	10,935.57	7,231.75	107.56	108.49	-95.56	-2,122.08	-3,845.37	1,900.43	1,686.34	214.09	8.877		
10,600.00	7,047.25	11,035.56	7,231.16	110.30	111.19	-95.55	-2,122.67	-3,945.37	1,900.40	1,680.88	219.52	8.657		
10,700.00	7,046.81	11,135.56	7,230.56	113.05	113.90	-95.55	-2,123.25	-4,045.37	1,900.37	1,675.40	224.97	8.447		
10,800.00	7,046.38	11,235.56	7,229.97	115.80	116.61	-95.54	-2,123.84	-4,145.36	1,900.34	1,669.91	230.43	8.247		
10,900.00	7,045.95	11,335.56	7,229.37	118.55	119.33	-95.54	-2,124.42	-4,245.36	1,900.31	1,664.41	235.90	8.056		
11,000.00	7,045.51	11,435.56	7,228.77	121.31	122.06	-95.53	-2,125.00	-4,345.35	1,900.28	1,658.90	241.38	7.873		
11,100.00	7,045.08	11,535.56	7,228.18	124.08	124.80	-95.53	-2,125.59	-4,445.35	1,900.25	1,653.38	246.87	7.697		
11,200.00	7,044.64	11,635.56	7,227.58	126.85	127.54	-95.52	-2,126.17	-4,545.35	1,900.22	1,647.85	252.37	7.530		
11,300.00	7,044.21	11,735.56	7,226.99	129.62	130.28	-95.52	-2,126.75	-4,645.34	1,900.19	1,642.31	257.87	7.369		
11,400.00	7,043.78	11,835.56	7,226.39	132.40	133.03	-95.52	-2,127.34	-4,745.34	1,900.16	1,636.77	263.39	7.214		
11,500.00	7,043.34	11,935.56	7,225.79	135.18	135.78	-95.51	-2,127.92	-4,845.34	1,900.13	1,631.21	268.91	7.066		
11,600.00	7,042.91	12,035.56	7,225.20	137.96	138.54	-95.51	-2,128.51	-4,945.33	1,900.10	1,625.65	274.45	6.923		
11,700.00	7,042.47	12,135.56	7,224.60	140.75	141.30	-95.50	-2,129.09	-5,045.33	1,900.06	1,620.08	279.98	6.786		
11,800.00	7,042.04	12,235.56	7,224.01	143.54	144.07	-95.50	-2,129.67	-5,145.33	1,900.03	1,614.51	285.53	6.654		
11,900.00	7,041.61	12,335.56	7,223.41	146.33	146.84	-95.49	-2,130.26	-5,245.32	1,900.00	1,608.93	291.08	6.527		
12,000.00	7,041.17	12,435.56	7,222.81	149.13	149.61	-95.49	-2,130.84	-5,345.32	1,899.97	1,603.34	296.63	6.405		
12,100.00	7,040.74	12,535.56	7,222.22	151.92	152.39	-95.48	-2,131.43	-5,445.32	1,899.94	1,597.75	302.20	6.287		
12,200.00	7,040.30	12,635.56	7,221.62	154.72	155.17	-95.48	-2,132.01	-5,545.31	1,899.91	1,592.15	307.76	6.173		
12,300.00	7,039.87	12,735.56	7,221.03	157.52	157.95	-95.47	-2,132.59	-5,645.31	1,899.88	1,586.55	313.33	6.063		
12,400.00	7,039.44	12,835.56	7,220.43	160.33	160.73	-95.47	-2,133.18	-5,745.30	1,899.85	1,580.94	318.91	5.957		
12,500.00	7,039.00	12,935.56	7,219.84	163.13	163.52	-95.46	-2,133.76	-5,845.30	1,899.82	1,575.33	324.49	5.855		
12,600.00	7,038.57	13,035.56	7,219.24	165.94	166.31	-95.46	-2,134.34	-5,945.30	1,899.79	1,569.72	330.07	5.756		
12,700.00	7,038.13	13,135.56	7,218.64	168.75	169.10	-95.45	-2,134.93	-6,045.29	1,899.76	1,564.10	335.66	5.660		
12,800.00	7,037.70	13,235.56	7,218.05	171.56	171.89	-95.45	-2,135.51	-6,145.29	1,899.73	1,558.48	341.25	5.567		
12,900.00	7,037.27	13,335.56	7,217.45	174.37	174.69	-95.44	-2,136.10	-6,245.29	1,899.70	1,552.85	346.85	5.477		
13,000.00	7,036.83	13,435.56	7,216.86	177.19	177.49	-95.44	-2,136.68	-6,345.28	1,899.67	1,547.22	352.45	5.390		
13,100.00	7,036.40	13,535.56	7,216.26	180.00	180.29	-95.43	-2,137.26	-6,445.28	1,899.64	1,541.59	358.05	5.305		
13,200.00	7,035.96	13,635.56	7,215.66	182.82	183.09	-95.43	-2,137.85	-6,545.28	1,899.61	1,535.95	363.66	5.224		
13,300.00	7,035.53	13,735.56	7,215.07	185.64	185.89	-95.42	-2,138.43	-6,645.27	1,899.58	1,530.31	369.27	5.144		
13,400.00	7,035.10	13,835.56	7,214.47	188.46	188.70	-95.42	-2,139.01	-6,745.27	1,899.55	1,524.67	374.88	5.067		
13,500.00	7,034.66	13,935.56	7,213.88	191.28	191.51	-95.41	-2,139.60	-6,845.26	1,899.52	1,519.03	380.49	4.992		
13,600.00	7,034.23	14,035.56	7,213.28	194.10	194.31	-95.41	-2,140.18	-6,945.26	1,899.49	1,513.38	386.11	4.920		
13,700.00	7,033.79	14,135.56	7,212.69	196.92	197.12	-95.40	-2,140.77	-7,045.26	1,899.46	1,507.73	391.73	4.849		
13,800.00	7,033.36	14,235.56	7,212.09	199.74	199.94	-95.40	-2,141.35	-7,145.25	1,899.43	1,502.08	397.35	4.780		
13,900.00	7,032.93	14,335.56	7,211.49	202.57	202.75	-95.39	-2,141.93	-7,245.25	1,899.40	1,496.43	402.97	4.713		
14,000.00	7,032.49	14,435.56	7,210.90	205.39	205.56	-95.39	-2,142.52	-7,345.25	1,899.37	1,490.77	408.60	4.649		
14,100.00	7,032.06	14,535.56	7,210.30	208.22	208.38	-95.38	-2,143.10	-7,445.24	1,899.34	1,485.11	414.22	4.585		
14,200.00	7,031.62	14,635.56	7,209.71	211.05	211.19	-95.38	-2,143.68	-7,545.24	1,899.31	1,479.45	419.85	4.524		
14,300.00	7,031.19	14,735.56	7,209.11	213.87	214.01	-95.38	-2,144.27	-7,645.24	1,899.28	1,473.79	425.49	4.464		
14,400.00	7,030.76	14,835.56	7,208.51	216.70	216.83	-95.37	-2,144.85	-7,745.23	1,899.25	1,468.13	431.12	4.405		
14,500.00	7,030.32	14,935.56	7,207.92	219.53	219.65	-95.37	-2,145.44	-7,845.23	1,899.22	1,462.46	436.76	4.348		
14,600.00	7,029.89	15,035.56	7,207.32	222.36	222.47	-95.36	-2,146.02	-7,945.22	1,899.19	1,456.80	442.39	4.293		
14,700.00	7,029.45	15,135.56	7,206.73	225.19	225.29	-95.36	-2,146.60	-8,045.22	1,899.16	1,451.13	448.03	4.239		
14,800.00	7,029.02	15,235.56	7,206.13	228.03	228.11	-95.35	-2,147.19	-8,145.22	1,899.13	1,445.46	453.67	4.186		
14,805.04	7,029.00	15,240.60	7,206.10	228.17	228.26	-95.35	-2,147.22	-8,150.26	1,899.13	1,445.17	453.96	4.184 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-179.53	-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	51.738		
200.00	200.00	198.00	200.00	3.34	3.34	-179.53	-339.90	-2.78	339.91	333.24	6.67	50.943 CC, ES		
300.00	300.00	287.58	289.57	3.44	3.42	-179.52	-341.24	-2.84	341.41	334.53	6.88	49.637		
400.00	400.00	376.79	378.68	3.60	3.55	-179.50	-345.35	-3.03	346.02	338.83	7.19	48.153		
500.00	499.98	465.75	467.37	3.80	3.72	-37.73	-352.20	-3.35	352.35	344.78	7.57	46.538		
600.00	599.90	554.42	555.52	4.02	3.92	-38.01	-361.77	-3.79	360.03	352.00	8.02	44.877		
700.00	699.82	642.60	642.84	4.28	4.15	-38.26	-373.99	-4.36	370.75	362.21	8.54	43.429		
800.00	799.74	730.12	729.10	4.57	4.41	-38.48	-388.76	-5.04	384.52	375.42	9.10	42.265		
900.00	899.66	816.82	814.07	4.88	4.70	-38.66	-405.98	-5.84	401.29	391.60	9.69	41.403		
1,000.00	999.58	902.57	897.55	5.21	5.01	-38.81	-425.53	-6.74	421.02	410.71	10.31	40.838		
1,100.00	1,099.50	987.22	979.35	5.55	5.34	-38.92	-447.27	-7.75	443.66	432.72	10.94	40.537		
1,200.00	1,199.42	1,070.66	1,059.31	5.91	5.70	-39.00	-471.05	-8.85	469.14	457.55	11.59	40.481		
1,300.00	1,299.34	1,152.76	1,137.29	6.28	6.07	-39.05	-496.71	-10.03	497.40	485.16	12.24	40.644		
1,400.00	1,399.26	1,233.44	1,213.17	6.66	6.46	-39.08	-524.09	-11.30	528.37	515.48	12.89	41.003		
1,500.00	1,499.18	1,312.60	1,286.84	7.04	6.86	-39.09	-553.02	-12.64	561.97	548.44	13.53	41.535		
1,600.00	1,599.10	1,390.16	1,358.22	7.43	7.27	-39.08	-583.33	-14.04	598.13	583.96	14.17	42.218		
1,700.00	1,699.01	1,466.07	1,427.26	7.83	7.70	-39.06	-614.85	-15.50	636.77	621.97	14.80	43.033		
1,800.00	1,798.93	1,540.28	1,493.92	8.23	8.14	-39.04	-647.42	-17.00	677.80	662.39	15.42	43.970		
1,900.00	1,898.85	1,612.74	1,558.17	8.64	8.58	-39.00	-680.87	-18.55	721.16	705.14	16.02	45.016		
2,000.00	1,998.77	1,683.43	1,620.02	9.05	9.02	-38.96	-715.07	-20.13	766.74	750.13	16.61	46.155		
2,100.00	2,098.69	1,752.33	1,679.47	9.46	9.48	-38.92	-749.85	-21.74	814.48	797.29	17.19	47.379		
2,200.00	2,198.61	1,819.42	1,736.54	9.88	9.93	-38.87	-785.08	-23.37	864.29	846.53	17.75	48.688		
2,300.00	2,298.53	1,902.15	1,806.25	10.30	10.51	-38.81	-829.59	-25.43	915.39	896.89	18.50	49.475		
2,400.00	2,398.45	1,988.09	1,878.64	10.72	11.12	-38.76	-875.84	-27.57	966.52	947.22	19.30	50.071		
2,500.00	2,498.37	2,074.02	1,951.04	11.14	11.74	-38.71	-922.10	-29.71	1,017.66	997.54	20.12	50.589		
2,600.00	2,598.29	2,159.96	2,023.44	11.56	12.36	-38.66	-968.35	-31.85	1,068.79	1,047.85	20.94	51.042		
2,700.00	2,698.21	2,245.89	2,095.83	11.98	13.00	-38.62	-1,014.60	-33.99	1,119.92	1,098.15	21.77	51.440		
2,800.00	2,798.13	2,331.83	2,168.23	12.41	13.63	-38.58	-1,060.85	-36.13	1,171.06	1,148.45	22.61	51.789		
2,900.00	2,898.05	2,417.77	2,240.62	12.84	14.27	-38.55	-1,107.10	-38.26	1,222.19	1,198.73	23.46	52.098		
3,000.00	2,997.97	2,503.70	2,313.02	13.27	14.92	-38.52	-1,153.35	-40.40	1,273.33	1,249.01	24.31	52.371		
3,100.00	3,097.89	2,589.64	2,385.41	13.69	15.57	-38.49	-1,199.61	-42.54	1,324.46	1,299.29	25.17	52.613		
3,200.00	3,197.81	2,675.57	2,457.81	14.12	16.22	-38.46	-1,245.86	-44.68	1,375.60	1,349.56	26.04	52.828		
3,300.00	3,297.73	2,761.51	2,530.20	14.56	16.87	-38.44	-1,292.11	-46.82	1,426.73	1,399.83	26.91	53.021		
3,400.00	3,397.65	2,847.44	2,602.60	14.99	17.53	-38.42	-1,338.36	-48.96	1,477.87	1,450.09	27.78	53.193		
3,500.00	3,497.56	2,933.38	2,674.99	15.42	18.19	-38.40	-1,384.61	-51.10	1,529.01	1,500.34	28.66	53.348		
3,600.00	3,597.48	3,019.31	2,747.39	15.85	18.85	-38.38	-1,430.86	-53.24	1,580.14	1,550.60	29.54	53.487		
3,700.00	3,697.40	3,105.25	2,819.79	16.28	19.51	-38.36	-1,477.12	-55.38	1,631.28	1,600.85	30.43	53.613		
3,800.00	3,797.32	3,208.82	2,892.18	16.72	20.31	-38.34	-1,523.37	-57.52	1,682.41	1,650.99	31.42	53.541		
3,900.00	3,897.24	3,277.12	2,964.58	17.15	20.84	-38.32	-1,569.62	-59.66	1,733.55	1,701.35	32.21	53.828		
4,000.00	3,997.16	3,363.05	3,036.97	17.59	21.51	-38.31	-1,615.87	-61.80	1,784.69	1,751.59	33.10	53.921		
4,100.00	4,097.08	3,448.99	3,109.37	18.02	22.18	-38.29	-1,662.12	-63.93	1,835.82	1,801.83	33.99	54.005		
4,200.00	4,197.00	3,534.93	3,181.76	18.46	22.85	-38.28	-1,708.37	-66.07	1,886.96	1,852.07	34.89	54.082		
4,300.00	4,296.92	3,620.86	3,254.16	18.89	23.52	-38.27	-1,754.63	-68.21	1,938.10	1,902.31	35.79	54.152		
4,400.00	4,396.84	3,706.80	3,326.55	19.33	24.19	-38.25	-1,800.88	-70.35	1,989.23	1,952.54	36.69	54.215		
4,500.00	4,496.76	3,807.27	3,398.95	19.77	24.97	-38.24	-1,847.13	-72.49	2,040.37	2,002.69	37.68	54.143		
4,600.00	4,596.68	3,878.67	3,471.34	20.20	25.53	-38.23	-1,893.38	-74.63	2,091.51	2,053.01	38.50	54.326		
4,700.00	4,696.60	3,964.60	3,543.74	20.64	26.20	-38.22	-1,939.63	-76.77	2,142.64	2,103.24	39.41	54.375		
4,800.00	4,796.52	4,050.54	3,616.14	21.08	26.88	-38.21	-1,985.88	-78.91	2,193.78	2,153.47	40.31	54.419		
4,900.00	4,896.44	4,136.47	3,688.53	21.51	27.55	-38.20	-2,032.14	-81.05	2,244.92	2,203.70	41.22	54.460		
5,000.00	4,996.36	4,222.41	3,760.93	21.95	28.23	-38.19	-2,078.39	-83.19	2,296.06	2,253.92	42.13	54.497		
5,100.00	5,096.28	4,308.34	3,833.32	22.39	28.90	-38.18	-2,124.64	-85.33	2,347.19	2,304.15	43.04	54.531		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	4,405.72	3,905.72	22.83	29.67	-38.17	-2,170.89	-87.47	2,398.33	2,354.30	44.03	54.473		
5,300.00	5,296.11	4,480.21	3,978.11	23.27	30.25	-38.16	-2,217.14	-89.60	2,449.47	2,404.60	44.87	54.591		
5,400.00	5,396.03	4,566.15	4,050.51	23.71	30.93	-38.16	-2,263.39	-91.74	2,500.60	2,454.82	45.78	54.617		
5,500.00	5,495.95	4,652.09	4,122.90	24.14	31.61	-38.15	-2,309.64	-93.88	2,551.74	2,505.04	46.70	54.641		
5,600.00	5,595.87	4,738.02	4,195.30	24.58	32.28	-38.14	-2,355.90	-96.02	2,602.88	2,555.26	47.62	54.663		
5,700.00	5,695.79	4,823.96	4,267.69	25.02	32.96	-38.13	-2,402.15	-98.16	2,654.02	2,605.48	48.53	54.683		
5,800.00	5,795.71	4,909.89	4,340.09	25.46	33.64	-38.13	-2,448.40	-100.30	2,705.15	2,655.70	49.45	54.701		
5,900.00	5,895.63	4,995.83	4,412.49	25.90	34.32	-38.12	-2,494.65	-102.44	2,756.29	2,705.92	50.37	54.718		
6,000.00	5,995.55	5,081.76	4,484.88	26.34	35.00	-38.11	-2,540.90	-104.58	2,807.43	2,756.14	51.29	54.733		
6,100.00	6,095.47	5,167.70	4,557.28	26.78	35.67	-38.11	-2,587.15	-106.72	2,858.57	2,806.35	52.21	54.747		
6,200.00	6,195.39	5,253.63	4,629.67	27.22	36.35	-38.10	-2,633.41	-108.86	2,909.70	2,856.57	53.14	54.759		
6,300.00	6,295.31	5,339.57	4,702.07	27.66	37.03	-38.10	-2,679.66	-111.00	2,960.84	2,906.78	54.06	54.771		
6,400.00	6,395.23	5,425.50	4,774.46	28.10	37.71	-38.09	-2,725.91	-113.14	3,011.98	2,957.00	54.98	54.781		
6,500.00	6,495.02	5,511.40	4,846.82	28.54	38.39	-70.83	-2,772.14	-115.27	3,063.07	3,007.16	55.91	54.789		
6,600.00	6,593.09	5,603.80	4,918.26	28.98	39.12	-75.04	-2,817.78	-117.38	3,113.41	3,056.54	56.88	54.741		
6,700.00	6,687.01	5,677.86	4,987.06	29.41	39.71	-73.13	-2,861.73	-119.42	3,162.01	3,104.28	57.73	54.770		
6,800.00	6,774.46	5,788.13	5,061.92	29.83	40.29	-88.86	-3,360.60	-171.04	3,161.75	3,095.01	66.74	47.377		
6,900.00	6,853.31	5,895.62	5,136.82	30.26	40.87	-90.17	-3,360.85	-212.48	3,159.95	3,092.57	67.38	46.896		
7,000.00	6,921.60	5,993.50	5,211.72	30.76	41.45	-91.18	-3,361.23	-274.47	3,158.65	3,090.59	68.06	46.409		
7,100.00	6,977.66	6,081.46	5,286.66	31.38	42.03	-91.98	-3,361.74	-357.89	3,157.80	3,088.92	68.88	45.848		
7,200.00	7,020.10	6,169.99	5,361.51	32.17	42.61	-92.60	-3,362.38	-462.16	3,157.33	3,087.35	69.98	45.118		
7,300.00	7,047.88	6,258.91	5,436.41	33.13	43.19	-93.03	-3,363.13	-584.44	3,157.16	3,085.62	71.54	44.132		
7,324.59	7,052.38	6,262.52	5,440.95	33.41	43.47	-93.10	-3,363.33	-616.70	3,157.15	3,085.13	72.03	43.833		
7,400.00	7,060.32	6,336.76	5,510.19	34.27	44.05	-93.25	-3,363.95	-719.21	3,157.20	3,083.54	73.67	42.857		
7,500.00	7,060.70	6,454.47	5,584.78	35.56	44.63	-93.29	-3,364.67	-836.83	3,157.27	3,081.13	76.14	41.465		
7,600.00	7,060.27	6,554.47	5,658.78	37.02	45.22	-93.29	-3,365.29	-936.83	3,157.29	3,078.48	78.81	40.064		
7,700.00	7,059.83	6,654.47	5,732.78	38.64	45.80	-93.29	-3,365.90	-1,036.82	3,157.30	3,075.52	81.78	38.607		
7,800.00	7,059.40	6,754.47	5,806.78	40.40	46.38	-93.29	-3,366.51	-1,136.82	3,157.32	3,072.28	85.03	37.130		
7,900.00	7,058.97	6,854.47	5,880.78	42.28	46.96	-93.29	-3,367.12	-1,236.82	3,157.33	3,068.80	88.54	35.662		
8,000.00	7,058.53	6,954.47	5,954.78	44.27	47.54	-93.29	-3,367.74	-1,336.82	3,157.35	3,065.09	92.26	34.224		
8,100.00	7,058.10	7,054.47	6,028.78	46.35	48.12	-93.29	-3,368.35	-1,436.81	3,157.36	3,061.19	96.17	32.831		
8,200.00	7,057.66	7,154.47	6,102.78	48.50	48.70	-93.29	-3,368.96	-1,536.81	3,157.38	3,057.12	100.26	31.492		
8,300.00	7,057.23	7,254.47	6,176.78	50.73	49.28	-93.29	-3,369.57	-1,636.81	3,157.40	3,052.90	104.50	30.215		
8,400.00	7,056.80	7,354.47	6,250.78	53.02	49.86	-93.29	-3,370.19	-1,736.81	3,157.41	3,048.54	108.87	29.002		
8,500.00	7,056.36	7,454.47	6,324.78	55.36	50.44	-93.29	-3,370.80	-1,836.80	3,157.43	3,044.07	113.36	27.853		
8,600.00	7,055.93	7,554.47	6,398.78	57.74	51.02	-93.29	-3,371.41	-1,936.80	3,157.44	3,039.49	117.95	26.768		
8,700.00	7,055.49	7,654.47	6,472.78	60.17	51.60	-93.29	-3,372.02	-2,036.80	3,157.46	3,034.81	122.64	25.745		
8,800.00	7,055.06	7,754.47	6,546.78	62.63	52.18	-93.29	-3,372.64	-2,136.79	3,157.47	3,030.06	127.41	24.781		
8,900.00	7,054.63	7,854.47	6,620.78	65.13	52.76	-93.29	-3,373.25	-2,236.79	3,157.49	3,025.23	132.26	23.873		
9,000.00	7,054.19	7,954.47	6,694.78	67.66	53.34	-93.30	-3,373.86	-2,336.79	3,157.50	3,020.33	137.17	23.018		
9,100.00	7,053.76	8,054.47	6,768.78	70.21	53.92	-93.30	-3,374.47	-2,436.79	3,157.52	3,015.37	142.14	22.214		
9,200.00	7,053.32	8,154.47	6,842.78	72.78	54.50	-93.30	-3,375.09	-2,536.78	3,157.53	3,010.36	147.17	21.455		
9,300.00	7,052.89	8,254.47	6,916.78	75.38	55.08	-93.30	-3,375.70	-2,636.78	3,157.55	3,005.31	152.24	20.740		
9,400.00	7,052.46	8,354.47	6,990.78	77.99	55.66	-93.30	-3,376.31	-2,736.78	3,157.56	3,000.21	157.36	20.066		
9,500.00	7,052.02	8,454.47	7,064.78	80.62	56.24	-93.30	-3,376.92	-2,836.78	3,157.58	2,995.06	162.51	19.430		
9,600.00	7,051.59	8,554.47	7,138.78	83.26	56.82	-93.30	-3,377.54	-2,936.77	3,157.59	2,989.89	167.71	18.828		
9,700.00	7,051.15	8,654.47	7,212.78	85.92	57.40	-93.30	-3,378.15	-3,036.77	3,157.61	2,984.68	172.93	18.259		
9,800.00	7,050.72	8,754.47	7,286.78	88.59	57.98	-93.30	-3,378.76	-3,136.77	3,157.62	2,979.44	178.18	17.721		
9,900.00	7,050.29	8,854.47	7,360.78	91.28	58.56	-93.30	-3,379.37	-3,236.76	3,157.64	2,974.17	183.47	17.211		
10,000.00	7,049.85	8,954.47	7,434.78	93.97	59.14	-93.30	-3,379.99	-3,336.76	3,157.66	2,968.88	188.77	16.727		
10,100.00	7,049.42	9,054.47	7,508.78	96.67	59.72	-93.30	-3,380.60	-3,436.76	3,157.67	2,963.57	194.10	16.268		
10,200.00	7,048.98	9,154.47	7,582.78	99.38	60.30	-93.30	-3,381.21	-3,536.76	3,157.69	2,958.24	199.45	15.832		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
10,300.00	7,048.55	11,254.47	7,230.42	102.10	103.99	-93.30	-3,381.82	-3,636.75	3,157.70	2,952.88	204.82	15.417		
10,400.00	7,048.12	11,354.47	7,230.01	104.83	106.64	-93.30	-3,382.44	-3,736.75	3,157.72	2,947.51	210.21	15.022		
10,500.00	7,047.68	11,454.47	7,229.61	107.56	109.31	-93.30	-3,383.05	-3,836.75	3,157.73	2,942.12	215.61	14.645		
10,600.00	7,047.25	11,554.47	7,229.20	110.30	111.98	-93.30	-3,383.66	-3,936.75	3,157.75	2,936.72	221.03	14.286		
10,700.00	7,046.81	11,654.47	7,228.80	113.05	114.67	-93.30	-3,384.27	-4,036.74	3,157.76	2,931.30	226.46	13.944		
10,800.00	7,046.38	11,754.47	7,228.39	115.80	117.36	-93.30	-3,384.89	-4,136.74	3,157.78	2,925.87	231.91	13.616		
10,900.00	7,045.95	11,854.47	7,227.99	118.55	120.06	-93.30	-3,385.50	-4,236.74	3,157.79	2,920.42	237.37	13.303		
11,000.00	7,045.51	11,954.47	7,227.58	121.31	122.77	-93.31	-3,386.11	-4,336.73	3,157.81	2,914.97	242.84	13.004		
11,100.00	7,045.08	12,054.47	7,227.17	124.08	125.48	-93.31	-3,386.72	-4,436.73	3,157.82	2,909.50	248.32	12.717		
11,200.00	7,044.64	12,154.47	7,226.77	126.85	128.20	-93.31	-3,387.33	-4,536.73	3,157.84	2,904.03	253.81	12.442		
11,300.00	7,044.21	12,254.47	7,226.36	129.62	130.93	-93.31	-3,387.95	-4,636.73	3,157.85	2,898.54	259.31	12.178		
11,400.00	7,043.78	12,354.47	7,225.96	132.40	133.66	-93.31	-3,388.56	-4,736.72	3,157.87	2,893.05	264.82	11.924		
11,500.00	7,043.34	12,454.47	7,225.55	135.18	136.40	-93.31	-3,389.17	-4,836.72	3,157.89	2,887.54	270.34	11.681		
11,600.00	7,042.91	12,554.47	7,225.15	137.96	139.14	-93.31	-3,389.78	-4,936.72	3,157.90	2,882.03	275.87	11.447		
11,700.00	7,042.47	12,654.47	7,224.74	140.75	141.89	-93.31	-3,390.40	-5,036.72	3,157.92	2,876.51	281.40	11.222		
11,800.00	7,042.04	12,754.47	7,224.33	143.54	144.64	-93.31	-3,391.01	-5,136.71	3,157.93	2,870.99	286.94	11.005		
11,900.00	7,041.61	12,854.47	7,223.93	146.33	147.40	-93.31	-3,391.62	-5,236.71	3,157.95	2,865.46	292.49	10.797		
12,000.00	7,041.17	12,954.47	7,223.52	149.13	150.15	-93.31	-3,392.23	-5,336.71	3,157.96	2,859.92	298.04	10.596		
12,100.00	7,040.74	13,054.47	7,223.12	151.92	152.92	-93.31	-3,392.85	-5,436.71	3,157.98	2,854.38	303.60	10.402		
12,200.00	7,040.30	13,154.47	7,222.71	154.72	155.68	-93.31	-3,393.46	-5,536.70	3,157.99	2,848.83	309.16	10.215		
12,300.00	7,039.87	13,254.47	7,222.31	157.52	158.45	-93.31	-3,394.07	-5,636.70	3,158.01	2,843.27	314.73	10.034		
12,400.00	7,039.44	13,354.47	7,221.90	160.33	161.23	-93.31	-3,394.68	-5,736.70	3,158.02	2,837.72	320.31	9.859		
12,500.00	7,039.00	13,454.47	7,221.49	163.13	164.00	-93.31	-3,395.30	-5,836.69	3,158.04	2,832.15	325.89	9.691		
12,600.00	7,038.57	13,554.47	7,221.09	165.94	166.78	-93.31	-3,395.91	-5,936.69	3,158.05	2,826.58	331.47	9.527		
12,700.00	7,038.13	13,654.47	7,220.68	168.75	169.56	-93.31	-3,396.52	-6,036.69	3,158.07	2,821.01	337.06	9.370		
12,800.00	7,037.70	13,754.47	7,220.28	171.56	172.35	-93.31	-3,397.13	-6,136.69	3,158.08	2,815.44	342.65	9.217		
12,900.00	7,037.27	13,854.47	7,219.87	174.37	175.13	-93.31	-3,397.75	-6,236.68	3,158.10	2,809.86	348.24	9.069		
13,000.00	7,036.83	13,954.47	7,219.47	177.19	177.92	-93.32	-3,398.36	-6,336.68	3,158.11	2,804.27	353.84	8.925		
13,100.00	7,036.40	14,054.47	7,219.06	180.00	180.71	-93.32	-3,398.97	-6,436.68	3,158.13	2,798.68	359.45	8.786		
13,200.00	7,035.96	14,154.47	7,218.65	182.82	183.50	-93.32	-3,399.58	-6,536.68	3,158.15	2,793.09	365.05	8.651		
13,300.00	7,035.53	14,254.47	7,218.25	185.64	186.30	-93.32	-3,400.20	-6,636.67	3,158.16	2,787.50	370.66	8.520		
13,400.00	7,035.10	14,354.47	7,217.84	188.46	189.10	-93.32	-3,400.81	-6,736.67	3,158.18	2,781.90	376.27	8.393		
13,500.00	7,034.66	14,454.47	7,217.44	191.28	191.89	-93.32	-3,401.42	-6,836.67	3,158.19	2,776.30	381.89	8.270		
13,600.00	7,034.23	14,554.47	7,217.03	194.10	194.69	-93.32	-3,402.03	-6,936.66	3,158.21	2,770.70	387.51	8.150		
13,700.00	7,033.79	14,654.47	7,216.62	196.92	197.50	-93.32	-3,402.65	-7,036.66	3,158.22	2,765.10	393.13	8.034		
13,800.00	7,033.36	14,754.47	7,216.22	199.74	200.30	-93.32	-3,403.26	-7,136.66	3,158.24	2,759.49	398.75	7.920		
13,900.00	7,032.93	14,854.47	7,215.81	202.57	203.11	-93.32	-3,403.87	-7,236.66	3,158.25	2,753.88	404.37	7.810		
14,000.00	7,032.49	14,954.47	7,215.41	205.39	205.91	-93.32	-3,404.48	-7,336.65	3,158.27	2,748.27	410.00	7.703		
14,100.00	7,032.06	15,054.47	7,215.00	208.22	208.72	-93.32	-3,405.10	-7,436.65	3,158.28	2,742.65	415.63	7.599		
14,200.00	7,031.62	15,154.47	7,214.60	211.05	211.53	-93.32	-3,405.71	-7,536.65	3,158.30	2,737.03	421.26	7.497		
14,300.00	7,031.19	15,254.47	7,214.19	213.87	214.34	-93.32	-3,406.32	-7,636.65	3,158.31	2,731.42	426.90	7.398		
14,400.00	7,030.76	15,354.47	7,213.78	216.70	217.15	-93.32	-3,406.93	-7,736.64	3,158.33	2,725.80	432.53	7.302		
14,500.00	7,030.32	15,454.47	7,213.38	219.53	219.96	-93.32	-3,407.55	-7,836.64	3,158.34	2,720.17	438.17	7.208		
14,600.00	7,029.89	15,554.47	7,212.97	222.36	222.78	-93.32	-3,408.16	-7,936.64	3,158.36	2,714.55	443.81	7.116		
14,700.00	7,029.45	15,654.47	7,212.57	225.19	225.59	-93.32	-3,408.77	-8,036.63	3,158.38	2,708.92	449.45	7.027		
14,800.00	7,029.02	15,754.47	7,212.16	228.03	228.41	-93.32	-3,409.38	-8,136.63	3,158.39	2,703.29	455.10	6.940		
14,805.04	7,029.00	15,759.51	7,212.14	228.17	228.55	-93.32	-3,409.41	-8,141.67	3,158.39	2,703.01	455.38	6.936 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.40	40.07	0.28	40.07					
100.00	100.00	100.00	100.00	3.28	3.28	0.40	40.07	0.28	40.07	33.50	6.57	6.099		
200.00	200.00	200.00	200.00	3.34	3.34	0.40	40.07	0.28	40.07	33.39	6.67	6.003		
300.00	300.00	300.00	300.00	3.44	3.44	0.40	40.07	0.28	40.07	33.18	6.89	5.815		
400.00	400.00	400.00	400.00	3.60	3.60	0.40	40.07	0.28	40.07	32.86	7.21	5.560 CC		
500.00	499.98	500.02	499.98	3.80	3.81	143.66	40.07	0.28	41.46	33.86	7.60	5.453		
600.00	599.90	599.90	599.90	4.02	4.05	146.67	40.07	0.28	44.72	36.65	8.07	5.543		
700.00	699.82	700.80	699.18	4.28	4.32	147.48	40.96	-1.15	48.85	40.25	8.60	5.682		
800.00	799.74	800.91	799.02	4.57	4.61	146.95	42.53	-3.66	53.55	44.38	9.18	5.836		
900.00	899.66	898.97	898.87	4.88	4.92	146.49	44.10	-6.18	58.26	48.46	9.79	5.949		
1,000.00	999.58	1,001.14	998.71	5.21	5.26	146.11	45.67	-8.69	62.97	52.50	10.46	6.019		
1,100.00	1,099.50	1,101.25	1,098.56	5.55	5.61	145.78	47.24	-11.20	67.68	56.52	11.15	6.069		
1,200.00	1,199.42	1,201.36	1,198.40	5.91	5.97	145.49	48.81	-13.72	72.39	60.52	11.87	6.100		
1,300.00	1,299.34	1,301.47	1,298.24	6.28	6.34	145.24	50.38	-16.23	77.10	64.50	12.60	6.117		
1,400.00	1,399.26	1,401.58	1,398.09	6.66	6.72	145.02	51.95	-18.74	81.82	68.46	13.36	6.124		
1,500.00	1,499.18	1,501.70	1,497.93	7.04	7.10	144.82	53.52	-21.25	86.53	72.40	14.13	6.125		
1,600.00	1,599.10	1,601.81	1,597.78	7.43	7.49	144.64	55.09	-23.77	91.25	76.34	14.91	6.120		
1,700.00	1,699.01	1,701.92	1,697.62	7.83	7.89	144.48	56.66	-26.28	95.97	80.26	15.70	6.112		
1,800.00	1,798.93	1,802.03	1,797.47	8.23	8.29	144.33	58.23	-28.79	100.68	84.18	16.50	6.101		
1,900.00	1,898.85	1,902.14	1,897.31	8.64	8.70	144.20	59.80	-31.31	105.40	88.09	17.31	6.089		
2,000.00	1,998.77	2,002.26	1,997.15	9.05	9.11	144.08	61.37	-33.82	110.12	92.00	18.13	6.075		
2,100.00	2,098.69	2,102.37	2,097.00	9.46	9.52	143.97	62.94	-36.33	114.84	95.89	18.95	6.061		
2,200.00	2,198.61	2,202.48	2,196.84	9.88	9.93	143.87	64.51	-38.85	119.56	99.79	19.77	6.046		
2,300.00	2,298.53	2,302.59	2,296.69	10.30	10.35	143.77	66.08	-41.36	124.28	103.68	20.61	6.032		
2,400.00	2,398.45	2,402.70	2,396.53	10.72	10.77	143.68	67.66	-43.87	129.00	107.56	21.44	6.017		
2,500.00	2,498.37	2,502.81	2,496.38	11.14	11.19	143.60	69.23	-46.39	133.73	111.45	22.28	6.002		
2,600.00	2,598.29	2,602.93	2,596.22	11.56	11.61	143.53	70.80	-48.90	138.45	115.33	23.12	5.988		
2,700.00	2,698.21	2,703.04	2,696.06	11.98	12.03	143.45	72.37	-51.41	143.17	119.20	23.97	5.974		
2,800.00	2,798.13	2,803.15	2,795.91	12.41	12.45	143.39	73.94	-53.93	147.89	123.08	24.81	5.960		
2,900.00	2,898.05	2,903.26	2,895.75	12.84	12.88	143.33	75.51	-56.44	152.61	126.95	25.66	5.947		
3,000.00	2,997.97	3,003.37	2,995.60	13.27	13.31	143.27	77.08	-58.95	157.34	130.82	26.51	5.934		
3,100.00	3,097.89	3,103.48	3,095.44	13.69	13.73	143.21	78.65	-61.47	162.06	134.69	27.37	5.922		
3,200.00	3,197.81	3,203.60	3,195.29	14.12	14.16	143.16	80.22	-63.98	166.78	138.56	28.22	5.910		
3,300.00	3,297.73	3,303.71	3,295.13	14.56	14.59	143.11	81.79	-66.49	171.50	142.43	29.08	5.898		
3,400.00	3,397.65	3,403.82	3,394.98	14.99	15.02	143.06	83.36	-69.01	176.23	146.29	29.94	5.887		
3,500.00	3,497.56	3,503.93	3,494.82	15.42	15.45	143.02	84.93	-71.52	180.95	150.16	30.79	5.876		
3,600.00	3,597.48	3,604.04	3,594.66	15.85	15.88	142.98	86.50	-74.03	185.67	154.02	31.65	5.866		
3,700.00	3,697.40	3,704.15	3,694.51	16.28	16.31	142.94	88.07	-76.55	190.40	157.88	32.52	5.855		
3,800.00	3,797.32	3,804.27	3,794.35	16.72	16.74	142.90	89.64	-79.06	195.12	161.74	33.38	5.846		
3,900.00	3,897.24	3,904.38	3,894.20	17.15	17.17	142.86	91.21	-81.57	199.84	165.60	34.24	5.836		
4,000.00	3,997.16	4,004.49	3,994.04	17.59	17.61	142.83	92.78	-84.09	204.57	169.46	35.11	5.827		
4,100.00	4,097.08	4,104.60	4,093.89	18.02	18.04	142.80	94.35	-86.60	209.29	173.32	35.97	5.818		
4,200.00	4,197.00	4,204.71	4,193.73	18.46	18.47	142.76	95.92	-89.11	214.01	177.18	36.84	5.810		
4,300.00	4,296.92	4,304.82	4,293.57	18.89	18.91	142.73	97.49	-91.63	218.74	181.03	37.70	5.801		
4,400.00	4,396.84	4,404.94	4,393.42	19.33	19.34	142.71	99.07	-94.14	223.46	184.89	38.57	5.793		
4,500.00	4,496.76	4,505.05	4,493.26	19.77	19.77	142.68	100.64	-96.65	228.18	188.75	39.44	5.786		
4,600.00	4,596.68	4,605.16	4,593.11	20.20	20.21	142.65	102.21	-99.17	232.91	192.60	40.31	5.778		
4,700.00	4,696.60	4,705.27	4,692.95	20.64	20.64	142.63	103.78	-101.68	237.63	196.46	41.18	5.771		
4,800.00	4,796.52	4,805.38	4,792.80	21.08	21.08	142.60	105.35	-104.19	242.36	200.31	42.05	5.764		
4,900.00	4,896.44	4,905.49	4,892.64	21.51	21.51	142.58	106.92	-106.71	247.08	204.16	42.92	5.757		
5,000.00	4,996.36	5,005.61	4,992.48	21.95	21.95	142.56	108.49	-109.22	251.80	208.02	43.79	5.751		
5,100.00	5,096.28	5,105.72	5,092.33	22.39	22.38	142.53	110.06	-111.73	256.53	211.87	44.66	5.744		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,205.83	5,192.17	22.83	22.82	142.51	111.63	-114.25	261.25	215.72	45.53	5.738	
5,300.00	5,296.11	5,305.94	5,292.02	23.27	23.26	142.49	113.20	-116.76	265.98	219.58	46.40	5.732	
5,400.00	5,396.03	5,406.05	5,391.86	23.71	23.69	142.47	114.77	-119.27	270.70	223.43	47.27	5.727	
5,500.00	5,495.95	5,506.16	5,491.71	24.14	24.13	142.45	116.34	-121.79	275.42	227.28	48.14	5.721	
5,600.00	5,595.87	5,593.72	5,591.55	24.58	24.51	142.44	117.91	-124.30	280.15	231.19	48.96	5.722	
5,700.00	5,695.79	5,706.39	5,691.40	25.02	25.00	142.42	119.48	-126.81	284.87	234.98	49.89	5.710	
5,800.00	5,795.71	5,806.50	5,791.24	25.46	25.44	142.40	121.05	-129.33	289.60	238.83	50.76	5.705	
5,900.00	5,895.63	5,906.61	5,891.08	25.90	25.87	142.38	122.62	-131.84	294.32	242.69	51.64	5.700	
6,000.00	5,995.55	6,006.72	5,990.93	26.34	26.31	142.37	124.19	-134.35	299.04	246.54	52.51	5.695	
6,100.00	6,095.47	6,106.83	6,090.77	26.78	26.75	142.35	125.76	-136.87	303.77	250.39	53.38	5.690	
6,200.00	6,195.39	6,206.95	6,190.62	27.22	27.19	142.34	127.33	-139.38	308.49	254.24	54.26	5.686	
6,300.00	6,295.31	6,307.06	6,290.46	27.66	27.62	142.32	128.90	-141.89	313.22	258.09	55.13	5.681	
6,400.00	6,395.23	6,407.17	6,390.31	28.10	28.06	142.31	130.48	-144.41	317.94	261.94	56.01	5.677	
6,500.00	6,495.02	6,507.35	6,490.08	28.54	28.50	106.87	132.04	-146.92	322.71	265.83	56.88	5.674	
6,600.00	6,593.09	6,591.10	6,588.48	28.98	28.86	100.08	133.59	-149.40	328.12	270.45	57.67	5.690	
6,700.00	6,687.01	6,691.11	6,688.27	29.41	29.30	101.84	135.14	-155.03	335.81	277.28	58.53	5.737	
6,800.00	6,774.46	6,798.03	6,792.75	29.83	29.78	104.94	136.63	-177.11	345.57	286.21	59.37	5.821	
6,900.00	6,853.31	6,911.14	6,897.60	30.26	30.29	108.16	137.98	-219.12	356.64	296.65	60.00	5.944	
7,000.00	6,921.60	7,030.96	6,998.71	30.76	30.85	111.15	139.10	-283.07	368.10	307.83	60.27	6.107	
7,100.00	6,977.66	7,157.66	7,090.60	31.38	31.52	113.73	139.90	-369.99	378.90	318.68	60.21	6.293	
7,200.00	7,020.10	7,290.83	7,166.66	32.17	32.39	115.75	140.28	-479.01	387.94	327.83	60.10	6.454	
7,300.00	7,047.88	7,429.31	7,219.94	33.13	33.57	117.11	140.16	-606.53	394.23	333.74	60.49	6.517	
7,400.00	7,060.32	7,571.10	7,244.68	34.27	35.09	117.73	139.49	-745.85	397.05	335.09	61.96	6.408	
7,500.00	7,060.70	7,683.96	7,245.78	35.56	36.51	117.78	138.65	-858.67	397.09	332.78	64.31	6.175	
7,600.00	7,060.27	7,783.96	7,245.47	37.02	37.95	117.81	137.88	-958.67	396.99	330.08	66.92	5.933	
7,700.00	7,059.83	7,883.96	7,245.15	38.64	39.54	117.84	137.11	-1,058.67	396.90	327.10	69.80	5.686	
7,800.00	7,059.40	7,983.96	7,244.84	40.40	41.26	117.86	136.35	-1,158.66	396.81	323.87	72.94	5.441	
7,900.00	7,058.97	8,083.96	7,244.53	42.28	43.11	117.89	135.58	-1,258.66	396.72	320.44	76.28	5.201	
8,000.00	7,058.53	8,183.96	7,244.22	44.27	45.06	117.92	134.81	-1,358.66	396.62	316.81	79.81	4.969	
8,100.00	7,058.10	8,283.96	7,243.91	46.35	47.11	117.94	134.04	-1,458.65	396.53	313.03	83.51	4.749	
8,200.00	7,057.66	8,383.96	7,243.60	48.50	49.23	117.97	133.28	-1,558.65	396.44	309.10	87.34	4.539	
8,300.00	7,057.23	8,483.96	7,243.28	50.73	51.43	118.00	132.51	-1,658.64	396.35	305.05	91.30	4.341	
8,400.00	7,056.80	8,583.96	7,242.97	53.02	53.69	118.02	131.74	-1,758.64	396.26	300.89	95.36	4.155	
8,500.00	7,056.36	8,683.96	7,242.66	55.36	56.00	118.05	130.97	-1,858.64	396.16	296.64	99.52	3.981	
8,600.00	7,055.93	8,783.96	7,242.35	57.74	58.36	118.08	130.21	-1,958.63	396.07	292.31	103.76	3.817	
8,700.00	7,055.49	8,883.96	7,242.04	60.17	60.77	118.11	129.44	-2,058.63	395.98	287.91	108.08	3.664	
8,800.00	7,055.06	8,983.96	7,241.72	62.63	63.21	118.13	128.67	-2,158.63	395.89	283.44	112.45	3.520	
8,900.00	7,054.63	9,083.96	7,241.41	65.13	65.69	118.16	127.90	-2,258.62	395.80	278.91	116.89	3.386	
9,000.00	7,054.19	9,183.96	7,241.10	67.66	68.19	118.19	127.13	-2,358.62	395.71	274.34	121.37	3.260	
9,100.00	7,053.76	9,283.96	7,240.79	70.21	70.73	118.21	126.37	-2,458.62	395.62	269.72	125.90	3.142	
9,200.00	7,053.32	9,383.96	7,240.48	72.78	73.28	118.24	125.60	-2,558.61	395.53	265.06	130.46	3.032	
9,300.00	7,052.89	9,483.96	7,240.16	75.38	75.86	118.27	124.83	-2,658.61	395.44	260.37	135.07	2.928	
9,400.00	7,052.46	9,583.96	7,239.85	77.99	78.46	118.30	124.06	-2,758.60	395.34	255.65	139.70	2.830	
9,500.00	7,052.02	9,683.96	7,239.54	80.62	81.08	118.32	123.30	-2,858.60	395.25	250.89	144.36	2.738	
9,600.00	7,051.59	9,783.96	7,239.23	83.26	83.71	118.35	122.53	-2,958.60	395.16	246.12	149.05	2.651	
9,700.00	7,051.15	9,883.95	7,238.92	85.92	86.35	118.38	121.76	-3,058.59	395.07	241.32	153.75	2.570	
9,800.00	7,050.72	9,983.95	7,238.60	88.59	89.01	118.40	120.99	-3,158.59	394.98	236.50	158.48	2.492	
9,900.00	7,050.29	10,083.95	7,238.29	91.28	91.68	118.43	120.23	-3,258.59	394.89	231.66	163.23	2.419	
10,000.00	7,049.85	10,183.95	7,237.98	93.97	94.36	118.46	119.46	-3,358.58	394.80	226.81	167.99	2.350	
10,100.00	7,049.42	10,283.95	7,237.67	96.67	97.06	118.49	118.69	-3,458.58	394.71	221.94	172.77	2.285	
10,200.00	7,048.98	10,383.95	7,237.36	99.38	99.76	118.51	117.92	-3,558.58	394.62	217.05	177.57	2.222	
10,300.00	7,048.55	10,483.95	7,237.04	102.10	102.47	118.54	117.16	-3,658.57	394.53	212.16	182.37	2.163	

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,400.00	7,048.12	10,583.95	7,236.73	104.83	105.18	118.57	116.39	-3,758.57	394.44	207.25	187.19	2.107		
10,500.00	7,047.68	10,683.95	7,236.42	107.56	107.91	118.60	115.62	-3,858.56	394.35	202.34	192.02	2.054		
10,600.00	7,047.25	10,783.95	7,236.11	110.30	110.64	118.62	114.85	-3,958.56	394.26	197.41	196.85	2.003		
10,700.00	7,046.81	10,883.95	7,235.80	113.05	113.38	118.65	114.09	-4,058.56	394.17	192.48	201.70	1.954		
10,800.00	7,046.38	10,983.95	7,235.49	115.80	116.12	118.68	113.32	-4,158.55	394.08	187.53	206.55	1.908		
10,900.00	7,045.95	11,083.95	7,235.17	118.55	118.87	118.70	112.55	-4,258.55	393.99	182.59	211.41	1.864		
11,000.00	7,045.51	11,183.95	7,234.86	121.31	121.63	118.73	111.78	-4,358.55	393.90	177.63	216.27	1.821		
11,100.00	7,045.08	11,283.95	7,234.55	124.08	124.38	118.76	111.02	-4,458.54	393.81	172.67	221.14	1.781		
11,200.00	7,044.64	11,383.95	7,234.24	126.85	127.15	118.79	110.25	-4,558.54	393.72	167.71	226.02	1.742		
11,300.00	7,044.21	11,483.95	7,233.93	129.62	129.91	118.81	109.48	-4,658.54	393.64	162.74	230.90	1.705		
11,400.00	7,043.78	11,583.95	7,233.61	132.40	132.69	118.84	108.71	-4,758.53	393.55	157.76	235.78	1.669		
11,500.00	7,043.34	11,683.95	7,233.30	135.18	135.46	118.87	107.95	-4,858.53	393.46	152.78	240.67	1.635		
11,600.00	7,042.91	11,783.95	7,232.99	137.96	138.24	118.90	107.18	-4,958.52	393.37	147.80	245.57	1.602		
11,700.00	7,042.47	11,883.95	7,232.68	140.75	141.02	118.92	106.41	-5,058.52	393.28	142.82	250.46	1.570		
11,800.00	7,042.04	11,983.95	7,232.37	143.54	143.80	118.95	105.64	-5,158.52	393.19	137.83	255.36	1.540		
11,900.00	7,041.61	12,083.95	7,232.05	146.33	146.59	118.98	104.87	-5,258.51	393.10	132.84	260.26	1.510		
12,000.00	7,041.17	12,183.95	7,231.74	149.13	149.38	119.01	104.11	-5,358.51	393.01	127.85	265.16	1.482 Level 3		
12,100.00	7,040.74	12,283.95	7,231.43	151.92	152.17	119.03	103.34	-5,458.51	392.93	122.86	270.07	1.455 Level 3		
12,200.00	7,040.30	12,383.95	7,231.12	154.72	154.97	119.06	102.57	-5,558.50	392.84	117.86	274.97	1.429 Level 3		
12,300.00	7,039.87	12,483.95	7,230.81	157.52	157.77	119.09	101.80	-5,658.50	392.75	112.87	279.88	1.403 Level 3		
12,400.00	7,039.44	12,583.95	7,230.49	160.33	160.57	119.12	101.04	-5,758.50	392.66	107.87	284.79	1.379 Level 3		
12,500.00	7,039.00	12,683.95	7,230.18	163.13	163.37	119.14	100.27	-5,858.49	392.57	102.87	289.70	1.355 Level 3		
12,600.00	7,038.57	12,783.95	7,229.87	165.94	166.17	119.17	99.50	-5,958.49	392.48	97.87	294.61	1.332 Level 3		
12,700.00	7,038.13	12,883.95	7,229.56	168.75	168.98	119.20	98.73	-6,058.48	392.40	92.87	299.52	1.310 Level 3		
12,800.00	7,037.70	12,983.95	7,229.25	171.56	171.78	119.23	97.97	-6,158.48	392.31	87.87	304.44	1.289 Level 3		
12,900.00	7,037.27	13,083.95	7,228.94	174.37	174.59	119.25	97.20	-6,258.48	392.22	82.87	309.35	1.268 Level 3		
13,000.00	7,036.83	13,183.95	7,228.62	177.19	177.40	119.28	96.43	-6,358.47	392.13	77.87	314.26	1.248 Level 2		
13,100.00	7,036.40	13,283.95	7,228.31	180.00	180.21	119.31	95.66	-6,458.47	392.05	72.87	319.18	1.228 Level 2		
13,200.00	7,035.96	13,383.95	7,228.00	182.82	183.03	119.34	94.90	-6,558.47	391.96	67.87	324.09	1.209 Level 2		
13,300.00	7,035.53	13,483.95	7,227.69	185.64	185.84	119.36	94.13	-6,658.46	391.87	62.87	329.00	1.191 Level 2		
13,400.00	7,035.10	13,583.95	7,227.38	188.46	188.66	119.39	93.36	-6,758.46	391.78	57.87	333.92	1.173 Level 2		
13,500.00	7,034.66	13,683.95	7,227.06	191.28	191.47	119.42	92.59	-6,858.46	391.70	52.87	338.83	1.156 Level 2		
13,600.00	7,034.23	13,783.95	7,226.75	194.10	194.29	119.45	91.83	-6,958.45	391.61	47.87	343.74	1.139 Level 2		
13,700.00	7,033.79	13,883.95	7,226.44	196.92	197.11	119.48	91.06	-7,058.45	391.52	42.87	348.65	1.123 Level 2		
13,800.00	7,033.36	13,983.95	7,226.13	199.74	199.93	119.50	90.29	-7,158.44	391.44	37.87	353.56	1.107 Level 2		
13,900.00	7,032.93	14,083.95	7,225.82	202.57	202.75	119.53	89.52	-7,258.44	391.35	32.87	358.47	1.092 Level 2		
14,000.00	7,032.49	14,183.95	7,225.50	205.39	205.57	119.56	88.76	-7,358.44	391.26	27.88	363.38	1.077 Level 2		
14,100.00	7,032.06	14,283.95	7,225.19	208.22	208.40	119.59	87.99	-7,458.43	391.18	22.88	368.29	1.062 Level 2		
14,200.00	7,031.62	14,383.95	7,224.88	211.05	211.22	119.61	87.22	-7,558.43	391.09	17.89	373.20	1.048 Level 2		
14,300.00	7,031.19	14,483.95	7,224.57	213.87	214.05	119.64	86.45	-7,658.43	391.00	12.89	378.11	1.034 Level 2		
14,400.00	7,030.76	14,583.94	7,224.26	216.70	216.87	119.67	85.69	-7,758.42	390.92	7.90	383.01	1.021 Level 2		
14,500.00	7,030.32	14,683.94	7,223.94	219.53	219.70	119.70	84.92	-7,858.42	390.83	2.91	387.92	1.008 Level 2		
14,600.00	7,029.89	14,783.94	7,223.63	222.36	222.53	119.73	84.15	-7,958.42	390.74	-2.08	392.82	0.995 Level 1		
14,700.00	7,029.45	14,883.94	7,223.32	225.19	225.36	119.75	83.38	-8,058.41	390.66	-7.07	397.73	0.982 Level 1		
14,800.00	7,029.02	14,983.94	7,223.01	228.03	228.19	119.78	82.62	-8,158.41	390.57	-12.05	402.63	0.970 Level 1		
14,805.04	7,029.00	14,988.98	7,222.99	228.17	228.33	119.78	82.58	-8,163.45	390.57	-12.31	402.87	0.969 Level 1, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-179.47	-179.98	-1.67	179.99					
100.00	100.00	101.00	100.00	3.28	3.28	-179.47	-179.98	-1.67	179.99	173.42	6.57	27.397		
200.00	200.00	199.00	200.00	3.34	3.34	-179.47	-179.98	-1.67	179.99	173.31	6.67	26.971	CC, ES	
300.00	300.00	293.14	294.12	3.44	3.43	-179.42	-181.48	-1.83	181.59	174.70	6.89	26.371		
400.00	400.00	387.02	387.89	3.60	3.57	-179.29	-186.05	-2.32	186.46	179.25	7.21	25.876		
500.00	499.98	480.62	481.17	3.80	3.75	-37.49	-193.63	-3.13	193.19	185.58	7.61	25.394		
600.00	599.90	573.89	573.83	4.02	3.97	-37.83	-204.21	-4.25	201.41	193.33	8.08	24.933		
700.00	699.82	666.57	665.51	4.28	4.22	-38.08	-217.67	-5.69	212.81	204.20	8.61	24.708		
800.00	799.74	758.48	755.95	4.57	4.50	-38.22	-233.94	-7.42	227.39	218.20	9.20	24.730		
900.00	899.66	849.77	844.89	4.88	4.81	-38.27	-252.86	-9.44	245.11	235.30	9.81	24.986		
1,000.00	999.58	947.56	940.50	5.21	5.18	-38.27	-274.80	-11.78	264.38	253.94	10.44	25.319		
1,100.00	1,099.50	1,045.69	1,036.11	5.55	5.57	-38.27	-296.73	-14.12	283.65	272.53	11.12	25.518		
1,200.00	1,199.42	1,143.81	1,131.73	5.91	5.98	-38.28	-318.67	-16.46	302.92	291.10	11.82	25.629		
1,300.00	1,299.34	1,241.94	1,227.34	6.28	6.40	-38.28	-340.61	-18.80	322.19	309.64	12.55	25.674		
1,400.00	1,399.26	1,340.06	1,322.96	6.66	6.83	-38.28	-362.54	-21.14	341.46	328.16	13.30	25.673		
1,500.00	1,499.18	1,438.19	1,418.57	7.04	7.28	-38.29	-384.48	-23.48	360.73	346.66	14.07	25.639		
1,600.00	1,599.10	1,536.32	1,514.18	7.43	7.73	-38.29	-406.41	-25.82	380.00	365.14	14.85	25.582		
1,700.00	1,699.01	1,634.44	1,609.80	7.83	8.19	-38.29	-428.35	-28.15	399.27	383.62	15.65	25.509		
1,800.00	1,798.93	1,732.57	1,705.41	8.23	8.66	-38.29	-450.29	-30.49	418.54	402.08	16.46	25.427		
1,900.00	1,898.85	1,830.69	1,801.03	8.64	9.13	-38.29	-472.22	-32.83	437.81	420.53	17.28	25.338		
2,000.00	1,998.77	1,928.82	1,896.64	9.05	9.60	-38.30	-494.16	-35.17	457.08	438.97	18.11	25.245		
2,100.00	2,098.69	2,026.94	1,992.25	9.46	10.08	-38.30	-516.09	-37.51	476.35	457.41	18.94	25.152		
2,200.00	2,198.61	2,125.07	2,087.87	9.88	10.56	-38.30	-538.03	-39.85	495.62	475.84	19.78	25.058		
2,300.00	2,298.53	2,223.20	2,183.48	10.30	11.04	-38.30	-559.96	-42.19	514.89	494.26	20.62	24.965		
2,400.00	2,398.45	2,321.32	2,279.10	10.72	11.53	-38.30	-581.90	-44.53	534.16	512.68	21.47	24.874		
2,500.00	2,498.37	2,419.45	2,374.71	11.14	12.02	-38.30	-603.84	-46.87	553.43	531.10	22.33	24.785		
2,600.00	2,598.29	2,517.57	2,470.32	11.56	12.51	-38.30	-625.77	-49.21	572.70	549.51	23.19	24.698		
2,700.00	2,698.21	2,615.70	2,565.94	11.98	13.00	-38.30	-647.71	-51.55	591.96	567.92	24.05	24.614		
2,800.00	2,798.13	2,713.83	2,661.55	12.41	13.49	-38.30	-669.64	-53.89	611.23	586.32	24.91	24.533		
2,900.00	2,898.05	2,811.95	2,757.17	12.84	13.99	-38.31	-691.58	-56.23	630.50	604.72	25.78	24.455		
3,000.00	2,997.97	2,910.08	2,852.78	13.27	14.48	-38.31	-713.51	-58.56	649.77	623.12	26.65	24.380		
3,100.00	3,097.89	3,008.20	2,948.39	13.69	14.98	-38.31	-735.45	-60.90	669.04	641.52	27.52	24.307		
3,200.00	3,197.81	3,106.33	3,044.01	14.12	15.47	-38.31	-757.39	-63.24	688.31	659.91	28.40	24.237		
3,300.00	3,297.73	3,204.45	3,139.62	14.56	15.97	-38.31	-779.32	-65.58	707.58	678.31	29.28	24.170		
3,400.00	3,397.65	3,302.58	3,235.24	14.99	16.47	-38.31	-801.26	-67.92	726.85	696.70	30.15	24.105		
3,500.00	3,497.56	3,400.71	3,330.85	15.42	16.97	-38.31	-823.19	-70.26	746.12	715.09	31.03	24.043		
3,600.00	3,597.48	3,501.17	3,426.46	15.85	17.48	-38.31	-845.13	-72.60	765.39	733.47	31.92	23.975		
3,700.00	3,697.40	3,603.04	3,522.08	16.28	18.00	-38.31	-867.06	-74.94	784.66	751.84	32.82	23.905		
3,800.00	3,797.32	3,704.92	3,617.69	16.72	18.52	-38.31	-889.00	-77.28	803.93	770.21	33.73	23.838		
3,900.00	3,897.24	3,806.79	3,713.31	17.15	19.04	-38.31	-910.94	-79.62	823.20	788.57	34.63	23.773		
4,000.00	3,997.16	3,908.66	3,808.92	17.59	19.57	-38.31	-932.87	-81.96	842.47	806.94	35.53	23.711		
4,100.00	4,097.08	3,989.46	3,904.53	18.02	19.98	-38.31	-954.81	-84.30	861.74	825.40	36.34	23.716		
4,200.00	4,197.00	4,087.59	4,000.15	18.46	20.48	-38.31	-976.74	-86.64	881.01	843.79	37.22	23.668		
4,300.00	4,296.92	4,185.71	4,095.76	18.89	20.99	-38.31	-998.68	-88.97	900.28	862.17	38.11	23.622		
4,400.00	4,396.84	4,283.84	4,191.37	19.33	21.49	-38.31	-1,020.62	-91.31	919.55	880.55	39.00	23.578		
4,500.00	4,496.76	4,381.96	4,286.99	19.77	21.99	-38.31	-1,042.55	-93.65	938.82	898.93	39.89	23.535		
4,600.00	4,596.68	4,480.09	4,382.60	20.20	22.50	-38.31	-1,064.49	-95.99	958.09	917.31	40.78	23.494		
4,700.00	4,696.60	4,578.22	4,478.22	20.64	23.00	-38.31	-1,086.42	-98.33	977.36	935.69	41.67	23.454		
4,800.00	4,796.52	4,676.34	4,573.83	21.08	23.51	-38.31	-1,108.36	-100.67	996.63	954.06	42.56	23.415		
4,900.00	4,896.44	4,774.47	4,669.44	21.51	24.01	-38.31	-1,130.29	-103.01	1,015.90	972.44	43.46	23.378		
5,000.00	4,996.36	4,872.59	4,765.06	21.95	24.52	-38.31	-1,152.23	-105.35	1,035.17	990.82	44.35	23.341		
5,100.00	5,096.28	4,970.72	4,860.67	22.39	25.02	-38.32	-1,174.17	-107.69	1,054.44	1,009.20	45.24	23.306		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,068.85	4,956.29	22.83	25.53	-38.32	-1,196.10	-110.03	1,073.71	1,027.57	46.14	23.273		
5,300.00	5,296.11	5,166.97	5,051.90	23.27	26.03	-38.32	-1,218.04	-112.37	1,092.98	1,045.95	47.03	23.240		
5,400.00	5,396.03	5,265.10	5,147.51	23.71	26.54	-38.32	-1,239.97	-114.71	1,112.25	1,064.32	47.93	23.208		
5,500.00	5,495.95	5,363.22	5,243.13	24.14	27.05	-38.32	-1,261.91	-117.05	1,131.52	1,082.70	48.82	23.177		
5,600.00	5,595.87	5,461.35	5,338.74	24.58	27.55	-38.32	-1,283.84	-119.38	1,150.79	1,101.07	49.72	23.147		
5,700.00	5,695.79	5,559.47	5,434.36	25.02	28.06	-38.32	-1,305.78	-121.72	1,170.06	1,119.44	50.61	23.118		
5,800.00	5,795.71	5,657.60	5,529.97	25.46	28.57	-38.32	-1,327.72	-124.06	1,189.33	1,137.82	51.51	23.090		
5,900.00	5,895.63	5,755.73	5,625.58	25.90	29.07	-38.32	-1,349.65	-126.40	1,208.59	1,156.19	52.40	23.063		
6,000.00	5,995.55	5,853.85	5,721.20	26.34	29.58	-38.32	-1,371.59	-128.74	1,227.86	1,174.56	53.30	23.036		
6,100.00	6,095.47	5,951.98	5,816.81	26.78	30.09	-38.32	-1,393.52	-131.08	1,247.13	1,192.94	54.20	23.011		
6,200.00	6,195.39	6,050.10	5,912.43	27.22	30.59	-38.32	-1,415.46	-133.42	1,266.40	1,211.31	55.10	22.986		
6,300.00	6,295.31	6,148.23	6,008.04	27.66	31.10	-38.32	-1,437.40	-135.76	1,285.67	1,229.68	55.99	22.961		
6,400.00	6,395.23	6,246.36	6,103.65	28.10	31.61	-38.32	-1,459.33	-138.10	1,304.94	1,248.05	56.89	22.937		
6,500.00	6,495.02	6,344.42	6,199.21	28.54	32.12	-73.07	-1,481.25	-140.44	1,324.19	1,266.40	57.79	22.914		
6,600.00	6,593.09	6,441.13	6,293.45	28.98	32.62	-81.11	-1,502.87	-142.74	1,343.25	1,284.57	58.69	22.888		
6,700.00	6,687.01	6,534.16	6,384.09	29.41	33.10	-83.06	-1,523.67	-144.96	1,362.20	1,302.63	59.57	22.865		
6,800.00	6,774.46	6,622.64	6,470.31	29.83	33.56	-84.10	-1,543.45	-147.14	1,381.55	1,321.08	60.47	22.848		
6,900.00	6,853.31	6,727.27	6,571.41	30.26	34.09	-85.13	-1,566.71	-159.72	1,401.28	1,339.71	61.57	22.760		
7,000.00	6,921.60	6,845.00	6,680.99	30.76	34.65	-86.12	-1,592.06	-193.95	1,420.58	1,357.76	62.82	22.615		
7,100.00	6,977.66	6,980.13	6,796.65	31.38	35.21	-87.20	-1,618.99	-257.89	1,438.58	1,374.40	64.18	22.416		
7,200.00	7,020.10	7,137.17	6,910.95	32.17	35.78	-88.36	-1,645.87	-361.58	1,454.09	1,388.43	65.65	22.148		
7,300.00	7,047.88	7,318.61	7,007.55	33.13	36.36	-89.44	-1,669.00	-512.69	1,465.58	1,398.13	67.45	21.728		
7,400.00	7,060.32	7,520.59	7,061.52	34.27	37.26	-90.12	-1,682.63	-705.96	1,471.44	1,401.43	70.01	21.017		
7,500.00	7,060.70	7,661.42	7,065.86	35.56	38.42	-90.20	-1,684.54	-846.60	1,471.93	1,399.10	72.83	20.211		
7,600.00	7,060.27	7,761.42	7,065.63	37.02	39.57	-90.21	-1,685.14	-946.60	1,471.93	1,396.28	75.65	19.457		
7,700.00	7,059.83	7,861.42	7,065.40	38.64	40.95	-90.22	-1,685.74	-1,046.59	1,471.93	1,393.14	78.79	18.682		
7,800.00	7,059.40	7,961.42	7,065.17	40.40	42.51	-90.22	-1,686.34	-1,146.59	1,471.93	1,389.73	82.20	17.906		
7,900.00	7,058.97	8,061.42	7,064.94	42.28	44.22	-90.23	-1,686.94	-1,246.59	1,471.93	1,386.07	85.86	17.143		
8,000.00	7,058.53	8,161.42	7,064.71	44.27	46.05	-90.24	-1,687.54	-1,346.59	1,471.93	1,382.19	89.74	16.403		
8,100.00	7,058.10	8,261.42	7,064.48	46.35	47.99	-90.25	-1,688.14	-1,446.58	1,471.93	1,378.13	93.80	15.692		
8,200.00	7,057.66	8,361.42	7,064.25	48.50	50.03	-90.26	-1,688.74	-1,546.58	1,471.93	1,373.91	98.03	15.015		
8,300.00	7,057.23	8,461.42	7,064.02	50.73	52.14	-90.26	-1,689.33	-1,646.58	1,471.93	1,369.53	102.40	14.374		
8,400.00	7,056.80	8,561.42	7,063.79	53.02	54.33	-90.27	-1,689.93	-1,746.58	1,471.94	1,365.03	106.90	13.769		
8,500.00	7,056.36	8,661.42	7,063.56	55.36	56.58	-90.28	-1,690.53	-1,846.58	1,471.94	1,360.42	111.51	13.200		
8,600.00	7,055.93	8,761.42	7,063.33	57.74	58.88	-90.29	-1,691.13	-1,946.57	1,471.94	1,355.72	116.22	12.665		
8,700.00	7,055.49	8,861.42	7,063.09	60.17	61.23	-90.30	-1,691.73	-2,046.57	1,471.94	1,350.92	121.02	12.163		
8,800.00	7,055.06	8,961.42	7,062.86	62.63	63.62	-90.30	-1,692.33	-2,146.57	1,471.94	1,346.05	125.89	11.692		
8,900.00	7,054.63	9,061.42	7,062.63	65.13	66.05	-90.31	-1,692.93	-2,246.57	1,471.94	1,341.11	130.83	11.251		
9,000.00	7,054.19	9,161.42	7,062.40	67.66	68.52	-90.32	-1,693.53	-2,346.56	1,471.94	1,336.11	135.84	10.836		
9,100.00	7,053.76	9,261.42	7,062.17	70.21	71.01	-90.33	-1,694.13	-2,446.56	1,471.94	1,331.05	140.89	10.447		
9,200.00	7,053.32	9,361.42	7,061.94	72.78	73.53	-90.34	-1,694.72	-2,546.56	1,471.94	1,325.95	146.00	10.082		
9,300.00	7,052.89	9,461.42	7,061.71	75.38	76.08	-90.34	-1,695.32	-2,646.56	1,471.95	1,320.80	151.15	9.739		
9,400.00	7,052.46	9,561.42	7,061.48	77.99	78.64	-90.35	-1,695.92	-2,746.55	1,471.95	1,315.61	156.34	9.415		
9,500.00	7,052.02	9,661.42	7,061.25	80.62	81.23	-90.36	-1,696.52	-2,846.55	1,471.95	1,310.39	161.56	9.111		
9,600.00	7,051.59	9,761.42	7,061.02	83.26	83.83	-90.37	-1,697.12	-2,946.55	1,471.95	1,305.13	166.82	8.824		
9,700.00	7,051.15	9,861.42	7,060.79	85.92	86.45	-90.38	-1,697.72	-3,046.55	1,471.95	1,299.85	172.10	8.553		
9,800.00	7,050.72	9,961.42	7,060.56	88.59	89.09	-90.38	-1,698.32	-3,146.55	1,471.95	1,294.54	177.41	8.297		
9,900.00	7,050.29	10,061.42	7,060.33	91.28	91.74	-90.39	-1,698.92	-3,246.54	1,471.95	1,289.20	182.75	8.054		
10,000.00	7,049.85	10,161.42	7,060.10	93.97	94.40	-90.40	-1,699.52	-3,346.54	1,471.96	1,283.84	188.11	7.825		
10,100.00	7,049.42	10,261.42	7,059.87	96.67	97.07	-90.41	-1,700.11	-3,446.54	1,471.96	1,278.47	193.49	7.607		
10,200.00	7,048.98	10,361.42	7,059.64	99.38	99.75	-90.41	-1,700.71	-3,546.54	1,471.96	1,273.07	198.89	7.401		
10,300.00	7,048.55	10,461.42	7,059.41	102.10	102.44	-90.42	-1,701.31	-3,646.53	1,471.96	1,267.65	204.31	7.205		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	10,561.42	7,059.18	104.83	105.14	-90.43	-1,701.91	-3,746.53	1,471.96	1,262.22	209.74	7.018		
10,500.00	7,047.68	10,661.42	7,058.95	107.56	107.85	-90.44	-1,702.51	-3,846.53	1,471.96	1,256.78	215.18	6.840		
10,600.00	7,047.25	10,761.42	7,058.72	110.30	110.57	-90.45	-1,703.11	-3,946.53	1,471.96	1,251.32	220.64	6.671		
10,700.00	7,046.81	10,861.42	7,058.49	113.05	113.29	-90.45	-1,703.71	-4,046.53	1,471.97	1,245.85	226.12	6.510		
10,800.00	7,046.38	10,961.42	7,058.26	115.80	116.02	-90.46	-1,704.31	-4,146.52	1,471.97	1,240.37	231.60	6.356		
10,900.00	7,045.95	11,061.42	7,058.03	118.55	118.76	-90.47	-1,704.90	-4,246.52	1,471.97	1,234.87	237.10	6.208		
11,000.00	7,045.51	11,161.42	7,057.80	121.31	121.50	-90.48	-1,705.50	-4,346.52	1,471.97	1,229.37	242.60	6.067		
11,100.00	7,045.08	11,261.42	7,057.57	124.08	124.25	-90.49	-1,706.10	-4,446.52	1,471.97	1,223.85	248.12	5.933		
11,200.00	7,044.64	11,361.42	7,057.34	126.85	127.00	-90.49	-1,706.70	-4,546.51	1,471.98	1,218.33	253.64	5.803		
11,300.00	7,044.21	11,461.42	7,057.10	129.62	129.76	-90.50	-1,707.30	-4,646.51	1,471.98	1,212.80	259.18	5.679		
11,400.00	7,043.78	11,561.42	7,056.87	132.40	132.52	-90.51	-1,707.90	-4,746.51	1,471.98	1,207.26	264.72	5.561		
11,500.00	7,043.34	11,661.42	7,056.64	135.18	135.28	-90.52	-1,708.50	-4,846.51	1,471.98	1,201.72	270.26	5.446		
11,600.00	7,042.91	11,761.42	7,056.41	137.96	138.05	-90.53	-1,709.10	-4,946.50	1,471.98	1,196.16	275.82	5.337		
11,700.00	7,042.47	11,861.41	7,056.18	140.75	140.83	-90.53	-1,709.70	-5,046.50	1,471.98	1,190.60	281.38	5.231		
11,800.00	7,042.04	11,961.41	7,055.95	143.54	143.60	-90.54	-1,710.29	-5,146.50	1,471.99	1,185.04	286.95	5.130		
11,900.00	7,041.61	12,061.41	7,055.72	146.33	146.38	-90.55	-1,710.89	-5,246.50	1,471.99	1,179.47	292.52	5.032		
12,000.00	7,041.17	12,161.41	7,055.49	149.13	149.16	-90.56	-1,711.49	-5,346.50	1,471.99	1,173.89	298.10	4.938		
12,100.00	7,040.74	12,261.41	7,055.26	151.92	151.95	-90.57	-1,712.09	-5,446.49	1,471.99	1,168.31	303.68	4.847		
12,200.00	7,040.30	12,361.41	7,055.03	154.72	154.74	-90.57	-1,712.69	-5,546.49	1,471.99	1,162.72	309.27	4.760		
12,300.00	7,039.87	12,461.41	7,054.80	157.52	157.53	-90.58	-1,713.29	-5,646.49	1,472.00	1,157.13	314.86	4.675		
12,400.00	7,039.44	12,561.41	7,054.57	160.33	160.32	-90.59	-1,713.89	-5,746.49	1,472.00	1,151.54	320.46	4.593		
12,500.00	7,039.00	12,661.41	7,054.34	163.13	163.11	-90.60	-1,714.49	-5,846.48	1,472.00	1,145.94	326.06	4.514		
12,600.00	7,038.57	12,761.41	7,054.11	165.94	165.91	-90.60	-1,715.08	-5,946.48	1,472.00	1,140.34	331.67	4.438		
12,700.00	7,038.13	12,861.41	7,053.88	168.75	168.71	-90.61	-1,715.68	-6,046.48	1,472.01	1,134.73	337.28	4.364		
12,800.00	7,037.70	12,961.41	7,053.65	171.56	171.51	-90.62	-1,716.28	-6,146.48	1,472.01	1,129.12	342.89	4.293		
12,900.00	7,037.27	13,061.41	7,053.42	174.37	174.32	-90.63	-1,716.88	-6,246.48	1,472.01	1,123.51	348.51	4.224		
13,000.00	7,036.83	13,161.41	7,053.19	177.19	177.12	-90.64	-1,717.48	-6,346.47	1,472.01	1,117.89	354.12	4.157		
13,100.00	7,036.40	13,261.41	7,052.96	180.00	179.93	-90.64	-1,718.08	-6,446.47	1,472.01	1,112.27	359.75	4.092		
13,200.00	7,035.96	13,361.41	7,052.73	182.82	182.73	-90.65	-1,718.68	-6,546.47	1,472.02	1,106.65	365.37	4.029		
13,300.00	7,035.53	13,461.41	7,052.50	185.64	185.54	-90.66	-1,719.28	-6,646.47	1,472.02	1,101.02	371.00	3.968		
13,400.00	7,035.10	13,561.41	7,052.27	188.46	188.36	-90.67	-1,719.88	-6,746.46	1,472.02	1,095.39	376.63	3.908		
13,500.00	7,034.66	13,661.41	7,052.04	191.28	191.17	-90.68	-1,720.47	-6,846.46	1,472.02	1,089.76	382.26	3.851		
13,600.00	7,034.23	13,761.41	7,051.81	194.10	193.98	-90.68	-1,721.07	-6,946.46	1,472.03	1,084.13	387.90	3.795		
13,700.00	7,033.79	13,861.41	7,051.58	196.92	196.80	-90.69	-1,721.67	-7,046.46	1,472.03	1,078.49	393.54	3.741		
13,800.00	7,033.36	13,961.41	7,051.34	199.74	199.61	-90.70	-1,722.27	-7,146.46	1,472.03	1,072.86	399.18	3.688		
13,900.00	7,032.93	14,061.41	7,051.11	202.57	202.43	-90.71	-1,722.87	-7,246.45	1,472.03	1,067.22	404.82	3.636		
14,000.00	7,032.49	14,161.41	7,050.88	205.39	205.25	-90.72	-1,723.47	-7,346.45	1,472.04	1,061.57	410.46	3.586		
14,100.00	7,032.06	14,261.41	7,050.65	208.22	208.07	-90.72	-1,724.07	-7,446.45	1,472.04	1,055.93	416.11	3.538		
14,200.00	7,031.62	14,361.41	7,050.42	211.05	210.89	-90.73	-1,724.67	-7,546.45	1,472.04	1,050.29	421.76	3.490		
14,300.00	7,031.19	14,461.41	7,050.19	213.87	213.71	-90.74	-1,725.26	-7,646.44	1,472.05	1,044.64	427.41	3.444		
14,400.00	7,030.76	14,561.41	7,049.96	216.70	216.54	-90.75	-1,725.86	-7,746.44	1,472.05	1,038.99	433.06	3.399		
14,500.00	7,030.32	14,661.41	7,049.73	219.53	219.36	-90.76	-1,726.46	-7,846.44	1,472.05	1,033.34	438.71	3.355		
14,600.00	7,029.89	14,761.41	7,049.50	222.36	222.19	-90.76	-1,727.06	-7,946.44	1,472.05	1,027.69	444.37	3.313		
14,700.00	7,029.45	14,861.41	7,049.27	225.19	225.01	-90.77	-1,727.66	-8,046.43	1,472.06	1,022.03	450.02	3.271		
14,800.00	7,029.02	14,961.41	7,049.04	228.03	227.84	-90.78	-1,728.26	-8,146.43	1,472.06	1,016.38	455.68	3.230		
14,805.04	7,029.00	14,966.45	7,049.03	228.17	227.98	-90.78	-1,728.29	-8,151.47	1,472.06	1,016.09	455.96	3.228 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-179.49	-279.80	-2.50	279.81					
100.00	100.00	102.00	100.00	3.28	3.29	-179.49	-279.80	-2.50	279.81	273.24	6.57	42.590		
200.00	200.00	198.00	200.00	3.34	3.34	-179.49	-279.80	-2.50	279.81	273.14	6.67	41.935 CC, ES		
300.00	300.00	289.26	291.25	3.44	3.43	-179.47	-281.19	-2.59	281.33	274.45	6.88	40.889		
400.00	400.00	380.17	382.05	3.60	3.56	-179.43	-285.45	-2.86	286.03	278.84	7.19	39.769		
500.00	499.98	470.82	472.41	3.80	3.73	-37.66	-292.56	-3.31	292.50	284.92	7.58	38.570		
600.00	599.90	561.16	562.21	4.02	3.94	-37.96	-302.49	-3.95	300.37	292.33	8.04	37.351		
700.00	699.82	650.98	651.12	4.28	4.17	-38.23	-315.15	-4.75	311.34	302.77	8.56	36.357		
800.00	799.74	740.10	738.91	4.57	4.44	-38.45	-330.46	-5.72	325.41	316.27	9.13	35.633		
900.00	899.66	828.36	825.33	4.88	4.74	-38.61	-348.30	-6.86	342.53	332.79	9.73	35.190		
1,000.00	999.58	915.61	910.19	5.21	5.06	-38.72	-368.53	-8.14	362.65	352.29	10.36	35.011		
1,100.00	1,099.50	1,001.70	993.28	5.55	5.40	-38.79	-391.02	-9.57	385.73	374.73	11.00	35.065		
1,200.00	1,199.42	1,086.51	1,074.43	5.91	5.77	-38.83	-415.60	-11.13	411.68	400.03	11.65	35.335		
1,300.00	1,299.34	1,169.92	1,153.49	6.28	6.15	-38.83	-442.10	-12.82	440.45	428.15	12.31	35.793		
1,400.00	1,399.26	1,255.19	1,233.53	6.66	6.56	-38.81	-471.46	-14.69	471.88	458.91	12.98	36.367		
1,500.00	1,499.18	1,349.87	1,322.14	7.04	7.04	-38.78	-504.75	-16.80	504.07	490.35	13.71	36.756		
1,600.00	1,599.10	1,444.55	1,410.75	7.43	7.54	-38.76	-538.03	-18.92	536.25	521.78	14.47	37.049		
1,700.00	1,699.01	1,539.23	1,499.36	7.83	8.05	-38.74	-571.32	-21.03	568.44	553.19	15.25	37.268		
1,800.00	1,798.93	1,633.91	1,587.97	8.23	8.56	-38.72	-604.60	-23.15	600.62	584.58	16.05	37.429		
1,900.00	1,898.85	1,728.59	1,676.58	8.64	9.09	-38.70	-637.89	-25.26	632.81	615.95	16.86	37.544		
2,000.00	1,998.77	1,823.27	1,765.19	9.05	9.62	-38.69	-671.17	-27.38	665.00	647.32	17.67	37.624		
2,100.00	2,098.69	1,917.94	1,853.80	9.46	10.16	-38.67	-704.46	-29.49	697.18	678.68	18.50	37.676		
2,200.00	2,198.61	2,012.62	1,942.41	9.88	10.70	-38.66	-737.74	-31.61	729.37	710.02	19.34	37.707		
2,300.00	2,298.53	2,107.30	2,031.02	10.30	11.24	-38.65	-771.03	-33.72	761.55	741.36	20.19	37.721		
2,400.00	2,398.45	2,201.98	2,119.63	10.72	11.79	-38.64	-804.31	-35.84	793.74	772.70	21.04	37.721		
2,500.00	2,498.37	2,303.34	2,208.24	11.14	12.39	-38.63	-837.60	-37.96	825.92	803.99	21.93	37.654		
2,600.00	2,598.29	2,408.66	2,296.85	11.56	13.00	-38.62	-870.88	-40.07	858.11	835.26	22.85	37.550		
2,700.00	2,698.21	2,486.02	2,385.46	11.98	13.46	-38.61	-904.17	-42.19	890.30	866.66	23.63	37.670		
2,800.00	2,798.13	2,580.70	2,474.07	12.41	14.02	-38.60	-937.45	-44.30	922.48	897.97	24.51	37.642		
2,900.00	2,898.05	2,675.37	2,562.68	12.84	14.58	-38.59	-970.74	-46.42	954.67	929.28	25.38	37.609		
3,000.00	2,997.97	2,770.05	2,651.29	13.27	15.14	-38.59	-1,004.02	-48.53	986.85	960.59	26.26	37.575		
3,100.00	3,097.89	2,864.73	2,739.90	13.69	15.71	-38.58	-1,037.31	-50.65	1,019.04	991.89	27.15	37.538		
3,200.00	3,197.81	2,959.41	2,828.51	14.12	16.28	-38.57	-1,070.59	-52.76	1,051.22	1,023.19	28.03	37.500		
3,300.00	3,297.73	3,054.09	2,917.12	14.56	16.84	-38.57	-1,103.88	-54.88	1,083.41	1,054.49	28.92	37.461		
3,400.00	3,397.65	3,148.77	3,005.73	14.99	17.41	-38.56	-1,137.16	-57.00	1,115.60	1,085.78	29.81	37.421		
3,500.00	3,497.56	3,243.45	3,094.34	15.42	17.98	-38.56	-1,170.45	-59.11	1,147.78	1,117.08	30.70	37.381		
3,600.00	3,597.48	3,338.13	3,182.94	15.85	18.55	-38.55	-1,203.74	-61.23	1,179.97	1,148.37	31.60	37.341		
3,700.00	3,697.40	3,432.80	3,271.55	16.28	19.12	-38.55	-1,237.02	-63.34	1,212.15	1,179.66	32.50	37.301		
3,800.00	3,797.32	3,527.48	3,360.16	16.72	19.69	-38.55	-1,270.31	-65.46	1,244.34	1,210.95	33.39	37.262		
3,900.00	3,897.24	3,622.16	3,448.77	17.15	20.27	-38.54	-1,303.59	-67.57	1,276.53	1,242.23	34.29	37.223		
4,000.00	3,997.16	3,716.84	3,537.38	17.59	20.84	-38.54	-1,336.88	-69.69	1,308.71	1,273.52	35.20	37.185		
4,100.00	4,097.08	3,811.52	3,625.99	18.02	21.41	-38.53	-1,370.16	-71.80	1,340.90	1,304.80	36.10	37.147		
4,200.00	4,197.00	3,906.20	3,714.60	18.46	21.99	-38.53	-1,403.45	-73.92	1,373.08	1,336.08	37.00	37.109		
4,300.00	4,296.92	4,000.88	3,803.21	18.89	22.56	-38.53	-1,436.73	-76.04	1,405.27	1,367.36	37.91	37.073		
4,400.00	4,396.84	4,104.45	3,891.82	19.33	23.19	-38.52	-1,470.02	-78.15	1,437.46	1,398.60	38.86	36.993		
4,500.00	4,496.76	4,209.77	3,980.43	19.77	23.83	-38.52	-1,503.30	-80.27	1,469.64	1,429.82	39.82	36.907		
4,600.00	4,596.68	4,284.91	4,069.04	20.20	24.29	-38.52	-1,536.59	-82.38	1,501.83	1,461.20	40.63	36.968		
4,700.00	4,696.60	4,379.59	4,157.65	20.64	24.87	-38.51	-1,569.87	-84.50	1,534.01	1,492.48	41.53	36.934		
4,800.00	4,796.52	4,474.27	4,246.26	21.08	25.44	-38.51	-1,603.16	-86.61	1,566.20	1,523.76	42.44	36.901		
4,900.00	4,896.44	4,568.95	4,334.87	21.51	26.02	-38.51	-1,636.44	-88.73	1,598.39	1,555.03	43.35	36.869		
5,000.00	4,996.36	4,663.63	4,423.48	21.95	26.60	-38.51	-1,669.73	-90.84	1,630.57	1,586.31	44.26	36.837		
5,100.00	5,096.28	4,758.31	4,512.09	22.39	27.17	-38.50	-1,703.01	-92.96	1,662.76	1,617.58	45.18	36.807		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	4,852.98	4,600.70	22.83	27.75	-38.50	-1,736.30	-95.08	1,694.94	1,648.86	46.09	36.777		
5,300.00	5,296.11	4,947.66	4,689.31	23.27	28.33	-38.50	-1,769.58	-97.19	1,727.13	1,680.13	47.00	36.747		
5,400.00	5,396.03	5,042.34	4,777.92	23.71	28.91	-38.50	-1,802.87	-99.31	1,759.32	1,711.40	47.91	36.719		
5,500.00	5,495.95	5,137.02	4,866.53	24.14	29.49	-38.50	-1,836.15	-101.42	1,791.50	1,742.67	48.83	36.691		
5,600.00	5,595.87	5,231.70	4,955.14	24.58	30.06	-38.49	-1,869.44	-103.54	1,823.69	1,773.95	49.74	36.663		
5,700.00	5,695.79	5,326.38	5,043.75	25.02	30.64	-38.49	-1,902.72	-105.65	1,855.87	1,805.22	50.66	36.636		
5,800.00	5,795.71	5,421.06	5,132.36	25.46	31.22	-38.49	-1,936.01	-107.77	1,888.06	1,836.49	51.57	36.610		
5,900.00	5,895.63	5,515.74	5,220.97	25.90	31.80	-38.49	-1,969.29	-109.88	1,920.25	1,867.76	52.49	36.585		
6,000.00	5,995.55	5,610.41	5,309.58	26.34	32.38	-38.49	-2,002.58	-112.00	1,952.43	1,899.03	53.40	36.560		
6,100.00	6,095.47	5,705.09	5,398.19	26.78	32.96	-38.48	-2,035.86	-114.11	1,984.62	1,930.30	54.32	36.535		
6,200.00	6,195.39	5,800.23	5,486.80	27.22	33.54	-38.48	-2,069.15	-116.23	2,016.80	1,961.56	55.24	36.510		
6,300.00	6,295.31	5,905.55	5,575.41	27.66	34.19	-38.48	-2,102.43	-118.35	2,048.99	1,992.77	56.21	36.450		
6,400.00	6,395.23	5,989.13	5,664.02	28.10	34.70	-38.48	-2,135.72	-120.46	2,081.18	2,024.10	57.07	36.465		
6,500.00	6,495.02	6,083.75	5,752.57	28.54	35.28	-72.48	-2,168.98	-122.58	2,113.34	2,055.35	57.99	36.442		
6,600.00	6,593.09	6,177.07	5,839.91	28.98	35.85	-79.02	-2,201.79	-124.66	2,145.13	2,086.22	58.91	36.415		
6,700.00	6,687.01	6,266.83	5,923.92	29.41	36.40	-79.32	-2,233.35	-126.67	2,176.10	2,116.29	59.81	36.384		
6,800.00	6,774.46	6,350.83	6,002.54	29.83	36.91	-78.68	-2,262.88	-128.54	2,206.12	2,145.42	60.70	36.346		
6,900.00	6,853.31	6,427.00	6,073.82	30.26	37.38	-77.81	-2,289.65	-130.25	2,235.26	2,173.67	61.59	36.295		
7,000.00	6,921.60	6,506.55	6,136.01	30.76	37.87	-76.82	-2,313.02	-131.73	2,263.72	2,201.15	62.57	36.177		
7,100.00	6,977.66	6,548.56	6,187.59	31.38	38.13	-75.65	-2,332.39	-132.96	2,291.76	2,228.27	63.48	36.101		
7,200.00	7,020.10	6,609.04	6,227.27	32.17	38.50	-74.25	-2,347.30	-133.91	2,319.55	2,254.90	64.65	35.881		
7,300.00	7,047.88	6,619.62	6,254.09	33.13	38.56	-72.53	-2,357.37	-134.55	2,347.15	2,281.45	65.70	35.723		
7,400.00	7,060.32	6,633.82	6,267.39	34.27	38.65	-70.48	-2,362.37	-134.87	2,374.40	2,307.48	66.92	35.482		
7,500.00	7,060.70	6,636.64	6,270.02	35.56	38.67	-69.78	-2,363.36	-134.93	2,402.04	2,333.86	68.17	35.233		
7,600.00	7,060.27	6,638.68	6,271.93	37.02	38.68	-69.83	-2,364.07	-134.98	2,433.23	2,363.69	69.54	34.993		
7,700.00	7,059.83	6,640.71	6,273.83	38.64	38.69	-69.88	-2,364.79	-135.02	2,468.08	2,397.11	70.97	34.777		
7,800.00	7,059.40	6,642.75	6,275.74	40.40	38.70	-69.93	-2,365.51	-135.07	2,506.44	2,433.99	72.45	34.597		
7,900.00	7,058.97	8,506.13	7,244.70	42.28	48.54	-94.21	-2,737.89	-1,241.48	2,529.71	2,442.23	87.48	28.918		
8,000.00	7,058.53	8,606.13	7,244.20	44.27	49.97	-94.21	-2,738.48	-1,341.48	2,529.69	2,438.47	91.22	27.731		
8,100.00	7,058.10	8,706.13	7,243.70	46.35	51.58	-94.21	-2,739.07	-1,441.47	2,529.68	2,434.52	95.16	26.583		
8,200.00	7,057.66	8,806.13	7,243.20	48.50	53.35	-94.21	-2,739.65	-1,541.47	2,529.66	2,430.39	99.27	25.483		
8,300.00	7,057.23	8,906.13	7,242.70	50.73	55.24	-94.20	-2,740.24	-1,641.47	2,529.65	2,426.12	103.53	24.434		
8,400.00	7,056.80	9,006.13	7,242.20	53.02	57.24	-94.20	-2,740.83	-1,741.47	2,529.63	2,421.70	107.93	23.439		
8,500.00	7,056.36	9,106.13	7,241.70	55.36	59.32	-94.20	-2,741.42	-1,841.46	2,529.62	2,417.18	112.44	22.498		
8,600.00	7,055.93	9,206.13	7,241.19	57.74	61.47	-94.20	-2,742.01	-1,941.46	2,529.60	2,412.55	117.05	21.611		
8,700.00	7,055.49	9,306.13	7,240.69	60.17	63.69	-94.20	-2,742.60	-2,041.46	2,529.58	2,407.83	121.76	20.775		
8,800.00	7,055.06	9,406.13	7,240.19	62.63	65.95	-94.20	-2,743.18	-2,141.45	2,529.57	2,403.02	126.55	19.989		
8,900.00	7,054.63	9,506.13	7,239.69	65.13	68.27	-94.20	-2,743.77	-2,241.45	2,529.55	2,398.14	131.41	19.249		
9,000.00	7,054.19	9,606.13	7,239.19	67.66	70.63	-94.19	-2,744.36	-2,341.45	2,529.54	2,393.20	136.34	18.554		
9,100.00	7,053.76	9,706.13	7,238.69	70.21	73.03	-94.19	-2,744.95	-2,441.44	2,529.52	2,388.20	141.32	17.899		
9,200.00	7,053.32	9,806.13	7,238.19	72.78	75.46	-94.19	-2,745.54	-2,541.44	2,529.51	2,383.15	146.36	17.283		
9,300.00	7,052.89	9,906.13	7,237.69	75.38	77.92	-94.19	-2,746.12	-2,641.44	2,529.49	2,378.05	151.45	16.702		
9,400.00	7,052.46	10,006.13	7,237.19	77.99	80.41	-94.19	-2,746.71	-2,741.44	2,529.48	2,372.90	156.57	16.155		
9,500.00	7,052.02	10,106.13	7,236.69	80.62	82.93	-94.19	-2,747.30	-2,841.43	2,529.46	2,367.72	161.74	15.639		
9,600.00	7,051.59	10,206.13	7,236.19	83.26	85.46	-94.19	-2,747.89	-2,941.43	2,529.45	2,362.50	166.94	15.152		
9,700.00	7,051.15	10,306.13	7,235.69	85.92	88.02	-94.18	-2,748.48	-3,041.43	2,529.43	2,357.26	172.18	14.691		
9,800.00	7,050.72	10,406.13	7,235.19	88.59	90.60	-94.18	-2,749.07	-3,141.42	2,529.42	2,351.98	177.44	14.255		
9,900.00	7,050.29	10,506.13	7,234.69	91.28	93.19	-94.18	-2,749.65	-3,241.42	2,529.40	2,346.67	182.73	13.842		
10,000.00	7,049.85	10,606.13	7,234.19	93.97	95.80	-94.18	-2,750.24	-3,341.42	2,529.38	2,341.34	188.04	13.451		
10,100.00	7,049.42	10,706.13	7,233.68	96.67	98.42	-94.18	-2,750.83	-3,441.41	2,529.37	2,335.99	193.38	13.080		
10,200.00	7,048.98	10,806.13	7,233.18	99.38	101.05	-94.18	-2,751.42	-3,541.41	2,529.35	2,330.62	198.73	12.727		
10,300.00	7,048.55	10,906.13	7,232.68	102.10	103.70	-94.17	-2,752.01	-3,641.41	2,529.34	2,325.23	204.11	12.392		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	11,006.13	7,232.18	104.83	106.36	-94.17	-2,752.59	-3,741.40	2,529.32	2,319.82	209.50	12.073		
10,500.00	7,047.68	11,106.13	7,231.68	107.56	109.03	-94.17	-2,753.18	-3,841.40	2,529.31	2,314.40	214.91	11.769		
10,600.00	7,047.25	11,206.13	7,231.18	110.30	111.71	-94.17	-2,753.77	-3,941.40	2,529.29	2,308.96	220.34	11.479		
10,700.00	7,046.81	11,306.13	7,230.68	113.05	114.39	-94.17	-2,754.36	-4,041.40	2,529.28	2,303.50	225.77	11.203		
10,800.00	7,046.38	11,406.13	7,230.18	115.80	117.09	-94.17	-2,754.95	-4,141.39	2,529.26	2,298.04	231.22	10.939		
10,900.00	7,045.95	11,506.13	7,229.68	118.55	119.79	-94.17	-2,755.54	-4,241.39	2,529.25	2,292.56	236.69	10.686		
11,000.00	7,045.51	11,606.13	7,229.18	121.31	122.50	-94.16	-2,756.12	-4,341.39	2,529.23	2,287.07	242.16	10.444		
11,100.00	7,045.08	11,706.13	7,228.68	124.08	125.22	-94.16	-2,756.71	-4,441.38	2,529.21	2,281.57	247.65	10.213		
11,200.00	7,044.64	11,806.13	7,228.18	126.85	127.94	-94.16	-2,757.30	-4,541.38	2,529.20	2,276.06	253.14	9.991		
11,300.00	7,044.21	11,906.13	7,227.68	129.62	130.67	-94.16	-2,757.89	-4,641.38	2,529.18	2,270.54	258.64	9.779		
11,400.00	7,043.78	12,006.13	7,227.18	132.40	133.41	-94.16	-2,758.48	-4,741.37	2,529.17	2,265.01	264.16	9.575		
11,500.00	7,043.34	12,106.13	7,226.68	135.18	136.15	-94.16	-2,759.06	-4,841.37	2,529.15	2,259.48	269.68	9.378		
11,600.00	7,042.91	12,206.13	7,226.17	137.96	138.89	-94.16	-2,759.65	-4,941.37	2,529.14	2,253.93	275.20	9.190		
11,700.00	7,042.47	12,306.13	7,225.67	140.75	141.64	-94.15	-2,760.24	-5,041.37	2,529.12	2,248.38	280.74	9.009		
11,800.00	7,042.04	12,406.13	7,225.17	143.54	144.40	-94.15	-2,760.83	-5,141.36	2,529.11	2,242.83	286.28	8.834		
11,900.00	7,041.61	12,506.13	7,224.67	146.33	147.15	-94.15	-2,761.42	-5,241.36	2,529.09	2,237.26	291.83	8.666		
12,000.00	7,041.17	12,606.13	7,224.17	149.13	149.91	-94.15	-2,762.01	-5,341.36	2,529.08	2,231.69	297.38	8.504		
12,100.00	7,040.74	12,706.13	7,223.67	151.92	152.68	-94.15	-2,762.59	-5,441.35	2,529.06	2,226.12	302.94	8.348		
12,200.00	7,040.30	12,806.13	7,223.17	154.72	155.45	-94.15	-2,763.18	-5,541.35	2,529.05	2,220.54	308.51	8.198		
12,300.00	7,039.87	12,906.13	7,222.67	157.52	158.22	-94.15	-2,763.77	-5,641.35	2,529.03	2,214.95	314.08	8.052		
12,400.00	7,039.44	13,006.13	7,222.17	160.33	160.99	-94.14	-2,764.36	-5,741.34	2,529.01	2,209.36	319.65	7.912		
12,500.00	7,039.00	13,106.13	7,221.67	163.13	163.77	-94.14	-2,764.95	-5,841.34	2,529.00	2,203.77	325.23	7.776		
12,600.00	7,038.57	13,206.13	7,221.17	165.94	166.55	-94.14	-2,765.53	-5,941.34	2,528.98	2,198.17	330.82	7.645		
12,700.00	7,038.13	13,306.13	7,220.67	168.75	169.33	-94.14	-2,766.12	-6,041.34	2,528.97	2,192.56	336.41	7.518		
12,800.00	7,037.70	13,406.13	7,220.17	171.56	172.12	-94.14	-2,766.71	-6,141.33	2,528.95	2,186.96	342.00	7.395		
12,900.00	7,037.27	13,506.13	7,219.67	174.37	174.91	-94.14	-2,767.30	-6,241.33	2,528.94	2,181.34	347.59	7.276		
13,000.00	7,036.83	13,606.13	7,219.17	177.19	177.70	-94.13	-2,767.89	-6,341.33	2,528.92	2,175.73	353.19	7.160		
13,100.00	7,036.40	13,706.13	7,218.66	180.00	180.49	-94.13	-2,768.48	-6,441.32	2,528.91	2,170.11	358.79	7.048		
13,200.00	7,035.96	13,806.13	7,218.16	182.82	183.29	-94.13	-2,769.06	-6,541.32	2,528.89	2,164.49	364.40	6.940		
13,300.00	7,035.53	13,906.13	7,217.66	185.64	186.08	-94.13	-2,769.65	-6,641.32	2,528.88	2,158.87	370.01	6.835		
13,400.00	7,035.10	14,006.13	7,217.16	188.46	188.88	-94.13	-2,770.24	-6,741.31	2,528.86	2,153.24	375.62	6.732		
13,500.00	7,034.66	14,106.13	7,216.66	191.28	191.68	-94.13	-2,770.83	-6,841.31	2,528.85	2,147.61	381.24	6.633		
13,600.00	7,034.23	14,206.13	7,216.16	194.10	194.48	-94.13	-2,771.42	-6,941.31	2,528.83	2,141.98	386.85	6.537		
13,700.00	7,033.79	14,306.13	7,215.66	196.92	197.28	-94.12	-2,772.00	-7,041.31	2,528.82	2,136.34	392.47	6.443		
13,800.00	7,033.36	14,406.13	7,215.16	199.74	200.09	-94.12	-2,772.59	-7,141.30	2,528.80	2,130.70	398.10	6.352		
13,900.00	7,032.93	14,506.13	7,214.66	202.57	202.90	-94.12	-2,773.18	-7,241.30	2,528.78	2,125.06	403.72	6.264		
14,000.00	7,032.49	14,606.13	7,214.16	205.39	205.70	-94.12	-2,773.77	-7,341.30	2,528.77	2,119.42	409.35	6.178		
14,100.00	7,032.06	14,706.13	7,213.66	208.22	208.51	-94.12	-2,774.36	-7,441.29	2,528.75	2,113.78	414.98	6.094		
14,200.00	7,031.62	14,806.13	7,213.16	211.05	211.32	-94.12	-2,774.95	-7,541.29	2,528.74	2,108.13	420.61	6.012		
14,300.00	7,031.19	14,906.13	7,212.66	213.87	214.14	-94.12	-2,775.53	-7,641.29	2,528.72	2,102.48	426.24	5.933		
14,400.00	7,030.76	15,006.13	7,212.16	216.70	216.95	-94.11	-2,776.12	-7,741.28	2,528.71	2,096.83	431.88	5.855		
14,500.00	7,030.32	15,106.13	7,211.65	219.53	219.76	-94.11	-2,776.71	-7,841.28	2,528.69	2,091.18	437.52	5.780		
14,600.00	7,029.89	15,206.13	7,211.15	222.36	222.58	-94.11	-2,777.30	-7,941.28	2,528.68	2,085.52	443.15	5.706		
14,700.00	7,029.45	15,306.13	7,210.65	225.19	225.40	-94.11	-2,777.89	-8,041.28	2,528.66	2,079.87	448.80	5.634		
14,800.00	7,029.02	15,406.13	7,210.15	228.03	228.21	-94.11	-2,778.47	-8,141.27	2,528.65	2,074.21	454.44	5.564		
14,805.04	7,029.00	15,411.16	7,210.13	228.17	228.36	-94.11	-2,778.50	-8,146.31	2,528.65	2,073.92	454.72	5.561 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-179.51	-259.76	-2.23	259.77					
100.00	100.00	102.00	100.00	3.28	3.29	-179.51	-259.76	-2.23	259.77	253.20	6.57	39.540		
200.00	200.00	198.00	200.00	3.34	3.34	-179.51	-259.76	-2.23	259.77	253.10	6.67	38.932 CC, ES		
300.00	300.00	289.84	291.82	3.44	3.43	-179.49	-261.17	-2.32	261.31	254.42	6.88	37.973		
400.00	400.00	381.32	383.20	3.60	3.56	-179.43	-265.48	-2.62	266.03	258.83	7.19	36.976		
500.00	499.98	472.55	474.14	3.80	3.73	-37.67	-272.69	-3.12	272.55	264.96	7.59	35.919		
600.00	599.90	563.47	564.49	4.02	3.94	-37.99	-282.73	-3.81	280.48	272.43	8.05	34.850		
700.00	699.82	653.84	653.95	4.28	4.18	-38.26	-295.55	-4.70	291.54	282.96	8.57	34.009		
800.00	799.74	743.51	742.26	4.57	4.45	-38.47	-311.04	-5.77	305.71	296.56	9.14	33.433		
900.00	899.66	832.30	829.18	4.88	4.75	-38.62	-329.09	-7.02	322.95	313.20	9.75	33.131		
1,000.00	999.58	920.06	914.50	5.21	5.08	-38.72	-349.57	-8.44	343.21	332.83	10.37	33.080		
1,100.00	1,099.50	1,006.64	998.03	5.55	5.42	-38.77	-372.31	-10.01	366.43	355.41	11.02	33.253		
1,200.00	1,199.42	1,091.92	1,079.58	5.91	5.79	-38.79	-397.16	-11.73	392.54	380.87	11.67	33.631		
1,300.00	1,299.34	1,177.26	1,160.42	6.28	6.18	-38.77	-424.42	-13.62	421.47	409.13	12.33	34.171		
1,400.00	1,399.26	1,272.65	1,250.45	6.66	6.64	-38.74	-455.89	-15.79	451.47	438.41	13.06	34.577		
1,500.00	1,499.18	1,368.05	1,340.48	7.04	7.12	-38.72	-487.37	-17.97	481.47	467.66	13.80	34.879		
1,600.00	1,599.10	1,463.44	1,430.50	7.43	7.61	-38.69	-518.84	-20.15	511.46	496.89	14.57	35.100		
1,700.00	1,699.01	1,558.83	1,520.53	7.83	8.11	-38.67	-550.32	-22.32	541.46	526.11	15.36	35.260		
1,800.00	1,798.93	1,654.23	1,610.55	8.23	8.62	-38.66	-581.79	-24.50	571.46	555.31	16.16	35.373		
1,900.00	1,898.85	1,749.62	1,700.58	8.64	9.14	-38.64	-613.26	-26.68	601.46	584.49	16.97	35.448		
2,000.00	1,998.77	1,845.02	1,790.61	9.05	9.66	-38.63	-644.74	-28.85	631.46	613.67	17.79	35.495		
2,100.00	2,098.69	1,940.41	1,880.63	9.46	10.19	-38.61	-676.21	-31.03	661.46	642.84	18.62	35.520		
2,200.00	2,198.61	2,035.81	1,970.66	9.88	10.72	-38.60	-707.68	-33.21	691.46	672.00	19.46	35.527		
2,300.00	2,298.53	2,131.20	2,060.68	10.30	11.26	-38.59	-739.16	-35.39	721.46	701.15	20.31	35.522		
2,400.00	2,398.45	2,226.59	2,150.71	10.72	11.79	-38.58	-770.63	-37.56	751.46	730.29	21.16	35.506		
2,500.00	2,498.37	2,321.99	2,240.74	11.14	12.34	-38.57	-802.10	-39.74	781.46	759.43	22.02	35.483		
2,600.00	2,598.29	2,417.38	2,330.76	11.56	12.88	-38.56	-833.58	-41.92	811.46	788.57	22.89	35.454		
2,700.00	2,698.21	2,512.78	2,420.79	11.98	13.43	-38.56	-865.05	-44.09	841.46	817.70	23.76	35.420		
2,800.00	2,798.13	2,608.17	2,510.81	12.41	13.98	-38.55	-896.52	-46.27	871.46	846.83	24.63	35.383		
2,900.00	2,898.05	2,703.56	2,600.84	12.84	14.53	-38.54	-928.00	-48.45	901.46	875.95	25.51	35.344		
3,000.00	2,997.97	2,801.04	2,690.87	13.27	15.09	-38.53	-959.47	-50.63	931.46	905.06	26.40	35.289		
3,100.00	3,097.89	2,905.65	2,780.89	13.69	15.70	-38.53	-990.94	-52.80	961.46	934.13	27.32	35.187		
3,200.00	3,197.81	2,989.75	2,870.92	14.12	16.19	-38.52	-1,022.42	-54.98	991.45	963.30	28.15	35.218		
3,300.00	3,297.73	3,085.14	2,960.94	14.56	16.74	-38.52	-1,053.89	-57.16	1,021.45	992.42	29.04	35.175		
3,400.00	3,397.65	3,180.53	3,050.97	14.99	17.30	-38.51	-1,085.37	-59.33	1,051.45	1,021.53	29.93	35.132		
3,500.00	3,497.56	3,275.93	3,141.00	15.42	17.85	-38.51	-1,116.84	-61.51	1,081.45	1,050.63	30.82	35.090		
3,600.00	3,597.48	3,371.32	3,231.02	15.85	18.41	-38.50	-1,148.31	-63.69	1,111.45	1,079.74	31.71	35.048		
3,700.00	3,697.40	3,466.72	3,321.05	16.28	18.97	-38.50	-1,179.79	-65.87	1,141.45	1,108.84	32.61	35.006		
3,800.00	3,797.32	3,562.11	3,411.08	16.72	19.53	-38.49	-1,211.26	-68.04	1,171.45	1,137.95	33.50	34.965		
3,900.00	3,897.24	3,657.50	3,501.10	17.15	20.09	-38.49	-1,242.73	-70.22	1,201.45	1,167.05	34.40	34.924		
4,000.00	3,997.16	3,752.90	3,591.13	17.59	20.65	-38.49	-1,274.21	-72.40	1,231.45	1,196.15	35.30	34.885		
4,100.00	4,097.08	3,848.29	3,681.15	18.02	21.21	-38.48	-1,305.68	-74.57	1,261.45	1,225.25	36.20	34.846		
4,200.00	4,197.00	3,943.69	3,771.18	18.46	21.78	-38.48	-1,337.15	-76.75	1,291.45	1,254.35	37.10	34.808		
4,300.00	4,296.92	4,039.08	3,861.21	18.89	22.34	-38.48	-1,368.63	-78.93	1,321.45	1,283.45	38.00	34.771		
4,400.00	4,396.84	4,134.47	3,951.23	19.33	22.90	-38.47	-1,400.10	-81.11	1,351.45	1,312.54	38.91	34.734		
4,500.00	4,496.76	4,229.87	4,041.26	19.77	23.46	-38.47	-1,431.57	-83.28	1,381.45	1,341.64	39.81	34.699		
4,600.00	4,596.68	4,325.26	4,131.28	20.20	24.03	-38.47	-1,463.05	-85.46	1,411.45	1,370.73	40.72	34.664		
4,700.00	4,696.60	4,420.66	4,221.31	20.64	24.59	-38.47	-1,494.52	-87.64	1,441.45	1,399.82	41.62	34.630		
4,800.00	4,796.52	4,516.05	4,311.34	21.08	25.15	-38.46	-1,525.99	-89.81	1,471.45	1,428.92	42.53	34.597		
4,900.00	4,896.44	4,611.44	4,401.36	21.51	25.72	-38.46	-1,557.47	-91.99	1,501.45	1,458.01	43.44	34.565		
5,000.00	4,996.36	4,706.84	4,491.39	21.95	26.28	-38.46	-1,588.94	-94.17	1,531.45	1,487.10	44.35	34.534		
5,100.00	5,096.28	4,802.23	4,581.41	22.39	26.85	-38.46	-1,620.42	-96.35	1,561.45	1,516.19	45.26	34.503		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	4,897.63	4,671.44	22.83	27.41	-38.45	-1,651.89	-98.52	1,591.45	1,545.28	46.16	34.473		
5,300.00	5,296.11	4,993.02	4,761.47	23.27	27.98	-38.45	-1,683.36	-100.70	1,621.45	1,574.37	47.07	34.444		
5,400.00	5,396.03	5,088.41	4,851.49	23.71	28.54	-38.45	-1,714.84	-102.88	1,651.45	1,603.46	47.99	34.416		
5,500.00	5,495.95	5,183.81	4,941.52	24.14	29.11	-38.45	-1,746.31	-105.05	1,681.44	1,632.55	48.90	34.388		
5,600.00	5,595.87	5,279.20	5,031.55	24.58	29.67	-38.45	-1,777.78	-107.23	1,711.44	1,661.64	49.81	34.361		
5,700.00	5,695.79	5,374.60	5,121.57	25.02	30.24	-38.44	-1,809.26	-109.41	1,741.44	1,690.72	50.72	34.334		
5,800.00	5,795.71	5,469.99	5,211.60	25.46	30.81	-38.44	-1,840.73	-111.59	1,771.44	1,719.81	51.63	34.309		
5,900.00	5,895.63	5,565.38	5,301.62	25.90	31.37	-38.44	-1,872.20	-113.76	1,801.44	1,748.90	52.55	34.283		
6,000.00	5,995.55	5,660.78	5,391.65	26.34	31.94	-38.44	-1,903.68	-115.94	1,831.44	1,777.98	53.46	34.259		
6,100.00	6,095.47	5,756.17	5,481.68	26.78	32.51	-38.44	-1,935.15	-118.12	1,861.44	1,807.07	54.37	34.235		
6,200.00	6,195.39	5,851.57	5,571.70	27.22	33.07	-38.44	-1,966.62	-120.29	1,891.44	1,836.16	55.29	34.211		
6,300.00	6,295.31	5,946.96	5,661.73	27.66	33.64	-38.43	-1,998.10	-122.47	1,921.44	1,865.24	56.20	34.188		
6,400.00	6,395.23	6,042.35	5,751.75	28.10	34.21	-38.43	-2,029.57	-124.65	1,951.44	1,894.32	57.12	34.166		
6,500.00	6,495.02	6,137.69	5,841.72	28.54	34.77	-72.57	-2,061.02	-126.82	1,981.42	1,923.39	58.03	34.143		
6,600.00	6,593.09	6,231.72	5,930.46	28.98	35.33	-79.35	-2,092.05	-128.97	2,011.04	1,952.10	58.95	34.117		
6,700.00	6,687.01	6,322.16	6,015.82	29.41	35.87	-79.92	-2,121.89	-131.03	2,039.96	1,980.11	59.85	34.087		
6,800.00	6,774.46	6,406.81	6,095.70	29.83	36.37	-79.53	-2,149.82	-132.97	2,068.10	2,007.37	60.73	34.053		
6,900.00	6,853.31	6,483.56	6,168.13	30.26	36.83	-78.89	-2,175.14	-134.72	2,095.66	2,034.04	61.62	34.010		
7,000.00	6,921.60	6,550.52	6,231.33	30.76	37.23	-78.09	-2,197.23	-136.25	2,122.93	2,060.39	62.54	33.947		
7,100.00	6,977.66	6,606.06	6,283.74	31.38	37.56	-77.07	-2,215.56	-137.51	2,150.25	2,086.73	63.52	33.852		
7,200.00	7,020.10	6,648.80	6,324.07	32.17	37.81	-75.74	-2,229.66	-138.49	2,177.88	2,113.30	64.59	33.720		
7,300.00	7,047.88	6,677.69	6,351.34	33.13	37.99	-74.01	-2,239.19	-139.15	2,205.91	2,140.17	65.74	33.553		
7,400.00	7,060.32	6,707.99	6,364.86	34.27	38.17	-71.87	-2,243.91	-139.47	2,234.19	2,167.15	67.04	33.326		
7,500.00	7,060.70	6,705.14	6,367.55	35.56	38.15	-71.13	-2,244.85	-139.54	2,263.35	2,195.09	68.26	33.158		
7,600.00	7,060.27	6,703.07	6,369.50	37.02	38.14	-71.18	-2,245.54	-139.59	2,296.28	2,226.70	69.58	33.001		
7,700.00	7,059.83	8,145.71	7,144.52	38.64	44.83	-92.10	-2,523.66	-1,041.72	2,311.40	2,230.87	80.53	28.703		
7,800.00	7,059.40	8,245.71	7,143.96	40.40	45.93	-92.10	-2,524.27	-1,141.71	2,311.41	2,227.57	83.84	27.568		
7,900.00	7,058.97	8,345.71	7,143.39	42.28	47.28	-92.09	-2,524.89	-1,241.71	2,311.42	2,224.01	87.41	26.445		
8,000.00	7,058.53	8,445.71	7,142.82	44.27	48.83	-92.09	-2,525.50	-1,341.71	2,311.43	2,220.24	91.19	25.348		
8,100.00	7,058.10	8,545.71	7,142.25	46.35	50.55	-92.09	-2,526.11	-1,441.70	2,311.44	2,216.28	95.16	24.290		
8,200.00	7,057.66	8,645.71	7,141.68	48.50	52.40	-92.08	-2,526.72	-1,541.70	2,311.45	2,212.15	99.30	23.277		
8,300.00	7,057.23	8,745.71	7,141.11	50.73	54.36	-92.08	-2,527.34	-1,641.70	2,311.46	2,207.86	103.60	22.312		
8,400.00	7,056.80	8,845.71	7,140.55	53.02	56.41	-92.08	-2,527.95	-1,741.69	2,311.47	2,203.45	108.02	21.399		
8,500.00	7,056.36	8,945.71	7,139.98	55.36	58.54	-92.07	-2,528.56	-1,841.69	2,311.48	2,198.92	112.56	20.536		
8,600.00	7,055.93	9,045.71	7,139.41	57.74	60.73	-92.07	-2,529.18	-1,941.69	2,311.49	2,194.28	117.20	19.722		
8,700.00	7,055.49	9,145.71	7,138.84	60.17	62.98	-92.07	-2,529.79	-2,041.68	2,311.50	2,189.56	121.94	18.957		
8,800.00	7,055.06	9,245.71	7,138.27	62.63	65.28	-92.06	-2,530.40	-2,141.68	2,311.50	2,184.75	126.75	18.237		
8,900.00	7,054.63	9,345.71	7,137.70	65.13	67.63	-92.06	-2,531.02	-2,241.67	2,311.51	2,179.88	131.64	17.560		
9,000.00	7,054.19	9,445.71	7,137.13	67.66	70.02	-92.06	-2,531.63	-2,341.67	2,311.52	2,174.94	136.59	16.923		
9,100.00	7,053.76	9,545.71	7,136.57	70.21	72.44	-92.05	-2,532.24	-2,441.67	2,311.53	2,169.94	141.59	16.325		
9,200.00	7,053.32	9,645.71	7,136.00	72.78	74.90	-92.05	-2,532.85	-2,541.66	2,311.54	2,164.89	146.65	15.762		
9,300.00	7,052.89	9,745.71	7,135.43	75.38	77.38	-92.05	-2,533.47	-2,641.66	2,311.55	2,159.79	151.76	15.232		
9,400.00	7,052.46	9,845.71	7,134.86	77.99	79.89	-92.04	-2,534.08	-2,741.66	2,311.56	2,154.65	156.91	14.732		
9,500.00	7,052.02	9,945.71	7,134.29	80.62	82.43	-92.04	-2,534.69	-2,841.65	2,311.57	2,149.47	162.10	14.261		
9,600.00	7,051.59	10,045.71	7,133.72	83.26	84.98	-92.04	-2,535.31	-2,941.65	2,311.58	2,144.26	167.32	13.816		
9,700.00	7,051.15	10,145.71	7,133.16	85.92	87.56	-92.03	-2,535.92	-3,041.65	2,311.59	2,139.02	172.57	13.395		
9,800.00	7,050.72	10,245.71	7,132.59	88.59	90.15	-92.03	-2,536.53	-3,141.64	2,311.60	2,133.75	177.85	12.998		
9,900.00	7,050.29	10,345.71	7,132.02	91.28	92.76	-92.03	-2,537.14	-3,241.64	2,311.61	2,128.45	183.16	12.621		
10,000.00	7,049.85	10,445.71	7,131.45	93.97	95.38	-92.02	-2,537.76	-3,341.63	2,311.62	2,123.13	188.49	12.264		
10,100.00	7,049.42	10,545.71	7,130.88	96.67	98.02	-92.02	-2,538.37	-3,441.63	2,311.63	2,117.79	193.84	11.925		
10,200.00	7,048.98	10,645.71	7,130.31	99.38	100.66	-92.02	-2,538.98	-3,541.63	2,311.64	2,112.42	199.21	11.604		
10,300.00	7,048.55	10,745.71	7,129.74	102.10	103.32	-92.01	-2,539.60	-3,641.62	2,311.65	2,107.04	204.60	11.298		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	10,845.71	7,129.18	104.83	105.99	-92.01	-2,540.21	-3,741.62	2,311.66	2,101.64	210.01	11.007		
10,500.00	7,047.68	10,945.71	7,128.61	107.56	108.67	-92.01	-2,540.82	-3,841.62	2,311.66	2,096.23	215.44	10.730		
10,600.00	7,047.25	11,045.71	7,128.04	110.30	111.36	-92.00	-2,541.44	-3,941.61	2,311.67	2,090.80	220.88	10.466		
10,700.00	7,046.81	11,145.71	7,127.47	113.05	114.06	-92.00	-2,542.05	-4,041.61	2,311.68	2,085.36	226.33	10.214		
10,800.00	7,046.38	11,245.71	7,126.90	115.80	116.76	-92.00	-2,542.66	-4,141.61	2,311.69	2,079.90	231.79	9.973		
10,900.00	7,045.95	11,345.71	7,126.33	118.55	119.48	-91.99	-2,543.27	-4,241.60	2,311.70	2,074.43	237.27	9.743		
11,000.00	7,045.51	11,445.71	7,125.77	121.31	122.20	-91.99	-2,543.89	-4,341.60	2,311.71	2,068.95	242.76	9.523		
11,100.00	7,045.08	11,545.71	7,125.20	124.08	124.92	-91.99	-2,544.50	-4,441.60	2,311.72	2,063.46	248.26	9.312		
11,200.00	7,044.64	11,645.71	7,124.63	126.85	127.65	-91.98	-2,545.11	-4,541.59	2,311.73	2,057.97	253.77	9.110		
11,300.00	7,044.21	11,745.71	7,124.06	129.62	130.39	-91.98	-2,545.73	-4,641.59	2,311.74	2,052.46	259.28	8.916		
11,400.00	7,043.78	11,845.71	7,123.49	132.40	133.13	-91.98	-2,546.34	-4,741.58	2,311.75	2,046.94	264.81	8.730		
11,500.00	7,043.34	11,945.71	7,122.92	135.18	135.88	-91.97	-2,546.95	-4,841.58	2,311.76	2,041.42	270.34	8.551		
11,600.00	7,042.91	12,045.71	7,122.35	137.96	138.63	-91.97	-2,547.57	-4,941.58	2,311.77	2,035.89	275.88	8.380		
11,700.00	7,042.47	12,145.71	7,121.79	140.75	141.38	-91.97	-2,548.18	-5,041.57	2,311.78	2,030.35	281.43	8.214		
11,800.00	7,042.04	12,245.71	7,121.22	143.54	144.14	-91.96	-2,548.79	-5,141.57	2,311.79	2,024.80	286.99	8.055		
11,900.00	7,041.61	12,345.71	7,120.65	146.33	146.91	-91.96	-2,549.40	-5,241.57	2,311.80	2,019.25	292.55	7.902		
12,000.00	7,041.17	12,445.71	7,120.08	149.13	149.68	-91.96	-2,550.02	-5,341.56	2,311.81	2,013.69	298.11	7.755		
12,100.00	7,040.74	12,545.71	7,119.51	151.92	152.45	-91.95	-2,550.63	-5,441.56	2,311.82	2,008.13	303.69	7.613		
12,200.00	7,040.30	12,645.71	7,118.94	154.72	155.22	-91.95	-2,551.24	-5,541.56	2,311.83	2,002.56	309.26	7.475		
12,300.00	7,039.87	12,745.71	7,118.38	157.52	158.00	-91.95	-2,551.86	-5,641.55	2,311.84	1,996.99	314.85	7.343		
12,400.00	7,039.44	12,845.71	7,117.81	160.33	160.78	-91.94	-2,552.47	-5,741.55	2,311.85	1,991.41	320.43	7.215		
12,500.00	7,039.00	12,945.71	7,117.24	163.13	163.56	-91.94	-2,553.08	-5,841.55	2,311.86	1,985.83	326.03	7.091		
12,600.00	7,038.57	13,045.71	7,116.67	165.94	166.34	-91.94	-2,553.70	-5,941.54	2,311.87	1,980.24	331.62	6.971		
12,700.00	7,038.13	13,145.71	7,116.10	168.75	169.13	-91.93	-2,554.31	-6,041.54	2,311.88	1,974.65	337.22	6.856		
12,800.00	7,037.70	13,245.71	7,115.53	171.56	171.92	-91.93	-2,554.92	-6,141.53	2,311.89	1,969.06	342.83	6.744		
12,900.00	7,037.27	13,345.71	7,114.96	174.37	174.71	-91.93	-2,555.53	-6,241.53	2,311.90	1,963.46	348.43	6.635		
13,000.00	7,036.83	13,445.71	7,114.40	177.19	177.51	-91.92	-2,556.15	-6,341.53	2,311.90	1,957.86	354.04	6.530		
13,100.00	7,036.40	13,545.71	7,113.83	180.00	180.30	-91.92	-2,556.76	-6,441.52	2,311.91	1,952.26	359.66	6.428		
13,200.00	7,035.96	13,645.71	7,113.26	182.82	183.10	-91.92	-2,557.37	-6,541.52	2,311.92	1,946.65	365.28	6.329		
13,300.00	7,035.53	13,745.71	7,112.69	185.64	185.90	-91.91	-2,557.99	-6,641.52	2,311.93	1,941.04	370.90	6.233		
13,400.00	7,035.10	13,845.71	7,112.12	188.46	188.70	-91.91	-2,558.60	-6,741.51	2,311.94	1,935.42	376.52	6.140		
13,500.00	7,034.66	13,945.71	7,111.55	191.28	191.51	-91.91	-2,559.21	-6,841.51	2,311.95	1,929.81	382.15	6.050		
13,600.00	7,034.23	14,045.71	7,110.99	194.10	194.31	-91.90	-2,559.82	-6,941.51	2,311.96	1,924.19	387.78	5.962		
13,700.00	7,033.79	14,145.71	7,110.42	196.92	197.12	-91.90	-2,560.44	-7,041.50	2,311.97	1,918.56	393.41	5.877		
13,800.00	7,033.36	14,245.71	7,109.85	199.74	199.93	-91.90	-2,561.05	-7,141.50	2,311.98	1,912.94	399.04	5.794		
13,900.00	7,032.93	14,345.71	7,109.28	202.57	202.74	-91.89	-2,561.66	-7,241.50	2,311.99	1,907.31	404.68	5.713		
14,000.00	7,032.49	14,445.71	7,108.71	205.39	205.55	-91.89	-2,562.28	-7,341.49	2,312.00	1,901.69	410.32	5.635		
14,100.00	7,032.06	14,545.71	7,108.14	208.22	208.36	-91.89	-2,562.89	-7,441.49	2,312.01	1,896.05	415.96	5.558		
14,200.00	7,031.62	14,645.71	7,107.57	211.05	211.17	-91.88	-2,563.50	-7,541.48	2,312.02	1,890.42	421.60	5.484		
14,300.00	7,031.19	14,745.71	7,107.01	213.87	213.99	-91.88	-2,564.12	-7,641.48	2,312.03	1,884.79	427.24	5.411		
14,400.00	7,030.76	14,845.71	7,106.44	216.70	216.80	-91.88	-2,564.73	-7,741.48	2,312.04	1,879.15	432.89	5.341		
14,500.00	7,030.32	14,945.71	7,105.87	219.53	219.62	-91.87	-2,565.34	-7,841.47	2,312.05	1,873.51	438.54	5.272		
14,600.00	7,029.89	15,045.71	7,105.30	222.36	222.44	-91.87	-2,565.95	-7,941.47	2,312.06	1,867.87	444.19	5.205		
14,700.00	7,029.45	15,145.71	7,104.73	225.19	225.26	-91.87	-2,566.57	-8,041.47	2,312.07	1,862.23	449.84	5.140		
14,800.00	7,029.02	15,245.71	7,104.16	228.03	228.08	-91.86	-2,567.18	-8,141.46	2,312.08	1,856.59	455.49	5.076		
14,805.04	7,029.00	15,250.74	7,104.14	228.17	228.22	-91.86	-2,567.21	-8,146.50	2,312.08	1,856.30	455.78	5.073 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	0.45	140.25	1.11	140.26					
100.00	100.00	101.00	100.00	3.28	0.18	0.45	140.25	1.11	140.26	136.79	3.46	40.483		
200.00	200.00	201.00	200.00	3.34	0.62	0.45	140.25	1.11	140.26	136.30	3.96	35.457		
300.00	300.00	301.00	300.00	3.44	1.06	0.45	140.25	1.11	140.26	135.76	4.50	31.152		
400.00	400.00	401.00	400.00	3.60	1.50	0.45	140.25	1.11	140.26	135.16	5.10	27.504 CC, ES		
500.00	499.98	500.98	499.98	3.80	1.93	142.67	140.25	1.11	141.64	135.91	5.73	24.710		
600.00	599.90	596.07	595.06	4.02	2.35	143.47	141.85	0.90	146.49	140.10	6.39	22.935		
700.00	699.82	690.83	689.68	4.28	2.77	144.02	146.55	0.26	154.66	147.57	7.08	21.831		
800.00	799.74	784.99	783.52	4.57	3.19	144.32	154.29	-0.80	166.06	158.26	7.81	21.267		
900.00	899.66	878.36	876.26	4.88	3.61	144.40	164.98	-2.25	180.67	172.12	8.55	21.133		
1,000.00	999.58	970.76	967.65	5.21	4.02	144.30	178.49	-4.09	198.41	189.12	9.30	21.341		
1,100.00	1,099.50	1,064.25	1,059.64	5.55	4.44	144.09	194.96	-6.33	219.10	209.05	10.05	21.809		
1,200.00	1,199.42	1,161.93	1,155.64	5.91	4.88	143.87	212.85	-8.76	240.49	229.67	10.82	22.236		
1,300.00	1,299.34	1,259.61	1,251.64	6.28	5.32	143.69	230.74	-11.20	261.87	250.27	11.60	22.575		
1,400.00	1,399.26	1,357.29	1,347.64	6.66	5.77	143.53	248.63	-13.63	283.27	270.87	12.40	22.849		
1,500.00	1,499.18	1,454.98	1,443.64	7.04	6.22	143.40	266.52	-16.06	304.66	291.45	13.21	23.070		
1,600.00	1,599.10	1,552.66	1,539.64	7.43	6.67	143.28	284.40	-18.50	326.05	312.03	14.02	23.251		
1,700.00	1,699.01	1,650.34	1,635.64	7.83	7.13	143.18	302.29	-20.93	347.45	332.60	14.85	23.401		
1,800.00	1,798.93	1,748.02	1,731.64	8.23	7.59	143.09	320.18	-23.36	368.85	353.17	15.68	23.524		
1,900.00	1,898.85	1,845.71	1,827.64	8.64	8.05	143.01	338.07	-25.80	390.24	373.73	16.52	23.627		
2,000.00	1,998.77	1,943.39	1,923.64	9.05	8.51	142.94	355.95	-28.23	411.64	394.28	17.36	23.714		
2,100.00	2,098.69	2,041.07	2,019.64	9.46	8.97	142.88	373.84	-30.67	433.04	414.84	18.20	23.787		
2,200.00	2,198.61	2,138.75	2,115.64	9.88	9.43	142.82	391.73	-33.10	454.44	435.39	19.05	23.849		
2,300.00	2,298.53	2,236.44	2,211.64	10.30	9.89	142.77	409.62	-35.53	475.84	455.93	19.91	23.902		
2,400.00	2,398.45	2,334.12	2,307.64	10.72	10.35	142.72	427.51	-37.97	497.24	476.48	20.76	23.947		
2,500.00	2,498.37	2,431.80	2,403.64	11.14	10.81	142.68	445.39	-40.40	518.64	497.02	21.62	23.986		
2,600.00	2,598.29	2,529.48	2,499.64	11.56	11.28	142.63	463.28	-42.83	540.04	517.56	22.48	24.020		
2,700.00	2,698.21	2,627.17	2,595.64	11.98	11.74	142.60	481.17	-45.27	561.44	538.09	23.35	24.049		
2,800.00	2,798.13	2,724.85	2,691.64	12.41	12.20	142.56	499.06	-47.70	582.84	558.63	24.21	24.074		
2,900.00	2,898.05	2,822.53	2,787.64	12.84	12.67	142.53	516.95	-50.13	604.24	579.17	25.08	24.096		
3,000.00	2,997.97	2,920.21	2,883.64	13.27	13.13	142.50	534.83	-52.57	625.64	599.70	25.94	24.115		
3,100.00	3,097.89	3,017.90	2,979.64	13.69	13.60	142.47	552.72	-55.00	647.05	620.23	26.81	24.132		
3,200.00	3,197.81	3,115.58	3,075.64	14.12	14.06	142.44	570.61	-57.43	668.45	640.76	27.68	24.146		
3,300.00	3,297.73	3,213.26	3,171.64	14.56	14.52	142.42	588.50	-59.87	689.85	661.29	28.55	24.159		
3,400.00	3,397.65	3,310.94	3,267.64	14.99	14.99	142.40	606.38	-62.30	711.25	681.82	29.43	24.170		
3,500.00	3,497.56	3,408.63	3,363.64	15.42	15.45	142.37	624.27	-64.73	732.65	702.35	30.30	24.180		
3,600.00	3,597.48	3,506.31	3,459.64	15.85	15.92	142.35	642.16	-67.17	754.05	722.88	31.17	24.188		
3,700.00	3,697.40	3,603.99	3,555.64	16.28	16.38	142.33	660.05	-69.60	775.46	743.41	32.05	24.196		
3,800.00	3,797.32	3,701.68	3,651.64	16.72	16.85	142.31	677.94	-72.03	796.86	763.93	32.92	24.203		
3,900.00	3,897.24	3,799.36	3,747.64	17.15	17.31	142.30	695.82	-74.47	818.26	784.46	33.80	24.208		
4,000.00	3,997.16	3,902.96	3,843.64	17.59	17.81	142.28	713.71	-76.90	839.66	804.96	34.71	24.194		
4,100.00	4,097.08	4,005.28	3,939.64	18.02	18.30	142.26	731.60	-79.33	861.07	825.46	35.60	24.185		
4,200.00	4,197.00	4,107.59	4,035.64	18.46	18.78	142.25	749.49	-81.77	882.47	845.96	36.50	24.175		
4,300.00	4,296.92	4,209.91	4,131.64	18.89	19.27	142.24	767.38	-84.20	903.87	866.47	37.40	24.165		
4,400.00	4,396.84	4,287.77	4,227.64	19.33	19.64	142.22	785.26	-86.64	925.27	887.08	38.19	24.228		
4,500.00	4,496.76	4,385.45	4,323.64	19.77	20.11	142.21	803.15	-89.07	946.68	907.61	39.07	24.231		
4,600.00	4,596.68	4,483.14	4,419.64	20.20	20.57	142.20	821.04	-91.50	968.08	928.13	39.95	24.233		
4,700.00	4,696.60	4,580.82	4,515.64	20.64	21.04	142.18	838.93	-93.94	989.48	948.65	40.83	24.235		
4,800.00	4,796.52	4,678.50	4,611.64	21.08	21.50	142.17	856.81	-96.37	1,010.88	969.17	41.71	24.236		
4,900.00	4,896.44	4,776.18	4,707.64	21.51	21.97	142.16	874.70	-98.80	1,032.29	989.70	42.59	24.237		
5,000.00	4,996.36	4,873.87	4,803.64	21.95	22.44	142.15	892.59	-101.24	1,053.69	1,010.22	43.47	24.239		
5,100.00	5,096.28	4,971.55	4,899.64	22.39	22.90	142.14	910.48	-103.67	1,075.09	1,030.74	44.35	24.239		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,069.23	4,995.64	22.83	23.37	142.13	928.37	-106.10	1,096.50	1,051.26	45.23	24.240		
5,300.00	5,296.11	5,166.91	5,091.64	23.27	23.83	142.12	946.25	-108.54	1,117.90	1,071.78	46.12	24.240		
5,400.00	5,396.03	5,264.60	5,187.64	23.71	24.30	142.11	964.14	-110.97	1,139.30	1,092.30	47.00	24.241		
5,500.00	5,495.95	5,362.28	5,283.64	24.14	24.76	142.10	982.03	-113.40	1,160.70	1,112.82	47.88	24.241		
5,600.00	5,595.87	5,459.96	5,379.63	24.58	25.23	142.10	999.92	-115.84	1,182.11	1,133.34	48.76	24.241		
5,700.00	5,695.79	5,557.64	5,475.63	25.02	25.70	142.09	1,017.81	-118.27	1,203.51	1,153.86	49.65	24.241		
5,800.00	5,795.71	5,655.33	5,571.63	25.46	26.16	142.08	1,035.69	-120.70	1,224.91	1,174.38	50.53	24.241		
5,900.00	5,895.63	5,753.01	5,667.63	25.90	26.63	142.07	1,053.58	-123.14	1,246.32	1,194.90	51.41	24.241		
6,000.00	5,995.55	5,850.69	5,763.63	26.34	27.10	142.07	1,071.47	-125.57	1,267.72	1,215.42	52.30	24.240		
6,100.00	6,095.47	5,948.37	5,859.63	26.78	27.56	142.06	1,089.36	-128.00	1,289.12	1,235.94	53.18	24.240		
6,200.00	6,195.39	6,046.06	5,955.63	27.22	28.03	142.05	1,107.24	-130.44	1,310.53	1,256.46	54.07	24.239		
6,300.00	6,295.31	6,143.74	6,051.63	27.66	28.49	142.05	1,125.13	-132.87	1,331.93	1,276.98	54.95	24.239		
6,400.00	6,395.23	6,241.42	6,147.63	28.10	28.96	142.04	1,143.02	-135.30	1,353.33	1,297.50	55.83	24.238		
6,500.00	6,495.02	6,339.04	6,243.57	28.54	29.43	105.45	1,160.90	-137.74	1,374.74	1,318.03	56.72	24.238		
6,600.00	6,593.09	6,435.30	6,338.17	28.98	29.89	95.05	1,178.52	-140.13	1,396.12	1,338.52	57.59	24.241		
6,700.00	6,687.01	6,527.86	6,429.14	29.41	30.33	91.89	1,195.47	-142.44	1,417.46	1,359.01	58.45	24.252		
6,800.00	6,774.46	6,614.46	6,514.24	29.83	30.74	90.44	1,211.33	-144.60	1,439.19	1,379.92	59.27	24.280		
6,900.00	6,853.31	6,692.95	6,591.39	30.26	31.11	89.60	1,225.71	-146.55	1,462.01	1,401.93	60.09	24.332		
7,000.00	6,921.60	6,768.29	6,665.42	30.76	31.47	89.08	1,239.50	-148.65	1,486.73	1,425.76	60.97	24.385		
7,100.00	6,977.66	6,893.68	6,787.16	31.38	32.07	90.06	1,261.93	-167.32	1,512.50	1,450.09	62.40	24.237		
7,200.00	7,020.10	7,067.13	6,944.92	32.17	32.85	92.10	1,290.37	-232.15	1,537.27	1,473.14	64.12	23.973		
7,300.00	7,047.88	7,331.09	7,137.74	33.13	34.00	95.31	1,323.62	-406.50	1,557.44	1,491.35	66.09	23.564		
7,400.00	7,060.32	7,400.00	7,258.37	34.27	34.35	97.32	1,340.99	-732.68	1,565.76	1,499.41	66.35	23.597		
7,500.00	7,060.70	7,833.33	7,260.61	35.56	38.68	97.34	1,339.05	-881.98	1,564.75	1,492.24	72.51	21.579		
7,600.00	7,060.27	7,933.32	7,260.19	37.02	40.09	97.35	1,337.39	-981.96	1,563.70	1,488.32	75.39	20.742		
7,700.00	7,059.83	8,033.32	7,259.77	38.64	41.65	97.35	1,335.73	-1,081.94	1,562.65	1,484.09	78.57	19.890		
7,800.00	7,059.40	8,133.31	7,259.35	40.40	43.34	97.36	1,334.07	-1,181.92	1,561.60	1,479.59	82.01	19.041		
7,900.00	7,058.97	8,233.31	7,258.93	42.28	45.15	97.37	1,332.42	-1,281.90	1,560.55	1,474.86	85.70	18.210		
8,000.00	7,058.53	8,333.30	7,258.51	44.27	47.07	97.37	1,330.76	-1,381.88	1,559.50	1,469.92	89.59	17.407		
8,100.00	7,058.10	8,433.30	7,258.09	46.35	49.08	97.38	1,329.10	-1,481.86	1,558.46	1,464.79	93.66	16.639		
8,200.00	7,057.66	8,533.29	7,257.67	48.50	51.16	97.38	1,327.44	-1,581.84	1,557.41	1,459.51	97.89	15.909		
8,300.00	7,057.23	8,633.28	7,257.25	50.73	53.32	97.39	1,325.78	-1,681.82	1,556.36	1,454.09	102.27	15.219		
8,400.00	7,056.80	8,733.28	7,256.83	53.02	55.54	97.39	1,324.12	-1,781.80	1,555.31	1,448.55	106.76	14.568		
8,500.00	7,056.36	8,833.27	7,256.41	55.36	57.82	97.40	1,322.46	-1,881.78	1,554.26	1,442.90	111.36	13.957		
8,600.00	7,055.93	8,933.27	7,255.99	57.74	60.15	97.40	1,320.81	-1,981.76	1,553.21	1,437.16	116.05	13.384		
8,700.00	7,055.49	9,033.26	7,255.57	60.17	62.52	97.41	1,319.15	-2,081.74	1,552.16	1,431.33	120.83	12.846		
8,800.00	7,055.06	9,133.26	7,255.15	62.63	64.93	97.41	1,317.49	-2,181.72	1,551.11	1,425.43	125.68	12.341		
8,900.00	7,054.63	9,233.25	7,254.73	65.13	67.38	97.42	1,315.83	-2,281.70	1,550.06	1,419.46	130.60	11.869		
9,000.00	7,054.19	9,333.24	7,254.31	67.66	69.85	97.43	1,314.17	-2,381.68	1,549.01	1,413.43	135.58	11.425		
9,100.00	7,053.76	9,433.24	7,253.89	70.21	72.36	97.43	1,312.51	-2,481.66	1,547.96	1,407.36	140.61	11.009		
9,200.00	7,053.32	9,533.23	7,253.47	72.78	74.88	97.44	1,310.85	-2,581.64	1,546.91	1,401.23	145.68	10.619		
9,300.00	7,052.89	9,633.23	7,253.05	75.38	77.44	97.44	1,309.20	-2,681.62	1,545.86	1,395.07	150.80	10.251		
9,400.00	7,052.46	9,733.22	7,252.63	77.99	80.01	97.45	1,307.54	-2,781.60	1,544.81	1,388.86	155.95	9.906		
9,500.00	7,052.02	9,833.22	7,252.21	80.62	82.60	97.45	1,305.88	-2,881.58	1,543.77	1,382.62	161.14	9.580		
9,600.00	7,051.59	9,933.21	7,251.79	83.26	85.21	97.46	1,304.22	-2,981.56	1,542.72	1,376.35	166.36	9.273		
9,700.00	7,051.15	10,033.21	7,251.36	85.92	87.83	97.46	1,302.56	-3,081.54	1,541.67	1,370.06	171.61	8.984		
9,800.00	7,050.72	10,133.20	7,250.94	88.59	90.47	97.47	1,300.90	-3,181.52	1,540.62	1,363.73	176.89	8.710		
9,900.00	7,050.29	10,233.19	7,250.52	91.28	93.12	97.48	1,299.24	-3,281.50	1,539.57	1,357.39	182.18	8.451		
10,000.00	7,049.85	10,333.19	7,250.10	93.97	95.78	97.48	1,297.59	-3,381.47	1,538.52	1,351.02	187.50	8.205		
10,100.00	7,049.42	10,433.18	7,249.68	96.67	98.45	97.49	1,295.93	-3,481.45	1,537.47	1,344.63	192.84	7.973		
10,200.00	7,048.98	10,533.18	7,249.26	99.38	101.14	97.49	1,294.27	-3,581.43	1,536.42	1,338.22	198.20	7.752		
10,300.00	7,048.55	10,633.17	7,248.84	102.10	103.83	97.50	1,292.61	-3,681.41	1,535.37	1,331.80	203.57	7.542		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	10,733.17	7,248.42	104.83	106.53	97.50	1,290.95	-3,781.39	1,534.32	1,325.36	208.96	7.343		
10,500.00	7,047.68	10,833.16	7,248.00	107.56	109.24	97.51	1,289.29	-3,881.37	1,533.27	1,318.91	214.36	7.153		
10,600.00	7,047.25	10,933.16	7,247.58	110.30	111.95	97.52	1,287.63	-3,981.35	1,532.22	1,312.45	219.78	6.972		
10,700.00	7,046.81	11,033.15	7,247.16	113.05	114.68	97.52	1,285.98	-4,081.33	1,531.18	1,305.97	225.21	6.799		
10,800.00	7,046.38	11,133.14	7,246.74	115.80	117.41	97.53	1,284.32	-4,181.31	1,530.13	1,299.48	230.65	6.634		
10,900.00	7,045.95	11,233.14	7,246.32	118.55	120.14	97.53	1,282.66	-4,281.29	1,529.08	1,292.98	236.10	6.477		
11,000.00	7,045.51	11,333.13	7,245.90	121.31	122.88	97.54	1,281.00	-4,381.27	1,528.03	1,286.47	241.56	6.326		
11,100.00	7,045.08	11,433.13	7,245.48	124.08	125.63	97.54	1,279.34	-4,481.25	1,526.98	1,279.96	247.02	6.181		
11,200.00	7,044.64	11,533.12	7,245.06	126.85	128.38	97.55	1,277.68	-4,581.23	1,525.93	1,273.43	252.50	6.043		
11,300.00	7,044.21	11,633.12	7,244.64	129.62	131.13	97.56	1,276.02	-4,681.21	1,524.88	1,266.90	257.99	5.911		
11,400.00	7,043.78	11,733.11	7,244.22	132.40	133.89	97.56	1,274.37	-4,781.19	1,523.83	1,260.35	263.48	5.784		
11,500.00	7,043.34	11,833.10	7,243.80	135.18	136.65	97.57	1,272.71	-4,881.17	1,522.78	1,253.81	268.98	5.661		
11,600.00	7,042.91	11,933.10	7,243.38	137.96	139.42	97.57	1,271.05	-4,981.15	1,521.74	1,247.25	274.49	5.544		
11,700.00	7,042.47	12,033.09	7,242.96	140.75	142.19	97.58	1,269.39	-5,081.13	1,520.69	1,240.69	280.00	5.431		
11,800.00	7,042.04	12,133.09	7,242.54	143.54	144.96	97.58	1,267.73	-5,181.11	1,519.64	1,234.12	285.52	5.322		
11,900.00	7,041.61	12,233.08	7,242.12	146.33	147.74	97.59	1,266.07	-5,281.09	1,518.59	1,227.55	291.04	5.218		
12,000.00	7,041.17	12,333.08	7,241.70	149.13	150.52	97.60	1,264.42	-5,381.07	1,517.54	1,220.97	296.57	5.117		
12,100.00	7,040.74	12,433.07	7,241.28	151.92	153.30	97.60	1,262.76	-5,481.05	1,516.49	1,214.39	302.10	5.020		
12,200.00	7,040.30	12,533.07	7,240.86	154.72	156.09	97.61	1,261.10	-5,581.03	1,515.44	1,207.80	307.64	4.926		
12,300.00	7,039.87	12,633.06	7,240.44	157.52	158.87	97.61	1,259.44	-5,681.01	1,514.39	1,201.21	313.18	4.836		
12,400.00	7,039.44	12,733.05	7,240.02	160.33	161.66	97.62	1,257.78	-5,780.99	1,513.34	1,194.62	318.73	4.748		
12,500.00	7,039.00	12,833.05	7,239.60	163.13	164.45	97.63	1,256.12	-5,880.97	1,512.30	1,188.02	324.28	4.664		
12,600.00	7,038.57	12,933.04	7,239.18	165.94	167.25	97.63	1,254.46	-5,980.95	1,511.25	1,181.41	329.83	4.582		
12,700.00	7,038.13	13,033.04	7,238.76	168.75	170.04	97.64	1,252.81	-6,080.93	1,510.20	1,174.81	335.39	4.503		
12,800.00	7,037.70	13,133.03	7,238.34	171.56	172.84	97.64	1,251.15	-6,180.91	1,509.15	1,168.20	340.95	4.426		
12,900.00	7,037.27	13,233.03	7,237.92	174.37	175.64	97.65	1,249.49	-6,280.89	1,508.10	1,161.59	346.52	4.352		
13,000.00	7,036.83	13,333.02	7,237.50	177.19	178.44	97.65	1,247.83	-6,380.87	1,507.05	1,154.97	352.08	4.280		
13,100.00	7,036.40	13,433.01	7,237.07	180.00	181.25	97.66	1,246.17	-6,480.85	1,506.00	1,148.35	357.65	4.211		
13,200.00	7,035.96	13,533.01	7,236.65	182.82	184.05	97.67	1,244.51	-6,580.83	1,504.96	1,141.73	363.22	4.143		
13,300.00	7,035.53	13,633.00	7,236.23	185.64	186.86	97.67	1,242.85	-6,680.81	1,503.91	1,135.11	368.80	4.078		
13,400.00	7,035.10	13,733.00	7,235.81	188.46	189.67	97.68	1,241.20	-6,780.79	1,502.86	1,128.48	374.38	4.014		
13,500.00	7,034.66	13,832.99	7,235.39	191.28	192.48	97.68	1,239.54	-6,880.77	1,501.81	1,121.85	379.96	3.953		
13,600.00	7,034.23	13,932.99	7,234.97	194.10	195.29	97.69	1,237.88	-6,980.75	1,500.76	1,115.22	385.54	3.893		
13,700.00	7,033.79	14,032.98	7,234.55	196.92	198.10	97.70	1,236.22	-7,080.73	1,499.71	1,108.59	391.12	3.834		
13,800.00	7,033.36	14,132.98	7,234.13	199.74	200.91	97.70	1,234.56	-7,180.71	1,498.66	1,101.95	396.71	3.778		
13,900.00	7,032.93	14,232.97	7,233.71	202.57	203.72	97.71	1,232.90	-7,280.69	1,497.62	1,095.32	402.30	3.723		
14,000.00	7,032.49	14,332.96	7,233.29	205.39	206.54	97.71	1,231.24	-7,380.66	1,496.57	1,088.68	407.89	3.669		
14,100.00	7,032.06	14,432.96	7,232.87	208.22	209.36	97.72	1,229.59	-7,480.64	1,495.52	1,082.04	413.48	3.617		
14,200.00	7,031.62	14,532.95	7,232.45	211.05	212.17	97.73	1,227.93	-7,580.62	1,494.47	1,075.40	419.07	3.566		
14,300.00	7,031.19	14,632.95	7,232.03	213.87	214.99	97.73	1,226.27	-7,680.60	1,493.42	1,068.75	424.67	3.517		
14,400.00	7,030.76	14,732.94	7,231.61	216.70	217.81	97.74	1,224.61	-7,780.58	1,492.37	1,062.11	430.26	3.469		
14,500.00	7,030.32	14,832.94	7,231.19	219.53	220.63	97.74	1,222.95	-7,880.56	1,491.32	1,055.46	435.86	3.422		
14,600.00	7,029.89	14,932.93	7,230.77	222.36	223.45	97.75	1,221.29	-7,980.54	1,490.28	1,048.81	441.46	3.376		
14,700.00	7,029.45	15,032.92	7,230.35	225.19	226.28	97.76	1,219.63	-8,080.52	1,489.23	1,042.17	447.06	3.331		
14,798.90	7,029.03	15,116.21	7,230.00	227.99	228.63	97.76	1,218.25	-8,163.80	1,488.27	1,036.06	452.22	3.291		
14,800.00	7,029.02	15,116.21	7,230.00	228.03	228.63	97.76	1,218.25	-8,163.80	1,488.27	1,036.02	452.25	3.291		
14,805.04	7,029.00	15,116.21	7,230.00	228.17	228.63	97.76	1,218.25	-8,163.80	1,488.29	1,035.89	452.39	3.290 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	9.58	1,450.66	244.75	1,471.16					
100.00	100.00	107.93	108.93	3.28	3.29	9.58	1,450.31	244.81	1,470.86	1,464.29	6.57	223.759		
200.00	200.00	213.50	214.50	3.34	3.34	9.59	1,449.41	244.89	1,470.02	1,463.35	6.68	220.226		
300.00	300.00	316.42	317.41	3.44	3.45	9.59	1,448.28	244.80	1,468.93	1,462.03	6.90	213.037		
400.00	400.00	409.20	410.18	3.60	3.60	9.59	1,447.38	244.63	1,467.94	1,460.75	7.20	203.906		
419.47	419.47	427.26	428.24	3.64	3.63	151.39	1,447.28	244.56	1,467.88	1,460.61	7.27	201.999		
500.00	499.98	504.91	505.89	3.80	3.79	151.40	1,446.94	244.23	1,468.95	1,461.37	7.58	193.734		
600.00	599.90	612.17	613.15	4.02	4.04	151.47	1,446.33	243.86	1,471.82	1,463.76	8.06	182.580		
700.00	699.82	708.56	709.53	4.28	4.30	151.52	1,445.70	243.23	1,474.60	1,466.02	8.58	171.918		
800.00	799.74	808.21	809.18	4.57	4.59	151.56	1,445.28	242.16	1,477.53	1,468.38	9.15	161.416		
900.00	899.66	911.95	912.91	4.88	4.92	151.59	1,444.57	240.98	1,480.19	1,470.40	9.79	151.218		
1,000.00	999.58	1,000.17	1,001.12	5.21	5.21	151.61	1,444.21	239.75	1,483.10	1,472.69	10.41	142.514		
1,100.00	1,099.50	1,079.86	1,080.77	5.55	5.48	151.58	1,445.10	237.48	1,487.23	1,476.21	11.02	134.982		
1,200.00	1,199.42	1,161.89	1,162.69	5.91	5.76	151.48	1,447.28	233.66	1,492.60	1,480.94	11.66	128.059		
1,300.00	1,299.34	1,238.47	1,239.02	6.28	6.04	151.33	1,450.63	228.69	1,499.36	1,487.07	12.29	121.984		
1,400.00	1,399.26	1,326.52	1,326.58	6.66	6.36	151.07	1,455.89	221.04	1,507.34	1,494.35	12.99	116.044		
1,500.00	1,499.18	1,409.33	1,408.67	7.04	6.68	150.75	1,461.81	211.94	1,516.19	1,502.51	13.69	110.786		
1,600.00	1,599.10	1,497.35	1,495.73	7.43	7.03	150.37	1,469.19	201.19	1,526.13	1,511.71	14.42	105.821		
1,700.00	1,699.01	1,593.62	1,590.84	7.83	7.44	149.95	1,477.71	189.03	1,536.56	1,521.35	15.21	101.002		
1,800.00	1,798.93	1,707.90	1,703.77	8.23	7.94	149.44	1,487.46	174.50	1,546.78	1,530.67	16.11	96.023		
1,900.00	1,898.85	1,809.85	1,804.61	8.64	8.39	149.01	1,495.29	161.73	1,556.25	1,539.29	16.96	91.760		
2,000.00	1,998.77	1,931.42	1,924.98	9.05	8.95	148.52	1,503.73	146.87	1,565.12	1,547.20	17.92	87.337		
2,100.00	2,098.69	2,030.69	2,023.36	9.46	9.40	148.15	1,509.77	135.09	1,573.24	1,554.46	18.78	83.771		
2,200.00	2,198.61	2,116.70	2,108.58	9.88	9.80	147.82	1,515.38	124.90	1,581.88	1,562.30	19.58	80.795		
2,300.00	2,298.53	2,203.16	2,194.15	10.30	10.21	147.48	1,521.78	114.38	1,591.41	1,571.03	20.39	78.067		
2,400.00	2,398.45	2,306.52	2,296.47	10.72	10.71	147.09	1,529.58	101.93	1,601.16	1,579.87	21.29	75.219		
2,500.00	2,498.37	2,393.51	2,382.59	11.14	11.13	146.77	1,536.42	91.73	1,611.32	1,589.22	22.10	72.905		
2,600.00	2,598.29	2,496.22	2,484.30	11.56	11.62	146.41	1,544.61	80.10	1,621.69	1,598.69	23.01	70.492		
2,700.00	2,698.21	2,596.27	2,573.48	11.98	12.06	146.11	1,552.06	70.05	1,632.42	1,608.58	23.84	68.473		
2,800.00	2,798.13	2,698.23	2,684.38	12.41	12.61	145.74	1,561.03	57.53	1,642.93	1,618.13	24.80	66.239		
2,900.00	2,898.05	2,797.50	2,782.69	12.84	13.10	145.40	1,568.62	46.05	1,653.13	1,627.44	25.70	64.326		
3,000.00	2,997.97	2,891.44	2,875.64	13.27	13.57	145.06	1,576.02	34.65	1,663.59	1,637.02	26.57	62.610		
3,100.00	3,097.89	2,992.45	2,975.54	13.69	14.07	144.69	1,584.22	22.14	1,674.34	1,646.85	27.49	60.914		
3,200.00	3,197.81	3,097.74	3,079.77	14.12	14.60	144.33	1,592.14	9.56	1,684.57	1,656.14	28.43	59.257		
3,300.00	3,297.73	3,192.46	3,173.54	14.56	15.08	144.01	1,599.41	-1.72	1,695.01	1,665.70	29.31	57.831		
3,400.00	3,397.65	3,314.25	3,294.05	14.99	15.70	143.59	1,608.42	-16.79	1,705.30	1,674.95	30.35	56.183		
3,500.00	3,497.56	3,423.91	3,402.78	15.42	16.24	143.24	1,614.96	-29.49	1,714.16	1,682.84	31.32	54.730		
3,600.00	3,597.48	3,522.19	3,500.33	15.85	16.73	142.96	1,620.67	-40.01	1,722.94	1,690.72	32.22	53.479		
3,700.00	3,697.40	3,601.85	3,579.44	16.28	17.11	142.76	1,625.75	-47.83	1,732.34	1,699.33	33.00	52.489		
3,800.00	3,797.32	3,687.05	3,663.97	16.72	17.53	142.55	1,632.07	-56.32	1,742.80	1,708.98	33.82	51.533		
3,900.00	3,897.24	3,788.10	3,764.22	17.15	18.03	142.30	1,639.99	-66.28	1,753.72	1,718.99	34.73	50.497		
4,000.00	3,997.16	3,872.37	3,847.83	17.59	18.45	142.10	1,646.65	-74.42	1,764.75	1,729.22	35.54	49.661		
4,100.00	4,097.08	3,962.75	3,937.45	18.02	18.90	141.89	1,654.71	-82.91	1,776.79	1,740.41	36.38	48.841		
4,200.00	4,197.00	4,056.51	4,030.33	18.46	19.37	141.65	1,663.19	-92.54	1,789.00	1,751.75	37.25	48.030		
4,300.00	4,296.92	4,147.56	4,120.42	18.89	19.84	141.41	1,671.85	-102.49	1,801.71	1,763.61	38.10	47.287		
4,400.00	4,396.84	4,268.82	4,240.46	19.33	20.45	141.10	1,683.23	-115.29	1,814.41	1,775.26	39.15	46.344		
4,500.00	4,496.76	4,389.33	4,359.96	19.77	21.06	140.81	1,692.65	-127.70	1,825.48	1,785.29	40.19	45.423		
4,600.00	4,596.68	4,517.05	4,486.75	20.20	21.69	140.51	1,701.20	-140.44	1,835.52	1,794.26	41.26	44.488		
4,700.00	4,696.60	4,657.95	4,626.98	20.64	22.36	140.25	1,707.61	-152.65	1,843.33	1,800.95	42.38	43.495		
4,800.00	4,796.52	4,778.73	4,747.25	21.08	22.92	140.02	1,711.17	-163.07	1,849.61	1,806.23	43.38	42.636		
4,900.00	4,896.44	4,891.29	4,859.48	21.51	23.43	139.86	1,713.42	-171.23	1,854.90	1,810.57	44.33	41.847		
5,000.00	4,996.36	4,996.27	4,964.32	21.95	23.89	139.78	1,715.26	-176.64	1,859.90	1,814.68	45.22	41.130		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,096.28	5,109.55	5,077.53	22.39	24.36	139.78	1,716.71	-179.77	1,864.34	1,818.20	46.14	40.410		
5,200.00	5,196.19	5,210.43	5,178.38	22.83	24.78	139.78	1,717.52	-182.19	1,868.29	1,821.29	46.99	39.756		
5,300.00	5,296.11	5,317.43	5,285.35	23.27	25.21	139.80	1,718.34	-184.41	1,872.19	1,824.32	47.88	39.105		
5,400.00	5,396.03	5,387.51	5,208.11	23.71	49.59	104.63	-195.83	-180.74	1,813.45	1,792.67	20.78	87.272		
5,500.00	5,495.95	5,488.38	5,208.09	24.14	49.61	103.18	-196.71	-180.74	1,713.45	1,692.60	20.85	82.179		
5,600.00	5,595.87	5,589.27	5,208.07	24.58	49.62	101.62	-197.59	-180.74	1,613.46	1,592.53	20.93	77.085		
5,700.00	5,695.79	5,790.16	5,208.05	25.02	49.64	99.94	-198.48	-180.74	1,513.47	1,492.45	21.02	71.997		
5,800.00	5,795.71	5,791.06	5,208.03	25.46	49.65	98.12	-199.38	-180.74	1,413.48	1,392.36	21.12	66.924		
5,900.00	5,895.63	5,791.96	5,208.01	25.90	49.67	96.16	-200.28	-180.74	1,313.49	1,292.26	21.23	61.872		
6,000.00	5,995.55	5,792.88	5,207.99	26.34	49.68	94.03	-201.20	-180.74	1,213.50	1,192.15	21.35	56.848		
6,100.00	6,095.47	5,793.81	5,207.97	26.78	49.70	91.73	-202.13	-180.74	1,113.51	1,092.04	21.47	51.859		
6,200.00	6,195.39	5,794.74	5,207.95	27.22	49.71	89.23	-203.06	-180.74	1,013.52	991.92	21.61	46.911		
6,300.00	6,295.31	5,795.69	5,207.93	27.66	49.73	86.53	-204.00	-180.74	913.54	891.79	21.75	42.008		
6,400.00	6,395.23	5,796.64	5,207.91	28.10	49.74	83.61	-204.96	-180.74	813.55	791.66	21.90	37.155		
6,500.00	6,495.02	5,797.61	5,207.89	28.54	49.76	-172.27	-205.93	-180.74	713.60	691.55	22.05	32.366		
6,600.00	6,593.09	5,798.65	5,207.87	28.98	49.78	-175.53	-206.97	-180.74	615.00	592.74	22.26	27.633		
6,700.00	6,687.01	5,799.74	5,207.85	29.41	49.80	-176.87	-208.06	-180.74	521.52	498.11	23.41	22.280		
6,800.00	6,774.46	5,800.83	5,207.82	29.83	49.81	-177.49	-209.15	-180.73	439.46	411.47	28.00	15.698		
6,900.00	6,853.31	5,801.90	5,207.80	30.26	49.83	-177.83	-210.22	-180.73	378.93	340.40	38.53	9.834		
7,000.00	6,921.60	5,802.92	5,207.78	30.76	49.85	-178.01	-211.24	-180.73	352.98	299.30	53.68	6.576		
7,011.28	6,928.57	5,803.03	5,207.77	30.83	49.85	-178.02	-211.35	-180.73	352.70	297.29	55.41	6.365 CC, ES		
7,100.00	6,977.66	5,803.86	5,207.76	31.38	49.86	-178.09	-212.18	-180.73	369.60	302.49	67.12	5.507 SF		
7,200.00	7,020.10	5,804.69	5,207.74	32.17	49.88	-178.10	-213.01	-180.73	423.48	348.67	74.80	5.661		
7,300.00	7,047.88	5,805.39	5,207.73	33.13	49.89	-178.04	-213.70	-180.73	501.72	423.58	78.14	6.421		
7,400.00	7,060.32	5,805.94	5,207.71	34.27	49.90	-177.83	-214.25	-180.73	593.29	513.88	79.41	7.472		
7,500.00	7,060.70	5,806.36	5,207.70	35.56	49.91	-177.59	-214.68	-180.73	690.50	610.62	79.89	8.643		
7,600.00	7,060.27	5,806.78	5,207.70	37.02	49.91	-177.42	-215.09	-180.73	788.58	708.40	80.18	9.835		
7,700.00	7,059.83	5,807.18	5,207.69	38.64	49.92	-177.26	-215.50	-180.73	887.08	806.71	80.37	11.037		
7,800.00	7,059.40	5,807.58	5,207.68	40.40	49.93	-177.11	-215.89	-180.73	985.88	905.37	80.51	12.246		
7,900.00	7,058.97	5,807.96	5,207.67	42.28	49.93	-176.95	-216.28	-180.72	1,084.90	1,004.29	80.61	13.458		
8,000.00	7,058.53	5,808.34	5,207.66	44.27	49.94	-176.80	-216.66	-180.72	1,184.09	1,103.40	80.69	14.674		
8,100.00	7,058.10	5,808.72	5,207.66	46.35	49.95	-176.65	-217.03	-180.72	1,283.40	1,202.65	80.76	15.893		
8,200.00	7,057.66	5,809.06	5,207.65	48.50	49.95	-176.52	-217.38	-180.72	1,382.82	1,302.01	80.81	17.112		
8,300.00	7,057.23	5,809.42	5,207.64	50.73	49.96	-176.38	-217.73	-180.72	1,482.31	1,401.45	80.86	18.333		
8,400.00	7,056.80	5,809.76	5,207.63	53.02	49.96	-176.24	-218.08	-180.72	1,581.86	1,500.96	80.90	19.554		
8,500.00	7,056.36	5,810.10	5,207.63	55.36	49.97	-176.10	-218.42	-180.72	1,681.47	1,600.53	80.94	20.775		
8,600.00	7,055.93	5,810.44	5,207.62	57.74	49.98	-175.97	-218.75	-180.72	1,781.12	1,700.15	80.97	21.996		
8,700.00	7,055.49	5,810.76	5,207.61	60.17	49.98	-175.84	-219.08	-180.72	1,880.81	1,799.80	81.01	23.217		
8,800.00	7,055.06	5,811.08	5,207.61	62.63	49.99	-175.72	-219.40	-180.72	1,980.53	1,899.49	81.04	24.438		
8,900.00	7,054.63	5,811.40	5,207.60	65.13	49.99	-175.59	-219.72	-180.72	2,080.28	1,999.20	81.08	25.658		
9,000.00	7,054.19	5,811.71	5,207.59	67.66	50.00	-175.47	-220.03	-180.72	2,180.05	2,098.93	81.11	26.877		
9,100.00	7,053.76	5,812.01	5,207.59	70.21	50.00	-175.35	-220.33	-180.72	2,279.84	2,198.69	81.15	28.095		
9,200.00	7,053.32	5,812.31	5,207.58	72.78	50.01	-175.23	-220.63	-180.72	2,379.64	2,298.46	81.18	29.313		
9,300.00	7,052.89	5,812.61	5,207.58	75.38	50.01	-175.11	-220.92	-180.72	2,479.47	2,398.25	81.22	30.529		
9,400.00	7,052.46	5,812.90	5,207.57	77.99	50.02	-175.00	-221.21	-180.71	2,579.30	2,498.05	81.25	31.744		
9,500.00	7,052.02	5,813.18	5,207.56	80.62	50.02	-174.89	-221.50	-180.71	2,679.15	2,597.86	81.29	32.958		
9,600.00	7,051.59	5,813.46	5,207.56	83.26	50.03	-174.78	-221.77	-180.71	2,779.01	2,697.69	81.33	34.171		
9,700.00	7,051.15	5,813.73	5,207.55	85.92	50.03	-174.67	-222.05	-180.71	2,878.88	2,797.52	81.36	35.383		
9,800.00	7,050.72	5,814.00	5,207.55	88.59	50.04	-174.56	-222.32	-180.71	2,978.76	2,897.36	81.40	36.593		
9,900.00	7,050.29	5,814.27	5,207.54	91.28	50.04	-174.46	-222.58	-180.71	3,078.65	2,997.20	81.44	37.801		
10,000.00	7,049.85	5,814.53	5,207.54	93.97	50.04	-174.35	-222.84	-180.71	3,178.54	3,097.05	81.48	39.008		
10,100.00	7,049.42	5,814.79	5,207.53	96.67	50.05	-174.25	-223.10	-180.71	3,278.44	3,196.91	81.53	40.214		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,048.98	8,815.04	7,207.53	99.38	50.05	-174.15	-223.35	-180.71	3,378.34	3,296.78	81.57	41.418	
10,300.00	7,048.55	8,815.29	7,207.52	102.10	50.06	-174.05	-223.60	-180.71	3,478.25	3,396.64	81.61	42.620	
10,400.00	7,048.12	8,815.53	7,207.52	104.83	50.06	-173.96	-223.85	-180.71	3,578.17	3,496.51	81.66	43.820	
10,500.00	7,047.68	8,815.77	7,207.51	107.56	50.07	-173.86	-224.09	-180.71	3,678.09	3,596.39	81.70	45.019	
10,600.00	7,047.25	8,816.01	7,207.51	110.30	50.07	-173.77	-224.32	-180.71	3,778.02	3,696.27	81.75	46.216	
10,700.00	7,046.81	8,816.24	7,207.50	113.05	50.07	-173.68	-224.56	-180.71	3,877.94	3,796.15	81.80	47.410	
10,800.00	7,046.38	8,816.47	7,207.50	115.80	50.08	-173.59	-224.79	-180.71	3,977.88	3,896.03	81.84	48.603	
10,900.00	7,045.95	8,816.70	7,207.49	118.55	50.08	-173.50	-225.01	-180.71	4,077.81	3,995.92	81.89	49.794	
11,000.00	7,045.51	8,816.92	7,207.49	121.31	50.08	-173.41	-225.24	-180.70	4,177.75	4,095.81	81.94	50.983	
11,100.00	7,045.08	8,817.14	7,207.49	124.08	50.09	-173.32	-225.46	-180.70	4,277.69	4,195.70	82.00	52.170	
11,200.00	7,044.64	8,817.36	7,207.48	126.85	50.09	-173.24	-225.67	-180.70	4,377.63	4,295.59	82.05	53.355	
11,300.00	7,044.21	8,817.57	7,207.48	129.62	50.10	-173.15	-225.89	-180.70	4,477.58	4,395.48	82.10	54.537	
11,400.00	7,043.78	8,817.78	7,207.47	132.40	50.10	-173.07	-226.10	-180.70	4,577.53	4,495.37	82.16	55.718	
11,500.00	7,043.34	8,817.99	7,207.47	135.18	50.10	-172.99	-226.30	-180.70	4,677.48	4,595.27	82.21	56.896	
11,600.00	7,042.91	8,818.19	7,207.47	137.96	50.11	-172.91	-226.51	-180.70	4,777.43	4,695.17	82.27	58.072	
11,700.00	7,042.47	8,818.39	7,207.46	140.75	50.11	-172.83	-226.71	-180.70	4,877.39	4,795.06	82.33	59.246	
11,800.00	7,042.04	8,818.59	7,207.46	143.54	50.11	-172.75	-226.90	-180.70	4,977.35	4,894.96	82.38	60.417	
11,900.00	7,041.61	8,818.79	7,207.45	146.33	50.12	-172.68	-227.10	-180.70	5,077.30	4,994.86	82.44	61.586	
12,000.00	7,041.17	8,818.98	7,207.45	149.13	50.12	-172.60	-227.29	-180.70	5,177.26	5,094.76	82.50	62.752	
12,100.00	7,040.74	8,819.17	7,207.45	151.92	50.12	-172.53	-227.48	-180.70	5,277.23	5,194.66	82.56	63.916	
12,200.00	7,040.30	8,819.35	7,207.44	154.72	50.13	-172.45	-227.67	-180.70	5,377.19	5,294.56	82.63	65.078	
12,300.00	7,039.87	8,819.54	7,207.44	157.52	50.13	-172.38	-227.85	-180.70	5,477.15	5,394.46	82.69	66.237	
12,400.00	7,039.44	8,819.72	7,207.44	160.33	50.13	-172.31	-228.04	-180.70	5,577.12	5,494.36	82.75	67.394	
12,500.00	7,039.00	8,819.90	7,207.43	163.13	50.13	-172.24	-228.22	-180.70	5,677.08	5,594.27	82.82	68.548	
12,600.00	7,038.57	8,820.08	7,207.43	165.94	50.14	-172.17	-228.39	-180.70	5,777.05	5,694.17	82.89	69.699	
12,700.00	7,038.13	8,820.25	7,207.43	168.75	50.14	-172.10	-228.57	-180.69	5,877.02	5,794.07	82.95	70.848	
12,800.00	7,037.70	8,820.43	7,207.42	171.56	50.14	-172.03	-228.74	-180.69	5,976.99	5,893.97	83.02	71.994	
12,900.00	7,037.27	8,820.60	7,207.42	174.37	50.15	-171.97	-228.91	-180.69	6,076.96	5,993.87	83.09	73.138	
13,000.00	7,036.83	8,820.76	7,207.42	177.19	50.15	-171.90	-229.08	-180.69	6,176.93	6,093.78	83.16	74.279	
13,100.00	7,036.40	8,820.93	7,207.41	180.00	50.15	-171.83	-229.24	-180.69	6,276.91	6,193.68	83.23	75.417	
13,200.00	7,035.96	8,821.09	7,207.41	182.82	50.15	-171.77	-229.41	-180.69	6,376.88	6,293.58	83.30	76.552	
13,300.00	7,035.53	8,821.25	7,207.41	185.64	50.16	-171.71	-229.57	-180.69	6,476.86	6,393.48	83.37	77.685	
13,400.00	7,035.10	8,821.41	7,207.40	188.46	50.16	-171.65	-229.73	-180.69	6,576.83	6,493.38	83.45	78.814	
13,500.00	7,034.66	8,821.57	7,207.40	191.28	50.16	-171.58	-229.89	-180.69	6,676.81	6,593.29	83.52	79.941	
13,600.00	7,034.23	8,821.73	7,207.40	194.10	50.17	-171.52	-230.04	-180.69	6,776.78	6,693.19	83.60	81.065	
13,700.00	7,033.79	8,821.88	7,207.40	196.92	50.17	-171.46	-230.19	-180.69	6,876.76	6,793.09	83.67	82.187	
13,800.00	7,033.36	8,822.03	7,207.39	199.74	50.17	-171.40	-230.35	-180.69	6,976.74	6,892.99	83.75	83.305	
13,900.00	7,032.93	8,822.18	7,207.39	202.57	50.17	-171.35	-230.50	-180.69	7,076.72	6,992.89	83.83	84.420	
14,000.00	7,032.49	8,822.33	7,207.39	205.39	50.18	-171.29	-230.64	-180.69	7,176.70	7,092.79	83.91	85.533	
14,100.00	7,032.06	8,822.47	7,207.38	208.22	50.18	-171.23	-230.79	-180.69	7,276.68	7,192.69	83.99	86.642	
14,200.00	7,031.62	8,822.62	7,207.38	211.05	50.18	-171.17	-230.93	-180.69	7,376.66	7,292.59	84.07	87.749	
14,300.00	7,031.19	8,822.76	7,207.38	213.87	50.18	-171.12	-231.08	-180.69	7,476.64	7,392.49	84.15	88.852	
14,400.00	7,030.76	8,822.90	7,207.38	216.70	50.19	-171.06	-231.22	-180.69	7,576.62	7,492.39	84.23	89.953	
14,500.00	7,030.32	8,823.04	7,207.37	219.53	50.19	-171.01	-231.36	-180.69	7,676.60	7,592.29	84.31	91.050	
14,600.00	7,029.89	8,823.18	7,207.37	222.36	50.19	-170.96	-231.49	-180.69	7,776.58	7,692.19	84.40	92.145	
14,700.00	7,029.45	8,823.31	7,207.37	225.19	50.19	-170.90	-231.63	-180.68	7,876.57	7,792.09	84.48	93.236	
14,800.00	7,029.02	8,823.45	7,207.37	228.03	50.19	-170.85	-231.76	-180.68	7,976.55	7,891.98	84.57	94.324	
14,805.04	7,029.00	8,823.46	7,207.37	228.17	50.19	-170.85	-231.77	-180.68	7,981.59	7,897.02	84.57	94.379	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	10.76	1,452.12	275.90	1,478.09				
100.00	100.00	102.36	103.36	3.28	3.29	10.77	1,451.96	276.09	1,477.98	1,471.41	6.57	224.877	
200.00	200.00	209.69	210.68	3.34	3.33	10.79	1,451.40	276.60	1,477.56	1,470.89	6.67	221.466	
300.00	300.00	313.53	314.52	3.44	3.44	10.79	1,450.47	276.44	1,476.65	1,469.76	6.89	214.370	
400.00	400.00	416.78	417.77	3.60	3.60	10.76	1,449.52	275.47	1,475.57	1,468.36	7.21	204.752	
442.70	442.70	461.24	462.22	3.68	3.69	152.57	1,448.97	275.37	1,475.31	1,467.94	7.37	200.194	
500.00	499.98	520.92	521.89	3.80	3.81	152.60	1,448.10	275.45	1,475.77	1,468.16	7.61	193.889	
600.00	599.90	613.34	614.31	4.02	4.04	152.68	1,446.95	275.68	1,478.13	1,470.07	8.06	183.451	
700.00	699.82	716.24	717.19	4.28	4.32	152.78	1,445.76	276.19	1,480.65	1,472.06	8.59	172.308	
800.00	799.74	819.52	820.46	4.57	4.62	152.89	1,444.19	276.83	1,482.85	1,473.66	9.19	161.432	
900.00	899.66	915.59	916.52	4.88	4.93	153.00	1,442.82	277.56	1,485.17	1,475.37	9.80	151.558	
1,000.00	999.58	1,009.25	1,010.17	5.21	5.24	153.12	1,441.64	278.72	1,487.76	1,477.32	10.44	142.527	
1,100.00	1,099.50	1,101.89	1,102.80	5.55	5.56	153.22	1,441.09	279.63	1,490.95	1,479.85	11.10	134.315	
1,200.00	1,199.42	1,200.88	1,201.79	5.91	5.92	153.32	1,440.77	280.33	1,494.36	1,482.55	11.81	126.553	
1,300.00	1,299.34	1,302.67	1,303.57	6.28	6.29	153.42	1,440.42	281.08	1,497.75	1,485.20	12.55	119.361	
1,400.00	1,399.26	1,399.47	1,400.37	6.66	6.65	153.51	1,440.03	281.62	1,501.07	1,487.79	13.29	112.983	
1,500.00	1,499.18	1,495.79	1,496.68	7.04	7.02	153.60	1,440.01	282.27	1,504.78	1,490.75	14.03	107.233	
1,600.00	1,599.10	1,595.09	1,595.98	7.43	7.40	153.69	1,440.04	283.00	1,508.55	1,493.75	14.80	101.912	
1,700.00	1,699.01	1,696.40	1,697.29	7.83	7.79	153.79	1,440.07	283.79	1,512.34	1,496.75	15.59	96.995	
1,800.00	1,798.93	1,802.89	1,803.78	8.23	8.21	153.89	1,439.85	284.46	1,515.88	1,499.46	16.41	92.348	
1,900.00	1,898.85	1,894.54	1,895.43	8.64	8.57	153.96	1,439.63	284.82	1,519.34	1,502.17	17.17	88.467	
2,000.00	1,998.77	1,981.21	1,982.09	9.05	8.90	153.98	1,440.37	284.03	1,523.60	1,505.69	17.91	85.090	
2,100.00	2,098.69	2,063.18	2,064.02	9.46	9.21	153.97	1,442.07	282.46	1,528.83	1,510.22	18.62	82.110	
2,200.00	2,198.61	2,140.96	2,141.72	9.88	9.50	153.92	1,444.85	280.43	1,535.39	1,516.07	19.32	79.479	
2,300.00	2,298.53	2,218.47	2,219.10	10.30	9.80	153.86	1,448.90	278.18	1,543.47	1,523.45	20.02	77.109	
2,400.00	2,398.45	2,304.70	2,305.13	10.72	10.14	153.79	1,454.33	275.79	1,552.64	1,531.89	20.76	74.796	
2,500.00	2,498.37	2,390.86	2,391.03	11.14	10.49	153.71	1,460.48	273.51	1,562.67	1,541.17	21.50	72.674	
2,600.00	2,598.29	2,482.45	2,482.29	11.56	10.85	153.62	1,467.74	270.69	1,573.38	1,551.10	22.28	70.626	
2,700.00	2,698.21	2,568.10	2,567.56	11.98	11.20	153.51	1,475.20	267.63	1,584.76	1,561.73	23.03	68.826	
2,800.00	2,798.13	2,655.22	2,654.23	12.41	11.57	153.39	1,483.52	264.52	1,596.97	1,573.19	23.78	67.146	
2,900.00	2,898.05	2,738.93	2,737.42	12.84	11.92	153.27	1,492.27	261.26	1,610.00	1,585.48	24.52	65.648	
3,000.00	2,997.97	2,833.30	2,831.07	13.27	12.32	153.10	1,503.02	257.00	1,623.84	1,598.51	25.33	64.111	
3,100.00	3,097.89	2,945.68	2,942.63	13.69	12.80	152.90	1,515.50	251.56	1,637.37	1,611.13	26.24	62.398	
3,200.00	3,197.81	3,048.52	3,044.76	14.12	13.25	152.71	1,526.29	246.24	1,650.23	1,623.13	27.10	60.888	
3,300.00	3,297.73	3,151.59	3,147.09	14.56	13.70	152.50	1,537.04	240.27	1,662.95	1,634.98	27.97	59.453	
3,400.00	3,397.65	3,264.07	3,258.86	14.99	14.20	152.30	1,548.10	234.15	1,675.17	1,646.27	28.90	57.972	
3,500.00	3,497.56	3,352.73	3,347.00	15.42	14.60	152.16	1,556.73	229.97	1,687.41	1,657.72	29.69	56.841	
3,600.00	3,597.48	3,444.83	3,438.53	15.85	15.01	152.02	1,566.05	225.75	1,700.08	1,669.58	30.50	55.744	
3,700.00	3,697.40	3,540.50	3,533.58	16.28	15.44	151.88	1,576.01	221.50	1,713.07	1,681.74	31.33	54.674	
3,800.00	3,797.32	3,642.88	3,635.30	16.72	15.90	151.73	1,586.66	216.95	1,726.07	1,693.86	32.21	53.589	
3,900.00	3,897.24	3,747.50	3,739.24	17.15	16.38	151.56	1,597.38	211.67	1,738.83	1,705.72	33.10	52.528	
4,000.00	3,997.16	3,844.99	3,836.10	17.59	16.83	151.40	1,607.15	206.54	1,751.33	1,717.37	33.96	51.577	
4,100.00	4,097.08	3,928.96	3,919.43	18.02	17.22	151.24	1,616.24	201.49	1,764.51	1,729.79	34.73	50.810	
4,200.00	4,197.00	4,022.61	4,012.27	18.46	17.65	151.05	1,626.90	195.40	1,778.20	1,742.64	35.56	50.003	
4,300.00	4,296.92	4,110.24	4,099.08	18.89	18.07	150.86	1,637.35	189.60	1,792.43	1,756.07	36.36	49.299	
4,400.00	4,396.84	4,214.00	4,201.91	19.33	18.56	150.67	1,649.81	183.47	1,806.86	1,769.60	37.26	48.493	
4,500.00	4,496.76	4,326.32	4,313.33	19.77	19.09	150.48	1,662.59	177.28	1,820.74	1,782.53	38.22	47.642	
4,600.00	4,596.68	4,429.74	4,416.00	20.20	19.58	150.33	1,673.70	171.94	1,834.07	1,794.95	39.12	46.887	
4,700.00	4,696.60	4,526.52	4,512.16	20.64	20.03	150.22	1,684.02	168.05	1,847.49	1,807.51	39.97	46.219	
4,800.00	4,796.52	4,630.06	4,615.04	21.08	20.52	150.11	1,694.97	164.16	1,860.86	1,819.99	40.87	45.531	
4,900.00	4,896.44	4,766.91	4,751.20	21.51	21.16	150.00	1,708.03	159.73	1,873.39	1,831.42	41.97	44.634	
5,000.00	4,996.36	4,899.88	4,883.74	21.95	21.76	149.92	1,717.85	155.91	1,883.77	1,840.73	43.03	43.776	

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,096.28	5,043.72	5,027.33	22.39	22.39	149.87	1,725.41	152.23	1,892.09	1,847.96	44.13	42.874		
5,200.00	5,196.19	5,181.66	5,165.21	22.83	22.98	149.90	1,729.06	151.10	1,898.02	1,852.84	45.17	42.018		
5,300.00	5,296.11	5,295.96	5,279.50	23.27	23.46	149.95	1,730.58	150.50	1,902.73	1,856.63	46.09	41.279		
5,400.00	5,396.03	8,818.00	7,236.54	23.71	48.79	-138.54	-155.35	152.16	1,860.91	1,836.97	23.94	77.719		
5,500.00	5,495.95	8,820.36	7,236.59	24.14	48.83	-138.14	-157.69	151.91	1,762.54	1,738.12	24.42	72.162		
5,600.00	5,595.87	8,824.84	7,236.67	24.58	48.90	-137.38	-162.14	151.43	1,664.35	1,639.37	24.98	66.621		
5,700.00	5,695.79	8,829.41	7,236.75	25.02	48.98	-136.60	-166.69	150.94	1,566.38	1,540.76	25.62	61.141		
5,800.00	5,795.71	8,834.07	7,236.84	25.46	49.05	-135.80	-171.32	150.43	1,468.66	1,442.31	26.35	55.736		
5,900.00	5,895.63	8,838.83	7,236.93	25.90	49.13	-134.97	-176.06	149.92	1,371.25	1,344.05	27.20	50.420		
6,000.00	5,995.55	8,843.69	7,237.03	26.34	49.21	-134.12	-180.89	149.39	1,274.22	1,246.04	28.19	45.209		
6,100.00	6,095.47	8,848.65	7,237.13	26.78	49.29	-133.25	-185.82	148.85	1,177.67	1,148.32	29.35	40.121		
6,200.00	6,195.39	8,855.17	7,237.26	27.22	49.40	-132.10	-192.29	148.13	1,081.71	1,050.96	30.75	35.174		
6,300.00	6,295.31	8,861.55	7,237.39	27.66	49.50	-130.96	-198.64	147.43	986.53	954.08	32.45	30.404		
6,400.00	6,395.23	8,867.69	7,237.50	28.10	49.60	-129.86	-204.74	146.76	892.36	857.83	34.53	25.844		
6,500.00	6,495.02	8,873.91	7,237.61	28.54	49.71	-164.31	-210.91	146.08	800.55	763.28	37.27	21.480		
6,600.00	6,593.09	8,881.82	7,237.74	28.98	49.84	-172.43	-218.77	145.21	718.50	676.81	41.69	17.236		
6,700.00	6,687.01	8,893.50	7,237.88	29.41	50.03	-173.72	-230.38	143.92	652.93	604.76	48.16	13.557		
6,800.00	6,774.46	8,905.72	7,237.96	29.83	50.23	-173.76	-242.53	142.57	610.93	554.65	56.28	10.854		
6,888.97	6,845.10	8,916.93	7,237.97	30.21	50.42	-173.30	-253.67	141.32	588.34	534.55	63.80	9.379 CC		
6,900.00	6,853.31	8,918.34	7,237.97	30.26	50.44	-173.21	-255.07	141.16	598.54	533.86	64.68	9.254 ES		
7,000.00	6,921.60	8,928.24	7,237.96	30.76	50.60	-172.48	-264.91	140.07	617.83	546.20	71.63	8.625 SF		
7,100.00	6,977.66	8,939.61	7,237.92	31.38	50.79	-171.03	-276.20	138.81	665.59	589.23	76.36	8.717		
7,200.00	7,020.10	8,951.53	7,237.85	32.17	50.99	-168.55	-288.06	137.51	735.24	656.11	79.13	9.292		
7,300.00	7,047.88	8,963.62	7,237.73	33.13	51.19	-164.02	-300.07	136.19	819.76	739.12	80.64	10.166		
7,400.00	7,060.32	8,975.46	7,237.55	34.27	51.39	-153.97	-311.84	134.91	913.26	831.81	81.45	11.213		
7,500.00	7,060.70	8,984.89	7,237.38	35.56	51.55	-146.41	-321.22	133.90	1,010.80	928.91	81.88	12.344		
7,600.00	7,060.27	8,993.82	7,237.19	37.02	51.70	-144.38	-330.09	132.97	1,108.82	1,026.58	82.24	13.483		
7,700.00	7,059.83	9,002.37	7,236.99	38.64	51.85	-142.53	-338.60	132.09	1,207.09	1,124.54	82.55	14.622		
7,800.00	7,059.40	9,010.43	7,236.78	40.40	51.98	-140.85	-346.62	131.29	1,305.56	1,222.73	82.83	15.762		
7,900.00	7,058.97	9,017.89	7,236.59	42.28	52.11	-139.36	-354.04	130.56	1,404.18	1,321.10	83.08	16.902		
8,000.00	7,058.53	9,025.07	7,236.40	44.27	52.23	-137.99	-361.18	129.88	1,502.94	1,419.63	83.31	18.040		
8,100.00	7,058.10	9,031.96	7,236.23	46.35	52.35	-136.72	-368.05	129.23	1,601.81	1,518.28	83.53	19.178		
8,200.00	7,057.66	9,039.00	7,236.06	48.50	52.47	-135.47	-375.05	128.59	1,700.77	1,617.03	83.74	20.311		
8,300.00	7,057.23	9,046.72	7,235.87	50.73	52.60	-134.16	-382.73	127.89	1,799.80	1,715.84	83.96	21.437		
8,400.00	7,056.80	9,054.79	7,235.66	53.02	52.74	-132.85	-390.77	127.17	1,898.90	1,814.72	84.18	22.557		
8,500.00	7,056.36	9,062.72	7,235.45	55.36	52.88	-131.62	-398.67	126.47	1,998.04	1,913.64	84.40	23.673		
8,600.00	7,055.93	9,070.51	7,235.23	57.74	53.01	-130.46	-406.42	125.79	2,097.24	2,012.62	84.62	24.785		
8,700.00	7,055.49	9,078.11	7,235.04	60.17	53.14	-129.38	-413.99	125.13	2,196.47	2,111.64	84.83	25.893		
8,800.00	7,055.06	9,085.64	7,234.88	62.63	53.27	-128.36	-421.49	124.48	2,295.74	2,210.70	85.04	26.996		
8,900.00	7,054.63	9,093.10	7,234.75	65.13	53.40	-127.40	-428.92	123.83	2,395.04	2,309.79	85.25	28.094		
9,000.00	7,054.19	9,100.49	7,234.66	67.66	53.53	-126.48	-436.29	123.20	2,494.37	2,408.91	85.46	29.188		
9,100.00	7,053.76	9,109.02	7,234.58	70.21	53.68	-125.48	-444.79	122.47	2,593.73	2,508.03	85.69	30.267		
9,200.00	7,053.32	9,118.16	7,234.50	72.78	53.84	-124.46	-453.89	121.69	2,693.10	2,607.15	85.94	31.335		
9,300.00	7,052.89	9,127.30	7,234.42	75.38	54.00	-123.49	-463.00	120.91	2,792.48	2,706.29	86.20	32.397		
9,400.00	7,052.46	9,136.44	7,234.34	77.99	54.15	-122.56	-472.11	120.13	2,891.88	2,805.43	86.45	33.451		
9,500.00	7,052.02	9,141.23	7,234.29	80.62	54.24	-122.09	-476.88	119.73	2,991.30	2,904.69	86.61	34.538		
9,600.00	7,051.59	9,146.77	7,234.23	83.26	54.34	-121.57	-482.39	119.26	3,090.74	3,003.96	86.79	35.613		
9,700.00	7,051.15	9,152.15	7,234.16	85.92	54.43	-121.06	-487.76	118.82	3,190.21	3,103.25	86.96	36.686		
9,800.00	7,050.72	9,157.40	7,234.09	88.59	54.52	-120.59	-492.99	118.40	3,289.68	3,202.55	87.13	37.756		
9,900.00	7,050.29	9,166.00	7,233.95	91.28	54.67	-119.83	-501.56	117.72	3,389.18	3,301.80	87.38	38.786		
10,000.00	7,049.85	9,168.25	7,233.91	93.97	54.71	-119.64	-503.81	117.54	3,488.69	3,401.21	87.49	39.877		
10,100.00	7,049.42	9,175.62	7,233.76	96.67	54.84	-119.02	-511.15	116.96	3,588.22	3,500.51	87.71	40.909		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS RESOURCES 15M-423(PR_150CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 146-MWD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	7,048.98	9,182.92	7,233.61	99.38	54.97	-118.43	-518.43	116.40	3,687.75	3,599.81	87.94	41.936		
10,300.00	7,048.55	9,190.15	7,233.44	102.10	55.10	-117.86	-525.63	115.84	3,787.29	3,699.13	88.16	42.957		
10,400.00	7,048.12	9,197.31	7,233.26	104.83	55.22	-117.32	-532.77	115.29	3,886.84	3,798.45	88.39	43.974		
10,500.00	7,047.68	9,205.00	7,233.07	107.56	55.36	-116.75	-540.43	114.70	3,986.40	3,897.77	88.63	44.977		
10,600.00	7,047.25	9,212.74	7,232.90	110.30	55.50	-116.21	-548.15	114.10	4,085.96	3,997.08	88.88	45.973		
10,700.00	7,046.81	9,220.48	7,232.75	113.05	55.63	-115.68	-555.87	113.51	4,185.53	4,096.41	89.13	46.962		
10,800.00	7,046.38	9,228.22	7,232.62	115.80	55.77	-115.18	-563.59	112.92	4,285.10	4,195.73	89.37	47.945		
10,900.00	7,045.95	9,231.00	7,232.58	118.55	55.82	-115.01	-566.35	112.70	4,384.69	4,295.19	89.50	48.991		
11,000.00	7,045.51	9,231.00	7,232.58	121.31	55.82	-115.01	-566.35	112.70	4,484.28	4,394.73	89.55	50.073		
11,100.00	7,045.08	9,239.97	7,232.49	124.08	55.98	-114.46	-575.29	112.03	4,583.88	4,494.04	89.84	51.023		
11,200.00	7,044.64	9,243.22	7,232.47	126.85	56.04	-114.27	-578.54	111.79	4,683.49	4,593.51	89.98	52.050		
11,300.00	7,044.21	9,246.40	7,232.46	129.62	56.09	-114.09	-581.71	111.56	4,783.12	4,693.00	90.12	53.075		
11,400.00	7,043.78	9,249.50	7,232.46	132.40	56.15	-113.91	-584.81	111.33	4,882.76	4,792.50	90.26	54.098		
11,500.00	7,043.34	9,252.54	7,232.47	135.18	56.20	-113.74	-587.84	111.12	4,982.40	4,892.01	90.39	55.118		
11,600.00	7,042.91	9,262.00	7,232.53	137.96	56.37	-113.24	-597.27	110.46	5,082.07	4,991.37	90.70	56.031		
11,700.00	7,042.47	9,262.00	7,232.53	140.75	56.37	-113.24	-597.27	110.46	5,181.72	5,090.96	90.76	57.092		
11,800.00	7,042.04	9,262.00	7,232.53	143.54	56.37	-113.24	-597.27	110.46	5,281.39	5,190.57	90.82	58.152		
11,900.00	7,041.61	9,266.05	7,232.57	146.33	56.44	-113.03	-601.31	110.19	5,381.07	5,290.09	90.99	59.140		
12,000.00	7,041.17	9,271.50	7,232.64	149.13	56.54	-112.76	-606.75	109.82	5,480.76	5,389.56	91.19	60.100		
12,100.00	7,040.74	9,276.91	7,232.71	151.92	56.64	-112.50	-612.15	109.45	5,580.45	5,489.05	91.40	61.055		
12,200.00	7,040.30	9,282.27	7,232.79	154.72	56.73	-112.24	-617.49	109.09	5,680.14	5,588.53	91.61	62.005		
12,300.00	7,039.87	9,287.59	7,232.87	157.52	56.83	-111.99	-622.80	108.74	5,779.84	5,688.02	91.81	62.951		
12,400.00	7,039.44	9,293.00	7,232.96	160.33	56.93	-111.75	-628.20	108.38	5,879.54	5,787.51	92.02	63.891		
12,500.00	7,039.00	9,293.00	7,232.96	163.13	56.93	-111.75	-628.20	108.38	5,979.24	5,887.15	92.09	64.929		
12,600.00	7,038.57	9,300.06	7,233.09	165.94	57.05	-111.44	-635.25	107.92	6,078.95	5,986.60	92.35	65.827		
12,700.00	7,038.13	9,303.56	7,233.15	168.75	57.12	-111.29	-638.73	107.69	6,178.67	6,086.16	92.51	66.789		
12,800.00	7,037.70	9,307.00	7,233.22	171.56	57.18	-111.14	-642.16	107.47	6,278.39	6,185.72	92.67	67.749		
12,900.00	7,037.27	9,310.38	7,233.28	174.37	57.24	-111.00	-645.54	107.25	6,378.11	6,285.28	92.83	68.706		
13,000.00	7,036.83	9,313.71	7,233.35	177.19	57.30	-110.87	-648.86	107.04	6,477.84	6,384.85	92.99	69.660		
13,100.00	7,036.40	9,316.99	7,233.41	180.00	57.36	-110.73	-652.14	106.84	6,577.58	6,484.43	93.15	70.612		
13,200.00	7,035.96	9,325.00	7,233.58	182.82	57.50	-110.42	-660.13	106.34	6,677.32	6,583.88	93.44	71.458		
13,300.00	7,035.53	9,325.00	7,233.58	185.64	57.50	-110.42	-660.13	106.34	6,777.06	6,683.55	93.51	72.471		
13,400.00	7,035.10	9,325.00	7,233.58	188.46	57.50	-110.42	-660.13	106.34	6,876.81	6,783.23	93.58	73.482		
13,500.00	7,034.66	9,325.00	7,233.58	191.28	57.50	-110.42	-660.13	106.34	6,976.57	6,882.91	93.66	74.491		
13,600.00	7,034.23	9,325.00	7,233.58	194.10	57.50	-110.42	-660.13	106.34	7,076.33	6,982.60	93.73	75.498		
13,700.00	7,033.79	9,325.00	7,233.58	196.92	57.50	-110.42	-660.13	106.34	7,176.10	7,082.30	93.80	76.503		
13,800.00	7,033.36	9,335.14	7,233.78	199.74	57.69	-110.03	-670.25	105.74	7,275.86	7,181.70	94.16	77.272		
13,900.00	7,032.93	9,337.29	7,233.83	202.57	57.73	-109.95	-672.39	105.61	7,375.63	7,281.33	94.29	78.219		
14,000.00	7,032.49	9,339.40	7,233.87	205.39	57.76	-109.87	-674.50	105.49	7,475.41	7,380.98	94.43	79.164		
14,100.00	7,032.06	9,341.47	7,233.91	208.22	57.80	-109.80	-676.57	105.37	7,575.19	7,480.62	94.56	80.107		
14,200.00	7,031.62	9,343.50	7,233.95	211.05	57.84	-109.72	-678.60	105.26	7,674.97	7,580.27	94.70	81.048		
14,300.00	7,031.19	9,345.50	7,233.98	213.87	57.87	-109.65	-680.59	105.15	7,774.76	7,679.93	94.83	81.986		
14,400.00	7,030.76	9,357.00	7,234.19	216.70	58.08	-109.24	-692.07	104.53	7,874.57	7,779.34	95.23	82.686		
14,500.00	7,030.32	9,357.00	7,234.19	219.53	58.08	-109.24	-692.07	104.53	7,974.36	7,879.05	95.31	83.665		
14,600.00	7,029.89	9,357.00	7,234.19	222.36	58.08	-109.24	-692.07	104.53	8,074.15	7,978.76	95.39	84.642		
14,700.00	7,029.45	9,357.00	7,234.19	225.19	58.08	-109.24	-692.07	104.53	8,173.95	8,078.48	95.47	85.617		
14,800.00	7,029.02	9,357.00	7,234.19	228.03	58.08	-109.24	-692.07	104.53	8,273.76	8,178.21	95.55	86.589		
14,805.04	7,029.00	9,357.00	7,234.19	228.17	58.08	-109.24	-692.07	104.53	8,278.79	8,183.23	95.56	86.638		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	11.84	1,447.74	303.43	1,479.20				
100.00	100.00	79.12	80.12	3.28	3.29	11.86	1,448.16	304.06	1,479.86	1,473.29	6.57	225.241	
200.00	200.00	163.79	164.75	3.34	3.31	11.92	1,449.48	306.08	1,481.86	1,475.22	6.64	223.012	
300.00	300.00	280.97	281.86	3.44	3.41	12.04	1,451.06	309.62	1,483.84	1,476.99	6.85	216.549	
400.00	400.00	374.72	375.57	3.60	3.54	12.15	1,451.34	312.40	1,484.78	1,477.64	7.14	207.834	
500.00	499.98	471.14	471.96	3.80	3.72	153.96	1,453.48	313.27	1,488.69	1,481.18	7.52	198.088	
600.00	599.90	592.68	593.49	4.02	3.99	154.03	1,454.67	313.22	1,493.16	1,485.15	8.01	186.365	
700.00	699.82	682.47	683.28	4.28	4.23	154.09	1,455.22	313.57	1,497.46	1,488.96	8.50	176.074	
800.00	799.74	774.19	774.99	4.57	4.49	154.17	1,456.38	314.28	1,502.47	1,493.42	9.05	165.946	
900.00	899.66	885.67	886.46	4.88	4.84	154.27	1,457.73	315.15	1,507.45	1,497.74	9.71	155.272	
1,000.00	999.58	981.56	982.34	5.21	5.15	154.34	1,458.64	315.66	1,512.11	1,501.75	10.35	146.072	
1,100.00	1,099.50	1,070.02	1,070.79	5.55	5.46	154.41	1,459.93	316.17	1,517.27	1,506.27	11.00	137.956	
1,200.00	1,199.42	1,171.26	1,172.01	5.91	5.82	154.48	1,461.80	316.63	1,522.78	1,511.07	11.71	130.008	
1,300.00	1,299.34	1,278.29	1,279.03	6.28	6.20	154.52	1,463.50	316.25	1,527.87	1,515.40	12.47	122.550	
1,400.00	1,399.26	1,376.63	1,377.36	6.66	6.57	154.54	1,465.11	315.47	1,532.92	1,519.71	13.21	116.082	
1,500.00	1,499.18	1,470.60	1,471.30	7.04	6.92	154.56	1,466.63	314.80	1,537.97	1,524.03	13.94	110.311	
1,600.00	1,599.10	1,548.01	1,548.69	7.43	7.22	154.64	1,468.38	315.89	1,544.12	1,529.50	14.63	105.578	
1,700.00	1,699.01	1,623.26	1,623.85	7.83	7.52	154.76	1,470.89	318.61	1,551.80	1,536.49	15.31	101.373	
1,800.00	1,798.93	1,708.13	1,708.51	8.23	7.86	154.96	1,474.43	323.44	1,560.78	1,544.74	16.04	97.320	
1,900.00	1,898.85	1,786.14	1,786.19	8.64	8.18	155.19	1,478.14	329.42	1,570.84	1,554.09	16.74	93.821	
2,000.00	1,998.77	1,861.35	1,860.97	9.05	8.50	155.44	1,482.64	336.10	1,582.41	1,564.97	17.44	90.743	
2,100.00	2,098.69	1,940.44	1,939.51	9.46	8.83	155.69	1,488.57	343.29	1,595.48	1,577.33	18.16	87.881	
2,200.00	2,198.61	2,032.19	2,030.54	9.88	9.23	155.98	1,496.02	351.98	1,609.34	1,590.40	18.94	84.971	
2,300.00	2,298.53	2,125.84	2,123.50	10.30	9.64	156.23	1,504.31	359.67	1,623.62	1,603.88	19.74	82.255	
2,400.00	2,398.45	2,224.92	2,221.83	10.72	10.08	156.49	1,513.15	368.09	1,638.07	1,617.50	20.57	79.626	
2,500.00	2,498.37	2,336.37	2,332.36	11.14	10.59	156.84	1,522.43	378.95	1,652.34	1,630.86	21.48	76.927	
2,600.00	2,598.29	2,447.88	2,443.09	11.56	11.10	157.18	1,530.41	389.47	1,665.40	1,643.01	22.39	74.376	
2,700.00	2,698.21	2,539.04	2,533.62	11.98	11.51	157.44	1,537.10	397.67	1,678.60	1,655.41	23.20	72.361	
2,800.00	2,798.13	2,624.59	2,618.53	12.41	11.91	157.69	1,543.85	405.65	1,692.45	1,668.48	23.97	70.595	
2,900.00	2,898.05	2,716.62	2,709.78	12.84	12.34	157.96	1,551.76	414.70	1,707.14	1,682.35	24.79	68.865	
3,000.00	2,997.97	2,843.00	2,835.06	13.27	12.94	158.36	1,561.50	428.15	1,721.34	1,695.53	25.81	66.699	
3,100.00	3,097.89	2,953.56	2,944.72	13.69	13.46	158.75	1,568.10	440.53	1,734.03	1,707.29	26.74	64.853	
3,200.00	3,197.81	3,063.15	3,053.64	14.12	13.97	159.06	1,574.76	450.67	1,746.32	1,718.66	27.66	63.135	
3,300.00	3,297.73	3,147.14	3,137.13	14.56	14.37	159.28	1,580.10	458.10	1,758.78	1,730.34	28.44	61.842	
3,400.00	3,397.65	3,231.63	3,221.01	14.99	14.77	159.52	1,585.88	466.44	1,772.06	1,742.84	29.22	60.637	
3,500.00	3,497.56	3,358.19	3,346.75	15.42	15.37	159.85	1,594.41	477.90	1,785.03	1,754.78	30.25	59.010	
3,600.00	3,597.48	3,451.25	3,439.30	15.85	15.80	160.06	1,600.31	485.64	1,797.42	1,766.33	31.08	57.827	
3,700.00	3,697.40	3,545.53	3,533.01	16.28	16.25	160.30	1,606.37	494.00	1,810.10	1,778.17	31.92	56.699	
3,800.00	3,797.32	3,637.00	3,623.91	16.72	16.69	160.52	1,612.63	502.04	1,823.18	1,790.43	32.75	55.668	
3,900.00	3,897.24	3,737.71	3,723.95	17.15	17.17	160.77	1,619.47	511.47	1,836.42	1,802.79	33.63	54.600	
4,000.00	3,997.16	3,832.67	3,818.22	17.59	17.63	161.03	1,625.55	521.10	1,849.60	1,815.11	34.49	53.633	
4,100.00	4,097.08	3,903.10	3,888.02	18.02	17.97	161.25	1,630.48	529.15	1,863.82	1,828.63	35.19	52.967	
4,200.00	4,197.00	3,990.22	3,974.17	18.46	18.41	161.53	1,637.25	540.11	1,879.18	1,843.19	36.00	52.206	
4,300.00	4,296.92	4,076.40	4,059.38	18.89	18.85	161.80	1,644.45	550.89	1,895.14	1,858.34	36.79	51.506	
4,400.00	4,396.84	4,185.20	4,167.04	19.33	19.39	162.08	1,654.35	563.07	1,911.38	1,873.64	37.74	50.644	
4,500.00	4,496.76	4,317.29	4,298.14	19.77	20.04	162.34	1,665.58	574.54	1,926.14	1,887.31	38.83	49.610	
4,600.00	4,596.68	4,414.85	4,395.10	20.20	20.50	162.48	1,673.78	581.47	1,940.32	1,900.63	39.69	48.891	
4,700.00	4,696.60	4,511.79	4,491.47	20.64	20.97	162.61	1,682.01	588.08	1,954.48	1,913.94	40.54	48.208	
4,800.00	4,796.52	4,605.66	4,584.73	21.08	21.42	162.75	1,690.13	595.07	1,969.03	1,927.65	41.38	47.583	
4,900.00	4,896.44	4,716.67	4,695.07	21.51	21.95	162.90	1,699.56	602.78	1,983.26	1,940.94	42.33	46.856	
5,000.00	4,996.36	4,834.80	4,812.54	21.95	22.51	163.08	1,708.64	611.24	1,996.87	1,953.55	43.31	46.101	
5,100.00	5,096.28	4,962.24	4,939.44	22.39	23.11	163.25	1,717.17	619.31	2,009.25	1,964.89	44.35	45.302	

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,196.19	5,143.11	5,119.90	22.83	23.92	163.50	1,723.86	629.14	2,018.25	1,972.60	45.65	44.213		
5,300.00	5,296.11	8,754.73	7,134.97	23.27	49.25	-128.52	-205.79	662.05	1,999.02	1,965.22	33.80	59.140		
5,400.00	5,396.03	8,754.64	7,134.97	23.71	49.25	-128.53	-205.70	662.05	1,908.44	1,873.39	35.05	54.442		
5,500.00	5,495.95	8,754.55	7,134.98	24.14	49.25	-128.53	-205.61	662.04	1,818.86	1,782.41	36.44	49.908		
5,600.00	5,595.87	8,754.45	7,134.98	24.58	49.24	-128.54	-205.51	662.04	1,730.41	1,692.42	37.99	45.553		
5,700.00	5,695.79	8,754.35	7,134.98	25.02	49.24	-128.55	-205.41	662.04	1,643.28	1,603.58	39.70	41.391		
5,800.00	5,795.71	8,754.24	7,134.99	25.46	49.24	-128.56	-205.30	662.04	1,557.71	1,516.10	41.61	37.438		
5,900.00	5,895.63	8,754.13	7,134.99	25.90	49.24	-128.56	-205.19	662.04	1,473.95	1,430.22	43.73	33.709		
6,000.00	5,995.55	8,754.01	7,134.99	26.34	49.24	-128.57	-205.07	662.04	1,392.34	1,346.26	46.08	30.216		
6,100.00	6,095.47	8,753.89	7,135.00	26.78	49.23	-128.58	-204.95	662.04	1,313.27	1,264.58	48.68	26.975		
6,200.00	6,195.39	8,753.76	7,135.00	27.22	49.23	-128.59	-204.82	662.04	1,237.23	1,185.67	51.56	23.997		
6,300.00	6,295.31	8,753.62	7,135.01	27.66	49.23	-128.60	-204.68	662.04	1,164.82	1,110.12	54.70	21.293		
6,400.00	6,395.23	8,753.48	7,135.01	28.10	49.23	-128.61	-204.54	662.04	1,096.76	1,038.65	58.11	18.875		
6,500.00	6,495.02	8,753.32	7,135.02	28.54	49.22	-164.22	-204.38	662.03	1,035.82	974.03	61.78	16.765		
6,600.00	6,593.09	8,753.12	7,135.02	28.98	49.22	-173.32	-204.17	662.03	993.92	928.08	65.83	15.097		
6,700.00	6,687.01	8,752.86	7,135.03	29.41	49.22	-175.75	-203.92	662.03	975.94	906.09	69.85	13.972		
6,720.13	6,705.20	8,752.80	7,135.03	29.49	49.22	-176.03	-203.86	662.03	975.42	904.81	70.61	13.815 CC, ES		
6,800.00	6,774.46	8,752.56	7,135.04	29.83	49.21	-176.85	-203.62	662.03	983.65	910.32	73.33	13.413		
6,900.00	6,853.31	8,752.20	7,135.05	30.26	49.21	-177.48	-203.26	662.02	1,016.28	940.31	75.97	13.378 SF		
7,000.00	6,921.60	8,751.81	7,135.07	30.76	49.20	-177.89	-202.87	662.02	1,070.80	993.08	77.72	13.777		
7,100.00	6,977.66	8,751.38	7,135.08	31.38	49.19	-178.20	-202.44	662.02	1,142.86	1,064.10	78.76	14.511		
7,200.00	7,020.10	8,750.92	7,135.10	32.17	49.18	-178.47	-201.98	662.01	1,227.79	1,148.47	79.31	15.480		
7,300.00	7,047.88	8,750.46	7,135.11	33.13	49.18	-178.84	-201.52	662.01	1,321.22	1,241.65	79.57	16.604		
7,400.00	7,060.32	8,750.00	7,135.13	34.27	49.17	-179.91	-201.06	662.00	1,419.43	1,339.76	79.67	17.816		
7,500.00	7,060.70	8,749.55	7,135.14	35.56	49.16	-177.51	-200.62	662.00	1,519.27	1,439.58	79.70	19.064		
7,600.00	7,060.27	8,749.09	7,135.16	37.02	49.15	-177.12	-200.15	661.99	1,619.18	1,539.47	79.71	20.313		
7,700.00	7,059.83	8,748.61	7,135.18	38.64	49.15	-176.71	-199.67	661.99	1,719.09	1,639.37	79.72	21.563		
7,800.00	7,059.40	8,748.17	7,135.12	40.40	46.75	-115.63	-57.98	655.22	1,819.02	1,741.48	77.54	23.458		
7,900.00	7,058.97	8,598.76	7,137.00	42.28	46.62	-114.43	-50.09	654.54	1,918.63	1,841.19	77.44	24.775		
8,000.00	7,058.53	8,590.84	7,136.88	44.27	46.49	-113.33	-42.20	653.87	2,018.25	1,940.91	77.34	26.095		
8,100.00	7,058.10	8,582.93	7,136.77	46.35	46.36	-112.32	-34.32	653.19	2,117.87	2,040.63	77.25	27.417		
8,200.00	7,057.66	8,574.71	7,136.65	48.50	46.22	-111.36	-26.13	652.49	2,217.50	2,140.35	77.15	28.744		
8,300.00	7,057.23	8,564.24	7,136.51	50.73	46.05	-110.23	-15.70	651.59	2,317.13	2,240.11	77.02	30.086		
8,400.00	7,056.80	8,553.46	7,136.39	53.02	45.87	-109.19	-4.96	650.65	2,416.75	2,339.87	76.88	31.433		
8,500.00	7,056.36	8,542.37	7,136.29	55.36	45.69	-108.22	6.09	649.67	2,516.37	2,439.62	76.75	32.786		
8,600.00	7,055.93	8,530.94	7,136.20	57.74	45.50	-107.32	17.47	648.64	2,615.98	2,539.36	76.62	34.142		
8,700.00	7,055.49	8,519.17	7,136.14	60.17	45.31	-106.49	29.18	647.57	2,715.58	2,639.09	76.49	35.504		
8,800.00	7,055.06	8,508.52	7,136.10	62.63	45.14	-105.80	39.80	646.59	2,815.18	2,738.80	76.37	36.860		
8,900.00	7,054.63	8,494.79	7,134.94	65.13	43.48	-101.06	142.88	635.27	2,914.55	2,839.48	75.08	38.821		
9,000.00	7,054.19	8,480.61	7,134.87	67.66	43.41	-100.92	147.03	634.75	3,013.83	2,938.76	75.07	40.145		
9,100.00	7,053.76	8,396.60	7,134.80	70.21	43.35	-100.79	151.01	634.27	3,113.14	3,038.07	75.07	41.468		
9,200.00	7,053.32	8,386.00	7,134.66	72.78	43.18	-100.47	161.54	633.04	3,212.50	3,137.51	75.00	42.835		
9,300.00	7,052.89	8,386.00	7,134.66	75.38	43.18	-100.47	161.54	633.04	3,311.85	3,236.81	75.05	44.131		
9,400.00	7,052.46	8,386.00	7,134.66	77.99	43.18	-100.47	161.54	633.04	3,411.24	3,336.15	75.09	45.427		
9,500.00	7,052.02	8,386.00	7,134.66	80.62	43.18	-100.47	161.54	633.04	3,510.66	3,435.52	75.14	46.721		
9,600.00	7,051.59	8,386.00	7,134.66	83.26	43.18	-100.47	161.54	633.04	3,610.12	3,534.93	75.19	48.014		
9,700.00	7,051.15	8,374.50	7,134.51	85.92	43.00	-100.14	172.97	631.77	3,709.55	3,634.43	75.11	49.385		
9,800.00	7,050.72	8,371.10	7,134.46	88.59	42.95	-100.04	176.35	631.41	3,809.02	3,733.90	75.13	50.700		
9,900.00	7,050.29	8,367.82	7,134.41	91.28	42.90	-99.95	179.61	631.06	3,908.52	3,833.37	75.14	52.013		
10,000.00	7,049.85	8,356.00	7,134.24	93.97	42.71	-99.64	191.37	629.87	4,008.06	3,932.98	75.07	53.388		
10,100.00	7,049.42	8,356.00	7,134.24	96.67	42.71	-99.64	191.37	629.87	4,107.57	4,032.44	75.13	54.675		
10,200.00	7,048.98	8,356.00	7,134.24	99.38	42.71	-99.64	191.37	629.87	4,207.10	4,131.92	75.18	55.961		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,048.55	8,356.00	7,134.24	102.10	42.71	99.64	191.37	629.87	4,306.66	4,231.43	75.23	57.245		
10,400.00	7,048.12	8,356.00	7,134.24	104.83	42.71	99.64	191.37	629.87	4,406.24	4,330.95	75.28	58.528		
10,500.00	7,047.68	8,356.00	7,134.24	107.56	42.71	99.64	191.37	629.87	4,505.83	4,430.49	75.34	59.808		
10,600.00	7,047.25	8,356.00	7,134.24	110.30	42.71	99.64	191.37	629.87	4,605.44	4,530.05	75.39	61.086		
10,700.00	7,046.81	8,356.00	7,134.24	113.05	42.71	99.64	191.37	629.87	4,705.07	4,629.62	75.45	62.363		
10,800.00	7,046.38	8,356.00	7,134.24	115.80	42.71	99.64	191.37	629.87	4,804.72	4,729.21	75.50	63.637		
10,900.00	7,045.95	8,356.00	7,134.24	118.55	42.71	99.64	191.37	629.87	4,904.37	4,828.82	75.56	64.909		
11,000.00	7,045.51	8,356.00	7,134.24	121.31	42.71	99.64	191.37	629.87	5,004.05	4,928.43	75.61	66.179		
11,100.00	7,045.08	8,356.00	7,134.24	124.08	42.71	99.64	191.37	629.87	5,103.73	5,028.06	75.67	67.447		
11,200.00	7,044.64	8,356.00	7,134.24	126.85	42.71	99.64	191.37	629.87	5,203.43	5,127.70	75.73	68.712		
11,300.00	7,044.21	8,356.00	7,134.24	129.62	42.71	99.64	191.37	629.87	5,303.14	5,227.35	75.79	69.975		
11,400.00	7,043.78	8,356.00	7,134.24	132.40	42.71	99.64	191.37	629.87	5,402.86	5,327.01	75.84	71.236		
11,500.00	7,043.34	8,356.00	7,134.24	135.18	42.71	99.64	191.37	629.87	5,502.59	5,426.68	75.90	72.494		
11,600.00	7,042.91	8,342.01	7,134.03	137.96	42.50	99.28	205.30	628.64	5,602.18	5,526.34	75.84	73.868		
11,700.00	7,042.47	8,341.18	7,134.02	140.75	42.49	99.26	206.13	628.57	5,701.91	5,626.01	75.89	75.130		
11,800.00	7,042.04	8,340.37	7,134.00	143.54	42.48	99.25	206.94	628.51	5,801.64	5,725.69	75.95	76.389		
11,900.00	7,041.61	8,339.58	7,133.99	146.33	42.46	99.23	207.72	628.45	5,901.39	5,825.39	76.00	77.645		
12,000.00	7,041.17	8,338.82	7,133.98	149.13	42.45	99.21	208.48	628.40	6,001.14	5,925.08	76.06	78.898		
12,100.00	7,040.74	8,325.00	7,133.80	151.92	42.24	98.89	222.27	627.50	6,101.03	6,025.03	76.01	80.267		
12,200.00	7,040.30	8,325.00	7,133.80	154.72	42.24	98.89	222.27	627.50	6,200.79	6,124.71	76.07	81.510		
12,300.00	7,039.87	8,325.00	7,133.80	157.52	42.24	98.89	222.27	627.50	6,300.55	6,224.41	76.14	82.749		
12,400.00	7,039.44	8,325.00	7,133.80	160.33	42.24	98.89	222.27	627.50	6,400.32	6,324.11	76.21	83.986		
12,500.00	7,039.00	8,325.00	7,133.80	163.13	42.24	98.89	222.27	627.50	6,500.10	6,423.82	76.27	85.220		
12,600.00	7,038.57	8,325.00	7,133.80	165.94	42.24	98.89	222.27	627.50	6,599.88	6,523.54	76.34	86.452		
12,700.00	7,038.13	8,325.00	7,133.80	168.75	42.24	98.89	222.27	627.50	6,699.67	6,623.26	76.41	87.680		
12,800.00	7,037.70	8,325.00	7,133.80	171.56	42.24	98.89	222.27	627.50	6,799.46	6,722.98	76.48	88.905		
12,900.00	7,037.27	8,325.00	7,133.80	174.37	42.24	98.89	222.27	627.50	6,899.27	6,822.72	76.55	90.127		
13,000.00	7,036.83	8,325.00	7,133.80	177.19	42.24	98.89	222.27	627.50	6,999.07	6,922.45	76.62	91.347		
13,100.00	7,036.40	8,325.00	7,133.80	180.00	42.24	98.89	222.27	627.50	7,098.89	7,022.19	76.69	92.563		
13,200.00	7,035.96	8,325.00	7,133.80	182.82	42.24	98.89	222.27	627.50	7,198.70	7,121.94	76.76	93.776		
13,300.00	7,035.53	8,325.00	7,133.80	185.64	42.24	98.89	222.27	627.50	7,298.53	7,221.69	76.84	94.986		
13,400.00	7,035.10	8,325.00	7,133.80	188.46	42.24	98.89	222.27	627.50	7,398.35	7,321.44	76.91	96.193		
13,500.00	7,034.66	8,325.00	7,133.80	191.28	42.24	98.89	222.27	627.50	7,498.19	7,421.20	76.99	97.396		
13,600.00	7,034.23	8,325.00	7,133.80	194.10	42.24	98.89	222.27	627.50	7,598.02	7,520.96	77.06	98.597		
13,700.00	7,033.79	8,325.00	7,133.80	196.92	42.24	98.89	222.27	627.50	7,697.86	7,620.73	77.14	99.794		
13,800.00	7,033.36	8,325.00	7,133.80	199.74	42.24	98.89	222.27	627.50	7,797.71	7,720.49	77.21	100.988		
13,900.00	7,032.93	8,325.00	7,133.80	202.57	42.24	98.89	222.27	627.50	7,897.56	7,820.27	77.29	102.179		
14,000.00	7,032.49	8,325.00	7,133.80	205.39	42.24	98.89	222.27	627.50	7,997.41	7,920.04	77.37	103.366		
14,100.00	7,032.06	8,325.00	7,133.80	208.22	42.24	98.89	222.27	627.50	8,097.27	8,019.82	77.45	104.550		
14,200.00	7,031.62	8,325.00	7,133.80	211.05	42.24	98.89	222.27	627.50	8,197.13	8,119.60	77.53	105.731		
14,300.00	7,031.19	8,325.00	7,133.80	213.87	42.24	98.89	222.27	627.50	8,296.99	8,219.38	77.61	106.908		
14,400.00	7,030.76	8,325.00	7,133.80	216.70	42.24	98.89	222.27	627.50	8,396.86	8,319.17	77.69	108.082		
14,500.00	7,030.32	8,325.00	7,133.80	219.53	42.24	98.89	222.27	627.50	8,496.73	8,418.95	77.77	109.253		
14,600.00	7,029.89	8,325.00	7,133.80	222.36	42.24	98.89	222.27	627.50	8,596.60	8,518.74	77.85	110.420		
14,700.00	7,029.45	8,325.00	7,133.80	225.19	42.24	98.89	222.27	627.50	8,696.47	8,618.54	77.94	111.583		
14,800.00	7,029.02	8,325.00	7,133.80	228.03	42.24	98.89	222.27	627.50	8,796.35	8,718.33	78.02	112.743		
14,805.04	7,029.00	8,325.00	7,133.80	228.17	42.24	98.89	222.27	627.50	8,801.39	8,723.36	78.03	112.802		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	49.55	1,444.15	1,694.03	2,226.05					
100.00	100.00	142.78	133.77	3.28	3.29	49.53	1,444.05	1,692.70	2,225.23	2,218.65	6.58	338.298		
200.00	200.00	256.91	247.86	3.34	3.37	49.48	1,444.30	1,689.73	2,223.39	2,216.68	6.71	331.372		
300.00	300.00	359.91	350.78	3.44	3.51	49.39	1,445.28	1,685.67	2,221.02	2,214.06	6.95	319.549		
400.00	400.00	449.36	440.12	3.60	3.67	49.29	1,447.08	1,681.81	2,219.04	2,211.77	7.27	305.381		
453.06	453.05	502.69	493.38	3.70	3.78	-168.98	1,448.38	1,679.42	2,218.56	2,211.08	7.48	296.769		
500.00	499.98	548.31	538.94	3.80	3.88	-169.04	1,449.59	1,677.29	2,218.95	2,211.27	7.68	289.079		
600.00	599.90	645.23	635.69	4.02	4.14	-169.21	1,452.76	1,672.40	2,221.18	2,213.03	8.15	272.563		
700.00	699.82	739.52	729.76	4.28	4.41	-169.38	1,456.41	1,667.32	2,223.60	2,214.93	8.68	256.219		
800.00	799.74	840.60	830.58	4.57	4.73	-169.59	1,460.99	1,661.62	2,226.30	2,217.02	9.28	239.818		
900.00	899.66	935.83	925.56	4.88	5.05	-169.78	1,465.17	1,656.11	2,228.83	2,218.91	9.91	224.826		
1,000.00	999.58	1,025.04	1,014.49	5.21	5.37	-169.97	1,469.81	1,650.95	2,231.91	2,221.35	10.56	211.340		
1,100.00	1,099.50	1,297.24	1,283.25	5.55	6.53	-171.05	1,491.05	1,614.77	2,230.94	2,218.90	12.04	185.284		
1,200.00	1,199.42	1,409.57	1,393.44	5.91	7.07	-171.57	1,498.89	1,594.47	2,226.32	2,213.40	12.92	172.318		
1,300.00	1,299.34	1,498.86	1,480.97	6.28	7.52	-171.99	1,505.33	1,577.97	2,221.74	2,208.02	13.72	161.930		
1,400.00	1,399.26	1,683.98	1,662.28	6.66	8.48	-172.86	1,515.86	1,542.28	2,215.70	2,200.70	15.00	147.667		
1,500.00	1,499.18	1,796.55	1,772.53	7.04	9.09	-173.35	1,519.37	1,519.86	2,207.60	2,191.65	15.95	138.410		
1,600.00	1,599.10	1,872.87	1,847.36	7.43	9.50	-173.67	1,521.33	1,504.94	2,199.54	2,182.81	16.73	131.463		
1,700.00	1,699.01	1,941.05	1,914.39	7.83	9.86	-173.95	1,523.44	1,492.66	2,193.00	2,175.52	17.48	125.459		
1,800.00	1,798.93	2,011.00	1,983.31	8.23	10.23	-174.22	1,525.89	1,480.98	2,187.79	2,169.55	18.24	119.947		
1,900.00	1,898.85	2,075.79	2,047.26	8.64	10.56	-174.46	1,528.68	1,470.95	2,184.11	2,165.13	18.98	115.099		
2,000.00	1,998.77	2,154.48	2,125.01	9.05	10.97	-174.77	1,533.00	1,459.57	2,181.99	2,162.21	19.78	110.286		
2,100.00	2,098.69	2,243.39	2,212.77	9.46	11.44	-175.12	1,538.55	1,446.52	2,180.42	2,159.77	20.65	105.571		
2,200.00	2,198.61	2,327.59	2,295.83	9.88	11.88	-175.48	1,544.62	1,434.08	2,179.58	2,158.07	21.51	101.334		
2,261.24	2,259.80	2,379.48	2,346.98	10.13	12.16	-175.71	1,548.74	1,426.39	2,179.44	2,157.40	22.04	98.892		
2,300.00	2,298.53	2,417.78	2,384.74	10.30	12.36	-175.87	1,551.88	1,420.75	2,179.47	2,157.06	22.40	97.288		
2,377.14	2,375.61	2,500.17	2,466.07	10.62	12.80	-176.21	1,557.95	1,409.13	2,179.43	2,156.27	23.16	94.106		
2,400.00	2,398.45	2,516.89	2,482.59	10.72	12.88	-176.28	1,559.15	1,406.85	2,179.45	2,156.11	23.34	93.377		
2,500.00	2,498.37	2,606.23	2,570.91	11.14	13.34	-176.63	1,565.53	1,395.02	2,179.93	2,155.70	24.22	89.996		
2,600.00	2,598.29	2,708.55	2,672.17	11.56	13.87	-177.01	1,572.53	1,381.99	2,180.61	2,155.44	25.17	86.633		
2,700.00	2,698.21	2,841.33	2,803.44	11.98	14.56	-177.53	1,581.31	1,364.12	2,180.84	2,154.56	26.28	82.972		
2,800.00	2,798.13	2,978.54	2,938.46	12.41	15.32	-178.14	1,590.38	1,341.54	2,179.12	2,151.67	27.45	79.387		
2,900.00	2,898.05	3,066.58	3,025.12	12.84	15.81	-178.53	1,595.83	1,326.98	2,177.16	2,148.80	28.36	76.755		
3,000.00	2,997.97	3,168.80	3,125.84	13.27	16.38	-178.96	1,601.68	1,310.52	2,175.28	2,145.94	29.35	74.120		
3,100.00	3,097.89	3,262.88	3,218.52	13.69	16.89	-179.37	1,607.17	1,295.30	2,173.56	2,143.27	30.29	71.758		
3,200.00	3,197.81	3,361.42	3,315.93	14.12	17.42	-179.73	1,611.78	1,281.22	2,172.24	2,141.01	31.24	69.540		
3,300.00	3,297.73	3,475.03	3,428.43	14.56	18.00	179.89	1,615.20	1,265.78	2,170.11	2,137.87	32.24	67.319		
3,400.00	3,397.65	3,552.78	3,505.54	14.99	18.39	179.65	1,617.44	1,256.02	2,168.62	2,135.56	33.06	65.592		
3,494.36	3,491.93	3,626.81	3,578.94	15.39	18.77	179.41	1,620.39	1,246.82	2,168.17	2,134.33	33.84	64.063		
3,500.00	3,497.56	3,631.43	3,583.51	15.42	18.79	179.40	1,620.60	1,246.24	2,168.17	2,134.28	33.89	63.972		
3,600.00	3,597.48	3,713.15	3,664.44	15.85	19.21	179.11	1,625.02	1,235.78	2,168.66	2,133.91	34.75	62.411		
3,700.00	3,697.40	3,814.87	3,764.92	16.28	19.76	178.70	1,631.91	1,221.56	2,169.61	2,133.88	35.73	60.726		
3,800.00	3,797.32	3,924.60	3,872.94	16.72	20.37	178.20	1,640.43	1,204.20	2,170.36	2,133.58	36.78	59.010		
3,900.00	3,897.24	4,050.08	3,996.25	17.15	21.09	177.61	1,649.80	1,182.97	2,170.38	2,132.45	37.93	57.219		
4,000.00	3,997.16	4,179.33	4,123.16	17.59	21.84	176.99	1,658.13	1,159.95	2,169.20	2,130.10	39.10	55.474		
4,100.00	4,097.08	4,270.14	4,212.37	18.02	22.35	176.57	1,663.25	1,143.77	2,167.54	2,127.48	40.06	54.113		
4,200.00	4,197.00	4,356.06	4,297.02	18.46	22.84	176.20	1,667.79	1,129.77	2,166.58	2,125.60	40.98	52.870		
4,300.00	4,296.92	4,444.96	4,384.80	18.89	23.33	175.85	1,672.28	1,116.43	2,166.26	2,124.36	41.90	51.695		
4,311.02	4,307.93	4,454.92	4,394.64	18.94	23.38	175.81	1,672.80	1,114.97	2,166.26	2,124.25	42.01	51.569		
4,400.00	4,396.84	4,535.36	4,474.11	19.33	23.81	175.50	1,677.00	1,103.30	2,166.46	2,123.62	42.83	50.582		
4,500.00	4,496.76	4,622.90	4,560.66	19.77	24.28	175.17	1,681.72	1,091.02	2,167.17	2,123.43	43.73	49.553		
4,600.00	4,596.68	4,708.22	4,645.10	20.20	24.72	174.86	1,686.42	1,079.84	2,168.58	2,123.96	44.62	48.601		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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		
4,700.00	4,696.60	4,790.86	4,727.01	20.64	25.15	174.58	1,691.09	1,069.81	2,170.72	2,125.23	45.48	47.725		
4,800.00	4,796.52	4,868.46	4,804.01	21.08	25.54	174.33	1,695.72	1,061.37	2,173.85	2,127.55	46.31	46.946		
4,900.00	4,896.44	4,955.09	4,890.07	21.51	25.96	174.08	1,700.98	1,053.04	2,177.82	2,130.66	47.16	46.178		
5,000.00	4,996.36	5,052.02	4,986.45	21.95	26.42	173.82	1,706.77	1,044.52	2,182.19	2,134.13	48.07	45.400		
5,100.00	5,096.28	5,143.94	5,077.77	22.39	26.87	173.56	1,712.80	1,035.96	2,186.83	2,137.88	48.95	44.675		
5,200.00	5,196.19	5,243.24	5,176.41	22.83	27.35	173.27	1,719.56	1,026.64	2,191.70	2,141.82	49.88	43.942		
5,300.00	5,296.11	5,360.16	5,292.72	23.27	27.90	172.97	1,726.18	1,016.84	2,196.15	2,145.27	50.88	43.160		
5,400.00	5,396.03	5,464.17	5,328.18	23.71	28.48	-130.40	-170.31	964.02	2,145.72	2,100.09	45.63	47.021		
5,500.00	5,495.95	5,563.43	5,426.16	24.14	29.07	-130.30	-172.28	964.04	2,061.48	2,014.30	47.18	43.694		
5,600.00	5,595.87	5,663.40	5,518.13	24.58	29.66	-130.20	-174.24	964.06	1,978.70	1,929.86	48.84	40.516		
5,700.00	5,695.79	5,763.29	5,558.12	25.02	30.25	-130.16	-175.14	964.07	1,897.58	1,846.98	50.60	37.503		
5,800.00	5,795.71	5,863.22	5,658.09	25.46	30.84	-130.07	-176.77	964.08	1,818.34	1,765.85	52.49	34.640		
5,900.00	5,895.63	5,963.15	5,758.07	25.90	31.43	-129.99	-178.40	964.10	1,741.24	1,686.73	54.51	31.942		
6,000.00	5,995.55	6,063.08	5,858.05	26.34	32.02	-129.91	-180.04	964.12	1,666.57	1,609.91	56.66	29.414		
6,100.00	6,095.47	6,163.00	5,958.03	26.78	32.61	-129.83	-181.67	964.14	1,594.68	1,535.75	58.93	27.061		
6,200.00	6,195.39	6,263.00	6,058.00	27.22	33.20	-129.74	-183.30	964.16	1,525.95	1,464.64	61.31	24.888		
6,300.00	6,295.31	6,363.00	6,158.00	27.66	33.79	-129.66	-184.93	964.18	1,460.84	1,397.05	63.79	22.900		
6,400.00	6,395.23	6,463.00	6,258.00	28.10	34.38	-129.58	-186.56	964.19	1,399.84	1,333.51	66.34	21.102		
6,500.00	6,495.02	6,563.00	6,358.00	28.54	34.97	-165.05	-188.18	964.21	1,345.54	1,276.60	68.94	19.518		
6,600.00	6,593.09	6,663.00	6,458.00	28.98	35.56	-174.03	-189.69	964.23	1,309.62	1,237.99	71.63	18.282		
6,700.00	6,687.01	6,757.00	6,558.00	29.41	36.15	-176.36	-191.06	964.25	1,295.94	1,221.74	74.20	17.465		
6,708.89	6,695.08	6,765.00	6,566.00	29.45	36.22	-176.49	-191.17	964.25	1,295.85	1,221.43	74.42	17.414 CC, ES		
6,800.00	6,774.46	6,844.00	6,644.00	29.83	36.81	-177.41	-192.24	964.26	1,305.52	1,229.11	76.40	17.087 SF		
6,900.00	6,853.31	6,923.00	6,723.00	30.26	37.40	-178.00	-193.20	964.27	1,337.63	1,259.53	78.10	17.128		
7,000.00	6,921.60	7,000.00	6,791.00	30.76	38.00	-178.40	-193.92	964.28	1,389.96	1,310.70	79.27	17.535		
7,100.00	6,977.66	7,057.00	6,847.00	31.38	38.62	-178.72	-194.39	964.29	1,459.14	1,379.15	79.99	18.241		
7,200.00	7,020.10	7,090.00	6,890.00	32.17	39.27	-179.05	-194.59	964.29	1,541.33	1,460.93	80.40	19.171		
7,300.00	7,047.88	7,138.00	6,917.00	33.13	39.97	-179.57	-194.53	964.29	1,632.71	1,552.12	80.60	20.258		
7,400.00	7,060.32	7,151.00	6,930.00	34.27	40.72	178.96	-194.21	964.28	1,729.77	1,649.09	80.67	21.441		
7,500.00	7,060.70	7,151.00	6,930.00	35.56	41.61	177.39	-193.69	964.28	1,829.17	1,748.48	80.70	22.668		
7,600.00	7,060.27	7,151.00	6,930.00	37.02	42.64	177.23	-193.17	964.27	1,928.72	1,848.02	80.71	23.898		
7,700.00	7,059.83	7,151.00	6,929.00	38.64	43.81	177.06	-192.65	964.26	2,028.32	1,947.60	80.72	25.128		
7,800.00	7,059.40	7,151.00	6,928.00	40.40	45.12	176.89	-192.13	964.26	2,127.95	2,047.23	80.73	26.359		
7,900.00	7,058.97	7,151.00	6,927.00	42.28	46.57	176.73	-191.62	964.25	2,227.62	2,146.88	80.74	27.590		
8,000.00	7,058.53	7,151.00	6,926.00	44.27	48.16	176.57	-191.12	964.25	2,327.32	2,246.57	80.75	28.821		
8,100.00	7,058.10	7,151.00	6,925.00	46.35	49.89	176.41	-190.62	964.24	2,427.04	2,346.28	80.76	30.052		
8,200.00	7,057.66	7,151.00	6,924.00	48.50	51.76	176.25	-190.13	964.24	2,526.78	2,446.01	80.77	31.283		
8,300.00	7,057.23	7,151.00	6,923.00	50.73	53.77	176.09	-189.64	964.23	2,626.54	2,545.76	80.78	32.514		
8,400.00	7,056.80	7,151.00	6,922.00	53.02	55.92	175.93	-189.15	964.22	2,726.32	2,645.53	80.79	33.744		
8,500.00	7,056.36	7,151.00	6,921.00	55.36	58.21	175.78	-188.67	964.22	2,826.12	2,745.31	80.81	34.974		
8,600.00	7,055.93	7,151.00	6,920.00	57.74	60.74	175.63	-188.19	964.21	2,925.92	2,845.10	80.82	36.203		
8,700.00	7,055.49	7,151.00	6,919.00	60.17	63.51	175.48	-187.72	964.21	3,025.75	2,944.91	80.83	37.431		
8,800.00	7,055.06	7,151.00	6,918.00	62.63	66.52	175.33	-187.26	964.20	3,125.58	3,044.73	80.85	38.659		
8,900.00	7,054.63	7,151.00	6,917.00	65.13	69.77	175.18	-186.79	964.20	3,225.42	3,144.55	80.87	39.885		
9,000.00	7,054.19	7,151.00	6,916.00	67.66	73.26	175.03	-186.33	964.19	3,325.27	3,244.39	80.88	41.111		
9,100.00	7,053.76	7,151.00	6,915.00	70.21	77.00	174.88	-185.88	964.19	3,425.13	3,344.23	80.90	42.336		
9,200.00	7,053.32	7,151.00	6,914.00	72.78	80.99	174.74	-185.43	964.18	3,525.00	3,444.08	80.92	43.560		
9,300.00	7,052.89	7,151.00	6,913.00	75.38	85.22	174.60	-184.98	964.18	3,624.88	3,543.93	80.94	44.782		
9,400.00	7,052.46	7,151.00	6,912.00	77.99	89.79	174.46	-184.54	964.17	3,724.76	3,643.79	80.97	46.004		
9,500.00	7,052.02	7,151.00	6,911.00	80.62	94.60	174.32	-184.10	964.17	3,824.65	3,743.66	80.99	47.224		
9,600.00	7,051.59	7,151.00	6,910.00	83.26	99.64	174.18	-183.67	964.16	3,924.54	3,843.53	81.01	48.443		
9,700.00	7,051.15	7,151.00	6,909.00	85.92	104.92	174.04	-183.24	964.16	4,024.44	3,943.40	81.04	49.660		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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		
9,800.00	7,050.72	8,883.97	7,246.01	88.59	50.48	173.90	-182.81	964.15	4,124.35	4,043.28	81.07	50.876		
9,900.00	7,050.29	8,883.55	7,246.02	91.28	50.47	173.77	-182.39	964.15	4,224.25	4,143.16	81.09	52.091		
10,000.00	7,049.85	8,883.13	7,246.02	93.97	50.47	173.64	-181.97	964.14	4,324.17	4,243.04	81.12	53.304		
10,100.00	7,049.42	8,882.71	7,246.03	96.67	50.46	173.50	-181.56	964.14	4,424.08	4,342.93	81.15	54.516		
10,200.00	7,048.98	8,882.30	7,246.03	99.38	50.45	173.37	-181.15	964.13	4,524.00	4,442.82	81.18	55.725		
10,300.00	7,048.55	8,881.89	7,246.04	102.10	50.45	173.24	-180.74	964.13	4,623.93	4,542.71	81.22	56.933		
10,400.00	7,048.12	8,881.49	7,246.04	104.83	50.44	173.12	-180.33	964.12	4,723.85	4,642.60	81.25	58.140		
10,500.00	7,047.68	8,881.09	7,246.05	107.56	50.43	172.99	-179.93	964.12	4,823.78	4,742.50	81.28	59.344		
10,600.00	7,047.25	8,880.69	7,246.06	110.30	50.43	172.86	-179.53	964.11	4,923.72	4,842.40	81.32	60.547		
10,700.00	7,046.81	8,880.30	7,246.06	113.05	50.42	172.74	-179.14	964.11	5,023.65	4,942.30	81.36	61.748		
10,800.00	7,046.38	8,879.90	7,246.07	115.80	50.41	172.61	-178.75	964.11	5,123.59	5,042.19	81.40	62.947		
10,900.00	7,045.95	8,879.52	7,246.07	118.55	50.41	172.49	-178.36	964.10	5,223.53	5,142.10	81.43	64.144		
11,000.00	7,045.51	8,879.13	7,246.08	121.31	50.40	172.37	-177.98	964.10	5,323.47	5,242.00	81.48	65.339		
11,100.00	7,045.08	8,878.75	7,246.08	124.08	50.39	172.25	-177.60	964.09	5,423.42	5,341.90	81.52	66.532		
11,200.00	7,044.64	8,878.37	7,246.09	126.85	50.39	172.13	-177.22	964.09	5,523.36	5,441.80	81.56	67.722		
11,300.00	7,044.21	8,878.00	7,246.09	129.62	50.38	172.01	-176.85	964.09	5,623.31	5,541.71	81.60	68.911		
11,400.00	7,043.78	8,877.63	7,246.10	132.40	50.38	171.89	-176.47	964.08	5,723.26	5,641.61	81.65	70.097		
11,500.00	7,043.34	8,877.26	7,246.10	135.18	50.37	171.78	-176.11	964.08	5,823.21	5,741.52	81.69	71.281		
11,600.00	7,042.91	8,876.89	7,246.11	137.96	50.36	171.66	-175.74	964.07	5,923.17	5,841.43	81.74	72.463		
11,700.00	7,042.47	8,876.53	7,246.11	140.75	50.36	171.55	-175.38	964.07	6,023.12	5,941.33	81.79	73.643		
11,800.00	7,042.04	8,876.17	7,246.12	143.54	50.35	171.43	-175.02	964.07	6,123.08	6,041.24	81.84	74.820		
11,900.00	7,041.61	8,875.82	7,246.12	146.33	50.35	171.32	-174.66	964.06	6,223.04	6,141.15	81.89	75.995		
12,000.00	7,041.17	8,875.46	7,246.13	149.13	50.34	171.21	-174.31	964.06	6,322.99	6,241.06	81.94	77.167		
12,100.00	7,040.74	12,100.00	7,246.27	151.92	103.61	168.06	-164.20	963.94	6,422.95	6,287.96	134.99	47.581		
12,200.00	7,040.30	12,200.00	7,246.28	154.72	105.27	167.87	-163.57	963.93	6,522.92	6,386.22	136.69	47.719		
12,300.00	7,039.87	12,300.00	7,246.29	157.52	106.93	167.68	-162.95	963.93	6,622.88	6,484.48	138.40	47.853		
12,400.00	7,039.44	12,400.00	7,246.30	160.33	108.59	167.49	-162.32	963.92	6,722.84	6,582.73	140.11	47.984		
12,500.00	7,039.00	12,500.00	7,246.30	163.13	110.26	167.30	-161.70	963.91	6,822.80	6,680.99	141.81	48.111		
12,600.00	7,038.57	12,600.00	7,246.31	165.94	111.92	167.11	-161.08	963.90	6,922.77	6,779.25	143.52	48.235		
12,700.00	7,038.13	12,700.00	7,246.32	168.75	113.58	166.92	-160.45	963.89	7,022.73	6,877.50	145.23	48.355		
12,800.00	7,037.70	12,800.00	7,246.33	171.56	115.24	166.73	-159.83	963.89	7,122.70	6,975.76	146.94	48.472		
12,900.00	7,037.27	12,900.00	7,246.34	174.37	116.90	166.54	-159.21	963.88	7,222.67	7,074.01	148.65	48.587		
13,000.00	7,036.83	13,000.00	7,246.35	177.19	118.57	166.35	-158.58	963.87	7,322.64	7,172.27	150.37	48.698		
13,100.00	7,036.40	8,876.55	7,246.11	180.00	50.36	171.55	-175.40	964.07	7,422.62	7,339.96	82.66	89.801		
13,200.00	7,035.96	8,874.39	7,246.14	182.82	50.32	170.87	-173.24	964.05	7,522.59	7,439.90	82.69	90.977		
13,300.00	7,035.53	8,871.95	7,246.18	185.64	50.28	170.11	-170.80	964.02	7,622.56	7,539.84	82.71	92.156		
13,400.00	7,035.10	8,869.17	7,246.22	188.46	50.24	169.24	-168.02	963.99	7,722.53	7,639.79	82.74	93.339		
13,500.00	7,034.66	8,865.98	7,246.26	191.28	50.19	168.26	-164.83	963.96	7,822.50	7,739.75	82.75	94.529		
13,600.00	7,034.23	8,862.28	7,246.31	194.10	50.13	167.12	-161.13	963.91	7,922.48	7,839.72	82.76	95.728		
13,700.00	7,033.79	8,857.94	7,246.37	196.92	50.06	165.80	-156.79	963.86	8,022.45	7,939.69	82.76	96.938		
13,800.00	7,033.36	8,852.77	7,246.44	199.74	49.97	164.25	-151.62	963.80	8,122.42	8,039.68	82.74	98.163		
13,900.00	7,032.93	8,846.50	7,246.53	202.57	49.87	162.41	-145.35	963.72	8,222.40	8,139.69	82.71	99.409		
14,000.00	7,032.49	8,839.00	7,246.64	205.39	49.75	160.25	-137.85	963.62	8,322.37	8,239.71	82.66	100.680		
14,100.00	7,032.06	8,839.00	7,246.64	208.22	49.75	160.25	-137.85	963.62	8,422.35	8,339.61	82.74	101.794		
14,200.00	7,031.62	8,839.00	7,246.64	211.05	49.75	160.25	-137.85	963.62	8,522.32	8,439.50	82.82	102.904		
14,300.00	7,031.19	8,839.00	7,246.64	213.87	49.75	160.25	-137.85	963.62	8,622.30	8,539.40	82.90	104.011		
14,400.00	7,030.76	8,839.00	7,246.64	216.70	49.75	160.25	-137.85	963.62	8,722.27	8,639.30	82.98	105.116		
14,500.00	7,030.32	8,839.00	7,246.64	219.53	49.75	160.25	-137.85	963.62	8,822.25	8,739.19	83.06	106.217		
14,600.00	7,029.89	8,839.00	7,246.64	222.36	49.75	160.25	-137.85	963.62	8,922.23	8,839.09	83.14	107.314		
14,700.00	7,029.45	8,839.00	7,246.64	225.19	49.75	160.25	-137.85	963.62	9,022.21	8,938.98	83.22	108.409		
14,800.00	7,029.02	8,839.00	7,246.64	228.03	49.75	160.25	-137.85	963.62	9,122.18	9,038.88	83.31	109.500		
14,805.04	7,029.00	8,839.00	7,246.64	228.17	49.75	160.25	-137.85	963.62	9,127.22	9,043.91	83.31	109.555		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	-179.52	-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	292.53	293.51	3.44	3.43	-179.49	-201.50	-1.81	201.61	194.73	6.89	29.283		
400.00	400.00	385.80	386.67	3.60	3.57	-179.38	-206.01	-2.23	206.45	199.25	7.20	28.661		
500.00	499.98	478.78	479.34	3.80	3.75	-37.60	-213.51	-2.94	213.14	205.54	7.60	28.033		
600.00	599.90	571.45	571.41	4.02	3.96	-37.94	-223.95	-3.92	221.30	213.23	8.07	27.419		
700.00	699.82	663.54	662.52	4.28	4.21	-38.20	-237.27	-5.18	232.63	224.03	8.60	27.040		
800.00	799.74	754.87	752.41	4.57	4.49	-38.37	-253.34	-6.69	247.12	237.94	9.18	26.911		
900.00	899.66	845.28	840.83	4.88	4.80	-38.46	-272.06	-8.46	264.73	254.94	9.79	27.034		
1,000.00	999.58	934.59	927.57	5.21	5.13	-38.47	-293.27	-10.45	285.41	274.98	10.43	27.364		
1,100.00	1,099.50	1,030.98	1,020.72	5.55	5.52	-38.45	-317.92	-12.78	307.92	296.83	11.09	27.764		
1,200.00	1,199.42	1,128.41	1,114.87	5.91	5.94	-38.44	-342.87	-15.13	330.46	318.68	11.79	28.038		
1,300.00	1,299.34	1,225.84	1,209.02	6.28	6.37	-38.42	-367.81	-17.48	353.00	340.49	12.51	28.220		
1,400.00	1,399.26	1,323.26	1,303.18	6.66	6.81	-38.41	-392.75	-19.82	375.54	362.29	13.26	28.332		
1,500.00	1,499.18	1,420.69	1,397.33	7.04	7.27	-38.40	-417.69	-22.17	398.08	384.06	14.02	28.393		
1,600.00	1,599.10	1,518.12	1,491.48	7.43	7.73	-38.38	-442.63	-24.52	420.62	405.82	14.80	28.415		
1,700.00	1,699.01	1,615.54	1,585.63	7.83	8.21	-38.37	-467.57	-26.87	443.16	427.56	15.60	28.410		
1,800.00	1,798.93	1,712.97	1,679.78	8.23	8.69	-38.37	-492.52	-29.22	465.70	449.29	16.41	28.385		
1,900.00	1,898.85	1,810.40	1,773.93	8.64	9.17	-38.36	-517.46	-31.57	488.24	471.01	17.22	28.345		
2,000.00	1,998.77	1,907.82	1,868.08	9.05	9.66	-38.35	-542.40	-33.92	510.78	492.72	18.05	28.296		
2,100.00	2,098.69	2,005.25	1,962.23	9.46	10.15	-38.34	-567.34	-36.27	533.31	514.43	18.89	28.238		
2,200.00	2,198.61	2,102.68	2,056.38	9.88	10.65	-38.34	-592.28	-38.62	555.85	536.13	19.73	28.177		
2,300.00	2,298.53	2,200.11	2,150.53	10.30	11.15	-38.33	-617.23	-40.97	578.39	557.82	20.57	28.112		
2,400.00	2,398.45	2,302.47	2,244.68	10.72	11.68	-38.33	-642.17	-43.32	600.93	579.48	21.45	28.015		
2,500.00	2,498.37	2,405.04	2,338.83	11.14	12.21	-38.32	-667.11	-45.67	623.47	601.14	22.33	27.919		
2,600.00	2,598.29	2,507.61	2,432.99	11.56	12.74	-38.32	-692.05	-48.02	646.01	622.79	23.22	27.825		
2,700.00	2,698.21	2,589.81	2,527.14	11.98	13.17	-38.31	-716.99	-50.37	668.55	644.54	24.01	27.845		
2,800.00	2,798.13	2,687.24	2,621.29	12.41	13.68	-38.31	-741.93	-52.72	691.09	666.21	24.88	27.779		
2,900.00	2,898.05	2,784.67	2,715.44	12.84	14.19	-38.31	-766.88	-55.07	713.63	687.88	25.75	27.715		
3,000.00	2,997.97	2,882.09	2,809.59	13.27	14.70	-38.30	-791.82	-57.42	736.16	709.54	26.62	27.652		
3,100.00	3,097.89	2,979.52	2,903.74	13.69	15.21	-38.30	-816.76	-59.77	758.70	731.21	27.50	27.591		
3,200.00	3,197.81	3,076.95	2,997.89	14.12	15.73	-38.30	-841.70	-62.12	781.24	752.87	28.38	27.531		
3,300.00	3,297.73	3,174.37	3,092.04	14.56	16.24	-38.29	-866.64	-64.46	803.78	774.53	29.26	27.473		
3,400.00	3,397.65	3,271.80	3,186.19	14.99	16.76	-38.29	-891.58	-66.81	826.32	796.18	30.14	27.417		
3,500.00	3,497.56	3,369.23	3,280.34	15.42	17.28	-38.29	-916.53	-69.16	848.86	817.84	31.02	27.363		
3,600.00	3,597.48	3,466.65	3,374.49	15.85	17.79	-38.29	-941.47	-71.51	871.40	839.49	31.91	27.310		
3,700.00	3,697.40	3,564.08	3,468.64	16.28	18.31	-38.28	-966.41	-73.86	893.94	861.14	32.79	27.259		
3,800.00	3,797.32	3,661.51	3,562.80	16.72	18.83	-38.28	-991.35	-76.21	916.48	882.80	33.68	27.210		
3,900.00	3,897.24	3,758.93	3,656.95	17.15	19.35	-38.28	-1,016.29	-78.56	939.02	904.45	34.57	27.162		
4,000.00	3,997.16	3,856.36	3,751.10	17.59	19.87	-38.28	-1,041.23	-80.91	961.56	926.09	35.46	27.116		
4,100.00	4,097.08	3,953.79	3,845.25	18.02	20.39	-38.28	-1,066.18	-83.26	984.09	947.74	36.35	27.071		
4,200.00	4,197.00	4,051.22	3,939.40	18.46	20.91	-38.27	-1,091.12	-85.61	1,006.63	969.39	37.24	27.028		
4,300.00	4,296.92	4,148.64	4,033.55	18.89	21.43	-38.27	-1,116.06	-87.96	1,029.17	991.04	38.14	26.986		
4,400.00	4,396.84	4,246.07	4,127.70	19.33	21.95	-38.27	-1,141.00	-90.31	1,051.71	1,012.68	39.03	26.946		
4,500.00	4,496.76	4,343.50	4,221.85	19.77	22.47	-38.27	-1,165.94	-92.66	1,074.25	1,034.32	39.93	26.907		
4,600.00	4,596.68	4,440.92	4,316.00	20.20	22.99	-38.27	-1,190.88	-95.01	1,096.79	1,055.97	40.82	26.869		
4,700.00	4,696.60	4,538.35	4,410.15	20.64	23.51	-38.27	-1,215.83	-97.36	1,119.33	1,077.61	41.72	26.832		
4,800.00	4,796.52	4,635.78	4,504.30	21.08	24.03	-38.26	-1,240.77	-99.71	1,141.87	1,099.25	42.61	26.796		
4,900.00	4,896.44	4,733.20	4,598.46	21.51	24.56	-38.26	-1,265.71	-102.06	1,164.41	1,120.90	43.51	26.762		
5,000.00	4,996.36	4,830.63	4,692.61	21.95	25.08	-38.26	-1,290.65	-104.41	1,186.95	1,142.54	44.41	26.728		
5,100.00	5,096.28	4,928.06	4,786.76	22.39	25.60	-38.26	-1,315.59	-106.76	1,209.48	1,164.18	45.31	26.696		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,196.19	5,025.48	4,880.91	22.83	26.12	-38.26	-1,340.54	-109.10	1,232.02	1,185.82	46.21	26.664		
5,300.00	5,296.11	5,122.91	4,975.06	23.27	26.65	-38.26	-1,365.48	-111.45	1,254.56	1,207.46	47.10	26.634		
5,400.00	5,396.03	5,220.34	5,069.21	23.71	27.17	-38.26	-1,390.42	-113.80	1,277.10	1,229.10	48.00	26.604		
5,500.00	5,495.95	5,317.76	5,163.36	24.14	27.70	-38.26	-1,415.36	-116.15	1,299.64	1,250.74	48.90	26.575		
5,600.00	5,595.87	5,415.19	5,257.51	24.58	28.22	-38.25	-1,440.30	-118.50	1,322.18	1,272.37	49.81	26.547		
5,700.00	5,695.79	5,512.62	5,351.66	25.02	28.74	-38.25	-1,465.24	-120.85	1,344.72	1,294.01	50.71	26.520		
5,800.00	5,795.71	5,610.05	5,445.81	25.46	29.27	-38.25	-1,490.19	-123.20	1,367.26	1,315.65	51.61	26.493		
5,900.00	5,895.63	5,707.47	5,539.96	25.90	29.79	-38.25	-1,515.13	-125.55	1,389.80	1,337.29	52.51	26.468		
6,000.00	5,995.55	5,804.90	5,634.11	26.34	30.31	-38.25	-1,540.07	-127.90	1,412.34	1,358.92	53.41	26.443		
6,100.00	6,095.47	5,902.33	5,728.27	26.78	30.84	-38.25	-1,565.01	-130.25	1,434.87	1,380.56	54.31	26.418		
6,200.00	6,195.39	6,000.25	5,822.42	27.22	31.37	-38.25	-1,589.95	-132.60	1,457.41	1,402.19	55.22	26.393		
6,300.00	6,295.31	6,097.18	5,916.57	27.66	31.89	-38.25	-1,614.89	-134.95	1,479.95	1,423.83	56.12	26.371		
6,400.00	6,395.23	6,205.39	6,010.72	28.10	32.47	-38.25	-1,639.84	-137.30	1,502.49	1,445.42	57.08	26.325		
6,500.00	6,495.02	6,308.03	6,104.81	28.54	33.02	-72.81	-1,664.76	-139.65	1,525.01	1,467.00	58.01	26.291		
6,600.00	6,593.09	6,388.01	6,197.62	28.98	33.46	-80.46	-1,689.35	-141.96	1,547.25	1,488.42	58.83	26.301		
6,700.00	6,687.01	6,480.39	6,286.90	29.41	33.95	-81.96	-1,713.00	-144.19	1,569.15	1,509.43	59.72	26.275		
6,800.00	6,774.46	6,570.33	6,373.79	29.83	34.44	-82.57	-1,736.02	-146.78	1,591.01	1,530.37	60.63	26.240		
6,900.00	6,853.31	6,675.16	6,473.97	30.26	34.99	-83.09	-1,762.65	-161.66	1,612.54	1,550.79	61.75	26.115		
7,000.00	6,921.60	6,792.70	6,581.70	30.76	35.56	-83.60	-1,791.42	-198.28	1,632.99	1,569.98	63.02	25.914		
7,100.00	6,977.66	6,926.86	6,694.24	31.38	36.13	-84.22	-1,821.68	-264.24	1,651.55	1,587.12	64.43	25.634		
7,200.00	7,020.10	7,081.61	6,804.08	32.17	36.69	-84.97	-1,851.48	-368.54	1,667.13	1,601.12	66.02	25.253		
7,300.00	7,047.88	7,258.86	6,895.72	33.13	37.26	-85.70	-1,876.79	-517.47	1,678.44	1,610.48	67.97	24.695		
7,400.00	7,060.32	7,454.81	6,946.63	34.27	38.02	-86.19	-1,891.58	-705.30	1,684.14	1,613.52	70.62	23.849		
7,500.00	7,060.70	7,605.38	6,950.77	35.56	39.07	-86.26	-1,893.65	-844.92	1,684.62	1,611.05	73.57	22.898		
7,600.00	7,060.27	7,705.38	6,950.39	37.02	40.12	-86.26	-1,894.25	-944.92	1,684.62	1,608.21	76.40	22.049		
7,700.00	7,059.83	7,794.62	6,950.01	38.64	41.28	-86.26	-1,894.85	-1,044.91	1,684.61	1,605.24	79.38	21.223		
7,800.00	7,059.40	7,905.38	6,949.63	40.40	42.95	-86.26	-1,895.45	-1,144.91	1,684.61	1,601.65	82.96	20.306		
7,900.00	7,058.97	8,005.38	6,949.25	42.28	44.63	-86.27	-1,896.04	-1,244.91	1,684.61	1,597.99	86.62	19.448		
8,000.00	7,058.53	8,105.38	6,948.87	44.27	46.44	-86.27	-1,896.64	-1,344.91	1,684.60	1,594.11	90.49	18.616		
8,100.00	7,058.10	8,194.62	6,948.49	46.35	48.16	-86.27	-1,897.24	-1,444.90	1,684.60	1,590.27	94.33	17.859		
8,200.00	7,057.66	8,305.38	6,948.12	48.50	50.40	-86.27	-1,897.84	-1,544.90	1,684.59	1,585.83	98.77	17.057		
8,300.00	7,057.23	8,405.38	6,947.74	50.73	52.50	-86.27	-1,898.44	-1,644.90	1,684.59	1,581.46	103.13	16.335		
8,400.00	7,056.80	8,505.38	6,947.36	53.02	54.68	-86.28	-1,899.04	-1,744.90	1,684.59	1,576.97	107.62	15.654		
8,500.00	7,056.36	8,605.38	6,946.98	55.36	56.93	-86.28	-1,899.64	-1,844.89	1,684.58	1,572.37	112.21	15.012		
8,600.00	7,055.93	8,705.38	6,946.60	57.74	59.22	-86.28	-1,900.24	-1,944.89	1,684.58	1,567.67	116.91	14.409		
8,700.00	7,055.49	8,805.38	6,946.22	60.17	61.57	-86.28	-1,900.83	-2,044.89	1,684.58	1,562.89	121.69	13.843		
8,800.00	7,055.06	8,905.38	6,945.84	62.63	63.96	-86.28	-1,901.43	-2,144.89	1,684.57	1,558.02	126.55	13.312		
8,900.00	7,054.63	9,005.38	6,945.46	65.13	66.38	-86.28	-1,902.03	-2,244.88	1,684.57	1,553.09	131.48	12.813		
9,000.00	7,054.19	9,105.38	6,945.08	67.66	68.84	-86.29	-1,902.63	-2,344.88	1,684.57	1,548.10	136.46	12.344		
9,100.00	7,053.76	9,194.62	6,944.70	70.21	71.07	-86.29	-1,903.23	-2,444.88	1,684.56	1,543.33	141.24	11.927		
9,200.00	7,053.32	9,294.62	6,944.32	72.78	73.58	-86.29	-1,903.83	-2,544.88	1,684.56	1,538.23	146.32	11.513		
9,300.00	7,052.89	9,405.38	6,943.94	75.38	76.39	-86.29	-1,904.43	-2,644.87	1,684.55	1,532.82	151.73	11.102		
9,400.00	7,052.46	9,494.62	6,943.56	77.99	78.68	-86.29	-1,905.02	-2,744.87	1,684.55	1,527.92	156.63	10.755		
9,500.00	7,052.02	9,605.38	6,943.18	80.62	81.54	-86.30	-1,905.62	-2,844.87	1,684.55	1,522.43	162.11	10.391		
9,600.00	7,051.59	9,705.38	6,942.80	83.26	84.14	-86.30	-1,906.22	-2,944.87	1,684.54	1,517.19	167.36	10.066		
9,700.00	7,051.15	9,805.38	6,942.43	85.92	86.76	-86.30	-1,906.82	-3,044.86	1,684.54	1,511.91	172.63	9.758		
9,800.00	7,050.72	9,905.38	6,942.05	88.59	89.40	-86.30	-1,907.42	-3,144.86	1,684.54	1,506.61	177.93	9.468		
9,900.00	7,050.29	10,005.38	6,941.67	91.28	92.04	-86.30	-1,908.02	-3,244.86	1,684.53	1,501.29	183.25	9.193		
10,000.00	7,049.85	10,105.38	6,941.29	93.97	94.70	-86.30	-1,908.62	-3,344.86	1,684.53	1,495.94	188.59	8.932		
10,100.00	7,049.42	10,205.38	6,940.91	96.67	97.37	-86.31	-1,909.21	-3,444.85	1,684.53	1,490.57	193.96	8.685		
10,200.00	7,048.98	10,305.38	6,940.53	99.38	100.05	-86.31	-1,909.81	-3,544.85	1,684.52	1,485.18	199.34	8.450		
10,300.00	7,048.55	10,405.38	6,940.15	102.10	102.74	-86.31	-1,910.41	-3,644.85	1,684.52	1,479.77	204.74	8.227		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,048.12	10,505.38	6,939.77	104.83	105.44	-86.31	-1,911.01	-3,744.85	1,684.51	1,474.35	210.16	8.015		
10,500.00	7,047.68	10,605.38	6,939.39	107.56	108.15	-86.31	-1,911.61	-3,844.84	1,684.51	1,468.91	215.60	7.813		
10,600.00	7,047.25	10,705.38	6,939.01	110.30	110.87	-86.32	-1,912.21	-3,944.84	1,684.51	1,463.46	221.04	7.621		
10,700.00	7,046.81	10,805.38	6,938.63	113.05	113.59	-86.32	-1,912.81	-4,044.84	1,684.50	1,458.00	226.50	7.437		
10,800.00	7,046.38	10,905.38	6,938.25	115.80	116.32	-86.32	-1,913.41	-4,144.84	1,684.50	1,452.53	231.97	7.262		
10,900.00	7,045.95	11,005.38	6,937.87	118.55	119.05	-86.32	-1,914.00	-4,244.83	1,684.50	1,447.04	237.46	7.094		
11,000.00	7,045.51	11,105.38	6,937.49	121.31	121.79	-86.32	-1,914.60	-4,344.83	1,684.49	1,441.54	242.95	6.934		
11,100.00	7,045.08	11,205.38	6,937.11	124.08	124.54	-86.33	-1,915.20	-4,444.83	1,684.49	1,436.04	248.45	6.780		
11,200.00	7,044.64	11,305.38	6,936.74	126.85	127.29	-86.33	-1,915.80	-4,544.83	1,684.49	1,430.52	253.96	6.633		
11,300.00	7,044.21	11,405.38	6,936.36	129.62	130.05	-86.33	-1,916.40	-4,644.82	1,684.48	1,425.00	259.48	6.492		
11,400.00	7,043.78	11,494.62	6,935.98	132.40	132.51	-86.33	-1,917.00	-4,744.82	1,684.48	1,419.76	264.71	6.363		
11,500.00	7,043.34	11,605.38	6,935.60	135.18	135.57	-86.33	-1,917.60	-4,844.82	1,684.47	1,413.93	270.55	6.226		
11,600.00	7,042.91	11,705.38	6,935.22	137.96	138.34	-86.33	-1,918.19	-4,944.82	1,684.47	1,408.38	276.09	6.101		
11,700.00	7,042.47	11,805.38	6,934.84	140.75	141.11	-86.34	-1,918.79	-5,044.81	1,684.47	1,402.83	281.64	5.981		
11,800.00	7,042.04	11,905.38	6,934.46	143.54	143.89	-86.34	-1,919.39	-5,144.81	1,684.46	1,397.27	287.19	5.865		
11,900.00	7,041.61	12,005.38	6,934.08	146.33	146.66	-86.34	-1,919.99	-5,244.81	1,684.46	1,391.71	292.75	5.754		
12,000.00	7,041.17	12,105.38	6,933.70	149.13	149.44	-86.34	-1,920.59	-5,344.81	1,684.46	1,386.14	298.32	5.646		
12,100.00	7,040.74	12,205.38	6,933.32	151.92	152.23	-86.34	-1,921.19	-5,444.80	1,684.45	1,380.56	303.89	5.543		
12,200.00	7,040.30	12,305.38	6,932.94	154.72	155.02	-86.35	-1,921.79	-5,544.80	1,684.45	1,374.98	309.47	5.443		
12,300.00	7,039.87	12,405.38	6,932.56	157.52	157.81	-86.35	-1,922.38	-5,644.80	1,684.45	1,369.40	315.05	5.347		
12,400.00	7,039.44	12,505.38	6,932.18	160.33	160.60	-86.35	-1,922.98	-5,744.80	1,684.44	1,363.81	320.64	5.253		
12,500.00	7,039.00	12,605.38	6,931.80	163.13	163.39	-86.35	-1,923.58	-5,844.79	1,684.44	1,358.21	326.23	5.163		
12,600.00	7,038.57	12,705.38	6,931.42	165.94	166.19	-86.35	-1,924.18	-5,944.79	1,684.43	1,352.62	331.82	5.076		
12,700.00	7,038.13	12,805.38	6,931.05	168.75	168.99	-86.35	-1,924.78	-6,044.79	1,684.43	1,347.01	337.42	4.992		
12,800.00	7,037.70	12,905.38	6,930.67	171.56	171.79	-86.36	-1,925.38	-6,144.79	1,684.43	1,341.41	343.02	4.911		
12,900.00	7,037.27	13,005.38	6,930.29	174.37	174.59	-86.36	-1,925.98	-6,244.78	1,684.42	1,335.80	348.62	4.832		
13,000.00	7,036.83	13,105.38	6,929.91	177.19	177.40	-86.36	-1,926.58	-6,344.78	1,684.42	1,330.19	354.23	4.755		
13,100.00	7,036.40	13,205.38	6,929.53	180.00	180.20	-86.36	-1,927.17	-6,444.78	1,684.42	1,324.57	359.84	4.681		
13,200.00	7,035.96	13,305.38	6,929.15	182.82	183.01	-86.36	-1,927.77	-6,544.78	1,684.41	1,318.96	365.46	4.609		
13,300.00	7,035.53	13,405.38	6,928.77	185.64	185.82	-86.37	-1,928.37	-6,644.77	1,684.41	1,313.34	371.07	4.539		
13,400.00	7,035.10	13,505.38	6,928.39	188.46	188.63	-86.37	-1,928.97	-6,744.77	1,684.41	1,307.71	376.69	4.472		
13,500.00	7,034.66	13,605.38	6,928.01	191.28	191.44	-86.37	-1,929.57	-6,844.77	1,684.40	1,302.09	382.32	4.406		
13,600.00	7,034.23	13,705.38	6,927.63	194.10	194.25	-86.37	-1,930.17	-6,944.77	1,684.40	1,296.46	387.94	4.342		
13,700.00	7,033.79	13,794.62	6,927.25	196.92	196.77	-86.37	-1,930.77	-7,044.76	1,684.40	1,291.13	393.27	4.283		
13,800.00	7,033.36	13,905.38	6,926.87	199.74	199.89	-86.38	-1,931.36	-7,144.76	1,684.39	1,285.19	399.20	4.219		
13,900.00	7,032.93	14,005.38	6,926.49	202.57	202.70	-86.38	-1,931.96	-7,244.76	1,684.39	1,279.56	404.83	4.161		
14,000.00	7,032.49	14,105.38	6,926.11	205.39	205.52	-86.38	-1,932.56	-7,344.76	1,684.38	1,273.92	410.46	4.104		
14,100.00	7,032.06	14,205.38	6,925.73	208.22	208.34	-86.38	-1,933.16	-7,444.75	1,684.38	1,268.28	416.10	4.048		
14,200.00	7,031.62	14,305.38	6,925.36	211.05	211.16	-86.38	-1,933.76	-7,544.75	1,684.38	1,262.64	421.74	3.994		
14,300.00	7,031.19	14,405.38	6,924.98	213.87	213.98	-86.38	-1,934.36	-7,644.75	1,684.37	1,257.00	427.38	3.941		
14,400.00	7,030.76	14,505.38	6,924.60	216.70	216.81	-86.39	-1,934.96	-7,744.75	1,684.37	1,251.35	433.02	3.890		
14,500.00	7,030.32	14,605.38	6,924.22	219.53	219.63	-86.39	-1,935.55	-7,844.74	1,684.37	1,245.71	438.66	3.840		
14,600.00	7,029.89	14,705.38	6,923.84	222.36	222.45	-86.39	-1,936.15	-7,944.74	1,684.36	1,240.06	444.31	3.791		
14,700.00	7,029.45	14,794.62	6,923.46	225.19	224.97	-86.39	-1,936.75	-8,044.74	1,684.36	1,234.71	449.65	3.746		
14,800.00	7,029.02	14,894.62	6,923.08	228.03	227.80	-86.39	-1,937.35	-8,144.74	1,684.36	1,229.06	455.30	3.699		
14,805.04	7,029.00	14,899.66	6,923.06	228.17	227.94	-86.39	-1,937.38	-8,149.77	1,684.36	1,228.77	455.58	3.697 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	-179.50	-159.93	-1.39	159.94					
100.00	100.00	101.00	100.00	3.28	3.28	-179.50	-159.93	-1.39	159.94	153.37	6.57	24.345		
200.00	200.00	199.00	200.00	3.34	3.34	-179.50	-159.93	-1.39	159.94	153.27	6.67	23.967	CC, ES	
300.00	300.00	293.77	294.75	3.44	3.43	-179.44	-161.46	-1.59	161.55	154.66	6.89	23.458		
400.00	400.00	388.28	389.14	3.60	3.57	-179.25	-166.07	-2.18	166.44	159.23	7.21	23.090		
500.00	499.98	482.50	483.04	3.80	3.75	-37.40	-173.74	-3.17	173.21	165.60	7.61	22.754		
600.00	599.90	576.38	576.30	4.02	3.97	-37.72	-184.42	-4.55	181.47	173.39	8.08	22.446		
700.00	699.82	669.68	668.58	4.28	4.23	-37.90	-198.03	-6.31	192.93	184.31	8.62	22.375		
800.00	799.74	764.68	762.08	4.57	4.52	-37.97	-214.72	-8.46	207.36	198.17	9.20	22.545		
900.00	899.66	863.54	859.27	4.88	4.86	-38.02	-232.67	-10.77	222.41	212.62	9.80	22.705		
1,000.00	999.58	962.40	956.46	5.21	5.22	-38.05	-250.62	-13.09	237.46	227.01	10.45	22.730		
1,100.00	1,099.50	1,061.26	1,053.65	5.55	5.60	-38.09	-268.57	-15.40	252.51	241.38	11.13	22.688		
1,200.00	1,199.42	1,160.12	1,150.84	5.91	6.00	-38.11	-286.52	-17.72	267.56	255.72	11.84	22.597		
1,300.00	1,299.34	1,258.99	1,248.03	6.28	6.41	-38.14	-304.48	-20.04	282.60	270.03	12.58	22.473		
1,400.00	1,399.26	1,357.85	1,345.22	6.66	6.83	-38.16	-322.43	-22.35	297.65	284.32	13.33	22.329		
1,500.00	1,499.18	1,456.71	1,442.41	7.04	7.26	-38.18	-340.38	-24.67	312.70	298.60	14.10	22.175		
1,600.00	1,599.10	1,555.57	1,539.60	7.43	7.69	-38.20	-358.33	-26.98	327.75	312.86	14.89	22.015		
1,700.00	1,699.01	1,654.43	1,636.79	7.83	8.14	-38.22	-376.28	-29.30	342.80	327.11	15.69	21.855		
1,800.00	1,798.93	1,753.29	1,733.98	8.23	8.58	-38.24	-394.24	-31.61	357.85	341.35	16.49	21.696		
1,900.00	1,898.85	1,852.15	1,831.17	8.64	9.04	-38.25	-412.19	-33.93	372.89	355.58	17.31	21.541		
2,000.00	1,998.77	1,951.01	1,928.36	9.05	9.49	-38.27	-430.14	-36.24	387.94	369.81	18.14	21.391		
2,100.00	2,098.69	2,049.87	2,025.55	9.46	9.95	-38.28	-448.09	-38.56	402.99	384.03	18.97	21.247		
2,200.00	2,198.61	2,148.74	2,122.74	9.88	10.41	-38.29	-466.04	-40.88	418.04	398.24	19.80	21.109		
2,300.00	2,298.53	2,247.60	2,219.93	10.30	10.88	-38.30	-484.00	-43.19	433.09	412.44	20.65	20.977		
2,400.00	2,398.45	2,346.46	2,317.12	10.72	11.34	-38.31	-501.95	-45.51	448.14	426.64	21.49	20.850		
2,500.00	2,498.37	2,445.32	2,414.31	11.14	11.81	-38.32	-519.90	-47.82	463.19	440.84	22.34	20.730		
2,600.00	2,598.29	2,544.18	2,511.50	11.56	12.28	-38.33	-537.85	-50.14	478.24	455.04	23.20	20.615		
2,700.00	2,698.21	2,643.04	2,608.69	11.98	12.75	-38.34	-555.81	-52.45	493.28	469.23	24.06	20.506		
2,800.00	2,798.13	2,741.90	2,705.87	12.41	13.23	-38.34	-573.76	-54.77	508.33	483.42	24.92	20.401		
2,900.00	2,898.05	2,840.76	2,803.06	12.84	13.70	-38.35	-591.71	-57.09	523.38	497.60	25.78	20.302		
3,000.00	2,997.97	2,939.69	2,900.25	13.27	14.18	-38.36	-609.66	-59.40	538.43	511.79	26.64	20.208		
3,100.00	3,097.89	3,038.49	2,997.44	13.69	14.65	-38.37	-627.61	-61.72	553.48	525.97	27.51	20.118		
3,200.00	3,197.81	3,137.35	3,094.63	14.12	15.13	-38.37	-645.57	-64.03	568.53	540.15	28.38	20.032		
3,300.00	3,297.73	3,236.21	3,191.82	14.56	15.61	-38.38	-663.52	-66.35	583.58	554.32	29.25	19.950		
3,400.00	3,397.65	3,335.07	3,289.01	14.99	16.09	-38.38	-681.47	-68.66	598.62	568.50	30.13	19.871		
3,500.00	3,497.56	3,433.93	3,386.20	15.42	16.56	-38.39	-699.42	-70.98	613.67	582.67	31.00	19.796		
3,600.00	3,597.48	3,532.79	3,483.39	15.85	17.04	-38.39	-717.37	-73.29	628.72	596.85	31.87	19.725		
3,700.00	3,697.40	3,631.65	3,580.58	16.28	17.52	-38.40	-735.33	-75.61	643.77	611.02	32.75	19.656		
3,800.00	3,797.32	3,730.51	3,677.77	16.72	18.01	-38.40	-753.28	-77.93	658.82	625.19	33.63	19.591		
3,900.00	3,897.24	3,829.38	3,774.96	17.15	18.49	-38.41	-771.23	-80.24	673.87	639.36	34.51	19.528		
4,000.00	3,997.16	3,928.24	3,872.15	17.59	18.97	-38.41	-789.18	-82.56	688.92	653.53	35.39	19.468		
4,100.00	4,097.08	4,027.10	3,969.34	18.02	19.45	-38.42	-807.13	-84.87	703.97	667.70	36.27	19.410		
4,200.00	4,197.00	4,125.96	4,066.53	18.46	19.93	-38.42	-825.09	-87.19	719.01	681.86	37.15	19.354		
4,300.00	4,296.92	4,224.82	4,163.72	18.89	20.42	-38.42	-843.04	-89.50	734.06	696.03	38.03	19.301		
4,400.00	4,396.84	4,323.68	4,260.91	19.33	20.90	-38.43	-860.99	-91.82	749.11	710.20	38.92	19.250		
4,500.00	4,496.76	4,422.54	4,358.10	19.77	21.38	-38.43	-878.94	-94.14	764.16	724.36	39.80	19.200		
4,600.00	4,596.68	4,521.40	4,455.29	20.20	21.87	-38.43	-896.90	-96.45	779.21	738.53	40.68	19.153		
4,700.00	4,696.60	4,620.27	4,552.48	20.64	22.35	-38.44	-914.85	-98.77	794.26	752.69	41.57	19.107		
4,800.00	4,796.52	4,719.13	4,649.67	21.08	22.84	-38.44	-932.80	-101.08	809.31	766.85	42.45	19.063		
4,900.00	4,896.44	4,817.99	4,746.86	21.51	23.32	-38.44	-950.75	-103.40	824.36	781.02	43.34	19.020		
5,000.00	4,996.36	4,916.85	4,844.05	21.95	23.81	-38.45	-968.70	-105.71	839.41	795.18	44.23	18.979		
5,100.00	5,096.28	5,015.71	4,941.24	22.39	24.29	-38.45	-986.66	-108.03	854.45	809.34	45.11	18.940		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,196.19	5,114.57	5,038.43	22.83	24.78	-38.45	-1,004.61	-110.35	869.50	823.50	46.00	18.902		
5,300.00	5,296.11	5,213.43	5,135.62	23.27	25.26	-38.45	-1,022.56	-112.66	884.55	837.66	46.89	18.865		
5,400.00	5,396.03	5,312.29	5,232.81	23.71	25.75	-38.46	-1,040.51	-114.98	899.60	851.82	47.78	18.829		
5,500.00	5,495.95	5,411.16	5,330.00	24.14	26.23	-38.46	-1,058.46	-117.29	914.65	865.98	48.67	18.794		
5,600.00	5,595.87	5,510.02	5,427.19	24.58	26.72	-38.46	-1,076.42	-119.61	929.70	880.14	49.56	18.761		
5,700.00	5,695.79	5,608.88	5,524.38	25.02	27.20	-38.46	-1,094.37	-121.92	944.75	894.30	50.45	18.728		
5,800.00	5,795.71	5,707.74	5,621.57	25.46	27.69	-38.47	-1,112.32	-124.24	959.80	908.46	51.33	18.697		
5,900.00	5,895.63	5,806.60	5,718.76	25.90	28.18	-38.47	-1,130.27	-126.55	974.84	922.62	52.22	18.666		
6,000.00	5,995.55	5,905.46	5,815.95	26.34	28.66	-38.47	-1,148.23	-128.87	989.89	936.78	53.12	18.637		
6,100.00	6,095.47	6,004.32	5,913.14	26.78	29.15	-38.47	-1,166.18	-131.19	1,004.94	950.94	54.01	18.608		
6,200.00	6,195.39	6,103.18	6,010.33	27.22	29.64	-38.47	-1,184.13	-133.50	1,019.99	965.09	54.90	18.580		
6,300.00	6,295.31	6,202.04	6,107.52	27.66	30.12	-38.48	-1,202.08	-135.82	1,035.04	979.25	55.79	18.553		
6,400.00	6,395.23	6,300.91	6,204.71	28.10	30.61	-38.48	-1,220.03	-138.13	1,050.09	993.41	56.68	18.527		
6,500.00	6,495.02	6,400.30	6,301.84	28.54	31.10	-73.47	-1,237.97	-140.45	1,065.13	1,007.55	57.57	18.500		
6,600.00	6,593.09	6,502.87	6,397.62	28.98	31.61	-82.06	-1,255.67	-142.73	1,080.10	1,021.61	58.49	18.467		
6,700.00	6,687.01	6,590.82	6,489.73	29.41	32.04	-84.65	-1,272.68	-144.92	1,095.33	1,035.99	59.35	18.457		
6,800.00	6,774.46	6,685.62	6,582.81	29.83	32.51	-86.45	-1,289.91	-149.29	1,111.52	1,051.24	60.28	18.438		
6,900.00	6,853.31	6,792.08	6,685.46	30.26	33.01	-87.98	-1,309.16	-169.29	1,128.37	1,067.01	61.36	18.389		
7,000.00	6,921.60	6,909.72	6,793.24	30.76	33.53	-89.37	-1,329.73	-211.24	1,145.23	1,082.70	62.52	18.317		
7,100.00	6,977.66	7,041.27	6,902.38	31.38	34.05	-90.72	-1,351.01	-281.09	1,161.26	1,097.52	63.74	18.218		
7,200.00	7,020.10	7,189.16	7,005.19	32.17	34.56	-91.99	-1,371.69	-384.89	1,175.39	1,110.33	65.06	18.067		
7,300.00	7,047.88	7,354.15	7,088.61	33.13	35.14	-93.07	-1,389.42	-525.60	1,186.31	1,119.63	66.68	17.791		
7,400.00	7,060.32	7,533.36	7,135.68	34.27	36.18	-93.73	-1,400.97	-697.51	1,192.73	1,123.72	69.01	17.284		
7,500.00	7,060.70	7,673.24	7,140.71	35.56	37.55	-93.84	-1,404.22	-837.12	1,194.39	1,122.63	71.77	16.642		
7,600.00	7,060.27	7,773.23	7,140.17	37.02	38.81	-93.83	-1,405.79	-937.10	1,195.36	1,120.76	74.60	16.025		
7,700.00	7,059.83	7,873.23	7,139.62	38.64	40.26	-93.82	-1,407.36	-1,037.09	1,196.32	1,118.58	77.73	15.390		
7,800.00	7,059.40	7,973.22	7,139.08	40.40	41.87	-93.81	-1,408.93	-1,137.07	1,197.28	1,116.13	81.15	14.753		
7,900.00	7,058.97	8,073.22	7,138.54	42.28	43.61	-93.81	-1,410.50	-1,237.05	1,198.24	1,113.42	84.82	14.127		
8,000.00	7,058.53	8,173.21	7,138.00	44.27	45.48	-93.80	-1,412.07	-1,337.03	1,199.20	1,110.50	88.70	13.520		
8,100.00	7,058.10	8,273.21	7,137.46	46.35	47.44	-93.79	-1,413.64	-1,437.01	1,200.17	1,107.40	92.77	12.937		
8,200.00	7,057.66	8,373.20	7,136.91	48.50	49.50	-93.78	-1,415.21	-1,536.99	1,201.13	1,104.12	97.00	12.382		
8,300.00	7,057.23	8,473.20	7,136.37	50.73	51.63	-93.77	-1,416.78	-1,636.97	1,202.09	1,100.71	101.38	11.857		
8,400.00	7,056.80	8,573.20	7,135.83	53.02	53.83	-93.76	-1,418.35	-1,736.96	1,203.05	1,097.16	105.89	11.361		
8,500.00	7,056.36	8,673.19	7,135.29	55.36	56.09	-93.76	-1,419.92	-1,836.94	1,204.01	1,093.51	110.51	10.895		
8,600.00	7,055.93	8,773.19	7,134.75	57.74	58.41	-93.75	-1,421.49	-1,936.92	1,204.98	1,089.76	115.22	10.458		
8,700.00	7,055.49	8,873.18	7,134.20	60.17	60.77	-93.74	-1,423.06	-2,036.90	1,205.94	1,085.92	120.02	10.048		
8,800.00	7,055.06	8,973.18	7,133.66	62.63	63.17	-93.73	-1,424.63	-2,136.88	1,206.90	1,082.00	124.90	9.663		
8,900.00	7,054.63	9,073.17	7,133.12	65.13	65.61	-93.72	-1,426.20	-2,236.86	1,207.86	1,078.02	129.84	9.303		
9,000.00	7,054.19	9,173.17	7,132.58	67.66	68.08	-93.72	-1,427.77	-2,336.84	1,208.83	1,073.98	134.85	8.964		
9,100.00	7,053.76	9,273.16	7,132.04	70.21	70.58	-93.71	-1,429.34	-2,436.83	1,209.79	1,069.88	139.90	8.647		
9,200.00	7,053.32	9,373.16	7,131.49	72.78	73.11	-93.70	-1,430.91	-2,536.81	1,210.75	1,065.74	145.01	8.349		
9,300.00	7,052.89	9,473.15	7,130.95	75.38	75.66	-93.69	-1,432.48	-2,636.79	1,211.71	1,061.55	150.16	8.069		
9,400.00	7,052.46	9,573.15	7,130.41	77.99	78.23	-93.68	-1,434.05	-2,736.77	1,212.68	1,057.33	155.35	7.806		
9,500.00	7,052.02	9,673.14	7,129.87	80.62	80.82	-93.68	-1,435.62	-2,836.75	1,213.64	1,053.06	160.57	7.558		
9,600.00	7,051.59	9,773.14	7,129.33	83.26	83.43	-93.67	-1,437.19	-2,936.73	1,214.60	1,048.77	165.83	7.324		
9,700.00	7,051.15	9,873.13	7,128.79	85.92	86.05	-93.66	-1,438.76	-3,036.71	1,215.56	1,044.45	171.11	7.104		
9,800.00	7,050.72	9,973.13	7,128.24	88.59	88.69	-93.65	-1,440.33	-3,136.70	1,216.52	1,040.10	176.43	6.895		
9,900.00	7,050.29	10,073.12	7,127.70	91.28	91.34	-93.64	-1,441.90	-3,236.68	1,217.49	1,035.73	181.76	6.698		
10,000.00	7,049.85	10,173.12	7,127.16	93.97	94.00	-93.64	-1,443.47	-3,336.66	1,218.45	1,031.33	187.12	6.512		
10,100.00	7,049.42	10,273.11	7,126.62	96.67	96.68	-93.63	-1,445.04	-3,436.64	1,219.41	1,026.92	192.50	6.335		
10,200.00	7,048.98	10,373.11	7,126.08	99.38	99.36	-93.62	-1,446.61	-3,536.62	1,220.37	1,022.48	197.89	6.167		
10,300.00	7,048.55	10,473.10	7,125.53	102.10	102.05	-93.61	-1,448.18	-3,636.60	1,221.34	1,018.03	203.30	6.007		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,048.12	10,573.10	7,124.99	104.83	104.76	-93.60	-1,449.75	-3,736.58	1,222.30	1,013.57	208.73	5.856		
10,500.00	7,047.68	10,673.10	7,124.45	107.56	107.47	-93.60	-1,451.32	-3,836.57	1,223.26	1,009.09	214.18	5.711		
10,600.00	7,047.25	10,773.09	7,123.91	110.30	110.18	-93.59	-1,452.89	-3,936.55	1,224.23	1,004.59	219.63	5.574		
10,700.00	7,046.81	10,873.09	7,123.37	113.05	112.91	-93.58	-1,454.46	-4,036.53	1,225.19	1,000.09	225.10	5.443		
10,800.00	7,046.38	10,973.08	7,122.82	115.80	115.64	-93.57	-1,456.03	-4,136.51	1,226.15	995.57	230.58	5.318		
10,900.00	7,045.95	11,073.08	7,122.28	118.55	118.37	-93.56	-1,457.60	-4,236.49	1,227.11	991.04	236.07	5.198		
11,000.00	7,045.51	11,173.07	7,121.74	121.31	121.12	-93.56	-1,459.17	-4,336.47	1,228.08	986.50	241.58	5.084		
11,100.00	7,045.08	11,273.07	7,121.20	124.08	123.86	-93.55	-1,460.74	-4,436.45	1,229.04	981.95	247.09	4.974		
11,200.00	7,044.64	11,373.06	7,120.66	126.85	126.62	-93.54	-1,462.31	-4,536.44	1,230.00	977.39	252.61	4.869		
11,300.00	7,044.21	11,473.06	7,120.11	129.62	129.37	-93.53	-1,463.88	-4,636.42	1,230.96	972.83	258.14	4.769		
11,400.00	7,043.78	11,573.05	7,119.57	132.40	132.13	-93.53	-1,465.45	-4,736.40	1,231.93	968.26	263.67	4.672		
11,500.00	7,043.34	11,673.05	7,119.03	135.18	134.90	-93.52	-1,467.02	-4,836.38	1,232.89	963.68	269.21	4.580		
11,600.00	7,042.91	11,773.04	7,118.49	137.96	137.67	-93.51	-1,468.59	-4,936.36	1,233.85	959.09	274.76	4.491		
11,700.00	7,042.47	11,873.04	7,117.95	140.75	140.44	-93.50	-1,470.16	-5,036.34	1,234.82	954.49	280.32	4.405		
11,800.00	7,042.04	11,973.03	7,117.40	143.54	143.21	-93.49	-1,471.73	-5,136.32	1,235.78	949.90	285.88	4.323		
11,900.00	7,041.61	12,073.03	7,116.86	146.33	145.99	-93.49	-1,473.30	-5,236.31	1,236.74	945.29	291.45	4.243		
12,000.00	7,041.17	12,173.02	7,116.32	149.13	148.77	-93.48	-1,474.87	-5,336.29	1,237.70	940.68	297.03	4.167		
12,100.00	7,040.74	12,273.02	7,115.78	151.92	151.56	-93.47	-1,476.44	-5,436.27	1,238.67	936.06	302.60	4.093		
12,200.00	7,040.30	12,373.01	7,115.24	154.72	154.34	-93.46	-1,478.01	-5,536.25	1,239.63	931.44	308.19	4.022		
12,300.00	7,039.87	12,473.01	7,114.69	157.52	157.13	-93.46	-1,479.58	-5,636.23	1,240.59	926.82	313.78	3.954		
12,400.00	7,039.44	12,573.00	7,114.15	160.33	159.92	-93.45	-1,481.15	-5,736.21	1,241.56	922.19	319.37	3.888		
12,500.00	7,039.00	12,673.00	7,113.61	163.13	162.72	-93.44	-1,482.72	-5,836.19	1,242.52	917.56	324.96	3.824		
12,600.00	7,038.57	12,772.99	7,113.07	165.94	165.51	-93.43	-1,484.29	-5,936.18	1,243.48	912.92	330.56	3.762		
12,700.00	7,038.13	12,872.99	7,112.53	168.75	168.31	-93.42	-1,485.86	-6,036.16	1,244.45	908.28	336.17	3.702		
12,800.00	7,037.70	12,972.99	7,111.99	171.56	171.11	-93.42	-1,487.43	-6,136.14	1,245.41	903.63	341.78	3.644		
12,900.00	7,037.27	13,072.98	7,111.44	174.37	173.91	-93.41	-1,489.00	-6,236.12	1,246.37	898.99	347.39	3.588		
13,000.00	7,036.83	13,172.98	7,110.90	177.19	176.71	-93.40	-1,490.57	-6,336.10	1,247.34	894.33	353.00	3.534		
13,100.00	7,036.40	13,272.97	7,110.36	180.00	179.52	-93.39	-1,492.14	-6,436.08	1,248.30	889.68	358.62	3.481		
13,200.00	7,035.96	13,372.97	7,109.82	182.82	182.32	-93.39	-1,493.71	-6,536.06	1,249.26	885.02	364.24	3.430		
13,300.00	7,035.53	13,472.96	7,109.28	185.64	185.13	-93.38	-1,495.28	-6,636.05	1,250.23	880.36	369.86	3.380		
13,400.00	7,035.10	13,572.96	7,108.73	188.46	187.94	-93.37	-1,496.85	-6,736.03	1,251.19	875.70	375.49	3.332		
13,500.00	7,034.66	13,672.95	7,108.19	191.28	190.75	-93.36	-1,498.42	-6,836.01	1,252.15	871.04	381.12	3.285		
13,600.00	7,034.23	13,772.95	7,107.65	194.10	193.56	-93.36	-1,499.99	-6,935.99	1,253.12	866.37	386.75	3.240		
13,700.00	7,033.79	13,872.94	7,107.11	196.92	196.38	-93.35	-1,501.56	-7,035.97	1,254.08	861.70	392.38	3.196		
13,800.00	7,033.36	13,972.94	7,106.57	199.74	199.19	-93.34	-1,503.13	-7,135.95	1,255.04	857.03	398.01	3.153		
13,900.00	7,032.93	14,072.93	7,106.02	202.57	202.01	-93.33	-1,504.70	-7,235.93	1,256.01	852.35	403.65	3.112		
14,000.00	7,032.49	14,172.93	7,105.48	205.39	204.82	-93.33	-1,506.27	-7,335.92	1,256.97	847.68	409.29	3.071		
14,100.00	7,032.06	14,272.92	7,104.94	208.22	207.64	-93.32	-1,507.84	-7,435.90	1,257.93	843.00	414.93	3.032		
14,200.00	7,031.62	14,372.92	7,104.40	211.05	210.46	-93.31	-1,509.41	-7,535.88	1,258.90	838.32	420.58	2.993		
14,300.00	7,031.19	14,472.91	7,103.86	213.87	213.28	-93.30	-1,510.98	-7,635.86	1,259.86	833.64	426.22	2.956		
14,400.00	7,030.76	14,572.91	7,103.31	216.70	216.10	-93.30	-1,512.55	-7,735.84	1,260.82	828.96	431.87	2.919		
14,500.00	7,030.32	14,672.90	7,102.77	219.53	218.92	-93.29	-1,514.12	-7,835.82	1,261.79	824.27	437.52	2.884		
14,600.00	7,029.89	14,772.90	7,102.23	222.36	221.74	-93.28	-1,515.69	-7,935.80	1,262.75	819.58	443.17	2.849		
14,700.00	7,029.45	14,872.89	7,101.69	225.19	224.57	-93.27	-1,517.26	-8,035.79	1,263.71	814.90	448.82	2.816		
14,800.00	7,029.02	14,972.89	7,101.15	228.03	227.39	-93.27	-1,518.83	-8,135.77	1,264.68	810.21	454.47	2.783		
14,805.04	7,029.00	14,977.93	7,101.12	228.17	227.53	-93.27	-1,518.91	-8,140.81	1,264.73	809.97	454.76	2.781 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	-179.52	-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	45.638		
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	-2.58	301.35	294.47	6.88	43.803		
400.00	400.00	379.03	380.91	3.60	3.56	-179.47	-305.41	-2.84	306.02	298.83	7.19	42.561		
500.00	499.98	469.11	470.71	3.80	3.73	-37.70	-312.44	-3.25	312.45	304.87	7.58	41.222		
600.00	599.90	558.89	559.95	4.02	3.93	-37.99	-322.24	-3.84	320.25	312.21	8.04	39.855		
700.00	699.82	648.16	648.33	4.28	4.16	-38.25	-334.75	-4.58	331.13	322.58	8.55	38.709		
800.00	799.74	736.74	735.61	4.57	4.43	-38.46	-349.87	-5.49	345.10	335.98	9.12	37.837		
900.00	899.66	824.48	821.54	4.88	4.72	-38.63	-367.50	-6.54	362.10	352.38	9.72	37.254		
1,000.00	999.58	911.22	905.94	5.21	5.04	-38.75	-387.50	-7.73	382.09	371.75	10.34	36.946		
1,100.00	1,099.50	996.83	988.60	5.55	5.38	-38.83	-409.74	-9.05	405.01	394.03	10.98	36.882		
1,200.00	1,199.42	1,081.18	1,069.35	5.91	5.75	-38.87	-434.05	-10.50	430.81	419.18	11.63	37.042		
1,300.00	1,299.34	1,164.16	1,148.06	6.28	6.12	-38.89	-460.26	-12.06	459.40	447.12	12.28	37.402		
1,400.00	1,399.26	1,245.65	1,224.59	6.66	6.52	-38.88	-488.22	-13.73	490.73	477.80	12.93	37.940		
1,500.00	1,499.18	1,325.58	1,298.84	7.04	6.93	-38.85	-517.73	-15.49	524.71	511.13	13.58	38.635		
1,600.00	1,599.10	1,416.33	1,382.52	7.43	7.41	-38.81	-552.80	-17.58	560.42	546.11	14.31	39.165		
1,700.00	1,699.01	1,509.72	1,468.61	7.83	7.93	-38.78	-588.93	-19.73	596.18	581.10	15.08	39.547		
1,800.00	1,798.93	1,603.11	1,554.70	8.23	8.45	-38.74	-625.06	-21.88	631.93	616.07	15.86	39.846		
1,900.00	1,898.85	1,703.50	1,640.79	8.64	9.03	-38.71	-661.18	-24.03	667.69	650.99	16.69	40.000		
2,000.00	1,998.77	1,789.89	1,726.89	9.05	9.53	-38.69	-697.31	-26.19	703.44	685.97	17.47	40.263		
2,100.00	2,098.69	1,883.28	1,812.98	9.46	10.09	-38.66	-733.43	-28.34	739.20	720.90	18.29	40.404		
2,200.00	2,198.61	1,976.67	1,899.07	9.88	10.64	-38.64	-769.56	-30.49	774.95	755.82	19.13	40.513		
2,300.00	2,298.53	2,070.06	1,985.16	10.30	11.20	-38.62	-805.68	-32.64	810.70	790.73	19.97	40.594		
2,400.00	2,398.45	2,163.44	2,071.25	10.72	11.77	-38.61	-841.81	-34.80	846.46	825.64	20.82	40.654		
2,500.00	2,498.37	2,256.83	2,157.34	11.14	12.34	-38.59	-877.94	-36.95	882.21	860.54	21.68	40.698		
2,600.00	2,598.29	2,350.22	2,243.44	11.56	12.91	-38.57	-914.06	-39.10	917.97	895.43	22.54	40.727		
2,700.00	2,698.21	2,443.61	2,329.53	11.98	13.49	-38.56	-950.19	-41.25	953.72	930.32	23.41	40.745		
2,800.00	2,798.13	2,537.00	2,415.62	12.41	14.07	-38.55	-986.31	-43.41	989.48	965.20	24.28	40.753		
2,900.00	2,898.05	2,630.39	2,501.71	12.84	14.65	-38.53	-1,022.44	-45.56	1,025.23	1,000.08	25.16	40.755		
3,000.00	2,997.97	2,723.78	2,587.80	13.27	15.23	-38.52	-1,058.57	-47.71	1,060.99	1,034.95	26.04	40.750		
3,100.00	3,097.89	2,817.17	2,673.90	13.69	15.82	-38.51	-1,094.69	-49.86	1,096.74	1,069.82	26.92	40.741		
3,200.00	3,197.81	2,910.56	2,759.99	14.12	16.40	-38.50	-1,130.82	-52.02	1,132.50	1,104.69	27.81	40.727		
3,300.00	3,297.73	3,003.95	2,846.08	14.56	16.99	-38.49	-1,166.94	-54.17	1,168.25	1,139.56	28.70	40.711		
3,400.00	3,397.65	3,102.66	2,932.17	14.99	17.61	-38.48	-1,203.07	-56.32	1,204.01	1,174.39	29.62	40.653		
3,500.00	3,497.56	3,209.27	3,018.26	15.42	18.28	-38.48	-1,239.19	-58.47	1,239.77	1,209.18	30.58	40.539		
3,600.00	3,597.48	3,284.11	3,104.36	15.85	18.75	-38.47	-1,275.32	-60.63	1,275.52	1,244.14	31.38	40.648		
3,700.00	3,697.40	3,377.50	3,190.45	16.28	19.35	-38.46	-1,311.45	-62.78	1,311.28	1,279.00	32.28	40.625		
3,800.00	3,797.32	3,470.89	3,276.54	16.72	19.94	-38.45	-1,347.57	-64.93	1,347.03	1,313.85	33.18	40.600		
3,900.00	3,897.24	3,564.28	3,362.63	17.15	20.53	-38.45	-1,383.70	-67.08	1,382.79	1,348.71	34.08	40.575		
4,000.00	3,997.16	3,657.67	3,448.72	17.59	21.12	-38.44	-1,419.82	-69.24	1,418.54	1,383.56	34.98	40.549		
4,100.00	4,097.08	3,751.06	3,534.82	18.02	21.72	-38.44	-1,455.95	-71.39	1,454.30	1,418.41	35.89	40.523		
4,200.00	4,197.00	3,844.45	3,620.91	18.46	22.31	-38.43	-1,492.08	-73.54	1,490.05	1,453.26	36.79	40.497		
4,300.00	4,296.92	3,937.84	3,707.00	18.89	22.91	-38.42	-1,528.20	-75.69	1,525.81	1,488.11	37.70	40.470		
4,400.00	4,396.84	4,031.23	3,793.09	19.33	23.50	-38.42	-1,564.33	-77.85	1,561.56	1,522.95	38.61	40.444		
4,500.00	4,496.76	4,124.62	3,879.18	19.77	24.10	-38.41	-1,600.45	-80.00	1,597.32	1,557.80	39.52	40.418		
4,600.00	4,596.68	4,218.01	3,965.28	20.20	24.69	-38.41	-1,636.58	-82.15	1,633.07	1,592.64	40.43	40.392		
4,700.00	4,696.60	4,311.40	4,051.37	20.64	25.29	-38.40	-1,672.70	-84.30	1,668.83	1,627.49	41.34	40.366		
4,800.00	4,796.52	4,404.78	4,137.46	21.08	25.89	-38.40	-1,708.83	-86.46	1,704.58	1,662.33	42.25	40.341		
4,900.00	4,896.44	4,501.83	4,223.55	21.51	26.51	-38.40	-1,744.96	-88.61	1,740.34	1,697.15	43.19	40.297		
5,000.00	4,996.36	4,608.44	4,309.64	21.95	27.19	-38.39	-1,781.08	-90.76	1,776.10	1,731.92	44.17	40.207		
5,100.00	5,096.28	4,684.95	4,395.74	22.39	27.68	-38.39	-1,817.21	-92.91	1,811.85	1,766.85	45.00	40.266		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,196.19	4,778.34	4,481.83	22.83	28.28	-38.38	-1,853.33	-95.07	1,847.61	1,801.69	45.91	40.242		
5,300.00	5,296.11	4,871.73	4,567.92	23.27	28.88	-38.38	-1,889.46	-97.22	1,883.36	1,836.53	46.83	40.218		
5,400.00	5,396.03	4,965.12	4,654.01	23.71	29.48	-38.38	-1,925.59	-99.37	1,919.12	1,871.37	47.75	40.194		
5,500.00	5,495.95	5,058.51	4,740.10	24.14	30.08	-38.37	-1,961.71	-101.52	1,954.87	1,906.21	48.66	40.171		
5,600.00	5,595.87	5,151.90	4,826.20	24.58	30.68	-38.37	-1,997.84	-103.68	1,990.63	1,941.05	49.58	40.148		
5,700.00	5,695.79	5,245.29	4,912.29	25.02	31.27	-38.37	-2,033.96	-105.83	2,026.38	1,975.88	50.50	40.126		
5,800.00	5,795.71	5,338.68	4,998.38	25.46	31.87	-38.37	-2,070.09	-107.98	2,062.14	2,010.72	51.42	40.104		
5,900.00	5,895.63	5,432.07	5,084.47	25.90	32.47	-38.36	-2,106.21	-110.13	2,097.89	2,045.56	52.34	40.082		
6,000.00	5,995.55	5,525.45	5,170.56	26.34	33.07	-38.36	-2,142.34	-112.29	2,133.65	2,080.39	53.26	40.061		
6,100.00	6,095.47	5,618.84	5,256.66	26.78	33.67	-38.36	-2,178.47	-114.44	2,169.41	2,115.22	54.18	40.040		
6,200.00	6,195.39	5,712.23	5,342.75	27.22	34.27	-38.35	-2,214.59	-116.59	2,205.16	2,150.06	55.10	40.020		
6,300.00	6,295.31	5,805.62	5,428.84	27.66	34.87	-38.35	-2,250.72	-118.74	2,240.92	2,184.89	56.02	39.999		
6,400.00	6,395.23	5,900.99	5,514.93	28.10	35.49	-38.35	-2,286.84	-120.90	2,276.67	2,219.72	56.96	39.972		
6,500.00	6,495.02	6,007.66	5,600.97	28.54	36.17	-72.14	-2,322.95	-123.05	2,312.40	2,254.45	57.95	39.901		
6,600.00	6,593.09	6,084.41	5,685.85	28.98	36.67	-78.27	-2,358.56	-125.17	2,347.66	2,288.87	58.79	39.934		
6,700.00	6,687.01	6,173.00	5,767.51	29.41	37.24	-78.17	-2,392.83	-127.21	2,381.91	2,322.22	59.69	39.902		
6,800.00	6,774.46	6,255.91	5,843.94	29.83	37.77	-77.14	-2,424.90	-129.12	2,414.86	2,354.28	60.59	39.859		
6,900.00	6,853.31	6,331.11	5,913.27	30.26	38.26	-75.93	-2,453.99	-130.85	2,446.45	2,384.98	61.47	39.796		
7,000.00	6,921.60	6,403.25	5,973.78	30.76	38.72	-74.66	-2,479.38	-132.37	2,476.75	2,414.32	62.43	39.675		
7,100.00	6,977.66	6,451.21	6,023.98	31.38	39.03	-73.31	-2,500.45	-133.62	2,505.87	2,442.51	63.37	39.545		
7,200.00	7,020.10	6,506.85	6,062.64	32.17	39.39	-71.81	-2,516.67	-134.59	2,533.92	2,469.41	64.51	39.282		
7,300.00	7,047.88	6,521.53	6,088.81	33.13	39.48	-70.12	-2,527.65	-135.24	2,560.87	2,495.29	65.58	39.048		
7,400.00	7,060.32	6,535.67	6,101.84	34.27	39.57	-68.21	-2,533.12	-135.57	2,586.57	2,519.77	66.80	38.721		
7,500.00	7,060.70	6,538.57	6,104.51	35.56	39.59	-67.59	-2,534.24	-135.64	2,611.92	2,543.86	68.07	38.373		
7,600.00	7,060.27	6,540.70	6,106.48	37.02	39.61	-67.64	-2,535.07	-135.69	2,640.54	2,571.10	69.45	38.023		
7,700.00	7,059.83	6,542.84	6,108.45	38.64	39.62	-67.68	-2,535.90	-135.73	2,672.60	2,601.69	70.91	37.691		
7,800.00	7,059.40	6,544.97	6,110.42	40.40	39.63	-67.73	-2,536.72	-135.78	2,707.97	2,635.54	72.43	37.388		
7,900.00	7,058.97	6,546.08	6,112.40	42.28	39.64	-67.78	-2,537.54	-135.82	2,743.05	2,669.43	74.00	37.096		
8,000.00	7,058.53	6,547.19	6,114.38	44.27	39.65	-67.83	-2,538.36	-135.86	2,778.13	2,703.32	75.61	36.823		
8,100.00	7,058.10	6,548.30	6,116.36	46.35	39.66	-67.88	-2,539.18	-135.89	2,813.21	2,738.40	77.26	36.569		
8,200.00	7,057.66	6,549.41	6,118.34	48.50	39.67	-67.93	-2,540.00	-135.92	2,848.29	2,773.48	78.94	36.325		
8,300.00	7,057.23	6,550.52	6,120.32	50.73	39.68	-67.98	-2,540.82	-135.95	2,883.37	2,808.56	80.66	36.091		
8,400.00	7,056.80	6,551.63	6,122.30	53.02	39.69	-68.03	-2,541.64	-135.98	2,918.45	2,843.64	82.41	35.867		
8,500.00	7,056.36	6,552.74	6,124.28	55.36	39.70	-68.08	-2,542.46	-136.01	2,953.53	2,878.72	84.18	35.653		
8,600.00	7,055.93	6,553.85	6,126.26	57.74	39.71	-68.13	-2,543.28	-136.04	2,988.61	2,913.80	85.97	35.449		
8,700.00	7,055.49	6,554.96	6,128.24	60.17	39.72	-68.18	-2,544.10	-136.07	3,023.69	2,948.88	87.78	35.255		
8,800.00	7,055.06	6,556.07	6,130.22	62.63	39.73	-68.23	-2,544.92	-136.10	3,058.77	2,983.96	89.60	35.071		
8,900.00	7,054.63	6,557.18	6,132.20	65.13	39.74	-68.28	-2,545.74	-136.13	3,093.85	3,019.04	91.43	34.897		
9,000.00	7,054.19	6,558.29	6,134.18	67.66	39.75	-68.33	-2,546.56	-136.16	3,128.93	3,054.12	93.28	34.733		
9,100.00	7,053.76	6,559.40	6,136.16	70.21	39.76	-68.38	-2,547.38	-136.19	3,164.01	3,089.20	95.14	34.579		
9,200.00	7,053.32	6,560.51	6,138.14	72.78	39.77	-68.43	-2,548.20	-136.22	3,199.09	3,124.28	97.01	34.435		
9,300.00	7,052.89	6,561.62	6,140.12	75.38	39.78	-68.48	-2,549.02	-136.25	3,234.17	3,159.36	98.90	34.301		
9,400.00	7,052.46	6,562.73	6,142.10	77.99	39.79	-68.53	-2,549.84	-136.28	3,269.25	3,194.44	100.80	34.177		
9,500.00	7,052.02	6,563.84	6,144.08	80.62	39.80	-68.58	-2,550.66	-136.31	3,304.33	3,229.52	102.71	34.063		
9,600.00	7,051.59	6,564.95	6,146.06	83.26	39.81	-68.63	-2,551.48	-136.34	3,339.41	3,264.60	104.63	33.959		
9,700.00	7,051.15	6,566.06	6,148.04	85.92	39.82	-68.68	-2,552.30	-136.37	3,374.49	3,299.68	106.56	33.865		
9,800.00	7,050.72	6,567.17	6,150.02	88.59	39.83	-68.73	-2,553.12	-136.40	3,409.57	3,334.76	108.50	33.781		
9,900.00	7,050.29	6,568.28	6,152.00	91.28	39.84	-68.78	-2,553.94	-136.43	3,444.65	3,369.84	110.45	33.707		
10,000.00	7,049.85	6,569.39	6,153.98	93.97	39.85	-68.83	-2,554.76	-136.46	3,479.73	3,404.92	112.41	33.643		
10,100.00	7,049.42	6,570.50	6,155.96	96.67	39.86	-68.88	-2,555.58	-136.49	3,514.81	3,440.00	114.38	33.589		
10,200.00	7,048.98	6,571.61	6,157.94	99.38	39.87	-68.93	-2,556.40	-136.52	3,549.89	3,475.08	116.36	33.545		
10,300.00	7,048.55	6,572.72	6,159.92	102.10	39.88	-68.98	-2,557.22	-136.55	3,584.97	3,510.16	118.35	33.511		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,048.12	10,909.08	7,062.20	104.83	106.26	-90.30	-2,961.98	-3,739.03	2,732.05	2,521.44	210.61	12.972	
10,500.00	7,047.68	11,009.08	7,061.90	107.56	108.93	-90.30	-2,962.58	-3,839.03	2,732.05	2,516.02	216.02	12.647	
10,600.00	7,047.25	11,109.08	7,061.60	110.30	111.60	-90.30	-2,963.17	-3,939.02	2,732.05	2,510.60	221.45	12.337	
10,700.00	7,046.81	11,209.08	7,061.30	113.05	114.29	-90.30	-2,963.77	-4,039.02	2,732.05	2,505.15	226.89	12.041	
10,800.00	7,046.38	11,309.08	7,061.01	115.80	116.98	-90.31	-2,964.37	-4,139.02	2,732.04	2,499.70	232.35	11.759	
10,900.00	7,045.95	11,409.08	7,060.71	118.55	119.68	-90.31	-2,964.97	-4,239.02	2,732.04	2,494.23	237.81	11.488	
11,000.00	7,045.51	11,509.08	7,060.41	121.31	122.39	-90.31	-2,965.56	-4,339.01	2,732.04	2,488.75	243.29	11.229	
11,100.00	7,045.08	11,609.08	7,060.11	124.08	125.11	-90.32	-2,966.16	-4,439.01	2,732.04	2,483.26	248.78	10.982	
11,200.00	7,044.64	11,709.08	7,059.82	126.85	127.83	-90.32	-2,966.76	-4,539.01	2,732.04	2,477.76	254.28	10.744	
11,300.00	7,044.21	11,809.08	7,059.52	129.62	130.56	-90.32	-2,967.36	-4,639.01	2,732.04	2,472.25	259.79	10.516	
11,400.00	7,043.78	11,909.08	7,059.22	132.40	133.29	-90.32	-2,967.96	-4,739.00	2,732.04	2,466.74	265.31	10.298	
11,500.00	7,043.34	12,009.08	7,058.92	135.18	136.03	-90.33	-2,968.55	-4,839.00	2,732.04	2,461.21	270.83	10.087	
11,600.00	7,042.91	12,109.08	7,058.63	137.96	138.77	-90.33	-2,969.15	-4,939.00	2,732.04	2,455.68	276.37	9.886	
11,700.00	7,042.47	12,209.08	7,058.33	140.75	141.52	-90.33	-2,969.75	-5,039.00	2,732.04	2,450.13	281.91	9.691	
11,800.00	7,042.04	12,309.08	7,058.03	143.54	144.27	-90.34	-2,970.35	-5,139.00	2,732.04	2,444.59	287.46	9.504	
11,900.00	7,041.61	12,409.08	7,057.73	146.33	147.03	-90.34	-2,970.95	-5,238.99	2,732.04	2,439.03	293.01	9.324	
12,000.00	7,041.17	12,509.08	7,057.44	149.13	149.79	-90.34	-2,971.54	-5,338.99	2,732.04	2,433.47	298.57	9.150	
12,100.00	7,040.74	12,609.08	7,057.14	151.92	152.55	-90.34	-2,972.14	-5,438.99	2,732.04	2,427.90	304.14	8.983	
12,200.00	7,040.30	12,709.08	7,056.84	154.72	155.32	-90.35	-2,972.74	-5,538.99	2,732.04	2,422.33	309.71	8.821	
12,300.00	7,039.87	12,809.08	7,056.54	157.52	158.09	-90.35	-2,973.34	-5,638.98	2,732.04	2,416.76	315.29	8.665	
12,400.00	7,039.44	12,909.08	7,056.25	160.33	160.86	-90.35	-2,973.94	-5,738.98	2,732.04	2,411.17	320.87	8.514	
12,500.00	7,039.00	13,009.08	7,055.95	163.13	163.64	-90.36	-2,974.53	-5,838.98	2,732.04	2,405.59	326.46	8.369	
12,503.49	7,038.99	13,012.57	7,055.94	163.23	163.74	-90.36	-2,974.55	-5,842.47	2,732.04	2,405.39	326.65	8.364	
12,600.00	7,038.57	13,109.08	7,055.65	165.94	166.42	-90.36	-2,975.13	-5,938.98	2,732.04	2,399.99	332.05	8.228	
12,700.00	7,038.13	13,209.08	7,055.35	168.75	169.20	-90.36	-2,975.73	-6,038.97	2,732.04	2,394.40	337.64	8.091	
12,800.00	7,037.70	13,309.08	7,055.06	171.56	171.99	-90.36	-2,976.33	-6,138.97	2,732.04	2,388.80	343.24	7.959	
12,900.00	7,037.27	13,409.08	7,054.76	174.37	174.77	-90.37	-2,976.93	-6,238.97	2,732.04	2,383.20	348.85	7.832	
13,000.00	7,036.83	13,509.08	7,054.46	177.19	177.56	-90.37	-2,977.52	-6,338.97	2,732.04	2,377.59	354.45	7.708	
13,100.00	7,036.40	13,609.08	7,054.16	180.00	180.36	-90.37	-2,978.12	-6,438.96	2,732.04	2,371.98	360.06	7.588	
13,200.00	7,035.96	13,709.08	7,053.86	182.82	183.15	-90.38	-2,978.72	-6,538.96	2,732.04	2,366.37	365.68	7.471	
13,300.00	7,035.53	13,809.08	7,053.57	185.64	185.95	-90.38	-2,979.32	-6,638.96	2,732.04	2,360.75	371.29	7.358	
13,400.00	7,035.10	13,909.08	7,053.27	188.46	188.74	-90.38	-2,979.91	-6,738.96	2,732.04	2,355.13	376.91	7.248	
13,500.00	7,034.66	14,009.08	7,052.97	191.28	191.54	-90.38	-2,980.51	-6,838.96	2,732.04	2,349.51	382.54	7.142	
13,600.00	7,034.23	14,109.08	7,052.67	194.10	194.34	-90.39	-2,981.11	-6,938.95	2,732.04	2,343.88	388.16	7.038	
13,700.00	7,033.79	14,209.08	7,052.38	196.92	197.15	-90.39	-2,981.71	-7,038.95	2,732.04	2,338.25	393.79	6.938	
13,800.00	7,033.36	14,309.08	7,052.08	199.74	199.95	-90.39	-2,982.31	-7,138.95	2,732.04	2,332.62	399.42	6.840	
13,900.00	7,032.93	14,409.08	7,051.78	202.57	202.76	-90.40	-2,982.90	-7,238.95	2,732.04	2,326.99	405.05	6.745	
14,000.00	7,032.49	14,509.08	7,051.48	205.39	205.56	-90.40	-2,983.50	-7,338.94	2,732.04	2,321.35	410.69	6.652	
14,100.00	7,032.06	14,609.08	7,051.19	208.22	208.37	-90.40	-2,984.10	-7,438.94	2,732.04	2,315.72	416.33	6.562	
14,200.00	7,031.62	14,709.08	7,050.89	211.05	211.18	-90.40	-2,984.70	-7,538.94	2,732.04	2,310.08	421.97	6.475	
14,300.00	7,031.19	14,809.08	7,050.59	213.87	214.00	-90.41	-2,985.30	-7,638.94	2,732.05	2,304.44	427.61	6.389	
14,400.00	7,030.76	14,909.08	7,050.29	216.70	216.81	-90.41	-2,985.89	-7,738.93	2,732.05	2,298.79	433.25	6.306	
14,500.00	7,030.32	15,009.08	7,050.00	219.53	219.62	-90.41	-2,986.49	-7,838.93	2,732.05	2,293.15	438.90	6.225	
14,600.00	7,029.89	15,109.08	7,049.70	222.36	222.44	-90.42	-2,987.09	-7,938.93	2,732.05	2,287.50	444.55	6.146	
14,700.00	7,029.45	15,209.08	7,049.40	225.19	225.25	-90.42	-2,987.69	-8,038.93	2,732.05	2,281.85	450.19	6.069	
14,800.00	7,029.02	15,309.08	7,049.10	228.03	228.07	-90.42	-2,988.29	-8,138.93	2,732.05	2,276.20	455.85	5.993	
14,805.04	7,029.00	15,314.11	7,049.09	228.17	228.21	-90.42	-2,988.32	-8,143.96	2,732.05	2,275.92	456.13	5.990 SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	0.53	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	53.44	6.67	9.007		
300.00	300.00	300.00	300.00	3.44	3.44	0.53	60.11	0.56	60.11	53.22	6.89	8.725		
400.00	400.00	400.00	400.00	3.60	3.60	0.53	60.11	0.56	60.11	52.91	7.21	8.341	CC, ES	
500.00	499.98	499.98	499.98	3.80	3.81	143.31	60.11	0.56	61.50	53.90	7.60	8.089		
600.00	599.90	597.96	597.95	4.02	4.04	144.62	61.60	-0.21	66.20	58.13	8.07	8.204		
700.00	699.82	703.40	696.47	4.28	4.33	144.55	65.78	-2.38	73.59	64.98	8.62	8.540		
800.00	799.74	803.71	796.02	4.57	4.63	144.33	70.45	-4.80	81.42	72.22	9.20	8.850		
900.00	899.66	904.02	895.57	4.88	4.95	144.14	75.11	-7.21	89.24	79.42	9.83	9.081		
1,000.00	999.58	995.68	995.13	5.21	5.26	143.98	79.78	-9.63	97.07	86.61	10.46	9.279		
1,100.00	1,099.50	1,104.63	1,094.68	5.55	5.64	143.85	84.45	-12.05	104.90	93.71	11.19	9.378		
1,200.00	1,199.42	1,204.94	1,194.24	5.91	6.00	143.73	89.12	-14.47	112.72	100.82	11.90	9.469		
1,300.00	1,299.34	1,305.24	1,293.79	6.28	6.38	143.63	93.79	-16.88	120.55	107.91	12.64	9.534		
1,400.00	1,399.26	1,405.55	1,393.35	6.66	6.76	143.54	98.45	-19.30	128.38	114.98	13.40	9.580		
1,500.00	1,499.18	1,494.14	1,492.90	7.04	7.10	143.46	103.12	-21.72	136.21	122.08	14.13	9.642		
1,600.00	1,599.10	1,606.16	1,592.45	7.43	7.54	143.39	107.79	-24.14	144.04	129.08	14.96	9.630		
1,700.00	1,699.01	1,706.47	1,692.01	7.83	7.95	143.33	112.46	-26.55	151.86	136.11	15.75	9.642		
1,800.00	1,798.93	1,806.78	1,791.56	8.23	8.35	143.28	117.12	-28.97	159.69	143.14	16.55	9.647		
1,900.00	1,898.85	1,907.09	1,891.12	8.64	8.76	143.23	121.79	-31.39	167.52	150.16	17.37	9.647		
2,000.00	1,998.77	2,007.39	1,990.67	9.05	9.17	143.18	126.46	-33.81	175.35	157.17	18.18	9.644		
2,100.00	2,098.69	2,107.70	2,090.23	9.46	9.58	143.14	131.13	-36.22	183.18	164.17	19.01	9.638		
2,200.00	2,198.61	2,191.99	2,189.78	9.88	9.93	143.10	135.80	-38.64	191.01	171.24	19.77	9.663		
2,300.00	2,298.53	2,308.31	2,289.33	10.30	10.42	143.06	140.46	-41.06	198.84	178.17	20.67	9.621		
2,400.00	2,398.45	2,408.62	2,388.89	10.72	10.84	143.03	145.13	-43.47	206.67	185.16	21.50	9.610		
2,500.00	2,498.37	2,508.93	2,488.44	11.14	11.26	143.00	149.80	-45.89	214.50	192.15	22.35	9.599		
2,600.00	2,598.29	2,609.23	2,588.00	11.56	11.69	142.97	154.47	-48.31	222.33	199.14	23.19	9.588		
2,700.00	2,698.21	2,709.54	2,687.55	11.98	12.11	142.94	159.13	-50.73	230.16	206.12	24.04	9.576		
2,800.00	2,798.13	2,809.85	2,787.11	12.41	12.54	142.92	163.80	-53.14	237.99	213.10	24.88	9.564		
2,900.00	2,898.05	2,889.84	2,886.66	12.84	12.88	142.89	168.47	-55.56	245.82	220.17	25.65	9.584		
3,000.00	2,997.97	2,989.54	2,986.21	13.27	13.31	142.87	173.14	-57.98	253.65	227.15	26.50	9.572		
3,100.00	3,097.89	3,089.23	3,085.77	13.69	13.73	142.85	177.81	-60.40	261.48	234.13	27.35	9.560		
3,200.00	3,197.81	3,188.92	3,185.32	14.12	14.16	142.83	182.47	-62.81	269.31	241.10	28.21	9.548		
3,300.00	3,297.73	3,288.62	3,284.88	14.56	14.59	142.81	187.14	-65.23	277.14	248.08	29.06	9.537		
3,400.00	3,397.65	3,388.31	3,384.43	14.99	15.02	142.80	191.81	-67.65	284.97	255.05	29.92	9.525		
3,500.00	3,497.56	3,488.00	3,483.99	15.42	15.45	142.78	196.48	-70.07	292.80	262.02	30.78	9.514		
3,600.00	3,597.48	3,587.69	3,583.54	15.85	15.88	142.76	201.14	-72.48	300.63	268.99	31.63	9.503		
3,700.00	3,697.40	3,687.39	3,683.09	16.28	16.31	142.75	205.81	-74.90	308.46	275.96	32.50	9.492		
3,800.00	3,797.32	3,787.08	3,782.65	16.72	16.74	142.74	210.48	-77.32	316.29	282.93	33.36	9.482		
3,900.00	3,897.24	3,886.77	3,882.20	17.15	17.17	142.72	215.15	-79.74	324.12	289.90	34.22	9.472		
4,000.00	3,997.16	3,986.47	3,981.76	17.59	17.60	142.71	219.82	-82.15	331.95	296.86	35.08	9.462		
4,100.00	4,097.08	4,086.16	4,081.31	18.02	18.04	142.70	224.48	-84.57	339.78	303.83	35.95	9.452		
4,200.00	4,197.00	4,185.85	4,180.87	18.46	18.47	142.69	229.15	-86.99	347.61	310.80	36.81	9.443		
4,300.00	4,296.92	4,285.55	4,280.42	18.89	18.90	142.67	233.82	-89.40	355.44	317.76	37.68	9.434		
4,400.00	4,396.84	4,385.24	4,379.97	19.33	19.34	142.66	238.49	-91.82	363.27	324.72	38.54	9.425		
4,500.00	4,496.76	4,484.93	4,479.53	19.77	19.77	142.65	243.15	-94.24	371.10	331.69	39.41	9.416		
4,600.00	4,596.68	4,584.62	4,579.08	20.20	20.20	142.64	247.82	-96.66	378.93	338.65	40.28	9.408		
4,700.00	4,696.60	4,684.32	4,678.64	20.64	20.64	142.63	252.49	-99.07	386.76	345.61	41.15	9.400		
4,800.00	4,796.52	4,784.01	4,778.19	21.08	21.07	142.63	257.16	-101.49	394.59	352.57	42.01	9.392		
4,900.00	4,896.44	4,883.70	4,877.75	21.51	21.51	142.62	261.83	-103.91	402.42	359.53	42.88	9.384		
5,000.00	4,996.36	4,983.40	4,977.30	21.95	21.94	142.61	266.49	-106.33	410.25	366.50	43.75	9.377		
5,100.00	5,096.28	5,083.09	5,076.85	22.39	22.38	142.60	271.16	-108.74	418.08	373.46	44.62	9.369		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,196.19	5,182.78	5,176.41	22.83	22.81	142.59	275.83	-111.16	425.91	380.42	45.49	9.362		
5,300.00	5,296.11	5,282.48	5,275.96	23.27	23.25	142.59	280.50	-113.58	433.74	387.38	46.36	9.355		
5,400.00	5,396.03	5,382.17	5,375.52	23.71	23.68	142.58	285.16	-116.00	441.57	394.34	47.23	9.349		
5,500.00	5,495.95	5,481.86	5,475.07	24.14	24.12	142.57	289.83	-118.41	449.40	401.29	48.10	9.342		
5,600.00	5,595.87	5,581.55	5,574.63	24.58	24.56	142.57	294.50	-120.83	457.23	408.25	48.98	9.336		
5,700.00	5,695.79	5,681.25	5,674.18	25.02	24.99	142.56	299.17	-123.25	465.06	415.21	49.85	9.330		
5,800.00	5,795.71	5,780.94	5,773.73	25.46	25.43	142.55	303.84	-125.67	472.89	422.17	50.72	9.324		
5,900.00	5,895.63	5,880.63	5,873.29	25.90	25.86	142.55	308.50	-128.08	480.72	429.13	51.59	9.318		
6,000.00	5,995.55	5,980.33	5,972.84	26.34	26.30	142.54	313.17	-130.50	488.55	436.09	52.46	9.312		
6,100.00	6,095.47	6,080.02	6,072.40	26.78	26.74	142.54	317.84	-132.92	496.38	443.04	53.34	9.306		
6,200.00	6,195.39	6,179.71	6,171.95	27.22	27.17	142.53	322.51	-135.34	504.21	450.00	54.21	9.301		
6,300.00	6,295.31	6,279.40	6,271.51	27.66	27.61	142.52	327.17	-137.75	512.04	456.96	55.08	9.296		
6,400.00	6,395.23	6,379.10	6,371.06	28.10	28.05	142.52	331.84	-140.17	519.87	463.91	55.96	9.291		
6,500.00	6,495.02	6,479.34	6,471.13	28.54	28.49	106.70	336.53	-143.35	527.72	470.89	56.83	9.285		
6,600.00	6,593.09	6,581.28	6,571.67	28.98	28.94	97.29	341.16	-158.84	535.50	477.77	57.73	9.277		
6,700.00	6,687.01	6,683.86	6,669.05	29.41	29.39	94.55	345.53	-190.42	542.95	484.33	58.62	9.262		
6,800.00	6,774.46	6,787.02	6,760.61	29.83	29.86	93.14	349.52	-237.54	549.89	490.36	59.53	9.238		
6,900.00	6,853.31	6,890.71	6,843.78	30.26	30.36	92.22	353.02	-299.17	556.13	495.64	60.49	9.194		
7,000.00	6,921.60	6,994.84	6,916.14	30.76	30.93	91.54	355.92	-373.83	561.53	499.94	61.59	9.117		
7,100.00	6,977.66	7,099.29	6,975.56	31.38	31.62	91.02	358.14	-459.56	565.93	503.01	62.92	8.994		
7,200.00	7,020.10	7,203.93	7,020.27	32.17	32.47	90.60	359.61	-554.03	569.22	504.65	64.57	8.815		
7,300.00	7,047.88	7,308.62	7,048.94	33.13	33.51	90.28	360.29	-654.59	571.32	504.74	66.58	8.581		
7,400.00	7,060.32	7,413.21	7,060.78	34.27	34.71	90.05	360.15	-758.39	572.19	503.25	68.93	8.301		
7,500.00	7,060.70	7,514.53	7,059.77	35.56	36.04	89.91	359.42	-859.69	572.09	500.54	71.55	7.996		
7,600.00	7,060.27	7,614.52	7,058.02	37.02	37.51	89.78	358.67	-959.66	571.94	497.45	74.49	7.678		
7,700.00	7,059.83	7,714.51	7,056.27	38.64	39.14	89.64	357.92	-1,059.64	571.79	494.05	77.74	7.355		
7,800.00	7,059.40	7,814.50	7,054.52	40.40	40.90	89.51	357.16	-1,159.61	571.65	490.38	81.27	7.034		
7,900.00	7,058.97	7,914.49	7,052.78	42.28	42.78	89.38	356.41	-1,259.58	571.51	486.48	85.03	6.721		
8,000.00	7,058.53	8,014.48	7,051.03	44.27	44.76	89.25	355.66	-1,359.56	571.37	482.37	89.00	6.420		
8,100.00	7,058.10	8,114.48	7,049.28	46.35	46.84	89.12	354.91	-1,459.53	571.24	478.08	93.15	6.132		
8,200.00	7,057.66	8,214.47	7,047.53	48.50	48.99	88.98	354.15	-1,559.50	571.10	473.64	97.46	5.860		
8,300.00	7,057.23	8,314.46	7,045.78	50.73	51.21	88.85	353.40	-1,659.48	570.97	469.07	101.91	5.603		
8,400.00	7,056.80	8,414.45	7,044.03	53.02	53.50	88.72	352.65	-1,759.45	570.85	464.37	106.48	5.361		
8,500.00	7,056.36	8,514.44	7,042.28	55.36	55.83	88.59	351.90	-1,859.42	570.73	459.58	111.15	5.135		
8,600.00	7,055.93	8,614.43	7,040.53	57.74	58.21	88.45	351.14	-1,959.39	570.61	454.69	115.91	4.923		
8,700.00	7,055.49	8,714.42	7,038.78	60.17	60.64	88.32	350.39	-2,059.37	570.49	449.73	120.76	4.724		
8,800.00	7,055.06	8,814.41	7,037.03	62.63	63.10	88.19	349.64	-2,159.34	570.37	444.70	125.68	4.538		
8,900.00	7,054.63	8,914.41	7,035.28	65.13	65.59	88.06	348.89	-2,259.31	570.26	439.61	130.66	4.365		
9,000.00	7,054.19	9,014.40	7,033.53	67.66	68.11	87.92	348.13	-2,359.29	570.16	434.46	135.69	4.202		
9,100.00	7,053.76	9,114.39	7,031.78	70.21	70.66	87.79	347.38	-2,459.26	570.05	429.27	140.78	4.049		
9,200.00	7,053.32	9,214.38	7,030.03	72.78	73.22	87.66	346.63	-2,559.23	569.95	424.04	145.91	3.906		
9,300.00	7,052.89	9,314.37	7,028.28	75.38	75.81	87.53	345.88	-2,659.21	569.85	418.77	151.08	3.772		
9,400.00	7,052.46	9,414.36	7,026.53	77.99	78.42	87.39	345.12	-2,759.18	569.76	413.47	156.29	3.646		
9,500.00	7,052.02	9,514.35	7,024.79	80.62	81.05	87.26	344.37	-2,859.15	569.66	408.14	161.52	3.527		
9,600.00	7,051.59	9,614.34	7,023.04	83.26	83.69	87.13	343.62	-2,959.13	569.57	402.78	166.79	3.415		
9,700.00	7,051.15	9,714.34	7,021.29	85.92	86.34	86.99	342.87	-3,059.10	569.49	397.40	172.08	3.309		
9,800.00	7,050.72	9,814.33	7,019.54	88.59	89.01	86.86	342.11	-3,159.07	569.40	392.01	177.40	3.210		
9,900.00	7,050.29	9,914.32	7,017.79	91.28	91.69	86.73	341.36	-3,259.04	569.32	386.59	182.73	3.116		
10,000.00	7,049.85	10,014.31	7,016.04	93.97	94.38	86.59	340.61	-3,359.02	569.25	381.16	188.09	3.026		
10,100.00	7,049.42	10,114.30	7,014.29	96.67	97.08	86.46	339.86	-3,458.99	569.17	375.71	193.46	2.942		
10,200.00	7,048.98	10,214.29	7,012.54	99.38	99.78	86.33	339.10	-3,558.96	569.10	370.26	198.85	2.862		
10,300.00	7,048.55	10,314.28	7,010.79	102.10	102.50	86.20	338.35	-3,658.94	569.03	364.79	204.25	2.786		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,048.12	10,414.27	7,009.04	104.83	105.22	86.06	337.60	-3,758.91	568.97	359.31	209.66	2.714		
10,500.00	7,047.68	10,514.26	7,007.29	107.56	107.95	85.93	336.85	-3,858.88	568.91	353.82	215.09	2.645		
10,600.00	7,047.25	10,614.26	7,005.54	110.30	110.69	85.80	336.09	-3,958.86	568.85	348.33	220.52	2.580		
10,700.00	7,046.81	10,714.25	7,003.79	113.05	113.43	85.66	335.34	-4,058.83	568.79	342.83	225.96	2.517		
10,800.00	7,046.38	10,814.24	7,002.04	115.80	116.18	85.53	334.59	-4,158.80	568.74	337.33	231.42	2.458		
10,900.00	7,045.95	10,914.23	7,000.29	118.55	118.93	85.40	333.84	-4,258.78	568.69	331.82	236.88	2.401		
11,000.00	7,045.51	11,014.22	6,998.54	121.31	121.69	85.26	333.08	-4,358.75	568.65	326.30	242.34	2.346		
11,100.00	7,045.08	11,114.21	6,996.80	124.08	124.46	85.13	332.33	-4,458.72	568.60	320.79	247.81	2.294		
11,200.00	7,044.64	11,214.20	6,995.05	126.85	127.22	85.00	331.58	-4,558.69	568.56	315.27	253.29	2.245		
11,300.00	7,044.21	11,314.19	6,993.30	129.62	129.99	84.86	330.83	-4,658.67	568.53	309.75	258.77	2.197		
11,400.00	7,043.78	11,414.19	6,991.55	132.40	132.77	84.73	330.07	-4,758.64	568.49	304.23	264.26	2.151		
11,500.00	7,043.34	11,514.18	6,989.80	135.18	135.55	84.60	329.32	-4,858.61	568.46	298.71	269.75	2.107		
11,600.00	7,042.91	11,614.17	6,988.05	137.96	138.33	84.46	328.57	-4,958.59	568.43	293.19	275.24	2.065		
11,700.00	7,042.47	11,714.16	6,986.30	140.75	141.11	84.33	327.81	-5,058.56	568.41	287.67	280.74	2.025		
11,800.00	7,042.04	11,814.15	6,984.55	143.54	143.90	84.19	327.06	-5,158.53	568.39	282.15	286.23	1.986		
11,900.00	7,041.61	11,914.14	6,982.80	146.33	146.69	84.06	326.31	-5,258.51	568.37	276.64	291.73	1.948		
12,000.00	7,041.17	12,014.13	6,981.05	149.13	149.48	83.93	325.56	-5,358.48	568.35	271.12	297.23	1.912		
12,100.00	7,040.74	12,114.12	6,979.30	151.92	152.28	83.79	324.80	-5,458.45	568.34	265.61	302.73	1.877		
12,200.00	7,040.30	12,214.12	6,977.55	154.72	155.07	83.66	324.05	-5,558.43	568.33	260.10	308.24	1.844		
12,300.00	7,039.87	12,314.11	6,975.80	157.52	157.87	83.53	323.30	-5,658.40	568.32	254.59	313.74	1.811		
12,400.00	7,039.44	12,414.10	6,974.05	160.33	160.67	83.39	322.55	-5,758.37	568.32	249.08	319.24	1.780		
12,451.12	7,039.21	12,465.21	6,973.16	161.76	162.11	83.33	322.16	-5,809.48	568.32	246.27	322.05	1.765		
12,500.00	7,039.00	12,514.09	6,972.30	163.13	163.48	83.26	321.79	-5,858.34	568.32	243.58	324.74	1.750		
12,600.00	7,038.57	12,614.08	6,970.55	165.94	166.28	83.13	321.04	-5,958.32	568.32	238.08	330.24	1.721		
12,700.00	7,038.13	12,714.07	6,968.80	168.75	169.09	82.99	320.29	-6,058.29	568.33	232.59	335.74	1.693		
12,800.00	7,037.70	12,814.06	6,967.06	171.56	171.90	82.86	319.54	-6,158.26	568.34	227.10	341.24	1.665		
12,900.00	7,037.27	12,914.05	6,965.31	174.37	174.71	82.73	318.78	-6,258.24	568.35	221.61	346.74	1.639		
13,000.00	7,036.83	13,014.05	6,963.56	177.19	177.52	82.59	318.03	-6,358.21	568.37	216.13	352.24	1.614		
13,100.00	7,036.40	13,114.04	6,961.81	180.00	180.33	82.46	317.28	-6,458.18	568.39	210.65	357.73	1.589		
13,200.00	7,035.96	13,214.03	6,960.06	182.82	183.15	82.33	316.53	-6,558.16	568.41	205.18	363.23	1.565		
13,300.00	7,035.53	13,314.02	6,958.31	185.64	185.96	82.19	315.77	-6,658.13	568.43	199.72	368.72	1.542		
13,400.00	7,035.10	13,414.01	6,956.56	188.46	188.78	82.06	315.02	-6,758.10	568.46	194.26	374.20	1.519		
13,500.00	7,034.66	13,514.00	6,954.81	191.28	191.60	81.93	314.27	-6,858.08	568.49	188.80	379.69	1.497 Level 3		
13,600.00	7,034.23	13,613.99	6,953.06	194.10	194.42	81.79	313.52	-6,958.05	568.52	183.35	385.17	1.476 Level 3		
13,700.00	7,033.79	13,713.98	6,951.31	196.92	197.24	81.66	312.76	-7,058.02	568.56	177.91	390.65	1.455 Level 3		
13,800.00	7,033.36	13,813.98	6,949.56	199.74	200.06	81.52	312.01	-7,158.00	568.60	172.47	396.13	1.435 Level 3		
13,900.00	7,032.93	13,913.97	6,947.81	202.57	202.88	81.39	311.26	-7,257.97	568.64	167.04	401.60	1.416 Level 3		
14,000.00	7,032.49	14,013.96	6,946.06	205.39	205.71	81.26	310.51	-7,357.94	568.69	161.62	407.07	1.397 Level 3		
14,100.00	7,032.06	14,113.95	6,944.31	208.22	208.53	81.12	309.75	-7,457.91	568.74	156.20	412.54	1.379 Level 3		
14,200.00	7,031.62	14,213.94	6,942.56	211.05	211.36	80.99	309.00	-7,557.89	568.79	150.79	418.00	1.361 Level 3		
14,300.00	7,031.19	14,313.93	6,940.81	213.87	214.18	80.86	308.25	-7,657.86	568.85	145.39	423.46	1.343 Level 3		
14,400.00	7,030.76	14,413.92	6,939.07	216.70	217.01	80.72	307.50	-7,757.83	568.91	139.99	428.92	1.326 Level 3		
14,500.00	7,030.32	14,513.91	6,937.32	219.53	219.84	80.59	306.74	-7,857.81	568.97	134.60	434.37	1.310 Level 3		
14,600.00	7,029.89	14,613.91	6,935.57	222.36	222.67	80.46	305.99	-7,957.78	569.03	129.22	439.82	1.294 Level 3		
14,700.00	7,029.45	14,713.90	6,933.82	225.19	225.50	80.33	305.24	-8,057.75	569.10	123.84	445.26	1.278 Level 3		
14,800.00	7,029.02	14,813.89	6,932.07	228.03	228.33	80.19	304.49	-8,157.73	569.17	118.48	450.70	1.263 Level 3		
14,805.04	7,029.00	14,818.93	6,931.98	228.17	228.47	80.19	304.45	-8,162.76	569.18	118.21	450.97	1.262 Level 3, 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	-179.54	-139.90	-1.11	139.90					
100.00	100.00	101.00	100.00	3.28	3.28	-179.54	-139.90	-1.11	139.90	133.33	6.57	21.295		
200.00	200.00	199.00	200.00	3.34	3.34	-179.54	-139.90	-1.11	139.90	133.23	6.67	20.965 CC, ES		
300.00	300.00	294.39	295.38	3.44	3.43	-179.46	-141.44	-1.33	141.52	134.63	6.89	20.547		
400.00	400.00	389.53	390.40	3.60	3.57	-179.22	-146.10	-1.99	146.43	139.22	7.21	20.308		
500.00	499.98	484.38	484.91	3.80	3.76	-37.34	-153.86	-3.09	153.25	145.63	7.62	20.119		
600.00	599.90	578.89	578.78	4.02	4.00	-37.65	-164.67	-4.61	161.57	153.47	8.09	19.965		
700.00	699.82	672.83	671.69	4.28	4.28	-37.81	-178.45	-6.56	173.10	164.47	8.63	20.053		
800.00	799.74	771.97	769.48	4.57	4.64	-37.89	-194.55	-8.83	186.22	177.02	9.20	20.248		
900.00	899.66	871.10	867.27	4.88	5.03	-37.95	-210.65	-11.11	199.34	189.54	9.80	20.336		
1,000.00	999.58	970.24	965.06	5.21	5.45	-38.01	-226.75	-13.38	212.46	202.00	10.46	20.319		
1,100.00	1,099.50	1,069.37	1,062.86	5.55	5.89	-38.06	-242.85	-15.66	225.58	214.44	11.14	20.244		
1,200.00	1,199.42	1,168.51	1,160.65	5.91	6.35	-38.11	-258.95	-17.93	238.70	226.84	11.86	20.130		
1,300.00	1,299.34	1,267.64	1,258.44	6.28	6.82	-38.15	-275.05	-20.21	251.82	239.23	12.60	19.993		
1,400.00	1,399.26	1,366.78	1,356.24	6.66	7.31	-38.19	-291.15	-22.48	264.94	251.59	13.35	19.841		
1,500.00	1,499.18	1,465.91	1,454.03	7.04	7.80	-38.22	-307.25	-24.75	278.07	263.94	14.13	19.683		
1,600.00	1,599.10	1,565.05	1,551.82	7.43	8.31	-38.25	-323.35	-27.03	291.19	276.27	14.92	19.523		
1,700.00	1,699.01	1,664.18	1,649.61	7.83	8.81	-38.28	-339.45	-29.30	304.31	288.59	15.71	19.365		
1,800.00	1,798.93	1,763.32	1,747.41	8.23	9.33	-38.31	-355.55	-31.58	317.43	300.91	16.52	19.210		
1,900.00	1,898.85	1,862.45	1,845.20	8.64	9.85	-38.33	-371.66	-33.85	330.55	313.21	17.34	19.061		
2,000.00	1,998.77	1,961.59	1,942.99	9.05	10.37	-38.35	-387.76	-36.13	343.67	325.51	18.17	18.917		
2,100.00	2,098.69	2,060.73	2,040.78	9.46	10.90	-38.37	-403.86	-38.40	356.79	337.80	19.00	18.779		
2,200.00	2,198.61	2,159.86	2,138.58	9.88	11.43	-38.39	-419.96	-40.68	369.92	350.08	19.84	18.647		
2,300.00	2,298.53	2,259.00	2,236.37	10.30	11.96	-38.41	-436.06	-42.95	383.04	362.36	20.68	18.522		
2,400.00	2,398.45	2,358.13	2,334.16	10.72	12.49	-38.42	-452.16	-45.23	396.16	374.63	21.53	18.403		
2,500.00	2,498.37	2,457.27	2,431.95	11.14	13.03	-38.44	-468.26	-47.50	409.28	386.90	22.38	18.289		
2,600.00	2,598.29	2,556.40	2,529.75	11.56	13.57	-38.45	-484.36	-49.78	422.40	399.17	23.23	18.181		
2,700.00	2,698.21	2,655.54	2,627.54	11.98	14.10	-38.47	-500.46	-52.05	435.52	411.43	24.09	18.079		
2,800.00	2,798.13	2,754.67	2,725.33	12.41	14.64	-38.48	-516.56	-54.32	448.65	423.70	24.95	17.981		
2,900.00	2,898.05	2,853.81	2,823.12	12.84	15.19	-38.49	-532.66	-56.60	461.77	435.96	25.81	17.889		
3,000.00	2,997.97	2,952.94	2,920.92	13.27	15.73	-38.50	-548.76	-58.87	474.89	448.21	26.68	17.800		
3,100.00	3,097.89	3,052.08	3,018.71	13.69	16.27	-38.51	-564.87	-61.15	488.01	460.47	27.55	17.716		
3,200.00	3,197.81	3,151.21	3,116.50	14.12	16.82	-38.52	-580.97	-63.42	501.13	472.72	28.41	17.636		
3,300.00	3,297.73	3,250.35	3,214.30	14.56	17.36	-38.53	-597.07	-65.70	514.26	484.97	29.29	17.560		
3,400.00	3,397.65	3,349.48	3,312.09	14.99	17.91	-38.54	-613.17	-67.97	527.38	497.22	30.16	17.487		
3,500.00	3,497.56	3,448.62	3,409.88	15.42	18.45	-38.55	-629.27	-70.25	540.50	509.47	31.03	17.418		
3,600.00	3,597.48	3,547.75	3,507.67	15.85	19.00	-38.56	-645.37	-72.52	553.62	521.72	31.91	17.351		
3,700.00	3,697.40	3,646.89	3,605.47	16.28	19.55	-38.57	-661.47	-74.80	566.74	533.96	32.78	17.288		
3,800.00	3,797.32	3,746.03	3,703.26	16.72	20.09	-38.58	-677.57	-77.07	579.87	546.21	33.66	17.227		
3,900.00	3,897.24	3,845.16	3,801.05	17.15	20.64	-38.58	-693.67	-79.34	592.99	558.45	34.54	17.169		
4,000.00	3,997.16	3,944.30	3,898.84	17.59	21.19	-38.59	-709.77	-81.62	606.11	570.69	35.42	17.113		
4,100.00	4,097.08	4,043.43	3,996.64	18.02	21.74	-38.60	-725.87	-83.89	619.23	582.93	36.30	17.060		
4,200.00	4,197.00	4,142.57	4,094.43	18.46	22.29	-38.60	-741.97	-86.17	632.35	595.18	37.18	17.008		
4,300.00	4,296.92	4,241.70	4,192.22	18.89	22.84	-38.61	-758.07	-88.44	645.48	607.42	38.06	16.959		
4,400.00	4,396.84	4,340.84	4,290.01	19.33	23.39	-38.61	-774.18	-90.72	658.60	619.65	38.94	16.912		
4,500.00	4,496.76	4,439.97	4,387.81	19.77	23.94	-38.62	-790.28	-92.99	671.72	631.89	39.83	16.866		
4,600.00	4,596.68	4,539.11	4,485.60	20.20	24.49	-38.63	-806.38	-95.27	684.84	644.13	40.71	16.823		
4,700.00	4,696.60	4,638.24	4,583.39	20.64	25.04	-38.63	-822.48	-97.54	697.96	656.37	41.59	16.780		
4,800.00	4,796.52	4,737.38	4,681.19	21.08	25.59	-38.64	-838.58	-99.82	711.09	668.61	42.48	16.740		
4,900.00	4,896.44	4,836.51	4,778.98	21.51	26.14	-38.64	-854.68	-102.09	724.21	680.84	43.36	16.701		
5,000.00	4,996.36	4,935.65	4,876.77	21.95	26.70	-38.65	-870.78	-104.36	737.33	693.08	44.25	16.663		
5,100.00	5,096.28	5,034.78	4,974.56	22.39	27.25	-38.65	-886.88	-106.64	750.45	705.32	45.14	16.626		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,196.19	5,133.92	5,072.36	22.83	27.80	-38.65	-902.98	-108.91	763.57	717.55	46.02	16.591		
5,300.00	5,296.11	5,233.05	5,170.15	23.27	28.35	-38.66	-919.08	-111.19	776.70	729.79	46.91	16.557		
5,400.00	5,396.03	5,332.19	5,267.94	23.71	28.90	-38.66	-935.18	-113.46	789.82	742.02	47.80	16.524		
5,500.00	5,495.95	5,431.33	5,365.73	24.14	29.46	-38.67	-951.28	-115.74	802.94	754.25	48.69	16.492		
5,600.00	5,595.87	5,530.46	5,463.53	24.58	30.01	-38.67	-967.39	-118.01	816.06	766.49	49.57	16.461		
5,700.00	5,695.79	5,629.60	5,561.32	25.02	30.56	-38.67	-983.49	-120.29	829.18	778.72	50.46	16.432		
5,800.00	5,795.71	5,728.73	5,659.11	25.46	31.11	-38.68	-999.59	-122.56	842.31	790.95	51.35	16.403		
5,900.00	5,895.63	5,827.87	5,756.90	25.90	31.67	-38.68	-1,015.69	-124.84	855.43	803.19	52.24	16.375		
6,000.00	5,995.55	5,927.00	5,854.70	26.34	32.22	-38.68	-1,031.79	-127.11	868.55	815.42	53.13	16.347		
6,100.00	6,095.47	6,026.14	5,952.49	26.78	32.77	-38.69	-1,047.89	-129.39	881.67	827.65	54.02	16.321		
6,200.00	6,195.39	6,125.27	6,050.28	27.22	33.33	-38.69	-1,063.99	-131.66	894.79	839.88	54.91	16.296		
6,300.00	6,295.31	6,224.41	6,148.07	27.66	33.88	-38.69	-1,080.09	-133.93	907.92	852.12	55.80	16.271		
6,400.00	6,395.23	6,323.54	6,245.87	28.10	34.43	-38.70	-1,096.19	-136.21	921.04	864.35	56.69	16.247		
6,500.00	6,495.02	6,422.61	6,343.59	28.54	34.99	-73.80	-1,112.28	-138.48	934.16	876.58	57.59	16.222		
6,600.00	6,593.09	6,520.30	6,439.96	28.98	35.53	-82.68	-1,128.15	-140.72	947.32	888.82	58.50	16.192		
6,700.00	6,687.01	6,614.23	6,532.62	29.41	36.06	-85.64	-1,143.40	-142.88	960.99	901.54	59.45	16.165		
6,800.00	6,774.46	6,702.11	6,619.30	29.83	36.55	-87.73	-1,157.68	-144.89	976.21	915.78	60.43	16.155		
6,900.00	6,853.31	6,803.21	6,718.64	30.26	37.12	-89.96	-1,174.07	-153.04	993.73	932.08	61.65	16.119		
7,000.00	6,921.60	6,921.15	6,831.17	30.76	37.78	-92.19	-1,192.78	-182.31	1,012.46	949.40	63.06	16.055		
7,100.00	6,977.66	7,058.28	6,952.63	31.38	38.53	-94.47	-1,213.15	-242.01	1,031.29	966.76	64.53	15.983		
7,200.00	7,020.10	7,220.52	7,076.00	32.17	39.44	-96.76	-1,234.14	-344.57	1,048.53	982.58	65.95	15.898		
7,300.00	7,047.88	7,411.85	7,183.05	33.13	40.63	-98.77	-1,252.80	-501.18	1,061.89	994.34	67.54	15.721		
7,400.00	7,060.32	7,628.15	7,242.83	34.27	42.51	-99.93	-1,264.01	-707.67	1,068.77	998.70	70.07	15.254		
7,500.00	7,060.70	7,770.89	7,246.65	35.56	44.24	-100.02	-1,265.60	-850.23	1,069.25	995.96	73.29	14.589		
7,600.00	7,060.27	7,870.89	7,246.13	37.02	45.74	-100.01	-1,266.19	-950.23	1,069.22	992.58	76.65	13.950		
7,700.00	7,059.83	7,970.89	7,245.60	38.64	47.46	-100.01	-1,266.77	-1,050.22	1,069.19	988.87	80.33	13.311		
7,800.00	7,059.40	8,070.89	7,245.07	40.40	49.38	-100.00	-1,267.35	-1,150.22	1,069.16	984.88	84.29	12.685		
7,900.00	7,058.97	8,170.89	7,244.54	42.28	51.47	-100.00	-1,267.94	-1,250.22	1,069.13	980.64	88.49	12.081		
8,000.00	7,058.53	8,270.88	7,244.01	44.27	53.71	-99.99	-1,268.52	-1,350.21	1,069.10	976.19	92.91	11.507		
8,100.00	7,058.10	8,370.88	7,243.48	46.35	56.08	-99.99	-1,269.11	-1,450.21	1,069.07	971.56	97.51	10.963		
8,200.00	7,057.66	8,470.88	7,242.95	48.50	58.55	-99.98	-1,269.69	-1,550.21	1,069.04	966.77	102.27	10.453		
8,300.00	7,057.23	8,570.88	7,242.42	50.73	61.12	-99.98	-1,270.28	-1,650.21	1,069.01	961.84	107.17	9.975		
8,400.00	7,056.80	8,670.88	7,241.90	53.02	63.76	-99.97	-1,270.86	-1,750.20	1,068.98	956.80	112.18	9.529		
8,500.00	7,056.36	8,770.88	7,241.37	55.36	66.47	-99.97	-1,271.44	-1,850.20	1,068.95	951.65	117.30	9.113		
8,600.00	7,055.93	8,870.88	7,240.84	57.74	69.25	-99.96	-1,272.03	-1,950.20	1,068.92	946.40	122.51	8.725		
8,700.00	7,055.49	8,970.88	7,240.31	60.17	72.07	-99.96	-1,272.61	-2,050.19	1,068.89	941.08	127.80	8.363		
8,800.00	7,055.06	9,070.88	7,239.78	62.63	74.93	-99.95	-1,273.20	-2,150.19	1,068.86	935.69	133.17	8.026		
8,900.00	7,054.63	9,170.88	7,239.25	65.13	77.84	-99.95	-1,273.78	-2,250.19	1,068.83	930.24	138.59	7.712		
9,000.00	7,054.19	9,270.88	7,238.72	67.66	80.78	-99.94	-1,274.37	-2,350.18	1,068.80	924.73	144.07	7.419		
9,100.00	7,053.76	9,370.88	7,238.19	70.21	83.76	-99.94	-1,274.95	-2,450.18	1,068.76	919.17	149.60	7.144		
9,200.00	7,053.32	9,470.88	7,237.67	72.78	86.76	-99.93	-1,275.53	-2,550.18	1,068.73	913.57	155.17	6.888		
9,300.00	7,052.89	9,570.88	7,237.14	75.38	89.78	-99.93	-1,276.12	-2,650.17	1,068.70	907.92	160.78	6.647		
9,400.00	7,052.46	9,670.88	7,236.61	77.99	92.83	-99.92	-1,276.70	-2,750.17	1,068.67	902.25	166.43	6.421		
9,500.00	7,052.02	9,770.88	7,236.08	80.62	95.89	-99.92	-1,277.29	-2,850.17	1,068.64	896.54	172.11	6.209		
9,600.00	7,051.59	9,870.88	7,235.55	83.26	98.98	-99.91	-1,277.87	-2,950.16	1,068.61	890.80	177.82	6.010		
9,700.00	7,051.15	9,970.88	7,235.02	85.92	102.08	-99.91	-1,278.46	-3,050.16	1,068.58	885.03	183.55	5.822		
9,800.00	7,050.72	10,070.88	7,234.49	88.59	105.19	-99.90	-1,279.04	-3,150.16	1,068.55	879.24	189.31	5.644		
9,900.00	7,050.29	10,170.88	7,233.97	91.28	108.32	-99.90	-1,279.63	-3,250.15	1,068.52	873.43	195.09	5.477		
10,000.00	7,049.85	10,270.88	7,233.44	93.97	111.46	-99.89	-1,280.21	-3,350.15	1,068.49	867.60	200.89	5.319		
10,100.00	7,049.42	10,370.88	7,232.91	96.67	114.61	-99.89	-1,280.79	-3,450.15	1,068.46	861.75	206.71	5.169		
10,200.00	7,048.98	10,470.88	7,232.38	99.38	117.78	-99.88	-1,281.38	-3,550.15	1,068.43	855.89	212.54	5.027		
10,300.00	7,048.55	10,570.88	7,231.85	102.10	120.95	-99.88	-1,281.96	-3,650.14	1,068.40	850.01	218.39	4.892		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,048.12	10,670.88	7,231.32	104.83	124.13	-99.87	-1,282.55	-3,750.14	1,068.37	844.11	224.26	4.764		
10,500.00	7,047.68	10,770.88	7,230.79	107.56	127.32	-99.87	-1,283.13	-3,850.14	1,068.34	838.20	230.14	4.642		
10,600.00	7,047.25	10,870.88	7,230.26	110.30	130.51	-99.86	-1,283.72	-3,950.13	1,068.31	832.28	236.03	4.526		
10,700.00	7,046.81	10,970.88	7,229.74	113.05	133.71	-99.86	-1,284.30	-4,050.13	1,068.28	826.35	241.93	4.416		
10,800.00	7,046.38	11,070.88	7,229.21	115.80	136.92	-99.85	-1,284.88	-4,150.13	1,068.25	820.41	247.84	4.310		
10,900.00	7,045.95	11,170.88	7,228.68	118.55	140.14	-99.85	-1,285.47	-4,250.12	1,068.22	814.45	253.76	4.210		
11,000.00	7,045.51	11,270.88	7,228.15	121.31	143.36	-99.84	-1,286.05	-4,350.12	1,068.19	808.49	259.69	4.113		
11,100.00	7,045.08	11,370.88	7,227.62	124.08	146.58	-99.84	-1,286.64	-4,450.12	1,068.16	802.52	265.63	4.021		
11,200.00	7,044.64	11,470.88	7,227.09	126.85	149.81	-99.84	-1,287.22	-4,550.11	1,068.13	796.54	271.58	3.933		
11,300.00	7,044.21	11,570.88	7,226.56	129.62	153.05	-99.83	-1,287.81	-4,650.11	1,068.09	790.56	277.54	3.848		
11,400.00	7,043.78	11,670.88	7,226.03	132.40	156.29	-99.83	-1,288.39	-4,750.11	1,068.06	784.57	283.50	3.767		
11,500.00	7,043.34	11,770.88	7,225.51	135.18	159.53	-99.82	-1,288.97	-4,850.10	1,068.03	778.57	289.47	3.690		
11,600.00	7,042.91	11,870.88	7,224.98	137.96	162.78	-99.82	-1,289.56	-4,950.10	1,068.00	772.56	295.44	3.615		
11,700.00	7,042.47	11,970.88	7,224.45	140.75	166.03	-99.81	-1,290.14	-5,050.10	1,067.97	766.55	301.42	3.543		
11,800.00	7,042.04	12,070.88	7,223.92	143.54	169.28	-99.81	-1,290.73	-5,150.09	1,067.94	760.53	307.41	3.474		
11,900.00	7,041.61	12,170.88	7,223.39	146.33	172.54	-99.80	-1,291.31	-5,250.09	1,067.91	754.51	313.40	3.408		
12,000.00	7,041.17	12,270.88	7,222.86	149.13	175.80	-99.80	-1,291.90	-5,350.09	1,067.88	748.49	319.40	3.343		
12,100.00	7,040.74	12,370.88	7,222.33	151.92	179.06	-99.79	-1,292.48	-5,450.09	1,067.85	742.45	325.40	3.282		
12,200.00	7,040.30	12,470.88	7,221.80	154.72	182.33	-99.79	-1,293.07	-5,550.08	1,067.82	736.42	331.40	3.222		
12,300.00	7,039.87	12,570.88	7,221.28	157.52	185.59	-99.78	-1,293.65	-5,650.08	1,067.79	730.38	337.41	3.165		
12,400.00	7,039.44	12,670.88	7,220.75	160.33	188.86	-99.78	-1,294.23	-5,750.08	1,067.76	724.33	343.43	3.109		
12,500.00	7,039.00	12,770.88	7,220.22	163.13	192.13	-99.77	-1,294.82	-5,850.07	1,067.73	718.29	349.45	3.056		
12,600.00	7,038.57	12,870.88	7,219.69	165.94	195.41	-99.77	-1,295.40	-5,950.07	1,067.70	712.23	355.47	3.004		
12,700.00	7,038.13	12,970.88	7,219.16	168.75	198.68	-99.76	-1,295.99	-6,050.07	1,067.67	706.18	361.49	2.954		
12,800.00	7,037.70	13,070.88	7,218.63	171.56	201.96	-99.76	-1,296.57	-6,150.06	1,067.64	700.12	367.52	2.905		
12,900.00	7,037.27	13,170.88	7,218.10	174.37	205.24	-99.75	-1,297.16	-6,250.06	1,067.61	694.06	373.55	2.858		
13,000.00	7,036.83	13,270.88	7,217.58	177.19	208.52	-99.75	-1,297.74	-6,350.06	1,067.58	688.00	379.58	2.813		
13,100.00	7,036.40	13,370.88	7,217.05	180.00	211.81	-99.74	-1,298.32	-6,450.05	1,067.55	681.93	385.62	2.768		
13,200.00	7,035.96	13,470.88	7,216.52	182.82	215.09	-99.74	-1,298.91	-6,550.05	1,067.52	675.86	391.66	2.726		
13,300.00	7,035.53	13,570.88	7,215.99	185.64	218.38	-99.73	-1,299.49	-6,650.05	1,067.49	669.79	397.70	2.684		
13,400.00	7,035.10	13,670.88	7,215.46	188.46	221.67	-99.73	-1,300.08	-6,750.04	1,067.46	663.71	403.75	2.644		
13,500.00	7,034.66	13,770.88	7,214.93	191.28	224.95	-99.72	-1,300.66	-6,850.04	1,067.43	657.64	409.79	2.605		
13,600.00	7,034.23	13,870.88	7,214.40	194.10	228.24	-99.72	-1,301.25	-6,950.04	1,067.40	651.56	415.84	2.567		
13,700.00	7,033.79	13,970.88	7,213.87	196.92	231.54	-99.71	-1,301.83	-7,050.04	1,067.37	645.47	421.89	2.530		
13,800.00	7,033.36	14,070.88	7,213.35	199.74	234.83	-99.71	-1,302.41	-7,150.03	1,067.34	639.39	427.95	2.494		
13,900.00	7,032.93	14,170.88	7,212.82	202.57	238.12	-99.70	-1,303.00	-7,250.03	1,067.31	633.30	434.00	2.459		
14,000.00	7,032.49	14,270.88	7,212.29	205.39	241.42	-99.70	-1,303.58	-7,350.03	1,067.28	627.22	440.06	2.425		
14,100.00	7,032.06	14,370.88	7,211.76	208.22	244.71	-99.69	-1,304.17	-7,450.02	1,067.25	621.13	446.12	2.392		
14,200.00	7,031.62	14,470.88	7,211.23	211.05	248.01	-99.69	-1,304.75	-7,550.02	1,067.22	615.04	452.18	2.360		
14,300.00	7,031.19	14,570.88	7,210.70	213.87	251.31	-99.68	-1,305.34	-7,650.02	1,067.19	608.94	458.25	2.329		
14,400.00	7,030.76	14,670.88	7,210.17	216.70	254.61	-99.68	-1,305.92	-7,750.01	1,067.16	602.85	464.31	2.298		
14,500.00	7,030.32	14,770.88	7,209.64	219.53	257.91	-99.67	-1,306.51	-7,850.01	1,067.13	596.75	470.38	2.269		
14,600.00	7,029.89	14,870.88	7,209.12	222.36	261.21	-99.67	-1,307.09	-7,950.01	1,067.10	590.65	476.44	2.240		
14,700.00	7,029.45	14,970.88	7,208.59	225.19	264.51	-99.66	-1,307.67	-8,050.00	1,067.07	584.55	482.51	2.211		
14,800.00	7,029.02	15,070.88	7,208.06	228.03	267.81	-99.66	-1,308.26	-8,150.00	1,067.04	578.45	488.58	2.184		
14,805.04	7,029.00	15,075.92	7,208.03	228.17	267.98	-99.66	-1,308.29	-8,155.04	1,067.04	578.15	488.89	2.183 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	-179.20	-20.04	-0.28	20.04					
100.00	100.00	100.00	100.00	3.28	3.28	-179.20	-20.04	-0.28	20.04	13.47	6.57	3.051		
200.00	200.00	200.00	200.00	3.34	3.34	-179.20	-20.04	-0.28	20.04	13.37	6.67	3.003		
300.00	300.00	300.00	300.00	3.44	3.44	-179.20	-20.04	-0.28	20.04	13.15	6.89	2.909		
400.00	400.00	400.00	400.00	3.60	3.60	-179.20	-20.04	-0.28	20.04	12.84	7.21	2.781		
500.00	499.98	499.98	499.98	3.80	3.81	-40.67	-20.04	-0.28	18.69	11.08	7.60	2.458		
590.42	590.33	589.86	589.84	4.00	4.01	-46.19	-21.38	-0.72	17.54	9.53	8.01	2.189		
600.00	599.90	599.38	599.36	4.02	4.03	-47.17	-21.68	-0.82	17.41	9.35	8.06	2.160 CC		
700.00	699.82	698.81	698.65	4.28	4.29	-48.85	-26.59	-2.43	19.32	10.74	8.58	2.252		
800.00	799.74	801.44	798.10	4.57	4.57	-47.13	-33.92	-4.83	23.46	14.31	9.15	2.563		
900.00	899.66	901.53	897.70	4.88	4.88	-45.81	-41.36	-7.27	27.73	17.96	9.77	2.839		
1,000.00	999.58	1,001.63	997.30	5.21	5.20	-44.85	-48.81	-9.72	32.00	21.59	10.42	3.072		
1,100.00	1,099.50	1,101.72	1,096.90	5.55	5.55	-44.11	-56.26	-12.16	36.29	25.19	11.10	3.269		
1,200.00	1,199.42	1,201.81	1,196.50	5.91	5.91	-43.53	-63.71	-14.61	40.58	28.77	11.81	3.436		
1,300.00	1,299.34	1,301.90	1,296.10	6.28	6.28	-43.06	-71.16	-17.05	44.87	32.33	12.54	3.577		
1,400.00	1,399.26	1,402.00	1,395.70	6.66	6.66	-42.67	-78.61	-19.49	49.17	35.87	13.30	3.698		
1,500.00	1,499.18	1,502.09	1,495.30	7.04	7.05	-42.34	-86.05	-21.94	53.46	39.40	14.06	3.802		
1,600.00	1,599.10	1,597.82	1,594.89	7.43	7.43	-42.07	-93.50	-24.38	57.76	42.94	14.83	3.896		
1,700.00	1,699.01	1,702.28	1,694.49	7.83	7.85	-41.83	-100.95	-26.82	62.06	46.43	15.63	3.970		
1,800.00	1,798.93	1,797.63	1,794.09	8.23	8.24	-41.62	-108.40	-29.27	66.36	49.95	16.42	4.043		
1,900.00	1,898.85	1,902.46	1,893.69	8.64	8.68	-41.44	-115.85	-31.71	70.66	53.42	17.24	4.098		
2,000.00	1,998.77	2,002.55	1,993.29	9.05	9.09	-41.28	-123.30	-34.15	74.96	56.90	18.06	4.151		
2,100.00	2,098.69	2,102.65	2,092.89	9.46	9.51	-41.13	-130.74	-36.60	79.27	60.38	18.88	4.198		
2,200.00	2,198.61	2,202.74	2,192.49	9.88	9.93	-41.00	-138.19	-39.04	83.57	63.86	19.71	4.240		
2,300.00	2,298.53	2,302.83	2,292.09	10.30	10.36	-40.89	-145.64	-41.49	87.87	67.33	20.54	4.277		
2,400.00	2,398.45	2,402.93	2,391.69	10.72	10.79	-40.78	-153.09	-43.93	92.18	70.79	21.38	4.311		
2,500.00	2,498.37	2,503.02	2,491.29	11.14	11.22	-40.68	-160.54	-46.37	96.48	74.26	22.22	4.342		
2,600.00	2,598.29	2,603.11	2,590.89	11.56	11.65	-40.60	-167.99	-48.82	100.78	77.72	23.07	4.370		
2,700.00	2,698.21	2,703.20	2,690.49	11.98	12.08	-40.52	-175.43	-51.26	105.09	81.17	23.91	4.395		
2,800.00	2,798.13	2,803.30	2,790.09	12.41	12.51	-40.44	-182.88	-53.70	109.39	84.63	24.76	4.418		
2,900.00	2,898.05	2,903.39	2,889.68	12.84	12.95	-40.37	-190.33	-56.15	113.70	88.08	25.61	4.439		
3,000.00	2,997.97	3,003.48	2,989.28	13.27	13.39	-40.31	-197.78	-58.59	118.00	91.53	26.47	4.458		
3,100.00	3,097.89	3,103.57	3,088.88	13.69	13.82	-40.25	-205.23	-61.04	122.31	94.98	27.32	4.476		
3,200.00	3,197.81	3,203.67	3,188.48	14.12	14.26	-40.19	-212.68	-63.48	126.61	98.43	28.18	4.492		
3,300.00	3,297.73	3,303.76	3,288.08	14.56	14.70	-40.14	-220.12	-65.92	130.92	101.87	29.04	4.508		
3,400.00	3,397.65	3,396.15	3,387.68	14.99	15.11	-40.09	-227.57	-68.37	135.22	105.35	29.87	4.527		
3,500.00	3,497.56	3,503.95	3,487.28	15.42	15.58	-40.05	-235.02	-70.81	139.53	108.76	30.77	4.535		
3,600.00	3,597.48	3,604.04	3,586.88	15.85	16.02	-40.01	-242.47	-73.25	143.83	112.20	31.63	4.547		
3,700.00	3,697.40	3,704.13	3,686.48	16.28	16.46	-39.97	-249.92	-75.70	148.14	115.64	32.50	4.559		
3,800.00	3,797.32	3,804.22	3,786.08	16.72	16.91	-39.93	-257.37	-78.14	152.44	119.08	33.36	4.569		
3,900.00	3,897.24	3,904.32	3,885.68	17.15	17.35	-39.89	-264.81	-80.59	156.75	122.52	34.23	4.579		
4,000.00	3,997.16	4,004.41	3,985.28	17.59	17.79	-39.86	-272.26	-83.03	161.05	125.96	35.10	4.589		
4,100.00	4,097.08	4,104.50	4,084.88	18.02	18.24	-39.83	-279.71	-85.47	165.36	129.39	35.97	4.598		
4,200.00	4,197.00	4,204.60	4,184.47	18.46	18.68	-39.80	-287.16	-87.92	169.67	132.83	36.84	4.606		
4,300.00	4,296.92	4,295.31	4,284.07	18.89	19.08	-39.77	-294.61	-90.36	173.97	136.31	37.66	4.619		
4,400.00	4,396.84	4,404.78	4,383.67	19.33	19.57	-39.74	-302.06	-92.80	178.28	139.70	38.58	4.621		
4,500.00	4,496.76	4,504.87	4,483.27	19.77	20.02	-39.71	-309.50	-95.25	182.58	143.13	39.45	4.628		
4,600.00	4,596.68	4,604.97	4,582.87	20.20	20.46	-39.69	-316.95	-97.69	186.89	146.57	40.32	4.635		
4,700.00	4,696.60	4,705.06	4,682.47	20.64	20.91	-39.66	-324.40	-100.13	191.19	150.00	41.19	4.641		
4,800.00	4,796.52	4,805.15	4,782.07	21.08	21.35	-39.64	-331.85	-102.58	195.50	153.43	42.07	4.647		
4,900.00	4,896.44	4,905.25	4,881.67	21.51	21.80	-39.62	-339.30	-105.02	199.81	156.87	42.94	4.653		
5,000.00	4,996.36	5,005.34	4,981.27	21.95	22.25	-39.60	-346.75	-107.47	204.11	160.30	43.82	4.658		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 32C-16-M2 - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,100.00	5,096.28	5,094.57	5,080.87	22.39	22.65	-39.58	-354.19	-109.91	208.42	163.78	44.64	4.669	
5,200.00	5,196.19	5,205.52	5,180.47	22.83	23.14	-39.56	-361.64	-112.35	212.72	167.16	45.57	4.669	
5,300.00	5,296.11	5,305.62	5,280.07	23.27	23.59	-39.54	-369.09	-114.80	217.03	170.59	46.44	4.673	
5,400.00	5,396.03	5,405.71	5,379.66	23.71	24.04	-39.52	-376.54	-117.24	221.34	174.02	47.32	4.678	
5,500.00	5,495.95	5,505.80	5,479.26	24.14	24.48	-39.50	-383.99	-119.68	225.64	177.45	48.19	4.682	
5,600.00	5,595.87	5,605.89	5,578.86	24.58	24.93	-39.49	-391.44	-122.13	229.95	180.88	49.07	4.686	
5,700.00	5,695.79	5,705.99	5,678.46	25.02	25.38	-39.47	-398.88	-124.57	234.26	184.31	49.95	4.690	
5,800.00	5,795.71	5,806.08	5,778.06	25.46	25.83	-39.46	-406.33	-127.02	238.56	187.74	50.82	4.694	
5,900.00	5,895.63	5,906.17	5,877.66	25.90	26.28	-39.44	-413.78	-129.46	242.87	191.17	51.70	4.698	
6,000.00	5,995.55	6,006.27	5,977.26	26.34	26.72	-39.43	-421.23	-131.90	247.17	194.59	52.58	4.701	
6,100.00	6,095.47	6,106.36	6,076.86	26.78	27.17	-39.41	-428.68	-134.35	251.48	198.02	53.46	4.704	
6,200.00	6,195.39	6,206.45	6,176.46	27.22	27.62	-39.40	-436.13	-136.79	255.79	201.45	54.34	4.708	
6,300.00	6,295.31	6,306.54	6,276.06	27.66	28.07	-39.39	-443.58	-139.23	260.09	204.88	55.21	4.711	
6,400.00	6,395.23	6,406.64	6,375.66	28.10	28.52	-39.38	-451.02	-141.68	264.40	208.31	56.09	4.714	
6,500.00	6,495.02	6,506.80	6,475.19	28.54	28.97	-75.25	-458.47	-144.12	268.75	211.77	56.97	4.717	
6,600.00	6,593.09	6,591.66	6,573.35	28.98	29.35	-87.24	-465.81	-146.53	273.85	216.04	57.81	4.737	
6,700.00	6,687.01	6,690.32	6,671.61	29.41	29.79	-94.89	-473.17	-150.73	281.93	223.19	58.74	4.799	
6,800.00	6,774.46	6,796.52	6,775.62	29.83	30.26	-101.36	-481.08	-170.03	293.14	233.49	59.65	4.914	
6,900.00	6,853.31	6,909.39	6,880.99	30.26	30.74	-106.81	-489.26	-209.21	306.40	246.17	60.23	5.087	
7,000.00	6,921.60	7,029.65	6,983.78	30.76	31.21	-111.36	-497.43	-270.74	320.50	260.29	60.20	5.323	
7,100.00	6,977.66	7,157.67	7,078.44	31.38	31.70	-115.05	-505.18	-356.26	334.04	274.53	59.51	5.613	
7,200.00	7,020.10	7,293.20	7,157.93	32.17	32.37	-117.82	-512.00	-465.51	345.62	287.15	58.47	5.911	
7,300.00	7,047.88	7,435.07	7,214.50	33.13	33.43	-119.65	-517.27	-595.19	353.94	296.15	57.79	6.124	
7,400.00	7,060.32	7,581.08	7,241.38	34.27	34.92	-120.47	-520.44	-738.34	358.04	299.65	58.39	6.132	
7,500.00	7,060.70	7,703.52	7,242.73	35.56	36.44	-120.52	-521.47	-853.70	358.48	297.88	60.60	5.916	
7,600.00	7,060.27	7,796.48	7,242.34	37.02	37.76	-120.51	-522.25	-953.70	358.66	295.57	63.09	5.685	
7,700.00	7,059.83	7,903.52	7,241.95	38.64	39.46	-120.50	-523.04	-1,053.69	358.84	292.79	66.05	5.433	
7,800.00	7,059.40	8,003.52	7,241.55	40.40	41.19	-120.49	-523.82	-1,153.69	359.02	289.85	69.17	5.191	
7,900.00	7,058.97	8,103.52	7,241.16	42.28	43.04	-120.48	-524.60	-1,253.68	359.20	286.70	72.50	4.954	
8,000.00	7,058.53	8,203.52	7,240.77	44.27	45.00	-120.47	-525.38	-1,353.68	359.37	283.35	76.02	4.727	
8,100.00	7,058.10	8,303.52	7,240.37	46.35	47.04	-120.46	-526.17	-1,453.68	359.55	279.85	79.70	4.511	
8,200.00	7,057.66	8,403.52	7,239.98	48.50	49.17	-120.45	-526.95	-1,553.67	359.73	276.20	83.53	4.307	
8,300.00	7,057.23	8,503.52	7,239.59	50.73	51.37	-120.44	-527.73	-1,653.67	359.91	272.43	87.48	4.114	
8,400.00	7,056.80	8,603.52	7,239.19	53.02	53.64	-120.43	-528.51	-1,753.66	360.09	268.55	91.54	3.934	
8,500.00	7,056.36	8,696.48	7,238.80	55.36	55.79	-120.42	-529.29	-1,853.66	360.27	264.73	95.54	3.771	
8,600.00	7,055.93	8,803.52	7,238.41	57.74	58.32	-120.41	-530.08	-1,953.66	360.45	260.53	99.92	3.607	
8,700.00	7,055.49	8,903.52	7,238.02	60.17	60.73	-120.41	-530.86	-2,053.65	360.63	256.40	104.23	3.460	
8,800.00	7,055.06	9,003.52	7,237.62	62.63	63.17	-120.40	-531.64	-2,153.65	360.80	252.21	108.59	3.322	
8,900.00	7,054.63	9,103.52	7,237.23	65.13	65.65	-120.39	-532.42	-2,253.64	360.98	247.96	113.02	3.194	
9,000.00	7,054.19	9,203.52	7,236.84	67.66	68.16	-120.38	-533.21	-2,353.64	361.16	243.66	117.50	3.074	
9,100.00	7,053.76	9,303.52	7,236.44	70.21	70.70	-120.37	-533.99	-2,453.64	361.34	239.32	122.02	2.961	
9,200.00	7,053.32	9,403.52	7,236.05	72.78	73.25	-120.36	-534.77	-2,553.63	361.52	234.94	126.58	2.856	
9,300.00	7,052.89	9,503.52	7,235.66	75.38	75.84	-120.35	-535.55	-2,653.63	361.70	230.52	131.18	2.757	
9,400.00	7,052.46	9,603.52	7,235.26	77.99	78.43	-120.34	-536.33	-2,753.62	361.88	226.07	135.81	2.665	
9,500.00	7,052.02	9,703.52	7,234.87	80.62	81.05	-120.33	-537.12	-2,853.62	362.06	221.59	140.47	2.577	
9,600.00	7,051.59	9,803.52	7,234.48	83.26	83.68	-120.32	-537.90	-2,953.62	362.24	217.08	145.16	2.495	
9,700.00	7,051.15	9,903.52	7,234.08	85.92	86.33	-120.31	-538.68	-3,053.61	362.41	212.55	149.87	2.418	
9,800.00	7,050.72	10,003.52	7,233.69	88.59	88.99	-120.31	-539.46	-3,153.61	362.59	207.99	154.60	2.345	
9,900.00	7,050.29	10,103.52	7,233.30	91.28	91.66	-120.30	-540.25	-3,253.60	362.77	203.42	159.35	2.277	
10,000.00	7,049.85	10,203.52	7,232.90	93.97	94.35	-120.29	-541.03	-3,353.60	362.95	198.83	164.12	2.211	
10,100.00	7,049.42	10,296.48	7,232.51	96.67	96.85	-120.28	-541.81	-3,453.60	363.13	194.39	168.74	2.152	
10,200.00	7,048.98	10,403.52	7,232.12	99.38	99.74	-120.27	-542.59	-3,553.59	363.31	189.59	173.72	2.091	

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	
10,300.00	7,048.55	10,503.52	7,231.72	102.10	102.45	-120.26	-543.37	-3,653.59	363.49	184.95	178.53	2.036	
10,400.00	7,048.12	10,603.52	7,231.33	104.83	105.17	-120.25	-544.16	-3,753.58	363.67	180.30	183.37	1.983	
10,500.00	7,047.68	10,696.48	7,230.94	107.56	107.71	-120.24	-544.94	-3,853.58	363.85	175.81	188.04	1.935	
10,600.00	7,047.25	10,796.48	7,230.54	110.30	110.44	-120.23	-545.72	-3,953.58	364.03	171.13	192.90	1.887	
10,700.00	7,046.81	10,903.52	7,230.15	113.05	113.37	-120.22	-546.50	-4,053.57	364.20	166.27	197.93	1.840	
10,800.00	7,046.38	10,996.48	7,229.76	115.80	115.92	-120.22	-547.29	-4,153.57	364.38	161.74	202.64	1.798	
10,900.00	7,045.95	11,103.52	7,229.36	118.55	118.86	-120.21	-548.07	-4,253.56	364.56	156.87	207.70	1.755	
11,000.00	7,045.51	11,203.52	7,228.97	121.31	121.62	-120.20	-548.85	-4,353.56	364.74	152.15	212.59	1.716	
11,100.00	7,045.08	11,303.52	7,228.58	124.08	124.38	-120.19	-549.63	-4,453.56	364.92	147.43	217.49	1.678	
11,200.00	7,044.64	11,403.52	7,228.18	126.85	127.14	-120.18	-550.41	-4,553.55	365.10	142.69	222.40	1.642	
11,300.00	7,044.21	11,503.52	7,227.79	129.62	129.91	-120.17	-551.20	-4,653.55	365.28	137.96	227.32	1.607	
11,400.00	7,043.78	11,603.52	7,227.40	132.40	132.68	-120.16	-551.98	-4,753.54	365.46	133.21	232.25	1.574	
11,500.00	7,043.34	11,703.52	7,227.00	135.18	135.46	-120.15	-552.76	-4,853.54	365.64	128.46	237.18	1.542	
11,600.00	7,042.91	11,803.52	7,226.61	137.96	138.24	-120.14	-553.54	-4,953.54	365.82	123.70	242.12	1.511	
11,700.00	7,042.47	11,903.52	7,226.22	140.75	141.02	-120.13	-554.33	-5,053.53	365.99	118.94	247.06	1.481 Level 3	
11,800.00	7,042.04	12,003.52	7,225.82	143.54	143.80	-120.13	-555.11	-5,153.53	366.17	114.17	252.01	1.453 Level 3	
11,900.00	7,041.61	12,103.53	7,225.43	146.33	146.59	-120.12	-555.89	-5,253.52	366.35	109.39	256.96	1.426 Level 3	
12,000.00	7,041.17	12,203.53	7,225.04	149.13	149.38	-120.11	-556.67	-5,353.52	366.53	104.61	261.92	1.399 Level 3	
12,100.00	7,040.74	12,296.48	7,224.64	151.92	151.98	-120.10	-557.45	-5,453.52	366.71	100.00	266.71	1.375 Level 3	
12,200.00	7,040.30	12,403.53	7,224.25	154.72	154.97	-120.09	-558.24	-5,553.51	366.89	95.04	271.85	1.350 Level 3	
12,300.00	7,039.87	12,503.53	7,223.86	157.52	157.77	-120.08	-559.02	-5,653.51	367.07	90.24	276.83	1.326 Level 3	
12,400.00	7,039.44	12,596.47	7,223.46	160.33	160.37	-120.07	-559.80	-5,753.50	367.25	85.62	281.63	1.304 Level 3	
12,500.00	7,039.00	12,703.53	7,223.07	163.13	163.37	-120.06	-560.58	-5,853.50	367.43	80.64	286.78	1.281 Level 3	
12,600.00	7,038.57	12,803.53	7,222.68	165.94	166.17	-120.05	-561.36	-5,953.50	367.61	75.84	291.77	1.260 Level 3	
12,700.00	7,038.13	12,896.47	7,222.28	168.75	168.78	-120.05	-562.15	-6,053.49	367.79	71.20	296.58	1.240 Level 2	
12,800.00	7,037.70	13,003.53	7,221.89	171.56	171.78	-120.04	-562.93	-6,153.49	367.96	66.22	301.75	1.219 Level 2	
12,900.00	7,037.27	13,103.53	7,221.50	174.37	174.59	-120.03	-563.71	-6,253.48	368.14	61.40	306.74	1.200 Level 2	
13,000.00	7,036.83	13,203.53	7,221.10	177.19	177.40	-120.02	-564.49	-6,353.48	368.32	56.58	311.74	1.181 Level 2	
13,100.00	7,036.40	13,296.47	7,220.71	180.00	180.02	-120.01	-565.28	-6,453.48	368.50	51.93	316.57	1.164 Level 2	
13,200.00	7,035.96	13,403.53	7,220.32	182.82	183.03	-120.00	-566.06	-6,553.47	368.68	46.93	321.75	1.146 Level 2	
13,300.00	7,035.53	13,503.53	7,219.92	185.64	185.84	-119.99	-566.84	-6,653.47	368.86	42.11	326.76	1.129 Level 2	
13,400.00	7,035.10	13,603.53	7,219.53	188.46	188.66	-119.98	-567.62	-6,753.46	369.04	37.27	331.77	1.112 Level 2	
13,500.00	7,034.66	13,703.53	7,219.14	191.28	191.48	-119.98	-568.40	-6,853.46	369.22	32.44	336.78	1.096 Level 2	
13,600.00	7,034.23	13,803.53	7,218.74	194.10	194.30	-119.97	-569.19	-6,953.46	369.40	27.60	341.79	1.081 Level 2	
13,700.00	7,033.79	13,903.53	7,218.35	196.92	197.12	-119.96	-569.97	-7,053.45	369.58	22.77	346.81	1.066 Level 2	
13,800.00	7,033.36	13,996.47	7,217.96	199.74	199.74	-119.95	-570.75	-7,153.45	369.76	18.10	351.66	1.051 Level 2	
13,900.00	7,032.93	14,103.53	7,217.56	202.57	202.76	-119.94	-571.53	-7,253.44	369.94	13.08	356.86	1.037 Level 2	
14,000.00	7,032.49	14,203.53	7,217.17	205.39	205.58	-119.93	-572.32	-7,353.44	370.12	8.23	361.88	1.023 Level 2	
14,100.00	7,032.06	14,303.53	7,216.78	208.22	208.40	-119.92	-573.10	-7,453.44	370.30	3.39	366.91	1.009 Level 2	
14,200.00	7,031.62	14,403.53	7,216.38	211.05	211.23	-119.91	-573.88	-7,553.43	370.47	-1.46	371.94	0.996 Level 1	
14,300.00	7,031.19	14,503.53	7,215.99	213.87	214.05	-119.91	-574.66	-7,653.43	370.65	-6.32	376.97	0.983 Level 1	
14,400.00	7,030.76	14,596.47	7,215.60	216.70	216.68	-119.90	-575.44	-7,753.42	370.83	-10.99	381.83	0.971 Level 1	
14,500.00	7,030.32	14,696.47	7,215.20	219.53	219.51	-119.89	-576.23	-7,853.42	371.01	-15.85	386.86	0.959 Level 1	
14,600.00	7,029.89	14,803.53	7,214.81	222.36	222.54	-119.88	-577.01	-7,953.42	371.19	-20.89	392.08	0.947 Level 1	
14,700.00	7,029.45	14,896.47	7,214.42	225.19	225.17	-119.87	-577.79	-8,053.41	371.37	-25.57	396.94	0.936 Level 1	
14,800.00	7,029.02	14,996.47	7,214.02	228.03	228.00	-119.86	-578.57	-8,153.41	371.55	-30.43	401.98	0.924 Level 1	
14,805.04	7,029.00	15,001.51	7,214.00	228.17	228.14	-119.86	-578.61	-8,158.45	371.56	-30.68	402.24	0.924 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	-179.47	-119.86	-1.11	119.87					
100.00	100.00	101.00	100.00	3.28	3.28	-179.47	-119.86	-1.11	119.87	113.30	6.57	18.245		
200.00	200.00	201.00	200.00	3.34	3.34	-179.47	-119.86	-1.11	119.87	113.19	6.67	17.958		
300.00	300.00	299.00	300.00	3.44	3.44	-179.47	-119.86	-1.11	119.87	112.98	6.89	17.401 CC, ES		
400.00	400.00	395.04	396.02	3.60	3.59	-179.35	-121.41	-1.38	121.49	114.29	7.20	16.875		
500.00	499.98	490.91	491.76	3.80	3.77	-37.62	-126.13	-2.20	125.03	117.44	7.59	16.467		
600.00	599.90	586.57	587.10	4.02	3.99	-38.07	-133.97	-3.56	130.11	122.05	8.06	16.146		
700.00	699.82	681.83	681.70	4.28	4.24	-38.27	-144.89	-5.46	138.44	129.85	8.59	16.113		
800.00	799.74	780.06	778.96	4.57	4.52	-38.29	-158.48	-7.82	149.14	139.98	9.16	16.284		
900.00	899.66	879.48	877.37	4.88	4.85	-38.30	-172.34	-10.22	159.95	150.18	9.77	16.377		
1,000.00	999.58	978.89	975.79	5.21	5.20	-38.30	-186.20	-12.63	170.76	160.34	10.42	16.392		
1,100.00	1,099.50	1,078.31	1,074.20	5.55	5.56	-38.31	-200.06	-15.04	181.57	170.47	11.10	16.356		
1,200.00	1,199.42	1,177.72	1,172.62	5.91	5.94	-38.32	-213.91	-17.44	192.38	180.56	11.81	16.286		
1,300.00	1,299.34	1,277.13	1,271.03	6.28	6.33	-38.32	-227.77	-19.85	203.19	190.64	12.55	16.194		
1,400.00	1,399.26	1,376.55	1,369.44	6.66	6.74	-38.33	-241.63	-22.25	214.00	200.69	13.30	16.089		
1,500.00	1,499.18	1,475.96	1,467.86	7.04	7.15	-38.33	-255.49	-24.66	224.81	210.73	14.07	15.976		
1,600.00	1,599.10	1,575.38	1,566.27	7.43	7.57	-38.34	-269.35	-27.06	235.62	220.76	14.85	15.861		
1,700.00	1,699.01	1,674.79	1,664.69	7.83	7.99	-38.34	-283.20	-29.47	246.42	230.77	15.65	15.746		
1,800.00	1,798.93	1,774.20	1,763.10	8.23	8.42	-38.35	-297.06	-31.88	257.23	240.78	16.46	15.632		
1,900.00	1,898.85	1,873.62	1,861.51	8.64	8.85	-38.35	-310.92	-34.28	268.04	250.78	17.27	15.522		
2,000.00	1,998.77	1,973.03	1,959.93	9.05	9.29	-38.35	-324.78	-36.69	278.85	260.76	18.09	15.415		
2,100.00	2,098.69	2,072.45	2,058.34	9.46	9.73	-38.36	-338.64	-39.09	289.66	270.75	18.92	15.312		
2,200.00	2,198.61	2,171.86	2,156.76	9.88	10.18	-38.36	-352.49	-41.50	300.47	280.72	19.75	15.213		
2,300.00	2,298.53	2,271.27	2,255.17	10.30	10.62	-38.36	-366.35	-43.91	311.28	290.69	20.59	15.119		
2,400.00	2,398.45	2,370.69	2,353.58	10.72	11.07	-38.36	-380.21	-46.31	322.09	300.66	21.43	15.029		
2,500.00	2,498.37	2,470.10	2,452.00	11.14	11.52	-38.36	-394.07	-48.72	332.90	310.63	22.28	14.943		
2,600.00	2,598.29	2,569.52	2,550.41	11.56	11.97	-38.37	-407.93	-51.12	343.71	320.59	23.13	14.862		
2,700.00	2,698.21	2,668.93	2,648.83	11.98	12.43	-38.37	-421.78	-53.53	354.52	330.54	23.98	14.784		
2,800.00	2,798.13	2,768.34	2,747.24	12.41	12.88	-38.37	-435.64	-55.94	365.33	340.50	24.84	14.710		
2,900.00	2,898.05	2,867.76	2,845.65	12.84	13.34	-38.37	-449.50	-58.34	376.14	350.45	25.69	14.640		
3,000.00	2,997.97	2,967.17	2,944.07	13.27	13.79	-38.37	-463.36	-60.75	386.95	360.40	26.55	14.572		
3,100.00	3,097.89	3,066.59	3,042.48	13.69	14.25	-38.37	-477.22	-63.15	397.76	370.35	27.42	14.508		
3,200.00	3,197.81	3,166.00	3,140.90	14.12	14.71	-38.38	-491.07	-65.56	408.57	380.29	28.28	14.447		
3,300.00	3,297.73	3,265.41	3,239.31	14.56	15.17	-38.38	-504.93	-67.97	419.38	390.24	29.15	14.389		
3,400.00	3,397.65	3,364.83	3,337.73	14.99	15.63	-38.38	-518.79	-70.37	430.19	400.18	30.01	14.333		
3,500.00	3,497.56	3,464.24	3,436.14	15.42	16.09	-38.38	-532.65	-72.78	441.00	410.12	30.88	14.280		
3,600.00	3,597.48	3,563.66	3,534.55	15.85	16.55	-38.38	-546.51	-75.18	451.81	420.06	31.75	14.229		
3,700.00	3,697.40	3,663.07	3,632.97	16.28	17.01	-38.38	-560.36	-77.59	462.62	430.00	32.62	14.181		
3,800.00	3,797.32	3,762.48	3,731.38	16.72	17.48	-38.38	-574.22	-79.99	473.43	439.94	33.50	14.134		
3,900.00	3,897.24	3,861.90	3,829.80	17.15	17.94	-38.38	-588.08	-82.40	484.24	449.87	34.37	14.090		
4,000.00	3,997.16	3,961.31	3,928.21	17.59	18.40	-38.39	-601.94	-84.81	495.05	459.81	35.24	14.047		
4,100.00	4,097.08	4,060.73	4,026.62	18.02	18.87	-38.39	-615.80	-87.21	505.86	469.74	36.12	14.006		
4,200.00	4,197.00	4,160.14	4,125.04	18.46	19.33	-38.39	-629.65	-89.62	516.67	479.68	36.99	13.966		
4,300.00	4,296.92	4,259.55	4,223.45	18.89	19.80	-38.39	-643.51	-92.02	527.48	489.61	37.87	13.929		
4,400.00	4,396.84	4,358.97	4,321.87	19.33	20.26	-38.39	-657.37	-94.43	538.29	499.54	38.75	13.892		
4,500.00	4,496.76	4,458.38	4,420.28	19.77	20.73	-38.39	-671.23	-96.84	549.10	509.47	39.63	13.857		
4,600.00	4,596.68	4,557.80	4,518.69	20.20	21.20	-38.39	-685.09	-99.24	559.91	519.40	40.50	13.823		
4,700.00	4,696.60	4,657.21	4,617.11	20.64	21.66	-38.39	-698.94	-101.65	570.72	529.34	41.38	13.791		
4,800.00	4,796.52	4,756.62	4,715.52	21.08	22.13	-38.39	-712.80	-104.05	581.53	539.27	42.26	13.760		
4,900.00	4,896.44	4,856.04	4,813.94	21.51	22.59	-38.39	-726.66	-106.46	592.34	549.19	43.14	13.729		
5,000.00	4,996.36	4,955.45	4,912.35	21.95	23.06	-38.39	-740.52	-108.87	603.15	559.12	44.02	13.700		
5,100.00	5,096.28	5,054.87	5,010.76	22.39	23.53	-38.39	-754.38	-111.27	613.96	569.05	44.91	13.672		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,196.19	5,154.28	5,109.18	22.83	24.00	-38.39	-768.23	-113.68	624.77	578.98	45.79	13.645		
5,300.00	5,296.11	5,253.69	5,207.59	23.27	24.46	-38.39	-782.09	-116.08	635.58	588.91	46.67	13.619		
5,400.00	5,396.03	5,353.11	5,306.01	23.71	24.93	-38.40	-795.95	-118.49	646.39	598.84	47.55	13.593		
5,500.00	5,495.95	5,452.52	5,404.42	24.14	25.40	-38.40	-809.81	-120.89	657.20	608.76	48.43	13.569		
5,600.00	5,595.87	5,551.94	5,502.83	24.58	25.87	-38.40	-823.67	-123.30	668.01	618.69	49.32	13.545		
5,700.00	5,695.79	5,651.35	5,601.25	25.02	26.33	-38.40	-837.52	-125.71	678.82	628.62	50.20	13.522		
5,800.00	5,795.71	5,750.76	5,699.66	25.46	26.80	-38.40	-851.38	-128.11	689.63	638.54	51.08	13.500		
5,900.00	5,895.63	5,850.18	5,798.08	25.90	27.27	-38.40	-865.24	-130.52	700.44	648.47	51.97	13.478		
6,000.00	5,995.55	5,949.59	5,896.49	26.34	27.74	-38.40	-879.10	-132.92	711.25	658.39	52.85	13.457		
6,100.00	6,095.47	6,049.01	5,994.90	26.78	28.21	-38.40	-892.96	-135.33	722.06	668.32	53.74	13.437		
6,200.00	6,195.39	6,148.42	6,093.32	27.22	28.68	-38.40	-906.81	-137.74	732.87	678.24	54.62	13.417		
6,300.00	6,295.31	6,247.84	6,191.73	27.66	29.15	-38.40	-920.67	-140.14	743.68	688.17	55.51	13.398		
6,400.00	6,395.23	6,347.25	6,290.15	28.10	29.61	-38.40	-934.53	-142.55	754.49	698.09	56.39	13.379		
6,500.00	6,495.02	6,446.60	6,388.49	28.54	30.08	-73.65	-948.38	-144.95	765.29	708.01	57.28	13.361		
6,600.00	6,593.09	6,545.48	6,486.34	28.98	30.55	-82.90	-962.17	-148.31	776.10	717.93	58.17	13.341		
6,700.00	6,687.01	6,647.28	6,585.75	29.41	31.02	-85.71	-976.28	-164.45	786.94	727.84	59.10	13.315		
6,800.00	6,774.46	6,752.41	6,684.35	29.83	31.48	-87.19	-990.43	-197.67	797.51	737.47	60.04	13.282		
6,900.00	6,853.31	6,861.07	6,779.13	30.26	31.92	-88.18	-1,004.20	-248.72	807.48	746.47	61.01	13.234		
7,000.00	6,921.60	6,973.32	6,866.52	30.76	32.33	-88.91	-1,017.09	-317.74	816.50	754.45	62.06	13.157		
7,100.00	6,977.66	7,089.04	6,942.60	31.38	32.74	-89.47	-1,028.53	-403.97	824.24	760.98	63.26	13.029		
7,200.00	7,020.10	7,207.88	7,003.32	32.17	33.22	-89.89	-1,037.95	-505.49	830.36	765.62	64.74	12.825		
7,300.00	7,047.88	7,329.22	7,044.96	33.13	33.99	-90.17	-1,044.79	-619.06	834.59	767.95	66.65	12.523		
7,400.00	7,060.32	7,452.18	7,064.63	34.27	35.14	-90.32	-1,048.60	-740.18	836.73	767.75	68.98	12.130		
7,500.00	7,060.70	7,560.66	7,065.75	35.56	36.44	-90.34	-1,049.70	-848.63	837.09	765.49	71.60	11.691		
7,600.00	7,060.27	7,660.66	7,065.35	37.02	37.82	-90.35	-1,050.51	-948.62	837.30	762.82	74.49	11.241		
7,700.00	7,059.83	7,760.66	7,064.96	38.64	39.37	-90.35	-1,051.33	-1,048.62	837.52	759.83	77.69	10.781		
7,800.00	7,059.40	7,860.66	7,064.57	40.40	41.06	-90.35	-1,052.14	-1,148.61	837.73	756.57	81.16	10.321		
7,900.00	7,058.97	7,960.66	7,064.17	42.28	42.88	-90.36	-1,052.95	-1,248.61	837.94	753.06	84.88	9.872		
8,000.00	7,058.53	8,060.66	7,063.78	44.27	44.81	-90.36	-1,053.76	-1,348.60	838.16	749.34	88.82	9.437		
8,100.00	7,058.10	8,160.66	7,063.39	46.35	46.84	-90.36	-1,054.57	-1,448.60	838.37	745.44	92.93	9.021		
8,200.00	7,057.66	8,260.66	7,062.99	48.50	48.95	-90.36	-1,055.38	-1,548.60	838.58	741.37	97.21	8.626		
8,300.00	7,057.23	8,360.66	7,062.60	50.73	51.13	-90.37	-1,056.20	-1,648.59	838.80	737.16	101.63	8.253		
8,400.00	7,056.80	8,460.66	7,062.21	53.02	53.38	-90.37	-1,057.01	-1,748.59	839.01	732.83	106.18	7.902		
8,500.00	7,056.36	8,560.66	7,061.81	55.36	55.68	-90.37	-1,057.82	-1,848.58	839.22	728.39	110.83	7.572		
8,600.00	7,055.93	8,660.66	7,061.42	57.74	58.03	-90.37	-1,058.63	-1,948.58	839.44	723.86	115.58	7.263		
8,700.00	7,055.49	8,760.66	7,061.03	60.17	60.43	-90.38	-1,059.44	-2,048.57	839.65	719.24	120.41	6.973		
8,800.00	7,055.06	8,860.66	7,060.63	62.63	62.87	-90.38	-1,060.25	-2,148.57	839.86	714.54	125.32	6.702		
8,900.00	7,054.63	8,960.66	7,060.24	65.13	65.34	-90.38	-1,061.07	-2,248.57	840.08	709.78	130.30	6.447		
9,000.00	7,054.19	9,060.66	7,059.85	67.66	67.84	-90.39	-1,061.88	-2,348.56	840.29	704.96	135.33	6.209		
9,100.00	7,053.76	9,160.66	7,059.45	70.21	70.37	-90.39	-1,062.69	-2,448.56	840.50	700.09	140.41	5.986		
9,200.00	7,053.32	9,260.65	7,059.06	72.78	72.92	-90.39	-1,063.50	-2,548.55	840.72	695.17	145.54	5.776		
9,300.00	7,052.89	9,360.65	7,058.67	75.38	75.49	-90.39	-1,064.31	-2,648.55	840.93	690.21	150.72	5.579		
9,400.00	7,052.46	9,460.65	7,058.28	77.99	78.09	-90.40	-1,065.12	-2,748.54	841.14	685.21	155.93	5.394		
9,500.00	7,052.02	9,560.65	7,057.88	80.62	80.70	-90.40	-1,065.94	-2,848.54	841.36	680.18	161.18	5.220		
9,600.00	7,051.59	9,660.65	7,057.49	83.26	83.33	-90.40	-1,066.75	-2,948.53	841.57	675.12	166.45	5.056		
9,700.00	7,051.15	9,760.65	7,057.10	85.92	85.97	-90.40	-1,067.56	-3,048.53	841.78	670.02	171.76	4.901		
9,800.00	7,050.72	9,860.65	7,056.70	88.59	88.63	-90.41	-1,068.37	-3,148.53	842.00	664.91	177.09	4.755		
9,900.00	7,050.29	9,960.65	7,056.31	91.28	91.30	-90.41	-1,069.18	-3,248.52	842.21	659.77	182.44	4.616		
10,000.00	7,049.85	10,060.65	7,055.92	93.97	93.98	-90.41	-1,069.99	-3,348.52	842.42	654.60	187.82	4.485		
10,100.00	7,049.42	10,160.65	7,055.52	96.67	96.67	-90.41	-1,070.81	-3,448.51	842.64	649.42	193.21	4.361		
10,200.00	7,048.98	10,260.65	7,055.13	99.38	99.37	-90.42	-1,071.62	-3,548.51	842.85	644.22	198.63	4.243		
10,300.00	7,048.55	10,360.65	7,054.74	102.10	102.08	-90.42	-1,072.43	-3,648.50	843.06	639.01	204.06	4.132		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,048.12	10,460.65	7,054.34	104.83	104.79	-90.42	-1,073.24	-3,748.50	843.28	633.77	209.50	4.025		
10,500.00	7,047.68	10,560.65	7,053.95	107.56	107.51	-90.43	-1,074.05	-3,848.50	843.49	628.53	214.96	3.924		
10,600.00	7,047.25	10,660.65	7,053.56	110.30	110.25	-90.43	-1,074.86	-3,948.49	843.70	623.27	220.43	3.827		
10,700.00	7,046.81	10,760.65	7,053.16	113.05	112.98	-90.43	-1,075.68	-4,048.49	843.92	618.00	225.92	3.736		
10,800.00	7,046.38	10,860.65	7,052.77	115.80	115.72	-90.43	-1,076.49	-4,148.48	844.13	612.72	231.41	3.648		
10,900.00	7,045.95	10,960.65	7,052.38	118.55	118.47	-90.44	-1,077.30	-4,248.48	844.34	607.42	236.92	3.564		
11,000.00	7,045.51	11,060.65	7,051.98	121.31	121.23	-90.44	-1,078.11	-4,348.47	844.56	602.12	242.43	3.484		
11,100.00	7,045.08	11,160.65	7,051.59	124.08	123.98	-90.44	-1,078.92	-4,448.47	844.77	596.81	247.96	3.407		
11,200.00	7,044.64	11,260.65	7,051.20	126.85	126.75	-90.44	-1,079.74	-4,548.47	844.98	591.49	253.49	3.333		
11,300.00	7,044.21	11,360.65	7,050.81	129.62	129.51	-90.45	-1,080.55	-4,648.46	845.19	586.16	259.03	3.263		
11,400.00	7,043.78	11,460.65	7,050.41	132.40	132.28	-90.45	-1,081.36	-4,748.46	845.41	580.83	264.58	3.195		
11,500.00	7,043.34	11,560.65	7,050.02	135.18	135.06	-90.45	-1,082.17	-4,848.45	845.62	575.48	270.14	3.130		
11,600.00	7,042.91	11,660.65	7,049.63	137.96	137.83	-90.45	-1,082.98	-4,948.45	845.83	570.13	275.70	3.068		
11,700.00	7,042.47	11,760.65	7,049.23	140.75	140.61	-90.46	-1,083.79	-5,048.44	846.05	564.78	281.27	3.008		
11,800.00	7,042.04	11,860.65	7,048.84	143.54	143.40	-90.46	-1,084.61	-5,148.44	846.26	559.42	286.84	2.950		
11,900.00	7,041.61	11,960.65	7,048.45	146.33	146.19	-90.46	-1,085.42	-5,248.44	846.47	554.05	292.42	2.895		
12,000.00	7,041.17	12,060.65	7,048.05	149.13	148.97	-90.47	-1,086.23	-5,348.43	846.69	548.68	298.01	2.841		
12,100.00	7,040.74	12,160.65	7,047.66	151.92	151.77	-90.47	-1,087.04	-5,448.43	846.90	543.30	303.60	2.790		
12,200.00	7,040.30	12,260.65	7,047.27	154.72	154.56	-90.47	-1,087.85	-5,548.42	847.11	537.92	309.19	2.740		
12,300.00	7,039.87	12,360.65	7,046.87	157.52	157.36	-90.47	-1,088.66	-5,648.42	847.33	532.54	314.79	2.692		
12,400.00	7,039.44	12,460.65	7,046.48	160.33	160.16	-90.48	-1,089.48	-5,748.41	847.54	527.15	320.39	2.645		
12,500.00	7,039.00	12,560.65	7,046.09	163.13	162.96	-90.48	-1,090.29	-5,848.41	847.75	521.75	326.00	2.600		
12,600.00	7,038.57	12,660.65	7,045.69	165.94	165.76	-90.48	-1,091.10	-5,948.41	847.97	516.36	331.61	2.557		
12,700.00	7,038.13	12,760.65	7,045.30	168.75	168.56	-90.48	-1,091.91	-6,048.40	848.18	510.95	337.23	2.515		
12,800.00	7,037.70	12,860.65	7,044.91	171.56	171.37	-90.49	-1,092.72	-6,148.40	848.39	505.55	342.84	2.475		
12,900.00	7,037.27	12,960.65	7,044.51	174.37	174.18	-90.49	-1,093.53	-6,248.39	848.61	500.14	348.47	2.435		
13,000.00	7,036.83	13,060.65	7,044.12	177.19	176.99	-90.49	-1,094.35	-6,348.39	848.82	494.73	354.09	2.397		
13,100.00	7,036.40	13,160.65	7,043.73	180.00	179.80	-90.49	-1,095.16	-6,448.38	849.03	489.32	359.72	2.360		
13,200.00	7,035.96	13,260.65	7,043.33	182.82	182.61	-90.50	-1,095.97	-6,548.38	849.25	483.90	365.35	2.325		
13,300.00	7,035.53	13,360.65	7,042.94	185.64	185.43	-90.50	-1,096.78	-6,648.38	849.46	478.48	370.98	2.290		
13,400.00	7,035.10	13,460.65	7,042.55	188.46	188.24	-90.50	-1,097.59	-6,748.37	849.67	473.06	376.61	2.256		
13,500.00	7,034.66	13,560.64	7,042.16	191.28	191.06	-90.50	-1,098.40	-6,848.37	849.89	467.64	382.25	2.223		
13,600.00	7,034.23	13,660.64	7,041.76	194.10	193.88	-90.51	-1,099.22	-6,948.36	850.10	462.21	387.89	2.192		
13,700.00	7,033.79	13,760.64	7,041.37	196.92	196.70	-90.51	-1,100.03	-7,048.36	850.31	456.78	393.53	2.161		
13,800.00	7,033.36	13,860.64	7,040.98	199.74	199.52	-90.51	-1,100.84	-7,148.35	850.53	451.35	399.18	2.131		
13,900.00	7,032.93	13,960.64	7,040.58	202.57	202.34	-90.52	-1,101.65	-7,248.35	850.74	445.92	404.82	2.102		
14,000.00	7,032.49	14,060.64	7,040.19	205.39	205.16	-90.52	-1,102.46	-7,348.35	850.95	440.48	410.47	2.073		
14,100.00	7,032.06	14,160.64	7,039.80	208.22	207.98	-90.52	-1,103.28	-7,448.34	851.17	435.05	416.12	2.045		
14,200.00	7,031.62	14,260.64	7,039.40	211.05	210.81	-90.52	-1,104.09	-7,548.34	851.38	429.61	421.77	2.019		
14,300.00	7,031.19	14,360.64	7,039.01	213.87	213.63	-90.53	-1,104.90	-7,648.33	851.59	424.17	427.42	1.992		
14,400.00	7,030.76	14,460.64	7,038.62	216.70	216.46	-90.53	-1,105.71	-7,748.33	851.81	418.73	433.08	1.967		
14,500.00	7,030.32	14,560.64	7,038.22	219.53	219.28	-90.53	-1,106.52	-7,848.32	852.02	413.28	438.74	1.942		
14,600.00	7,029.89	14,660.64	7,037.83	222.36	222.11	-90.53	-1,107.33	-7,948.32	852.23	407.84	444.39	1.918		
14,700.00	7,029.45	14,760.64	7,037.44	225.19	224.94	-90.54	-1,108.15	-8,048.32	852.45	402.39	450.05	1.894		
14,800.00	7,029.02	14,860.64	7,037.04	228.03	227.77	-90.54	-1,108.96	-8,148.31	852.66	396.95	455.71	1.871		
14,805.04	7,029.00	14,865.68	7,037.02	228.17	227.91	-90.54	-1,109.00	-8,153.35	852.67	396.67	456.00	1.870 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	-179.60	-39.71	-0.28	39.71					
100.00	100.00	100.00	100.00	3.28	3.28	-179.60	-39.71	-0.28	39.71	33.14	6.57	6.045		
200.00	200.00	200.00	200.00	3.34	3.34	-179.60	-39.71	-0.28	39.71	33.04	6.67	5.950		
300.00	300.00	300.00	300.00	3.44	3.44	-179.60	-39.71	-0.28	39.71	32.82	6.89	5.764		
400.00	400.00	400.00	400.00	3.60	3.60	-179.60	-39.71	-0.28	39.71	32.50	7.21	5.510		
500.00	499.98	500.02	499.98	3.80	3.81	-39.41	-39.71	-0.28	38.35	30.74	7.60	5.043		
600.00	599.90	599.67	599.67	4.02	4.04	-43.46	-39.78	-0.29	35.43	27.37	8.07	4.393		
666.80	666.65	665.69	665.68	4.19	4.20	-45.84	-40.96	-0.57	34.68	26.28	8.40	4.129 CC, ES		
700.00	699.82	698.51	698.48	4.28	4.29	-46.71	-42.10	-0.84	34.86	26.29	8.57	4.066		
800.00	799.74	797.32	797.12	4.57	4.56	-47.86	-47.73	-2.15	37.56	28.42	9.14	4.108		
900.00	899.66	895.87	895.23	4.88	4.86	-47.03	-56.65	-4.24	43.45	33.69	9.76	4.451		
1,000.00	999.58	1,004.46	994.29	5.21	5.21	-45.65	-67.41	-6.75	51.02	40.58	10.44	4.889		
1,100.00	1,099.50	1,104.75	1,093.38	5.55	5.56	-44.63	-78.17	-9.27	58.61	47.50	11.12	5.273		
1,200.00	1,199.42	1,205.05	1,192.47	5.91	5.92	-43.85	-88.94	-11.78	66.22	54.40	11.82	5.600		
1,300.00	1,299.34	1,305.34	1,291.56	6.28	6.30	-43.22	-99.70	-14.30	73.84	61.28	12.56	5.881		
1,400.00	1,399.26	1,405.63	1,390.65	6.66	6.69	-42.72	-110.46	-16.81	81.46	68.16	13.31	6.122		
1,500.00	1,499.18	1,494.07	1,489.74	7.04	7.04	-42.30	-121.23	-19.33	89.09	75.06	14.03	6.351		
1,600.00	1,599.10	1,606.22	1,588.84	7.43	7.49	-41.94	-131.99	-21.84	96.73	81.87	14.86	6.511		
1,700.00	1,699.01	1,706.52	1,687.93	7.83	7.90	-41.64	-142.76	-24.36	104.36	88.71	15.65	6.669		
1,800.00	1,798.93	1,806.81	1,787.02	8.23	8.31	-41.38	-153.52	-26.87	112.00	95.55	16.45	6.808		
1,900.00	1,898.85	1,907.10	1,886.11	8.64	8.74	-41.15	-164.28	-29.39	119.64	102.38	17.26	6.931		
2,000.00	1,998.77	2,007.40	1,985.20	9.05	9.16	-40.95	-175.05	-31.90	127.29	109.21	18.08	7.039		
2,100.00	2,098.69	2,092.31	2,084.30	9.46	9.52	-40.77	-185.81	-34.42	134.93	116.09	18.84	7.161		
2,200.00	2,198.61	2,207.98	2,183.39	9.88	10.02	-40.61	-196.58	-36.93	142.58	122.84	19.74	7.223		
2,300.00	2,298.53	2,308.28	2,282.48	10.30	10.46	-40.47	-207.34	-39.45	150.22	129.65	20.57	7.301		
2,400.00	2,398.45	2,391.43	2,381.57	10.72	10.82	-40.34	-218.10	-41.96	157.87	136.53	21.34	7.397		
2,500.00	2,498.37	2,508.86	2,480.66	11.14	11.33	-40.23	-228.87	-44.48	165.52	143.26	22.26	7.436		
2,600.00	2,598.29	2,609.16	2,579.76	11.56	11.77	-40.12	-239.63	-47.00	173.17	150.06	23.11	7.494		
2,700.00	2,698.21	2,709.45	2,678.85	11.98	12.22	-40.02	-250.40	-49.51	180.82	156.86	23.96	7.547		
2,800.00	2,798.13	2,809.74	2,777.94	12.41	12.66	-39.93	-261.16	-52.03	188.47	163.66	24.81	7.596		
2,900.00	2,898.05	2,889.96	2,877.03	12.84	13.02	-39.85	-271.92	-54.54	196.12	170.54	25.58	7.667		
3,000.00	2,997.97	2,989.67	2,976.12	13.27	13.46	-39.77	-282.69	-57.06	203.77	177.33	26.44	7.708		
3,100.00	3,097.89	3,089.38	3,075.22	13.69	13.91	-39.70	-293.45	-59.57	211.42	184.12	27.29	7.746		
3,200.00	3,197.81	3,189.08	3,174.31	14.12	14.35	-39.64	-304.22	-62.09	219.07	190.92	28.15	7.781		
3,300.00	3,297.73	3,288.79	3,273.40	14.56	14.80	-39.58	-314.98	-64.60	226.72	197.71	29.02	7.814		
3,400.00	3,397.65	3,388.50	3,372.49	14.99	15.25	-39.52	-325.74	-67.12	234.37	204.49	29.88	7.844		
3,500.00	3,497.56	3,488.20	3,471.58	15.42	15.70	-39.46	-336.51	-69.63	242.02	211.28	30.74	7.873		
3,600.00	3,597.48	3,587.91	3,570.67	15.85	16.15	-39.41	-347.27	-72.15	249.68	218.07	31.61	7.899		
3,700.00	3,697.40	3,687.62	3,669.77	16.28	16.60	-39.37	-358.04	-74.66	257.33	224.85	32.48	7.924		
3,800.00	3,797.32	3,787.32	3,768.86	16.72	17.05	-39.32	-368.80	-77.18	264.98	231.64	33.34	7.947		
3,900.00	3,897.24	3,887.03	3,867.95	17.15	17.50	-39.28	-379.56	-79.69	272.63	238.42	34.21	7.969		
4,000.00	3,997.16	3,986.74	3,967.04	17.59	17.95	-39.24	-390.33	-82.21	280.29	245.21	35.08	7.990		
4,100.00	4,097.08	4,086.44	4,066.13	18.02	18.40	-39.20	-401.09	-84.72	287.94	251.99	35.95	8.009		
4,200.00	4,197.00	4,186.15	4,165.23	18.46	18.85	-39.17	-411.86	-87.24	295.59	258.77	36.82	8.027		
4,300.00	4,296.92	4,285.86	4,264.32	18.89	19.31	-39.13	-422.62	-89.76	303.25	265.55	37.70	8.044		
4,400.00	4,396.84	4,385.56	4,363.41	19.33	19.76	-39.10	-433.39	-92.27	310.90	272.33	38.57	8.061		
4,500.00	4,496.76	4,485.27	4,462.50	19.77	20.21	-39.07	-444.15	-94.79	318.55	279.11	39.44	8.076		
4,600.00	4,596.68	4,584.98	4,561.59	20.20	20.67	-39.04	-454.91	-97.30	326.21	285.89	40.32	8.091		
4,700.00	4,696.60	4,684.68	4,660.69	20.64	21.12	-39.01	-465.68	-99.82	333.86	292.67	41.19	8.105		
4,800.00	4,796.52	4,784.39	4,759.78	21.08	21.58	-38.98	-476.44	-102.33	341.51	299.44	42.07	8.118		
4,900.00	4,896.44	4,884.09	4,858.87	21.51	22.03	-38.96	-487.21	-104.85	349.17	306.22	42.94	8.131		
5,000.00	4,996.36	4,983.80	4,957.96	21.95	22.49	-38.93	-497.97	-107.36	356.82	313.00	43.82	8.143		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,096.28	5,083.51	5,057.05	22.39	22.94	-38.91	-508.73	-109.88	364.47	319.78	44.70	8.154	
5,200.00	5,196.19	5,183.21	5,156.15	22.83	23.40	-38.89	-519.50	-112.39	372.13	326.55	45.58	8.165	
5,300.00	5,296.11	5,282.92	5,255.24	23.27	23.85	-38.87	-530.26	-114.91	379.78	333.33	46.45	8.176	
5,400.00	5,396.03	5,382.63	5,354.33	23.71	24.31	-38.85	-541.03	-117.42	387.44	340.10	47.33	8.186	
5,500.00	5,495.95	5,482.33	5,453.42	24.14	24.77	-38.83	-551.79	-119.94	395.09	346.88	48.21	8.195	
5,600.00	5,595.87	5,582.04	5,552.51	24.58	25.22	-38.81	-562.55	-122.45	402.74	353.65	49.09	8.204	
5,700.00	5,695.79	5,681.75	5,651.61	25.02	25.68	-38.79	-573.32	-124.97	410.40	360.43	49.97	8.213	
5,800.00	5,795.71	5,781.45	5,750.70	25.46	26.14	-38.77	-584.08	-127.48	418.05	367.20	50.85	8.222	
5,900.00	5,895.63	5,881.16	5,849.79	25.90	26.59	-38.75	-594.85	-130.00	425.71	373.98	51.73	8.230	
6,000.00	5,995.55	5,980.87	5,948.88	26.34	27.05	-38.74	-605.61	-132.52	433.36	380.75	52.61	8.238	
6,100.00	6,095.47	6,080.57	6,047.97	26.78	27.51	-38.72	-616.37	-135.03	441.01	387.53	53.49	8.245	
6,200.00	6,195.39	6,180.28	6,147.06	27.22	27.96	-38.71	-627.14	-137.55	448.67	394.30	54.37	8.252	
6,300.00	6,295.31	6,279.99	6,246.16	27.66	28.42	-38.69	-637.90	-140.06	456.32	401.07	55.25	8.259	
6,400.00	6,395.23	6,379.69	6,345.25	28.10	28.88	-38.68	-648.67	-142.58	463.98	407.85	56.13	8.266	
6,500.00	6,495.02	6,479.34	6,444.28	28.54	29.34	-74.18	-659.42	-145.09	471.64	414.62	57.01	8.272	
6,600.00	6,593.09	6,578.47	6,542.77	28.98	29.79	-84.42	-670.13	-148.22	479.55	421.64	57.91	8.281	
6,700.00	6,687.01	6,680.92	6,643.35	29.41	30.25	-88.39	-681.16	-163.54	487.95	429.11	58.84	8.292	
6,800.00	6,774.46	6,786.88	6,743.40	29.83	30.71	-90.96	-692.27	-196.22	496.55	436.77	59.78	8.306	
6,900.00	6,853.31	6,896.53	6,839.78	30.26	31.16	-92.91	-703.14	-247.11	505.01	444.31	60.70	8.320	
7,000.00	6,921.60	7,009.94	6,928.77	30.76	31.58	-94.48	-713.36	-316.40	512.92	451.30	61.62	8.324	
7,100.00	6,977.66	7,126.93	6,908.26	31.38	32.02	-95.72	-722.48	-403.34	519.87	457.25	62.63	8.301	
7,200.00	7,020.10	7,247.09	7,068.03	32.17	32.62	-96.64	-730.02	-505.94	525.48	461.60	63.88	8.226	
7,300.00	7,047.88	7,369.77	7,110.19	33.13	33.56	-97.26	-735.54	-620.81	529.39	463.84	65.55	8.076	
7,400.00	7,060.32	7,494.01	7,129.79	34.27	34.83	-97.55	-738.68	-743.26	531.35	463.61	67.74	7.844	
7,500.00	7,060.70	7,602.39	7,130.71	35.56	36.16	-97.57	-739.67	-851.61	531.66	461.35	70.31	7.562	
7,600.00	7,060.27	7,702.39	7,130.28	37.02	37.58	-97.56	-740.45	-951.60	531.84	458.65	73.19	7.267	
7,700.00	7,059.83	7,802.39	7,129.84	38.64	39.16	-97.56	-741.22	-1,051.60	532.01	455.63	76.38	6.965	
7,800.00	7,059.40	7,902.39	7,129.41	40.40	40.88	-97.56	-742.00	-1,151.59	532.19	452.34	79.85	6.665	
7,900.00	7,058.97	8,002.39	7,128.97	42.28	42.72	-97.56	-742.78	-1,251.59	532.37	448.80	83.56	6.371	
8,000.00	7,058.53	8,102.39	7,128.54	44.27	44.67	-97.55	-743.56	-1,351.59	532.54	445.06	87.49	6.087	
8,100.00	7,058.10	8,202.39	7,128.11	46.35	46.71	-97.55	-744.33	-1,451.58	532.72	441.13	91.59	5.816	
8,200.00	7,057.66	8,302.39	7,127.67	48.50	48.84	-97.55	-745.11	-1,551.58	532.90	437.04	95.86	5.559	
8,300.00	7,057.23	8,402.39	7,127.24	50.73	51.04	-97.55	-745.89	-1,651.57	533.08	432.81	100.27	5.317	
8,400.00	7,056.80	8,502.39	7,126.80	53.02	53.30	-97.54	-746.66	-1,751.57	533.25	428.46	104.79	5.089	
8,500.00	7,056.36	8,602.39	7,126.37	55.36	55.61	-97.54	-747.44	-1,851.57	533.43	424.00	109.43	4.875	
8,600.00	7,055.93	8,702.39	7,125.94	57.74	57.98	-97.54	-748.22	-1,951.56	533.61	419.45	114.16	4.674	
8,700.00	7,055.49	8,802.39	7,125.50	60.17	60.38	-97.54	-749.00	-2,051.56	533.78	414.81	118.97	4.487	
8,800.00	7,055.06	8,902.39	7,125.07	62.63	62.83	-97.53	-749.77	-2,151.55	533.96	410.10	123.86	4.311	
8,900.00	7,054.63	9,002.39	7,124.63	65.13	65.31	-97.53	-750.55	-2,251.55	534.14	405.33	128.81	4.147	
9,000.00	7,054.19	9,102.39	7,124.20	67.66	67.82	-97.53	-751.33	-2,351.55	534.32	400.50	133.82	3.993	
9,100.00	7,053.76	9,202.39	7,123.77	70.21	70.35	-97.53	-752.11	-2,451.54	534.49	395.61	138.88	3.849	
9,200.00	7,053.32	9,302.39	7,123.33	72.78	72.91	-97.52	-752.88	-2,551.54	534.67	390.69	143.98	3.713	
9,300.00	7,052.89	9,402.39	7,122.90	75.38	75.49	-97.52	-753.66	-2,651.53	534.85	385.71	149.13	3.586	
9,400.00	7,052.46	9,502.39	7,122.46	77.99	78.09	-97.52	-754.44	-2,751.53	535.02	380.71	154.32	3.467	
9,500.00	7,052.02	9,602.39	7,122.03	80.62	80.71	-97.52	-755.22	-2,851.52	535.20	375.67	159.53	3.355	
9,600.00	7,051.59	9,702.39	7,121.60	83.26	83.34	-97.51	-755.99	-2,951.52	535.38	370.60	164.78	3.249	
9,700.00	7,051.15	9,802.39	7,121.16	85.92	85.99	-97.51	-756.77	-3,051.52	535.55	365.50	170.06	3.149	
9,800.00	7,050.72	9,902.39	7,120.73	88.59	88.65	-97.51	-757.55	-3,151.51	535.73	360.37	175.36	3.055	
9,900.00	7,050.29	10,002.39	7,120.30	91.28	91.33	-97.51	-758.33	-3,251.51	535.91	355.23	180.68	2.966	
10,000.00	7,049.85	10,102.39	7,119.86	93.97	94.01	-97.50	-759.10	-3,351.50	536.09	350.06	186.03	2.882	
10,100.00	7,049.42	10,202.39	7,119.43	96.67	96.70	-97.50	-759.88	-3,451.50	536.26	344.87	191.39	2.802	
10,200.00	7,048.98	10,302.39	7,118.99	99.38	99.41	-97.50	-760.66	-3,551.50	536.44	339.67	196.77	2.726	

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,048.55	10,402.39	7,118.56	102.10	102.12	-97.50	-761.43	-3,651.49	536.62	334.45	202.17	2.654		
10,400.00	7,048.12	10,502.39	7,118.13	104.83	104.84	-97.49	-762.21	-3,751.49	536.79	329.21	207.58	2.586		
10,500.00	7,047.68	10,602.39	7,117.69	107.56	107.56	-97.49	-762.99	-3,851.48	536.97	323.96	213.01	2.521		
10,600.00	7,047.25	10,702.39	7,117.26	110.30	110.30	-97.49	-763.77	-3,951.48	537.15	318.70	218.45	2.459		
10,700.00	7,046.81	10,802.39	7,116.82	113.05	113.04	-97.49	-764.54	-4,051.48	537.33	313.42	223.90	2.400		
10,800.00	7,046.38	10,902.39	7,116.39	115.80	115.78	-97.48	-765.32	-4,151.47	537.50	308.14	229.36	2.343		
10,900.00	7,045.95	11,002.39	7,115.96	118.55	118.53	-97.48	-766.10	-4,251.47	537.68	302.84	234.84	2.290		
11,000.00	7,045.51	11,102.39	7,115.52	121.31	121.29	-97.48	-766.88	-4,351.46	537.86	297.54	240.32	2.238		
11,100.00	7,045.08	11,202.39	7,115.09	124.08	124.05	-97.48	-767.65	-4,451.46	538.03	292.23	245.81	2.189		
11,200.00	7,044.64	11,302.39	7,114.65	126.85	126.81	-97.47	-768.43	-4,551.45	538.21	286.90	251.31	2.142		
11,300.00	7,044.21	11,402.39	7,114.22	129.62	129.58	-97.47	-769.21	-4,651.45	538.39	281.57	256.81	2.096		
11,400.00	7,043.78	11,502.39	7,113.79	132.40	132.35	-97.47	-769.99	-4,751.45	538.57	276.24	262.33	2.053		
11,500.00	7,043.34	11,602.39	7,113.35	135.18	135.13	-97.47	-770.76	-4,851.44	538.74	270.89	267.85	2.011		
11,600.00	7,042.91	11,702.39	7,112.92	137.96	137.91	-97.46	-771.54	-4,951.44	538.92	265.54	273.38	1.971		
11,700.00	7,042.47	11,802.39	7,112.48	140.75	140.69	-97.46	-772.32	-5,051.43	539.10	260.19	278.91	1.933		
11,800.00	7,042.04	11,902.39	7,112.05	143.54	143.47	-97.46	-773.10	-5,151.43	539.27	254.82	284.45	1.896		
11,900.00	7,041.61	12,002.39	7,111.62	146.33	146.26	-97.46	-773.87	-5,251.43	539.45	249.45	290.00	1.860		
12,000.00	7,041.17	12,102.38	7,111.18	149.13	149.05	-97.45	-774.65	-5,351.42	539.63	244.08	295.55	1.826		
12,100.00	7,040.74	12,202.38	7,110.75	151.92	151.85	-97.45	-775.43	-5,451.42	539.80	238.70	301.10	1.793		
12,200.00	7,040.30	12,302.38	7,110.31	154.72	154.64	-97.45	-776.20	-5,551.41	539.98	233.32	306.66	1.761		
12,300.00	7,039.87	12,402.38	7,109.88	157.52	157.44	-97.45	-776.98	-5,651.41	540.16	227.94	312.22	1.730		
12,400.00	7,039.44	12,502.38	7,109.45	160.33	160.24	-97.44	-777.76	-5,751.41	540.34	222.54	317.79	1.700		
12,500.00	7,039.00	12,602.38	7,109.01	163.13	163.04	-97.44	-778.54	-5,851.40	540.51	217.15	323.36	1.672		
12,600.00	7,038.57	12,702.38	7,108.58	165.94	165.85	-97.44	-779.31	-5,951.40	540.69	211.75	328.94	1.644		
12,700.00	7,038.13	12,802.38	7,108.15	168.75	168.65	-97.44	-780.09	-6,051.39	540.87	206.35	334.52	1.617		
12,800.00	7,037.70	12,902.38	7,107.71	171.56	171.46	-97.43	-780.87	-6,151.39	541.04	200.95	340.10	1.591		
12,900.00	7,037.27	13,002.38	7,107.28	174.37	174.27	-97.43	-781.65	-6,251.38	541.22	195.54	345.68	1.566		
13,000.00	7,036.83	13,102.38	7,106.84	177.19	177.08	-97.43	-782.42	-6,351.38	541.40	190.13	351.27	1.541		
13,100.00	7,036.40	13,202.38	7,106.41	180.00	179.89	-97.43	-783.20	-6,451.38	541.58	184.71	356.86	1.518		
13,200.00	7,035.96	13,302.38	7,105.98	182.82	182.71	-97.42	-783.98	-6,551.37	541.75	179.29	362.46	1.495 Level 3		
13,300.00	7,035.53	13,402.38	7,105.54	185.64	185.52	-97.42	-784.76	-6,651.37	541.93	173.88	368.06	1.472 Level 3		
13,400.00	7,035.10	13,502.38	7,105.11	188.46	188.34	-97.42	-785.53	-6,751.36	542.11	168.45	373.65	1.451 Level 3		
13,500.00	7,034.66	13,602.38	7,104.67	191.28	191.16	-97.42	-786.31	-6,851.36	542.28	163.03	379.26	1.430 Level 3		
13,600.00	7,034.23	13,702.38	7,104.24	194.10	193.97	-97.42	-787.09	-6,951.36	542.46	157.60	384.86	1.410 Level 3		
13,700.00	7,033.79	13,802.38	7,103.81	196.92	196.79	-97.41	-787.86	-7,051.35	542.64	152.17	390.47	1.390 Level 3		
13,800.00	7,033.36	13,902.38	7,103.37	199.74	199.62	-97.41	-788.64	-7,151.35	542.82	146.74	396.07	1.370 Level 3		
13,900.00	7,032.93	14,002.38	7,102.94	202.57	202.44	-97.41	-789.42	-7,251.34	542.99	141.31	401.68	1.352 Level 3		
14,000.00	7,032.49	14,102.38	7,102.50	205.39	205.26	-97.41	-790.20	-7,351.34	543.17	135.87	407.30	1.334 Level 3		
14,100.00	7,032.06	14,202.38	7,102.07	208.22	208.08	-97.40	-790.97	-7,451.34	543.35	130.44	412.91	1.316 Level 3		
14,200.00	7,031.62	14,302.38	7,101.64	211.05	210.91	-97.40	-791.75	-7,551.33	543.52	125.00	418.53	1.299 Level 3		
14,300.00	7,031.19	14,402.38	7,101.20	213.87	213.74	-97.40	-792.53	-7,651.33	543.70	119.56	424.14	1.282 Level 3		
14,400.00	7,030.76	14,502.38	7,100.77	216.70	216.56	-97.40	-793.31	-7,751.32	543.88	114.11	429.76	1.266 Level 3		
14,500.00	7,030.32	14,602.38	7,100.33	219.53	219.39	-97.39	-794.08	-7,851.32	544.06	108.67	435.38	1.250 Level 2		
14,600.00	7,029.89	14,702.38	7,099.90	222.36	222.22	-97.39	-794.86	-7,951.31	544.23	103.23	441.01	1.234 Level 2		
14,700.00	7,029.45	14,802.38	7,099.47	225.19	225.05	-97.39	-795.64	-8,051.31	544.41	97.78	446.63	1.219 Level 2		
14,800.00	7,029.02	14,902.38	7,099.03	228.03	227.88	-97.39	-796.42	-8,151.31	544.59	92.33	452.26	1.204 Level 2		
14,805.04	7,029.00	14,907.42	7,099.01	228.17	228.02	-97.39	-796.46	-8,156.34	544.60	92.06	452.54	1.203 Level 2, 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	-179.53	-239.71	-1.95	239.72					
100.00	100.00	101.00	100.00	3.28	3.28	-179.53	-239.71	-1.95	239.72	233.15	6.57	36.489		
200.00	200.00	199.00	200.00	3.34	3.34	-179.53	-239.71	-1.95	239.72	233.05	6.67	35.923 CC, ES		
300.00	300.00	291.34	292.33	3.44	3.43	-179.51	-241.16	-2.06	241.30	234.41	6.88	35.055		
400.00	400.00	383.42	384.29	3.60	3.56	-179.44	-245.57	-2.40	246.08	238.88	7.20	34.184		
500.00	499.98	475.22	475.80	3.80	3.74	-37.67	-252.88	-2.96	252.68	245.09	7.59	33.271		
600.00	599.90	566.71	566.71	4.02	3.95	-38.00	-263.08	-3.74	260.71	252.65	8.06	32.356		
700.00	699.82	657.66	656.71	4.28	4.19	-38.27	-276.08	-4.74	271.88	263.29	8.58	31.670		
800.00	799.74	747.87	745.54	4.57	4.47	-38.47	-291.79	-5.94	286.18	277.02	9.16	31.246		
900.00	899.66	837.19	832.95	4.88	4.77	-38.60	-310.08	-7.35	303.56	293.80	9.76	31.088		
1,000.00	999.58	925.45	918.72	5.21	5.10	-38.68	-330.81	-8.94	323.98	313.59	10.40	31.166		
1,100.00	1,099.50	1,012.52	1,002.67	5.55	5.45	-38.71	-353.83	-10.70	347.38	336.34	11.04	31.459		
1,200.00	1,199.42	1,101.20	1,085.13	5.91	5.83	-38.69	-379.14	-12.65	373.68	361.97	11.71	31.917		
1,300.00	1,299.34	1,194.92	1,176.60	6.28	6.26	-38.66	-408.57	-14.90	401.27	388.87	12.40	32.350		
1,400.00	1,399.26	1,308.97	1,268.08	6.66	6.81	-38.64	-437.99	-17.16	428.87	415.66	13.21	32.462		
1,500.00	1,499.18	1,387.15	1,359.55	7.04	7.19	-38.61	-467.42	-19.42	456.47	442.58	13.89	32.859		
1,600.00	1,599.10	1,483.27	1,451.02	7.43	7.68	-38.59	-496.84	-21.68	484.06	469.40	14.67	33.008		
1,700.00	1,699.01	1,579.38	1,542.50	7.83	8.17	-38.57	-526.27	-23.93	511.66	496.21	15.45	33.107		
1,800.00	1,798.93	1,675.50	1,633.97	8.23	8.67	-38.56	-555.70	-26.19	539.26	523.00	16.26	33.168		
1,900.00	1,898.85	1,771.62	1,725.44	8.64	9.17	-38.54	-585.12	-28.45	566.85	549.78	17.07	33.201		
2,000.00	1,998.77	1,867.73	1,816.92	9.05	9.69	-38.53	-614.55	-30.71	594.45	576.55	17.90	33.212		
2,100.00	2,098.69	1,963.85	1,908.39	9.46	10.20	-38.52	-643.97	-32.97	622.05	603.32	18.73	33.207		
2,200.00	2,198.61	2,059.97	1,999.86	9.88	10.72	-38.51	-673.40	-35.22	649.65	630.07	19.57	33.189		
2,300.00	2,298.53	2,156.08	2,091.34	10.30	11.25	-38.50	-702.83	-37.48	677.24	656.82	20.42	33.162		
2,400.00	2,398.45	2,252.20	2,182.81	10.72	11.78	-38.49	-732.25	-39.74	704.84	683.56	21.28	33.128		
2,500.00	2,498.37	2,348.32	2,274.28	11.14	12.31	-38.48	-761.68	-42.00	732.44	710.30	22.14	33.089		
2,600.00	2,598.29	2,444.43	2,365.76	11.56	12.84	-38.47	-791.10	-44.26	760.03	737.03	23.00	33.046		
2,700.00	2,698.21	2,540.55	2,457.23	11.98	13.37	-38.46	-820.53	-46.51	787.63	763.76	23.87	33.000		
2,800.00	2,798.13	2,636.66	2,548.71	12.41	13.91	-38.45	-849.96	-48.77	815.23	790.49	24.74	32.953		
2,900.00	2,898.05	2,732.78	2,640.18	12.84	14.44	-38.45	-879.38	-51.03	842.82	817.21	25.61	32.905		
3,000.00	2,997.97	2,828.90	2,731.65	13.27	14.98	-38.44	-908.81	-53.29	870.42	843.93	26.49	32.856		
3,100.00	3,097.89	2,925.01	2,823.13	13.69	15.52	-38.44	-938.23	-55.54	898.02	870.65	27.37	32.807		
3,200.00	3,197.81	3,021.13	2,914.60	14.12	16.06	-38.43	-967.66	-57.80	925.62	897.36	28.26	32.759		
3,300.00	3,297.73	3,117.25	3,006.07	14.56	16.61	-38.43	-997.08	-60.06	953.21	924.07	29.14	32.710		
3,400.00	3,397.65	3,213.36	3,097.55	14.99	17.15	-38.42	-1,026.51	-62.32	980.81	950.78	30.03	32.663		
3,500.00	3,497.56	3,309.48	3,189.02	15.42	17.69	-38.42	-1,055.94	-64.58	1,008.41	977.49	30.92	32.616		
3,600.00	3,597.48	3,405.60	3,280.49	15.85	18.24	-38.41	-1,085.36	-66.83	1,036.00	1,004.20	31.81	32.570		
3,700.00	3,697.40	3,501.71	3,371.97	16.28	18.78	-38.41	-1,114.79	-69.09	1,063.60	1,030.90	32.70	32.525		
3,800.00	3,797.32	3,602.17	3,463.44	16.72	19.35	-38.40	-1,144.21	-71.35	1,091.20	1,057.58	33.62	32.460		
3,900.00	3,897.24	3,706.05	3,554.91	17.15	19.95	-38.40	-1,173.64	-73.61	1,118.80	1,084.25	34.55	32.381		
4,000.00	3,997.16	3,790.06	3,646.39	17.59	20.42	-38.40	-1,203.07	-75.87	1,146.39	1,111.01	35.39	32.397		
4,100.00	4,097.08	3,886.18	3,737.86	18.02	20.97	-38.39	-1,232.49	-78.12	1,173.99	1,137.71	36.28	32.356		
4,200.00	4,197.00	3,982.30	3,829.34	18.46	21.52	-38.39	-1,261.92	-80.38	1,201.59	1,164.40	37.18	32.316		
4,300.00	4,296.92	4,078.41	3,920.81	18.89	22.07	-38.39	-1,291.34	-82.64	1,229.18	1,191.10	38.08	32.277		
4,400.00	4,396.84	4,174.53	4,012.28	19.33	22.62	-38.38	-1,320.77	-84.90	1,256.78	1,217.80	38.98	32.239		
4,500.00	4,496.76	4,270.65	4,103.76	19.77	23.17	-38.38	-1,350.20	-87.15	1,284.38	1,244.49	39.88	32.203		
4,600.00	4,596.68	4,366.76	4,195.23	20.20	23.72	-38.38	-1,379.62	-89.41	1,311.98	1,271.19	40.79	32.167		
4,700.00	4,696.60	4,462.88	4,286.70	20.64	24.27	-38.38	-1,409.05	-91.67	1,339.57	1,297.88	41.69	32.132		
4,800.00	4,796.52	4,559.00	4,378.18	21.08	24.82	-38.37	-1,438.47	-93.93	1,367.17	1,324.58	42.59	32.098		
4,900.00	4,896.44	4,655.11	4,469.65	21.51	25.37	-38.37	-1,467.90	-96.19	1,394.77	1,351.27	43.50	32.065		
5,000.00	4,996.36	4,751.23	4,561.12	21.95	25.92	-38.37	-1,497.32	-98.44	1,422.36	1,377.96	44.40	32.033		
5,100.00	5,096.28	4,847.35	4,652.60	22.39	26.47	-38.37	-1,526.75	-100.70	1,449.96	1,404.65	45.31	32.002		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,196.19	4,943.46	4,744.07	22.83	27.02	-38.36	-1,556.18	-102.96	1,477.56	1,431.34	46.21	31.972		
5,300.00	5,296.11	5,039.58	4,835.54	23.27	27.57	-38.36	-1,585.60	-105.22	1,505.16	1,458.03	47.12	31.942		
5,400.00	5,396.03	5,135.70	4,927.02	23.71	28.12	-38.36	-1,615.03	-107.47	1,532.75	1,484.72	48.03	31.913		
5,500.00	5,495.95	5,231.81	5,018.49	24.14	28.67	-38.36	-1,644.45	-109.73	1,560.35	1,511.41	48.94	31.885		
5,600.00	5,595.87	5,327.93	5,109.97	24.58	29.23	-38.36	-1,673.88	-111.99	1,587.95	1,538.10	49.85	31.858		
5,700.00	5,695.79	5,424.05	5,201.44	25.02	29.78	-38.35	-1,703.31	-114.25	1,615.54	1,564.79	50.75	31.831		
5,800.00	5,795.71	5,520.16	5,292.91	25.46	30.33	-38.35	-1,732.73	-116.51	1,643.14	1,591.48	51.66	31.805		
5,900.00	5,895.63	5,616.28	5,384.39	25.90	30.88	-38.35	-1,762.16	-118.76	1,670.74	1,618.17	52.57	31.780		
6,000.00	5,995.55	5,712.40	5,475.86	26.34	31.44	-38.35	-1,791.58	-121.02	1,698.34	1,644.85	53.48	31.755		
6,100.00	6,095.47	5,808.51	5,567.33	26.78	31.99	-38.35	-1,821.01	-123.28	1,725.93	1,671.54	54.39	31.731		
6,200.00	6,195.39	5,904.63	5,658.81	27.22	32.54	-38.35	-1,850.44	-125.54	1,753.53	1,698.23	55.30	31.707		
6,300.00	6,295.31	6,000.74	5,750.28	27.66	33.09	-38.35	-1,879.86	-127.80	1,781.13	1,724.91	56.21	31.684		
6,400.00	6,395.23	6,103.14	5,841.75	28.10	33.68	-38.34	-1,909.29	-130.05	1,808.72	1,751.57	57.16	31.644		
6,500.00	6,495.02	6,192.92	5,933.17	28.54	34.20	-72.62	-1,938.69	-132.31	1,836.30	1,778.26	58.04	31.639		
6,600.00	6,593.09	6,287.66	6,023.34	28.98	34.75	-79.68	-1,967.70	-134.54	1,863.54	1,804.59	58.95	31.613		
6,700.00	6,687.01	6,378.81	6,110.08	29.41	35.27	-80.54	-1,995.60	-136.68	1,890.17	1,830.32	59.85	31.584		
6,800.00	6,774.46	6,464.11	6,191.26	29.83	35.76	-80.44	-2,021.72	-138.68	1,916.24	1,855.51	60.73	31.554		
6,900.00	6,853.31	6,541.46	6,264.87	30.26	36.21	-80.07	-2,045.40	-140.50	1,942.06	1,880.44	61.62	31.518		
7,000.00	6,921.60	6,608.95	6,329.11	30.76	36.60	-79.50	-2,066.06	-142.08	1,968.04	1,905.50	62.54	31.470		
7,100.00	6,977.66	6,664.94	6,382.39	31.38	36.92	-78.64	-2,083.20	-143.40	1,994.63	1,931.11	63.52	31.402		
7,200.00	7,020.10	6,708.03	6,423.40	32.17	37.17	-77.39	-2,096.40	-144.41	2,022.17	1,957.58	64.59	31.307		
7,300.00	7,047.88	6,737.17	6,451.13	33.13	37.33	-75.65	-2,105.32	-145.09	2,050.79	1,985.05	65.75	31.192		
7,400.00	7,060.32	6,751.64	6,464.90	34.27	37.42	-73.40	-2,109.75	-145.43	2,080.37	2,013.41	66.95	31.072		
7,500.00	7,060.70	7,817.50	7,075.81	35.56	41.79	-90.41	-2,311.52	-841.44	2,098.97	2,024.62	74.36	28.229		
7,600.00	7,060.27	7,917.50	7,075.48	37.02	42.49	-90.42	-2,312.19	-941.44	2,099.04	2,021.93	77.11	27.223		
7,700.00	7,059.83	8,017.50	7,075.16	38.64	43.47	-90.42	-2,312.86	-1,041.43	2,099.11	2,018.94	80.17	26.183		
7,800.00	7,059.40	8,117.50	7,074.83	40.40	44.72	-90.42	-2,313.53	-1,141.43	2,099.18	2,015.67	83.51	25.136		
7,900.00	7,058.97	8,217.50	7,074.51	42.28	46.19	-90.42	-2,314.19	-1,241.43	2,099.25	2,012.15	87.10	24.101		
8,000.00	7,058.53	8,317.50	7,074.18	44.27	47.84	-90.43	-2,314.86	-1,341.43	2,099.32	2,008.41	90.91	23.092		
8,100.00	7,058.10	8,417.50	7,073.86	46.35	49.63	-90.43	-2,315.53	-1,441.42	2,099.39	2,004.48	94.91	22.120		
8,200.00	7,057.66	8,517.50	7,073.53	48.50	51.54	-90.43	-2,316.19	-1,541.42	2,099.46	2,000.38	99.07	21.191		
8,300.00	7,057.23	8,617.50	7,073.21	50.73	53.55	-90.44	-2,316.86	-1,641.42	2,099.53	1,996.14	103.39	20.307		
8,400.00	7,056.80	8,717.50	7,072.88	53.02	55.65	-90.44	-2,317.53	-1,741.41	2,099.60	1,991.76	107.83	19.471		
8,500.00	7,056.36	8,817.50	7,072.56	55.36	57.81	-90.44	-2,318.20	-1,841.41	2,099.67	1,987.27	112.39	18.681		
8,600.00	7,055.93	8,917.50	7,072.23	57.74	60.04	-90.44	-2,318.86	-1,941.41	2,099.74	1,982.68	117.05	17.938		
8,700.00	7,055.49	9,017.50	7,071.91	60.17	62.32	-90.45	-2,319.53	-2,041.41	2,099.81	1,978.00	121.81	17.239		
8,800.00	7,055.06	9,117.50	7,071.58	62.63	64.65	-90.45	-2,320.20	-2,141.40	2,099.87	1,973.24	126.64	16.582		
8,900.00	7,054.63	9,217.50	7,071.26	65.13	67.03	-90.45	-2,320.87	-2,241.40	2,099.94	1,968.41	131.54	15.965		
9,000.00	7,054.19	9,317.50	7,070.93	67.66	69.44	-90.46	-2,321.53	-2,341.40	2,100.01	1,963.51	136.50	15.384		
9,100.00	7,053.76	9,417.50	7,070.61	70.21	71.88	-90.46	-2,322.20	-2,441.39	2,100.08	1,958.56	141.52	14.839		
9,200.00	7,053.32	9,517.50	7,070.28	72.78	74.36	-90.46	-2,322.87	-2,541.39	2,100.15	1,953.56	146.60	14.326		
9,300.00	7,052.89	9,617.50	7,069.96	75.38	76.86	-90.47	-2,323.54	-2,641.39	2,100.22	1,948.51	151.72	13.843		
9,400.00	7,052.46	9,717.50	7,069.63	77.99	79.39	-90.47	-2,324.20	-2,741.39	2,100.29	1,943.42	156.88	13.388		
9,500.00	7,052.02	9,817.50	7,069.31	80.62	81.94	-90.47	-2,324.87	-2,841.38	2,100.36	1,938.29	162.07	12.959		
9,600.00	7,051.59	9,917.50	7,068.98	83.26	84.51	-90.47	-2,325.54	-2,941.38	2,100.43	1,933.13	167.30	12.555		
9,700.00	7,051.15	10,017.50	7,068.66	85.92	87.10	-90.48	-2,326.21	-3,041.38	2,100.50	1,927.94	172.56	12.172		
9,800.00	7,050.72	10,117.50	7,068.34	88.59	89.71	-90.48	-2,326.87	-3,141.37	2,100.57	1,922.72	177.85	11.811		
9,900.00	7,050.29	10,217.50	7,068.01	91.28	92.33	-90.48	-2,327.54	-3,241.37	2,100.64	1,917.47	183.17	11.468		
10,000.00	7,049.85	10,317.50	7,067.69	93.97	94.96	-90.49	-2,328.21	-3,341.37	2,100.71	1,912.20	188.51	11.144		
10,100.00	7,049.42	10,417.50	7,067.36	96.67	97.61	-90.49	-2,328.88	-3,441.37	2,100.78	1,906.91	193.87	10.836		
10,200.00	7,048.98	10,517.50	7,067.04	99.38	100.27	-90.49	-2,329.54	-3,541.36	2,100.85	1,901.60	199.25	10.544		
10,300.00	7,048.55	10,617.50	7,066.71	102.10	102.94	-90.50	-2,330.21	-3,641.36	2,100.92	1,896.27	204.65	10.266		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,048.12	10,717.50	7,066.39	104.83	105.62	-90.50	-2,330.88	-3,741.36	2,100.99	1,890.93	210.06	10.002		
10,500.00	7,047.68	10,817.50	7,066.06	107.56	108.30	-90.50	-2,331.55	-3,841.35	2,101.06	1,885.56	215.49	9.750		
10,600.00	7,047.25	10,917.50	7,065.74	110.30	111.00	-90.50	-2,332.21	-3,941.35	2,101.13	1,880.19	220.94	9.510		
10,700.00	7,046.81	11,017.50	7,065.41	113.05	113.71	-90.51	-2,332.88	-4,041.35	2,101.20	1,874.80	226.40	9.281		
10,800.00	7,046.38	11,117.50	7,065.09	115.80	116.42	-90.51	-2,333.55	-4,141.35	2,101.27	1,869.40	231.87	9.062		
10,900.00	7,045.95	11,217.50	7,064.76	118.55	119.14	-90.51	-2,334.22	-4,241.34	2,101.34	1,863.99	237.35	8.853		
11,000.00	7,045.51	11,317.50	7,064.44	121.31	121.87	-90.52	-2,334.88	-4,341.34	2,101.41	1,858.56	242.85	8.653		
11,100.00	7,045.08	11,417.50	7,064.11	124.08	124.60	-90.52	-2,335.55	-4,441.34	2,101.48	1,853.13	248.35	8.462		
11,200.00	7,044.64	11,517.50	7,063.79	126.85	127.34	-90.52	-2,336.22	-4,541.33	2,101.55	1,847.68	253.86	8.278		
11,300.00	7,044.21	11,617.50	7,063.46	129.62	130.08	-90.52	-2,336.89	-4,641.33	2,101.62	1,842.23	259.38	8.102		
11,400.00	7,043.78	11,717.50	7,063.14	132.40	132.83	-90.53	-2,337.55	-4,741.33	2,101.69	1,836.77	264.91	7.933		
11,500.00	7,043.34	11,817.50	7,062.81	135.18	135.58	-90.53	-2,338.22	-4,841.33	2,101.76	1,831.30	270.45	7.771		
11,600.00	7,042.91	11,917.50	7,062.49	137.96	138.34	-90.53	-2,338.89	-4,941.32	2,101.82	1,825.83	276.00	7.615		
11,700.00	7,042.47	12,017.50	7,062.16	140.75	141.10	-90.54	-2,339.56	-5,041.32	2,101.89	1,820.35	281.55	7.465		
11,800.00	7,042.04	12,117.50	7,061.84	143.54	143.86	-90.54	-2,340.22	-5,141.32	2,101.96	1,814.86	287.11	7.321		
11,900.00	7,041.61	12,217.50	7,061.51	146.33	146.63	-90.54	-2,340.89	-5,241.31	2,102.03	1,809.36	292.67	7.182		
12,000.00	7,041.17	12,317.50	7,061.19	149.13	149.40	-90.55	-2,341.56	-5,341.31	2,102.10	1,803.86	298.24	7.048		
12,100.00	7,040.74	12,417.50	7,060.86	151.92	152.18	-90.55	-2,342.23	-5,441.31	2,102.17	1,798.36	303.82	6.919		
12,200.00	7,040.30	12,517.50	7,060.54	154.72	154.96	-90.55	-2,342.89	-5,541.31	2,102.24	1,792.84	309.40	6.795		
12,300.00	7,039.87	12,617.50	7,060.21	157.52	157.74	-90.55	-2,343.56	-5,641.30	2,102.31	1,787.33	314.98	6.674		
12,400.00	7,039.44	12,717.50	7,059.89	160.33	160.52	-90.56	-2,344.23	-5,741.30	2,102.38	1,781.81	320.58	6.558		
12,500.00	7,039.00	12,817.50	7,059.56	163.13	163.31	-90.56	-2,344.90	-5,841.30	2,102.45	1,776.28	326.17	6.446		
12,600.00	7,038.57	12,917.50	7,059.24	165.94	166.09	-90.56	-2,345.56	-5,941.29	2,102.52	1,770.75	331.77	6.337		
12,700.00	7,038.13	13,017.50	7,058.91	168.75	168.89	-90.57	-2,346.23	-6,041.29	2,102.59	1,765.22	337.37	6.232		
12,800.00	7,037.70	13,117.50	7,058.59	171.56	171.68	-90.57	-2,346.90	-6,141.29	2,102.66	1,759.68	342.98	6.131		
12,900.00	7,037.27	13,217.50	7,058.26	174.37	174.47	-90.57	-2,347.57	-6,241.29	2,102.73	1,754.14	348.59	6.032		
13,000.00	7,036.83	13,317.50	7,057.94	177.19	177.27	-90.57	-2,348.23	-6,341.28	2,102.80	1,748.60	354.20	5.937		
13,100.00	7,036.40	13,417.50	7,057.61	180.00	180.07	-90.58	-2,348.90	-6,441.28	2,102.87	1,743.05	359.82	5.844		
13,200.00	7,035.96	13,517.50	7,057.29	182.82	182.87	-90.58	-2,349.57	-6,541.28	2,102.94	1,737.50	365.44	5.755		
13,300.00	7,035.53	13,617.50	7,056.96	185.64	185.68	-90.58	-2,350.24	-6,641.27	2,103.01	1,731.95	371.06	5.668		
13,400.00	7,035.10	13,717.50	7,056.64	188.46	188.48	-90.59	-2,350.90	-6,741.27	2,103.08	1,726.39	376.69	5.583		
13,500.00	7,034.66	13,817.50	7,056.31	191.28	191.29	-90.59	-2,351.57	-6,841.27	2,103.15	1,720.83	382.32	5.501		
13,600.00	7,034.23	13,917.50	7,055.99	194.10	194.09	-90.59	-2,352.24	-6,941.27	2,103.22	1,715.27	387.95	5.421		
13,700.00	7,033.79	14,017.50	7,055.66	196.92	196.90	-90.60	-2,352.91	-7,041.26	2,103.29	1,709.71	393.58	5.344		
13,800.00	7,033.36	14,117.50	7,055.34	199.74	199.71	-90.60	-2,353.57	-7,141.26	2,103.36	1,704.14	399.22	5.269		
13,900.00	7,032.93	14,217.49	7,055.01	202.57	202.53	-90.60	-2,354.24	-7,241.26	2,103.43	1,698.58	404.85	5.196		
14,000.00	7,032.49	14,317.49	7,054.69	205.39	205.34	-90.60	-2,354.91	-7,341.26	2,103.50	1,693.00	410.50	5.124		
14,100.00	7,032.06	14,417.49	7,054.36	208.22	208.15	-90.61	-2,355.58	-7,441.25	2,103.57	1,687.43	416.14	5.055		
14,200.00	7,031.62	14,517.49	7,054.04	211.05	210.97	-90.61	-2,356.24	-7,541.25	2,103.64	1,681.86	421.78	4.988		
14,300.00	7,031.19	14,617.49	7,053.71	213.87	213.79	-90.61	-2,356.91	-7,641.25	2,103.71	1,676.28	427.43	4.922		
14,400.00	7,030.76	14,717.49	7,053.39	216.70	216.60	-90.62	-2,357.58	-7,741.24	2,103.78	1,670.70	433.08	4.858		
14,500.00	7,030.32	14,817.49	7,053.06	219.53	219.42	-90.62	-2,358.25	-7,841.24	2,103.85	1,665.12	438.73	4.795		
14,600.00	7,029.89	14,917.49	7,052.74	222.36	222.24	-90.62	-2,358.91	-7,941.24	2,103.92	1,659.54	444.38	4.735		
14,700.00	7,029.45	15,017.49	7,052.41	225.19	225.06	-90.63	-2,359.58	-8,041.24	2,103.99	1,653.96	450.03	4.675		
14,800.00	7,029.02	15,117.49	7,052.09	228.03	227.89	-90.63	-2,360.25	-8,141.23	2,104.06	1,648.37	455.69	4.617		
14,805.04	7,029.00	15,122.53	7,052.07	228.17	228.03	-90.63	-2,360.28	-8,146.27	2,104.06	1,648.09	455.97	4.614 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	-179.50	-319.86	-2.78	319.88					
100.00	100.00	102.00	100.00	3.28	3.29	-179.50	-319.86	-2.78	319.88	313.31	6.57	48.688		
200.00	200.00	198.00	200.00	3.34	3.34	-179.50	-319.86	-2.78	319.88	313.20	6.67	47.940	CC, ES	
300.00	300.00	288.14	290.12	3.44	3.42	-179.49	-321.22	-2.86	321.38	314.50	6.88	46.720		
400.00	400.00	377.90	379.79	3.60	3.55	-179.46	-325.38	-3.08	326.02	318.83	7.19	45.357		
500.00	499.98	467.42	469.03	3.80	3.72	-37.69	-332.32	-3.46	332.40	324.82	7.58	43.879		
600.00	599.90	556.65	557.72	4.02	3.93	-37.97	-342.00	-3.99	340.13	332.10	8.03	42.364		
700.00	699.82	645.37	645.57	4.28	4.16	-38.22	-354.36	-4.67	350.93	342.39	8.55	41.066		
800.00	799.74	733.41	732.34	4.57	4.42	-38.44	-369.31	-5.49	364.80	355.69	9.11	40.048		
900.00	899.66	820.63	817.79	4.88	4.71	-38.61	-386.73	-6.44	381.68	371.98	9.71	39.324		
1,000.00	999.58	906.88	901.73	5.21	5.03	-38.73	-406.50	-7.53	401.54	391.22	10.33	38.888		
1,100.00	1,099.50	992.01	983.96	5.55	5.36	-38.83	-428.49	-8.73	424.32	413.36	10.96	38.705		
1,200.00	1,199.42	1,075.90	1,064.32	5.91	5.72	-38.89	-452.53	-10.04	449.95	438.34	11.61	38.757		
1,300.00	1,299.34	1,158.44	1,142.66	6.28	6.10	-38.92	-478.46	-11.47	478.38	466.12	12.26	39.018		
1,400.00	1,399.26	1,239.53	1,218.86	6.66	6.49	-38.93	-506.13	-12.98	509.52	496.61	12.91	39.466		
1,500.00	1,499.18	1,319.07	1,292.83	7.04	6.89	-38.92	-535.35	-14.58	543.31	529.75	13.56	40.079		
1,600.00	1,599.10	1,397.00	1,364.47	7.43	7.31	-38.89	-565.95	-16.26	579.66	565.47	14.19	40.837		
1,700.00	1,699.01	1,487.78	1,447.33	7.83	7.82	-38.85	-602.97	-18.28	617.54	602.60	14.94	41.342		
1,800.00	1,798.93	1,580.32	1,531.80	8.23	8.35	-38.82	-640.72	-20.35	655.43	639.72	15.71	41.714		
1,900.00	1,898.85	1,672.86	1,616.26	8.64	8.89	-38.79	-678.48	-22.42	693.33	676.82	16.50	42.008		
2,000.00	1,998.77	1,765.40	1,700.73	9.05	9.44	-38.76	-716.23	-24.48	731.22	713.91	17.31	42.241		
2,100.00	2,098.69	1,857.94	1,785.19	9.46	10.00	-38.74	-753.98	-26.55	769.12	750.99	18.13	42.424		
2,200.00	2,198.61	1,950.48	1,869.66	9.88	10.57	-38.72	-791.73	-28.62	807.01	788.05	18.96	42.567		
2,300.00	2,298.53	2,043.02	1,954.12	10.30	11.14	-38.70	-829.49	-30.68	844.91	825.11	19.80	42.679		
2,400.00	2,398.45	2,135.57	2,038.59	10.72	11.71	-38.68	-867.24	-32.75	882.80	862.16	20.64	42.764		
2,500.00	2,498.37	2,228.11	2,123.05	11.14	12.29	-38.66	-904.99	-34.82	920.70	899.20	21.50	42.828		
2,600.00	2,598.29	2,320.65	2,207.52	11.56	12.87	-38.65	-942.74	-36.89	958.59	936.23	22.36	42.875		
2,700.00	2,698.21	2,413.19	2,291.99	11.98	13.46	-38.63	-980.50	-38.95	996.49	973.26	23.22	42.909		
2,800.00	2,798.13	2,505.73	2,376.45	12.41	14.05	-38.62	-1,018.25	-41.02	1,034.38	1,010.29	24.09	42.931		
2,900.00	2,898.05	2,601.73	2,460.92	12.84	14.66	-38.61	-1,056.00	-43.09	1,072.28	1,047.29	24.99	42.912		
3,000.00	2,997.97	2,709.19	2,545.38	13.27	15.35	-38.60	-1,093.75	-45.15	1,110.17	1,084.22	25.95	42.786		
3,100.00	3,097.89	2,783.36	2,629.85	13.69	15.83	-38.59	-1,131.51	-47.22	1,148.07	1,121.33	26.73	42.947		
3,200.00	3,197.81	2,875.90	2,714.31	14.12	16.42	-38.58	-1,169.26	-49.29	1,185.96	1,158.34	27.62	42.941		
3,300.00	3,297.73	2,968.44	2,798.78	14.56	17.02	-38.57	-1,207.01	-51.35	1,223.86	1,195.35	28.51	42.931		
3,400.00	3,397.65	3,060.98	2,883.24	14.99	17.62	-38.56	-1,244.77	-53.42	1,261.75	1,232.35	29.40	42.917		
3,500.00	3,497.56	3,153.52	2,967.71	15.42	18.22	-38.55	-1,282.52	-55.49	1,299.65	1,269.35	30.29	42.901		
3,600.00	3,597.48	3,246.06	3,052.17	15.85	18.82	-38.54	-1,320.27	-57.56	1,337.54	1,306.35	31.19	42.883		
3,700.00	3,697.40	3,338.60	3,136.64	16.28	19.43	-38.53	-1,358.02	-59.62	1,375.44	1,343.35	32.09	42.862		
3,800.00	3,797.32	3,431.15	3,221.10	16.72	20.03	-38.53	-1,395.78	-61.69	1,413.33	1,380.34	32.99	42.841		
3,900.00	3,897.24	3,523.69	3,305.57	17.15	20.63	-38.52	-1,433.53	-63.76	1,451.23	1,417.34	33.89	42.818		
4,000.00	3,997.16	3,616.23	3,390.03	17.59	21.24	-38.51	-1,471.28	-65.82	1,489.12	1,454.33	34.80	42.795		
4,100.00	4,097.08	3,708.77	3,474.50	18.02	21.84	-38.51	-1,509.03	-67.89	1,527.02	1,491.32	35.70	42.770		
4,200.00	4,197.00	3,801.31	3,558.96	18.46	22.45	-38.50	-1,546.79	-69.96	1,564.91	1,528.30	36.61	42.746		
4,300.00	4,296.92	3,906.15	3,643.43	18.89	23.14	-38.50	-1,584.54	-72.02	1,602.81	1,565.22	37.59	42.644		
4,400.00	4,396.84	3,986.39	3,727.90	19.33	23.66	-38.49	-1,622.29	-74.09	1,640.71	1,602.28	38.43	42.696		
4,500.00	4,496.76	4,078.94	3,812.36	19.77	24.27	-38.49	-1,660.04	-76.16	1,678.60	1,639.26	39.34	42.671		
4,600.00	4,596.68	4,171.48	3,896.83	20.20	24.88	-38.48	-1,697.80	-78.23	1,716.50	1,676.25	40.25	42.645		
4,700.00	4,696.60	4,264.02	3,981.29	20.64	25.49	-38.48	-1,735.55	-80.29	1,754.39	1,713.23	41.16	42.620		
4,800.00	4,796.52	4,356.56	4,065.76	21.08	26.10	-38.47	-1,773.30	-82.36	1,792.29	1,750.21	42.08	42.595		
4,900.00	4,896.44	4,449.10	4,150.22	21.51	26.71	-38.47	-1,811.05	-84.43	1,830.18	1,787.19	42.99	42.570		
5,000.00	4,996.36	4,541.64	4,234.69	21.95	27.32	-38.47	-1,848.81	-86.49	1,868.08	1,824.17	43.91	42.546		
5,100.00	5,096.28	4,634.18	4,319.15	22.39	27.93	-38.46	-1,886.56	-88.56	1,905.97	1,861.15	44.82	42.521		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,196.19	4,726.73	4,403.62	22.83	28.54	-38.46	-1,924.31	-90.63	1,943.87	1,898.13	45.74	42.497		
5,300.00	5,296.11	4,819.27	4,488.08	23.27	29.15	-38.45	-1,962.07	-92.69	1,981.76	1,935.11	46.66	42.474		
5,400.00	5,396.03	4,911.81	4,572.55	23.71	29.76	-38.45	-1,999.82	-94.76	2,019.66	1,972.08	47.58	42.450		
5,500.00	5,495.95	5,004.35	4,657.01	24.14	30.37	-38.45	-2,037.57	-96.83	2,057.56	2,009.06	48.50	42.427		
5,600.00	5,595.87	5,103.11	4,741.48	24.58	31.02	-38.44	-2,075.32	-98.90	2,095.45	2,046.00	49.45	42.374		
5,700.00	5,695.79	5,189.43	4,825.94	25.02	31.59	-38.44	-2,113.08	-100.96	2,133.35	2,083.01	50.34	42.381		
5,800.00	5,795.71	5,281.97	4,910.41	25.46	32.21	-38.44	-2,150.83	-103.03	2,171.24	2,119.98	51.26	42.359		
5,900.00	5,895.63	5,374.52	4,994.87	25.90	32.82	-38.44	-2,188.58	-105.10	2,209.14	2,156.96	52.18	42.337		
6,000.00	5,995.55	5,467.06	5,079.34	26.34	33.43	-38.43	-2,226.33	-107.16	2,247.03	2,193.93	53.10	42.316		
6,100.00	6,095.47	5,559.60	5,163.81	26.78	34.04	-38.43	-2,264.09	-109.23	2,284.93	2,230.90	54.02	42.294		
6,200.00	6,195.39	5,652.14	5,248.27	27.22	34.65	-38.43	-2,301.84	-111.30	2,322.82	2,267.88	54.95	42.273		
6,300.00	6,295.31	5,744.68	5,332.74	27.66	35.27	-38.42	-2,339.59	-113.36	2,360.72	2,304.85	55.87	42.253		
6,400.00	6,395.23	5,837.22	5,417.20	28.10	35.88	-38.42	-2,377.34	-115.43	2,398.62	2,341.82	56.80	42.232		
6,500.00	6,495.02	5,929.71	5,501.61	28.54	36.49	-72.08	-2,415.07	-117.50	2,436.48	2,378.76	57.72	42.212		
6,600.00	6,593.09	6,020.94	5,584.88	28.98	37.10	-77.95	-2,452.29	-119.54	2,473.87	2,415.23	58.64	42.186		
6,700.00	6,687.01	6,108.70	5,664.99	29.41	37.68	-77.60	-2,488.10	-121.50	2,510.16	2,450.61	59.55	42.153		
6,800.00	6,774.46	6,209.15	5,739.96	29.83	38.34	-76.34	-2,521.61	-123.33	2,545.00	2,484.46	60.54	42.036		
6,900.00	6,853.31	6,265.35	5,807.96	30.26	38.72	-74.91	-2,552.00	-124.99	2,578.23	2,516.90	61.33	42.039		
7,000.00	6,921.60	6,330.36	5,867.30	30.76	39.15	-73.45	-2,578.52	-126.45	2,609.83	2,547.59	62.24	41.929		
7,100.00	6,977.66	6,384.30	5,916.53	31.38	39.51	-71.97	-2,600.53	-127.65	2,639.86	2,576.64	63.22	41.759		
7,200.00	7,020.10	6,425.83	5,954.44	32.17	39.78	-70.39	-2,617.47	-128.58	2,668.34	2,604.06	64.28	41.514		
7,300.00	7,047.88	6,453.92	5,980.08	33.13	39.97	-68.69	-2,628.93	-129.21	2,695.23	2,629.81	65.42	41.197		
7,400.00	7,060.32	6,467.89	5,992.83	34.27	40.06	-66.84	-2,634.63	-129.52	2,720.34	2,653.71	66.64	40.824		
7,500.00	7,060.70	6,470.73	5,995.42	35.56	40.08	-66.24	-2,635.78	-129.58	2,744.67	2,676.77	67.90	40.422		
7,600.00	7,060.27	6,472.81	5,997.32	37.02	40.09	-66.29	-2,636.63	-129.63	2,772.10	2,702.82	69.28	40.011		
7,700.00	7,059.83	6,474.89	5,999.22	38.64	40.11	-66.33	-2,637.48	-129.67	2,802.83	2,732.07	70.76	39.613		
7,800.00	7,059.40	6,476.97	6,001.12	40.40	40.12	-66.38	-2,638.33	-129.72	2,836.75	2,764.46	72.29	39.241		
7,900.00	7,058.97	6,479.06	6,003.02	42.28	40.13	-66.42	-2,639.18	-129.77	2,873.76	2,799.89	73.86	38.906		
8,000.00	7,058.53	6,481.14	6,004.92	44.27	40.15	-66.47	-2,640.03	-129.81	2,913.72	2,838.26	75.46	38.614		
8,100.00	7,058.10	6,483.22	6,006.82	46.35	40.16	-66.51	-2,640.88	-129.85	2,954.67	2,880.14	77.12	38.364		
8,200.00	7,057.66	6,485.30	6,008.72	48.50	40.17	-66.55	-2,641.73	-129.89	2,995.62	2,921.02	78.83	38.154		
8,300.00	7,057.23	6,487.38	6,010.62	50.73	40.18	-66.59	-2,642.58	-129.93	3,036.57	2,961.90	80.58	37.984		
8,400.00	7,056.80	6,489.46	6,012.52	53.02	40.19	-66.63	-2,643.43	-129.97	3,077.52	3,002.78	82.37	37.854		
8,500.00	7,056.36	6,491.54	6,014.42	55.36	40.20	-66.67	-2,644.28	-130.01	3,118.47	3,043.66	84.20	37.764		
8,600.00	7,055.93	6,493.62	6,016.32	57.74	40.21	-66.71	-2,645.13	-130.05	3,159.42	3,084.54	86.07	37.704		
8,700.00	7,055.49	6,495.70	6,018.22	60.17	40.22	-66.75	-2,645.98	-130.09	3,200.37	3,125.42	87.98	37.674		
8,800.00	7,055.06	6,497.78	6,020.12	62.63	40.23	-66.79	-2,646.83	-130.13	3,241.32	3,166.30	89.93	37.664		
8,900.00	7,054.63	6,499.86	6,022.02	65.13	40.24	-66.83	-2,647.68	-130.17	3,282.27	3,207.18	91.92	37.674		
9,000.00	7,054.19	6,501.94	6,023.92	67.66	40.25	-66.87	-2,648.53	-130.21	3,323.22	3,248.06	93.94	37.694		
9,100.00	7,053.76	6,504.02	6,025.82	70.21	40.26	-66.91	-2,649.38	-130.25	3,364.17	3,288.94	96.00	37.724		
9,200.00	7,053.32	6,506.10	6,027.72	72.78	40.27	-66.95	-2,650.23	-130.29	3,405.12	3,329.82	98.10	37.764		
9,300.00	7,052.89	6,508.18	6,029.62	75.38	40.28	-66.99	-2,651.08	-130.33	3,446.07	3,370.70	100.24	37.814		
9,400.00	7,052.46	6,510.26	6,031.52	77.99	40.29	-67.03	-2,651.93	-130.37	3,487.02	3,411.58	102.42	37.864		
9,500.00	7,052.02	6,512.34	6,033.42	80.62	40.30	-67.07	-2,652.78	-130.41	3,527.97	3,452.46	104.64	37.924		
9,600.00	7,051.59	6,514.42	6,035.32	83.26	40.31	-67.11	-2,653.63	-130.45	3,568.92	3,493.34	106.90	37.984		
9,700.00	7,051.15	6,516.50	6,037.22	85.92	40.32	-67.15	-2,654.48	-130.49	3,609.87	3,534.22	109.20	38.054		
9,800.00	7,050.72	6,518.58	6,039.12	88.59	40.33	-67.19	-2,655.33	-130.53	3,650.82	3,575.10	111.54	38.124		
9,900.00	7,050.29	6,520.66	6,041.02	91.28	40.34	-67.23	-2,656.18	-130.57	3,691.77	3,615.98	113.92	38.204		
10,000.00	7,049.85	6,522.74	6,042.92	93.97	40.35	-67.27	-2,657.03	-130.61	3,732.72	3,656.86	116.34	38.284		
10,100.00	7,049.42	6,524.82	6,044.82	96.67	40.36	-67.31	-2,657.88	-130.65	3,773.67	3,697.74	118.80	38.364		
10,200.00	7,048.98	6,526.90	6,046.72	99.38	40.37	-67.35	-2,658.73	-130.69	3,814.62	3,738.62	121.30	38.454		
10,300.00	7,048.55	6,528.98	6,048.62	102.10	40.38	-67.39	-2,659.58	-130.73	3,855.57	3,779.50	123.84	38.544		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,048.12	11,054.90	7,130.01	104.83	106.66	-91.59	-3,172.61	-3,738.46	2,943.78	2,733.19	210.59	13.979		
10,500.00	7,047.68	11,154.90	7,129.47	107.56	109.31	-91.59	-3,173.20	-3,838.46	2,943.77	2,727.78	215.99	13.629		
10,600.00	7,047.25	11,254.90	7,128.92	110.30	111.98	-91.59	-3,173.79	-3,938.46	2,943.75	2,722.34	221.42	13.295		
10,700.00	7,046.81	11,354.90	7,128.38	113.05	114.65	-91.59	-3,174.38	-4,038.45	2,943.74	2,716.89	226.85	12.977		
10,800.00	7,046.38	11,454.90	7,127.84	115.80	117.34	-91.59	-3,174.96	-4,138.45	2,943.73	2,711.43	232.30	12.672		
10,900.00	7,045.95	11,554.90	7,127.30	118.55	120.03	-91.58	-3,175.55	-4,238.45	2,943.71	2,705.95	237.76	12.381		
11,000.00	7,045.51	11,654.90	7,126.76	121.31	122.73	-91.58	-3,176.14	-4,338.44	2,943.70	2,700.46	243.24	12.102		
11,100.00	7,045.08	11,754.90	7,126.22	124.08	125.44	-91.58	-3,176.73	-4,438.44	2,943.69	2,694.96	248.72	11.835		
11,200.00	7,044.64	11,854.90	7,125.68	126.85	128.15	-91.58	-3,177.31	-4,538.44	2,943.67	2,689.46	254.22	11.579		
11,300.00	7,044.21	11,954.90	7,125.14	129.62	130.87	-91.58	-3,177.90	-4,638.43	2,943.66	2,683.94	259.72	11.334		
11,400.00	7,043.78	12,054.90	7,124.60	132.40	133.60	-91.57	-3,178.49	-4,738.43	2,943.64	2,678.41	265.23	11.098		
11,500.00	7,043.34	12,154.90	7,124.05	135.18	136.33	-91.57	-3,179.08	-4,838.43	2,943.63	2,672.87	270.76	10.872		
11,600.00	7,042.91	12,254.90	7,123.51	137.96	139.07	-91.57	-3,179.67	-4,938.42	2,943.62	2,667.33	276.29	10.654		
11,700.00	7,042.47	12,354.90	7,122.97	140.75	141.81	-91.57	-3,180.25	-5,038.42	2,943.60	2,661.78	281.82	10.445		
11,800.00	7,042.04	12,454.90	7,122.43	143.54	144.56	-91.57	-3,180.84	-5,138.42	2,943.59	2,656.22	287.37	10.243		
11,900.00	7,041.61	12,554.90	7,121.89	146.33	147.31	-91.56	-3,181.43	-5,238.41	2,943.58	2,650.66	292.92	10.049		
12,000.00	7,041.17	12,654.90	7,121.35	149.13	150.06	-91.56	-3,182.02	-5,338.41	2,943.56	2,645.09	298.48	9.862		
12,100.00	7,040.74	12,754.90	7,120.81	151.92	152.82	-91.56	-3,182.61	-5,438.41	2,943.55	2,639.51	304.04	9.681		
12,200.00	7,040.30	12,854.90	7,120.27	154.72	155.58	-91.56	-3,183.19	-5,538.40	2,943.53	2,633.93	309.61	9.507		
12,300.00	7,039.87	12,954.90	7,119.73	157.52	158.35	-91.55	-3,183.78	-5,638.40	2,943.52	2,628.34	315.18	9.339		
12,400.00	7,039.44	13,054.90	7,119.18	160.33	161.12	-91.55	-3,184.37	-5,738.40	2,943.51	2,622.75	320.76	9.177		
12,500.00	7,039.00	13,154.90	7,118.64	163.13	163.89	-91.55	-3,184.96	-5,838.40	2,943.49	2,617.15	326.34	9.020		
12,600.00	7,038.57	13,254.90	7,118.10	165.94	166.67	-91.55	-3,185.55	-5,938.39	2,943.48	2,611.55	331.93	8.868		
12,700.00	7,038.13	13,354.90	7,117.56	168.75	169.44	-91.55	-3,186.13	-6,038.39	2,943.47	2,605.94	337.53	8.721		
12,800.00	7,037.70	13,454.90	7,117.02	171.56	172.22	-91.54	-3,186.72	-6,138.39	2,943.45	2,600.33	343.12	8.578		
12,900.00	7,037.27	13,554.90	7,116.48	174.37	175.01	-91.54	-3,187.31	-6,238.38	2,943.44	2,594.72	348.72	8.441		
13,000.00	7,036.83	13,654.90	7,115.94	177.19	177.79	-91.54	-3,187.90	-6,338.38	2,943.42	2,589.10	354.33	8.307		
13,100.00	7,036.40	13,754.90	7,115.40	180.00	180.58	-91.54	-3,188.49	-6,438.38	2,943.41	2,583.48	359.94	8.178		
13,200.00	7,035.96	13,854.90	7,114.86	182.82	183.37	-91.54	-3,189.07	-6,538.37	2,943.40	2,577.85	365.55	8.052		
13,300.00	7,035.53	13,954.90	7,114.31	185.64	186.16	-91.53	-3,189.66	-6,638.37	2,943.38	2,572.22	371.16	7.930		
13,400.00	7,035.10	14,054.90	7,113.77	188.46	188.96	-91.53	-3,190.25	-6,738.37	2,943.37	2,566.59	376.78	7.812		
13,500.00	7,034.66	14,154.90	7,113.23	191.28	191.75	-91.53	-3,190.84	-6,838.36	2,943.36	2,560.96	382.40	7.697		
13,600.00	7,034.23	14,254.90	7,112.69	194.10	194.55	-91.53	-3,191.43	-6,938.36	2,943.34	2,555.32	388.02	7.585		
13,700.00	7,033.79	14,354.90	7,112.15	196.92	197.35	-91.53	-3,192.01	-7,038.36	2,943.33	2,549.68	393.65	7.477		
13,800.00	7,033.36	14,454.90	7,111.61	199.74	200.15	-91.52	-3,192.60	-7,138.35	2,943.32	2,544.04	399.28	7.372		
13,900.00	7,032.93	14,554.90	7,111.07	202.57	202.96	-91.52	-3,193.19	-7,238.35	2,943.30	2,538.39	404.91	7.269		
14,000.00	7,032.49	14,654.90	7,110.53	205.39	205.76	-91.52	-3,193.78	-7,338.35	2,943.29	2,532.75	410.54	7.169		
14,100.00	7,032.06	14,754.90	7,109.99	208.22	208.57	-91.52	-3,194.36	-7,438.34	2,943.27	2,527.10	416.18	7.072		
14,200.00	7,031.62	14,854.90	7,109.45	211.05	211.37	-91.52	-3,194.95	-7,538.34	2,943.26	2,521.44	421.82	6.978		
14,300.00	7,031.19	14,954.90	7,108.90	213.87	214.18	-91.51	-3,195.54	-7,638.34	2,943.25	2,515.79	427.46	6.885		
14,400.00	7,030.76	15,054.90	7,108.36	216.70	216.99	-91.51	-3,196.13	-7,738.33	2,943.23	2,510.13	433.10	6.796		
14,500.00	7,030.32	15,154.90	7,107.82	219.53	219.80	-91.51	-3,196.72	-7,838.33	2,943.22	2,504.48	438.74	6.708		
14,600.00	7,029.89	15,254.90	7,107.28	222.36	222.62	-91.51	-3,197.30	-7,938.33	2,943.21	2,498.82	444.39	6.623		
14,700.00	7,029.45	15,354.90	7,106.74	225.19	225.43	-91.50	-3,197.89	-8,038.32	2,943.19	2,493.16	450.04	6.540		
14,800.00	7,029.02	15,454.90	7,106.20	228.03	228.25	-91.50	-3,198.48	-8,138.32	2,943.18	2,487.49	455.69	6.459		
14,805.04	7,029.00	15,459.94	7,106.17	228.17	228.39	-91.50	-3,198.51	-8,143.36	2,943.18	2,487.21	455.97	6.455 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	0.48	100.18	0.83	100.18					
100.00	100.00	100.00	100.00	3.28	3.28	0.48	100.18	0.83	100.18	93.61	6.57	15.249		
200.00	200.00	200.00	200.00	3.34	3.34	0.48	100.18	0.83	100.18	93.51	6.67	15.010		
300.00	300.00	300.00	300.00	3.44	3.44	0.48	100.18	0.83	100.18	93.29	6.89	14.540		
400.00	400.00	400.00	400.00	3.60	3.60	0.48	100.18	0.83	100.18	92.97	7.21	13.901	CC, ES	
500.00	499.98	500.02	499.98	3.80	3.81	142.86	100.18	0.83	101.57	93.96	7.60	13.358		
600.00	599.90	599.90	599.90	4.02	4.05	144.17	100.18	0.83	104.76	96.69	8.07	12.984		
700.00	699.82	699.82	699.82	4.28	4.31	145.12	101.75	0.46	109.65	101.05	8.59	12.760		
800.00	799.74	799.74	799.74	4.57	4.59	145.52	106.45	-0.67	117.76	108.59	9.17	12.838		
900.00	899.66	899.66	899.66	4.88	4.90	145.43	114.22	-2.53	129.05	119.26	9.79	13.179		
1,000.00	999.58	999.58	999.58	5.21	5.23	145.02	124.82	-5.07	143.07	132.63	10.44	13.702		
1,100.00	1,099.50	1,099.50	1,099.50	5.55	5.57	144.63	136.00	-7.75	157.46	146.33	11.12	14.157		
1,200.00	1,199.42	1,199.42	1,199.42	5.91	5.93	144.31	147.17	-10.42	171.85	160.02	11.83	14.527		
1,300.00	1,299.34	1,299.34	1,299.34	6.28	6.30	144.04	158.35	-13.10	186.25	173.69	12.56	14.829		
1,400.00	1,399.26	1,399.26	1,399.26	6.66	6.68	143.81	169.52	-15.78	200.65	187.34	13.31	15.078		
1,500.00	1,499.18	1,499.18	1,499.18	7.04	7.07	143.61	180.70	-18.45	215.06	200.99	14.07	15.283		
1,600.00	1,599.10	1,599.10	1,599.10	7.43	7.46	143.44	191.87	-21.13	229.47	214.62	14.85	15.453		
1,700.00	1,699.01	1,699.01	1,699.01	7.83	7.86	143.28	203.05	-23.81	243.87	228.24	15.64	15.596		
1,800.00	1,798.93	1,798.93	1,798.93	8.23	8.27	143.15	214.22	-26.48	258.29	241.85	16.43	15.716		
1,900.00	1,898.85	1,898.85	1,898.85	8.64	8.68	143.03	225.40	-29.16	272.70	255.46	17.24	15.817		
2,000.00	1,998.77	1,998.77	1,998.77	9.05	9.09	142.92	236.57	-31.84	287.11	269.06	18.05	15.903		
2,100.00	2,098.69	2,098.69	2,098.69	9.46	9.51	142.82	247.75	-34.51	301.53	282.65	18.87	15.976		
2,200.00	2,198.61	2,198.61	2,198.61	9.88	9.93	142.73	258.92	-37.19	315.94	296.24	19.70	16.039		
2,300.00	2,298.53	2,298.53	2,298.53	10.30	10.35	142.64	270.10	-39.87	330.36	309.83	20.53	16.093		
2,400.00	2,398.45	2,398.45	2,398.45	10.72	10.78	142.57	281.27	-42.54	344.77	323.41	21.36	16.139		
2,500.00	2,498.37	2,498.37	2,498.37	11.14	11.20	142.50	292.45	-45.22	359.19	336.99	22.20	16.180		
2,600.00	2,598.29	2,598.29	2,598.29	11.56	11.63	142.43	303.62	-47.90	373.61	350.57	23.04	16.215		
2,700.00	2,698.21	2,698.21	2,698.21	11.98	12.06	142.37	314.80	-50.58	388.02	364.14	23.89	16.245		
2,800.00	2,798.13	2,798.13	2,798.13	12.41	12.49	142.32	325.97	-53.25	402.44	377.71	24.73	16.272		
2,900.00	2,898.05	2,898.05	2,898.05	12.84	12.92	142.27	337.15	-55.93	416.86	391.28	25.58	16.296		
3,000.00	2,997.97	2,997.97	2,997.97	13.27	13.35	142.22	348.32	-58.61	431.28	404.85	26.43	16.316		
3,100.00	3,097.89	3,097.89	3,097.89	13.69	13.79	142.17	359.50	-61.28	445.70	418.41	27.29	16.334		
3,200.00	3,197.81	3,197.81	3,197.81	14.12	14.22	142.13	370.67	-63.96	460.12	431.98	28.14	16.350		
3,300.00	3,297.73	3,297.73	3,297.73	14.56	14.66	142.09	381.85	-66.64	474.54	445.54	29.00	16.364		
3,400.00	3,397.65	3,397.65	3,397.65	14.99	15.09	142.06	393.02	-69.31	488.96	459.10	29.86	16.377		
3,500.00	3,497.56	3,497.56	3,497.56	15.42	15.53	142.02	404.20	-71.99	503.38	472.66	30.72	16.388		
3,600.00	3,597.48	3,597.48	3,597.48	15.85	15.97	141.99	415.37	-74.67	517.80	486.22	31.58	16.398		
3,700.00	3,697.40	3,697.40	3,697.40	16.28	16.41	141.96	426.55	-77.34	532.22	499.78	32.44	16.407		
3,800.00	3,797.32	3,797.32	3,797.32	16.72	16.84	141.93	437.73	-80.02	546.64	513.34	33.30	16.414		
3,900.00	3,897.24	3,897.24	3,897.24	17.15	17.28	141.90	448.90	-82.70	561.06	526.89	34.17	16.421		
4,000.00	3,997.16	3,997.16	3,997.16	17.59	17.72	141.87	460.08	-85.37	575.48	540.45	35.03	16.427		
4,100.00	4,097.08	4,097.08	4,097.08	18.02	18.16	141.85	471.25	-88.05	589.90	554.00	35.90	16.433		
4,200.00	4,197.00	4,197.00	4,197.00	18.46	18.60	141.82	482.43	-90.73	604.32	567.56	36.76	16.438		
4,300.00	4,296.92	4,296.92	4,296.92	18.89	19.04	141.80	493.60	-93.40	618.74	581.11	37.63	16.442		
4,400.00	4,396.84	4,396.84	4,396.84	19.33	19.48	141.78	504.78	-96.08	633.16	594.66	38.50	16.446		
4,500.00	4,496.76	4,496.76	4,496.76	19.77	19.93	141.76	515.95	-98.76	647.59	608.22	39.37	16.449		
4,600.00	4,596.68	4,596.68	4,596.68	20.20	20.37	141.74	527.13	-101.43	662.01	621.77	40.24	16.452		
4,700.00	4,696.60	4,696.60	4,696.60	20.64	20.81	141.72	538.30	-104.11	676.43	635.32	41.11	16.455		
4,800.00	4,796.52	4,796.52	4,796.52	21.08	21.25	141.70	549.48	-106.79	690.85	648.87	41.98	16.457		
4,900.00	4,896.44	4,896.44	4,896.44	21.51	21.69	141.68	560.65	-109.47	705.27	662.42	42.85	16.459		
5,000.00	4,996.36	4,996.36	4,996.36	21.95	22.14	141.66	571.83	-112.14	719.69	675.97	43.72	16.461		
5,100.00	5,096.28	5,096.28	5,096.28	22.39	22.58	141.65	583.00	-114.82	734.11	689.52	44.59	16.462		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	5,196.19	5,140.85	5,111.64	22.83	23.02	141.63	594.18	-117.50	748.54	703.07	45.47	16.463		
5,300.00	5,296.11	5,239.81	5,209.92	23.27	23.47	141.62	605.35	-120.17	762.96	716.62	46.34	16.464		
5,400.00	5,396.03	5,338.76	5,308.21	23.71	23.91	141.60	616.53	-122.85	777.38	730.17	47.21	16.465		
5,500.00	5,495.95	5,437.72	5,406.49	24.14	24.35	141.59	627.70	-125.53	791.80	743.72	48.09	16.466		
5,600.00	5,595.87	5,536.67	5,504.78	24.58	24.80	141.57	638.88	-128.20	806.22	757.26	48.96	16.467		
5,700.00	5,695.79	5,635.63	5,603.06	25.02	25.24	141.56	650.05	-130.88	820.65	770.81	49.83	16.467		
5,800.00	5,795.71	5,734.58	5,701.35	25.46	25.69	141.55	661.23	-133.56	835.07	784.36	50.71	16.468		
5,900.00	5,895.63	5,833.53	5,799.63	25.90	26.13	141.54	672.40	-136.23	849.49	797.91	51.58	16.468		
6,000.00	5,995.55	5,932.49	5,897.92	26.34	26.57	141.52	683.58	-138.91	863.91	811.45	52.46	16.468		
6,100.00	6,095.47	6,031.44	5,996.20	26.78	27.02	141.51	694.75	-141.59	878.33	825.00	53.33	16.468		
6,200.00	6,195.39	6,130.40	6,094.49	27.22	27.46	141.50	705.93	-144.26	892.76	838.55	54.21	16.468		
6,300.00	6,295.31	6,229.35	6,192.77	27.66	27.91	141.49	717.10	-146.94	907.18	852.09	55.09	16.468		
6,400.00	6,395.23	6,328.31	6,291.05	28.10	28.35	141.48	728.28	-149.62	921.60	865.64	55.96	16.468		
6,500.00	6,495.02	6,427.63	6,389.58	28.54	28.80	105.15	739.46	-154.68	936.00	879.16	56.84	16.466		
6,600.00	6,593.09	6,527.28	6,486.69	28.98	29.25	94.77	750.39	-173.64	950.14	892.42	57.73	16.460		
6,700.00	6,687.01	6,627.04	6,579.79	29.41	29.68	91.14	760.75	-207.66	963.67	905.06	58.61	16.443		
6,800.00	6,774.46	6,726.97	6,666.62	29.83	30.12	88.93	770.30	-255.97	976.26	916.75	59.51	16.406		
6,900.00	6,853.31	6,827.11	6,745.05	30.26	30.59	87.33	778.80	-317.48	987.58	927.12	60.47	16.332		
7,000.00	6,921.60	6,927.48	6,813.09	30.76	31.14	86.10	786.04	-390.77	997.38	935.81	61.57	16.199		
7,100.00	6,977.66	7,028.06	6,868.96	31.38	31.81	85.16	791.81	-474.09	1,005.40	942.50	62.90	15.984		
7,200.00	7,020.10	7,128.82	6,911.18	32.17	32.65	84.47	795.98	-565.36	1,011.44	946.90	64.54	15.671		
7,300.00	7,047.88	7,229.67	6,938.61	33.13	33.66	84.02	798.42	-662.27	1,015.37	948.84	66.52	15.264		
7,400.00	7,060.32	7,330.53	6,950.50	34.27	34.83	83.81	799.07	-762.32	1,017.07	948.25	68.82	14.778		
7,500.00	7,060.70	7,430.75	6,950.78	35.56	36.14	83.80	798.40	-862.53	1,017.03	945.61	71.42	14.240		
7,600.00	7,060.27	7,530.75	6,950.48	37.02	37.60	83.80	797.66	-962.53	1,016.88	942.53	74.35	13.678		
7,700.00	7,059.83	7,630.75	6,950.19	38.64	39.22	83.81	796.92	-1,062.52	1,016.73	939.15	77.58	13.105		
7,800.00	7,059.40	7,730.75	6,949.89	40.40	40.98	83.82	796.19	-1,162.52	1,016.57	935.49	81.09	12.537		
7,900.00	7,058.97	7,830.75	6,949.59	42.28	42.85	83.82	795.45	-1,262.52	1,016.42	931.59	84.83	11.982		
8,000.00	7,058.53	7,930.75	6,949.29	44.27	44.83	83.83	794.71	-1,362.51	1,016.27	927.49	88.78	11.447		
8,100.00	7,058.10	8,030.75	6,948.99	46.35	46.89	83.84	793.97	-1,462.51	1,016.12	923.21	92.91	10.937		
8,200.00	7,057.66	8,130.75	6,948.69	48.50	49.04	83.84	793.23	-1,562.51	1,015.96	918.77	97.20	10.453		
8,300.00	7,057.23	8,230.75	6,948.40	50.73	51.26	83.85	792.50	-1,662.50	1,015.81	914.19	101.62	9.996		
8,400.00	7,056.80	8,330.75	6,948.10	53.02	53.53	83.86	791.76	-1,762.50	1,015.66	909.49	106.17	9.566		
8,500.00	7,056.36	8,430.75	6,947.80	55.36	55.87	83.86	791.02	-1,862.50	1,015.51	904.68	110.82	9.163		
8,600.00	7,055.93	8,530.75	6,947.50	57.74	58.24	83.87	790.28	-1,962.49	1,015.35	899.78	115.57	8.786		
8,700.00	7,055.49	8,630.75	6,947.20	60.17	60.66	83.88	789.55	-2,062.49	1,015.20	894.80	120.40	8.432		
8,800.00	7,055.06	8,730.75	6,946.90	62.63	63.12	83.88	788.81	-2,162.49	1,015.05	889.75	125.30	8.101		
8,900.00	7,054.63	8,830.75	6,946.61	65.13	65.61	83.89	788.07	-2,262.48	1,014.90	884.63	130.27	7.791		
9,000.00	7,054.19	8,930.75	6,946.31	67.66	68.13	83.90	787.33	-2,362.48	1,014.74	879.45	135.29	7.501		
9,100.00	7,053.76	9,030.75	6,946.01	70.21	70.67	83.90	786.59	-2,462.48	1,014.59	874.23	140.36	7.228		
9,200.00	7,053.32	9,130.75	6,945.71	72.78	73.24	83.91	785.86	-2,562.47	1,014.44	868.96	145.48	6.973		
9,300.00	7,052.89	9,230.75	6,945.41	75.38	75.82	83.92	785.12	-2,662.47	1,014.28	863.64	150.64	6.733		
9,400.00	7,052.46	9,330.75	6,945.11	77.99	78.43	83.92	784.38	-2,762.47	1,014.13	858.29	155.84	6.508		
9,500.00	7,052.02	9,430.75	6,944.82	80.62	81.05	83.93	783.64	-2,862.46	1,013.98	852.91	161.07	6.295		
9,600.00	7,051.59	9,530.75	6,944.52	83.26	83.69	83.94	782.91	-2,962.46	1,013.83	847.50	166.33	6.095		
9,700.00	7,051.15	9,630.75	6,944.22	85.92	86.35	83.94	782.17	-3,062.46	1,013.67	842.05	171.62	5.906		
9,800.00	7,050.72	9,730.75	6,943.92	88.59	89.01	83.95	781.43	-3,162.45	1,013.52	836.59	176.94	5.728		
9,900.00	7,050.29	9,830.75	6,943.62	91.28	91.69	83.96	780.69	-3,262.45	1,013.37	831.10	182.27	5.560		
10,000.00	7,049.85	9,930.75	6,943.32	93.97	94.38	83.97	779.95	-3,362.45	1,013.22	825.59	187.63	5.400		
10,100.00	7,049.42	10,030.75	6,943.03	96.67	97.08	83.97	779.22	-3,462.44	1,013.06	820.06	193.01	5.249		
10,200.00	7,048.98	10,130.75	6,942.73	99.38	99.78	83.98	778.48	-3,562.44	1,012.91	814.51	198.40	5.105		
10,300.00	7,048.55	10,230.75	6,942.43	102.10	102.50	83.99	777.74	-3,662.44	1,012.76	808.94	203.82	4.969		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,048.12	10,330.75	6,942.13	104.83	105.22	83.99	777.00	-3,762.43	1,012.61	803.37	209.24	4.839		
10,500.00	7,047.68	10,430.75	6,941.83	107.56	107.95	84.00	776.27	-3,862.43	1,012.45	797.77	214.68	4.716		
10,600.00	7,047.25	10,530.75	6,941.53	110.30	110.69	84.01	775.53	-3,962.43	1,012.30	792.17	220.14	4.599		
10,700.00	7,046.81	10,630.75	6,941.24	113.05	113.43	84.01	774.79	-4,062.42	1,012.15	786.55	225.60	4.486		
10,800.00	7,046.38	10,730.75	6,940.94	115.80	116.17	84.02	774.05	-4,162.42	1,012.00	780.92	231.08	4.379		
10,900.00	7,045.95	10,830.75	6,940.64	118.55	118.93	84.03	773.31	-4,262.42	1,011.84	775.28	236.56	4.277		
11,000.00	7,045.51	10,930.75	6,940.34	121.31	121.69	84.03	772.58	-4,362.41	1,011.69	769.63	242.06	4.179		
11,100.00	7,045.08	11,030.75	6,940.04	124.08	124.45	84.04	771.84	-4,462.41	1,011.54	763.97	247.57	4.086		
11,200.00	7,044.64	11,130.75	6,939.74	126.85	127.21	84.05	771.10	-4,562.41	1,011.39	758.31	253.08	3.996		
11,300.00	7,044.21	11,230.75	6,939.44	129.62	129.98	84.05	770.36	-4,662.40	1,011.24	752.63	258.60	3.910		
11,400.00	7,043.78	11,330.75	6,939.15	132.40	132.76	84.06	769.63	-4,762.40	1,011.08	746.95	264.13	3.828		
11,500.00	7,043.34	11,430.75	6,938.85	135.18	135.54	84.07	768.89	-4,862.40	1,010.93	741.26	269.67	3.749		
11,600.00	7,042.91	11,530.75	6,938.55	137.96	138.32	84.07	768.15	-4,962.39	1,010.78	735.57	275.21	3.673		
11,700.00	7,042.47	11,630.75	6,938.25	140.75	141.10	84.08	767.41	-5,062.39	1,010.63	729.87	280.76	3.600		
11,800.00	7,042.04	11,730.75	6,937.95	143.54	143.89	84.09	766.67	-5,162.39	1,010.47	724.16	286.31	3.529		
11,900.00	7,041.61	11,830.75	6,937.65	146.33	146.68	84.09	765.94	-5,262.38	1,010.32	718.45	291.87	3.461		
12,000.00	7,041.17	11,930.75	6,937.36	149.13	149.47	84.10	765.20	-5,362.38	1,010.17	712.73	297.44	3.396		
12,100.00	7,040.74	12,030.75	6,937.06	151.92	152.27	84.11	764.46	-5,462.38	1,010.02	707.01	303.01	3.333		
12,200.00	7,040.30	12,130.75	6,936.76	154.72	155.06	84.12	763.72	-5,562.37	1,009.87	701.28	308.59	3.273		
12,300.00	7,039.87	12,230.75	6,936.46	157.52	157.86	84.12	762.99	-5,662.37	1,009.71	695.55	314.17	3.214		
12,400.00	7,039.44	12,330.75	6,936.16	160.33	160.66	84.13	762.25	-5,762.37	1,009.56	689.81	319.75	3.157		
12,500.00	7,039.00	12,430.74	6,935.86	163.13	163.47	84.14	761.51	-5,862.36	1,009.41	684.07	325.34	3.103		
12,600.00	7,038.57	12,530.74	6,935.57	165.94	166.27	84.14	760.77	-5,962.36	1,009.26	678.33	330.93	3.050		
12,700.00	7,038.13	12,630.74	6,935.27	168.75	169.08	84.15	760.03	-6,062.36	1,009.10	672.58	336.52	2.999		
12,800.00	7,037.70	12,730.74	6,934.97	171.56	171.89	84.16	759.30	-6,162.35	1,008.95	666.83	342.12	2.949		
12,900.00	7,037.27	12,830.74	6,934.67	174.37	174.70	84.16	758.56	-6,262.35	1,008.80	661.08	347.72	2.901		
13,000.00	7,036.83	12,930.74	6,934.37	177.19	177.51	84.17	757.82	-6,362.35	1,008.65	655.32	353.33	2.855		
13,100.00	7,036.40	13,030.74	6,934.07	180.00	180.32	84.18	757.08	-6,462.34	1,008.50	649.56	358.94	2.810		
13,200.00	7,035.96	13,130.74	6,933.78	182.82	183.14	84.18	756.35	-6,562.34	1,008.34	643.80	364.55	2.766		
13,300.00	7,035.53	13,230.74	6,933.48	185.64	185.95	84.19	755.61	-6,662.34	1,008.19	638.03	370.16	2.724		
13,400.00	7,035.10	13,330.74	6,933.18	188.46	188.77	84.20	754.87	-6,762.33	1,008.04	632.26	375.78	2.683		
13,500.00	7,034.66	13,430.74	6,932.88	191.28	191.59	84.20	754.13	-6,862.33	1,007.89	626.49	381.40	2.643		
13,600.00	7,034.23	13,530.74	6,932.58	194.10	194.41	84.21	753.40	-6,962.33	1,007.74	620.72	387.02	2.604		
13,700.00	7,033.79	13,630.74	6,932.28	196.92	197.23	84.22	752.66	-7,062.32	1,007.58	614.94	392.64	2.566		
13,800.00	7,033.36	13,730.74	6,931.99	199.74	200.05	84.23	751.92	-7,162.32	1,007.43	609.17	398.27	2.530		
13,900.00	7,032.93	13,830.74	6,931.69	202.57	202.88	84.23	751.18	-7,262.32	1,007.28	603.39	403.89	2.494		
14,000.00	7,032.49	13,930.74	6,931.39	205.39	205.70	84.24	750.44	-7,362.31	1,007.13	597.61	409.52	2.459		
14,100.00	7,032.06	14,030.74	6,931.09	208.22	208.52	84.25	749.71	-7,462.31	1,006.98	591.82	415.15	2.426		
14,200.00	7,031.62	14,130.74	6,930.79	211.05	211.35	84.25	748.97	-7,562.31	1,006.82	586.04	420.79	2.393		
14,300.00	7,031.19	14,230.74	6,930.49	213.87	214.18	84.26	748.23	-7,662.30	1,006.67	580.25	426.42	2.361		
14,400.00	7,030.76	14,330.74	6,930.20	216.70	217.00	84.27	747.49	-7,762.30	1,006.52	574.46	432.06	2.330		
14,500.00	7,030.32	14,430.74	6,929.90	219.53	219.83	84.27	746.76	-7,862.30	1,006.37	568.67	437.70	2.299		
14,600.00	7,029.89	14,530.74	6,929.60	222.36	222.66	84.28	746.02	-7,962.29	1,006.22	562.88	443.34	2.270		
14,700.00	7,029.45	14,630.74	6,929.30	225.19	225.49	84.29	745.28	-8,062.29	1,006.07	557.08	448.98	2.241		
14,800.00	7,029.02	14,730.74	6,929.00	228.03	228.32	84.29	744.54	-8,162.29	1,005.91	551.29	454.62	2.213		
14,803.49	7,029.01	14,734.23	6,928.99	228.12	228.42	84.29	744.52	-8,165.78	1,005.91	551.09	454.82	2.212 SF		
14,805.04	7,029.00	14,732.12	6,929.00	228.17	228.36	84.29	744.53	-8,163.67	1,005.91	551.10	454.81	2.212		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	0.40	120.22	0.83	120.22					
100.00	100.00	100.00	100.00	3.28	3.28	0.40	120.22	0.83	120.22	113.65	6.57	18.301		
200.00	200.00	200.00	200.00	3.34	3.34	0.40	120.22	0.83	120.22	113.55	6.67	18.014		
300.00	300.00	300.00	300.00	3.44	3.44	0.40	120.22	0.83	120.22	113.33	6.89	17.450		
400.00	400.00	400.00	400.00	3.60	3.60	0.40	120.22	0.83	120.22	113.02	7.21	16.682 CC, ES		
500.00	499.98	500.02	499.98	3.80	3.81	142.68	120.22	0.83	121.61	114.00	7.60	15.994		
600.00	599.90	599.90	599.90	4.02	4.05	143.79	120.22	0.83	124.79	116.72	8.07	15.467		
700.00	699.82	699.82	699.82	4.28	4.31	144.65	121.80	0.58	129.68	121.09	8.59	15.094		
800.00	799.74	799.92	799.78	4.57	4.59	145.16	126.50	-0.18	137.84	128.68	9.17	15.034		
900.00	899.66	899.66	899.66	4.88	4.89	145.34	134.27	-1.43	149.24	139.45	9.79	15.250		
1,000.00	999.58	999.57	998.46	5.21	5.21	145.25	145.01	-3.16	163.81	153.38	10.43	15.706		
1,100.00	1,099.50	1,072.96	1,070.81	5.55	5.54	144.95	158.67	-5.36	181.53	170.43	11.09	16.365		
1,200.00	1,199.42	1,171.12	1,167.68	5.91	5.90	144.62	174.35	-7.88	200.57	188.79	11.79	17.018		
1,300.00	1,299.34	1,269.28	1,264.55	6.28	6.26	144.34	190.02	-10.41	219.62	207.11	12.51	17.557		
1,400.00	1,399.26	1,367.45	1,361.42	6.66	6.64	144.10	205.70	-12.93	238.68	225.43	13.25	18.013		
1,500.00	1,499.18	1,465.61	1,458.30	7.04	7.03	143.91	221.38	-15.46	257.74	243.73	14.01	18.399		
1,600.00	1,599.10	1,563.77	1,555.17	7.43	7.43	143.73	237.06	-17.98	276.80	262.02	14.78	18.728		
1,700.00	1,699.01	1,661.94	1,652.04	7.83	7.84	143.58	252.74	-20.51	295.86	280.30	15.56	19.009		
1,800.00	1,798.93	1,760.10	1,748.91	8.23	8.25	143.45	268.42	-23.04	314.93	298.57	16.36	19.252		
1,900.00	1,898.85	1,858.26	1,845.78	8.64	8.67	143.34	284.10	-25.56	333.99	316.83	17.16	19.461		
2,000.00	1,998.77	1,956.43	1,942.65	9.05	9.09	143.23	299.77	-28.09	353.06	335.09	17.97	19.644		
2,100.00	2,098.69	2,054.59	2,039.52	9.46	9.51	143.14	315.45	-30.61	372.13	353.34	18.79	19.803		
2,200.00	2,198.61	2,152.76	2,136.39	9.88	9.94	143.05	331.13	-33.14	391.20	371.58	19.62	19.944		
2,300.00	2,298.53	2,250.92	2,233.26	10.30	10.37	142.98	346.81	-35.66	410.27	389.82	20.44	20.068		
2,400.00	2,398.45	2,349.08	2,330.13	10.72	10.80	142.91	362.49	-38.19	429.34	408.06	21.28	20.178		
2,500.00	2,498.37	2,447.25	2,427.00	11.14	11.24	142.85	378.17	-40.71	448.41	426.30	22.12	20.275		
2,600.00	2,598.29	2,545.41	2,523.87	11.56	11.67	142.79	393.84	-43.24	467.48	444.53	22.96	20.363		
2,700.00	2,698.21	2,643.57	2,620.74	11.98	12.11	142.73	409.52	-45.76	486.56	462.75	23.80	20.442		
2,800.00	2,798.13	2,741.74	2,717.61	12.41	12.55	142.68	425.20	-48.29	505.63	480.98	24.65	20.513		
2,900.00	2,898.05	2,839.90	2,814.48	12.84	12.99	142.64	440.88	-50.81	524.70	499.20	25.50	20.577		
3,000.00	2,997.97	2,938.06	2,911.35	13.27	13.44	142.59	456.56	-53.34	543.77	517.42	26.35	20.635		
3,100.00	3,097.89	3,036.23	3,008.22	13.69	13.88	142.55	472.24	-55.86	562.85	535.64	27.21	20.688		
3,200.00	3,197.81	3,134.39	3,105.09	14.12	14.32	142.52	487.91	-58.39	581.92	553.86	28.06	20.736		
3,300.00	3,297.73	3,232.55	3,201.96	14.56	14.77	142.48	503.59	-60.92	601.00	572.07	28.92	20.780		
3,400.00	3,397.65	3,330.72	3,298.83	14.99	15.22	142.45	519.27	-63.44	620.07	590.29	29.78	20.820		
3,500.00	3,497.56	3,428.88	3,395.70	15.42	15.66	142.42	534.95	-65.97	639.15	608.50	30.64	20.857		
3,600.00	3,597.48	3,527.04	3,492.57	15.85	16.11	142.39	550.63	-68.49	658.22	626.71	31.51	20.891		
3,700.00	3,697.40	3,625.21	3,589.44	16.28	16.56	142.36	566.31	-71.02	677.30	644.92	32.37	20.923		
3,800.00	3,797.32	3,723.37	3,686.31	16.72	17.01	142.34	581.99	-73.54	696.37	663.13	33.24	20.952		
3,900.00	3,897.24	3,821.53	3,783.18	17.15	17.46	142.31	597.66	-76.07	715.45	681.34	34.10	20.979		
4,000.00	3,997.16	3,919.70	3,880.05	17.59	17.91	142.29	613.34	-78.59	734.52	699.55	34.97	21.004		
4,100.00	4,097.08	4,017.86	3,976.92	18.02	18.36	142.27	629.02	-81.12	753.60	717.76	35.84	21.027		
4,200.00	4,197.00	4,116.02	4,073.79	18.46	18.81	142.24	644.70	-83.64	772.67	735.96	36.71	21.049		
4,300.00	4,296.92	4,214.19	4,170.66	18.89	19.26	142.22	660.38	-86.17	791.75	754.17	37.58	21.070		
4,400.00	4,396.84	4,312.35	4,267.53	19.33	19.71	142.20	676.06	-88.69	810.82	772.37	38.45	21.088		
4,500.00	4,496.76	4,410.51	4,364.40	19.77	20.17	142.19	691.73	-91.22	829.90	790.58	39.32	21.106		
4,600.00	4,596.68	4,508.68	4,461.28	20.20	20.62	142.17	707.41	-93.74	848.97	808.78	40.19	21.123		
4,700.00	4,696.60	4,606.84	4,558.15	20.64	21.07	142.15	723.09	-96.27	868.05	826.99	41.06	21.138		
4,800.00	4,796.52	4,705.00	4,655.02	21.08	21.52	142.14	738.77	-98.79	887.13	845.19	41.94	21.153		
4,900.00	4,896.44	4,803.17	4,751.89	21.51	21.98	142.12	754.45	-101.32	906.20	863.39	42.81	21.167		
5,000.00	4,996.36	4,901.33	4,848.76	21.95	22.43	142.11	770.13	-103.85	925.28	881.59	43.69	21.180		
5,100.00	5,096.28	5,000.51	4,945.63	22.39	22.89	142.09	785.80	-106.37	944.35	899.79	44.57	21.190		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 4N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,196.19	5,097.66	5,042.50	22.83	23.34	142.08	801.48	-108.90	963.43	917.99	45.44	21.204		
5,300.00	5,296.11	5,204.18	5,139.37	23.27	23.83	142.07	817.16	-111.42	982.51	936.16	46.35	21.197		
5,400.00	5,396.03	5,306.02	5,236.24	23.71	24.30	142.05	832.84	-113.95	1,001.58	954.34	47.24	21.200		
5,500.00	5,495.95	5,407.85	5,333.11	24.14	24.77	142.04	848.52	-116.47	1,020.66	972.52	48.14	21.203		
5,600.00	5,595.87	5,509.69	5,429.98	24.58	25.25	142.03	864.20	-119.00	1,039.74	990.71	49.03	21.206		
5,700.00	5,695.79	5,588.47	5,526.85	25.02	25.61	142.02	879.88	-121.52	1,058.81	1,008.99	49.82	21.253		
5,800.00	5,795.71	5,686.64	5,623.72	25.46	26.07	142.01	895.55	-124.05	1,077.89	1,027.19	50.70	21.261		
5,900.00	5,895.63	5,784.80	5,720.59	25.90	26.52	142.00	911.23	-126.57	1,096.97	1,045.39	51.58	21.269		
6,000.00	5,995.55	5,882.96	5,817.46	26.34	26.98	141.99	926.91	-129.10	1,116.04	1,063.59	52.45	21.277		
6,100.00	6,095.47	5,981.13	5,914.33	26.78	27.43	141.98	942.59	-131.62	1,135.12	1,081.79	53.33	21.284		
6,200.00	6,195.39	6,079.29	6,011.20	27.22	27.89	141.97	958.27	-134.15	1,154.20	1,099.98	54.21	21.291		
6,300.00	6,295.31	6,177.45	6,108.07	27.66	28.34	141.96	973.95	-136.67	1,173.27	1,118.18	55.09	21.297		
6,400.00	6,395.23	6,275.62	6,204.94	28.10	28.80	141.95	989.62	-139.20	1,192.35	1,136.38	55.97	21.304		
6,500.00	6,495.02	6,373.72	6,301.75	28.54	29.26	105.49	1,005.29	-141.72	1,211.43	1,154.59	56.85	21.310		
6,600.00	6,593.09	6,470.46	6,397.22	28.98	29.71	95.40	1,020.74	-144.21	1,230.50	1,172.78	57.72	21.319		
6,700.00	6,687.01	6,563.51	6,489.04	29.41	30.14	92.61	1,035.61	-146.61	1,249.70	1,191.13	58.57	21.338		
6,800.00	6,774.46	6,665.37	6,589.38	29.83	30.61	91.76	1,051.73	-152.54	1,269.31	1,209.78	59.53	21.324		
6,900.00	6,853.31	6,786.00	6,705.48	30.26	31.16	91.74	1,069.72	-179.11	1,288.23	1,227.56	60.67	21.233		
7,000.00	6,921.60	6,921.43	6,827.40	30.76	31.75	92.08	1,087.68	-234.66	1,305.48	1,243.55	61.92	21.082		
7,100.00	6,977.66	7,073.94	6,947.45	31.38	32.39	92.63	1,104.10	-326.67	1,319.93	1,256.62	63.31	20.850		
7,200.00	7,020.10	7,243.58	7,051.56	32.17	33.29	93.17	1,116.54	-459.39	1,330.32	1,265.33	64.99	20.470		
7,300.00	7,047.88	7,426.11	7,120.94	33.13	34.77	93.47	1,122.13	-627.45	1,335.47	1,268.17	67.30	19.843		
7,400.00	7,060.32	7,602.24	7,140.95	34.27	36.71	93.39	1,119.47	-801.87	1,334.74	1,264.47	70.27	18.993		
7,500.00	7,060.70	7,702.18	7,140.52	35.56	38.02	93.44	1,116.01	-901.75	1,331.86	1,258.99	72.88	18.275		
7,600.00	7,060.27	7,802.14	7,140.08	37.02	39.48	93.45	1,112.55	-1,001.65	1,329.01	1,253.19	75.82	17.529		
7,700.00	7,059.83	7,902.10	7,139.65	38.64	41.10	93.46	1,109.09	-1,101.55	1,326.15	1,247.09	79.06	16.774		
7,800.00	7,059.40	8,002.06	7,139.22	40.40	42.84	93.47	1,105.63	-1,201.45	1,323.29	1,240.73	82.57	16.027		
7,900.00	7,058.97	8,102.02	7,138.78	42.28	44.69	93.47	1,102.17	-1,301.34	1,320.44	1,234.13	86.31	15.299		
8,000.00	7,058.53	8,201.98	7,138.35	44.27	46.65	93.48	1,098.71	-1,401.24	1,317.58	1,227.33	90.25	14.599		
8,100.00	7,058.10	8,301.94	7,137.92	46.35	48.69	93.49	1,095.26	-1,501.14	1,314.72	1,220.35	94.37	13.931		
8,200.00	7,057.66	8,401.90	7,137.48	48.50	50.81	93.50	1,091.80	-1,601.04	1,311.87	1,213.21	98.65	13.298		
8,300.00	7,057.23	8,501.85	7,137.05	50.73	53.00	93.50	1,088.34	-1,700.94	1,309.01	1,205.94	103.07	12.700		
8,400.00	7,056.80	8,601.81	7,136.62	53.02	55.24	93.51	1,084.88	-1,800.84	1,306.15	1,198.55	107.61	12.138		
8,500.00	7,056.36	8,701.77	7,136.18	55.36	57.55	93.52	1,081.42	-1,900.73	1,303.30	1,191.05	112.25	11.611		
8,600.00	7,055.93	8,801.73	7,135.75	57.74	59.89	93.53	1,077.96	-2,000.63	1,300.44	1,183.46	116.99	11.116		
8,700.00	7,055.49	8,901.69	7,135.32	60.17	62.29	93.54	1,074.50	-2,100.53	1,297.59	1,175.78	121.80	10.653		
8,800.00	7,055.06	9,001.65	7,134.88	62.63	64.71	93.54	1,071.04	-2,200.43	1,294.73	1,168.04	126.69	10.219		
8,900.00	7,054.63	9,101.61	7,134.45	65.13	67.17	93.55	1,067.58	-2,300.33	1,291.87	1,160.23	131.65	9.813		
9,000.00	7,054.19	9,201.57	7,134.01	67.66	69.66	93.56	1,064.13	-2,400.22	1,289.02	1,152.36	136.66	9.432		
9,100.00	7,053.76	9,301.53	7,133.58	70.21	72.18	93.57	1,060.67	-2,500.12	1,286.16	1,144.44	141.72	9.075		
9,200.00	7,053.32	9,401.49	7,133.15	72.78	74.72	93.57	1,057.21	-2,600.02	1,283.30	1,136.47	146.83	8.740		
9,300.00	7,052.89	9,501.44	7,132.71	75.38	77.28	93.58	1,053.75	-2,699.92	1,280.45	1,128.47	151.98	8.425		
9,400.00	7,052.46	9,601.40	7,132.28	77.99	79.86	93.59	1,050.29	-2,799.82	1,277.59	1,120.42	157.17	8.129		
9,500.00	7,052.02	9,701.36	7,131.85	80.62	82.46	93.60	1,046.83	-2,899.72	1,274.73	1,112.34	162.39	7.850		
9,600.00	7,051.59	9,801.32	7,131.41	83.26	85.07	93.61	1,043.37	-2,999.61	1,271.88	1,104.23	167.64	7.587		
9,700.00	7,051.15	9,901.28	7,130.98	85.92	87.70	93.62	1,039.91	-3,099.51	1,269.02	1,096.10	172.92	7.339		
9,800.00	7,050.72	10,001.24	7,130.55	88.59	90.35	93.62	1,036.45	-3,199.41	1,266.17	1,087.94	178.23	7.104		
9,900.00	7,050.29	10,101.20	7,130.11	91.28	93.00	93.63	1,032.99	-3,299.31	1,263.31	1,079.75	183.56	6.882		
10,000.00	7,049.85	10,201.16	7,129.68	93.97	95.66	93.64	1,029.54	-3,399.21	1,260.45	1,071.55	188.91	6.672		
10,100.00	7,049.42	10,301.12	7,129.24	96.67	98.34	93.65	1,026.08	-3,499.11	1,257.60	1,063.32	194.27	6.473		
10,200.00	7,048.98	10,401.08	7,128.81	99.38	101.03	93.66	1,022.62	-3,599.00	1,254.74	1,055.08	199.66	6.284		
10,300.00	7,048.55	10,501.04	7,128.38	102.10	103.72	93.66	1,019.16	-3,698.90	1,251.89	1,046.82	205.06	6.105		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	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	7,048.12	10,600.99	7,127.94	104.83	106.42	93.67	1,015.70	-3,798.80	1,249.03	1,038.55	210.48	5.934		
10,500.00	7,047.68	10,700.95	7,127.51	107.56	109.13	93.68	1,012.24	-3,898.70	1,246.17	1,030.26	215.91	5.772		
10,600.00	7,047.25	10,800.91	7,127.08	110.30	111.85	93.69	1,008.78	-3,998.60	1,243.32	1,021.96	221.36	5.617		
10,700.00	7,046.81	10,900.87	7,126.64	113.05	114.57	93.70	1,005.32	-4,098.49	1,240.46	1,013.64	226.82	5.469		
10,800.00	7,046.38	11,000.83	7,126.21	115.80	117.30	93.71	1,001.86	-4,198.39	1,237.61	1,005.32	232.28	5.328		
10,900.00	7,045.95	11,100.79	7,125.78	118.55	120.03	93.72	998.41	-4,298.29	1,234.75	996.99	237.76	5.193		
11,000.00	7,045.51	11,200.75	7,125.34	121.31	122.77	93.72	994.95	-4,398.19	1,231.89	988.64	243.25	5.064		
11,100.00	7,045.08	11,300.71	7,124.91	124.08	125.51	93.73	991.49	-4,498.09	1,229.04	980.29	248.75	4.941		
11,200.00	7,044.64	11,400.67	7,124.48	126.85	128.26	93.74	988.03	-4,597.99	1,226.18	971.93	254.25	4.823		
11,300.00	7,044.21	11,500.63	7,124.04	129.62	131.01	93.75	984.57	-4,697.88	1,223.33	963.56	259.77	4.709		
11,400.00	7,043.78	11,600.58	7,123.61	132.40	133.77	93.76	981.11	-4,797.78	1,220.47	955.18	265.29	4.601		
11,500.00	7,043.34	11,700.54	7,123.17	135.18	136.53	93.77	977.65	-4,897.68	1,217.61	946.80	270.82	4.496		
11,600.00	7,042.91	11,800.50	7,122.74	137.96	139.29	93.78	974.19	-4,997.58	1,214.76	938.41	276.35	4.396		
11,700.00	7,042.47	11,900.46	7,122.31	140.75	142.06	93.79	970.73	-5,097.48	1,211.90	930.01	281.89	4.299		
11,800.00	7,042.04	12,000.42	7,121.87	143.54	144.83	93.79	967.28	-5,197.38	1,209.05	921.61	287.44	4.206		
11,900.00	7,041.61	12,100.38	7,121.44	146.33	147.61	93.80	963.82	-5,297.27	1,206.19	913.21	292.99	4.117		
12,000.00	7,041.17	12,200.34	7,121.01	149.13	150.38	93.81	960.36	-5,397.17	1,203.34	904.79	298.54	4.031		
12,100.00	7,040.74	12,300.30	7,120.57	151.92	153.16	93.82	956.90	-5,497.07	1,200.48	896.38	304.10	3.948		
12,200.00	7,040.30	12,400.26	7,120.14	154.72	155.94	93.83	953.44	-5,596.97	1,197.63	887.96	309.67	3.867		
12,300.00	7,039.87	12,500.22	7,119.71	157.52	158.72	93.84	949.98	-5,696.87	1,194.77	879.53	315.24	3.790		
12,400.00	7,039.44	12,600.17	7,119.27	160.33	161.51	93.85	946.52	-5,796.76	1,191.91	871.10	320.81	3.715		
12,500.00	7,039.00	12,700.13	7,118.84	163.13	164.30	93.86	943.06	-5,896.66	1,189.06	862.67	326.39	3.643		
12,600.00	7,038.57	12,800.09	7,118.40	165.94	167.09	93.87	939.60	-5,996.56	1,186.20	854.23	331.97	3.573		
12,700.00	7,038.13	12,900.05	7,117.97	168.75	169.88	93.88	936.14	-6,096.46	1,183.35	845.79	337.56	3.506		
12,800.00	7,037.70	13,000.01	7,117.54	171.56	172.67	93.89	932.69	-6,196.36	1,180.49	837.35	343.15	3.440		
12,900.00	7,037.27	13,100.03	7,117.10	174.37	175.47	93.90	929.23	-6,296.26	1,177.64	828.90	348.74	3.377		
13,000.00	7,036.83	13,200.07	7,116.67	177.19	178.27	93.91	925.77	-6,396.15	1,174.78	820.45	354.34	3.315		
13,100.00	7,036.40	13,300.11	7,116.24	180.00	181.07	93.92	922.31	-6,496.05	1,171.93	811.99	359.94	3.256		
13,200.00	7,035.96	13,400.15	7,115.80	182.82	183.87	93.92	918.85	-6,595.95	1,169.07	803.53	365.54	3.198		
13,300.00	7,035.53	13,500.19	7,115.37	185.64	186.68	93.93	915.39	-6,695.85	1,166.22	795.07	371.14	3.142		
13,400.00	7,035.10	13,600.24	7,114.94	188.46	189.48	93.94	911.93	-6,795.75	1,163.36	786.61	376.75	3.088		
13,500.00	7,034.66	13,700.28	7,114.50	191.28	192.29	93.95	908.47	-6,895.65	1,160.51	778.15	382.36	3.035		
13,600.00	7,034.23	13,800.32	7,114.07	194.10	195.09	93.96	905.01	-6,995.54	1,157.65	769.68	387.97	2.984		
13,700.00	7,033.79	13,900.36	7,113.64	196.92	197.90	93.97	901.56	-7,095.44	1,154.80	761.21	393.58	2.934		
13,800.00	7,033.36	14,000.40	7,113.20	199.74	200.71	93.98	898.10	-7,195.34	1,151.94	752.74	399.20	2.886		
13,900.00	7,032.93	14,100.44	7,112.77	202.57	203.52	93.99	894.64	-7,295.24	1,149.09	744.27	404.82	2.839		
14,000.00	7,032.49	14,200.48	7,112.33	205.39	206.34	94.00	891.18	-7,395.14	1,146.23	735.80	410.44	2.793		
14,100.00	7,032.06	14,300.52	7,111.90	208.22	209.15	94.01	887.72	-7,495.03	1,143.38	727.32	416.06	2.748		
14,200.00	7,031.62	14,400.56	7,111.47	211.05	211.96	94.02	884.26	-7,594.93	1,140.52	718.84	421.68	2.705		
14,300.00	7,031.19	14,500.60	7,111.03	213.87	214.78	94.03	880.80	-7,694.83	1,137.67	710.36	427.30	2.662		
14,400.00	7,030.76	14,600.64	7,110.60	216.70	217.59	94.04	877.34	-7,794.73	1,134.81	701.88	432.93	2.621		
14,500.00	7,030.32	14,700.69	7,110.17	219.53	220.41	94.05	873.88	-7,894.63	1,131.96	693.40	438.56	2.581		
14,600.00	7,029.89	14,800.73	7,109.73	222.36	223.23	94.06	870.42	-7,994.53	1,129.10	684.92	444.18	2.542		
14,700.00	7,029.45	14,900.77	7,109.30	225.19	226.05	94.07	866.97	-8,094.42	1,126.25	676.43	449.81	2.504		
14,800.00	7,029.02	14,969.16	7,109.00	228.03	227.97	94.08	864.55	-8,164.31	1,123.79	669.13	454.67	2.472		
14,802.05	7,029.01	14,969.16	7,109.00	228.08	227.97	94.08	864.55	-8,164.31	1,123.79	669.07	454.72	2.471		
14,805.04	7,029.00	14,969.16	7,109.00	228.17	227.97	94.08	864.55	-8,164.31	1,123.80	669.00	454.80	2.471 SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	3.28	3.28	0.00	20.03	0.00	20.03					
100.00	100.00	100.00	100.00	3.28	3.28	0.00	20.03	0.00	20.03	13.46	6.57	3.049		
200.00	200.00	200.00	200.00	3.34	3.34	0.00	20.03	0.00	20.03	13.36	6.67	3.002		
300.00	300.00	300.00	300.00	3.44	3.44	0.00	20.03	0.00	20.03	13.14	6.89	2.908		
400.00	400.00	400.00	400.00	3.60	3.60	0.00	20.03	0.00	20.03	12.83	7.21	2.780 CC		
500.00	499.98	499.98	499.98	3.80	3.81	144.67	20.03	0.00	21.43	13.83	7.60	2.819		
600.00	599.90	600.03	599.95	4.02	4.04	146.29	20.03	-1.60	24.60	16.54	8.06	3.052		
700.00	699.82	700.08	699.87	4.28	4.30	145.74	20.03	-4.10	27.75	19.17	8.58	3.233		
800.00	799.74	800.13	799.79	4.57	4.59	145.31	20.03	-6.60	30.89	21.74	9.16	3.374		
900.00	899.66	900.18	899.71	4.88	4.90	144.96	20.03	-9.10	34.04	24.26	9.78	3.482		
1,000.00	999.58	1,000.23	999.63	5.21	5.23	144.66	20.03	-11.59	37.19	26.75	10.44	3.564		
1,100.00	1,099.50	1,100.28	1,099.54	5.55	5.58	144.42	20.03	-14.09	40.34	29.21	11.12	3.626		
1,200.00	1,199.42	1,200.33	1,199.46	5.91	5.94	144.20	20.03	-16.59	43.49	31.65	11.84	3.674		
1,300.00	1,299.34	1,300.38	1,299.38	6.28	6.31	144.02	20.03	-19.09	46.64	34.07	12.57	3.709		
1,400.00	1,399.26	1,400.43	1,399.30	6.66	6.68	143.86	20.03	-21.58	49.79	36.46	13.33	3.736		
1,500.00	1,499.18	1,500.48	1,499.22	7.04	7.07	143.72	20.03	-24.08	52.94	38.85	14.09	3.756		
1,600.00	1,599.10	1,600.53	1,599.14	7.43	7.46	143.59	20.03	-26.58	56.09	41.22	14.88	3.771		
1,700.00	1,699.01	1,700.58	1,699.06	7.83	7.85	143.48	20.03	-29.08	59.24	43.58	15.67	3.782		
1,800.00	1,798.93	1,800.63	1,798.98	8.23	8.26	143.38	20.03	-31.57	62.40	45.93	16.47	3.789		
1,900.00	1,898.85	1,900.68	1,898.90	8.64	8.66	143.29	20.03	-34.07	65.55	48.28	17.27	3.795		
2,000.00	1,998.77	2,000.73	1,998.82	9.05	9.07	143.21	20.03	-36.57	68.70	50.61	18.09	3.798		
2,100.00	2,098.69	2,100.78	2,098.73	9.46	9.48	143.13	20.03	-39.07	71.85	52.94	18.91	3.800		
2,200.00	2,198.61	2,200.83	2,198.65	9.88	9.89	143.06	20.03	-41.56	75.01	55.27	19.74	3.801		
2,300.00	2,298.53	2,300.88	2,298.57	10.30	10.31	143.00	20.03	-44.06	78.16	57.59	20.57	3.800		
2,400.00	2,398.45	2,400.93	2,398.49	10.72	10.72	142.94	20.03	-46.56	81.31	59.91	21.40	3.800		
2,500.00	2,498.37	2,500.98	2,498.41	11.14	11.14	142.89	20.03	-49.06	84.46	62.23	22.24	3.798		
2,600.00	2,598.29	2,601.03	2,598.33	11.56	11.56	142.84	20.03	-51.55	87.62	64.54	23.08	3.796		
2,700.00	2,698.21	2,701.08	2,698.25	11.98	11.99	142.79	20.03	-54.05	90.77	66.85	23.92	3.794		
2,800.00	2,798.13	2,801.13	2,798.17	12.41	12.41	142.75	20.03	-56.55	93.92	69.15	24.77	3.792		
2,900.00	2,898.05	2,901.18	2,898.09	12.84	12.84	142.71	20.03	-59.05	97.08	71.46	25.62	3.789		
3,000.00	2,997.97	3,001.23	2,998.01	13.27	13.26	142.67	20.03	-61.54	100.23	73.76	26.47	3.787		
3,100.00	3,097.89	3,101.28	3,097.93	13.69	13.69	142.63	20.03	-64.04	103.38	76.06	27.32	3.784		
3,200.00	3,197.81	3,201.33	3,197.84	14.12	14.12	142.60	20.03	-66.54	106.54	78.36	28.18	3.781		
3,300.00	3,297.73	3,301.38	3,297.76	14.56	14.54	142.57	20.03	-69.03	109.69	80.66	29.03	3.778		
3,400.00	3,397.65	3,401.43	3,397.68	14.99	14.97	142.54	20.03	-71.53	112.84	82.95	29.89	3.775		
3,500.00	3,497.56	3,501.48	3,497.60	15.42	15.40	142.51	20.03	-74.03	116.00	85.25	30.75	3.772		
3,600.00	3,597.48	3,601.53	3,597.52	15.85	15.83	142.48	20.03	-76.53	119.15	87.54	31.61	3.770		
3,700.00	3,697.40	3,701.58	3,697.44	16.28	16.26	142.46	20.03	-79.02	122.30	89.83	32.47	3.767		
3,800.00	3,797.32	3,801.63	3,797.36	16.72	16.69	142.43	20.03	-81.52	125.46	92.12	33.33	3.764		
3,900.00	3,897.24	3,901.68	3,897.28	17.15	17.13	142.41	20.03	-84.02	128.61	94.41	34.20	3.761		
4,000.00	3,997.16	4,001.73	3,997.20	17.59	17.56	142.39	20.03	-86.52	131.76	96.70	35.06	3.758		
4,100.00	4,097.08	4,101.78	4,097.12	18.02	17.99	142.37	20.03	-89.01	134.92	98.99	35.92	3.756		
4,200.00	4,197.00	4,201.83	4,197.03	18.46	18.42	142.35	20.03	-91.51	138.07	101.28	36.79	3.753		
4,300.00	4,296.92	4,301.88	4,296.95	18.89	18.86	142.33	20.03	-94.01	141.22	103.57	37.66	3.750		
4,400.00	4,396.84	4,401.93	4,396.87	19.33	19.29	142.31	20.03	-96.51	144.38	105.85	38.52	3.748		
4,500.00	4,496.76	4,501.97	4,496.79	19.77	19.73	142.29	20.03	-99.00	147.53	108.14	39.39	3.745		
4,600.00	4,596.68	4,602.02	4,596.71	20.20	20.16	142.27	20.03	-101.50	150.68	110.43	40.26	3.743		
4,700.00	4,696.60	4,702.07	4,696.63	20.64	20.59	142.26	20.03	-104.00	153.84	112.71	41.13	3.741		
4,800.00	4,796.52	4,802.12	4,796.55	21.08	21.03	142.24	20.03	-106.50	156.99	115.00	42.00	3.738		
4,900.00	4,896.44	4,902.17	4,896.47	21.51	21.46	142.23	20.03	-108.99	160.14	117.28	42.87	3.736		
5,000.00	4,996.36	5,002.22	4,996.39	21.95	21.90	142.21	20.03	-111.49	163.30	119.56	43.74	3.734		
5,100.00	5,096.28	5,102.27	5,096.31	22.39	22.33	142.20	20.03	-113.99	166.45	121.85	44.61	3.732		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16C-M - OH - PLAN #1												Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	5,196.19	5,202.32	5,196.23	22.83	22.77	142.19	20.03	-116.49	169.61	124.13	45.48	3.730	
5,300.00	5,296.11	5,302.37	5,296.14	23.27	23.21	142.17	20.03	-118.98	172.76	126.41	46.35	3.727	
5,400.00	5,396.03	5,402.42	5,396.06	23.71	23.64	142.16	20.03	-121.48	175.91	128.69	47.22	3.725	
5,500.00	5,495.95	5,502.47	5,495.98	24.14	24.08	142.15	20.03	-123.98	179.07	130.98	48.09	3.723	
5,600.00	5,595.87	5,602.52	5,595.90	24.58	24.51	142.14	20.03	-126.48	182.22	133.26	48.96	3.722	
5,700.00	5,695.79	5,702.57	5,695.82	25.02	24.95	142.13	20.03	-128.97	185.37	135.54	49.84	3.720	
5,800.00	5,795.71	5,802.62	5,795.74	25.46	25.39	142.12	20.03	-131.47	188.53	137.82	50.71	3.718	
5,900.00	5,895.63	5,902.67	5,895.66	25.90	25.82	142.11	20.03	-133.97	191.68	140.10	51.58	3.716	
6,000.00	5,995.55	6,002.72	5,995.58	26.34	26.26	142.10	20.03	-136.47	194.83	142.38	52.45	3.714	
6,100.00	6,095.47	6,102.77	6,095.50	26.78	26.70	142.09	20.03	-138.96	197.99	144.66	53.33	3.713	
6,200.00	6,195.39	6,202.82	6,195.42	27.22	27.13	142.08	20.03	-141.46	201.14	146.94	54.20	3.711	
6,300.00	6,295.31	6,302.87	6,295.33	27.66	27.57	142.07	20.03	-143.96	204.30	149.22	55.08	3.709	
6,400.00	6,395.23	6,402.92	6,395.25	28.10	28.01	142.06	20.03	-146.46	207.45	151.50	55.95	3.708	
6,500.00	6,495.02	6,496.96	6,495.11	28.54	28.42	106.92	20.03	-148.95	210.64	153.84	56.80	3.709	
6,600.00	6,593.09	6,598.18	6,595.89	28.98	28.87	100.39	19.92	-157.28	214.16	156.49	57.67	3.714	
6,700.00	6,687.01	6,701.41	6,696.01	29.41	29.33	100.46	19.49	-181.90	217.83	159.30	58.53	3.722	
6,800.00	6,774.46	6,806.47	6,792.48	29.83	29.80	101.65	18.73	-223.22	221.47	162.15	59.32	3.734	
6,900.00	6,853.31	6,913.32	6,882.26	30.26	30.30	103.08	17.64	-280.91	224.87	164.84	60.02	3.746	
7,000.00	6,921.60	7,021.82	6,962.26	30.76	30.86	104.46	16.25	-354.00	227.81	167.11	60.69	3.753	
7,100.00	6,977.66	7,131.76	7,029.49	31.38	31.53	105.66	14.59	-440.81	230.08	168.62	61.46	3.743	
7,200.00	7,020.10	7,242.87	7,081.24	32.17	32.38	106.61	12.69	-538.94	231.51	169.00	62.51	3.703	
7,300.00	7,047.88	7,354.78	7,115.35	33.13	33.44	107.27	10.63	-645.36	231.96	167.92	64.03	3.623	
7,400.00	7,060.32	7,467.11	7,130.34	34.27	34.70	107.61	8.46	-756.51	231.34	165.22	66.12	3.499	
7,500.00	7,060.70	7,570.57	7,130.74	35.56	36.04	107.73	6.44	-859.94	230.06	161.45	68.61	3.353	
7,600.00	7,060.27	7,670.56	7,130.37	37.02	37.50	107.85	4.48	-959.91	228.79	157.41	71.37	3.206	
7,700.00	7,059.83	7,770.55	7,130.01	38.64	39.10	107.97	2.53	-1,059.88	227.52	153.09	74.43	3.057	
7,800.00	7,059.40	7,870.54	7,129.64	40.40	40.85	108.09	0.57	-1,159.85	226.25	148.51	77.74	2.910	
7,900.00	7,058.97	7,970.53	7,129.27	42.28	42.71	108.22	-1.38	-1,259.83	224.98	143.70	81.27	2.768	
8,000.00	7,058.53	8,070.52	7,128.91	44.27	44.68	108.34	-3.34	-1,359.80	223.71	138.71	85.00	2.632	
8,100.00	7,058.10	8,170.51	7,128.54	46.35	46.74	108.47	-5.29	-1,459.77	222.45	133.55	88.90	2.502	
8,200.00	7,057.66	8,270.50	7,128.17	48.50	48.88	108.60	-7.25	-1,559.74	221.18	128.24	92.94	2.380	
8,300.00	7,057.23	8,370.49	7,127.81	50.73	51.09	108.72	-9.20	-1,659.71	219.92	122.81	97.11	2.265	
8,400.00	7,056.80	8,470.48	7,127.44	53.02	53.36	108.86	-11.16	-1,759.68	218.65	117.27	101.38	2.157	
8,500.00	7,056.36	8,570.47	7,127.08	55.36	55.69	108.99	-13.12	-1,859.65	217.39	111.64	105.75	2.056	
8,600.00	7,055.93	8,670.47	7,126.71	57.74	58.06	109.12	-15.07	-1,959.62	216.13	105.93	110.20	1.961	
8,700.00	7,055.49	8,770.46	7,126.34	60.17	60.48	109.26	-17.03	-2,059.59	214.87	100.15	114.72	1.873	
8,800.00	7,055.06	8,870.45	7,125.98	62.63	62.93	109.39	-18.98	-2,159.56	213.61	94.31	119.30	1.790	
8,900.00	7,054.63	8,970.44	7,125.61	65.13	65.41	109.53	-20.94	-2,259.54	212.36	88.42	123.94	1.713	
9,000.00	7,054.19	9,070.43	7,125.25	67.66	67.92	109.67	-22.89	-2,359.51	211.10	82.48	128.62	1.641	
9,100.00	7,053.76	9,170.42	7,124.88	70.21	70.46	109.82	-24.85	-2,459.48	209.85	76.51	133.34	1.574	
9,200.00	7,053.32	9,270.41	7,124.51	72.78	73.02	109.96	-26.80	-2,559.45	208.59	70.50	138.09	1.511	
9,300.00	7,052.89	9,370.40	7,124.15	75.38	75.61	110.11	-28.76	-2,659.42	207.34	64.47	142.88	1.451 Level 3	
9,400.00	7,052.46	9,470.39	7,123.78	77.99	78.21	110.25	-30.71	-2,759.39	206.09	58.41	147.68	1.396 Level 3	
9,500.00	7,052.02	9,570.38	7,123.41	80.62	80.83	110.40	-32.67	-2,859.36	204.84	52.33	152.51	1.343 Level 3	
9,600.00	7,051.59	9,670.37	7,123.05	83.26	83.46	110.55	-34.62	-2,959.33	203.60	46.24	157.36	1.294 Level 3	
9,700.00	7,051.15	9,770.36	7,122.68	85.92	86.11	110.71	-36.58	-3,059.30	202.35	40.13	162.22	1.247 Level 2	
9,800.00	7,050.72	9,870.35	7,122.32	88.59	88.77	110.86	-38.54	-3,159.27	201.11	34.01	167.09	1.204 Level 2	
9,900.00	7,050.29	9,970.35	7,121.95	91.28	91.44	111.02	-40.49	-3,259.25	199.86	27.89	171.98	1.162 Level 2	
10,000.00	7,049.85	10,070.34	7,121.58	93.97	94.13	111.18	-42.45	-3,359.22	198.62	21.76	176.86	1.123 Level 2	
10,100.00	7,049.42	10,170.33	7,121.22	96.67	96.82	111.34	-44.40	-3,459.19	197.38	15.62	181.76	1.086 Level 2	
10,200.00	7,048.98	10,270.32	7,120.85	99.38	99.52	111.50	-46.36	-3,559.16	196.14	9.49	186.66	1.051 Level 2	
10,300.00	7,048.55	10,370.31	7,120.49	102.10	102.23	111.66	-48.31	-3,659.13	194.91	3.35	191.56	1.017 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HARVESTERS STATE 5N-16C-M - OH - PLAN #1													Offset Site Error:	0.00 ft
Survey Program: 0-MWD+IFR1													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,048.12	10,470.30	7,120.12	104.83	104.95	111.83	-50.27	-3,759.10	193.67	-2.79	196.46	0.986	Level 1	
10,500.00	7,047.68	10,570.29	7,119.75	107.56	107.67	112.00	-52.22	-3,859.07	192.44	-8.92	201.36	0.956	Level 1	
10,600.00	7,047.25	10,670.28	7,119.39	110.30	110.41	112.17	-54.18	-3,959.04	191.21	-15.05	206.25	0.927	Level 1	
10,700.00	7,046.81	10,770.27	7,119.02	113.05	113.14	112.34	-56.13	-4,059.01	189.98	-21.17	211.14	0.900	Level 1	
10,800.00	7,046.38	10,870.26	7,118.66	115.80	115.89	112.52	-58.09	-4,158.98	188.75	-27.28	216.03	0.874	Level 1	
10,900.00	7,045.95	10,970.25	7,118.29	118.55	118.63	112.70	-60.04	-4,258.96	187.52	-33.39	220.91	0.849	Level 1	
11,000.00	7,045.51	11,070.24	7,117.92	121.31	121.39	112.88	-62.00	-4,358.93	186.30	-39.48	225.78	0.825	Level 1	
11,100.00	7,045.08	11,170.23	7,117.56	124.08	124.15	113.06	-63.96	-4,458.90	185.07	-45.57	230.64	0.802	Level 1	
11,200.00	7,044.64	11,270.23	7,117.19	126.85	126.91	113.25	-65.91	-4,558.87	183.85	-51.64	235.49	0.781	Level 1	
11,300.00	7,044.21	11,370.22	7,116.82	129.62	129.67	113.43	-67.87	-4,658.84	182.63	-57.70	240.33	0.760	Level 1	
11,400.00	7,043.78	11,470.21	7,116.46	132.40	132.44	113.62	-69.82	-4,758.81	181.42	-63.74	245.16	0.740	Level 1	
11,500.00	7,043.34	11,570.20	7,116.09	135.18	135.22	113.82	-71.78	-4,858.78	180.20	-69.77	249.97	0.721	Level 1	
11,600.00	7,042.91	11,670.19	7,115.73	137.96	137.99	114.01	-73.73	-4,958.75	178.99	-75.79	254.77	0.703	Level 1	
11,700.00	7,042.47	11,770.18	7,115.36	140.75	140.77	114.21	-75.69	-5,058.72	177.78	-81.78	259.56	0.685	Level 1	
11,800.00	7,042.04	11,870.17	7,114.99	143.54	143.56	114.41	-77.64	-5,158.69	176.57	-87.76	264.33	0.668	Level 1	
11,900.00	7,041.61	11,970.16	7,114.63	146.33	146.34	114.61	-79.60	-5,258.67	175.36	-93.72	269.08	0.652	Level 1	
12,000.00	7,041.17	12,070.15	7,114.26	149.13	149.13	114.82	-81.55	-5,358.64	174.16	-99.66	273.81	0.636	Level 1	
12,100.00	7,040.74	12,170.14	7,113.90	151.92	151.92	115.03	-83.51	-5,458.61	172.96	-105.57	278.53	0.621	Level 1	
12,200.00	7,040.30	12,270.13	7,113.53	154.72	154.71	115.24	-85.46	-5,558.58	171.76	-111.47	283.22	0.606	Level 1	
12,300.00	7,039.87	12,370.12	7,113.16	157.52	157.51	115.46	-87.42	-5,658.55	170.56	-117.34	287.90	0.592	Level 1	
12,400.00	7,039.44	12,470.11	7,112.80	160.33	160.30	115.67	-89.38	-5,758.52	169.36	-123.18	292.55	0.579	Level 1	
12,500.00	7,039.00	12,570.11	7,112.43	163.13	163.10	115.89	-91.33	-5,858.49	168.17	-129.00	297.18	0.566	Level 1	
12,600.00	7,038.57	12,670.10	7,112.06	165.94	165.90	116.12	-93.29	-5,958.46	166.98	-134.80	301.78	0.553	Level 1	
12,700.00	7,038.13	12,770.09	7,111.70	168.75	168.71	116.35	-95.24	-6,058.43	165.79	-140.56	306.36	0.541	Level 1	
12,800.00	7,037.70	12,870.08	7,111.33	171.56	171.51	116.58	-97.20	-6,158.40	164.61	-146.30	310.91	0.529	Level 1	
12,900.00	7,037.27	12,970.07	7,110.97	174.37	174.32	116.81	-99.15	-6,258.38	163.43	-152.01	315.44	0.518	Level 1	
13,000.00	7,036.83	13,070.06	7,110.60	177.17	177.12	117.05	-101.11	-6,358.35	162.25	-157.69	319.94	0.507	Level 1	
13,100.00	7,036.40	13,170.05	7,110.23	180.00	179.93	117.29	-103.06	-6,458.32	161.07	-163.33	324.40	0.497	Level 1	
13,200.00	7,035.96	13,270.04	7,109.87	182.82	182.74	117.53	-105.02	-6,558.29	159.90	-168.94	328.84	0.486	Level 1	
13,300.00	7,035.53	13,370.03	7,109.50	185.64	185.55	117.78	-106.97	-6,658.26	158.73	-174.52	333.25	0.476	Level 1	
13,400.00	7,035.10	13,470.02	7,109.14	188.46	188.37	118.03	-108.93	-6,758.23	157.56	-180.06	337.62	0.467	Level 1	
13,500.00	7,034.66	13,570.01	7,108.77	191.28	191.18	118.29	-110.88	-6,858.20	156.40	-185.56	341.96	0.457	Level 1	
13,600.00	7,034.23	13,670.00	7,108.40	194.10	194.00	118.55	-112.84	-6,958.17	155.24	-191.03	346.26	0.448	Level 1	
13,700.00	7,033.79	13,769.99	7,108.04	196.92	196.81	118.81	-114.80	-7,058.14	154.08	-196.45	350.53	0.440	Level 1	
13,800.00	7,033.36	13,869.98	7,107.67	199.74	199.63	119.08	-116.75	-7,158.11	152.92	-201.84	354.76	0.431	Level 1	
13,900.00	7,032.93	13,969.97	7,107.30	202.57	202.45	119.35	-118.71	-7,258.08	151.77	-207.18	358.95	0.423	Level 1	
14,000.00	7,032.49	14,069.96	7,106.94	205.39	205.27	119.63	-120.66	-7,358.06	150.63	-212.47	363.10	0.415	Level 1	
14,100.00	7,032.06	14,169.95	7,106.57	208.22	208.09	119.91	-122.62	-7,458.03	149.48	-217.73	367.21	0.407	Level 1	
14,200.00	7,031.62	14,269.94	7,106.21	211.05	210.91	120.19	-124.57	-7,558.00	148.34	-222.93	371.27	0.400	Level 1	
14,300.00	7,031.19	14,369.93	7,105.84	213.87	213.73	120.48	-126.53	-7,657.97	147.20	-228.08	375.29	0.392	Level 1	
14,400.00	7,030.76	14,469.92	7,105.47	216.70	216.56	120.77	-128.48	-7,757.94	146.07	-233.19	379.26	0.385	Level 1	
14,500.00	7,030.32	14,569.91	7,105.11	219.53	219.38	121.07	-130.44	-7,857.91	144.94	-238.24	383.18	0.378	Level 1	
14,600.00	7,029.89	14,669.90	7,104.74	222.36	222.20	121.37	-132.39	-7,957.88	143.82	-243.24	387.06	0.372	Level 1	
14,700.00	7,029.45	14,769.89	7,104.38	225.19	225.03	121.68	-134.35	-8,057.85	142.69	-248.18	390.88	0.365	Level 1	
14,800.00	7,029.02	14,869.88	7,104.01	228.03	227.85	121.99	-136.30	-8,157.82	141.58	-253.07	394.65	0.359	Level 1	
14,805.04	7,029.00	14,874.93	7,103.99	228.17	228.00	122.00	-136.40	-8,162.86	141.52	-253.31	394.84	0.358	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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-115.32	-4,255.63	-8,994.87	9,950.97				
100.00	100.00	39.00	100.00	3.28	3.35	-115.32	-4,255.63	-8,994.87	9,950.79	9,944.15	6.63	1,499.827	
200.00	200.00	139.00	200.00	3.34	4.52	-115.32	-4,255.63	-8,994.87	9,950.79	9,942.93	7.85	1,266.814	
300.00	300.00	239.00	300.00	3.44	7.37	-115.32	-4,255.63	-8,994.87	9,950.79	9,939.97	10.81	920.243	
400.00	400.00	339.00	400.00	3.60	10.61	-115.32	-4,255.63	-8,994.87	9,950.79	9,936.57	14.21	700.162	
500.00	499.98	438.98	499.98	3.80	13.97	26.50	-4,255.63	-8,994.87	9,949.22	9,931.46	17.77	559.985	
600.00	599.90	538.90	599.90	4.02	17.38	26.51	-4,255.63	-8,994.87	9,945.67	9,924.26	21.40	464.713	
700.00	699.82	638.82	699.82	4.28	20.82	26.52	-4,255.63	-8,994.87	9,942.07	9,916.98	25.09	396.180	
800.00	799.74	738.74	799.74	4.57	24.27	26.53	-4,255.63	-8,994.87	9,938.48	9,909.65	28.83	344.714	
900.00	899.66	838.66	899.66	4.88	27.73	26.54	-4,255.63	-8,994.87	9,934.89	9,902.29	32.60	304.752	
1,000.00	999.58	938.58	999.58	5.21	31.19	26.55	-4,255.63	-8,994.87	9,931.30	9,894.91	36.39	272.883	
1,100.00	1,099.50	1,038.50	1,099.50	5.55	34.66	26.57	-4,255.63	-8,994.87	9,927.71	9,887.50	40.21	246.907	
1,200.00	1,199.42	1,138.42	1,199.42	5.91	38.14	26.58	-4,255.63	-8,994.87	9,924.12	9,880.08	44.04	225.350	
1,300.00	1,299.34	1,238.34	1,299.34	6.28	41.61	26.59	-4,255.63	-8,994.87	9,920.53	9,872.65	47.88	207.186	
1,400.00	1,399.26	1,338.26	1,399.26	6.66	45.09	26.60	-4,255.63	-8,994.87	9,916.94	9,865.21	51.74	191.682	
1,500.00	1,499.18	1,438.18	1,499.18	7.04	48.57	26.61	-4,255.63	-8,994.87	9,913.35	9,857.75	55.60	178.299	
1,600.00	1,599.10	1,538.10	1,599.10	7.43	52.05	26.62	-4,255.63	-8,994.87	9,909.77	9,850.30	59.47	166.633	
1,700.00	1,699.01	1,638.01	1,699.01	7.83	55.53	26.63	-4,255.63	-8,994.87	9,906.18	9,842.83	63.35	156.378	
1,800.00	1,798.93	1,737.93	1,798.93	8.23	59.02	26.64	-4,255.63	-8,994.87	9,902.59	9,835.36	67.23	147.294	
1,900.00	1,898.85	1,837.85	1,898.85	8.64	62.50	26.65	-4,255.63	-8,994.87	9,899.00	9,827.88	71.12	139.192	
2,000.00	1,998.77	1,937.77	1,998.77	9.05	65.98	26.66	-4,255.63	-8,994.87	9,895.41	9,820.41	75.01	131.924	
2,100.00	2,098.69	2,037.69	2,098.69	9.46	69.47	26.67	-4,255.63	-8,994.87	9,891.83	9,812.92	78.90	125.367	
2,200.00	2,198.61	2,137.61	2,198.61	9.88	72.95	26.68	-4,255.63	-8,994.87	9,888.24	9,805.44	82.80	119.422	
2,300.00	2,298.53	2,237.53	2,298.53	10.30	76.44	26.69	-4,255.63	-8,994.87	9,884.65	9,797.95	86.70	114.008	
2,400.00	2,398.45	2,337.45	2,398.45	10.72	79.92	26.70	-4,255.63	-8,994.87	9,881.07	9,790.46	90.60	109.058	
2,500.00	2,498.37	2,437.37	2,498.37	11.14	83.41	26.71	-4,255.63	-8,994.87	9,877.48	9,782.97	94.51	104.514	
2,600.00	2,598.29	2,537.29	2,598.29	11.56	86.89	26.72	-4,255.63	-8,994.87	9,873.90	9,775.48	98.41	100.329	
2,700.00	2,698.21	2,637.21	2,698.21	11.98	90.38	26.73	-4,255.63	-8,994.87	9,870.31	9,767.99	102.32	96.462	
2,800.00	2,798.13	2,737.13	2,798.13	12.41	93.87	26.74	-4,255.63	-8,994.87	9,866.73	9,760.50	106.23	92.878	
2,900.00	2,898.05	2,837.05	2,898.05	12.84	97.35	26.75	-4,255.63	-8,994.87	9,863.14	9,753.00	110.14	89.548	
3,000.00	2,997.97	2,936.97	2,997.97	13.27	100.84	26.76	-4,255.63	-8,994.87	9,859.56	9,745.50	114.06	86.445	
3,100.00	3,097.89	3,036.89	3,097.89	13.69	104.32	26.77	-4,255.63	-8,994.87	9,855.98	9,738.01	117.97	83.547	
3,200.00	3,197.81	3,136.81	3,197.81	14.12	107.81	26.78	-4,255.63	-8,994.87	9,852.39	9,730.51	121.88	80.835	
3,300.00	3,297.73	3,236.73	3,297.73	14.56	111.30	26.79	-4,255.63	-8,994.87	9,848.81	9,723.01	125.80	78.290	
3,400.00	3,397.65	3,336.65	3,397.65	14.99	114.78	26.81	-4,255.63	-8,994.87	9,845.23	9,715.51	129.71	75.899	
3,500.00	3,497.56	3,436.56	3,497.56	15.42	118.27	26.82	-4,255.63	-8,994.87	9,841.64	9,708.01	133.63	73.648	
3,600.00	3,597.48	3,536.48	3,597.48	15.85	121.76	26.83	-4,255.63	-8,994.87	9,838.06	9,700.51	137.55	71.524	
3,700.00	3,697.40	3,636.40	3,697.40	16.28	125.24	26.84	-4,255.63	-8,994.87	9,834.48	9,693.01	141.47	69.518	
3,800.00	3,797.32	3,736.32	3,797.32	16.72	128.73	26.85	-4,255.63	-8,994.87	9,830.90	9,685.51	145.39	67.620	
3,900.00	3,897.24	3,836.24	3,897.24	17.15	132.22	26.86	-4,255.63	-8,994.87	9,827.32	9,678.01	149.30	65.821	
4,000.00	3,997.16	3,936.16	3,997.16	17.59	135.71	26.87	-4,255.63	-8,994.87	9,823.74	9,670.51	153.22	64.114	
4,100.00	4,097.08	4,036.08	4,097.08	18.02	139.19	26.88	-4,255.63	-8,994.87	9,820.16	9,663.01	157.14	62.491	
4,200.00	4,197.00	4,136.00	4,197.00	18.46	142.68	26.89	-4,255.63	-8,994.87	9,816.58	9,655.51	161.06	60.948	
4,300.00	4,296.92	4,235.92	4,296.92	18.89	146.17	26.90	-4,255.63	-8,994.87	9,813.00	9,648.01	164.99	59.478	
4,400.00	4,396.84	4,335.84	4,396.84	19.33	149.65	26.91	-4,255.63	-8,994.87	9,809.42	9,640.51	168.91	58.076	
4,500.00	4,496.76	4,435.76	4,496.76	19.77	153.14	26.92	-4,255.63	-8,994.87	9,805.84	9,633.01	172.83	56.737	
4,600.00	4,596.68	4,535.68	4,596.68	20.20	156.63	26.93	-4,255.63	-8,994.87	9,802.26	9,625.51	176.75	55.458	
4,700.00	4,696.60	4,635.60	4,696.60	20.64	160.12	26.94	-4,255.63	-8,994.87	9,798.68	9,618.01	180.67	54.234	
4,800.00	4,796.52	4,735.52	4,796.52	21.08	163.60	26.95	-4,255.63	-8,994.87	9,795.10	9,610.51	184.60	53.063	
4,900.00	4,896.44	4,835.44	4,896.44	21.51	167.09	26.96	-4,255.63	-8,994.87	9,791.53	9,603.01	188.52	51.939	
5,000.00	4,996.36	4,935.36	4,996.36	21.95	170.58	26.97	-4,255.63	-8,994.87	9,787.95	9,595.51	192.44	50.862	
5,100.00	5,096.28	5,035.28	5,096.28	22.39	174.07	26.99	-4,255.63	-8,994.87	9,784.37	9,588.01	196.36	49.828	

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,135.19	5,196.19	22.83	177.55	27.00	-4,255.63	-8,994.87	9,780.80	9,580.51	200.29	48.834		
5,300.00	5,296.11	5,235.11	5,296.11	23.27	181.04	27.01	-4,255.63	-8,994.87	9,777.22	9,573.01	204.21	47.878		
5,400.00	5,396.03	5,335.03	5,396.03	23.71	184.53	27.02	-4,255.63	-8,994.87	9,773.64	9,565.51	208.14	46.958		
5,500.00	5,495.95	5,434.95	5,495.95	24.14	188.02	27.03	-4,255.63	-8,994.87	9,770.07	9,558.01	212.06	46.072		
5,600.00	5,595.87	5,534.87	5,595.87	24.58	191.51	27.04	-4,255.63	-8,994.87	9,766.49	9,550.51	215.98	45.218		
5,700.00	5,695.79	5,634.79	5,695.79	25.02	194.99	27.05	-4,255.63	-8,994.87	9,762.92	9,543.01	219.91	44.395		
5,800.00	5,795.71	5,734.71	5,795.71	25.46	198.48	27.06	-4,255.63	-8,994.87	9,759.34	9,535.51	223.83	43.601		
5,900.00	5,895.63	5,834.63	5,895.63	25.90	201.97	27.07	-4,255.63	-8,994.87	9,755.77	9,528.01	227.76	42.834		
6,000.00	5,995.55	5,934.55	5,995.55	26.34	205.46	27.08	-4,255.63	-8,994.87	9,752.19	9,520.51	231.68	42.093		
6,100.00	6,095.47	6,034.47	6,095.47	26.78	208.94	27.09	-4,255.63	-8,994.87	9,748.62	9,513.01	235.61	41.376		
6,200.00	6,195.39	6,134.39	6,195.39	27.22	212.43	27.10	-4,255.63	-8,994.87	9,745.05	9,505.51	239.53	40.683		
6,300.00	6,295.31	6,234.31	6,295.31	27.66	215.92	27.11	-4,255.63	-8,994.87	9,741.47	9,498.02	243.46	40.013		
6,400.00	6,395.23	6,334.23	6,395.23	28.10	219.41	27.12	-4,255.63	-8,994.87	9,737.90	9,490.52	247.39	39.363		
6,500.00	6,495.02	6,434.02	6,495.02	28.54	222.89	-8.63	-4,255.63	-8,994.87	9,732.20	9,480.90	251.31	38.727		
6,600.00	6,593.09	6,532.09	6,593.09	28.98	226.31	-18.46	-4,255.63	-8,994.87	9,713.81	9,458.65	255.16	38.070		
6,700.00	6,687.01	6,626.01	6,687.01	29.41	229.59	-22.28	-4,255.63	-8,994.87	9,681.71	9,422.86	258.84	37.404		
6,800.00	6,774.46	6,713.46	6,774.46	29.83	232.65	-25.60	-4,255.63	-8,994.87	9,636.71	9,374.44	262.27	36.744		
6,900.00	6,853.31	6,807.69	6,853.31	30.26	235.93	-29.53	-4,255.63	-8,994.87	9,579.95	9,314.06	265.89	36.030		
7,000.00	6,921.60	6,860.60	6,921.60	30.76	237.78	-34.74	-4,255.63	-8,994.87	9,512.88	9,244.85	268.03	35.492		
7,100.00	6,977.66	6,916.66	6,977.66	31.38	239.74	-42.03	-4,255.63	-8,994.87	9,437.18	9,166.94	270.24	34.921		
7,200.00	7,020.10	6,959.10	7,020.10	32.17	241.22	-52.40	-4,255.63	-8,994.87	9,354.77	9,082.81	271.96	34.398		
7,300.00	7,047.88	6,986.88	7,047.88	33.13	242.19	-66.73	-4,255.63	-8,994.87	9,267.72	8,994.56	273.16	33.928		
7,400.00	7,060.32	7,000.68	7,060.32	34.27	242.67	-84.51	-4,255.63	-8,994.87	9,178.20	8,904.33	273.87	33.513		
7,500.00	7,060.70	7,000.30	7,060.70	35.56	242.66	-90.51	-4,255.63	-8,994.87	9,088.27	8,814.15	274.12	33.155		
7,600.00	7,060.27	7,000.73	7,060.27	37.02	242.67	-90.50	-4,255.63	-8,994.87	8,998.56	8,724.10	274.45	32.787		
7,700.00	7,059.83	7,001.17	7,059.83	38.64	242.69	-90.50	-4,255.63	-8,994.87	8,909.06	8,634.21	274.85	32.414		
7,800.00	7,059.40	7,001.60	7,059.40	40.40	242.70	-90.49	-4,255.63	-8,994.87	8,819.79	8,544.47	275.31	32.036		
7,900.00	7,058.97	7,002.03	7,058.97	42.28	242.72	-90.48	-4,255.63	-8,994.87	8,730.75	8,454.91	275.84	31.652		
8,000.00	7,058.53	7,002.47	7,058.53	44.27	242.73	-90.48	-4,255.63	-8,994.87	8,641.95	8,365.52	276.43	31.263		
8,100.00	7,058.10	7,002.90	7,058.10	46.35	242.75	-90.47	-4,255.63	-8,994.87	8,553.39	8,276.31	277.08	30.869		
8,200.00	7,057.66	7,003.34	7,057.66	48.50	242.76	-90.46	-4,255.63	-8,994.87	8,465.10	8,187.29	277.81	30.471		
8,300.00	7,057.23	7,003.77	7,057.23	50.73	242.78	-90.46	-4,255.63	-8,994.87	8,377.06	8,098.46	278.60	30.069		
8,400.00	7,056.80	7,004.20	7,056.80	53.02	242.79	-90.45	-4,255.63	-8,994.87	8,289.30	8,009.84	279.46	29.662		
8,500.00	7,056.36	7,004.64	7,056.36	55.36	242.81	-90.45	-4,255.63	-8,994.87	8,201.81	7,921.43	280.38	29.252		
8,600.00	7,055.93	7,005.07	7,055.93	57.74	242.82	-90.44	-4,255.63	-8,994.87	8,114.62	7,833.25	281.37	28.839		
8,700.00	7,055.49	7,005.51	7,055.49	60.17	242.84	-90.43	-4,255.63	-8,994.87	8,027.72	7,745.29	282.43	28.423		
8,800.00	7,055.06	7,005.94	7,055.06	62.63	242.85	-90.43	-4,255.63	-8,994.87	7,941.14	7,657.58	283.56	28.005		
8,900.00	7,054.63	7,006.37	7,054.63	65.13	242.87	-90.42	-4,255.63	-8,994.87	7,854.87	7,570.12	284.75	27.585		
9,000.00	7,054.19	7,006.81	7,054.19	67.66	242.88	-90.41	-4,255.63	-8,994.87	7,768.93	7,482.92	286.01	27.163		
9,100.00	7,053.76	7,007.24	7,053.76	70.21	242.90	-90.41	-4,255.63	-8,994.87	7,683.33	7,396.00	287.34	26.740		
9,200.00	7,053.32	7,007.68	7,053.32	72.78	242.92	-90.40	-4,255.63	-8,994.87	7,598.08	7,309.36	288.73	26.316		
9,300.00	7,052.89	7,008.11	7,052.89	75.38	242.93	-90.40	-4,255.63	-8,994.87	7,513.20	7,223.02	290.18	25.891		
9,400.00	7,052.46	7,008.54	7,052.46	77.99	242.95	-90.39	-4,255.63	-8,994.87	7,428.69	7,136.99	291.70	25.467		
9,500.00	7,052.02	7,008.98	7,052.02	80.62	242.96	-90.38	-4,255.63	-8,994.87	7,344.58	7,051.29	293.29	25.042		
9,600.00	7,051.59	7,009.41	7,051.59	83.26	242.98	-90.38	-4,255.63	-8,994.87	7,260.86	6,965.92	294.94	24.618		
9,700.00	7,051.15	7,009.85	7,051.15	85.92	242.99	-90.37	-4,255.63	-8,994.87	7,177.56	6,880.91	296.66	24.195		
9,800.00	7,050.72	6,989.72	7,050.72	88.59	242.29	-90.37	-4,255.63	-8,994.87	7,094.69	6,796.98	297.72	23.830		
9,900.00	7,050.29	6,989.29	7,050.29	91.28	242.27	-90.36	-4,255.63	-8,994.87	7,012.27	6,712.74	299.53	23.411		
10,000.00	7,049.85	6,988.85	7,049.85	93.97	242.26	-90.35	-4,255.63	-8,994.87	6,930.32	6,628.90	301.41	22.993		
10,100.00	7,049.42	6,988.42	7,049.42	96.67	242.24	-90.35	-4,255.63	-8,994.87	6,848.84	6,545.48	303.36	22.577		
10,200.00	7,048.98	6,987.98	7,048.98	99.38	242.23	-90.34	-4,255.63	-8,994.87	6,767.86	6,462.48	305.37	22.163		
10,300.00	7,048.55	6,987.55	7,048.55	102.10	242.21	-90.33	-4,255.63	-8,994.87	6,687.39	6,379.94	307.45	21.751		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	6,987.12	7,048.12	104.83	242.20	-90.33	-4,255.63	-8,994.87	6,607.46	6,297.86	309.59	21.342		
10,500.00	7,047.68	6,986.68	7,047.68	107.56	242.18	-90.32	-4,255.63	-8,994.87	6,528.08	6,216.27	311.81	20.936		
10,600.00	7,047.25	6,986.25	7,047.25	110.30	242.17	-90.32	-4,255.63	-8,994.87	6,449.27	6,135.19	314.08	20.534		
10,700.00	7,046.81	6,985.81	7,046.81	113.05	242.15	-90.31	-4,255.63	-8,994.87	6,371.06	6,054.63	316.43	20.134		
10,800.00	7,046.38	6,985.38	7,046.38	115.80	242.14	-90.30	-4,255.63	-8,994.87	6,293.46	5,974.62	318.84	19.738		
10,900.00	7,045.95	6,984.95	7,045.95	118.55	242.12	-90.30	-4,255.63	-8,994.87	6,216.51	5,895.18	321.33	19.346		
11,000.00	7,045.51	6,984.51	7,045.51	121.31	242.11	-90.29	-4,255.63	-8,994.87	6,140.22	5,816.34	323.88	18.958		
11,100.00	7,045.08	6,984.08	7,045.08	124.08	242.09	-90.28	-4,255.63	-8,994.87	6,064.62	5,738.11	326.50	18.574		
11,200.00	7,044.64	6,983.64	7,044.64	126.85	242.08	-90.28	-4,255.63	-8,994.87	5,989.73	5,660.53	329.20	18.195		
11,300.00	7,044.21	6,983.21	7,044.21	129.62	242.06	-90.27	-4,255.63	-8,994.87	5,915.58	5,583.63	331.96	17.820		
11,400.00	7,043.78	6,982.78	7,043.78	132.40	242.05	-90.27	-4,255.63	-8,994.87	5,842.21	5,507.42	334.79	17.450		
11,500.00	7,043.34	6,982.34	7,043.34	135.18	242.03	-90.26	-4,255.63	-8,994.87	5,769.64	5,431.94	337.70	17.085		
11,600.00	7,042.91	6,981.91	7,042.91	137.96	242.02	-90.25	-4,255.63	-8,994.87	5,697.90	5,357.22	340.68	16.725		
11,700.00	7,042.47	6,981.47	7,042.47	140.75	242.00	-90.25	-4,255.63	-8,994.87	5,627.02	5,283.29	343.73	16.370		
11,800.00	7,042.04	6,981.04	7,042.04	143.54	241.99	-90.24	-4,255.63	-8,994.87	5,557.03	5,210.18	346.85	16.021		
11,900.00	7,041.61	6,980.61	7,041.61	146.33	241.97	-90.23	-4,255.63	-8,994.87	5,487.98	5,137.93	350.05	15.678		
12,000.00	7,041.17	6,980.17	7,041.17	149.13	241.96	-90.23	-4,255.63	-8,994.87	5,419.89	5,066.57	353.32	15.340		
12,100.00	7,040.74	6,979.74	7,040.74	151.92	241.94	-90.22	-4,255.63	-8,994.87	5,352.80	4,996.14	356.66	15.008		
12,200.00	7,040.30	6,979.30	7,040.30	154.72	241.92	-90.22	-4,255.63	-8,994.87	5,286.76	4,926.69	360.07	14.683		
12,300.00	7,039.87	6,978.87	7,039.87	157.52	241.91	-90.21	-4,255.63	-8,994.87	5,221.79	4,858.24	363.55	14.363		
12,400.00	7,039.44	6,978.44	7,039.44	160.33	241.89	-90.20	-4,255.63	-8,994.87	5,157.94	4,790.84	367.10	14.051		
12,500.00	7,039.00	6,978.00	7,039.00	163.13	241.88	-90.20	-4,255.63	-8,994.87	5,095.26	4,724.54	370.72	13.744		
12,600.00	7,038.57	6,977.57	7,038.57	165.94	241.86	-90.19	-4,255.63	-8,994.87	5,033.78	4,659.37	374.41	13.445		
12,700.00	7,038.13	6,977.13	7,038.13	168.75	241.85	-90.18	-4,255.63	-8,994.87	4,973.55	4,595.40	378.16	13.152		
12,800.00	7,037.70	6,976.70	7,037.70	171.56	241.83	-90.18	-4,255.63	-8,994.87	4,914.62	4,532.65	381.97	12.866		
12,900.00	7,037.27	6,976.27	7,037.27	174.37	241.82	-90.17	-4,255.63	-8,994.87	4,857.04	4,471.19	385.85	12.588		
13,000.00	7,036.83	6,975.83	7,036.83	177.19	241.80	-90.17	-4,255.63	-8,994.87	4,800.84	4,411.07	389.78	12.317		
13,100.00	7,036.40	6,975.40	7,036.40	180.00	241.79	-90.16	-4,255.63	-8,994.87	4,746.09	4,352.33	393.76	12.053		
13,200.00	7,035.96	6,974.96	7,035.96	182.82	241.77	-90.15	-4,255.63	-8,994.87	4,692.83	4,295.03	397.80	11.797		
13,300.00	7,035.53	6,974.53	7,035.53	185.64	241.76	-90.15	-4,255.63	-8,994.87	4,641.12	4,239.23	401.88	11.548		
13,400.00	7,035.10	6,974.10	7,035.10	188.46	241.74	-90.14	-4,255.63	-8,994.87	4,591.00	4,184.99	406.01	11.308		
13,500.00	7,034.66	6,973.66	7,034.66	191.28	241.73	-90.13	-4,255.63	-8,994.87	4,542.52	4,132.36	410.17	11.075		
13,600.00	7,034.23	6,973.23	7,034.23	194.10	241.71	-90.13	-4,255.63	-8,994.87	4,495.76	4,081.40	414.36	10.850		
13,700.00	7,033.79	6,972.79	7,033.79	196.92	241.70	-90.12	-4,255.63	-8,994.87	4,450.74	4,032.17	418.58	10.633		
13,800.00	7,033.36	6,972.36	7,033.36	199.74	241.68	-90.12	-4,255.63	-8,994.87	4,407.54	3,984.73	422.81	10.424		
13,900.00	7,032.93	6,971.93	7,032.93	202.57	241.67	-90.11	-4,255.63	-8,994.87	4,366.20	3,939.14	427.05	10.224		
14,000.00	7,032.49	6,971.49	7,032.49	205.39	241.65	-90.10	-4,255.63	-8,994.87	4,326.77	3,895.47	431.30	10.032		
14,100.00	7,032.06	6,971.06	7,032.06	208.22	241.64	-90.10	-4,255.63	-8,994.87	4,289.32	3,853.78	435.54	9.848		
14,200.00	7,031.62	6,970.62	7,031.62	211.05	241.62	-90.09	-4,255.63	-8,994.87	4,253.88	3,814.12	439.77	9.673		
14,300.00	7,031.19	6,970.19	7,031.19	213.87	241.61	-90.08	-4,255.63	-8,994.87	4,220.52	3,776.55	443.97	9.506		
14,400.00	7,030.76	6,969.76	7,030.76	216.70	241.59	-90.08	-4,255.63	-8,994.87	4,189.28	3,741.14	448.14	9.348		
14,500.00	7,030.32	6,969.32	7,030.32	219.53	241.58	-90.07	-4,255.63	-8,994.87	4,160.21	3,707.94	452.27	9.198		
14,600.00	7,029.89	6,968.89	7,029.89	222.36	241.56	-90.07	-4,255.63	-8,994.87	4,133.36	3,677.01	456.35	9.057		
14,700.00	7,029.45	6,968.45	7,029.45	225.19	241.55	-90.06	-4,255.63	-8,994.87	4,108.76	3,648.40	460.36	8.925		
14,800.00	7,029.02	6,968.02	7,029.02	228.03	241.53	-90.05	-4,255.63	-8,994.87	4,086.47	3,622.16	464.30	8.801		
14,805.04	7,029.00	6,968.00	7,029.00	228.17	241.53	-90.05	-4,255.63	-8,994.87	4,085.41	3,620.91	464.50	8.795 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	672.74	706.60	3.28	4.33	-108.15	-2,928.85	-8,936.72	9,430.92					
100.00	100.00	724.00	757.32	3.28	4.49	-108.18	-2,933.84	-8,931.28	9,423.76	9,416.01	7.75	1,216.228		
200.00	200.00	724.00	757.32	3.34	4.49	-108.18	-2,933.84	-8,931.28	9,417.31	9,409.52	7.79	1,209.016		
300.00	300.00	724.00	757.32	3.44	4.49	-108.18	-2,933.84	-8,931.28	9,411.92	9,404.03	7.89	1,193.184		
400.00	400.00	763.88	796.74	3.60	4.62	-108.22	-2,938.54	-8,927.46	9,407.02	9,398.85	8.17	1,151.373		
500.00	499.98	778.35	811.01	3.80	4.67	33.63	-2,940.54	-8,926.24	9,401.80	9,393.39	8.41	1,118.223		
600.00	599.90	818.00	850.05	4.02	4.81	33.60	-2,946.84	-8,923.32	9,395.87	9,387.11	8.77	1,071.820		
700.00	699.82	818.00	850.05	4.28	4.81	33.60	-2,946.84	-8,923.32	9,390.40	9,381.38	9.02	1,041.021		
800.00	799.74	818.00	850.05	4.57	4.81	33.60	-2,946.84	-8,923.32	9,385.99	9,376.68	9.30	1,008.759		
900.00	899.66	818.00	850.05	4.88	4.81	33.60	-2,946.84	-8,923.32	9,382.64	9,373.03	9.61	976.011		
1,000.00	999.58	818.00	850.05	5.21	4.81	33.60	-2,946.84	-8,923.32	9,380.36	9,370.42	9.94	943.496		
1,100.00	1,099.50	866.00	897.20	5.55	4.98	33.55	-2,955.47	-8,920.81	9,378.32	9,367.86	10.46	896.506		
1,200.00	1,199.42	912.00	942.33	5.91	5.15	33.50	-2,964.28	-8,919.60	9,377.94	9,366.95	10.99	853.242		
1,256.78	1,256.15	912.00	942.33	6.12	5.15	33.50	-2,964.28	-8,919.60	9,377.76	9,366.57	11.20	837.403		
1,300.00	1,299.34	912.00	942.33	6.28	5.15	33.50	-2,964.28	-8,919.60	9,377.86	9,366.51	11.36	825.611		
1,400.00	1,399.26	912.00	942.33	6.66	5.15	33.50	-2,964.28	-8,919.60	9,378.86	9,367.12	11.74	799.205		
1,500.00	1,499.18	912.00	942.33	7.04	5.15	33.50	-2,964.28	-8,919.60	9,380.92	9,368.80	12.12	774.075		
1,600.00	1,599.10	912.00	942.33	7.43	5.15	33.50	-2,964.28	-8,919.60	9,384.04	9,371.54	12.51	750.229		
1,700.00	1,699.01	953.05	982.59	7.83	5.30	33.46	-2,972.32	-8,919.63	9,387.61	9,374.55	13.06	718.816		
1,800.00	1,798.93	1,006.00	1,034.51	8.23	5.50	33.41	-2,982.52	-8,921.38	9,392.91	9,379.24	13.67	687.350		
1,900.00	1,898.85	1,006.00	1,034.51	8.64	5.50	33.41	-2,982.52	-8,921.38	9,398.24	9,384.17	14.06	668.209		
2,000.00	1,998.77	1,006.00	1,034.51	9.05	5.50	33.41	-2,982.52	-8,921.38	9,404.62	9,390.16	14.47	650.106		
2,100.00	2,098.69	1,006.00	1,034.51	9.46	5.50	33.41	-2,982.52	-8,921.38	9,412.07	9,397.20	14.87	632.991		
2,200.00	2,198.61	1,006.00	1,034.51	9.88	5.50	33.41	-2,982.52	-8,921.38	9,420.57	9,405.30	15.27	616.812		
2,300.00	2,298.53	1,049.88	1,077.54	10.30	5.66	33.38	-2,990.65	-8,924.17	9,429.60	9,413.75	15.85	594.979		
2,400.00	2,398.45	1,101.00	1,127.68	10.72	5.85	33.34	-2,999.49	-8,928.75	9,439.92	9,423.46	16.46	573.618		
2,500.00	2,498.37	1,101.00	1,127.68	11.14	5.85	33.34	-2,999.49	-8,928.75	9,450.58	9,433.72	16.86	560.510		
2,600.00	2,598.29	1,101.00	1,127.68	11.56	5.85	33.34	-2,999.49	-8,928.75	9,462.28	9,445.02	17.26	548.097		
2,700.00	2,698.21	1,101.00	1,127.68	11.98	5.85	33.34	-2,999.49	-8,928.75	9,475.03	9,457.36	17.67	536.340		
2,800.00	2,798.13	1,141.70	1,167.50	12.41	6.01	33.32	-3,006.55	-8,933.30	9,488.31	9,470.08	18.23	520.390		
2,900.00	2,898.05	1,159.05	1,184.42	12.84	6.07	33.30	-3,009.74	-8,935.43	9,502.62	9,483.91	18.70	508.038		
3,000.00	2,997.97	1,197.00	1,221.30	13.27	6.23	33.28	-3,017.11	-8,940.50	9,517.90	9,498.63	19.26	494.141		
3,100.00	3,097.89	1,197.00	1,221.30	13.69	6.23	33.28	-3,017.11	-8,940.50	9,533.77	9,514.11	19.66	484.986		
3,200.00	3,197.81	1,197.00	1,221.30	14.12	6.23	33.28	-3,017.11	-8,940.50	9,550.67	9,530.62	20.05	476.295		
3,300.00	3,297.73	1,197.00	1,221.30	14.56	6.23	33.28	-3,017.11	-8,940.50	9,568.58	9,548.14	20.44	468.041		
3,400.00	3,397.65	1,250.46	1,272.96	14.99	6.46	33.23	-3,028.28	-8,948.51	9,586.74	9,565.66	21.07	454.936		
3,500.00	3,497.56	1,292.00	1,312.86	15.42	6.64	33.20	-3,037.57	-8,955.39	9,606.16	9,584.51	21.65	443.690		
3,600.00	3,597.48	1,292.00	1,312.86	15.85	6.64	33.20	-3,037.57	-8,955.39	9,626.12	9,604.09	22.04	436.847		
3,700.00	3,697.40	1,292.00	1,312.86	16.28	6.64	33.20	-3,037.57	-8,955.39	9,647.08	9,624.67	22.42	430.339		
3,800.00	3,797.32	1,292.00	1,312.86	16.72	6.64	33.20	-3,037.57	-8,955.39	9,669.03	9,646.24	22.80	424.149		
3,900.00	3,897.24	1,344.59	1,363.05	17.15	6.90	33.15	-3,050.06	-8,964.93	9,691.23	9,667.80	23.42	413.716		
4,000.00	3,997.16	1,387.00	1,403.23	17.59	7.12	33.11	-3,060.74	-8,973.28	9,714.67	9,690.66	24.01	404.527		
4,100.00	4,097.08	1,387.00	1,403.23	18.02	7.12	33.11	-3,060.74	-8,973.28	9,738.61	9,714.22	24.39	399.365		
4,200.00	4,197.00	1,439.71	1,452.95	18.46	7.42	33.06	-3,074.55	-8,983.99	9,763.33	9,738.29	25.04	389.943		
4,300.00	4,296.92	1,481.00	1,491.84	18.89	7.66	33.02	-3,085.68	-8,992.32	9,788.38	9,762.77	25.62	382.079		
4,400.00	4,396.84	1,529.99	1,537.82	19.33	7.97	32.97	-3,099.36	-9,002.26	9,813.94	9,787.68	26.27	373.633		
4,500.00	4,496.76	1,573.00	1,577.98	19.77	8.25	32.92	-3,111.90	-9,011.16	9,840.17	9,813.30	26.87	366.264		
4,600.00	4,596.68	1,705.35	1,701.05	20.20	9.19	32.75	-3,153.05	-9,037.13	9,866.19	9,838.14	28.05	351.742		
4,700.00	4,696.60	1,760.00	1,751.48	20.64	9.60	32.67	-3,171.41	-9,047.45	9,892.57	9,863.81	28.76	343.933		
4,800.00	4,796.52	1,760.00	1,751.48	21.08	9.60	32.67	-3,171.41	-9,047.45	9,919.58	9,890.46	29.11	340.707		
4,900.00	4,896.44	2,455.76	2,377.63	21.51	15.88	31.34	-3,457.75	-9,141.16	9,945.27	9,910.20	35.07	283.573		
5,000.00	4,996.36	2,513.00	2,429.24	21.95	16.42	31.22	-3,481.79	-9,147.11	9,967.74	9,931.81	35.92	277.467		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
5,100.00	5,096.28	2,513.00	2,429.24	22.39	16.42	31.22	-3,481.79	-9,147.11	9,990.64	9,954.36	36.28	275.372		
7,400.00	7,060.32	7,215.15	6,804.04	34.27	53.10	-81.79	-4,889.31	-9,551.17	9,965.33	9,889.47	75.86	131.365		
7,500.00	7,060.70	7,217.87	6,806.76	35.56	53.11	-87.32	-4,889.36	-9,551.22	9,876.91	9,800.83	76.08	129.827		
7,600.00	7,060.27	7,219.64	6,808.54	37.02	53.11	-87.35	-4,889.39	-9,551.25	9,788.69	9,712.33	76.36	128.200		
7,700.00	7,059.83	7,221.42	6,810.31	38.64	53.12	-87.37	-4,889.42	-9,551.29	9,700.69	9,623.99	76.70	126.479		
7,800.00	7,059.40	7,223.20	6,812.09	40.40	53.12	-87.39	-4,889.45	-9,551.32	9,612.93	9,535.83	77.11	124.670		
7,900.00	7,058.97	7,224.98	6,813.87	42.28	53.13	-87.41	-4,889.48	-9,551.36	9,525.41	9,447.83	77.58	122.776		
8,000.00	7,058.53	7,226.76	6,815.65	44.27	53.13	-87.43	-4,889.52	-9,551.39	9,438.14	9,360.02	78.13	120.805		
8,100.00	7,058.10	7,228.55	6,817.44	46.35	53.14	-87.46	-4,889.55	-9,551.43	9,351.13	9,272.39	78.74	118.762		
8,200.00	7,057.66	7,230.33	6,819.22	48.50	53.14	-87.48	-4,889.58	-9,551.46	9,264.37	9,184.96	79.42	116.655		
8,300.00	7,057.23	7,232.12	6,821.01	50.73	53.15	-87.50	-4,889.61	-9,551.50	9,177.89	9,097.73	80.16	114.492		
8,400.00	7,056.80	7,233.91	6,822.80	53.02	53.15	-87.52	-4,889.64	-9,551.53	9,091.68	9,010.71	80.97	112.279		
8,500.00	7,056.36	7,235.71	6,824.59	55.36	53.16	-87.55	-4,889.67	-9,551.57	9,005.76	8,923.91	81.85	110.026		
8,600.00	7,055.93	7,237.50	6,826.39	57.74	53.16	-87.57	-4,889.70	-9,551.60	8,920.13	8,837.33	82.79	107.740		
8,700.00	7,055.49	7,239.30	6,828.19	60.17	53.17	-87.59	-4,889.74	-9,551.64	8,834.80	8,751.00	83.80	105.428		
8,800.00	7,055.06	7,241.10	6,829.99	62.63	53.18	-87.61	-4,889.77	-9,551.67	8,749.78	8,664.91	84.87	103.098		
8,900.00	7,054.63	7,242.90	6,831.79	65.13	53.18	-87.63	-4,889.80	-9,551.71	8,665.08	8,579.08	86.00	100.756		
9,000.00	7,054.19	7,244.71	6,833.59	67.66	53.19	-87.66	-4,889.83	-9,551.74	8,580.71	8,493.52	87.19	98.410		
9,100.00	7,053.76	7,246.51	6,835.40	70.21	53.19	-87.68	-4,889.86	-9,551.78	8,496.68	8,408.23	88.45	96.065		
9,200.00	7,053.32	7,248.32	6,837.20	72.78	53.20	-87.70	-4,889.89	-9,551.81	8,413.00	8,323.24	89.76	93.726		
9,300.00	7,052.89	7,250.13	6,839.02	75.38	53.20	-87.72	-4,889.92	-9,551.85	8,329.68	8,238.54	91.13	91.400		
9,400.00	7,052.46	7,251.95	6,840.83	77.99	53.21	-87.75	-4,889.95	-9,551.88	8,246.73	8,154.16	92.57	89.090		
9,500.00	7,052.02	7,253.76	6,842.64	80.62	53.21	-87.77	-4,889.98	-9,551.92	8,164.16	8,070.10	94.06	86.801		
9,600.00	7,051.59	7,255.58	6,844.46	83.26	53.22	-87.79	-4,890.01	-9,551.96	8,081.98	7,986.38	95.60	84.537		
9,700.00	7,051.15	7,257.40	6,846.28	85.92	53.22	-87.81	-4,890.04	-9,551.99	8,000.21	7,903.00	97.21	82.301		
9,800.00	7,050.72	7,259.22	6,848.10	88.59	53.23	-87.84	-4,890.07	-9,552.03	7,918.86	7,819.99	98.87	80.096		
9,900.00	7,050.29	7,261.04	6,849.92	91.28	53.23	-87.86	-4,890.10	-9,552.06	7,837.94	7,737.35	100.58	77.924		
10,000.00	7,049.85	7,262.87	6,851.75	93.97	53.24	-87.88	-4,890.13	-9,552.10	7,757.46	7,655.10	102.36	75.788		
10,100.00	7,049.42	7,264.70	6,853.58	96.67	53.24	-87.90	-4,890.16	-9,552.14	7,677.44	7,573.25	104.19	73.690		
10,200.00	7,048.98	7,266.53	6,855.41	99.38	53.25	-87.93	-4,890.19	-9,552.17	7,597.89	7,491.82	106.07	71.631		
10,300.00	7,048.55	7,268.36	6,857.24	102.10	53.25	-87.95	-4,890.22	-9,552.21	7,518.84	7,410.83	108.01	69.612		
10,400.00	7,048.12	7,270.20	6,859.07	104.83	53.26	-87.97	-4,890.25	-9,552.24	7,440.28	7,330.28	110.01	67.634		
10,500.00	7,047.68	7,272.04	6,860.91	107.56	53.26	-88.00	-4,890.28	-9,552.28	7,362.25	7,250.19	112.06	65.699		
10,600.00	7,047.25	7,273.88	6,862.75	110.30	53.27	-88.02	-4,890.31	-9,552.32	7,284.75	7,170.58	114.17	63.807		
10,700.00	7,046.81	7,275.72	6,864.59	113.05	53.28	-88.04	-4,890.34	-9,552.35	7,207.81	7,091.48	116.33	61.958		
10,800.00	7,046.38	7,277.56	6,866.44	115.80	53.28	-88.06	-4,890.37	-9,552.39	7,131.44	7,012.88	118.55	60.153		
10,900.00	7,045.95	7,279.41	6,868.28	118.55	53.29	-88.09	-4,890.40	-9,552.43	7,055.65	6,934.82	120.83	58.392		
11,000.00	7,045.51	7,281.26	6,870.13	121.31	53.29	-88.11	-4,890.42	-9,552.46	6,980.48	6,857.32	123.17	56.675		
11,100.00	7,045.08	7,283.11	6,871.98	124.08	53.30	-88.13	-4,890.45	-9,552.50	6,905.94	6,780.38	125.56	55.002		
11,200.00	7,044.64	7,284.96	6,873.83	126.85	53.30	-88.16	-4,890.48	-9,552.54	6,832.05	6,704.04	128.01	53.372		
11,300.00	7,044.21	7,286.82	6,875.69	129.62	53.31	-88.18	-4,890.51	-9,552.57	6,758.82	6,628.31	130.51	51.786		
11,400.00	7,043.78	7,288.68	6,877.55	132.40	53.31	-88.20	-4,890.54	-9,552.61	6,686.30	6,553.22	133.08	50.243		
11,500.00	7,043.34	7,290.54	6,879.41	135.18	53.32	-88.22	-4,890.57	-9,552.65	6,614.48	6,478.78	135.70	48.743		
11,600.00	7,042.91	7,292.40	6,881.27	137.96	53.32	-88.25	-4,890.60	-9,552.68	6,543.41	6,405.03	138.38	47.284		
11,700.00	7,042.47	7,294.26	6,883.13	140.75	53.33	-88.27	-4,890.62	-9,552.72	6,473.10	6,331.98	141.12	45.868		
11,800.00	7,042.04	7,296.13	6,885.00	143.54	53.33	-88.29	-4,890.65	-9,552.76	6,403.58	6,259.66	143.92	44.493		
11,900.00	7,041.61	7,298.00	6,886.87	146.33	53.34	-88.32	-4,890.68	-9,552.79	6,334.88	6,188.10	146.78	43.159		
12,000.00	7,041.17	7,299.87	6,888.74	149.13	53.34	-88.34	-4,890.71	-9,552.83	6,267.02	6,117.32	149.70	41.864		
12,100.00	7,040.74	7,301.75	6,890.61	151.92	53.35	-88.36	-4,890.73	-9,552.87	6,200.03	6,047.35	152.67	40.610		
12,200.00	7,040.30	7,303.62	6,892.49	154.72	53.36	-88.39	-4,890.76	-9,552.91	6,133.93	5,978.22	155.71	39.394		
12,300.00	7,039.87	7,305.50	6,894.37	157.52	53.36	-88.41	-4,890.79	-9,552.94	6,068.77	5,909.96	158.80	38.216		
12,400.00	7,039.44	7,307.38	6,896.25	160.33	53.37	-88.43	-4,890.82	-9,552.98	6,004.56	5,842.60	161.96	37.075		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - HOOD 6-2-20(PR_150CC) - OH - OH												Offset Site Error:		0.00 ft
Survey Program: 82-MWD												Offset Well Error:		3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
12,500.00	7,039.00	7,309.27	6,898.13	163.13	53.37	-88.46	-4,890.84	-9,553.02	5,941.34	5,776.17	165.17	35.972		
12,600.00	7,038.57	7,311.15	6,900.01	165.94	53.38	-88.48	-4,890.87	-9,553.06	5,879.14	5,710.71	168.43	34.905		
12,700.00	7,038.13	7,313.04	6,901.90	168.75	53.38	-88.50	-4,890.90	-9,553.09	5,817.99	5,646.23	171.76	33.873		
12,800.00	7,037.70	7,314.93	6,903.79	171.56	53.39	-88.53	-4,890.93	-9,553.13	5,757.93	5,582.79	175.14	32.876		
12,900.00	7,037.27	7,316.82	6,905.68	174.37	53.39	-88.55	-4,890.95	-9,553.17	5,699.00	5,520.42	178.58	31.913		
13,000.00	7,036.83	7,318.72	6,907.58	177.19	53.40	-88.57	-4,890.98	-9,553.21	5,641.22	5,459.15	182.07	30.984		
13,100.00	7,036.40	7,320.61	6,909.47	180.00	53.40	-88.60	-4,891.01	-9,553.25	5,584.63	5,399.01	185.62	30.087		
13,200.00	7,035.96	7,322.51	6,911.37	182.82	53.41	-88.62	-4,891.03	-9,553.28	5,529.27	5,340.06	189.21	29.223		
13,300.00	7,035.53	7,324.42	6,913.27	185.64	53.42	-88.64	-4,891.06	-9,553.32	5,475.18	5,282.32	192.86	28.390		
13,400.00	7,035.10	7,326.32	6,915.18	188.46	53.42	-88.67	-4,891.08	-9,553.36	5,422.39	5,225.83	196.55	27.587		
13,500.00	7,034.66	7,328.23	6,917.08	191.28	53.43	-88.69	-4,891.11	-9,553.40	5,370.94	5,170.65	200.29	26.815		
13,600.00	7,034.23	7,330.14	6,918.99	194.10	53.43	-88.71	-4,891.14	-9,553.44	5,320.88	5,116.80	204.08	26.073		
13,700.00	7,033.79	7,332.05	6,920.90	196.92	53.44	-88.74	-4,891.16	-9,553.47	5,272.23	5,064.33	207.91	25.359		
13,800.00	7,033.36	7,333.96	6,922.82	199.74	53.44	-88.76	-4,891.19	-9,553.51	5,225.05	5,013.28	211.77	24.673		
13,900.00	7,032.93	7,335.88	6,924.73	202.57	53.45	-88.79	-4,891.21	-9,553.55	5,179.37	4,963.70	215.67	24.015		
14,000.00	7,032.49	7,337.80	6,926.65	205.39	53.45	-88.81	-4,891.24	-9,553.59	5,135.23	4,915.63	219.60	23.384		
14,100.00	7,032.06	7,339.72	6,928.57	208.22	53.46	-88.83	-4,891.27	-9,553.63	5,092.66	4,869.10	223.56	22.780		
14,200.00	7,031.62	7,341.64	6,930.49	211.05	53.47	-88.86	-4,891.29	-9,553.67	5,051.72	4,824.18	227.54	22.201		
14,300.00	7,031.19	7,343.57	6,932.42	213.87	53.47	-88.88	-4,891.32	-9,553.71	5,012.44	4,780.90	231.54	21.648		
14,400.00	7,030.76	7,345.50	6,934.35	216.70	53.48	-88.90	-4,891.34	-9,553.74	4,974.86	4,739.30	235.56	21.119		
14,500.00	7,030.32	7,347.43	6,936.28	219.53	53.48	-88.93	-4,891.37	-9,553.78	4,939.02	4,699.43	239.59	20.615		
14,600.00	7,029.89	7,349.36	6,938.21	222.36	53.49	-88.95	-4,891.39	-9,553.82	4,904.95	4,661.33	243.62	20.134		
14,700.00	7,029.45	7,351.30	6,940.15	225.19	53.49	-88.98	-4,891.42	-9,553.86	4,872.70	4,625.05	247.65	19.676		
14,800.00	7,029.02	7,353.23	6,942.08	228.03	53.50	-89.00	-4,891.44	-9,553.90	4,842.30	4,590.62	251.68	19.240		
14,805.04	7,029.00	7,353.33	6,942.18	228.17	53.50	-89.00	-4,891.44	-9,553.90	4,840.82	4,588.94	251.88	19.219 CC, ES, SF		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-130.39	-4,182.83	-4,916.65	6,455.51					
100.00	100.00	48.04	112.04	3.28	3.28	-130.39	-4,182.67	-4,916.72	6,455.16	6,448.59	6.57	983.048		
200.00	200.00	181.27	245.25	3.34	3.33	-130.37	-4,180.82	-4,917.52	6,454.71	6,448.04	6.67	967.933		
300.00	300.00	276.95	340.91	3.44	3.43	-130.35	-4,178.98	-4,918.20	6,454.00	6,447.13	6.87	939.015		
400.00	400.00	374.74	438.69	3.60	3.57	-130.34	-4,177.41	-4,918.75	6,453.40	6,446.23	7.18	899.367		
500.00	499.98	478.23	542.17	3.80	3.77	11.48	-4,175.97	-4,919.14	6,451.07	6,443.51	7.57	852.657		
600.00	599.90	596.75	660.68	4.02	4.04	11.51	-4,174.36	-4,919.29	6,446.40	6,438.34	8.06	799.435		
700.00	699.82	685.29	749.21	4.28	4.27	11.52	-4,173.24	-4,919.24	6,441.61	6,433.06	8.55	753.270		
800.00	799.74	787.00	850.92	4.57	4.56	11.53	-4,172.17	-4,919.13	6,436.92	6,427.79	9.13	705.310		
900.00	899.66	876.18	940.09	4.88	4.83	11.55	-4,171.25	-4,919.06	6,432.26	6,422.55	9.71	662.675		
1,000.00	999.58	969.91	1,033.82	5.21	5.13	11.56	-4,170.35	-4,919.13	6,427.76	6,417.43	10.33	621.963		
1,100.00	1,099.50	1,077.90	1,141.80	5.55	5.50	11.57	-4,169.30	-4,919.21	6,423.26	6,412.22	11.04	581.814		
1,200.00	1,199.42	1,171.00	1,234.89	5.91	5.82	11.59	-4,168.34	-4,919.24	6,418.69	6,406.97	11.72	547.676		
1,300.00	1,299.34	1,257.13	1,321.02	6.28	6.13	11.60	-4,167.52	-4,919.43	6,414.31	6,401.92	12.39	517.531		
1,400.00	1,399.26	1,344.29	1,408.18	6.66	6.45	11.61	-4,166.96	-4,919.64	6,410.15	6,397.06	13.09	489.816		
1,500.00	1,499.18	1,442.72	1,506.61	7.04	6.82	11.62	-4,166.56	-4,919.87	6,406.14	6,392.30	13.83	463.053		
1,600.00	1,599.10	1,546.92	1,610.80	7.43	7.21	11.64	-4,166.08	-4,920.02	6,402.02	6,387.40	14.62	437.992		
1,700.00	1,699.01	1,647.19	1,711.08	7.83	7.60	11.64	-4,165.82	-4,920.04	6,397.93	6,382.53	15.40	415.573		
1,800.00	1,798.93	1,747.44	1,811.33	8.23	7.99	11.65	-4,165.44	-4,920.06	6,393.78	6,377.60	16.18	395.086		
1,900.00	1,898.85	1,833.05	1,896.93	8.64	8.33	11.66	-4,165.25	-4,920.09	6,389.73	6,372.81	16.92	377.611		
2,000.00	1,998.77	1,910.41	1,974.29	9.05	8.63	11.67	-4,165.25	-4,920.31	6,386.02	6,368.39	17.63	362.170		
2,100.00	2,098.69	1,999.13	2,063.01	9.46	8.98	11.68	-4,165.37	-4,920.76	6,382.56	6,364.17	18.39	347.018		
2,200.00	2,198.61	2,094.48	2,158.36	9.88	9.36	11.69	-4,165.60	-4,921.31	6,379.22	6,360.04	19.18	332.533		
2,300.00	2,298.53	2,194.31	2,258.19	10.30	9.76	11.70	-4,165.85	-4,921.92	6,375.93	6,355.93	20.00	318.835		
2,400.00	2,398.45	2,285.66	2,349.54	10.72	10.13	11.70	-4,166.02	-4,922.62	6,372.69	6,351.91	20.78	306.647		
2,500.00	2,498.37	2,386.85	2,450.72	11.14	10.54	11.72	-4,166.20	-4,923.48	6,369.53	6,347.93	21.61	294.758		
2,600.00	2,598.29	2,481.27	2,545.14	11.56	10.92	11.73	-4,166.37	-4,924.31	6,366.39	6,343.97	22.41	284.047		
2,700.00	2,698.21	2,574.61	2,638.47	11.98	11.30	11.74	-4,166.54	-4,925.24	6,363.34	6,340.13	23.22	274.099		
2,800.00	2,798.13	2,660.90	2,724.75	12.41	11.66	11.75	-4,166.60	-4,926.35	6,360.45	6,336.45	23.99	265.109		
2,900.00	2,898.05	2,748.34	2,812.19	12.84	12.02	11.76	-4,166.81	-4,927.62	6,357.78	6,333.01	24.78	256.621		
3,000.00	2,997.97	2,839.41	2,903.24	13.27	12.39	11.77	-4,167.16	-4,929.29	6,355.27	6,329.70	25.57	248.496		
3,100.00	3,097.89	2,931.22	2,995.04	13.69	12.77	11.79	-4,167.75	-4,930.39	6,352.90	6,326.52	26.38	240.823		
3,200.00	3,197.81	3,029.06	3,092.86	14.12	13.18	11.80	-4,168.41	-4,931.96	6,350.64	6,323.43	27.21	233.381		
3,300.00	3,297.73	3,300.00	3,236.04	14.56	14.30	11.81	-4,169.16	-4,933.72	6,347.97	6,319.21	28.76	220.701		
3,400.00	3,397.65	3,292.10	3,355.90	14.99	14.27	11.82	-4,169.45	-4,934.48	6,344.65	6,315.49	29.16	217.598		
3,500.00	3,497.56	3,413.15	3,476.94	15.42	14.77	11.84	-4,169.54	-4,935.22	6,341.24	6,311.15	30.09	210.745		
3,600.00	3,597.48	3,500.59	3,564.38	15.85	15.14	11.84	-4,169.66	-4,935.64	6,337.76	6,306.88	30.89	205.204		
3,700.00	3,697.40	3,578.67	3,642.45	16.28	15.46	11.85	-4,169.85	-4,936.19	6,334.53	6,302.89	31.64	200.188		
3,800.00	3,797.32	3,658.00	3,721.78	16.72	15.80	11.86	-4,170.02	-4,937.11	6,331.63	6,299.23	32.41	195.381		
3,900.00	3,897.24	3,741.96	3,805.73	17.15	16.15	11.88	-4,170.21	-4,938.42	6,329.04	6,295.85	33.19	190.690		
4,000.00	3,997.16	3,830.94	3,894.70	17.59	16.52	11.89	-4,170.55	-4,939.92	6,326.65	6,292.65	34.00	186.103		
4,100.00	4,097.08	3,915.62	3,979.36	18.02	16.88	11.90	-4,171.11	-4,941.33	6,324.43	6,289.65	34.78	181.824		
4,200.00	4,197.00	3,983.57	4,047.30	18.46	17.16	11.91	-4,171.82	-4,942.61	6,322.62	6,287.12	35.50	178.096		
4,300.00	4,296.92	4,055.15	4,118.85	18.89	17.46	11.91	-4,172.86	-4,944.17	6,321.29	6,285.06	36.23	174.456		
4,400.00	4,396.84	4,126.95	4,190.62	19.33	17.77	11.92	-4,174.27	-4,945.83	6,320.40	6,283.43	36.97	170.969		
4,500.00	4,496.76	4,200.01	4,263.63	19.77	18.08	11.92	-4,175.99	-4,947.73	6,319.97	6,282.26	37.71	167.607		
4,600.00	4,596.68	4,340.64	4,404.18	20.20	18.67	11.93	-4,179.05	-4,951.32	6,319.39	6,280.66	38.74	163.136		
4,700.00	4,696.60	4,457.85	4,521.35	20.64	19.16	11.95	-4,180.87	-4,954.22	6,318.36	6,278.69	39.67	159.286		
4,800.00	4,796.52	4,607.24	4,670.68	21.08	19.80	11.97	-4,182.50	-4,957.64	6,316.92	6,276.19	40.73	155.081		
4,900.00	4,896.44	4,748.06	4,811.48	21.51	20.39	11.98	-4,183.48	-4,959.85	6,314.64	6,272.88	41.76	151.206		
5,000.00	4,996.36	4,858.53	4,921.94	21.95	20.86	11.99	-4,184.20	-4,960.99	6,311.91	6,269.25	42.66	147.946		
5,100.00	5,096.28	4,963.92	5,027.33	22.39	21.30	12.00	-4,184.77	-4,962.11	6,309.15	6,265.61	43.54	144.890		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 1 21-2(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,196.19	5,081.12	5,144.52	22.83	21.80	12.02	-4,185.03	-4,963.37	6,306.20	6,261.72	44.47	141.794		
5,300.00	5,296.11	5,186.54	5,249.93	23.27	22.25	12.03	-4,184.85	-4,964.56	6,303.03	6,257.67	45.36	138.969		
5,400.00	5,396.03	5,296.80	5,360.18	23.71	22.71	12.06	-4,184.27	-4,965.99	6,299.76	6,253.51	46.26	136.190		
5,500.00	5,495.95	5,373.59	5,436.97	24.14	23.04	12.07	-4,183.96	-4,966.99	6,296.58	6,249.56	47.02	133.911		
5,600.00	5,595.87	5,510.93	5,574.30	24.58	23.62	12.09	-4,183.53	-4,968.71	6,293.47	6,245.43	48.03	131.020		
5,700.00	5,695.79	5,574.70	5,638.06	25.02	23.89	12.10	-4,183.40	-4,969.40	6,290.23	6,241.48	48.75	129.043		
5,800.00	5,795.71	5,653.74	5,717.10	25.46	24.23	12.11	-4,183.62	-4,970.37	6,287.41	6,237.89	49.52	126.970		
5,900.00	5,895.63	5,743.83	5,807.17	25.90	24.61	12.13	-4,183.89	-4,971.74	6,284.84	6,234.50	50.34	124.852		
6,000.00	5,995.55	5,834.22	5,897.56	26.34	25.00	12.14	-4,184.31	-4,973.08	6,282.37	6,231.21	51.16	122.799		
6,100.00	6,095.47	5,918.53	5,981.85	26.78	25.35	12.15	-4,184.54	-4,974.77	6,280.15	6,228.20	51.96	120.876		
6,200.00	6,195.39	6,021.31	6,084.60	27.22	25.79	12.17	-4,184.61	-4,977.12	6,278.03	6,225.20	52.83	118.836		
6,300.00	6,295.31	6,125.91	6,189.18	27.66	26.24	12.19	-4,184.82	-4,979.23	6,275.78	6,222.07	53.71	116.844		
6,400.00	6,395.23	6,208.29	6,271.53	28.10	26.59	12.21	-4,184.74	-4,981.24	6,273.69	6,219.19	54.50	115.115		
6,500.00	6,495.02	6,284.59	6,347.80	28.54	26.91	-23.54	-4,184.85	-4,983.29	6,270.11	6,214.85	55.26	113.465		
6,600.00	6,593.09	6,393.82	6,456.99	28.98	27.38	-33.56	-4,185.25	-4,986.24	6,255.89	6,199.74	56.15	111.408		
6,700.00	6,687.01	6,485.39	6,548.53	29.41	27.77	-37.73	-4,185.27	-4,988.83	6,229.87	6,172.92	56.95	109.388		
6,800.00	6,774.46	6,564.66	6,627.77	29.83	28.10	-41.50	-4,185.48	-4,991.01	6,192.99	6,135.32	57.67	107.381		
6,900.00	6,853.31	6,632.78	6,695.86	30.26	28.39	-45.86	-4,185.96	-4,992.80	6,146.33	6,088.00	58.32	105.381		
7,000.00	6,921.60	6,690.42	6,753.47	30.76	28.64	-51.19	-4,186.21	-4,994.60	6,091.17	6,032.25	58.92	103.375		
7,100.00	6,977.66	6,737.55	6,800.57	31.38	28.84	-57.77	-4,186.26	-4,996.34	6,028.99	5,969.50	59.49	101.345		
7,200.00	7,020.10	6,774.36	6,837.34	32.17	29.00	-65.69	-4,186.22	-4,997.85	5,961.42	5,901.37	60.05	99.268		
7,300.00	7,047.88	6,800.01	6,862.98	33.13	29.11	-74.76	-4,186.14	-4,999.00	5,890.22	5,829.58	60.64	97.139		
7,400.00	7,060.32	6,811.38	6,874.33	34.27	29.16	-84.44	-4,186.10	-4,999.52	5,817.24	5,756.00	61.24	94.985		
7,500.00	7,060.70	6,814.75	6,877.70	35.56	29.17	-87.61	-4,186.09	-4,999.68	5,744.28	5,682.36	61.92	92.772		
7,600.00	7,060.27	6,817.60	6,880.55	37.02	29.18	-87.65	-4,186.08	-4,999.81	5,672.12	5,609.40	62.73	90.424		
7,700.00	7,059.83	6,820.48	6,883.42	38.64	29.20	-87.69	-4,186.08	-4,999.95	5,600.82	5,537.14	63.68	87.956		
7,800.00	7,059.40	6,823.38	6,886.32	40.40	29.21	-87.73	-4,186.07	-5,000.09	5,530.41	5,465.64	64.77	85.391		
7,900.00	7,058.97	6,826.31	6,889.24	42.28	29.22	-87.78	-4,186.06	-5,000.23	5,460.91	5,394.92	65.99	82.752		
8,000.00	7,058.53	6,829.26	6,892.19	44.27	29.23	-87.82	-4,186.06	-5,000.37	5,392.37	5,325.02	67.35	80.064		
8,100.00	7,058.10	6,832.24	6,895.17	46.35	29.25	-87.86	-4,186.05	-5,000.51	5,324.83	5,255.99	68.84	77.349		
8,200.00	7,057.66	6,835.24	6,898.17	48.50	29.26	-87.90	-4,186.04	-5,000.65	5,258.32	5,187.86	70.46	74.628		
8,300.00	7,057.23	6,838.27	6,901.19	50.73	29.27	-87.95	-4,186.04	-5,000.80	5,192.88	5,120.67	72.20	71.922		
8,400.00	7,056.80	6,841.33	6,904.25	53.02	29.28	-87.99	-4,186.04	-5,000.95	5,128.55	5,054.49	74.06	69.248		
8,500.00	7,056.36	6,844.41	6,907.33	55.36	29.30	-88.04	-4,186.03	-5,001.10	5,065.37	4,989.34	76.04	66.619		
8,600.00	7,055.93	6,847.52	6,910.43	57.74	29.31	-88.08	-4,186.03	-5,001.25	5,003.40	4,925.28	78.12	64.048		
8,700.00	7,055.49	6,850.66	6,913.57	60.17	29.32	-88.13	-4,186.03	-5,001.40	4,942.66	4,862.35	80.31	61.545		
8,800.00	7,055.06	6,853.83	6,916.73	62.63	29.34	-88.17	-4,186.02	-5,001.56	4,883.22	4,800.62	82.60	59.118		
8,900.00	7,054.63	6,857.03	6,919.93	65.13	29.35	-88.22	-4,186.02	-5,001.72	4,825.11	4,740.12	84.99	56.773		
9,000.00	7,054.19	6,860.25	6,923.15	67.66	29.36	-88.27	-4,186.02	-5,001.88	4,768.40	4,680.92	87.47	54.513		
9,100.00	7,053.76	6,863.51	6,926.40	70.21	29.38	-88.31	-4,186.02	-5,002.04	4,713.11	4,623.07	90.04	52.343		
9,200.00	7,053.32	6,866.79	6,929.68	72.78	29.39	-88.36	-4,186.02	-5,002.20	4,659.32	4,566.62	92.70	50.263		
9,300.00	7,052.89	6,870.11	6,932.99	75.38	29.41	-88.41	-4,186.02	-5,002.37	4,607.06	4,511.63	95.43	48.275		
9,400.00	7,052.46	6,873.45	6,936.33	77.99	29.42	-88.46	-4,186.02	-5,002.54	4,556.40	4,458.15	98.25	46.378		
9,500.00	7,052.02	6,876.83	6,939.71	80.62	29.44	-88.51	-4,186.03	-5,002.71	4,507.38	4,406.25	101.13	44.571		
9,600.00	7,051.59	6,880.24	6,943.11	83.26	29.45	-88.56	-4,186.03	-5,002.88	4,460.06	4,355.98	104.08	42.853		
9,700.00	7,051.15	6,883.68	6,946.55	85.92	29.46	-88.61	-4,186.03	-5,003.06	4,414.50	4,307.41	107.09	41.223		
9,800.00	7,050.72	6,887.15	6,950.01	88.59	29.48	-88.66	-4,186.04	-5,003.24	4,370.75	4,260.59	110.16	39.677		
9,900.00	7,050.29	6,890.66	6,953.51	91.28	29.49	-88.71	-4,186.04	-5,003.42	4,328.86	4,215.58	113.28	38.215		
10,000.00	7,049.85	6,894.20	6,957.05	93.97	29.51	-88.76	-4,186.05	-5,003.60	4,288.89	4,172.45	116.44	36.833		
10,100.00	7,049.42	6,900.01	6,962.86	96.67	29.53	-88.84	-4,186.06	-5,003.90	4,250.89	4,131.24	119.65	35.527		
10,200.00	7,048.98	6,900.01	6,962.86	99.38	29.53	-88.84	-4,186.06	-5,003.90	4,214.92	4,092.05	122.88	34.302		
10,300.00	7,048.55	6,900.01	6,962.86	102.10	29.53	-88.84	-4,186.06	-5,003.90	4,181.03	4,054.91	126.12	33.150		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 1 21-2(SI_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.00	7,048.12	6,900.01	6,962.86	104.83	29.53	-88.84	-4,186.06	-5,003.90	4,149.28	4,019.89	129.39	32.067		
10,500.00	7,047.68	6,911.18	6,974.01	107.56	29.58	-89.00	-4,186.09	-5,004.49	4,119.69	3,986.97	132.72	31.040		
10,600.00	7,047.25	6,914.59	6,977.42	110.30	29.60	-89.05	-4,186.10	-5,004.68	4,092.33	3,956.31	136.02	30.086		
10,700.00	7,046.81	6,918.06	6,980.88	113.05	29.61	-89.10	-4,186.11	-5,004.86	4,067.25	3,927.93	139.32	29.194		
10,800.00	7,046.38	6,921.58	6,984.39	115.80	29.63	-89.16	-4,186.13	-5,005.06	4,044.47	3,901.87	142.61	28.361		
10,900.00	7,045.95	6,925.16	6,987.96	118.55	29.64	-89.21	-4,186.14	-5,005.25	4,024.06	3,878.18	145.88	27.586		
11,000.00	7,045.51	6,928.79	6,991.59	121.31	29.66	-89.26	-4,186.16	-5,005.45	4,006.02	3,856.91	149.12	26.865		
11,100.00	7,045.08	6,932.48	6,995.27	124.08	29.67	-89.31	-4,186.17	-5,005.66	3,990.41	3,838.08	152.33	26.196		
11,200.00	7,044.64	6,936.22	6,999.01	126.85	29.69	-89.37	-4,186.19	-5,005.87	3,977.25	3,821.75	155.50	25.577		
11,300.00	7,044.21	6,940.03	7,002.81	129.62	29.71	-89.42	-4,186.21	-5,006.08	3,966.57	3,807.95	158.62	25.007		
11,400.00	7,043.78	6,943.90	7,006.67	132.40	29.72	-89.48	-4,186.23	-5,006.30	3,958.37	3,796.69	161.68	24.482		
11,500.00	7,043.34	6,947.83	7,010.60	135.18	29.74	-89.54	-4,186.26	-5,006.53	3,952.69	3,788.00	164.68	24.002		
11,600.00	7,042.91	6,951.82	7,014.59	137.96	29.76	-89.59	-4,186.28	-5,006.76	3,949.52	3,781.91	167.61	23.563		
11,675.40	7,042.58	6,954.88	7,017.64	140.06	29.77	-89.64	-4,186.30	-5,006.93	3,948.80	3,779.03	169.77	23.260 CC		
11,700.00	7,042.47	6,955.88	7,018.64	140.75	29.77	-89.65	-4,186.31	-5,006.99	3,948.88	3,778.41	170.46	23.165		
11,800.00	7,042.04	6,960.01	7,022.76	143.54	29.79	-89.71	-4,186.34	-5,007.23	3,950.76	3,777.53	173.23	22.806 ES		
11,900.00	7,041.61	6,964.21	7,026.95	146.33	29.81	-89.77	-4,186.37	-5,007.48	3,955.17	3,779.25	175.92	22.483		
12,000.00	7,041.17	6,968.48	7,031.22	149.13	29.83	-89.84	-4,186.40	-5,007.73	3,962.09	3,783.59	178.50	22.196		
12,100.00	7,040.74	6,972.82	7,035.55	151.92	29.85	-89.90	-4,186.44	-5,007.99	3,971.51	3,790.52	180.99	21.943		
12,200.00	7,040.30	6,977.24	7,039.96	154.72	29.86	-89.96	-4,186.47	-5,008.26	3,983.42	3,800.03	183.39	21.722		
12,300.00	7,039.87	6,981.73	7,044.44	157.52	29.88	-90.03	-4,186.51	-5,008.53	3,997.78	3,812.11	185.67	21.531		
12,400.00	7,039.44	6,986.31	7,049.01	160.33	29.90	-90.09	-4,186.55	-5,008.81	4,014.58	3,826.73	187.85	21.371		
12,500.00	7,039.00	6,990.96	7,053.65	163.13	29.92	-90.16	-4,186.60	-5,009.10	4,033.78	3,843.86	189.93	21.239		
12,600.00	7,038.57	6,995.69	7,058.38	165.94	29.94	-90.23	-4,186.64	-5,009.40	4,055.35	3,863.46	191.89	21.134		
12,700.00	7,038.13	7,000.52	7,063.19	168.75	29.96	-90.30	-4,186.69	-5,009.70	4,079.25	3,885.51	193.75	21.055		
12,800.00	7,037.70	7,005.39	7,068.05	171.56	29.98	-90.37	-4,186.74	-5,010.01	4,105.45	3,909.95	195.49	21.000		
12,900.00	7,037.27	7,010.26	7,072.91	174.37	30.01	-90.44	-4,186.80	-5,010.32	4,133.89	3,936.75	197.13	20.970		
13,000.00	7,036.83	7,015.13	7,077.78	177.19	30.03	-90.51	-4,186.85	-5,010.62	4,164.53	3,965.86	198.66	20.963 SF		
13,100.00	7,036.40	7,020.01	7,082.65	180.00	30.05	-90.58	-4,186.90	-5,010.93	4,197.32	3,997.23	200.09	20.977		
13,200.00	7,035.96	7,024.90	7,087.52	182.82	30.07	-90.65	-4,186.96	-5,011.24	4,232.21	4,030.80	201.42	21.012		
13,300.00	7,035.53	7,029.79	7,092.40	185.64	30.09	-90.72	-4,187.02	-5,011.55	4,269.16	4,066.52	202.64	21.068		
13,400.00	7,035.10	7,034.68	7,097.28	188.46	30.11	-90.79	-4,187.08	-5,011.86	4,308.10	4,104.34	203.77	21.142		
13,500.00	7,034.66	7,039.58	7,102.17	191.28	30.13	-90.86	-4,187.14	-5,012.17	4,348.99	4,144.19	204.80	21.236		
13,600.00	7,034.23	7,044.48	7,107.06	194.10	30.15	-90.94	-4,187.20	-5,012.48	4,391.77	4,186.03	205.74	21.346		
13,700.00	7,033.79	7,049.38	7,111.95	196.92	30.17	-91.01	-4,187.26	-5,012.79	4,436.38	4,229.79	206.59	21.474		
13,800.00	7,033.36	7,054.29	7,116.85	199.74	30.19	-91.08	-4,187.33	-5,013.10	4,482.78	4,275.41	207.36	21.618		
13,900.00	7,032.93	7,059.20	7,121.76	202.57	30.21	-91.15	-4,187.39	-5,013.41	4,530.90	4,322.85	208.05	21.778		
14,000.00	7,032.49	7,064.12	7,126.66	205.39	30.24	-91.22	-4,187.46	-5,013.72	4,580.69	4,372.02	208.67	21.952		
14,100.00	7,032.06	7,069.04	7,131.57	208.22	30.26	-91.29	-4,187.53	-5,014.03	4,632.10	4,422.89	209.21	22.141		
14,200.00	7,031.62	7,073.97	7,136.49	211.05	30.28	-91.36	-4,187.60	-5,014.35	4,685.07	4,475.39	209.68	22.344		
14,300.00	7,031.19	7,078.90	7,141.41	213.87	30.30	-91.43	-4,187.67	-5,014.66	4,739.56	4,529.47	210.09	22.560		
14,400.00	7,030.76	7,083.83	7,146.33	216.70	30.32	-91.50	-4,187.75	-5,014.97	4,795.51	4,585.07	210.44	22.788		
14,500.00	7,030.32	7,088.77	7,151.26	219.53	30.34	-91.58	-4,187.82	-5,015.29	4,852.86	4,642.13	210.73	23.029		
14,600.00	7,029.89	7,093.71	7,156.19	222.36	30.36	-91.65	-4,187.90	-5,015.60	4,911.58	4,700.61	210.97	23.281		
14,700.00	7,029.45	7,098.65	7,161.12	225.19	30.38	-91.72	-4,187.97	-5,015.91	4,971.61	4,760.46	211.15	23.545		
14,800.00	7,029.02	7,104.31	7,166.77	228.03	30.41	-91.80	-4,188.06	-5,016.27	5,032.90	4,821.61	211.29	23.819		
14,805.04	7,029.00	7,104.61	7,167.07	228.17	30.41	-91.81	-4,188.07	-5,016.29	5,036.02	4,824.72	211.30	23.833		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26C-23-L(SRC PLAN_75CC) - OH - BAKER PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	25.00	73.00	3.28	3.28	-148.21	-5,313.12	-3,293.59	6,251.58					
100.00	100.00	89.89	137.89	3.28	3.28	-148.21	-5,312.97	-3,293.46	6,251.08	6,244.51	6.57	951.750		
200.00	200.00	192.76	240.75	3.34	3.33	-148.20	-5,312.21	-3,293.27	6,250.35	6,243.68	6.67	937.623		
300.00	300.00	263.11	311.11	3.44	3.39	-148.20	-5,311.71	-3,293.48	6,249.91	6,243.07	6.84	914.012		
400.00	400.00	1,467.82	1,502.87	3.60	7.48	-147.28	-5,174.38	-3,323.94	6,248.13	6,237.13	11.00	567.988		
500.00	499.98	1,526.31	1,559.78	3.80	7.79	-5.44	-5,161.08	-3,326.10	6,229.09	6,217.64	11.45	544.068		
600.00	599.90	1,601.06	1,632.61	4.02	8.19	-5.34	-5,144.47	-3,329.01	6,208.43	6,196.42	12.01	516.743		
700.00	699.82	1,674.00	1,703.62	4.28	8.59	-5.23	-5,128.15	-3,332.34	6,188.02	6,175.42	12.61	490.884		
800.00	799.74	1,736.67	1,764.71	4.57	8.94	-5.14	-5,114.47	-3,335.32	6,168.17	6,154.99	13.18	467.987		
900.00	899.66	1,881.83	1,906.01	4.88	9.77	-4.92	-5,081.99	-3,342.43	6,147.87	6,133.66	14.21	432.758		
1,000.00	999.58	1,978.47	2,000.04	5.21	10.33	-4.77	-5,060.21	-3,347.15	6,127.59	6,112.57	15.01	408.119		
1,100.00	1,099.50	2,075.10	2,094.07	5.55	10.90	-4.62	-5,038.44	-3,351.87	6,107.35	6,091.50	15.84	385.447		
1,200.00	1,199.42	2,171.74	2,188.11	5.91	11.47	-4.47	-5,016.66	-3,356.60	6,087.15	6,070.45	16.69	364.617		
1,300.00	1,299.34	2,268.38	2,282.14	6.28	12.05	-4.32	-4,994.89	-3,361.32	6,066.99	6,049.43	17.56	345.486		
1,400.00	1,399.26	2,365.02	2,376.18	6.66	12.63	-4.16	-4,973.11	-3,366.04	6,046.88	6,028.44	18.44	327.906		
1,500.00	1,499.18	2,461.66	2,470.21	7.04	13.21	-4.01	-4,951.33	-3,370.76	6,026.81	6,007.47	19.33	311.735		
1,600.00	1,599.10	2,558.29	2,564.24	7.43	13.80	-3.86	-4,929.56	-3,375.49	6,006.78	5,986.54	20.24	296.840		
1,700.00	1,699.01	2,654.93	2,658.28	7.83	14.39	-3.70	-4,907.78	-3,380.21	5,986.79	5,965.64	21.15	283.095		
1,800.00	1,798.93	2,752.44	2,752.31	8.23	14.99	-3.54	-4,886.00	-3,384.93	5,966.85	5,944.78	22.07	270.331		
1,900.00	1,898.85	2,855.81	2,846.34	8.64	15.62	-3.39	-4,864.23	-3,389.65	5,946.95	5,923.92	23.04	258.155		
2,000.00	1,998.77	2,944.84	2,940.38	9.05	16.17	-3.23	-4,842.45	-3,394.37	5,927.10	5,903.17	23.93	247.703		
2,100.00	2,098.69	3,041.48	3,034.41	9.46	16.77	-3.07	-4,820.68	-3,399.10	5,907.29	5,882.43	24.87	237.551		
2,200.00	2,198.61	3,138.12	3,128.45	9.88	17.37	-2.91	-4,798.90	-3,403.82	5,887.53	5,861.72	25.81	228.093		
2,300.00	2,298.53	3,234.76	3,222.48	10.30	17.97	-2.75	-4,777.12	-3,408.54	5,867.82	5,841.06	26.76	219.265		
2,400.00	2,398.45	3,331.39	3,316.51	10.72	18.57	-2.58	-4,755.35	-3,413.26	5,848.15	5,820.44	27.71	211.011		
2,500.00	2,498.37	3,428.03	3,410.55	11.14	19.17	-2.42	-4,733.57	-3,417.99	5,828.53	5,799.86	28.67	203.280		
2,600.00	2,598.29	3,524.67	3,504.58	11.56	19.77	-2.25	-4,711.79	-3,422.71	5,808.95	5,779.32	29.63	196.025		
2,700.00	2,698.21	3,621.31	3,598.61	11.98	20.38	-2.09	-4,690.02	-3,427.43	5,789.43	5,758.83	30.60	189.207		
2,800.00	2,798.13	3,717.94	3,692.65	12.41	20.98	-1.92	-4,668.24	-3,432.15	5,769.95	5,738.38	31.57	182.788		
2,900.00	2,898.05	10,709.44	7,245.46	12.84	120.50	-41.34	-3,831.90	28.41	5,745.17	5,649.12	96.05	59.816		
3,000.00	2,997.97	10,705.19	7,245.53	13.27	120.36	-41.27	-3,831.92	24.17	5,667.89	5,570.79	97.10	58.373		
3,100.00	3,097.89	10,700.94	7,245.61	13.69	120.23	-41.21	-3,831.93	19.92	5,591.32	5,493.14	98.18	56.951		
3,200.00	3,197.81	10,703.31	7,245.68	14.12	120.30	-41.14	-3,831.95	15.67	5,515.50	5,416.06	99.43	55.468		
3,300.00	3,297.73	10,692.44	7,245.76	14.56	119.96	-41.07	-3,831.96	11.42	5,440.46	5,340.04	100.42	54.177		
3,400.00	3,397.65	10,688.19	7,245.83	14.99	119.82	-41.00	-3,831.97	7.17	5,366.23	5,264.65	101.58	52.827		
3,500.00	3,497.56	10,683.94	7,245.91	15.42	119.69	-40.94	-3,831.99	2.92	5,292.84	5,190.07	102.77	51.502		
3,600.00	3,597.48	10,679.69	7,245.98	15.85	119.56	-40.87	-3,832.00	-1.33	5,220.34	5,116.35	103.98	50.204		
3,700.00	3,697.40	10,675.44	7,246.06	16.28	119.42	-40.80	-3,832.02	-5.58	5,148.75	5,043.53	105.22	48.933		
3,800.00	3,797.32	10,671.19	7,246.13	16.72	119.29	-40.74	-3,832.03	-9.83	5,078.12	4,971.64	106.48	47.690		
3,900.00	3,897.24	10,666.94	7,246.21	17.15	119.15	-40.67	-3,832.05	-14.08	5,008.49	4,900.72	107.77	46.476		
4,000.00	3,997.16	10,662.69	7,246.28	17.59	119.02	-40.60	-3,832.06	-18.32	4,939.89	4,830.82	109.07	45.290		
4,100.00	4,097.08	10,658.44	7,246.36	18.02	118.88	-40.53	-3,832.07	-22.57	4,872.38	4,761.98	110.40	44.135		
4,200.00	4,197.00	10,654.19	7,246.43	18.46	118.75	-40.47	-3,832.09	-26.82	4,806.00	4,694.25	111.74	43.009		
4,300.00	4,296.92	10,650.10	7,246.50	18.89	118.75	-40.40	-3,832.10	-31.07	4,740.79	4,627.58	113.21	41.876		
4,400.00	4,396.84	10,645.69	7,246.58	19.33	118.48	-40.33	-3,832.12	-35.32	4,676.81	4,562.33	114.48	40.851		
4,500.00	4,496.76	10,641.44	7,246.65	19.77	118.35	-40.27	-3,832.13	-39.57	4,614.11	4,498.23	115.88	39.819		
4,600.00	4,596.68	10,637.19	7,246.73	20.20	118.21	-40.20	-3,832.14	-43.82	4,552.73	4,435.45	117.28	38.819		
4,700.00	4,696.60	10,632.94	7,246.80	20.64	118.08	-40.13	-3,832.16	-48.07	4,492.74	4,374.04	118.69	37.852		
4,800.00	4,796.52	10,628.69	7,246.88	21.08	117.94	-40.06	-3,832.17	-52.32	4,434.19	4,314.07	120.11	36.917		
4,900.00	4,896.44	10,624.44	7,246.95	21.51	117.81	-40.00	-3,832.19	-56.57	4,377.13	4,255.59	121.54	36.015		
5,000.00	4,996.36	10,620.19	7,247.03	21.95	117.67	-39.93	-3,832.20	-60.82	4,321.63	4,198.67	122.96	35.146		
5,100.00	5,096.28	10,615.94	7,247.10	22.39	117.54	-39.86	-3,832.22	-65.06	4,267.75	4,143.37	124.38	34.312		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	10,611.69	7,247.18	22.83	117.40	-39.80	-3,832.23	-69.31	4,215.55	4,089.75	125.80	33.511		
5,300.00	5,296.11	10,607.44	7,247.25	23.27	117.27	-39.73	-3,832.24	-73.56	4,165.09	4,037.89	127.20	32.744		
5,400.00	5,396.03	10,603.19	7,247.33	23.71	117.14	-39.66	-3,832.26	-77.81	4,116.44	3,987.85	128.59	32.012		
5,500.00	5,495.95	10,601.06	7,247.40	24.14	117.07	-39.59	-3,832.27	-82.06	4,069.66	3,939.64	130.02	31.300		
5,600.00	5,595.87	10,594.69	7,247.48	24.58	116.87	-39.53	-3,832.29	-86.31	4,024.82	3,893.51	131.31	30.652		
5,700.00	5,695.79	10,590.45	7,247.55	25.02	116.73	-39.46	-3,832.30	-90.56	3,981.98	3,849.35	132.62	30.025		
5,800.00	5,795.71	10,586.20	7,247.63	25.46	116.60	-39.39	-3,832.32	-94.81	3,941.20	3,807.30	133.91	29.433		
5,900.00	5,895.63	10,581.95	7,247.70	25.90	116.46	-39.32	-3,832.33	-99.06	3,902.56	3,767.41	135.15	28.876		
6,000.00	5,995.55	10,577.70	7,247.78	26.34	116.33	-39.26	-3,832.34	-103.31	3,866.12	3,729.77	136.35	28.355		
6,100.00	6,095.47	10,573.45	7,247.85	26.78	116.20	-39.19	-3,832.36	-107.55	3,831.93	3,694.44	137.50	27.869		
6,200.00	6,195.39	10,569.20	7,247.93	27.22	116.06	-39.12	-3,832.37	-111.80	3,800.07	3,661.48	138.59	27.420		
6,300.00	6,295.31	10,564.95	7,248.00	27.66	115.93	-39.06	-3,832.39	-116.05	3,770.58	3,630.96	139.62	27.007		
6,400.00	6,395.23	10,560.70	7,248.07	28.10	115.79	-38.99	-3,832.40	-120.30	3,743.53	3,602.95	140.58	26.629		
6,500.00	6,495.02	10,554.11	7,248.19	28.54	115.59	-38.92	-3,832.42	-124.55	3,719.00	3,577.60	141.39	26.302		
6,600.00	6,593.09	10,553.60	7,248.55	28.98	114.94	-38.85	-3,832.49	-128.80	3,697.36	3,555.68	141.68	26.096		
6,700.00	6,687.01	10,551.95	7,249.18	29.41	113.94	-38.78	-3,832.61	-133.05	3,678.95	3,537.44	141.51	25.997		
6,800.00	6,774.46	10,555.71	7,250.05	29.83	112.49	-38.71	-3,832.78	-137.30	3,663.86	3,523.07	140.79	26.023		
6,900.00	6,853.31	10,555.90	7,251.15	30.26	110.29	-38.64	-3,832.98	-141.55	3,651.95	3,512.68	139.26	26.224		
7,000.00	6,921.60	10,555.80	7,251.62	30.76	107.78	-38.57	-3,833.25	-145.80	3,642.83	3,505.46	137.38	26.517		
7,100.00	6,977.66	10,555.14	7,251.62	31.38	105.20	-38.50	-3,833.53	-149.83	3,636.20	3,500.70	135.50	26.835		
7,200.00	7,020.10	10,555.12	7,251.62	32.17	102.39	-38.43	-3,833.83	-153.85	3,631.67	3,498.16	133.50	27.203		
7,300.00	7,047.88	10,556.77	7,251.62	33.13	99.42	-38.36	-3,834.15	-157.87	3,628.86	3,497.37	131.49	27.597 ES		
7,400.00	7,060.32	9,937.65	7,251.62	34.27	96.36	-38.29	-3,834.48	-161.89	3,627.52	3,497.97	129.55	28.000		
7,500.00	7,060.70	9,837.66	7,251.62	35.56	93.30	-38.22	-3,834.81	-165.91	3,627.21	3,499.46	127.75	28.393		
7,600.00	7,060.27	9,737.66	7,251.62	37.02	90.25	-38.15	-3,835.15	-169.93	3,626.97	3,500.83	126.14	28.754		
7,700.00	7,059.83	9,637.66	7,251.62	38.64	87.23	-38.08	-3,835.48	-173.95	3,626.73	3,502.03	124.70	29.083		
7,800.00	7,059.40	9,537.67	7,251.62	40.40	84.23	-38.01	-3,835.82	-177.97	3,626.49	3,503.06	123.42	29.383		
7,900.00	7,058.97	9,437.67	7,251.62	42.28	81.26	-37.94	-3,836.15	-181.99	3,626.24	3,503.96	122.29	29.653		
8,000.00	7,058.53	9,337.67	7,251.62	44.27	78.31	-37.87	-3,836.48	-186.01	3,626.00	3,504.72	121.28	29.897		
8,100.00	7,058.10	9,237.67	7,251.62	46.35	75.40	-37.80	-3,836.82	-190.03	3,625.76	3,505.36	120.40	30.115		
8,200.00	7,057.66	9,137.67	7,251.62	48.50	72.53	-37.73	-3,837.15	-194.05	3,625.52	3,505.90	119.63	30.307		
8,300.00	7,057.23	9,037.67	7,251.62	50.73	69.70	-37.66	-3,837.49	-198.07	3,625.28	3,506.32	118.96	30.475		
8,400.00	7,056.80	8,937.67	7,251.62	53.02	66.92	-37.59	-3,837.82	-202.09	3,625.04	3,506.64	118.39	30.618		
8,500.00	7,056.36	8,837.67	7,251.62	55.36	64.19	-37.52	-3,838.15	-206.11	3,624.80	3,506.87	117.93	30.737		
8,600.00	7,055.93	8,737.68	7,251.62	57.74	61.53	-37.45	-3,838.49	-210.13	3,624.56	3,506.99	117.57	30.830		
8,700.00	7,055.49	8,637.68	7,251.62	60.17	58.94	-37.38	-3,838.82	-214.15	3,624.32	3,507.01	117.31	30.896		
8,800.00	7,055.06	8,537.68	7,251.62	62.63	56.45	-37.31	-3,839.16	-218.17	3,624.07	3,506.92	117.15	30.935		
8,900.00	7,054.63	8,437.68	7,251.62	65.13	54.06	-37.24	-3,839.49	-222.19	3,623.83	3,506.72	117.11	30.944		
9,000.00	7,054.19	8,337.68	7,251.62	67.66	51.81	-37.17	-3,839.82	-226.21	3,623.59	3,506.40	117.19	30.920		
9,100.00	7,053.76	8,237.68	7,251.62	70.21	49.72	-37.10	-3,840.16	-230.23	3,623.35	3,505.94	117.41	30.861		
9,200.00	7,053.32	8,137.68	7,251.62	72.78	47.85	-37.03	-3,840.49	-234.25	3,623.11	3,505.34	117.77	30.764		
9,300.00	7,052.89	8,037.68	7,251.62	75.38	46.25	-36.96	-3,840.83	-238.27	3,622.87	3,504.57	118.30	30.625		
9,400.00	7,052.46	7,937.69	7,251.62	77.99	44.98	-36.89	-3,841.16	-242.29	3,622.63	3,503.62	119.01	30.439		
9,500.00	7,052.02	7,837.69	7,251.62	80.62	44.08	-36.82	-3,841.49	-246.31	3,622.39	3,502.46	119.93	30.204		
9,600.00	7,051.59	7,738.50	7,251.62	83.26	43.50	-36.75	-3,841.83	-250.33	3,622.15	3,501.06	121.08	29.914		
9,617.22	7,051.51	7,729.18	7,251.56	83.72	43.46	-36.71	-3,841.87	-250.33	3,622.13	3,500.70	121.43	29.829 CC		
9,700.00	7,051.15	7,687.38	7,249.66	85.92	43.29	-36.64	-3,842.45	-254.35	3,622.60	3,499.48	123.12	29.423		
9,800.00	7,050.72	7,637.46	7,243.89	88.59	43.13	-36.57	-3,843.95	-258.37	3,624.42	3,499.22	125.20	28.949		
9,900.00	7,050.29	7,586.07	7,234.02	91.28	43.00	-36.50	-3,846.41	-262.39	3,627.66	3,500.38	127.29	28.500		
10,000.00	7,049.85	7,541.67	7,222.34	93.97	42.89	-36.43	-3,849.26	-266.41	3,632.36	3,502.87	129.49	28.052		
10,100.00	7,049.42	7,500.00	7,208.75	96.67	42.81	-36.36	-3,852.54	-270.43	3,638.60	3,506.88	131.72	27.623		
10,200.00	7,048.98	7,452.02	7,190.05	99.38	42.71	-36.29	-3,857.02	-274.45	3,646.45	3,512.53	133.92	27.229		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.55	7,414.01	7,172.98	102.10	42.63	-91.94	-3,861.09	-3,253.07	3,656.00	3,519.79	136.21	26.841		
10,400.00	7,048.12	7,376.52	7,154.26	104.83	42.56	-91.64	-3,865.53	-3,285.22	3,667.32	3,528.86	138.46	26.486		
10,500.00	7,047.68	7,341.63	7,135.20	107.56	42.48	-91.34	-3,870.05	-3,314.09	3,680.50	3,539.79	140.71	26.157		
10,600.00	7,047.25	7,309.26	7,116.16	110.30	42.41	-91.04	-3,874.55	-3,339.88	3,695.59	3,552.66	142.93	25.856		
10,700.00	7,046.81	7,279.30	7,097.42	113.05	42.34	-90.75	-3,878.96	-3,362.84	3,712.65	3,567.52	145.13	25.582		
10,800.00	7,046.38	7,252.01	7,079.46	115.80	42.27	-90.47	-3,883.19	-3,382.93	3,731.74	3,584.47	147.27	25.339		
10,900.00	7,045.95	7,226.02	7,061.58	118.55	42.20	-90.19	-3,887.40	-3,401.32	3,752.88	3,603.51	149.37	25.124		
11,000.00	7,045.51	7,200.00	7,042.96	121.31	42.13	-89.90	-3,891.77	-3,418.97	3,776.09	3,624.70	151.40	24.941		
11,100.00	7,045.08	7,180.55	7,028.60	124.08	42.07	-89.67	-3,895.14	-3,431.64	3,801.40	3,648.01	153.38	24.784		
11,200.00	7,044.64	7,152.01	7,006.86	126.85	41.99	-89.34	-3,900.24	-3,449.40	3,828.82	3,673.55	155.27	24.660		
11,300.00	7,044.21	7,152.01	7,006.86	129.62	41.99	-89.34	-3,900.24	-3,449.40	3,858.32	3,701.18	157.14	24.553		
11,400.00	7,043.78	7,124.34	6,985.05	132.40	41.90	-89.00	-3,905.35	-3,465.65	3,889.82	3,730.94	158.88	24.483		
11,500.00	7,043.34	7,100.00	6,965.32	135.18	41.82	-88.69	-3,909.97	-3,479.13	3,923.46	3,762.91	160.55	24.438		
11,600.00	7,042.91	7,100.00	6,965.32	137.96	41.82	-88.69	-3,909.97	-3,479.13	3,959.08	3,796.89	162.18	24.411 SF		
11,700.00	7,042.47	7,079.43	6,948.26	140.75	41.74	-88.43	-3,913.96	-3,489.91	3,996.68	3,832.97	163.70	24.414		
11,800.00	7,042.04	7,052.01	6,925.01	143.54	41.65	-88.07	-3,919.39	-3,503.38	4,036.36	3,871.22	165.13	24.443		
11,900.00	7,041.61	7,052.01	6,925.01	146.33	41.65	-88.07	-3,919.39	-3,503.38	4,077.75	3,911.22	166.53	24.486		
12,000.00	7,041.17	7,049.69	6,923.02	149.13	41.64	-88.04	-3,919.86	-3,504.47	4,121.13	3,953.29	167.85	24.553		
12,100.00	7,040.74	7,032.45	6,908.08	151.92	41.57	-87.81	-3,923.34	-3,512.36	4,166.30	3,997.23	169.07	24.642		
12,200.00	7,040.30	7,010.76	6,889.02	154.72	41.48	-87.52	-3,927.79	-3,521.69	4,213.35	4,043.13	170.21	24.753		
12,300.00	7,039.87	7,010.76	6,889.02	157.52	41.48	-87.52	-3,927.79	-3,521.69	4,261.98	4,090.66	171.31	24.878		
12,400.00	7,039.44	7,004.37	6,883.34	160.33	41.46	-87.44	-3,929.12	-3,524.31	4,312.36	4,140.02	172.34	25.023		
12,500.00	7,039.00	7,000.00	6,879.45	163.13	41.44	-87.38	-3,930.02	-3,526.07	4,364.38	4,191.08	173.29	25.185		
12,600.00	7,038.57	7,000.00	6,879.45	165.94	41.44	-87.38	-3,930.02	-3,526.07	4,418.04	4,243.85	174.19	25.363		
12,700.00	7,038.13	6,980.89	6,862.27	168.75	41.35	-87.12	-3,934.03	-3,533.44	4,473.08	4,298.06	175.01	25.559		
12,800.00	7,037.70	6,973.90	6,855.94	171.56	41.32	-87.02	-3,935.51	-3,535.99	4,529.67	4,353.89	175.78	25.768		
12,900.00	7,037.27	6,952.01	6,835.94	174.37	41.23	-86.72	-3,940.17	-3,543.55	4,587.83	4,411.35	176.49	25.995		
13,000.00	7,036.83	6,952.01	6,835.94	177.19	41.23	-86.72	-3,940.17	-3,543.55	4,647.14	4,469.99	177.15	26.232		
13,100.00	7,036.40	6,952.01	6,835.94	180.00	41.23	-86.72	-3,940.17	-3,543.55	4,707.83	4,530.06	177.77	26.483		
13,200.00	7,035.96	6,952.01	6,835.94	182.82	41.23	-86.72	-3,940.17	-3,543.55	4,769.84	4,591.51	178.33	26.747		
13,300.00	7,035.53	6,952.01	6,835.94	185.64	41.23	-86.72	-3,940.17	-3,543.55	4,833.13	4,654.28	178.85	27.023		
13,400.00	7,035.10	6,952.01	6,835.94	188.46	41.23	-86.72	-3,940.17	-3,543.55	4,897.64	4,718.32	179.32	27.312		
13,500.00	7,034.66	6,952.01	6,835.94	191.28	41.23	-86.72	-3,940.17	-3,543.55	4,963.32	4,783.57	179.75	27.612		
13,600.00	7,034.23	6,929.30	6,814.92	194.10	41.12	-86.40	-3,945.06	-3,550.64	5,029.80	4,849.66	180.15	27.921		
13,700.00	7,033.79	6,924.83	6,810.76	196.92	41.10	-86.33	-3,946.03	-3,551.94	5,097.55	4,917.05	180.50	28.241		
13,800.00	7,033.36	6,900.00	6,787.47	199.74	40.98	-85.98	-3,951.45	-3,558.64	5,166.61	4,985.79	180.82	28.574		
13,900.00	7,032.93	6,900.00	6,787.47	202.57	40.98	-85.98	-3,951.45	-3,558.64	5,236.27	5,055.16	181.11	28.912		
14,000.00	7,032.49	6,900.00	6,787.47	205.39	40.98	-85.98	-3,951.45	-3,558.64	5,306.90	5,125.53	181.37	29.260		
14,100.00	7,032.06	6,900.00	6,787.47	208.22	40.98	-85.98	-3,951.45	-3,558.64	5,378.46	5,196.86	181.60	29.617		
14,200.00	7,031.62	6,900.00	6,787.47	211.05	40.98	-85.98	-3,951.45	-3,558.64	5,450.91	5,269.11	181.80	29.983		
14,300.00	7,031.19	6,900.00	6,787.47	213.87	40.98	-85.98	-3,951.45	-3,558.64	5,524.23	5,342.25	181.98	30.356		
14,400.00	7,030.76	6,900.00	6,787.47	216.70	40.98	-85.98	-3,951.45	-3,558.64	5,598.37	5,416.24	182.13	30.738		
14,500.00	7,030.32	6,900.00	6,787.47	219.53	40.98	-85.98	-3,951.45	-3,558.64	5,673.31	5,491.04	182.27	31.127		
14,600.00	7,029.89	6,900.00	6,787.47	222.36	40.98	-85.98	-3,951.45	-3,558.64	5,749.01	5,566.63	182.38	31.523		
14,700.00	7,029.45	6,900.00	6,787.47	225.19	40.98	-85.98	-3,951.45	-3,558.64	5,825.44	5,642.97	182.47	31.926		
14,800.00	7,029.02	6,900.00	6,787.47	228.03	40.98	-85.98	-3,951.45	-3,558.64	5,902.57	5,720.03	182.54	32.336		
14,805.04	7,029.00	6,900.00	6,787.47	228.17	40.98	-85.98	-3,951.45	-3,558.64	5,906.48	5,723.94	182.54	32.356		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN												Offset Site Error:	0.00 ft
Survey Program: 25-MWVD												Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	25.00	73.00	3.28	3.28	-148.11	-5,293.08	-3,293.58	6,234.56				
100.00	100.00	1,240.10	1,270.56	3.28	6.98	-147.02	-5,126.88	-3,326.68	6,222.69	6,212.54	10.15	613.233	
200.00	200.00	1,380.42	1,405.79	3.34	7.81	-146.77	-5,090.31	-3,334.70	6,203.66	6,192.75	10.91	568.414	
300.00	300.00	1,453.47	1,476.29	3.44	8.26	-146.65	-5,071.49	-3,338.19	6,184.43	6,173.06	11.37	543.698	
400.00	400.00	1,567.90	1,586.87	3.60	8.96	-146.46	-5,042.42	-3,342.93	6,165.21	6,153.10	12.11	508.968	
500.00	499.98	1,624.66	1,641.80	3.80	9.30	-4.60	-5,028.30	-3,345.06	6,144.59	6,132.01	12.58	488.408	
600.00	599.90	1,722.52	1,736.63	4.02	9.90	-4.45	-5,004.40	-3,348.77	6,122.24	6,108.93	13.31	460.096	
700.00	699.82	1,875.62	1,884.38	4.28	10.88	-4.19	-4,964.89	-3,355.61	6,098.95	6,084.56	14.39	423.964	
800.00	799.74	1,971.24	1,976.55	4.57	11.51	-4.02	-4,939.86	-3,360.05	6,075.64	6,060.46	15.18	400.208	
900.00	899.66	2,066.85	2,068.73	4.88	12.14	-3.85	-4,914.83	-3,364.49	6,052.38	6,036.38	16.01	378.128	
1,000.00	999.58	2,162.46	2,160.90	5.21	12.77	-3.68	-4,889.81	-3,368.93	6,029.18	6,012.32	16.86	357.686	
1,100.00	1,099.50	2,258.08	2,253.07	5.55	13.40	-3.51	-4,864.78	-3,373.37	6,006.03	5,988.30	17.73	338.805	
1,200.00	1,199.42	2,353.69	2,345.25	5.91	14.04	-3.33	-4,839.76	-3,377.81	5,982.94	5,964.32	18.62	321.384	
1,300.00	1,299.34	2,449.31	2,437.42	6.28	14.68	-3.16	-4,814.73	-3,382.25	5,959.89	5,940.37	19.52	305.312	
1,400.00	1,399.26	2,544.92	2,526.60	6.66	15.32	-2.98	-4,789.71	-3,386.69	5,936.91	5,916.47	20.44	290.476	
1,500.00	1,499.18	2,640.54	2,621.77	7.04	15.96	-2.80	-4,764.68	-3,391.13	5,913.98	5,892.61	21.37	276.768	
1,600.00	1,599.10	2,736.15	2,713.94	7.43	16.61	-2.62	-4,739.65	-3,395.57	5,891.10	5,868.80	22.31	264.086	
1,700.00	1,699.01	2,838.25	2,806.12	7.83	17.30	-2.44	-4,714.63	-3,400.01	5,868.29	5,844.99	23.29	251.922	
1,800.00	1,798.93	2,927.38	2,898.29	8.23	17.90	-2.26	-4,689.60	-3,404.45	5,845.53	5,821.31	24.21	241.426	
1,900.00	1,898.85	3,022.99	2,990.47	8.64	18.55	-2.08	-4,664.58	-3,408.89	5,822.83	5,797.65	25.18	231.285	
2,000.00	1,998.77	3,118.61	3,082.64	9.05	19.20	-1.89	-4,639.55	-3,413.33	5,800.18	5,774.04	26.15	221.838	
2,100.00	2,098.69	3,214.22	3,174.82	9.46	19.85	-1.71	-4,614.53	-3,417.77	5,777.60	5,750.48	27.12	213.025	
2,200.00	2,198.61	3,309.84	3,266.99	9.88	20.50	-1.52	-4,589.50	-3,422.21	5,755.08	5,726.98	28.10	204.786	
2,300.00	2,298.53	3,405.45	3,359.16	10.30	21.15	-1.33	-4,564.47	-3,426.65	5,732.62	5,703.53	29.09	197.073	
2,400.00	2,398.45	3,501.06	3,451.34	10.72	21.81	-1.14	-4,539.45	-3,431.09	5,710.22	5,680.14	30.08	189.838	
2,500.00	2,498.37	3,603.32	3,543.51	11.14	22.51	-0.95	-4,514.42	-3,435.54	5,687.89	5,656.77	31.11	182.808	
2,600.00	2,598.29	3,692.29	3,635.69	11.56	23.11	-0.76	-4,489.40	-3,439.98	5,665.61	5,633.54	32.07	176.648	
2,700.00	2,698.21	10,479.32	7,077.95	11.98	117.71	-39.86	-3,569.00	-68.66	5,605.38	5,514.17	91.21	61.456	
2,800.00	2,798.13	10,476.94	7,077.95	12.41	117.64	-39.82	-3,568.99	-71.03	5,525.66	5,433.42	92.24	59.906	
2,900.00	2,898.05	10,474.57	7,077.95	12.84	117.56	-39.77	-3,568.99	-73.41	5,446.60	5,353.30	93.30	58.378	
3,000.00	2,997.97	10,472.19	7,077.94	13.27	117.49	-39.73	-3,568.98	-75.78	5,368.25	5,273.86	94.39	56.872	
3,100.00	3,097.89	10,469.82	7,077.94	13.69	117.41	-39.69	-3,568.98	-78.16	5,290.62	5,195.10	95.52	55.389	
3,200.00	3,197.81	10,467.45	7,077.94	14.12	117.34	-39.65	-3,568.97	-80.53	5,213.76	5,117.08	96.67	53.932	
3,300.00	3,297.73	10,465.07	7,077.94	14.56	117.26	-39.61	-3,568.97	-82.91	5,137.68	5,039.83	97.86	52.501	
3,400.00	3,397.65	10,462.70	7,077.93	14.99	117.19	-39.57	-3,568.96	-85.28	5,062.45	4,963.37	99.08	51.096	
3,500.00	3,497.56	10,460.32	7,077.93	15.42	117.11	-39.53	-3,568.95	-87.66	4,988.08	4,887.75	100.32	49.720	
3,600.00	3,597.48	10,457.95	7,077.93	15.85	117.04	-39.49	-3,568.95	-90.03	4,914.61	4,813.01	101.60	48.372	
3,700.00	3,697.40	10,455.57	7,077.93	16.28	116.96	-39.45	-3,568.94	-92.41	4,842.10	4,739.20	102.90	47.054	
3,800.00	3,797.32	10,453.20	7,077.93	16.72	116.89	-39.41	-3,568.94	-94.78	4,770.58	4,666.35	104.24	45.767	
3,900.00	3,897.24	10,450.82	7,077.92	17.15	116.81	-39.37	-3,568.93	-97.15	4,700.10	4,594.51	105.59	44.511	
4,000.00	3,997.16	10,448.45	7,077.92	17.59	116.74	-39.33	-3,568.92	-99.53	4,630.71	4,523.73	106.98	43.286	
4,100.00	4,097.08	10,446.07	7,077.92	18.02	116.66	-39.29	-3,568.92	-101.90	4,562.45	4,454.06	108.39	42.094	
4,200.00	4,197.00	10,443.70	7,077.92	18.46	116.59	-39.25	-3,568.91	-104.28	4,495.37	4,385.56	109.82	40.935	
4,300.00	4,296.92	10,441.33	7,077.91	18.89	116.52	-39.21	-3,568.91	-106.65	4,429.54	4,318.27	111.27	39.809	
4,400.00	4,396.84	10,438.95	7,077.91	19.33	116.44	-39.17	-3,568.90	-109.03	4,365.01	4,252.27	112.74	38.718	
4,500.00	4,496.76	10,436.58	7,077.91	19.77	116.37	-39.13	-3,568.89	-111.40	4,301.83	4,187.60	114.23	37.661	
4,600.00	4,596.68	10,434.20	7,077.91	20.20	116.29	-39.09	-3,568.89	-113.78	4,240.06	4,124.34	115.73	36.639	
4,700.00	4,696.60	10,438.21	7,077.90	20.64	116.42	-39.05	-3,568.88	-116.15	4,179.78	4,062.37	117.41	35.601	
4,800.00	4,796.52	10,440.59	7,077.90	21.08	116.49	-39.01	-3,568.88	-118.53	4,121.04	4,001.98	119.06	34.615	
4,900.00	4,896.44	10,427.08	7,077.90	21.51	116.07	-38.96	-3,568.87	-120.90	4,063.90	3,943.62	120.28	33.787	
5,000.00	4,996.36	10,424.70	7,077.90	21.95	115.99	-38.92	-3,568.87	-123.27	4,008.45	3,886.65	121.81	32.909	
5,100.00	5,096.28	10,422.33	7,077.89	22.39	115.92	-38.88	-3,568.86	-125.65	3,954.75	3,831.42	123.33	32.067	

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - LEFFLER 26N-23B-L(SRC PLAN_75CC) - OH - PLAN													Offset Site Error:	0.00 ft
Survey Program: 25-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.00	5,196.19	10,419.95	7,077.89	22.83	115.84	-38.84	-3,568.85	-128.02	3,902.87	3,778.03	124.84	31.263		
5,300.00	5,296.11	10,417.58	7,077.89	23.27	115.77	-38.80	-3,568.85	-130.40	3,852.89	3,726.55	126.34	30.496		
5,400.00	5,396.03	10,415.21	7,077.89	23.71	115.69	-38.76	-3,568.84	-132.77	3,804.87	3,677.05	127.82	29.767		
5,500.00	5,495.95	10,412.83	7,077.88	24.14	115.62	-38.72	-3,568.84	-135.15	3,758.91	3,629.63	129.28	29.076		
5,600.00	5,595.87	10,410.46	7,077.88	24.58	115.54	-38.68	-3,568.83	-137.52	3,715.06	3,584.36	130.71	28.423		
5,700.00	5,695.79	10,408.08	7,077.88	25.02	115.47	-38.64	-3,568.82	-139.90	3,673.42	3,541.32	132.10	27.809		
5,800.00	5,795.71	10,405.71	7,077.88	25.46	115.39	-38.60	-3,568.82	-142.27	3,634.04	3,500.60	133.44	27.233		
5,900.00	5,895.63	10,403.33	7,077.88	25.90	115.32	-38.56	-3,568.81	-144.65	3,597.02	3,462.28	134.74	26.695		
6,000.00	5,995.55	10,400.96	7,077.87	26.34	115.25	-38.52	-3,568.81	-147.02	3,562.42	3,426.43	135.98	26.197		
6,100.00	6,095.47	10,398.58	7,077.87	26.78	115.17	-38.48	-3,568.80	-149.40	3,530.30	3,393.14	137.16	25.738		
6,200.00	6,195.39	10,396.21	7,077.87	27.22	115.10	-38.44	-3,568.79	-151.77	3,500.76	3,362.48	138.27	25.318		
6,300.00	6,295.31	10,393.83	7,077.87	27.66	115.02	-38.40	-3,568.79	-154.14	3,473.83	3,334.53	139.30	24.937		
6,400.00	6,395.23	10,391.46	7,077.86	28.10	114.95	-38.36	-3,568.78	-156.52	3,449.60	3,309.35	140.25	24.596		
6,500.00	6,495.02	10,386.75	7,077.86	28.54	114.80	-74.93	-3,568.77	-161.23	3,428.11	3,287.08	141.03	24.307		
6,600.00	6,593.09	10,386.08	7,077.84	28.98	114.21	-85.41	-3,568.73	-179.90	3,409.60	3,268.33	141.27	24.135		
6,700.00	6,687.01	10,335.76	7,077.81	29.41	113.20	-88.68	-3,568.64	-213.69	3,394.29	3,253.33	140.96	24.080		
6,800.00	6,774.46	10,286.20	7,077.76	29.83	111.65	-90.14	-3,568.52	-261.78	3,382.19	3,242.18	140.01	24.157		
6,900.00	6,853.31	10,225.01	7,077.70	30.26	109.74	-90.75	-3,568.37	-322.97	3,373.03	3,234.41	138.62	24.333		
7,000.00	6,921.60	10,152.22	7,077.63	30.76	107.47	-90.87	-3,568.19	-395.75	3,366.40	3,229.53	136.87	24.596		
7,100.00	6,977.66	10,069.63	7,077.54	31.38	104.90	-90.73	-3,567.99	-478.35	3,361.80	3,226.91	134.88	24.924		
7,200.00	7,020.10	9,979.26	7,077.45	32.17	102.11	-90.50	-3,567.76	-568.71	3,358.69	3,225.89	132.80	25.291		
7,300.00	7,047.88	9,883.35	7,077.36	33.13	99.15	-90.32	-3,567.53	-664.63	3,356.64	3,225.90	130.74	25.675		
7,400.00	7,060.32	9,784.25	7,077.26	34.27	96.12	-90.26	-3,567.28	-763.73	3,355.31	3,226.53	128.77	26.056		
7,500.00	7,060.70	9,684.27	7,077.16	35.56	93.08	-90.28	-3,567.03	-863.71	3,354.43	3,227.47	126.97	26.420		
7,600.00	7,060.27	9,584.27	7,077.06	37.02	90.06	-90.29	-3,566.79	-963.71	3,353.59	3,228.23	125.36	26.752		
7,700.00	7,059.83	9,484.27	7,076.96	38.64	87.06	-90.29	-3,566.54	-1,063.70	3,352.74	3,228.82	123.92	27.055		
7,800.00	7,059.40	9,384.28	7,076.86	40.40	84.10	-90.30	-3,566.29	-1,163.70	3,351.90	3,229.26	122.64	27.330		
7,900.00	7,058.97	9,284.28	7,076.76	42.28	81.16	-90.31	-3,566.05	-1,263.69	3,351.06	3,229.54	121.51	27.578		
8,000.00	7,058.53	9,184.16	7,076.41	44.27	78.25	-90.31	-3,565.80	-1,363.82	3,350.21	3,229.70	120.51	27.801		
8,100.00	7,058.10	9,084.16	7,075.59	46.35	75.38	-90.30	-3,565.55	-1,463.81	3,349.36	3,229.74	119.62	28.000		
8,200.00	7,057.66	8,984.16	7,074.76	48.50	72.56	-90.29	-3,565.30	-1,563.80	3,348.51	3,229.66	118.85	28.174		
8,300.00	7,057.23	8,884.17	7,073.93	50.73	69.79	-90.29	-3,565.06	-1,663.79	3,347.67	3,229.48	118.19	28.325		
8,400.00	7,056.80	8,784.17	7,073.10	53.02	67.07	-90.28	-3,564.81	-1,763.78	3,346.82	3,229.19	117.63	28.453		
8,500.00	7,056.36	8,684.18	7,072.28	55.36	64.43	-90.27	-3,564.56	-1,863.78	3,345.97	3,228.80	117.17	28.557		
8,600.00	7,055.93	8,584.18	7,071.45	57.74	61.87	-90.27	-3,564.32	-1,963.77	3,345.12	3,228.31	116.81	28.637		
8,700.00	7,055.49	8,484.19	7,070.62	60.17	59.40	-90.26	-3,564.07	-2,063.76	3,344.27	3,227.71	116.56	28.691		
8,800.00	7,055.06	8,384.19	7,069.80	62.63	57.07	-90.25	-3,563.82	-2,163.75	3,343.43	3,227.01	116.42	28.718		
8,900.00	7,054.63	8,284.20	7,068.97	65.13	54.88	-90.25	-3,563.57	-2,263.74	3,342.58	3,226.18	116.40	28.717		
9,000.00	7,054.19	8,184.20	7,068.14	67.66	52.88	-90.24	-3,563.33	-2,363.74	3,341.73	3,225.23	116.50	28.685		
9,100.00	7,053.76	8,084.20	7,067.31	70.21	51.13	-90.23	-3,563.08	-2,463.73	3,340.88	3,224.15	116.74	28.619		
9,200.00	7,053.32	7,984.21	7,066.49	72.78	49.66	-90.23	-3,562.83	-2,563.72	3,340.04	3,222.90	117.13	28.515		
9,300.00	7,052.89	7,884.21	7,065.66	75.38	48.51	-90.22	-3,562.58	-2,663.71	3,339.19	3,221.49	117.70	28.371		
9,400.00	7,052.46	7,784.22	7,064.83	77.99	47.68	-90.21	-3,562.34	-2,763.70	3,338.34	3,219.89	118.45	28.183		
9,500.00	7,052.02	7,684.22	7,064.00	80.62	47.11	-90.21	-3,562.09	-2,863.70	3,337.49	3,218.07	119.42	27.947		
9,600.00	7,051.59	7,600.00	7,063.29	83.26	46.79	-90.20	-3,561.89	-2,947.91	3,336.69	3,215.83	120.86	27.607		
9,628.27	7,051.47	7,584.22	7,062.85	84.01	46.74	-90.20	-3,561.93	-2,963.69	3,336.62	3,215.19	121.43	27.478 CC		
9,700.00	7,051.15	7,550.00	7,060.60	85.92	46.64	-90.16	-3,562.38	-2,997.83	3,337.07	3,214.14	122.93	27.146		
9,800.00	7,050.72	7,511.96	7,058.02	88.59	46.54	-90.08	-3,563.44	-3,035.57	3,339.17	3,214.00	125.18	26.676 ES		
9,900.00	7,050.29	7,472.62	7,049.01	91.28	46.45	-89.97	-3,565.16	-3,074.24	3,343.05	3,215.66	127.39	26.242		
10,000.00	7,049.85	7,435.02	7,040.17	93.97	46.37	-89.82	-3,567.39	-3,110.71	3,348.73	3,219.10	129.63	25.833		
10,100.00	7,049.42	7,400.00	7,030.08	96.67	46.29	-89.65	-3,569.97	-3,144.14	3,356.26	3,224.38	131.88	25.448		
10,200.00	7,048.98	7,350.00	7,012.63	99.38	46.19	-89.35	-3,574.48	-3,190.76	3,365.66	3,231.69	133.97	25.122		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.55	7,319.91	7,000.45	102.10	46.13	-89.15	-3,577.66	-3,218.09	3,377.01	3,240.79	136.22	24.791	
10,400.00	7,048.12	7,300.00	6,991.71	104.83	46.08	-89.00	-3,579.94	-3,235.83	3,390.44	3,251.89	138.54	24.472	
10,500.00	7,047.68	7,250.00	6,967.45	107.56	45.97	-88.59	-3,586.32	-3,279.07	3,405.77	3,265.19	140.58	24.227	
10,600.00	7,047.25	7,221.20	6,952.01	110.30	45.91	-88.33	-3,590.40	-3,303.03	3,423.25	3,280.52	142.73	23.985	
10,700.00	7,046.81	7,200.00	6,939.98	113.05	45.85	-88.13	-3,593.58	-3,320.20	3,442.86	3,297.99	144.87	23.765	
10,800.00	7,046.38	7,170.37	6,922.27	115.80	45.77	-87.83	-3,598.27	-3,343.48	3,464.61	3,317.71	146.90	23.585	
10,900.00	7,045.95	7,150.00	6,909.49	118.55	45.72	-87.62	-3,601.67	-3,358.98	3,488.53	3,339.62	148.91	23.427	
11,000.00	7,045.51	7,121.76	6,891.01	121.31	45.64	-87.31	-3,606.58	-3,379.74	3,514.62	3,363.80	150.81	23.304	
11,100.00	7,045.08	7,100.00	6,876.16	124.08	45.57	-87.07	-3,610.54	-3,395.16	3,542.88	3,390.21	152.68	23.205	
11,200.00	7,044.64	7,080.78	6,862.64	126.85	45.51	-86.84	-3,614.14	-3,408.33	3,573.32	3,418.84	154.48	23.132	
11,300.00	7,044.21	7,050.00	6,840.20	129.62	45.42	-86.47	-3,620.14	-3,428.52	3,605.97	3,449.82	156.15	23.094	
11,400.00	7,043.78	7,044.17	6,835.84	132.40	45.40	-86.40	-3,621.30	-3,432.22	3,640.60	3,482.77	157.83	23.066 SF	
11,500.00	7,043.34	7,035.01	6,828.94	135.18	45.36	-86.28	-3,623.15	-3,437.94	3,677.43	3,518.01	159.42	23.067	
11,600.00	7,042.91	7,000.00	6,801.83	137.96	45.24	-85.84	-3,630.40	-3,458.86	3,716.34	3,555.49	160.85	23.104	
11,700.00	7,042.47	7,000.00	6,801.83	140.75	45.24	-85.84	-3,630.40	-3,458.86	3,757.16	3,594.85	162.31	23.149	
11,800.00	7,042.04	7,000.00	6,801.83	143.54	45.24	-85.84	-3,630.40	-3,458.86	3,800.16	3,636.49	163.67	23.218	
11,900.00	7,041.61	6,970.88	6,778.46	146.33	45.13	-85.46	-3,636.66	-3,475.07	3,844.81	3,679.91	164.89	23.317	
12,000.00	7,041.17	6,950.00	6,761.27	149.13	45.05	-85.18	-3,641.28	-3,486.00	3,891.53	3,725.48	166.05	23.436	
12,100.00	7,040.74	6,950.00	6,761.27	151.92	45.05	-85.18	-3,641.28	-3,486.00	3,939.99	3,772.80	167.19	23.566	
12,200.00	7,040.30	6,935.01	6,748.73	154.72	44.98	-84.97	-3,644.64	-3,493.48	3,990.26	3,822.05	168.21	23.721	
12,300.00	7,039.87	6,935.01	6,748.73	157.52	44.98	-84.97	-3,644.64	-3,493.48	4,042.30	3,873.10	169.20	23.891	
12,400.00	7,039.44	6,916.83	6,733.29	160.33	44.91	-84.72	-3,648.79	-3,502.14	4,095.92	3,925.83	170.09	24.081	
12,500.00	7,039.00	6,900.00	6,718.80	163.13	44.83	-84.49	-3,652.69	-3,509.75	4,151.23	3,980.32	170.91	24.289	
12,600.00	7,038.57	6,900.00	6,718.80	165.94	44.83	-84.49	-3,652.69	-3,509.75	4,208.02	4,036.32	171.70	24.508	
12,700.00	7,038.13	6,900.00	6,718.80	168.75	44.83	-84.49	-3,652.69	-3,509.75	4,266.40	4,093.98	172.42	24.744	
12,800.00	7,037.70	6,900.00	6,718.80	171.56	44.83	-84.49	-3,652.69	-3,509.75	4,326.30	4,153.22	173.09	24.995	
12,900.00	7,037.27	6,875.86	6,697.67	174.37	44.72	-84.15	-3,658.37	-3,519.97	4,387.29	4,213.61	173.68	25.261	
13,000.00	7,036.83	6,850.00	6,674.66	177.19	44.60	-83.78	-3,664.56	-3,529.98	4,450.03	4,275.82	174.21	25.545	
13,100.00	7,036.40	6,850.00	6,674.66	180.00	44.60	-83.78	-3,664.56	-3,529.98	4,513.69	4,338.97	174.72	25.834	
13,200.00	7,035.96	6,850.00	6,674.66	182.82	44.60	-83.78	-3,664.56	-3,529.98	4,578.65	4,403.46	175.19	26.136	
13,300.00	7,035.53	6,850.00	6,674.66	185.64	44.60	-83.78	-3,664.56	-3,529.98	4,644.85	4,469.24	175.61	26.450	
13,400.00	7,035.10	6,850.00	6,674.66	188.46	44.60	-83.78	-3,664.56	-3,529.98	4,712.25	4,536.26	175.99	26.776	
13,500.00	7,034.66	6,835.01	6,661.14	191.28	44.53	-83.57	-3,668.21	-3,535.34	4,780.70	4,604.38	176.32	27.114	
13,600.00	7,034.23	6,835.01	6,661.14	194.10	44.53	-83.57	-3,668.21	-3,535.34	4,850.22	4,673.60	176.62	27.461	
13,700.00	7,033.79	6,835.01	6,661.14	196.92	44.53	-83.57	-3,668.21	-3,535.34	4,920.79	4,743.90	176.89	27.818	
13,800.00	7,033.36	6,835.01	6,661.14	199.74	44.53	-83.57	-3,668.21	-3,535.34	4,992.37	4,815.24	177.13	28.186	
13,900.00	7,032.93	6,818.57	6,646.18	202.57	44.45	-83.33	-3,672.24	-3,540.83	5,064.71	4,887.38	177.33	28.560	
14,000.00	7,032.49	6,800.00	6,629.13	205.39	44.35	-83.06	-3,676.84	-3,546.56	5,138.20	4,960.68	177.51	28.946	
14,100.00	7,032.06	6,800.00	6,629.13	208.22	44.35	-83.06	-3,676.84	-3,546.56	5,212.32	5,034.66	177.67	29.337	
14,200.00	7,031.62	6,800.00	6,629.13	211.05	44.35	-83.06	-3,676.84	-3,546.56	5,287.30	5,109.50	177.80	29.738	
14,300.00	7,031.19	6,800.00	6,629.13	213.87	44.35	-83.06	-3,676.84	-3,546.56	5,363.10	5,185.19	177.91	30.146	
14,400.00	7,030.76	6,800.00	6,629.13	216.70	44.35	-83.06	-3,676.84	-3,546.56	5,439.68	5,261.69	177.99	30.561	
14,500.00	7,030.32	6,800.00	6,629.13	219.53	44.35	-83.06	-3,676.84	-3,546.56	5,517.01	5,338.95	178.06	30.984	
14,600.00	7,029.89	6,800.00	6,629.13	222.36	44.35	-83.06	-3,676.84	-3,546.56	5,595.05	5,416.95	178.11	31.414	
14,700.00	7,029.45	6,800.00	6,629.13	225.19	44.35	-83.06	-3,676.84	-3,546.56	5,673.79	5,495.65	178.14	31.850	
14,800.00	7,029.02	6,800.00	6,629.13	228.03	44.35	-83.06	-3,676.84	-3,546.56	5,753.18	5,575.03	178.15	32.293	
14,805.04	7,029.00	6,800.00	6,629.13	228.17	44.35	-83.06	-3,676.84	-3,546.56	5,757.20	5,579.05	178.15	32.316	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-124.80	-4,410.55	-6,344.91	7,727.56					
100.00	100.00	34.00	100.00	3.28	3.33	-124.80	-4,410.55	-6,344.91	7,727.28	7,720.66	6.62	1,167.619		
200.00	200.00	134.00	200.00	3.34	4.40	-124.80	-4,410.55	-6,344.91	7,727.28	7,719.54	7.74	998.775		
300.00	300.00	234.00	300.00	3.44	7.21	-124.80	-4,410.55	-6,344.91	7,727.28	7,716.62	10.66	725.067		
400.00	400.00	334.00	400.00	3.60	10.44	-124.80	-4,410.55	-6,344.91	7,727.28	7,713.23	14.05	550.131		
500.00	499.98	433.98	499.98	3.80	13.80	17.01	-4,410.55	-6,344.91	7,725.61	7,708.01	17.60	439.018		
600.00	599.90	533.90	599.90	4.02	17.21	17.02	-4,410.55	-6,344.91	7,721.81	7,700.58	21.23	363.710		
700.00	699.82	633.82	699.82	4.28	20.64	17.03	-4,410.55	-6,344.91	7,717.97	7,693.05	24.92	309.676		
800.00	799.74	733.74	799.74	4.57	24.09	17.04	-4,410.55	-6,344.91	7,714.14	7,685.48	28.66	269.178		
900.00	899.66	833.66	899.66	4.88	27.55	17.05	-4,410.55	-6,344.91	7,710.30	7,677.87	32.43	237.779		
1,000.00	999.58	933.58	999.58	5.21	31.02	17.06	-4,410.55	-6,344.91	7,706.46	7,670.24	36.22	212.769		
1,100.00	1,099.50	1,033.50	1,099.50	5.55	34.49	17.06	-4,410.55	-6,344.91	7,702.63	7,662.59	40.03	192.404		
1,200.00	1,199.42	1,133.42	1,199.42	5.91	37.96	17.07	-4,410.55	-6,344.91	7,698.79	7,654.93	43.86	175.517		
1,300.00	1,299.34	1,233.34	1,299.34	6.28	41.44	17.08	-4,410.55	-6,344.91	7,694.95	7,647.25	47.71	161.298		
1,400.00	1,399.26	1,333.26	1,399.26	6.66	44.92	17.09	-4,410.55	-6,344.91	7,691.12	7,639.56	51.56	149.167		
1,500.00	1,499.18	1,433.18	1,499.18	7.04	48.40	17.10	-4,410.55	-6,344.91	7,687.28	7,631.86	55.42	138.702		
1,600.00	1,599.10	1,533.10	1,599.10	7.43	51.88	17.11	-4,410.55	-6,344.91	7,683.44	7,624.15	59.29	129.583		
1,700.00	1,699.01	1,633.01	1,699.01	7.83	55.36	17.12	-4,410.55	-6,344.91	7,679.61	7,616.44	63.17	121.570		
1,800.00	1,798.93	1,732.93	1,798.93	8.23	58.84	17.13	-4,410.55	-6,344.91	7,675.77	7,608.72	67.05	114.475		
1,900.00	1,898.85	1,832.85	1,898.85	8.64	62.33	17.13	-4,410.55	-6,344.91	7,671.94	7,601.00	70.94	108.149		
2,000.00	1,998.77	1,932.77	1,998.77	9.05	65.81	17.14	-4,410.55	-6,344.91	7,668.10	7,593.27	74.83	102.474		
2,100.00	2,098.69	2,032.69	2,098.69	9.46	69.29	17.15	-4,410.55	-6,344.91	7,664.27	7,585.54	78.72	97.357		
2,200.00	2,198.61	2,132.61	2,198.61	9.88	72.78	17.16	-4,410.55	-6,344.91	7,660.43	7,577.81	82.62	92.718		
2,300.00	2,298.53	2,232.53	2,298.53	10.30	76.26	17.17	-4,410.55	-6,344.91	7,656.60	7,570.08	86.52	88.495		
2,400.00	2,398.45	2,332.45	2,398.45	10.72	79.75	17.18	-4,410.55	-6,344.91	7,652.76	7,562.34	90.42	84.633		
2,500.00	2,498.37	2,432.37	2,498.37	11.14	83.23	17.19	-4,410.55	-6,344.91	7,648.93	7,554.60	94.33	81.090		
2,600.00	2,598.29	2,532.29	2,598.29	11.56	86.72	17.20	-4,410.55	-6,344.91	7,645.09	7,546.86	98.23	77.826		
2,700.00	2,698.21	2,632.21	2,698.21	11.98	90.20	17.21	-4,410.55	-6,344.91	7,641.26	7,539.12	102.14	74.811		
2,800.00	2,798.13	2,732.13	2,798.13	12.41	93.69	17.21	-4,410.55	-6,344.91	7,637.43	7,531.38	106.05	72.017		
2,900.00	2,898.05	2,832.05	2,898.05	12.84	97.18	17.22	-4,410.55	-6,344.91	7,633.59	7,523.63	109.96	69.421		
3,000.00	2,997.97	2,931.97	2,997.97	13.27	100.66	17.23	-4,410.55	-6,344.91	7,629.76	7,515.89	113.87	67.003		
3,100.00	3,097.89	3,031.89	3,097.89	13.69	104.15	17.24	-4,410.55	-6,344.91	7,625.93	7,508.14	117.78	64.745		
3,200.00	3,197.81	3,131.81	3,197.81	14.12	107.64	17.25	-4,410.55	-6,344.91	7,622.09	7,500.40	121.70	62.631		
3,300.00	3,297.73	3,231.73	3,297.73	14.56	111.12	17.26	-4,410.55	-6,344.91	7,618.26	7,492.65	125.61	60.649		
3,400.00	3,397.65	3,331.65	3,397.65	14.99	114.61	17.27	-4,410.55	-6,344.91	7,614.43	7,484.90	129.53	58.786		
3,500.00	3,497.56	3,431.56	3,497.56	15.42	118.10	17.28	-4,410.55	-6,344.91	7,610.60	7,477.15	133.44	57.032		
3,600.00	3,597.48	3,531.48	3,597.48	15.85	121.58	17.29	-4,410.55	-6,344.91	7,606.76	7,469.40	137.36	55.378		
3,700.00	3,697.40	3,631.40	3,697.40	16.28	125.07	17.30	-4,410.55	-6,344.91	7,602.93	7,461.65	141.28	53.815		
3,800.00	3,797.32	3,731.32	3,797.32	16.72	128.56	17.30	-4,410.55	-6,344.91	7,599.10	7,453.90	145.20	52.336		
3,900.00	3,897.24	3,831.24	3,897.24	17.15	132.04	17.31	-4,410.55	-6,344.91	7,595.27	7,446.15	149.12	50.935		
4,000.00	3,997.16	3,931.16	3,997.16	17.59	135.53	17.32	-4,410.55	-6,344.91	7,591.44	7,438.40	153.03	49.606		
4,100.00	4,097.08	4,031.08	4,097.08	18.02	139.02	17.33	-4,410.55	-6,344.91	7,587.60	7,430.65	156.95	48.343		
4,200.00	4,197.00	4,131.00	4,197.00	18.46	142.51	17.34	-4,410.55	-6,344.91	7,583.77	7,422.90	160.87	47.141		
4,300.00	4,296.92	4,230.92	4,296.92	18.89	145.99	17.35	-4,410.55	-6,344.91	7,579.94	7,415.15	164.79	45.996		
4,400.00	4,396.84	4,330.84	4,396.84	19.33	149.48	17.36	-4,410.55	-6,344.91	7,576.11	7,407.40	168.72	44.905		
4,500.00	4,496.76	4,430.76	4,496.76	19.77	152.97	17.37	-4,410.55	-6,344.91	7,572.28	7,399.64	172.64	43.862		
4,600.00	4,596.68	4,530.68	4,596.68	20.20	156.46	17.38	-4,410.55	-6,344.91	7,568.45	7,391.89	176.56	42.867		
4,700.00	4,696.60	4,630.60	4,696.60	20.64	159.94	17.39	-4,410.55	-6,344.91	7,564.62	7,384.14	180.48	41.914		
4,800.00	4,796.52	4,730.52	4,796.52	21.08	163.43	17.39	-4,410.55	-6,344.91	7,560.79	7,376.39	184.40	41.002		
4,900.00	4,896.44	4,830.44	4,896.44	21.51	166.92	17.40	-4,410.55	-6,344.91	7,556.96	7,368.64	188.32	40.127		
5,000.00	4,996.36	4,930.36	4,996.36	21.95	170.41	17.41	-4,410.55	-6,344.91	7,553.13	7,360.88	192.25	39.289		
5,100.00	5,096.28	5,030.28	5,096.28	22.39	173.89	17.42	-4,410.55	-6,344.91	7,549.30	7,353.13	196.17	38.483		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,130.19	5,196.19	22.83	177.38	17.43	-4,410.55	-6,344.91	7,545.47	7,345.38	200.09	37.710		
5,300.00	5,296.11	5,230.11	5,296.11	23.27	180.87	17.44	-4,410.55	-6,344.91	7,541.64	7,337.63	204.02	36.966		
5,400.00	5,396.03	5,330.03	5,396.03	23.71	184.36	17.45	-4,410.55	-6,344.91	7,537.81	7,329.87	207.94	36.250		
5,500.00	5,495.95	5,429.95	5,495.95	24.14	187.84	17.46	-4,410.55	-6,344.91	7,533.99	7,322.12	211.86	35.561		
5,600.00	5,595.87	5,529.87	5,595.87	24.58	191.33	17.47	-4,410.55	-6,344.91	7,530.16	7,314.37	215.79	34.896		
5,700.00	5,695.79	5,629.79	5,695.79	25.02	194.82	17.48	-4,410.55	-6,344.91	7,526.33	7,306.62	219.71	34.255		
5,800.00	5,795.71	5,729.71	5,795.71	25.46	198.31	17.49	-4,410.55	-6,344.91	7,522.50	7,298.87	223.64	33.637		
5,900.00	5,895.63	5,829.63	5,895.63	25.90	201.79	17.50	-4,410.55	-6,344.91	7,518.67	7,291.11	227.56	33.040		
6,000.00	5,995.55	5,929.55	5,995.55	26.34	205.28	17.50	-4,410.55	-6,344.91	7,514.85	7,283.36	231.48	32.464		
6,100.00	6,095.47	6,029.47	6,095.47	26.78	208.77	17.51	-4,410.55	-6,344.91	7,511.02	7,275.61	235.41	31.906		
6,200.00	6,195.39	6,129.39	6,195.39	27.22	212.26	17.52	-4,410.55	-6,344.91	7,507.19	7,267.86	239.33	31.367		
6,300.00	6,295.31	6,229.31	6,295.31	27.66	215.75	17.53	-4,410.55	-6,344.91	7,503.36	7,260.10	243.26	30.845		
6,400.00	6,395.23	6,329.23	6,395.23	28.10	219.23	17.54	-4,410.55	-6,344.91	7,499.54	7,252.35	247.18	30.340		
6,500.00	6,495.02	6,429.02	6,495.02	28.54	222.72	-18.27	-4,410.55	-6,344.91	7,493.77	7,242.67	251.10	29.843		
6,600.00	6,593.09	6,527.09	6,593.09	28.98	226.14	-28.33	-4,410.55	-6,344.91	7,476.46	7,221.51	254.95	29.325		
6,700.00	6,687.01	6,621.01	6,687.01	29.41	229.42	-32.52	-4,410.55	-6,344.91	7,446.71	7,188.07	258.64	28.792		
6,800.00	6,774.46	6,708.46	6,774.46	29.83	232.47	-36.35	-4,410.55	-6,344.91	7,405.31	7,143.24	262.07	28.257		
6,900.00	6,853.31	6,787.31	6,853.31	30.26	235.22	-40.86	-4,410.55	-6,344.91	7,353.35	7,088.18	265.17	27.731		
7,000.00	6,921.60	6,855.60	6,921.60	30.76	237.61	-46.59	-4,410.55	-6,344.91	7,292.22	7,024.35	267.88	27.222		
7,100.00	6,977.66	6,911.66	6,977.66	31.38	239.56	-53.96	-4,410.55	-6,344.91	7,223.53	6,953.38	270.15	26.739		
7,200.00	7,020.10	6,954.10	7,020.10	32.17	241.05	-63.24	-4,410.55	-6,344.91	7,149.08	6,877.12	271.97	26.287		
7,300.00	7,047.88	6,981.88	7,047.88	33.13	242.01	-74.31	-4,410.55	-6,344.91	7,070.81	6,797.50	273.31	25.871		
7,400.00	7,060.32	7,005.68	7,060.32	34.27	242.85	-86.42	-4,410.55	-6,344.91	6,990.71	6,716.15	274.57	25.461		
7,500.00	7,060.70	7,005.30	7,060.70	35.56	242.83	-90.33	-4,410.55	-6,344.91	6,910.65	6,635.60	275.05	25.125		
7,600.00	7,060.27	7,005.73	7,060.27	37.02	242.85	-90.32	-4,410.55	-6,344.91	6,831.12	6,555.44	275.68	24.779		
7,700.00	7,059.83	7,006.17	7,059.83	38.64	242.86	-90.32	-4,410.55	-6,344.91	6,752.13	6,475.72	276.42	24.427		
7,800.00	7,059.40	7,006.60	7,059.40	40.40	242.88	-90.31	-4,410.55	-6,344.91	6,673.71	6,396.44	277.27	24.070		
7,900.00	7,058.97	7,007.03	7,058.97	42.28	242.89	-90.31	-4,410.55	-6,344.91	6,595.87	6,317.64	278.22	23.707		
8,000.00	7,058.53	7,007.47	7,058.53	44.27	242.91	-90.30	-4,410.55	-6,344.91	6,518.63	6,239.34	279.29	23.340		
8,100.00	7,058.10	7,007.90	7,058.10	46.35	242.92	-90.29	-4,410.55	-6,344.91	6,442.03	6,161.55	280.47	22.968		
8,200.00	7,057.66	7,008.34	7,057.66	48.50	242.94	-90.29	-4,410.55	-6,344.91	6,366.07	6,084.30	281.76	22.594		
8,300.00	7,057.23	7,008.77	7,057.23	50.73	242.95	-90.28	-4,410.55	-6,344.91	6,290.78	6,007.62	283.15	22.217		
8,400.00	7,056.80	7,009.20	7,056.80	53.02	242.97	-90.28	-4,410.55	-6,344.91	6,216.19	5,931.54	284.65	21.838		
8,500.00	7,056.36	7,009.64	7,056.36	55.36	242.98	-90.27	-4,410.55	-6,344.91	6,142.32	5,856.07	286.25	21.458		
8,600.00	7,055.93	6,989.93	7,055.93	57.74	242.30	-90.26	-4,410.55	-6,344.91	6,069.20	5,781.96	287.24	21.129		
8,700.00	7,055.49	6,989.49	7,055.49	60.17	242.28	-90.26	-4,410.55	-6,344.91	5,996.86	5,707.85	289.01	20.750		
8,800.00	7,055.06	6,989.06	7,055.06	62.63	242.27	-90.25	-4,410.55	-6,344.91	5,925.32	5,634.45	290.86	20.372		
8,900.00	7,054.63	6,988.63	7,054.63	65.13	242.25	-90.25	-4,410.55	-6,344.91	5,854.61	5,561.80	292.81	19.994		
9,000.00	7,054.19	6,988.19	7,054.19	67.66	242.23	-90.24	-4,410.55	-6,344.91	5,784.77	5,489.92	294.85	19.619		
9,100.00	7,053.76	6,987.76	7,053.76	70.21	242.22	-90.23	-4,410.55	-6,344.91	5,715.83	5,418.84	296.98	19.246		
9,200.00	7,053.32	6,987.32	7,053.32	72.78	242.20	-90.23	-4,410.55	-6,344.91	5,647.81	5,348.61	299.20	18.877		
9,300.00	7,052.89	6,986.89	7,052.89	75.38	242.19	-90.22	-4,410.55	-6,344.91	5,580.76	5,279.26	301.49	18.510		
9,400.00	7,052.46	6,986.46	7,052.46	77.99	242.17	-90.22	-4,410.55	-6,344.91	5,514.70	5,210.83	303.88	18.148		
9,500.00	7,052.02	6,986.02	7,052.02	80.62	242.16	-90.21	-4,410.55	-6,344.91	5,449.68	5,143.34	306.34	17.790		
9,600.00	7,051.59	6,985.59	7,051.59	83.26	242.14	-90.20	-4,410.55	-6,344.91	5,385.73	5,076.85	308.88	17.436		
9,700.00	7,051.15	6,985.15	7,051.15	85.92	242.13	-90.20	-4,410.55	-6,344.91	5,322.90	5,011.40	311.50	17.088		
9,800.00	7,050.72	6,984.72	7,050.72	88.59	242.11	-90.19	-4,410.55	-6,344.91	5,261.21	4,947.02	314.19	16.745		
9,900.00	7,050.29	6,984.29	7,050.29	91.28	242.10	-90.19	-4,410.55	-6,344.91	5,200.71	4,883.75	316.96	16.408		
10,000.00	7,049.85	6,983.85	7,049.85	93.97	242.08	-90.18	-4,410.55	-6,344.91	5,141.45	4,821.65	319.80	16.077		
10,100.00	7,049.42	6,983.42	7,049.42	96.67	242.07	-90.17	-4,410.55	-6,344.91	5,083.46	4,760.75	322.71	15.752		
10,200.00	7,048.98	6,982.98	7,048.98	99.38	242.05	-90.17	-4,410.55	-6,344.91	5,026.80	4,701.11	325.68	15.435		
10,300.00	7,048.55	6,982.55	7,048.55	102.10	242.04	-90.16	-4,410.55	-6,344.91	4,971.50	4,642.77	328.73	15.124		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	6,982.12	7,048.12	104.83	242.02	-90.16	-4,410.55	-6,344.91	4,917.61	4,585.78	331.83	14.820		
10,500.00	7,047.68	6,981.68	7,047.68	107.56	242.01	-90.15	-4,410.55	-6,344.91	4,865.18	4,530.19	334.99	14.523		
10,600.00	7,047.25	6,981.25	7,047.25	110.30	241.99	-90.14	-4,410.55	-6,344.91	4,814.25	4,476.05	338.21	14.235		
10,700.00	7,046.81	6,980.81	7,046.81	113.05	241.98	-90.14	-4,410.55	-6,344.91	4,764.89	4,423.41	341.48	13.954		
10,800.00	7,046.38	6,980.38	7,046.38	115.80	241.96	-90.13	-4,410.55	-6,344.91	4,717.12	4,372.33	344.80	13.681		
10,900.00	7,045.95	6,979.95	7,045.95	118.55	241.95	-90.13	-4,410.55	-6,344.91	4,671.01	4,322.85	348.16	13.416		
11,000.00	7,045.51	6,979.51	7,045.51	121.31	241.93	-90.12	-4,410.55	-6,344.91	4,626.60	4,275.03	351.56	13.160		
11,100.00	7,045.08	6,979.08	7,045.08	124.08	241.92	-90.11	-4,410.55	-6,344.91	4,583.94	4,228.94	355.00	12.912		
11,200.00	7,044.64	6,978.64	7,044.64	126.85	241.90	-90.11	-4,410.55	-6,344.91	4,543.08	4,184.61	358.47	12.673		
11,300.00	7,044.21	6,978.21	7,044.21	129.62	241.89	-90.10	-4,410.55	-6,344.91	4,504.07	4,142.10	361.97	12.443		
11,400.00	7,043.78	6,977.78	7,043.78	132.40	241.87	-90.10	-4,410.55	-6,344.91	4,466.96	4,101.48	365.48	12.222		
11,500.00	7,043.34	6,977.34	7,043.34	135.18	241.86	-90.09	-4,410.55	-6,344.91	4,431.80	4,062.79	369.01	12.010		
11,600.00	7,042.91	6,976.91	7,042.91	137.96	241.84	-90.08	-4,410.55	-6,344.91	4,398.63	4,026.08	372.55	11.807		
11,700.00	7,042.47	6,976.47	7,042.47	140.75	241.83	-90.08	-4,410.55	-6,344.91	4,367.49	3,991.41	376.08	11.613		
11,800.00	7,042.04	6,976.04	7,042.04	143.54	241.81	-90.07	-4,410.55	-6,344.91	4,338.44	3,958.83	379.61	11.429		
11,900.00	7,041.61	6,975.61	7,041.61	146.33	241.80	-90.07	-4,410.55	-6,344.91	4,311.52	3,928.39	383.13	11.253		
12,000.00	7,041.17	6,975.17	7,041.17	149.13	241.78	-90.06	-4,410.55	-6,344.91	4,286.75	3,900.13	386.62	11.088		
12,100.00	7,040.74	6,974.74	7,040.74	151.92	241.77	-90.05	-4,410.55	-6,344.91	4,264.19	3,874.10	390.09	10.931		
12,200.00	7,040.30	6,974.30	7,040.30	154.72	241.75	-90.05	-4,410.55	-6,344.91	4,243.87	3,850.35	393.52	10.784		
12,300.00	7,039.87	6,973.87	7,039.87	157.52	241.74	-90.04	-4,410.55	-6,344.91	4,225.81	3,828.91	396.91	10.647		
12,400.00	7,039.44	6,973.44	7,039.44	160.33	241.72	-90.04	-4,410.55	-6,344.91	4,210.06	3,809.81	400.25	10.519		
12,500.00	7,039.00	6,973.00	7,039.00	163.13	241.70	-90.03	-4,410.55	-6,344.91	4,196.63	3,793.10	403.53	10.400		
12,600.00	7,038.57	6,972.57	7,038.57	165.94	241.69	-90.02	-4,410.55	-6,344.91	4,185.54	3,778.80	406.74	10.290		
12,700.00	7,038.13	6,972.13	7,038.13	168.75	241.67	-90.02	-4,410.55	-6,344.91	4,176.82	3,766.94	409.88	10.190		
12,800.00	7,037.70	6,971.70	7,037.70	171.56	241.66	-90.01	-4,410.55	-6,344.91	4,170.48	3,757.54	412.94	10.099		
12,900.00	7,037.27	6,971.27	7,037.27	174.37	241.64	-90.01	-4,410.55	-6,344.91	4,166.53	3,750.61	415.92	10.018		
13,000.00	7,036.83	6,970.83	7,036.83	177.19	241.63	-90.00	-4,410.55	-6,344.91	4,164.98	3,746.18	418.81	9.945		
13,014.60	7,036.77	6,970.77	7,036.77	177.60	241.63	-90.00	-4,410.55	-6,344.91	4,164.96	3,745.74	419.22	9.935 CC		
13,100.00	7,036.40	6,970.40	7,036.40	180.00	241.61	-89.99	-4,410.55	-6,344.91	4,165.83	3,744.24	421.60	9.881 ES		
13,200.00	7,035.96	6,969.96	7,035.96	182.82	241.60	-89.99	-4,410.55	-6,344.91	4,169.08	3,744.80	424.29	9.826		
13,300.00	7,035.53	6,969.53	7,035.53	185.64	241.58	-89.98	-4,410.55	-6,344.91	4,174.72	3,747.86	426.87	9.780		
13,400.00	7,035.10	6,969.10	7,035.10	188.46	241.57	-89.98	-4,410.55	-6,344.91	4,182.75	3,753.41	429.34	9.742		
13,500.00	7,034.66	6,968.66	7,034.66	191.28	241.55	-89.97	-4,410.55	-6,344.91	4,193.15	3,761.45	431.70	9.713		
13,600.00	7,034.23	6,968.23	7,034.23	194.10	241.54	-89.97	-4,410.55	-6,344.91	4,205.90	3,771.95	433.94	9.692		
13,700.00	7,033.79	6,967.79	7,033.79	196.92	241.52	-89.96	-4,410.55	-6,344.91	4,220.98	3,784.91	436.07	9.680		
13,800.00	7,033.36	6,967.36	7,033.36	199.74	241.51	-89.95	-4,410.55	-6,344.91	4,238.36	3,800.28	438.08	9.675 SF		
13,900.00	7,032.93	6,966.93	7,032.93	202.57	241.49	-89.95	-4,410.55	-6,344.91	4,258.03	3,818.06	439.97	9.678		
14,000.00	7,032.49	6,966.49	7,032.49	205.39	241.48	-89.94	-4,410.55	-6,344.91	4,279.94	3,838.20	441.74	9.689		
14,100.00	7,032.06	6,966.06	7,032.06	208.22	241.46	-89.94	-4,410.55	-6,344.91	4,304.06	3,860.67	443.39	9.707		
14,200.00	7,031.62	6,965.62	7,031.62	211.05	241.45	-89.93	-4,410.55	-6,344.91	4,330.36	3,885.44	444.92	9.733		
14,300.00	7,031.19	6,965.19	7,031.19	213.87	241.43	-89.92	-4,410.55	-6,344.91	4,358.80	3,912.45	446.34	9.766		
14,400.00	7,030.76	6,964.76	7,030.76	216.70	241.42	-89.92	-4,410.55	-6,344.91	4,389.32	3,941.68	447.65	9.805		
14,500.00	7,030.32	6,964.32	7,030.32	219.53	241.40	-89.91	-4,410.55	-6,344.91	4,421.91	3,973.07	448.84	9.852		
14,600.00	7,029.89	6,963.89	7,029.89	222.36	241.39	-89.91	-4,410.55	-6,344.91	4,456.49	4,006.57	449.92	9.905		
14,700.00	7,029.45	6,963.45	7,029.45	225.19	241.37	-89.90	-4,410.55	-6,344.91	4,493.04	4,042.14	450.90	9.965		
14,800.00	7,029.02	6,963.02	7,029.02	228.03	241.36	-89.89	-4,410.55	-6,344.91	4,531.50	4,079.72	451.78	10.030		
14,805.04	7,029.00	6,963.00	7,029.00	228.17	241.36	-89.89	-4,410.55	-6,344.91	4,533.49	4,081.67	451.82	10.034		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-69.41	2,388.47	-6,357.34	6,791.24					
100.00	100.00	81.00	100.00	3.28	3.57	-69.41	2,388.47	-6,357.34	6,791.22	6,784.36	6.86	990.484		
200.00	200.00	181.00	200.00	3.34	5.63	-69.41	2,388.47	-6,357.34	6,791.22	6,782.25	8.96	757.536		
300.00	300.00	281.00	300.00	3.44	8.71	-69.41	2,388.47	-6,357.34	6,791.22	6,779.07	12.15	558.918		
400.00	400.00	381.00	400.00	3.60	12.01	-69.41	2,388.47	-6,357.34	6,791.22	6,775.60	15.62	434.915		
500.00	499.98	480.98	499.98	3.80	15.40	72.42	2,388.47	-6,357.34	6,790.69	6,771.49	19.20	353.762		
600.00	599.90	580.90	599.90	4.02	18.82	72.45	2,388.47	-6,357.34	6,789.49	6,766.65	22.84	297.231		
700.00	699.82	680.82	699.82	4.28	22.26	72.48	2,388.47	-6,357.34	6,788.28	6,761.74	26.54	255.739		
800.00	799.74	780.74	799.74	4.57	25.72	72.52	2,388.47	-6,357.34	6,787.07	6,756.79	30.29	224.102		
900.00	899.66	880.66	899.66	4.88	29.18	72.55	2,388.47	-6,357.34	6,785.87	6,751.81	34.06	199.239		
1,000.00	999.58	980.58	999.58	5.21	32.65	72.58	2,388.47	-6,357.34	6,784.66	6,746.81	37.86	179.220		
1,100.00	1,099.50	1,080.50	1,099.50	5.55	36.12	72.61	2,388.47	-6,357.34	6,783.46	6,741.79	41.67	162.774		
1,200.00	1,199.42	1,180.42	1,199.42	5.91	39.60	72.64	2,388.47	-6,357.34	6,782.26	6,736.76	45.51	149.036		
1,300.00	1,299.34	1,280.34	1,299.34	6.28	43.08	72.68	2,388.47	-6,357.34	6,781.07	6,731.71	49.35	137.397		
1,400.00	1,399.26	1,380.26	1,399.26	6.66	46.56	72.71	2,388.47	-6,357.34	6,779.87	6,726.66	53.21	127.416		
1,500.00	1,499.18	1,480.18	1,499.18	7.04	50.04	72.74	2,388.47	-6,357.34	6,778.68	6,721.60	57.08	118.765		
1,600.00	1,599.10	1,580.10	1,599.10	7.43	53.52	72.77	2,388.47	-6,357.34	6,777.49	6,716.54	60.95	111.198		
1,700.00	1,699.01	1,680.01	1,699.01	7.83	57.00	72.81	2,388.47	-6,357.34	6,776.30	6,711.47	64.83	104.525		
1,800.00	1,798.93	1,779.93	1,798.93	8.23	60.48	72.84	2,388.47	-6,357.34	6,775.11	6,706.40	68.71	98.598		
1,900.00	1,898.85	1,879.85	1,898.85	8.64	63.96	72.87	2,388.47	-6,357.34	6,773.93	6,701.33	72.60	93.300		
2,000.00	1,998.77	1,979.77	1,998.77	9.05	67.45	72.90	2,388.47	-6,357.34	6,772.75	6,696.25	76.50	88.536		
2,100.00	2,098.69	2,079.69	2,098.69	9.46	70.93	72.94	2,388.47	-6,357.34	6,771.57	6,691.17	80.39	84.230		
2,200.00	2,198.61	2,179.61	2,198.61	9.88	74.42	72.97	2,388.47	-6,357.34	6,770.39	6,686.10	84.29	80.319		
2,300.00	2,298.53	2,279.53	2,298.53	10.30	77.90	73.00	2,388.47	-6,357.34	6,769.22	6,681.02	88.20	76.751		
2,400.00	2,398.45	2,379.45	2,398.45	10.72	81.39	73.03	2,388.47	-6,357.34	6,768.04	6,675.94	92.10	73.485		
2,500.00	2,498.37	2,479.37	2,498.37	11.14	84.87	73.07	2,388.47	-6,357.34	6,766.87	6,670.86	96.01	70.482		
2,600.00	2,598.29	2,579.29	2,598.29	11.56	88.36	73.10	2,388.47	-6,357.34	6,765.70	6,665.79	99.92	67.713		
2,700.00	2,698.21	2,679.21	2,698.21	11.98	91.84	73.13	2,388.47	-6,357.34	6,764.54	6,660.71	103.83	65.152		
2,800.00	2,798.13	2,779.13	2,798.13	12.41	95.33	73.16	2,388.47	-6,357.34	6,763.37	6,655.63	107.74	62.775		
2,900.00	2,898.05	2,879.05	2,898.05	12.84	98.82	73.20	2,388.47	-6,357.34	6,762.21	6,650.56	111.65	60.565		
3,000.00	2,997.97	2,978.97	2,997.97	13.27	102.30	73.23	2,388.47	-6,357.34	6,761.05	6,645.48	115.57	58.503		
3,100.00	3,097.89	3,078.89	3,097.89	13.69	105.79	73.26	2,388.47	-6,357.34	6,759.89	6,640.41	119.48	56.576		
3,200.00	3,197.81	3,178.81	3,197.81	14.12	109.28	73.29	2,388.47	-6,357.34	6,758.74	6,635.34	123.40	54.772		
3,300.00	3,297.73	3,278.73	3,297.73	14.56	112.76	73.33	2,388.47	-6,357.34	6,757.58	6,630.27	127.32	53.077		
3,400.00	3,397.65	3,378.65	3,397.65	14.99	116.25	73.36	2,388.47	-6,357.34	6,756.43	6,625.20	131.23	51.484		
3,500.00	3,497.56	3,478.56	3,497.56	15.42	119.74	73.39	2,388.47	-6,357.34	6,755.28	6,620.13	135.15	49.982		
3,600.00	3,597.48	3,578.48	3,597.48	15.85	123.22	73.42	2,388.47	-6,357.34	6,754.14	6,615.06	139.07	48.566		
3,700.00	3,697.40	3,678.40	3,697.40	16.28	126.71	73.46	2,388.47	-6,357.34	6,752.99	6,610.00	142.99	47.226		
3,800.00	3,797.32	3,778.32	3,797.32	16.72	130.20	73.49	2,388.47	-6,357.34	6,751.85	6,604.94	146.91	45.958		
3,900.00	3,897.24	3,878.24	3,897.24	17.15	133.68	73.52	2,388.47	-6,357.34	6,750.71	6,599.87	150.83	44.756		
4,000.00	3,997.16	3,978.16	3,997.16	17.59	137.17	73.55	2,388.47	-6,357.34	6,749.57	6,594.81	154.76	43.614		
4,100.00	4,097.08	4,078.08	4,097.08	18.02	140.66	73.59	2,388.47	-6,357.34	6,748.43	6,589.76	158.68	42.529		
4,200.00	4,197.00	4,178.00	4,197.00	18.46	144.15	73.62	2,388.47	-6,357.34	6,747.30	6,584.70	162.60	41.496		
4,300.00	4,296.92	4,277.92	4,296.92	18.89	147.63	73.65	2,388.47	-6,357.34	6,746.17	6,579.64	166.52	40.512		
4,400.00	4,396.84	4,377.84	4,396.84	19.33	151.12	73.68	2,388.47	-6,357.34	6,745.04	6,574.59	170.45	39.572		
4,500.00	4,496.76	4,477.76	4,496.76	19.77	154.61	73.72	2,388.47	-6,357.34	6,743.91	6,569.54	174.37	38.675		
4,600.00	4,596.68	4,577.68	4,596.68	20.20	158.10	73.75	2,388.47	-6,357.34	6,742.79	6,564.49	178.30	37.818		
4,700.00	4,696.60	4,677.60	4,696.60	20.64	161.58	73.78	2,388.47	-6,357.34	6,741.67	6,559.44	182.22	36.997		
4,800.00	4,796.52	4,777.52	4,796.52	21.08	165.07	73.82	2,388.47	-6,357.34	6,740.54	6,554.40	186.15	36.211		
4,900.00	4,896.44	4,877.44	4,896.44	21.51	168.56	73.85	2,388.47	-6,357.34	6,739.43	6,549.36	190.07	35.458		
5,000.00	4,996.36	4,977.36	4,996.36	21.95	172.05	73.88	2,388.47	-6,357.34	6,738.31	6,544.31	194.00	34.734		
5,100.00	5,096.28	5,077.28	5,096.28	22.39	175.53	73.91	2,388.47	-6,357.34	6,737.20	6,539.28	197.92	34.040		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,177.19	5,196.19	22.83	179.02	73.95	2,388.47	-6,357.34	6,736.08	6,534.24	201.85	33.372		
5,300.00	5,296.11	5,277.11	5,296.11	23.27	182.51	73.98	2,388.47	-6,357.34	6,734.98	6,529.20	205.77	32.730		
5,400.00	5,396.03	5,377.03	5,396.03	23.71	186.00	74.01	2,388.47	-6,357.34	6,733.87	6,524.17	209.70	32.112		
5,500.00	5,495.95	5,476.95	5,495.95	24.14	189.48	74.05	2,388.47	-6,357.34	6,732.76	6,519.14	213.63	31.517		
5,600.00	5,595.87	5,576.87	5,595.87	24.58	192.97	74.08	2,388.47	-6,357.34	6,731.66	6,514.11	217.55	30.943		
5,700.00	5,695.79	5,676.79	5,695.79	25.02	196.46	74.11	2,388.47	-6,357.34	6,730.56	6,509.08	221.48	30.389		
5,800.00	5,795.71	5,776.71	5,795.71	25.46	199.95	74.14	2,388.47	-6,357.34	6,729.46	6,504.06	225.41	29.855		
5,900.00	5,895.63	5,876.63	5,895.63	25.90	203.43	74.18	2,388.47	-6,357.34	6,728.36	6,499.03	229.33	29.339		
6,000.00	5,995.55	5,976.55	5,995.55	26.34	206.92	74.21	2,388.47	-6,357.34	6,727.27	6,494.01	233.26	28.840		
6,100.00	6,095.47	6,076.47	6,095.47	26.78	210.41	74.24	2,388.47	-6,357.34	6,726.18	6,488.99	237.19	28.358		
6,200.00	6,195.39	6,176.39	6,195.39	27.22	213.90	74.28	2,388.47	-6,357.34	6,725.09	6,483.98	241.11	27.892		
6,300.00	6,295.31	6,276.31	6,295.31	27.66	217.39	74.31	2,388.47	-6,357.34	6,724.00	6,478.96	245.04	27.440		
6,400.00	6,395.23	6,376.23	6,395.23	28.10	220.87	74.34	2,388.47	-6,357.34	6,722.92	6,473.95	248.97	27.003		
6,500.00	6,495.02	6,476.02	6,495.02	28.54	224.36	38.87	2,388.47	-6,357.34	6,719.68	6,466.79	252.89	26.571		
6,600.00	6,593.09	6,574.09	6,593.09	28.98	227.78	30.45	2,388.47	-6,357.34	6,703.58	6,446.82	256.75	26.109		
6,700.00	6,687.01	6,668.01	6,687.01	29.41	231.06	29.35	2,388.47	-6,357.34	6,673.53	6,413.07	260.46	25.622		
6,800.00	6,774.46	6,755.46	6,774.46	29.83	234.11	30.36	2,388.47	-6,357.34	6,630.33	6,366.42	263.91	25.123		
6,900.00	6,853.31	6,834.31	6,853.31	30.26	236.86	32.89	2,388.47	-6,357.34	6,575.09	6,308.05	267.04	24.622		
7,000.00	6,921.60	6,902.60	6,921.60	30.76	239.25	37.10	2,388.47	-6,357.34	6,509.22	6,239.45	269.77	24.129		
7,100.00	6,977.66	6,958.66	6,977.66	31.38	241.20	43.54	2,388.47	-6,357.34	6,434.41	6,162.36	272.04	23.652		
7,200.00	7,020.10	7,001.10	7,020.10	32.17	242.69	53.12	2,388.47	-6,357.34	6,352.55	6,078.72	273.83	23.199		
7,300.00	7,047.88	7,028.88	7,047.88	33.13	243.66	66.81	2,388.47	-6,357.34	6,265.73	5,990.63	275.10	22.776		
7,400.00	7,060.32	7,041.32	7,060.32	34.27	244.09	84.42	2,388.47	-6,357.34	6,176.10	5,900.26	275.84	22.390		
7,500.00	7,060.70	7,041.70	7,060.70	35.56	244.10	90.52	2,388.47	-6,357.34	6,085.82	5,809.64	276.19	22.035		
7,600.00	7,060.27	7,041.27	7,060.27	37.02	244.09	90.51	2,388.47	-6,357.34	5,995.83	5,719.27	276.56	21.680		
7,700.00	7,059.83	7,040.83	7,059.83	38.64	244.07	90.50	2,388.47	-6,357.34	5,906.16	5,629.16	277.01	21.321		
7,800.00	7,059.40	7,040.40	7,059.40	40.40	244.06	90.49	2,388.47	-6,357.34	5,816.83	5,539.31	277.52	20.960		
7,900.00	7,058.97	7,039.97	7,058.97	42.28	244.04	90.48	2,388.47	-6,357.34	5,727.85	5,449.75	278.10	20.596		
8,000.00	7,058.53	7,039.53	7,058.53	44.27	244.03	90.47	2,388.47	-6,357.34	5,639.24	5,360.47	278.76	20.229		
8,100.00	7,058.10	7,039.10	7,058.10	46.35	244.01	90.46	2,388.47	-6,357.34	5,551.02	5,271.51	279.50	19.860		
8,200.00	7,057.66	7,038.66	7,057.66	48.50	244.00	90.45	2,388.47	-6,357.34	5,463.20	5,182.88	280.32	19.489		
8,300.00	7,057.23	7,038.23	7,057.23	50.73	243.98	90.44	2,388.47	-6,357.34	5,375.81	5,094.58	281.22	19.116		
8,400.00	7,056.80	7,037.80	7,056.80	53.02	243.97	90.43	2,388.47	-6,357.34	5,288.86	5,006.65	282.21	18.741		
8,500.00	7,056.36	7,037.36	7,056.36	55.36	243.95	90.42	2,388.47	-6,357.34	5,202.38	4,919.10	283.28	18.365		
8,600.00	7,055.93	7,036.93	7,055.93	57.74	243.94	90.41	2,388.47	-6,357.34	5,116.40	4,831.96	284.44	17.988		
8,700.00	7,055.49	7,036.49	7,055.49	60.17	243.92	90.40	2,388.47	-6,357.34	5,030.93	4,745.24	285.69	17.610		
8,800.00	7,055.06	7,036.06	7,055.06	62.63	243.91	90.40	2,388.47	-6,357.34	4,946.01	4,658.98	287.03	17.231		
8,900.00	7,054.63	7,035.63	7,054.63	65.13	243.89	90.39	2,388.47	-6,357.34	4,861.67	4,573.20	288.47	16.853		
9,000.00	7,054.19	7,035.19	7,054.19	67.66	243.88	90.38	2,388.47	-6,357.34	4,777.92	4,487.92	290.00	16.475		
9,100.00	7,053.76	7,034.76	7,053.76	70.21	243.86	90.37	2,388.47	-6,357.34	4,694.82	4,403.19	291.63	16.099		
9,200.00	7,053.32	7,034.32	7,053.32	72.78	243.85	90.36	2,388.47	-6,357.34	4,612.38	4,319.02	293.36	15.723		
9,300.00	7,052.89	7,033.89	7,052.89	75.38	243.83	90.35	2,388.47	-6,357.34	4,530.65	4,235.47	295.18	15.349		
9,400.00	7,052.46	7,033.46	7,052.46	77.99	243.81	90.34	2,388.47	-6,357.34	4,449.67	4,152.55	297.11	14.976		
9,500.00	7,052.02	7,033.02	7,052.02	80.62	243.80	90.33	2,388.47	-6,357.34	4,369.47	4,070.33	299.15	14.606		
9,600.00	7,051.59	7,032.59	7,051.59	83.26	243.78	90.32	2,388.47	-6,357.34	4,290.11	3,988.83	301.28	14.239		
9,700.00	7,051.15	7,032.15	7,051.15	85.92	243.77	90.31	2,388.47	-6,357.34	4,211.63	3,908.10	303.53	13.876		
9,800.00	7,050.72	7,031.72	7,050.72	88.59	243.75	90.30	2,388.47	-6,357.34	4,134.07	3,828.19	305.88	13.515		
9,900.00	7,050.29	7,031.29	7,050.29	91.28	243.74	90.29	2,388.47	-6,357.34	4,057.50	3,749.15	308.35	13.159		
10,000.00	7,049.85	7,030.85	7,049.85	93.97	243.72	90.28	2,388.47	-6,357.34	3,981.96	3,671.04	310.92	12.807		
10,100.00	7,049.42	7,030.42	7,049.42	96.67	243.71	90.27	2,388.47	-6,357.34	3,907.53	3,593.92	313.61	12.460		
10,200.00	7,048.98	7,029.98	7,048.98	99.38	243.69	90.26	2,388.47	-6,357.34	3,834.26	3,517.85	316.41	12.118		
10,300.00	7,048.55	7,029.55	7,048.55	102.10	243.68	90.25	2,388.47	-6,357.34	3,762.22	3,442.89	319.33	11.782		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	7,029.12	7,048.12	104.83	243.66	90.24	2,388.47	-6,357.34	3,691.48	3,369.12	322.36	11.451		
10,500.00	7,047.68	7,028.68	7,047.68	107.56	243.65	90.23	2,388.47	-6,357.34	3,622.12	3,296.62	325.51	11.128		
10,600.00	7,047.25	7,028.25	7,047.25	110.30	243.63	90.23	2,388.47	-6,357.34	3,554.22	3,225.46	328.77	10.811		
10,700.00	7,046.81	7,027.81	7,046.81	113.05	243.62	90.22	2,388.47	-6,357.34	3,487.87	3,155.73	332.14	10.501		
10,800.00	7,046.38	7,027.38	7,046.38	115.80	243.60	90.21	2,388.47	-6,357.34	3,423.16	3,087.53	335.63	10.199		
10,900.00	7,045.95	7,026.95	7,045.95	118.55	243.59	90.20	2,388.47	-6,357.34	3,360.17	3,020.95	339.22	9.905		
11,000.00	7,045.51	7,026.51	7,045.51	121.31	243.57	90.19	2,388.47	-6,357.34	3,299.01	2,956.09	342.92	9.620		
11,100.00	7,045.08	7,026.08	7,045.08	124.08	243.56	90.18	2,388.47	-6,357.34	3,239.79	2,893.06	346.72	9.344		
11,200.00	7,044.64	7,025.64	7,044.64	126.85	243.54	90.17	2,388.47	-6,357.34	3,182.60	2,831.99	350.62	9.077		
11,300.00	7,044.21	7,025.21	7,044.21	129.62	243.53	90.16	2,388.47	-6,357.34	3,127.57	2,772.97	354.60	8.820		
11,400.00	7,043.78	7,024.78	7,043.78	132.40	243.51	90.15	2,388.47	-6,357.34	3,074.81	2,716.15	358.66	8.573		
11,500.00	7,043.34	7,024.34	7,043.34	135.18	243.50	90.14	2,388.47	-6,357.34	3,024.43	2,661.65	362.78	8.337		
11,600.00	7,042.91	7,023.91	7,042.91	137.96	243.48	90.13	2,388.47	-6,357.34	2,976.56	2,609.60	366.96	8.111		
11,700.00	7,042.47	7,023.47	7,042.47	140.75	243.47	90.12	2,388.47	-6,357.34	2,931.33	2,560.15	371.18	7.897		
11,800.00	7,042.04	7,023.04	7,042.04	143.54	243.45	90.11	2,388.47	-6,357.34	2,888.84	2,513.42	375.42	7.695		
11,900.00	7,041.61	7,022.61	7,041.61	146.33	243.44	90.10	2,388.47	-6,357.34	2,849.24	2,469.57	379.67	7.505		
12,000.00	7,041.17	7,022.17	7,041.17	149.13	243.42	90.09	2,388.47	-6,357.34	2,812.63	2,428.73	383.90	7.326		
12,100.00	7,040.74	7,021.74	7,040.74	151.92	243.41	90.08	2,388.47	-6,357.34	2,779.14	2,391.05	388.10	7.161		
12,200.00	7,040.30	7,021.30	7,040.30	154.72	243.39	90.07	2,388.47	-6,357.34	2,748.89	2,356.65	392.23	7.008		
12,300.00	7,039.87	7,020.87	7,039.87	157.52	243.38	90.06	2,388.47	-6,357.34	2,721.97	2,325.68	396.29	6.869		
12,400.00	7,039.44	7,020.44	7,039.44	160.33	243.36	90.06	2,388.47	-6,357.34	2,698.49	2,298.25	400.24	6.742		
12,500.00	7,039.00	7,020.00	7,039.00	163.13	243.35	90.05	2,388.47	-6,357.34	2,678.54	2,274.48	404.06	6.629		
12,600.00	7,038.57	7,019.57	7,038.57	165.94	243.33	90.04	2,388.47	-6,357.34	2,662.20	2,254.47	407.73	6.529		
12,700.00	7,038.13	7,019.13	7,038.13	168.75	243.32	90.03	2,388.47	-6,357.34	2,649.54	2,238.32	411.22	6.443		
12,800.00	7,037.70	7,018.70	7,037.70	171.56	243.30	90.02	2,388.47	-6,357.34	2,640.61	2,226.09	414.52	6.370		
12,900.00	7,037.27	7,018.27	7,037.27	174.37	243.28	90.01	2,388.47	-6,357.34	2,635.44	2,217.84	417.60	6.311		
12,986.32	7,036.89	7,017.89	7,036.89	176.80	243.27	90.00	2,388.47	-6,357.34	2,634.02	2,213.95	420.07	6.270 CC		
13,000.00	7,036.83	7,017.83	7,036.83	177.19	243.27	90.00	2,388.47	-6,357.34	2,634.06	2,213.61	420.45	6.265		
13,100.00	7,036.40	7,017.40	7,036.40	180.00	243.25	89.99	2,388.47	-6,357.34	2,636.48	2,213.43	423.05	6.232 ES		
13,200.00	7,035.96	7,016.96	7,035.96	182.82	243.24	89.98	2,388.47	-6,357.34	2,642.68	2,217.28	425.39	6.212		
13,300.00	7,035.53	7,016.53	7,035.53	185.64	243.22	89.97	2,388.47	-6,357.34	2,652.64	2,225.16	427.47	6.205 SF		
13,400.00	7,035.10	7,016.10	7,035.10	188.46	243.21	89.96	2,388.47	-6,357.34	2,666.31	2,237.02	429.29	6.211		
13,500.00	7,034.66	7,015.66	7,034.66	191.28	243.19	89.95	2,388.47	-6,357.34	2,683.64	2,252.80	430.84	6.229		
13,600.00	7,034.23	7,015.23	7,034.23	194.10	243.18	89.94	2,388.47	-6,357.34	2,704.57	2,272.44	432.13	6.259		
13,700.00	7,033.79	7,014.79	7,033.79	196.92	243.16	89.93	2,388.47	-6,357.34	2,728.99	2,295.84	433.16	6.300		
13,800.00	7,033.36	7,014.36	7,033.36	199.74	243.15	89.92	2,388.47	-6,357.34	2,756.84	2,322.89	433.94	6.353		
13,900.00	7,032.93	7,013.93	7,032.93	202.57	243.13	89.91	2,388.47	-6,357.34	2,787.99	2,353.50	434.49	6.417		
14,000.00	7,032.49	7,013.49	7,032.49	205.39	243.12	89.90	2,388.47	-6,357.34	2,822.34	2,387.53	434.82	6.491		
14,100.00	7,032.06	7,013.06	7,032.06	208.22	243.10	89.89	2,388.47	-6,357.34	2,859.78	2,424.85	434.93	6.575		
14,200.00	7,031.62	7,012.62	7,031.62	211.05	243.09	89.89	2,388.47	-6,357.34	2,900.18	2,465.33	434.86	6.669		
14,300.00	7,031.19	7,012.19	7,031.19	213.87	243.07	89.88	2,388.47	-6,357.34	2,943.43	2,508.83	434.60	6.773		
14,400.00	7,030.76	7,011.76	7,030.76	216.70	243.06	89.87	2,388.47	-6,357.34	2,989.40	2,555.22	434.19	6.885		
14,500.00	7,030.32	7,011.32	7,030.32	219.53	243.04	89.86	2,388.47	-6,357.34	3,037.97	2,604.34	433.63	7.006		
14,600.00	7,029.89	7,010.89	7,029.89	222.36	243.03	89.85	2,388.47	-6,357.34	3,089.01	2,656.07	432.94	7.135		
14,700.00	7,029.45	7,010.45	7,029.45	225.19	243.01	89.84	2,388.47	-6,357.34	3,142.41	2,710.27	432.14	7.272		
14,800.00	7,029.02	7,010.02	7,029.02	228.03	243.00	89.83	2,388.47	-6,357.34	3,198.04	2,766.81	431.23	7.416		
14,805.04	7,029.00	7,010.00	7,029.00	228.17	243.00	89.83	2,388.47	-6,357.34	3,200.90	2,769.71	431.18	7.423		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-73.52	2,323.33	-7,853.60	8,190.07					
100.00	100.00	84.00	100.00	3.28	3.59	-73.52	2,323.33	-7,853.60	8,190.05	8,183.17	6.88	1,190.846		
200.00	200.00	184.00	200.00	3.34	5.71	-73.52	2,323.33	-7,853.60	8,190.05	8,181.00	9.05	904.947		
300.00	300.00	284.00	300.00	3.44	8.80	-73.52	2,323.33	-7,853.60	8,190.05	8,177.80	12.25	668.698		
400.00	400.00	384.00	400.00	3.60	12.11	-73.52	2,323.33	-7,853.60	8,190.05	8,174.34	15.72	521.134		
500.00	499.98	483.98	499.98	3.80	15.50	68.30	2,323.33	-7,853.60	8,189.41	8,170.11	19.30	424.366		
600.00	599.90	583.90	599.90	4.02	18.92	68.33	2,323.33	-7,853.60	8,187.94	8,164.99	22.95	356.840		
700.00	699.82	683.82	699.82	4.28	22.37	68.36	2,323.33	-7,853.60	8,186.46	8,159.81	26.65	307.215		
800.00	799.74	783.74	799.74	4.57	25.82	68.38	2,323.33	-7,853.60	8,184.98	8,154.59	30.39	269.336		
900.00	899.66	883.66	899.66	4.88	29.29	68.41	2,323.33	-7,853.60	8,183.50	8,149.33	34.16	239.545		
1,000.00	999.58	983.58	999.58	5.21	32.76	68.44	2,323.33	-7,853.60	8,182.02	8,144.06	37.96	215.540		
1,100.00	1,099.50	1,083.50	1,099.50	5.55	36.23	68.46	2,323.33	-7,853.60	8,180.54	8,138.77	41.78	195.810		
1,200.00	1,199.42	1,183.42	1,199.42	5.91	39.70	68.49	2,323.33	-7,853.60	8,179.07	8,133.46	45.61	179.321		
1,300.00	1,299.34	1,283.34	1,299.34	6.28	43.18	68.52	2,323.33	-7,853.60	8,177.60	8,128.14	49.46	165.346		
1,400.00	1,399.26	1,383.26	1,399.26	6.66	46.66	68.54	2,323.33	-7,853.60	8,176.13	8,122.82	53.31	153.357		
1,500.00	1,499.18	1,483.18	1,499.18	7.04	50.14	68.57	2,323.33	-7,853.60	8,174.66	8,117.48	57.18	142.963		
1,600.00	1,599.10	1,583.10	1,599.10	7.43	53.62	68.59	2,323.33	-7,853.60	8,173.19	8,112.14	61.05	133.870		
1,700.00	1,699.01	1,683.01	1,699.01	7.83	57.10	68.62	2,323.33	-7,853.60	8,171.73	8,106.80	64.93	125.849		
1,800.00	1,798.93	1,782.93	1,798.93	8.23	60.59	68.65	2,323.33	-7,853.60	8,170.27	8,101.45	68.82	118.723		
1,900.00	1,898.85	1,882.85	1,898.85	8.64	64.07	68.67	2,323.33	-7,853.60	8,168.81	8,096.10	72.71	112.352		
2,000.00	1,998.77	1,982.77	1,998.77	9.05	67.55	68.70	2,323.33	-7,853.60	8,167.35	8,090.75	76.60	106.622		
2,100.00	2,098.69	2,082.69	2,098.69	9.46	71.04	68.73	2,323.33	-7,853.60	8,165.89	8,085.39	80.50	101.443		
2,200.00	2,198.61	2,182.61	2,198.61	9.88	74.52	68.75	2,323.33	-7,853.60	8,164.43	8,080.03	84.40	96.738		
2,300.00	2,298.53	2,282.53	2,298.53	10.30	78.01	68.78	2,323.33	-7,853.60	8,162.98	8,074.68	88.30	92.446		
2,400.00	2,398.45	2,382.45	2,398.45	10.72	81.49	68.80	2,323.33	-7,853.60	8,161.52	8,069.32	92.20	88.515		
2,500.00	2,498.37	2,482.37	2,498.37	11.14	84.98	68.83	2,323.33	-7,853.60	8,160.07	8,063.96	96.11	84.902		
2,600.00	2,598.29	2,582.29	2,598.29	11.56	88.46	68.86	2,323.33	-7,853.60	8,158.62	8,058.60	100.02	81.570		
2,700.00	2,698.21	2,682.21	2,698.21	11.98	91.95	68.88	2,323.33	-7,853.60	8,157.18	8,053.25	103.93	78.487		
2,800.00	2,798.13	2,782.13	2,798.13	12.41	95.44	68.91	2,323.33	-7,853.60	8,155.73	8,047.89	107.84	75.627		
2,900.00	2,898.05	2,882.05	2,898.05	12.84	98.92	68.94	2,323.33	-7,853.60	8,154.29	8,042.53	111.76	72.966		
3,000.00	2,997.97	2,981.97	2,997.97	13.27	102.41	68.96	2,323.33	-7,853.60	8,152.84	8,037.17	115.67	70.484		
3,100.00	3,097.89	3,081.89	3,097.89	13.69	105.89	68.99	2,323.33	-7,853.60	8,151.40	8,031.82	119.58	68.164		
3,200.00	3,197.81	3,181.81	3,197.81	14.12	109.38	69.01	2,323.33	-7,853.60	8,149.96	8,026.46	123.50	65.991		
3,300.00	3,297.73	3,281.73	3,297.73	14.56	112.87	69.04	2,323.33	-7,853.60	8,148.53	8,021.11	127.42	63.951		
3,400.00	3,397.65	3,381.65	3,397.65	14.99	116.35	69.07	2,323.33	-7,853.60	8,147.09	8,015.75	131.34	62.032		
3,500.00	3,497.56	3,481.56	3,497.56	15.42	119.84	69.09	2,323.33	-7,853.60	8,145.66	8,010.40	135.26	60.224		
3,600.00	3,597.48	3,581.48	3,597.48	15.85	123.33	69.12	2,323.33	-7,853.60	8,144.22	8,005.05	139.17	58.518		
3,700.00	3,697.40	3,681.40	3,697.40	16.28	126.81	69.15	2,323.33	-7,853.60	8,142.79	7,999.70	143.09	56.905		
3,800.00	3,797.32	3,781.32	3,797.32	16.72	130.30	69.17	2,323.33	-7,853.60	8,141.36	7,994.35	147.02	55.378		
3,900.00	3,897.24	3,881.24	3,897.24	17.15	133.79	69.20	2,323.33	-7,853.60	8,139.94	7,989.00	150.94	53.929		
4,000.00	3,997.16	3,981.16	3,997.16	17.59	137.28	69.22	2,323.33	-7,853.60	8,138.51	7,983.65	154.86	52.554		
4,100.00	4,097.08	4,081.08	4,097.08	18.02	140.76	69.25	2,323.33	-7,853.60	8,137.09	7,978.31	158.78	51.247		
4,200.00	4,197.00	4,181.00	4,197.00	18.46	144.25	69.28	2,323.33	-7,853.60	8,135.67	7,972.96	162.70	50.003		
4,300.00	4,296.92	4,280.92	4,296.92	18.89	147.74	69.30	2,323.33	-7,853.60	8,134.25	7,967.62	166.63	48.817		
4,400.00	4,396.84	4,380.84	4,396.84	19.33	151.23	69.33	2,323.33	-7,853.60	8,132.83	7,962.28	170.55	47.686		
4,500.00	4,496.76	4,480.76	4,496.76	19.77	154.71	69.36	2,323.33	-7,853.60	8,131.41	7,956.94	174.47	46.605		
4,600.00	4,596.68	4,580.68	4,596.68	20.20	158.20	69.38	2,323.33	-7,853.60	8,130.00	7,951.60	178.40	45.572		
4,700.00	4,696.60	4,680.60	4,696.60	20.64	161.69	69.41	2,323.33	-7,853.60	8,128.58	7,946.26	182.32	44.584		
4,800.00	4,796.52	4,780.52	4,796.52	21.08	165.18	69.44	2,323.33	-7,853.60	8,127.17	7,940.92	186.25	43.637		
4,900.00	4,896.44	4,880.44	4,896.44	21.51	168.66	69.46	2,323.33	-7,853.60	8,125.76	7,935.59	190.17	42.729		
5,000.00	4,996.36	4,980.36	4,996.36	21.95	172.15	69.49	2,323.33	-7,853.60	8,124.35	7,930.26	194.10	41.857		
5,100.00	5,096.28	5,080.28	5,096.28	22.39	175.64	69.52	2,323.33	-7,853.60	8,122.95	7,924.92	198.02	41.020		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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 Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (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	5,196.19	5,180.19	5,196.19	22.83	179.13	69.54	2,323.33	-7,853.60	8,121.54	7,919.59	201.95	40.216		
5,300.00	5,296.11	5,280.11	5,296.11	23.27	182.61	69.57	2,323.33	-7,853.60	8,120.14	7,914.27	205.87	39.442		
5,400.00	5,396.03	5,380.03	5,396.03	23.71	186.10	69.60	2,323.33	-7,853.60	8,118.74	7,908.94	209.80	38.698		
5,500.00	5,495.95	5,479.95	5,495.95	24.14	189.59	69.62	2,323.33	-7,853.60	8,117.34	7,903.61	213.73	37.980		
5,600.00	5,595.87	5,579.87	5,595.87	24.58	193.08	69.65	2,323.33	-7,853.60	8,115.94	7,898.29	217.65	37.289		
5,700.00	5,695.79	5,679.79	5,695.79	25.02	196.56	69.68	2,323.33	-7,853.60	8,114.55	7,892.97	221.58	36.621		
5,800.00	5,795.71	5,779.71	5,795.71	25.46	200.05	69.70	2,323.33	-7,853.60	8,113.15	7,887.65	225.51	35.978		
5,900.00	5,895.63	5,879.63	5,895.63	25.90	203.54	69.73	2,323.33	-7,853.60	8,111.76	7,882.33	229.43	35.356		
6,000.00	5,995.55	5,979.55	5,995.55	26.34	207.03	69.75	2,323.33	-7,853.60	8,110.37	7,877.01	233.36	34.755		
6,100.00	6,095.47	6,079.47	6,095.47	26.78	210.51	69.78	2,323.33	-7,853.60	8,108.98	7,871.69	237.29	34.174		
6,200.00	6,195.39	6,179.39	6,195.39	27.22	214.00	69.81	2,323.33	-7,853.60	8,107.59	7,866.38	241.21	33.612		
6,300.00	6,295.31	6,279.31	6,295.31	27.66	217.49	69.83	2,323.33	-7,853.60	8,106.21	7,861.07	245.14	33.067		
6,400.00	6,395.23	6,379.23	6,395.23	28.10	220.98	69.86	2,323.33	-7,853.60	8,104.82	7,855.76	249.07	32.540		
6,500.00	6,495.02	6,479.02	6,495.02	28.54	224.46	34.37	2,323.33	-7,853.60	8,101.22	7,848.23	252.99	32.022		
6,600.00	6,593.09	6,577.09	6,593.09	28.98	227.88	25.84	2,323.33	-7,853.60	8,098.37	7,827.52	256.85	31.475		
6,700.00	6,687.01	6,671.01	6,687.01	29.41	231.16	24.52	2,323.33	-7,853.60	8,093.16	7,792.60	260.56	30.908		
6,800.00	6,774.46	6,758.46	6,774.46	29.83	234.22	25.20	2,323.33	-7,853.60	8,098.37	7,744.36	264.01	30.334		
6,900.00	6,853.31	6,837.31	6,853.31	30.26	236.97	27.27	2,323.33	-7,853.60	7,951.15	7,684.02	267.12	29.766		
7,000.00	6,921.60	6,905.60	6,921.60	30.76	239.35	30.92	2,323.33	-7,853.60	7,882.92	7,613.09	269.83	29.214		
7,100.00	6,977.66	6,961.66	6,977.66	31.38	241.31	36.79	2,323.33	-7,853.60	7,805.42	7,533.34	272.08	28.688		
7,200.00	7,020.10	7,004.10	7,020.10	32.17	242.79	46.19	2,323.33	-7,853.60	7,720.56	7,446.75	273.81	28.196		
7,300.00	7,047.88	7,031.88	7,047.88	33.13	243.76	61.14	2,323.33	-7,853.60	7,630.48	7,355.46	275.02	27.746		
7,400.00	7,060.32	7,044.32	7,060.32	34.27	244.19	82.79	2,323.33	-7,853.60	7,537.40	7,261.73	275.67	27.342		
7,500.00	7,060.70	7,044.70	7,060.70	35.56	244.21	90.67	2,323.33	-7,853.60	7,443.52	7,167.62	275.91	26.978		
7,600.00	7,060.27	7,044.27	7,060.27	37.02	244.19	90.66	2,323.33	-7,853.60	7,349.80	7,073.64	276.15	26.615		
7,700.00	7,059.83	7,043.83	7,059.83	38.64	244.18	90.65	2,323.33	-7,853.60	7,256.23	6,979.79	276.44	26.249		
7,800.00	7,059.40	7,043.40	7,059.40	40.40	244.16	90.64	2,323.33	-7,853.60	7,162.85	6,886.07	276.78	25.880		
7,900.00	7,058.97	7,042.97	7,058.97	42.28	244.15	90.63	2,323.33	-7,853.60	7,069.64	6,792.48	277.16	25.508		
8,000.00	7,058.53	7,042.53	7,058.53	44.27	244.13	90.63	2,323.33	-7,853.60	6,976.62	6,699.04	277.58	25.133		
8,100.00	7,058.10	7,042.10	7,058.10	46.35	244.12	90.62	2,323.33	-7,853.60	6,883.80	6,605.73	278.06	24.756		
8,200.00	7,057.66	7,041.66	7,057.66	48.50	244.10	90.61	2,323.33	-7,853.60	6,791.18	6,512.58	278.59	24.377		
8,300.00	7,057.23	7,041.23	7,057.23	50.73	244.09	90.60	2,323.33	-7,853.60	6,698.77	6,419.59	279.18	23.995		
8,400.00	7,056.80	7,040.80	7,056.80	53.02	244.07	90.59	2,323.33	-7,853.60	6,606.58	6,326.77	279.82	23.611		
8,500.00	7,056.36	7,040.36	7,056.36	55.36	244.06	90.58	2,323.33	-7,853.60	6,514.63	6,234.12	280.51	23.224		
8,600.00	7,055.93	7,039.93	7,055.93	57.74	244.04	90.57	2,323.33	-7,853.60	6,422.91	6,141.65	281.26	22.836		
8,700.00	7,055.49	7,039.49	7,055.49	60.17	244.03	90.56	2,323.33	-7,853.60	6,331.45	6,049.37	282.08	22.446		
8,800.00	7,055.06	7,039.06	7,055.06	62.63	244.01	90.55	2,323.33	-7,853.60	6,240.25	5,957.29	282.95	22.054		
8,900.00	7,054.63	7,038.63	7,054.63	65.13	244.00	90.54	2,323.33	-7,853.60	6,149.32	5,865.43	283.89	21.661		
9,000.00	7,054.19	7,038.19	7,054.19	67.66	243.98	90.53	2,323.33	-7,853.60	6,058.67	5,773.78	284.89	21.267		
9,100.00	7,053.76	7,037.76	7,053.76	70.21	243.97	90.52	2,323.33	-7,853.60	5,968.33	5,682.37	285.96	20.871		
9,200.00	7,053.32	7,037.32	7,053.32	72.78	243.95	90.51	2,323.33	-7,853.60	5,878.30	5,591.20	287.09	20.475		
9,300.00	7,052.89	7,036.89	7,052.89	75.38	243.93	90.50	2,323.33	-7,853.60	5,788.59	5,500.30	288.30	20.079		
9,400.00	7,052.46	7,036.46	7,052.46	77.99	243.92	90.49	2,323.33	-7,853.60	5,699.23	5,409.66	289.57	19.682		
9,500.00	7,052.02	7,036.02	7,052.02	80.62	243.90	90.48	2,323.33	-7,853.60	5,610.23	5,319.31	290.92	19.285		
9,600.00	7,051.59	7,035.59	7,051.59	83.26	243.89	90.47	2,323.33	-7,853.60	5,521.60	5,229.27	292.34	18.888		
9,700.00	7,051.15	7,035.15	7,051.15	85.92	243.87	90.46	2,323.33	-7,853.60	5,433.37	5,139.54	293.83	18.491		
9,800.00	7,050.72	7,034.72	7,050.72	88.59	243.86	90.45	2,323.33	-7,853.60	5,345.55	5,050.15	295.40	18.096		
9,900.00	7,050.29	7,034.29	7,050.29	91.28	243.84	90.44	2,323.33	-7,853.60	5,258.17	4,961.12	297.06	17.701		
10,000.00	7,049.85	7,033.85	7,049.85	93.97	243.83	90.43	2,323.33	-7,853.60	5,171.25	4,872.46	298.79	17.307		
10,100.00	7,049.42	7,033.42	7,049.42	96.67	243.81	90.42	2,323.33	-7,853.60	5,084.80	4,784.20	300.60	16.915		
10,200.00	7,048.98	7,032.98	7,048.98	99.38	243.80	90.41	2,323.33	-7,853.60	4,998.87	4,696.36	302.50	16.525		
10,300.00	7,048.55	7,032.55	7,048.55	102.10	243.78	90.40	2,323.33	-7,853.60	4,913.46	4,608.97	304.49	16.137		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	7,032.12	7,048.12	104.83	243.77	90.39	2,323.33	-7,853.60	4,828.61	4,522.05	306.56	15.751		
10,500.00	7,047.68	7,031.68	7,047.68	107.56	243.75	90.38	2,323.33	-7,853.60	4,744.36	4,435.63	308.73	15.367		
10,600.00	7,047.25	7,031.25	7,047.25	110.30	243.74	90.37	2,323.33	-7,853.60	4,660.72	4,349.73	310.99	14.987		
10,700.00	7,046.81	7,030.81	7,046.81	113.05	243.72	90.36	2,323.33	-7,853.60	4,577.75	4,264.39	313.35	14.609		
10,800.00	7,046.38	7,030.38	7,046.38	115.80	243.71	90.36	2,323.33	-7,853.60	4,495.46	4,179.65	315.81	14.235		
10,900.00	7,045.95	7,029.95	7,045.95	118.55	243.69	90.35	2,323.33	-7,853.60	4,413.91	4,095.54	318.37	13.864		
11,000.00	7,045.51	7,029.51	7,045.51	121.31	243.68	90.34	2,323.33	-7,853.60	4,333.13	4,012.09	321.04	13.497		
11,100.00	7,045.08	7,029.08	7,045.08	124.08	243.66	90.33	2,323.33	-7,853.60	4,253.17	3,929.36	323.81	13.135		
11,200.00	7,044.64	7,028.64	7,044.64	126.85	243.65	90.32	2,323.33	-7,853.60	4,174.07	3,847.38	326.69	12.777		
11,300.00	7,044.21	7,028.21	7,044.21	129.62	243.63	90.31	2,323.33	-7,853.60	4,095.89	3,766.20	329.69	12.424		
11,400.00	7,043.78	7,027.78	7,043.78	132.40	243.62	90.30	2,323.33	-7,853.60	4,018.67	3,685.87	332.80	12.075		
11,500.00	7,043.34	7,027.34	7,043.34	135.18	243.60	90.29	2,323.33	-7,853.60	3,942.48	3,606.46	336.02	11.733		
11,600.00	7,042.91	7,026.91	7,042.91	137.96	243.59	90.28	2,323.33	-7,853.60	3,867.37	3,528.00	339.37	11.396		
11,700.00	7,042.47	7,026.47	7,042.47	140.75	243.57	90.27	2,323.33	-7,853.60	3,793.41	3,450.58	342.83	11.065		
11,800.00	7,042.04	7,026.04	7,042.04	143.54	243.56	90.26	2,323.33	-7,853.60	3,720.67	3,374.25	346.42	10.740		
11,900.00	7,041.61	7,025.61	7,041.61	146.33	243.54	90.25	2,323.33	-7,853.60	3,649.22	3,299.09	350.13	10.423		
12,000.00	7,041.17	7,025.17	7,041.17	149.13	243.53	90.24	2,323.33	-7,853.60	3,579.14	3,225.18	353.96	10.112		
12,100.00	7,040.74	7,024.74	7,040.74	151.92	243.51	90.23	2,323.33	-7,853.60	3,510.51	3,152.59	357.91	9.808		
12,200.00	7,040.30	7,024.30	7,040.30	154.72	243.50	90.22	2,323.33	-7,853.60	3,443.41	3,081.42	361.99	9.513		
12,300.00	7,039.87	7,023.87	7,039.87	157.52	243.48	90.21	2,323.33	-7,853.60	3,377.94	3,011.76	366.18	9.225		
12,400.00	7,039.44	7,023.44	7,039.44	160.33	243.47	90.20	2,323.33	-7,853.60	3,314.20	2,943.71	370.49	8.946		
12,500.00	7,039.00	7,023.00	7,039.00	163.13	243.45	90.19	2,323.33	-7,853.60	3,252.28	2,877.37	374.90	8.675		
12,600.00	7,038.57	7,022.57	7,038.57	165.94	243.43	90.18	2,323.33	-7,853.60	3,192.29	2,812.87	379.42	8.414		
12,700.00	7,038.13	7,022.13	7,038.13	168.75	243.42	90.17	2,323.33	-7,853.60	3,134.35	2,750.31	384.04	8.162		
12,800.00	7,037.70	7,021.70	7,037.70	171.56	243.40	90.16	2,323.33	-7,853.60	3,078.56	2,689.82	388.74	7.919		
12,900.00	7,037.27	7,021.27	7,037.27	174.37	243.39	90.15	2,323.33	-7,853.60	3,025.06	2,631.54	393.52	7.687		
13,000.00	7,036.83	7,020.83	7,036.83	177.19	243.37	90.14	2,323.33	-7,853.60	2,973.95	2,575.60	398.35	7.466		
13,100.00	7,036.40	7,020.40	7,036.40	180.00	243.36	90.13	2,323.33	-7,853.60	2,925.37	2,522.14	403.23	7.255		
13,200.00	7,035.96	7,019.96	7,035.96	182.82	243.34	90.12	2,323.33	-7,853.60	2,879.45	2,471.31	408.14	7.055		
13,300.00	7,035.53	7,019.53	7,035.53	185.64	243.33	90.11	2,323.33	-7,853.60	2,836.31	2,423.26	413.04	6.867		
13,400.00	7,035.10	7,019.10	7,035.10	188.46	243.31	90.10	2,323.33	-7,853.60	2,796.08	2,378.14	417.93	6.690		
13,500.00	7,034.66	7,018.66	7,034.66	191.28	243.30	90.09	2,323.33	-7,853.60	2,758.89	2,336.10	422.78	6.526		
13,600.00	7,034.23	7,018.23	7,034.23	194.10	243.28	90.09	2,323.33	-7,853.60	2,724.86	2,297.30	427.56	6.373		
13,700.00	7,033.79	7,017.79	7,033.79	196.92	243.27	90.08	2,323.33	-7,853.60	2,694.12	2,261.88	432.24	6.233		
13,800.00	7,033.36	7,017.36	7,033.36	199.74	243.25	90.07	2,323.33	-7,853.60	2,666.77	2,229.99	436.79	6.105		
13,900.00	7,032.93	7,016.93	7,032.93	202.57	243.24	90.06	2,323.33	-7,853.60	2,642.93	2,201.75	441.18	5.991		
14,000.00	7,032.49	7,016.49	7,032.49	205.39	243.22	90.05	2,323.33	-7,853.60	2,622.69	2,177.30	445.39	5.889		
14,100.00	7,032.06	7,016.06	7,032.06	208.22	243.21	90.04	2,323.33	-7,853.60	2,606.13	2,156.76	449.38	5.799		
14,200.00	7,031.62	7,015.62	7,031.62	211.05	243.19	90.03	2,323.33	-7,853.60	2,593.32	2,140.20	453.12	5.723		
14,300.00	7,031.19	7,015.19	7,031.19	213.87	243.18	90.02	2,323.33	-7,853.60	2,584.32	2,127.73	456.60	5.660		
14,400.00	7,030.76	7,014.76	7,030.76	216.70	243.16	90.01	2,323.33	-7,853.60	2,579.17	2,119.39	459.79	5.610		
14,482.96	7,030.40	7,014.40	7,030.40	219.05	243.15	90.00	2,323.33	-7,853.60	2,577.84	2,115.64	462.20	5.577 CC		
14,500.00	7,030.32	7,014.32	7,030.32	219.53	243.15	90.00	2,323.33	-7,853.60	2,577.90	2,115.23	462.67	5.572 ES		
14,600.00	7,029.89	7,013.89	7,029.89	222.36	243.13	89.99	2,323.33	-7,853.60	2,580.50	2,115.27	465.22	5.547		
14,700.00	7,029.45	7,013.45	7,029.45	225.19	243.12	89.98	2,323.33	-7,853.60	2,586.96	2,119.51	467.45	5.534		
14,800.00	7,029.02	7,013.02	7,029.02	228.03	243.10	89.97	2,323.33	-7,853.60	2,597.26	2,127.93	469.33	5.534 SF		
14,805.04	7,029.00	7,013.00	7,029.00	228.17	243.10	89.97	2,323.33	-7,853.60	2,597.88	2,128.46	469.42	5.534		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-56.10	2,438.92	-3,629.07	4,372.47					
100.00	100.00	101.00	100.00	3.28	3.73	-56.10	2,438.92	-3,629.07	4,372.47	4,365.45	7.02	623.147		
200.00	200.00	201.00	200.00	3.34	6.21	-56.10	2,438.92	-3,629.07	4,372.47	4,362.92	9.55	458.062		
300.00	300.00	301.00	300.00	3.44	9.36	-56.10	2,438.92	-3,629.07	4,372.47	4,359.67	12.80	341.570		
400.00	400.00	401.00	400.00	3.60	12.68	-56.10	2,438.92	-3,629.07	4,372.47	4,356.18	16.29	268.445		
500.00	499.98	500.98	499.98	3.80	16.08	85.73	2,438.92	-3,629.07	4,372.34	4,352.46	19.88	219.953		
600.00	599.90	600.90	599.90	4.02	19.51	85.78	2,438.92	-3,629.07	4,372.04	4,348.51	23.53	185.804		
700.00	699.82	700.82	699.82	4.28	22.96	85.83	2,438.92	-3,629.07	4,371.75	4,344.51	27.23	160.521		
800.00	799.74	800.74	799.74	4.57	26.41	85.89	2,438.92	-3,629.07	4,371.46	4,340.48	30.98	141.112		
900.00	899.66	900.66	899.66	4.88	29.88	85.94	2,438.92	-3,629.07	4,371.17	4,336.42	34.75	125.777		
1,000.00	999.58	1,000.58	999.58	5.21	33.35	85.99	2,438.92	-3,629.07	4,370.89	4,332.34	38.55	113.376		
1,100.00	1,099.50	1,100.50	1,099.50	5.55	36.82	86.04	2,438.92	-3,629.07	4,370.61	4,328.24	42.37	103.153		
1,200.00	1,199.42	1,200.42	1,199.42	5.91	40.29	86.10	2,438.92	-3,629.07	4,370.34	4,324.13	46.20	94.587		
1,300.00	1,299.34	1,300.34	1,299.34	6.28	43.77	86.15	2,438.92	-3,629.07	4,370.06	4,320.01	50.05	87.312		
1,400.00	1,399.26	1,400.26	1,399.26	6.66	47.25	86.20	2,438.92	-3,629.07	4,369.80	4,315.89	53.91	81.060		
1,500.00	1,499.18	1,500.18	1,499.18	7.04	50.73	86.25	2,438.92	-3,629.07	4,369.53	4,311.76	57.77	75.631		
1,600.00	1,599.10	1,600.10	1,599.10	7.43	54.21	86.31	2,438.92	-3,629.07	4,369.27	4,307.62	61.65	70.875		
1,700.00	1,699.01	1,700.01	1,699.01	7.83	57.70	86.36	2,438.92	-3,629.07	4,369.01	4,303.49	65.53	66.674		
1,800.00	1,798.93	1,800.07	1,798.93	8.23	61.18	86.41	2,438.92	-3,629.07	4,368.76	4,299.34	69.42	62.935		
1,900.00	1,898.85	1,900.15	1,898.85	8.64	64.67	86.46	2,438.92	-3,629.07	4,368.51	4,295.20	73.31	59.587		
2,000.00	1,998.77	2,000.23	1,998.77	9.05	68.16	86.52	2,438.92	-3,629.07	4,368.27	4,291.05	77.21	56.575		
2,100.00	2,098.69	2,100.31	2,098.69	9.46	71.65	86.57	2,438.92	-3,629.07	4,368.02	4,286.91	81.11	53.850		
2,200.00	2,198.61	2,200.39	2,198.61	9.88	75.14	86.62	2,438.92	-3,629.07	4,367.78	4,282.76	85.02	51.374		
2,300.00	2,298.53	2,300.47	2,298.53	10.30	78.63	86.67	2,438.92	-3,629.07	4,367.55	4,278.62	88.93	49.113		
2,400.00	2,398.45	2,400.55	2,398.45	10.72	82.12	86.73	2,438.92	-3,629.07	4,367.32	4,274.48	92.84	47.042		
2,500.00	2,498.37	2,500.63	2,498.37	11.14	85.61	86.78	2,438.92	-3,629.07	4,367.09	4,270.34	96.75	45.137		
2,600.00	2,598.29	2,600.71	2,598.29	11.56	89.11	86.83	2,438.92	-3,629.07	4,366.87	4,266.20	100.67	43.380		
2,700.00	2,698.21	2,700.79	2,698.21	11.98	92.60	86.88	2,438.92	-3,629.07	4,366.65	4,262.07	104.58	41.753		
2,800.00	2,798.13	2,800.87	2,798.13	12.41	96.09	86.94	2,438.92	-3,629.07	4,366.43	4,257.93	108.50	40.244		
2,900.00	2,898.05	2,900.95	2,898.05	12.84	99.58	86.99	2,438.92	-3,629.07	4,366.22	4,253.80	112.42	38.839		
3,000.00	2,997.97	3,001.03	2,997.97	13.27	103.07	87.04	2,438.92	-3,629.07	4,366.01	4,249.67	116.34	37.528		
3,100.00	3,097.89	3,101.11	3,097.89	13.69	106.57	87.09	2,438.92	-3,629.07	4,365.80	4,245.54	120.26	36.303		
3,200.00	3,197.81	3,201.19	3,197.81	14.12	110.06	87.15	2,438.92	-3,629.07	4,365.60	4,241.42	124.18	35.155		
3,300.00	3,297.73	3,301.27	3,297.73	14.56	113.55	87.20	2,438.92	-3,629.07	4,365.40	4,237.30	128.10	34.077		
3,400.00	3,397.65	3,401.36	3,397.65	14.99	117.04	87.25	2,438.92	-3,629.07	4,365.21	4,233.18	132.03	33.063		
3,500.00	3,497.56	3,501.44	3,497.56	15.42	120.53	87.30	2,438.92	-3,629.07	4,365.02	4,229.07	135.95	32.107		
3,600.00	3,597.48	3,601.52	3,597.48	15.85	124.03	87.36	2,438.92	-3,629.07	4,364.83	4,224.95	139.88	31.205		
3,700.00	3,697.40	3,701.60	3,697.40	16.28	127.52	87.41	2,438.92	-3,629.07	4,364.65	4,220.84	143.80	30.351		
3,800.00	3,797.32	3,801.68	3,797.32	16.72	131.01	87.46	2,438.92	-3,629.07	4,364.47	4,216.74	147.73	29.543		
3,900.00	3,897.24	3,901.76	3,897.24	17.15	134.51	87.51	2,438.92	-3,629.07	4,364.29	4,212.63	151.66	28.777		
4,000.00	3,997.16	4,001.84	3,997.16	17.59	138.00	87.57	2,438.92	-3,629.07	4,364.12	4,208.53	155.58	28.050		
4,100.00	4,097.08	4,101.92	4,097.08	18.02	141.49	87.62	2,438.92	-3,629.07	4,363.95	4,204.44	159.51	27.358		
4,200.00	4,197.00	4,202.00	4,197.00	18.46	144.98	87.67	2,438.92	-3,629.07	4,363.79	4,200.34	163.44	26.699		
4,300.00	4,296.92	4,302.08	4,296.92	18.89	148.48	87.72	2,438.92	-3,629.07	4,363.62	4,196.25	167.37	26.072		
4,400.00	4,396.84	4,402.16	4,396.84	19.33	151.97	87.78	2,438.92	-3,629.07	4,363.47	4,192.17	171.30	25.473		
4,500.00	4,496.76	4,502.24	4,496.76	19.77	155.46	87.83	2,438.92	-3,629.07	4,363.31	4,188.08	175.23	24.901		
4,600.00	4,596.68	4,602.32	4,596.68	20.20	158.96	87.88	2,438.92	-3,629.07	4,363.16	4,184.00	179.16	24.354		
4,700.00	4,696.60	4,702.40	4,696.60	20.64	162.45	87.94	2,438.92	-3,629.07	4,363.02	4,179.93	183.09	23.830		
4,800.00	4,796.52	4,802.48	4,796.52	21.08	165.94	87.99	2,438.92	-3,629.07	4,362.87	4,175.86	187.02	23.329		
4,900.00	4,896.44	4,902.56	4,896.44	21.51	169.44	88.04	2,438.92	-3,629.07	4,362.73	4,171.79	190.95	22.848		
5,000.00	4,996.36	5,002.64	4,996.36	21.95	172.93	88.09	2,438.92	-3,629.07	4,362.60	4,167.72	194.88	22.386		
5,100.00	5,096.28	5,102.72	5,096.28	22.39	176.42	88.15	2,438.92	-3,629.07	4,362.47	4,163.66	198.81	21.943		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	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	5,196.19	5,202.81	5,196.19	22.83	179.91	88.20	2,438.92	-3,629.07	4,362.34	4,159.60	202.74	21.517	
5,300.00	5,296.11	5,302.89	5,296.11	23.27	183.41	88.25	2,438.92	-3,629.07	4,362.21	4,155.54	206.67	21.107	
5,400.00	5,396.03	5,402.97	5,396.03	23.71	186.90	88.30	2,438.92	-3,629.07	4,362.09	4,151.49	210.60	20.712	
5,500.00	5,495.95	5,503.05	5,495.95	24.14	190.39	88.36	2,438.92	-3,629.07	4,361.98	4,147.44	214.54	20.332	
5,600.00	5,595.87	5,603.13	5,595.87	24.58	193.89	88.41	2,438.92	-3,629.07	4,361.86	4,143.39	218.47	19.966	
5,700.00	5,695.79	5,703.21	5,695.79	25.02	197.38	88.46	2,438.92	-3,629.07	4,361.75	4,139.35	222.40	19.612	
5,800.00	5,795.71	5,803.29	5,795.71	25.46	200.87	88.51	2,438.92	-3,629.07	4,361.65	4,135.31	226.33	19.271	
5,900.00	5,895.63	5,903.37	5,895.63	25.90	204.37	88.57	2,438.92	-3,629.07	4,361.54	4,131.28	230.27	18.941	
6,000.00	5,995.55	6,003.45	5,995.55	26.34	207.86	88.62	2,438.92	-3,629.07	4,361.45	4,127.25	234.20	18.623	
6,100.00	6,095.47	6,103.53	6,095.47	26.78	211.35	88.67	2,438.92	-3,629.07	4,361.35	4,123.22	238.13	18.315	
6,200.00	6,195.39	6,203.61	6,195.39	27.22	214.85	88.72	2,438.92	-3,629.07	4,361.26	4,119.20	242.06	18.017	
6,300.00	6,295.31	6,303.69	6,295.31	27.66	218.34	88.78	2,438.92	-3,629.07	4,361.17	4,115.18	246.00	17.729	
6,400.00	6,395.23	6,403.77	6,395.23	28.10	221.83	88.83	2,438.92	-3,629.07	4,361.09	4,111.16	249.93	17.449	
6,500.00	6,495.02	6,503.98	6,495.02	28.54	225.33	53.40	2,438.92	-3,629.07	4,359.15	4,105.28	253.87	17.171	
6,600.00	6,593.09	6,605.91	6,593.09	28.98	228.89	45.21	2,438.92	-3,629.07	4,346.12	4,088.26	257.87	16.854	
6,700.00	6,687.01	6,688.01	6,687.01	29.41	231.76	44.59	2,438.92	-3,629.07	4,321.13	4,059.97	261.16	16.546	
6,800.00	6,774.46	6,775.46	6,774.46	29.83	234.81	46.25	2,438.92	-3,629.07	4,284.93	4,020.29	264.64	16.192	
6,900.00	6,853.31	6,854.31	6,853.31	30.26	237.56	49.52	2,438.92	-3,629.07	4,238.60	3,970.80	267.80	15.828	
7,000.00	6,921.60	6,922.60	6,921.60	30.76	239.95	54.31	2,438.92	-3,629.07	4,183.50	3,912.91	270.60	15.460	
7,100.00	6,977.66	6,978.66	6,977.66	31.38	241.90	60.65	2,438.92	-3,629.07	4,121.24	3,848.25	272.99	15.097	
7,200.00	7,020.10	7,021.10	7,020.10	32.17	243.38	68.50	2,438.92	-3,629.07	4,053.58	3,778.62	274.97	14.742	
7,300.00	7,047.88	7,048.88	7,047.88	33.13	244.35	77.55	2,438.92	-3,629.07	3,982.41	3,705.91	276.50	14.403	
7,400.00	7,060.32	7,061.32	7,060.32	34.27	244.79	87.17	2,438.92	-3,629.07	3,909.66	3,632.06	277.60	14.084	
7,500.00	7,060.70	7,061.70	7,060.70	35.56	244.80	90.26	2,438.92	-3,629.07	3,837.20	3,558.82	278.38	13.784	
7,600.00	7,060.27	7,061.27	7,060.27	37.02	244.79	90.25	2,438.92	-3,629.07	3,765.97	3,486.69	279.28	13.485	
7,700.00	7,059.83	7,060.83	7,059.83	38.64	244.77	90.24	2,438.92	-3,629.07	3,696.08	3,415.74	280.34	13.184	
7,800.00	7,059.40	7,060.40	7,059.40	40.40	244.76	90.23	2,438.92	-3,629.07	3,627.60	3,346.04	281.55	12.884	
7,900.00	7,058.97	7,059.97	7,058.97	42.28	244.74	90.22	2,438.92	-3,629.07	3,560.61	3,277.68	282.93	12.585	
8,000.00	7,058.53	7,059.53	7,058.53	44.27	244.73	90.21	2,438.92	-3,629.07	3,495.19	3,210.73	284.46	12.287	
8,100.00	7,058.10	7,059.10	7,058.10	46.35	244.71	90.20	2,438.92	-3,629.07	3,431.45	3,145.29	286.16	11.991	
8,200.00	7,057.66	7,058.66	7,057.66	48.50	244.69	90.19	2,438.92	-3,629.07	3,369.46	3,081.46	288.00	11.699	
8,300.00	7,057.23	7,058.23	7,057.23	50.73	244.68	90.18	2,438.92	-3,629.07	3,309.34	3,019.34	290.00	11.412	
8,400.00	7,056.80	7,057.80	7,056.80	53.02	244.66	90.17	2,438.92	-3,629.07	3,251.18	2,959.04	292.14	11.129	
8,500.00	7,056.36	7,057.36	7,056.36	55.36	244.65	90.16	2,438.92	-3,629.07	3,195.10	2,900.68	294.42	10.852	
8,600.00	7,055.93	7,056.93	7,055.93	57.74	244.63	90.15	2,438.92	-3,629.07	3,141.19	2,844.37	296.83	10.583	
8,700.00	7,055.49	7,056.49	7,055.49	60.17	244.62	90.15	2,438.92	-3,629.07	3,089.59	2,790.23	299.36	10.321	
8,800.00	7,055.06	7,056.06	7,055.06	62.63	244.60	90.14	2,438.92	-3,629.07	3,040.39	2,738.39	302.01	10.067	
8,900.00	7,054.63	7,055.63	7,054.63	65.13	244.59	90.13	2,438.92	-3,629.07	2,993.74	2,688.97	304.76	9.823	
9,000.00	7,054.19	7,055.19	7,054.19	67.66	244.57	90.12	2,438.92	-3,629.07	2,949.73	2,642.12	307.61	9.589	
9,100.00	7,053.76	7,054.76	7,053.76	70.21	244.56	90.11	2,438.92	-3,629.07	2,908.50	2,597.96	310.54	9.366	
9,200.00	7,053.32	7,054.32	7,053.32	72.78	244.54	90.10	2,438.92	-3,629.07	2,870.16	2,556.62	313.53	9.154	
9,300.00	7,052.89	7,053.89	7,052.89	75.38	244.53	90.09	2,438.92	-3,629.07	2,834.83	2,518.24	316.59	8.954	
9,400.00	7,052.46	7,053.46	7,052.46	77.99	244.51	90.08	2,438.92	-3,629.07	2,802.62	2,482.95	319.68	8.767	
9,500.00	7,052.02	7,053.02	7,052.02	80.62	244.50	90.07	2,438.92	-3,629.07	2,773.65	2,450.86	322.79	8.593	
9,600.00	7,051.59	7,052.59	7,051.59	83.26	244.48	90.06	2,438.92	-3,629.07	2,748.02	2,422.11	325.91	8.432	
9,700.00	7,051.15	7,052.15	7,051.15	85.92	244.47	90.05	2,438.92	-3,629.07	2,725.81	2,396.79	329.02	8.285	
9,800.00	7,050.72	7,051.72	7,050.72	88.59	244.45	90.04	2,438.92	-3,629.07	2,707.12	2,375.02	332.10	8.152	
9,900.00	7,050.29	7,051.29	7,050.29	91.28	244.44	90.03	2,438.92	-3,629.07	2,692.02	2,356.89	335.13	8.033	
10,000.00	7,049.85	7,050.85	7,049.85	93.97	244.42	90.02	2,438.92	-3,629.07	2,680.56	2,342.46	338.10	7.928	
10,100.00	7,049.42	7,050.42	7,049.42	96.67	244.41	90.01	2,438.92	-3,629.07	2,672.80	2,331.82	340.98	7.839	
10,200.00	7,048.98	7,049.98	7,048.98	99.38	244.39	90.01	2,438.92	-3,629.07	2,668.76	2,324.99	343.77	7.763	
10,257.77	7,048.73	7,049.73	7,048.73	100.95	244.38	90.00	2,438.92	-3,629.07	2,668.14	2,322.81	345.33	7.726 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.55	7,049.55	7,048.55	102.10	244.38	90.00	2,438.92	-3,629.07	2,668.47	2,322.03	346.44	7.702	ES	
10,400.00	7,048.12	7,049.12	7,048.12	104.83	244.36	89.99	2,438.92	-3,629.07	2,671.93	2,322.93	348.99	7.656		
10,500.00	7,047.68	7,048.68	7,047.68	107.56	244.35	89.98	2,438.92	-3,629.07	2,679.11	2,327.71	351.40	7.624		
10,600.00	7,047.25	7,048.25	7,047.25	110.30	244.33	89.97	2,438.92	-3,629.07	2,690.00	2,336.33	353.67	7.606		
10,700.00	7,046.81	7,047.81	7,046.81	113.05	244.32	89.96	2,438.92	-3,629.07	2,704.54	2,348.75	355.78	7.602	SF	
10,800.00	7,046.38	7,047.38	7,046.38	115.80	244.30	89.95	2,438.92	-3,629.07	2,722.68	2,364.94	357.74	7.611		
10,900.00	7,045.95	7,046.95	7,045.95	118.55	244.29	89.94	2,438.92	-3,629.07	2,744.34	2,384.80	359.54	7.633		
11,000.00	7,045.51	7,046.51	7,045.51	121.31	244.27	89.93	2,438.92	-3,629.07	2,769.45	2,408.28	361.17	7.668		
11,100.00	7,045.08	7,046.08	7,045.08	124.08	244.26	89.92	2,438.92	-3,629.07	2,797.91	2,435.26	362.65	7.715		
11,200.00	7,044.64	7,045.64	7,044.64	126.85	244.24	89.91	2,438.92	-3,629.07	2,829.62	2,465.65	363.97	7.774		
11,300.00	7,044.21	7,045.21	7,044.21	129.62	244.23	89.90	2,438.92	-3,629.07	2,864.47	2,499.33	365.14	7.845		
11,400.00	7,043.78	7,044.78	7,043.78	132.40	244.21	89.89	2,438.92	-3,629.07	2,902.35	2,536.19	366.16	7.926		
11,500.00	7,043.34	7,044.34	7,043.34	135.18	244.19	89.88	2,438.92	-3,629.07	2,943.14	2,576.09	367.05	8.018		
11,600.00	7,042.91	7,043.91	7,042.91	137.96	244.18	89.87	2,438.92	-3,629.07	2,986.72	2,618.92	367.80	8.120		
11,700.00	7,042.47	7,043.47	7,042.47	140.75	244.16	89.87	2,438.92	-3,629.07	3,032.98	2,664.55	368.43	8.232		
11,800.00	7,042.04	7,043.04	7,042.04	143.54	244.15	89.86	2,438.92	-3,629.07	3,081.79	2,712.84	368.95	8.353		
11,900.00	7,041.61	7,042.61	7,041.61	146.33	244.13	89.85	2,438.92	-3,629.07	3,133.02	2,763.67	369.35	8.482		
12,000.00	7,041.17	7,042.17	7,041.17	149.13	244.12	89.84	2,438.92	-3,629.07	3,186.58	2,816.91	369.67	8.620		
12,100.00	7,040.74	7,041.74	7,040.74	151.92	244.10	89.83	2,438.92	-3,629.07	3,242.33	2,872.45	369.89	8.766		
12,200.00	7,040.30	7,041.30	7,040.30	154.72	244.09	89.82	2,438.92	-3,629.07	3,300.18	2,930.15	370.02	8.919		
12,300.00	7,039.87	7,040.87	7,039.87	157.52	244.07	89.81	2,438.92	-3,629.07	3,360.00	2,989.91	370.09	9.079		
12,400.00	7,039.44	7,040.44	7,039.44	160.33	244.06	89.80	2,438.92	-3,629.07	3,421.70	3,051.61	370.09	9.246		
12,500.00	7,039.00	7,040.00	7,039.00	163.13	244.04	89.79	2,438.92	-3,629.07	3,485.18	3,115.15	370.03	9.419		
12,600.00	7,038.57	7,039.57	7,038.57	165.94	244.03	89.78	2,438.92	-3,629.07	3,550.34	3,180.43	369.91	9.598		
12,700.00	7,038.13	7,039.13	7,038.13	168.75	244.01	89.77	2,438.92	-3,629.07	3,617.09	3,247.34	369.75	9.782		
12,800.00	7,037.70	7,038.70	7,037.70	171.56	244.00	89.76	2,438.92	-3,629.07	3,685.35	3,315.80	369.55	9.972		
12,900.00	7,037.27	7,038.27	7,037.27	174.37	243.98	89.75	2,438.92	-3,629.07	3,755.03	3,385.72	369.31	10.168		
13,000.00	7,036.83	7,037.83	7,036.83	177.19	243.97	89.74	2,438.92	-3,629.07	3,826.05	3,457.01	369.04	10.368		
13,100.00	7,036.40	7,037.40	7,036.40	180.00	243.95	89.74	2,438.92	-3,629.07	3,898.35	3,529.60	368.74	10.572		
13,200.00	7,035.96	7,036.96	7,035.96	182.82	243.94	89.73	2,438.92	-3,629.07	3,971.84	3,603.42	368.42	10.781		
13,300.00	7,035.53	7,036.53	7,035.53	185.64	243.92	89.72	2,438.92	-3,629.07	4,046.48	3,678.40	368.08	10.993		
13,400.00	7,035.10	7,036.10	7,035.10	188.46	243.91	89.71	2,438.92	-3,629.07	4,122.19	3,754.46	367.72	11.210		
13,500.00	7,034.66	7,035.66	7,034.66	191.28	243.89	89.70	2,438.92	-3,629.07	4,198.91	3,831.56	367.35	11.430		
13,600.00	7,034.23	7,035.23	7,034.23	194.10	243.88	89.69	2,438.92	-3,629.07	4,276.60	3,909.63	366.97	11.654		
13,700.00	7,033.79	7,034.79	7,033.79	196.92	243.86	89.68	2,438.92	-3,629.07	4,355.19	3,988.62	366.57	11.881		
13,800.00	7,033.36	7,034.36	7,033.36	199.74	243.85	89.67	2,438.92	-3,629.07	4,434.65	4,068.48	366.17	12.111		
13,900.00	7,032.93	7,033.93	7,032.93	202.57	243.83	89.66	2,438.92	-3,629.07	4,514.93	4,149.16	365.77	12.344		
14,000.00	7,032.49	7,033.49	7,032.49	205.39	243.82	89.65	2,438.92	-3,629.07	4,595.98	4,230.62	365.35	12.579		
14,100.00	7,032.06	7,033.06	7,032.06	208.22	243.80	89.64	2,438.92	-3,629.07	4,677.76	4,312.82	364.94	12.818		
14,200.00	7,031.62	7,032.62	7,031.62	211.05	243.79	89.63	2,438.92	-3,629.07	4,760.24	4,395.71	364.53	13.059		
14,300.00	7,031.19	7,032.19	7,031.19	213.87	243.77	89.62	2,438.92	-3,629.07	4,843.38	4,479.26	364.11	13.302		
14,400.00	7,030.76	7,031.76	7,030.76	216.70	243.76	89.61	2,438.92	-3,629.07	4,927.14	4,563.44	363.70	13.547		
14,500.00	7,030.32	7,031.32	7,030.32	219.53	243.74	89.60	2,438.92	-3,629.07	5,011.50	4,648.22	363.29	13.795		
14,600.00	7,029.89	7,030.89	7,029.89	222.36	243.73	89.60	2,438.92	-3,629.07	5,096.43	4,733.55	362.88	14.044		
14,700.00	7,029.45	7,030.45	7,029.45	225.19	243.71	89.59	2,438.92	-3,629.07	5,181.90	4,819.42	362.47	14.296		
14,800.00	7,029.02	7,030.02	7,029.02	228.03	243.70	89.58	2,438.92	-3,629.07	5,267.87	4,905.80	362.07	14.549		
14,805.04	7,029.00	7,030.00	7,029.00	228.17	243.69	89.58	2,438.92	-3,629.07	5,272.22	4,910.17	362.05	14.562		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-63.55	2,409.99	-4,844.42	5,410.91				
100.00	100.00	61.00	100.00	3.28	3.45	-63.55	2,409.99	-4,844.42	5,410.77	5,404.03	6.73	803.593	
200.00	200.00	161.00	200.00	3.34	5.08	-63.55	2,409.99	-4,844.42	5,410.77	5,402.35	8.41	643.079	
300.00	300.00	261.00	300.00	3.44	8.06	-63.55	2,409.99	-4,844.42	5,410.77	5,399.26	11.51	470.167	
400.00	400.00	361.00	400.00	3.60	11.34	-63.55	2,409.99	-4,844.42	5,410.77	5,395.82	14.94	362.046	
500.00	499.98	460.98	499.98	3.80	14.72	78.27	2,409.99	-4,844.42	5,410.41	5,391.90	18.51	292.230	
600.00	599.90	560.90	599.90	4.02	18.13	78.32	2,409.99	-4,844.42	5,409.61	5,387.45	22.16	244.167	
700.00	699.82	660.82	699.82	4.28	21.57	78.36	2,409.99	-4,844.42	5,408.79	5,382.94	25.85	209.209	
800.00	799.74	760.74	799.74	4.57	25.03	78.40	2,409.99	-4,844.42	5,407.98	5,378.39	29.59	182.742	
900.00	899.66	860.66	899.66	4.88	28.49	78.44	2,409.99	-4,844.42	5,407.18	5,373.81	33.37	162.059	
1,000.00	999.58	960.58	999.58	5.21	31.96	78.48	2,409.99	-4,844.42	5,406.38	5,369.21	37.16	145.480	
1,100.00	1,099.50	1,060.50	1,099.50	5.55	35.43	78.53	2,409.99	-4,844.42	5,405.58	5,364.60	40.98	131.910	
1,200.00	1,199.42	1,160.42	1,199.42	5.91	38.90	78.57	2,409.99	-4,844.42	5,404.78	5,359.97	44.81	120.609	
1,300.00	1,299.34	1,260.34	1,299.34	6.28	42.38	78.61	2,409.99	-4,844.42	5,403.98	5,355.32	48.66	111.060	
1,400.00	1,399.26	1,360.26	1,399.26	6.66	45.86	78.65	2,409.99	-4,844.42	5,403.19	5,350.68	52.51	102.889	
1,500.00	1,499.18	1,460.18	1,499.18	7.04	49.34	78.69	2,409.99	-4,844.42	5,402.40	5,346.02	56.38	95.820	
1,600.00	1,599.10	1,560.10	1,599.10	7.43	52.82	78.73	2,409.99	-4,844.42	5,401.62	5,341.36	60.25	89.648	
1,700.00	1,699.01	1,660.01	1,699.01	7.83	56.30	78.78	2,409.99	-4,844.42	5,400.83	5,336.70	64.13	84.213	
1,800.00	1,798.93	1,759.93	1,798.93	8.23	59.78	78.82	2,409.99	-4,844.42	5,400.05	5,332.03	68.02	79.391	
1,900.00	1,898.85	1,859.85	1,898.85	8.64	63.27	78.86	2,409.99	-4,844.42	5,399.28	5,327.37	71.91	75.086	
2,000.00	1,998.77	1,959.77	1,998.77	9.05	66.75	78.90	2,409.99	-4,844.42	5,398.50	5,322.70	75.80	71.219	
2,100.00	2,098.69	2,059.69	2,098.69	9.46	70.24	78.94	2,409.99	-4,844.42	5,397.73	5,318.03	79.70	67.727	
2,200.00	2,198.61	2,159.61	2,198.61	9.88	73.72	78.98	2,409.99	-4,844.42	5,396.96	5,313.36	83.60	64.559	
2,300.00	2,298.53	2,259.53	2,298.53	10.30	77.20	79.03	2,409.99	-4,844.42	5,396.19	5,308.69	87.50	61.671	
2,400.00	2,398.45	2,359.45	2,398.45	10.72	80.69	79.07	2,409.99	-4,844.42	5,395.43	5,304.03	91.41	59.028	
2,500.00	2,498.37	2,459.37	2,498.37	11.14	84.18	79.11	2,409.99	-4,844.42	5,394.67	5,299.36	95.31	56.600	
2,600.00	2,598.29	2,559.29	2,598.29	11.56	87.66	79.15	2,409.99	-4,844.42	5,393.91	5,294.69	99.22	54.363	
2,700.00	2,698.21	2,659.21	2,698.21	11.98	91.15	79.19	2,409.99	-4,844.42	5,393.16	5,290.03	103.13	52.294	
2,800.00	2,798.13	2,759.13	2,798.13	12.41	94.63	79.24	2,409.99	-4,844.42	5,392.41	5,285.36	107.04	50.376	
2,900.00	2,898.05	2,859.05	2,898.05	12.84	98.12	79.28	2,409.99	-4,844.42	5,391.66	5,280.70	110.96	48.593	
3,000.00	2,997.97	2,958.97	2,997.97	13.27	101.61	79.32	2,409.99	-4,844.42	5,390.91	5,276.04	114.87	46.930	
3,100.00	3,097.89	3,058.89	3,097.89	13.69	105.09	79.36	2,409.99	-4,844.42	5,390.17	5,271.38	118.79	45.377	
3,200.00	3,197.81	3,158.81	3,197.81	14.12	108.58	79.40	2,409.99	-4,844.42	5,389.43	5,266.73	122.70	43.923	
3,300.00	3,297.73	3,258.73	3,297.73	14.56	112.06	79.45	2,409.99	-4,844.42	5,388.69	5,262.07	126.62	42.558	
3,400.00	3,397.65	3,358.65	3,397.65	14.99	115.55	79.49	2,409.99	-4,844.42	5,387.96	5,257.42	130.54	41.275	
3,500.00	3,497.56	3,458.56	3,497.56	15.42	119.04	79.53	2,409.99	-4,844.42	5,387.23	5,252.77	134.46	40.067	
3,600.00	3,597.48	3,558.48	3,597.48	15.85	122.53	79.57	2,409.99	-4,844.42	5,386.50	5,248.12	138.38	38.926	
3,700.00	3,697.40	3,658.40	3,697.40	16.28	126.01	79.61	2,409.99	-4,844.42	5,385.77	5,243.48	142.30	37.849	
3,800.00	3,797.32	3,758.32	3,797.32	16.72	129.50	79.65	2,409.99	-4,844.42	5,385.05	5,238.83	146.22	36.829	
3,900.00	3,897.24	3,858.24	3,897.24	17.15	132.99	79.70	2,409.99	-4,844.42	5,384.33	5,234.19	150.14	35.862	
4,000.00	3,997.16	3,958.16	3,997.16	17.59	136.47	79.74	2,409.99	-4,844.42	5,383.61	5,229.55	154.06	34.945	
4,100.00	4,097.08	4,058.08	4,097.08	18.02	139.96	79.78	2,409.99	-4,844.42	5,382.90	5,224.92	157.98	34.073	
4,200.00	4,197.00	4,158.00	4,197.00	18.46	143.45	79.82	2,409.99	-4,844.42	5,382.19	5,220.28	161.91	33.243	
4,300.00	4,296.92	4,257.92	4,296.92	18.89	146.94	79.86	2,409.99	-4,844.42	5,381.48	5,215.65	165.83	32.452	
4,400.00	4,396.84	4,357.84	4,396.84	19.33	150.42	79.91	2,409.99	-4,844.42	5,380.78	5,211.02	169.75	31.698	
4,500.00	4,496.76	4,457.76	4,496.76	19.77	153.91	79.95	2,409.99	-4,844.42	5,380.07	5,206.40	173.68	30.978	
4,600.00	4,596.68	4,557.68	4,596.68	20.20	157.40	79.99	2,409.99	-4,844.42	5,379.37	5,201.77	177.60	30.289	
4,700.00	4,696.60	4,657.60	4,696.60	20.64	160.88	80.03	2,409.99	-4,844.42	5,378.68	5,197.15	181.52	29.631	
4,800.00	4,796.52	4,757.52	4,796.52	21.08	164.37	80.08	2,409.99	-4,844.42	5,377.98	5,192.53	185.45	29.000	
4,900.00	4,896.44	4,857.44	4,896.44	21.51	167.86	80.12	2,409.99	-4,844.42	5,377.29	5,187.92	189.37	28.395	
5,000.00	4,996.36	4,957.36	4,996.36	21.95	171.35	80.16	2,409.99	-4,844.42	5,376.60	5,183.30	193.30	27.815	
5,100.00	5,096.28	5,057.28	5,096.28	22.39	174.84	80.20	2,409.99	-4,844.42	5,375.92	5,178.69	197.23	27.258	

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,157.19	5,196.19	22.83	178.32	80.24	2,409.99	-4,844.42	5,375.24	5,174.09	201.15	26.722		
5,300.00	5,296.11	5,257.11	5,296.11	23.27	181.81	80.29	2,409.99	-4,844.42	5,374.56	5,169.48	205.08	26.207		
5,400.00	5,396.03	5,357.03	5,396.03	23.71	185.30	80.33	2,409.99	-4,844.42	5,373.88	5,164.88	209.00	25.712		
5,500.00	5,495.95	5,456.95	5,495.95	24.14	188.79	80.37	2,409.99	-4,844.42	5,373.21	5,160.28	212.93	25.235		
5,600.00	5,595.87	5,556.87	5,595.87	24.58	192.27	80.41	2,409.99	-4,844.42	5,372.54	5,155.68	216.86	24.775		
5,700.00	5,695.79	5,656.79	5,695.79	25.02	195.76	80.45	2,409.99	-4,844.42	5,371.87	5,151.09	220.78	24.331		
5,800.00	5,795.71	5,756.71	5,795.71	25.46	199.25	80.50	2,409.99	-4,844.42	5,371.21	5,146.50	224.71	23.903		
5,900.00	5,895.63	5,856.63	5,895.63	25.90	202.74	80.54	2,409.99	-4,844.42	5,370.54	5,141.91	228.64	23.489		
6,000.00	5,995.55	5,956.55	5,995.55	26.34	206.22	80.58	2,409.99	-4,844.42	5,369.89	5,137.32	232.56	23.090		
6,100.00	6,095.47	6,056.47	6,095.47	26.78	209.71	80.62	2,409.99	-4,844.42	5,369.23	5,132.74	236.49	22.704		
6,200.00	6,195.39	6,156.39	6,195.39	27.22	213.20	80.67	2,409.99	-4,844.42	5,368.58	5,128.16	240.42	22.330		
6,300.00	6,295.31	6,256.31	6,295.31	27.66	216.69	80.71	2,409.99	-4,844.42	5,367.93	5,123.58	244.35	21.969		
6,400.00	6,395.23	6,356.23	6,395.23	28.10	220.18	80.75	2,409.99	-4,844.42	5,367.28	5,119.01	248.27	21.618		
6,500.00	6,495.02	6,456.02	6,495.02	28.54	223.66	45.30	2,409.99	-4,844.42	5,364.60	5,112.40	252.20	21.271		
6,600.00	6,593.09	6,554.09	6,593.09	28.98	227.08	37.01	2,409.99	-4,844.42	5,349.74	5,093.68	256.06	20.892		
6,700.00	6,687.01	6,648.01	6,687.01	29.41	230.36	36.17	2,409.99	-4,844.42	5,321.70	5,061.93	259.77	20.486		
6,800.00	6,774.46	6,735.46	6,774.46	29.83	233.41	37.56	2,409.99	-4,844.42	5,281.25	5,018.02	263.23	20.063		
6,900.00	6,853.31	6,814.31	6,853.31	30.26	236.17	40.55	2,409.99	-4,844.42	5,229.50	4,963.12	266.37	19.632		
7,000.00	6,921.60	6,882.60	6,921.60	30.76	238.55	45.24	2,409.99	-4,844.42	5,167.82	4,898.69	269.13	19.202		
7,100.00	6,977.66	6,938.66	6,977.66	31.38	240.51	51.93	2,409.99	-4,844.42	5,097.87	4,826.41	271.46	18.780		
7,200.00	7,020.10	6,981.10	7,020.10	32.17	241.99	61.01	2,409.99	-4,844.42	5,021.48	4,748.16	273.32	18.372		
7,300.00	7,047.88	7,008.88	7,047.88	33.13	242.96	72.58	2,409.99	-4,844.42	4,940.65	4,665.95	274.71	17.985		
7,400.00	7,060.32	7,021.32	7,060.32	34.27	243.39	85.94	2,409.99	-4,844.42	4,857.46	4,581.87	275.59	17.625		
7,500.00	7,060.70	7,021.70	7,060.70	35.56	243.40	90.37	2,409.99	-4,844.42	4,773.94	4,497.82	276.12	17.289		
7,600.00	7,060.27	7,021.27	7,060.27	37.02	243.39	90.36	2,409.99	-4,844.42	4,691.04	4,414.32	276.72	16.952		
7,700.00	7,059.83	7,020.83	7,059.83	38.64	243.37	90.35	2,409.99	-4,844.42	4,608.82	4,331.39	277.43	16.613		
7,800.00	7,059.40	7,020.40	7,059.40	40.40	243.36	90.35	2,409.99	-4,844.42	4,527.31	4,249.06	278.25	16.271		
7,900.00	7,058.97	7,019.97	7,058.97	42.28	243.34	90.34	2,409.99	-4,844.42	4,446.56	4,167.38	279.18	15.927		
8,000.00	7,058.53	7,019.53	7,058.53	44.27	243.33	90.33	2,409.99	-4,844.42	4,366.61	4,086.37	280.24	15.582		
8,100.00	7,058.10	7,019.10	7,058.10	46.35	243.31	90.32	2,409.99	-4,844.42	4,287.50	4,006.09	281.41	15.236		
8,200.00	7,057.66	7,018.66	7,057.66	48.50	243.30	90.31	2,409.99	-4,844.42	4,209.27	3,926.57	282.70	14.889		
8,300.00	7,057.23	7,018.23	7,057.23	50.73	243.28	90.30	2,409.99	-4,844.42	4,131.99	3,847.87	284.12	14.543		
8,400.00	7,056.80	7,017.80	7,056.80	53.02	243.27	90.29	2,409.99	-4,844.42	4,055.70	3,770.03	285.67	14.197		
8,500.00	7,056.36	7,017.36	7,056.36	55.36	243.25	90.28	2,409.99	-4,844.42	3,980.46	3,693.12	287.34	13.853		
8,600.00	7,055.93	7,016.93	7,055.93	57.74	243.24	90.27	2,409.99	-4,844.42	3,906.33	3,617.19	289.14	13.510		
8,700.00	7,055.49	7,016.49	7,055.49	60.17	243.22	90.26	2,409.99	-4,844.42	3,833.38	3,542.31	291.07	13.170		
8,800.00	7,055.06	7,016.06	7,055.06	62.63	243.21	90.25	2,409.99	-4,844.42	3,761.67	3,468.54	293.12	12.833		
8,900.00	7,054.63	7,015.63	7,054.63	65.13	243.19	90.24	2,409.99	-4,844.42	3,691.27	3,395.97	295.30	12.500		
9,000.00	7,054.19	7,015.19	7,054.19	67.66	243.18	90.23	2,409.99	-4,844.42	3,622.27	3,324.66	297.61	12.171		
9,100.00	7,053.76	7,014.76	7,053.76	70.21	243.16	90.22	2,409.99	-4,844.42	3,554.74	3,254.70	300.04	11.848		
9,200.00	7,053.32	7,014.32	7,053.32	72.78	243.15	90.21	2,409.99	-4,844.42	3,488.77	3,186.18	302.59	11.530		
9,300.00	7,052.89	7,013.89	7,052.89	75.38	243.13	90.20	2,409.99	-4,844.42	3,424.46	3,119.19	305.27	11.218		
9,400.00	7,052.46	7,013.46	7,052.46	77.99	243.12	90.19	2,409.99	-4,844.42	3,361.88	3,053.82	308.06	10.913		
9,500.00	7,052.02	7,013.02	7,052.02	80.62	243.10	90.19	2,409.99	-4,844.42	3,301.15	2,990.19	310.96	10.616		
9,600.00	7,051.59	7,012.59	7,051.59	83.26	243.09	90.18	2,409.99	-4,844.42	3,242.37	2,928.39	313.98	10.327		
9,700.00	7,051.15	7,012.15	7,051.15	85.92	243.07	90.17	2,409.99	-4,844.42	3,185.64	2,868.54	317.10	10.046		
9,800.00	7,050.72	7,011.72	7,050.72	88.59	243.06	90.16	2,409.99	-4,844.42	3,131.08	2,810.76	320.32	9.775		
9,900.00	7,050.29	7,011.29	7,050.29	91.28	243.04	90.15	2,409.99	-4,844.42	3,078.80	2,755.16	323.64	9.513		
10,000.00	7,049.85	7,010.85	7,049.85	93.97	243.03	90.14	2,409.99	-4,844.42	3,028.92	2,701.89	327.03	9.262		
10,100.00	7,049.42	7,010.42	7,049.42	96.67	243.01	90.13	2,409.99	-4,844.42	2,981.56	2,651.06	330.50	9.021		
10,200.00	7,048.98	7,009.98	7,048.98	99.38	243.00	90.12	2,409.99	-4,844.42	2,936.84	2,602.82	334.03	8.792		
10,300.00	7,048.55	7,009.55	7,048.55	102.10	242.98	90.11	2,409.99	-4,844.42	2,894.89	2,557.29	337.60	8.575		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	7,009.12	7,048.12	104.83	242.97	90.10	2,409.99	-4,844.42	2,855.83	2,514.62	341.21	8.370		
10,500.00	7,047.68	7,008.68	7,047.68	107.56	242.95	90.09	2,409.99	-4,844.42	2,819.77	2,474.93	344.84	8.177		
10,600.00	7,047.25	7,008.25	7,047.25	110.30	242.94	90.08	2,409.99	-4,844.42	2,786.84	2,438.37	348.47	7.997		
10,700.00	7,046.81	7,007.81	7,046.81	113.05	242.92	90.07	2,409.99	-4,844.42	2,757.14	2,405.06	352.08	7.831		
10,800.00	7,046.38	7,007.38	7,046.38	115.80	242.90	90.06	2,409.99	-4,844.42	2,730.78	2,375.13	355.65	7.678		
10,900.00	7,045.95	7,006.95	7,045.95	118.55	242.89	90.05	2,409.99	-4,844.42	2,707.86	2,348.69	359.17	7.539		
11,000.00	7,045.51	7,006.51	7,045.51	121.31	242.87	90.04	2,409.99	-4,844.42	2,688.46	2,325.86	362.60	7.414		
11,100.00	7,045.08	7,006.08	7,045.08	124.08	242.86	90.04	2,409.99	-4,844.42	2,672.67	2,306.73	365.94	7.304		
11,200.00	7,044.64	7,005.64	7,044.64	126.85	242.84	90.03	2,409.99	-4,844.42	2,660.55	2,291.38	369.17	7.207		
11,300.00	7,044.21	7,005.21	7,044.21	129.62	242.83	90.02	2,409.99	-4,844.42	2,652.15	2,279.89	372.26	7.125		
11,400.00	7,043.78	7,004.78	7,043.78	132.40	242.81	90.01	2,409.99	-4,844.42	2,647.49	2,272.30	375.19	7.056		
11,473.28	7,043.46	7,004.46	7,043.46	134.44	242.80	90.00	2,409.99	-4,844.42	2,646.48	2,269.24	377.24	7.015 CC		
11,500.00	7,043.34	7,004.34	7,043.34	135.18	242.80	90.00	2,409.99	-4,844.42	2,646.61	2,268.66	377.96	7.002 ES		
11,600.00	7,042.91	7,003.91	7,042.91	137.96	242.78	89.99	2,409.99	-4,844.42	2,649.51	2,268.97	380.54	6.962		
11,700.00	7,042.47	7,003.47	7,042.47	140.75	242.77	89.98	2,409.99	-4,844.42	2,656.17	2,273.23	382.94	6.936		
11,800.00	7,042.04	7,003.04	7,042.04	143.54	242.75	89.97	2,409.99	-4,844.42	2,666.57	2,281.44	385.13	6.924 SF		
11,900.00	7,041.61	7,002.61	7,041.61	146.33	242.74	89.96	2,409.99	-4,844.42	2,680.66	2,293.53	387.13	6.925		
12,000.00	7,041.17	7,002.17	7,041.17	149.13	242.72	89.95	2,409.99	-4,844.42	2,698.39	2,309.47	388.91	6.938		
12,100.00	7,040.74	7,001.74	7,040.74	151.92	242.71	89.94	2,409.99	-4,844.42	2,719.67	2,329.19	390.49	6.965		
12,200.00	7,040.30	7,001.30	7,040.30	154.72	242.69	89.93	2,409.99	-4,844.42	2,744.44	2,352.58	391.86	7.004		
12,300.00	7,039.87	7,000.87	7,039.87	157.52	242.68	89.92	2,409.99	-4,844.42	2,772.60	2,379.56	393.04	7.054		
12,400.00	7,039.44	7,000.44	7,039.44	160.33	242.66	89.91	2,409.99	-4,844.42	2,804.04	2,410.02	394.02	7.117		
12,500.00	7,039.00	7,000.00	7,039.00	163.13	242.65	89.90	2,409.99	-4,844.42	2,838.66	2,443.84	394.82	7.190		
12,600.00	7,038.57	7,000.43	7,038.57	165.94	242.66	89.89	2,409.99	-4,844.42	2,876.34	2,480.87	395.47	7.273		
12,700.00	7,038.13	7,000.87	7,038.13	168.75	242.68	89.88	2,409.99	-4,844.42	2,916.96	2,521.00	395.96	7.367		
12,800.00	7,037.70	7,001.30	7,037.70	171.56	242.69	89.88	2,409.99	-4,844.42	2,960.41	2,564.11	396.30	7.470		
12,900.00	7,037.27	7,001.73	7,037.27	174.37	242.71	89.87	2,409.99	-4,844.42	3,006.55	2,610.05	396.50	7.583		
13,000.00	7,036.83	7,002.17	7,036.83	177.19	242.72	89.86	2,409.99	-4,844.42	3,055.27	2,658.71	396.57	7.704		
13,100.00	7,036.40	7,002.60	7,036.40	180.00	242.74	89.85	2,409.99	-4,844.42	3,106.45	2,709.93	396.52	7.834		
13,200.00	7,035.96	7,003.04	7,035.96	182.82	242.75	89.84	2,409.99	-4,844.42	3,159.96	2,763.60	396.37	7.972		
13,300.00	7,035.53	7,003.47	7,035.53	185.64	242.77	89.83	2,409.99	-4,844.42	3,215.70	2,819.58	396.12	8.118		
13,400.00	7,035.10	7,003.90	7,035.10	188.46	242.78	89.82	2,409.99	-4,844.42	3,273.54	2,877.75	395.79	8.271		
13,500.00	7,034.66	7,004.34	7,034.66	191.28	242.80	89.81	2,409.99	-4,844.42	3,333.37	2,937.99	395.38	8.431		
13,600.00	7,034.23	7,004.77	7,034.23	194.10	242.81	89.80	2,409.99	-4,844.42	3,395.10	3,000.19	394.91	8.597		
13,700.00	7,033.79	7,005.21	7,033.79	196.92	242.83	89.79	2,409.99	-4,844.42	3,458.62	3,064.24	394.38	8.770		
13,800.00	7,033.36	7,005.64	7,033.36	199.74	242.84	89.78	2,409.99	-4,844.42	3,523.83	3,130.02	393.81	8.948		
13,900.00	7,032.93	7,006.07	7,032.93	202.57	242.86	89.77	2,409.99	-4,844.42	3,590.64	3,197.45	393.19	9.132		
14,000.00	7,032.49	7,006.51	7,032.49	205.39	242.87	89.76	2,409.99	-4,844.42	3,658.97	3,266.43	392.54	9.321		
14,100.00	7,032.06	7,006.94	7,032.06	208.22	242.89	89.75	2,409.99	-4,844.42	3,728.73	3,336.87	391.86	9.515		
14,200.00	7,031.62	7,007.38	7,031.62	211.05	242.90	89.74	2,409.99	-4,844.42	3,799.83	3,408.68	391.16	9.714		
14,300.00	7,031.19	7,007.81	7,031.19	213.87	242.92	89.73	2,409.99	-4,844.42	3,872.22	3,481.78	390.44	9.918		
14,400.00	7,030.76	7,008.24	7,030.76	216.70	242.93	89.73	2,409.99	-4,844.42	3,945.81	3,556.11	389.70	10.125		
14,500.00	7,030.32	7,008.68	7,030.32	219.53	242.95	89.72	2,409.99	-4,844.42	4,020.54	3,631.58	388.95	10.337		
14,600.00	7,029.89	7,009.11	7,029.89	222.36	242.97	89.71	2,409.99	-4,844.42	4,096.35	3,708.15	388.20	10.552		
14,700.00	7,029.45	7,009.55	7,029.45	225.19	242.98	89.70	2,409.99	-4,844.42	4,173.18	3,785.73	387.45	10.771		
14,800.00	7,029.02	7,009.98	7,029.02	228.03	243.00	89.69	2,409.99	-4,844.42	4,250.97	3,864.28	386.69	10.993		
14,805.04	7,029.00	6,990.00	7,029.00	228.17	242.30	89.69	2,409.99	-4,844.42	4,254.91	3,868.96	385.95	11.024		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-123.55	-4,211.64	-6,351.53	7,621.30				
100.00	100.00	34.00	100.00	3.28	3.33	-123.55	-4,211.64	-6,351.53	7,621.02	7,614.40	6.62	1,151.563	
200.00	200.00	134.00	200.00	3.34	4.40	-123.55	-4,211.64	-6,351.53	7,621.02	7,613.28	7.74	985.040	
300.00	300.00	234.00	300.00	3.44	7.21	-123.55	-4,211.64	-6,351.53	7,621.02	7,610.36	10.66	715.097	
400.00	400.00	334.00	400.00	3.60	10.44	-123.55	-4,211.64	-6,351.53	7,621.02	7,606.97	14.05	542.566	
500.00	499.98	433.98	499.98	3.80	13.80	18.27	-4,211.64	-6,351.53	7,619.36	7,601.76	17.60	432.981	
600.00	599.90	533.90	599.90	4.02	17.21	18.28	-4,211.64	-6,351.53	7,615.59	7,594.36	21.23	358.708	
700.00	699.82	633.82	699.82	4.28	20.64	18.29	-4,211.64	-6,351.53	7,611.78	7,586.85	24.92	305.416	
800.00	799.74	733.74	799.74	4.57	24.09	18.30	-4,211.64	-6,351.53	7,607.97	7,579.31	28.66	265.473	
900.00	899.66	833.66	899.66	4.88	27.55	18.31	-4,211.64	-6,351.53	7,604.16	7,571.73	32.43	234.505	
1,000.00	999.58	933.58	999.58	5.21	31.02	18.32	-4,211.64	-6,351.53	7,600.35	7,564.13	36.22	209.839	
1,100.00	1,099.50	1,033.50	1,099.50	5.55	34.49	18.33	-4,211.64	-6,351.53	7,596.54	7,556.50	40.03	189.753	
1,200.00	1,199.42	1,133.42	1,199.42	5.91	37.96	18.34	-4,211.64	-6,351.53	7,592.73	7,548.86	43.86	173.098	
1,300.00	1,299.34	1,233.34	1,299.34	6.28	41.44	18.35	-4,211.64	-6,351.53	7,588.92	7,541.21	47.71	159.075	
1,400.00	1,399.26	1,333.26	1,399.26	6.66	44.92	18.36	-4,211.64	-6,351.53	7,585.11	7,533.55	51.56	147.111	
1,500.00	1,499.18	1,433.18	1,499.18	7.04	48.40	18.36	-4,211.64	-6,351.53	7,581.30	7,525.87	55.42	136.789	
1,600.00	1,599.10	1,533.10	1,599.10	7.43	51.88	18.37	-4,211.64	-6,351.53	7,577.49	7,518.19	59.29	127.796	
1,700.00	1,699.01	1,633.01	1,699.01	7.83	55.36	18.38	-4,211.64	-6,351.53	7,573.68	7,510.51	63.17	119.893	
1,800.00	1,798.93	1,732.93	1,798.93	8.23	58.84	18.39	-4,211.64	-6,351.53	7,569.87	7,502.82	67.05	112.895	
1,900.00	1,898.85	1,832.85	1,898.85	8.64	62.33	18.40	-4,211.64	-6,351.53	7,566.06	7,495.12	70.94	106.655	
2,000.00	1,998.77	1,932.77	1,998.77	9.05	65.81	18.41	-4,211.64	-6,351.53	7,562.25	7,487.42	74.83	101.059	
2,100.00	2,098.69	2,032.69	2,098.69	9.46	69.29	18.42	-4,211.64	-6,351.53	7,558.45	7,479.72	78.72	96.012	
2,200.00	2,198.61	2,132.61	2,198.61	9.88	72.78	18.43	-4,211.64	-6,351.53	7,554.64	7,472.02	82.62	91.437	
2,300.00	2,298.53	2,232.53	2,298.53	10.30	76.26	18.44	-4,211.64	-6,351.53	7,550.83	7,464.31	86.52	87.271	
2,400.00	2,398.45	2,332.45	2,398.45	10.72	79.75	18.45	-4,211.64	-6,351.53	7,547.02	7,456.60	90.42	83.463	
2,500.00	2,498.37	2,432.37	2,498.37	11.14	83.23	18.46	-4,211.64	-6,351.53	7,543.22	7,448.89	94.33	79.968	
2,600.00	2,598.29	2,532.29	2,598.29	11.56	86.72	18.47	-4,211.64	-6,351.53	7,539.41	7,441.18	98.23	76.750	
2,700.00	2,698.21	2,632.21	2,698.21	11.98	90.20	18.48	-4,211.64	-6,351.53	7,535.60	7,433.46	102.14	73.776	
2,800.00	2,798.13	2,732.13	2,798.13	12.41	93.69	18.49	-4,211.64	-6,351.53	7,531.80	7,425.75	106.05	71.021	
2,900.00	2,898.05	2,832.05	2,898.05	12.84	97.18	18.50	-4,211.64	-6,351.53	7,527.99	7,418.03	109.96	68.460	
3,000.00	2,997.97	2,931.97	2,997.97	13.27	100.66	18.51	-4,211.64	-6,351.53	7,524.18	7,410.31	113.87	66.075	
3,100.00	3,097.89	3,031.89	3,097.89	13.69	104.15	18.52	-4,211.64	-6,351.53	7,520.38	7,402.59	117.79	63.848	
3,200.00	3,197.81	3,131.81	3,197.81	14.12	107.64	18.53	-4,211.64	-6,351.53	7,516.57	7,394.87	121.70	61.763	
3,300.00	3,297.73	3,231.73	3,297.73	14.56	111.12	18.54	-4,211.64	-6,351.53	7,512.77	7,387.15	125.61	59.808	
3,400.00	3,397.65	3,331.65	3,397.65	14.99	114.61	18.55	-4,211.64	-6,351.53	7,508.96	7,379.43	129.53	57.971	
3,500.00	3,497.56	3,431.56	3,497.56	15.42	118.10	18.56	-4,211.64	-6,351.53	7,505.16	7,371.71	133.45	56.241	
3,600.00	3,597.48	3,531.48	3,597.48	15.85	121.58	18.57	-4,211.64	-6,351.53	7,501.35	7,363.99	137.36	54.610	
3,700.00	3,697.40	3,631.40	3,697.40	16.28	125.07	18.58	-4,211.64	-6,351.53	7,497.55	7,356.27	141.28	53.068	
3,800.00	3,797.32	3,731.32	3,797.32	16.72	128.56	18.59	-4,211.64	-6,351.53	7,493.74	7,348.55	145.20	51.610	
3,900.00	3,897.24	3,831.24	3,897.24	17.15	132.04	18.60	-4,211.64	-6,351.53	7,489.94	7,340.82	149.12	50.228	
4,000.00	3,997.16	3,931.16	3,997.16	17.59	135.53	18.61	-4,211.64	-6,351.53	7,486.14	7,333.10	153.04	48.917	
4,100.00	4,097.08	4,031.08	4,097.08	18.02	139.02	18.62	-4,211.64	-6,351.53	7,482.33	7,325.38	156.96	47.671	
4,200.00	4,197.00	4,131.00	4,197.00	18.46	142.51	18.63	-4,211.64	-6,351.53	7,478.53	7,317.65	160.88	46.486	
4,300.00	4,296.92	4,230.92	4,296.92	18.89	145.99	18.64	-4,211.64	-6,351.53	7,474.73	7,309.93	164.80	45.357	
4,400.00	4,396.84	4,330.84	4,396.84	19.33	149.48	18.65	-4,211.64	-6,351.53	7,470.92	7,302.21	168.72	44.281	
4,500.00	4,496.76	4,430.76	4,496.76	19.77	152.97	18.66	-4,211.64	-6,351.53	7,467.12	7,294.48	172.64	43.253	
4,600.00	4,596.68	4,452.00	4,518.00	20.20	153.71	18.66	-4,211.64	-6,351.53	7,463.73	7,289.92	173.81	42.941	
4,700.00	4,696.60	4,452.00	4,518.00	20.64	153.71	18.66	-4,211.64	-6,351.53	7,461.65	7,287.44	174.22	42.830	
4,800.00	4,796.52	4,452.00	4,518.00	21.08	153.71	18.66	-4,211.64	-6,351.53	7,460.91	7,286.33	174.59	42.734	
4,805.17	4,801.68	4,452.00	4,518.00	21.10	153.71	18.66	-4,211.64	-6,351.53	7,460.91	7,286.31	174.61	42.730	
4,900.00	4,896.44	4,452.00	4,518.00	21.51	153.71	18.66	-4,211.64	-6,351.53	7,461.52	7,286.58	174.93	42.654	
5,000.00	4,996.36	4,452.00	4,518.00	21.95	153.71	18.66	-4,211.64	-6,351.53	7,463.46	7,288.22	175.24	42.590	

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,096.28	4,452.00	4,518.00	22.39	153.71	18.66	-4,211.64	-6,351.53	7,466.74	7,291.22	175.52	42.541		
5,200.00	5,196.19	4,452.00	4,518.00	22.83	153.71	18.66	-4,211.64	-6,351.53	7,471.35	7,295.58	175.77	42.507		
5,300.00	5,296.11	4,452.00	4,518.00	23.27	153.71	18.66	-4,211.64	-6,351.53	7,477.30	7,301.32	175.98	42.489		
5,400.00	5,396.03	4,452.00	4,518.00	23.71	153.71	18.66	-4,211.64	-6,351.53	7,484.59	7,308.42	176.17	42.485		
5,500.00	5,495.95	4,452.00	4,518.00	24.14	153.71	18.66	-4,211.64	-6,351.53	7,493.20	7,316.88	176.32	42.497		
5,600.00	5,595.87	4,452.00	4,518.00	24.58	153.71	18.66	-4,211.64	-6,351.53	7,503.13	7,326.69	176.44	42.524		
5,700.00	5,695.79	4,452.00	4,518.00	25.02	153.71	18.66	-4,211.64	-6,351.53	7,514.38	7,337.85	176.54	42.566		
5,800.00	5,795.71	4,452.00	4,518.00	25.46	153.71	18.66	-4,211.64	-6,351.53	7,526.95	7,350.35	176.60	42.622		
5,900.00	5,895.63	4,452.00	4,518.00	25.90	153.71	18.66	-4,211.64	-6,351.53	7,540.81	7,364.19	176.63	42.694		
6,000.00	5,995.55	4,452.00	4,518.00	26.34	153.71	18.66	-4,211.64	-6,351.53	7,555.98	7,379.35	176.63	42.780		
6,100.00	6,095.47	4,452.00	4,518.00	26.78	153.71	18.66	-4,211.64	-6,351.53	7,572.44	7,395.84	176.60	42.880		
6,200.00	6,195.39	4,452.00	4,518.00	27.22	153.71	18.66	-4,211.64	-6,351.53	7,590.18	7,413.64	176.54	42.995		
6,300.00	6,295.31	4,452.00	4,518.00	27.66	153.71	18.66	-4,211.64	-6,351.53	7,609.19	7,432.74	176.45	43.124		
6,400.00	6,395.23	4,452.00	4,518.00	28.10	153.71	18.66	-4,211.64	-6,351.53	7,629.46	7,453.13	176.33	43.268		
6,500.00	6,495.02	4,452.00	4,518.00	28.54	153.71	-16.46	-4,211.64	-6,351.53	7,649.06	7,472.88	176.18	43.415		
6,600.00	6,593.09	4,452.00	4,518.00	28.98	153.71	-25.12	-4,211.64	-6,351.53	7,658.15	7,482.16	176.00	43.513		
6,700.00	6,687.01	4,452.00	4,518.00	29.41	153.71	-27.67	-4,211.64	-6,351.53	7,655.24	7,479.47	175.78	43.551		
6,800.00	6,774.46	4,452.00	4,518.00	29.83	153.71	-29.48	-4,211.64	-6,351.53	7,640.38	7,464.85	175.53	43.526		
6,900.00	6,853.31	4,452.00	4,518.00	30.26	153.71	-31.44	-4,211.64	-6,351.53	7,613.87	7,438.59	175.28	43.438		
7,000.00	6,921.60	4,452.00	4,518.00	30.76	153.71	-33.92	-4,211.64	-6,351.53	7,576.24	7,401.20	175.04	43.282		
7,100.00	6,977.66	4,452.00	4,518.00	31.38	153.71	-37.17	-4,211.64	-6,351.53	7,528.27	7,353.42	174.85	43.056		
7,200.00	7,020.10	4,452.00	4,518.00	32.17	153.71	-41.48	-4,211.64	-6,351.53	7,470.94	7,296.21	174.73	42.758		
7,300.00	7,047.88	4,452.00	4,518.00	33.13	153.71	-47.20	-4,211.64	-6,351.53	7,405.47	7,230.75	174.72	42.386		
7,400.00	7,060.32	4,452.00	4,518.00	34.27	153.71	-54.72	-4,211.64	-6,351.53	7,333.27	7,158.44	174.83	41.944		
7,500.00	7,060.70	4,452.00	4,518.00	35.56	153.71	-57.58	-4,211.64	-6,351.53	7,257.05	7,081.96	175.08	41.449		
7,600.00	7,060.27	4,452.00	4,518.00	37.02	153.71	-57.58	-4,211.64	-6,351.53	7,181.13	7,005.70	175.42	40.936		
7,700.00	7,059.83	4,452.00	4,518.00	38.64	153.71	-57.58	-4,211.64	-6,351.53	7,105.80	6,929.95	175.85	40.408		
7,800.00	7,059.40	4,452.00	4,518.00	40.40	153.71	-57.58	-4,211.64	-6,351.53	7,031.09	6,854.72	176.37	39.866		
7,900.00	7,058.97	4,452.00	4,518.00	42.28	153.71	-57.58	-4,211.64	-6,351.53	6,957.01	6,780.03	176.98	39.310		
8,000.00	7,058.53	4,452.00	4,518.00	44.27	153.71	-57.58	-4,211.64	-6,351.53	6,883.59	6,705.91	177.68	38.742		
8,100.00	7,058.10	4,452.00	4,518.00	46.35	153.71	-57.58	-4,211.64	-6,351.53	6,810.84	6,632.38	178.47	38.163		
8,200.00	7,057.66	4,452.00	4,518.00	48.50	153.71	-57.58	-4,211.64	-6,351.53	6,738.80	6,559.46	179.34	37.575		
8,300.00	7,057.23	4,452.00	4,518.00	50.73	153.71	-57.58	-4,211.64	-6,351.53	6,667.47	6,487.17	180.30	36.980		
8,400.00	7,056.80	4,452.00	4,518.00	53.02	153.71	-57.58	-4,211.64	-6,351.53	6,596.89	6,415.55	181.34	36.378		
8,500.00	7,056.36	4,452.00	4,518.00	55.36	153.71	-57.58	-4,211.64	-6,351.53	6,527.08	6,344.62	182.46	35.772		
8,600.00	7,055.93	4,452.00	4,518.00	57.74	153.71	-57.58	-4,211.64	-6,351.53	6,458.07	6,274.40	183.66	35.162		
8,700.00	7,055.49	4,452.00	4,518.00	60.17	153.71	-57.58	-4,211.64	-6,351.53	6,389.87	6,204.93	184.94	34.551		
8,800.00	7,055.06	4,452.00	4,518.00	62.63	153.71	-57.58	-4,211.64	-6,351.53	6,322.52	6,136.23	186.29	33.939		
8,900.00	7,054.63	4,452.00	4,518.00	65.13	153.71	-57.58	-4,211.64	-6,351.53	6,256.04	6,068.33	187.71	33.328		
9,000.00	7,054.19	4,452.00	4,518.00	67.66	153.71	-57.58	-4,211.64	-6,351.53	6,190.47	6,001.27	189.20	32.719		
9,100.00	7,053.76	4,452.00	4,518.00	70.21	153.71	-57.58	-4,211.64	-6,351.53	6,125.82	5,935.06	190.76	32.113		
9,200.00	7,053.32	4,452.00	4,518.00	72.78	153.71	-57.58	-4,211.64	-6,351.53	6,062.13	5,869.76	192.38	31.512		
9,300.00	7,052.89	4,452.00	4,518.00	75.38	153.71	-57.58	-4,211.64	-6,351.53	5,999.44	5,805.38	194.06	30.915		
9,400.00	7,052.46	4,452.00	4,518.00	77.99	153.71	-57.58	-4,211.64	-6,351.53	5,937.77	5,741.96	195.81	30.324		
9,500.00	7,052.02	4,452.00	4,518.00	80.62	153.71	-57.58	-4,211.64	-6,351.53	5,877.15	5,679.53	197.62	29.740		
9,600.00	7,051.59	4,452.00	4,518.00	83.26	153.71	-57.58	-4,211.64	-6,351.53	5,817.62	5,618.14	199.48	29.164		
9,700.00	7,051.15	4,452.00	4,518.00	85.92	153.71	-57.58	-4,211.64	-6,351.53	5,759.21	5,557.81	201.40	28.596		
9,800.00	7,050.72	4,452.00	4,518.00	88.59	153.71	-57.58	-4,211.64	-6,351.53	5,701.96	5,498.58	203.38	28.036		
9,900.00	7,050.29	4,452.00	4,518.00	91.28	153.71	-57.58	-4,211.64	-6,351.53	5,645.89	5,440.49	205.41	27.487		
10,000.00	7,049.85	4,452.00	4,518.00	93.97	153.71	-57.58	-4,211.64	-6,351.53	5,591.06	5,383.57	207.49	26.947		
10,100.00	7,049.42	4,452.00	4,518.00	96.67	153.71	-57.58	-4,211.64	-6,351.53	5,537.48	5,327.87	209.62	26.417		
10,200.00	7,048.98	4,452.00	4,518.00	99.38	153.71	-57.58	-4,211.64	-6,351.53	5,485.21	5,273.42	211.79	25.899		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,048.55	4,452.00	4,518.00	102.10	153.71	-57.58	-4,211.64	-6,351.53	5,434.28	5,220.26	214.02	25.391		
10,400.00	7,048.12	4,452.00	4,518.00	104.83	153.71	-57.58	-4,211.64	-6,351.53	5,384.72	5,168.43	216.29	24.896		
10,500.00	7,047.68	4,452.00	4,518.00	107.56	153.71	-57.58	-4,211.64	-6,351.53	5,336.57	5,117.97	218.60	24.412		
10,600.00	7,047.25	4,452.00	4,518.00	110.30	153.71	-57.58	-4,211.64	-6,351.53	5,289.87	5,068.92	220.96	23.941		
10,700.00	7,046.81	4,452.00	4,518.00	113.05	153.71	-57.58	-4,211.64	-6,351.53	5,244.67	5,021.32	223.35	23.482		
10,800.00	7,046.38	4,452.00	4,518.00	115.80	153.71	-57.58	-4,211.64	-6,351.53	5,201.00	4,975.22	225.78	23.036		
10,900.00	7,045.95	4,452.00	4,518.00	118.55	153.71	-57.58	-4,211.64	-6,351.53	5,158.89	4,930.65	228.24	22.602		
11,000.00	7,045.51	4,452.00	4,518.00	121.31	153.71	-57.58	-4,211.64	-6,351.53	5,118.40	4,887.66	230.74	22.182		
11,100.00	7,045.08	4,452.00	4,518.00	124.08	153.71	-57.58	-4,211.64	-6,351.53	5,079.55	4,846.28	233.27	21.776		
11,200.00	7,044.64	4,452.00	4,518.00	126.85	153.71	-57.58	-4,211.64	-6,351.53	5,042.38	4,806.56	235.82	21.382		
11,300.00	7,044.21	4,452.00	4,518.00	129.62	153.71	-57.58	-4,211.64	-6,351.53	5,006.94	4,768.54	238.40	21.002		
11,400.00	7,043.78	4,452.00	4,518.00	132.40	153.71	-57.58	-4,211.64	-6,351.53	4,973.25	4,732.25	241.00	20.636		
11,500.00	7,043.34	4,452.00	4,518.00	135.18	153.71	-57.58	-4,211.64	-6,351.53	4,941.36	4,697.74	243.62	20.283		
11,600.00	7,042.91	4,452.00	4,518.00	137.96	153.71	-57.58	-4,211.64	-6,351.53	4,911.30	4,665.04	246.26	19.944		
11,700.00	7,042.47	4,452.00	4,518.00	140.75	153.71	-57.58	-4,211.64	-6,351.53	4,883.10	4,634.20	248.90	19.619		
11,800.00	7,042.04	4,452.00	4,518.00	143.54	153.71	-57.58	-4,211.64	-6,351.53	4,856.80	4,605.24	251.56	19.307		
11,900.00	7,041.61	4,452.00	4,518.00	146.33	153.71	-57.58	-4,211.64	-6,351.53	4,832.42	4,578.20	254.22	19.009		
12,000.00	7,041.17	4,452.00	4,518.00	149.13	153.71	-57.58	-4,211.64	-6,351.53	4,810.00	4,553.12	256.88	18.725		
12,100.00	7,040.74	4,452.00	4,518.00	151.92	153.71	-57.58	-4,211.64	-6,351.53	4,789.56	4,530.02	259.54	18.454		
12,200.00	7,040.30	4,452.00	4,518.00	154.72	153.71	-57.58	-4,211.64	-6,351.53	4,771.13	4,508.94	262.20	18.197		
12,300.00	7,039.87	4,452.00	4,518.00	157.52	153.71	-57.58	-4,211.64	-6,351.53	4,754.73	4,489.89	264.84	17.953		
12,400.00	7,039.44	4,452.00	4,518.00	160.33	153.71	-57.58	-4,211.64	-6,351.53	4,740.39	4,472.92	267.47	17.723		
12,500.00	7,039.00	4,452.00	4,518.00	163.13	153.71	-57.58	-4,211.64	-6,351.53	4,728.12	4,458.03	270.09	17.506		
12,600.00	7,038.57	4,452.00	4,518.00	165.94	153.71	-57.58	-4,211.64	-6,351.53	4,717.94	4,445.26	272.68	17.302		
12,700.00	7,038.13	4,452.00	4,518.00	168.75	153.71	-57.58	-4,211.64	-6,351.53	4,709.85	4,434.61	275.25	17.111		
12,800.00	7,037.70	4,452.00	4,518.00	171.56	153.71	-57.58	-4,211.64	-6,351.53	4,703.88	4,426.10	277.78	16.934		
12,900.00	7,037.27	4,452.00	4,518.00	174.37	153.71	-57.58	-4,211.64	-6,351.53	4,700.04	4,419.75	280.29	16.769		
13,000.00	7,036.83	4,452.00	4,518.00	177.19	153.71	-57.58	-4,211.64	-6,351.53	4,698.31	4,415.56	282.76	16.616		
13,030.96	7,036.70	4,452.00	4,518.00	178.06	153.71	-57.58	-4,211.64	-6,351.53	4,698.21	4,414.70	283.51	16.571 CC		
13,100.00	7,036.40	4,452.00	4,518.00	180.00	153.71	-57.58	-4,211.64	-6,351.53	4,698.72	4,413.53	285.18	16.476 ES		
13,200.00	7,035.96	4,452.00	4,518.00	182.82	153.71	-57.58	-4,211.64	-6,351.53	4,701.25	4,413.68	287.57	16.348		
13,300.00	7,035.53	4,452.00	4,518.00	185.64	153.71	-57.58	-4,211.64	-6,351.53	4,705.91	4,416.00	289.90	16.233		
13,400.00	7,035.10	4,452.00	4,518.00	188.46	153.71	-57.58	-4,211.64	-6,351.53	4,712.68	4,420.49	292.19	16.129		
13,500.00	7,034.66	4,452.00	4,518.00	191.28	153.71	-57.58	-4,211.64	-6,351.53	4,721.57	4,427.14	294.42	16.037		
13,600.00	7,034.23	4,452.00	4,518.00	194.10	153.71	-57.58	-4,211.64	-6,351.53	4,732.55	4,435.94	296.60	15.956		
13,700.00	7,033.79	4,452.00	4,518.00	196.92	153.71	-57.58	-4,211.64	-6,351.53	4,745.61	4,446.89	298.72	15.886		
13,800.00	7,033.36	4,452.00	4,518.00	199.74	153.71	-57.58	-4,211.64	-6,351.53	4,760.74	4,459.96	300.78	15.828		
13,900.00	7,032.93	4,452.00	4,518.00	202.57	153.71	-57.58	-4,211.64	-6,351.53	4,777.91	4,475.13	302.78	15.780		
14,000.00	7,032.49	4,452.00	4,518.00	205.39	153.71	-57.58	-4,211.64	-6,351.53	4,797.11	4,492.40	304.71	15.743		
14,100.00	7,032.06	4,452.00	4,518.00	208.22	153.71	-57.58	-4,211.64	-6,351.53	4,818.30	4,511.73	306.57	15.717		
14,200.00	7,031.62	4,452.00	4,518.00	211.05	153.71	-57.58	-4,211.64	-6,351.53	4,841.47	4,533.10	308.37	15.700		
14,300.00	7,031.19	4,452.00	4,518.00	213.87	153.71	-57.58	-4,211.64	-6,351.53	4,866.58	4,556.48	310.10	15.694 SF		
14,400.00	7,030.76	4,452.00	4,518.00	216.70	153.71	-57.58	-4,211.64	-6,351.53	4,893.61	4,581.85	311.76	15.697		
14,500.00	7,030.32	4,452.00	4,518.00	219.53	153.71	-57.58	-4,211.64	-6,351.53	4,922.53	4,609.17	313.36	15.709		
14,600.00	7,029.89	4,452.00	4,518.00	222.36	153.71	-57.58	-4,211.64	-6,351.53	4,953.29	4,638.41	314.88	15.731		
14,700.00	7,029.45	4,452.00	4,518.00	225.19	153.71	-57.58	-4,211.64	-6,351.53	4,985.87	4,669.53	316.33	15.761		
14,800.00	7,029.02	4,452.00	4,518.00	228.03	153.71	-57.58	-4,211.64	-6,351.53	5,020.23	4,702.51	317.72	15.801		
14,805.04	7,029.00	4,452.00	4,518.00	228.17	153.71	-57.58	-4,211.64	-6,351.53	5,022.00	4,704.22	317.79	15.803		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-107.56	-2,788.99	-8,815.17	9,337.81					
100.00	100.00	1,408.65	1,338.55	3.28	7.54	-107.54	-2,785.35	-8,811.84	9,324.20	9,313.93	10.27	908.267		
200.00	200.00	1,471.00	1,400.14	3.34	7.85	-107.51	-2,777.72	-8,805.92	9,311.30	9,300.73	10.57	880.942		
300.00	300.00	1,509.53	1,438.22	3.44	8.03	-107.48	-2,772.88	-8,802.52	9,298.86	9,288.03	10.83	858.970		
400.00	400.00	1,660.00	1,586.91	3.60	8.77	-107.41	-2,755.17	-8,787.83	9,285.78	9,274.15	11.63	798.179		
500.00	499.98	1,705.46	1,631.85	3.80	8.99	34.57	-2,750.28	-8,783.06	9,271.50	9,259.49	12.01	772.009		
600.00	599.90	1,755.00	1,680.96	4.02	9.23	34.63	-2,745.26	-8,778.91	9,256.76	9,244.33	12.44	744.311		
700.00	699.82	1,925.88	1,850.04	4.28	10.07	34.74	-2,725.79	-8,763.84	9,241.79	9,228.35	13.45	687.282		
800.00	799.74	2,267.68	2,187.05	4.57	11.86	35.01	-2,680.04	-8,730.02	9,225.75	9,210.43	15.32	602.272		
900.00	899.66	2,323.54	2,242.02	4.88	12.17	35.05	-2,672.29	-8,723.79	9,207.70	9,191.83	15.87	580.021		
1,000.00	999.58	2,510.00	2,425.38	5.21	13.19	35.19	-2,646.51	-8,701.81	9,188.80	9,171.72	17.07	538.145		
1,100.00	1,099.50	2,563.03	2,477.53	5.55	13.48	35.23	-2,639.56	-8,695.20	9,170.02	9,152.36	17.65	519.423		
1,200.00	1,199.42	2,743.69	2,655.42	5.91	14.47	35.36	-2,616.80	-8,673.46	9,151.79	9,132.94	18.85	485.611		
1,300.00	1,299.34	2,792.00	2,702.94	6.28	14.74	35.39	-2,610.47	-8,667.46	9,132.88	9,113.45	19.43	469.953		
1,400.00	1,399.26	2,792.00	2,702.94	6.66	14.74	35.39	-2,610.47	-8,667.46	9,114.81	9,095.01	19.81	460.218		
1,500.00	1,499.18	2,792.00	2,702.94	7.04	14.74	35.39	-2,610.47	-8,667.46	9,097.81	9,077.62	20.19	450.685		
1,600.00	1,599.10	2,845.87	2,756.08	7.43	15.02	35.43	-2,603.95	-8,661.49	9,080.96	9,060.14	20.82	436.116		
1,700.00	1,699.01	2,887.00	2,796.81	7.83	15.23	35.45	-2,599.65	-8,657.77	9,065.60	9,044.20	21.41	423.500		
1,800.00	1,798.93	3,035.78	2,943.95	8.23	16.00	35.56	-2,582.52	-8,643.99	9,050.26	9,027.77	22.49	402.393		
1,900.00	1,898.85	3,181.06	3,087.39	8.64	16.77	35.67	-2,564.21	-8,630.11	9,034.31	9,010.73	23.58	383.203		
2,000.00	1,998.77	3,240.61	3,146.19	9.05	17.09	35.71	-2,556.77	-8,624.29	9,018.14	8,993.87	24.27	371.644		
2,100.00	2,098.69	3,374.74	3,278.69	9.46	17.79	35.81	-2,540.66	-8,611.01	9,002.00	8,976.70	25.30	355.778		
2,200.00	2,198.61	3,431.98	3,335.22	9.88	18.10	35.85	-2,533.70	-8,605.39	8,985.90	8,959.91	25.99	345.769		
2,300.00	2,298.53	2,300.00	3,442.65	10.30	12.16	35.93	-2,520.51	-8,594.84	8,969.94	8,948.85	21.09	425.325		
2,400.00	2,398.45	4,488.00	4,368.51	10.72	24.30	36.79	-2,371.86	-8,468.12	8,950.69	8,918.83	31.86	280.944		
2,500.00	2,498.37	4,528.01	4,407.31	11.14	24.55	36.82	-2,365.29	-8,460.86	8,925.75	8,893.26	32.50	274.672		
2,600.00	2,598.29	4,583.00	4,460.81	11.56	24.90	36.87	-2,356.63	-8,451.55	8,901.78	8,868.57	33.21	268.083		
2,700.00	2,698.21	4,583.00	4,460.81	11.98	24.90	36.87	-2,356.63	-8,451.55	8,878.25	8,844.59	33.66	263.762		
2,800.00	2,798.13	4,583.00	4,460.81	12.41	24.90	36.87	-2,356.63	-8,451.55	8,855.79	8,821.67	34.12	259.583		
2,900.00	2,898.05	4,583.00	4,460.81	12.84	24.90	36.87	-2,356.63	-8,451.55	8,834.40	8,799.83	34.57	255.543		
3,000.00	2,997.97	4,631.97	4,508.69	13.27	25.19	36.91	-2,349.55	-8,444.15	8,813.31	8,778.06	35.25	250.019		
3,100.00	3,097.89	4,678.00	4,553.95	13.69	25.46	36.95	-2,343.68	-8,438.19	8,793.74	8,757.82	35.92	244.830		
3,200.00	3,197.81	4,678.00	4,553.95	14.12	25.46	36.95	-2,343.68	-8,438.19	8,774.57	8,738.20	36.37	241.228		
3,300.00	3,297.73	4,678.00	4,553.95	14.56	25.46	36.95	-2,343.68	-8,438.19	8,756.50	8,719.67	36.83	237.754		
3,400.00	3,397.65	4,727.06	4,602.35	14.99	25.72	36.98	-2,338.05	-8,432.51	8,739.19	8,701.69	37.50	233.027		
3,500.00	3,497.56	4,772.00	4,646.77	15.42	25.96	37.01	-2,333.28	-8,427.58	8,722.57	8,684.42	38.16	228.591		
3,600.00	3,597.48	4,815.55	4,689.86	15.85	26.19	37.04	-2,328.93	-8,422.99	8,706.58	8,667.77	38.80	224.383		
3,700.00	3,697.40	4,867.00	4,740.81	16.28	26.45	37.07	-2,324.04	-8,417.77	8,691.12	8,651.64	39.48	220.132		
3,800.00	3,797.32	4,902.91	4,776.40	16.72	26.63	37.09	-2,320.79	-8,414.32	8,676.30	8,636.21	40.09	216.424		
3,900.00	3,897.24	4,961.00	4,834.06	17.15	26.92	37.12	-2,315.82	-8,409.22	8,662.27	8,621.48	40.79	212.345		
4,000.00	3,997.16	4,983.81	4,856.71	17.59	27.03	37.13	-2,313.96	-8,407.35	8,648.80	8,607.45	41.34	209.201		
4,100.00	4,097.08	5,056.00	4,928.46	18.02	27.37	37.17	-2,308.32	-8,401.63	8,635.91	8,593.81	42.10	205.114		
4,200.00	4,197.00	5,056.00	4,928.46	18.46	27.37	37.17	-2,308.32	-8,401.63	8,623.67	8,581.12	42.55	202.669		
4,300.00	4,296.92	5,104.46	4,976.66	18.89	27.59	37.20	-2,304.82	-8,398.23	8,612.08	8,568.87	43.20	199.338		
4,400.00	4,396.84	5,150.00	5,022.04	19.33	27.80	37.22	-2,301.84	-8,395.63	8,601.49	8,557.65	43.84	196.188		
4,500.00	4,496.76	5,170.94	5,042.91	19.77	27.89	37.23	-2,300.56	-8,394.58	8,591.58	8,547.20	44.37	193.623		
4,600.00	4,596.68	5,243.00	5,114.77	20.20	28.20	37.26	-2,296.61	-8,391.03	8,582.22	8,537.10	45.12	190.213		
4,700.00	4,696.60	5,272.87	5,144.58	20.64	28.33	37.27	-2,295.17	-8,389.68	8,573.41	8,527.73	45.68	187.680		
4,800.00	4,796.52	5,304.84	5,176.50	21.08	28.46	37.29	-2,293.76	-8,388.45	8,565.39	8,519.14	46.25	185.199		
4,900.00	4,896.44	5,336.00	5,207.61	21.51	28.59	37.30	-2,292.52	-8,387.47	8,558.16	8,511.34	46.81	182.817		
5,000.00	4,996.36	5,390.14	5,261.70	21.95	28.80	37.31	-2,290.76	-8,386.04	8,551.59	8,504.12	47.47	180.162		
5,100.00	5,096.28	5,430.00	5,301.54	22.39	28.95	37.33	-2,289.85	-8,385.08	8,545.59	8,497.53	48.06	177.817		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,513.55	5,385.06	22.83	29.27	37.35	-2,288.07	-8,383.43	8,539.97	8,491.14	48.83	174.884		
5,300.00	5,296.11	5,580.66	5,452.14	23.27	29.52	37.37	-2,286.36	-8,382.47	8,534.76	8,485.23	49.54	172.291		
5,400.00	5,396.03	5,647.77	5,519.21	23.71	29.77	37.39	-2,284.39	-8,381.84	8,529.94	8,479.70	50.24	169.779		
5,500.00	5,495.95	5,711.00	5,582.41	24.14	30.01	37.41	-2,282.30	-8,381.56	8,525.50	8,474.57	50.93	167.400		
5,600.00	5,595.87	5,785.18	5,656.54	24.58	30.29	37.44	-2,279.77	-8,381.52	8,521.42	8,469.76	51.66	164.940		
5,700.00	5,695.79	5,855.34	5,726.67	25.02	30.55	37.47	-2,277.47	-8,381.72	8,517.70	8,465.32	52.38	162.611		
5,800.00	5,795.71	5,925.52	5,796.81	25.46	30.81	37.50	-2,275.26	-8,382.15	8,514.33	8,461.23	53.10	160.352		
5,900.00	5,895.63	5,996.13	5,867.39	25.90	31.07	37.52	-2,273.14	-8,382.81	8,511.30	8,457.49	53.82	158.156		
6,000.00	5,995.55	6,106.57	5,977.78	26.34	31.48	37.56	-2,269.98	-8,383.92	8,508.39	8,453.69	54.70	155.534		
6,100.00	6,095.47	6,217.02	6,088.19	26.78	31.88	37.60	-2,266.99	-8,384.85	8,505.36	8,449.76	55.59	152.994		
6,200.00	6,195.39	6,322.50	6,193.62	27.22	32.28	37.64	-2,264.21	-8,385.59	8,502.21	8,445.75	56.46	150.576		
6,300.00	6,295.31	6,421.75	6,292.82	27.66	32.65	37.68	-2,260.92	-8,386.45	8,499.06	8,441.74	57.32	148.286		
6,400.00	6,395.23	6,520.89	6,391.87	28.10	33.03	37.72	-2,256.82	-8,387.52	8,495.92	8,437.75	58.17	146.062		
6,500.00	6,495.02	6,663.09	6,533.86	28.54	33.60	2.10	-2,249.44	-8,389.17	8,490.38	8,431.15	59.23	143.351		
6,600.00	6,593.09	6,833.91	6,704.30	28.98	34.29	-7.38	-2,237.99	-8,390.47	8,470.51	8,410.10	60.42	140.195		
6,700.00	6,687.01	6,909.13	6,779.29	29.41	34.60	-10.62	-2,232.18	-8,390.95	8,435.70	8,374.54	61.16	137.928		
6,800.00	6,774.46	6,972.88	6,842.83	29.83	34.87	-13.06	-2,227.12	-8,391.58	8,387.38	8,325.56	61.81	135.693		
6,900.00	6,853.31	7,030.70	6,900.46	30.26	35.11	-15.76	-2,222.43	-8,392.34	8,326.69	8,264.30	62.39	133.466		
7,000.00	6,921.60	7,081.24	6,950.81	30.76	35.32	-19.37	-2,218.25	-8,393.15	8,255.07	8,192.20	62.88	131.288		
7,100.00	6,977.66	7,129.00	6,998.40	31.38	35.52	-24.84	-2,214.23	-8,394.04	8,174.23	8,110.93	63.30	129.136		
7,200.00	7,020.10	7,158.43	7,027.72	32.17	35.64	-33.93	-2,211.79	-8,394.62	8,086.08	8,022.50	63.58	127.174		
7,300.00	7,047.88	7,182.47	7,051.68	33.13	35.74	-50.56	-2,209.87	-8,395.10	7,992.77	7,928.97	63.80	125.280		
7,400.00	7,060.32	7,194.11	7,063.29	34.27	35.79	-79.73	-2,208.97	-8,395.33	7,896.58	7,832.66	63.93	123.521		
7,500.00	7,060.70	7,195.99	7,065.15	35.56	35.80	-91.09	-2,208.83	-8,395.36	7,799.73	7,735.72	64.01	121.857		
7,600.00	7,060.27	7,197.20	7,066.36	37.02	35.80	-91.13	-2,208.74	-8,395.39	7,702.95	7,638.85	64.10	120.168		
7,700.00	7,059.83	7,198.40	7,067.56	38.64	35.81	-91.16	-2,208.65	-8,395.41	7,606.25	7,542.03	64.22	118.442		
7,800.00	7,059.40	7,199.61	7,068.77	40.40	35.81	-91.20	-2,208.55	-8,395.43	7,509.64	7,445.28	64.36	116.680		
7,900.00	7,058.97	7,200.82	7,069.97	42.28	35.82	-91.23	-2,208.46	-8,395.46	7,413.12	7,348.59	64.53	114.882		
8,000.00	7,058.53	7,202.03	7,071.18	44.27	35.82	-91.27	-2,208.37	-8,395.48	7,316.70	7,251.97	64.72	113.047		
8,100.00	7,058.10	7,203.23	7,072.38	46.35	35.82	-91.31	-2,208.28	-8,395.50	7,220.37	7,155.42	64.95	111.175		
8,200.00	7,057.66	7,204.44	7,073.58	48.50	35.83	-91.34	-2,208.19	-8,395.53	7,124.14	7,058.94	65.20	109.268		
8,300.00	7,057.23	7,205.64	7,074.78	50.73	35.83	-91.38	-2,208.10	-8,395.55	7,028.01	6,962.53	65.48	107.325		
8,400.00	7,056.80	7,206.85	7,075.98	53.02	35.84	-91.41	-2,208.01	-8,395.57	6,932.00	6,866.20	65.80	105.348		
8,500.00	7,056.36	7,208.05	7,077.18	55.36	35.84	-91.45	-2,207.92	-8,395.60	6,836.10	6,769.94	66.15	103.337		
8,600.00	7,055.93	7,209.26	7,078.38	57.74	35.85	-91.48	-2,207.83	-8,395.62	6,740.31	6,673.77	66.54	101.294		
8,700.00	7,055.49	7,210.46	7,079.58	60.17	35.85	-91.52	-2,207.74	-8,395.65	6,644.66	6,577.69	66.97	99.221		
8,800.00	7,055.06	7,211.66	7,080.78	62.63	35.86	-91.55	-2,207.65	-8,395.67	6,549.13	6,481.69	67.43	97.118		
8,900.00	7,054.63	7,212.86	7,081.98	65.13	35.86	-91.59	-2,207.56	-8,395.69	6,453.73	6,385.79	67.94	94.989		
9,000.00	7,054.19	7,214.06	7,083.17	67.66	35.87	-91.62	-2,207.47	-8,395.72	6,358.48	6,289.99	68.49	92.835		
9,100.00	7,053.76	7,215.26	7,084.37	70.21	35.87	-91.66	-2,207.38	-8,395.74	6,263.38	6,194.29	69.09	90.659		
9,200.00	7,053.32	7,216.46	7,085.57	72.78	35.88	-91.69	-2,207.29	-8,395.76	6,168.43	6,098.70	69.73	88.463		
9,300.00	7,052.89	7,217.66	7,086.76	75.38	35.88	-91.73	-2,207.21	-8,395.79	6,073.64	6,003.22	70.42	86.250		
9,400.00	7,052.46	7,218.86	7,087.96	77.99	35.89	-91.76	-2,207.12	-8,395.81	5,979.02	5,907.86	71.16	84.024		
9,500.00	7,052.02	7,220.06	7,089.15	80.62	35.89	-91.80	-2,207.03	-8,395.83	5,884.58	5,812.63	71.95	81.786		
9,600.00	7,051.59	7,221.25	7,090.35	83.26	35.90	-91.83	-2,206.94	-8,395.86	5,790.33	5,717.53	72.80	79.541		
9,700.00	7,051.15	7,222.45	7,091.54	85.92	35.90	-91.87	-2,206.85	-8,395.88	5,696.27	5,622.57	73.70	77.292		
9,800.00	7,050.72	7,223.65	7,092.73	88.59	35.91	-91.90	-2,206.77	-8,395.90	5,602.41	5,527.76	74.66	75.041		
9,900.00	7,050.29	7,224.84	7,093.92	91.28	35.91	-91.94	-2,206.68	-8,395.93	5,508.78	5,433.10	75.68	72.792		
10,000.00	7,049.85	7,226.04	7,095.11	93.97	35.92	-91.97	-2,206.59	-8,395.95	5,415.37	5,338.61	76.76	70.549		
10,100.00	7,049.42	7,227.23	7,096.30	96.67	35.92	-92.01	-2,206.51	-8,395.97	5,322.20	5,244.29	77.91	68.315		
10,200.00	7,048.98	7,228.42	7,097.49	99.38	35.93	-92.04	-2,206.42	-8,396.00	5,229.28	5,150.16	79.12	66.092		
10,300.00	7,048.55	7,229.62	7,098.68	102.10	35.93	-92.08	-2,206.34	-8,396.02	5,136.62	5,056.22	80.40	63.885		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	7,230.81	7,099.87	104.83	35.94	-92.11	-2,206.25	-8,396.04	5,044.25	4,962.49	81.76	61.696	
10,500.00	7,047.68	7,232.00	7,101.06	107.56	35.94	-92.15	-2,206.16	-8,396.07	4,952.17	4,868.98	83.19	59.528	
10,600.00	7,047.25	7,233.19	7,102.25	110.30	35.95	-92.18	-2,206.08	-8,396.09	4,860.41	4,775.71	84.70	57.384	
10,700.00	7,046.81	7,234.38	7,103.44	113.05	35.95	-92.22	-2,205.99	-8,396.11	4,768.98	4,682.69	86.29	55.267	
10,800.00	7,046.38	7,235.57	7,104.62	115.80	35.96	-92.25	-2,205.91	-8,396.14	4,677.89	4,589.93	87.96	53.180	
10,900.00	7,045.95	7,236.76	7,105.81	118.55	35.96	-92.29	-2,205.82	-8,396.16	4,587.18	4,497.46	89.73	51.125	
11,000.00	7,045.51	7,237.95	7,106.99	121.31	35.97	-92.32	-2,205.74	-8,396.18	4,496.86	4,405.28	91.58	49.104	
11,100.00	7,045.08	7,239.14	7,108.18	124.08	35.97	-92.36	-2,205.66	-8,396.20	4,406.96	4,313.43	93.53	47.119	
11,200.00	7,044.64	7,240.32	7,109.36	126.85	35.98	-92.39	-2,205.57	-8,396.23	4,317.50	4,221.93	95.58	45.174	
11,300.00	7,044.21	7,241.51	7,110.55	129.62	35.98	-92.43	-2,205.49	-8,396.25	4,228.52	4,130.79	97.73	43.268	
11,400.00	7,043.78	7,242.70	7,111.73	132.40	35.99	-92.46	-2,205.40	-8,396.27	4,140.04	4,040.05	99.99	41.405	
11,500.00	7,043.34	7,243.88	7,112.91	135.18	35.99	-92.50	-2,205.32	-8,396.30	4,052.09	3,949.73	102.36	39.586	
11,600.00	7,042.91	7,245.07	7,114.09	137.96	36.00	-92.53	-2,205.24	-8,396.32	3,964.71	3,859.86	104.85	37.812	
11,700.00	7,042.47	7,246.25	7,115.27	140.75	36.00	-92.57	-2,205.16	-8,396.34	3,877.94	3,770.47	107.47	36.084	
11,800.00	7,042.04	7,247.44	7,116.46	143.54	36.00	-92.60	-2,205.07	-8,396.37	3,791.83	3,681.61	110.22	34.404	
11,900.00	7,041.61	7,248.62	7,117.64	146.33	36.01	-92.64	-2,204.99	-8,396.39	3,706.41	3,593.31	113.10	32.772	
12,000.00	7,041.17	7,249.80	7,118.81	149.13	36.01	-92.67	-2,204.91	-8,396.41	3,621.74	3,505.62	116.12	31.190	
12,100.00	7,040.74	7,250.98	7,119.99	151.92	36.02	-92.71	-2,204.83	-8,396.43	3,537.86	3,418.58	119.29	29.659	
12,200.00	7,040.30	7,252.16	7,121.17	154.72	36.02	-92.74	-2,204.74	-8,396.46	3,454.85	3,332.24	122.61	28.178	
12,300.00	7,039.87	7,253.34	7,122.35	157.52	36.03	-92.78	-2,204.66	-8,396.48	3,372.75	3,246.67	126.09	26.749	
12,400.00	7,039.44	7,254.53	7,123.53	160.33	36.03	-92.81	-2,204.58	-8,396.50	3,291.65	3,161.91	129.74	25.372	
12,500.00	7,039.00	7,255.70	7,124.70	163.13	36.04	-92.85	-2,204.50	-8,396.53	3,211.61	3,078.05	133.56	24.047	
12,600.00	7,038.57	7,256.88	7,125.88	165.94	36.04	-92.88	-2,204.42	-8,396.55	3,132.72	2,995.16	137.56	22.774	
12,700.00	7,038.13	7,258.06	7,127.05	168.75	36.05	-92.92	-2,204.34	-8,396.57	3,055.06	2,913.32	141.74	21.554	
12,800.00	7,037.70	7,259.24	7,128.23	171.56	36.05	-92.95	-2,204.26	-8,396.59	2,978.74	2,832.63	146.11	20.386	
12,900.00	7,037.27	7,260.42	7,129.40	174.37	36.06	-92.98	-2,204.18	-8,396.62	2,903.85	2,753.17	150.68	19.272	
13,000.00	7,036.83	7,261.59	7,130.58	177.19	36.06	-93.02	-2,204.10	-8,396.64	2,830.52	2,675.07	155.44	18.209	
13,100.00	7,036.40	7,262.77	7,131.75	180.00	36.07	-93.05	-2,204.02	-8,396.66	2,758.86	2,598.45	160.41	17.199	
13,200.00	7,035.96	7,263.94	7,132.92	182.82	36.07	-93.09	-2,203.94	-8,396.69	2,689.01	2,523.44	165.57	16.241	
13,300.00	7,035.53	7,265.12	7,134.09	185.64	36.08	-93.12	-2,203.86	-8,396.71	2,621.11	2,450.19	170.92	15.335	
13,400.00	7,035.10	7,266.29	7,135.27	188.46	36.08	-93.16	-2,203.78	-8,396.73	2,555.33	2,378.86	176.47	14.480	
13,500.00	7,034.66	7,267.47	7,136.44	191.28	36.09	-93.19	-2,203.70	-8,396.75	2,491.81	2,309.62	182.19	13.677	
13,600.00	7,034.23	7,268.64	7,137.61	194.10	36.09	-93.23	-2,203.62	-8,396.78	2,430.76	2,242.67	188.09	12.924	
13,700.00	7,033.79	7,269.81	7,138.78	196.92	36.10	-93.26	-2,203.54	-8,396.80	2,372.35	2,178.22	194.13	12.220	
13,800.00	7,033.36	7,270.98	7,139.95	199.74	36.10	-93.30	-2,203.47	-8,396.82	2,316.78	2,116.48	200.30	11.567	
13,900.00	7,032.93	7,272.16	7,141.11	202.57	36.11	-93.33	-2,203.39	-8,396.84	2,264.27	2,057.71	206.56	10.962	
14,000.00	7,032.49	7,273.33	7,142.28	205.39	36.11	-93.36	-2,203.31	-8,396.87	2,215.03	2,002.15	212.88	10.405	
14,100.00	7,032.06	7,274.50	7,143.45	208.22	36.11	-93.40	-2,203.23	-8,396.89	2,169.28	1,950.06	219.22	9.896	
14,200.00	7,031.62	7,275.67	7,144.61	211.05	36.12	-93.43	-2,203.15	-8,396.91	2,127.26	1,901.74	225.52	9.433	
14,300.00	7,031.19	7,276.83	7,145.78	213.87	36.12	-93.47	-2,203.08	-8,396.94	2,089.17	1,857.45	231.72	9.016	
14,400.00	7,030.76	7,278.00	7,146.95	216.70	36.13	-93.50	-2,203.00	-8,396.96	2,055.25	1,817.48	237.77	8.644	
14,500.00	7,030.32	7,279.17	7,148.11	219.53	36.13	-93.54	-2,202.92	-8,396.98	2,025.71	1,782.12	243.59	8.316	
14,600.00	7,029.89	7,280.34	7,149.28	222.36	36.14	-93.57	-2,202.85	-8,397.00	2,000.73	1,751.61	249.12	8.031	
14,700.00	7,029.45	7,281.50	7,150.44	225.19	36.14	-93.60	-2,202.77	-8,397.03	1,980.48	1,726.21	254.28	7.789	
14,800.00	7,029.02	7,282.67	7,151.60	228.03	36.15	-93.64	-2,202.69	-8,397.05	1,965.13	1,706.12	259.01	7.587	
14,805.04	7,029.00	7,282.73	7,151.66	228.17	36.15	-93.64	-2,202.69	-8,397.05	1,964.49	1,705.25	259.23	7.578 CC, ES, SF	



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	30.00	3.28	3.28	-82.54	1,198.07	-9,144.46	9,222.66					
100.00	100.00	70.00	100.00	3.28	3.50	-82.54	1,198.07	-9,144.46	9,222.61	9,215.82	6.78	1,359.283		
200.00	200.00	170.00	200.00	3.34	5.32	-82.54	1,198.07	-9,144.46	9,222.61	9,213.95	8.66	1,065.269		
300.00	300.00	270.00	300.00	3.44	8.35	-82.54	1,198.07	-9,144.46	9,222.61	9,210.81	11.80	781.830		
400.00	400.00	370.00	400.00	3.60	11.64	-82.54	1,198.07	-9,144.46	9,222.61	9,207.36	15.25	604.915		
500.00	499.98	469.98	499.98	3.80	15.02	59.29	1,198.07	-9,144.46	9,221.72	9,202.90	18.82	489.977		
600.00	599.90	569.90	599.90	4.02	18.44	59.31	1,198.07	-9,144.46	9,219.69	9,197.22	22.46	410.409		
700.00	699.82	669.82	699.82	4.28	21.89	59.34	1,198.07	-9,144.46	9,217.64	9,191.48	26.16	352.304		
800.00	799.74	769.74	799.74	4.57	25.34	59.36	1,198.07	-9,144.46	9,215.59	9,185.69	29.90	308.168		
900.00	899.66	869.66	899.66	4.88	28.80	59.38	1,198.07	-9,144.46	9,213.55	9,179.87	33.68	273.589		
1,000.00	999.58	969.58	999.58	5.21	32.27	59.40	1,198.07	-9,144.46	9,211.50	9,174.03	37.47	245.814		
1,100.00	1,099.50	1,069.50	1,099.50	5.55	35.74	59.42	1,198.07	-9,144.46	9,209.46	9,168.17	41.29	223.042		
1,200.00	1,199.42	1,169.42	1,199.42	5.91	39.22	59.44	1,198.07	-9,144.46	9,207.42	9,162.29	45.12	204.052		
1,300.00	1,299.34	1,269.34	1,299.34	6.28	42.69	59.47	1,198.07	-9,144.46	9,205.38	9,156.41	48.97	187.985		
1,400.00	1,399.26	1,369.26	1,399.26	6.66	46.17	59.49	1,198.07	-9,144.46	9,203.34	9,150.51	52.83	174.223		
1,500.00	1,499.18	1,469.18	1,499.18	7.04	49.65	59.51	1,198.07	-9,144.46	9,201.30	9,144.61	56.69	162.308		
1,600.00	1,599.10	1,569.10	1,599.10	7.43	53.13	59.53	1,198.07	-9,144.46	9,199.26	9,138.70	60.56	151.895		
1,700.00	1,699.01	1,669.01	1,699.01	7.83	56.62	59.55	1,198.07	-9,144.46	9,197.22	9,132.78	64.44	142.721		
1,800.00	1,798.93	1,768.93	1,798.93	8.23	60.10	59.57	1,198.07	-9,144.46	9,195.19	9,126.86	68.33	134.577		
1,900.00	1,898.85	1,868.85	1,898.85	8.64	63.58	59.59	1,198.07	-9,144.46	9,193.16	9,120.94	72.22	127.301		
2,000.00	1,998.77	1,968.77	1,998.77	9.05	67.06	59.62	1,198.07	-9,144.46	9,191.13	9,115.02	76.11	120.763		
2,100.00	2,098.69	2,068.69	2,098.69	9.46	70.55	59.64	1,198.07	-9,144.46	9,189.10	9,109.09	80.01	114.856		
2,200.00	2,198.61	2,168.61	2,198.61	9.88	74.03	59.66	1,198.07	-9,144.46	9,187.07	9,103.16	83.90	109.494		
2,300.00	2,298.53	2,268.53	2,298.53	10.30	77.52	59.68	1,198.07	-9,144.46	9,185.04	9,097.23	87.81	104.605		
2,400.00	2,398.45	2,368.45	2,398.45	10.72	81.00	59.70	1,198.07	-9,144.46	9,183.01	9,091.30	91.71	100.130		
2,500.00	2,498.37	2,468.37	2,498.37	11.14	84.49	59.72	1,198.07	-9,144.46	9,180.99	9,085.37	95.62	96.018		
2,600.00	2,598.29	2,568.29	2,598.29	11.56	87.97	59.75	1,198.07	-9,144.46	9,178.96	9,079.44	99.53	92.227		
2,700.00	2,698.21	2,668.21	2,698.21	11.98	91.46	59.77	1,198.07	-9,144.46	9,176.94	9,073.50	103.44	88.721		
2,800.00	2,798.13	2,768.13	2,798.13	12.41	94.95	59.79	1,198.07	-9,144.46	9,174.92	9,067.57	107.35	85.469		
2,900.00	2,898.05	2,868.05	2,898.05	12.84	98.43	59.81	1,198.07	-9,144.46	9,172.90	9,061.64	111.26	82.445		
3,000.00	2,997.97	2,967.97	2,997.97	13.27	101.92	59.83	1,198.07	-9,144.46	9,170.88	9,055.71	115.17	79.626		
3,100.00	3,097.89	3,067.89	3,097.89	13.69	105.41	59.85	1,198.07	-9,144.46	9,168.86	9,049.77	119.09	76.991		
3,200.00	3,197.81	3,167.81	3,197.81	14.12	108.89	59.88	1,198.07	-9,144.46	9,166.85	9,043.84	123.01	74.524		
3,300.00	3,297.73	3,267.73	3,297.73	14.56	112.38	59.90	1,198.07	-9,144.46	9,164.83	9,037.91	126.92	72.208		
3,400.00	3,397.65	3,367.65	3,397.65	14.99	115.87	59.92	1,198.07	-9,144.46	9,162.82	9,031.98	130.84	70.031		
3,500.00	3,497.56	3,467.56	3,497.56	15.42	119.35	59.94	1,198.07	-9,144.46	9,160.81	9,026.05	134.76	67.979		
3,600.00	3,597.48	3,567.48	3,597.48	15.85	122.84	59.96	1,198.07	-9,144.46	9,158.80	9,020.12	138.68	66.044		
3,700.00	3,697.40	3,667.40	3,697.40	16.28	126.33	59.98	1,198.07	-9,144.46	9,156.79	9,014.19	142.60	64.214		
3,800.00	3,797.32	3,767.32	3,797.32	16.72	129.81	60.01	1,198.07	-9,144.46	9,154.78	9,008.26	146.52	62.482		
3,900.00	3,897.24	3,867.24	3,897.24	17.15	133.30	60.03	1,198.07	-9,144.46	9,152.77	9,002.33	150.44	60.840		
4,000.00	3,997.16	3,967.16	3,997.16	17.59	136.79	60.05	1,198.07	-9,144.46	9,150.77	8,996.41	154.36	59.282		
4,100.00	4,097.08	4,067.08	4,097.08	18.02	140.27	60.07	1,198.07	-9,144.46	9,148.76	8,990.48	158.28	57.800		
4,200.00	4,197.00	4,167.00	4,197.00	18.46	143.76	60.09	1,198.07	-9,144.46	9,146.76	8,984.55	162.20	56.390		
4,300.00	4,296.92	4,266.92	4,296.92	18.89	147.25	60.11	1,198.07	-9,144.46	9,144.76	8,978.63	166.13	55.047		
4,400.00	4,396.84	4,366.84	4,396.84	19.33	150.74	60.14	1,198.07	-9,144.46	9,142.76	8,972.71	170.05	53.765		
4,500.00	4,496.76	4,466.76	4,496.76	19.77	154.22	60.16	1,198.07	-9,144.46	9,140.76	8,966.79	173.97	52.541		
4,600.00	4,596.68	4,566.68	4,596.68	20.20	157.71	60.18	1,198.07	-9,144.46	9,138.76	8,960.86	177.90	51.371		
4,700.00	4,696.60	4,666.60	4,696.60	20.64	161.20	60.20	1,198.07	-9,144.46	9,136.77	8,954.94	181.82	50.251		
4,800.00	4,796.52	4,766.52	4,796.52	21.08	164.69	60.22	1,198.07	-9,144.46	9,134.77	8,949.02	185.75	49.179		
4,900.00	4,896.44	4,866.44	4,896.44	21.51	168.17	60.25	1,198.07	-9,144.46	9,132.78	8,943.11	189.67	48.151		
5,000.00	4,996.36	4,966.36	4,996.36	21.95	171.66	60.27	1,198.07	-9,144.46	9,130.78	8,937.19	193.60	47.164		
5,100.00	5,096.28	5,066.28	5,096.28	22.39	175.15	60.29	1,198.07	-9,144.46	9,128.79	8,931.27	197.52	46.217		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,166.19	5,196.19	22.83	178.64	60.31	1,198.07	-9,144.46	9,126.80	8,925.36	201.45	45.306		
5,300.00	5,296.11	5,266.11	5,296.11	23.27	182.12	60.33	1,198.07	-9,144.46	9,124.82	8,919.44	205.37	44.431		
5,400.00	5,396.03	5,366.03	5,396.03	23.71	185.61	60.35	1,198.07	-9,144.46	9,122.83	8,913.53	209.30	43.588		
5,500.00	5,495.95	5,465.95	5,495.95	24.14	189.10	60.38	1,198.07	-9,144.46	9,120.84	8,907.62	213.22	42.776		
5,600.00	5,595.87	5,565.87	5,595.87	24.58	192.59	60.40	1,198.07	-9,144.46	9,118.86	8,901.71	217.15	41.993		
5,700.00	5,695.79	5,665.79	5,695.79	25.02	196.08	60.42	1,198.07	-9,144.46	9,116.88	8,895.80	221.08	41.239		
5,800.00	5,795.71	5,765.71	5,795.71	25.46	199.56	60.44	1,198.07	-9,144.46	9,114.89	8,889.89	225.00	40.510		
5,900.00	5,895.63	5,865.63	5,895.63	25.90	203.05	60.46	1,198.07	-9,144.46	9,112.91	8,883.99	228.93	39.807		
6,000.00	5,995.55	5,965.55	5,995.55	26.34	206.54	60.49	1,198.07	-9,144.46	9,110.94	8,878.08	232.86	39.127		
6,100.00	6,095.47	6,065.47	6,095.47	26.78	210.03	60.51	1,198.07	-9,144.46	9,108.96	8,872.18	236.78	38.470		
6,200.00	6,195.39	6,165.39	6,195.39	27.22	213.51	60.53	1,198.07	-9,144.46	9,106.98	8,866.27	240.71	37.834		
6,300.00	6,295.31	6,265.31	6,295.31	27.66	217.00	60.55	1,198.07	-9,144.46	9,105.01	8,860.37	244.64	37.218		
6,400.00	6,395.23	6,365.23	6,395.23	28.10	220.49	60.57	1,198.07	-9,144.46	9,103.03	8,854.47	248.56	36.622		
6,500.00	6,495.02	6,465.02	6,495.02	28.54	223.97	25.04	1,198.07	-9,144.46	9,098.75	8,848.27	252.49	36.036		
6,600.00	6,593.09	6,563.09	6,593.09	28.98	227.40	16.25	1,198.07	-9,144.46	9,080.69	8,824.34	256.35	35.423		
6,700.00	6,687.01	6,657.01	6,687.01	29.41	230.67	14.43	1,198.07	-9,144.46	9,047.68	8,787.64	260.04	34.793		
6,800.00	6,774.46	6,744.46	6,774.46	29.83	233.73	14.30	1,198.07	-9,144.46	9,000.55	8,737.07	263.48	34.160		
6,900.00	6,853.31	6,823.31	6,853.31	30.26	236.48	15.19	1,198.07	-9,144.46	8,940.47	8,673.89	266.58	33.538		
7,000.00	6,921.60	6,908.40	6,921.60	30.76	239.45	17.13	1,198.07	-9,144.46	8,868.93	8,599.08	269.85	32.867		
7,100.00	6,977.66	6,947.66	6,977.66	31.38	240.82	20.69	1,198.07	-9,144.46	8,787.69	8,516.23	271.46	32.373		
7,200.00	7,020.10	7,009.90	7,020.10	32.17	242.99	27.37	1,198.07	-9,144.46	8,698.76	8,424.94	273.81	31.769		
7,300.00	7,047.88	7,017.88	7,047.88	33.13	243.27	41.56	1,198.07	-9,144.46	8,604.33	8,330.10	274.23	31.377		
7,400.00	7,060.32	7,030.32	7,060.32	34.27	243.71	75.26	1,198.07	-9,144.46	8,506.73	8,231.98	274.76	30.961		
7,500.00	7,060.70	7,030.70	7,060.70	35.56	243.72	91.41	1,198.07	-9,144.46	8,408.25	8,133.41	274.84	30.593		
7,600.00	7,060.27	7,030.27	7,060.27	37.02	243.70	91.39	1,198.07	-9,144.46	8,309.79	8,034.88	274.91	30.227		
7,700.00	7,059.83	7,029.83	7,059.83	38.64	243.69	91.38	1,198.07	-9,144.46	8,211.36	7,936.37	274.99	29.860		
7,800.00	7,059.40	7,029.40	7,059.40	40.40	243.67	91.36	1,198.07	-9,144.46	8,112.98	7,837.89	275.09	29.493		
7,900.00	7,058.97	7,028.97	7,058.97	42.28	243.66	91.34	1,198.07	-9,144.46	8,014.63	7,739.44	275.19	29.124		
8,000.00	7,058.53	7,028.53	7,058.53	44.27	243.64	91.32	1,198.07	-9,144.46	7,916.33	7,641.02	275.31	28.754		
8,100.00	7,058.10	7,028.10	7,058.10	46.35	243.63	91.31	1,198.07	-9,144.46	7,818.07	7,542.62	275.45	28.383		
8,200.00	7,057.66	7,027.66	7,057.66	48.50	243.61	91.29	1,198.07	-9,144.46	7,719.85	7,444.25	275.60	28.011		
8,300.00	7,057.23	7,027.23	7,057.23	50.73	243.60	91.27	1,198.07	-9,144.46	7,621.68	7,345.91	275.77	27.638		
8,400.00	7,056.80	7,026.80	7,056.80	53.02	243.58	91.26	1,198.07	-9,144.46	7,523.56	7,247.60	275.96	27.264		
8,500.00	7,056.36	7,026.36	7,056.36	55.36	243.57	91.24	1,198.07	-9,144.46	7,425.49	7,149.33	276.16	26.888		
8,600.00	7,055.93	7,025.93	7,055.93	57.74	243.55	91.22	1,198.07	-9,144.46	7,327.47	7,051.09	276.38	26.512		
8,700.00	7,055.49	7,025.49	7,055.49	60.17	243.54	91.21	1,198.07	-9,144.46	7,229.50	6,952.88	276.62	26.135		
8,800.00	7,055.06	7,025.06	7,055.06	62.63	243.52	91.19	1,198.07	-9,144.46	7,131.59	6,854.70	276.89	25.756		
8,900.00	7,054.63	7,024.63	7,054.63	65.13	243.51	91.17	1,198.07	-9,144.46	7,033.74	6,756.57	277.18	25.377		
9,000.00	7,054.19	7,024.19	7,054.19	67.66	243.49	91.15	1,198.07	-9,144.46	6,935.95	6,658.47	277.48	24.996		
9,100.00	7,053.76	7,023.76	7,053.76	70.21	243.48	91.14	1,198.07	-9,144.46	6,838.23	6,560.41	277.82	24.614		
9,200.00	7,053.32	7,023.32	7,053.32	72.78	243.46	91.12	1,198.07	-9,144.46	6,740.57	6,462.39	278.18	24.231		
9,300.00	7,052.89	7,022.89	7,052.89	75.38	243.45	91.10	1,198.07	-9,144.46	6,642.98	6,364.42	278.56	23.847		
9,400.00	7,052.46	7,022.46	7,052.46	77.99	243.43	91.09	1,198.07	-9,144.46	6,545.47	6,266.49	278.98	23.462		
9,500.00	7,052.02	7,022.02	7,052.02	80.62	243.42	91.07	1,198.07	-9,144.46	6,448.03	6,168.61	279.42	23.076		
9,600.00	7,051.59	7,021.59	7,051.59	83.26	243.40	91.05	1,198.07	-9,144.46	6,350.67	6,070.77	279.89	22.690		
9,700.00	7,051.15	7,021.15	7,051.15	85.92	243.39	91.04	1,198.07	-9,144.46	6,253.39	5,972.99	280.40	22.302		
9,800.00	7,050.72	7,020.72	7,050.72	88.59	243.37	91.02	1,198.07	-9,144.46	6,156.20	5,875.26	280.94	21.913		
9,900.00	7,050.29	7,020.29	7,050.29	91.28	243.36	91.00	1,198.07	-9,144.46	6,059.10	5,777.59	281.51	21.523		
10,000.00	7,049.85	7,019.85	7,049.85	93.97	243.34	90.98	1,198.07	-9,144.46	5,962.10	5,679.98	282.12	21.133		
10,100.00	7,049.42	7,019.42	7,049.42	96.67	243.32	90.97	1,198.07	-9,144.46	5,865.20	5,582.42	282.77	20.742		
10,200.00	7,048.98	7,018.98	7,048.98	99.38	243.31	90.95	1,198.07	-9,144.46	5,768.40	5,484.94	283.46	20.350		
10,300.00	7,048.55	7,018.55	7,048.55	102.10	243.29	90.93	1,198.07	-9,144.46	5,671.71	5,387.52	284.19	19.957		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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						
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)		
10,400.00	7,048.12	7,018.12	7,048.12	104.83	243.28	90.92	1,198.07	-9,144.46	5,575.15	5,290.18	284.97	19.564	
10,500.00	7,047.68	7,017.68	7,047.68	107.56	243.26	90.90	1,198.07	-9,144.46	5,478.70	5,192.91	285.79	19.170	
10,600.00	7,047.25	7,017.25	7,047.25	110.30	243.25	90.88	1,198.07	-9,144.46	5,382.39	5,095.73	286.66	18.776	
10,700.00	7,046.81	7,016.81	7,046.81	113.05	243.23	90.87	1,198.07	-9,144.46	5,286.21	4,998.63	287.58	18.382	
10,800.00	7,046.38	7,016.38	7,046.38	115.80	243.22	90.85	1,198.07	-9,144.46	5,190.17	4,901.62	288.55	17.987	
10,900.00	7,045.95	7,015.95	7,045.95	118.55	243.20	90.83	1,198.07	-9,144.46	5,094.29	4,804.71	289.58	17.592	
11,000.00	7,045.51	7,015.51	7,045.51	121.31	243.19	90.81	1,198.07	-9,144.46	4,998.57	4,707.90	290.67	17.197	
11,100.00	7,045.08	7,015.08	7,045.08	124.08	243.17	90.80	1,198.07	-9,144.46	4,903.02	4,611.20	291.82	16.802	
11,200.00	7,044.64	7,014.64	7,044.64	126.85	243.16	90.78	1,198.07	-9,144.46	4,807.65	4,514.62	293.03	16.406	
11,300.00	7,044.21	7,014.21	7,044.21	129.62	243.14	90.76	1,198.07	-9,144.46	4,712.48	4,418.16	294.32	16.012	
11,400.00	7,043.78	7,013.78	7,043.78	132.40	243.13	90.75	1,198.07	-9,144.46	4,617.51	4,321.84	295.67	15.617	
11,500.00	7,043.34	7,013.34	7,043.34	135.18	243.11	90.73	1,198.07	-9,144.46	4,522.75	4,225.65	297.10	15.223	
11,600.00	7,042.91	7,012.91	7,042.91	137.96	243.10	90.71	1,198.07	-9,144.46	4,428.22	4,129.62	298.60	14.830	
11,700.00	7,042.47	7,012.47	7,042.47	140.75	243.08	90.69	1,198.07	-9,144.46	4,333.94	4,033.75	300.20	14.437	
11,800.00	7,042.04	7,012.04	7,042.04	143.54	243.07	90.68	1,198.07	-9,144.46	4,239.93	3,938.05	301.88	14.045	
11,900.00	7,041.61	7,011.61	7,041.61	146.33	243.05	90.66	1,198.07	-9,144.46	4,146.19	3,842.54	303.65	13.655	
12,000.00	7,041.17	7,011.17	7,041.17	149.13	243.04	90.64	1,198.07	-9,144.46	4,052.75	3,747.23	305.52	13.265	
12,100.00	7,040.74	7,010.74	7,040.74	151.92	243.02	90.63	1,198.07	-9,144.46	3,959.63	3,652.14	307.50	12.877	
12,200.00	7,040.30	7,010.30	7,040.30	154.72	243.01	90.61	1,198.07	-9,144.46	3,866.86	3,557.28	309.58	12.491	
12,300.00	7,039.87	7,009.87	7,039.87	157.52	242.99	90.59	1,198.07	-9,144.46	3,774.46	3,462.67	311.79	12.106	
12,400.00	7,039.44	7,009.44	7,039.44	160.33	242.98	90.58	1,198.07	-9,144.46	3,682.45	3,368.33	314.12	11.723	
12,500.00	7,039.00	7,009.00	7,039.00	163.13	242.96	90.56	1,198.07	-9,144.46	3,590.87	3,274.29	316.58	11.343	
12,600.00	7,038.57	7,008.57	7,038.57	165.94	242.95	90.54	1,198.07	-9,144.46	3,499.75	3,180.57	319.18	10.965	
12,700.00	7,038.13	7,008.13	7,038.13	168.75	242.93	90.52	1,198.07	-9,144.46	3,409.12	3,087.20	321.93	10.590	
12,800.00	7,037.70	7,007.70	7,037.70	171.56	242.92	90.51	1,198.07	-9,144.46	3,319.04	2,994.21	324.83	10.218	
12,900.00	7,037.27	7,007.27	7,037.27	174.37	242.90	90.49	1,198.07	-9,144.46	3,229.54	2,901.63	327.91	9.849	
13,000.00	7,036.83	7,006.83	7,036.83	177.19	242.89	90.47	1,198.07	-9,144.46	3,140.67	2,809.51	331.17	9.484	
13,100.00	7,036.40	7,006.40	7,036.40	180.00	242.87	90.46	1,198.07	-9,144.46	3,052.50	2,717.89	334.61	9.123	
13,200.00	7,035.96	7,005.96	7,035.96	182.82	242.86	90.44	1,198.07	-9,144.46	2,965.07	2,626.81	338.26	8.766	
13,300.00	7,035.53	7,005.53	7,035.53	185.64	242.84	90.42	1,198.07	-9,144.46	2,878.46	2,536.34	342.13	8.413	
13,400.00	7,035.10	7,005.10	7,035.10	188.46	242.83	90.41	1,198.07	-9,144.46	2,792.75	2,446.53	346.22	8.066	
13,500.00	7,034.66	7,004.66	7,034.66	191.28	242.81	90.39	1,198.07	-9,144.46	2,708.01	2,357.46	350.55	7.725	
13,600.00	7,034.23	7,004.23	7,034.23	194.10	242.79	90.37	1,198.07	-9,144.46	2,624.36	2,269.21	355.15	7.390	
13,700.00	7,033.79	7,003.79	7,033.79	196.92	242.78	90.35	1,198.07	-9,144.46	2,541.88	2,181.87	360.01	7.061	
13,800.00	7,033.36	7,003.36	7,033.36	199.74	242.76	90.34	1,198.07	-9,144.46	2,460.70	2,095.54	365.16	6.739	
13,900.00	7,032.93	7,002.93	7,032.93	202.57	242.75	90.32	1,198.07	-9,144.46	2,380.95	2,010.35	370.60	6.425	
14,000.00	7,032.49	7,002.49	7,032.49	205.39	242.73	90.30	1,198.07	-9,144.46	2,302.79	1,926.44	376.35	6.119	
14,100.00	7,032.06	7,002.06	7,032.06	208.22	242.72	90.29	1,198.07	-9,144.46	2,226.37	1,843.95	382.42	5.822	
14,200.00	7,031.62	7,001.62	7,031.62	211.05	242.70	90.27	1,198.07	-9,144.46	2,151.89	1,763.07	388.82	5.534	
14,300.00	7,031.19	7,001.19	7,031.19	213.87	242.69	90.25	1,198.07	-9,144.46	2,079.55	1,684.01	395.54	5.258	
14,400.00	7,030.76	7,000.76	7,030.76	216.70	242.67	90.24	1,198.07	-9,144.46	2,009.58	1,607.01	402.58	4.992	
14,500.00	7,030.32	7,000.32	7,030.32	219.53	242.66	90.22	1,198.07	-9,144.46	1,942.25	1,532.33	409.92	4.738	
14,600.00	7,029.89	7,000.11	7,029.89	222.36	242.65	90.20	1,198.07	-9,144.46	1,877.82	1,460.27	417.55	4.497	
14,700.00	7,029.45	7,000.55	7,029.45	225.19	242.67	90.18	1,198.07	-9,144.46	1,816.62	1,391.17	425.45	4.270	
14,800.00	7,029.02	7,000.98	7,029.02	228.03	242.68	90.17	1,198.07	-9,144.46	1,758.98	1,325.45	433.53	4.057	
14,805.04	7,029.00	7,001.00	7,029.00	228.17	242.68	90.17	1,198.07	-9,144.46	1,756.18	1,322.24	433.94	4.047	CC, ES, SF



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	14.20	1.20	3.28	3.28	3.00	2,244.47	117.64	2,247.55					
100.00	100.00	124.15	111.15	3.28	3.30	2.99	2,244.20	117.26	2,247.29	2,240.71	6.58	341.517		
200.00	200.00	232.85	219.85	3.34	3.37	2.99	2,243.40	117.13	2,246.54	2,239.83	6.71	334.801		
300.00	300.00	330.34	317.33	3.44	3.49	2.99	2,242.55	117.10	2,245.67	2,238.73	6.94	323.645		
400.00	400.00	421.23	408.22	3.60	3.65	2.98	2,242.05	116.56	2,245.09	2,237.84	7.25	309.703		
411.04	411.04	431.12	418.10	3.62	3.66	144.77	2,242.02	116.48	2,245.07	2,237.78	7.29	308.077	CC, ES	
500.00	499.98	511.10	498.09	3.80	3.83	144.76	2,241.97	115.77	2,246.38	2,238.76	7.63	294.536		
600.00	599.90	603.14	590.12	4.02	4.05	144.79	2,242.25	114.89	2,249.89	2,241.82	8.07	278.822		
700.00	699.82	693.58	680.55	4.28	4.29	144.83	2,242.86	114.46	2,253.82	2,245.25	8.56	263.176		
800.00	799.74	813.85	800.82	4.57	4.63	144.90	2,243.39	114.50	2,257.55	2,248.35	9.19	245.522		
900.00	899.66	896.28	883.26	4.88	4.89	144.95	2,243.76	114.67	2,261.27	2,251.51	9.76	231.728		
1,000.00	999.58	1,017.00	1,003.97	5.21	5.28	145.03	2,244.10	115.00	2,264.86	2,254.38	10.48	216.127		
1,100.00	1,099.50	1,112.08	1,099.05	5.55	5.60	145.10	2,244.06	115.48	2,268.13	2,256.99	11.15	203.484		
1,200.00	1,199.42	1,207.35	1,194.32	5.91	5.94	145.17	2,244.16	116.24	2,271.58	2,259.74	11.84	191.895		
1,300.00	1,299.34	1,318.00	1,304.96	6.28	6.34	145.25	2,244.03	116.89	2,274.78	2,262.18	12.60	180.477		
1,400.00	1,399.26	1,412.86	1,399.83	6.66	6.69	145.31	2,243.94	116.97	2,277.99	2,264.66	13.33	170.893		
1,500.00	1,499.18	1,524.69	1,511.65	7.04	7.11	145.38	2,243.58	117.22	2,280.99	2,266.86	14.13	161.384		
1,600.00	1,599.10	1,630.05	1,617.01	7.43	7.51	145.45	2,242.83	117.35	2,283.59	2,268.66	14.93	152.993		
1,700.00	1,699.01	1,731.34	1,718.29	7.83	7.90	145.50	2,242.06	116.93	2,286.11	2,270.40	15.71	145.490		
1,800.00	1,798.93	1,830.79	1,817.75	8.23	8.29	145.53	2,241.20	116.12	2,288.50	2,272.00	16.50	138.681		
1,900.00	1,898.85	1,924.24	1,911.19	8.64	8.66	145.57	2,240.71	115.33	2,291.23	2,273.95	17.27	132.641		
2,000.00	1,998.77	2,030.49	2,017.43	9.05	9.08	145.61	2,239.91	114.53	2,293.73	2,275.63	18.10	126.699		
2,100.00	2,098.69	2,120.30	2,107.23	9.46	9.44	145.63	2,239.47	113.44	2,296.47	2,277.60	18.87	121.683		
2,200.00	2,198.61	2,211.91	2,198.83	9.88	9.81	145.66	2,239.34	112.39	2,299.56	2,279.91	19.65	117.009		
2,300.00	2,298.53	2,293.89	2,280.81	10.30	10.14	145.69	2,239.69	111.72	2,303.26	2,282.86	20.40	112.928		
2,400.00	2,398.45	2,383.27	2,370.19	10.72	10.50	145.71	2,240.66	110.82	2,307.58	2,286.41	21.17	108.990		
2,500.00	2,498.37	2,469.67	2,456.56	11.14	10.85	145.73	2,242.05	109.53	2,312.40	2,290.46	21.94	105.401		
2,600.00	2,598.29	2,557.17	2,544.03	11.56	11.21	145.74	2,243.97	108.23	2,317.81	2,295.10	22.71	102.050		
2,700.00	2,698.21	2,664.29	2,651.10	11.98	11.65	145.76	2,246.63	106.53	2,323.50	2,299.93	23.58	98.557		
2,800.00	2,798.13	2,765.83	2,752.61	12.41	12.07	145.77	2,248.63	104.94	2,328.67	2,304.25	24.42	95.376		
2,900.00	2,898.05	2,871.92	2,858.66	12.84	12.51	145.77	2,250.82	102.83	2,333.92	2,308.64	25.28	92.324		
3,000.00	2,997.97	2,978.15	2,964.84	13.27	12.95	145.77	2,252.60	100.39	2,338.74	2,312.60	26.15	89.447		
3,100.00	3,097.89	3,068.49	3,055.15	13.69	13.33	145.77	2,254.14	98.57	2,343.62	2,316.68	26.94	86.980		
3,200.00	3,197.81	3,171.05	3,157.68	14.12	13.75	145.78	2,256.21	96.68	2,348.83	2,321.03	27.80	84.496		
3,300.00	3,297.73	3,259.47	3,246.06	14.56	14.12	145.79	2,257.91	95.28	2,353.97	2,325.38	28.59	82.337		
3,400.00	3,397.65	3,340.71	3,327.27	14.99	14.46	145.80	2,260.12	94.03	2,359.89	2,330.54	29.35	80.412		
3,500.00	3,497.56	3,438.80	3,425.29	15.42	14.87	145.82	2,263.40	92.95	2,366.47	2,336.28	30.18	78.401		
3,600.00	3,597.48	3,549.67	3,536.13	15.85	15.33	145.87	2,266.30	92.63	2,372.34	2,341.26	31.08	76.326		
3,700.00	3,697.40	3,672.83	3,659.25	16.28	15.85	145.91	2,269.35	91.85	2,378.17	2,346.14	32.04	74.234		
3,800.00	3,797.32	3,777.54	3,763.94	16.72	16.29	145.94	2,270.79	90.86	2,382.78	2,349.88	32.91	72.409		
3,900.00	3,897.24	3,886.99	3,873.37	17.15	16.75	145.96	2,272.30	89.37	2,387.40	2,353.60	33.80	70.632		
4,000.00	3,997.16	4,011.33	3,997.67	17.59	17.27	145.96	2,273.15	88.37	2,391.23	2,356.47	34.76	68.791		
4,100.00	4,097.08	4,109.92	4,096.22	18.02	17.68	145.95	2,273.37	83.63	2,394.58	2,358.97	35.61	67.249		
4,200.00	4,197.00	4,196.78	4,183.05	18.46	18.05	145.94	2,273.79	81.53	2,398.22	2,361.81	36.40	65.879		
4,300.00	4,296.92	4,293.62	4,279.88	18.89	18.46	145.95	2,274.56	79.74	2,402.20	2,364.95	37.24	64.500		
4,400.00	4,396.84	4,378.74	4,364.98	19.33	18.81	145.97	2,275.50	78.57	2,406.52	2,368.49	38.03	63.280		
4,500.00	4,496.76	4,471.58	4,457.80	19.77	19.21	145.99	2,276.97	77.74	2,411.36	2,372.51	38.85	62.066		
4,600.00	4,596.68	4,558.68	4,544.89	20.20	19.57	146.01	2,278.64	76.61	2,416.52	2,376.87	39.65	60.952		
4,700.00	4,696.60	4,663.79	4,649.95	20.64	20.02	146.02	2,281.14	74.83	2,422.10	2,381.57	40.53	59.765		
4,800.00	4,796.52	4,779.44	4,765.56	21.08	20.51	146.03	2,283.10	72.61	2,426.96	2,385.51	41.46	58.542		
4,900.00	4,896.44	4,901.16	4,887.24	21.51	21.02	146.02	2,284.37	69.69	2,431.16	2,388.74	42.41	57.320		
5,000.00	4,996.36	4,986.70	4,972.74	21.95	21.38	146.01	2,285.13	67.32	2,435.17	2,391.96	43.21	56.361		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MONTERA 10-34 (PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,096.28	5,096.68	5,082.67	22.39	21.85	145.99	2,286.26	64.36	2,439.34	2,395.23	44.11	55.300		
5,200.00	5,196.19	5,186.31	5,172.29	22.83	22.23	146.00	2,287.06	62.80	2,443.42	2,398.50	44.92	54.393		
5,300.00	5,296.11	5,279.82	5,265.78	23.27	22.63	146.02	2,288.19	61.66	2,447.87	2,402.12	45.75	53.505		
5,400.00	5,396.03	5,378.66	5,364.61	23.71	23.04	146.05	2,289.54	60.58	2,452.48	2,405.87	46.60	52.624		
5,500.00	5,495.95	5,476.70	5,462.64	24.14	23.46	146.09	2,290.86	60.24	2,457.12	2,409.66	47.45	51.780		
5,600.00	5,595.87	5,564.79	5,550.72	24.58	23.83	146.13	2,292.23	60.13	2,462.00	2,413.74	48.26	51.019		
5,700.00	5,695.79	5,667.98	5,653.89	25.02	24.27	146.19	2,294.17	60.64	2,467.25	2,418.12	49.13	50.217		
5,800.00	5,795.71	5,791.61	5,777.51	25.46	24.79	146.28	2,295.64	61.65	2,471.84	2,421.74	50.10	49.336		
5,900.00	5,895.63	5,905.05	5,890.95	25.90	25.27	146.34	2,296.15	61.78	2,475.64	2,424.62	51.02	48.519		
6,000.00	5,995.55	6,029.01	6,014.90	26.34	25.80	146.39	2,295.73	61.41	2,478.60	2,426.62	51.99	47.676		
6,100.00	6,095.47	6,135.37	6,121.26	26.78	26.25	146.44	2,294.78	60.86	2,481.01	2,428.14	52.87	46.922		
6,200.00	6,195.39	6,234.98	6,220.86	27.22	26.67	146.48	2,293.75	60.35	2,483.29	2,429.56	53.73	46.216		
6,300.00	6,295.31	6,329.22	6,315.10	27.66	27.07	146.51	2,292.95	59.59	2,485.72	2,431.15	54.57	45.553		
6,400.00	6,395.23	6,419.45	6,405.31	28.10	27.45	146.53	2,292.45	58.46	2,488.42	2,433.03	55.39	44.929		
6,500.00	6,495.02	6,500.01	6,485.87	28.54	27.80	110.79	2,292.53	57.32	2,491.96	2,435.80	56.16	44.374		
6,600.00	6,593.09	6,615.63	6,601.47	28.98	28.29	101.72	2,292.68	55.91	2,496.81	2,439.72	57.08	43.739		
6,700.00	6,687.01	6,713.91	6,699.74	29.41	28.71	99.49	2,292.44	54.43	2,502.89	2,444.96	57.93	43.209		
6,800.00	6,774.46	6,806.35	6,792.17	29.83	29.10	98.67	2,292.05	52.93	2,510.81	2,452.07	58.74	42.743		
6,900.00	6,853.31	6,885.38	6,871.19	30.26	29.44	98.20	2,291.66	51.68	2,521.27	2,461.75	59.52	42.360		
7,000.00	6,921.60	6,952.21	6,938.01	30.76	29.72	97.68	2,291.35	50.72	2,534.94	2,474.64	60.30	42.038		
7,100.00	6,977.66	7,006.91	6,992.71	31.38	29.95	96.88	2,291.10	50.23	2,552.40	2,491.27	61.12	41.757		
7,200.00	7,020.10	7,052.18	7,037.98	32.17	30.15	95.68	2,290.86	49.98	2,573.90	2,511.87	62.03	41.493		
7,300.00	7,047.88	7,081.61	7,067.41	33.13	30.27	93.86	2,290.66	49.89	2,599.53	2,536.52	63.00	41.260		
7,400.00	7,060.32	7,094.76	7,080.56	34.27	30.33	91.34	2,290.57	49.86	2,629.04	2,565.02	64.02	41.068		
7,500.00	7,060.70	7,095.31	7,081.10	35.56	30.33	90.38	2,290.56	49.86	2,661.95	2,596.89	65.06	40.914		
7,600.00	7,060.27	7,095.01	7,080.80	37.02	30.33	90.37	2,290.56	49.86	2,698.16	2,631.95	66.20	40.755		
7,700.00	7,059.83	7,094.71	7,080.51	38.64	30.33	90.36	2,290.57	49.86	2,737.54	2,670.12	67.42	40.605		
7,800.00	7,059.40	7,094.42	7,080.22	40.40	30.32	90.36	2,290.57	49.86	2,779.96	2,711.28	68.68	40.477		
7,900.00	7,058.97	7,094.13	7,079.93	42.28	30.32	90.35	2,290.57	49.86	2,825.29	2,755.32	69.97	40.379		
8,000.00	7,058.53	7,093.85	7,079.65	44.27	30.32	90.34	2,290.57	49.87	2,873.38	2,802.11	71.27	40.317		
8,100.00	7,058.10	7,093.57	7,079.37	46.35	30.32	90.34	2,290.57	49.87	2,924.10	2,851.54	72.56	40.297 SF		
8,200.00	7,057.66	7,093.29	7,079.09	48.50	30.32	90.33	2,290.58	49.87	2,977.32	2,903.48	73.84	40.319		
8,300.00	7,057.23	7,093.02	7,078.82	50.73	30.32	90.32	2,290.58	49.87	3,032.90	2,957.80	75.10	40.385		
8,400.00	7,056.80	7,092.75	7,078.55	53.02	30.32	90.32	2,290.58	49.87	3,090.72	3,014.40	76.32	40.495		
8,500.00	7,056.36	7,092.48	7,078.28	55.36	30.32	90.31	2,290.58	49.87	3,150.65	3,073.14	77.51	40.648		
8,600.00	7,055.93	7,092.22	7,078.01	57.74	30.32	90.31	2,290.58	49.87	3,212.58	3,133.92	78.66	40.841		
8,700.00	7,055.49	7,091.96	7,077.75	60.17	30.31	90.30	2,290.59	49.87	3,276.39	3,196.62	79.77	41.074		
8,800.00	7,055.06	7,091.70	7,077.50	62.63	30.31	90.29	2,290.59	49.87	3,341.98	3,261.14	80.83	41.345		
8,900.00	7,054.63	7,091.44	7,077.24	65.13	30.31	90.29	2,290.59	49.87	3,409.23	3,327.38	81.85	41.651		
9,000.00	7,054.19	7,091.19	7,076.99	67.66	30.31	90.28	2,290.59	49.87	3,478.06	3,395.23	82.83	41.990		
9,100.00	7,053.76	7,090.94	7,076.74	70.21	30.31	90.28	2,290.59	49.87	3,548.38	3,464.61	83.77	42.360		
9,200.00	7,053.32	7,090.70	7,076.49	72.78	30.31	90.27	2,290.60	49.87	3,620.09	3,535.43	84.66	42.760		
9,300.00	7,052.89	7,090.45	7,076.25	75.38	30.31	90.27	2,290.60	49.87	3,693.12	3,607.60	85.51	43.188		
9,400.00	7,052.46	7,090.21	7,076.01	77.99	30.31	90.26	2,290.60	49.87	3,767.38	3,681.05	86.33	43.641		
9,500.00	7,052.02	7,089.97	7,075.77	80.62	30.31	90.25	2,290.60	49.87	3,842.81	3,755.71	87.10	44.118		
9,600.00	7,051.59	7,089.74	7,075.54	83.26	30.30	90.25	2,290.60	49.87	3,919.35	3,831.50	87.84	44.617		
9,700.00	7,051.15	7,089.51	7,075.30	85.92	30.30	90.24	2,290.60	49.87	3,996.92	3,908.37	88.55	45.138		
9,800.00	7,050.72	7,089.28	7,075.07	88.59	30.30	90.24	2,290.61	49.87	4,075.46	3,986.24	89.22	45.678		
9,900.00	7,050.29	7,089.05	7,074.85	91.28	30.30	90.23	2,290.61	49.87	4,154.93	4,065.07	89.86	46.236		
10,000.00	7,049.85	7,088.82	7,074.62	93.97	30.30	90.23	2,290.61	49.87	4,235.27	4,144.80	90.48	46.811		
10,100.00	7,049.42	7,088.60	7,074.40	96.67	30.30	90.22	2,290.61	49.87	4,316.43	4,225.37	91.06	47.402		
10,200.00	7,048.98	7,088.38	7,074.18	99.38	30.30	90.22	2,290.61	49.87	4,398.37	4,306.75	91.62	48.008		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - MONTERA 10-34 (PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-GYRO-NS													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,048.55	7,088.16	7,073.96	102.10	30.30	90.21	2,290.61	49.87	4,481.04	4,388.89	92.15	48.628		
10,400.00	7,048.12	7,087.95	7,073.75	104.83	30.30	90.21	2,290.62	49.87	4,564.40	4,471.75	92.66	49.262		
10,500.00	7,047.68	7,087.74	7,073.53	107.56	30.30	90.20	2,290.62	49.88	4,648.42	4,555.28	93.14	49.907		
10,600.00	7,047.25	7,087.52	7,073.32	110.30	30.30	90.20	2,290.62	49.88	4,733.06	4,639.46	93.61	50.564		
10,700.00	7,046.81	7,087.32	7,073.11	113.05	30.29	90.19	2,290.62	49.88	4,818.29	4,724.24	94.05	51.231		
10,800.00	7,046.38	7,087.11	7,072.91	115.80	30.29	90.19	2,290.62	49.88	4,904.08	4,809.61	94.47	51.909		
10,900.00	7,045.95	7,086.91	7,072.70	118.55	30.29	90.18	2,290.62	49.88	4,990.40	4,895.51	94.88	52.596		
11,000.00	7,045.51	7,086.70	7,072.50	121.31	30.29	90.18	2,290.63	49.88	5,077.22	4,981.94	95.27	53.292		
11,100.00	7,045.08	7,086.50	7,072.30	124.08	30.29	90.17	2,290.63	49.88	5,164.51	5,068.87	95.65	53.996		
11,200.00	7,044.64	7,086.31	7,072.10	126.85	30.29	90.17	2,290.63	49.88	5,252.26	5,156.26	96.00	54.708		
11,300.00	7,044.21	7,086.11	7,071.91	129.62	30.29	90.17	2,290.63	49.88	5,340.44	5,244.09	96.35	55.428		
11,400.00	7,043.78	7,085.92	7,071.71	132.40	30.29	90.16	2,290.63	49.88	5,429.03	5,332.35	96.68	56.154		
11,500.00	7,043.34	7,085.72	7,071.52	135.18	30.29	90.16	2,290.63	49.88	5,518.01	5,421.01	97.00	56.887		
11,600.00	7,042.91	7,085.53	7,071.33	137.96	30.29	90.15	2,290.63	49.88	5,607.36	5,510.05	97.31	57.626		
11,700.00	7,042.47	7,085.35	7,071.14	140.75	30.29	90.15	2,290.64	49.88	5,697.06	5,599.46	97.60	58.371		
11,800.00	7,042.04	7,085.16	7,070.96	143.54	30.29	90.14	2,290.64	49.88	5,787.10	5,689.22	97.88	59.122		
11,900.00	7,041.61	7,084.98	7,070.77	146.33	30.28	90.14	2,290.64	49.88	5,877.47	5,779.31	98.16	59.877		
12,000.00	7,041.17	7,084.79	7,070.59	149.13	30.28	90.14	2,290.64	49.88	5,968.14	5,869.72	98.42	60.637		
12,100.00	7,040.74	7,084.61	7,070.41	151.92	30.28	90.13	2,290.64	49.88	6,059.10	5,960.43	98.68	61.402		
12,200.00	7,040.30	7,084.43	7,070.23	154.72	30.28	90.13	2,290.64	49.88	6,150.35	6,051.42	98.93	62.171		
12,300.00	7,039.87	7,084.26	7,070.05	157.52	30.28	90.12	2,290.64	49.88	6,241.86	6,142.70	99.16	62.945		
12,400.00	7,039.44	7,084.08	7,069.88	160.33	30.28	90.12	2,290.64	49.88	6,333.63	6,234.24	99.40	63.722		
12,500.00	7,039.00	7,083.91	7,069.70	163.13	30.28	90.11	2,290.65	49.88	6,425.65	6,326.03	99.62	64.502		
12,600.00	7,038.57	7,083.73	7,069.53	165.94	30.28	90.11	2,290.65	49.88	6,517.90	6,418.07	99.84	65.286		
12,700.00	7,038.13	7,083.56	7,069.36	168.75	30.28	90.11	2,290.65	49.88	6,610.38	6,510.33	100.05	66.074		
12,800.00	7,037.70	7,083.39	7,069.19	171.56	30.28	90.10	2,290.65	49.88	6,703.07	6,602.82	100.25	66.864		
12,900.00	7,037.27	7,083.23	7,069.03	174.37	30.28	90.10	2,290.65	49.88	6,795.97	6,695.52	100.45	67.657		
13,000.00	7,036.83	7,083.06	7,068.86	177.19	30.28	90.10	2,290.65	49.88	6,889.07	6,788.43	100.64	68.453		
13,100.00	7,036.40	7,082.90	7,068.70	180.00	30.28	90.09	2,290.65	49.88	6,982.36	6,881.53	100.83	69.251		
13,200.00	7,035.96	7,082.74	7,068.53	182.82	30.27	90.09	2,290.65	49.89	7,075.83	6,974.82	101.01	70.052		
13,300.00	7,035.53	7,082.57	7,068.37	185.64	30.27	90.08	2,290.66	49.89	7,169.48	7,068.29	101.19	70.855		
13,400.00	7,035.10	7,082.41	7,068.21	188.46	30.27	90.08	2,290.66	49.89	7,263.30	7,161.94	101.36	71.660		
13,500.00	7,034.66	7,082.26	7,068.05	191.28	30.27	90.08	2,290.66	49.89	7,357.28	7,255.75	101.53	72.467		
13,600.00	7,034.23	7,082.10	7,067.90	194.10	30.27	90.07	2,290.66	49.89	7,451.42	7,349.73	101.69	73.276		
13,700.00	7,033.79	7,081.94	7,067.74	196.92	30.27	90.07	2,290.66	49.89	7,545.71	7,443.85	101.85	74.086		
13,800.00	7,033.36	7,081.79	7,067.59	199.74	30.27	90.07	2,290.66	49.89	7,640.14	7,538.13	102.01	74.898		
13,900.00	7,032.93	7,081.64	7,067.44	202.57	30.27	90.06	2,290.66	49.89	7,734.71	7,632.55	102.16	75.712		
14,000.00	7,032.49	7,081.49	7,067.29	205.39	30.27	90.06	2,290.66	49.89	7,829.42	7,727.11	102.31	76.527		
14,100.00	7,032.06	7,081.34	7,067.14	208.22	30.27	90.06	2,290.66	49.89	7,924.26	7,821.80	102.46	77.344		
14,200.00	7,031.62	7,081.19	7,066.99	211.05	30.27	90.05	2,290.67	49.89	8,019.22	7,916.63	102.60	78.161		
14,300.00	7,031.19	7,081.04	7,066.84	213.87	30.27	90.05	2,290.67	49.89	8,114.31	8,011.57	102.74	78.980		
14,400.00	7,030.76	7,080.90	7,066.69	216.70	30.27	90.05	2,290.67	49.89	8,209.51	8,106.63	102.88	79.800		
14,500.00	7,030.32	7,080.75	7,066.55	219.53	30.27	90.04	2,290.67	49.89	8,304.82	8,201.81	103.01	80.621		
14,600.00	7,029.89	7,080.61	7,066.41	222.36	30.27	90.04	2,290.67	49.89	8,400.25	8,297.11	103.14	81.443		
14,700.00	7,029.45	7,080.47	7,066.26	225.19	30.27	90.04	2,290.67	49.89	8,495.78	8,392.50	103.27	82.265		
14,800.00	7,029.02	7,080.33	7,066.12	228.03	30.26	90.03	2,290.67	49.89	8,591.41	8,488.01	103.40	83.089		
14,805.04	7,029.00	7,080.32	7,066.12	228.17	30.26	90.03	2,290.67	49.89	8,596.23	8,492.82	103.41	83.130		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-165.95	-4,179.65	-1,046.25	4,309.03					
100.00	100.00	40.00	100.00	3.28	3.35	-165.95	-4,179.65	-1,046.25	4,308.61	4,301.97	6.64	649.062		
200.00	200.00	140.00	200.00	3.34	4.54	-165.95	-4,179.65	-1,046.25	4,308.61	4,300.73	7.88	546.844		
300.00	300.00	240.00	300.00	3.44	7.40	-165.95	-4,179.65	-1,046.25	4,308.61	4,297.77	10.84	397.309		
400.00	400.00	340.00	400.00	3.60	10.64	-165.95	-4,179.65	-1,046.25	4,308.61	4,294.37	14.25	302.458		
500.00	499.98	439.98	499.98	3.80	14.00	-24.17	-4,179.65	-1,046.25	4,307.02	4,289.22	17.80	241.951		
600.00	599.90	539.90	599.90	4.02	17.41	-24.19	-4,179.65	-1,046.25	4,303.39	4,281.96	21.44	200.748		
700.00	699.82	639.82	699.82	4.28	20.85	-24.22	-4,179.65	-1,046.25	4,299.73	4,274.60	25.13	171.097		
800.00	799.74	739.74	799.74	4.57	24.30	-24.24	-4,179.65	-1,046.25	4,296.07	4,267.21	28.87	148.825		
900.00	899.66	839.66	899.66	4.88	27.76	-24.26	-4,179.65	-1,046.25	4,292.41	4,259.78	32.64	131.526		
1,000.00	999.58	939.58	999.58	5.21	31.23	-24.28	-4,179.65	-1,046.25	4,288.75	4,252.32	36.43	117.728		
1,100.00	1,099.50	1,039.50	1,099.50	5.55	34.70	-24.30	-4,179.65	-1,046.25	4,285.10	4,244.85	40.24	106.480		
1,200.00	1,199.42	1,139.42	1,199.42	5.91	38.17	-24.33	-4,179.65	-1,046.25	4,281.44	4,237.36	44.07	97.144		
1,300.00	1,299.34	1,239.34	1,299.34	6.28	41.65	-24.35	-4,179.65	-1,046.25	4,277.78	4,229.86	47.92	89.277		
1,400.00	1,399.26	1,339.26	1,399.26	6.66	45.13	-24.37	-4,179.65	-1,046.25	4,274.12	4,222.35	51.77	82.560		
1,500.00	1,499.18	1,439.18	1,499.18	7.04	48.61	-24.39	-4,179.65	-1,046.25	4,270.47	4,214.84	55.63	76.762		
1,600.00	1,599.10	1,539.10	1,599.10	7.43	52.09	-24.42	-4,179.65	-1,046.25	4,266.81	4,207.31	59.50	71.708		
1,700.00	1,699.01	1,639.01	1,699.01	7.83	55.57	-24.44	-4,179.65	-1,046.25	4,263.16	4,199.78	63.38	67.265		
1,800.00	1,798.93	1,738.93	1,798.93	8.23	59.05	-24.46	-4,179.65	-1,046.25	4,259.51	4,192.24	67.26	63.328		
1,900.00	1,898.85	1,838.85	1,898.85	8.64	62.54	-24.48	-4,179.65	-1,046.25	4,255.85	4,184.71	71.15	59.818		
2,000.00	1,898.77	1,838.77	1,898.77	9.05	66.02	-24.51	-4,179.65	-1,046.25	4,252.20	4,177.16	75.04	56.668		
2,100.00	2,098.69	2,038.69	2,098.69	9.46	69.50	-24.53	-4,179.65	-1,046.25	4,248.55	4,169.62	78.93	53.826		
2,200.00	2,198.61	2,138.61	2,198.61	9.88	72.99	-24.55	-4,179.65	-1,046.25	4,244.90	4,162.07	82.83	51.250		
2,300.00	2,298.53	2,238.53	2,298.53	10.30	76.47	-24.57	-4,179.65	-1,046.25	4,241.25	4,154.52	86.73	48.903		
2,400.00	2,398.45	2,338.45	2,398.45	10.72	79.96	-24.60	-4,179.65	-1,046.25	4,237.60	4,146.97	90.63	46.758		
2,500.00	2,498.37	2,438.37	2,498.37	11.14	83.44	-24.62	-4,179.65	-1,046.25	4,233.95	4,139.41	94.53	44.788		
2,600.00	2,598.29	2,538.29	2,598.29	11.56	86.93	-24.64	-4,179.65	-1,046.25	4,230.30	4,131.86	98.44	42.974		
2,700.00	2,698.21	2,638.21	2,698.21	11.98	90.41	-24.66	-4,179.65	-1,046.25	4,226.65	4,124.30	102.35	41.298		
2,800.00	2,798.13	2,738.13	2,798.13	12.41	93.90	-24.69	-4,179.65	-1,046.25	4,223.00	4,116.75	106.25	39.744		
2,900.00	2,898.05	2,838.05	2,898.05	12.84	97.39	-24.71	-4,179.65	-1,046.25	4,219.36	4,109.19	110.16	38.300		
3,000.00	2,997.97	2,937.97	2,997.97	13.27	100.87	-24.73	-4,179.65	-1,046.25	4,215.71	4,101.63	114.08	36.955		
3,100.00	3,097.89	3,037.89	3,097.89	13.69	104.36	-24.75	-4,179.65	-1,046.25	4,212.06	4,094.08	117.99	35.699		
3,200.00	3,197.81	3,137.81	3,197.81	14.12	107.85	-24.78	-4,179.65	-1,046.25	4,208.42	4,086.52	121.90	34.523		
3,300.00	3,297.73	3,237.73	3,297.73	14.56	111.33	-24.80	-4,179.65	-1,046.25	4,204.78	4,078.96	125.82	33.420		
3,400.00	3,397.65	3,337.65	3,397.65	14.99	114.82	-24.82	-4,179.65	-1,046.25	4,201.13	4,071.40	129.73	32.383		
3,500.00	3,497.56	3,437.56	3,497.56	15.42	118.31	-24.85	-4,179.65	-1,046.25	4,197.49	4,063.84	133.65	31.407		
3,600.00	3,597.48	3,537.48	3,597.48	15.85	121.79	-24.87	-4,179.65	-1,046.25	4,193.85	4,056.29	137.56	30.487		
3,700.00	3,697.40	3,637.40	3,697.40	16.28	125.28	-24.89	-4,179.65	-1,046.25	4,190.21	4,048.73	141.48	29.617		
3,800.00	3,797.32	3,737.32	3,797.32	16.72	128.77	-24.92	-4,179.65	-1,046.25	4,186.57	4,041.17	145.40	28.794		
3,900.00	3,897.24	3,837.24	3,897.24	17.15	132.25	-24.94	-4,179.65	-1,046.25	4,182.93	4,033.61	149.32	28.014		
4,000.00	3,997.16	3,937.16	3,997.16	17.59	135.74	-24.96	-4,179.65	-1,046.25	4,179.29	4,026.05	153.24	27.274		
4,100.00	4,097.08	4,037.08	4,097.08	18.02	139.23	-24.98	-4,179.65	-1,046.25	4,175.65	4,018.50	157.15	26.570		
4,200.00	4,197.00	4,137.00	4,197.00	18.46	142.72	-25.01	-4,179.65	-1,046.25	4,172.01	4,010.94	161.07	25.901		
4,300.00	4,296.92	4,236.92	4,296.92	18.89	146.20	-25.03	-4,179.65	-1,046.25	4,168.37	4,003.38	164.99	25.264		
4,400.00	4,396.84	4,336.84	4,396.84	19.33	149.69	-25.05	-4,179.65	-1,046.25	4,164.74	3,995.82	168.91	24.656		
4,500.00	4,496.76	4,436.76	4,496.76	19.77	153.18	-25.08	-4,179.65	-1,046.25	4,161.10	3,988.27	172.84	24.076		
4,600.00	4,596.68	4,536.68	4,596.68	20.20	156.66	-25.10	-4,179.65	-1,046.25	4,157.47	3,980.71	176.76	23.521		
4,700.00	4,696.60	4,636.60	4,696.60	20.64	160.15	-25.12	-4,179.65	-1,046.25	4,153.83	3,973.16	180.68	22.990		
4,800.00	4,796.52	4,736.52	4,796.52	21.08	163.64	-25.15	-4,179.65	-1,046.25	4,150.20	3,965.60	184.60	22.482		
4,900.00	4,896.44	4,836.44	4,896.44	21.51	167.13	-25.17	-4,179.65	-1,046.25	4,146.57	3,958.04	188.52	21.995		
5,000.00	4,996.36	4,936.36	4,996.36	21.95	170.61	-25.20	-4,179.65	-1,046.25	4,142.93	3,950.49	192.44	21.528		
5,100.00	5,096.28	5,036.28	5,096.28	22.39	174.10	-25.22	-4,179.65	-1,046.25	4,139.30	3,942.94	196.37	21.080		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,136.19	5,196.19	22.83	177.59	-25.24	-4,179.65	-1,046.25	4,135.67	3,935.38	200.29	20.649	
5,300.00	5,296.11	5,236.11	5,296.11	23.27	181.08	-25.27	-4,179.65	-1,046.25	4,132.04	3,927.83	204.21	20.234	
5,400.00	5,396.03	5,336.03	5,396.03	23.71	184.56	-25.29	-4,179.65	-1,046.25	4,128.41	3,920.28	208.13	19.835	
5,500.00	5,495.95	5,435.95	5,495.95	24.14	188.05	-25.31	-4,179.65	-1,046.25	4,124.78	3,912.73	212.06	19.451	
5,600.00	5,595.87	5,535.87	5,595.87	24.58	191.54	-25.34	-4,179.65	-1,046.25	4,121.16	3,905.17	215.98	19.081	
5,700.00	5,695.79	5,635.79	5,695.79	25.02	195.03	-25.36	-4,179.65	-1,046.25	4,117.53	3,897.62	219.91	18.724	
5,800.00	5,795.71	5,735.71	5,795.71	25.46	198.52	-25.39	-4,179.65	-1,046.25	4,113.90	3,890.07	223.83	18.380	
5,900.00	5,895.63	5,835.63	5,895.63	25.90	202.00	-25.41	-4,179.65	-1,046.25	4,110.28	3,882.52	227.75	18.047	
6,000.00	5,995.55	5,935.55	5,995.55	26.34	205.49	-25.43	-4,179.65	-1,046.25	4,106.65	3,874.97	231.68	17.726	
6,100.00	6,095.47	6,035.47	6,095.47	26.78	208.98	-25.46	-4,179.65	-1,046.25	4,103.03	3,867.43	235.60	17.415	
6,200.00	6,195.39	6,135.39	6,195.39	27.22	212.47	-25.48	-4,179.65	-1,046.25	4,099.40	3,859.88	239.53	17.115	
6,300.00	6,295.31	6,235.31	6,295.31	27.66	215.95	-25.51	-4,179.65	-1,046.25	4,095.78	3,852.33	243.45	16.824	
6,400.00	6,395.23	6,335.23	6,395.23	28.10	219.44	-25.53	-4,179.65	-1,046.25	4,092.16	3,844.78	247.37	16.542	
6,500.00	6,495.02	6,435.02	6,495.02	28.54	222.93	-61.41	-4,179.65	-1,046.25	4,088.01	3,836.72	251.29	16.268	
6,600.00	6,593.09	6,533.09	6,593.09	28.98	226.35	-71.39	-4,179.65	-1,046.25	4,080.83	3,825.68	255.15	15.994	
6,700.00	6,687.01	6,627.01	6,687.01	29.41	229.63	-75.14	-4,179.65	-1,046.25	4,070.60	3,811.75	258.85	15.726	
6,800.00	6,774.46	6,714.46	6,774.46	29.83	232.68	-77.94	-4,179.65	-1,046.25	4,057.94	3,795.61	262.33	15.469	
6,900.00	6,853.31	6,806.69	6,853.31	30.26	235.90	-80.51	-4,179.65	-1,046.25	4,043.60	3,777.61	265.99	15.202	
7,000.00	6,921.60	6,861.60	6,921.60	30.76	237.82	-82.95	-4,179.65	-1,046.25	4,028.50	3,760.07	268.42	15.008	
7,100.00	6,977.66	6,917.66	6,977.66	31.38	239.77	-85.20	-4,179.65	-1,046.25	4,013.56	3,742.55	271.01	14.810	
7,200.00	7,020.10	6,960.10	7,020.10	32.17	241.25	-87.16	-4,179.65	-1,046.25	3,999.70	3,726.42	273.28	14.636	
7,300.00	7,047.88	6,987.88	7,047.88	33.13	242.22	-88.72	-4,179.65	-1,046.25	3,987.73	3,712.51	275.23	14.489	
7,400.00	7,060.32	7,000.32	7,060.32	34.27	242.66	-89.79	-4,179.65	-1,046.25	3,978.27	3,701.45	276.82	14.371	
7,500.00	7,060.70	7,000.70	7,060.70	35.56	242.67	-90.01	-4,179.65	-1,046.25	3,971.59	3,693.44	278.14	14.279	
7,600.00	7,060.27	7,000.27	7,060.27	37.02	242.66	-90.01	-4,179.65	-1,046.25	3,967.44	3,687.82	279.62	14.189	
7,700.00	7,059.83	7,000.17	7,059.83	38.64	242.65	-90.00	-4,179.65	-1,046.25	3,965.81	3,684.54	281.27	14.100	
7,714.61	7,059.77	7,000.23	7,059.77	38.90	242.66	-90.00	-4,179.65	-1,046.25	3,965.78	3,684.25	281.53	14.086 CC	
7,800.00	7,059.40	7,000.60	7,059.40	40.40	242.67	-89.99	-4,179.65	-1,046.25	3,966.70	3,683.64	283.06	14.013 ES	
7,900.00	7,058.97	7,001.03	7,058.97	42.28	242.68	-89.99	-4,179.65	-1,046.25	3,970.12	3,685.15	284.97	13.932	
8,000.00	7,058.53	7,001.47	7,058.53	44.27	242.70	-89.98	-4,179.65	-1,046.25	3,976.04	3,689.08	286.96	13.856	
8,100.00	7,058.10	7,001.90	7,058.10	46.35	242.71	-89.98	-4,179.65	-1,046.25	3,984.47	3,695.45	289.01	13.787	
8,200.00	7,057.66	7,002.34	7,057.66	48.50	242.73	-89.97	-4,179.65	-1,046.25	3,995.38	3,704.26	291.12	13.724	
8,300.00	7,057.23	7,002.77	7,057.23	50.73	242.74	-89.96	-4,179.65	-1,046.25	4,008.76	3,715.50	293.26	13.670	
8,400.00	7,056.80	7,003.20	7,056.80	53.02	242.76	-89.96	-4,179.65	-1,046.25	4,024.57	3,729.16	295.42	13.623	
8,500.00	7,056.36	7,003.64	7,056.36	55.36	242.77	-89.95	-4,179.65	-1,046.25	4,042.81	3,745.22	297.59	13.585	
8,600.00	7,055.93	7,004.07	7,055.93	57.74	242.79	-89.94	-4,179.65	-1,046.25	4,063.42	3,763.66	299.75	13.556	
8,700.00	7,055.49	7,004.51	7,055.49	60.17	242.80	-89.94	-4,179.65	-1,046.25	4,086.37	3,784.46	301.91	13.535	
8,800.00	7,055.06	7,004.94	7,055.06	62.63	242.82	-89.93	-4,179.65	-1,046.25	4,111.63	3,807.59	304.04	13.523	
8,900.00	7,054.63	7,005.37	7,054.63	65.13	242.83	-89.93	-4,179.65	-1,046.25	4,139.15	3,833.00	306.15	13.520 SF	
9,000.00	7,054.19	7,005.81	7,054.19	67.66	242.85	-89.92	-4,179.65	-1,046.25	4,168.89	3,860.67	308.22	13.526	
9,100.00	7,053.76	7,006.24	7,053.76	70.21	242.87	-89.91	-4,179.65	-1,046.25	4,200.80	3,890.54	310.26	13.540	
9,200.00	7,053.32	7,006.68	7,053.32	72.78	242.88	-89.91	-4,179.65	-1,046.25	4,234.83	3,922.58	312.26	13.562	
9,300.00	7,052.89	7,007.11	7,052.89	75.38	242.90	-89.90	-4,179.65	-1,046.25	4,270.93	3,956.73	314.21	13.593	
9,400.00	7,052.46	7,007.54	7,052.46	77.99	242.91	-89.89	-4,179.65	-1,046.25	4,309.05	3,992.95	316.11	13.632	
9,500.00	7,052.02	7,007.98	7,052.02	80.62	242.93	-89.89	-4,179.65	-1,046.25	4,349.14	4,031.18	317.96	13.678	
9,600.00	7,051.59	7,008.41	7,051.59	83.26	242.94	-89.88	-4,179.65	-1,046.25	4,391.14	4,071.38	319.76	13.733	
9,700.00	7,051.15	7,008.85	7,051.15	85.92	242.96	-89.88	-4,179.65	-1,046.25	4,434.99	4,113.49	321.51	13.794	
9,800.00	7,050.72	7,009.28	7,050.72	88.59	242.97	-89.87	-4,179.65	-1,046.25	4,480.65	4,157.45	323.20	13.863	
9,900.00	7,050.29	7,009.71	7,050.29	91.28	242.99	-89.86	-4,179.65	-1,046.25	4,528.06	4,203.22	324.84	13.940	
10,000.00	7,049.85	6,989.85	7,049.85	93.97	242.29	-89.86	-4,179.65	-1,046.25	4,577.16	4,251.45	325.71	14.053	
10,100.00	7,049.42	6,989.42	7,049.42	96.67	242.28	-89.85	-4,179.65	-1,046.25	4,627.90	4,300.69	327.21	14.144	
10,200.00	7,048.98	6,988.98	7,048.98	99.38	242.26	-89.84	-4,179.65	-1,046.25	4,680.23	4,351.57	328.65	14.241	

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.55	6,988.55	7,048.55	102.10	242.25	-89.84	-4,179.65	-1,046.25	4,734.09	4,404.04	330.05	14.344		
10,400.00	7,048.12	6,988.12	7,048.12	104.83	242.23	-89.83	-4,179.65	-1,046.25	4,789.43	4,458.04	331.39	14.453		
10,500.00	7,047.68	6,987.68	7,047.68	107.56	242.22	-89.83	-4,179.65	-1,046.25	4,846.21	4,513.53	332.67	14.567		
10,600.00	7,047.25	6,987.25	7,047.25	110.30	242.20	-89.82	-4,179.65	-1,046.25	4,904.36	4,570.45	333.91	14.688		
10,700.00	7,046.81	6,986.81	7,046.81	113.05	242.19	-89.81	-4,179.65	-1,046.25	4,963.85	4,628.75	335.10	14.813		
10,800.00	7,046.38	6,986.38	7,046.38	115.80	242.17	-89.81	-4,179.65	-1,046.25	5,024.63	4,688.39	336.24	14.943		
10,900.00	7,045.95	6,985.95	7,045.95	118.55	242.16	-89.80	-4,179.65	-1,046.25	5,086.65	4,749.31	337.34	15.079		
11,000.00	7,045.51	6,985.51	7,045.51	121.31	242.14	-89.79	-4,179.65	-1,046.25	5,149.86	4,811.47	338.39	15.219		
11,100.00	7,045.08	6,985.08	7,045.08	124.08	242.13	-89.79	-4,179.65	-1,046.25	5,214.22	4,874.82	339.40	15.363		
11,200.00	7,044.64	6,984.64	7,044.64	126.85	242.11	-89.78	-4,179.65	-1,046.25	5,279.70	4,939.33	340.37	15.512		
11,300.00	7,044.21	6,984.21	7,044.21	129.62	242.10	-89.78	-4,179.65	-1,046.25	5,346.24	5,004.95	341.29	15.665		
11,400.00	7,043.78	6,983.78	7,043.78	132.40	242.08	-89.77	-4,179.65	-1,046.25	5,413.81	5,071.63	342.18	15.822		
11,500.00	7,043.34	6,983.34	7,043.34	135.18	242.07	-89.76	-4,179.65	-1,046.25	5,482.37	5,139.34	343.03	15.982		
11,600.00	7,042.91	6,982.91	7,042.91	137.96	242.05	-89.76	-4,179.65	-1,046.25	5,551.89	5,208.04	343.84	16.147		
11,700.00	7,042.47	6,982.47	7,042.47	140.75	242.04	-89.75	-4,179.65	-1,046.25	5,622.32	5,277.70	344.62	16.314		
11,800.00	7,042.04	6,982.04	7,042.04	143.54	242.02	-89.74	-4,179.65	-1,046.25	5,693.64	5,348.27	345.37	16.486		
11,900.00	7,041.61	6,981.61	7,041.61	146.33	242.01	-89.74	-4,179.65	-1,046.25	5,765.82	5,419.73	346.08	16.660		
12,000.00	7,041.17	6,981.17	7,041.17	149.13	241.99	-89.73	-4,179.65	-1,046.25	5,838.81	5,492.04	346.77	16.838		
12,100.00	7,040.74	6,980.74	7,040.74	151.92	241.97	-89.73	-4,179.65	-1,046.25	5,912.59	5,565.17	347.42	17.018		
12,200.00	7,040.30	6,980.30	7,040.30	154.72	241.96	-89.72	-4,179.65	-1,046.25	5,987.14	5,639.09	348.05	17.202		
12,300.00	7,039.87	6,979.87	7,039.87	157.52	241.94	-89.71	-4,179.65	-1,046.25	6,062.42	5,713.76	348.65	17.388		
12,400.00	7,039.44	6,979.44	7,039.44	160.33	241.93	-89.71	-4,179.65	-1,046.25	6,138.40	5,789.17	349.23	17.577		
12,500.00	7,039.00	6,979.00	7,039.00	163.13	241.91	-89.70	-4,179.65	-1,046.25	6,215.06	5,865.28	349.78	17.768		
12,600.00	7,038.57	6,978.57	7,038.57	165.94	241.90	-89.69	-4,179.65	-1,046.25	6,292.38	5,942.07	350.31	17.962		
12,700.00	7,038.13	6,978.13	7,038.13	168.75	241.88	-89.69	-4,179.65	-1,046.25	6,370.33	6,019.52	350.82	18.159		
12,800.00	7,037.70	6,977.70	7,037.70	171.56	241.87	-89.68	-4,179.65	-1,046.25	6,448.89	6,097.59	351.30	18.357		
12,900.00	7,037.27	6,977.27	7,037.27	174.37	241.85	-89.67	-4,179.65	-1,046.25	6,528.04	6,176.27	351.77	18.558		
13,000.00	7,036.83	6,976.83	7,036.83	177.19	241.84	-89.67	-4,179.65	-1,046.25	6,607.75	6,255.53	352.21	18.761		
13,100.00	7,036.40	6,976.40	7,036.40	180.00	241.82	-89.66	-4,179.65	-1,046.25	6,688.00	6,335.36	352.64	18.966		
13,200.00	7,035.96	6,975.96	7,035.96	182.82	241.81	-89.66	-4,179.65	-1,046.25	6,768.78	6,415.73	353.05	19.172		
13,300.00	7,035.53	6,975.53	7,035.53	185.64	241.79	-89.65	-4,179.65	-1,046.25	6,850.07	6,496.63	353.44	19.381		
13,400.00	7,035.10	6,975.10	7,035.10	188.46	241.78	-89.64	-4,179.65	-1,046.25	6,931.85	6,578.03	353.82	19.591		
13,500.00	7,034.66	6,974.66	7,034.66	191.28	241.76	-89.64	-4,179.65	-1,046.25	7,014.10	6,659.92	354.18	19.804		
13,600.00	7,034.23	6,974.23	7,034.23	194.10	241.75	-89.63	-4,179.65	-1,046.25	7,096.81	6,742.28	354.53	20.018		
13,700.00	7,033.79	6,973.79	7,033.79	196.92	241.73	-89.62	-4,179.65	-1,046.25	7,179.95	6,825.09	354.86	20.233		
13,800.00	7,033.36	6,973.36	7,033.36	199.74	241.72	-89.62	-4,179.65	-1,046.25	7,263.52	6,908.34	355.18	20.450		
13,900.00	7,032.93	6,972.93	7,032.93	202.57	241.70	-89.61	-4,179.65	-1,046.25	7,347.50	6,992.02	355.49	20.669		
14,000.00	7,032.49	6,972.49	7,032.49	205.39	241.69	-89.61	-4,179.65	-1,046.25	7,431.88	7,076.10	355.78	20.889		
14,100.00	7,032.06	6,972.06	7,032.06	208.22	241.67	-89.60	-4,179.65	-1,046.25	7,516.64	7,160.57	356.07	21.110		
14,200.00	7,031.62	6,971.62	7,031.62	211.05	241.66	-89.59	-4,179.65	-1,046.25	7,601.78	7,245.43	356.34	21.333		
14,300.00	7,031.19	6,971.19	7,031.19	213.87	241.64	-89.59	-4,179.65	-1,046.25	7,687.26	7,330.66	356.60	21.557		
14,400.00	7,030.76	6,970.76	7,030.76	216.70	241.63	-89.58	-4,179.65	-1,046.25	7,773.10	7,416.24	356.86	21.782		
14,500.00	7,030.32	6,970.32	7,030.32	219.53	241.61	-89.57	-4,179.65	-1,046.25	7,859.27	7,502.17	357.10	22.009		
14,600.00	7,029.89	6,969.89	7,029.89	222.36	241.60	-89.57	-4,179.65	-1,046.25	7,945.77	7,588.43	357.33	22.236		
14,700.00	7,029.45	6,969.45	7,029.45	225.19	241.58	-89.56	-4,179.65	-1,046.25	8,032.57	7,675.02	357.56	22.465		
14,800.00	7,029.02	6,969.02	7,029.02	228.03	241.57	-89.56	-4,179.65	-1,046.25	8,119.69	7,761.91	357.77	22.695		
14,805.04	7,029.00	6,969.00	7,029.00	228.17	241.56	-89.56	-4,179.65	-1,046.25	8,124.08	7,766.30	357.79	22.707		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-43.82	1,210.97	-1,162.28	1,678.50					
100.00	100.00	105.00	100.00	3.28	3.80	-43.82	1,210.97	-1,162.28	1,678.50	1,671.41	7.09	236.897		
200.00	200.00	205.00	200.00	3.34	6.33	-43.82	1,210.97	-1,162.28	1,678.50	1,668.83	9.66	173.675		
300.00	300.00	305.00	300.00	3.44	9.49	-43.82	1,210.97	-1,162.28	1,678.50	1,665.57	12.93	129.794		
400.00	400.00	405.00	400.00	3.60	12.82	-43.82	1,210.97	-1,162.28	1,678.50	1,662.08	16.42	102.204		
500.00	499.98	505.02	499.98	3.80	16.22	98.03	1,210.97	-1,162.28	1,678.74	1,658.73	20.02	83.867		
600.00	599.90	605.10	599.90	4.02	19.65	98.16	1,210.97	-1,162.28	1,679.30	1,655.63	23.68	70.931		
700.00	699.82	705.18	699.82	4.28	23.11	98.30	1,210.97	-1,162.28	1,679.88	1,652.49	27.39	61.341		
800.00	799.74	805.26	799.74	4.57	26.57	98.43	1,210.97	-1,162.28	1,680.46	1,649.33	31.14	53.972		
900.00	899.66	905.34	899.66	4.88	30.04	98.57	1,210.97	-1,162.28	1,681.06	1,646.14	34.92	48.146		
1,000.00	999.58	1,005.42	999.58	5.21	33.51	98.70	1,210.97	-1,162.28	1,681.66	1,642.94	38.72	43.431		
1,100.00	1,099.50	1,105.50	1,099.50	5.55	36.99	98.84	1,210.97	-1,162.28	1,682.27	1,639.73	42.54	39.542		
1,200.00	1,199.42	1,205.58	1,199.42	5.91	40.47	98.97	1,210.97	-1,162.28	1,682.89	1,636.51	46.38	36.282		
1,300.00	1,299.34	1,305.66	1,299.34	6.28	43.96	99.11	1,210.97	-1,162.28	1,683.52	1,633.29	50.24	33.512		
1,400.00	1,399.26	1,405.74	1,399.26	6.66	47.44	99.24	1,210.97	-1,162.28	1,684.16	1,630.07	54.10	31.131		
1,500.00	1,499.18	1,505.82	1,499.18	7.04	50.93	99.38	1,210.97	-1,162.28	1,684.81	1,626.84	57.97	29.063		
1,600.00	1,599.10	1,605.91	1,599.10	7.43	54.42	99.51	1,210.97	-1,162.28	1,685.47	1,623.62	61.85	27.251		
1,700.00	1,699.01	1,705.99	1,699.01	7.83	57.90	99.65	1,210.97	-1,162.28	1,686.14	1,620.41	65.73	25.651		
1,800.00	1,798.93	1,806.07	1,798.93	8.23	61.39	99.78	1,210.97	-1,162.28	1,686.82	1,617.19	69.62	24.227		
1,900.00	1,898.85	1,906.15	1,898.85	8.64	64.88	99.91	1,210.97	-1,162.28	1,687.51	1,613.99	73.52	22.953		
2,000.00	1,998.77	2,006.23	1,998.77	9.05	68.37	100.05	1,210.97	-1,162.28	1,688.20	1,610.78	77.42	21.806		
2,100.00	2,098.69	2,106.31	2,098.69	9.46	71.86	100.18	1,210.97	-1,162.28	1,688.91	1,607.59	81.32	20.768		
2,200.00	2,198.61	2,206.39	2,198.61	9.88	75.35	100.32	1,210.97	-1,162.28	1,689.62	1,604.40	85.23	19.825		
2,300.00	2,298.53	2,306.47	2,298.53	10.30	78.84	100.45	1,210.97	-1,162.28	1,690.35	1,601.21	89.13	18.964		
2,400.00	2,398.45	2,406.55	2,398.45	10.72	82.33	100.58	1,210.97	-1,162.28	1,691.08	1,598.03	93.04	18.175		
2,500.00	2,498.37	2,506.63	2,498.37	11.14	85.82	100.72	1,210.97	-1,162.28	1,691.82	1,594.86	96.96	17.449		
2,600.00	2,598.29	2,606.71	2,598.29	11.56	89.32	100.85	1,210.97	-1,162.28	1,692.57	1,591.70	100.87	16.780		
2,700.00	2,698.21	2,706.79	2,698.21	11.98	92.81	100.98	1,210.97	-1,162.28	1,693.33	1,588.55	104.79	16.160		
2,800.00	2,798.13	2,806.87	2,798.13	12.41	96.30	101.12	1,210.97	-1,162.28	1,694.10	1,585.40	108.70	15.585		
2,900.00	2,898.05	2,906.95	2,898.05	12.84	99.79	101.25	1,210.97	-1,162.28	1,694.88	1,582.26	112.62	15.049		
3,000.00	2,997.97	3,007.03	2,997.97	13.27	103.28	101.38	1,210.97	-1,162.28	1,695.67	1,579.13	116.54	14.550		
3,100.00	3,097.89	3,107.11	3,097.89	13.69	106.77	101.52	1,210.97	-1,162.28	1,696.47	1,576.01	120.46	14.083		
3,200.00	3,197.81	3,207.19	3,197.81	14.12	110.27	101.65	1,210.97	-1,162.28	1,697.27	1,572.89	124.38	13.645		
3,300.00	3,297.73	3,307.27	3,297.73	14.56	113.76	101.78	1,210.97	-1,162.28	1,698.09	1,569.78	128.31	13.235		
3,400.00	3,397.65	3,407.36	3,397.65	14.99	117.25	101.91	1,210.97	-1,162.28	1,698.91	1,566.68	132.23	12.848		
3,500.00	3,497.56	3,507.44	3,497.56	15.42	120.74	102.05	1,210.97	-1,162.28	1,699.75	1,563.59	136.15	12.484		
3,600.00	3,597.48	3,607.52	3,597.48	15.85	124.24	102.18	1,210.97	-1,162.28	1,700.59	1,560.51	140.08	12.140		
3,700.00	3,697.40	3,707.60	3,697.40	16.28	127.73	102.31	1,210.97	-1,162.28	1,701.44	1,557.44	144.00	11.815		
3,800.00	3,797.32	3,807.68	3,797.32	16.72	131.22	102.44	1,210.97	-1,162.28	1,702.30	1,554.37	147.93	11.508		
3,900.00	3,897.24	3,907.76	3,897.24	17.15	134.71	102.57	1,210.97	-1,162.28	1,703.17	1,551.32	151.86	11.216		
4,000.00	3,997.16	4,007.84	3,997.16	17.59	138.21	102.70	1,210.97	-1,162.28	1,704.05	1,548.27	155.78	10.939		
4,100.00	4,097.08	4,107.92	4,097.08	18.02	141.70	102.84	1,210.97	-1,162.28	1,704.94	1,545.23	159.71	10.675		
4,200.00	4,197.00	4,208.00	4,197.00	18.46	145.19	102.97	1,210.97	-1,162.28	1,705.84	1,542.20	163.64	10.424		
4,300.00	4,296.92	4,308.08	4,296.92	18.89	148.69	103.10	1,210.97	-1,162.28	1,706.74	1,539.18	167.57	10.186		
4,400.00	4,396.84	4,408.16	4,396.84	19.33	152.18	103.23	1,210.97	-1,162.28	1,707.66	1,536.16	171.49	9.958		
4,500.00	4,496.76	4,508.24	4,496.76	19.77	155.67	103.36	1,210.97	-1,162.28	1,708.58	1,533.16	175.42	9.740		
4,600.00	4,596.68	4,608.32	4,596.68	20.20	159.17	103.49	1,210.97	-1,162.28	1,709.51	1,530.16	179.35	9.532		
4,700.00	4,696.60	4,708.40	4,696.60	20.64	162.66	103.62	1,210.97	-1,162.28	1,710.45	1,527.17	183.28	9.332		
4,800.00	4,796.52	4,808.48	4,796.52	21.08	166.15	103.75	1,210.97	-1,162.28	1,711.40	1,524.19	187.21	9.142		
4,900.00	4,896.44	4,908.56	4,896.44	21.51	169.64	103.88	1,210.97	-1,162.28	1,712.36	1,521.22	191.14	8.959		
5,000.00	4,996.36	5,008.64	4,996.36	21.95	173.14	104.01	1,210.97	-1,162.28	1,713.33	1,518.26	195.07	8.783		
5,100.00	5,096.28	5,108.72	5,096.28	22.39	176.63	104.14	1,210.97	-1,162.28	1,714.31	1,515.31	199.00	8.615		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,208.81	5,196.19	22.83	180.12	104.27	1,210.97	-1,162.28	1,715.29	1,512.36	202.93	8.453	
5,300.00	5,296.11	5,308.89	5,296.11	23.27	183.62	104.40	1,210.97	-1,162.28	1,716.29	1,509.43	206.86	8.297	
5,400.00	5,396.03	5,408.97	5,396.03	23.71	187.11	104.53	1,210.97	-1,162.28	1,717.29	1,506.50	210.79	8.147	
5,500.00	5,495.95	5,509.05	5,495.95	24.14	190.60	104.66	1,210.97	-1,162.28	1,718.30	1,503.58	214.73	8.002	
5,600.00	5,595.87	5,609.13	5,595.87	24.58	194.10	104.79	1,210.97	-1,162.28	1,719.32	1,500.67	218.66	7.863	
5,700.00	5,695.79	5,709.21	5,695.79	25.02	197.59	104.92	1,210.97	-1,162.28	1,720.35	1,497.77	222.59	7.729	
5,800.00	5,795.71	5,809.29	5,795.71	25.46	201.08	105.05	1,210.97	-1,162.28	1,721.39	1,494.87	226.52	7.599	
5,900.00	5,895.63	5,909.37	5,895.63	25.90	204.58	105.18	1,210.97	-1,162.28	1,722.44	1,491.99	230.45	7.474	
6,000.00	5,995.55	6,009.45	5,995.55	26.34	208.07	105.31	1,210.97	-1,162.28	1,723.50	1,489.11	234.38	7.353	
6,100.00	6,095.47	6,109.53	6,095.47	26.78	211.56	105.44	1,210.97	-1,162.28	1,724.56	1,486.24	238.32	7.236	
6,200.00	6,195.39	6,209.61	6,195.39	27.22	215.06	105.56	1,210.97	-1,162.28	1,725.63	1,483.39	242.25	7.123	
6,300.00	6,295.31	6,309.69	6,295.31	27.66	218.55	105.69	1,210.97	-1,162.28	1,726.72	1,480.54	246.18	7.014	
6,400.00	6,395.23	6,409.77	6,395.23	28.10	222.04	105.82	1,210.97	-1,162.28	1,727.81	1,477.69	250.11	6.908	
6,500.00	6,495.02	6,509.98	6,495.02	28.54	225.54	70.46	1,210.97	-1,162.28	1,727.55	1,473.50	254.05	6.800	
6,600.00	6,593.09	6,588.09	6,593.09	28.98	228.27	62.54	1,210.97	-1,162.28	1,719.25	1,462.03	257.21	6.684	
6,700.00	6,687.01	6,682.01	6,687.01	29.41	231.55	62.37	1,210.97	-1,162.28	1,702.54	1,441.61	260.93	6.525	
6,800.00	6,774.46	6,769.46	6,774.46	29.83	234.60	64.52	1,210.97	-1,162.28	1,678.48	1,414.07	264.41	6.348	
6,900.00	6,853.31	6,848.31	6,853.31	30.26	237.35	68.04	1,210.97	-1,162.28	1,648.54	1,380.94	267.61	6.160	
7,000.00	6,921.60	6,916.60	6,921.60	30.76	239.74	72.43	1,210.97	-1,162.28	1,614.55	1,344.07	270.49	5.969	
7,100.00	6,977.66	6,972.66	6,977.66	31.38	241.69	77.22	1,210.97	-1,162.28	1,578.58	1,305.54	273.04	5.781	
7,200.00	7,020.10	7,015.10	7,020.10	32.17	243.17	81.92	1,210.97	-1,162.28	1,542.81	1,267.54	275.27	5.605	
7,300.00	7,047.88	7,042.88	7,047.88	33.13	244.14	86.05	1,210.97	-1,162.28	1,509.34	1,232.16	277.18	5.445	
7,400.00	7,060.32	7,055.32	7,060.32	34.27	244.58	89.26	1,210.97	-1,162.28	1,480.03	1,201.27	278.75	5.309	
7,500.00	7,060.70	7,055.70	7,060.70	35.56	244.59	90.05	1,210.97	-1,162.28	1,456.33	1,176.25	280.08	5.200	
7,600.00	7,060.27	7,055.27	7,060.27	37.02	244.58	90.03	1,210.97	-1,162.28	1,439.17	1,157.60	281.57	5.111	
7,700.00	7,059.83	7,054.83	7,059.83	38.64	244.56	90.02	1,210.97	-1,162.28	1,428.83	1,145.62	283.20	5.045	
7,798.36	7,059.41	7,054.41	7,059.41	40.37	244.55	90.00	1,210.97	-1,162.28	1,425.44	1,140.54	284.90	5.003 CC	
7,800.00	7,059.40	7,054.40	7,059.40	40.40	244.55	90.00	1,210.97	-1,162.28	1,425.44	1,140.51	284.93	5.003 ES	
7,900.00	7,058.97	7,053.97	7,058.97	42.28	244.53	89.98	1,210.97	-1,162.28	1,429.06	1,142.38	286.68	4.985 SF	
8,000.00	7,058.53	7,053.53	7,058.53	44.27	244.52	89.96	1,210.97	-1,162.28	1,439.63	1,151.22	288.41	4.992	
8,100.00	7,058.10	7,053.10	7,058.10	46.35	244.50	89.95	1,210.97	-1,162.28	1,457.01	1,166.92	290.08	5.023	
8,200.00	7,057.66	7,052.66	7,057.66	48.50	244.49	89.93	1,210.97	-1,162.28	1,480.94	1,189.30	291.65	5.078	
8,300.00	7,057.23	7,052.23	7,057.23	50.73	244.47	89.91	1,210.97	-1,162.28	1,511.13	1,218.05	293.08	5.156	
8,400.00	7,056.80	7,051.80	7,056.80	53.02	244.46	89.90	1,210.97	-1,162.28	1,547.21	1,252.83	294.37	5.256	
8,500.00	7,056.36	7,051.36	7,056.36	55.36	244.44	89.88	1,210.97	-1,162.28	1,588.76	1,293.25	295.52	5.376	
8,600.00	7,055.93	7,050.93	7,055.93	57.74	244.42	89.86	1,210.97	-1,162.28	1,635.39	1,338.87	296.52	5.515	
8,700.00	7,055.49	7,050.49	7,055.49	60.17	244.41	89.84	1,210.97	-1,162.28	1,686.66	1,389.29	297.37	5.672	
8,800.00	7,055.06	7,050.06	7,055.06	62.63	244.39	89.83	1,210.97	-1,162.28	1,742.17	1,444.07	298.10	5.844	
8,900.00	7,054.63	7,049.63	7,054.63	65.13	244.38	89.81	1,210.97	-1,162.28	1,801.52	1,502.81	298.71	6.031	
9,000.00	7,054.19	7,049.19	7,054.19	67.66	244.36	89.79	1,210.97	-1,162.28	1,864.35	1,565.14	299.21	6.231	
9,100.00	7,053.76	7,048.76	7,053.76	70.21	244.35	89.77	1,210.97	-1,162.28	1,930.32	1,630.69	299.63	6.442	
9,200.00	7,053.32	7,048.32	7,053.32	72.78	244.33	89.76	1,210.97	-1,162.28	1,999.11	1,699.15	299.96	6.665	
9,300.00	7,052.89	7,047.89	7,052.89	75.38	244.32	89.74	1,210.97	-1,162.28	2,070.45	1,770.22	300.23	6.896	
9,400.00	7,052.46	7,047.46	7,052.46	77.99	244.30	89.72	1,210.97	-1,162.28	2,144.08	1,843.65	300.44	7.137	
9,500.00	7,052.02	7,047.02	7,052.02	80.62	244.29	89.70	1,210.97	-1,162.28	2,219.78	1,919.18	300.60	7.385	
9,600.00	7,051.59	7,046.59	7,051.59	83.26	244.27	89.69	1,210.97	-1,162.28	2,297.33	1,996.62	300.72	7.639	
9,700.00	7,051.15	7,046.15	7,051.15	85.92	244.26	89.67	1,210.97	-1,162.28	2,376.57	2,075.76	300.80	7.901	
9,800.00	7,050.72	7,045.72	7,050.72	88.59	244.24	89.65	1,210.97	-1,162.28	2,457.31	2,156.45	300.86	8.168	
9,900.00	7,050.29	7,045.29	7,050.29	91.28	244.23	89.63	1,210.97	-1,162.28	2,539.43	2,238.54	300.89	8.440	
10,000.00	7,049.85	7,044.85	7,049.85	93.97	244.21	89.62	1,210.97	-1,162.28	2,622.79	2,321.89	300.90	8.716	
10,100.00	7,049.42	7,044.42	7,049.42	96.67	244.20	89.60	1,210.97	-1,162.28	2,707.28	2,406.38	300.90	8.997	
10,200.00	7,048.98	7,043.98	7,048.98	99.38	244.18	89.58	1,210.97	-1,162.28	2,792.79	2,491.90	300.88	9.282	

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.55	7,043.55	7,048.55	102.10	244.17	89.56	1,210.97	-1,162.28	2,879.23	2,578.38	300.86	9.570		
10,400.00	7,048.12	7,043.12	7,048.12	104.83	244.15	89.55	1,210.97	-1,162.28	2,966.53	2,665.71	300.82	9.861		
10,500.00	7,047.68	7,042.68	7,047.68	107.56	244.14	89.53	1,210.97	-1,162.28	3,054.61	2,753.83	300.78	10.156		
10,600.00	7,047.25	7,042.25	7,047.25	110.30	244.12	89.51	1,210.97	-1,162.28	3,143.40	2,842.66	300.73	10.452		
10,700.00	7,046.81	7,041.81	7,046.81	113.05	244.11	89.49	1,210.97	-1,162.28	3,232.84	2,932.16	300.68	10.752		
10,800.00	7,046.38	7,041.38	7,046.38	115.80	244.09	89.48	1,210.97	-1,162.28	3,322.89	3,022.26	300.63	11.053		
10,900.00	7,045.95	7,040.95	7,045.95	118.55	244.08	89.46	1,210.97	-1,162.28	3,413.49	3,112.92	300.57	11.357		
11,000.00	7,045.51	7,040.51	7,045.51	121.31	244.06	89.44	1,210.97	-1,162.28	3,504.60	3,204.08	300.51	11.662		
11,100.00	7,045.08	7,040.08	7,045.08	124.08	244.05	89.42	1,210.97	-1,162.28	3,596.18	3,295.73	300.46	11.969		
11,200.00	7,044.64	7,039.64	7,044.64	126.85	244.03	89.41	1,210.97	-1,162.28	3,688.20	3,387.81	300.40	12.278		
11,300.00	7,044.21	7,039.21	7,044.21	129.62	244.02	89.39	1,210.97	-1,162.28	3,780.63	3,480.29	300.34	12.588		
11,400.00	7,043.78	7,038.78	7,043.78	132.40	244.00	89.37	1,210.97	-1,162.28	3,873.43	3,573.15	300.28	12.899		
11,500.00	7,043.34	7,038.34	7,043.34	135.18	243.99	89.35	1,210.97	-1,162.28	3,966.58	3,666.36	300.22	13.212		
11,600.00	7,042.91	7,037.91	7,042.91	137.96	243.97	89.34	1,210.97	-1,162.28	4,060.06	3,759.89	300.17	13.526		
11,700.00	7,042.47	7,037.47	7,042.47	140.75	243.96	89.32	1,210.97	-1,162.28	4,153.84	3,853.73	300.11	13.841		
11,800.00	7,042.04	7,037.04	7,042.04	143.54	243.94	89.30	1,210.97	-1,162.28	4,247.91	3,947.85	300.06	14.157		
11,900.00	7,041.61	7,036.61	7,041.61	146.33	243.92	89.28	1,210.97	-1,162.28	4,342.24	4,042.23	300.01	14.474		
12,000.00	7,041.17	7,036.17	7,041.17	149.13	243.91	89.27	1,210.97	-1,162.28	4,436.82	4,136.86	299.96	14.791		
12,100.00	7,040.74	7,035.74	7,040.74	151.92	243.89	89.25	1,210.97	-1,162.28	4,531.63	4,231.72	299.91	15.110		
12,200.00	7,040.30	7,035.30	7,040.30	154.72	243.88	89.23	1,210.97	-1,162.28	4,626.66	4,326.80	299.86	15.429		
12,300.00	7,039.87	7,034.87	7,039.87	157.52	243.86	89.21	1,210.97	-1,162.28	4,721.90	4,422.08	299.82	15.749		
12,400.00	7,039.44	7,034.44	7,039.44	160.33	243.85	89.20	1,210.97	-1,162.28	4,817.32	4,517.55	299.77	16.070		
12,500.00	7,039.00	7,034.00	7,039.00	163.13	243.83	89.18	1,210.97	-1,162.28	4,912.93	4,613.20	299.73	16.391		
12,600.00	7,038.57	7,033.57	7,038.57	165.94	243.82	89.16	1,210.97	-1,162.28	5,008.72	4,709.02	299.69	16.713		
12,700.00	7,038.13	7,033.13	7,038.13	168.75	243.80	89.15	1,210.97	-1,162.28	5,104.66	4,805.00	299.66	17.035		
12,800.00	7,037.70	7,032.70	7,037.70	171.56	243.79	89.13	1,210.97	-1,162.28	5,200.76	4,901.13	299.62	17.358		
12,900.00	7,037.27	7,032.27	7,037.27	174.37	243.77	89.11	1,210.97	-1,162.28	5,297.00	4,997.41	299.59	17.681		
13,000.00	7,036.83	7,031.83	7,036.83	177.19	243.76	89.09	1,210.97	-1,162.28	5,393.37	5,093.82	299.56	18.005		
13,100.00	7,036.40	7,031.40	7,036.40	180.00	243.74	89.08	1,210.97	-1,162.28	5,489.88	5,190.35	299.53	18.329		
13,200.00	7,035.96	7,030.96	7,035.96	182.82	243.73	89.06	1,210.97	-1,162.28	5,586.51	5,287.01	299.50	18.653		
13,300.00	7,035.53	7,030.53	7,035.53	185.64	243.71	89.04	1,210.97	-1,162.28	5,683.26	5,383.79	299.47	18.978		
13,400.00	7,035.10	7,030.10	7,035.10	188.46	243.70	89.02	1,210.97	-1,162.28	5,780.11	5,480.67	299.45	19.303		
13,500.00	7,034.66	7,029.66	7,034.66	191.28	243.68	89.01	1,210.97	-1,162.28	5,877.08	5,577.65	299.42	19.628		
13,600.00	7,034.23	7,029.23	7,034.23	194.10	243.67	88.99	1,210.97	-1,162.28	5,974.14	5,674.73	299.40	19.953		
13,700.00	7,033.79	7,028.79	7,033.79	196.92	243.65	88.97	1,210.97	-1,162.28	6,071.30	5,771.91	299.38	20.279		
13,800.00	7,033.36	7,028.36	7,033.36	199.74	243.64	88.95	1,210.97	-1,162.28	6,168.54	5,869.18	299.37	20.605		
13,900.00	7,032.93	7,027.93	7,032.93	202.57	243.62	88.94	1,210.97	-1,162.28	6,265.88	5,966.53	299.35	20.932		
14,000.00	7,032.49	7,027.49	7,032.49	205.39	243.61	88.92	1,210.97	-1,162.28	6,363.30	6,063.96	299.34	21.258		
14,100.00	7,032.06	7,027.06	7,032.06	208.22	243.59	88.90	1,210.97	-1,162.28	6,460.79	6,161.47	299.33	21.585		
14,200.00	7,031.62	7,026.62	7,031.62	211.05	243.58	88.88	1,210.97	-1,162.28	6,558.37	6,259.05	299.31	21.911		
14,300.00	7,031.19	7,026.19	7,031.19	213.87	243.56	88.87	1,210.97	-1,162.28	6,656.01	6,356.70	299.31	22.238		
14,400.00	7,030.76	7,025.76	7,030.76	216.70	243.55	88.85	1,210.97	-1,162.28	6,753.72	6,454.43	299.30	22.565		
14,500.00	7,030.32	7,025.32	7,030.32	219.53	243.53	88.83	1,210.97	-1,162.28	6,851.50	6,552.21	299.29	22.892		
14,600.00	7,029.89	7,024.89	7,029.89	222.36	243.52	88.81	1,210.97	-1,162.28	6,949.34	6,650.06	299.29	23.220		
14,700.00	7,029.45	7,024.45	7,029.45	225.19	243.50	88.80	1,210.97	-1,162.28	7,047.25	6,747.96	299.28	23.547		
14,800.00	7,029.02	7,024.02	7,029.02	228.03	243.49	88.78	1,210.97	-1,162.28	7,145.21	6,845.93	299.28	23.874		
14,805.04	7,029.00	7,024.00	7,029.00	228.17	243.48	88.78	1,210.97	-1,162.28	7,150.14	6,850.86	299.28	23.891		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-94.83	-93.24	-1,103.93	1,108.03				
100.00	100.00	81.00	100.00	3.28	3.57	-94.83	-93.24	-1,103.93	1,107.87	1,101.01	6.86	161.580	
200.00	200.00	181.00	200.00	3.34	5.63	-94.83	-93.24	-1,103.93	1,107.87	1,098.90	8.96	123.578	
300.00	300.00	281.00	300.00	3.44	8.71	-94.83	-93.24	-1,103.93	1,107.87	1,095.71	12.15	91.177	
400.00	400.00	381.00	400.00	3.60	12.01	-94.83	-93.24	-1,103.93	1,107.87	1,092.25	15.62	70.949	
500.00	499.98	480.98	499.98	3.80	15.40	47.06	-93.24	-1,103.93	1,106.68	1,087.48	19.20	57.652	
600.00	599.90	580.90	599.90	4.02	18.82	47.21	-93.24	-1,103.93	1,103.97	1,081.13	22.84	48.329	
700.00	699.82	680.82	699.82	4.28	22.26	47.37	-93.24	-1,103.93	1,101.25	1,074.70	26.54	41.488	
800.00	799.74	780.74	799.74	4.57	25.72	47.52	-93.24	-1,103.93	1,098.53	1,068.25	30.28	36.273	
900.00	899.66	880.66	899.66	4.88	29.18	47.67	-93.24	-1,103.93	1,095.82	1,061.77	34.06	32.176	
1,000.00	999.58	980.58	999.58	5.21	32.65	47.83	-93.24	-1,103.93	1,093.12	1,055.27	37.85	28.877	
1,100.00	1,099.50	1,080.50	1,099.50	5.55	36.12	47.99	-93.24	-1,103.93	1,090.43	1,048.76	41.67	26.168	
1,200.00	1,199.42	1,180.42	1,199.42	5.91	39.60	48.14	-93.24	-1,103.93	1,087.75	1,042.25	45.50	23.905	
1,300.00	1,299.34	1,280.34	1,299.34	6.28	43.08	48.30	-93.24	-1,103.93	1,085.08	1,035.73	49.35	21.988	
1,400.00	1,399.26	1,380.26	1,399.26	6.66	46.56	48.46	-93.24	-1,103.93	1,082.41	1,029.20	53.21	20.344	
1,500.00	1,499.18	1,480.18	1,499.18	7.04	50.04	48.62	-93.24	-1,103.93	1,079.75	1,022.68	57.07	18.920	
1,600.00	1,599.10	1,580.10	1,599.10	7.43	53.52	48.78	-93.24	-1,103.93	1,077.10	1,016.16	60.94	17.674	
1,700.00	1,699.01	1,680.01	1,699.01	7.83	57.00	48.94	-93.24	-1,103.93	1,074.46	1,009.64	64.82	16.576	
1,800.00	1,798.93	1,779.93	1,798.93	8.23	60.48	49.10	-93.24	-1,103.93	1,071.83	1,003.12	68.71	15.600	
1,900.00	1,898.85	1,879.85	1,898.85	8.64	63.96	49.26	-93.24	-1,103.93	1,069.20	996.61	72.59	14.728	
2,000.00	1,998.77	1,979.77	1,998.77	9.05	67.45	49.43	-93.24	-1,103.93	1,066.59	990.10	76.49	13.945	
2,100.00	2,098.69	2,079.69	2,098.69	9.46	70.93	49.59	-93.24	-1,103.93	1,063.98	983.60	80.38	13.236	
2,200.00	2,198.61	2,179.61	2,198.61	9.88	74.42	49.76	-93.24	-1,103.93	1,061.38	977.10	84.28	12.593	
2,300.00	2,298.53	2,279.53	2,298.53	10.30	77.90	49.92	-93.24	-1,103.93	1,058.79	970.61	88.18	12.007	
2,400.00	2,398.45	2,379.45	2,398.45	10.72	81.39	50.09	-93.24	-1,103.93	1,056.21	964.12	92.09	11.470	
2,500.00	2,498.37	2,479.37	2,498.37	11.14	84.87	50.26	-93.24	-1,103.93	1,053.64	957.64	95.99	10.976	
2,600.00	2,598.29	2,579.29	2,598.29	11.56	88.36	50.42	-93.24	-1,103.93	1,051.08	951.17	99.90	10.521	
2,700.00	2,698.21	2,679.21	2,698.21	11.98	91.84	50.59	-93.24	-1,103.93	1,048.52	944.71	103.81	10.100	
2,800.00	2,798.13	2,779.13	2,798.13	12.41	95.33	50.76	-93.24	-1,103.93	1,045.98	938.25	107.72	9.710	
2,900.00	2,898.05	2,879.05	2,898.05	12.84	98.82	50.93	-93.24	-1,103.93	1,043.44	931.81	111.64	9.347	
3,000.00	2,997.97	2,978.97	2,997.97	13.27	102.30	51.10	-93.24	-1,103.93	1,040.92	925.37	115.55	9.008	
3,100.00	3,097.89	3,078.89	3,097.89	13.69	105.79	51.28	-93.24	-1,103.93	1,038.40	918.94	119.46	8.692	
3,200.00	3,197.81	3,178.81	3,197.81	14.12	109.28	51.45	-93.24	-1,103.93	1,035.89	912.51	123.38	8.396	
3,300.00	3,297.73	3,278.73	3,297.73	14.56	112.76	51.62	-93.24	-1,103.93	1,033.40	906.10	127.30	8.118	
3,400.00	3,397.65	3,378.65	3,397.65	14.99	116.25	51.80	-93.24	-1,103.93	1,030.91	899.69	131.21	7.857	
3,500.00	3,497.56	3,478.56	3,497.56	15.42	119.74	51.97	-93.24	-1,103.93	1,028.43	893.30	135.13	7.610	
3,600.00	3,597.48	3,578.48	3,597.48	15.85	123.22	52.15	-93.24	-1,103.93	1,025.96	886.91	139.05	7.378	
3,700.00	3,697.40	3,678.40	3,697.40	16.28	126.71	52.33	-93.24	-1,103.93	1,023.50	880.53	142.97	7.159	
3,800.00	3,797.32	3,778.32	3,797.32	16.72	130.20	52.51	-93.24	-1,103.93	1,021.05	874.16	146.89	6.951	
3,900.00	3,897.24	3,878.24	3,897.24	17.15	133.68	52.68	-93.24	-1,103.93	1,018.61	867.80	150.81	6.754	
4,000.00	3,997.16	3,978.16	3,997.16	17.59	137.17	52.86	-93.24	-1,103.93	1,016.19	861.45	154.73	6.567	
4,100.00	4,097.08	4,078.08	4,097.08	18.02	140.66	53.05	-93.24	-1,103.93	1,013.77	855.11	158.66	6.390	
4,200.00	4,197.00	4,178.00	4,197.00	18.46	144.15	53.23	-93.24	-1,103.93	1,011.36	848.78	162.58	6.221	
4,300.00	4,296.92	4,277.92	4,296.92	18.89	147.63	53.41	-93.24	-1,103.93	1,008.96	842.46	166.50	6.060	
4,400.00	4,396.84	4,377.84	4,396.84	19.33	151.12	53.59	-93.24	-1,103.93	1,006.57	836.15	170.42	5.906	
4,500.00	4,496.76	4,477.76	4,496.76	19.77	154.61	53.78	-93.24	-1,103.93	1,004.19	829.84	174.35	5.760	
4,600.00	4,596.68	4,577.68	4,596.68	20.20	158.10	53.96	-93.24	-1,103.93	1,001.82	823.55	178.27	5.620	
4,700.00	4,696.60	4,677.60	4,696.60	20.64	161.58	54.15	-93.24	-1,103.93	999.47	817.27	182.20	5.486	
4,800.00	4,796.52	4,777.52	4,796.52	21.08	165.07	54.33	-93.24	-1,103.93	997.12	811.00	186.12	5.357	
4,900.00	4,896.44	4,877.44	4,896.44	21.51	168.56	54.52	-93.24	-1,103.93	994.79	804.74	190.04	5.234	
5,000.00	4,996.36	4,977.36	4,996.36	21.95	172.05	54.71	-93.24	-1,103.93	992.46	798.49	193.97	5.117	
5,100.00	5,096.28	5,077.28	5,096.28	22.39	175.53	54.90	-93.24	-1,103.93	990.15	792.25	197.90	5.003	

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,177.19	5,196.19	22.83	179.02	55.09	-93.24	-1,103.93	987.84	786.02	201.82	4.895		
5,300.00	5,296.11	5,277.11	5,296.11	23.27	182.51	55.28	-93.24	-1,103.93	985.55	779.80	205.75	4.790		
5,400.00	5,396.03	5,377.03	5,396.03	23.71	186.00	55.47	-93.24	-1,103.93	983.27	773.60	209.67	4.690		
5,500.00	5,495.95	5,476.95	5,495.95	24.14	189.48	55.67	-93.24	-1,103.93	981.00	767.40	213.60	4.593		
5,600.00	5,595.87	5,576.87	5,595.87	24.58	192.97	55.86	-93.24	-1,103.93	978.74	761.22	217.52	4.499		
5,700.00	5,695.79	5,676.79	5,695.79	25.02	196.46	56.06	-93.24	-1,103.93	976.49	755.04	221.45	4.410		
5,800.00	5,795.71	5,776.71	5,795.71	25.46	199.95	56.25	-93.24	-1,103.93	974.26	748.88	225.38	4.323		
5,900.00	5,895.63	5,876.63	5,895.63	25.90	203.43	56.45	-93.24	-1,103.93	972.03	742.73	229.30	4.239		
6,000.00	5,995.55	5,976.55	5,995.55	26.34	206.92	56.65	-93.24	-1,103.93	969.82	736.59	233.23	4.158		
6,100.00	6,095.47	6,076.47	6,095.47	26.78	210.41	56.84	-93.24	-1,103.93	967.61	730.46	237.16	4.080		
6,200.00	6,195.39	6,176.39	6,195.39	27.22	213.90	57.04	-93.24	-1,103.93	965.42	724.34	241.09	4.004		
6,300.00	6,295.31	6,276.31	6,295.31	27.66	217.39	57.24	-93.24	-1,103.93	963.25	718.23	245.01	3.931		
6,400.00	6,395.23	6,376.23	6,395.23	28.10	220.87	57.44	-93.24	-1,103.93	961.08	712.14	248.94	3.861		
6,500.00	6,495.02	6,476.02	6,495.02	28.54	224.36	22.09	-93.24	-1,103.93	956.60	703.74	252.86	3.783		
6,600.00	6,593.09	6,574.09	6,593.09	28.98	227.78	13.50	-93.24	-1,103.93	958.26	697.54	256.72	3.655		
6,700.00	6,687.01	6,668.01	6,687.01	29.41	231.06	11.94	-93.24	-1,103.93	954.92	691.40	260.42	3.475		
6,800.00	6,774.46	6,755.46	6,774.46	29.83	234.11	12.20	-93.24	-1,103.93	857.46	593.59	263.86	3.250		
6,900.00	6,853.31	6,834.31	6,853.31	30.26	236.86	13.72	-93.24	-1,103.93	797.08	530.12	266.96	2.986		
7,000.00	6,921.60	6,902.60	6,921.60	30.76	239.25	16.82	-93.24	-1,103.93	725.38	455.74	269.64	2.690		
7,100.00	6,977.66	6,958.66	6,977.66	31.38	241.20	22.56	-93.24	-1,103.93	644.24	372.39	271.85	2.370		
7,200.00	7,020.10	7,001.10	7,020.10	32.17	242.69	33.44	-93.24	-1,103.93	555.89	282.33	273.56	2.032		
7,300.00	7,047.88	7,028.88	7,047.88	33.13	243.66	53.88	-93.24	-1,103.93	462.87	188.12	274.76	1.685		
7,400.00	7,060.32	7,041.32	7,060.32	34.27	244.09	82.45	-93.24	-1,103.93	368.21	92.68	275.52	1.336 Level 3		
7,500.00	7,060.70	7,041.70	7,060.70	35.56	244.10	90.51	-93.24	-1,103.93	275.73	-0.48	276.21	0.998 Level 1		
7,600.00	7,060.27	7,041.27	7,060.27	37.02	244.09	90.30	-93.24	-1,103.93	190.96	-86.99	277.95	0.687 Level 1		
7,700.00	7,059.83	7,040.83	7,059.83	38.64	244.07	90.10	-93.24	-1,103.93	130.01	-152.01	282.02	0.461 Level 1		
7,747.82	7,059.63	7,040.63	7,059.63	39.48	244.07	90.00	-93.24	-1,103.93	120.90	-162.63	283.53	0.426 Level 1, CC, ES, SF		
7,800.00	7,059.40	7,040.40	7,059.40	40.40	244.06	89.89	-93.24	-1,103.93	131.68	-151.09	282.77	0.466 Level 1		
7,900.00	7,058.97	7,039.97	7,058.97	42.28	244.04	89.69	-93.24	-1,103.93	194.36	-84.88	279.24	0.696 Level 1		
8,000.00	7,058.53	7,039.53	7,058.53	44.27	244.03	89.48	-93.24	-1,103.93	279.66	2.32	277.34	1.008 Level 2		
8,100.00	7,058.10	7,039.10	7,058.10	46.35	244.01	89.28	-93.24	-1,103.93	372.35	95.88	276.48	1.347 Level 3		
8,200.00	7,057.66	7,038.66	7,057.66	48.50	244.00	89.07	-93.24	-1,103.93	468.06	192.03	276.03	1.696		
8,300.00	7,057.23	7,038.23	7,057.23	50.73	243.98	88.86	-93.24	-1,103.93	565.26	289.49	275.77	2.050		
8,400.00	7,056.80	7,037.80	7,056.80	53.02	243.97	88.66	-93.24	-1,103.93	663.29	387.68	275.61	2.407		
8,500.00	7,056.36	7,037.36	7,056.36	55.36	243.95	88.45	-93.24	-1,103.93	761.83	486.33	275.50	2.765		
8,600.00	7,055.93	7,036.93	7,055.93	57.74	243.94	88.25	-93.24	-1,103.93	860.71	585.28	275.43	3.125		
8,700.00	7,055.49	7,036.49	7,055.49	60.17	243.92	88.04	-93.24	-1,103.93	959.82	684.44	275.38	3.485		
8,800.00	7,055.06	7,036.06	7,055.06	62.63	243.91	87.84	-93.24	-1,103.93	1,059.10	783.76	275.34	3.847		
8,900.00	7,054.63	7,035.63	7,054.63	65.13	243.89	87.63	-93.24	-1,103.93	1,158.50	883.19	275.31	4.208		
9,000.00	7,054.19	7,035.19	7,054.19	67.66	243.88	87.43	-93.24	-1,103.93	1,257.99	982.70	275.29	4.570		
9,100.00	7,053.76	7,034.76	7,053.76	70.21	243.86	87.22	-93.24	-1,103.93	1,357.56	1,082.28	275.28	4.932		
9,200.00	7,053.32	7,034.32	7,053.32	72.78	243.85	87.02	-93.24	-1,103.93	1,457.19	1,181.92	275.27	5.294		
9,300.00	7,052.89	7,033.89	7,052.89	75.38	243.83	86.81	-93.24	-1,103.93	1,556.87	1,281.60	275.27	5.656		
9,400.00	7,052.46	7,033.46	7,052.46	77.99	243.81	86.61	-93.24	-1,103.93	1,656.58	1,381.31	275.27	6.018		
9,500.00	7,052.02	7,033.02	7,052.02	80.62	243.80	86.40	-93.24	-1,103.93	1,756.33	1,481.05	275.28	6.380		
9,600.00	7,051.59	7,032.59	7,051.59	83.26	243.78	86.20	-93.24	-1,103.93	1,856.11	1,580.82	275.28	6.743		
9,700.00	7,051.15	7,032.15	7,051.15	85.92	243.77	85.99	-93.24	-1,103.93	1,955.90	1,680.61	275.29	7.105		
9,800.00	7,050.72	7,031.72	7,050.72	88.59	243.75	85.79	-93.24	-1,103.93	2,055.72	1,780.42	275.30	7.467		
9,900.00	7,050.29	7,031.29	7,050.29	91.28	243.74	85.58	-93.24	-1,103.93	2,155.56	1,880.24	275.32	7.829		
10,000.00	7,049.85	7,030.85	7,049.85	93.97	243.72	85.38	-93.24	-1,103.93	2,255.40	1,980.07	275.33	8.192		
10,100.00	7,049.42	7,030.42	7,049.42	96.67	243.71	85.17	-93.24	-1,103.93	2,355.27	2,079.92	275.35	8.554		
10,200.00	7,048.98	7,029.98	7,048.98	99.38	243.69	84.97	-93.24	-1,103.93	2,455.14	2,179.77	275.37	8.916		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.55	7,029.55	7,048.55	102.10	243.68	84.77	-93.24	-1,103.93	2,555.02	2,279.63	275.39	9.278		
10,400.00	7,048.12	7,029.12	7,048.12	104.83	243.66	84.56	-93.24	-1,103.93	2,654.91	2,379.50	275.41	9.640		
10,500.00	7,047.68	7,028.68	7,047.68	107.56	243.65	84.36	-93.24	-1,103.93	2,754.81	2,479.38	275.43	10.002		
10,600.00	7,047.25	7,028.25	7,047.25	110.30	243.63	84.15	-93.24	-1,103.93	2,854.72	2,579.26	275.46	10.364		
10,700.00	7,046.81	7,027.81	7,046.81	113.05	243.62	83.95	-93.24	-1,103.93	2,954.63	2,679.15	275.48	10.725		
10,800.00	7,046.38	7,027.38	7,046.38	115.80	243.60	83.75	-93.24	-1,103.93	3,054.55	2,779.04	275.51	11.087		
10,900.00	7,045.95	7,026.95	7,045.95	118.55	243.59	83.54	-93.24	-1,103.93	3,154.47	2,878.93	275.54	11.448		
11,000.00	7,045.51	7,026.51	7,045.51	121.31	243.57	83.34	-93.24	-1,103.93	3,254.40	2,978.83	275.57	11.810		
11,100.00	7,045.08	7,026.08	7,045.08	124.08	243.56	83.14	-93.24	-1,103.93	3,354.33	3,078.73	275.60	12.171		
11,200.00	7,044.64	7,025.64	7,044.64	126.85	243.54	82.94	-93.24	-1,103.93	3,454.27	3,178.63	275.63	12.532		
11,300.00	7,044.21	7,025.21	7,044.21	129.62	243.53	82.73	-93.24	-1,103.93	3,554.21	3,278.54	275.67	12.893		
11,400.00	7,043.78	7,024.78	7,043.78	132.40	243.51	82.53	-93.24	-1,103.93	3,654.15	3,378.45	275.70	13.254		
11,500.00	7,043.34	7,024.34	7,043.34	135.18	243.50	82.33	-93.24	-1,103.93	3,754.09	3,478.36	275.74	13.615		
11,600.00	7,042.91	7,023.91	7,042.91	137.96	243.48	82.13	-93.24	-1,103.93	3,854.04	3,578.27	275.77	13.975		
11,700.00	7,042.47	7,023.47	7,042.47	140.75	243.47	81.93	-93.24	-1,103.93	3,953.99	3,678.18	275.81	14.336		
11,800.00	7,042.04	7,023.04	7,042.04	143.54	243.45	81.72	-93.24	-1,103.93	4,053.95	3,778.10	275.85	14.696		
11,900.00	7,041.61	7,022.61	7,041.61	146.33	243.44	81.52	-93.24	-1,103.93	4,153.90	3,878.01	275.89	15.056		
12,000.00	7,041.17	7,022.17	7,041.17	149.13	243.42	81.32	-93.24	-1,103.93	4,253.86	3,977.93	275.93	15.416		
12,100.00	7,040.74	7,021.74	7,040.74	151.92	243.41	81.12	-93.24	-1,103.93	4,353.82	4,077.85	275.98	15.776		
12,200.00	7,040.30	7,021.30	7,040.30	154.72	243.39	80.92	-93.24	-1,103.93	4,453.78	4,177.76	276.02	16.136		
12,300.00	7,039.87	7,020.87	7,039.87	157.52	243.38	80.72	-93.24	-1,103.93	4,553.75	4,277.68	276.06	16.495		
12,400.00	7,039.44	7,020.44	7,039.44	160.33	243.36	80.52	-93.24	-1,103.93	4,653.71	4,377.60	276.11	16.855		
12,500.00	7,039.00	7,020.00	7,039.00	163.13	243.35	80.32	-93.24	-1,103.93	4,753.68	4,477.52	276.16	17.214		
12,600.00	7,038.57	7,019.57	7,038.57	165.94	243.33	80.12	-93.24	-1,103.93	4,853.64	4,577.44	276.20	17.573		
12,700.00	7,038.13	7,019.13	7,038.13	168.75	243.32	79.92	-93.24	-1,103.93	4,953.61	4,677.36	276.25	17.932		
12,800.00	7,037.70	7,018.70	7,037.70	171.56	243.30	79.72	-93.24	-1,103.93	5,053.58	4,777.28	276.30	18.290		
12,900.00	7,037.27	7,018.27	7,037.27	174.37	243.28	79.52	-93.24	-1,103.93	5,153.55	4,877.20	276.35	18.649		
13,000.00	7,036.83	7,017.83	7,036.83	177.19	243.27	79.32	-93.24	-1,103.93	5,253.52	4,977.12	276.40	19.007		
13,100.00	7,036.40	7,017.40	7,036.40	180.00	243.25	79.12	-93.24	-1,103.93	5,353.50	5,077.04	276.46	19.365		
13,200.00	7,035.96	7,016.96	7,035.96	182.82	243.24	78.93	-93.24	-1,103.93	5,453.47	5,176.96	276.51	19.723		
13,300.00	7,035.53	7,016.53	7,035.53	185.64	243.22	78.73	-93.24	-1,103.93	5,553.45	5,276.88	276.56	20.080		
13,400.00	7,035.10	7,016.10	7,035.10	188.46	243.21	78.53	-93.24	-1,103.93	5,653.42	5,376.80	276.62	20.438		
13,500.00	7,034.66	7,015.66	7,034.66	191.28	243.19	78.33	-93.24	-1,103.93	5,753.40	5,476.72	276.68	20.795		
13,600.00	7,034.23	7,015.23	7,034.23	194.10	243.18	78.14	-93.24	-1,103.93	5,853.38	5,576.64	276.73	21.152		
13,700.00	7,033.79	7,014.79	7,033.79	196.92	243.16	77.94	-93.24	-1,103.93	5,953.35	5,676.56	276.79	21.508		
13,800.00	7,033.36	7,014.36	7,033.36	199.74	243.15	77.74	-93.24	-1,103.93	6,053.33	5,776.48	276.85	21.865		
13,900.00	7,032.93	7,013.93	7,032.93	202.57	243.13	77.55	-93.24	-1,103.93	6,153.31	5,876.40	276.91	22.221		
14,000.00	7,032.49	7,013.49	7,032.49	205.39	243.12	77.35	-93.24	-1,103.93	6,253.29	5,976.32	276.97	22.577		
14,100.00	7,032.06	7,013.06	7,032.06	208.22	243.10	77.15	-93.24	-1,103.93	6,353.27	6,076.24	277.03	22.933		
14,200.00	7,031.62	7,012.62	7,031.62	211.05	243.09	76.96	-93.24	-1,103.93	6,453.25	6,176.16	277.10	23.289		
14,300.00	7,031.19	7,012.19	7,031.19	213.87	243.07	76.76	-93.24	-1,103.93	6,553.24	6,276.08	277.16	23.644		
14,400.00	7,030.76	7,011.76	7,030.76	216.70	243.06	76.57	-93.24	-1,103.93	6,653.22	6,375.99	277.22	23.999		
14,500.00	7,030.32	7,011.32	7,030.32	219.53	243.04	76.38	-93.24	-1,103.93	6,753.20	6,475.91	277.29	24.354		
14,600.00	7,029.89	7,010.89	7,029.89	222.36	243.03	76.18	-93.24	-1,103.93	6,853.18	6,575.83	277.36	24.709		
14,700.00	7,029.45	7,010.45	7,029.45	225.19	243.01	75.99	-93.24	-1,103.93	6,953.17	6,675.75	277.42	25.063		
14,800.00	7,029.02	7,010.02	7,029.02	228.03	243.00	75.79	-93.24	-1,103.93	7,053.15	6,775.66	277.49	25.418		
14,805.04	7,029.00	7,010.00	7,029.00	228.17	243.00	75.78	-93.24	-1,103.93	7,058.19	6,780.70	277.49	25.435		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-68.36	588.03	-1,482.16	1,594.59				
100.00	100.00	88.00	100.00	3.28	3.62	-68.36	588.03	-1,482.16	1,594.55	1,587.64	6.91	230.875	
200.00	200.00	188.00	200.00	3.34	5.83	-68.36	588.03	-1,482.16	1,594.55	1,585.38	9.17	173.979	
300.00	300.00	288.00	300.00	3.44	8.93	-68.36	588.03	-1,482.16	1,594.55	1,582.17	12.38	128.827	
400.00	400.00	388.00	400.00	3.60	12.25	-68.36	588.03	-1,482.16	1,594.55	1,578.70	15.85	100.600	
500.00	499.98	487.98	499.98	3.80	15.64	73.51	588.03	-1,482.16	1,594.05	1,574.62	19.43	82.022	
600.00	599.90	587.90	599.90	4.02	19.06	73.65	588.03	-1,482.16	1,592.93	1,569.84	23.08	69.008	
700.00	699.82	687.82	699.82	4.28	22.51	73.79	588.03	-1,482.16	1,591.80	1,565.02	26.79	59.428	
800.00	799.74	787.74	799.74	4.57	25.96	73.93	588.03	-1,482.16	1,590.69	1,560.16	30.53	52.106	
900.00	899.66	887.66	899.66	4.88	29.43	74.07	588.03	-1,482.16	1,589.58	1,555.28	34.30	46.341	
1,000.00	999.58	987.58	999.58	5.21	32.89	74.20	588.03	-1,482.16	1,588.48	1,550.38	38.10	41.692	
1,100.00	1,099.50	1,087.50	1,099.50	5.55	36.37	74.34	588.03	-1,482.16	1,587.39	1,545.47	41.92	37.869	
1,200.00	1,199.42	1,187.42	1,199.42	5.91	39.84	74.48	588.03	-1,482.16	1,586.31	1,540.56	45.75	34.673	
1,300.00	1,299.34	1,287.34	1,299.34	6.28	43.32	74.62	588.03	-1,482.16	1,585.24	1,535.65	49.60	31.962	
1,400.00	1,399.26	1,387.26	1,399.26	6.66	46.80	74.76	588.03	-1,482.16	1,584.18	1,530.73	53.45	29.636	
1,500.00	1,499.18	1,487.18	1,499.18	7.04	50.28	74.90	588.03	-1,482.16	1,583.13	1,525.81	57.32	27.619	
1,600.00	1,599.10	1,587.10	1,599.10	7.43	53.76	75.04	588.03	-1,482.16	1,582.09	1,520.90	61.19	25.854	
1,700.00	1,699.01	1,687.01	1,699.01	7.83	57.24	75.18	588.03	-1,482.16	1,581.06	1,515.99	65.07	24.296	
1,800.00	1,798.93	1,786.93	1,798.93	8.23	60.73	75.32	588.03	-1,482.16	1,580.04	1,511.08	68.96	22.913	
1,900.00	1,898.85	1,886.85	1,898.85	8.64	64.21	75.47	588.03	-1,482.16	1,579.02	1,506.18	72.85	21.676	
2,000.00	1,998.77	1,986.77	1,998.77	9.05	67.69	75.61	588.03	-1,482.16	1,578.02	1,501.28	76.74	20.563	
2,100.00	2,098.69	2,086.69	2,098.69	9.46	71.18	75.75	588.03	-1,482.16	1,577.03	1,496.39	80.64	19.557	
2,200.00	2,198.61	2,186.61	2,198.61	9.88	74.66	75.89	588.03	-1,482.16	1,576.04	1,491.50	84.54	18.643	
2,300.00	2,298.53	2,286.53	2,298.53	10.30	78.15	76.03	588.03	-1,482.16	1,575.07	1,486.63	88.44	17.809	
2,400.00	2,398.45	2,386.45	2,398.45	10.72	81.63	76.17	588.03	-1,482.16	1,574.10	1,481.76	92.35	17.046	
2,500.00	2,498.37	2,486.37	2,498.37	11.14	85.12	76.31	588.03	-1,482.16	1,573.15	1,476.90	96.25	16.344	
2,600.00	2,598.29	2,586.29	2,598.29	11.56	88.60	76.46	588.03	-1,482.16	1,572.20	1,472.04	100.16	15.697	
2,700.00	2,698.21	2,686.21	2,698.21	11.98	92.09	76.60	588.03	-1,482.16	1,571.27	1,467.20	104.07	15.098	
2,800.00	2,798.13	2,786.13	2,798.13	12.41	95.57	76.74	588.03	-1,482.16	1,570.34	1,462.36	107.98	14.542	
2,900.00	2,898.05	2,886.05	2,898.05	12.84	99.06	76.88	588.03	-1,482.16	1,569.43	1,457.53	111.90	14.026	
3,000.00	2,997.97	2,985.97	2,997.97	13.27	102.55	77.03	588.03	-1,482.16	1,568.52	1,452.71	115.81	13.544	
3,100.00	3,097.89	3,085.89	3,097.89	13.69	106.03	77.17	588.03	-1,482.16	1,567.62	1,447.89	119.73	13.093	
3,200.00	3,197.81	3,185.81	3,197.81	14.12	109.52	77.31	588.03	-1,482.16	1,566.73	1,443.09	123.64	12.671	
3,300.00	3,297.73	3,285.73	3,297.73	14.56	113.01	77.45	588.03	-1,482.16	1,565.86	1,438.30	127.56	12.275	
3,400.00	3,397.65	3,385.65	3,397.65	14.99	116.49	77.60	588.03	-1,482.16	1,564.99	1,433.51	131.48	11.903	
3,500.00	3,497.56	3,485.56	3,497.56	15.42	119.98	77.74	588.03	-1,482.16	1,564.13	1,428.73	135.40	11.552	
3,600.00	3,597.48	3,585.48	3,597.48	15.85	123.47	77.88	588.03	-1,482.16	1,563.28	1,423.97	139.32	11.221	
3,700.00	3,697.40	3,685.40	3,697.40	16.28	126.95	78.03	588.03	-1,482.16	1,562.45	1,419.21	143.24	10.908	
3,800.00	3,797.32	3,785.32	3,797.32	16.72	130.44	78.17	588.03	-1,482.16	1,561.62	1,414.46	147.16	10.612	
3,900.00	3,897.24	3,885.24	3,897.24	17.15	133.93	78.32	588.03	-1,482.16	1,560.80	1,409.72	151.08	10.331	
4,000.00	3,997.16	3,985.16	3,997.16	17.59	137.42	78.46	588.03	-1,482.16	1,559.99	1,404.99	155.00	10.064	
4,100.00	4,097.08	4,085.08	4,097.08	18.02	140.90	78.60	588.03	-1,482.16	1,559.19	1,400.27	158.93	9.811	
4,200.00	4,197.00	4,185.00	4,197.00	18.46	144.39	78.75	588.03	-1,482.16	1,558.40	1,395.56	162.85	9.570	
4,300.00	4,296.92	4,284.92	4,296.92	18.89	147.88	78.89	588.03	-1,482.16	1,557.63	1,390.85	166.77	9.340	
4,400.00	4,396.84	4,384.84	4,396.84	19.33	151.37	79.04	588.03	-1,482.16	1,556.86	1,386.16	170.69	9.121	
4,500.00	4,496.76	4,484.76	4,496.76	19.77	154.85	79.18	588.03	-1,482.16	1,556.10	1,381.48	174.62	8.911	
4,600.00	4,596.68	4,584.68	4,596.68	20.20	158.34	79.33	588.03	-1,482.16	1,555.35	1,376.81	178.54	8.711	
4,700.00	4,696.60	4,684.60	4,696.60	20.64	161.83	79.47	588.03	-1,482.16	1,554.61	1,372.14	182.47	8.520	
4,800.00	4,796.52	4,784.52	4,796.52	21.08	165.31	79.62	588.03	-1,482.16	1,553.88	1,367.49	186.39	8.337	
4,900.00	4,896.44	4,884.44	4,896.44	21.51	168.80	79.77	588.03	-1,482.16	1,553.16	1,362.85	190.32	8.161	
5,000.00	4,996.36	4,984.36	4,996.36	21.95	172.29	79.91	588.03	-1,482.16	1,552.46	1,358.21	194.24	7.992	
5,100.00	5,096.28	5,084.28	5,096.28	22.39	175.78	80.06	588.03	-1,482.16	1,551.76	1,353.59	198.17	7.831	

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,184.19	5,196.19	22.83	179.27	80.20	588.03	-1,482.16	1,551.07	1,348.97	202.09	7.675		
5,300.00	5,296.11	5,284.11	5,296.11	23.27	182.75	80.35	588.03	-1,482.16	1,550.39	1,344.37	206.02	7.525		
5,400.00	5,396.03	5,384.03	5,396.03	23.71	186.24	80.49	588.03	-1,482.16	1,549.72	1,339.78	209.95	7.382		
5,500.00	5,495.95	5,483.95	5,495.95	24.14	189.73	80.64	588.03	-1,482.16	1,549.06	1,335.19	213.87	7.243		
5,600.00	5,595.87	5,583.87	5,595.87	24.58	193.22	80.79	588.03	-1,482.16	1,548.42	1,330.62	217.80	7.109		
5,700.00	5,695.79	5,683.79	5,695.79	25.02	196.70	80.93	588.03	-1,482.16	1,547.78	1,326.05	221.73	6.981		
5,800.00	5,795.71	5,783.71	5,795.71	25.46	200.19	81.08	588.03	-1,482.16	1,547.15	1,321.50	225.65	6.856		
5,900.00	5,895.63	5,883.63	5,895.63	25.90	203.68	81.23	588.03	-1,482.16	1,546.53	1,316.95	229.58	6.736		
6,000.00	5,995.55	5,983.55	5,995.55	26.34	207.17	81.37	588.03	-1,482.16	1,545.92	1,312.42	233.51	6.620		
6,100.00	6,095.47	6,083.47	6,095.47	26.78	210.65	81.52	588.03	-1,482.16	1,545.33	1,307.89	237.43	6.508		
6,200.00	6,195.39	6,183.39	6,195.39	27.22	214.14	81.67	588.03	-1,482.16	1,544.74	1,303.38	241.36	6.400		
6,300.00	6,295.31	6,283.31	6,295.31	27.66	217.63	81.82	588.03	-1,482.16	1,544.16	1,298.87	245.29	6.295		
6,400.00	6,395.23	6,383.23	6,395.23	28.10	221.12	81.96	588.03	-1,482.16	1,543.60	1,294.38	249.22	6.194		
6,500.00	6,495.02	6,483.02	6,495.02	28.54	224.60	46.65	588.03	-1,482.16	1,541.03	1,287.89	253.14	6.088		
6,600.00	6,593.09	6,581.09	6,593.09	28.98	228.02	38.71	588.03	-1,482.16	1,526.49	1,269.49	257.00	5.940		
6,700.00	6,687.01	6,675.01	6,687.01	29.41	231.30	38.48	588.03	-1,482.16	1,499.13	1,238.42	260.71	5.750		
6,800.00	6,774.46	6,762.46	6,774.46	29.83	234.36	40.77	588.03	-1,482.16	1,459.94	1,195.76	264.18	5.526		
6,900.00	6,853.31	6,841.31	6,853.31	30.26	237.11	44.98	588.03	-1,482.16	1,410.34	1,143.01	267.33	5.276		
7,000.00	6,921.60	6,909.60	6,921.60	30.76	239.49	51.09	588.03	-1,482.16	1,352.15	1,082.04	270.12	5.006		
7,100.00	6,977.66	6,965.66	6,977.66	31.38	241.45	59.08	588.03	-1,482.16	1,287.54	1,015.03	272.51	4.725		
7,200.00	7,020.10	7,008.10	7,020.10	32.17	242.93	68.55	588.03	-1,482.16	1,218.97	944.46	274.51	4.440		
7,300.00	7,047.88	7,035.88	7,047.88	33.13	243.90	78.50	588.03	-1,482.16	1,149.15	873.01	276.15	4.161		
7,400.00	7,060.32	7,048.32	7,060.32	34.27	244.33	87.63	588.03	-1,482.16	1,080.86	803.42	277.44	3.896		
7,500.00	7,060.70	7,048.70	7,060.70	35.56	244.35	90.19	588.03	-1,482.16	1,016.82	738.25	278.57	3.650		
7,600.00	7,060.27	7,048.27	7,060.27	37.02	244.33	90.16	588.03	-1,482.16	958.92	678.93	279.99	3.425		
7,700.00	7,059.83	7,047.83	7,059.83	38.64	244.32	90.13	588.03	-1,482.16	908.37	626.62	281.75	3.224		
7,800.00	7,059.40	7,047.40	7,059.40	40.40	244.30	90.10	588.03	-1,482.16	866.46	582.65	283.81	3.053		
7,900.00	7,058.97	7,046.97	7,058.97	42.28	244.29	90.07	588.03	-1,482.16	834.48	548.40	286.08	2.917		
8,000.00	7,058.53	7,046.53	7,058.53	44.27	244.27	90.04	588.03	-1,482.16	813.61	525.21	288.40	2.821		
8,100.00	7,058.10	7,046.10	7,058.10	46.35	244.26	90.01	588.03	-1,482.16	804.72	514.12	290.60	2.769		
8,121.96	7,058.00	7,046.00	7,058.00	46.82	244.25	90.00	588.03	-1,482.16	804.42	513.37	291.06	2.764 CC, ES		
8,200.00	7,057.66	7,045.66	7,057.66	48.50	244.24	89.98	588.03	-1,482.16	808.20	515.70	292.50	2.763 SF		
8,300.00	7,057.23	7,045.23	7,057.23	50.73	244.23	89.94	588.03	-1,482.16	823.89	529.90	293.98	2.803		
8,400.00	7,056.80	7,044.80	7,056.80	53.02	244.21	89.91	588.03	-1,482.16	851.11	556.11	295.00	2.885		
8,500.00	7,056.36	7,044.36	7,056.36	55.36	244.20	89.88	588.03	-1,482.16	888.82	593.24	295.58	3.007		
8,600.00	7,055.93	7,043.93	7,055.93	57.74	244.18	89.85	588.03	-1,482.16	935.74	639.95	295.78	3.164		
8,700.00	7,055.49	7,043.49	7,055.49	60.17	244.17	89.82	588.03	-1,482.16	990.56	694.85	295.71	3.350		
8,800.00	7,055.06	7,043.06	7,055.06	62.63	244.15	89.79	588.03	-1,482.16	1,052.05	756.62	295.44	3.561		
8,900.00	7,054.63	7,042.63	7,054.63	65.13	244.14	89.76	588.03	-1,482.16	1,119.12	824.08	295.04	3.793		
9,000.00	7,054.19	7,042.19	7,054.19	67.66	244.12	89.73	588.03	-1,482.16	1,190.81	896.24	294.57	4.043		
9,100.00	7,053.76	7,041.76	7,053.76	70.21	244.10	89.70	588.03	-1,482.16	1,266.35	972.29	294.06	4.306		
9,200.00	7,053.32	7,041.32	7,053.32	72.78	244.09	89.67	588.03	-1,482.16	1,345.08	1,051.54	293.54	4.582		
9,300.00	7,052.89	7,040.89	7,052.89	75.38	244.07	89.64	588.03	-1,482.16	1,426.48	1,133.44	293.03	4.868		
9,400.00	7,052.46	7,040.46	7,052.46	77.99	244.06	89.60	588.03	-1,482.16	1,510.11	1,217.57	292.54	5.162		
9,500.00	7,052.02	7,040.02	7,052.02	80.62	244.04	89.57	588.03	-1,482.16	1,595.63	1,303.56	292.07	5.463		
9,600.00	7,051.59	7,039.59	7,051.59	83.26	244.03	89.54	588.03	-1,482.16	1,682.75	1,391.12	291.63	5.770		
9,700.00	7,051.15	7,039.15	7,051.15	85.92	244.01	89.51	588.03	-1,482.16	1,771.23	1,480.01	291.22	6.082		
9,800.00	7,050.72	7,038.72	7,050.72	88.59	244.00	89.48	588.03	-1,482.16	1,860.87	1,570.04	290.83	6.398		
9,900.00	7,050.29	7,038.29	7,050.29	91.28	243.98	89.45	588.03	-1,482.16	1,951.52	1,661.05	290.47	6.718		
10,000.00	7,049.85	7,037.85	7,049.85	93.97	243.97	89.42	588.03	-1,482.16	2,043.05	1,752.91	290.14	7.042		
10,100.00	7,049.42	7,037.42	7,049.42	96.67	243.95	89.39	588.03	-1,482.16	2,135.33	1,845.50	289.83	7.368		
10,200.00	7,048.98	7,036.98	7,048.98	99.38	243.94	89.36	588.03	-1,482.16	2,228.28	1,938.74	289.54	7.696		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.55	7,036.55	7,048.55	102.10	243.92	89.33	588.03	-1,482.16	2,321.82	2,032.54	289.28	8.026		
10,400.00	7,048.12	7,036.12	7,048.12	104.83	243.91	89.30	588.03	-1,482.16	2,415.87	2,126.84	289.03	8.359		
10,500.00	7,047.68	7,035.68	7,047.68	107.56	243.89	89.26	588.03	-1,482.16	2,510.39	2,221.59	288.80	8.692		
10,600.00	7,047.25	7,035.25	7,047.25	110.30	243.88	89.23	588.03	-1,482.16	2,605.31	2,316.72	288.59	9.028		
10,700.00	7,046.81	7,034.81	7,046.81	113.05	243.86	89.20	588.03	-1,482.16	2,700.60	2,412.21	288.39	9.364		
10,800.00	7,046.38	7,034.38	7,046.38	115.80	243.85	89.17	588.03	-1,482.16	2,796.22	2,508.01	288.21	9.702		
10,900.00	7,045.95	7,033.95	7,045.95	118.55	243.83	89.14	588.03	-1,482.16	2,892.13	2,604.10	288.04	10.041		
11,000.00	7,045.51	7,033.51	7,045.51	121.31	243.82	89.11	588.03	-1,482.16	2,988.32	2,700.44	287.88	10.380		
11,100.00	7,045.08	7,033.08	7,045.08	124.08	243.80	89.08	588.03	-1,482.16	3,084.74	2,797.01	287.73	10.721		
11,200.00	7,044.64	7,032.64	7,044.64	126.85	243.79	89.05	588.03	-1,482.16	3,181.39	2,893.79	287.60	11.062		
11,300.00	7,044.21	7,032.21	7,044.21	129.62	243.77	89.02	588.03	-1,482.16	3,278.23	2,990.76	287.47	11.404		
11,400.00	7,043.78	7,031.78	7,043.78	132.40	243.76	88.99	588.03	-1,482.16	3,375.27	3,087.91	287.35	11.746		
11,500.00	7,043.34	7,031.34	7,043.34	135.18	243.74	88.96	588.03	-1,482.16	3,472.46	3,185.22	287.24	12.089		
11,600.00	7,042.91	7,030.91	7,042.91	137.96	243.73	88.93	588.03	-1,482.16	3,569.82	3,282.68	287.14	12.432		
11,700.00	7,042.47	7,030.47	7,042.47	140.75	243.71	88.89	588.03	-1,482.16	3,667.32	3,380.27	287.05	12.776		
11,800.00	7,042.04	7,030.04	7,042.04	143.54	243.70	88.86	588.03	-1,482.16	3,764.94	3,477.98	286.96	13.120		
11,900.00	7,041.61	7,029.61	7,041.61	146.33	243.68	88.83	588.03	-1,482.16	3,862.69	3,575.81	286.88	13.464		
12,000.00	7,041.17	7,029.17	7,041.17	149.13	243.67	88.80	588.03	-1,482.16	3,960.55	3,673.75	286.81	13.809		
12,100.00	7,040.74	7,028.74	7,040.74	151.92	243.65	88.77	588.03	-1,482.16	4,058.52	3,771.78	286.74	14.154		
12,200.00	7,040.30	7,028.30	7,040.30	154.72	243.64	88.74	588.03	-1,482.16	4,156.58	3,869.91	286.67	14.499		
12,300.00	7,039.87	7,027.87	7,039.87	157.52	243.62	88.71	588.03	-1,482.16	4,254.73	3,968.12	286.62	14.845		
12,400.00	7,039.44	7,027.44	7,039.44	160.33	243.60	88.68	588.03	-1,482.16	4,352.97	4,066.41	286.56	15.190		
12,500.00	7,039.00	7,027.00	7,039.00	163.13	243.59	88.65	588.03	-1,482.16	4,451.29	4,164.77	286.51	15.536		
12,600.00	7,038.57	7,026.57	7,038.57	165.94	243.57	88.62	588.03	-1,482.16	4,549.67	4,263.20	286.47	15.882		
12,700.00	7,038.13	7,026.13	7,038.13	168.75	243.56	88.59	588.03	-1,482.16	4,648.13	4,361.70	286.43	16.228		
12,800.00	7,037.70	7,025.70	7,037.70	171.56	243.54	88.55	588.03	-1,482.16	4,746.65	4,460.26	286.39	16.574		
12,900.00	7,037.27	7,025.27	7,037.27	174.37	243.53	88.52	588.03	-1,482.16	4,845.23	4,558.87	286.36	16.920		
13,000.00	7,036.83	7,024.83	7,036.83	177.19	243.51	88.49	588.03	-1,482.16	4,943.87	4,657.54	286.33	17.266		
13,100.00	7,036.40	7,024.40	7,036.40	180.00	243.50	88.46	588.03	-1,482.16	5,042.57	4,756.26	286.31	17.612		
13,200.00	7,035.96	7,023.96	7,035.96	182.82	243.48	88.43	588.03	-1,482.16	5,141.31	4,855.02	286.29	17.959		
13,300.00	7,035.53	7,023.53	7,035.53	185.64	243.47	88.40	588.03	-1,482.16	5,240.10	4,953.83	286.27	18.305		
13,400.00	7,035.10	7,023.10	7,035.10	188.46	243.45	88.37	588.03	-1,482.16	5,338.94	5,052.68	286.25	18.651		
13,500.00	7,034.66	7,022.66	7,034.66	191.28	243.44	88.34	588.03	-1,482.16	5,437.81	5,151.57	286.24	18.997		
13,600.00	7,034.23	7,022.23	7,034.23	194.10	243.42	88.31	588.03	-1,482.16	5,536.73	5,250.50	286.23	19.344		
13,700.00	7,033.79	7,021.79	7,033.79	196.92	243.41	88.28	588.03	-1,482.16	5,635.69	5,349.47	286.22	19.690		
13,800.00	7,033.36	7,021.36	7,033.36	199.74	243.39	88.25	588.03	-1,482.16	5,734.68	5,448.46	286.22	20.036		
13,900.00	7,032.93	7,020.93	7,032.93	202.57	243.38	88.21	588.03	-1,482.16	5,833.71	5,547.49	286.22	20.382		
14,000.00	7,032.49	7,020.49	7,032.49	205.39	243.36	88.18	588.03	-1,482.16	5,932.77	5,646.55	286.22	20.728		
14,100.00	7,032.06	7,020.06	7,032.06	208.22	243.35	88.15	588.03	-1,482.16	6,031.86	5,745.64	286.22	21.074		
14,200.00	7,031.62	7,019.62	7,031.62	211.05	243.33	88.12	588.03	-1,482.16	6,130.98	5,844.76	286.22	21.420		
14,300.00	7,031.19	7,019.19	7,031.19	213.87	243.32	88.09	588.03	-1,482.16	6,230.13	5,943.90	286.23	21.766		
14,400.00	7,030.76	7,018.76	7,030.76	216.70	243.30	88.06	588.03	-1,482.16	6,329.30	6,043.06	286.24	22.112		
14,500.00	7,030.32	7,018.32	7,030.32	219.53	243.29	88.03	588.03	-1,482.16	6,428.51	6,142.25	286.25	22.457		
14,600.00	7,029.89	7,017.89	7,029.89	222.36	243.27	88.00	588.03	-1,482.16	6,527.73	6,241.47	286.27	22.803		
14,700.00	7,029.45	7,017.45	7,029.45	225.19	243.26	87.97	588.03	-1,482.16	6,626.98	6,340.70	286.28	23.149		
14,800.00	7,029.02	7,017.02	7,029.02	228.03	243.24	87.94	588.03	-1,482.16	6,726.25	6,439.95	286.30	23.494		
14,805.04	7,029.00	7,017.00	7,029.00	228.17	243.24	87.94	588.03	-1,482.16	6,731.25	6,444.95	286.30	23.511		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-77.61	1,095.97	-4,990.13	5,109.30				
100.00	100.00	51.00	100.00	3.28	3.40	-77.61	1,095.97	-4,990.13	5,109.07	5,102.38	6.68	764.444	
200.00	200.00	151.00	200.00	3.34	4.82	-77.61	1,095.97	-4,990.13	5,109.07	5,100.91	8.15	626.674	
300.00	300.00	251.00	300.00	3.44	7.75	-77.61	1,095.97	-4,990.13	5,109.07	5,097.88	11.19	456.551	
400.00	400.00	351.00	400.00	3.60	11.01	-77.61	1,095.97	-4,990.13	5,109.07	5,094.46	14.61	349.666	
500.00	499.98	450.98	499.98	3.80	14.38	64.22	1,095.97	-4,990.13	5,108.31	5,090.13	18.17	281.076	
600.00	599.90	550.90	599.90	4.02	17.79	64.26	1,095.97	-4,990.13	5,106.58	5,084.77	21.81	234.115	
700.00	699.82	650.82	699.82	4.28	21.23	64.30	1,095.97	-4,990.13	5,104.84	5,079.33	25.51	200.124	
800.00	799.74	750.74	799.74	4.57	24.68	64.34	1,095.97	-4,990.13	5,103.10	5,073.85	29.25	174.483	
900.00	899.66	850.66	899.66	4.88	28.14	64.38	1,095.97	-4,990.13	5,101.36	5,068.34	33.02	154.502	
1,000.00	999.58	950.58	999.58	5.21	31.61	64.43	1,095.97	-4,990.13	5,099.63	5,062.81	36.81	138.523	
1,100.00	1,099.50	1,050.50	1,099.50	5.55	35.08	64.47	1,095.97	-4,990.13	5,097.89	5,057.26	40.63	125.470	
1,200.00	1,199.42	1,150.42	1,199.42	5.91	38.56	64.51	1,095.97	-4,990.13	5,096.16	5,051.70	44.46	114.616	
1,300.00	1,299.34	1,250.34	1,299.34	6.28	42.03	64.55	1,095.97	-4,990.13	5,094.44	5,046.13	48.31	105.457	
1,400.00	1,399.26	1,350.26	1,399.26	6.66	45.51	64.59	1,095.97	-4,990.13	5,092.71	5,040.55	52.16	97.628	
1,500.00	1,499.18	1,450.18	1,499.18	7.04	48.99	64.63	1,095.97	-4,990.13	5,090.99	5,034.96	56.03	90.862	
1,600.00	1,599.10	1,550.10	1,599.10	7.43	52.47	64.67	1,095.97	-4,990.13	5,089.27	5,029.37	59.90	84.959	
1,700.00	1,699.01	1,650.01	1,699.01	7.83	55.95	64.71	1,095.97	-4,990.13	5,087.55	5,023.77	63.78	79.765	
1,800.00	1,798.93	1,749.93	1,798.93	8.23	59.44	64.75	1,095.97	-4,990.13	5,085.84	5,018.17	67.67	75.161	
1,900.00	1,898.85	1,849.85	1,898.85	8.64	62.92	64.79	1,095.97	-4,990.13	5,084.13	5,012.57	71.56	71.052	
2,000.00	1,998.77	1,949.77	1,998.77	9.05	66.40	64.83	1,095.97	-4,990.13	5,082.42	5,006.97	75.45	67.363	
2,100.00	2,098.69	2,049.69	2,098.69	9.46	69.89	64.87	1,095.97	-4,990.13	5,080.71	5,001.37	79.35	64.033	
2,200.00	2,198.61	2,149.61	2,198.61	9.88	73.37	64.91	1,095.97	-4,990.13	5,079.01	4,995.76	83.24	61.013	
2,300.00	2,298.53	2,249.53	2,298.53	10.30	76.86	64.96	1,095.97	-4,990.13	5,077.31	4,990.16	87.15	58.261	
2,400.00	2,398.45	2,349.45	2,398.45	10.72	80.34	65.00	1,095.97	-4,990.13	5,075.61	4,984.56	91.05	55.744	
2,500.00	2,498.37	2,449.37	2,498.37	11.14	83.83	65.04	1,095.97	-4,990.13	5,073.91	4,978.95	94.96	53.433	
2,600.00	2,598.29	2,549.29	2,598.29	11.56	87.31	65.08	1,095.97	-4,990.13	5,072.22	4,973.35	98.87	51.304	
2,700.00	2,698.21	2,649.21	2,698.21	11.98	90.80	65.12	1,095.97	-4,990.13	5,070.53	4,967.75	102.78	49.335	
2,800.00	2,798.13	2,749.13	2,798.13	12.41	94.28	65.16	1,095.97	-4,990.13	5,068.84	4,962.15	106.69	47.511	
2,900.00	2,898.05	2,849.05	2,898.05	12.84	97.77	65.20	1,095.97	-4,990.13	5,067.15	4,956.55	110.60	45.814	
3,000.00	2,997.97	2,948.97	2,997.97	13.27	101.26	65.24	1,095.97	-4,990.13	5,065.47	4,950.95	114.52	44.234	
3,100.00	3,097.89	3,048.89	3,097.89	13.69	104.74	65.28	1,095.97	-4,990.13	5,063.79	4,945.36	118.43	42.757	
3,200.00	3,197.81	3,148.81	3,197.81	14.12	108.23	65.33	1,095.97	-4,990.13	5,062.11	4,939.77	122.35	41.375	
3,300.00	3,297.73	3,248.73	3,297.73	14.56	111.72	65.37	1,095.97	-4,990.13	5,060.44	4,934.17	126.26	40.078	
3,400.00	3,397.65	3,348.65	3,397.65	14.99	115.20	65.41	1,095.97	-4,990.13	5,058.76	4,928.58	130.18	38.859	
3,500.00	3,497.56	3,448.56	3,497.56	15.42	118.69	65.45	1,095.97	-4,990.13	5,057.10	4,922.99	134.10	37.711	
3,600.00	3,597.48	3,548.48	3,597.48	15.85	122.18	65.49	1,095.97	-4,990.13	5,055.43	4,917.41	138.02	36.628	
3,700.00	3,697.40	3,648.40	3,697.40	16.28	125.66	65.53	1,095.97	-4,990.13	5,053.76	4,911.82	141.94	35.605	
3,800.00	3,797.32	3,748.32	3,797.32	16.72	129.15	65.57	1,095.97	-4,990.13	5,052.10	4,906.24	145.86	34.636	
3,900.00	3,897.24	3,848.24	3,897.24	17.15	132.64	65.62	1,095.97	-4,990.13	5,050.44	4,900.66	149.78	33.719	
4,000.00	3,997.16	3,948.16	3,997.16	17.59	136.12	65.66	1,095.97	-4,990.13	5,048.79	4,895.08	153.70	32.848	
4,100.00	4,097.08	4,048.08	4,097.08	18.02	139.61	65.70	1,095.97	-4,990.13	5,047.13	4,889.51	157.63	32.020	
4,200.00	4,197.00	4,148.00	4,197.00	18.46	143.10	65.74	1,095.97	-4,990.13	5,045.48	4,883.93	161.55	31.232	
4,300.00	4,296.92	4,247.92	4,296.92	18.89	146.59	65.78	1,095.97	-4,990.13	5,043.83	4,878.36	165.47	30.482	
4,400.00	4,396.84	4,347.84	4,396.84	19.33	150.07	65.82	1,095.97	-4,990.13	5,042.19	4,872.79	169.39	29.766	
4,500.00	4,496.76	4,447.76	4,496.76	19.77	153.56	65.86	1,095.97	-4,990.13	5,040.54	4,867.22	173.32	29.083	
4,600.00	4,596.68	4,547.68	4,596.68	20.20	157.05	65.91	1,095.97	-4,990.13	5,038.90	4,861.66	177.24	28.429	
4,700.00	4,696.60	4,647.60	4,696.60	20.64	160.54	65.95	1,095.97	-4,990.13	5,037.26	4,856.10	181.17	27.805	
4,800.00	4,796.52	4,747.52	4,796.52	21.08	164.02	65.99	1,095.97	-4,990.13	5,035.63	4,850.54	185.09	27.206	
4,900.00	4,896.44	4,847.44	4,896.44	21.51	167.51	66.03	1,095.97	-4,990.13	5,033.99	4,844.98	189.02	26.633	
5,000.00	4,996.36	4,947.36	4,996.36	21.95	171.00	66.07	1,095.97	-4,990.13	5,032.36	4,839.42	192.94	26.082	
5,100.00	5,096.28	5,047.28	5,096.28	22.39	174.49	66.11	1,095.97	-4,990.13	5,030.74	4,833.87	196.87	25.554	

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	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	5,196.19	5,147.19	5,196.19	22.83	177.97	66.16	1,095.97	-4,990.13	5,029.11	4,828.32	200.79	25.046		
5,300.00	5,296.11	5,247.11	5,296.11	23.27	181.46	66.20	1,095.97	-4,990.13	5,027.49	4,822.77	204.72	24.558		
5,400.00	5,396.03	5,347.03	5,396.03	23.71	184.95	66.24	1,095.97	-4,990.13	5,025.87	4,817.23	208.64	24.088		
5,500.00	5,495.95	5,446.95	5,495.95	24.14	188.44	66.28	1,095.97	-4,990.13	5,024.25	4,811.68	212.57	23.636		
5,600.00	5,595.87	5,546.87	5,595.87	24.58	191.92	66.32	1,095.97	-4,990.13	5,022.64	4,806.14	216.50	23.200		
5,700.00	5,695.79	5,646.79	5,695.79	25.02	195.41	66.37	1,095.97	-4,990.13	5,021.03	4,800.61	220.42	22.779		
5,800.00	5,795.71	5,746.71	5,795.71	25.46	198.90	66.41	1,095.97	-4,990.13	5,019.42	4,795.07	224.35	22.373		
5,900.00	5,895.63	5,846.63	5,895.63	25.90	202.39	66.45	1,095.97	-4,990.13	5,017.81	4,789.54	228.28	21.981		
6,000.00	5,995.55	5,946.55	5,995.55	26.34	205.88	66.49	1,095.97	-4,990.13	5,016.21	4,784.01	232.20	21.603		
6,100.00	6,095.47	6,046.47	6,095.47	26.78	209.36	66.53	1,095.97	-4,990.13	5,014.61	4,778.48	236.13	21.237		
6,200.00	6,195.39	6,146.39	6,195.39	27.22	212.85	66.58	1,095.97	-4,990.13	5,013.01	4,772.96	240.06	20.883		
6,300.00	6,295.31	6,246.31	6,295.31	27.66	216.34	66.62	1,095.97	-4,990.13	5,011.42	4,767.43	243.98	20.540		
6,400.00	6,395.23	6,346.23	6,395.23	28.10	219.83	66.66	1,095.97	-4,990.13	5,009.83	4,761.91	247.91	20.208		
6,500.00	6,495.02	6,446.02	6,495.02	28.54	223.31	31.18	1,095.97	-4,990.13	5,005.98	4,754.15	251.84	19.878		
6,600.00	6,593.09	6,544.09	6,593.09	28.98	226.73	22.60	1,095.97	-4,990.13	4,988.66	4,732.97	255.70	19.510		
6,700.00	6,687.01	6,638.01	6,687.01	29.41	230.01	21.18	1,095.97	-4,990.13	4,956.75	4,697.35	259.40	19.109		
6,800.00	6,774.46	6,725.46	6,774.46	29.83	233.06	21.70	1,095.97	-4,990.13	4,911.06	4,648.21	262.84	18.684		
6,900.00	6,853.31	6,804.31	6,853.31	30.26	235.82	23.55	1,095.97	-4,990.13	4,852.75	4,586.79	265.95	18.247		
7,000.00	6,921.60	6,872.60	6,921.60	30.76	238.20	26.90	1,095.97	-4,990.13	4,783.29	4,514.63	268.65	17.805		
7,100.00	6,977.66	6,928.66	6,977.66	31.38	240.16	32.46	1,095.97	-4,990.13	4,704.43	4,433.55	270.88	17.367		
7,200.00	7,020.10	6,971.10	7,020.10	32.17	241.64	41.72	1,095.97	-4,990.13	4,618.16	4,345.56	272.60	16.941		
7,300.00	7,047.88	7,001.12	7,047.88	33.13	242.69	57.37	1,095.97	-4,990.13	4,526.63	4,252.77	273.85	16.529		
7,400.00	7,060.32	7,011.32	7,060.32	34.27	243.04	81.70	1,095.97	-4,990.13	4,432.12	4,157.72	274.40	16.152		
7,500.00	7,060.70	7,011.70	7,060.70	35.56	243.06	90.77	1,095.97	-4,990.13	4,336.88	4,062.27	274.60	15.793		
7,600.00	7,060.27	7,011.27	7,060.27	37.02	243.04	90.75	1,095.97	-4,990.13	4,241.83	3,967.02	274.82	15.435		
7,700.00	7,059.83	7,010.83	7,059.83	38.64	243.03	90.73	1,095.97	-4,990.13	4,147.02	3,871.95	275.07	15.076		
7,800.00	7,059.40	7,010.40	7,059.40	40.40	243.01	90.71	1,095.97	-4,990.13	4,052.46	3,777.08	275.38	14.716		
7,900.00	7,058.97	7,009.97	7,058.97	42.28	243.00	90.69	1,095.97	-4,990.13	3,958.17	3,682.43	275.73	14.355		
8,000.00	7,058.53	7,009.53	7,058.53	44.27	242.98	90.68	1,095.97	-4,990.13	3,864.16	3,588.01	276.15	13.993		
8,100.00	7,058.10	7,009.10	7,058.10	46.35	242.96	90.66	1,095.97	-4,990.13	3,770.46	3,493.84	276.62	13.630		
8,200.00	7,057.66	7,008.66	7,057.66	48.50	242.95	90.64	1,095.97	-4,990.13	3,677.09	3,399.92	277.17	13.267		
8,300.00	7,057.23	7,008.23	7,057.23	50.73	242.93	90.62	1,095.97	-4,990.13	3,584.08	3,306.29	277.79	12.902		
8,400.00	7,056.80	7,007.80	7,056.80	53.02	242.92	90.60	1,095.97	-4,990.13	3,491.46	3,212.97	278.49	12.537		
8,500.00	7,056.36	7,007.36	7,056.36	55.36	242.90	90.58	1,095.97	-4,990.13	3,399.25	3,119.98	279.28	12.172		
8,600.00	7,055.93	7,006.93	7,055.93	57.74	242.89	90.56	1,095.97	-4,990.13	3,307.50	3,027.34	280.16	11.806		
8,700.00	7,055.49	7,006.49	7,055.49	60.17	242.87	90.55	1,095.97	-4,990.13	3,216.24	2,935.09	281.15	11.440		
8,800.00	7,055.06	7,006.06	7,055.06	62.63	242.86	90.53	1,095.97	-4,990.13	3,125.51	2,843.27	282.24	11.074		
8,900.00	7,054.63	7,005.63	7,054.63	65.13	242.84	90.51	1,095.97	-4,990.13	3,035.37	2,751.91	283.46	10.708		
9,000.00	7,054.19	7,005.19	7,054.19	67.66	242.83	90.49	1,095.97	-4,990.13	2,945.86	2,661.05	284.81	10.343		
9,100.00	7,053.76	7,004.76	7,053.76	70.21	242.81	90.47	1,095.97	-4,990.13	2,857.05	2,570.76	286.29	9.979		
9,200.00	7,053.32	7,004.32	7,053.32	72.78	242.80	90.45	1,095.97	-4,990.13	2,769.00	2,481.08	287.93	9.617		
9,300.00	7,052.89	7,003.89	7,052.89	75.38	242.78	90.43	1,095.97	-4,990.13	2,681.79	2,392.07	289.72	9.256		
9,400.00	7,052.46	7,003.46	7,052.46	77.99	242.77	90.42	1,095.97	-4,990.13	2,595.51	2,303.82	291.69	8.898		
9,500.00	7,052.02	7,003.02	7,052.02	80.62	242.75	90.40	1,095.97	-4,990.13	2,510.24	2,216.40	293.83	8.543		
9,600.00	7,051.59	7,002.59	7,051.59	83.26	242.74	90.38	1,095.97	-4,990.13	2,426.09	2,129.91	296.18	8.191		
9,700.00	7,051.15	7,002.15	7,051.15	85.92	242.72	90.36	1,095.97	-4,990.13	2,343.19	2,044.47	298.73	7.844		
9,800.00	7,050.72	7,001.72	7,050.72	88.59	242.71	90.34	1,095.97	-4,990.13	2,261.68	1,960.18	301.50	7.501		
9,900.00	7,050.29	7,001.29	7,050.29	91.28	242.69	90.32	1,095.97	-4,990.13	2,181.70	1,877.20	304.50	7.165		
10,000.00	7,049.85	7,000.85	7,049.85	93.97	242.68	90.30	1,095.97	-4,990.13	2,103.44	1,795.69	307.75	6.835		
10,100.00	7,049.42	7,000.42	7,049.42	96.67	242.66	90.28	1,095.97	-4,990.13	2,027.09	1,715.84	311.25	6.513		
10,200.00	7,048.98	7,000.02	7,048.98	99.38	242.65	90.27	1,095.97	-4,990.13	1,952.88	1,637.87	315.01	6.199		
10,300.00	7,048.55	7,000.45	7,048.55	102.10	242.66	90.25	1,095.97	-4,990.13	1,881.05	1,561.98	319.07	5.895		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	7,000.88	7,048.12	104.83	242.68	90.23	1,095.97	-4,990.13	1,811.90	1,488.50	323.40	5.603		
10,500.00	7,047.68	7,001.32	7,047.68	107.56	242.69	90.21	1,095.97	-4,990.13	1,745.75	1,417.76	327.99	5.323		
10,600.00	7,047.25	7,001.75	7,047.25	110.30	242.71	90.19	1,095.97	-4,990.13	1,682.93	1,350.11	332.82	5.057		
10,700.00	7,046.81	7,002.19	7,046.81	113.05	242.72	90.17	1,095.97	-4,990.13	1,623.85	1,285.98	337.87	4.806		
10,800.00	7,046.38	7,002.62	7,046.38	115.80	242.74	90.15	1,095.97	-4,990.13	1,568.92	1,225.83	343.10	4.573		
10,900.00	7,045.95	7,003.05	7,045.95	118.55	242.75	90.14	1,095.97	-4,990.13	1,518.60	1,170.16	348.44	4.358		
11,000.00	7,045.51	7,003.49	7,045.51	121.31	242.77	90.12	1,095.97	-4,990.13	1,473.36	1,119.53	353.82	4.164		
11,100.00	7,045.08	7,003.92	7,045.08	124.08	242.78	90.10	1,095.97	-4,990.13	1,433.67	1,074.52	359.15	3.992		
11,200.00	7,044.64	7,004.36	7,044.64	126.85	242.80	90.08	1,095.97	-4,990.13	1,400.01	1,035.70	364.31	3.843		
11,300.00	7,044.21	7,004.79	7,044.21	129.62	242.81	90.06	1,095.97	-4,990.13	1,372.83	1,003.65	369.18	3.719		
11,400.00	7,043.78	7,005.22	7,043.78	132.40	242.83	90.04	1,095.97	-4,990.13	1,352.52	978.88	373.63	3.620		
11,500.00	7,043.34	7,005.66	7,043.34	135.18	242.84	90.02	1,095.97	-4,990.13	1,339.38	961.83	377.55	3.548		
11,600.00	7,042.91	7,006.09	7,042.91	137.96	242.86	90.01	1,095.97	-4,990.13	1,333.62	952.81	380.81	3.502		
11,626.86	7,042.79	7,006.21	7,042.79	138.71	242.86	90.00	1,095.97	-4,990.13	1,333.35	951.78	381.57	3.494 CC, ES		
11,700.00	7,042.47	7,006.53	7,042.47	140.75	242.87	89.99	1,095.97	-4,990.13	1,335.36	951.99	383.36	3.483 SF		
11,800.00	7,042.04	7,006.96	7,042.04	143.54	242.89	89.97	1,095.97	-4,990.13	1,344.55	959.39	385.16	3.491		
11,900.00	7,041.61	7,007.39	7,041.61	146.33	242.91	89.95	1,095.97	-4,990.13	1,361.04	974.85	386.19	3.524		
12,000.00	7,041.17	7,007.83	7,041.17	149.13	242.92	89.93	1,095.97	-4,990.13	1,384.58	998.07	386.51	3.582		
12,100.00	7,040.74	7,008.26	7,040.74	151.92	242.94	89.91	1,095.97	-4,990.13	1,414.81	1,028.64	386.17	3.664		
12,200.00	7,040.30	7,008.70	7,040.30	154.72	242.95	89.89	1,095.97	-4,990.13	1,451.31	1,066.05	385.26	3.767		
12,300.00	7,039.87	7,009.13	7,039.87	157.52	242.97	89.87	1,095.97	-4,990.13	1,493.63	1,109.75	383.88	3.891		
12,400.00	7,039.44	7,009.56	7,039.44	160.33	242.98	89.86	1,095.97	-4,990.13	1,541.29	1,159.17	382.12	4.034		
12,500.00	7,039.00	7,010.00	7,039.00	163.13	243.00	89.84	1,095.97	-4,990.13	1,593.80	1,213.72	380.07	4.193		
12,600.00	7,038.57	6,989.57	7,038.57	165.94	242.28	89.82	1,095.97	-4,990.13	1,650.70	1,273.61	377.10	4.377		
12,700.00	7,038.13	6,989.13	7,038.13	168.75	242.27	89.80	1,095.97	-4,990.13	1,711.56	1,336.88	374.68	4.568		
12,800.00	7,037.70	6,988.70	7,037.70	171.56	242.25	89.78	1,095.97	-4,990.13	1,775.97	1,403.77	372.19	4.772		
12,900.00	7,037.27	6,988.27	7,037.27	174.37	242.24	89.76	1,095.97	-4,990.13	1,843.55	1,473.87	369.68	4.987		
13,000.00	7,036.83	6,987.83	7,036.83	177.19	242.22	89.74	1,095.97	-4,990.13	1,913.98	1,546.80	367.18	5.213		
13,100.00	7,036.40	6,987.40	7,036.40	180.00	242.21	89.73	1,095.97	-4,990.13	1,986.94	1,622.23	364.71	5.448		
13,200.00	7,035.96	6,986.96	7,035.96	182.82	242.19	89.71	1,095.97	-4,990.13	2,062.17	1,699.87	362.30	5.692		
13,300.00	7,035.53	6,986.53	7,035.53	185.64	242.18	89.69	1,095.97	-4,990.13	2,139.43	1,779.47	359.96	5.944		
13,400.00	7,035.10	6,986.10	7,035.10	188.46	242.16	89.67	1,095.97	-4,990.13	2,218.51	1,860.81	357.70	6.202		
13,500.00	7,034.66	6,985.66	7,034.66	191.28	242.15	89.65	1,095.97	-4,990.13	2,299.22	1,943.69	355.53	6.467		
13,600.00	7,034.23	6,985.23	7,034.23	194.10	242.13	89.63	1,095.97	-4,990.13	2,381.39	2,027.94	353.45	6.738		
13,700.00	7,033.79	6,984.79	7,033.79	196.92	242.12	89.61	1,095.97	-4,990.13	2,464.88	2,113.42	351.46	7.013		
13,800.00	7,033.36	6,984.36	7,033.36	199.74	242.10	89.59	1,095.97	-4,990.13	2,549.56	2,200.00	349.56	7.294		
13,900.00	7,032.93	6,983.93	7,032.93	202.57	242.09	89.58	1,095.97	-4,990.13	2,635.32	2,287.57	347.75	7.578		
14,000.00	7,032.49	6,983.49	7,032.49	205.39	242.07	89.56	1,095.97	-4,990.13	2,722.04	2,376.02	346.02	7.867		
14,100.00	7,032.06	6,983.06	7,032.06	208.22	242.06	89.54	1,095.97	-4,990.13	2,809.65	2,465.27	344.38	8.159		
14,200.00	7,031.62	6,982.62	7,031.62	211.05	242.04	89.52	1,095.97	-4,990.13	2,898.06	2,555.24	342.82	8.454		
14,300.00	7,031.19	6,982.19	7,031.19	213.87	242.03	89.50	1,095.97	-4,990.13	2,987.20	2,645.87	341.33	8.752		
14,400.00	7,030.76	6,981.76	7,030.76	216.70	242.01	89.48	1,095.97	-4,990.13	3,077.01	2,737.09	339.92	9.052		
14,500.00	7,030.32	6,981.32	7,030.32	219.53	242.00	89.46	1,095.97	-4,990.13	3,167.43	2,828.86	338.57	9.355		
14,600.00	7,029.89	6,980.89	7,029.89	222.36	241.98	89.45	1,095.97	-4,990.13	3,258.41	2,921.12	337.29	9.661		
14,700.00	7,029.45	6,980.45	7,029.45	225.19	241.96	89.43	1,095.97	-4,990.13	3,349.90	3,013.83	336.07	9.968		
14,800.00	7,029.02	6,980.02	7,029.02	228.03	241.95	89.41	1,095.97	-4,990.13	3,441.87	3,106.96	334.90	10.277		
14,805.04	7,029.00	6,980.00	7,029.00	228.17	241.95	89.41	1,095.97	-4,990.13	3,446.51	3,111.67	334.85	10.293		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-77.70	1,116.76	-5,120.01	5,240.60					
100.00	100.00	53.00	100.00	3.28	3.41	-77.70	1,116.76	-5,120.01	5,240.39	5,233.70	6.69	783.002		
200.00	200.00	153.00	200.00	3.34	4.87	-77.70	1,116.76	-5,120.01	5,240.39	5,232.19	8.20	638.758		
300.00	300.00	253.00	300.00	3.44	7.81	-77.70	1,116.76	-5,120.01	5,240.39	5,229.14	11.25	465.651		
400.00	400.00	353.00	400.00	3.60	11.07	-77.70	1,116.76	-5,120.01	5,240.39	5,225.71	14.68	357.025		
500.00	499.98	452.98	499.98	3.80	14.45	64.14	1,116.76	-5,120.01	5,239.63	5,221.39	18.24	287.227		
600.00	599.90	552.90	599.90	4.02	17.86	64.18	1,116.76	-5,120.01	5,237.89	5,216.01	21.88	239.382		
700.00	699.82	652.82	699.82	4.28	21.30	64.22	1,116.76	-5,120.01	5,236.15	5,210.57	25.58	204.718		
800.00	799.74	752.74	799.74	4.57	24.75	64.26	1,116.76	-5,120.01	5,234.40	5,205.08	29.32	178.550		
900.00	899.66	852.66	899.66	4.88	28.21	64.30	1,116.76	-5,120.01	5,232.66	5,199.57	33.09	158.147		
1,000.00	999.58	952.58	999.58	5.21	31.68	64.34	1,116.76	-5,120.01	5,230.92	5,194.03	36.88	141.822		
1,100.00	1,099.50	1,052.50	1,099.50	5.55	35.15	64.38	1,116.76	-5,120.01	5,229.18	5,188.48	40.70	128.481		
1,200.00	1,199.42	1,152.42	1,199.42	5.91	38.62	64.42	1,116.76	-5,120.01	5,227.44	5,182.91	44.53	117.385		
1,300.00	1,299.34	1,252.34	1,299.34	6.28	42.10	64.46	1,116.76	-5,120.01	5,225.71	5,177.33	48.38	108.019		
1,400.00	1,399.26	1,352.26	1,399.26	6.66	45.58	64.50	1,116.76	-5,120.01	5,223.98	5,171.75	52.23	100.011		
1,500.00	1,499.18	1,452.18	1,499.18	7.04	49.06	64.54	1,116.76	-5,120.01	5,222.25	5,166.15	56.10	93.089		
1,600.00	1,599.10	1,552.10	1,599.10	7.43	52.54	64.58	1,116.76	-5,120.01	5,220.53	5,160.56	59.97	87.049		
1,700.00	1,699.01	1,652.01	1,699.01	7.83	56.02	64.61	1,116.76	-5,120.01	5,218.80	5,154.95	63.85	81.734		
1,800.00	1,798.93	1,751.93	1,798.93	8.23	59.51	64.65	1,116.76	-5,120.01	5,217.08	5,149.35	67.74	77.021		
1,900.00	1,898.85	1,851.85	1,898.85	8.64	62.99	64.69	1,116.76	-5,120.01	5,215.37	5,143.74	71.63	72.815		
2,000.00	1,998.77	1,951.77	1,998.77	9.05	66.47	64.73	1,116.76	-5,120.01	5,213.65	5,138.13	75.52	69.038		
2,100.00	2,098.69	2,051.69	2,098.69	9.46	69.96	64.77	1,116.76	-5,120.01	5,211.94	5,132.52	79.41	65.629		
2,200.00	2,198.61	2,151.61	2,198.61	9.88	73.44	64.81	1,116.76	-5,120.01	5,210.23	5,126.91	83.31	62.537		
2,300.00	2,298.53	2,251.53	2,298.53	10.30	76.93	64.85	1,116.76	-5,120.01	5,208.52	5,121.30	87.22	59.719		
2,400.00	2,398.45	2,351.45	2,398.45	10.72	80.41	64.89	1,116.76	-5,120.01	5,206.82	5,115.69	91.12	57.142		
2,500.00	2,498.37	2,451.37	2,498.37	11.14	83.90	64.93	1,116.76	-5,120.01	5,205.11	5,110.08	95.03	54.775		
2,600.00	2,598.29	2,551.29	2,598.29	11.56	87.38	64.97	1,116.76	-5,120.01	5,203.41	5,104.48	98.94	52.593		
2,700.00	2,698.21	2,651.21	2,698.21	11.98	90.87	65.01	1,116.76	-5,120.01	5,201.72	5,098.87	102.85	50.577		
2,800.00	2,798.13	2,751.13	2,798.13	12.41	94.35	65.05	1,116.76	-5,120.01	5,200.02	5,093.26	106.76	48.708		
2,900.00	2,898.05	2,851.05	2,898.05	12.84	97.84	65.09	1,116.76	-5,120.01	5,198.33	5,087.66	110.67	46.971		
3,000.00	2,997.97	2,950.97	2,997.97	13.27	101.33	65.13	1,116.76	-5,120.01	5,196.64	5,082.05	114.59	45.352		
3,100.00	3,097.89	3,050.89	3,097.89	13.69	104.81	65.17	1,116.76	-5,120.01	5,194.95	5,076.45	118.50	43.839		
3,200.00	3,197.81	3,150.81	3,197.81	14.12	108.30	65.21	1,116.76	-5,120.01	5,193.27	5,070.85	122.42	42.423		
3,300.00	3,297.73	3,250.73	3,297.73	14.56	111.79	65.25	1,116.76	-5,120.01	5,191.58	5,065.25	126.33	41.094		
3,400.00	3,397.65	3,350.65	3,397.65	14.99	115.27	65.29	1,116.76	-5,120.01	5,189.90	5,059.65	130.25	39.845		
3,500.00	3,497.56	3,450.56	3,497.56	15.42	118.76	65.34	1,116.76	-5,120.01	5,188.23	5,054.06	134.17	38.669		
3,600.00	3,597.48	3,550.48	3,597.48	15.85	122.25	65.38	1,116.76	-5,120.01	5,186.55	5,048.46	138.09	37.559		
3,700.00	3,697.40	3,650.40	3,697.40	16.28	125.73	65.42	1,116.76	-5,120.01	5,184.88	5,042.87	142.01	36.511		
3,800.00	3,797.32	3,750.32	3,797.32	16.72	129.22	65.46	1,116.76	-5,120.01	5,183.21	5,037.28	145.93	35.518		
3,900.00	3,897.24	3,850.24	3,897.24	17.15	132.71	65.50	1,116.76	-5,120.01	5,181.54	5,031.69	149.85	34.578		
4,000.00	3,997.16	3,950.16	3,997.16	17.59	136.19	65.54	1,116.76	-5,120.01	5,179.88	5,026.11	153.77	33.685		
4,100.00	4,097.08	4,050.08	4,097.08	18.02	139.68	65.58	1,116.76	-5,120.01	5,178.22	5,020.52	157.70	32.837		
4,200.00	4,197.00	4,150.00	4,197.00	18.46	143.17	65.62	1,116.76	-5,120.01	5,176.56	5,014.94	161.62	32.030		
4,300.00	4,296.92	4,249.92	4,296.92	18.89	146.66	65.66	1,116.76	-5,120.01	5,174.90	5,009.36	165.54	31.261		
4,400.00	4,396.84	4,349.84	4,396.84	19.33	150.14	65.70	1,116.76	-5,120.01	5,173.25	5,003.78	169.46	30.527		
4,500.00	4,496.76	4,449.76	4,496.76	19.77	153.63	65.74	1,116.76	-5,120.01	5,171.60	4,998.21	173.39	29.827		
4,600.00	4,596.68	4,549.68	4,596.68	20.20	157.12	65.78	1,116.76	-5,120.01	5,169.95	4,992.64	177.31	29.157		
4,700.00	4,696.60	4,649.60	4,696.60	20.64	160.61	65.82	1,116.76	-5,120.01	5,168.30	4,987.07	181.24	28.517		
4,800.00	4,796.52	4,749.52	4,796.52	21.08	164.09	65.86	1,116.76	-5,120.01	5,166.66	4,981.50	185.16	27.904		
4,900.00	4,896.44	4,849.44	4,896.44	21.51	167.58	65.90	1,116.76	-5,120.01	5,165.02	4,975.93	189.09	27.316		
5,000.00	4,996.36	4,949.36	4,996.36	21.95	171.07	65.94	1,116.76	-5,120.01	5,163.38	4,970.37	193.01	26.752		
5,100.00	5,096.28	5,049.28	5,096.28	22.39	174.56	65.98	1,116.76	-5,120.01	5,161.74	4,964.81	196.94	26.210		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,149.19	5,196.19	22.83	178.04	66.02	1,116.76	-5,120.01	5,160.11	4,959.25	200.86	25.690		
5,300.00	5,296.11	5,249.11	5,296.11	23.27	181.53	66.06	1,116.76	-5,120.01	5,158.48	4,953.69	204.79	25.189		
5,400.00	5,396.03	5,349.03	5,396.03	23.71	185.02	66.10	1,116.76	-5,120.01	5,156.85	4,948.14	208.71	24.708		
5,500.00	5,495.95	5,448.95	5,495.95	24.14	188.51	66.15	1,116.76	-5,120.01	5,155.23	4,942.59	212.64	24.244		
5,600.00	5,595.87	5,548.87	5,595.87	24.58	191.99	66.19	1,116.76	-5,120.01	5,153.60	4,937.04	216.57	23.797		
5,700.00	5,695.79	5,648.79	5,695.79	25.02	195.48	66.23	1,116.76	-5,120.01	5,151.98	4,931.49	220.49	23.366		
5,800.00	5,795.71	5,748.71	5,795.71	25.46	198.97	66.27	1,116.76	-5,120.01	5,150.36	4,925.95	224.42	22.950		
5,900.00	5,895.63	5,848.63	5,895.63	25.90	202.46	66.31	1,116.76	-5,120.01	5,148.75	4,920.40	228.35	22.548		
6,000.00	5,995.55	5,948.55	5,995.55	26.34	205.94	66.35	1,116.76	-5,120.01	5,147.14	4,914.86	232.27	22.160		
6,100.00	6,095.47	6,048.47	6,095.47	26.78	209.43	66.39	1,116.76	-5,120.01	5,145.53	4,909.33	236.20	21.785		
6,200.00	6,195.39	6,148.39	6,195.39	27.22	212.92	66.43	1,116.76	-5,120.01	5,143.92	4,903.79	240.13	21.422		
6,300.00	6,295.31	6,248.31	6,295.31	27.66	216.41	66.47	1,116.76	-5,120.01	5,142.32	4,898.26	244.05	21.070		
6,400.00	6,395.23	6,348.23	6,395.23	28.10	219.90	66.51	1,116.76	-5,120.01	5,140.71	4,892.73	247.98	20.730		
6,500.00	6,495.02	6,448.02	6,495.02	28.54	223.38	31.03	1,116.76	-5,120.01	5,136.86	4,884.95	251.91	20.392		
6,600.00	6,593.09	6,546.09	6,593.09	28.98	226.80	22.44	1,116.76	-5,120.01	5,119.52	4,863.75	255.77	20.016		
6,700.00	6,687.01	6,640.01	6,687.01	29.41	230.08	21.02	1,116.76	-5,120.01	5,087.58	4,828.11	259.47	19.608		
6,800.00	6,774.46	6,727.46	6,774.46	29.83	233.13	21.52	1,116.76	-5,120.01	5,041.84	4,778.93	262.91	19.177		
6,900.00	6,853.31	6,806.31	6,853.31	30.26	235.89	23.34	1,116.76	-5,120.01	4,983.47	4,717.45	266.02	18.733		
7,000.00	6,921.60	6,874.60	6,921.60	30.76	238.27	26.65	1,116.76	-5,120.01	4,913.95	4,645.23	268.72	18.286		
7,100.00	6,977.66	6,930.66	6,977.66	31.38	240.23	32.16	1,116.76	-5,120.01	4,835.01	4,564.06	270.95	17.845		
7,200.00	7,020.10	6,973.10	7,020.10	32.17	241.71	41.37	1,116.76	-5,120.01	4,748.65	4,475.98	272.67	17.416		
7,300.00	7,047.88	7,000.88	7,047.88	33.13	242.68	57.03	1,116.76	-5,120.01	4,657.01	4,383.17	273.84	17.006		
7,400.00	7,060.32	7,013.32	7,060.32	34.27	243.11	81.58	1,116.76	-5,120.01	4,562.39	4,287.93	274.46	16.623		
7,500.00	7,060.70	7,013.70	7,060.70	35.56	243.13	90.78	1,116.76	-5,120.01	4,467.02	4,192.36	274.66	16.264		
7,600.00	7,060.27	7,013.27	7,060.27	37.02	243.11	90.76	1,116.76	-5,120.01	4,371.84	4,096.97	274.86	15.905		
7,700.00	7,059.83	7,012.83	7,059.83	38.64	243.10	90.74	1,116.76	-5,120.01	4,276.87	4,001.76	275.11	15.546		
7,800.00	7,059.40	7,012.40	7,059.40	40.40	243.08	90.73	1,116.76	-5,120.01	4,182.14	3,906.74	275.41	15.185		
7,900.00	7,058.97	7,011.97	7,058.97	42.28	243.06	90.71	1,116.76	-5,120.01	4,087.67	3,811.92	275.75	14.824		
8,000.00	7,058.53	7,011.53	7,058.53	44.27	243.05	90.69	1,116.76	-5,120.01	3,993.46	3,717.31	276.15	14.461		
8,100.00	7,058.10	7,011.10	7,058.10	46.35	243.03	90.67	1,116.76	-5,120.01	3,899.54	3,622.93	276.61	14.098		
8,200.00	7,057.66	7,010.66	7,057.66	48.50	243.02	90.65	1,116.76	-5,120.01	3,805.93	3,528.80	277.13	13.733		
8,300.00	7,057.23	7,010.23	7,057.23	50.73	243.00	90.63	1,116.76	-5,120.01	3,712.65	3,434.92	277.73	13.368		
8,400.00	7,056.80	7,009.80	7,056.80	53.02	242.99	90.62	1,116.76	-5,120.01	3,619.73	3,341.33	278.40	13.002		
8,500.00	7,056.36	7,009.36	7,056.36	55.36	242.97	90.60	1,116.76	-5,120.01	3,527.20	3,248.05	279.15	12.635		
8,600.00	7,055.93	7,008.93	7,055.93	57.74	242.96	90.58	1,116.76	-5,120.01	3,435.09	3,155.09	280.00	12.268		
8,700.00	7,055.49	7,008.49	7,055.49	60.17	242.94	90.56	1,116.76	-5,120.01	3,343.43	3,062.49	280.94	11.901		
8,800.00	7,055.06	7,008.06	7,055.06	62.63	242.93	90.54	1,116.76	-5,120.01	3,252.26	2,970.28	281.98	11.533		
8,900.00	7,054.63	7,007.63	7,054.63	65.13	242.91	90.52	1,116.76	-5,120.01	3,161.63	2,878.49	283.14	11.166		
9,000.00	7,054.19	7,007.19	7,054.19	67.66	242.90	90.51	1,116.76	-5,120.01	3,071.58	2,787.16	284.42	10.799		
9,100.00	7,053.76	7,006.76	7,053.76	70.21	242.88	90.49	1,116.76	-5,120.01	2,982.16	2,696.33	285.83	10.433		
9,200.00	7,053.32	7,006.32	7,053.32	72.78	242.87	90.47	1,116.76	-5,120.01	2,893.44	2,606.06	287.38	10.068		
9,300.00	7,052.89	7,005.89	7,052.89	75.38	242.85	90.45	1,116.76	-5,120.01	2,805.47	2,516.40	289.07	9.705		
9,400.00	7,052.46	7,005.46	7,052.46	77.99	242.84	90.43	1,116.76	-5,120.01	2,718.33	2,427.41	290.93	9.344		
9,500.00	7,052.02	7,005.02	7,052.02	80.62	242.82	90.41	1,116.76	-5,120.01	2,632.11	2,339.16	292.95	8.985		
9,600.00	7,051.59	7,004.59	7,051.59	83.26	242.81	90.40	1,116.76	-5,120.01	2,546.90	2,251.74	295.16	8.629		
9,700.00	7,051.15	7,004.15	7,051.15	85.92	242.79	90.38	1,116.76	-5,120.01	2,462.80	2,165.24	297.56	8.277		
9,800.00	7,050.72	7,003.72	7,050.72	88.59	242.78	90.36	1,116.76	-5,120.01	2,379.93	2,079.76	300.17	7.929		
9,900.00	7,050.29	7,003.29	7,050.29	91.28	242.76	90.34	1,116.76	-5,120.01	2,298.43	1,995.43	302.99	7.586		
10,000.00	7,049.85	7,002.85	7,049.85	93.97	242.75	90.32	1,116.76	-5,120.01	2,218.43	1,912.39	306.05	7.249		
10,100.00	7,049.42	7,002.42	7,049.42	96.67	242.73	90.30	1,116.76	-5,120.01	2,140.12	1,830.78	309.34	6.918		
10,200.00	7,048.98	7,001.98	7,048.98	99.38	242.72	90.29	1,116.76	-5,120.01	2,063.69	1,750.80	312.89	6.596		
10,300.00	7,048.55	7,001.55	7,048.55	102.10	242.70	90.27	1,116.76	-5,120.01	1,989.35	1,672.65	316.69	6.282		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	7,001.12	7,048.12	104.83	242.69	90.25	1,116.76	-5,120.01	1,917.34	1,596.58	320.76	5.977		
10,500.00	7,047.68	7,000.68	7,047.68	107.56	242.67	90.23	1,116.76	-5,120.01	1,847.93	1,522.84	325.09	5.684		
10,600.00	7,047.25	7,000.25	7,047.25	110.30	242.66	90.21	1,116.76	-5,120.01	1,781.44	1,451.76	329.68	5.404		
10,700.00	7,046.81	7,000.19	7,046.81	113.05	242.65	90.19	1,116.76	-5,120.01	1,718.20	1,383.68	334.53	5.136		
10,800.00	7,046.38	7,000.62	7,046.38	115.80	242.67	90.18	1,116.76	-5,120.01	1,658.58	1,318.98	339.61	4.884		
10,900.00	7,045.95	7,001.05	7,045.95	118.55	242.68	90.16	1,116.76	-5,120.01	1,602.99	1,258.13	344.87	4.648		
11,000.00	7,045.51	7,001.49	7,045.51	121.31	242.70	90.14	1,116.76	-5,120.01	1,551.86	1,201.61	350.25	4.431		
11,100.00	7,045.08	7,001.92	7,045.08	124.08	242.71	90.12	1,116.76	-5,120.01	1,505.64	1,149.95	355.68	4.233		
11,200.00	7,044.64	7,002.36	7,044.64	126.85	242.73	90.10	1,116.76	-5,120.01	1,464.79	1,103.72	361.08	4.057		
11,300.00	7,044.21	7,002.79	7,044.21	129.62	242.74	90.08	1,116.76	-5,120.01	1,429.79	1,063.46	366.33	3.903		
11,400.00	7,043.78	7,003.22	7,043.78	132.40	242.76	90.07	1,116.76	-5,120.01	1,401.06	1,029.74	371.32	3.773		
11,500.00	7,043.34	7,003.66	7,043.34	135.18	242.77	90.05	1,116.76	-5,120.01	1,379.01	1,003.09	375.92	3.668		
11,600.00	7,042.91	7,004.09	7,042.91	137.96	242.79	90.03	1,116.76	-5,120.01	1,363.94	983.93	380.01	3.589		
11,700.00	7,042.47	7,004.53	7,042.47	140.75	242.81	90.01	1,116.76	-5,120.01	1,356.10	972.62	383.48	3.536		
11,756.62	7,042.23	7,004.77	7,042.23	142.33	242.81	90.00	1,116.76	-5,120.01	1,354.92	969.78	385.14	3.518 CC		
11,800.00	7,042.04	7,004.96	7,042.04	143.54	242.82	89.99	1,116.76	-5,120.01	1,355.61	969.36	386.25	3.510 ES		
11,900.00	7,041.61	7,005.39	7,041.61	146.33	242.84	89.97	1,116.76	-5,120.01	1,362.48	974.20	388.28	3.509 SF		
12,000.00	7,041.17	7,005.83	7,041.17	149.13	242.85	89.96	1,116.76	-5,120.01	1,376.60	987.05	389.55	3.534		
12,100.00	7,040.74	7,006.26	7,040.74	151.92	242.87	89.94	1,116.76	-5,120.01	1,397.75	1,007.66	390.09	3.583		
12,200.00	7,040.30	7,006.70	7,040.30	154.72	242.88	89.92	1,116.76	-5,120.01	1,425.62	1,035.67	389.95	3.656		
12,300.00	7,039.87	7,007.13	7,039.87	157.52	242.90	89.90	1,116.76	-5,120.01	1,459.82	1,070.60	389.21	3.751		
12,400.00	7,039.44	7,007.56	7,039.44	160.33	242.91	89.88	1,116.76	-5,120.01	1,499.91	1,111.95	387.97	3.866		
12,500.00	7,039.00	7,008.00	7,039.00	163.13	242.93	89.86	1,116.76	-5,120.01	1,545.45	1,159.14	386.31	4.001		
12,600.00	7,038.57	7,008.43	7,038.57	165.94	242.94	89.85	1,116.76	-5,120.01	1,595.96	1,211.63	384.33	4.153		
12,700.00	7,038.13	7,008.87	7,038.13	168.75	242.96	89.83	1,116.76	-5,120.01	1,650.99	1,268.87	382.12	4.321		
12,800.00	7,037.70	7,009.30	7,037.70	171.56	242.97	89.81	1,116.76	-5,120.01	1,710.10	1,330.36	379.74	4.503		
12,900.00	7,037.27	7,009.73	7,037.27	174.37	242.99	89.79	1,116.76	-5,120.01	1,772.88	1,395.61	377.27	4.699		
13,000.00	7,036.83	6,989.83	7,036.83	177.19	242.29	89.77	1,116.76	-5,120.01	1,838.96	1,464.92	374.04	4.916		
13,100.00	7,036.40	6,989.40	7,036.40	180.00	242.28	89.75	1,116.76	-5,120.01	1,908.00	1,536.51	371.48	5.136		
13,200.00	7,035.96	6,988.96	7,035.96	182.82	242.26	89.74	1,116.76	-5,120.01	1,979.68	1,610.72	368.95	5.366		
13,300.00	7,035.53	6,988.53	7,035.53	185.64	242.25	89.72	1,116.76	-5,120.01	2,053.73	1,687.26	366.47	5.604		
13,400.00	7,035.10	6,988.10	7,035.10	188.46	242.23	89.70	1,116.76	-5,120.01	2,129.90	1,765.85	364.05	5.851		
13,500.00	7,034.66	6,987.66	7,034.66	191.28	242.22	89.68	1,116.76	-5,120.01	2,207.97	1,846.26	361.71	6.104		
13,600.00	7,034.23	6,987.23	7,034.23	194.10	242.20	89.66	1,116.76	-5,120.01	2,287.75	1,928.30	359.46	6.364		
13,700.00	7,033.79	6,986.79	7,033.79	196.92	242.19	89.64	1,116.76	-5,120.01	2,369.07	2,011.78	357.29	6.631		
13,800.00	7,033.36	6,986.36	7,033.36	199.74	242.17	89.63	1,116.76	-5,120.01	2,451.76	2,096.55	355.21	6.902		
13,900.00	7,032.93	6,985.93	7,032.93	202.57	242.16	89.61	1,116.76	-5,120.01	2,535.71	2,182.48	353.22	7.179		
14,000.00	7,032.49	6,985.49	7,032.49	205.39	242.14	89.59	1,116.76	-5,120.01	2,620.78	2,269.45	351.33	7.460		
14,100.00	7,032.06	6,985.06	7,032.06	208.22	242.13	89.57	1,116.76	-5,120.01	2,706.87	2,357.35	349.52	7.745		
14,200.00	7,031.62	6,984.62	7,031.62	211.05	242.11	89.55	1,116.76	-5,120.01	2,793.89	2,446.09	347.79	8.033		
14,300.00	7,031.19	6,984.19	7,031.19	213.87	242.10	89.53	1,116.76	-5,120.01	2,881.75	2,535.60	346.15	8.325		
14,400.00	7,030.76	6,983.76	7,030.76	216.70	242.08	89.51	1,116.76	-5,120.01	2,970.38	2,625.79	344.59	8.620		
14,500.00	7,030.32	6,983.32	7,030.32	219.53	242.06	89.50	1,116.76	-5,120.01	3,059.71	2,716.61	343.10	8.918		
14,600.00	7,029.89	6,982.89	7,029.89	222.36	242.05	89.48	1,116.76	-5,120.01	3,149.68	2,808.00	341.68	9.218		
14,700.00	7,029.45	6,982.45	7,029.45	225.19	242.03	89.46	1,116.76	-5,120.01	3,240.24	2,899.91	340.33	9.521		
14,800.00	7,029.02	6,982.02	7,029.02	228.03	242.02	89.44	1,116.76	-5,120.01	3,331.34	2,992.30	339.04	9.826		
14,805.04	7,029.00	6,982.00	7,029.00	228.17	242.02	89.44	1,116.76	-5,120.01	3,335.94	2,996.96	338.98	9.841		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-94.13	-355.08	-4,917.28	4,930.37					
100.00	100.00	46.00	100.00	3.28	3.38	-94.13	-355.08	-4,917.28	4,930.08	4,923.42	6.66	740.077		
200.00	200.00	146.00	200.00	3.34	4.69	-94.13	-355.08	-4,917.28	4,930.08	4,922.05	8.03	614.234		
300.00	300.00	246.00	300.00	3.44	7.59	-94.13	-355.08	-4,917.28	4,930.08	4,919.05	11.03	446.856		
400.00	400.00	346.00	400.00	3.60	10.84	-94.13	-355.08	-4,917.28	4,930.08	4,915.63	14.44	341.305		
500.00	499.98	445.98	499.98	3.80	14.21	47.70	-355.08	-4,917.28	4,928.90	4,910.90	18.00	273.762		
600.00	599.90	545.90	599.90	4.02	17.62	47.74	-355.08	-4,917.28	4,926.23	4,904.59	21.64	227.633		
700.00	699.82	645.82	699.82	4.28	21.06	47.78	-355.08	-4,917.28	4,923.53	4,898.19	25.34	194.330		
800.00	799.74	745.74	799.74	4.57	24.51	47.81	-355.08	-4,917.28	4,920.83	4,891.76	29.07	169.255		
900.00	899.66	845.66	899.66	4.88	27.97	47.85	-355.08	-4,917.28	4,918.14	4,885.29	32.84	149.744		
1,000.00	999.58	945.58	999.58	5.21	31.44	47.88	-355.08	-4,917.28	4,915.44	4,878.80	36.64	134.159		
1,100.00	1,099.50	1,045.50	1,099.50	5.55	34.91	47.92	-355.08	-4,917.28	4,912.75	4,872.30	40.45	121.439		
1,200.00	1,199.42	1,145.42	1,199.42	5.91	38.38	47.95	-355.08	-4,917.28	4,910.06	4,865.78	44.29	110.872		
1,300.00	1,299.34	1,245.34	1,299.34	6.28	41.86	47.98	-355.08	-4,917.28	4,907.37	4,859.24	48.13	101.959		
1,400.00	1,399.26	1,345.26	1,399.26	6.66	45.34	48.02	-355.08	-4,917.28	4,904.69	4,852.70	51.99	94.346		
1,500.00	1,499.18	1,445.18	1,499.18	7.04	48.82	48.05	-355.08	-4,917.28	4,902.00	4,846.15	55.85	87.770		
1,600.00	1,599.10	1,545.10	1,599.10	7.43	52.30	48.09	-355.08	-4,917.28	4,899.32	4,839.60	59.72	82.034		
1,700.00	1,699.01	1,645.01	1,699.01	7.83	55.78	48.12	-355.08	-4,917.28	4,896.64	4,833.04	63.60	76.990		
1,800.00	1,798.93	1,744.93	1,798.93	8.23	59.26	48.16	-355.08	-4,917.28	4,893.96	4,826.47	67.48	72.519		
1,900.00	1,898.85	1,844.85	1,898.85	8.64	62.74	48.19	-355.08	-4,917.28	4,891.28	4,819.91	71.37	68.531		
2,000.00	1,998.77	1,944.77	1,998.77	9.05	66.23	48.23	-355.08	-4,917.28	4,888.61	4,813.34	75.27	64.951		
2,100.00	2,098.69	2,044.69	2,098.69	9.46	69.71	48.26	-355.08	-4,917.28	4,885.93	4,806.77	79.16	61.721		
2,200.00	2,198.61	2,144.61	2,198.61	9.88	73.20	48.30	-355.08	-4,917.28	4,883.26	4,800.20	83.06	58.792		
2,300.00	2,298.53	2,244.53	2,298.53	10.30	76.68	48.33	-355.08	-4,917.28	4,880.59	4,793.63	86.96	56.123		
2,400.00	2,398.45	2,344.45	2,398.45	10.72	80.17	48.37	-355.08	-4,917.28	4,877.92	4,787.06	90.87	53.683		
2,500.00	2,498.37	2,444.37	2,498.37	11.14	83.65	48.40	-355.08	-4,917.28	4,875.26	4,780.48	94.77	51.442		
2,600.00	2,598.29	2,544.29	2,598.29	11.56	87.14	48.44	-355.08	-4,917.28	4,872.59	4,773.91	98.68	49.378		
2,700.00	2,698.21	2,644.21	2,698.21	11.98	90.62	48.48	-355.08	-4,917.28	4,869.93	4,767.34	102.59	47.470		
2,800.00	2,798.13	2,744.13	2,798.13	12.41	94.11	48.51	-355.08	-4,917.28	4,867.27	4,760.77	106.50	45.702		
2,900.00	2,898.05	2,844.05	2,898.05	12.84	97.60	48.55	-355.08	-4,917.28	4,864.61	4,754.20	110.41	44.059		
3,000.00	2,997.97	2,943.97	2,997.97	13.27	101.08	48.58	-355.08	-4,917.28	4,861.95	4,747.63	114.33	42.527		
3,100.00	3,097.89	3,043.89	3,097.89	13.69	104.57	48.62	-355.08	-4,917.28	4,859.30	4,741.06	118.24	41.097		
3,200.00	3,197.81	3,143.81	3,197.81	14.12	108.05	48.65	-355.08	-4,917.28	4,856.64	4,734.49	122.16	39.758		
3,300.00	3,297.73	3,243.73	3,297.73	14.56	111.54	48.69	-355.08	-4,917.28	4,853.99	4,727.92	126.07	38.502		
3,400.00	3,397.65	3,343.65	3,397.65	14.99	115.03	48.72	-355.08	-4,917.28	4,851.34	4,721.35	129.99	37.321		
3,500.00	3,497.56	3,443.56	3,497.56	15.42	118.51	48.76	-355.08	-4,917.28	4,848.70	4,714.79	133.91	36.209		
3,600.00	3,597.48	3,543.48	3,597.48	15.85	122.00	48.80	-355.08	-4,917.28	4,846.05	4,708.22	137.83	35.161		
3,700.00	3,697.40	3,643.40	3,697.40	16.28	125.49	48.83	-355.08	-4,917.28	4,843.41	4,701.66	141.75	34.170		
3,800.00	3,797.32	3,743.32	3,797.32	16.72	128.98	48.87	-355.08	-4,917.28	4,840.76	4,695.10	145.67	33.232		
3,900.00	3,897.24	3,843.24	3,897.24	17.15	132.46	48.90	-355.08	-4,917.28	4,838.12	4,688.54	149.59	32.343		
4,000.00	3,997.16	3,943.16	3,997.16	17.59	135.95	48.94	-355.08	-4,917.28	4,835.49	4,681.98	153.51	31.500		
4,100.00	4,097.08	4,043.08	4,097.08	18.02	139.44	48.97	-355.08	-4,917.28	4,832.85	4,675.42	157.43	30.699		
4,200.00	4,197.00	4,143.00	4,197.00	18.46	142.92	49.01	-355.08	-4,917.28	4,830.21	4,668.86	161.35	29.936		
4,300.00	4,296.92	4,242.92	4,296.92	18.89	146.41	49.05	-355.08	-4,917.28	4,827.58	4,662.31	165.27	29.210		
4,400.00	4,396.84	4,342.84	4,396.84	19.33	149.90	49.08	-355.08	-4,917.28	4,824.95	4,655.76	169.19	28.517		
4,500.00	4,496.76	4,442.76	4,496.76	19.77	153.39	49.12	-355.08	-4,917.28	4,822.32	4,649.20	173.12	27.856		
4,600.00	4,596.68	4,542.68	4,596.68	20.20	156.87	49.15	-355.08	-4,917.28	4,819.70	4,642.65	177.04	27.224		
4,700.00	4,696.60	4,642.60	4,696.60	20.64	160.36	49.19	-355.08	-4,917.28	4,817.07	4,636.11	180.96	26.619		
4,800.00	4,796.52	4,742.52	4,796.52	21.08	163.85	49.23	-355.08	-4,917.28	4,814.45	4,629.56	184.89	26.040		
4,900.00	4,896.44	4,842.44	4,896.44	21.51	167.34	49.26	-355.08	-4,917.28	4,811.83	4,623.01	188.81	25.485		
5,000.00	4,996.36	4,942.36	4,996.36	21.95	170.82	49.30	-355.08	-4,917.28	4,809.21	4,616.47	192.74	24.952		
5,100.00	5,096.28	5,042.28	5,096.28	22.39	174.31	49.33	-355.08	-4,917.28	4,806.59	4,609.93	196.66	24.441		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,142.19	5,196.19	22.83	177.80	49.37	-355.08	-4,917.28	4,803.97	4,603.39	200.59	23.950		
5,300.00	5,296.11	5,242.11	5,296.11	23.27	181.29	49.41	-355.08	-4,917.28	4,801.36	4,596.85	204.51	23.477		
5,400.00	5,396.03	5,342.03	5,396.03	23.71	184.77	49.44	-355.08	-4,917.28	4,798.75	4,590.31	208.44	23.023		
5,500.00	5,495.95	5,441.95	5,495.95	24.14	188.26	49.48	-355.08	-4,917.28	4,796.14	4,583.78	212.36	22.585		
5,600.00	5,595.87	5,541.87	5,595.87	24.58	191.75	49.52	-355.08	-4,917.28	4,793.53	4,577.24	216.29	22.163		
5,700.00	5,695.79	5,641.79	5,695.79	25.02	195.24	49.55	-355.08	-4,917.28	4,790.93	4,570.71	220.21	21.756		
5,800.00	5,795.71	5,741.71	5,795.71	25.46	198.73	49.59	-355.08	-4,917.28	4,788.32	4,564.18	224.14	21.363		
5,900.00	5,895.63	5,841.63	5,895.63	25.90	202.21	49.63	-355.08	-4,917.28	4,785.72	4,557.65	228.07	20.984		
6,000.00	5,995.55	5,941.55	5,995.55	26.34	205.70	49.66	-355.08	-4,917.28	4,783.12	4,551.13	231.99	20.618		
6,100.00	6,095.47	6,041.47	6,095.47	26.78	209.19	49.70	-355.08	-4,917.28	4,780.52	4,544.60	235.92	20.263		
6,200.00	6,195.39	6,141.39	6,195.39	27.22	212.68	49.74	-355.08	-4,917.28	4,777.93	4,538.08	239.85	19.921		
6,300.00	6,295.31	6,241.31	6,295.31	27.66	216.16	49.77	-355.08	-4,917.28	4,775.33	4,531.56	243.77	19.589		
6,400.00	6,395.23	6,341.23	6,395.23	28.10	219.65	49.81	-355.08	-4,917.28	4,772.74	4,525.04	247.70	19.268		
6,500.00	6,495.02	6,441.02	6,495.02	28.54	223.14	14.23	-355.08	-4,917.28	4,767.82	4,516.19	251.62	18.948		
6,600.00	6,593.09	6,539.09	6,593.09	28.98	226.56	5.11	-355.08	-4,917.28	4,748.94	4,493.46	255.48	18.588		
6,700.00	6,687.01	6,633.01	6,687.01	29.41	229.84	2.63	-355.08	-4,917.28	4,714.96	4,455.79	259.17	18.192		
6,800.00	6,774.46	6,720.46	6,774.46	29.83	232.89	1.41	-355.08	-4,917.28	4,666.71	4,404.10	262.60	17.771		
6,900.00	6,853.31	6,800.69	6,853.31	30.26	235.69	0.58	-355.08	-4,917.28	4,605.37	4,339.64	265.73	17.331		
7,000.00	6,921.60	6,867.60	6,921.60	30.76	238.03	-0.16	-355.08	-4,917.28	4,532.46	4,264.12	268.34	16.891		
7,100.00	6,977.66	6,923.66	6,977.66	31.38	239.98	-1.06	-355.08	-4,917.28	4,449.78	4,179.27	270.51	16.450		
7,200.00	7,020.10	6,966.10	7,020.10	32.17	241.46	-2.51	-355.08	-4,917.28	4,359.35	4,087.21	272.14	16.019		
7,300.00	7,047.88	7,006.12	7,047.88	33.13	242.86	-5.99	-355.08	-4,917.28	4,263.41	3,989.79	273.62	15.581		
7,400.00	7,060.32	7,006.32	7,060.32	34.27	242.87	-30.05	-355.08	-4,917.28	4,164.32	3,890.65	273.67	15.217		
7,500.00	7,060.70	7,006.70	7,060.70	35.56	242.88	-98.49	-355.08	-4,917.28	4,064.37	3,790.68	273.69	14.850		
7,600.00	7,060.27	7,006.27	7,060.27	37.02	242.87	-98.29	-355.08	-4,917.28	3,964.42	3,690.73	273.68	14.486		
7,700.00	7,059.83	7,005.83	7,059.83	38.64	242.85	-98.08	-355.08	-4,917.28	3,864.46	3,590.79	273.68	14.121		
7,800.00	7,059.40	7,005.40	7,059.40	40.40	242.84	-97.87	-355.08	-4,917.28	3,764.51	3,490.84	273.67	13.756		
7,900.00	7,058.97	7,004.97	7,058.97	42.28	242.82	-97.67	-355.08	-4,917.28	3,664.56	3,390.89	273.67	13.390		
8,000.00	7,058.53	7,004.53	7,058.53	44.27	242.81	-97.46	-355.08	-4,917.28	3,564.62	3,290.95	273.67	13.025		
8,100.00	7,058.10	7,004.10	7,058.10	46.35	242.79	-97.25	-355.08	-4,917.28	3,464.67	3,191.00	273.67	12.660		
8,200.00	7,057.66	7,003.66	7,057.66	48.50	242.78	-97.04	-355.08	-4,917.28	3,364.73	3,091.06	273.67	12.295		
8,300.00	7,057.23	7,003.23	7,057.23	50.73	242.76	-96.84	-355.08	-4,917.28	3,264.80	2,991.12	273.68	11.929		
8,400.00	7,056.80	7,002.80	7,056.80	53.02	242.74	-96.63	-355.08	-4,917.28	3,164.87	2,891.19	273.68	11.564		
8,500.00	7,056.36	7,002.36	7,056.36	55.36	242.73	-96.42	-355.08	-4,917.28	3,064.94	2,791.25	273.69	11.199		
8,600.00	7,055.93	7,001.93	7,055.93	57.74	242.71	-96.21	-355.08	-4,917.28	2,965.02	2,691.32	273.70	10.833		
8,700.00	7,055.49	7,001.49	7,055.49	60.17	242.70	-96.01	-355.08	-4,917.28	2,865.10	2,591.39	273.71	10.468		
8,800.00	7,055.06	7,001.06	7,055.06	62.63	242.68	-95.80	-355.08	-4,917.28	2,765.19	2,491.46	273.73	10.102		
8,900.00	7,054.63	7,000.63	7,054.63	65.13	242.67	-95.59	-355.08	-4,917.28	2,665.29	2,391.54	273.75	9.736		
9,000.00	7,054.19	7,000.19	7,054.19	67.66	242.65	-95.38	-355.08	-4,917.28	2,565.39	2,291.62	273.77	9.371		
9,100.00	7,053.76	7,000.24	7,053.76	70.21	242.66	-95.17	-355.08	-4,917.28	2,465.50	2,191.69	273.81	9.004		
9,200.00	7,053.32	7,000.68	7,053.32	72.78	242.67	-94.96	-355.08	-4,917.28	2,365.62	2,091.74	273.88	8.638		
9,300.00	7,052.89	7,001.11	7,052.89	75.38	242.69	-94.75	-355.08	-4,917.28	2,265.75	1,991.81	273.94	8.271		
9,400.00	7,052.46	7,001.54	7,052.46	77.99	242.70	-94.54	-355.08	-4,917.28	2,165.89	1,891.88	274.02	7.904		
9,500.00	7,052.02	7,001.98	7,052.02	80.62	242.72	-94.33	-355.08	-4,917.28	2,066.05	1,791.96	274.10	7.538		
9,600.00	7,051.59	7,002.41	7,051.59	83.26	242.73	-94.13	-355.08	-4,917.28	1,966.22	1,692.04	274.18	7.171		
9,700.00	7,051.15	7,002.85	7,051.15	85.92	242.75	-93.92	-355.08	-4,917.28	1,866.42	1,592.13	274.28	6.805		
9,800.00	7,050.72	7,003.28	7,050.72	88.59	242.76	-93.71	-355.08	-4,917.28	1,766.63	1,492.23	274.40	6.438		
9,900.00	7,050.29	7,003.71	7,050.29	91.28	242.78	-93.50	-355.08	-4,917.28	1,666.87	1,392.34	274.53	6.072		
10,000.00	7,049.85	7,004.15	7,049.85	93.97	242.79	-93.29	-355.08	-4,917.28	1,567.13	1,292.45	274.68	5.705		
10,100.00	7,049.42	7,004.58	7,049.42	96.67	242.81	-93.08	-355.08	-4,917.28	1,467.44	1,192.58	274.86	5.339		
10,200.00	7,048.98	7,005.02	7,048.98	99.38	242.82	-92.87	-355.08	-4,917.28	1,367.79	1,092.71	275.08	4.972		
10,300.00	7,048.55	7,005.45	7,048.55	102.10	242.84	-92.66	-355.08	-4,917.28	1,268.19	992.85	275.34	4.606		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	7,005.88	7,048.12	104.83	242.85	-92.45	-355.08	-4,917.28	1,168.66	892.99	275.67	4.239		
10,500.00	7,047.68	7,006.32	7,047.68	107.56	242.87	-92.24	-355.08	-4,917.28	1,069.23	793.13	276.10	3.873		
10,600.00	7,047.25	7,006.75	7,047.25	110.30	242.88	-92.03	-355.08	-4,917.28	969.90	693.25	276.65	3.506		
10,700.00	7,046.81	7,007.19	7,046.81	113.05	242.90	-91.82	-355.08	-4,917.28	870.73	593.33	277.40	3.139		
10,800.00	7,046.38	7,007.62	7,046.38	115.80	242.91	-91.61	-355.08	-4,917.28	771.78	493.34	278.44	2.772		
10,900.00	7,045.95	7,008.05	7,045.95	118.55	242.93	-91.40	-355.08	-4,917.28	673.13	393.19	279.94	2.405		
11,000.00	7,045.51	7,008.49	7,045.51	121.31	242.94	-91.18	-355.08	-4,917.28	574.95	292.74	282.21	2.037		
11,100.00	7,045.08	7,008.92	7,045.08	124.08	242.96	-90.97	-355.08	-4,917.28	477.52	191.73	285.79	1.671		
11,200.00	7,044.64	7,009.36	7,044.64	126.85	242.97	-90.76	-355.08	-4,917.28	381.43	89.60	291.83	1.307 Level 3		
11,300.00	7,044.21	7,009.79	7,044.21	129.62	242.99	-90.55	-355.08	-4,917.28	288.02	-14.77	302.78	0.951 Level 1		
11,400.00	7,043.78	6,989.78	7,043.78	132.40	242.29	-90.34	-355.08	-4,917.28	201.04	-122.43	323.47	0.621 Level 1		
11,500.00	7,043.34	6,989.34	7,043.34	135.18	242.28	-90.13	-355.08	-4,917.28	133.71	-228.42	362.13	0.369 Level 1		
11,562.69	7,043.07	6,989.07	7,043.07	136.93	242.27	-90.00	-355.08	-4,917.28	118.10	-261.09	379.19	0.311 Level 1, CC, ES, SF		
11,600.00	7,042.91	6,988.91	7,042.91	137.96	242.26	-89.92	-355.08	-4,917.28	123.85	-250.63	374.48	0.331 Level 1		
11,700.00	7,042.47	6,988.47	7,042.47	140.75	242.24	-89.71	-355.08	-4,917.28	181.11	-156.87	337.98	0.536 Level 1		
11,800.00	7,042.04	6,988.04	7,042.04	143.54	242.23	-89.50	-355.08	-4,917.28	265.07	-48.18	313.25	0.846 Level 1		
11,900.00	7,041.61	6,987.61	7,041.61	146.33	242.21	-89.29	-355.08	-4,917.28	357.38	57.17	300.22	1.190 Level 2		
12,000.00	7,041.17	6,987.17	7,041.17	149.13	242.20	-89.08	-355.08	-4,917.28	452.97	160.10	292.87	1.547		
12,100.00	7,040.74	6,986.74	7,040.74	151.92	242.18	-88.87	-355.08	-4,917.28	550.13	261.75	288.38	1.908		
12,200.00	7,040.30	6,986.30	7,040.30	154.72	242.17	-88.66	-355.08	-4,917.28	648.15	362.69	285.46	2.271		
12,300.00	7,039.87	6,985.87	7,039.87	157.52	242.15	-88.45	-355.08	-4,917.28	746.70	463.24	283.45	2.634		
12,400.00	7,039.44	6,985.44	7,039.44	160.33	242.14	-88.24	-355.08	-4,917.28	845.59	563.56	282.03	2.998		
12,500.00	7,039.00	6,985.00	7,039.00	163.13	242.12	-88.03	-355.08	-4,917.28	944.71	663.73	280.98	3.362		
12,600.00	7,038.57	6,984.57	7,038.57	165.94	242.11	-87.82	-355.08	-4,917.28	1,044.00	763.81	280.19	3.726		
12,700.00	7,038.13	6,984.13	7,038.13	168.75	242.09	-87.61	-355.08	-4,917.28	1,143.41	863.83	279.58	4.090		
12,800.00	7,037.70	6,983.70	7,037.70	171.56	242.08	-87.40	-355.08	-4,917.28	1,242.92	963.81	279.11	4.453		
12,900.00	7,037.27	6,983.27	7,037.27	174.37	242.06	-87.19	-355.08	-4,917.28	1,342.50	1,063.77	278.73	4.817		
13,000.00	7,036.83	6,982.83	7,036.83	177.19	242.05	-86.98	-355.08	-4,917.28	1,442.14	1,163.71	278.43	5.180		
13,100.00	7,036.40	6,982.40	7,036.40	180.00	242.03	-86.77	-355.08	-4,917.28	1,541.82	1,263.64	278.19	5.542		
13,200.00	7,035.96	6,981.96	7,035.96	182.82	242.02	-86.56	-355.08	-4,917.28	1,641.55	1,363.56	277.99	5.905		
13,300.00	7,035.53	6,981.53	7,035.53	185.64	242.00	-86.35	-355.08	-4,917.28	1,741.30	1,463.47	277.83	6.268		
13,400.00	7,035.10	6,981.10	7,035.10	188.46	241.99	-86.14	-355.08	-4,917.28	1,841.08	1,563.38	277.70	6.630		
13,500.00	7,034.66	6,980.66	7,034.66	191.28	241.97	-85.93	-355.08	-4,917.28	1,940.89	1,663.29	277.60	6.992		
13,600.00	7,034.23	6,980.23	7,034.23	194.10	241.96	-85.72	-355.08	-4,917.28	2,040.71	1,763.19	277.51	7.354		
13,700.00	7,033.79	6,979.79	7,033.79	196.92	241.94	-85.51	-355.08	-4,917.28	2,140.55	1,863.10	277.45	7.715		
13,800.00	7,033.36	6,979.36	7,033.36	199.74	241.93	-85.30	-355.08	-4,917.28	2,240.40	1,963.00	277.40	8.077		
13,900.00	7,032.93	6,978.93	7,032.93	202.57	241.91	-85.09	-355.08	-4,917.28	2,340.27	2,062.91	277.36	8.438		
14,000.00	7,032.49	6,978.49	7,032.49	205.39	241.90	-84.88	-355.08	-4,917.28	2,440.14	2,162.81	277.33	8.799		
14,100.00	7,032.06	6,978.06	7,032.06	208.22	241.88	-84.67	-355.08	-4,917.28	2,540.03	2,262.72	277.31	9.159		
14,200.00	7,031.62	6,977.62	7,031.62	211.05	241.87	-84.46	-355.08	-4,917.28	2,639.93	2,362.62	277.30	9.520		
14,300.00	7,031.19	6,977.19	7,031.19	213.87	241.85	-84.26	-355.08	-4,917.28	2,739.83	2,462.53	277.30	9.880		
14,400.00	7,030.76	6,976.76	7,030.76	216.70	241.84	-84.05	-355.08	-4,917.28	2,839.74	2,562.43	277.31	10.240		
14,500.00	7,030.32	6,976.32	7,030.32	219.53	241.82	-83.84	-355.08	-4,917.28	2,939.65	2,662.34	277.32	10.600		
14,600.00	7,029.89	6,975.89	7,029.89	222.36	241.81	-83.63	-355.08	-4,917.28	3,039.57	2,762.24	277.33	10.960		
14,700.00	7,029.45	6,975.45	7,029.45	225.19	241.79	-83.42	-355.08	-4,917.28	3,139.50	2,862.15	277.35	11.319		
14,800.00	7,029.02	6,975.02	7,029.02	228.03	241.78	-83.22	-355.08	-4,917.28	3,239.43	2,962.05	277.38	11.679		
14,805.04	7,029.00	6,975.00	7,029.00	228.17	241.77	-83.21	-355.08	-4,917.28	3,244.47	2,967.08	277.38	11.697		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-111.81	-3,062.62	-7,655.03	8,245.15					
100.00	100.00	43.00	100.00	3.28	3.36	-111.81	-3,062.62	-7,655.03	8,244.95	8,238.30	6.65	1,239.934		
200.00	200.00	143.00	200.00	3.34	4.62	-111.81	-3,062.62	-7,655.03	8,244.95	8,237.00	7.95	1,036.825		
300.00	300.00	243.00	300.00	3.44	7.49	-111.81	-3,062.62	-7,655.03	8,244.95	8,234.01	10.94	753.754		
400.00	400.00	343.00	400.00	3.60	10.74	-111.81	-3,062.62	-7,655.03	8,244.95	8,230.60	14.34	574.761		
500.00	499.98	442.98	499.98	3.80	14.11	30.02	-3,062.62	-7,655.03	8,243.44	8,225.54	17.90	460.458		
600.00	599.90	542.90	599.90	4.02	17.52	30.03	-3,062.62	-7,655.03	8,240.00	8,218.46	21.54	382.566		
700.00	699.82	642.82	699.82	4.28	20.95	30.05	-3,062.62	-7,655.03	8,236.52	8,211.29	25.23	326.423		
800.00	799.74	742.74	799.74	4.57	24.41	30.06	-3,062.62	-7,655.03	8,233.05	8,204.08	28.97	284.197		
900.00	899.66	842.66	899.66	4.88	27.87	30.08	-3,062.62	-7,655.03	8,229.57	8,196.84	32.74	251.371		
1,000.00	999.58	942.58	999.58	5.21	31.33	30.09	-3,062.62	-7,655.03	8,226.10	8,189.57	36.53	225.168		
1,100.00	1,099.50	1,042.50	1,099.50	5.55	34.80	30.10	-3,062.62	-7,655.03	8,222.63	8,182.28	40.35	203.794		
1,200.00	1,199.42	1,142.42	1,199.42	5.91	38.28	30.12	-3,062.62	-7,655.03	8,219.16	8,174.98	44.18	186.045		
1,300.00	1,299.34	1,242.34	1,299.34	6.28	41.75	30.13	-3,062.62	-7,655.03	8,215.68	8,167.66	48.02	171.081		
1,400.00	1,399.26	1,342.26	1,399.26	6.66	45.23	30.15	-3,062.62	-7,655.03	8,212.21	8,160.34	51.88	158.303		
1,500.00	1,499.18	1,442.18	1,499.18	7.04	48.71	30.16	-3,062.62	-7,655.03	8,208.74	8,153.00	55.74	147.268		
1,600.00	1,599.10	1,542.10	1,599.10	7.43	52.19	30.17	-3,062.62	-7,655.03	8,205.27	8,145.66	59.61	137.646		
1,700.00	1,699.01	1,642.01	1,699.01	7.83	55.67	30.19	-3,062.62	-7,655.03	8,201.80	8,138.31	63.49	129.185		
1,800.00	1,798.93	1,741.93	1,798.93	8.23	59.16	30.20	-3,062.62	-7,655.03	8,198.33	8,130.96	67.37	121.689		
1,900.00	1,898.85	1,841.85	1,898.85	8.64	62.64	30.22	-3,062.62	-7,655.03	8,194.86	8,123.60	71.26	115.002		
2,000.00	1,998.77	1,941.77	1,998.77	9.05	66.12	30.23	-3,062.62	-7,655.03	8,191.40	8,116.25	75.15	109.000		
2,100.00	2,098.69	2,041.69	2,098.69	9.46	69.61	30.25	-3,062.62	-7,655.03	8,187.93	8,108.88	79.04	103.586		
2,200.00	2,198.61	2,141.61	2,198.61	9.88	73.09	30.26	-3,062.62	-7,655.03	8,184.46	8,101.52	82.94	98.676		
2,300.00	2,298.53	2,241.53	2,298.53	10.30	76.58	30.27	-3,062.62	-7,655.03	8,180.99	8,094.15	86.84	94.204		
2,400.00	2,398.45	2,341.45	2,398.45	10.72	80.06	30.29	-3,062.62	-7,655.03	8,177.53	8,086.78	90.75	90.114		
2,500.00	2,498.37	2,441.37	2,498.37	11.14	83.55	30.30	-3,062.62	-7,655.03	8,174.06	8,079.41	94.65	86.360		
2,600.00	2,598.29	2,541.29	2,598.29	11.56	87.03	30.32	-3,062.62	-7,655.03	8,170.60	8,072.04	98.56	82.902		
2,700.00	2,698.21	2,641.21	2,698.21	11.98	90.52	30.33	-3,062.62	-7,655.03	8,167.13	8,064.66	102.47	79.706		
2,800.00	2,798.13	2,741.13	2,798.13	12.41	94.00	30.34	-3,062.62	-7,655.03	8,163.67	8,057.29	106.38	76.743		
2,900.00	2,898.05	2,841.05	2,898.05	12.84	97.49	30.36	-3,062.62	-7,655.03	8,160.20	8,049.92	110.29	73.990		
3,000.00	2,997.97	2,940.97	2,997.97	13.27	100.98	30.37	-3,062.62	-7,655.03	8,156.74	8,042.54	114.20	71.425		
3,100.00	3,097.89	3,040.89	3,097.89	13.69	104.46	30.39	-3,062.62	-7,655.03	8,153.28	8,035.16	118.11	69.029		
3,200.00	3,197.81	3,140.81	3,197.81	14.12	107.95	30.40	-3,062.62	-7,655.03	8,149.81	8,027.79	122.03	66.787		
3,300.00	3,297.73	3,240.73	3,297.73	14.56	111.44	30.42	-3,062.62	-7,655.03	8,146.35	8,020.41	125.94	64.683		
3,400.00	3,397.65	3,340.65	3,397.65	14.99	114.92	30.43	-3,062.62	-7,655.03	8,142.89	8,013.03	129.86	62.706		
3,500.00	3,497.56	3,440.56	3,497.56	15.42	118.41	30.44	-3,062.62	-7,655.03	8,139.43	8,005.65	133.78	60.844		
3,600.00	3,597.48	3,540.48	3,597.48	15.85	121.90	30.46	-3,062.62	-7,655.03	8,135.97	7,998.28	137.69	59.088		
3,700.00	3,697.40	3,640.40	3,697.40	16.28	125.38	30.47	-3,062.62	-7,655.03	8,132.51	7,990.90	141.61	57.428		
3,800.00	3,797.32	3,740.32	3,797.32	16.72	128.87	30.49	-3,062.62	-7,655.03	8,129.05	7,983.52	145.53	55.858		
3,900.00	3,897.24	3,840.24	3,897.24	17.15	132.36	30.50	-3,062.62	-7,655.03	8,125.59	7,976.14	149.45	54.370		
4,000.00	3,997.16	3,940.16	3,997.16	17.59	135.85	30.52	-3,062.62	-7,655.03	8,122.13	7,968.76	153.37	52.958		
4,100.00	4,097.08	4,040.08	4,097.08	18.02	139.33	30.53	-3,062.62	-7,655.03	8,118.68	7,961.39	157.29	51.616		
4,200.00	4,197.00	4,140.00	4,197.00	18.46	142.82	30.55	-3,062.62	-7,655.03	8,115.22	7,954.01	161.21	50.339		
4,300.00	4,296.92	4,239.92	4,296.92	18.89	146.31	30.56	-3,062.62	-7,655.03	8,111.76	7,946.63	165.13	49.123		
4,400.00	4,396.84	4,339.84	4,396.84	19.33	149.79	30.57	-3,062.62	-7,655.03	8,108.31	7,939.25	169.05	47.963		
4,500.00	4,496.76	4,439.76	4,496.76	19.77	153.28	30.59	-3,062.62	-7,655.03	8,104.85	7,931.87	172.98	46.855		
4,600.00	4,596.68	4,539.68	4,596.68	20.20	156.77	30.60	-3,062.62	-7,655.03	8,101.39	7,924.50	176.90	45.797		
4,700.00	4,696.60	4,639.60	4,696.60	20.64	160.26	30.62	-3,062.62	-7,655.03	8,097.94	7,917.12	180.82	44.784		
4,800.00	4,796.52	4,739.52	4,796.52	21.08	163.74	30.63	-3,062.62	-7,655.03	8,094.49	7,909.74	184.74	43.815		
4,900.00	4,896.44	4,839.44	4,896.44	21.51	167.23	30.65	-3,062.62	-7,655.03	8,091.03	7,902.37	188.67	42.885		
5,000.00	4,996.36	4,939.36	4,996.36	21.95	170.72	30.66	-3,062.62	-7,655.03	8,087.58	7,894.99	192.59	41.994		
5,100.00	5,096.28	5,039.28	5,096.28	22.39	174.21	30.68	-3,062.62	-7,655.03	8,084.13	7,887.61	196.51	41.138		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,139.19	5,196.19	22.83	177.69	30.69	-3,062.62	-7,655.03	8,080.67	7,880.24	200.44	40.315		
5,300.00	5,296.11	5,239.11	5,296.11	23.27	181.18	30.70	-3,062.62	-7,655.03	8,077.22	7,872.86	204.36	39.524		
5,400.00	5,396.03	5,339.03	5,396.03	23.71	184.67	30.72	-3,062.62	-7,655.03	8,073.77	7,865.49	208.28	38.763		
5,500.00	5,495.95	5,438.95	5,495.95	24.14	188.16	30.73	-3,062.62	-7,655.03	8,070.32	7,858.11	212.21	38.030		
5,600.00	5,595.87	5,538.87	5,595.87	24.58	191.64	30.75	-3,062.62	-7,655.03	8,066.87	7,850.74	216.13	37.323		
5,700.00	5,695.79	5,638.79	5,695.79	25.02	195.13	30.76	-3,062.62	-7,655.03	8,063.42	7,843.36	220.06	36.642		
5,800.00	5,795.71	5,738.71	5,795.71	25.46	198.62	30.78	-3,062.62	-7,655.03	8,059.97	7,835.99	223.98	35.985		
5,900.00	5,895.63	5,838.63	5,895.63	25.90	202.11	30.79	-3,062.62	-7,655.03	8,056.52	7,828.62	227.91	35.350		
6,000.00	5,995.55	5,938.55	5,995.55	26.34	205.60	30.81	-3,062.62	-7,655.03	8,053.08	7,821.24	231.83	34.736		
6,100.00	6,095.47	6,038.47	6,095.47	26.78	209.08	30.82	-3,062.62	-7,655.03	8,049.63	7,813.87	235.76	34.143		
6,200.00	6,195.39	6,138.39	6,195.39	27.22	212.57	30.84	-3,062.62	-7,655.03	8,046.18	7,806.50	239.68	33.570		
6,300.00	6,295.31	6,238.31	6,295.31	27.66	216.06	30.85	-3,062.62	-7,655.03	8,042.74	7,799.13	243.61	33.015		
6,400.00	6,395.23	6,338.23	6,395.23	28.10	219.55	30.86	-3,062.62	-7,655.03	8,039.29	7,791.75	247.54	32.477		
6,500.00	6,495.02	6,438.02	6,495.02	28.54	223.03	-4.86	-3,062.62	-7,655.03	8,035.66	7,782.20	251.46	31.948		
6,600.00	6,593.09	6,536.09	6,593.09	28.98	226.45	-14.60	-3,062.62	-7,655.03	8,031.98	7,772.67	255.31	31.393		
6,700.00	6,687.01	6,630.01	6,687.01	29.41	229.73	-18.26	-3,062.62	-7,655.03	7,982.21	7,723.21	259.00	30.820		
6,800.00	6,774.46	6,717.46	6,774.46	29.83	232.78	-21.33	-3,062.62	-7,655.03	7,936.16	7,673.74	262.42	30.242		
6,900.00	6,853.31	6,803.69	6,853.31	30.26	235.79	-24.94	-3,062.62	-7,655.03	7,878.01	7,612.25	265.76	29.643		
7,000.00	6,921.60	6,864.60	6,921.60	30.76	237.92	-29.80	-3,062.62	-7,655.03	7,809.21	7,541.04	268.17	29.121		
7,100.00	6,977.66	6,920.66	6,977.66	31.38	239.88	-36.79	-3,062.62	-7,655.03	7,731.51	7,461.14	270.37	28.596		
7,200.00	7,020.10	6,963.10	7,020.10	32.17	241.36	-47.25	-3,062.62	-7,655.03	7,646.86	7,374.80	272.05	28.108		
7,300.00	7,047.88	7,009.12	7,047.88	33.13	242.97	-62.80	-3,062.62	-7,655.03	7,557.37	7,283.53	273.85	27.597		
7,400.00	7,060.32	7,003.32	7,060.32	34.27	242.76	-83.47	-3,062.62	-7,655.03	7,465.30	7,191.47	273.82	27.263		
7,500.00	7,060.70	7,003.70	7,060.70	35.56	242.78	-90.60	-3,062.62	-7,655.03	7,372.74	7,098.71	274.03	26.904		
7,600.00	7,060.27	7,003.27	7,060.27	37.02	242.76	-90.59	-3,062.62	-7,655.03	7,280.39	7,006.12	274.26	26.545		
7,700.00	7,059.83	7,002.83	7,059.83	38.64	242.75	-90.59	-3,062.62	-7,655.03	7,188.24	6,913.69	274.54	26.183		
7,800.00	7,059.40	7,002.40	7,059.40	40.40	242.73	-90.58	-3,062.62	-7,655.03	7,096.30	6,821.42	274.88	25.816		
7,900.00	7,058.97	7,001.97	7,058.97	42.28	242.72	-90.57	-3,062.62	-7,655.03	7,004.58	6,729.31	275.26	25.447		
8,000.00	7,058.53	7,001.53	7,058.53	44.27	242.70	-90.56	-3,062.62	-7,655.03	6,913.09	6,637.38	275.71	25.074		
8,100.00	7,058.10	7,001.10	7,058.10	46.35	242.69	-90.55	-3,062.62	-7,655.03	6,821.84	6,545.62	276.22	24.697		
8,200.00	7,057.66	7,000.66	7,057.66	48.50	242.67	-90.54	-3,062.62	-7,655.03	6,730.84	6,454.05	276.79	24.318		
8,300.00	7,057.23	7,000.23	7,057.23	50.73	242.66	-90.53	-3,062.62	-7,655.03	6,640.10	6,362.68	277.42	23.935		
8,400.00	7,056.80	7,000.20	7,056.80	53.02	242.65	-90.52	-3,062.62	-7,655.03	6,549.63	6,271.50	278.13	23.549		
8,500.00	7,056.36	7,000.64	7,056.36	55.36	242.67	-90.51	-3,062.62	-7,655.03	6,459.43	6,180.51	278.92	23.158		
8,600.00	7,055.93	7,001.07	7,055.93	57.74	242.68	-90.51	-3,062.62	-7,655.03	6,369.54	6,089.75	279.79	22.766		
8,700.00	7,055.49	7,001.51	7,055.49	60.17	242.70	-90.50	-3,062.62	-7,655.03	6,279.94	5,999.22	280.72	22.371		
8,800.00	7,055.06	7,001.94	7,055.06	62.63	242.71	-90.49	-3,062.62	-7,655.03	6,190.67	5,908.95	281.72	21.974		
8,900.00	7,054.63	7,002.37	7,054.63	65.13	242.73	-90.48	-3,062.62	-7,655.03	6,101.73	5,818.93	282.80	21.576		
9,000.00	7,054.19	7,002.81	7,054.19	67.66	242.75	-90.47	-3,062.62	-7,655.03	6,013.13	5,729.19	283.95	21.177		
9,100.00	7,053.76	7,003.24	7,053.76	70.21	242.76	-90.46	-3,062.62	-7,655.03	5,924.90	5,639.73	285.17	20.777		
9,200.00	7,053.32	7,003.68	7,053.32	72.78	242.78	-90.45	-3,062.62	-7,655.03	5,837.05	5,550.58	286.47	20.376		
9,300.00	7,052.89	7,004.11	7,052.89	75.38	242.79	-90.44	-3,062.62	-7,655.03	5,749.59	5,461.75	287.84	19.975		
9,400.00	7,052.46	7,004.54	7,052.46	77.99	242.81	-90.44	-3,062.62	-7,655.03	5,662.55	5,373.26	289.30	19.573		
9,500.00	7,052.02	7,004.98	7,052.02	80.62	242.82	-90.43	-3,062.62	-7,655.03	5,575.95	5,285.12	290.83	19.172		
9,600.00	7,051.59	7,005.41	7,051.59	83.26	242.84	-90.42	-3,062.62	-7,655.03	5,489.80	5,197.36	292.44	18.772		
9,700.00	7,051.15	7,005.85	7,051.15	85.92	242.85	-90.41	-3,062.62	-7,655.03	5,404.13	5,109.99	294.14	18.373		
9,800.00	7,050.72	7,006.28	7,050.72	88.59	242.87	-90.40	-3,062.62	-7,655.03	5,318.96	5,023.04	295.92	17.974		
9,900.00	7,050.29	7,006.71	7,050.29	91.28	242.88	-90.39	-3,062.62	-7,655.03	5,234.31	4,936.52	297.78	17.578		
10,000.00	7,049.85	7,007.15	7,049.85	93.97	242.90	-90.38	-3,062.62	-7,655.03	5,150.21	4,850.48	299.73	17.183		
10,100.00	7,049.42	7,007.58	7,049.42	96.67	242.91	-90.37	-3,062.62	-7,655.03	5,066.69	4,764.92	301.77	16.790		
10,200.00	7,048.98	7,008.02	7,048.98	99.38	242.93	-90.36	-3,062.62	-7,655.03	4,983.78	4,679.88	303.90	16.399		
10,300.00	7,048.55	7,008.45	7,048.55	102.10	242.94	-90.36	-3,062.62	-7,655.03	4,901.50	4,595.38	306.12	16.012		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	7,008.88	7,048.12	104.83	242.96	-90.35	-3,062.62	-7,655.03	4,819.90	4,511.46	308.43	15.627		
10,500.00	7,047.68	7,009.32	7,047.68	107.56	242.97	-90.34	-3,062.62	-7,655.03	4,739.00	4,428.16	310.84	15.246		
10,600.00	7,047.25	7,009.75	7,047.25	110.30	242.99	-90.33	-3,062.62	-7,655.03	4,658.84	4,345.49	313.35	14.868		
10,700.00	7,046.81	6,989.81	7,046.81	113.05	242.29	-90.32	-3,062.62	-7,655.03	4,579.46	4,264.22	315.24	14.527		
10,800.00	7,046.38	6,989.38	7,046.38	115.80	242.28	-90.31	-3,062.62	-7,655.03	4,500.91	4,182.99	317.91	14.158		
10,900.00	7,045.95	6,988.95	7,045.95	118.55	242.26	-90.30	-3,062.62	-7,655.03	4,423.22	4,102.53	320.69	13.793		
11,000.00	7,045.51	6,988.51	7,045.51	121.31	242.25	-90.29	-3,062.62	-7,655.03	4,346.44	4,022.87	323.57	13.433		
11,100.00	7,045.08	6,988.08	7,045.08	124.08	242.23	-90.28	-3,062.62	-7,655.03	4,270.62	3,944.07	326.55	13.078		
11,200.00	7,044.64	6,987.64	7,044.64	126.85	242.22	-90.28	-3,062.62	-7,655.03	4,195.82	3,866.17	329.64	12.728		
11,300.00	7,044.21	6,987.21	7,044.21	129.62	242.20	-90.27	-3,062.62	-7,655.03	4,122.08	3,789.24	332.85	12.384		
11,400.00	7,043.78	6,986.78	7,043.78	132.40	242.19	-90.26	-3,062.62	-7,655.03	4,049.48	3,713.32	336.16	12.046		
11,500.00	7,043.34	6,986.34	7,043.34	135.18	242.17	-90.25	-3,062.62	-7,655.03	3,978.06	3,638.48	339.58	11.715		
11,600.00	7,042.91	6,985.91	7,042.91	137.96	242.16	-90.24	-3,062.62	-7,655.03	3,907.89	3,564.79	343.11	11.390		
11,700.00	7,042.47	6,985.47	7,042.47	140.75	242.14	-90.23	-3,062.62	-7,655.03	3,839.05	3,492.30	346.75	11.072		
11,800.00	7,042.04	6,985.04	7,042.04	143.54	242.12	-90.22	-3,062.62	-7,655.03	3,771.60	3,421.10	350.50	10.761		
11,900.00	7,041.61	6,984.61	7,041.61	146.33	242.11	-90.21	-3,062.62	-7,655.03	3,705.63	3,351.27	354.36	10.457		
12,000.00	7,041.17	6,984.17	7,041.17	149.13	242.09	-90.21	-3,062.62	-7,655.03	3,641.20	3,282.88	358.32	10.162		
12,100.00	7,040.74	6,983.74	7,040.74	151.92	242.08	-90.20	-3,062.62	-7,655.03	3,578.41	3,216.02	362.39	9.875		
12,200.00	7,040.30	6,983.30	7,040.30	154.72	242.06	-90.19	-3,062.62	-7,655.03	3,517.34	3,150.79	366.55	9.596		
12,300.00	7,039.87	6,982.87	7,039.87	157.52	242.05	-90.18	-3,062.62	-7,655.03	3,458.09	3,087.28	370.81	9.326		
12,400.00	7,039.44	6,982.44	7,039.44	160.33	242.03	-90.17	-3,062.62	-7,655.03	3,400.74	3,025.58	375.16	9.065		
12,500.00	7,039.00	6,982.00	7,039.00	163.13	242.02	-90.16	-3,062.62	-7,655.03	3,345.41	2,965.82	379.59	8.813		
12,600.00	7,038.57	6,981.57	7,038.57	165.94	242.00	-90.15	-3,062.62	-7,655.03	3,292.18	2,908.09	384.09	8.571		
12,700.00	7,038.13	6,981.13	7,038.13	168.75	241.99	-90.14	-3,062.62	-7,655.03	3,241.16	2,852.51	388.64	8.340		
12,800.00	7,037.70	6,980.70	7,037.70	171.56	241.97	-90.13	-3,062.62	-7,655.03	3,192.46	2,799.21	393.25	8.118		
12,900.00	7,037.27	6,980.27	7,037.27	174.37	241.96	-90.13	-3,062.62	-7,655.03	3,146.18	2,748.29	397.89	7.907		
13,000.00	7,036.83	6,979.83	7,036.83	177.19	241.94	-90.12	-3,062.62	-7,655.03	3,102.44	2,699.89	402.55	7.707		
13,100.00	7,036.40	6,979.40	7,036.40	180.00	241.93	-90.11	-3,062.62	-7,655.03	3,061.34	2,654.13	407.21	7.518		
13,200.00	7,035.96	6,978.96	7,035.96	182.82	241.91	-90.10	-3,062.62	-7,655.03	3,022.99	2,611.14	411.86	7.340		
13,300.00	7,035.53	6,978.53	7,035.53	185.64	241.90	-90.09	-3,062.62	-7,655.03	2,987.50	2,571.04	416.47	7.173		
13,400.00	7,035.10	6,978.10	7,035.10	188.46	241.88	-90.08	-3,062.62	-7,655.03	2,954.97	2,533.95	421.02	7.019		
13,500.00	7,034.66	6,977.66	7,034.66	191.28	241.87	-90.07	-3,062.62	-7,655.03	2,925.49	2,500.01	425.48	6.876		
13,600.00	7,034.23	6,977.23	7,034.23	194.10	241.85	-90.06	-3,062.62	-7,655.03	2,899.17	2,469.32	429.85	6.745		
13,700.00	7,033.79	6,976.79	7,033.79	196.92	241.84	-90.05	-3,062.62	-7,655.03	2,876.08	2,442.00	434.09	6.626		
13,800.00	7,033.36	6,976.36	7,033.36	199.74	241.82	-90.05	-3,062.62	-7,655.03	2,856.32	2,418.14	438.17	6.519		
13,900.00	7,032.93	6,975.93	7,032.93	202.57	241.81	-90.04	-3,062.62	-7,655.03	2,839.93	2,397.84	442.09	6.424		
14,000.00	7,032.49	6,975.49	7,032.49	205.39	241.79	-90.03	-3,062.62	-7,655.03	2,826.99	2,381.18	445.81	6.341		
14,100.00	7,032.06	6,975.06	7,032.06	208.22	241.78	-90.02	-3,062.62	-7,655.03	2,817.54	2,368.23	449.31	6.271		
14,200.00	7,031.62	6,974.62	7,031.62	211.05	241.76	-90.01	-3,062.62	-7,655.03	2,811.62	2,359.04	452.58	6.212		
14,300.00	7,031.19	6,974.19	7,031.19	213.87	241.75	-90.00	-3,062.62	-7,655.03	2,809.25	2,353.64	455.61	6.166		
14,316.64	7,031.12	6,974.12	7,031.12	214.34	241.74	-90.00	-3,062.62	-7,655.03	2,809.20	2,353.12	456.09	6.159 CC		
14,400.00	7,030.76	6,973.76	7,030.76	216.70	241.73	-89.99	-3,062.62	-7,655.03	2,810.44	2,352.07	458.37	6.131 ES		
14,500.00	7,030.32	6,973.32	7,030.32	219.53	241.72	-89.98	-3,062.62	-7,655.03	2,815.18	2,354.32	460.86	6.109		
14,600.00	7,029.89	6,972.89	7,029.89	222.36	241.70	-89.97	-3,062.62	-7,655.03	2,823.46	2,360.39	463.07	6.097 SF		
14,700.00	7,029.45	6,972.45	7,029.45	225.19	241.69	-89.97	-3,062.62	-7,655.03	2,835.24	2,370.24	465.00	6.097		
14,800.00	7,029.02	6,972.02	7,029.02	228.03	241.67	-89.96	-3,062.62	-7,655.03	2,850.48	2,383.84	466.64	6.109		
14,805.04	7,029.00	6,972.00	7,029.00	228.17	241.67	-89.96	-3,062.62	-7,655.03	2,851.34	2,384.62	466.72	6.109		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-103.55	-1,570.75	-6,519.42	6,706.12					
100.00	100.00	56.00	100.00	3.28	3.42	-103.55	-1,570.75	-6,519.42	6,705.97	6,699.27	6.71	999.806		
200.00	200.00	156.00	200.00	3.34	4.94	-103.55	-1,570.75	-6,519.42	6,705.97	6,697.69	8.28	809.714		
300.00	300.00	256.00	300.00	3.44	7.90	-103.55	-1,570.75	-6,519.42	6,705.97	6,694.62	11.35	590.884		
400.00	400.00	356.00	400.00	3.60	11.17	-103.55	-1,570.75	-6,519.42	6,705.97	6,691.19	14.78	453.780		
500.00	499.98	455.98	499.98	3.80	14.55	38.28	-1,570.75	-6,519.42	6,704.60	6,686.26	18.34	365.486		
600.00	599.90	555.90	599.90	4.02	17.96	38.31	-1,570.75	-6,519.42	6,701.48	6,679.50	21.98	304.828		
700.00	699.82	655.82	699.82	4.28	21.40	38.33	-1,570.75	-6,519.42	6,698.33	6,672.65	25.68	260.829		
800.00	799.74	755.74	799.74	4.57	24.85	38.35	-1,570.75	-6,519.42	6,695.18	6,665.76	29.42	227.577		
900.00	899.66	855.66	899.66	4.88	28.32	38.37	-1,570.75	-6,519.42	6,692.04	6,658.85	33.19	201.629		
1,000.00	999.58	955.58	999.58	5.21	31.78	38.39	-1,570.75	-6,519.42	6,688.89	6,651.90	36.99	180.853		
1,100.00	1,099.50	1,055.50	1,099.50	5.55	35.25	38.41	-1,570.75	-6,519.42	6,685.74	6,644.94	40.80	163.864		
1,200.00	1,199.42	1,155.42	1,199.42	5.91	38.73	38.43	-1,570.75	-6,519.42	6,682.60	6,637.97	44.63	149.727		
1,300.00	1,299.34	1,255.34	1,299.34	6.28	42.21	38.46	-1,570.75	-6,519.42	6,679.45	6,630.98	48.48	137.788		
1,400.00	1,399.26	1,355.26	1,399.26	6.66	45.68	38.48	-1,570.75	-6,519.42	6,676.31	6,623.98	52.33	127.577		
1,500.00	1,499.18	1,455.18	1,499.18	7.04	49.16	38.50	-1,570.75	-6,519.42	6,673.17	6,616.97	56.20	118.749		
1,600.00	1,599.10	1,555.10	1,599.10	7.43	52.65	38.52	-1,570.75	-6,519.42	6,670.03	6,609.96	60.07	111.042		
1,700.00	1,699.01	1,655.01	1,699.01	7.83	56.13	38.54	-1,570.75	-6,519.42	6,666.89	6,602.94	63.95	104.259		
1,800.00	1,798.93	1,754.93	1,798.93	8.23	59.61	38.56	-1,570.75	-6,519.42	6,663.75	6,595.92	67.83	98.244		
1,900.00	1,898.85	1,854.85	1,898.85	8.64	63.09	38.58	-1,570.75	-6,519.42	6,660.61	6,588.89	71.72	92.874		
2,000.00	1,998.77	1,954.77	1,998.77	9.05	66.58	38.61	-1,570.75	-6,519.42	6,657.47	6,581.86	75.61	88.052		
2,100.00	2,098.69	2,054.69	2,098.69	9.46	70.06	38.63	-1,570.75	-6,519.42	6,654.34	6,574.83	79.50	83.698		
2,200.00	2,198.61	2,154.61	2,198.61	9.88	73.55	38.65	-1,570.75	-6,519.42	6,651.20	6,567.80	83.40	79.748		
2,300.00	2,298.53	2,254.53	2,298.53	10.30	77.03	38.67	-1,570.75	-6,519.42	6,648.06	6,560.76	87.30	76.149		
2,400.00	2,398.45	2,354.45	2,398.45	10.72	80.52	38.69	-1,570.75	-6,519.42	6,644.93	6,553.72	91.21	72.856		
2,500.00	2,498.37	2,454.37	2,498.37	11.14	84.00	38.71	-1,570.75	-6,519.42	6,641.80	6,546.69	95.11	69.831		
2,600.00	2,598.29	2,554.29	2,598.29	11.56	87.49	38.74	-1,570.75	-6,519.42	6,638.67	6,539.65	99.02	67.044		
2,700.00	2,698.21	2,654.21	2,698.21	11.98	90.97	38.76	-1,570.75	-6,519.42	6,635.54	6,532.61	102.93	64.468		
2,800.00	2,798.13	2,754.13	2,798.13	12.41	94.46	38.78	-1,570.75	-6,519.42	6,632.41	6,525.57	106.84	62.079		
2,900.00	2,898.05	2,854.05	2,898.05	12.84	97.94	38.80	-1,570.75	-6,519.42	6,629.28	6,518.53	110.75	59.858		
3,000.00	2,997.97	2,953.97	2,997.97	13.27	101.43	38.82	-1,570.75	-6,519.42	6,626.15	6,511.48	114.66	57.788		
3,100.00	3,097.89	3,053.89	3,097.89	13.69	104.92	38.84	-1,570.75	-6,519.42	6,623.02	6,504.44	118.58	55.854		
3,200.00	3,197.81	3,153.81	3,197.81	14.12	108.40	38.87	-1,570.75	-6,519.42	6,619.89	6,497.40	122.49	54.043		
3,300.00	3,297.73	3,253.73	3,297.73	14.56	111.89	38.89	-1,570.75	-6,519.42	6,616.77	6,490.36	126.41	52.345		
3,400.00	3,397.65	3,353.65	3,397.65	14.99	115.38	38.91	-1,570.75	-6,519.42	6,613.65	6,483.32	130.32	50.747		
3,500.00	3,497.56	3,453.56	3,497.56	15.42	118.86	38.93	-1,570.75	-6,519.42	6,610.52	6,476.28	134.24	49.243		
3,600.00	3,597.48	3,553.48	3,597.48	15.85	122.35	38.95	-1,570.75	-6,519.42	6,607.40	6,469.24	138.16	47.824		
3,700.00	3,697.40	3,653.40	3,697.40	16.28	125.84	38.98	-1,570.75	-6,519.42	6,604.28	6,462.20	142.08	46.483		
3,800.00	3,797.32	3,753.32	3,797.32	16.72	129.32	39.00	-1,570.75	-6,519.42	6,601.16	6,455.16	146.00	45.214		
3,900.00	3,897.24	3,853.24	3,897.24	17.15	132.81	39.02	-1,570.75	-6,519.42	6,598.04	6,448.12	149.92	44.011		
4,000.00	3,997.16	3,953.16	3,997.16	17.59	136.30	39.04	-1,570.75	-6,519.42	6,594.92	6,441.08	153.84	42.869		
4,100.00	4,097.08	4,053.08	4,097.08	18.02	139.79	39.06	-1,570.75	-6,519.42	6,591.80	6,434.04	157.76	41.784		
4,200.00	4,197.00	4,153.00	4,197.00	18.46	143.27	39.08	-1,570.75	-6,519.42	6,588.69	6,427.00	161.68	40.751		
4,300.00	4,296.92	4,252.92	4,296.92	18.89	146.76	39.11	-1,570.75	-6,519.42	6,585.57	6,419.97	165.60	39.767		
4,400.00	4,396.84	4,352.84	4,396.84	19.33	150.25	39.13	-1,570.75	-6,519.42	6,582.46	6,412.93	169.52	38.829		
4,500.00	4,496.76	4,452.76	4,496.76	19.77	153.74	39.15	-1,570.75	-6,519.42	6,579.34	6,405.89	173.45	37.933		
4,600.00	4,596.68	4,552.68	4,596.68	20.20	157.22	39.17	-1,570.75	-6,519.42	6,576.23	6,398.86	177.37	37.076		
4,700.00	4,696.60	4,652.60	4,696.60	20.64	160.71	39.20	-1,570.75	-6,519.42	6,573.12	6,391.82	181.29	36.257		
4,800.00	4,796.52	4,752.52	4,796.52	21.08	164.20	39.22	-1,570.75	-6,519.42	6,570.01	6,384.79	185.22	35.472		
4,900.00	4,896.44	4,852.44	4,896.44	21.51	167.69	39.24	-1,570.75	-6,519.42	6,566.90	6,377.76	189.14	34.720		
5,000.00	4,996.36	4,952.36	4,996.36	21.95	171.17	39.26	-1,570.75	-6,519.42	6,563.79	6,370.72	193.06	33.998		
5,100.00	5,096.28	5,052.28	5,096.28	22.39	174.66	39.28	-1,570.75	-6,519.42	6,560.68	6,363.69	196.99	33.305		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,152.19	5,196.19	22.83	178.15	39.31	-1,570.75	-6,519.42	6,557.57	6,356.66	200.91	32.639		
5,300.00	5,296.11	5,252.11	5,296.11	23.27	181.64	39.33	-1,570.75	-6,519.42	6,554.47	6,349.63	204.84	31.999		
5,400.00	5,396.03	5,352.03	5,396.03	23.71	185.12	39.35	-1,570.75	-6,519.42	6,551.36	6,342.60	208.76	31.382		
5,500.00	5,495.95	5,451.95	5,495.95	24.14	188.61	39.37	-1,570.75	-6,519.42	6,548.26	6,335.57	212.69	30.788		
5,600.00	5,595.87	5,551.87	5,595.87	24.58	192.10	39.39	-1,570.75	-6,519.42	6,545.16	6,328.55	216.61	30.216		
5,700.00	5,695.79	5,651.79	5,695.79	25.02	195.59	39.42	-1,570.75	-6,519.42	6,542.05	6,321.52	220.54	29.664		
5,800.00	5,795.71	5,751.71	5,795.71	25.46	199.07	39.44	-1,570.75	-6,519.42	6,538.95	6,314.49	224.46	29.132		
5,900.00	5,895.63	5,851.63	5,895.63	25.90	202.56	39.46	-1,570.75	-6,519.42	6,535.85	6,307.47	228.39	28.617		
6,000.00	5,995.55	5,951.55	5,995.55	26.34	206.05	39.48	-1,570.75	-6,519.42	6,532.75	6,300.44	232.31	28.120		
6,100.00	6,095.47	6,051.47	6,095.47	26.78	209.54	39.51	-1,570.75	-6,519.42	6,529.66	6,293.42	236.24	27.640		
6,200.00	6,195.39	6,151.39	6,195.39	27.22	213.03	39.53	-1,570.75	-6,519.42	6,526.56	6,286.39	240.17	27.175		
6,300.00	6,295.31	6,251.31	6,295.31	27.66	216.51	39.55	-1,570.75	-6,519.42	6,523.46	6,279.37	244.09	26.726		
6,400.00	6,395.23	6,351.23	6,395.23	28.10	220.00	39.57	-1,570.75	-6,519.42	6,520.37	6,272.35	248.02	26.290		
6,500.00	6,495.02	6,451.02	6,495.02	28.54	223.48	3.91	-1,570.75	-6,519.42	6,514.99	6,263.05	251.94	25.859		
6,600.00	6,593.09	6,549.09	6,593.09	28.98	226.91	-5.56	-1,570.75	-6,519.42	6,495.96	6,240.17	255.79	25.395		
6,700.00	6,687.01	6,643.01	6,687.01	29.41	230.19	-8.72	-1,570.75	-6,519.42	6,462.17	6,202.69	259.48	24.904		
6,800.00	6,774.46	6,730.46	6,774.46	29.83	233.24	-11.05	-1,570.75	-6,519.42	6,414.45	6,151.54	262.91	24.398		
6,900.00	6,853.31	6,809.31	6,853.31	30.26	235.99	-13.57	-1,570.75	-6,519.42	6,353.99	6,088.01	265.99	23.888		
7,000.00	6,921.60	6,877.60	6,921.60	30.76	238.37	-16.93	-1,570.75	-6,519.42	6,282.29	6,013.65	268.64	23.386		
7,100.00	6,977.66	6,933.66	6,977.66	31.38	240.33	-22.04	-1,570.75	-6,519.42	6,201.14	5,930.33	270.81	22.898		
7,200.00	7,020.10	6,976.10	7,020.10	32.17	241.81	-30.73	-1,570.75	-6,519.42	6,112.55	5,840.10	272.45	22.435		
7,300.00	7,047.88	7,003.88	7,047.88	33.13	242.78	-47.28	-1,570.75	-6,519.42	6,018.72	5,745.19	273.53	22.004		
7,400.00	7,060.32	7,016.32	7,060.32	34.27	243.22	-78.51	-1,570.75	-6,519.42	5,921.98	5,647.93	274.05	21.609		
7,500.00	7,060.70	7,016.70	7,060.70	35.56	243.23	-91.07	-1,570.75	-6,519.42	5,824.56	5,550.43	274.13	21.247		
7,600.00	7,060.27	7,016.27	7,060.27	37.02	243.22	-91.05	-1,570.75	-6,519.42	5,727.23	5,453.03	274.20	20.887		
7,700.00	7,059.83	7,015.83	7,059.83	38.64	243.20	-91.03	-1,570.75	-6,519.42	5,629.99	5,355.69	274.29	20.525		
7,800.00	7,059.40	7,015.40	7,059.40	40.40	243.18	-91.01	-1,570.75	-6,519.42	5,532.84	5,258.43	274.41	20.163		
7,900.00	7,058.97	7,014.97	7,058.97	42.28	243.17	-90.99	-1,570.75	-6,519.42	5,435.80	5,161.25	274.55	19.799		
8,000.00	7,058.53	7,014.53	7,058.53	44.27	243.15	-90.97	-1,570.75	-6,519.42	5,338.87	5,064.15	274.72	19.434		
8,100.00	7,058.10	7,014.10	7,058.10	46.35	243.14	-90.95	-1,570.75	-6,519.42	5,242.05	4,967.14	274.92	19.068		
8,200.00	7,057.66	7,013.66	7,057.66	48.50	243.12	-90.93	-1,570.75	-6,519.42	5,145.36	4,870.21	275.15	18.700		
8,300.00	7,057.23	7,013.23	7,057.23	50.73	243.11	-90.91	-1,570.75	-6,519.42	5,048.79	4,773.38	275.41	18.332		
8,400.00	7,056.80	7,012.80	7,056.80	53.02	243.09	-90.90	-1,570.75	-6,519.42	4,952.37	4,676.65	275.71	17.962		
8,500.00	7,056.36	7,012.36	7,056.36	55.36	243.08	-90.88	-1,570.75	-6,519.42	4,856.08	4,580.03	276.05	17.591		
8,600.00	7,055.93	7,011.93	7,055.93	57.74	243.06	-90.86	-1,570.75	-6,519.42	4,759.95	4,483.52	276.43	17.219		
8,700.00	7,055.49	7,011.49	7,055.49	60.17	243.05	-90.84	-1,570.75	-6,519.42	4,663.98	4,387.12	276.86	16.846		
8,800.00	7,055.06	7,011.06	7,055.06	62.63	243.03	-90.82	-1,570.75	-6,519.42	4,568.19	4,290.84	277.34	16.471		
8,900.00	7,054.63	7,010.63	7,054.63	65.13	243.02	-90.80	-1,570.75	-6,519.42	4,472.57	4,194.70	277.87	16.096		
9,000.00	7,054.19	7,010.19	7,054.19	67.66	243.00	-90.78	-1,570.75	-6,519.42	4,377.16	4,098.70	278.46	15.719		
9,100.00	7,053.76	7,009.76	7,053.76	70.21	242.99	-90.76	-1,570.75	-6,519.42	4,281.95	4,002.84	279.11	15.341		
9,200.00	7,053.32	7,009.32	7,053.32	72.78	242.97	-90.75	-1,570.75	-6,519.42	4,186.97	3,907.14	279.82	14.963		
9,300.00	7,052.89	7,008.89	7,052.89	75.38	242.96	-90.73	-1,570.75	-6,519.42	4,092.22	3,811.62	280.61	14.583		
9,400.00	7,052.46	7,008.46	7,052.46	77.99	242.94	-90.71	-1,570.75	-6,519.42	3,997.74	3,716.27	281.46	14.203		
9,500.00	7,052.02	7,008.02	7,052.02	80.62	242.93	-90.69	-1,570.75	-6,519.42	3,903.52	3,621.12	282.40	13.823		
9,600.00	7,051.59	7,007.59	7,051.59	83.26	242.91	-90.67	-1,570.75	-6,519.42	3,809.60	3,526.18	283.42	13.441		
9,700.00	7,051.15	7,007.15	7,051.15	85.92	242.90	-90.65	-1,570.75	-6,519.42	3,716.00	3,431.47	284.53	13.060		
9,800.00	7,050.72	7,006.72	7,050.72	88.59	242.88	-90.63	-1,570.75	-6,519.42	3,622.74	3,337.00	285.74	12.678		
9,900.00	7,050.29	7,006.29	7,050.29	91.28	242.87	-90.61	-1,570.75	-6,519.42	3,529.85	3,242.80	287.05	12.297		
10,000.00	7,049.85	7,005.85	7,049.85	93.97	242.85	-90.60	-1,570.75	-6,519.42	3,437.36	3,148.89	288.47	11.916		
10,100.00	7,049.42	7,005.42	7,049.42	96.67	242.84	-90.58	-1,570.75	-6,519.42	3,345.30	3,055.29	290.01	11.535		
10,200.00	7,048.98	7,004.98	7,048.98	99.38	242.82	-90.56	-1,570.75	-6,519.42	3,253.71	2,962.04	291.67	11.155		
10,300.00	7,048.55	7,004.55	7,048.55	102.10	242.81	-90.54	-1,570.75	-6,519.42	3,162.63	2,869.16	293.47	10.777		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.12	7,004.12	7,048.12	104.83	242.79	-90.52	-1,570.75	-6,519.42	3,072.10	2,776.70	295.40	10.400		
10,500.00	7,047.68	7,003.68	7,047.68	107.56	242.78	-90.50	-1,570.75	-6,519.42	2,982.18	2,684.69	297.49	10.024		
10,600.00	7,047.25	7,003.25	7,047.25	110.30	242.76	-90.48	-1,570.75	-6,519.42	2,892.92	2,593.17	299.75	9.651		
10,700.00	7,046.81	7,002.81	7,046.81	113.05	242.75	-90.46	-1,570.75	-6,519.42	2,804.39	2,502.21	302.18	9.281		
10,800.00	7,046.38	7,002.38	7,046.38	115.80	242.73	-90.45	-1,570.75	-6,519.42	2,716.65	2,411.86	304.79	8.913		
10,900.00	7,045.95	7,001.95	7,045.95	118.55	242.72	-90.43	-1,570.75	-6,519.42	2,629.78	2,322.18	307.60	8.549		
11,000.00	7,045.51	7,001.51	7,045.51	121.31	242.70	-90.41	-1,570.75	-6,519.42	2,543.88	2,233.26	310.63	8.189		
11,100.00	7,045.08	7,001.08	7,045.08	124.08	242.68	-90.39	-1,570.75	-6,519.42	2,459.05	2,145.17	313.88	7.834		
11,200.00	7,044.64	7,000.64	7,044.64	126.85	242.67	-90.37	-1,570.75	-6,519.42	2,375.40	2,058.02	317.37	7.485		
11,300.00	7,044.21	7,000.21	7,044.21	129.62	242.65	-90.35	-1,570.75	-6,519.42	2,293.06	1,971.93	321.12	7.141		
11,400.00	7,043.78	7,000.22	7,043.78	132.40	242.65	-90.33	-1,570.75	-6,519.42	2,212.17	1,887.01	325.16	6.803		
11,500.00	7,043.34	7,000.66	7,043.34	135.18	242.67	-90.31	-1,570.75	-6,519.42	2,132.90	1,803.41	329.50	6.473		
11,600.00	7,042.91	7,001.09	7,042.91	137.96	242.69	-90.30	-1,570.75	-6,519.42	2,055.45	1,721.32	334.13	6.152		
11,700.00	7,042.47	7,001.53	7,042.47	140.75	242.70	-90.28	-1,570.75	-6,519.42	1,980.01	1,640.94	339.07	5.840		
11,800.00	7,042.04	7,001.96	7,042.04	143.54	242.72	-90.26	-1,570.75	-6,519.42	1,906.84	1,562.51	344.33	5.538		
11,900.00	7,041.61	7,002.39	7,041.61	146.33	242.73	-90.24	-1,570.75	-6,519.42	1,836.20	1,486.30	349.90	5.248		
12,000.00	7,041.17	7,002.83	7,041.17	149.13	242.75	-90.22	-1,570.75	-6,519.42	1,768.39	1,412.62	355.77	4.971		
12,100.00	7,040.74	7,003.26	7,040.74	151.92	242.76	-90.20	-1,570.75	-6,519.42	1,703.76	1,341.82	361.94	4.707		
12,200.00	7,040.30	7,003.70	7,040.30	154.72	242.78	-90.18	-1,570.75	-6,519.42	1,642.67	1,274.31	368.36	4.459		
12,300.00	7,039.87	7,004.13	7,039.87	157.52	242.79	-90.16	-1,570.75	-6,519.42	1,585.55	1,210.55	374.99	4.228		
12,400.00	7,039.44	7,004.56	7,039.44	160.33	242.81	-90.14	-1,570.75	-6,519.42	1,532.82	1,151.06	381.76	4.015		
12,500.00	7,039.00	7,005.00	7,039.00	163.13	242.82	-90.13	-1,570.75	-6,519.42	1,484.96	1,096.40	388.57	3.822		
12,600.00	7,038.57	7,005.43	7,038.57	165.94	242.84	-90.11	-1,570.75	-6,519.42	1,442.46	1,047.16	395.31	3.649		
12,700.00	7,038.13	7,005.87	7,038.13	168.75	242.85	-90.09	-1,570.75	-6,519.42	1,405.80	1,003.97	401.83	3.498		
12,800.00	7,037.70	7,006.30	7,037.70	171.56	242.87	-90.07	-1,570.75	-6,519.42	1,375.45	967.46	407.99	3.371		
12,900.00	7,037.27	7,006.73	7,037.27	174.37	242.88	-90.05	-1,570.75	-6,519.42	1,351.83	938.23	413.60	3.268		
13,000.00	7,036.83	7,007.17	7,036.83	177.19	242.90	-90.03	-1,570.75	-6,519.42	1,335.30	916.78	418.52	3.191		
13,100.00	7,036.40	7,007.60	7,036.40	180.00	242.91	-90.01	-1,570.75	-6,519.42	1,326.13	903.53	422.60	3.138		
13,172.10	7,036.09	7,007.91	7,036.09	182.03	242.92	-90.00	-1,570.75	-6,519.42	1,324.16	899.21	424.95	3.116 CC		
13,200.00	7,035.96	7,008.04	7,035.96	182.82	242.93	-89.99	-1,570.75	-6,519.42	1,324.46	898.73	425.73	3.111 ES		
13,300.00	7,035.53	7,008.47	7,035.53	185.64	242.94	-89.98	-1,570.75	-6,519.42	1,330.33	902.48	427.84	3.109 SF		
13,400.00	7,035.10	7,008.90	7,035.10	188.46	242.96	-89.96	-1,570.75	-6,519.42	1,343.63	914.69	428.94	3.132		
13,500.00	7,034.66	7,009.34	7,034.66	191.28	242.97	-89.94	-1,570.75	-6,519.42	1,364.16	935.10	429.06	3.179		
13,600.00	7,034.23	7,009.77	7,034.23	194.10	242.99	-89.92	-1,570.75	-6,519.42	1,391.58	963.30	428.28	3.249		
13,700.00	7,033.79	6,989.79	7,033.79	196.92	242.29	-89.90	-1,570.75	-6,519.42	1,425.51	999.50	426.01	3.346		
13,800.00	7,033.36	6,989.36	7,033.36	199.74	242.28	-89.88	-1,570.75	-6,519.42	1,465.49	1,041.72	423.77	3.458		
13,900.00	7,032.93	6,988.93	7,032.93	202.57	242.26	-89.86	-1,570.75	-6,519.42	1,511.04	1,090.03	421.01	3.589		
14,000.00	7,032.49	6,988.49	7,032.49	205.39	242.25	-89.84	-1,570.75	-6,519.42	1,561.67	1,143.81	417.86	3.737		
14,100.00	7,032.06	6,988.06	7,032.06	208.22	242.23	-89.83	-1,570.75	-6,519.42	1,616.91	1,202.47	414.44	3.901		
14,200.00	7,031.62	6,987.62	7,031.62	211.05	242.22	-89.81	-1,570.75	-6,519.42	1,676.30	1,265.45	410.84	4.080		
14,300.00	7,031.19	6,987.19	7,031.19	213.87	242.20	-89.79	-1,570.75	-6,519.42	1,739.41	1,332.25	407.16	4.272		
14,400.00	7,030.76	6,986.76	7,030.76	216.70	242.18	-89.77	-1,570.75	-6,519.42	1,805.86	1,402.40	403.46	4.476		
14,500.00	7,030.32	6,986.32	7,030.32	219.53	242.17	-89.75	-1,570.75	-6,519.42	1,875.28	1,475.51	399.78	4.691		
14,600.00	7,029.89	6,985.89	7,029.89	222.36	242.15	-89.73	-1,570.75	-6,519.42	1,947.37	1,551.21	396.17	4.916		
14,700.00	7,029.45	6,985.45	7,029.45	225.19	242.14	-89.71	-1,570.75	-6,519.42	2,021.84	1,629.19	392.65	5.149		
14,800.00	7,029.02	6,985.02	7,029.02	228.03	242.12	-89.69	-1,570.75	-6,519.42	2,098.43	1,709.18	389.25	5.391		
14,805.04	7,029.00	6,985.00	7,029.00	228.17	242.12	-89.69	-1,570.75	-6,519.42	2,102.34	1,713.26	389.08	5.403		

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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-93.24	-434.16	-7,658.11	7,670.51					
100.00	100.00	100.00	126.38	3.28	3.29	-93.24	-433.88	-7,657.83	7,670.15	7,663.58	6.57	1,167.123		
200.00	200.00	181.72	220.72	3.34	3.33	-93.24	-433.28	-7,657.43	7,669.70	7,663.04	6.67	1,150.621		
277.04	277.04	238.05	277.04	3.42	3.38	-93.24	-432.90	-7,657.37	7,669.60	7,662.81	6.79	1,128.965		
300.00	300.00	254.98	293.97	3.44	3.40	-93.24	-432.82	-7,657.38	7,669.61	7,662.77	6.84	1,121.136		
400.00	400.00	330.14	369.13	3.60	3.49	-93.23	-432.62	-7,657.58	7,669.86	7,662.76	7.10	1,080.829		
500.00	499.98	411.08	450.07	3.80	3.63	48.58	-432.69	-7,658.03	7,669.25	7,661.83	7.42	1,033.174		
600.00	599.90	519.87	558.86	4.02	3.85	48.61	-432.96	-7,658.63	7,667.19	7,659.32	7.87	974.437		
700.00	699.82	609.97	648.96	4.28	4.06	48.63	-433.61	-7,659.13	7,665.13	7,656.79	8.34	918.960		
800.00	799.74	698.49	737.47	4.57	4.30	48.64	-434.50	-7,659.74	7,663.21	7,654.35	8.86	864.709		
900.00	899.66	800.51	839.48	4.88	4.59	48.65	-435.54	-7,660.50	7,661.36	7,651.90	9.47	809.326		
1,000.00	999.58	905.41	944.37	5.21	4.92	48.67	-436.57	-7,661.23	7,659.46	7,649.34	10.12	756.863		
1,100.00	1,099.50	1,010.57	1,049.53	5.55	5.26	48.69	-437.45	-7,661.91	7,657.50	7,646.69	10.81	708.471		
1,200.00	1,199.42	1,111.43	1,150.38	5.91	5.60	48.71	-437.99	-7,662.53	7,655.50	7,643.99	11.51	665.115		
1,300.00	1,299.34	1,209.74	1,248.69	6.28	5.95	48.73	-438.35	-7,663.16	7,653.51	7,641.28	12.22	626.063		
1,400.00	1,399.26	1,319.52	1,358.47	6.66	6.35	48.75	-438.61	-7,663.78	7,651.43	7,638.43	13.00	588.583		
1,500.00	1,499.18	1,411.98	1,450.93	7.04	6.69	48.77	-438.90	-7,664.31	7,649.37	7,635.65	13.73	557.249		
1,600.00	1,599.10	1,511.73	1,550.67	7.43	7.07	48.79	-439.30	-7,664.91	7,647.35	7,632.86	14.49	527.626		
1,700.00	1,699.01	1,605.13	1,644.07	7.83	7.42	48.81	-439.62	-7,665.53	7,645.39	7,630.14	15.25	501.417		
1,800.00	1,798.93	1,713.62	1,752.56	8.23	7.84	48.83	-439.79	-7,666.24	7,643.41	7,627.34	16.07	475.670		
1,900.00	1,898.85	1,810.03	1,849.97	8.64	8.22	48.85	-439.91	-7,666.86	7,641.41	7,624.56	16.85	453.457		
2,000.00	1,998.77	1,912.22	1,951.15	9.05	8.63	48.87	-440.13	-7,667.49	7,639.40	7,621.73	17.66	432.490		
2,100.00	2,098.69	2,005.44	2,044.37	9.46	9.00	48.89	-440.34	-7,668.12	7,637.44	7,618.99	18.45	414.028		
2,200.00	2,198.61	2,142.94	2,181.87	9.88	9.55	48.93	-440.40	-7,668.66	7,635.17	7,615.76	19.41	393.337		
2,300.00	2,298.53	2,254.85	2,293.78	10.30	10.00	48.95	-440.91	-7,668.83	7,632.71	7,612.43	20.28	376.402		
2,400.00	2,398.45	2,359.74	2,398.67	10.72	10.42	48.97	-441.56	-7,668.78	7,630.06	7,608.94	21.12	361.266		
2,500.00	2,498.37	2,458.65	2,497.57	11.14	10.83	48.98	-442.03	-7,668.77	7,627.44	7,605.50	21.94	347.617		
2,600.00	2,598.29	2,583.25	2,622.18	11.56	11.33	49.01	-442.46	-7,668.62	7,624.71	7,601.84	22.87	333.394		
2,700.00	2,698.21	2,707.42	2,746.35	11.98	11.84	49.04	-442.57	-7,668.02	7,621.59	7,597.80	23.80	320.262		
2,800.00	2,798.13	2,800.50	2,839.42	12.41	12.22	49.06	-442.33	-7,667.50	7,618.39	7,593.78	24.60	309.644		
2,900.00	2,898.05	2,854.73	2,893.66	12.84	12.44	49.07	-442.02	-7,667.38	7,615.51	7,590.26	25.26	301.544		
3,000.00	2,997.97	2,900.01	2,938.93	13.27	12.63	49.09	-441.62	-7,667.54	7,613.25	7,587.38	25.87	294.285		
3,100.00	3,097.89	2,970.31	3,009.22	13.69	12.92	49.11	-440.86	-7,668.18	7,611.52	7,584.93	26.59	286.256		
3,200.00	3,197.81	3,045.59	3,084.49	14.12	13.23	49.13	-439.93	-7,669.27	7,610.26	7,582.93	27.33	278.445		
3,300.00	3,297.73	3,122.21	3,161.10	14.56	13.55	49.16	-438.84	-7,670.53	7,609.23	7,581.15	28.08	270.988		
3,400.00	3,397.65	3,178.37	3,217.23	14.99	13.78	49.18	-437.94	-7,671.74	7,608.69	7,579.94	28.74	264.714		
3,447.47	3,445.08	3,206.68	3,245.53	15.19	13.90	49.19	-437.45	-7,672.47	7,608.63	7,579.57	29.07	261.780		
3,500.00	3,497.56	3,245.83	3,284.66	15.42	14.06	49.21	-436.75	-7,673.57	7,608.68	7,579.22	29.45	258.320		
3,600.00	3,597.48	3,328.23	3,367.00	15.85	14.41	49.24	-435.14	-7,676.08	7,609.01	7,578.78	30.23	251.705		
3,700.00	3,697.40	3,441.17	3,479.85	16.28	14.88	49.29	-432.39	-7,679.57	7,609.38	7,578.24	31.14	244.390		
3,800.00	3,797.32	3,571.42	3,610.00	16.72	15.43	49.34	-428.82	-7,683.18	7,609.41	7,577.29	32.12	236.924		
3,900.00	3,897.24	3,677.64	3,716.16	17.15	15.88	49.39	-426.22	-7,685.83	7,609.18	7,576.19	33.00	230.598		
4,000.00	3,997.16	3,781.37	3,819.84	17.59	16.31	49.43	-424.04	-7,688.37	7,608.93	7,575.07	33.87	224.667		
4,100.00	4,097.08	3,883.57	3,921.99	18.02	16.74	49.47	-422.12	-7,690.81	7,608.64	7,573.90	34.73	219.068		
4,200.00	4,197.00	3,988.55	4,026.93	18.46	17.18	49.50	-420.49	-7,693.27	7,608.30	7,572.69	35.61	213.666		
4,300.00	4,296.92	4,110.31	4,148.65	18.89	17.70	49.55	-418.74	-7,695.89	7,607.80	7,571.24	36.56	208.109		
4,400.00	4,396.84	4,200.72	4,239.03	19.33	18.08	49.58	-417.50	-7,697.78	7,607.23	7,569.85	37.37	203.548		
4,500.00	4,496.76	4,309.04	4,347.32	19.77	18.53	49.61	-416.32	-7,700.02	7,606.64	7,568.38	38.27	198.784		
4,600.00	4,596.68	4,415.72	4,453.98	20.20	18.98	49.64	-415.54	-7,702.11	7,605.98	7,566.82	39.15	194.267		
4,700.00	4,696.60	4,548.00	4,586.24	20.64	19.54	49.68	-414.91	-7,704.41	7,605.11	7,564.97	40.15	189.431		
4,800.00	4,796.52	4,668.49	4,706.71	21.08	20.05	49.71	-414.56	-7,705.90	7,603.73	7,562.64	41.09	185.039		
4,900.00	4,896.44	4,764.17	4,802.38	21.51	20.45	49.73	-414.26	-7,707.07	7,602.34	7,560.41	41.93	181.292		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	4,996.36	4,871.04	4,909.24	21.95	20.91	49.76	-413.93	-7,708.38	7,600.97	7,558.14	42.82	177.496		
5,100.00	5,096.28	4,974.25	5,012.45	22.39	21.34	49.79	-413.54	-7,709.54	7,599.48	7,555.78	43.70	173.912		
5,200.00	5,196.19	5,083.92	5,122.12	22.83	21.81	49.82	-413.05	-7,710.71	7,597.95	7,553.35	44.60	170.362		
5,300.00	5,296.11	5,182.12	5,220.31	23.27	22.22	49.84	-412.65	-7,711.68	7,596.33	7,550.88	45.45	167.126		
5,400.00	5,396.03	5,286.69	5,324.87	23.71	22.67	49.87	-412.34	-7,712.72	7,594.72	7,548.39	46.33	163.914		
5,500.00	5,495.95	5,455.93	5,494.11	24.14	23.38	49.92	-411.43	-7,713.45	7,592.51	7,545.02	47.48	159.901		
5,600.00	5,595.87	5,545.35	5,583.53	24.58	23.76	49.94	-410.81	-7,713.48	7,589.94	7,541.64	48.30	157.144		
5,700.00	5,695.79	5,625.15	5,663.32	25.02	24.10	49.96	-410.52	-7,713.77	7,587.69	7,538.62	49.08	154.607		
5,800.00	5,795.71	5,725.16	5,763.33	25.46	24.52	49.99	-410.21	-7,714.19	7,585.52	7,535.58	49.94	151.893		
5,900.00	5,895.63	5,815.82	5,853.99	25.90	24.91	50.01	-409.86	-7,714.65	7,583.43	7,532.67	50.76	149.386		
6,000.00	5,995.55	5,910.93	5,949.10	26.34	25.31	50.04	-409.45	-7,715.20	7,581.42	7,529.81	51.61	146.908		
6,100.00	6,095.47	5,987.22	6,025.39	26.78	25.63	50.06	-409.20	-7,715.79	7,579.61	7,527.24	52.37	144.729		
6,200.00	6,195.39	6,099.46	6,137.62	27.22	26.11	50.09	-409.00	-7,716.78	7,577.91	7,524.63	53.29	142.211		
6,300.00	6,295.31	6,169.50	6,207.66	27.66	26.41	50.10	-408.92	-7,717.46	7,576.30	7,522.27	54.02	140.237		
6,400.00	6,395.23	6,255.73	6,293.88	28.10	26.78	50.12	-408.91	-7,718.58	7,575.02	7,520.19	54.83	138.151		
6,500.00	6,495.02	6,354.57	6,392.71	28.54	27.20	50.14	-409.12	-7,719.90	7,571.45	7,515.76	55.69	135.954		
6,600.00	6,593.09	6,471.06	6,509.19	28.98	27.69	50.16	-409.44	-7,721.39	7,567.86	7,512.24	56.62	133.411		
6,700.00	6,687.01	6,580.24	6,618.36	29.41	28.16	50.18	-409.99	-7,722.45	7,564.21	7,508.63	57.60	130.797		
6,800.00	6,774.46	6,661.86	6,699.98	29.83	28.50	50.20	-410.53	-7,723.20	7,560.59	7,504.98	58.62	128.347		
6,900.00	6,853.31	6,728.28	6,766.39	30.26	28.79	50.22	-411.31	-7,723.88	7,556.99	7,501.36	59.69	125.974		
7,000.00	6,921.60	6,782.12	6,820.22	30.76	29.02	50.24	-412.03	-7,724.55	7,553.40	7,497.74	60.80	123.683		
7,100.00	6,977.66	6,831.18	6,869.27	31.38	29.23	50.26	-412.72	-7,725.24	7,549.81	7,494.09	61.94	121.435		
7,200.00	7,020.10	6,871.04	6,909.12	32.17	29.39	50.28	-413.22	-7,725.84	7,546.21	7,490.44	63.10	119.291		
7,300.00	7,047.88	6,897.70	6,935.78	33.13	29.51	50.30	-413.52	-7,726.24	7,542.61	7,486.81	64.28	117.301		
7,400.00	7,060.32	6,900.01	6,938.09	34.27	29.52	50.32	-413.55	-7,726.28	7,542.61	7,486.81	64.28	115.557		
7,500.00	7,060.70	6,909.19	6,947.27	35.56	29.56	50.34	-413.65	-7,726.43	7,542.61	7,486.81	64.28	113.808		
7,600.00	7,060.27	6,910.01	6,948.09	37.02	29.56	50.36	-413.66	-7,726.44	7,542.61	7,486.81	64.28	112.127		
7,700.00	7,059.83	6,910.84	6,948.92	38.64	29.56	50.38	-413.66	-7,726.45	7,542.61	7,486.81	64.28	110.445		
7,800.00	7,059.40	6,911.68	6,949.75	40.40	29.57	50.40	-413.67	-7,726.47	7,542.61	7,486.81	64.28	108.761		
7,900.00	7,058.97	6,912.52	6,950.60	42.28	29.57	50.42	-413.68	-7,726.48	7,542.61	7,486.81	64.28	107.075		
8,000.00	7,058.53	6,913.37	6,951.45	44.27	29.58	50.44	-413.69	-7,726.49	7,542.61	7,486.81	64.28	105.388		
8,100.00	7,058.10	6,914.23	6,952.31	46.35	29.58	50.46	-413.70	-7,726.51	7,542.61	7,486.81	64.28	103.700		
8,200.00	7,057.66	6,915.10	6,953.18	48.50	29.58	50.48	-413.71	-7,726.52	7,542.61	7,486.81	64.28	102.011		
8,300.00	7,057.23	6,915.98	6,954.05	50.73	29.59	50.50	-413.72	-7,726.54	7,542.61	7,486.81	64.28	100.320		
8,400.00	7,056.80	6,916.86	6,954.94	53.02	29.59	50.52	-413.73	-7,726.55	7,542.61	7,486.81	64.28	98.628		
8,500.00	7,056.36	6,917.75	6,955.83	55.36	29.59	50.54	-413.74	-7,726.57	7,542.61	7,486.81	64.28	96.935		
8,600.00	7,055.93	6,918.66	6,956.73	57.74	29.60	50.56	-413.74	-7,726.58	7,542.61	7,486.81	64.28	95.242		
8,700.00	7,055.49	6,919.57	6,957.64	60.17	29.60	50.58	-413.75	-7,726.60	7,542.61	7,486.81	64.28	93.547		
8,800.00	7,055.06	6,920.49	6,958.56	62.63	29.61	50.60	-413.76	-7,726.61	7,542.61	7,486.81	64.28	91.852		
8,900.00	7,054.63	6,921.42	6,959.49	65.13	29.61	50.62	-413.77	-7,726.63	7,542.61	7,486.81	64.28	90.157		
9,000.00	7,054.19	6,922.36	6,960.43	67.66	29.61	50.64	-413.78	-7,726.65	7,542.61	7,486.81	64.28	88.460		
9,100.00	7,053.76	6,923.30	6,961.38	70.21	29.62	50.66	-413.79	-7,726.66	7,542.61	7,486.81	64.28	86.763		
9,200.00	7,053.32	6,924.26	6,962.34	72.78	29.62	50.68	-413.80	-7,726.68	7,542.61	7,486.81	64.28	85.066		
9,300.00	7,052.89	6,925.23	6,963.30	75.38	29.63	50.70	-413.81	-7,726.70	7,542.61	7,486.81	64.28	83.368		
9,400.00	7,052.46	6,926.21	6,964.28	77.99	29.63	50.72	-413.82	-7,726.71	7,542.61	7,486.81	64.28	81.670		
9,500.00	7,052.02	6,927.19	6,965.27	80.62	29.63	50.74	-413.83	-7,726.73	7,542.61	7,486.81	64.28	79.972		
9,600.00	7,051.59	6,928.19	6,966.26	83.26	29.64	50.76	-413.84	-7,726.75	7,542.61	7,486.81	64.28	78.273		
9,700.00	7,051.15	6,929.20	6,967.27	85.92	29.64	50.78	-413.85	-7,726.76	7,542.61	7,486.81	64.28	76.575		
9,800.00	7,050.72	6,930.21	6,968.29	88.59	29.65	50.80	-413.86	-7,726.78	7,542.61	7,486.81	64.28	74.876		
9,900.00	7,050.29	6,931.24	6,969.32	91.28	29.65	50.82	-413.87	-7,726.80	7,542.61	7,486.81	64.28	73.178		
10,000.00	7,049.85	6,932.28	6,970.35	93.97	29.66	50.84	-413.88	-7,726.82	7,542.61	7,486.81	64.28	71.479		
10,100.00	7,049.42	6,933.33	6,971.40	96.67	29.66	50.86	-413.89	-7,726.84	7,542.61	7,486.81	64.28	69.780		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.98	6,934.39	6,972.47	99.38	29.66	-69.96	-413.90	-7,726.86	4,176.33	4,114.99	61.34	68.082		
10,300.00	7,048.55	6,935.47	6,973.54	102.10	29.67	-70.30	-413.91	-7,726.88	4,076.42	4,015.01	61.41	66.383		
10,400.00	7,048.12	6,936.55	6,974.62	104.83	29.67	-70.64	-413.92	-7,726.90	3,976.51	3,915.03	61.47	64.685		
10,500.00	7,047.68	6,937.65	6,975.72	107.56	29.68	-70.99	-413.93	-7,726.92	3,876.60	3,815.06	61.55	62.987		
10,600.00	7,047.25	6,938.75	6,976.82	110.30	29.68	-71.35	-413.94	-7,726.94	3,776.70	3,715.08	61.62	61.289		
10,700.00	7,046.81	6,939.87	6,977.94	113.05	29.69	-71.71	-413.95	-7,726.96	3,676.80	3,615.10	61.70	59.591		
10,800.00	7,046.38	6,941.00	6,979.08	115.80	29.69	-72.08	-413.96	-7,726.98	3,576.91	3,515.13	61.78	57.894		
10,900.00	7,045.95	6,942.15	6,980.22	118.55	29.70	-72.45	-413.98	-7,727.00	3,477.02	3,415.15	61.87	56.196		
11,000.00	7,045.51	6,943.31	6,981.38	121.31	29.70	-72.83	-413.99	-7,727.02	3,377.14	3,315.18	61.97	54.499		
11,100.00	7,045.08	6,944.48	6,982.55	124.08	29.71	-73.21	-414.00	-7,727.04	3,277.27	3,215.20	62.07	52.801		
11,200.00	7,044.64	6,945.66	6,983.73	126.85	29.71	-73.60	-414.01	-7,727.06	3,177.41	3,115.23	62.18	51.103		
11,300.00	7,044.21	6,946.86	6,984.92	129.62	29.72	-74.00	-414.02	-7,727.08	3,077.55	3,015.26	62.29	49.406		
11,400.00	7,043.78	6,948.07	6,986.13	132.40	29.72	-74.40	-414.03	-7,727.11	2,977.70	2,915.28	62.42	47.708		
11,500.00	7,043.34	6,949.29	6,987.36	135.18	29.73	-74.81	-414.04	-7,727.13	2,877.86	2,815.31	62.55	46.009		
11,600.00	7,042.91	6,950.53	6,988.59	137.96	29.73	-75.22	-414.05	-7,727.15	2,778.03	2,715.34	62.70	44.310		
11,700.00	7,042.47	6,951.78	6,989.85	140.75	29.74	-75.64	-414.06	-7,727.18	2,678.22	2,615.36	62.85	42.610		
11,800.00	7,042.04	6,953.04	6,991.11	143.54	29.74	-76.07	-414.08	-7,727.20	2,578.42	2,515.39	63.03	40.909		
11,900.00	7,041.61	6,954.33	6,992.39	146.33	29.75	-76.50	-414.09	-7,727.23	2,478.63	2,415.41	63.22	39.207		
12,000.00	7,041.17	6,955.62	6,993.69	149.13	29.76	-76.94	-414.10	-7,727.25	2,378.86	2,315.43	63.43	37.504		
12,100.00	7,040.74	6,956.93	6,995.00	151.92	29.76	-77.39	-414.11	-7,727.28	2,279.11	2,215.44	63.66	35.799		
12,200.00	7,040.30	6,958.26	6,996.33	154.72	29.77	-77.84	-414.12	-7,727.30	2,179.38	2,115.45	63.93	34.091		
12,300.00	7,039.87	6,959.60	6,997.67	157.52	29.77	-78.30	-414.14	-7,727.33	2,079.68	2,015.45	64.23	32.381		
12,400.00	7,039.44	6,960.96	6,999.03	160.33	29.78	-78.77	-414.15	-7,727.36	1,980.00	1,915.44	64.56	30.668		
12,500.00	7,039.00	6,962.34	7,000.40	163.13	29.78	-79.24	-414.16	-7,727.38	1,880.36	1,815.41	64.95	28.951		
12,600.00	7,038.57	6,963.73	7,001.79	165.94	29.79	-79.72	-414.17	-7,727.41	1,780.76	1,715.36	65.40	27.231		
12,700.00	7,038.13	6,965.14	7,003.20	168.75	29.80	-80.21	-414.18	-7,727.44	1,681.20	1,615.29	65.92	25.505		
12,800.00	7,037.70	6,966.56	7,004.63	171.56	29.80	-80.71	-414.20	-7,727.47	1,581.70	1,515.17	66.53	23.775		
12,900.00	7,037.27	6,968.01	7,006.07	174.37	29.81	-81.21	-414.21	-7,727.50	1,482.27	1,415.01	67.25	22.040		
13,000.00	7,036.83	6,969.47	7,007.53	177.19	29.81	-81.72	-414.22	-7,727.53	1,382.91	1,314.78	68.13	20.299		
13,100.00	7,036.40	6,970.95	7,009.01	180.00	29.82	-82.24	-414.23	-7,727.56	1,283.65	1,214.46	69.19	18.552		
13,200.00	7,035.96	6,972.45	7,010.51	182.82	29.83	-82.77	-414.25	-7,727.59	1,184.52	1,114.02	70.50	16.801		
13,300.00	7,035.53	6,973.97	7,012.03	185.64	29.83	-83.30	-414.26	-7,727.62	1,085.54	1,013.40	72.14	15.048		
13,400.00	7,035.10	6,975.50	7,013.57	188.46	29.84	-83.84	-414.27	-7,727.65	986.76	912.54	74.22	13.295		
13,500.00	7,034.66	6,977.06	7,015.12	191.28	29.85	-84.40	-414.29	-7,727.68	888.26	811.35	76.91	11.550		
13,600.00	7,034.23	6,978.64	7,016.70	194.10	29.85	-84.95	-414.30	-7,727.72	790.13	709.67	80.46	9.820		
13,700.00	7,033.79	6,980.23	7,018.30	196.92	29.86	-85.52	-414.31	-7,727.75	692.53	607.27	85.25	8.123		
13,800.00	7,033.36	6,981.85	7,019.91	199.74	29.87	-86.09	-414.33	-7,727.78	595.72	503.80	91.92	6.481		
13,900.00	7,032.93	6,983.49	7,021.55	202.57	29.87	-86.68	-414.34	-7,727.82	500.16	398.66	101.50	4.928		
14,000.00	7,032.49	6,985.15	7,023.21	205.39	29.88	-87.27	-414.35	-7,727.85	406.74	290.87	115.86	3.510		
14,100.00	7,032.06	6,986.84	7,024.90	208.22	29.89	-87.87	-414.37	-7,727.89	317.34	178.95	138.39	2.293		
14,200.00	7,031.62	6,988.54	7,026.60	211.05	29.90	-88.48	-414.38	-7,727.93	236.58	62.03	174.55	1.355 Level 3		
14,300.00	7,031.19	6,990.27	7,028.33	213.87	29.90	-89.09	-414.39	-7,727.96	176.72	-47.59	224.31	0.788 Level 1		
14,373.75	7,030.87	6,991.56	7,029.62	215.96	29.91	-89.55	-414.40	-7,727.99	160.60	-85.20	245.81	0.653 Level 1, CC, ES, SF		
14,400.00	7,030.76	6,992.03	7,030.08	216.70	29.91	-89.72	-414.41	-7,728.00	162.73	-81.22	243.95	0.667 Level 1		
14,500.00	7,030.32	6,993.80	7,031.86	219.53	29.92	-90.35	-414.42	-7,728.04	204.27	-0.14	204.42	0.999 Level 1		
14,600.00	7,029.89	6,995.60	7,033.66	222.36	29.93	-91.00	-414.44	-7,728.08	277.43	114.95	162.49	1.707		
14,700.00	7,029.45	6,997.43	7,035.49	225.19	29.93	-91.65	-414.45	-7,728.12	363.59	228.60	135.00	2.693		
14,800.00	7,029.02	6,999.28	7,037.34	228.03	29.94	-92.31	-414.46	-7,728.16	455.44	337.92	117.53	3.875		
14,805.04	7,029.00	6,999.38	7,037.43	228.17	29.94	-92.34	-414.46	-7,728.16	460.16	343.33	116.83	3.939		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-113.14	-1,525.09	-3,567.90	3,880.68					
100.00	100.00	38.00	100.00	3.28	3.35	-113.14	-1,525.09	-3,567.90	3,880.18	3,873.55	6.63	585.147		
200.00	200.00	138.00	200.00	3.34	4.49	-113.14	-1,525.09	-3,567.90	3,880.18	3,872.35	7.83	495.488		
300.00	300.00	238.00	300.00	3.44	7.34	-113.14	-1,525.09	-3,567.90	3,880.18	3,869.40	10.78	359.877		
400.00	400.00	338.00	400.00	3.60	10.58	-113.14	-1,525.09	-3,567.90	3,880.18	3,866.00	14.18	273.658		
500.00	499.98	437.98	499.98	3.80	13.94	28.68	-1,525.09	-3,567.90	3,878.65	3,860.92	17.73	218.725		
600.00	599.90	537.90	599.90	4.02	17.35	28.72	-1,525.09	-3,567.90	3,875.16	3,853.80	21.37	181.359		
700.00	699.82	637.82	699.82	4.28	20.78	28.74	-1,525.09	-3,567.90	3,871.64	3,846.58	25.06	154.493		
800.00	799.74	737.74	799.74	4.57	24.23	28.77	-1,525.09	-3,567.90	3,868.12	3,839.33	28.80	134.326		
900.00	899.66	837.66	899.66	4.88	27.69	28.80	-1,525.09	-3,567.90	3,864.61	3,832.04	32.57	118.672		
1,000.00	999.58	937.58	999.58	5.21	31.16	28.83	-1,525.09	-3,567.90	3,861.09	3,824.73	36.36	106.192		
1,100.00	1,099.50	1,037.50	1,099.50	5.55	34.63	28.86	-1,525.09	-3,567.90	3,857.57	3,817.40	40.17	96.022		
1,200.00	1,199.42	1,137.42	1,199.42	5.91	38.10	28.89	-1,525.09	-3,567.90	3,854.06	3,810.05	44.00	87.584		
1,300.00	1,299.34	1,237.34	1,299.34	6.28	41.58	28.92	-1,525.09	-3,567.90	3,850.55	3,802.70	47.85	80.475		
1,400.00	1,399.26	1,337.26	1,399.26	6.66	45.06	28.95	-1,525.09	-3,567.90	3,847.03	3,795.33	51.70	74.407		
1,500.00	1,499.18	1,437.18	1,499.18	7.04	48.54	28.97	-1,525.09	-3,567.90	3,843.52	3,787.95	55.57	69.171		
1,600.00	1,599.10	1,537.10	1,599.10	7.43	52.02	29.00	-1,525.09	-3,567.90	3,840.01	3,780.57	59.44	64.607		
1,700.00	1,699.01	1,637.01	1,699.01	7.83	55.50	29.03	-1,525.09	-3,567.90	3,836.50	3,773.19	63.31	60.595		
1,800.00	1,798.93	1,736.93	1,798.93	8.23	58.98	29.06	-1,525.09	-3,567.90	3,832.99	3,765.79	67.20	57.041		
1,900.00	1,898.85	1,836.85	1,898.85	8.64	62.47	29.09	-1,525.09	-3,567.90	3,829.48	3,758.40	71.08	53.873		
2,000.00	1,998.77	1,936.77	1,998.77	9.05	65.95	29.12	-1,525.09	-3,567.90	3,825.97	3,751.00	74.98	51.030		
2,100.00	2,098.69	2,036.69	2,098.69	9.46	69.43	29.15	-1,525.09	-3,567.90	3,822.47	3,743.60	78.87	48.466		
2,200.00	2,198.61	2,136.61	2,198.61	9.88	72.92	29.18	-1,525.09	-3,567.90	3,818.96	3,736.20	82.77	46.141		
2,300.00	2,298.53	2,236.53	2,298.53	10.30	76.40	29.21	-1,525.09	-3,567.90	3,815.46	3,728.79	86.67	44.024		
2,400.00	2,398.45	2,336.45	2,398.45	10.72	79.89	29.24	-1,525.09	-3,567.90	3,811.96	3,721.39	90.57	42.088		
2,500.00	2,498.37	2,436.37	2,498.37	11.14	83.37	29.27	-1,525.09	-3,567.90	3,808.45	3,713.98	94.48	40.311		
2,600.00	2,598.29	2,536.29	2,598.29	11.56	86.86	29.30	-1,525.09	-3,567.90	3,804.95	3,706.57	98.38	38.675		
2,700.00	2,698.21	2,636.21	2,698.21	11.98	90.34	29.33	-1,525.09	-3,567.90	3,801.45	3,699.16	102.29	37.163		
2,800.00	2,798.13	2,736.13	2,798.13	12.41	93.83	29.36	-1,525.09	-3,567.90	3,797.95	3,691.75	106.20	35.762		
2,900.00	2,898.05	2,836.05	2,898.05	12.84	97.32	29.39	-1,525.09	-3,567.90	3,794.46	3,684.34	110.11	34.460		
3,000.00	2,997.97	2,935.97	2,997.97	13.27	100.80	29.42	-1,525.09	-3,567.90	3,790.96	3,676.94	114.02	33.247		
3,100.00	3,097.89	3,035.89	3,097.89	13.69	104.29	29.44	-1,525.09	-3,567.90	3,787.46	3,669.53	117.94	32.114		
3,200.00	3,197.81	3,135.81	3,197.81	14.12	107.78	29.47	-1,525.09	-3,567.90	3,783.97	3,662.12	121.85	31.054		
3,300.00	3,297.73	3,235.73	3,297.73	14.56	111.26	29.50	-1,525.09	-3,567.90	3,780.47	3,654.71	125.77	30.059		
3,400.00	3,397.65	3,335.65	3,397.65	14.99	114.75	29.53	-1,525.09	-3,567.90	3,776.98	3,647.30	129.68	29.125		
3,500.00	3,497.56	3,435.56	3,497.56	15.42	118.24	29.56	-1,525.09	-3,567.90	3,773.49	3,639.89	133.60	28.245		
3,600.00	3,597.48	3,535.48	3,597.48	15.85	121.72	29.59	-1,525.09	-3,567.90	3,770.00	3,632.48	137.52	27.415		
3,700.00	3,697.40	3,635.40	3,697.40	16.28	125.21	29.62	-1,525.09	-3,567.90	3,766.51	3,625.07	141.44	26.630		
3,800.00	3,797.32	3,735.32	3,797.32	16.72	128.70	29.66	-1,525.09	-3,567.90	3,763.02	3,617.67	145.35	25.889		
3,900.00	3,897.24	3,835.24	3,897.24	17.15	132.18	29.69	-1,525.09	-3,567.90	3,759.53	3,610.26	149.27	25.185		
4,000.00	3,997.16	3,935.16	3,997.16	17.59	135.67	29.72	-1,525.09	-3,567.90	3,756.05	3,602.85	153.19	24.518		
4,100.00	4,097.08	4,035.08	4,097.08	18.02	139.16	29.75	-1,525.09	-3,567.90	3,752.56	3,595.45	157.11	23.884		
4,200.00	4,197.00	4,135.00	4,197.00	18.46	142.65	29.78	-1,525.09	-3,567.90	3,749.08	3,588.04	161.03	23.281		
4,300.00	4,296.92	4,234.92	4,296.92	18.89	146.13	29.81	-1,525.09	-3,567.90	3,745.59	3,580.64	164.96	22.707		
4,400.00	4,396.84	4,334.84	4,396.84	19.33	149.62	29.84	-1,525.09	-3,567.90	3,742.11	3,573.23	168.88	22.159		
4,500.00	4,496.76	4,434.76	4,496.76	19.77	153.11	29.87	-1,525.09	-3,567.90	3,738.63	3,565.83	172.80	21.636		
4,600.00	4,596.68	4,534.68	4,596.68	20.20	156.59	29.90	-1,525.09	-3,567.90	3,735.15	3,558.43	176.72	21.136		
4,700.00	4,696.60	4,634.60	4,696.60	20.64	160.08	29.93	-1,525.09	-3,567.90	3,731.67	3,551.02	180.64	20.658		
4,800.00	4,796.52	4,734.52	4,796.52	21.08	163.57	29.96	-1,525.09	-3,567.90	3,728.19	3,543.62	184.57	20.200		
4,900.00	4,896.44	4,834.44	4,896.44	21.51	167.06	29.99	-1,525.09	-3,567.90	3,724.71	3,536.22	188.49	19.761		
5,000.00	4,996.36	4,934.36	4,996.36	21.95	170.54	30.02	-1,525.09	-3,567.90	3,721.24	3,528.82	192.41	19.340		
5,100.00	5,096.28	5,034.28	5,096.28	22.39	174.03	30.05	-1,525.09	-3,567.90	3,717.76	3,521.43	196.34	18.936		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,134.19	5,196.19	22.83	177.52	30.08	-1,525.09	-3,567.90	3,714.29	3,514.03	200.26	18.547		
5,300.00	5,296.11	5,234.11	5,296.11	23.27	181.01	30.11	-1,525.09	-3,567.90	3,710.82	3,506.63	204.18	18.174		
5,400.00	5,396.03	5,334.03	5,396.03	23.71	184.50	30.15	-1,525.09	-3,567.90	3,707.34	3,499.24	208.11	17.814		
5,500.00	5,495.95	5,433.95	5,495.95	24.14	187.98	30.18	-1,525.09	-3,567.90	3,703.87	3,491.84	212.03	17.468		
5,600.00	5,595.87	5,533.87	5,595.87	24.58	191.47	30.21	-1,525.09	-3,567.90	3,700.40	3,484.45	215.96	17.135		
5,700.00	5,695.79	5,633.79	5,695.79	25.02	194.96	30.24	-1,525.09	-3,567.90	3,696.94	3,477.05	219.88	16.813		
5,800.00	5,795.71	5,733.71	5,795.71	25.46	198.45	30.27	-1,525.09	-3,567.90	3,693.47	3,469.66	223.81	16.503		
5,900.00	5,895.63	5,833.63	5,895.63	25.90	201.93	30.30	-1,525.09	-3,567.90	3,690.00	3,462.27	227.73	16.203		
6,000.00	5,995.55	5,933.55	5,995.55	26.34	205.42	30.33	-1,525.09	-3,567.90	3,686.54	3,454.88	231.66	15.914		
6,100.00	6,095.47	6,033.47	6,095.47	26.78	208.91	30.37	-1,525.09	-3,567.90	3,683.07	3,447.49	235.58	15.634		
6,200.00	6,195.39	6,133.39	6,195.39	27.22	212.40	30.40	-1,525.09	-3,567.90	3,679.61	3,440.10	239.51	15.363		
6,300.00	6,295.31	6,233.31	6,295.31	27.66	215.88	30.43	-1,525.09	-3,567.90	3,676.15	3,432.71	243.43	15.101		
6,400.00	6,395.23	6,333.23	6,395.23	28.10	219.37	30.46	-1,525.09	-3,567.90	3,672.69	3,425.33	247.36	14.848		
6,500.00	6,495.02	6,433.02	6,495.02	28.54	222.86	-5.26	-1,525.09	-3,567.90	3,667.05	3,415.77	251.28	14.593		
6,600.00	6,593.09	6,531.09	6,593.09	28.98	226.28	-15.04	-1,525.09	-3,567.90	3,648.40	3,393.27	255.13	14.300		
6,700.00	6,687.01	6,625.01	6,687.01	29.41	229.56	-18.81	-1,525.09	-3,567.90	3,615.70	3,356.88	258.82	13.970		
6,800.00	6,774.46	6,712.46	6,774.46	29.83	232.61	-22.08	-1,525.09	-3,567.90	3,569.81	3,307.56	262.24	13.613		
6,900.00	6,853.31	6,808.69	6,853.31	30.26	235.97	-25.97	-1,525.09	-3,567.90	3,511.91	3,245.98	265.93	13.206		
7,000.00	6,921.60	6,859.60	6,921.60	30.76	237.75	-31.24	-1,525.09	-3,567.90	3,443.52	3,175.53	267.99	12.849		
7,100.00	6,977.66	6,915.66	6,977.66	31.38	239.70	-38.77	-1,525.09	-3,567.90	3,366.44	3,096.24	270.20	12.459		
7,200.00	7,020.10	6,958.10	7,020.10	32.17	241.18	-49.73	-1,525.09	-3,567.90	3,282.67	3,010.77	271.90	12.073		
7,300.00	7,047.88	6,985.88	7,047.88	33.13	242.15	-65.16	-1,525.09	-3,567.90	3,194.40	2,921.31	273.08	11.698		
7,400.00	7,060.32	7,001.68	7,060.32	34.27	242.71	-84.22	-1,525.09	-3,567.90	3,103.90	2,830.04	273.86	11.334		
7,500.00	7,060.70	7,001.30	7,060.70	35.56	242.69	-90.52	-1,525.09	-3,567.90	3,013.33	2,739.21	274.12	10.993		
7,600.00	7,060.27	7,001.73	7,060.27	37.02	242.71	-90.50	-1,525.09	-3,567.90	2,923.37	2,648.88	274.49	10.650		
7,700.00	7,059.83	7,002.17	7,059.83	38.64	242.72	-90.48	-1,525.09	-3,567.90	2,834.08	2,559.14	274.95	10.308		
7,800.00	7,059.40	7,002.60	7,059.40	40.40	242.74	-90.46	-1,525.09	-3,567.90	2,745.54	2,470.02	275.52	9.965		
7,900.00	7,058.97	7,003.03	7,058.97	42.28	242.75	-90.45	-1,525.09	-3,567.90	2,657.80	2,381.60	276.21	9.623		
8,000.00	7,058.53	7,003.47	7,058.53	44.27	242.77	-90.43	-1,525.09	-3,567.90	2,570.96	2,293.93	277.03	9.280		
8,100.00	7,058.10	7,003.90	7,058.10	46.35	242.78	-90.41	-1,525.09	-3,567.90	2,485.12	2,207.11	278.00	8.939		
8,200.00	7,057.66	7,004.34	7,057.66	48.50	242.80	-90.39	-1,525.09	-3,567.90	2,400.36	2,121.22	279.14	8.599		
8,300.00	7,057.23	7,004.77	7,057.23	50.73	242.81	-90.37	-1,525.09	-3,567.90	2,316.83	2,036.37	280.46	8.261		
8,400.00	7,056.80	7,005.20	7,056.80	53.02	242.83	-90.35	-1,525.09	-3,567.90	2,234.64	1,952.67	281.97	7.925		
8,500.00	7,056.36	7,005.64	7,056.36	55.36	242.84	-90.33	-1,525.09	-3,567.90	2,153.96	1,870.27	283.69	7.593		
8,600.00	7,055.93	7,006.07	7,055.93	57.74	242.86	-90.31	-1,525.09	-3,567.90	2,074.97	1,789.33	285.64	7.264		
8,700.00	7,055.49	7,006.51	7,055.49	60.17	242.87	-90.29	-1,525.09	-3,567.90	1,997.86	1,710.03	287.83	6.941		
8,800.00	7,055.06	7,006.94	7,055.06	62.63	242.89	-90.27	-1,525.09	-3,567.90	1,922.86	1,632.59	290.27	6.624		
8,900.00	7,054.63	7,007.37	7,054.63	65.13	242.90	-90.25	-1,525.09	-3,567.90	1,850.22	1,557.25	292.97	6.315		
9,000.00	7,054.19	7,007.81	7,054.19	67.66	242.92	-90.23	-1,525.09	-3,567.90	1,780.24	1,484.30	295.94	6.016		
9,100.00	7,053.76	7,008.24	7,053.76	70.21	242.93	-90.21	-1,525.09	-3,567.90	1,713.24	1,414.06	299.18	5.726		
9,200.00	7,053.32	7,008.68	7,053.32	72.78	242.95	-90.20	-1,525.09	-3,567.90	1,649.58	1,346.90	302.68	5.450		
9,300.00	7,052.89	7,009.11	7,052.89	75.38	242.97	-90.18	-1,525.09	-3,567.90	1,589.67	1,283.24	306.44	5.188		
9,400.00	7,052.46	7,009.54	7,052.46	77.99	242.98	-90.16	-1,525.09	-3,567.90	1,533.95	1,223.53	310.42	4.942		
9,500.00	7,052.02	7,009.98	7,052.02	80.62	243.00	-90.14	-1,525.09	-3,567.90	1,482.88	1,168.30	314.58	4.714		
9,600.00	7,051.59	6,989.59	7,051.59	83.26	242.28	-90.12	-1,525.09	-3,567.90	1,436.97	1,118.82	318.14	4.517		
9,700.00	7,051.15	6,989.15	7,051.15	85.92	242.27	-90.10	-1,525.09	-3,567.90	1,396.71	1,074.25	322.46	4.331		
9,800.00	7,050.72	6,988.72	7,050.72	88.59	242.25	-90.08	-1,525.09	-3,567.90	1,362.62	1,035.87	326.75	4.170		
9,900.00	7,050.29	6,988.29	7,050.29	91.28	242.24	-90.06	-1,525.09	-3,567.90	1,335.17	1,004.26	330.91	4.035		
10,000.00	7,049.85	6,987.85	7,049.85	93.97	242.22	-90.04	-1,525.09	-3,567.90	1,314.77	979.94	334.83	3.927		
10,100.00	7,049.42	6,987.42	7,049.42	96.67	242.21	-90.02	-1,525.09	-3,567.90	1,301.75	963.34	338.41	3.847		
10,200.00	7,048.98	6,986.98	7,048.98	99.38	242.19	-90.00	-1,525.09	-3,567.90	1,296.33	954.79	341.54	3.796		
10,220.33	7,048.90	6,986.90	7,048.90	99.93	242.19	-90.00	-1,525.09	-3,567.90	1,296.17	954.06	342.12	3.789	CC, 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - STOCKOVER 16-1(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-2" Cone@2.448 Sigma													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,300.00	7,048.55	6,986.55	7,048.55	102.10	242.18	-89.98	-1,525.09	-3,567.90	1,298.62	954.46	344.16	3.773 SF		
10,400.00	7,048.12	6,986.12	7,048.12	104.83	242.16	-89.97	-1,525.09	-3,567.90	1,308.57	962.34	346.22	3.780		
10,500.00	7,047.68	6,985.68	7,047.68	107.56	242.15	-89.95	-1,525.09	-3,567.90	1,326.00	978.29	347.71	3.813		
10,600.00	7,047.25	6,985.25	7,047.25	110.30	242.13	-89.93	-1,525.09	-3,567.90	1,350.63	1,001.99	348.65	3.874		
10,700.00	7,046.81	6,984.81	7,046.81	113.05	242.12	-89.91	-1,525.09	-3,567.90	1,382.08	1,033.02	349.06	3.959		
10,800.00	7,046.38	6,984.38	7,046.38	115.80	242.10	-89.89	-1,525.09	-3,567.90	1,419.89	1,070.87	349.02	4.068		
10,900.00	7,045.95	6,983.95	7,045.95	118.55	242.09	-89.87	-1,525.09	-3,567.90	1,463.56	1,114.97	348.59	4.199		
11,000.00	7,045.51	6,983.51	7,045.51	121.31	242.07	-89.85	-1,525.09	-3,567.90	1,512.59	1,164.75	347.84	4.348		
11,100.00	7,045.08	6,983.08	7,045.08	124.08	242.06	-89.83	-1,525.09	-3,567.90	1,566.48	1,219.63	346.85	4.516		
11,200.00	7,044.64	6,982.64	7,044.64	126.85	242.04	-89.81	-1,525.09	-3,567.90	1,624.74	1,279.08	345.67	4.700		
11,300.00	7,044.21	6,982.21	7,044.21	129.62	242.03	-89.79	-1,525.09	-3,567.90	1,686.93	1,342.57	344.36	4.899		
11,400.00	7,043.78	6,981.78	7,043.78	132.40	242.01	-89.77	-1,525.09	-3,567.90	1,752.61	1,409.66	342.96	5.110		
11,500.00	7,043.34	6,981.34	7,043.34	135.18	242.00	-89.75	-1,525.09	-3,567.90	1,821.42	1,479.91	341.51	5.333		
11,600.00	7,042.91	6,980.91	7,042.91	137.96	241.98	-89.74	-1,525.09	-3,567.90	1,893.02	1,552.97	340.04	5.567		
11,700.00	7,042.47	6,980.47	7,042.47	140.75	241.97	-89.72	-1,525.09	-3,567.90	1,967.09	1,628.51	338.58	5.810		
11,800.00	7,042.04	6,980.04	7,042.04	143.54	241.95	-89.70	-1,525.09	-3,567.90	2,043.37	1,706.24	337.13	6.061		
11,900.00	7,041.61	6,979.61	7,041.61	146.33	241.94	-89.68	-1,525.09	-3,567.90	2,121.62	1,785.91	335.71	6.320		
12,000.00	7,041.17	6,979.17	7,041.17	149.13	241.92	-89.66	-1,525.09	-3,567.90	2,201.64	1,867.30	334.34	6.585		
12,100.00	7,040.74	6,978.74	7,040.74	151.92	241.90	-89.64	-1,525.09	-3,567.90	2,283.23	1,950.23	333.00	6.856		
12,200.00	7,040.30	6,978.30	7,040.30	154.72	241.89	-89.62	-1,525.09	-3,567.90	2,366.24	2,034.51	331.72	7.133		
12,300.00	7,039.87	6,977.87	7,039.87	157.52	241.87	-89.60	-1,525.09	-3,567.90	2,450.51	2,120.02	330.49	7.415		
12,400.00	7,039.44	6,977.44	7,039.44	160.33	241.86	-89.58	-1,525.09	-3,567.90	2,535.93	2,206.61	329.31	7.701		
12,500.00	7,039.00	6,977.00	7,039.00	163.13	241.84	-89.56	-1,525.09	-3,567.90	2,622.37	2,294.19	328.18	7.991		
12,600.00	7,038.57	6,976.57	7,038.57	165.94	241.83	-89.54	-1,525.09	-3,567.90	2,709.75	2,382.65	327.11	8.284		
12,700.00	7,038.13	6,976.13	7,038.13	168.75	241.81	-89.52	-1,525.09	-3,567.90	2,797.98	2,471.90	326.08	8.581		
12,800.00	7,037.70	6,975.70	7,037.70	171.56	241.80	-89.51	-1,525.09	-3,567.90	2,886.97	2,561.87	325.10	8.880		
12,900.00	7,037.27	6,975.27	7,037.27	174.37	241.78	-89.49	-1,525.09	-3,567.90	2,976.67	2,652.50	324.17	9.183		
13,000.00	7,036.83	6,974.83	7,036.83	177.19	241.77	-89.47	-1,525.09	-3,567.90	3,067.00	2,743.72	323.28	9.487		
13,100.00	7,036.40	6,974.40	7,036.40	180.00	241.75	-89.45	-1,525.09	-3,567.90	3,157.91	2,835.48	322.43	9.794		
13,200.00	7,035.96	6,973.96	7,035.96	182.82	241.74	-89.43	-1,525.09	-3,567.90	3,249.36	2,927.73	321.62	10.103		
13,300.00	7,035.53	6,973.53	7,035.53	185.64	241.72	-89.41	-1,525.09	-3,567.90	3,341.29	3,020.44	320.85	10.414		
13,400.00	7,035.10	6,973.10	7,035.10	188.46	241.71	-89.39	-1,525.09	-3,567.90	3,433.68	3,113.56	320.12	10.726		
13,500.00	7,034.66	6,972.66	7,034.66	191.28	241.69	-89.37	-1,525.09	-3,567.90	3,526.48	3,207.06	319.42	11.040		
13,600.00	7,034.23	6,972.23	7,034.23	194.10	241.68	-89.35	-1,525.09	-3,567.90	3,619.67	3,300.92	318.75	11.356		
13,700.00	7,033.79	6,971.79	7,033.79	196.92	241.66	-89.33	-1,525.09	-3,567.90	3,713.21	3,395.09	318.11	11.673		
13,800.00	7,033.36	6,971.36	7,033.36	199.74	241.65	-89.31	-1,525.09	-3,567.90	3,807.08	3,489.57	317.51	11.991		
13,900.00	7,032.93	6,970.93	7,032.93	202.57	241.63	-89.29	-1,525.09	-3,567.90	3,901.25	3,584.32	316.93	12.310		
14,000.00	7,032.49	6,970.49	7,032.49	205.39	241.62	-89.27	-1,525.09	-3,567.90	3,995.71	3,679.33	316.37	12.630		
14,100.00	7,032.06	6,970.06	7,032.06	208.22	241.60	-89.26	-1,525.09	-3,567.90	4,090.43	3,774.58	315.84	12.951		
14,200.00	7,031.62	6,969.62	7,031.62	211.05	241.59	-89.24	-1,525.09	-3,567.90	4,185.39	3,870.05	315.34	13.273		
14,300.00	7,031.19	6,969.19	7,031.19	213.87	241.57	-89.22	-1,525.09	-3,567.90	4,280.59	3,965.73	314.86	13.595		
14,400.00	7,030.76	6,968.76	7,030.76	216.70	241.56	-89.20	-1,525.09	-3,567.90	4,376.00	4,061.60	314.39	13.919		
14,500.00	7,030.32	6,968.32	7,030.32	219.53	241.54	-89.18	-1,525.09	-3,567.90	4,471.61	4,157.66	313.95	14.243		
14,600.00	7,029.89	6,967.89	7,029.89	222.36	241.53	-89.16	-1,525.09	-3,567.90	4,567.40	4,253.88	313.53	14.568		
14,700.00	7,029.45	6,967.45	7,029.45	225.19	241.51	-89.14	-1,525.09	-3,567.90	4,663.38	4,350.26	313.12	14.893		
14,800.00	7,029.02	6,967.02	7,029.02	228.03	241.50	-89.12	-1,525.09	-3,567.90	4,759.52	4,446.79	312.73	15.219		
14,805.04	7,029.00	6,967.00	7,029.00	228.17	241.50	-89.12	-1,525.09	-3,567.90	4,764.37	4,451.65	312.71	15.236		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Reference Datum

Offset Design HARVESTERS STATE 7-15 PAD - ULRICH PC I 17-07D(PR_75CC) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 78-MWVD													Offset Well Error:	3.28 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	59.78	3.28	3.28	-91.96	-313.56	-9,144.81	9,150.38					
100.00	100.00	185.34	211.32	3.28	3.34	-91.96	-312.11	-9,143.24	9,149.24	9,142.62	6.62	1,381.587		
200.00	200.00	289.23	315.20	3.34	3.45	-91.95	-311.60	-9,141.92	9,147.95	9,141.16	6.79	1,347.819		
300.00	300.00	369.10	395.06	3.44	3.58	-91.95	-311.43	-9,141.01	9,146.81	9,139.79	7.02	1,303.243		
400.00	400.00	464.95	490.91	3.60	3.76	-91.95	-311.19	-9,140.04	9,145.79	9,138.43	7.36	1,242.086		
500.00	499.98	547.69	573.65	3.80	3.95	49.89	-310.97	-9,139.29	9,143.75	9,136.00	7.75	1,180.504		
600.00	599.90	624.04	649.99	4.02	4.15	49.91	-311.09	-9,138.76	9,140.50	9,132.34	8.16	1,119.640		
700.00	699.82	738.70	764.65	4.28	4.47	49.93	-311.24	-9,138.18	9,137.44	9,128.70	8.74	1,045.078		
800.00	799.74	849.46	875.41	4.57	4.81	49.95	-311.09	-9,137.34	9,134.09	9,124.72	9.37	974.638		
900.00	899.66	930.85	956.79	4.88	5.08	49.97	-310.97	-9,136.74	9,130.77	9,120.82	9.95	917.947		
1,000.00	999.58	984.00	1,009.95	5.21	5.26	49.98	-311.02	-9,136.44	9,127.72	9,117.26	10.46	873.038		
1,100.00	1,099.50	984.00	1,009.95	5.55	5.26	49.98	-311.02	-9,136.44	9,125.57	9,114.77	10.80	844.904		
1,200.00	1,199.42	1,050.00	1,075.95	5.91	5.47	49.99	-311.02	-9,136.73	9,123.68	9,112.30	11.38	801.960		
1,300.00	1,299.34	1,112.00	1,137.93	6.28	5.68	50.01	-310.79	-9,138.11	9,123.06	9,111.11	11.95	763.129		
1,373.96	1,373.23	1,112.00	1,137.93	6.56	5.68	50.01	-310.79	-9,138.11	9,122.76	9,110.53	12.23	745.702		
1,400.00	1,399.26	1,112.00	1,137.93	6.66	5.68	50.01	-310.79	-9,138.11	9,122.80	9,110.47	12.33	739.707		
1,500.00	1,499.18	1,112.00	1,137.93	7.04	5.68	50.01	-310.79	-9,138.11	9,123.63	9,110.91	12.72	717.361		
1,600.00	1,599.10	1,157.21	1,183.11	7.43	5.83	50.02	-310.57	-9,139.85	9,125.11	9,111.85	13.26	688.194		
1,700.00	1,699.01	1,182.18	1,208.04	7.83	5.92	50.02	-310.46	-9,141.09	9,127.51	9,113.77	13.74	664.347		
1,800.00	1,798.93	1,241.00	1,266.74	8.23	6.12	50.04	-310.27	-9,144.83	9,130.97	9,116.63	14.34	636.798		
1,900.00	1,898.85	1,241.00	1,266.74	8.64	6.12	50.04	-310.27	-9,144.83	9,134.77	9,120.03	14.74	619.692		
2,000.00	1,998.77	1,241.00	1,266.74	9.05	6.12	50.04	-310.27	-9,144.83	9,139.67	9,124.52	15.14	603.486		
2,100.00	2,098.69	1,241.00	1,266.74	9.46	6.12	50.04	-310.27	-9,144.83	9,145.65	9,130.10	15.55	588.142		
2,200.00	2,198.61	1,303.16	1,328.68	9.88	6.34	50.05	-310.12	-9,150.06	9,151.83	9,135.65	16.18	565.740		
2,300.00	2,298.53	1,369.00	1,394.14	10.30	6.58	50.06	-309.96	-9,157.09	9,159.60	9,142.78	16.82	544.530		
2,400.00	2,398.45	1,369.00	1,394.14	10.72	6.58	50.06	-309.96	-9,157.09	9,167.46	9,150.23	17.23	532.114		
2,500.00	2,498.37	1,369.00	1,394.14	11.14	6.58	50.06	-309.96	-9,157.09	9,176.39	9,158.76	17.64	520.347		
2,600.00	2,598.29	1,369.00	1,394.14	11.56	6.58	50.06	-309.96	-9,157.09	9,186.41	9,168.37	18.04	509.194		
2,700.00	2,698.21	1,425.50	1,450.19	11.98	6.79	50.08	-309.98	-9,164.27	9,196.83	9,178.17	18.66	492.938		
2,800.00	2,798.13	1,451.22	1,475.65	12.41	6.89	50.08	-310.11	-9,167.86	9,208.25	9,189.09	19.16	480.622		
2,900.00	2,898.05	1,498.00	1,521.90	12.84	7.07	50.09	-310.52	-9,174.91	9,220.55	9,200.81	19.74	467.026		
3,000.00	2,997.97	1,498.00	1,521.90	13.27	7.07	50.09	-310.52	-9,174.91	9,233.46	9,213.32	20.14	458.359		
3,100.00	3,097.89	1,498.00	1,521.90	13.69	7.07	50.09	-310.52	-9,174.91	9,247.44	9,226.90	20.54	450.130		
3,200.00	3,197.81	1,549.94	1,573.11	14.12	7.28	50.10	-311.14	-9,183.55	9,261.87	9,240.72	21.15	437.958		
3,300.00	3,297.73	1,573.72	1,596.50	14.56	7.38	50.10	-311.46	-9,187.81	9,277.28	9,255.64	21.64	428.726		
3,400.00	3,397.65	1,626.00	1,647.80	14.99	7.60	50.11	-312.20	-9,197.84	9,293.67	9,271.42	22.25	417.767		
3,500.00	3,497.56	1,626.00	1,647.80	15.42	7.60	50.11	-312.20	-9,197.84	9,310.49	9,287.86	22.64	411.290		
3,600.00	3,597.48	1,626.00	1,647.80	15.85	7.60	50.11	-312.20	-9,197.84	9,328.36	9,305.33	23.03	405.132		
3,700.00	3,697.40	1,626.00	1,647.80	16.28	7.60	50.11	-312.20	-9,197.84	9,347.26	9,323.85	23.41	399.276		
3,800.00	3,797.32	1,688.11	1,708.50	16.72	7.89	50.11	-313.25	-9,210.98	9,366.28	9,342.23	24.06	389.336		
3,900.00	3,897.24	1,754.00	1,772.54	17.15	8.19	50.12	-314.61	-9,226.42	9,386.93	9,362.20	24.72	379.688		
4,000.00	3,997.16	1,754.00	1,772.54	17.59	8.19	50.12	-314.61	-9,226.42	9,407.57	9,382.47	25.10	374.797		
4,100.00	4,097.08	1,754.00	1,772.54	18.02	8.19	50.12	-314.61	-9,226.42	9,429.22	9,403.75	25.47	370.144		
4,200.00	4,197.00	1,754.00	1,772.54	18.46	8.19	50.12	-314.61	-9,226.42	9,451.89	9,426.04	25.84	365.718		
4,300.00	4,296.92	1,810.47	1,827.16	18.89	8.48	50.13	-315.80	-9,240.71	9,474.97	9,448.50	26.47	357.983		
4,400.00	4,396.84	1,838.42	1,854.11	19.33	8.63	50.13	-316.31	-9,248.09	9,498.91	9,471.95	26.96	352.331		
4,500.00	4,496.76	1,883.00	1,896.99	19.77	8.86	50.14	-317.02	-9,260.26	9,523.60	9,496.08	27.53	345.956		
4,600.00	4,596.68	1,883.00	1,896.99	20.20	8.86	50.14	-317.02	-9,260.26	9,548.92	9,521.04	27.89	342.424		
4,700.00	4,696.60	1,926.78	1,938.98	20.64	9.11	50.14	-317.67	-9,272.65	9,574.91	9,546.46	28.45	336.553		
4,800.00	4,796.52	1,957.98	1,968.82	21.08	9.29	50.15	-318.16	-9,281.73	9,601.58	9,572.62	28.95	331.637		
4,900.00	4,896.44	2,011.00	2,019.39	21.51	9.60	50.15	-319.03	-9,297.62	9,628.98	9,599.42	29.56	325.747		
5,000.00	4,996.36	2,011.00	2,019.39	21.95	9.60	50.15	-319.03	-9,297.62	9,656.88	9,626.98	29.90	322.923		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,096.28	2,067.83	2,073.44	22.39	9.95	50.16	-319.99	-9,315.16	9,685.38	9,654.85	30.53	317.219		
5,200.00	5,196.19	2,140.00	2,141.90	22.83	10.41	50.17	-321.20	-9,337.96	9,714.50	9,683.26	31.24	310.968		
5,300.00	5,296.11	5,300.00	2,383.97	23.27	32.19	50.21	-324.69	-9,415.61	9,742.44	9,695.82	46.62	208.964		
5,400.00	5,396.03	2,466.77	2,453.20	23.71	12.61	50.22	-325.84	-9,437.17	9,769.81	9,736.18	33.64	290.445		
5,500.00	5,495.95	2,525.00	2,508.67	24.14	13.01	50.23	-326.62	-9,454.88	9,797.75	9,763.46	34.29	285.731		
5,600.00	5,595.87	2,567.58	2,549.17	24.58	13.32	50.23	-327.06	-9,468.01	9,826.11	9,791.25	34.86	281.877		
5,700.00	5,695.79	2,624.76	2,603.50	25.02	13.73	50.25	-327.40	-9,485.85	9,854.87	9,819.36	35.51	277.540		
5,800.00	5,795.71	2,653.00	2,630.30	25.46	13.94	50.25	-327.47	-9,494.74	9,884.07	9,848.08	36.00	274.590		
5,900.00	5,895.63	2,700.81	2,675.59	25.90	14.30	50.26	-327.50	-9,510.05	9,913.78	9,877.19	36.59	270.923		
6,000.00	5,995.55	2,732.41	2,705.45	26.34	14.54	50.27	-327.50	-9,520.41	9,944.15	9,907.05	37.10	268.062		
6,100.00	6,095.47	3,008.25	2,966.83	26.78	16.64	50.32	-330.26	-9,608.38	9,973.02	9,934.03	38.99	255.757		
6,900.00	6,853.31	6,743.05	6,595.15	30.26	38.69	1.97	-347.59	-10,297.87	9,987.84	9,927.88	59.96	166.584		
7,000.00	6,921.60	6,806.16	6,658.22	30.76	38.92	1.49	-348.72	-10,299.51	9,916.76	9,856.26	60.50	163.907		
7,100.00	6,977.66	6,858.57	6,710.61	31.38	39.10	1.06	-349.69	-10,300.91	9,835.62	9,774.68	60.94	161.394		
7,200.00	7,020.10	6,897.95	6,749.96	32.17	39.24	0.53	-350.43	-10,301.97	9,746.38	9,685.12	61.26	159.089		
7,300.00	7,047.88	6,922.20	6,774.20	33.13	39.33	-0.47	-350.92	-10,302.65	9,651.24	9,589.78	61.46	157.023		
7,400.00	7,060.32	6,934.36	6,786.35	34.27	39.37	-5.33	-351.17	-10,302.99	9,552.52	9,490.96	61.56	155.170		
7,500.00	7,060.70	6,936.95	6,788.94	35.56	39.38	-19.56	-351.23	-10,303.06	9,452.59	9,391.00	61.59	153.483		
7,600.00	7,060.27	6,938.89	6,790.88	37.02	39.39	-19.73	-351.27	-10,303.12	9,352.62	9,291.01	61.61	151.809		
7,700.00	7,059.83	6,940.84	6,792.83	38.64	39.39	-19.89	-351.31	-10,303.17	9,252.65	9,191.02	61.63	150.132		
7,800.00	7,059.40	6,942.80	6,794.79	40.40	39.40	-20.06	-351.35	-10,303.23	9,152.69	9,091.03	61.65	148.454		
7,900.00	7,058.97	6,944.77	6,796.75	42.28	39.41	-20.23	-351.40	-10,303.29	9,052.72	8,991.04	61.68	146.774		
8,000.00	7,058.53	6,946.74	6,798.73	44.27	39.41	-20.41	-351.44	-10,303.34	8,952.76	8,891.05	61.70	145.093		
8,100.00	7,058.10	6,948.73	6,800.71	46.35	39.42	-20.59	-351.48	-10,303.40	8,852.79	8,791.06	61.73	143.410		
8,200.00	7,057.66	6,950.72	6,802.70	48.50	39.43	-20.77	-351.53	-10,303.46	8,752.83	8,691.07	61.76	141.726		
8,300.00	7,057.23	6,952.72	6,804.70	50.73	39.44	-20.96	-351.57	-10,303.51	8,652.86	8,591.07	61.79	140.040		
8,400.00	7,056.80	6,954.73	6,806.71	53.02	39.44	-21.15	-351.62	-10,303.57	8,552.90	8,491.08	61.82	138.354		
8,500.00	7,056.36	6,956.74	6,808.72	55.36	39.45	-21.34	-351.66	-10,303.63	8,452.93	8,391.08	61.85	136.666		
8,600.00	7,055.93	6,958.77	6,810.75	57.74	39.46	-21.54	-351.71	-10,303.69	8,352.97	8,291.08	61.88	134.978		
8,700.00	7,055.49	6,960.80	6,812.78	60.17	39.46	-21.74	-351.76	-10,303.75	8,253.01	8,191.09	61.92	133.288		
8,800.00	7,055.06	6,962.85	6,814.82	62.63	39.47	-21.95	-351.80	-10,303.81	8,153.04	8,091.09	61.95	131.598		
8,900.00	7,054.63	6,964.90	6,816.87	65.13	39.48	-22.16	-351.85	-10,303.87	8,053.08	7,991.09	61.99	129.908		
9,000.00	7,054.19	6,966.96	6,818.93	67.66	39.49	-22.38	-351.90	-10,303.93	7,953.12	7,891.09	62.03	128.216		
9,100.00	7,053.76	6,969.03	6,821.00	70.21	39.49	-22.60	-351.95	-10,303.99	7,853.15	7,791.09	62.07	126.525		
9,200.00	7,053.32	6,971.11	6,823.08	72.78	39.50	-22.83	-351.99	-10,304.05	7,753.19	7,691.08	62.11	124.833		
9,300.00	7,052.89	6,973.19	6,825.16	75.38	39.51	-23.06	-352.04	-10,304.11	7,653.23	7,591.08	62.15	123.141		
9,400.00	7,052.46	6,975.29	6,827.26	77.99	39.52	-23.30	-352.09	-10,304.17	7,553.27	7,491.07	62.19	121.448		
9,500.00	7,052.02	6,977.40	6,829.36	80.62	39.52	-23.54	-352.14	-10,304.23	7,453.31	7,391.07	62.24	119.756		
9,600.00	7,051.59	6,979.51	6,831.47	83.26	39.53	-23.79	-352.19	-10,304.30	7,353.34	7,291.06	62.28	118.064		
9,700.00	7,051.15	6,981.63	6,833.59	85.92	39.54	-24.04	-352.24	-10,304.36	7,253.38	7,191.05	62.33	116.372		
9,800.00	7,050.72	6,983.77	6,835.73	88.59	39.55	-24.30	-352.29	-10,304.42	7,153.42	7,091.05	62.38	114.680		
9,900.00	7,050.29	6,985.91	6,837.87	91.28	39.55	-24.57	-352.35	-10,304.49	7,053.46	6,991.04	62.43	112.989		
10,000.00	7,049.85	6,988.06	6,840.02	93.97	39.56	-24.84	-352.40	-10,304.55	6,953.50	6,891.03	62.48	111.298		
10,100.00	7,049.42	6,990.22	6,842.18	96.67	39.57	-25.12	-352.45	-10,304.61	6,853.54	6,791.02	62.53	109.607		
10,200.00	7,048.98	6,992.39	6,844.34	99.38	39.58	-25.40	-352.50	-10,304.68	6,753.59	6,691.00	62.58	107.918		
10,300.00	7,048.55	6,994.57	6,846.52	102.10	39.58	-25.70	-352.56	-10,304.74	6,653.63	6,590.99	62.64	106.229		
10,400.00	7,048.12	6,996.76	6,848.71	104.83	39.59	-26.00	-352.61	-10,304.81	6,553.67	6,490.98	62.69	104.540		
10,500.00	7,047.68	6,998.96	6,850.91	107.56	39.60	-26.30	-352.67	-10,304.87	6,453.71	6,390.96	62.75	102.853		
10,600.00	7,047.25	7,001.17	6,853.11	110.30	39.61	-26.62	-352.72	-10,304.94	6,353.75	6,290.95	62.80	101.167		
10,700.00	7,046.81	7,003.39	6,855.33	113.05	39.62	-26.94	-352.78	-10,305.01	6,253.80	6,190.93	62.86	99.482		
10,800.00	7,046.38	7,005.62	6,857.56	115.80	39.62	-27.28	-352.83	-10,305.07	6,153.84	6,090.92	62.92	97.798		
10,900.00	7,045.95	7,007.85	6,859.79	118.55	39.63	-27.62	-352.89	-10,305.14	6,053.89	5,990.90	62.99	96.115		

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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		
11,000.00	7,045.51	7,010.10	6,862.04	121.31	39.64	-27.97	-352.95	-10,305.21	5,953.93	5,890.88	63.05	94.434		
11,100.00	7,045.08	7,012.36	6,864.30	124.08	39.65	-28.33	-353.01	-10,305.28	5,853.98	5,790.86	63.11	92.754		
11,200.00	7,044.64	7,014.63	6,866.56	126.85	39.66	-28.70	-353.06	-10,305.35	5,754.02	5,690.84	63.18	91.076		
11,300.00	7,044.21	7,016.91	6,868.84	129.62	39.66	-29.08	-353.12	-10,305.42	5,654.07	5,590.82	63.25	89.399		
11,400.00	7,043.78	7,019.25	6,871.18	132.40	39.67	-29.48	-353.18	-10,305.49	5,554.11	5,490.80	63.31	87.724		
11,500.00	7,043.34	7,022.17	6,874.10	135.18	39.68	-29.99	-353.26	-10,305.58	5,454.16	5,390.78	63.38	86.049		
11,600.00	7,042.91	7,025.08	6,877.01	137.96	39.69	-30.52	-353.33	-10,305.67	5,354.21	5,290.75	63.46	84.376		
11,700.00	7,042.47	7,027.98	6,879.90	140.75	39.70	-31.05	-353.41	-10,305.75	5,254.26	5,190.73	63.53	82.705		
11,800.00	7,042.04	7,030.87	6,882.79	143.54	39.71	-31.61	-353.48	-10,305.84	5,154.31	5,090.70	63.60	81.037		
11,900.00	7,041.61	7,033.74	6,885.66	146.33	39.73	-32.17	-353.55	-10,305.93	5,054.35	4,990.67	63.68	79.371		
12,000.00	7,041.17	7,036.61	6,888.53	149.13	39.74	-32.76	-353.62	-10,306.02	4,954.40	4,890.65	63.76	77.707		
12,100.00	7,040.74	7,039.47	6,891.38	151.92	39.75	-33.35	-353.69	-10,306.10	4,854.45	4,790.62	63.84	76.045		
12,200.00	7,040.30	7,042.31	6,894.23	154.72	39.76	-33.97	-353.76	-10,306.19	4,754.50	4,690.59	63.92	74.386		
12,300.00	7,039.87	7,045.15	6,897.06	157.52	39.77	-34.60	-353.82	-10,306.27	4,654.56	4,590.56	64.00	72.729		
12,400.00	7,039.44	7,047.98	6,899.89	160.33	39.78	-35.24	-353.89	-10,306.36	4,554.61	4,490.52	64.08	71.075		
12,500.00	7,039.00	7,050.79	6,902.70	163.13	39.79	-35.91	-353.96	-10,306.44	4,454.66	4,390.49	64.17	69.423		
12,600.00	7,038.57	7,053.60	6,905.50	165.94	39.80	-36.59	-354.02	-10,306.53	4,354.71	4,290.46	64.25	67.774		
12,700.00	7,038.13	7,056.40	6,908.30	168.75	39.81	-37.30	-354.08	-10,306.61	4,254.77	4,190.42	64.34	66.128		
12,800.00	7,037.70	7,059.18	6,911.08	171.56	39.82	-38.02	-354.14	-10,306.70	4,154.82	4,090.39	64.43	64.484		
12,900.00	7,037.27	7,061.96	6,913.86	174.37	39.83	-38.76	-354.20	-10,306.78	4,054.88	3,990.35	64.52	62.843		
13,000.00	7,036.83	7,064.73	6,916.62	177.19	39.84	-39.52	-354.26	-10,306.86	3,954.93	3,890.31	64.62	61.205		
13,100.00	7,036.40	7,067.48	6,919.38	180.00	39.85	-40.31	-354.32	-10,306.94	3,854.99	3,790.28	64.71	59.569		
13,200.00	7,035.96	7,070.23	6,922.13	182.82	39.86	-41.11	-354.38	-10,307.02	3,755.05	3,690.24	64.81	57.936		
13,300.00	7,035.53	7,072.97	6,924.86	185.64	39.87	-41.94	-354.44	-10,307.11	3,655.11	3,590.19	64.91	56.306		
13,400.00	7,035.10	7,075.70	6,927.59	188.46	39.88	-42.79	-354.49	-10,307.19	3,555.17	3,490.15	65.02	54.679		
13,500.00	7,034.66	7,078.42	6,930.31	191.28	39.89	-43.66	-354.55	-10,307.27	3,455.23	3,390.11	65.13	53.054		
13,600.00	7,034.23	7,081.13	6,933.01	194.10	39.90	-44.56	-354.60	-10,307.35	3,355.30	3,290.06	65.24	51.433		
13,700.00	7,033.79	7,083.83	6,935.71	196.92	39.91	-45.49	-354.66	-10,307.43	3,255.37	3,190.01	65.35	49.814		
13,800.00	7,033.36	7,086.52	6,938.40	199.74	39.92	-46.44	-354.71	-10,307.51	3,155.43	3,089.96	65.47	48.198		
13,900.00	7,032.93	7,089.20	6,941.08	202.57	39.93	-47.41	-354.76	-10,307.59	3,055.50	2,989.91	65.59	46.584		
14,000.00	7,032.49	7,091.87	6,943.75	205.39	39.94	-48.41	-354.81	-10,307.66	2,955.58	2,889.86	65.72	44.973		
14,100.00	7,032.06	7,094.53	6,946.41	208.22	39.94	-49.44	-354.86	-10,307.74	2,855.65	2,789.80	65.85	43.365		
14,200.00	7,031.62	7,097.19	6,949.07	211.05	39.95	-50.50	-354.91	-10,307.82	2,755.73	2,689.74	65.99	41.759		
14,300.00	7,031.19	7,099.83	6,951.71	213.87	39.96	-51.58	-354.95	-10,307.90	2,655.82	2,589.68	66.14	40.155		
14,400.00	7,030.76	7,102.47	6,954.34	216.70	39.97	-52.70	-355.00	-10,307.97	2,555.90	2,489.61	66.29	38.554		
14,500.00	7,030.32	7,105.09	6,956.97	219.53	39.98	-53.84	-355.05	-10,308.05	2,456.00	2,389.54	66.46	36.955		
14,600.00	7,029.89	7,107.71	6,959.59	222.36	39.99	-55.01	-355.09	-10,308.13	2,356.09	2,289.46	66.64	35.358		
14,700.00	7,029.45	7,110.32	6,962.19	225.19	40.00	-56.20	-355.14	-10,308.20	2,256.19	2,189.37	66.83	33.762		
14,800.00	7,029.02	7,112.92	6,964.79	228.03	40.01	-57.43	-355.18	-10,308.28	2,156.30	2,089.27	67.03	32.168		
14,805.04	7,029.00	7,113.05	6,964.92	228.17	40.01	-57.49	-355.18	-10,308.28	2,151.27	2,084.23	67.04	32.088	CC, ES, SF	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-91.62	-259.15	-9,147.78	9,151.54				
100.00	100.00	61.00	100.00	3.28	3.45	-91.62	-259.15	-9,147.78	9,151.45	9,144.72	6.73	1,359.150	
200.00	200.00	161.00	200.00	3.34	5.08	-91.62	-259.15	-9,147.78	9,151.45	9,143.04	8.41	1,087.665	
300.00	300.00	261.00	300.00	3.44	8.06	-91.62	-259.15	-9,147.78	9,151.45	9,139.94	11.51	795.212	
400.00	400.00	361.00	400.00	3.60	11.34	-91.62	-259.15	-9,147.78	9,151.45	9,136.51	14.94	612.342	
500.00	499.98	460.98	499.98	3.80	14.72	50.20	-259.15	-9,147.78	9,150.33	9,131.82	18.51	494.230	
600.00	599.90	560.90	599.90	4.02	18.13	50.23	-259.15	-9,147.78	9,147.79	9,125.63	22.16	412.886	
700.00	699.82	660.82	699.82	4.28	21.57	50.25	-259.15	-9,147.78	9,145.22	9,119.37	25.85	353.735	
800.00	799.74	760.74	799.74	4.57	25.03	50.27	-259.15	-9,147.78	9,142.66	9,113.06	29.59	308.950	
900.00	899.66	860.66	899.66	4.88	28.49	50.29	-259.15	-9,147.78	9,140.09	9,106.73	33.36	273.952	
1,000.00	999.58	960.58	999.58	5.21	31.96	50.30	-259.15	-9,147.78	9,137.52	9,100.36	37.16	245.896	
1,100.00	1,099.50	1,060.50	1,099.50	5.55	35.43	50.32	-259.15	-9,147.78	9,134.96	9,093.98	40.98	222.934	
1,200.00	1,199.42	1,160.42	1,199.42	5.91	38.90	50.34	-259.15	-9,147.78	9,132.40	9,087.59	44.81	203.811	
1,300.00	1,299.34	1,260.34	1,299.34	6.28	42.38	50.36	-259.15	-9,147.78	9,129.84	9,081.18	48.65	187.651	
1,400.00	1,399.26	1,360.26	1,399.26	6.66	45.86	50.38	-259.15	-9,147.78	9,127.28	9,074.77	52.51	173.822	
1,500.00	1,499.18	1,460.18	1,499.18	7.04	49.34	50.40	-259.15	-9,147.78	9,124.72	9,068.34	56.37	161.860	
1,600.00	1,599.10	1,560.10	1,599.10	7.43	52.82	50.42	-259.15	-9,147.78	9,122.16	9,061.91	60.25	151.414	
1,700.00	1,699.01	1,660.01	1,699.01	7.83	56.30	50.44	-259.15	-9,147.78	9,119.60	9,055.47	64.12	142.216	
1,800.00	1,798.93	1,759.93	1,798.93	8.23	59.78	50.46	-259.15	-9,147.78	9,117.04	9,049.03	68.01	134.057	
1,900.00	1,898.85	1,859.85	1,898.85	8.64	63.27	50.48	-259.15	-9,147.78	9,114.49	9,042.59	71.90	126.771	
2,000.00	1,998.77	1,959.77	1,998.77	9.05	66.75	50.50	-259.15	-9,147.78	9,111.93	9,036.14	75.79	120.226	
2,100.00	2,098.69	2,059.69	2,098.69	9.46	70.24	50.52	-259.15	-9,147.78	9,109.38	9,029.69	79.69	114.316	
2,200.00	2,198.61	2,159.61	2,198.61	9.88	73.72	50.54	-259.15	-9,147.78	9,106.83	9,023.24	83.59	108.953	
2,300.00	2,298.53	2,259.53	2,298.53	10.30	77.20	50.56	-259.15	-9,147.78	9,104.28	9,016.79	87.49	104.064	
2,400.00	2,398.45	2,359.45	2,398.45	10.72	80.69	50.58	-259.15	-9,147.78	9,101.72	9,010.33	91.39	99.591	
2,500.00	2,498.37	2,459.37	2,498.37	11.14	84.18	50.60	-259.15	-9,147.78	9,099.18	9,003.88	95.30	95.482	
2,600.00	2,598.29	2,559.29	2,598.29	11.56	87.66	50.62	-259.15	-9,147.78	9,096.63	8,997.42	99.20	91.695	
2,700.00	2,698.21	2,659.21	2,698.21	11.98	91.15	50.64	-259.15	-9,147.78	9,094.08	8,990.97	103.11	88.194	
2,800.00	2,798.13	2,759.13	2,798.13	12.41	94.63	50.65	-259.15	-9,147.78	9,091.53	8,984.51	107.03	84.947	
2,900.00	2,898.05	2,859.05	2,898.05	12.84	98.12	50.67	-259.15	-9,147.78	9,088.99	8,978.05	110.94	81.929	
3,000.00	2,997.97	2,958.97	2,997.97	13.27	101.61	50.69	-259.15	-9,147.78	9,086.45	8,971.59	114.85	79.115	
3,100.00	3,097.89	3,058.89	3,097.89	13.69	105.09	50.71	-259.15	-9,147.78	9,083.90	8,965.14	118.77	76.486	
3,200.00	3,197.81	3,158.81	3,197.81	14.12	108.58	50.73	-259.15	-9,147.78	9,081.36	8,958.68	122.68	74.024	
3,300.00	3,297.73	3,258.73	3,297.73	14.56	112.06	50.75	-259.15	-9,147.78	9,078.82	8,952.22	126.60	71.714	
3,400.00	3,397.65	3,358.65	3,397.65	14.99	115.55	50.77	-259.15	-9,147.78	9,076.28	8,945.76	130.52	69.542	
3,500.00	3,497.56	3,458.56	3,497.56	15.42	119.04	50.79	-259.15	-9,147.78	9,073.74	8,939.31	134.43	67.496	
3,600.00	3,597.48	3,558.48	3,597.48	15.85	122.53	50.81	-259.15	-9,147.78	9,071.20	8,932.85	138.35	65.566	
3,700.00	3,697.40	3,658.40	3,697.40	16.28	126.01	50.83	-259.15	-9,147.78	9,068.67	8,926.40	142.27	63.742	
3,800.00	3,797.32	3,758.32	3,797.32	16.72	129.50	50.85	-259.15	-9,147.78	9,066.13	8,919.94	146.19	62.015	
3,900.00	3,897.24	3,858.24	3,897.24	17.15	132.99	50.87	-259.15	-9,147.78	9,063.60	8,913.49	150.11	60.379	
4,000.00	3,997.16	3,958.16	3,997.16	17.59	136.47	50.89	-259.15	-9,147.78	9,061.06	8,907.03	154.03	58.825	
4,100.00	4,097.08	4,058.08	4,097.08	18.02	139.96	50.91	-259.15	-9,147.78	9,058.53	8,900.58	157.95	57.349	
4,200.00	4,197.00	4,158.00	4,197.00	18.46	143.45	50.93	-259.15	-9,147.78	9,056.00	8,894.12	161.88	55.944	
4,300.00	4,296.92	4,257.92	4,296.92	18.89	146.94	50.95	-259.15	-9,147.78	9,053.47	8,887.67	165.80	54.605	
4,400.00	4,396.84	4,357.84	4,396.84	19.33	150.42	50.97	-259.15	-9,147.78	9,050.94	8,881.22	169.72	53.328	
4,500.00	4,496.76	4,457.76	4,496.76	19.77	153.91	50.99	-259.15	-9,147.78	9,048.41	8,874.77	173.64	52.109	
4,600.00	4,596.68	4,557.68	4,596.68	20.20	157.40	51.01	-259.15	-9,147.78	9,045.89	8,868.32	177.57	50.943	
4,700.00	4,696.60	4,657.60	4,696.60	20.64	160.88	51.03	-259.15	-9,147.78	9,043.36	8,861.87	181.49	49.828	
4,800.00	4,796.52	4,757.52	4,796.52	21.08	164.37	51.05	-259.15	-9,147.78	9,040.84	8,855.42	185.42	48.760	
4,900.00	4,896.44	4,857.44	4,896.44	21.51	167.86	51.07	-259.15	-9,147.78	9,038.31	8,848.97	189.34	47.736	
5,000.00	4,996.36	4,957.36	4,996.36	21.95	171.35	51.09	-259.15	-9,147.78	9,035.79	8,842.53	193.26	46.753	
5,100.00	5,096.28	5,057.28	5,096.28	22.39	174.84	51.11	-259.15	-9,147.78	9,033.27	8,836.08	197.19	45.810	

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



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	5,196.19	5,157.19	5,196.19	22.83	178.32	51.13	-259.15	-9,147.78	9,030.75	8,829.63	201.11	44.904		
5,300.00	5,296.11	5,257.11	5,296.11	23.27	181.81	51.15	-259.15	-9,147.78	9,028.23	8,823.19	205.04	44.032		
5,400.00	5,396.03	5,357.03	5,396.03	23.71	185.30	51.17	-259.15	-9,147.78	9,025.71	8,816.75	208.96	43.193		
5,500.00	5,495.95	5,456.95	5,495.95	24.14	188.79	51.19	-259.15	-9,147.78	9,023.19	8,810.30	212.89	42.384		
5,600.00	5,595.87	5,556.87	5,595.87	24.58	192.27	51.21	-259.15	-9,147.78	9,020.68	8,803.86	216.82	41.605		
5,700.00	5,695.79	5,656.79	5,695.79	25.02	195.76	51.23	-259.15	-9,147.78	9,018.16	8,797.42	220.74	40.854		
5,800.00	5,795.71	5,756.71	5,795.71	25.46	199.25	51.25	-259.15	-9,147.78	9,015.65	8,790.98	224.67	40.129		
5,900.00	5,895.63	5,856.63	5,895.63	25.90	202.74	51.27	-259.15	-9,147.78	9,013.14	8,784.54	228.59	39.429		
6,000.00	5,995.55	5,956.55	5,995.55	26.34	206.22	51.29	-259.15	-9,147.78	9,010.62	8,778.10	232.52	38.752		
6,100.00	6,095.47	6,056.47	6,095.47	26.78	209.71	51.31	-259.15	-9,147.78	9,008.11	8,771.67	236.45	38.098		
6,200.00	6,195.39	6,156.39	6,195.39	27.22	213.20	51.33	-259.15	-9,147.78	9,005.60	8,765.23	240.37	37.465		
6,300.00	6,295.31	6,256.31	6,295.31	27.66	216.69	51.35	-259.15	-9,147.78	9,003.10	8,758.79	244.30	36.853		
6,400.00	6,395.23	6,356.23	6,395.23	28.10	220.18	51.37	-259.15	-9,147.78	9,000.59	8,752.36	248.23	36.259		
6,500.00	6,495.02	6,456.02	6,495.02	28.54	223.66	15.78	-259.15	-9,147.78	8,995.75	8,743.60	252.15	35.676		
6,600.00	6,593.09	6,554.09	6,593.09	28.98	227.08	6.70	-259.15	-9,147.78	8,976.94	8,720.94	256.01	35.065		
6,700.00	6,687.01	6,648.01	6,687.01	29.41	230.36	4.30	-259.15	-9,147.78	8,943.03	8,683.33	259.70	34.436		
6,800.00	6,774.46	6,735.46	6,774.46	29.83	233.41	3.23	-259.15	-9,147.78	8,894.83	8,631.70	263.13	33.804		
6,900.00	6,853.31	6,814.31	6,853.31	30.26	236.17	2.65	-259.15	-9,147.78	8,833.54	8,567.32	266.22	33.182		
7,000.00	6,921.60	6,882.60	6,921.60	30.76	238.55	2.30	-259.15	-9,147.78	8,760.66	8,491.79	268.88	32.583		
7,100.00	6,977.66	6,938.66	6,977.66	31.38	240.51	2.09	-259.15	-9,147.78	8,678.00	8,406.95	271.04	32.017		
7,200.00	7,020.10	6,981.10	7,020.10	32.17	241.99	1.98	-259.15	-9,147.78	8,587.57	8,314.90	272.68	31.494		
7,300.00	7,047.88	7,008.88	7,047.88	33.13	242.96	1.97	-259.15	-9,147.78	8,491.62	8,217.89	273.73	31.021		
7,400.00	7,060.32	7,021.32	7,060.32	34.27	243.39	2.43	-259.15	-9,147.78	8,392.50	8,118.29	274.21	30.606		
7,500.00	7,060.70	7,021.70	7,060.70	35.56	243.40	174.99	-259.15	-9,147.78	8,292.51	8,018.28	274.23	30.239		
7,600.00	7,060.27	7,021.27	7,060.27	37.02	243.39	174.93	-259.15	-9,147.78	8,192.51	7,918.29	274.23	29.875		
7,700.00	7,059.83	7,020.83	7,059.83	38.64	243.37	174.87	-259.15	-9,147.78	8,092.51	7,818.29	274.22	29.511		
7,800.00	7,059.40	7,020.40	7,059.40	40.40	243.36	174.80	-259.15	-9,147.78	7,992.52	7,718.29	274.22	29.146		
7,900.00	7,058.97	7,019.97	7,058.97	42.28	243.34	174.74	-259.15	-9,147.78	7,892.52	7,618.30	274.22	28.782		
8,000.00	7,058.53	7,019.53	7,058.53	44.27	243.33	174.67	-259.15	-9,147.78	7,792.52	7,518.30	274.22	28.417		
8,100.00	7,058.10	7,019.10	7,058.10	46.35	243.31	174.60	-259.15	-9,147.78	7,692.52	7,418.30	274.22	28.052		
8,200.00	7,057.66	7,018.66	7,057.66	48.50	243.30	174.53	-259.15	-9,147.78	7,592.52	7,318.30	274.22	27.688		
8,300.00	7,057.23	7,018.23	7,057.23	50.73	243.28	174.46	-259.15	-9,147.78	7,492.52	7,218.30	274.22	27.323		
8,400.00	7,056.80	7,017.80	7,056.80	53.02	243.27	174.38	-259.15	-9,147.78	7,392.52	7,118.29	274.23	26.958		
8,500.00	7,056.36	7,017.36	7,056.36	55.36	243.25	174.31	-259.15	-9,147.78	7,292.52	7,018.29	274.23	26.592		
8,600.00	7,055.93	7,016.93	7,055.93	57.74	243.24	174.23	-259.15	-9,147.78	7,192.52	6,918.28	274.24	26.227		
8,700.00	7,055.49	7,016.49	7,055.49	60.17	243.22	174.15	-259.15	-9,147.78	7,092.52	6,818.28	274.25	25.862		
8,800.00	7,055.06	7,016.06	7,055.06	62.63	243.21	174.06	-259.15	-9,147.78	6,992.52	6,718.27	274.25	25.496		
8,900.00	7,054.63	7,015.63	7,054.63	65.13	243.19	173.98	-259.15	-9,147.78	6,892.53	6,618.26	274.26	25.131		
9,000.00	7,054.19	7,015.19	7,054.19	67.66	243.18	173.89	-259.15	-9,147.78	6,792.53	6,518.25	274.28	24.765		
9,100.00	7,053.76	7,014.76	7,053.76	70.21	243.16	173.80	-259.15	-9,147.78	6,692.53	6,418.24	274.29	24.400		
9,200.00	7,053.32	7,014.32	7,053.32	72.78	243.15	173.71	-259.15	-9,147.78	6,592.53	6,318.23	274.30	24.034		
9,300.00	7,052.89	7,013.89	7,052.89	75.38	243.13	173.61	-259.15	-9,147.78	6,492.53	6,218.21	274.31	23.668		
9,400.00	7,052.46	7,013.46	7,052.46	77.99	243.12	173.51	-259.15	-9,147.78	6,392.53	6,118.20	274.33	23.302		
9,500.00	7,052.02	7,013.02	7,052.02	80.62	243.10	173.41	-259.15	-9,147.78	6,292.53	6,018.18	274.35	22.936		
9,600.00	7,051.59	7,012.59	7,051.59	83.26	243.09	173.30	-259.15	-9,147.78	6,192.53	5,918.17	274.36	22.570		
9,700.00	7,051.15	7,012.15	7,051.15	85.92	243.07	173.20	-259.15	-9,147.78	6,092.53	5,818.15	274.38	22.204		
9,800.00	7,050.72	7,011.72	7,050.72	88.59	243.06	173.08	-259.15	-9,147.78	5,992.53	5,718.13	274.40	21.838		
9,900.00	7,050.29	7,011.29	7,050.29	91.28	243.04	172.97	-259.15	-9,147.78	5,892.54	5,618.11	274.42	21.472		
10,000.00	7,049.85	7,010.85	7,049.85	93.97	243.03	172.85	-259.15	-9,147.78	5,792.54	5,518.09	274.45	21.106		
10,100.00	7,049.42	7,010.42	7,049.42	96.67	243.01	172.72	-259.15	-9,147.78	5,692.54	5,418.07	274.47	20.740		
10,200.00	7,048.98	7,009.98	7,048.98	99.38	243.00	172.59	-259.15	-9,147.78	5,592.54	5,318.04	274.49	20.374		
10,300.00	7,048.55	7,009.55	7,048.55	102.10	242.98	172.46	-259.15	-9,147.78	5,492.54	5,218.02	274.52	20.008		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,400.00	7,048.12	7,009.12	7,048.12	104.83	242.97	172.32	-259.15	-9,147.78	5,392.54	5,118.00	274.54	19.642		
10,500.00	7,047.68	7,008.68	7,047.68	107.56	242.95	172.18	-259.15	-9,147.78	5,292.54	5,017.97	274.57	19.276		
10,600.00	7,047.25	7,008.25	7,047.25	110.30	242.94	172.03	-259.15	-9,147.78	5,192.54	4,917.94	274.60	18.909		
10,700.00	7,046.81	7,007.81	7,046.81	113.05	242.92	171.88	-259.15	-9,147.78	5,092.54	4,817.91	274.63	18.543		
10,800.00	7,046.38	7,007.38	7,046.38	115.80	242.90	171.71	-259.15	-9,147.78	4,992.54	4,717.88	274.66	18.177		
10,900.00	7,045.95	7,006.95	7,045.95	118.55	242.89	171.55	-259.15	-9,147.78	4,892.54	4,617.85	274.69	17.811		
11,000.00	7,045.51	7,006.51	7,045.51	121.31	242.87	171.37	-259.15	-9,147.78	4,792.55	4,517.82	274.73	17.445		
11,100.00	7,045.08	7,006.08	7,045.08	124.08	242.86	171.19	-259.15	-9,147.78	4,692.55	4,417.79	274.76	17.079		
11,200.00	7,044.64	7,005.64	7,044.64	126.85	242.84	171.00	-259.15	-9,147.78	4,592.55	4,317.75	274.79	16.713		
11,300.00	7,044.21	7,005.21	7,044.21	129.62	242.83	170.81	-259.15	-9,147.78	4,492.55	4,217.72	274.83	16.347		
11,400.00	7,043.78	7,004.78	7,043.78	132.40	242.81	170.60	-259.15	-9,147.78	4,392.55	4,117.68	274.87	15.981		
11,500.00	7,043.34	7,004.34	7,043.34	135.18	242.80	170.39	-259.15	-9,147.78	4,292.55	4,017.64	274.91	15.615		
11,600.00	7,042.91	7,003.91	7,042.91	137.96	242.78	170.16	-259.15	-9,147.78	4,192.55	3,917.61	274.94	15.249		
11,700.00	7,042.47	7,003.47	7,042.47	140.75	242.77	169.93	-259.15	-9,147.78	4,092.55	3,817.57	274.98	14.883		
11,800.00	7,042.04	7,003.04	7,042.04	143.54	242.75	169.68	-259.15	-9,147.78	3,992.55	3,717.53	275.03	14.517		
11,900.00	7,041.61	7,002.61	7,041.61	146.33	242.74	169.42	-259.15	-9,147.78	3,892.55	3,617.49	275.07	14.151		
12,000.00	7,041.17	7,002.17	7,041.17	149.13	242.72	169.15	-259.15	-9,147.78	3,792.56	3,517.44	275.11	13.786		
12,100.00	7,040.74	7,001.74	7,040.74	151.92	242.71	168.86	-259.15	-9,147.78	3,692.56	3,417.40	275.16	13.420		
12,200.00	7,040.30	7,001.30	7,040.30	154.72	242.69	168.56	-259.15	-9,147.78	3,592.56	3,317.36	275.20	13.054		
12,300.00	7,039.87	7,000.87	7,039.87	157.52	242.68	168.24	-259.15	-9,147.78	3,492.56	3,217.31	275.25	12.689		
12,400.00	7,039.44	7,000.44	7,039.44	160.33	242.66	167.90	-259.15	-9,147.78	3,392.56	3,117.27	275.29	12.323		
12,500.00	7,039.00	7,000.00	7,039.00	163.13	242.65	167.55	-259.15	-9,147.78	3,292.56	3,017.22	275.34	11.958		
12,600.00	7,038.57	7,000.43	7,038.57	165.94	242.66	167.17	-259.15	-9,147.78	3,192.56	2,917.14	275.42	11.592		
12,700.00	7,038.13	7,000.87	7,038.13	168.75	242.68	166.77	-259.15	-9,147.78	3,092.56	2,817.06	275.50	11.225		
12,800.00	7,037.70	7,001.30	7,037.70	171.56	242.69	166.34	-259.15	-9,147.78	2,992.56	2,716.98	275.58	10.859		
12,900.00	7,037.27	7,001.73	7,037.27	174.37	242.71	165.89	-259.15	-9,147.78	2,892.56	2,616.90	275.67	10.493		
13,000.00	7,036.83	7,002.17	7,036.83	177.19	242.72	165.41	-259.15	-9,147.78	2,792.57	2,516.82	275.75	10.127		
13,100.00	7,036.40	7,002.60	7,036.40	180.00	242.74	164.89	-259.15	-9,147.78	2,692.57	2,416.73	275.83	9.762		
13,200.00	7,035.96	7,003.04	7,035.96	182.82	242.75	164.34	-259.15	-9,147.78	2,592.57	2,316.65	275.92	9.396		
13,300.00	7,035.53	7,003.47	7,035.53	185.64	242.77	163.74	-259.15	-9,147.78	2,492.57	2,216.56	276.00	9.031		
13,400.00	7,035.10	7,003.90	7,035.10	188.46	242.78	163.10	-259.15	-9,147.78	2,392.57	2,116.48	276.09	8.666		
13,500.00	7,034.66	7,004.34	7,034.66	191.28	242.80	162.41	-259.15	-9,147.78	2,292.57	2,016.39	276.18	8.301		
13,600.00	7,034.23	7,004.77	7,034.23	194.10	242.81	161.66	-259.15	-9,147.78	2,192.57	1,916.30	276.27	7.936		
13,700.00	7,033.79	7,005.21	7,033.79	196.92	242.83	160.84	-259.15	-9,147.78	2,092.57	1,816.21	276.36	7.572		
13,800.00	7,033.36	7,005.64	7,033.36	199.74	242.84	159.95	-259.15	-9,147.78	1,992.57	1,716.12	276.45	7.208		
13,900.00	7,032.93	7,006.07	7,032.93	202.57	242.86	158.99	-259.15	-9,147.78	1,892.57	1,616.03	276.54	6.844		
14,000.00	7,032.49	7,006.51	7,032.49	205.39	242.87	157.92	-259.15	-9,147.78	1,792.58	1,515.94	276.64	6.480		
14,100.00	7,032.06	7,006.94	7,032.06	208.22	242.89	156.75	-259.15	-9,147.78	1,692.58	1,415.85	276.73	6.116		
14,200.00	7,031.62	7,007.38	7,031.62	211.05	242.90	155.46	-259.15	-9,147.78	1,592.58	1,315.75	276.82	5.753		
14,300.00	7,031.19	7,007.81	7,031.19	213.87	242.92	154.03	-259.15	-9,147.78	1,492.58	1,215.66	276.92	5.390		
14,400.00	7,030.76	7,008.24	7,030.76	216.70	242.93	152.43	-259.15	-9,147.78	1,392.58	1,115.56	277.02	5.027		
14,500.00	7,030.32	7,008.68	7,030.32	219.53	242.95	150.64	-259.15	-9,147.78	1,292.58	1,015.47	277.12	4.664		
14,600.00	7,029.89	7,009.11	7,029.89	222.36	242.97	148.63	-259.15	-9,147.78	1,192.58	915.37	277.22	4.302		
14,700.00	7,029.45	7,009.55	7,029.45	225.19	242.98	146.36	-259.15	-9,147.78	1,092.58	815.27	277.32	3.940		
14,800.00	7,029.02	7,009.98	7,029.02	228.03	243.00	143.78	-259.15	-9,147.78	992.59	715.17	277.42	3.578		
14,805.04	7,029.00	6,990.00	7,029.00	228.17	242.30	143.64	-259.15	-9,147.78	987.55	710.82	276.73	3.569 CC, ES, SF		



Anticollision Report



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	-91.81	-288.30	-9,145.01	9,149.59					
100.00	100.00	110.47	136.46	3.28	3.29	-91.81	-288.58	-9,144.65	9,149.28	9,142.70	6.58	1,391.100		
200.00	200.00	185.28	211.28	3.34	3.34	-91.81	-288.50	-9,144.46	9,149.02	9,142.34	6.67	1,371.228		
243.27	243.27	217.27	243.27	3.38	3.36	-91.81	-288.45	-9,144.44	9,148.99	9,142.25	6.74	1,357.542		
300.00	300.00	259.42	285.42	3.44	3.41	-91.81	-288.45	-9,144.47	9,149.03	9,142.18	6.85	1,335.469		
400.00	400.00	346.40	372.40	3.60	3.52	-91.81	-288.54	-9,144.67	9,149.27	9,142.14	7.13	1,283.728		
500.00	499.98	434.80	460.79	3.80	3.68	50.01	-288.66	-9,144.99	9,148.51	9,141.03	7.48	1,223.542		
600.00	599.90	609.06	635.05	4.02	4.08	50.05	-289.14	-9,145.30	9,146.26	9,138.17	8.10	1,129.693		
700.00	699.82	678.75	704.74	4.28	4.26	50.06	-289.49	-9,145.11	9,143.43	9,134.89	8.54	1,070.811		
800.00	799.74	727.00	752.99	4.57	4.40	50.07	-289.72	-9,145.15	9,141.02	9,132.06	8.96	1,020.118		
900.00	899.66	767.50	793.49	4.88	4.51	50.07	-289.77	-9,145.43	9,139.23	9,129.84	9.39	973.399		
1,000.00	999.58	800.19	826.18	5.21	4.61	50.08	-289.60	-9,145.94	9,138.18	9,128.36	9.82	930.890		
1,100.00	1,099.50	856.00	881.96	5.55	4.78	50.10	-288.88	-9,147.37	9,137.96	9,127.63	10.33	884.285		
1,117.74	1,117.22	856.00	881.96	5.61	4.78	50.10	-288.88	-9,147.37	9,137.94	9,127.55	10.40	878.933		
1,200.00	1,199.42	856.00	881.96	5.91	4.78	50.10	-288.88	-9,147.37	9,138.31	9,127.62	10.69	854.604		
1,300.00	1,299.34	856.00	881.96	6.28	4.78	50.10	-288.88	-9,147.37	9,139.76	9,128.70	11.06	826.146		
1,400.00	1,399.26	912.77	938.67	6.66	4.97	50.11	-287.63	-9,149.73	9,141.59	9,129.97	11.62	786.698		
1,500.00	1,499.18	937.51	963.36	7.04	5.05	50.12	-286.93	-9,151.10	9,144.47	9,132.39	12.09	756.659		
1,600.00	1,599.10	984.00	1,009.72	7.43	5.20	50.14	-285.37	-9,154.22	9,148.28	9,135.65	12.63	724.393		
1,700.00	1,699.01	984.00	1,009.72	7.83	5.20	50.14	-285.37	-9,154.22	9,152.70	9,139.67	13.02	702.746		
1,800.00	1,798.93	984.00	1,009.72	8.23	5.20	50.14	-285.37	-9,154.22	9,158.21	9,144.79	13.42	682.279		
1,900.00	1,898.85	1,043.37	1,068.82	8.64	5.41	50.17	-282.65	-9,159.17	9,164.12	9,150.10	14.03	653.304		
2,000.00	1,998.77	1,112.00	1,136.95	9.05	5.65	50.22	-278.22	-9,166.15	9,171.33	9,156.66	14.67	625.101		
2,100.00	2,098.69	1,112.00	1,136.95	9.46	5.65	50.22	-278.22	-9,166.15	9,178.72	9,163.64	15.08	608.804		
2,200.00	2,198.61	1,112.00	1,136.95	9.88	5.65	50.22	-278.22	-9,166.15	9,187.18	9,171.70	15.48	593.399		
2,300.00	2,298.53	1,174.60	1,198.91	10.30	5.89	50.26	-273.05	-9,173.43	9,196.21	9,180.09	16.12	570.499		
2,400.00	2,398.45	1,241.00	1,264.44	10.72	6.15	50.32	-266.46	-9,181.82	9,206.03	9,189.25	16.78	548.674		
2,500.00	2,498.37	1,267.27	1,290.31	11.14	6.26	50.34	-263.48	-9,185.30	9,216.29	9,199.00	17.29	533.039		
2,600.00	2,598.29	1,339.90	1,361.63	11.56	6.57	50.42	-253.83	-9,195.04	9,227.01	9,209.02	17.99	512.849		
2,700.00	2,698.21	1,369.00	1,390.11	11.98	6.70	50.45	-249.37	-9,199.00	9,238.17	9,219.65	18.52	498.879		
2,800.00	2,798.13	1,437.41	1,456.86	12.41	7.02	50.54	-237.92	-9,208.66	9,249.76	9,230.53	19.23	481.123		
2,900.00	2,898.05	1,498.00	1,515.73	12.84	7.31	50.62	-226.80	-9,217.74	9,262.08	9,242.18	19.90	465.380		
3,000.00	2,997.97	1,498.00	1,515.73	13.27	7.31	50.62	-226.80	-9,217.74	9,275.02	9,254.72	20.31	456.782		
3,100.00	3,097.89	1,559.71	1,575.44	13.69	7.63	50.71	-214.70	-9,227.54	9,288.52	9,267.51	21.01	442.188		
3,200.00	3,197.81	1,626.00	1,639.33	14.12	7.98	50.80	-201.01	-9,238.70	9,302.82	9,281.09	21.73	428.073		
3,300.00	3,297.73	1,626.00	1,639.33	14.56	7.98	50.80	-201.01	-9,238.70	9,317.60	9,295.47	22.13	421.041		
3,400.00	3,397.65	1,683.45	1,694.44	14.99	8.31	50.89	-188.34	-9,248.85	9,333.05	9,310.22	22.83	408.768		
3,500.00	3,497.56	1,754.00	1,761.70	15.42	8.72	51.01	-171.46	-9,261.83	9,349.19	9,325.59	23.61	396.037		
3,600.00	3,597.48	1,754.00	1,761.70	15.85	8.72	51.01	-171.46	-9,261.83	9,365.80	9,341.80	24.00	390.263		
3,700.00	3,697.40	1,754.00	1,761.70	16.28	8.72	51.01	-171.46	-9,261.83	9,383.45	9,359.06	24.39	384.768		
3,800.00	3,797.32	1,819.70	1,823.90	16.72	9.15	51.13	-154.67	-9,274.70	9,401.33	9,376.17	25.16	373.648		
3,900.00	3,897.24	1,883.00	1,883.40	17.15	9.56	51.25	-137.75	-9,288.10	9,420.48	9,394.55	25.92	363.419		
4,000.00	3,997.16	1,883.00	1,883.40	17.59	9.56	51.25	-137.75	-9,288.10	9,439.91	9,413.61	26.30	358.897		
4,100.00	4,097.08	2,049.55	2,039.49	18.02	10.74	51.56	-91.73	-9,323.53	9,459.65	9,431.90	27.75	340.903		
4,200.00	4,197.00	2,156.93	2,140.47	18.46	11.52	51.76	-62.81	-9,345.88	9,478.95	9,450.11	28.83	328.744		
4,300.00	4,296.92	2,220.92	2,200.76	18.89	12.00	51.88	-46.14	-9,359.32	9,498.45	9,468.81	29.64	320.510		
4,400.00	4,396.84	2,317.07	2,291.53	19.33	12.71	52.04	-21.86	-9,379.74	9,518.22	9,487.57	30.65	310.538		
4,500.00	4,496.76	2,423.73	2,392.51	19.77	13.51	52.22	4.17	-9,402.17	9,537.80	9,506.06	31.74	300.498		
4,600.00	4,596.68	2,481.99	2,447.55	20.20	13.95	52.32	18.72	-9,414.53	9,557.68	9,525.17	32.51	294.002		
4,700.00	4,696.60	2,556.32	2,517.53	20.64	14.52	52.45	37.99	-9,430.51	9,577.97	9,544.58	33.39	286.832		
4,800.00	4,796.52	2,678.02	2,632.04	21.08	15.47	52.67	69.99	-9,456.50	9,598.25	9,563.64	34.62	277.269		
4,900.00	4,896.44	2,701.97	2,654.49	21.51	15.67	52.71	76.48	-9,461.74	9,618.92	9,583.75	35.16	273.568		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	4,996.36	2,742.30	2,692.24	21.95	16.00	52.78	87.53	-9,470.65	9,640.16	9,604.35	35.82	269.157		
5,100.00	5,096.28	2,784.22	2,731.35	22.39	16.34	52.86	99.27	-9,480.11	9,662.01	9,625.53	36.48	264.854		
5,200.00	5,196.19	3,038.00	2,969.22	22.83	18.42	53.32	167.76	-9,536.03	9,683.24	9,644.54	38.70	250.188		
5,300.00	5,296.11	3,096.43	3,024.20	23.27	18.90	53.42	183.08	-9,548.52	9,704.02	9,664.52	39.49	245.719		
5,400.00	5,396.03	3,167.00	3,090.36	23.71	19.48	53.54	202.07	-9,564.10	9,725.49	9,685.12	40.37	240.918		
5,500.00	5,495.95	5,500.00	3,267.73	24.14	38.35	53.86	250.57	-9,605.23	9,747.04	9,690.60	56.45	172.674		
5,600.00	5,595.87	3,497.03	3,401.61	24.58	22.14	54.09	286.04	-9,634.72	9,767.32	9,723.84	43.48	224.654		
5,700.00	5,695.79	5,856.26	5,702.35	25.02	34.61	56.07	558.65	-9,878.59	9,775.33	9,719.78	55.55	175.966		
5,800.00	5,795.71	5,969.50	5,815.56	25.46	34.93	56.08	556.56	-9,878.59	9,772.95	9,716.61	56.34	173.454		
5,900.00	5,895.63	6,138.08	5,984.11	25.90	35.40	56.09	553.26	-9,877.96	9,770.22	9,712.93	57.29	170.544		
6,000.00	5,995.55	6,243.18	6,089.20	26.34	35.70	56.10	551.25	-9,877.16	9,767.08	9,709.02	58.06	168.222		
6,100.00	6,095.47	6,335.39	6,181.38	26.78	35.97	56.11	549.69	-9,876.43	9,763.92	9,705.12	58.80	166.049		
6,200.00	6,195.39	6,468.18	6,314.16	27.22	36.35	56.13	547.71	-9,875.27	9,760.73	9,701.07	59.66	163.604		
6,300.00	6,295.31	6,571.11	6,417.07	27.66	36.66	56.14	546.58	-9,874.01	9,757.19	9,696.75	60.44	161.438		
6,400.00	6,395.23	6,653.96	6,499.92	28.10	36.91	56.15	546.03	-9,873.08	9,753.78	9,692.62	61.16	159.473		
6,500.00	6,495.02	6,731.30	6,577.25	28.54	37.15	20.59	545.52	-9,872.38	9,748.26	9,686.39	61.87	157.554		
6,600.00	6,593.09	6,815.66	6,661.60	28.98	37.41	11.66	544.92	-9,871.79	9,729.04	9,666.44	62.60	155.416		
6,700.00	6,687.01	6,899.53	6,745.48	29.41	37.67	9.57	544.55	-9,871.26	9,694.86	9,631.55	63.31	153.144		
6,800.00	6,774.46	6,964.15	6,810.09	29.83	37.88	8.99	544.41	-9,870.95	9,646.63	9,582.71	63.92	150.920		
6,900.00	6,853.31	6,900.00	6,944.89	30.26	37.67	9.24	544.28	-9,870.05	9,585.22	9,521.23	64.00	149.780		
7,000.00	6,921.60	7,238.79	7,084.71	30.76	38.75	10.25	543.53	-9,868.06	9,511.71	9,446.29	65.41	145.406		
7,100.00	6,977.66	7,287.86	7,133.77	31.38	38.90	12.23	542.80	-9,867.28	9,428.55	9,362.75	65.80	143.288		
7,200.00	7,020.10	7,317.31	7,163.21	32.17	39.00	16.30	542.32	-9,866.84	9,337.91	9,271.85	66.06	141.349		
7,300.00	7,047.88	7,336.33	7,182.22	33.13	39.05	26.72	542.01	-9,866.58	9,242.00	9,175.77	66.23	139.546		
7,400.00	7,060.32	7,344.36	7,190.25	34.27	39.08	70.48	541.88	-9,866.48	9,143.13	9,076.82	66.31	137.889		
7,500.00	7,060.70	7,343.71	7,189.60	35.56	39.08	101.74	541.90	-9,866.49	9,043.54	8,977.21	66.33	136.344		
7,600.00	7,060.27	7,342.46	7,188.36	37.02	39.07	101.65	541.92	-9,866.50	8,943.96	8,877.61	66.35	134.802		
7,700.00	7,059.83	7,341.21	7,187.10	38.64	39.07	101.57	541.94	-9,866.52	8,844.39	8,778.02	66.37	133.253		
7,800.00	7,059.40	7,339.95	7,185.84	40.40	39.07	101.48	541.96	-9,866.54	8,744.84	8,678.43	66.40	131.696		
7,900.00	7,058.97	7,338.67	7,184.57	42.28	39.06	101.39	541.98	-9,866.55	8,645.29	8,578.85	66.43	130.133		
8,000.00	7,058.53	7,337.40	7,183.29	44.27	39.06	101.31	542.00	-9,866.57	8,545.75	8,479.28	66.47	128.563		
8,100.00	7,058.10	7,336.11	7,182.01	46.35	39.05	101.22	542.02	-9,866.59	8,446.22	8,379.71	66.51	126.986		
8,200.00	7,057.66	7,334.82	7,180.71	48.50	39.05	101.13	542.04	-9,866.60	8,346.70	8,280.14	66.56	125.401		
8,300.00	7,057.23	7,333.51	7,179.41	50.73	39.05	101.04	542.06	-9,866.62	8,247.20	8,180.59	66.61	123.809		
8,400.00	7,056.80	7,332.20	7,178.10	53.02	39.04	100.95	542.08	-9,866.64	8,147.70	8,081.03	66.67	122.210		
8,500.00	7,056.36	7,330.88	7,176.78	55.36	39.04	100.86	542.10	-9,866.66	8,048.22	7,981.49	66.73	120.604		
8,600.00	7,055.93	7,329.56	7,175.45	57.74	39.03	100.77	542.12	-9,866.67	7,948.75	7,881.95	66.80	118.990		
8,700.00	7,055.49	7,328.22	7,174.12	60.17	39.03	100.68	542.15	-9,866.69	7,849.30	7,782.42	66.88	117.369		
8,800.00	7,055.06	7,326.88	7,172.77	62.63	39.03	100.59	542.17	-9,866.71	7,749.86	7,682.90	66.96	115.741		
8,900.00	7,054.63	7,325.52	7,171.42	65.13	39.02	100.49	542.19	-9,866.73	7,650.43	7,583.38	67.05	114.105		
9,000.00	7,054.19	7,324.16	7,170.06	67.66	39.02	100.40	542.21	-9,866.75	7,551.02	7,483.87	67.14	112.462		
9,100.00	7,053.76	7,322.79	7,168.69	70.21	39.01	100.31	542.23	-9,866.77	7,451.62	7,384.37	67.25	110.811		
9,200.00	7,053.32	7,321.41	7,167.31	72.78	39.01	100.21	542.26	-9,866.79	7,352.24	7,284.88	67.36	109.152		
9,300.00	7,052.89	7,320.02	7,165.92	75.38	39.00	100.12	542.28	-9,866.80	7,252.87	7,185.39	67.48	107.486		
9,400.00	7,052.46	7,318.63	7,164.53	77.99	39.00	100.02	542.30	-9,866.82	7,153.52	7,085.92	67.61	105.812		
9,500.00	7,052.02	7,317.22	7,163.12	80.62	38.99	99.92	542.32	-9,866.84	7,054.20	6,986.45	67.74	104.131		
9,600.00	7,051.59	7,315.80	7,161.70	83.26	38.99	99.82	542.35	-9,866.86	6,954.88	6,886.99	67.89	102.442		
9,700.00	7,051.15	7,314.38	7,160.28	85.92	38.99	99.73	542.37	-9,866.88	6,855.59	6,787.55	68.05	100.745		
9,800.00	7,050.72	7,312.95	7,158.85	88.59	38.98	99.63	542.39	-9,866.90	6,756.32	6,688.11	68.22	99.041		
9,900.00	7,050.29	7,311.50	7,157.40	91.28	38.98	99.53	542.42	-9,866.93	6,657.07	6,588.68	68.40	97.330		
10,000.00	7,049.85	7,310.05	7,155.95	93.97	38.97	99.43	542.44	-9,866.95	6,557.85	6,489.26	68.59	95.611		
10,100.00	7,049.42	7,308.59	7,154.49	96.67	38.97	99.33	542.46	-9,866.97	6,458.65	6,389.85	68.79	93.884		

CC - Min centre to center 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-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors are at	2.45 sigma
Reference Wellbore	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	7,048.98	7,307.11	7,153.02	99.38	38.96	99.22	542.49	-9,866.99	6,359.47	6,290.45	69.01	92.150		
10,300.00	7,048.55	7,305.63	7,151.53	102.10	38.96	99.12	542.51	-9,867.01	6,260.31	6,191.07	69.24	90.409		
10,400.00	7,048.12	7,304.14	7,150.04	104.83	38.95	99.02	542.54	-9,867.03	6,161.19	6,091.70	69.49	88.661		
10,500.00	7,047.68	7,302.64	7,148.54	107.56	38.95	98.91	542.56	-9,867.05	6,062.09	5,992.34	69.75	86.906		
10,600.00	7,047.25	7,301.12	7,147.03	110.30	38.94	98.81	542.59	-9,867.08	5,963.02	5,892.99	70.03	85.144		
10,700.00	7,046.81	7,299.60	7,145.50	113.05	38.94	98.70	542.61	-9,867.10	5,863.99	5,793.65	70.33	83.375		
10,800.00	7,046.38	7,298.07	7,143.97	115.80	38.93	98.60	542.64	-9,867.12	5,764.98	5,694.33	70.65	81.600		
10,900.00	7,045.95	7,296.52	7,142.43	118.55	38.93	98.49	542.66	-9,867.14	5,666.01	5,595.03	70.99	79.818		
11,000.00	7,045.51	7,294.97	7,140.87	121.31	38.93	98.38	542.69	-9,867.17	5,567.08	5,495.73	71.34	78.031		
11,100.00	7,045.08	7,293.40	7,139.31	124.08	38.92	98.27	542.71	-9,867.19	5,468.18	5,396.46	71.73	76.238		
11,200.00	7,044.64	7,291.83	7,137.73	126.85	38.92	98.16	542.74	-9,867.22	5,369.33	5,297.20	72.13	74.440		
11,300.00	7,044.21	7,290.24	7,136.15	129.62	38.91	98.05	542.76	-9,867.24	5,270.52	5,197.96	72.56	72.636		
11,400.00	7,043.78	7,288.64	7,134.55	132.40	38.91	97.94	542.79	-9,867.26	5,171.75	5,098.73	73.02	70.829		
11,500.00	7,043.34	7,287.05	7,132.95	135.18	38.91	97.82	542.76	-9,867.24	5,073.03	4,999.52	73.51	69.013		
11,600.00	7,042.91	7,285.46	7,131.36	137.96	38.90	97.70	542.80	-9,867.28	4,974.36	4,900.33	74.02	67.199		
11,700.00	7,042.47	7,283.87	7,129.76	140.75	38.90	97.58	542.83	-9,867.31	4,875.74	4,801.17	74.57	65.382		
11,800.00	7,042.04	7,282.28	7,128.16	143.54	38.89	97.46	542.87	-9,867.34	4,777.19	4,702.03	75.16	63.562		
11,900.00	7,041.61	7,280.69	7,126.56	146.33	38.88	97.34	542.90	-9,867.37	4,678.69	4,602.91	75.78	61.741		
12,000.00	7,041.17	7,279.10	7,124.96	149.13	38.88	97.22	542.94	-9,867.41	4,580.26	4,505.82	76.44	59.919		
12,100.00	7,040.74	7,277.51	7,123.36	151.92	38.87	97.10	542.97	-9,867.44	4,481.89	4,404.75	77.14	58.097		
12,200.00	7,040.30	7,275.92	7,121.76	154.72	38.86	96.98	543.01	-9,867.47	4,383.60	4,305.71	77.89	56.276		
12,300.00	7,039.87	7,274.33	7,120.16	157.52	38.86	96.86	543.04	-9,867.50	4,285.39	4,206.69	78.69	54.457		
12,400.00	7,039.44	7,272.74	7,118.56	160.33	38.85	96.74	543.07	-9,867.54	4,187.26	4,107.71	79.55	52.640		
12,500.00	7,039.00	7,271.15	7,116.96	163.13	38.84	96.62	543.10	-9,867.57	4,089.22	4,008.76	80.45	50.827		
12,600.00	7,038.57	7,269.56	7,115.36	165.94	38.84	96.50	543.14	-9,867.60	3,991.27	3,909.85	81.42	49.020		
12,700.00	7,038.13	7,267.97	7,113.76	168.75	38.83	96.38	543.17	-9,867.64	3,893.43	3,810.98	82.46	47.219		
12,800.00	7,037.70	7,266.38	7,112.16	171.56	38.82	96.26	543.20	-9,867.67	3,795.70	3,712.14	83.56	45.425		
12,900.00	7,037.27	7,264.79	7,110.56	174.37	38.82	96.14	543.23	-9,867.70	3,698.09	3,613.35	84.74	43.641		
13,000.00	7,036.83	7,263.20	7,108.96	177.19	38.81	96.02	543.26	-9,867.74	3,600.61	3,514.61	86.00	41.868		
13,100.00	7,036.40	7,261.61	7,107.36	180.00	38.80	95.90	543.29	-9,867.77	3,503.28	3,415.93	87.35	40.106		
13,200.00	7,035.96	7,259.99	7,105.76	182.82	38.80	95.78	543.32	-9,867.81	3,406.09	3,317.30	88.80	38.359		
13,300.00	7,035.53	7,258.38	7,104.16	185.64	38.79	95.66	543.35	-9,867.84	3,309.07	3,218.73	90.35	36.627		
13,400.00	7,035.10	7,256.77	7,102.56	188.46	38.78	95.54	543.38	-9,867.87	3,212.24	3,120.23	92.01	34.912		
13,500.00	7,034.66	7,255.16	7,100.96	191.28	38.78	95.42	543.41	-9,867.91	3,115.60	3,021.80	93.80	33.217		
13,600.00	7,034.23	7,253.55	7,100.00	194.10	38.77	95.30	543.44	-9,867.94	3,019.17	2,923.46	95.72	31.543		
13,700.00	7,033.79	7,251.94	7,098.40	196.92	38.76	95.18	543.47	-9,867.98	2,922.99	2,825.21	97.78	29.893		
13,800.00	7,033.36	7,250.33	7,096.80	199.74	38.76	95.06	543.49	-9,868.01	2,827.07	2,727.06	100.01	28.267		
13,900.00	7,032.93	7,248.72	7,095.20	202.57	38.75	94.94	543.52	-9,868.05	2,731.45	2,629.03	102.42	26.670		
14,000.00	7,032.49	7,247.11	7,093.60	205.39	38.74	94.82	543.55	-9,868.08	2,636.14	2,531.12	105.02	25.102		
14,100.00	7,032.06	7,245.50	7,092.00	208.22	38.74	94.70	543.57	-9,868.12	2,541.19	2,433.37	107.83	23.567		
14,200.00	7,031.62	7,243.89	7,090.40	211.05	38.73	94.58	543.60	-9,868.15	2,446.65	2,335.77	110.88	22.066		
14,300.00	7,031.19	7,242.28	7,088.80	213.87	38.72	94.46	543.63	-9,868.19	2,352.55	2,238.36	114.19	20.602		
14,400.00	7,030.76	7,240.67	7,087.20	216.70	38.72	94.34	543.65	-9,868.23	2,258.96	2,141.17	117.79	19.177		
14,500.00	7,030.32	7,239.06	7,085.60	219.53	38.71	94.22	543.68	-9,868.26	2,165.94	2,044.22	121.72	17.794		
14,600.00	7,029.89	7,237.45	7,084.00	222.36	38.70	94.10	543.70	-9,868.30	2,073.57	1,947.56	126.01	16.456		
14,700.00	7,029.45	7,235.84	7,082.40	225.19	38.70	93.98	543.72	-9,868.33	1,981.94	1,851.24	130.70	15.164		
14,800.00	7,029.02	7,234.23	7,080.80	228.03	38.69	93.86	543.75	-9,868.37	1,891.15	1,755.31	135.84	13.922		
14,805.04	7,029.00	7,234.23	7,080.80	228.17	38.69	93.99	543.75	-9,868.37	1,886.60	1,750.49	136.11	13.861	CC, ES, SF	

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

Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-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-16B-M	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 ft	Output errors 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

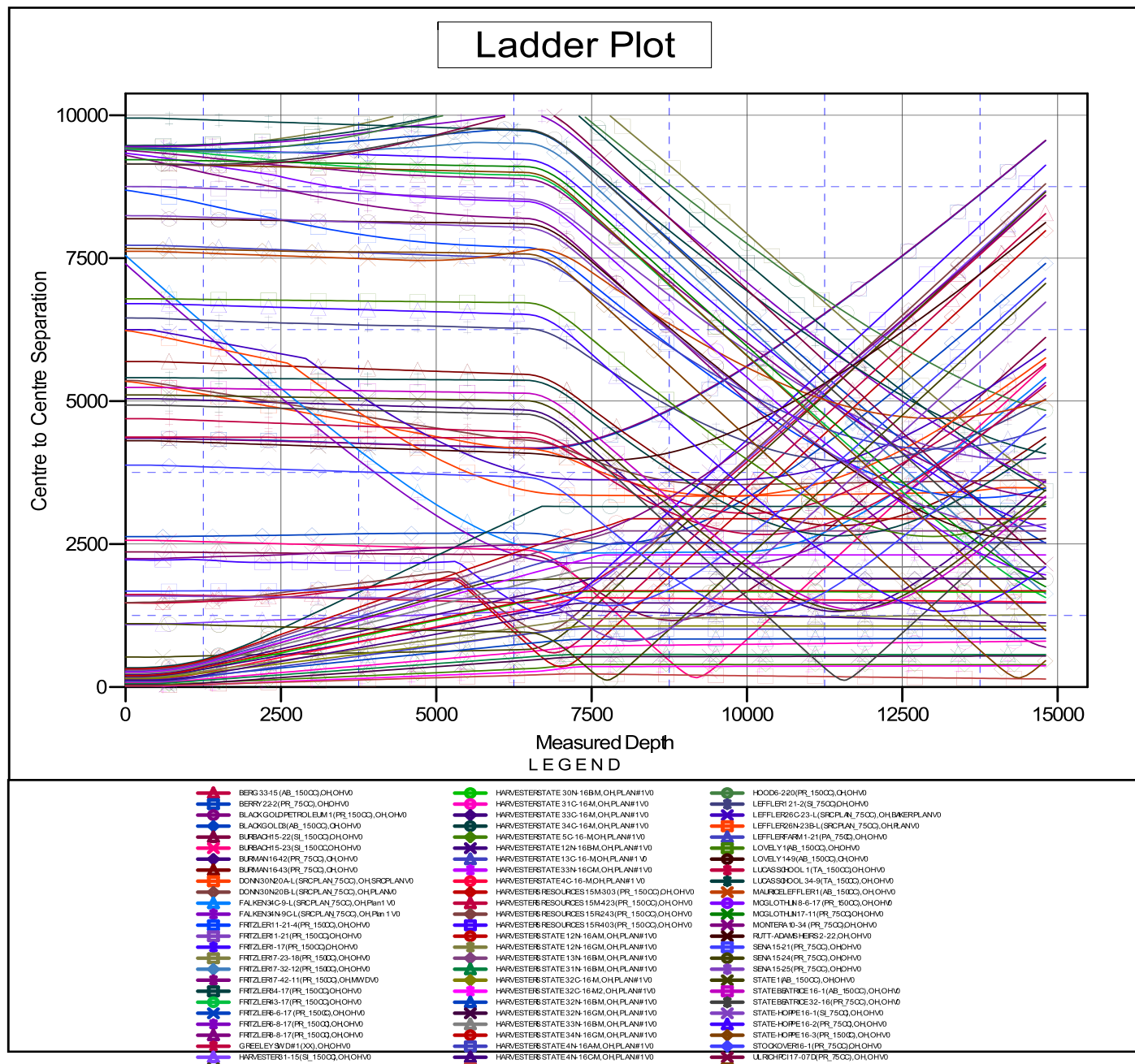
Offset Depths are relative to Offset Datum

Central Meridian is -105.5000000

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

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.48°



Company:	SRC ENERGY	Local Co-ordinate Reference:	Well HARVESTERS STATE 5N-16B-M
Project:	SECTION 15, T6N, R66W	TVD Reference:	KB @ 4821.00ft
Reference Site:	HARVESTERS STATE 7-15 PAD	MD Reference:	KB @ 4821.00ft
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Reference Depths are relative to KB @ 4821.00ft

Offset Depths are relative to Offset Datum

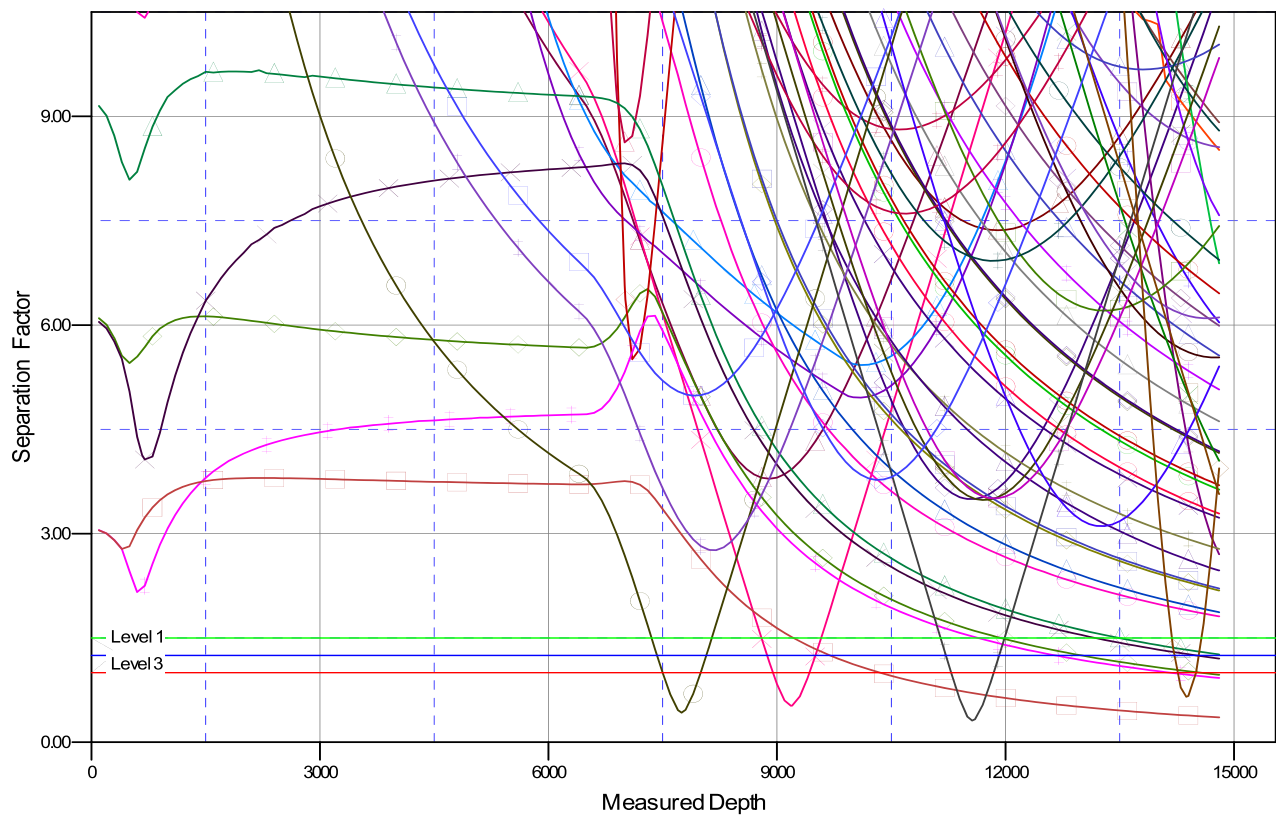
Central Meridian is -105.5000000

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

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.48°

Separation Factor Plot



LEGEND

BERG 33-15 (AB, 1500Q, OH, OHV0)	HARVESTER STATE 30N-16BM, OH, PLAN#1V0	HODDE-220 (PR, 1500Q, OH, OHV0)
BERRY 22-2 (PR, 750Q, OH, OHV0)	HARVESTER STATE 31C-16M, OH, PLAN#1V0	LEFFLER 21-2 (SL, 750Q, OH, OHV0)
BLACK GOLD PETROLEUM 1 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 33C-16M, OH, PLAN#1V0	LEFFLER 26-23-L (SRC PLAN, 750Q, OH, PLANV0)
BLURBACH 15-22 (SL, 1500Q, OH, OHV0)	HARVESTER STATE 34C-16M, OH, PLAN#1V0	LEFFLER FARM 1-21 (PA, 750Q, OH, OHV0)
BURBACH 15-23 (SL, 1500Q, OH, OHV0)	HARVESTER STATE 12N-16BM, OH, PLAN#1V0	LOVELY 1 (AB, 1500Q, OH, OHV0)
BURMAN 16-42 (PR, 750Q, OH, OHV0)	HARVESTER STATE 13C-16M, OH, PLAN#1V0	LOVELY 149 (AB, 1500Q, OH, OHV0)
BURMAN 16-43 (PR, 750Q, OH, OHV0)	HARVESTER STATE 33N-16CM, OH, PLAN#1V0	LUCAS SCHOOL 1 (TA, 1500Q, OH, OHV0)
DOHN 30-20-4-L (SRC PLAN, 750Q, OH, SRC PLANV0)	HARVESTER STATE 4C-16M, OH, PLAN#1V0	LUCAS SCHOOL 34-9 (TA, 1500Q, OH, OHV0)
DOHN 30-20-4-L (SRC PLAN, 750Q, OH, PLANV0)	HARVESTER RESOURCES 15M423 (PR, 1500Q, OH, OHV0)	MAIRZ LEFFLER 1 (AB, 1500Q, OH, OHV0)
FALKEN 30-9-L (SRC PLAN, 750Q, OH, PLANV0)	HARVESTER RESOURCES 15M423 (PR, 1500Q, OH, OHV0)	MOGLOTHUN 6-17 (PR, 600Q, OH, OHV0)
FALKEN 30-9-L (SRC PLAN, 750Q, OH, Plan 1V0)	HARVESTER RESOURCES 15R243 (PR, 1500Q, OH, OHV0)	MOGLOTHUN 17-11 (PR, 750Q, OH, OHV0)
FRTZLER 11-21-4 (PR, 1500Q, OH, OHV0)	HARVESTER RESOURCES 15R403 (PR, 1500Q, OH, OHV0)	MONTEWA 10-34 (PR, 750Q, OH, OHV0)
FRTZLER 11-21 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 12N-16AM, OH, PLAN#1V0	RUTT-ADAMS HERS 2-22 (OH, OHV0)
FRTZLER 16-17 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 12N-16GM, OH, PLAN#1V0	SENA 15-21 (PR, 750Q, OH, OHV0)
FRTZLER 17-23-16 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 13N-16BM, OH, PLAN#1V0	SENA 15-24 (PR, 750Q, OH, OHV0)
FRTZLER 17-32-12 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 31N-16BM, OH, PLAN#1V0	SENA 15-25 (PR, 750Q, OH, OHV0)
FRTZLER 17-42-11 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 32C-16M, OH, PLAN#1V0	STATE 1 (AB, 1500Q, OH, OHV0)
FRTZLER 17-42-11 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 32C-16M2, OH, PLAN#1V0	STATEBATRICE 16-11 (AB, 1500Q, OH, OHV0)
FRTZLER 17-42-11 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 32N-16BM, OH, PLAN#1V0	STATEBATRICE 32-16 (PR, 750Q, OH, OHV0)
FRTZLER 17-42-11 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 32N-16GM, OH, PLAN#1V0	STATE-FOIFE 16-1 (SL, 750Q, OH, OHV0)
FRTZLER 17-42-11 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 33N-16BM, OH, PLAN#1V0	STATE-FOIFE 16-2 (PR, 750Q, OH, OHV0)
FRTZLER 17-42-11 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 34N-16GM, OH, PLAN#1V0	STATE-FOIFE 16-3 (PR, 1500Q, OH, OHV0)
FRTZLER 17-42-11 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 4N-16AM, OH, PLAN#1V0	STOCKOVER 6-11 (PR, 750Q, OH, OHV0)
FRTZLER 17-42-11 (PR, 1500Q, OH, OHV0)	HARVESTER STATE 4N-16CM, OH, PLAN#1V0	ULRICH 17-07 (PR, 750Q, OH, OHV0)
GRIFFIN 30-20-4-L (SRC PLAN, 750Q, OH, SRC PLANV0)		
HARVESTER 11-15 (SL, 1500Q, OH, OHV0)		